FORMER GASTOWN MGP SITE SITE NO. 915171

2015 LAB REPORTS FOR THE GROUNDWATER COLLECTION & TREATMENT SYSTEM

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



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 480-74493-1

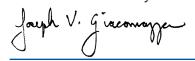
Client Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Sampling Event: Mthly Post-Carbon Mthly Pre-Carbon

For:

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

Attn: Mr. Glenn May



Authorized for release by: 2/6/2015 11:26:10 AM

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Designee for

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

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

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

Joe Giacomazza

Project Management Assistant II

2/6/2015 11:26:10 AM

TestAmerica Job ID: 480-74493-1

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

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-74493-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description

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

GC VOA

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

H Sample was prepped or analyzed beyond the specified holding time

Metals

B Compound was found in the blank and sample.

General Chemistry

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

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

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Glossary

RPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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

2/6/2015

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Case Narrative

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-74493-1

Job ID: 480-74493-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-74493-1

Receipt

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

GC/MS VOA

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

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

IPI C/IC

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

GC VOA

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

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

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

Metals

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

General Chemistry

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

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

4

6

9

Client: New York State D.E.C.

Date Received: 01/21/15 14:30

Analyte

Chloride

Alkalinity, Total

Sulfate

General Chemistry

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

TestAmerica Job ID: 480-74493-1

Lab Sample ID: 480-74493-1

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 01/21/15 13:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	10	J	40	6.9	ug/L			02/04/15 18:03	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			02/04/15 18:03	200
Benzene	6400		40	4.7	ug/L			02/04/15 18:03	200
Ethylbenzene	180		40	5.7	ug/L			02/04/15 18:03	200
Isopropylbenzene	9.7	J	40	5.4	ug/L			02/04/15 18:03	200
Methyl tert-butyl ether	78	J	80	8.7	ug/L			02/04/15 18:03	200
m,p-Xylene	14	J	80	11	ug/L			02/04/15 18:03	200
n-Butylbenzene	ND		40	6.2	ug/L			02/04/15 18:03	200
n-Propylbenzene	ND		40	26	ug/L			02/04/15 18:03	200
o-Xylene	7.2	J	40	5.4	ug/L			02/04/15 18:03	200
p-Cymene	ND		40	5.9	ug/L			02/04/15 18:03	200
sec-Butylbenzene	9.5	J	40	4.1	ug/L			02/04/15 18:03	200
Toluene	330		40	7.1	ug/L			02/04/15 18:03	200
Xylenes, Total	21	J	80	11	ug/L			02/04/15 18:03	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145					02/04/15 18:03	200
4-Bromofluorobenzene	101		64 - 141					02/04/15 18:03	200
Method: 200.7 Rev 4.4 - Meta	als (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	133000	В	500	100	ug/L		01/23/15 10:15	01/23/15 16:19	1
Iron	5870		50.0	19.3	ug/L		01/23/15 10:15	01/23/15 16:19	1
Magnesium	83700		200	43.4	ug/L		01/23/15 10:15	01/23/15 16:19	1
Potassium	4700		500	100	ug/L		01/23/15 10:15	01/23/15 16:19	1
Sodium	71800		1000	324	ug/L		01/23/15 10:15	01/23/15 16:19	1

RL

10.0

40.0

60.0

MDL Unit

5.6 mg/L

7.0 mg/L

24.0 mg/L

D

Prepared

Analyzed

01/23/15 20:28

01/23/15 20:28

01/27/15 19:05

Dil Fac

20

20

6

115

145

515

Result Qualifier

TestAmerica Buffalo

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-74493-1

Lab Sample ID: 480-74493-2

Matrix: Water

Client Sample ID: Outside Sump Date Collected: 01/21/15 13:30

Date Received: 01/21/15 14:30

Method: 8021B - Volatile Org Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	41	J	100	17	ug/L			02/04/15 18:40	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			02/04/15 18:40	500
Benzene	7900		100	12	ug/L			02/04/15 18:40	500
Ethylbenzene	880		100	14	ug/L			02/04/15 18:40	500
Isopropylbenzene	ND		100	14	ug/L			02/04/15 18:40	500
Methyl tert-butyl ether	98	J	200	22	ug/L			02/04/15 18:40	500
m,p-Xylene	340		200	27	ug/L			02/04/15 18:40	500
n-Butylbenzene	ND		100	15	ug/L			02/04/15 18:40	500
n-Propylbenzene	ND		100	65	ug/L			02/04/15 18:40	500
o-Xylene	170		100	14	ug/L			02/04/15 18:40	500
p-Cymene	ND		100	15	ug/L			02/04/15 18:40	500
sec-Butylbenzene	ND		100	10	ug/L			02/04/15 18:40	500
Toluene	2100		100	18	ug/L			02/04/15 18:40	500
Xylenes, Total	510		200	27	ug/L			02/04/15 18:40	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145			-		02/04/15 18:40	500
4-Bromofluorobenzene	100		64 - 141					02/04/15 18:40	500

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-74493-1

Client Sample ID: Post-Carbon 1

Date Collected: 01/21/15 14:00 Date Received: 01/21/15 14:30 Lab Sample ID: 480-74495-1

Matrix: Wastewater

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

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

Method: 8021B - Volatile Organic Compounds (GC) - DL											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Benzene	6600	Н	100	12	ug/L			02/05/15 10:16	500		
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac		
a,a,a-Trifluorotoluene	102		63 - 145			-		02/05/15 10:16	500		
4-Bromofluorobenzene	103		64 - 141					02/05/15 10:16	500		

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-74493-1

Lab Sample ID: 480-74495-2

02/05/15 10:50

02/05/15 10:50

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 01/21/15 14:05 Date Received: 01/21/15 14:30

a,a,a-Trifluorotoluene

4-Bromofluorobenzene

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			02/04/15 19:49	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			02/04/15 19:49	50
Ethylbenzene	410		10	1.4	ug/L			02/04/15 19:49	50
Isopropylbenzene	2.5	J	10	1.4	ug/L			02/04/15 19:49	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			02/04/15 19:49	50
m,p-Xylene	8.5	J	20	2.7	ug/L			02/04/15 19:49	50
n-Butylbenzene	ND		10	1.5	ug/L			02/04/15 19:49	50
n-Propylbenzene	ND		10	6.5	ug/L			02/04/15 19:49	50
o-Xylene	15		10	1.4	ug/L			02/04/15 19:49	50
p-Cymene	ND		10	1.5	ug/L			02/04/15 19:49	50
sec-Butylbenzene	ND		10	1.0	ug/L			02/04/15 19:49	50
Toluene	970		10	1.8	ug/L			02/04/15 19:49	50
Xylenes, Total	24		20	2.7	ug/L			02/04/15 19:49	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145			_		02/04/15 19:49	50
4-Bromofluorobenzene	99		64 - 141					02/04/15 19:49	50
Method: 8021B - Volatile Orga	nic Compounds ((GC) - DL							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6700	Н	100	12	ug/L			02/05/15 10:50	500

63 - 145

64 - 141

102

103

2

4

J

9

10

500

4

Client: New York State D.E.C.

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

Client Sample ID: Post-Carbon 3

Date Collected: 01/21/15 14:10 Date Received: 01/21/15 14:30 Lab Sample ID: 480-74495-3

Matrix: Water

6

7

9

11

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	MD		1.0	0.82	ug/L			02/03/15 10:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/03/15 10:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/03/15 10:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/03/15 10:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/03/15 10:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/03/15 10:41	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			02/03/15 10:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/03/15 10:41	1
2-Hexanone	ND		5.0	1.2	ug/L			02/03/15 10:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/03/15 10:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/03/15 10:41	1
Acetone	ND		10	3.0	ug/L			02/03/15 10:41	1
Benzene	0.43	J	1.0	0.41	ug/L			02/03/15 10:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/03/15 10:41	1
Bromoform	ND		1.0	0.26	ug/L			02/03/15 10:41	1
Bromomethane	ND		1.0	0.69	ug/L			02/03/15 10:41	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/03/15 10:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/03/15 10:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/03/15 10:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/03/15 10:41	1
Chloroethane	ND		1.0	0.32	ug/L			02/03/15 10:41	1
Chloroform	1.9		1.0	0.34	ug/L			02/03/15 10:41	1
Chloromethane	ND		1.0	0.35	ug/L			02/03/15 10:41	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/03/15 10:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/03/15 10:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/03/15 10:41	1
Styrene	ND		1.0	0.73	ug/L			02/03/15 10:41	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/03/15 10:41	1
Toluene	ND		1.0	0.51	ug/L			02/03/15 10:41	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/03/15 10:41	1
Trichloroethene	ND		1.0	0.46	ug/L			02/03/15 10:41	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/03/15 10:41	1
Vinyl acetate	ND		5.0	0.85	ug/L			02/03/15 10:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/03/15 10:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analvzed	Dil Fac

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

Method: 8021B -	Volatile Organic	Compounds	(GC)
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Method. 002 1D - Volatile Orga	inc compounds (GO)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/04/15 20:23	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/04/15 20:23	1
Benzene	0.52		0.20	0.023	ug/L			02/04/15 20:23	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/04/15 20:23	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/04/15 20:23	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/04/15 20:23	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/04/15 20:23	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/04/15 20:23	1

TestAmerica Buffalo

Client: New York State D.E.C.

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

Lab Sample ID: 480-74495-3

Analyzed

01/22/15 10:39

TestAmerica Job ID: 480-74493-1

Matrix: Water

Client	Sample	e ID:	Post-	Carbon	3

Date Collected: 01/21/15 14:10 Date Received: 01/21/15 14:30

Analyte

рН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			02/04/15 20:23	1
o-Xylene	ND		0.20	0.027	ug/L			02/04/15 20:23	1
p-Cymene	ND		0.20	0.030	ug/L			02/04/15 20:23	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/04/15 20:23	1
Toluene	ND		0.20	0.036	ug/L			02/04/15 20:23	1
Xylenes, Total	ND		0.40	0.054	ug/L			02/04/15 20:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145					02/04/15 20:23	1
4-Bromofluorobenzene	99		64 - 141					02/04/15 20:23	1
- Method: 200.7 Rev 4.4 - Met	als (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	170		50.0	19.3	ug/L		01/23/15 10:15	01/23/15 16:22	1
- General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
							01/26/15 19:00	01/27/15 10:55	

RL

0.100

RL Unit

0.100 SU

D

Prepared

Result Qualifier

7.44 HF

Dil Fac

Client: New York State D.E.C.

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

Client Sample ID: Pre-Carbon

Date Collected: 01/21/15 13:30 Date Received: 01/21/15 14:30 Lab Sample ID: 480-74493-1

Matrix: Wastewater

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

Client Sample ID: Outside Sump

Date Collected: 01/21/15 13:30

Date Received: 01/21/15 14:30

Lab Sample ID: 480-74493-2

Matrix: Water

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

Client Sample ID: Post-Carbon 1

Date Collected: 01/21/15 14:00

Date Received: 01/21/15 14:30

Lab Sample ID: 480-74495-1

Matrix: Wastewater

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

Client Sample ID: Post-Carbon 2

Date Collected: 01/21/15 14:05

Date Received: 01/21/15 14:30

Lab	Samp	le ID:	480-7	4495-2
	Camp		100 1	

Matrix: Water

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

Client Sample ID: Post-Carbon 3

Date Collected: 01/21/15 14:10

Date Received: 01/21/15 14:30

Lab Sample ID: 480-74495-3

Matrix: Water

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

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.

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

Laboratory References:

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

TestAmerica Job ID: 480-74493-1

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Certification Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-74493-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-15 *
The following analytes a	are included in this report, bu	t certification is not offere	d by the governing a	uthority:	
Analysis Method	Prep Method	Matrix	Analyt	е	
8021B		Wastewater	m,p-X	ylene	
8021B		Wastewater	o-Xyle	ne	
8021B		Water	m,p-X	ylene	
8021B		Water	o-Xyle	ne	
8260C		Water	1,2-Di	chloroethene, Total	
SM 4500 H+ B		Water	pН		

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

Method Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-74493-1

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

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

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Chain of Custody Record



Phone 480-74493 Chain of Custody	Sampler:	21<1		Lab		'					C	Carrier '	Frackir	g No(s):			COC No:	VALUADOS (AL CES
Cliet 480-74493 Chain of Custody	Sampler: Phone: 71 6 80	1100		FISC E-Ma		Brian J					\dashv	-						480-43989-1176.1 Page:	
Thomas Palmer	716 80	50 49	34	bria	n.fische	r@tes	tame	ricain	c.com								!	Page 1 of 1	
Company: Groundwater & Environmental Services Inc									Anal	ysis	Requ	ıeste	d				Ţ	Job#:	
Address: 495 Aero Drive Suite 3	Due Date Requeste	ed:		·	7 33				102							× ::		Preservation Cod	es:
City:	TAT Requested (da	ıys):							ಶ									A - HCL B - NaOH	M - Hexane N - None
Cheektowaga		N						1	8							38	(A)	C - Zn Acetate D - Nitric Acid	O - AsNaO2 P - Na2O4S
State, Zip: NY, 14225	 	y					- 1		12.0									E - NaHSO4	Q - Na2SO3
Phone:	PO#: Purchase Order	not roquir						-	3								»′ [F - MeOH G - Amchlor	R - Na2S2SO3 S - H2SO4
Email:	WO#:	not requir			-8			,	53									H - Ascorbic Acid I - Ice	T - TSP Dodecahydi U - Acetone
palmer@gesonline.com					5 Q	thod	Ì		ISTANCS									J - DI Water K - EDTA	V - MCAA W - ph 4-5
Project Name: NYSDEC - Gastown WWTP/Gastown Event Desc: Mthly Pre-Car	Project#: 48002525					Local Method	P P	[م]										L-EDA	Z - other (specify)
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New York	<u> </u>				S S	οg	Pog		3								٤		
			Sample	Matrix (w=water,	eld Filtered erform MS/N	يو- (ز	- (MOD) Local Method	Alkatinity,	2								Total Number		
		Sample	Type (C≃comp,	S=solid, O=waste/oil,	Field Fill	300.0_28D	5-1	2. A	202	1			ı				ᇎ		
Sample Identification	Sample Date	Time	G=grab)	BT=Tissue, A=Air) £ 2												2	Special Ins	tructions/Note:
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Possible Hazard Identification			<u>i</u>		1 Sa	mple	Disn	osal (A fee	mav l	e ass	esse	if sa	mple	s are	retain	ed	longer than 1 m	onth)
Non-Hazard Flammable Skin Irritant Poison	B Unknow	n Rad	liological			\Box_{Re}	turn	To Cli	ent		Dis	posal	By La	b		Arch	ive	l onger than 1 m For	Months
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2/6/2015

Tees∆merica Buffalo

Chain of Custody Record



THE LEADER IN PRIVACHINENTAL TESTING Carrier Tracking No(s): COC No: Fischer, Brian J 480-43997-1177.1 8G0 4934 brian.fischer@testamericainc.com Page 1 of 1 Company: Job#: **Analysis Requested** Groundwater & Environmental Services Inc Due Date Requested: Preservation Codes: 495 Aero Drive Suite 3 A - HCL M - Hexane TAT Requested (days): B - NaOH N - None Cheektowaga C - Zn Acetate O - AsNaO2 State, Zip: D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 NY, 14225 R - Na2S2SO3 F - MeOH PO#: Phone: G - Amchlor S - H2SO4 8021B - (MOD) STARS List - VOA - 8021 Purchase Order not requir H - Ascorbic Acid T - TSP Dodecahydrate Perform, MS/MSD (Yes or No) U - Acetone J - DI Water V - MCAA tpalmer@gesonline.com 8260B - (MOD) TCL list OLM04.2 K-EDTA W-ph 4-5 Project#: Z - other (specify) L-EDA NYSDEC - Gastown WWTP/Gastown Event Desc: Mthly Post-C 48002525 Other: New York Total Number Matrix Sample (W=water, Type S=solid. Sample (C=comp, Sample Date Time G=grab) BT=Tissue, A=Ali Special Instructions/Note: Sample Identification Preservation Code: Post-Carbon 1400 G Water 6 N Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Possible Hazard Identification Disposal By Lab Non-Hazard Flammable Radiological Return To Client Archive For Skin Irritant Poison B Months Deliverable Requested: I, II, III, IV, Other (specify) Special Instructions/QC Requirements: Time: Empty Kit Relinquished by: Date: Company 1430 Relinquished by: Company Date/Time: Received by: Company Relinquished by: Custody Seals intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: Δ Yes Δ No

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-74493-1

Login Number: 74493 List Source: TestAmerica Buffalo

List Number: 1 Creator: Janish, Carl M

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.	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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Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-74493-1

Login Number: 74495 List Source: TestAmerica Buffalo

List Number: 1 Creator: Janish, Carl M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and he COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
/OA 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: 480-75579-1

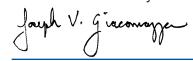
Client Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Sampling Event: Qtrly Post-Carbon Qtrly Pre-Carbon

For:

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

Attn: Mr. Glenn May



Authorized for release by: 3/2/2015 10:49:21 AM

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

Designee for

Brian Fischer, Manager of Project Management (716)504-9835

brian_fischer@testamericainc.com

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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.

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

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

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

TestAmerica Job ID: 480-75579-1

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

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Cover Page	1
Table of Contents	3
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Case Narrative	5
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Method Summary	18
Sample Summary	19
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Receipt Checklists	22

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-75579-1

Qualifiers

GC/MS VOA

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

GC VOA

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

Metals

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

General Chemistry

Qualifier	Qualifier Description
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.

Glossary

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

Case Narrative

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-75579-1

Job ID: 480-75579-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-75579-1

Receipt

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

GC/MS VOA

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

Method(s) 8260C: The laboratory control sample (LCS) for batch 228007 recovered outside control limits for the following analytes: Chloroethane, 1.1 Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

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

GC/MS Semi VOA

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch227638 recovered above the upper control limit for Benzo(k)fluoranthene. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: (CCVIS 480-227638/3).

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

HPLC/IC

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

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

GC VOA

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

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

GC Semi VOA

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

Metals

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

General Chemistry

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

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

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

Organic Prep

Case Narrative

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-75579-1

Job ID: 480-75579-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

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

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

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

Lab Sample ID: 480-75579-1

TestAmerica Job ID: 480-75579-1

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 02/18/15 15:55

Date Received: 02/18/15 16:30

Analyte	Result Qua	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	200	160	ug/L			02/19/15 19:32	200
1,1,2,2-Tetrachloroethane	ND	200	42	ug/L			02/19/15 19:32	200
1,1,2-Trichloroethane	ND	200	46	ug/L			02/19/15 19:32	200
1,1-Dichloroethane	ND	200	76	ug/L			02/19/15 19:32	200
1,1-Dichloroethene	ND	200	58	ug/L			02/19/15 19:32	200
1,2-Dichloroethane	ND	200	42	ug/L			02/19/15 19:32	200
1,2-Dichloroethene, Total	ND	400	160	ug/L			02/19/15 19:32	200
1,2-Dichloropropane	ND	200	140	ug/L			02/19/15 19:32	200
2-Hexanone	ND	1000	250	ug/L			02/19/15 19:32	200
2-Butanone (MEK)	ND	2000	260	ug/L			02/19/15 19:32	200
4-Methyl-2-pentanone (MIBK)	ND	1000	420	ug/L			02/19/15 19:32	200
Acetone	ND	2000	600	ug/L			02/19/15 19:32	200
Benzene	13000	200	82	ug/L			02/19/15 19:32	200
Bromodichloromethane	ND	200	78	ug/L			02/19/15 19:32	200
Bromoform	ND	200	52	ug/L			02/19/15 19:32	200
Bromomethane	ND	200	140	ug/L			02/19/15 19:32	200
Carbon disulfide	ND	200	38	ug/L			02/19/15 19:32	200
Carbon tetrachloride	ND	200	54	ug/L			02/19/15 19:32	200
Chlorobenzene	ND	200	150	ug/L			02/19/15 19:32	200
Dibromochloromethane	ND	200	64	ug/L			02/19/15 19:32	200
Chloroethane	ND	200	64	ug/L			02/19/15 19:32	200
Chloroform	87 J	200	68	ug/L			02/19/15 19:32	200
Chloromethane	ND	200	70	ug/L			02/19/15 19:32	200
cis-1,3-Dichloropropene	ND	200	72	ug/L			02/19/15 19:32	200
Ethylbenzene	1300	200	150	ug/L			02/19/15 19:32	200
Methylene Chloride	210	200	88	ug/L			02/19/15 19:32	200
Styrene	ND	200	150	ug/L			02/19/15 19:32	200
Tetrachloroethene	ND	200	72	ug/L			02/19/15 19:32	200
Toluene	3100	200	100	ug/L			02/19/15 19:32	200
trans-1,3-Dichloropropene	ND	200	74	ug/L			02/19/15 19:32	200
Trichloroethene	ND	200	92	ug/L			02/19/15 19:32	200
Vinyl chloride	ND	200	180	ug/L			02/19/15 19:32	200
Vinyl acetate	ND	1000	170	ug/L			02/19/15 19:32	200
Xylenes, Total	610	400	130	ug/L			02/19/15 19:32	200
Surrogate	%Recovery Qua	alifier Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	106	66 - 137			-		02/19/15 19:32	20
Toluene-d8 (Surr)	101	71 - 126					02/19/15 19:32	200
4-Bromofluorobenzene (Surr)	97	73 - 120					02/19/15 19:32	200

Method: 8021B - Volatile Organic (ompounds ((GC)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared
1,2,4-Trimethylbenzene	29	J	40	6.9	ug/L		

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

TestAmerica Buffalo

Analyzed

Dil Fac

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5

7

9

Client: New York State D.E.C.

Date Collected: 02/18/15 15:55

Date Received: 02/18/15 16:30

Sodium

Client Sample ID: Pre-Carbon

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

Lab Sample ID: 480-75579-1

TestAmerica Job ID: 480-75579-1

02/19/15 21:32

02/19/15 09:34

Matrix: Wastewater

Method: 8021B - Volatile Or	ganic Compounds	(GC) (Conti	nued)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		40	26	ug/L			02/19/15 11:41	200
o-Xylene	230		40	5.4	ug/L			02/19/15 11:41	200
p-Cymene	ND		40	5.9	ug/L			02/19/15 11:41	200
sec-Butylbenzene	ND		40	4.1	ug/L			02/19/15 11:41	200
Toluene	2600		40	7.1	ug/L			02/19/15 11:41	200
Xylenes, Total	610		80	11	ug/L			02/19/15 11:41	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	109		63 - 145					02/19/15 11:41	200
4-Bromofluorobenzene	110		64 - 141					02/19/15 11:41	200
- Method: 200.7 Rev 4.4 - Met	tals (ICP)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	136000		500	100	ug/L		02/19/15 09:34	02/19/15 21:32	1
Iron	2330		50.0	19.3	ug/L		02/19/15 09:34	02/19/15 21:32	1
Magnesium	101000		200	43.4	ug/L		02/19/15 09:34	02/19/15 21:32	1
Potassium	4640		500	100	ug/L		02/19/15 09:34	02/19/15 21:32	1

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

1000

67800

324 ug/L

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-75579-1

Lab Sample ID: 480-75579-2

Matrix: Water

Date Collected: 02/18/15 16:05 Date Received: 02/18/15 16:30

Client Sample ID: Inside Sump

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	120		40	6.9	ug/L			02/19/15 12:15	200
1,3,5-Trimethylbenzene	35	J	40	30	ug/L			02/19/15 12:15	200
Ethylbenzene	2100		40	5.7	ug/L			02/19/15 12:15	200
Isopropylbenzene	15	J	40	5.4	ug/L			02/19/15 12:15	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			02/19/15 12:15	200
m,p-Xylene	1200		80	11	ug/L			02/19/15 12:15	200
n-Butylbenzene	ND		40	6.2	ug/L			02/19/15 12:15	200
n-Propylbenzene	ND		40	26	ug/L			02/19/15 12:15	200
o-Xylene	ND		40	5.4	ug/L			02/19/15 12:15	200
p-Cymene	ND		40	5.9	ug/L			02/19/15 12:15	200
sec-Butylbenzene	ND		40	4.1	ug/L			02/19/15 12:15	200
Toluene	7400		40	7.1	ug/L			02/19/15 12:15	200
Xylenes, Total	1200		80	11	ug/L			02/19/15 12:15	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		63 - 145			-		02/19/15 12:15	200
4-Bromofluorobenzene	108		64 - 141					02/19/15 12:15	200

Method: 8021B - Volatile Or	ganic Compounds (GC) - DL							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	25000		200	23	ug/L			02/19/15 13:07	1000
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		63 - 145			-		02/19/15 13:07	1000
4-Bromofluorobenzene	109		64 - 141					02/19/15 13:07	1000

3/2/2015

Client: New York State D.E.C.

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

Client Sample ID: Post-Carbon-3

Date Collected: 02/18/15 15:30 Date Received: 02/18/15 16:30 Lab Sample ID: 480-75580-1

Matrix: Wastewater

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/21/15 04:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/21/15 04:34	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/21/15 04:34	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/21/15 04:34	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/21/15 04:34	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/21/15 04:34	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			02/21/15 04:34	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/21/15 04:34	1
2-Hexanone	ND		5.0	1.2	ug/L			02/21/15 04:34	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/21/15 04:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/21/15 04:34	1
Acetone	ND		10	3.0	ug/L			02/21/15 04:34	1
Benzene	ND		1.0	0.41	ug/L			02/21/15 04:34	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/21/15 04:34	1
Bromoform	ND		1.0	0.26	ug/L			02/21/15 04:34	1
Bromomethane	ND		1.0	0.69	ug/L			02/21/15 04:34	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/21/15 04:34	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/21/15 04:34	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/21/15 04:34	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/21/15 04:34	1
Chloroethane	ND		1.0	0.32	ug/L			02/21/15 04:34	1
Chloroform	ND		1.0	0.34	ug/L			02/21/15 04:34	1
Chloromethane	ND		1.0	0.35	ug/L			02/21/15 04:34	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/21/15 04:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/21/15 04:34	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/21/15 04:34	1
Styrene	ND		1.0	0.73	ug/L			02/21/15 04:34	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/21/15 04:34	1
Toluene	ND		1.0	0.51	ug/L			02/21/15 04:34	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/21/15 04:34	1
Trichloroethene	ND		1.0	0.46	ug/L			02/21/15 04:34	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/21/15 04:34	1
Vinyl acetate	ND		5.0	0.85	ug/L			02/21/15 04:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/21/15 04:34	1

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

Method: 8270D - Semivolatile	Organic Compounds (GC/MS	S)						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND ND	4.9	0.59	ug/L		02/19/15 08:30	02/20/15 13:22	1
Acenaphthene	ND	4.9	0.40	ug/L		02/19/15 08:30	02/20/15 13:22	1
Acenaphthylene	ND	4.9	0.38	ug/L		02/19/15 08:30	02/20/15 13:22	1
Anthracene	ND	4.9	0.28	ug/L		02/19/15 08:30	02/20/15 13:22	1
Benzo[a]anthracene	ND	4.9	0.36	ug/L		02/19/15 08:30	02/20/15 13:22	1
Benzo[a]pyrene	ND	4.9	0.46	ug/L		02/19/15 08:30	02/20/15 13:22	1
Benzo[b]fluoranthene	ND	4.9	0.34	ug/L		02/19/15 08:30	02/20/15 13:22	1
Benzo[g,h,i]perylene	ND	4.9	0.35	ug/L		02/19/15 08:30	02/20/15 13:22	1

TestAmerica Buffalo

Client: New York State D.E.C.

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

Client Sample ID: Post-Carbon-3

Date Collected: 02/18/15 15:30 Date Received: 02/18/15 16:30

p-Terphenyl-d14 Phenol-d5

a,a,a-Trifluorotoluene

4-Bromofluorobenzene

Lab Sample ID: 480-75580-1

02/20/15 13:22

02/19/15 08:30

Matrix: Wastewater

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		4.9	0.72	ug/L		02/19/15 08:30	02/20/15 13:22	1
Biphenyl	ND		4.9	0.64	ug/L		02/19/15 08:30	02/20/15 13:22	1
Bis(2-ethylhexyl) phthalate	ND		4.9	1.8	ug/L		02/19/15 08:30	02/20/15 13:22	1
Carbazole	ND		4.9	0.30	ug/L		02/19/15 08:30	02/20/15 13:22	1
Chrysene	ND		4.9	0.33	ug/L		02/19/15 08:30	02/20/15 13:22	1
Dibenz(a,h)anthracene	ND		4.9	0.41	ug/L		02/19/15 08:30	02/20/15 13:22	1
Dibenzofuran	ND		9.9	0.50	ug/L		02/19/15 08:30	02/20/15 13:22	1
Fluoranthene	ND		4.9	0.39	ug/L		02/19/15 08:30	02/20/15 13:22	1
Fluorene	ND		4.9	0.36	ug/L		02/19/15 08:30	02/20/15 13:22	1
Indeno[1,2,3-cd]pyrene	ND		4.9	0.46	ug/L		02/19/15 08:30	02/20/15 13:22	1
Naphthalene	ND		4.9	0.75	ug/L		02/19/15 08:30	02/20/15 13:22	1
Pentachlorophenol	ND		9.9	2.2	ug/L		02/19/15 08:30	02/20/15 13:22	1
Phenanthrene	ND		4.9	0.43	ug/L		02/19/15 08:30	02/20/15 13:22	1
Phenol	ND		4.9	0.38	ug/L		02/19/15 08:30	02/20/15 13:22	1
Pyrene	ND		4.9	0.34	ug/L		02/19/15 08:30	02/20/15 13:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	100		52 - 132				02/19/15 08:30	02/20/15 13:22	1
2-Fluorobiphenyl	93		48 - 120				02/19/15 08:30	02/20/15 13:22	1
2-Fluorophenol	60		20 - 120				02/19/15 08:30	02/20/15 13:22	1
Nitrobenzene-d5	89		46 - 120				02/19/15 08:30	02/20/15 13:22	1

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

67 - 150

16 - 120

103

47

110

110

Method: 608 - Organochlorine Pes	ticides in Wa	ter							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.048	0.0064	ug/L		02/19/15 08:20	02/20/15 10:13	1
alpha-BHC	ND		0.048	0.0064	ug/L		02/19/15 08:20	02/20/15 10:13	1
beta-BHC	ND		0.048	0.024	ug/L		02/19/15 08:20	02/20/15 10:13	1

63 - 145

64 - 141

TestAmerica Buffalo

02/19/15 15:00

02/19/15 15:00

Client: New York State D.E.C.

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

Lab Sample ID: 480-75580-1

TestAmerica Job ID: 480-75579-1

Matrix: Wastewater

Client Sample ID: Post-Carbon-3

Date Collected: 02/18/15 15:30 Date Received: 02/18/15 16:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.048	0.0096	ug/L		02/19/15 08:20	02/20/15 10:13	1
gamma-BHC (Lindane)	ND		0.048	0.0058	ug/L		02/19/15 08:20	02/20/15 10:13	1
Chlordane (technical)	ND		0.48	0.28	ug/L		02/19/15 08:20	02/20/15 10:13	1
4,4'-DDD	ND		0.048	0.0089	ug/L		02/19/15 08:20	02/20/15 10:13	1
4,4'-DDE	ND		0.048	0.011	ug/L		02/19/15 08:20	02/20/15 10:13	1
4,4'-DDT	ND		0.048	0.011	ug/L		02/19/15 08:20	02/20/15 10:13	1
Dieldrin	ND		0.048	0.0095	ug/L		02/19/15 08:20	02/20/15 10:13	1
Endosulfan I	ND		0.048	0.011	ug/L		02/19/15 08:20	02/20/15 10:13	1
Endosulfan II	ND		0.048	0.012	ug/L		02/19/15 08:20	02/20/15 10:13	1
Endosulfan sulfate	ND		0.048	0.015	ug/L		02/19/15 08:20	02/20/15 10:13	1
Endrin	ND		0.048	0.013	ug/L		02/19/15 08:20	02/20/15 10:13	1
Endrin aldehyde	ND		0.048	0.016	ug/L		02/19/15 08:20	02/20/15 10:13	1
Heptachlor	ND		0.048	0.0082	ug/L		02/19/15 08:20	02/20/15 10:13	1
Heptachlor epoxide	ND		0.048	0.0051	ug/L		02/19/15 08:20	02/20/15 10:13	1
Toxaphene	ND		0.48	0.12	ug/L		02/19/15 08:20	02/20/15 10:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	87		23 - 120				02/19/15 08:20	02/20/15 10:13	1
Tetrachloro-m-xylene	74		36 - 120				02/19/15 08:20	02/20/15 10:13	1
- Method: 200.7 Rev 4.4 - Metals	(ICP)								
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.7	J	10.0	5.6	ug/L		02/19/15 09:34	02/19/15 21:35	1
Iron	27.2	J	50.0	19.3	ug/L		02/19/15 09:34	02/19/15 21:35	1
Manganese	383		3.0	0.40	ug/L		02/19/15 09:34	02/19/15 21:35	1
Zinc	ND		10.0	1.5	ug/L		02/19/15 09:34	02/19/15 21:35	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0		mg/L		02/25/15 03:06	02/25/15 03:36	1

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

Client: New York State D.E.C.

Date Received: 02/18/15 16:30

4-Bromofluorobenzene

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

TestAmerica Job ID: 480-75579-1

Lab Sample ID: 480-75580-2

02/19/15 15:34

Matrix: Water

Client Sample ID: Post-Carbon-2 Date Collected: 02/18/15 15:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/19/15 15:34	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/19/15 15:34	1
Benzene	2.2		0.20	0.023	ug/L			02/19/15 15:34	1
Ethylbenzene	0.099	J	0.20	0.029	ug/L			02/19/15 15:34	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/19/15 15:34	1
Methyl tert-butyl ether	0.19	J	0.40	0.044	ug/L			02/19/15 15:34	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/19/15 15:34	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/19/15 15:34	1
n-Propylbenzene	ND		0.20	0.13	ug/L			02/19/15 15:34	1
o-Xylene	ND		0.20	0.027	ug/L			02/19/15 15:34	1
p-Cymene	ND		0.20	0.030	ug/L			02/19/15 15:34	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/19/15 15:34	1
Toluene	0.16	J	0.20	0.036	ug/L			02/19/15 15:34	1
Xylenes, Total	ND		0.40	0.054	ug/L			02/19/15 15:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene			63 - 145			-		02/19/15 15:34	

64 - 141

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-75579-1

Lab Sample ID: 480-75580-3

. Matrix: Water

Client Sample ID: Post-Carbon-1 Date Collected: 02/18/15 15:45

Date Received: 02/18/15 16:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		20	3.5	ug/L			02/19/15 16:08	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			02/19/15 16:08	100
Benzene	3400		20	2.3	ug/L			02/19/15 16:08	100
Ethylbenzene	110		20	2.9	ug/L			02/19/15 16:08	100
Isopropylbenzene	ND		20	2.7	ug/L			02/19/15 16:08	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			02/19/15 16:08	100
m,p-Xylene	33	J	40	5.4	ug/L			02/19/15 16:08	100
n-Butylbenzene	ND		20	3.1	ug/L			02/19/15 16:08	100
n-Propylbenzene	ND		20	13	ug/L			02/19/15 16:08	100
o-Xylene	20		20	2.7	ug/L			02/19/15 16:08	100
p-Cymene	ND		20	3.0	ug/L			02/19/15 16:08	100
sec-Butylbenzene	ND		20	2.0	ug/L			02/19/15 16:08	100
Toluene	330		20	3.6	ug/L			02/19/15 16:08	100
Xylenes, Total	53		40	5.4	ug/L			02/19/15 16:08	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	108		63 - 145			-		02/19/15 16:08	100
4-Bromofluorobenzene	108		64 - 141					02/19/15 16:08	100

Lab Chronicle

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-75579-1

Lab Sample ID: 480-75579-1

Matrix: Wastewater

Client Sample ID: Pre-Carbon

Date Collected: 02/18/15 15:55 Date Received: 02/18/15 16:30

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

Client Sample ID: Inside Sump

Date Collected: 02/18/15 16:05 Date Received: 02/18/15 16:30 Lab Sample ID: 480-75579-2

Matrix: Water

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

Client Sample ID: Post-Carbon-3

Date Collected: 02/18/15 15:30 Date Received: 02/18/15 16:30

Lab	Samp	ie	:טו	48	U- /	5580	-1
			104	i \	Ma	-4	

Matrix: Wastewater

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

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Lab Chronicle

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-75579-1

Lab Sample ID: 480-75580-2

Matrix: Water

Date Collected: 02/18/15 15:40 Date Received: 02/18/15 16:30

Client Sample ID: Post-Carbon-2

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

Client Sample ID: Post-Carbon-1 Lab Sample ID: 480-75580-3

Date Collected: 02/18/15 15:45 Matrix: Water

Date Received: 02/18/15 16:30

Batch Dilution Batch Prepared Method Factor Number Prep Type Туре Run or Analyzed Analyst Lab 8021B TAL BUF Total/NA Analysis 100 227434 02/19/15 16:08 MAN

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date		
New York	NELAP		2	10026	03-31-15 *		
The following analytes a	are included in this report, bu	t certification is not offere	d by the governing a	uthority:			
Analysis Method	Prep Method	Matrix	Analyte	е			
8021B		Wastewater	m,p-Xy	ylene			
8021B		Wastewater	o-Xyle	ne			
8021B		Water	m,p-Xy	ylene			
8021B		Water	o-Xyle				
8260C		Wastewater	1,2-Dio	chloroethene, Total			
SM 4500 H+ B		Wastewater	pH				

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

Method Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-75579-1

/lethod	Method Description	Protocol	Laboratory
3260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
3270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8021B	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
00.0	Anions, Ion Chromatography	MCAWW	TAL BUF
10.2	Alkalinity	MCAWW	TAL BUF
35.4	Cyanide, Total	MCAWW	TAL BUF
20.4	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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

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

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TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Chain of Custody Record



Phone (716) 691-2600 Fax (716) 691-7991																				
Client Information		2mar		Fis		, Bria	rian J				Ca	Carrier Tracking No(s):					COC No: 480-61872-15806.2			
Client Contact: Thomas Palmer	Phone: (716	7866-5	3590	E-M bria		schen	er@testamericainc.com								Page: Page 2 of 2					
Company: Groundwater & Environmental Services Inc							Analysis Requested									Job#:				
Address: 495 Aero Drive Suite 3	Due Date Request	ed:			7 (A) (A) (A) (A) (A) (A) (A) (A) (A) (A)		- 5	\$	6,	तु								Preservation Co	des: M - Hexane	
City: Cheektowaga	TAT Requested (da	ays):					Mahon	=	3	\$								B - NaOH	N - None	1
Orieentowaga State, Zip: NY, 14225		10 db	55				meshard	L131-101/202	Z)							C - Zn Acetate D - Nitric Acid E - NaHSO4	O - AsNaO2 P - Na2O4S Q - Na2SO3	,		
Phone:	PO#:	<u>`</u>	<u> </u>				1	Š	13	色	(O)						i i	F - MeOH G - Amchlor	R - Na2S2S0 S - H2SO4	
Email: tpalmer@gesonline.com	Callout# 120597 WO #:				or No)	(0)	/Now)		Tel List olmora	STARS							\$	H - Ascorbic Acid I - Ice J - DI Water	T - TSP Dode U - Acetone V - MCAA	
Project Name:	Project#:				(Yes		3		\ <u> </u>] ما	3						ainer	K-EDTA L-EDA	W - ph 4-5 Z - other (spe	ecify)
NYSDEC-Gastown WWTP: Site# 91517: QTRLY Event Desc: Qu Site:	48002525 SSOW#:					٤] 9	دسک ا ف	CMOD	á.	PHKalmly						containers	Other:		
New York	<u> </u>			, 	d Sam	GS.	F 20	i S		2	4	-					5	ă		
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, S=solid, O=waste/oil, BT=Tissue, A=Air	Field Filtere	Perform MS/MSD (Yes of No)	400 C	2007		81608	310.0						Total Number	Special Ir	nstructions/N	Note:
The state of the s			Preserva	ation Code:	X			(D			N .	41. 990 P 5 Y					X	(S = S		
Pre-Carbon	218-15	1555	G	Water	N	T	1	</td <td>X</td> <td>X;</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>7</td> <td>9</td> <td></td> <td></td> <td></td>	X	X;	X					7	9			
Post Carbon Inside Surp	1	1605	上	Water	N	W	T	\top		X			\top			\top	3			
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Possible Hazard Identification Non-Hazard Flammable Skin Irritant Poison	B Unknow	n Rac	diological			Sam	nple Di Retu	sposa ım To	al (A i	fee ma			ssed if sal By		les ar			d longer than 1 m	nonth) Months	
Deliverable Requested: I, II, III, IV, Other (specify)							cial Ins													
Empty Kit Relinquished by:		Date:			Tir	me:							Meth	nod of Sh	nipment					
Relinquished by: MwwWWW	Date/Time:	1 16	30	Company	<u></u>		Receive		ري'	21	18	115	- 1 (⊉كم	ate/Tim	<u> </u>	No	orkow		4-
Relinquished by:	Date/Time:	-		Company	_	F	Receive	d by:							Date/Tim	ie:			Company	
Relinquished by:	Date/Time:			Company		1	Receive	d by:							Date/Tim	ie:			Company	
Custody Seals Intact: Custody Seal No.:						- (Cooler T	етрет	ature(s)	°C and	Other	Remark	ks:	1	ŧЦ	井	3)	FCE		

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Chain of Custody Record



Phone (716) 691-2600 Fax (716) 691-7991 COC No: Carrier Tracking No(s): 480-61872-15806.1 Fischer, Brian J Client Information Client Contact Phone: (716)866-3590 Page: Thomas Palmer brian.fischer@testamericainc.com Page 1 of 2 Company: Job#: **Analysis Requested** Groundwater & Environmental Services Inc Due Date Requested: Preservation Codes: 495 Aero Drive Suite 3 A - HCL M - Heyane TAT Requested (days): B - NaOH N - None 古-+ Cheektowaga C - Zn Acetate O - AsNaO2 10 D - Nitric Acid P - Na2O4S State, Zip: E - NaHSO4 Q - Na2SO3 NY, 14225 F - MeOH R - Na2S2SO3 Phone: PO#: G - Amchlor S - H2\$O4 Callout# 120597 SM4500 608_Pest - Priority Pollutant Pesticides H - Ascorbic Acid T - TSP Dodecahydrate 2540C_Calcd - Total Dissolved Solids 8270C - (MOD) TCL SVOA - OLM04.2 420.4 - Phenolics, Total Recoverable Email: WO#; - ice U - Acetone Total Number of Containers of Perform MS/MSD (Yes or No) 8021B - (MOD) STARS List - VOA J - DI Water V - MCAA tpalmer@gesonline.com 8260B - (MOD) TCL list OLM04.2 2540D - Total Suspended Solids W - ph 4-5 K-EDTA Project Name: Project #: 200.7 - (MOD) Local Method L-EDA Z - other (specify) 1664A_Calc - Oli & Grease NYSDEC-Gastown WWTP: Site# 91517: QTRLY Event Desc: Qu 48002525 340-2-Alkalinity, Fotal SOW#: 335.4 - Cyanide, Total New York Matrix Sample (W=water, S=solid, Type (C=comp, Sample Sample Date Sample Identification Time G=grab) BT=Tissue, A=Air Special Instructions/Note: Preservation Code: Wate XXXXX Post-Carbon -3 XX 6 2-18-15 1530 N Water X 1540 Post-Carbon-X 1545 480-75580 Chain of Custody Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Possible Hazard Identification Non-Hazard Flammable Radiological Return To Client Disposal By Lab Archive For Skin Imitant Deliverable Requested: I, II, III, IV, Other (specify) Special Instructions/QC Requirements: Method of Shipment. Date: Time: Empty Kit Relinquished by: 1630 Company Received by: Relinquished by: Received by: Relinguished by: Company Date/Time: Company Date/Time: Company Received by: Date/Time: Company Relinquished by: Cooler Temperature(s) °C and Other Remarks: Custody Seals Intact: Custody Seal No.: #3 ICE ∆ Yes ∆ No





Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-75579-1

Login Number: 75579 List Source: TestAmerica Buffalo

List Number: 1 Creator: Kolb, Chris M

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

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Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-75579-1

Login Number: 75580 List Source: TestAmerica Buffalo

List Number: 1 Creator: Kolb, Chris M

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

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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: 480-76820-1

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

Sampling Event: Monthly

For:

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

Attn: Mr. Glenn May



Authorized for release by: 4/3/2015 11:44:45 AM

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

Designee for

Brian Fischer, Manager of Project Management (716)504-9835

brian.fischer@testamericainc.com

.....LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com

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

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

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

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

Joseph V. giveonogen

Joe Giacomazza

Project Management Assistant II

. 4/3/2015 11:44:45 AM 6

C

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TestAmerica Job ID: 480-76820-1

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

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-76820-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F0	MOMOD DDD accessed accepted limite

F2 MS/MSD RPD exceeds control limits

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

GC VOA

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

General Chemistry

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

Glossary

Abbreviation	Those commonly	used abbroviations may	or may not be	procent in this report
Appreviation	These commonly	/ used abbreviations may	or may not be	present in this report.

Example 2 Listed under the "D" column to designate that the result is reported on a dry weight basis

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

DER Duplicate error ratio (normalized absolute difference)

Dil Fac Dilution Factor

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

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

MDL Method Detection Limit

ML Minimum Level (Dioxin)

NC Not Calculated

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

PQL Practical Quantitation Limit

QC Quality Control
RER Relative error ratio

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

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TestAmerica Buffalo

Case Narrative

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-76820-1

Job ID: 480-76820-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-76820-1

Receipt

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

GC/MS VOA

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

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

HPLC/IC

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

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

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

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

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

GC VOA

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

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

Metale

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

General Chemistry

Method(s) 335.4: The matrix spike (MS/MSD) precision for batch 232895 was outside control limits. Non-homogeneity are suspected. 2015-00752 WNSP001 (480-76922-3 MSD)

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

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

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

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TestAmerica Buffalo 4/3/2015

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

Client Sample ID: Pre-Carbon

Date Collected: 03/18/15 12:45 Date Received: 03/18/15 13:20

4-Bromofluorobenzene (Surr)

Lab Sample ID: 480-76820-1

Matrix: Wastewater

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	MD		100	82	ug/L			03/23/15 12:51	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			03/23/15 12:51	100
1,1,2-Trichloroethane	ND		100	23	ug/L			03/23/15 12:51	100
1,1-Dichloroethane	ND		100	38	ug/L			03/23/15 12:51	100
1,1-Dichloroethene	ND		100	29	ug/L			03/23/15 12:51	100
1,2-Dichloroethane	ND		100	21	ug/L			03/23/15 12:51	100
1,2-Dichloroethene, Total	ND		200	81	ug/L			03/23/15 12:51	100
1,2-Dichloropropane	ND		100	72	ug/L			03/23/15 12:51	100
2-Hexanone	ND		500	120	ug/L			03/23/15 12:51	100
2-Butanone (MEK)	ND		1000	130	ug/L			03/23/15 12:51	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			03/23/15 12:51	100
Acetone	ND		1000	300	ug/L			03/23/15 12:51	100
Benzene	3900		100	41	ug/L			03/23/15 12:51	100
Bromodichloromethane	ND		100	39	ug/L			03/23/15 12:51	100
Bromoform	ND		100	26	ug/L			03/23/15 12:51	100
Bromomethane	ND	F2	100	69	ug/L			03/23/15 12:51	100
Carbon disulfide	ND		100	19	ug/L			03/23/15 12:51	100
Carbon tetrachloride	ND		100	27	ug/L			03/23/15 12:51	100
Chlorobenzene	ND		100	75	ug/L			03/23/15 12:51	100
Dibromochloromethane	ND		100	32	ug/L			03/23/15 12:51	100
Chloroethane	ND		100	32	ug/L			03/23/15 12:51	100
Chloroform	ND		100	34	ug/L			03/23/15 12:51	100
Chloromethane	ND		100	35	ug/L			03/23/15 12:51	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			03/23/15 12:51	100
Ethylbenzene	260		100	74	ug/L			03/23/15 12:51	100
Methylene Chloride	ND		100	44	ug/L			03/23/15 12:51	100
Styrene	ND		100	73	ug/L			03/23/15 12:51	100
Tetrachloroethene	ND		100	36	ug/L			03/23/15 12:51	100
Toluene	1100		100	51	ug/L			03/23/15 12:51	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			03/23/15 12:51	100
Trichloroethene	ND		100	46	ug/L			03/23/15 12:51	100
Vinyl chloride	ND		100	90	ug/L			03/23/15 12:51	100
Vinyl acetate	ND		500	85	ug/L			03/23/15 12:51	100
Xylenes, Total	110	J	200	66	ug/L			03/23/15 12:51	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		66 - 137			-		03/23/15 12:51	100
Toluene-d8 (Surr)	105		71 - 126					03/23/15 12:51	100

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

73 - 120

100

TestAmerica Buffalo

03/23/15 12:51

100

Page 6 of 19

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Client: New York State D.E.C.

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

TestAmerica Job ID: 480-76820-1

Lab Sample ID: 480-76820-1

Matrix: Wastewater

Client Sample ID: Pre-C	Carbon
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Date Collected: 03/18/15 12:45 Date Received: 03/18/15 13:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		40	26	ug/L			03/19/15 19:38	200
o-Xylene	64		40	5.4	ug/L			03/19/15 19:38	200
p-Cymene	ND		40	5.9	ug/L			03/19/15 19:38	200
sec-Butylbenzene	ND		40	4.1	ug/L			03/19/15 19:38	200
Toluene	840		40	7.1	ug/L			03/19/15 19:38	200
Xylenes, Total	170		80	11	ug/L			03/19/15 19:38	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145					03/19/15 19:38	200
4-Bromofluorobenzene	98		64 - 141					03/19/15 19:38	200
- Method: 200.7 Rev 4.4 - Met	tals (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	127000		500	100	ug/L		03/23/15 08:20	03/23/15 20:57	1
Iron	799		50.0	19.3	ug/L		03/23/15 08:20	03/23/15 20:57	1

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

seneral Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		5.0	2.8	mg/L			04/01/15 19:22	10
Sulfate	109		20.0	3.5	mg/L			03/31/15 12:53	10
Alkalinity, Total	486		100	40.0	mg/L			03/31/15 11:03	10
	analyte Chloride Gulfate	nalyte Result Chloride 131 Gulfate 109	Analyte Result Qualifier Chloride 131 Sulfate 109	Analyte Result 20 Qualifier RL 31 Chloride 131 5.0 Sulfate 109 20.0	Analyte Result 2016 Qualifier RL 2016 MDL 3.8 Chloride 3.13 5.0 2.8 Sulfate 3.0 3.5 3.5	Analyte Result chloride Qualifier RL mg/L MDL mg/L Unit Shloride 131 5.0 2.8 mg/L mg/L Sulfate 109 20.0 3.5 mg/L	Analyte Result chloride Qualifier RL mg/L MDL mg/L Unit mg/L D Shloride 131 5.0 2.8 mg/L Sulfate 109 20.0 3.5 mg/L	Analyte Result chloride Qualifier RL prepared MDL prepared Unit prepared D prepared Shloride 131 5.0 2.8 mg/L mg/L Sulfate 109 20.0 3.5 mg/L	Analyte Result chloride Qualifier RL chloride MDL chloride Unit chloride D chloride Prepared chloride Analyzed chloride Sulfate 109 20.0 3.5 mg/L 04/01/15 19:22 03/31/15 12:53

Client: New York State D.E.C.

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

Client Sample ID: Post-Carbon-3

Date Collected: 03/18/15 12:30 Date Received: 03/18/15 13:20 Lab Sample ID: 480-76820-2

Matrix: Wastewater

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	1.0	0.82	ug/L			03/23/15 13:15	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			03/23/15 13:15	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			03/23/15 13:15	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			03/23/15 13:15	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			03/23/15 13:15	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			03/23/15 13:15	1
1,2-Dichloroethene, Total	ND	2.0	0.81	ug/L			03/23/15 13:15	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			03/23/15 13:15	1
2-Hexanone	ND	5.0	1.2	ug/L			03/23/15 13:15	1
2-Butanone (MEK)	ND	10	1.3	ug/L			03/23/15 13:15	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			03/23/15 13:15	1
Acetone	ND	10	3.0	ug/L			03/23/15 13:15	1
Benzene	ND	1.0	0.41	ug/L			03/23/15 13:15	1
Bromodichloromethane	ND	1.0	0.39	ug/L			03/23/15 13:15	1
Bromoform	ND	1.0	0.26	ug/L			03/23/15 13:15	1
Bromomethane	ND	1.0	0.69	ug/L			03/23/15 13:15	1
Carbon disulfide	ND	1.0	0.19	ug/L			03/23/15 13:15	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			03/23/15 13:15	1
Chlorobenzene	ND	1.0	0.75	ug/L			03/23/15 13:15	1
Dibromochloromethane	ND	1.0	0.32	ug/L			03/23/15 13:15	1
Chloroethane	ND	1.0	0.32	ug/L			03/23/15 13:15	1
Chloroform	ND	1.0	0.34	ug/L			03/23/15 13:15	1
Chloromethane	ND	1.0	0.35	ug/L			03/23/15 13:15	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			03/23/15 13:15	1
Ethylbenzene	ND	1.0	0.74	ug/L			03/23/15 13:15	1
Methylene Chloride	ND	1.0	0.44	ug/L			03/23/15 13:15	1
Styrene	ND	1.0	0.73	ug/L			03/23/15 13:15	1
Tetrachloroethene	ND	1.0	0.36	ug/L			03/23/15 13:15	1
Toluene	ND	1.0	0.51	ug/L			03/23/15 13:15	1
trans-1,3-Dichloropropene	ND	1.0	0.37	ug/L			03/23/15 13:15	1
Trichloroethene	ND	1.0	0.46	ug/L			03/23/15 13:15	1
Vinyl chloride	ND	1.0	0.90	ug/L			03/23/15 13:15	1
Vinyl acetate	ND	5.0	0.85	ug/L			03/23/15 13:15	1
Xylenes, Total	ND	2.0		ug/L			03/23/15 13:15	1

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

Method: 8021B - Volatile Orga	Method: 8021B - Volatile Organic Compounds (GC)											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac			
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			03/19/15 20:12	1			
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/19/15 20:12	1			
Benzene	0.079	J	0.20	0.023	ug/L			03/19/15 20:12	1			
Ethylbenzene	ND		0.20	0.029	ug/L			03/19/15 20:12	1			
Isopropylbenzene	ND		0.20	0.027	ug/L			03/19/15 20:12	1			
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/19/15 20:12	1			
m,p-Xylene	ND		0.40	0.054	ug/L			03/19/15 20:12	1			
n-Butylbenzene	ND		0.20	0.031	ug/L			03/19/15 20:12	1			

TestAmerica Buffalo

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-76820-1

Lab Sample ID: 480-76820-2

Matrix: Wastewater

Dil Fac

Analyzed

03/23/15 12:03

CI	ient	Samp	le ID	: Pos	t-Car	bon-3
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Date Collected: 03/18/15 12:30 Date Received: 03/18/15 13:20

Analyte

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			03/19/15 20:12	1
o-Xylene	ND		0.20	0.027	ug/L			03/19/15 20:12	1
p-Cymene	ND		0.20	0.030	ug/L			03/19/15 20:12	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/19/15 20:12	1
Toluene	ND		0.20	0.036	ug/L			03/19/15 20:12	1
Xylenes, Total	ND		0.40	0.054	ug/L			03/19/15 20:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145					03/19/15 20:12	1
4-Bromofluorobenzene	99		64 - 141					03/19/15 20:12	1
-									
Method: 200.7 Rev 4.4 - Met	tals (ICP)								
		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte		Qualifier	RL 50.0	MDL 19.3		D	Prepared 03/23/15 08:20	Analyzed 03/23/15 21:19	Dil Fac
Method: 200.7 Rev 4.4 - Met Analyte Iron General Chemistry	Result	Qualifier				<u>D</u>	<u> </u>		Dil Fac
Analyte Iron General Chemistry	Result 55.2	Qualifier Qualifier		19.3		D_	<u> </u>		Dil Fac Dil Fac
Analyte Iron General Chemistry Analyte	Result 55.2		50.0	19.3	ug/L		03/23/15 08:20	03/23/15 21:19	1
Analyte Iron General Chemistry Analyte Chloride	Result 55.2		50.0	19.3	ug/L Unit mg/L		03/23/15 08:20	03/23/15 21:19 Analyzed	1 Dil Fac
Analyte Iron	Result 55.2 Result 144			19.3 MDL 1.4 1.7	ug/L Unit mg/L		03/23/15 08:20	03/23/15 21:19 Analyzed 03/27/15 07:29	Dil Fac

RL

0.100

RL Unit

0.100 SU

D

Prepared

Result Qualifier

7.57 HF

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-76820-1

Lab Sample ID: 480-76820-3

Matrix: Wastewater

Client Sample ID: Post-Carbon-2

Date Collected: 03/18/15 12:35 Date Received: 03/18/15 13:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			03/19/15 20:46	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/19/15 20:46	1
Benzene	33		0.20	0.023	ug/L			03/19/15 20:46	1
Ethylbenzene	0.18	J	0.20	0.029	ug/L			03/19/15 20:46	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/19/15 20:46	1
Methyl tert-butyl ether	0.56		0.40	0.044	ug/L			03/19/15 20:46	1
m,p-Xylene	0.070	J	0.40	0.054	ug/L			03/19/15 20:46	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/19/15 20:46	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/19/15 20:46	1
o-Xylene	0.040	J	0.20	0.027	ug/L			03/19/15 20:46	1
p-Cymene	ND		0.20	0.030	ug/L			03/19/15 20:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/19/15 20:46	1
Toluene	1.2		0.20	0.036	ug/L			03/19/15 20:46	1
Xylenes, Total	0.11	J	0.40	0.054	ug/L			03/19/15 20:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145			-		03/19/15 20:46	1
4-Bromofluorobenzene	100		64 - 141					03/19/15 20:46	1

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Client: New York State D.E.C.

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

TestAmerica Job ID: 480-76820-1

Lab Sample ID: 480-76820-4

Prepared

Analyzed

03/19/15 21:20

03/19/15 21:20

Dil Fac

50

50

Matrix: Water

Date Collected: 03/18/15 12:40 Date Received: 03/18/15 13:20

Surrogate

a,a,a-Trifluorotoluene

4-Bromofluorobenzene

Client Sample ID: Post-Carbon-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2.7		2.0	0.35	ug/L			03/19/15 21:54	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			03/19/15 21:54	10
Ethylbenzene	57		2.0	0.29	ug/L			03/19/15 21:54	10
Isopropylbenzene	0.52	J	2.0	0.27	ug/L			03/19/15 21:54	10
Methyl tert-butyl ether	14		4.0	0.44	ug/L			03/19/15 21:54	10
m,p-Xylene	28		4.0	0.54	ug/L			03/19/15 21:54	10
n-Butylbenzene	ND		2.0	0.31	ug/L			03/19/15 21:54	10
n-Propylbenzene	ND		2.0	1.3	ug/L			03/19/15 21:54	10
o-Xylene	16		2.0	0.27	ug/L			03/19/15 21:54	10
p-Cymene	ND		2.0	0.30	ug/L			03/19/15 21:54	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			03/19/15 21:54	10
Toluene	250		2.0	0.36	ug/L			03/19/15 21:54	10
Xylenes, Total	44		4.0	0.54	ug/L			03/19/15 21:54	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 145			-		03/19/15 21:54	10
4-Bromofluorobenzene	102		64 - 141					03/19/15 21:54	10
Method: 8021B - Volatile Org	anic Compounds	(GC) - DL							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1900			1.2	ug/L			03/19/15 21:20	50

Limits

63 - 145

64 - 141

%Recovery Qualifier

103

Client: New York State D.E.C.

Date Received: 03/18/15 13:20

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

TestAmerica Job ID: 480-76820-1

Lab Sample ID: 480-76820-5

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

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	23	J	100	17	ug/L			03/19/15 22:29	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			03/19/15 22:29	500
Benzene	3800		100	12	ug/L			03/19/15 22:29	500
Ethylbenzene	330		100	14	ug/L			03/19/15 22:29	500
Isopropylbenzene	ND		100	14	ug/L			03/19/15 22:29	500
Methyl tert-butyl ether	ND		200	22	ug/L			03/19/15 22:29	500
m,p-Xylene	160	J	200	27	ug/L			03/19/15 22:29	500
n-Butylbenzene	ND		100	15	ug/L			03/19/15 22:29	500
n-Propylbenzene	ND		100	65	ug/L			03/19/15 22:29	500
o-Xylene	ND		100	14	ug/L			03/19/15 22:29	500
p-Cymene	ND		100	15	ug/L			03/19/15 22:29	500
sec-Butylbenzene	ND		100	10	ug/L			03/19/15 22:29	500
Toluene	1000		100	18	ug/L			03/19/15 22:29	500
Xylenes, Total	160	J	200	27	ug/L			03/19/15 22:29	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145			-		03/19/15 22:29	500
4-Bromofluorobenzene	97		64 - 141					03/19/15 22:29	500

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Lab Sample ID: 480-76820-1

Matrix: Wastewater

Client Sample ID: Pre-Carbon

Date Collected: 03/18/15 12:45 Date Received: 03/18/15 13:20

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

Client Sample ID: Post-Carbon-3

Date Collected: 03/18/15 12:30 Date Received: 03/18/15 13:20 Lab Sample ID: 480-76820-2

Matrix: Wastewater

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

Client Sample ID: Post-Carbon-2

Date Collected: 03/18/15 12:35

Date Received: 03/18/15 13:20

Lab Sample	ID: 480-76820-3
------------	-----------------

Matrix: Wastewater

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

Client Sample ID: Post-Carbon-1

Date Collected: 03/18/15 12:40

Date Received: 03/18/15 13:20

id: Post-Carbon-1	Lab Sample ID: 480-76820-4
B/18/15 12:40	Matrix: Water
3/18/15 13:20	

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

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-76820-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-76820-5 Date Collected: 03/18/15 12:50

Matrix: Water

Date Received: 03/18/15 13:20

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

Laboratory References:

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

Certification Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-76820-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-16
The following analytes	are included in this report, but	t certification is not offere	d by the governing a	uthority:	
Analysis Method	Prep Method	Matrix	Analyt	е	
8021B		Wastewater	m,p-X	/lene	
8021B		Wastewater	o-Xyle	ne	
8021B		Water	m,p-X	/lene	
8021B		Water	o-Xyle	ne	
8260C		Wastewater	1,2-Dio	chloroethene, Total	
SM 4500 H+ B		Wastewater	pН		

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Method Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-76820-1

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

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

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TestAmerica Buffalo

, 13 Hazelwood Drive

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

Chain of Custody Record





Client Information	IM.	COINT	<u>) </u>	Fisc	cher, B	3rian	J				:		Callie							1 1111 1	_	
Client Contact: Thomas Palmer	Phone:	/(OK)	7887	E-Ma bria	lail: an.fisch	ner@)testan	nerica	ainc.cc	om				48U-	/662	U Una	III OI	Custo			_	
Company: Groundwater & Environmental Services Inc					T				Ar	nalys	is R	equ	uested	 d			-	Job #:				_
Address: 495 Aero Drive Suite 3 City:	Due Date Requeste				I							Ī		T						М -	- Hexane	
Cheektowaga State, ℤip:										į l									aOH n Acetate litric Acid	0-	- None - AsNaO2 - Na2O4S	
NY, 14225 Phone:	PO#:	STO				iş.							1				100	E-N	aHSO4 eOH	Q - R -	- Na2SO3 - Na2S2SO3	;
Email:	Callout# 120597				- 2						- 8021			ŀ					mchlor scorbic Acid	d T- U-	- H2SO4 - TSP Dodeca - Acetone	ahydrate
tpalmer@gesonline.com Project Name:	Project#:	<i></i>				or No	Method			M04.2	List - VOA - 8021						iners	. L DI	Water DTA	V - W-	- MCAA - ph 4-5 - other (specif	:6.A
NYSDEC-Gastown WWTP: Site# 915171/Gastow Event Desc: M Site:	48002525 SSOW#:					SOU)	Local Me	otal		llst OL	RS List	ta					containers	Other		۷-	Other (sherri	ry)
New York			Sample	Matrix	ered Sa	MS/MS	300.0_28D - (MOD) Local 200.7 - (MOD) Local Meth	310.2 - Alkalinity, Total		8260B - (MOD) TCL IIst OLM04,2	8021B - (MOD) STARS	335.4 - Cyanide, Total	Hd - +/				mber of					
Commission	Sample Date	Sample	Type (C=comp,		leid Filt	Perform MS/	300.0_28D 200.7 - (MC	10.2 - Alk	200.7 - Iron	260B - (M	021B - (M	35.4 - Cyr	SM4500_H+ - pH				Total Number		O naial	* -	4:a/Nla	4
Sample Identification	Sample Date	Time		BT=Tissue, A=Air ation Code:		N X			D		& ∂ A∗⊹B		N N		Tang vay	2	\		Special	Instru	ictions/Not	ote:
Pre-Carbon	.comuronaminos.	1245	6	Water	NN		X X				8	1									Diff. Outre C. micheline.	
Post-Carbon ~ 3		1230	G	Water	NΛ		××	, ×	8	75	જ	6	১				*	*				
Rist carbon -2 Varl carbon -3 Sutside sump	<u> </u>	1235	6	water	NA	_	\perp	⊥_		<u> </u>	Z	\perp	_	_								
Parl corbon-3	<u> </u>	1240	G	uder	NV	4	\bot	1	11	\dashv	×	\downarrow	\perp	_		\sqcup	- 100	4				
Outside sump		1250	G	vatr	#	+			11	\dashv	X	\dashv	_	lacksquare		\vdash		_				
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					+	+	+			+	+	+	+	+			- 100 pt					
Possible Hazard Identification					s						ay be	ass	essed	if san	nples				er than 1	monti	1)	
Non-Hazard Flammable Skin Irritant Poison	B Unknowi	n Rad	diological		4		Returr				_ <u>K</u>	Disj	posal B	y Lab			Archiv	/e For_		Moi	nths	
Deliverable Requested: I, II, III, IV, Other (specify)							ial Instr	uction	ns/QU	; Requ	ireme	ents.										
Empty Kit Relinquished by:		Date:			Time			_					Met	thod of								
Relinquisbert by:	Date/Time3/18/	118 13	5/5	Company			eceived	ul	2	1	Be	之	<u> </u>		Date/		8/2		1376		mpany 1A B	7) U
Relinquished by:	Date/Time:			Company	_/		eceived	by	L	/_					Date/	/Time:				Cor	mpany	
Relinquished by:	Date/Time:			Company		R	eceived	by.							Date/	/Time:				Cor	mpany	
Custody Seals Intact: Custody Seal No.:			,			Cc	ooler Ter	mperat	ure(s)	°C and	Other	Rem	arks:			#1	4	54	<u> </u>			

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-76820-1

Login Number: 76820 List Source: TestAmerica Buffalo

List Number: 1 Creator: Janish, Carl M

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

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 480-78465-1

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

Sampling Event: Monthly

For:

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

Attn: Mr. Glenn May



Authorized for release by: 4/28/2015 8:54:59 PM

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

Designee for

Brian Fischer, Manager of Project Management (716)504-9835

brian.fischer@testamericainc.com

..... Links

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

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

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

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

Joe Giacomazza

Project Management Assistant II

4/28/2015 8:54:59 PM

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

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-78465-1

Qualifiers

GC VOA

Qualifier	Qualifier Description

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

Metals

Qualifier Qualifier Description

B Compound was found in the blank and sample.

General Chemistry

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

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

Glossary

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

Dil Fac Dilution Factor

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

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

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

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

PQL Practical Quantitation Limit

QC Quality Control
RER Relative error ratio

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TestAmerica Buffalo

Case Narrative

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-78465-1

Job ID: 480-78465-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-78465-1

Receipt

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

GC/MS VOA

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

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

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

HPLC/IC

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

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

GC VOA

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

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

Metals

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

General Chemistry

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

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

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TestAmerica Buffalo 4/28/2015

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-78465-1

Lab Sample ID: 480-78465-1

Matrix: Wastewater

Client	t Samp	le ID): Pr	e-Car	bon
Date C	ollected	. 04/4	5/15	00.30	

Date Received: 04/15/15 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			04/25/15 14:19	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			04/25/15 14:19	500
Benzene	3900		100	12	ug/L			04/25/15 14:19	500
Ethylbenzene	100		100	14	ug/L			04/25/15 14:19	500
Isopropylbenzene	ND		100	14	ug/L			04/25/15 14:19	500
Methyl tert-butyl ether	ND		200	22	ug/L			04/25/15 14:19	500
m,p-Xylene	ND		200	27	ug/L			04/25/15 14:19	500
n-Butylbenzene	ND		100	15	ug/L			04/25/15 14:19	500
n-Propylbenzene	ND		100	65	ug/L			04/25/15 14:19	500
o-Xylene	ND		100	14	ug/L			04/25/15 14:19	500
p-Cymene	ND		100	15	ug/L			04/25/15 14:19	500
sec-Butylbenzene	ND		100	10	ug/L			04/25/15 14:19	500
Toluene	890		100	18	ug/L			04/25/15 14:19	500
Xylenes, Total	ND		200	27	ug/L			04/25/15 14:19	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	100		63 - 145					04/25/15 14:19	500
4-Bromofluorobenzene	100		64 - 141					04/25/15 14:19	500
Method: 200.7 Rev 4.4 - Met	als (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Calcium	140000	В	500	100	ug/L		04/16/15 12:05	04/17/15 16:42	
Iron	4050		50.0	19.3	ug/L		04/16/15 12:05	04/17/15 16:42	•
Magnesium	70600		200	43.4	ug/L		04/16/15 12:05	04/17/15 16:42	•
Potassium	4210		500	100	ug/L		04/16/15 12:05	04/17/15 16:42	
Sodium	65200		1000	324	ug/L		04/16/15 12:05	04/17/15 16:42	
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
011 11	103		5.0	2.8	mg/L			04/18/15 18:02	10
Chloride	100				•				
Chloride Sulfate	135		20.0		mg/L			04/18/15 18:02	10

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

Client Sample ID: Post-Carbon-3

Date Collected: 04/15/15 09:00 Date Received: 04/15/15 10:30

Lab Sample ID: 480-78465-2

Matrix: Wastewater

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/25/15 00:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/25/15 00:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/25/15 00:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/25/15 00:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/25/15 00:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/25/15 00:55	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			04/25/15 00:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/25/15 00:55	1
2-Hexanone	ND		5.0	1.2	ug/L			04/25/15 00:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/25/15 00:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/25/15 00:55	1
Acetone	ND		10	3.0	ug/L			04/25/15 00:55	1
Benzene	ND		1.0	0.41	ug/L			04/25/15 00:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/25/15 00:55	1
Bromoform	ND		1.0	0.26	ug/L			04/25/15 00:55	1
Bromomethane	ND		1.0	0.69	ug/L			04/25/15 00:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/25/15 00:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/25/15 00:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/25/15 00:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/25/15 00:55	1
Chloroethane	ND		1.0	0.32	ug/L			04/25/15 00:55	1
Chloroform	ND		1.0	0.34	ug/L			04/25/15 00:55	1
Chloromethane	ND		1.0	0.35	ug/L			04/25/15 00:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/25/15 00:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/25/15 00:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/25/15 00:55	1
Styrene	ND		1.0	0.73	ug/L			04/25/15 00:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/25/15 00:55	1
Toluene	ND		1.0	0.51	ug/L			04/25/15 00:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/25/15 00:55	1
Trichloroethene	ND		1.0	0.46	ug/L			04/25/15 00:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/25/15 00:55	1
Vinyl acetate	ND		5.0	0.85	ug/L			04/25/15 00:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/25/15 00:55	1

1,2-Dichloroethane-d4 (Surr)	97	66 - 137	04/25/15 00:55 1
Toluene-d8 (Surr)	103	71 - 126	04/25/15 00:55 1
4-Bromofluorobenzene (Surr)	92	73 - 120	04/25/15 00:55 1

Limits

%Recovery Qualifier

Method: 8021B - \	Volatile (Organic	Compounds ((GC)
Analyto			Pocult	Oualit

Surrogate

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

TestAmerica Buffalo

Prepared

Analyzed

Dil Fac

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-78465-1

Client Sample ID: Post-Carbon-3 Date Collected: 04/15/15 09:00

Date Received: 04/15/15 10:30

Lab Sample ID: 480-78465-2

Matrix: Wastewater

Method: 8021B - Volatile Org	anic Compounds	(GC) (Conti	nued)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			04/25/15 14:54	1
o-Xylene	ND		0.20	0.027	ug/L			04/25/15 14:54	1
p-Cymene	ND		0.20	0.030	ug/L			04/25/15 14:54	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/25/15 14:54	1
Toluene	ND		0.20	0.036	ug/L			04/25/15 14:54	1
Xylenes, Total	ND		0.40	0.054	ug/L			04/25/15 14:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145					04/25/15 14:54	1
4-Bromofluorobenzene	97		64 - 141					04/25/15 14:54	1
- Method: 200.7 Rev 4.4 - Meta	Is (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	166		50.0	19.3	ug/L		04/16/15 12:05	04/17/15 16:45	1
- General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.29		0.010	0.0050	mg/L		04/21/15 11:02	04/22/15 13:09	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.34	HF	0.100	0.100	SU			04/16/15 15:40	1

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-78465-1

Lab Sample ID: 480-78465-3

Matrix: Water

Client Sample ID: Post-Carbon-2 Date Collected: 04/15/15 09:15

Date Received: 04/15/15 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	0.35	ug/L			04/25/15 15:28	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			04/25/15 15:28	10
Benzene	110		2.0	0.23	ug/L			04/25/15 15:28	10
Ethylbenzene	ND		2.0	0.29	ug/L			04/25/15 15:28	10
Isopropylbenzene	ND		2.0	0.27	ug/L			04/25/15 15:28	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			04/25/15 15:28	10
m,p-Xylene	ND		4.0	0.54	ug/L			04/25/15 15:28	10
n-Butylbenzene	ND		2.0	0.31	ug/L			04/25/15 15:28	10
n-Propylbenzene	ND		2.0	1.3	ug/L			04/25/15 15:28	10
o-Xylene	ND		2.0	0.27	ug/L			04/25/15 15:28	10
p-Cymene	ND		2.0	0.30	ug/L			04/25/15 15:28	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			04/25/15 15:28	10
Toluene	2.4		2.0	0.36	ug/L			04/25/15 15:28	10
Xylenes, Total	ND		4.0	0.54	ug/L			04/25/15 15:28	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145			-		04/25/15 15:28	10
4-Bromofluorobenzene	98		64 - 141					04/25/15 15:28	10

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Client: New York State D.E.C.

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

TestAmerica Job ID: 480-78465-1

Lab Sample ID: 480-78465-4

Matrix: Water

Client Sample ID: Post-Carbon-1 Date Collected: 04/15/15 09:20

Date Received: 04/15/15 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			04/25/15 16:02	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			04/25/15 16:02	50
Benzene	2200		10	1.2	ug/L			04/25/15 16:02	50
Ethylbenzene	52		10	1.4	ug/L			04/25/15 16:02	50
Isopropylbenzene	ND		10	1.4	ug/L			04/25/15 16:02	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			04/25/15 16:02	50
m,p-Xylene	8.3	J	20	2.7	ug/L			04/25/15 16:02	50
n-Butylbenzene	ND		10	1.5	ug/L			04/25/15 16:02	50
n-Propylbenzene	ND		10	6.5	ug/L			04/25/15 16:02	50
o-Xylene	8.1	J	10	1.4	ug/L			04/25/15 16:02	50
p-Cymene	ND		10	1.5	ug/L			04/25/15 16:02	50
sec-Butylbenzene	ND		10	1.0	ug/L			04/25/15 16:02	50
Toluene	300		10	1.8	ug/L			04/25/15 16:02	50
Xylenes, Total	16	J	20	2.7	ug/L			04/25/15 16:02	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145			-		04/25/15 16:02	50
4-Bromofluorobenzene	99		64 - 141					04/25/15 16:02	50

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-78465-1

Lab Sample ID: 480-78465-5

Client Sample ID: Outside Sump

Date Collected: 04/15/15 09:35

Matrix: Water Date Received: 04/15/15 10:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			04/25/15 16:36	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			04/25/15 16:36	500
Benzene	4500		100	12	ug/L			04/25/15 16:36	500
Ethylbenzene	300		100	14	ug/L			04/25/15 16:36	500
Isopropylbenzene	ND		100	14	ug/L			04/25/15 16:36	500
Methyl tert-butyl ether	ND		200	22	ug/L			04/25/15 16:36	500
m,p-Xylene	ND		200	27	ug/L			04/25/15 16:36	500
n-Butylbenzene	ND		100	15	ug/L			04/25/15 16:36	500
n-Propylbenzene	ND		100	65	ug/L			04/25/15 16:36	500
o-Xylene	ND		100	14	ug/L			04/25/15 16:36	500
p-Cymene	ND		100	15	ug/L			04/25/15 16:36	500
sec-Butylbenzene	ND		100	10	ug/L			04/25/15 16:36	500
Toluene	1100		100	18	ug/L			04/25/15 16:36	500
Xylenes, Total	ND		200	27	ug/L			04/25/15 16:36	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145			-		04/25/15 16:36	500
4-Bromofluorobenzene	99		64 - 141					04/25/15 16:36	500

4/28/2015

Client: New York State D.E.C.

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

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-78465-1

Matrix: Wastewater

Date Collected: 04/15/15 09:30 Date Received: 04/15/15 10:30

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

Client Sample ID: Post-Carbon-3 Lab Sample ID: 480-78465-2

Date Collected: 04/15/15 09:00 **Matrix: Wastewater**

Date Received: 04/15/15 10:30

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

Client Sample ID: Post-Carbon-2 Lab Sample ID: 480-78465-3 Date Collected: 04/15/15 09:15

Date Received: 04/15/15 10:30

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

Client Sample ID: Post-Carbon-1 Lab Sample ID: 480-78465-4

Date Collected: 04/15/15 09:20 Date Received: 04/15/15 10:30

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

Client Sample ID: Outside Sump Lab Sample ID: 480-78465-5

Date Collected: 04/15/15 09:35

Matrix: Water Date Received: 04/15/15 10:30

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

Laboratory References:

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

Matrix: Water

Matrix: Water

Certification Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-78465-1

Laboratory: TestAmerica Buffalo

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

Authority	Program			Certification ID	Expiration Date			
New York	NELAP		2	10026	03-31-16			
The following analytes	are included in this report, bu	t certification is not offere	d by the governing a	uthority:				
Analysis Method	Prep Method	Matrix	Analyt	е				
8021B		Wastewater	m,p-X	m,p-Xylene				
8021B		Wastewater	o-Xyle	o-Xylene				
8021B		Water	m,p-X	ylene				
8021B		Water	o-Xyle	ne				
8260C		Wastewater	1,2-Di	chloroethene, Total				
SM 4500 H+ B		Wastewater	рH	pH				

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Method Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-78465-1

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-78465-1

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

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TestAmerica Buffalo

10 Hazelwood Drive Amherst, NY 14228-2298 **Chain of Custody Record**

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PROMINENTAL TESTING

Phone (716) 691-2600 Fax (716) 691-7991																		em 111 11	1 11/11 T	111 III				
Client Information Client Contact	Sampler:	end.			her, B	rian J	-																	
Client Contact Thomas Palmer	Phone:			E-Ma bria	ail: n.fisch	er@te	estam	ericair	nc.co	m														
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City: Cheektowaga	TAT Requested (da	ays):													İ				B C	3 - NaOH 3 - Zn Acet		N - None O - AsN	e aO2	
State, Zip: NY, 14225											İ								ΜE	- Nitric Ac		P - Na20 Q - Na20	SO3	
Phone:	PO #: Callout# 120597]』						8021							 W	G	- MeOH - Amchloi I - Ascorbid		R - Na25 S - H2S T - TSP		iydrate
Email: tpalmer@gesonline.com	WO #:					g g				- 1	•								3835	- Ice - DI Water	r	U ~ Acet V ~ MCA	A	
Project Name: NYSDEC-Gastown WWTP: Site# 915171/Gastow Event Desc: Me	Project #:					al Method	hod			OLM0	ist - V									- EDTA - EDA		W - ph 4 Z - other	⊢5 ·(specify)	,
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New York				-	- S P	Q Q M	Loc	nlty,		5	PS	T, T	표					**	<u></u> }					
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air	Field Filtered Samp	Fefformi, MSJMSE/1, 1983, Ot. 190 300.0_28D - (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity, Total	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS List - VOA	335.4 - Cyanide, Total	SM4500_H+ - pH					Table 1	Total Number of	Spe	cial In	structio	ns/Note	<u>.</u> :
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Pre-Carbon	4/15/18	OP30	G	Water	W 1	VX	X	X	vf.		X							3	K.A.					
Post-Carbon - 3	4/15/15	0700	ĺ	Water					X	× :	×	×	×					-	- 1					
Post Carbon 2	4/15/15	0915		1						-	×							Ľ,	34					
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Possible Hazard Identification					s					ee ma	ay b	e ass	ess	ed if	sam	ples	are r	etaine	ed lo	nger tha	an 1 m	onth)		
Non-Hazard Flammable Skin Irritant Poison	B Unknow	n Rad	liological			<u></u>	Return	To C	lient		ملا	Dis	posa	I By I	Lab			Archi	ive F	or		Months		
Deliverable Requested: I, II, III, IV, Other (specify)					S	pecia	Instru	uction	s/QC	Requ	uiren	nents	5:											I-
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Custody Seals Intact: Custody Seal No.: Δ Yes Δ No						Coo	ler Ten	nperatu	re(s)	°C and	Othe	r Rem	arks:		4	<u> </u>		12	3,1	1				

4/28/2015

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-78465-1

Login Number: 78465 List Source: TestAmerica Buffalo

List Number: 1 Creator: Janish, Carl M

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

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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: 480-80733-1

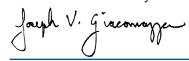
Client Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Sampling Event: Qtrly Post-Carbon Qtrly Pre-Carbon

For:

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

Attn: Mr. Glenn May



Authorized for release by: 6/2/2015 10:45:57 AM

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

Designee for

Brian Fischer, Manager of Project Management (716)504-9835

brian_fischer@testamericainc.com

.....LINKS

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

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

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

TestAmerica Job ID: 480-80733-1

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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. Gracomogyen

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

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TestAmerica Job ID: 480-80733-1

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

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-80733-1

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

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

GC/MS Semi VOA

Qualifier **Qualifier Description**

X Surrogate is outside control limits

GC VOA

Qualifier **Qualifier Description**

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.

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

General Chemistry

Qualifier Description Qualifier

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

Glossary

Abbreviation	These commonly use	ed abbreviations may	or may not be	present in this repor
Appreviation	These commonly us	eu appreviations may	y or may not be	present in this re

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

Percent Recovery %R Contains Free Liquid CFL **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 FDI **Estimated Detection Limit** MDC Minimum detectable concentration

MDL Method Detection Limit MLMinimum 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

RLReporting Limit or Requested Limit (Radiochemistry)

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

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

TestAmerica Buffalo

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6/2/2015

Case Narrative

Client: New York State D.E.C.

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

Job ID: 480-80733-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-80733-1

Receipt

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

GC/MS VOA

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

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-80733-1). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA

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

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

HPLC/IC

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

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

GC VOA

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

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Post-Carbon-1 (480-80735-3). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

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

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

Metals

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

General Chemistry

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

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

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TestAmerica Job ID: 480-80733-1

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Case Narrative

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-80733-1

Job ID: 480-80733-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

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

Organic Prep

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

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

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

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

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-80733-1 Date Collected: 05/20/15 14:00 **Matrix: Wastewater**

Date Received: 05/20/15 15:45

Method: 8260C - Volatile O Analyte	Result Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	200		ug/L			05/29/15 06:41	200
1,1,2,2-Tetrachloroethane	ND	200	42	ug/L			05/29/15 06:41	200
1,1,2-Trichloroethane	ND	200	46	ug/L			05/29/15 06:41	200
1,1-Dichloroethane	ND	200	76	ug/L			05/29/15 06:41	200
1,1-Dichloroethene	ND	200	58	ug/L			05/29/15 06:41	200
1,2-Dichloroethane	ND	200	42	ug/L			05/29/15 06:41	200
1,2-Dichloroethene, Total	ND	400	160	ug/L			05/29/15 06:41	200
1,2-Dichloropropane	ND	200	140	ug/L			05/29/15 06:41	200
2-Hexanone	ND	1000	250	ug/L			05/29/15 06:41	200
2-Butanone (MEK)	ND	2000	260	ug/L			05/29/15 06:41	200
4-Methyl-2-pentanone (MIBK)	ND	1000	420	ug/L			05/29/15 06:41	200
Acetone	ND	2000	600	ug/L			05/29/15 06:41	200
Benzene	7400	200	82	ug/L			05/29/15 06:41	200
Bromodichloromethane	ND	200	78	ug/L			05/29/15 06:41	200
Bromoform	ND	200	52	ug/L			05/29/15 06:41	200
Bromomethane	ND	200	140	ug/L			05/29/15 06:41	200
Carbon disulfide	ND	200	38	ug/L			05/29/15 06:41	200
Carbon tetrachloride	ND	200	54	ug/L			05/29/15 06:41	200
Chlorobenzene	ND	200	150	ug/L			05/29/15 06:41	200
Dibromochloromethane	ND	200	64	ug/L			05/29/15 06:41	200
Chloroethane	ND	200	64	ug/L			05/29/15 06:41	200
Chloroform	130 J	200	68	ug/L			05/29/15 06:41	200
Chloromethane	ND	200	70	ug/L			05/29/15 06:41	200
cis-1,3-Dichloropropene	ND	200	72	ug/L			05/29/15 06:41	200
Ethylbenzene	450	200	150	ug/L			05/29/15 06:41	200
Methylene Chloride	ND	200	88	ug/L			05/29/15 06:41	200
Styrene	ND	200	150	ug/L			05/29/15 06:41	200
Tetrachloroethene	ND	200	72	ug/L			05/29/15 06:41	200
Toluene	1200	200	100	ug/L			05/29/15 06:41	200
trans-1,3-Dichloropropene	ND	200	74	ug/L			05/29/15 06:41	200
Trichloroethene	ND	200	92	ug/L			05/29/15 06:41	200
Vinyl chloride	ND	200		ug/L			05/29/15 06:41	200
Vinyl acetate	ND	1000		ug/L			05/29/15 06:41	200
Xylenes, Total	ND	400	130	ug/L			05/29/15 06:41	200
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100	66 - 137					05/29/15 06:41	200
Toluene-d8 (Surr)	98	71 - 126					05/29/15 06:41	200
4-Bromofluorobenzene (Surr)	95	73 - 120					05/29/15 06:41	200

Method: 8021B - V	olatile Organic Compounds (GC)		
Analyte	Result Qualifier	RL	MDL Unit

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

TestAmerica Buffalo

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Client: New York State D.E.C.

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

TestAmerica Job ID: 480-80733-1

Client Sample ID: Pre-Carbon

Date Collected: 05/20/15 14:00 Date Received: 05/20/15 15:45

Sulfate

Alkalinity, Total

Lab Sample ID: 480-80733-1

Matrix: Wastewater

05/22/15 09:30

05/27/15 19:38

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		100	65	ug/L			05/21/15 17:40	500
o-Xylene	ND		100	14	ug/L			05/21/15 17:40	500
p-Cymene	ND		100	15	ug/L			05/21/15 17:40	500
sec-Butylbenzene	ND		100	10	ug/L			05/21/15 17:40	500
Toluene	1000		100	18	ug/L			05/21/15 17:40	500
Xylenes, Total	ND		300	27	ug/L			05/21/15 17:40	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 145					05/21/15 17:40	500
	20		.					05/04/45 45 40	
4-Bromofluorobenzene	93		64 - 141					05/21/15 17:40	500
Method: 200.7 Rev 4.4 -	Metals (ICP)	Qualifier	64 - 141 RL	MDL	Unit	D	Prepared	05/21/15 17:40 Analyzed	
Method: 200.7 Rev 4.4 - Analyte	Metals (ICP)	Qualifier			Unit ug/L	D	Prepared 05/22/15 07:40		
Method: 200.7 Rev 4.4 - Analyte Calcium	Metals (ICP) Result	Qualifier	RL	100		D		Analyzed 05/22/15 18:27	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron	Metals (ICP) Result 123000	Qualifier	RL 500	100 19.3	ug/L	D	05/22/15 07:40	Analyzed 05/22/15 18:27 05/22/15 18:27	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium Potassium	Metals (ICP) Result 123000 4960	Qualifier	RL 500 50.0	100 19.3 43.4	ug/L ug/L	<u>D</u>	05/22/15 07:40 05/22/15 07:40 05/22/15 07:40	Analyzed 05/22/15 18:27 05/22/15 18:27	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium Potassium	Metals (ICP) Result 123000 4960 84700	Qualifier	RL 500 50.0 200	100 19.3 43.4 100	ug/L ug/L ug/L	<u>D</u>	05/22/15 07:40 05/22/15 07:40 05/22/15 07:40 05/22/15 07:40	Analyzed 05/22/15 18:27 05/22/15 18:27 05/22/15 18:27	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium	Metals (ICP) Result 123000 4960 84700 4920	Qualifier	RL 500 50.0 200 500	100 19.3 43.4 100	ug/L ug/L ug/L ug/L	D	05/22/15 07:40 05/22/15 07:40 05/22/15 07:40 05/22/15 07:40	Analyzed 05/22/15 18:27 05/22/15 18:27 05/22/15 18:27 05/22/15 18:27	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium Potassium Sodium	Metals (ICP) Result 123000 4960 84700 4920 68500	QualifierQualifier	RL 500 50.0 200 500	100 19.3 43.4 100	ug/L ug/L ug/L ug/L ug/L	D	05/22/15 07:40 05/22/15 07:40 05/22/15 07:40 05/22/15 07:40	Analyzed 05/22/15 18:27 05/22/15 18:27 05/22/15 18:27 05/22/15 18:27	Dil Fac 1 1 1 1 Dil Fac

40.0

70.0

125

637

7.0 mg/L

28.0 mg/L

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-80733-1

Lab Sample ID: 480-80733-2

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 05/20/15 14:15 Date Received: 05/20/15 15:45

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

Client: New York State D.E.C.

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

Lab Sample ID: 480-80735-1

Matrix: Wastewater

Date Collected: 05/20/15 13:00 Date Received: 05/20/15 15:45

Client Sample ID: Post-Carbon-3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/29/15 18:34	
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/29/15 18:34	•
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/29/15 18:34	
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/29/15 18:34	•
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/29/15 18:34	•
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/29/15 18:34	•
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			05/29/15 18:34	• • • • • • • • •
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/29/15 18:34	
2-Hexanone	ND		5.0	1.2	ug/L			05/29/15 18:34	•
2-Butanone (MEK)	ND		10	1.3	ug/L			05/29/15 18:34	
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/29/15 18:34	•
Acetone	ND		10	3.0	ug/L			05/29/15 18:34	•
Benzene	ND		1.0	0.41	ug/L			05/29/15 18:34	
Bromodichloromethane	ND		1.0	0.39	ug/L			05/29/15 18:34	•
Bromoform	ND		1.0	0.26	ug/L			05/29/15 18:34	
Bromomethane	ND		1.0	0.69	ug/L			05/29/15 18:34	
Carbon disulfide	ND		1.0	0.19	ug/L			05/29/15 18:34	
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/29/15 18:34	
Chlorobenzene	ND		1.0	0.75	ug/L			05/29/15 18:34	· · · · · · · · · ·
Dibromochloromethane	ND		1.0	0.32	ug/L			05/29/15 18:34	
Chloroethane	ND		1.0	0.32	ug/L			05/29/15 18:34	
Chloroform	ND		1.0	0.34	ug/L			05/29/15 18:34	· · · · · · · .
Chloromethane	ND		1.0	0.35	ug/L			05/29/15 18:34	
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/29/15 18:34	
Ethylbenzene	ND		1.0	0.74	ug/L			05/29/15 18:34	· · · · · · · ·
Methylene Chloride	ND		1.0	0.44	ug/L			05/29/15 18:34	
Styrene	ND		1.0	0.73	ug/L			05/29/15 18:34	
Tetrachloroethene	ND		1.0	0.36	ug/L			05/29/15 18:34	
Toluene	ND		1.0	0.51	ug/L			05/29/15 18:34	
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/29/15 18:34	
Trichloroethene	ND		1.0	0.46	ug/L			05/29/15 18:34	
Vinyl chloride	ND		1.0	0.90	ug/L			05/29/15 18:34	
Vinyl acetate	ND		5.0	0.85	ug/L			05/29/15 18:34	
Xylenes, Total	ND		2.0	0.66	ug/L			05/29/15 18:34	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	99		66 - 137					05/29/15 18:34	
Toluene-d8 (Surr)	97		71 - 126					05/29/15 18:34	

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

Method: 8270D - Semivolatile	Organic Compounds ((GC/MS)
A I 4	Descrit Overlities	

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

TestAmerica Buffalo

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

Lab Sample ID: 480-80735-1

TestAmerica Job ID: 480-80733-1

Matrix: Wastewater

Client Sample ID: Post-Carbon-3

Date Collected: 05/20/15 13:00 Date Received: 05/20/15 15:45

Analyte	Result Quali	fier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND ND	5.5	0.80	ug/L		05/21/15 14:50	05/22/15 17:42	1
Biphenyl	ND	5.5	0.72	ug/L		05/21/15 14:50	05/22/15 17:42	1
Bis(2-ethylhexyl) phthalate	ND	5.5	2.0	ug/L		05/21/15 14:50	05/22/15 17:42	1
Carbazole	ND	5.5	0.33	ug/L		05/21/15 14:50	05/22/15 17:42	1
Chrysene	ND	5.5	0.36	ug/L		05/21/15 14:50	05/22/15 17:42	1
Dibenz(a,h)anthracene	ND	5.5	0.46	ug/L		05/21/15 14:50	05/22/15 17:42	1
Dibenzofuran	ND	11	0.56	ug/L		05/21/15 14:50	05/22/15 17:42	1
Fluoranthene	ND	5.5	0.44	ug/L		05/21/15 14:50	05/22/15 17:42	1
Fluorene	ND	5.5	0.39	ug/L		05/21/15 14:50	05/22/15 17:42	1
Indeno[1,2,3-cd]pyrene	ND	5.5	0.52	ug/L		05/21/15 14:50	05/22/15 17:42	1
Naphthalene	ND	5.5	0.83	ug/L		05/21/15 14:50	05/22/15 17:42	1
Pentachlorophenol	ND	11	2.4	ug/L		05/21/15 14:50	05/22/15 17:42	1
Phenanthrene	ND	5.5	0.48	ug/L		05/21/15 14:50	05/22/15 17:42	1
Phenol	ND	5.5	0.43	ug/L		05/21/15 14:50	05/22/15 17:42	1
Pyrene	ND	5.5	0.37	ug/L		05/21/15 14:50	05/22/15 17:42	1

Surrogate	%Recovery Qua	lifier Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	77	52 - 132	05/21/15 14:50	05/22/15 17:42	1
2-Fluorobiphenyl	64	48 - 120	05/21/15 14:50	05/22/15 17:42	1
2-Fluorophenol	34	20 - 120	05/21/15 14:50	05/22/15 17:42	1
Nitrobenzene-d5	54	46 - 120	05/21/15 14:50	05/22/15 17:42	1
p-Terphenyl-d14	62 X	67 - 150	05/21/15 14:50	05/22/15 17:42	1
Phenol-d5	30	16 - 120	05/21/15 14:50	05/22/15 17:42	1

Analyte	Result Qua	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND	0.20	0.035	ug/L			05/22/15 14:15	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			05/22/15 14:15	1
Benzene	ND	0.20	0.023	ug/L			05/22/15 14:15	1
Ethylbenzene	ND	0.20	0.029	ug/L			05/22/15 14:15	1
Isopropylbenzene	ND	0.20	0.027	ug/L			05/22/15 14:15	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			05/22/15 14:15	1
m,p-Xylene	ND	0.40	0.054	ug/L			05/22/15 14:15	1
n-Butylbenzene	ND	0.20	0.031	ug/L			05/22/15 14:15	1
n-Propylbenzene	ND	0.20	0.13	ug/L			05/22/15 14:15	1
o-Xylene	ND	0.20	0.027	ug/L			05/22/15 14:15	1
p-Cymene	ND	0.20	0.030	ug/L			05/22/15 14:15	1
sec-Butylbenzene	ND	0.20	0.020	ug/L			05/22/15 14:15	1
Toluene	ND	0.20	0.036	ug/L			05/22/15 14:15	1
Xylenes, Total	ND	0.60	0.054	ug/L			05/22/15 14:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145		05/22/15 14:15	1
4-Bromofluorobenzene	92		64 - 141		05/22/15 14:15	1

Method: 608 - Organochlorine	Pesticides in Water
Analyte	Result Qualifier

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

TestAmerica Buffalo

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-80733-1

Client Sample ID: Post-Carbon-3

Date Collected: 05/20/15 13:00 Date Received: 05/20/15 15:45 Lab Sample ID: 480-80735-1

Matrix: Wastewater

Method: 608 - Organochic Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC			0.055	0.011	ug/L		05/21/15 15:01	05/26/15 10:41	1
gamma-BHC (Lindane)	ND		0.055	0.0066			05/21/15 15:01	05/26/15 10:41	1
Chlordane (technical)	ND		0.55	0.32	ug/L		05/21/15 15:01	05/26/15 10:41	1
4,4'-DDD	ND		0.055	0.010	ug/L		05/21/15 15:01	05/26/15 10:41	1
4,4'-DDE	ND		0.055	0.013	ug/L		05/21/15 15:01	05/26/15 10:41	1
4,4'-DDT	ND		0.055	0.012	ug/L		05/21/15 15:01	05/26/15 10:41	1
Dieldrin	ND		0.055	0.011	ug/L		05/21/15 15:01	05/26/15 10:41	1
Endosulfan I	ND		0.055	0.012	ug/L		05/21/15 15:01	05/26/15 10:41	1
Endosulfan II	ND		0.055	0.013	ug/L		05/21/15 15:01	05/26/15 10:41	1
Endosulfan sulfate	ND		0.055	0.017	ug/L		05/21/15 15:01	05/26/15 10:41	1
Endrin	ND		0.055	0.015	ug/L		05/21/15 15:01	05/26/15 10:41	1
Endrin aldehyde	ND		0.055	0.018	ug/L		05/21/15 15:01	05/26/15 10:41	1
Heptachlor	ND		0.055	0.0094	ug/L		05/21/15 15:01	05/26/15 10:41	1
Heptachlor epoxide	ND		0.055	0.0059	ug/L		05/21/15 15:01	05/26/15 10:41	1
Toxaphene	ND		0.55	0.13	ug/L		05/21/15 15:01	05/26/15 10:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	64		23 - 120				05/21/15 15:01	05/26/15 10:41	1
Tetrachloro-m-xylene	70		36 - 120				05/21/15 15:01	05/26/15 10:41	1

Method: 200.7 Rev 4.4 - M	letals (ICP)					
Analyte	Result Qualifier	RL	MDL Uni	it D Prepared	Analyzed	Dil Fac
Arsenic	ND ND	10.0	5.6 ug/l	L 05/22/15 07:4	05/22/15 17:57	1
Iron	187	50.0	19.3 ug/l	L 05/22/15 07:4	0 05/22/15 17:57	1
Manganese	140 B	3.0	0.40 ug/l	L 05/22/15 07:4	0 05/22/15 17:57	1
Zinc	2.5 JB	10.0	1.5 ug/l	L 05/22/15 07:4	0 05/22/15 17:57	1

General Chemistry Analyte	Rosult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0			=		06/01/15 13:05	1
Oli & Grease	שוו		5.0	1.4	mg/L		00/01/13 11.03	00/01/13 13.03	'
Cyanide, Total	0.31		0.010	0.0050	mg/L		05/21/15 17:25	05/26/15 13:10	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		05/27/15 15:10	05/28/15 14:49	1
Total Dissolved Solids	896		10.0	4.0	mg/L			05/26/15 04:42	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			05/21/15 15:47	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			05/22/15 17:05	1
pH	6.85	HF	0.100	0.100	SU			05/21/15 16:15	1

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6/2/2015

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-80733-1

Client Sample ID: Post-Carbon-2

Date Collected: 05/20/15 13:05 Date Received: 05/20/15 15:45 Lab Sample ID: 480-80735-2

Matrix: Wastewater

Method: 8021B - Volatile Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	0.35	ug/L			05/21/15 19:22	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			05/21/15 19:22	10
Benzene	260		2.0	0.23	ug/L			05/21/15 19:22	10
Ethylbenzene	ND		2.0	0.29	ug/L			05/21/15 19:22	10
Isopropylbenzene	ND		2.0	0.27	ug/L			05/21/15 19:22	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			05/21/15 19:22	10
m,p-Xylene	ND		4.0	0.54	ug/L			05/21/15 19:22	10
n-Butylbenzene	ND		2.0	0.31	ug/L			05/21/15 19:22	10
n-Propylbenzene	ND		2.0	1.3	ug/L			05/21/15 19:22	10
o-Xylene	ND		2.0	0.27	ug/L			05/21/15 19:22	10
p-Cymene	ND		2.0	0.30	ug/L			05/21/15 19:22	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			05/21/15 19:22	10
Toluene	8.8		2.0	0.36	ug/L			05/21/15 19:22	10
Xylenes, Total	ND		6.0	0.54	ug/L			05/21/15 19:22	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 145					05/21/15 19:22	10
4-Bromofluorobenzene	90		64 - 141					05/21/15 19:22	10

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-80733-1

Client Sample ID: Post-Carbon-1

Date Collected: 05/20/15 13:10 Date Received: 05/20/15 15:45

Surrogate

a,a,a-Trifluorotoluene

4-Bromofluorobenzene

Lab Sample ID: 480-80735-3

Prepared

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			05/21/15 19:56	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			05/21/15 19:56	50
Ethylbenzene	56		10	1.4	ug/L			05/21/15 19:56	50
Isopropylbenzene	ND		10	1.4	ug/L			05/21/15 19:56	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			05/21/15 19:56	50
m,p-Xylene	ND		20	2.7	ug/L			05/21/15 19:56	50
n-Butylbenzene	ND		10	1.5	ug/L			05/21/15 19:56	50
n-Propylbenzene	ND		10	6.5	ug/L			05/21/15 19:56	50
o-Xylene	2.2	J	10	1.4	ug/L			05/21/15 19:56	50
p-Cymene	ND		10	1.5	ug/L			05/21/15 19:56	50
sec-Butylbenzene	ND		10	1.0	ug/L			05/21/15 19:56	50
Toluene	290		10	1.8	ug/L			05/21/15 19:56	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		63 - 145			-		05/21/15 19:56	50
4-Bromofluorobenzene	91		64 - 141					05/21/15 19:56	50
: Method: 8021B - Volatile	Organia Compo	undo (CC)	DI						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3100	-	40	4.7	ug/L			05/22/15 14:49	200

Limits

63 - 145

64 - 141

%Recovery Qualifier

97

95

TestAmerica Buffalo

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Dil Fac

200

200

Analyzed

05/22/15 14:49

05/22/15 14:49

Lab Chronicle

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-80733-1

Lab Sample ID: 480-80733-1

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 05/20/15 14:00

Date Received: 05/20/15 15:45

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

Client Sample ID: Outside Sump

Lab Sample ID: 480-80733-2 Date Collected: 05/20/15 14:15

Matrix: Water

Date Received: 05/20/15 15:45

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

Lab Sample ID: 480-80735-1 **Client Sample ID: Post-Carbon-3**

Date Collected: 05/20/15 13:00 **Matrix: Wastewater**

Date Received: 05/20/15 15:45

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

6/2/2015

Lab Chronicle

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-80733-1

Client Sample ID: Post-Carbon-2

Lab Sample ID: 480-80735-2 Date Collected: 05/20/15 13:05

Matrix: Wastewater

Date Received: 05/20/15 15:45

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

Client Sample ID: Post-Carbon-1 Lab Sample ID: 480-80735-3

Date Collected: 05/20/15 13:10 **Matrix: Water**

Date Received: 05/20/15 15:45

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

Laboratory References:

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

Certification Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-80733-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-16
The following analytes	s 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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

l 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
00.7 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
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
И 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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

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

TestAmerica Buffalo

10 Hazelwood Drive Arriherst, NY 14228-2298

Chain of Custody Record



THE LEAVER ALSO VERDIAMENTAL TESTING

Phone (716) 691-2600 Fax (716) 691-7991																				44 & X.	rome Newscall of wit	123122
Client Information	Sampler:				PM: cher, E	Brian	j					Сапіє	er Track	dng N	o(s):				C No:)-61873-1:	5806.	2	
Client Contact: Thomas Palmer	Phone:			E-M bria		ail: n.fischer@testamericainc.com													Page: Page 2 of 2			
Groundwater & Environmental Services Inc					T	Analysis Requ										Job#:						
Address:	Due Date Request	ed:			200			П	, 	liy Sis	1	1	Teu	_	\neg	-	Migrate	Pre	servation	Code	es:	
495 Aero Drive Suite 3							Melha		7 5	\$							Alest.	A-	HCL		M - Hexane	
City: Cheektowaga	TAT Requested (da	ays):															100	ି C-	NaOH Zn Acetate		N - None O - AsNaO2	
State, Zip: NY, 14225							(MOD) Local	hil	2	137-10M		·					13	/ E-	Nitric Acid NaHSO4		P - Na2O4S Q - Na2SO3	
Phone:	PO#:						120	Mesh		٤	ļ		:	1			10 A 0	G-	MeOH Amchlor		R - Na2S2SO3 S - H2SO4	
Email:	Callout# 120597 WO#:				- <u>8</u>		Mo	local	CAMOD) TRULYST	<u>چ</u> رچ	\downarrow							1-1			T - TSP Dodeo U - Acetone	ahydrate
tpalmer@gesonline.com	Project#:				o se	2) -	3	7	宣鱼)						ers		DI Water EDTA		V - MCAA W - ph 4-5	
Project Name: NYSDEC-Gastown WWTP: Site# 91517: QTRLY Event Desc: Qu					2	Perform MS/MSD (Yes or No)	0	9		Allcalmak							ntaine) L-	EDA		Z - other (spec	ify)
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			Ournpie	Matrix (w=water,	Field Filtere	E	300,0	1.1	80008	ひり							Number					
		Sample	(C=comp,	S=solid, =waste/oil,	B	S S	300,	200	200	210,2	<u> </u>						Total					
Sample Identification	Sample Date	Time	G=grab) BT=		***	XN			4	N A	Zig / Autor	1.1					<u> </u>	4	Specia	al Ins	tructions/No	ote:
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Water	W				_		7	d Mexical	1800	T DESCRIPTION	Walter 1	3	4					
Pre-Carbon	5/20/15	1400	6		—		×	X	<u> </u>	<u> </u>	\	\vdash		+	+	-		Y 5				
Post-Carbon Outside Sump	5/20/15	1415	-\$	Water	M	IA	<u> </u>		- 13	<u> </u>							0.10					
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Possible Hazard Identification		<u> </u>			1	Samı	ole Dis	posal	(A fe	e may	be as	ssess	ed if	samp	oles a	are re	taine	d lon	ger than	1 mo	nth)	
Non-Hazard Flammable Skin Irritant Poison	B Unknow	n Rad	liological				Retun	1 To C	lient		Z)	isposa	al By I	.ab			rchiv	ve Fo	ger than r		Months	
Deliverable Requested: I, II, III, IV, Other (specify)							ial Instr															
Empty Kit Relinquished by:		Date:			Tim	ie:			1		,		Metho									
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Custody Seals Intact: Custody Seal No.: Δ Yes Δ No		_				C	ooler Te	mperatu	ne(s) "	o and O	mer Ke	enarks:		<u>3</u> '	<u>Ľ</u>	<u> </u>						-

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Chain of Custody Record



Phone (716) 691-2600 Fax (716) 691-7991 Carrier Tracking No(s): COC No: Sampler: Fischer, Brian J 480-61873-15806.1 Client Information Client Contact: Phone: E-Mail: Page: Thomas Palmer brian.fischer@testamericainc.com Page 1 of 2 Job#: Company: Groundwater & Environmental Services Inc **Analysis Requested** Due Date Requested: Preservation Codes: 495 Aero Drive Suite 3 A-HCL TAT Requested (days): B - NaOH N - None Cheektowaga C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S State, Zip: + E - NaHSO4 Q - Na2SO3 NY, 14225 F - MeOH R - Na2S2SO3 Phone: S - H2SO4 G - Amchlor 8021B - (MOD) STARS List - VOA - 8021 Callout# 120597 Smysoo 608_Pest - Priority Pollutant Pesticides H - Ascorbic Acid T - TSP Dodecahydrate 5210B - Biochemical Oxygen Demand 8270C - (MOD) TCL SVOA - OLM04.2 420,4 - Phenolics, Total Recoverable U - Acetone I-Ice J - Di Water V-MCAA 8260B - (MOD) TCL IIst OLM04.2 tpalmer@gesonline.com 2640D - Total Suspended Solids W - ph 4-5 K-EDTA Project#: L-EDA Z - other (specify) NYSDEC-Gastown WWTP: Site# 91517: QTRLY Event Desc: Qui 48002525 335.4 - Cyanide, Total New York Matrix Sample (w=water, Type S=solid. (C=comp, Sample Sample Date Time G=grab) | BT=Tissue, A=Alr Special Instructions/Note: Sample Identification Preservation Code: 600 |X|X|X|X|XPost-Carbon ~3 5/20/15 Water 1300 Post-Guban-2 395 Post Carbon-1 1310 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Possible Hazard Identification Unknown Return To Client Disposal By Lab Non-Hazard Flammable Radiological Archive For Skin Irritant Poison B Months Deliverable Requested: I, II, III, IV, Other (specify) Special Instructions/QC Requirements: Empty Kit Relinquished by: Date: Time: Method of Shipmen Company Company 1545 Received by: Company Relinquished by: Date/Time: Received by: Date/Time: Relinquished by: Custody Seals Intact: Custody Seal No .: Cooler Temperature(s) °C and Other Remarks: Δ Yes Δ No





Client: New York State D.E.C.

Job Number: 480-80733-1

Login Number: 80733 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.	
The cooler or samples do not appear to have been compromised or tampered with.	
Samples were received on ice.	
Cooler Temperature is acceptable. True	
Cooler Temperature is recorded. True	
COC is present. True	
COC is filled out in ink and legible.	
COC is filled out with all pertinent information.	
Is the Field Sampler's name present on COC?	
There are no discrepancies between the sample IDs on the containers and the COC.	
Samples are received within Holding Time. True	
Sample containers have legible labels. True	
Containers are not broken or leaking. True	
Sample collection date/times are provided. True	
Appropriate sample containers are used. True	
Sample bottles are completely filled. True	
Sample Preservation Verified True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in True diameter.	
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.	
Sampling Company provided. True	GES
Samples received within 48 hours of sampling. True	
Samples requiring field filtration have been filtered in the field.	
Chlorine Residual checked. N/A	

TestAmerica Buffalo

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-80733-1

Login Number: 80735 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

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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: 480-82405-1

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

For:

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

Attn: Mr. Glenn May

Authorized for release by: 6/30/2015 1:23:06 PM

Brian Fischer, Manager of Project Management (716)504-9835

brian.fischer@testamericainc.com

LINKS

Review your project results through
Total Access

Have a Question?



Visit us at: www.testamericainc.com

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

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

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

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

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

TestAmerica Job ID: 480-82405-1

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

Table of Contents

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-82405-1

Qualifiers

GC VOA

Qualifier Qualifier Description

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

General Chemistry

Qualifier Qualifier Description

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

Glossary

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

Case Narrative

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-82405-1

Job ID: 480-82405-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-82405-1

Comments

No additional comments.

Receipt

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

GC/MS VOA

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

HPLC/IC

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

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

GC VOA

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

Metals

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

General Chemistry

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

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

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

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-82405-1 Date Collected: 06/17/15 13:30 **Matrix: Wastewater**

Date Received: 06/17/15 15:30

Method: 8260C - Volatile O Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/25/15 16:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/25/15 16:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/25/15 16:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/25/15 16:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/25/15 16:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/25/15 16:36	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			06/25/15 16:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/25/15 16:36	1
2-Hexanone	ND		5.0	1.2	ug/L			06/25/15 16:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/25/15 16:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/25/15 16:36	1
Acetone	ND		10	3.0	ug/L			06/25/15 16:36	1
Benzene	ND		1.0	0.41	ug/L			06/25/15 16:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/25/15 16:36	1
Bromoform	ND		1.0	0.26	ug/L			06/25/15 16:36	1
Bromomethane	ND		1.0	0.69	ug/L			06/25/15 16:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/25/15 16:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/25/15 16:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/25/15 16:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/25/15 16:36	1
Chloroethane	ND		1.0	0.32	ug/L			06/25/15 16:36	1
Chloroform	1.9		1.0	0.34	ug/L			06/25/15 16:36	1
Chloromethane	ND		1.0	0.35	ug/L			06/25/15 16:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/25/15 16:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/25/15 16:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/25/15 16:36	1
Styrene	ND		1.0	0.73	ug/L			06/25/15 16:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/25/15 16:36	1
Toluene	ND		1.0	0.51	ug/L			06/25/15 16:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/25/15 16:36	1
Trichloroethene	ND		1.0	0.46	ug/L			06/25/15 16:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/25/15 16:36	1
Vinyl acetate	ND		5.0	0.85	ug/L			06/25/15 16:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/25/15 16:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		66 - 137					06/25/15 16:36	1
Toluene-d8 (Surr)	97		71 - 126					06/25/15 16:36	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	c Compounds (GC)						
4-Bromofluorobenzene (Surr)	107	73 - 120				06/25/15 16:36	1
Toluene-d8 (Surr)	97	71 - 126				06/25/15 16:36	1
1,2-Dichloroethane-d4 (Surr)	92	66 - 137		-		06/25/15 16:36	1

motriodi coz ib Tolatilo o	gaine compea	ao (5 0)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.0045	0.00079	ug/L			06/18/15 15:17	1
1,3,5-Trimethylbenzene	ND		0.0045	0.0034	ug/L			06/18/15 15:17	1
Benzene	0.0029	J	0.0045	0.00053	ug/L			06/18/15 15:17	1
Ethylbenzene	ND		0.0045	0.00065	ug/L			06/18/15 15:17	1
Isopropylbenzene	ND		0.0045	0.00061	ug/L			06/18/15 15:17	1
Methyl tert-butyl ether	0.0024	J	0.0091	0.00099	ug/L			06/18/15 15:17	1
m,p-Xylene	ND		0.0091	0.0012	ug/L			06/18/15 15:17	1
n-Butylbenzene	ND		0.0045	0.00070	ug/L			06/18/15 15:17	1

TestAmerica Buffalo

Page 6 of 18

6/30/2015

Client: New York State D.E.C.

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

Lab Sample ID: 480-82405-1

TestAmerica Job ID: 480-82405-1

Matrice Masterester

Matrix: Wastewater

Client Sample ID: Post-Carbon-3

Date Collected: 06/17/15 13:30 Date Received: 06/17/15 15:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.0045	0.0030	ug/L			06/18/15 15:17	1
o-Xylene	ND		0.0045	0.00061	ug/L			06/18/15 15:17	1
p-Cymene	ND		0.0045	0.00067	ug/L			06/18/15 15:17	1
sec-Butylbenzene	ND		0.0045	0.00046	ug/L			06/18/15 15:17	1
Toluene	ND		0.0045	0.00081	ug/L			06/18/15 15:17	1
Xylenes, Total	ND		0.0091	0.0012	ug/L			06/18/15 15:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145					06/18/15 15:17	1
4-Bromofluorobenzene	99		64 - 141					06/18/15 15:17	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	164		50.0	19.3	ug/L		06/18/15 10:26	06/19/15 15:53	1
General Chemistry Analyte	Posult	Qualifier	RL	MDL	Unit	D	Prepared	Analvzed	Dil Fac
		Qualifier							Dil Fac
Cyanide, Total	0.34		0.010	0.0050	mg/L		06/19/15 10:00	06/22/15 11:44	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.24	HF	0.100	0.100	SU			06/18/15 10:39	1

Client: New York State D.E.C.

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

Lab Sample ID: 480-82405-2

TestAmerica Job ID: 480-82405-1

Matrix: Water

Client Sample ID: Post-Carbon-2

Date Collected: 06/17/15 13:35 Date Received: 06/17/15 15:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.045	0.0079	ug/L			06/18/15 15:51	10
1,3,5-Trimethylbenzene	ND		0.045	0.034	ug/L			06/18/15 15:51	10
Benzene	5.7		0.045	0.0053	ug/L			06/18/15 15:51	10
Ethylbenzene	0.032	J	0.045	0.0065	ug/L			06/18/15 15:51	10
Isopropylbenzene	ND		0.045	0.0061	ug/L			06/18/15 15:51	10
Methyl tert-butyl ether	ND		0.091	0.0099	ug/L			06/18/15 15:51	10
m,p-Xylene	0.016	J	0.091	0.012	ug/L			06/18/15 15:51	10
n-Butylbenzene	ND		0.045	0.0070	ug/L			06/18/15 15:51	10
n-Propylbenzene	ND		0.045	0.030	ug/L			06/18/15 15:51	10
o-Xylene	ND		0.045	0.0061	ug/L			06/18/15 15:51	10
p-Cymene	ND		0.045	0.0067	ug/L			06/18/15 15:51	10
sec-Butylbenzene	ND		0.045	0.0046	ug/L			06/18/15 15:51	10
Toluene	0.22		0.045	0.0081	ug/L			06/18/15 15:51	10
Xylenes, Total	0.016	J	0.091	0.012	ug/L			06/18/15 15:51	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145					06/18/15 15:51	10
4-Bromofluorobenzene	100		64 - 141					06/18/15 15:51	10

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-82405-1

Lab Sample ID: 480-82405-3

Matrix: Water

Client Sample ID: Post-Carbon-1 Date Collected: 06/17/15 13:40

Date Received: 06/17/15 15:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.046	J	0.23	0.039	ug/L			06/18/15 16:26	50
1,3,5-Trimethylbenzene	ND		0.23	0.17	ug/L			06/18/15 16:26	50
Benzene	40		0.23	0.026	ug/L			06/18/15 16:26	50
Ethylbenzene	1.7		0.23	0.033	ug/L			06/18/15 16:26	50
Isopropylbenzene	ND		0.23	0.031	ug/L			06/18/15 16:26	50
Methyl tert-butyl ether	ND		0.45	0.050	ug/L			06/18/15 16:26	50
m,p-Xylene	0.61		0.45	0.061	ug/L			06/18/15 16:26	50
n-Butylbenzene	ND		0.23	0.035	ug/L			06/18/15 16:26	50
n-Propylbenzene	ND		0.23	0.15	ug/L			06/18/15 16:26	50
o-Xylene	0.37		0.23	0.031	ug/L			06/18/15 16:26	50
p-Cymene	ND		0.23	0.034	ug/L			06/18/15 16:26	50
sec-Butylbenzene	ND		0.23	0.023	ug/L			06/18/15 16:26	50
Toluene	5.6		0.23	0.040	ug/L			06/18/15 16:26	50
Xylenes, Total	0.98		0.45	0.061	ug/L			06/18/15 16:26	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145					06/18/15 16:26	50
4-Bromofluorobenzene	102		64 - 141					06/18/15 16:26	50

Client: New York State D.E.C.

Date Received: 06/17/15 15:30

Xylenes, Total

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

TestAmerica Job ID: 480-82405-1

06/18/15 17:00

Client Sample ID: Pre-Carbon Lab Sample ID: 480-82405-4

1.7 J

Date Collected: 06/17/15 13:45 **Matrix: Wastewater**

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL **MDL** Unit D Dil Fac Prepared Analyzed 1,2,4-Trimethylbenzene ND 0.91 0.16 ug/L 06/18/15 17:00 200 ND 1,3,5-Trimethylbenzene 0.91 0.68 ug/L 06/18/15 17:00 200 **Benzene** 66 0.91 0.11 ug/L 06/18/15 17:00 200 Ethylbenzene 6.4 0.91 0.13 ug/L 06/18/15 17:00 200 0.12 ug/L 200 Isopropylbenzene ND 0.91 06/18/15 17:00 200 Methyl tert-butyl ether ND 1.8 0.20 ug/L 06/18/15 17:00 0.25 ug/L 200 m,p-Xylene 0.70 J 1.8 06/18/15 17:00 n-Butylbenzene ND 0.91 200 0.14 ug/L 06/18/15 17:00 200 n-Propylbenzene ND 0.91 0.59 ug/L 06/18/15 17:00 0.91 0.12 ug/L 200 o-Xylene 1.0 06/18/15 17:00 p-Cymene ND 0.91 0.13 ug/L 200 06/18/15 17:00 sec-Butylbenzene ND 0.91 0.093 ug/L 06/18/15 17:00 200 0.91 200 **Toluene** 14 0.16 ug/L 06/18/15 17:00

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

1.8

0.25 ug/L

Method: 200.7 Rev 4.4 -	- Metals (ICP)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000	500	100	ug/L		06/18/15 10:26	06/19/15 15:56	1
Iron	1750	50.0	19.3	ug/L		06/18/15 10:26	06/19/15 15:56	1
Magnesium	73600	200	43.4	ug/L		06/18/15 10:26	06/19/15 15:56	1
Potassium	4650	500	100	ug/L		06/18/15 10:26	06/19/15 15:56	1
Sodium	71300	1000	324	ug/L		06/18/15 10:26	06/19/15 15:56	1

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

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-82405-1

Lab Sample ID: 480-82405-5

Matrix: Water

Client Sample ID: Inside/Outside Sump

Date Collected: 06/17/15 14:00 Date Received: 06/17/15 15:30

4-Bromofluorobenzene

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.28		0.23	0.039	ug/L			06/18/15 17:34	50
1,3,5-Trimethylbenzene	ND		0.23	0.17	ug/L			06/18/15 17:34	50
Ethylbenzene	8.3		0.23	0.033	ug/L			06/18/15 17:34	50
Isopropylbenzene	ND		0.23	0.031	ug/L			06/18/15 17:34	50
Methyl tert-butyl ether	ND		0.45	0.050	ug/L			06/18/15 17:34	50
m,p-Xylene	2.9		0.45	0.061	ug/L			06/18/15 17:34	50
n-Butylbenzene	ND		0.23	0.035	ug/L			06/18/15 17:34	50
n-Propylbenzene	ND		0.23	0.15	ug/L			06/18/15 17:34	50
o-Xylene	1.6		0.23	0.031	ug/L			06/18/15 17:34	50
p-Cymene	ND		0.23	0.034	ug/L			06/18/15 17:34	50
sec-Butylbenzene	ND		0.23	0.023	ug/L			06/18/15 17:34	50
Toluene	17		0.23	0.040	ug/L			06/18/15 17:34	50
Xylenes, Total	4.5		0.45	0.061	ug/L			06/18/15 17:34	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145			-		06/18/15 17:34	50
4-Bromofluorobenzene	96		64 - 141					06/18/15 17:34	50
Method: 8021B - Volatile O	rganic Compo	unds (GC)	- DI						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	87		0.91	0.11	ug/L			06/22/15 16:28	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 145			-		06/22/15 16:28	200

64 - 141

93

06/22/15 16:28

Client: New York State D.E.C.

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

Lab Sample ID: 480-82405-1

Lab Sample ID: 480-82405-2

Lab Sample ID: 480-82405-3

Lab Sample ID: 480-82405-4

Lab Sample ID: 480-82405-5

Matrix: Water

Matrix: Water

Matrix: Wastewater

Matrix: Wastewater

Client Sample ID: Post-Carbon-3

Date Collected: 06/17/15 13:30 Date Received: 06/17/15 15:30

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

Client Sample ID: Post-Carbon-2

Date Collected: 06/17/15 13:35

Date Received: 06/17/15 15:30

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

Client Sample ID: Post-Carbon-1

Date Collected: 06/17/15 13:40

Date Received: 06/17/15 15:30

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

Client Sample ID: Pre-Carbon

Date Collected: 06/17/15 13:45

Date Received: 06/17/15 15:30

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

Client Sample ID: Inside/Outside Sump

Date Collected: 06/17/15 14:00

Date Received: 06/17/15 15:30

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

TestAmerica Buffalo

Matrix: Water

Lab Chronicle

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-82405-1

Laboratory References:

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

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Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-82405-1

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

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-16
The following analytes	are included in this repor	rt, but certification is no	ot offered by the g	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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Method Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-82405-1

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

TestAmerica Buffalo

Sample Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-82405-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228

phone 716.504.9852 fax 716.691.7991							_								.	- Principal	,				TestAmerica Laboratories, Inc.
Client Contact	Project	Manager	Glenn May	(NYSDEC)	Site	Conta	act: T	hom	as Pa	almer		Da	ite: (7115	5			T	COC No:
Groundwater & Environmental Services, Inc	Tel/Fax	: (716) 85	-7220			Lab	Cont	act: I	3. Fis	cher			Ca	ırrier		-					of COCs
495 Aero Drive Suite 3		Analy	sis Turnaro	nd Time		JT					021		1				7			1	Job No.
Cheektowaga, NY 14225	Caler	ndar (C)	r Work Days	(W)			_			2	A-			1 1						1	
(800) 287-7857 Phone		TAT if diff	erent from Belov	v						M04	۶				-					L	
(866) 902-2187 FAX		\mathbf{x}	2 weeks				though			Ö	<u>i</u>		l							F	SDG No.
Project Name: NYSDEC Gatown WWTP	7 -		1 week				E G			L lis	E E										
Site: 915171			2 days				[] 2	4		TC	ST.									1	
P O # Callout 120597			1 day				<u> </u>	alini	_	<u>@</u>		[]				1				L	
Sample Identification	Samp Date				# of Cont.	Filtered Samp	300.0_28D (MOD) Local Method 200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 8021 335.4 - Cyanide, Total	SM4500_H+-pH									Sample Specific Notes:
Post-Carbon 3	6/1-	132	€ Gra	W	9	N			X	X	$\mathbf{x} \mid \mathbf{x}$	$ \mathbf{x} $									i
Post-Carbon 2	ali	7 13		w	3	N					x										
Post-Carbon 1	cir	1 134	() Gra	o W	3	N					x										
Pre-Carbon	6/17	134	Gra'	W	6	N :	x x	X			x				١					\neg	
Inside / Outside Sump	6/17	140	O Gra	w	3	N					x										
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					+	11					\top			TT	\top	+	1	-		7	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=Nat	OFF: 6= Of	her					+	1		\dashv	+	1 1	1	+	_	_	T		H	\dashv	
Possible Hazard Identification	ψ <u>ι</u> ι, υ– Οι				<u> </u>	- Is	amp	le Di:	spos	sal (A fee	may b	re ass	sesse	ed if s	amp	les :	are r	etain	ed i	longer than 1 month)
Non-Hazard Flammable Skin Irritant	Poiso	n B □] _{Unknowr}	Ź				Retu	m To	o Clie	ent	Jer	_	posal					Archi		
Special Instructions/QC Requirements & Comments:				•		TORRADOL LABORRE MAN AND AND AND AND AND AND AND AND AND A															
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Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-82405-1

Login Number: 82405 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

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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: 480-84881-1

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

For:

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

Attn: Mr. Glenn May

Inlette & Johnson

Authorized for release by: 8/11/2015 12:28:32 PM Orlette Johnson, Senior Project Manager (484)685-0864

or lette. johns on @testamerica in c. com

Designee for

Brian Fischer, Manager of Project Management (716)504-9835

brian.fischer@testamericainc.com

..... Links

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

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

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

Orlette Johnson

Senior Project Manager 8/11/2015 12:28:32 PM

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

TestAmerica Job ID: 480-84881-1

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

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Method Summary	
Sample Summary	19
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Receint Checklists	21

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-84881-1

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Qualifiers

GC/MS VOA

Quaimer	Qualifier Description	

* LCS or LCSD is outside acceptance limits.

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

GC VOA

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

Metals

Qualifier Qualifier Description

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

General Chemistry

Qualifier Qualifier Description

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

B Compound was found in the blank and sample.

Glossary

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

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

Case Narrative

Client: New York State D.E.C.

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

Job ID: 480-84881-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-84881-1

Receipt

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

Receipt Exceptions

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

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

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

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-84881-4). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA

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

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

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

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-84881-4) and Outside Sump (480-84881-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method(s) 608: The surrogate percent difference in the associated continuing calibration verifications (CCV) for Decachlorobiphenyl was decreased and slightly exceeded 15% on the RTXCLPII column, indicating a low bias. The following sample is impacted: Post-Carbon 3 (480-84881-1).

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

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

General Chemistry

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

TestAmerica Job ID: 480-84881-1

Case Narrative

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-84881-1

Job ID: 480-84881-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

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

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

Organic Prep

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

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

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-84881-1 Date Collected: 07/31/15 09:30 **Matrix: Wastewater**

Date Received: 07/31/15 14:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/07/15 16:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/07/15 16:58	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/07/15 16:58	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/07/15 16:58	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/07/15 16:58	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/07/15 16:58	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			08/07/15 16:58	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/07/15 16:58	1
2-Hexanone	ND		5.0	1.2	ug/L			08/07/15 16:58	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/07/15 16:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/07/15 16:58	1
Acetone	ND		10	3.0	ug/L			08/07/15 16:58	1
Benzene	ND		1.0	0.41	ug/L			08/07/15 16:58	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/07/15 16:58	1
Bromoform	ND	*	1.0	0.26	ug/L			08/07/15 16:58	1
Bromomethane	ND		1.0	0.69	ug/L			08/07/15 16:58	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/07/15 16:58	1
Carbon tetrachloride	ND	*	1.0	0.27	ug/L			08/07/15 16:58	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/07/15 16:58	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/07/15 16:58	1
Chloroethane	ND		1.0	0.32	ug/L			08/07/15 16:58	1
Chloroform	ND		1.0	0.34				08/07/15 16:58	1
Chloromethane	ND		1.0	0.35	ug/L			08/07/15 16:58	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/07/15 16:58	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/07/15 16:58	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/07/15 16:58	1
Styrene	ND		1.0	0.73	ug/L			08/07/15 16:58	1
Tetrachloroethene	ND		1.0	0.36				08/07/15 16:58	1
Toluene	ND		1.0	0.51	ug/L			08/07/15 16:58	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/07/15 16:58	1
Trichloroethene	ND		1.0	0.46				08/07/15 16:58	1
Vinyl chloride	ND		1.0	0.90	-			08/07/15 16:58	1
Vinyl acetate	ND		5.0	0.85	-			08/07/15 16:58	1
Xylenes, Total	ND		2.0	0.66	•			08/07/15 16:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		66 - 137			-		08/07/15 16:58	1
Toluene-d8 (Surr)	77		71 - 126					08/07/15 16:58	1
	0.0		70 400					00/07/45 40:50	

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		66 - 137	08/07/15 16:5	3 1
Toluene-d8 (Surr)	77		71 - 126	08/07/15 16:5	3 1
4-Bromofluorobenzene (Surr)	93		73 - 120	08/07/15 16:5	3 1

Method: 8270D - Semivolatile (Organic Compoun	ds (GC/MS)
Analyte	Result Qualifie	r RL

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

TestAmerica Buffalo

TestAmerica Job ID: 480-84881-1

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

Client Sample ID: Post-Carbon 3

Date Collected: 07/31/15 09:30 Date Received: 07/31/15 14:00

4-Bromofluorobenzene

Lab Sample ID: 480-84881-1

Matrix: Wastewater

Result Qualifi	er RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND ND	5.0	0.73	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.66	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	1.8	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.30	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.33	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.42	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	10	0.51	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.40	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.36	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.47	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.76	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	10	2.2	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.44	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.39	ug/L		08/04/15 14:18	08/05/15 18:58	1
ND	5.0	0.34	ug/L		08/04/15 14:18	08/05/15 18:58	1
%Recovery Qualifi	ier Limits				Prepared	Analyzed	Dil Fac
	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND 5.0 ND 5.0 ND 5.0 ND 5.0 ND 10 ND 5.0 ND 5.0 ND 5.0 ND 5.0 ND 10 ND 5.0 ND 5.0	ND 5.0 0.66 ND 5.0 1.8 ND 5.0 0.30 ND 5.0 0.42 ND 10 0.51 ND 5.0 0.40 ND 5.0 0.36 ND 5.0 0.76 ND 5.0 0.76 ND 10 2.2 ND 5.0 0.44 ND 5.0 0.39 ND 5.0 0.34	ND 5.0 0.66 ug/L ND 5.0 1.8 ug/L ND 5.0 0.30 ug/L ND 5.0 0.33 ug/L ND 5.0 0.42 ug/L ND 10 0.51 ug/L ND 5.0 0.40 ug/L ND 5.0 0.36 ug/L ND 5.0 0.47 ug/L ND 5.0 0.76 ug/L ND 10 2.2 ug/L ND 5.0 0.44 ug/L ND 5.0 0.39 ug/L ND 5.0 0.34 ug/L	ND 5.0 0.66 ug/L ND 5.0 1.8 ug/L ND 5.0 0.30 ug/L ND 5.0 0.33 ug/L ND 5.0 0.42 ug/L ND 10 0.51 ug/L ND 5.0 0.40 ug/L ND 5.0 0.36 ug/L ND 5.0 0.47 ug/L ND 5.0 0.76 ug/L ND 10 2.2 ug/L ND 5.0 0.44 ug/L ND 5.0 0.39 ug/L ND 5.0 0.34 ug/L	ND 5.0 0.66 ug/L 08/04/15 14:18 ND 5.0 1.8 ug/L 08/04/15 14:18 ND 5.0 0.30 ug/L 08/04/15 14:18 ND 5.0 0.33 ug/L 08/04/15 14:18 ND 5.0 0.42 ug/L 08/04/15 14:18 ND 10 0.51 ug/L 08/04/15 14:18 ND 5.0 0.40 ug/L 08/04/15 14:18 ND 5.0 0.36 ug/L 08/04/15 14:18 ND 5.0 0.47 ug/L 08/04/15 14:18 ND 5.0 0.76 ug/L 08/04/15 14:18 ND 5.0 0.76 ug/L 08/04/15 14:18 ND 5.0 0.44 ug/L 08/04/15 14:18 ND 5.0 0.39 ug/L 08/04/15 14:18 ND 5.0 0.39 ug/L 08/04/15 14:18 ND 5.0 0.39 ug/L 08/04/15 14:18 ND 5.0 0.34 ug/L 08/04/15 14:18	ND 5.0 0.66 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 1.8 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.30 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.33 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.42 ug/L 08/04/15 14:18 08/05/15 18:58 ND 10 0.51 ug/L 08/04/15 14:18 08/05/15 18:58 ND 10 0.51 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.40 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.40 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.36 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.47 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.76 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.76 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.76 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.44 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.39 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.39 ug/L 08/04/15 14:18 08/05/15 18:58 ND 5.0 0.34 ug/L 08/04/15 14:18 08/05/15 18:58

%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
78	52 - 132	08/04/15 14:18	08/05/15 18:58	1
89	48 - 120	08/04/15 14:18	08/05/15 18:58	1
45	20 - 120	08/04/15 14:18	08/05/15 18:58	1
80	46 - 120	08/04/15 14:18	08/05/15 18:58	1
91	67 - 150	08/04/15 14:18	08/05/15 18:58	1
33	16 - 120	08/04/15 14:18	08/05/15 18:58	1
	78 89 45 80 91	78 52 - 132 89 48 - 120 45 20 - 120 80 46 - 120 91 67 - 150	78 52 - 132 08/04/15 14:18 89 48 - 120 08/04/15 14:18 45 20 - 120 08/04/15 14:18 80 46 - 120 08/04/15 14:18 91 67 - 150 08/04/15 14:18	78 52 - 132 08/04/15 14:18 08/05/15 18:58 89 48 - 120 08/04/15 14:18 08/05/15 18:58 45 20 - 120 08/04/15 14:18 08/05/15 18:58 80 46 - 120 08/04/15 14:18 08/05/15 18:58 91 67 - 150 08/04/15 14:18 08/05/15 18:58

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/03/15 11:02	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/03/15 11:02	1
Benzene	ND		0.20	0.023	ug/L			08/03/15 11:02	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/03/15 11:02	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/03/15 11:02	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/03/15 11:02	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/03/15 11:02	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/03/15 11:02	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/03/15 11:02	1
o-Xylene	ND		0.20	0.027	ug/L			08/03/15 11:02	1
p-Cymene	ND		0.20	0.030	ug/L			08/03/15 11:02	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/03/15 11:02	1
Toluene	ND		0.20	0.036	ug/L			08/03/15 11:02	1
Xylenes, Total	ND		0.40	0.054	ug/L			08/03/15 11:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		63 - 145					08/03/15 11:02	1

Method: 608 - Organochlorine Pesticides in Water									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.049	0.0064	ug/L		08/03/15 14:37	08/05/15 15:14	1
alpha-BHC	ND		0.049	0.0064	ug/L		08/03/15 14:37	08/05/15 15:14	1
beta-BHC	ND		0.049	0.024	ug/L		08/03/15 14:37	08/05/15 15:14	1

64 - 141

92

TestAmerica Buffalo

08/03/15 11:02

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8/11/2015

Client: New York State D.E.C.

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

Lab Sample ID: 480-84881-1

TestAmerica Job ID: 480-84881-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 07/31/15 09:30 Date Received: 07/31/15 14:00

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.049	0.0097	ug/L		08/03/15 14:37	08/05/15 15:14	1
gamma-BHC (Lindane)	ND		0.049	0.0058	ug/L		08/03/15 14:37	08/05/15 15:14	1
Chlordane (technical)	ND		0.49	0.28	ug/L		08/03/15 14:37	08/05/15 15:14	1
4,4'-DDD	ND		0.049	0.0089	ug/L		08/03/15 14:37	08/05/15 15:14	1
4,4'-DDE	ND		0.049	0.011	ug/L		08/03/15 14:37	08/05/15 15:14	1
4,4'-DDT	ND		0.049	0.011	ug/L		08/03/15 14:37	08/05/15 15:14	1
Dieldrin	ND		0.049	0.0095	ug/L		08/03/15 14:37	08/05/15 15:14	1
Endosulfan I	ND		0.049	0.011	ug/L		08/03/15 14:37	08/05/15 15:14	1
Endosulfan II	ND		0.049	0.012	ug/L		08/03/15 14:37	08/05/15 15:14	1
Endosulfan sulfate	ND		0.049	0.015	ug/L		08/03/15 14:37	08/05/15 15:14	1
Endrin	ND		0.049	0.013	ug/L		08/03/15 14:37	08/05/15 15:14	1
Endrin aldehyde	ND		0.049	0.016	ug/L		08/03/15 14:37	08/05/15 15:14	1
Heptachlor	ND		0.049	0.0082	ug/L		08/03/15 14:37	08/05/15 15:14	1
Heptachlor epoxide	ND		0.049	0.0051	ug/L		08/03/15 14:37	08/05/15 15:14	1
Toxaphene	ND		0.49	0.12	ug/L		08/03/15 14:37	08/05/15 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	53		23 - 120				08/03/15 14:37	08/05/15 15:14	1
Tetrachloro-m-xylene	76		36 - 120				08/03/15 14:37	08/05/15 15:14	1
- Method: 200.7 Rev 4.4 - Me	etals (ICP)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	32.5	J	50.0	19.3	ug/L		08/04/15 08:00	08/04/15 15:51	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		08/07/15 12:57	08/07/15 13:08	1
Cyanide, Total	0.064	В	0.010	0.0050	mg/L		08/04/15 10:35	08/05/15 11:11	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		08/03/15 13:32	08/04/15 07:32	1
Total Dissolved Solids	924		20.0	8.0	mg/L			08/04/15 09:30	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			08/01/15 09:03	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			08/02/15 08:19	1

0.100

0.100 SU

7.56 HF

08/03/15 18:23

Client: New York State D.E.C.

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

Lab Sample ID: 480-84881-2

TestAmerica Job ID: 480-84881-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 2 Date Collected: 07/31/15 09:35

Date Received: 07/31/15 14:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/03/15 15:41	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/03/15 15:41	1
Benzene	0.051	J	0.20	0.023	ug/L			08/03/15 15:41	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/03/15 15:41	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/03/15 15:41	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/03/15 15:41	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/03/15 15:41	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/03/15 15:41	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/03/15 15:41	1
o-Xylene	ND		0.20	0.027	ug/L			08/03/15 15:41	1
p-Cymene	ND		0.20	0.030	ug/L			08/03/15 15:41	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/03/15 15:41	1
Toluene	ND		0.20	0.036	ug/L			08/03/15 15:41	1
Xylenes, Total	ND		0.40	0.054	ug/L			08/03/15 15:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		63 - 145			-		08/03/15 15:41	1
4-Bromofluorobenzene	95		64 - 141					08/03/15 15:41	1

Client: New York State D.E.C.

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

Lab Sample ID: 480-84881-3

TestAmerica Job ID: 480-84881-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 1

Date Collected: 07/31/15 09:40 Date Received: 07/31/15 14:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/03/15 16:15	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/03/15 16:15	1
Benzene	33		0.20	0.023	ug/L			08/03/15 16:15	1
Ethylbenzene	0.61		0.20	0.029	ug/L			08/03/15 16:15	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/03/15 16:15	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/03/15 16:15	1
m,p-Xylene	0.43		0.40	0.054	ug/L			08/03/15 16:15	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/03/15 16:15	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/03/15 16:15	1
o-Xylene	0.37		0.20	0.027	ug/L			08/03/15 16:15	1
p-Cymene	ND		0.20	0.030	ug/L			08/03/15 16:15	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/03/15 16:15	1
Toluene	2.7		0.20	0.036	ug/L			08/03/15 16:15	1
Xylenes, Total	0.80		0.40	0.054	ug/L			08/03/15 16:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		63 - 145			-		08/03/15 16:15	1
4-Bromofluorobenzene	92		64 - 141					08/03/15 16:15	1

8/11/2015

Analyzed

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

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

Result Qualifier

ND

ND

ND

170 J

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-84881-4 Date Collected: 07/31/15 09:45 **Matrix: Wastewater**

RL

MDL Unit

D

Prepared

Date Received: 07/31/15 14:00

Analyte

Trichloroethene

Vinyl chloride

Vinyl acetate

Xylenes, Total

Client: New York State D.E.C.

•					•	•	
1,1,1-Trichloroethane	ND	200	160	ug/L		08/07/15 17:21	200
1,1,2,2-Tetrachloroethane	ND	200	42	ug/L		08/07/15 17:21	200
1,1,2-Trichloroethane	ND	200	46	ug/L		08/07/15 17:21	200
1,1-Dichloroethane	ND	200	76	ug/L		08/07/15 17:21	200
1,1-Dichloroethene	ND	200	58	ug/L		08/07/15 17:21	200
1,2-Dichloroethane	ND	200	42	ug/L		08/07/15 17:21	200
1,2-Dichloroethene, Total	ND	400	160	ug/L		08/07/15 17:21	200
1,2-Dichloropropane	ND	200	140	ug/L		08/07/15 17:21	200
2-Hexanone	ND	1000	250	ug/L		08/07/15 17:21	200
2-Butanone (MEK)	ND	2000	260	ug/L		08/07/15 17:21	200
4-Methyl-2-pentanone (MIBK)	ND	1000	420	ug/L		08/07/15 17:21	200
Acetone	ND	2000	600	ug/L		08/07/15 17:21	200
Benzene	5300	200	82	ug/L		08/07/15 17:21	200
Bromodichloromethane	ND	200	78	ug/L		08/07/15 17:21	200
Bromoform	ND *	200	52	ug/L		08/07/15 17:21	200
Bromomethane	ND	200	140	ug/L		08/07/15 17:21	200
Carbon disulfide	ND	200	38	ug/L		08/07/15 17:21	200
Carbon tetrachloride	ND *	200	54	ug/L		08/07/15 17:21	200
Chlorobenzene	ND	200	150	ug/L		08/07/15 17:21	200
Dibromochloromethane	ND	200	64	ug/L		08/07/15 17:21	200
Chloroethane	ND	200	64	ug/L		08/07/15 17:21	200
Chloroform	ND	200	68	ug/L		08/07/15 17:21	200
Chloromethane	ND	200	70	ug/L		08/07/15 17:21	200
cis-1,3-Dichloropropene	ND	200	72	ug/L		08/07/15 17:21	200
Ethylbenzene	250	200	150	ug/L		08/07/15 17:21	200
Methylene Chloride	ND	200	88	ug/L		08/07/15 17:21	200
Styrene	ND	200	150	ug/L		08/07/15 17:21	200
Tetrachloroethene	ND	200	72	ug/L		08/07/15 17:21	200
Toluene	870	200		ug/L		08/07/15 17:21	200
trans-1,3-Dichloropropene	ND	200		ug/L		08/07/15 17:21	200

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

200

200

1000

400

92 ug/L

180 ug/L

170 ug/L

130 ug/L

Method: 8021B - Volatile Organic Compounds (GC)

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

TestAmerica Buffalo

8/11/2015

08/07/15 17:21

08/07/15 17:21

08/07/15 17:21

08/07/15 17:21

200

200

200

200

Dil Fac

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-84881-1

Client Sample ID: Pre-Carbon

Date Collected: 07/31/15 09:45 Date Received: 07/31/15 14:00

Sulfate

Alkalinity, Total

Lab Sample ID: 480-84881-4

Matrix: Wastewater

20

6

08/03/15 17:44

08/05/15 19:51

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		40	26	ug/L			08/03/15 15:07	200
o-Xylene	ND		40	5.4	ug/L			08/03/15 15:07	200
p-Cymene	ND		40	5.9	ug/L			08/03/15 15:07	200
sec-Butylbenzene	ND		40	4.1	ug/L			08/03/15 15:07	200
Toluene	870		40	7.1	ug/L			08/03/15 15:07	200
Xylenes, Total	160		80	11	ug/L			08/03/15 15:07	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		63 - 145					08/03/15 15:07	200
4.5. 6. 1	00		.					00/00/45 45:07	000
4-Bromofluorobenzene	89		64 - 141					08/03/15 15:07	200
Method: 200.7 Rev 4.4 -	Metals (ICP)	Qualifier	64 - 141 RL	MDL	Unit	D	Prepared	08/03/15 15:07 Analyzed	
Method: 200.7 Rev 4.4 - Analyte	Metals (ICP)	Qualifier				<u>D</u>	Prepared 08/04/15 08:00		
Method: 200.7 Rev 4.4 - Analyte Calcium	Metals (ICP) Result	Qualifier	RL	100		D	<u> </u>	Analyzed 08/04/15 15:54	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron	Metals (ICP) Result 144000	Qualifier	RL 500	100 19.3	ug/L	D	08/04/15 08:00 08/04/15 08:00	Analyzed 08/04/15 15:54	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium Potassium	Metals (ICP) Result 144000 3680	Qualifier	RL 500 50.0	100 19.3 43.4	ug/L ug/L ug/L	<u>D</u>	08/04/15 08:00 08/04/15 08:00 08/04/15 08:00	Analyzed 08/04/15 15:54 08/04/15 15:54	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium	Metals (ICP) Result 144000 3680 83500	Qualifier	RL 500 50.0 200	100 19.3 43.4 100	ug/L ug/L ug/L	<u>D</u>	08/04/15 08:00 08/04/15 08:00 08/04/15 08:00 08/04/15 08:00	Analyzed 08/04/15 15:54 08/04/15 15:54 08/04/15 15:54	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium Potassium	Metals (ICP) Result 144000 3680 83500 4480	Qualifier	RL 500 50.0 200 500	100 19.3 43.4 100	ug/L ug/L ug/L ug/L	D	08/04/15 08:00 08/04/15 08:00 08/04/15 08:00 08/04/15 08:00	Analyzed 08/04/15 15:54 08/04/15 15:54 08/04/15 15:54 08/04/15 15:54	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium Potassium Sodium	Metals (ICP) Result 144000 3680 83500 4480 76300	QualifierQualifier	RL 500 50.0 200 500	100 19.3 43.4 100 324	ug/L ug/L ug/L ug/L	D	08/04/15 08:00 08/04/15 08:00 08/04/15 08:00 08/04/15 08:00	Analyzed 08/04/15 15:54 08/04/15 15:54 08/04/15 15:54 08/04/15 15:54	Dil Fac 1 1 1 1 Dil Fac

40.0

60.0

155

530

7.0 mg/L

24.0 mg/L

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-84881-1

Lab Sample ID: 480-84881-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 07/31/15 10:00 Date Received: 07/31/15 14:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			08/03/15 13:19	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			08/03/15 13:19	500
Benzene	6500		100	12	ug/L			08/03/15 13:19	500
Ethylbenzene	530		100	14	ug/L			08/03/15 13:19	500
Isopropylbenzene	ND		100	14	ug/L			08/03/15 13:19	500
Methyl tert-butyl ether	ND		200	22	ug/L			08/03/15 13:19	500
m,p-Xylene	200		200	27	ug/L			08/03/15 13:19	500
n-Butylbenzene	ND		100	15	ug/L			08/03/15 13:19	500
n-Propylbenzene	ND		100	65	ug/L			08/03/15 13:19	500
o-Xylene	ND		100	14	ug/L			08/03/15 13:19	500
p-Cymene	ND		100	15	ug/L			08/03/15 13:19	500
sec-Butylbenzene	ND		100	10	ug/L			08/03/15 13:19	500
Toluene	1100		100	18	ug/L			08/03/15 13:19	500
Xylenes, Total	200		200	27	ug/L			08/03/15 13:19	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145					08/03/15 13:19	500
4-Bromofluorobenzene	95		64 - 141					08/03/15 13:19	500

Client: New York State D.E.C.

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

Client Sample ID: Post-Carbon 3 Lab Sample ID: 480-84881-1

Date Collected: 07/31/15 09:30 **Matrix: Wastewater** Date Received: 07/31/15 14:00

	Batch	Batch	D	Dilution	Batch	Prepared	A l 4	Lab
Prep Type	Type	Method	Run	Factor _	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	257571	08/07/15 16:58	SWO	TAL BUF
Total/NA	Prep	3510C			256962	08/04/15 14:18	VNP	TAL BUF
Total/NA	Analysis	8270D		1	257114	08/05/15 18:58	DMR	TAL BUF
Total/NA	Analysis	8021B		1	256634	08/03/15 11:02	MAN	TAL BUF
Total/NA	Prep	3510C			256764	08/03/15 14:37	GVF	TAL BUF
Total/NA	Analysis	608		1	257168	08/05/15 15:14	MAN	TAL BUF
Total/NA	Prep	200.7			256765	08/04/15 08:00	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	257047	08/04/15 15:51	LMH	TAL BUF
Total/NA	Prep	1664A			257611	08/07/15 12:57	MDL	TAL BUF
Total/NA	Analysis	1664A		1	257614	08/07/15 13:08	MDL	TAL BUF
Total/NA	Prep	Distill/CN			256922	08/04/15 10:35	NDB	TAL BUF
Total/NA	Analysis	335.4		1	257137	08/05/15 11:11	KMF	TAL BUF
Total/NA	Prep	Distill/Phenol			256739	08/03/15 13:32	GMG	TAL BUF
Total/NA	Analysis	420.1		1	256835	08/04/15 07:32	EKB	TAL BUF
Total/NA	Analysis	SM 2540C		1	256889	08/04/15 09:30	EKB	TAL BUF
Total/NA	Analysis	SM 2540D		1	256612	08/02/15 08:19	EKB	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	256899	08/03/15 18:23	KMF	TAL BUF
Total/NA	Analysis	SM 5210B		1	256597	08/01/15 09:03	NCH	TAL BUF

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-84881-2 Date Collected: 07/31/15 09:35 **Matrix: Wastewater**

Date Received: 07/31/15 14:00

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

Client Sample ID: Post-Carbon 1 Lab Sample ID: 480-84881-3

Date Collected: 07/31/15 09:40 Date Received: 07/31/15 14:00

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

Client Sample ID: Pre-Carbon Lab Sample ID: 480-84881-4

Date Collected: 07/31/15 09:45 Date Received: 07/31/15 14:00

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

TestAmerica Buffalo

Matrix: Wastewater

Matrix: Wastewater

Page 15 of 21

Lab Chronicle

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-84881-1

Lab Sample ID: 480-84881-4

Matrix: Wastewater

Date Collected: 07/31/15 09:45 Date Received: 07/31/15 14:00

Client Sample ID: Pre-Carbon

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

Lab Sample ID: 480-84881-5 **Client Sample ID: Outside Sump**

Date Collected: 07/31/15 10:00 **Matrix: Water**

Date Received: 07/31/15 14:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	256634	08/03/15 13:19	MAN	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-84881-1

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

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-16
The following analytes	are included in this repor	rt, but certification is no	ot offered by the g	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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Method Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-84881-1

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

TestAmerica Buffalo

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Sample Summary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-84881-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228

phone 716.504.9852 fax 716.691.7991	_					<u> </u>												1				Tes	tAmer	ica La	borator	ies, In	c.
Client Contact Project Manager: Glenn May (NYSDEC)						Site Contact: Thomas Palmer							Date: 7 31 15.							CO	COC No:						
Groundwater & Environmental Services, Inc Tel/Fax: (716) 851-7220						Lab Contact: B. Fischer						Carrier:								f	_ COC	S					
495 Aero Drive Suite 3	Analysis Turnaround				Time	11					3021				SS	_		П	П		Job	No.					
Cheektowaga, NY 14225	C	alenda	r(C) or Wo)	↓ ₋	,			5.	¥-			aple	ticid	Ž	lids											
(800) 287-7857 Phone	TAT if different from Below					tho	-			W.	<u>۲</u>	-		over	t Pes	Biochemical Oxygen De Total Suspended Solids	ed S				\perp			_			
(866) 902-2187 FAX	2 weeks								1		O	ist		Grease	2	utan	ryger	solv	1			SD	G No.				
Project Name: NYSDEC Gatown WWTP	1 week					j	를 돌			Lis	8021B - (MOD) STARS 335.4 - Cyanide, Total	e, Total H	Gr	otal	Poll :												
Site: 915171	2 days				ءَ ا		4		5	S) II &			cs, T	rity .	mic.	12	ļ										
P O # Callout 120597			1	day			٤١٤	9	alin		<u>0</u>	[0]) - 9	ioi	. 다	oche	3				L					
Sample Identification	Sample Sample Sample Date Time Type		Matrix	# of Cont.	Filtered Sample	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 8021	SM4500_H+-pH	1664A_Cale - Oil	420.4 - Phenolics, Total Recoverable	608 Pest - Priority Pollutant Pesticides	5210B - Biochemical Oxygen Demand	2540C_Calcd - Total Disolved Solids			į		Sa	mple Sj	ecific N	lotes:			
Post-Carbon 3	7/3	31/15	0930	Grab	W	19	N			X	X	XX	X	X	x	X	x x	X									
Post-Carbon 2			0935	Grab	w	3	N					x															
Post-Carbon 1			0990	Grab	w	3	N					x															
Pre-Carbon			0945	Grab	w	9	N X	X	x		x	X															
7 P Luside/ Outside Sump			1000	Grab	w	3	N					x							l								
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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaC)H; 6=	Other	•		·			T				\neg		Ħ		T	\top							-			
Possible Hazard Identification							s	Sample Disposal (A fee may be a							assessed if samples are retained								n 1 me	onth)			
Non-Hazard Flammable Skin Irritant	Po	oison B		Inknown			l	\Box	Retu	m To	o Cli	ent			Dispo	osal L	3y La	ab				e For			/onths		
Special Instructions/QC Requirements & Comments: SPME DAY 9.3°C 4.6°C WICE Relinquished by 1 (Va. Company: Coc Date/Time: Received by 1 (Date/Time) Company: Coc Date/Time: Coc Date/																											
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Relinquished by:	Company:				Date/Tir	ne:	R	Received by:					Company:						Date	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: 480-84881-1

Login Number: 84881 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

ordator: reals, orma 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.	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: 480-86774-1

Client Project/Site: Gastown WWTP #915171

For:

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

Attn: Mr. Richard Dana

Authorized for release by: 9/17/2015 12:31:03 PM

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

orlette.johnson@testamericainc.com

LINKS

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.

Orlette Johnson

Senior Project Manager 9/17/2015 12:31:03 PM

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

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-86774-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Qualifiers

GC VOA

Qualifier **Qualifier Description**

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

General Chemistry

Qualifier **Qualifier Description**

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

Glossary

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

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 Minimum detectable activity MDA **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

RLReporting Limit or Requested Limit (Radiochemistry)

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

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

TestAmerica Buffalo

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Job ID: 480-86774-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-86774-1

Receipt

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

GC/MS VOA

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

HPLC/IC

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

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

GC VOA

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

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

Metals

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

General Chemistry

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

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

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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: 480-86774-1

Date Collected: 09/04/15 12:00 Date Received: 09/04/15 15:10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/12/15 16:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/12/15 16:00	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/12/15 16:00	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/12/15 16:00	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/12/15 16:00	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/12/15 16:00	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			09/12/15 16:00	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/12/15 16:00	1
2-Hexanone	ND		5.0	1.2	ug/L			09/12/15 16:00	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/12/15 16:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/12/15 16:00	1
Acetone	ND		10	3.0	ug/L			09/12/15 16:00	1
Benzene	ND		1.0	0.41	ug/L			09/12/15 16:00	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/12/15 16:00	1
Bromoform	ND		1.0	0.26	ug/L			09/12/15 16:00	1
Bromomethane	ND		1.0	0.69	ug/L			09/12/15 16:00	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/12/15 16:00	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/12/15 16:00	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/12/15 16:00	1
Dibromochloromethane	ND		1.0		ug/L			09/12/15 16:00	1
Chloroethane	ND		1.0	0.32	ug/L			09/12/15 16:00	1
Chloroform	ND		1.0	0.34	ug/L			09/12/15 16:00	1
Chloromethane	ND		1.0	0.35	ug/L			09/12/15 16:00	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/12/15 16:00	1
Ethylbenzene	ND		1.0		ug/L			09/12/15 16:00	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/12/15 16:00	1
Styrene	ND		1.0	0.73	ug/L			09/12/15 16:00	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/12/15 16:00	1
Toluene	ND		1.0	0.51	ug/L			09/12/15 16:00	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/12/15 16:00	1
Trichloroethene	ND		1.0	0.46	ug/L			09/12/15 16:00	1
Vinyl chloride	ND		1.0		ug/L			09/12/15 16:00	1
Vinyl acetate	ND		5.0	0.85	ug/L			09/12/15 16:00	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/12/15 16:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		66 - 137			-		09/12/15 16:00	1
Toluene-d8 (Surr)	92		71 - 126					09/12/15 16:00	1

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

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

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TestAmerica Buffalo

09/12/15 16:00

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Lab Sample ID: 480-86774-1

Client Sample ID: POST-CARBON 3

Date Collected: 09/04/15 12:00 **Matrix: Water** Date Received: 09/04/15 15:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			09/14/15 16:46	1
o-Xylene	ND		0.20	0.027	ug/L			09/14/15 16:46	1
p-Cymene	ND		0.20	0.030	ug/L			09/14/15 16:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/14/15 16:46	1
Toluene	ND		0.20	0.036	ug/L			09/14/15 16:46	1
Xylenes, Total	ND		0.40	0.054	ug/L			09/14/15 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		63 - 145					09/14/15 16:46	1
4-Bromofluorobenzene	81		64 - 141					09/14/15 16:46	1
Method: 200.7 Rev 4.4 - I	Metals (ICP)								
Analyte	· ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	255		50.0	19.3	ug/L		09/10/15 07:30	09/10/15 21:35	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.55		0.020	0.010	mg/L		09/06/15 10:03	09/08/15 13:30	2
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
рН	7.39	HE	0.100	0.100	SU			09/08/15 13:34	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Lab Sample ID: 480-86774-2

Matrix: Water

Client Sample ID: POST-CARBON 2

Date Collected: 09/04/15 12:05 Date Received: 09/04/15 15:10

Method: 8021B - Volatile	Organic Compounds (G	SC)						
Analyte	Result Qualifie	r RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	0.20	0.035	ug/L			09/14/15 16:14	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			09/14/15 16:14	1
Benzene	0.078 J	0.20	0.023	ug/L			09/14/15 16:14	1
Ethylbenzene	ND	0.20	0.029	ug/L			09/14/15 16:14	1
Isopropylbenzene	ND	0.20	0.027	ug/L			09/14/15 16:14	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			09/14/15 16:14	1
m,p-Xylene	ND	0.40	0.054	ug/L			09/14/15 16:14	1
n-Butylbenzene	ND	0.20	0.031	ug/L			09/14/15 16:14	1
n-Propylbenzene	ND	0.20	0.13	ug/L			09/14/15 16:14	1
o-Xylene	ND	0.20	0.027	ug/L			09/14/15 16:14	1
p-Cymene	ND	0.20	0.030	ug/L			09/14/15 16:14	1
sec-Butylbenzene	ND	0.20	0.020	ug/L			09/14/15 16:14	1
Toluene	ND	0.20	0.036	ug/L			09/14/15 16:14	1
Xylenes, Total	ND	0.40	0.054	ug/L			09/14/15 16:14	1
Surrogate	%Recovery Qualifie	r Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	84	63 - 145			-		09/14/15 16:14	1
4-Bromofluorobenzene	80	64 - 141					09/14/15 16:14	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Lab Sample ID: 480-86774-3

Matrix: Water

Client Sample ID: POST-CARBON 1

Date Collected: 09/04/15 12:10 Date Received: 09/04/15 15:10

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	2.0	0.35	ug/L			09/14/15 17:50	10
1,3,5-Trimethylbenzene	ND	2.0	1.5	ug/L			09/14/15 17:50	10
Benzene	41	2.0	0.23	ug/L			09/14/15 17:50	10
Ethylbenzene	ND	2.0	0.29	ug/L			09/14/15 17:50	10
Isopropylbenzene	ND	2.0	0.27	ug/L			09/14/15 17:50	10
Methyl tert-butyl ether	ND	4.0	0.44	ug/L			09/14/15 17:50	10
m,p-Xylene	ND	4.0	0.54	ug/L			09/14/15 17:50	10
n-Butylbenzene	ND	2.0	0.31	ug/L			09/14/15 17:50	10
n-Propylbenzene	ND	2.0	1.3	ug/L			09/14/15 17:50	10
o-Xylene	ND	2.0	0.27	ug/L			09/14/15 17:50	10
p-Cymene	ND	2.0	0.30	ug/L			09/14/15 17:50	10
sec-Butylbenzene	ND	2.0	0.20	ug/L			09/14/15 17:50	10
Toluene	2.8	2.0	0.36	ug/L			09/14/15 17:50	10
Xylenes, Total	ND	4.0	0.54	ug/L			09/14/15 17:50	10
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	82	63 - 145					09/14/15 17:50	10
4-Bromofluorobenzene	83	64 - 141					09/14/15 17:50	10

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Lab Sample ID: 480-86774-4

Matrix: Water

Client Sample ID: PRE-CARBON

Date Collected: 09/04/15 12:15 Date Received: 09/04/15 15:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	26	J	100	17	ug/L			09/14/15 14:22	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			09/14/15 14:22	500
Benzene	9100		100	12	ug/L			09/14/15 14:22	500
Ethylbenzene	230		100	14	ug/L			09/14/15 14:22	500
Isopropylbenzene	ND		100	14	ug/L			09/14/15 14:22	500
Methyl tert-butyl ether	ND		200	22	ug/L			09/14/15 14:22	500
m,p-Xylene	180	J	200	27	ug/L			09/14/15 14:22	500
n-Butylbenzene	ND		100	15	ug/L			09/14/15 14:22	500
n-Propylbenzene	ND		100	65	ug/L			09/14/15 14:22	500
o-Xylene	98	J	100	14	ug/L			09/14/15 14:22	500
p-Cymene	ND		100	15	ug/L			09/14/15 14:22	500
sec-Butylbenzene	ND		100	10	ug/L			09/14/15 14:22	500
Toluene	1300		100	18	ug/L			09/14/15 14:22	500
Xylenes, Total	280		200	27	ug/L			09/14/15 14:22	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	80		63 - 145					09/14/15 14:22	500
4-Bromofluorobenzene	76		64 - 141					09/14/15 14:22	50
Method: 200.7 Rev 4.4 - N	Metals (ICP)								
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
Calcium	121000		500	100	ug/L		09/10/15 07:30	09/10/15 21:38	
Iron	7330		50.0	19.3	ug/L		09/10/15 07:30	09/10/15 21:38	
Magnesium	103000		200	43.4	ug/L		09/10/15 07:30	09/10/15 21:38	
Potassium	5190		500	100	ug/L		09/10/15 07:30	09/10/15 21:38	
Sodium	73500		1000	324	ug/L		09/10/15 07:30	09/10/15 21:38	
General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
Chloride	142		10.0	5.6	mg/L			09/08/15 15:57	2
Sulfate	104		40.0	7.0	mg/L			09/08/15 15:57	2
Alkalinity, Total	563		100	40.0	mg/L			09/10/15 16:00	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Lab Sample ID: 480-86774-5

Matrix: Water

Client Sample ID: INSIDE/OUTSIDE SUMP Date Collected: 09/04/15 12:30

Date Received: 09/04/15 15:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	88		40	6.9	ug/L			09/14/15 13:50	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			09/14/15 13:50	200
Ethylbenzene	1900		40	5.7	ug/L			09/14/15 13:50	200
Isopropylbenzene	14	J	40	5.4	ug/L			09/14/15 13:50	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			09/14/15 13:50	200
m,p-Xylene	760		80	11	ug/L			09/14/15 13:50	200
n-Butylbenzene	ND		40	6.2	ug/L			09/14/15 13:50	200
n-Propylbenzene	ND		40	26	ug/L			09/14/15 13:50	200
o-Xylene	ND		40	5.4	ug/L			09/14/15 13:50	200
p-Cymene	ND		40	5.9	ug/L			09/14/15 13:50	200
sec-Butylbenzene	ND		40	4.1	ug/L			09/14/15 13:50	200
Toluene	3900		40	7.1	ug/L			09/14/15 13:50	200
Xylenes, Total	760		80	11	ug/L			09/14/15 13:50	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		63 - 145			-		09/14/15 13:50	200
4-Bromofluorobenzene	85		64 - 141					09/14/15 13:50	200
Method: 8021B - Volatile	Organic Compo	unds (GC)	- DL						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	21000		200	23	ug/L			09/14/15 17:18	1000
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	84		63 - 145			-		09/14/15 17:18	1000
4-Bromofluorobenzene	84		64 - 141					09/14/15 17:18	1000

2

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-86774-1

Matrix: Water

Lab Sample ID: 480-86774-3

Lab Sample ID: 480-86774-4

Lab Sample ID: 480-86774-5

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Client Sample ID: POST-CARBON 3
Date Collected: 09/04/15 12:00

Date Received: 09/04/15 15:10

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

Client Sample ID: POST-CARBON 2 Lab Sample ID: 480-86774-2

Date Collected: 09/04/15 12:05

Date Received: 09/04/15 15:10

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

Client Sample ID: POST-CARBON 1

Date Collected: 09/04/15 12:10

Date Received: 09/04/15 15:10

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

Client Sample ID: PRE-CARBON

Date Collected: 09/04/15 12:15

Date Received: 09/04/15 15:10

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

Client Sample ID: INSIDE/OUTSIDE SUMP

Date Collected: 09/04/15 12:30

Date Received: 09/04/15 15:10

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

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Laboratory References:

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

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Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date				
New York	NELAP		2	10026	03-31-16				
The following analytes	are included in this repo	rt, but certification is	s not offered by the g	overning authority:					
Analysis Method	Prep Method	Matrix	Analy	е					
8021B		Water	m,p-X	m,p-Xylene					
8021B		Water	o-Xyle	ene					
8260C		Water	1,2-D	ichloroethene, 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: 480-86774-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record

Amherst, NY 14228

THE LEADER IN ENVIRONMENTAL TESTING

phone 716.504.9852 fax 716.691.7991															١,						TestAmerica Laboratories, Inc.
Client Contact	Project Ma	nager: Gle	nn May (N	NYSDEC)		Site	Cont	act:]	Thom	as I	Palmer		D	Date: 9415							COC No:
Groundwater & Environmental Services, Inc	Tel/Fax: (716) 851-722	20			Lab	Cont	act:]	B. Fis	sche	r		_	arrier		1	1.51		0.0		of COCs
495 Aero Drive Suite 3		Analysis T	urnaroun	d Time		П	Т				021			\top			Т		Т		Job No.
Cheektowaga, NY 14225	Calenda	r(C) or Wo	ork Days (V	W)		Ы.				7	8-A						-1				
(800) 287-7857 Phone	T.	AT if different	from Below				thod			list OLM04.2	0										
(866) 902-2187 FAX	X	2	2 weeks				tho	1		OL	list								1		SDG No.
Project Name: NYSDEC Gatown WWTP	1 🗆	1	week				I Me			C list	ARS In										
Site: 915171			2 days				Loca	ځ		TC	ST.					- 1	-				
P O # Callout 120597			l day			du	E E	alini	ايا	[<u>@</u>	(a)	+pI									
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sampl	300.0_28D (MOD) Local Method 200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL	8021B - (MOD) STARS list - VOA - 8021	SM4500_H+-pH									Sample Specific Notes:
Post-Carbon 3	9/4	1200	Grab	W	9	N			X	x	X X	x									
Post-Carbon 2	94	1205	Grab	w	3	N					x										
Post-Carbon 1	914	1210	Grab	w	3	N					x										
Pre-Carbon	9/4	1215	Grab	w	6	N :	x x	x			x										
Inside / Outside Sump	9/4	1230	Grab	w	3	N					x			1	11111			1111111	1111111	14 4 6 6 6 1	
						П									Ш	h.		Ш			
					-	П		Т				T		-	W						
***						П	1	T			T	П		480-86774 Chain of Custody				iy			
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		-				H	\top	T			\top	\top	1	\Box	Ť	\dashv	\dagger	Ť	T	1	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO	H; 6= Other					+	+		П	\exists	1	\forall	_	H	Ħ		+	+	t	+	
Possible Hazard Identification				1	-	s	amp	le Di	spos	sal (A fee	may	be as	sesse	ed if	sam	ples	are	reta	ined	l longer than 1 month)
Non-Hazard Flammable Skin Irritant	Poison B		Inknown					Retu	m To	o Cli	ient	[☐ _{Dis}	posal	Ву	Lab			Arc	hive	For Months
Special Instructions/QC Requirements & Comments:														16	24	n f)	5	: 0	,‡	+1
Relinquished by:	Company:			Date/Tir	ne: { 6	R	eceive	dby	7	3	ek	7				pany.		, 0			Date/Time: 9/4/15 \\$ (0
Relinquished by:	Company:	1		Date/Tir			eceive				~	_//			Con	pany:	K (<u> </u>			Date/Time:
Relinquished by:	Company:			Date/Tin	ne:	R	eceive	ed by	:						Com	pany:					Date/Time:
Control of the contro							_	-							-		_				

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-86774-1

Login Number: 86774 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

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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: 480-88499-1

Client Project/Site: Gastown WWTP #915171

For:

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

Attn: Mr. Richard Dana

Authorized for release by:

10/19/2015 1:43:13 PM

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

.....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 10/19/2015 1:43:13 PM

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

Page 2 of 17

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-88499-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Qualifiers

GC VOA

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

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 **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)

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Job ID: 480-88499-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-88499-1

Receipt

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

GC/MS VOA

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

HPLC/IC

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

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

GC VOA

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

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

Metals

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

General Chemistry

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

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-88499-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 10/06/15 12:15 Date Received: 10/06/15 13:00

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/16/15 06:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/16/15 06:12	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/16/15 06:12	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/16/15 06:12	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/16/15 06:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/16/15 06:12	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			10/16/15 06:12	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/16/15 06:12	1
2-Hexanone	ND		5.0	1.2	ug/L			10/16/15 06:12	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/16/15 06:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/16/15 06:12	1
Acetone	ND		10	3.0	ug/L			10/16/15 06:12	1
Benzene	ND		1.0	0.41	ug/L			10/16/15 06:12	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/16/15 06:12	1
Bromoform	ND		1.0	0.26	ug/L			10/16/15 06:12	1
Bromomethane	ND		1.0	0.69	ug/L			10/16/15 06:12	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/16/15 06:12	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/16/15 06:12	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/16/15 06:12	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/16/15 06:12	1
Chloroethane	ND		1.0	0.32	ug/L			10/16/15 06:12	1
Chloroform	ND		1.0	0.34	ug/L			10/16/15 06:12	1
Chloromethane	ND		1.0	0.35	ug/L			10/16/15 06:12	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/16/15 06:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/16/15 06:12	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/16/15 06:12	1
Styrene	ND		1.0	0.73	ug/L			10/16/15 06:12	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/16/15 06:12	1
Toluene	ND		1.0	0.51	ug/L			10/16/15 06:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/16/15 06:12	1
Trichloroethene	ND		1.0	0.46	ug/L			10/16/15 06:12	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/16/15 06:12	1
Vinyl acetate	ND		5.0	0.85	ug/L			10/16/15 06:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/16/15 06:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137					10/16/15 06:12	1
Toluene-d8 (Surr)	98		71 - 126					10/16/15 06:12	1

Mothod:	2021B	Volatila	Organic (Compounds	(GC)
welliou.	00210	·voiatile	Organic v	Compounds	IUCI

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4-Bromofluorobenzene (Surr)

Method: 8021B - Volatile Or	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			10/07/15 16:52	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			10/07/15 16:52	1
Benzene	ND	0.20	0.023	ug/L			10/07/15 16:52	1
Ethylbenzene	ND	0.20	0.029	ug/L			10/07/15 16:52	1
Isopropylbenzene	ND	0.20	0.027	ug/L			10/07/15 16:52	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			10/07/15 16:52	1
m,p-Xylene	ND	0.40	0.054	ug/L			10/07/15 16:52	1
n-Butylbenzene	ND	0.20	0.031	ug/L			10/07/15 16:52	1

73 - 120

TestAmerica Buffalo

10/16/15 06:12

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10/19/2015

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Client: New York State D.E.C.

Date Collected: 10/06/15 12:15

Date Received: 10/06/15 13:00

Iron

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

TestAmerica Job ID: 480-88499-1

Lab Sample ID: 480-88499-1

<u>10/07/15 11:10</u> <u>10/08/15 11:43</u>

Matrix: Wastewater

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			10/07/15 16:52	1
o-Xylene	ND		0.20	0.027	ug/L			10/07/15 16:52	1
p-Cymene	ND		0.20	0.030	ug/L			10/07/15 16:52	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/07/15 16:52	1
Toluene	ND		0.20	0.036	ug/L			10/07/15 16:52	1
Xylenes, Total	ND		0.60	0.054	ug/L			10/07/15 16:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	77		63 - 145					10/07/15 16:52	1
4-Bromofluorobenzene	75		64 - 141					10/07/15 16:52	1
Mathadi 200 7 Pay 4.4	Motolo (ICB)								
Method: 200.7 Rev 4.4 - I Analyte	• •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.54	В	0.020	0.010	mg/L		10/07/15 16:40	10/08/15 11:16	2
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
рН	7.52	HF	0.100	0.100	SU			10/06/15 21:10	1

50.0

222

19.3 ug/L

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Lab Sample ID: 480-88499-2

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 10/06/15 12:20 Date Received: 10/06/15 13:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			10/08/15 13:29	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/08/15 13:29	1
Benzene	0.054	J	0.20	0.023	ug/L			10/08/15 13:29	1
Ethylbenzene	ND		0.20	0.029	ug/L			10/08/15 13:29	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/08/15 13:29	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/08/15 13:29	1
m,p-Xylene	ND		0.40	0.054	ug/L			10/08/15 13:29	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/08/15 13:29	1
n-Propylbenzene	ND		0.20	0.13	ug/L			10/08/15 13:29	1
o-Xylene	ND		0.20	0.027	ug/L			10/08/15 13:29	1
p-Cymene	ND		0.20	0.030	ug/L			10/08/15 13:29	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/08/15 13:29	1
Toluene	ND		0.20	0.036	ug/L			10/08/15 13:29	1
Xylenes, Total	ND		0.60	0.054	ug/L			10/08/15 13:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	79		63 - 145					10/08/15 13:29	1
4-Bromofluorobenzene	78		64 - 141					10/08/15 13:29	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Lab Sample ID: 480-88499-3

Matrix: Wastewater

Client Sample ID: Post-Carbon 1

Date Collected: 10/06/15 12:25 Date Received: 10/06/15 13:00

Method: 8021B - Volatile Analyte	Result Qualifie	,	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	1.0	0.17	ug/L			10/08/15 14:01	5
1,3,5-Trimethylbenzene	ND	1.0	0.75	ug/L			10/08/15 14:01	5
Benzene	57	1.0	0.12	ug/L			10/08/15 14:01	5
Ethylbenzene	ND	1.0	0.14	ug/L			10/08/15 14:01	5
Isopropylbenzene	ND	1.0	0.14	ug/L			10/08/15 14:01	5
Methyl tert-butyl ether	ND	2.0	0.22	ug/L			10/08/15 14:01	5
m,p-Xylene	ND	2.0	0.27	ug/L			10/08/15 14:01	5
n-Butylbenzene	ND	1.0	0.15	ug/L			10/08/15 14:01	5
n-Propylbenzene	ND	1.0	0.65	ug/L			10/08/15 14:01	5
o-Xylene	ND	1.0	0.14	ug/L			10/08/15 14:01	5
p-Cymene	ND	1.0	0.15	ug/L			10/08/15 14:01	5
sec-Butylbenzene	ND	1.0	0.10	ug/L			10/08/15 14:01	5
Toluene	1.0	1.0	0.18	ug/L			10/08/15 14:01	5
Xylenes, Total	ND	3.0	0.27	ug/L			10/08/15 14:01	5
Surrogate	%Recovery Qualifie	r Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101	63 - 145					10/08/15 14:01	5
4-Bromofluorobenzene	99	64 - 141					10/08/15 14:01	5

Client: New York State D.E.C.

Date Received: 10/06/15 13:00

Sodium

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Lab Sample ID: 480-88499-4

10/07/15 11:10 10/08/15 11:46

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 10/06/15 12:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	17	J	40	6.9	ug/L			10/07/15 18:28	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			10/07/15 18:28	200
Benzene	6900		40	4.7	ug/L			10/07/15 18:28	200
Ethylbenzene	72		40	5.7	ug/L			10/07/15 18:28	200
Isopropylbenzene	ND		40	5.4	ug/L			10/07/15 18:28	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			10/07/15 18:28	200
m,p-Xylene	180		80	11	ug/L			10/07/15 18:28	200
n-Butylbenzene	ND		40	6.2	ug/L			10/07/15 18:28	200
n-Propylbenzene	ND		40	26	ug/L			10/07/15 18:28	200
o-Xylene	170		40	5.4	ug/L			10/07/15 18:28	200
p-Cymene	ND		40	5.9	ug/L			10/07/15 18:28	200
sec-Butylbenzene	ND		40	4.1	ug/L			10/07/15 18:28	200
Toluene	1000		40	7.1	ug/L			10/07/15 18:28	200
Xylenes, Total	350		120	11	ug/L			10/07/15 18:28	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		63 - 145					10/07/15 18:28	200
4-Bromofluorobenzene	103		64 - 141					10/07/15 18:28	200
Method: 200.7 Rev 4.4 - M	letals (ICP)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	129000	В	500	100	ug/L		10/07/15 11:10	10/08/15 11:46	1
Iron	4000		50.0	19.3	ug/L		10/07/15 11:10	10/08/15 11:46	1
Magnesium	82900		200	43.4	ug/L		10/07/15 11:10	10/08/15 11:46	1
Potassium	4840		500	100	ug/L		10/07/15 11:10	10/08/15 11:46	1

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

1000

324 ug/L

80200

TestAmerica Buffalo

10/19/2015

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Lab Sample ID: 480-88499-5

Matrix: Water

Client Sample ID: Inside/Outside Sump

Date Collected: 10/06/15 12:45 Date Received: 10/06/15 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			10/07/15 19:00	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			10/07/15 19:00	500
Benzene	11000		100	12	ug/L			10/07/15 19:00	500
Ethylbenzene	860		100	14	ug/L			10/07/15 19:00	500
Isopropylbenzene	ND		100	14	ug/L			10/07/15 19:00	500
Methyl tert-butyl ether	ND		200	22	ug/L			10/07/15 19:00	500
m,p-Xylene	370		200	27	ug/L			10/07/15 19:00	500
n-Butylbenzene	ND		100	15	ug/L			10/07/15 19:00	500
n-Propylbenzene	ND		100	65	ug/L			10/07/15 19:00	500
o-Xylene	450		100	14	ug/L			10/07/15 19:00	500
p-Cymene	ND		100	15	ug/L			10/07/15 19:00	500
sec-Butylbenzene	ND		100	10	ug/L			10/07/15 19:00	500
Toluene	2100		100	18	ug/L			10/07/15 19:00	500
Xylenes, Total	820		300	27	ug/L			10/07/15 19:00	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		63 - 145					10/07/15 19:00	500
4-Bromofluorobenzene	105		64 - 141					10/07/15 19:00	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

Date Collected: 10/06/15 12:15 Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-1

Matrix: Wastewater

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

Client Sample ID: Post-Carbon 2

Date Collected: 10/06/15 12:20 Date Received: 10/06/15 13:00 Lab Sample ID: 480-88499-2

Matrix: Wastewater

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

Client Sample ID: Post-Carbon 1

Date Collected: 10/06/15 12:25

Date Received: 10/06/15 13:00

Lab	Samp	le	ID	4	480	-88	499-	3

Lab Sample ID: 480-88499-4

Matrix: Wastewater

Matrix: Wastewater

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

Client Sample ID: Pre-Carbon

Date Collected: 10/06/15 12:30

Date Received: 10/06/15 13:00

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

Client Sample ID: Inside/Outside Sump

Date Collected: 10/06/15 12:45 Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-5 **Matrix: Water**

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

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date			
New York	NELAP		2	10026	03-31-16			
The following analytes	are included in this repor	rt, but certification is no	ot offered by the g	overning authority:				
Analysis Method	Prep Method	Matrix	Analyt	е				
8021B		Wastewater	m,p-X	ylene				
8021B		Wastewater	Wastewater o-Xyle					
8021B		Water	m,p-X	ylene				
8021B		Water	o-Xyle	o-Xylene				
8260C		Wastewater	1,2-Di	1,2-Dichloroethene, 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: 480-88499-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

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

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10 Hazelwood Drive

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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Amherst, NY 14228

phone 716.504.9852 fax 716.691.7991															1	,				TestAmerica Laboratories, Inc.
Client Contact	Project Manager: Glenn May (NYSDEC)				Site Contact: Thomas Palmer Date						Date:	Date: 10/6/15					COC No:			
Groundwater & Environmental Services, Inc	Tel/Fax: (716) 851-7220											Carrier:				Si Si	11/10/2			
495 Aero Drive Suite 3		Analysis T	urnaround	Time		d.chi		1			8021						\Box		T	Job No.
Cheektowaga, NY 14225	Calendar (C) or Work Days (W)				1	1_1	poqua		12	- V										
(800) 287-7857 Phone	TAT if different from Below				1.00	etho			- (MOD) TCL list OLM04.2	- vo										
(866) 902-2187 FAX		2	weeks			19	I Me	etho		Q	list						1	1		SDG No.
Project Name: NYSDEC Gatown WWTP		1	week				Locs	al M		Lis	ARS	Int								
Site: 915171			2 days			6	(QC	Loc	è	TC	ST.	P, To		1						
P O # Callout 120597			l day	,			(MC	(a)	Alkalınıty	100	10D	nnid H-n								
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sampl	300.0_28D (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - All	200.7 - Iron 8260B - (MG	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total SM4500 H+-nH								Sample Specific Notes:
Post-Carbon 3	10/6	1215	Grab	W	9	N				X X	X	x x								
Post-Carbon 2	10/6	1220	Grab	W	3	N					x									
Post-Carbon 1	10/6	1225	Grab	W	3	N					X						П			
Pre-Carbon	10/6	1230	Grab	W	6	N	X	X	X		X									
Inside / Outside Sump	10/6	1248	Grab	W	3	N					x				\sqcap					
									+						480-88499 Chain of Custody					Stoky
							П	1		T					. 10		1	r) Cu	stody
											П				H	T				
															П					
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO	H; 6= Other				14 11:50		П	1	7					/	\Box		\Box	7		
Possible Hazard Identification			Inknown	Sample Disposal (A fee may be assessed if samples Return To Client Disposal By Lab										d longer than 1 month) e For Months						
Special Instructions/QC Requirements & Comments:																				
													-	1	Ten	18	5	10	+	+1
Relinquished by	Company: Date/Tim			me:	00	Rece	ived	by:	گ-	4	XU	/		Temp S.O.T.					Date/Time: 1300	
Relinquished by: Company: Date/Tim					Received by: Company: Date/Time:						Date/Time:									
Relinquished by:	Company:			Date/Ti	me:	//	Rece	eived	by:					_	Com	pany:				Date/Time:

Form No. CA-C-W1-002, dated 04/07/2011



















Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-88499-1

Login Number: 88499 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Creator. Roll, Critis 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.	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: 480-92248-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Quarterly

For:

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

Attn: Mr. Richard Dana

Authorized for release by: 12/21/2015 11:57:09 PM

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

orlette.johnson@testamericainc.com

·····LINKS ·······

Review your project results through

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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 12/21/2015 11:57:09 PM

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

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-92248-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Qualifiers

GC/MS VOA

Qualitier	Qualitier Description	

LCS or LCSD is outside acceptance limits.

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

GC VOA

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

Metals

B Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description

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

B Compound was found in the blank and sample.

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

Glossary

Abbreviation	These commonly used	abbreviations may or may n	ot 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)

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Job ID: 480-92248-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-92248-1

Receipt

The samples were received on 12/7/2015 3:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-92248-3). Elevated reporting limits (RLs) are provided.

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

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

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

GC/MS Semi VOA

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

HPLC/IC

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

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

GC VOA

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

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

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

GC Semi VOA

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

Metals

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

General Chemistry

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

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

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

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-92248-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 12/07/15 11:30 Date Received: 12/07/15 15:05

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	1.0	0.82	ug/L			12/18/15 14:29	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			12/18/15 14:29	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			12/18/15 14:29	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			12/18/15 14:29	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			12/18/15 14:29	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			12/18/15 14:29	1
1,2-Dichloroethene, Total	ND	2.0	0.81	ug/L			12/18/15 14:29	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			12/18/15 14:29	1
2-Hexanone	ND *	5.0	1.2	ug/L			12/18/15 14:29	1
2-Butanone (MEK)	ND	10	1.3	ug/L			12/18/15 14:29	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			12/18/15 14:29	1
Acetone	ND	10	3.0	ug/L			12/18/15 14:29	1
Benzene	ND	1.0	0.41	ug/L			12/18/15 14:29	1
Bromodichloromethane	ND	1.0	0.39	ug/L			12/18/15 14:29	1
Bromoform	ND	1.0	0.26	ug/L			12/18/15 14:29	1
Bromomethane	ND	1.0	0.69	ug/L			12/18/15 14:29	1
Carbon disulfide	ND	1.0	0.19	ug/L			12/18/15 14:29	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			12/18/15 14:29	1
Chlorobenzene	ND	1.0	0.75	ug/L			12/18/15 14:29	1
Dibromochloromethane	ND	1.0	0.32	ug/L			12/18/15 14:29	1
Chloroethane	ND	1.0	0.32	ug/L			12/18/15 14:29	1
Chloroform	ND	1.0	0.34	ug/L			12/18/15 14:29	1
Chloromethane	ND	1.0	0.35	ug/L			12/18/15 14:29	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			12/18/15 14:29	1
Ethylbenzene	ND	1.0	0.74	ug/L			12/18/15 14:29	1
Methylene Chloride	ND	1.0	0.44	ug/L			12/18/15 14:29	1
Styrene	ND	1.0	0.73	ug/L			12/18/15 14:29	1
Tetrachloroethene	ND	1.0	0.36	ug/L			12/18/15 14:29	1
Toluene	ND	1.0	0.51	ug/L			12/18/15 14:29	1
trans-1,3-Dichloropropene	ND	1.0	0.37	ug/L			12/18/15 14:29	1
Trichloroethene	ND	1.0	0.46	ug/L			12/18/15 14:29	1
Vinyl chloride	ND	1.0	0.90	ug/L			12/18/15 14:29	1
Vinyl acetate	ND	5.0	0.85	ug/L			12/18/15 14:29	1
Xylenes, Total	ND	2.0	0.66	ug/L			12/18/15 14:29	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105	66 - 137			-		12/18/15 14:29	1
Toluene-d8 (Surr)	101	71 - 126					12/18/15 14:29	1
4-Bromofluorobenzene (Surr)	99	73 - 120					12/18/15 14:29	1

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

Method: 8270D - Semivolatil Analyte Biphenyl 2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo[a]anthracene	itile Organic Compounds (G	C/IVIS)							
	Analyte	Result Qualifier	ŔL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Biphenyl	ND —	5.0	0.65	ug/L		12/08/15 13:48	12/15/15 13:49	1
	2-Methylnaphthalene	ND	5.0	0.60	ug/L		12/08/15 13:48	12/15/15 13:49	1
	Acenaphthene	ND	5.0	0.41	ug/L		12/08/15 13:48	12/15/15 13:49	1
	Acenaphthylene	ND	5.0	0.38	ug/L		12/08/15 13:48	12/15/15 13:49	1
	Anthracene	ND	5.0	0.28	ug/L		12/08/15 13:48	12/15/15 13:49	1
	Benzo[a]anthracene	ND	5.0	0.36	ug/L		12/08/15 13:48	12/15/15 13:49	1
	Benzo[a]pyrene	ND	5.0	0.47	ug/L		12/08/15 13:48	12/15/15 13:49	1
	Benzo[b]fluoranthene	ND	5.0	0.34	ug/L		12/08/15 13:48	12/15/15 13:49	1

TestAmerica Buffalo

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-92248-1

12/08/15 13:48 12/15/15 13:49

12/08/15 13:48 12/15/15 13:49

12/08/15 13:48 12/15/15 13:49

12/08/15 13:48 12/15/15 13:49

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 12/07/15 11:30 Date Received: 12/07/15 15:05

p-Terphenyl-d14

2-Fluorophenol

2,4,6-Tribromophenol

4-Bromofluorobenzene

Phenol-d5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		12/08/15 13:48	12/15/15 13:49	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		12/08/15 13:48	12/15/15 13:49	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		12/08/15 13:48	12/15/15 13:49	1
Carbazole	ND		5.0	0.30	ug/L		12/08/15 13:48	12/15/15 13:49	1
Chrysene	ND		5.0	0.33	ug/L		12/08/15 13:48	12/15/15 13:49	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		12/08/15 13:48	12/15/15 13:49	1
Dibenzofuran	ND		10	0.51	ug/L		12/08/15 13:48	12/15/15 13:49	1
Fluoranthene	ND		5.0	0.40	ug/L		12/08/15 13:48	12/15/15 13:49	1
Fluorene	ND		5.0	0.36	ug/L		12/08/15 13:48	12/15/15 13:49	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		12/08/15 13:48	12/15/15 13:49	1
Naphthalene	ND		5.0	0.76	ug/L		12/08/15 13:48	12/15/15 13:49	1
Pentachlorophenol	ND		10	2.2	ug/L		12/08/15 13:48	12/15/15 13:49	1
Phenanthrene	ND		5.0	0.44	ug/L		12/08/15 13:48	12/15/15 13:49	1
Phenol	ND		5.0	0.39	ug/L		12/08/15 13:48	12/15/15 13:49	1
Pyrene	ND		5.0	0.34	ug/L		12/08/15 13:48	12/15/15 13:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	51		46 - 120				12/08/15 13:48	12/15/15 13:49	1
2-Fluorobiphenyl	50		48 - 120				12/08/15 13:48	12/15/15 13:49	1

67 - 150

16 - 120

20 - 120

52 - 132

79

28

37

69

96

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L	 .		12/08/15 13:29	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			12/08/15 13:29	1
Benzene	ND		0.20	0.023	ug/L			12/08/15 13:29	1
Ethylbenzene	ND		0.20	0.029	ug/L			12/08/15 13:29	1
Isopropylbenzene	ND		0.20	0.027	ug/L			12/08/15 13:29	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			12/08/15 13:29	1
m,p-Xylene	ND		0.40	0.054	ug/L			12/08/15 13:29	1
n-Butylbenzene	ND		0.20	0.031	ug/L			12/08/15 13:29	1
n-Propylbenzene	ND		0.20	0.13	ug/L			12/08/15 13:29	1
o-Xylene	ND		0.20	0.027	ug/L			12/08/15 13:29	1
p-Cymene	ND		0.20	0.030	ug/L			12/08/15 13:29	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			12/08/15 13:29	1
Toluene	0.091	J	0.20	0.036	ug/L			12/08/15 13:29	1
Xylenes, Total	ND		0.60	0.054	ug/L			12/08/15 13:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145					12/08/15 13:29	1

Method: 608 - Org	ganochlorine Pesticides	in Water						
Analyte	Result	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND ND	0.050	0.0066	ug/L		12/08/15 13:59	12/09/15 17:37	1
alpha-BHC	ND	0.050	0.0066	ug/L		12/08/15 13:59	12/09/15 17:37	1
beta-BHC	ND	0.050	0.025	ug/L		12/08/15 13:59	12/09/15 17:37	1

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TestAmerica Buffalo

12/08/15 13:29

Client: New York State D.E.C.

Date Received: 12/07/15 15:05

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Lab Sample ID: 480-92248-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3
Date Collected: 12/07/15 11:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.050	0.010	ug/L		12/08/15 13:59	12/09/15 17:37	1
gamma-BHC (Lindane)	ND		0.050	0.0060	ug/L		12/08/15 13:59	12/09/15 17:37	1
Chlordane (technical)	ND		0.50	0.29	ug/L		12/08/15 13:59	12/09/15 17:37	1
4,4'-DDD	ND		0.050	0.0092	ug/L		12/08/15 13:59	12/09/15 17:37	1
4,4'-DDE	ND		0.050	0.012	ug/L		12/08/15 13:59	12/09/15 17:37	1
4,4'-DDT	ND		0.050	0.011	ug/L		12/08/15 13:59	12/09/15 17:37	1
Dieldrin	ND		0.050	0.0098	ug/L		12/08/15 13:59	12/09/15 17:37	1
Endosulfan I	ND		0.050	0.011	ug/L		12/08/15 13:59	12/09/15 17:37	1
Endosulfan II	ND		0.050	0.012	ug/L		12/08/15 13:59	12/09/15 17:37	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		12/08/15 13:59	12/09/15 17:37	1
Endrin	ND		0.050	0.014	ug/L		12/08/15 13:59	12/09/15 17:37	1
Endrin aldehyde	ND		0.050	0.016	ug/L		12/08/15 13:59	12/09/15 17:37	1
Heptachlor	ND		0.050	0.0085	ug/L		12/08/15 13:59	12/09/15 17:37	1
Heptachlor epoxide	ND		0.050	0.0053	ug/L		12/08/15 13:59	12/09/15 17:37	1
Toxaphene	ND		0.50	0.12	ug/L		12/08/15 13:59	12/09/15 17:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	89		23 - 120				12/08/15 13:59	12/09/15 17:37	1
Tetrachloro-m-xylene	75		36 - 120				12/08/15 13:59	12/09/15 17:37	1
	letals (ICP)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	128		50.0	19.3	ug/L		12/08/15 10:15	12/08/15 21:18	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.1	1.4	mg/L		12/14/15 10:55	12/14/15 14:34	1

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

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Lab Sample ID: 480-92248-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 12/07/15 11:35 Date Received: 12/07/15 15:05

Method: 8021B - Volatile Analyte	Result Qu		MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND	0.20	0.035	ug/L		-	12/08/15 14:01	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			12/08/15 14:01	1
Benzene	ND	0.20	0.023	ug/L			12/08/15 14:01	1
Ethylbenzene	ND	0.20	0.029	ug/L			12/08/15 14:01	1
Isopropylbenzene	ND	0.20	0.027	ug/L			12/08/15 14:01	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			12/08/15 14:01	1
m,p-Xylene	ND	0.40	0.054	ug/L			12/08/15 14:01	1
n-Butylbenzene	ND	0.20	0.031	ug/L			12/08/15 14:01	1
n-Propylbenzene	ND	0.20	0.13	ug/L			12/08/15 14:01	1
o-Xylene	ND	0.20	0.027	ug/L			12/08/15 14:01	1
p-Cymene	ND	0.20	0.030	ug/L			12/08/15 14:01	1
sec-Butylbenzene	ND	0.20	0.020	ug/L			12/08/15 14:01	1
Toluene	ND	0.20	0.036	ug/L			12/08/15 14:01	1
Xylenes, Total	ND	0.60	0.054	ug/L			12/08/15 14:01	1
Surrogate	%Recovery Qu	alifier Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95	63 - 145					12/08/15 14:01	1
4-Bromofluorobenzene	93	64 - 141					12/08/15 14:01	1

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

Lab Sample ID: 480-92248-3

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 12/07/15 11:40

Date Received: 12/07/15 15:05

Method: 8260C - Volatile O Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	160	ug/L			12/18/15 01:11	200
1,1,2,2-Tetrachloroethane	ND		200	42	ug/L			12/18/15 01:11	200
1,1,2-Trichloroethane	ND		200	46	ug/L			12/18/15 01:11	200
1,1-Dichloroethane	ND		200	76	ug/L			12/18/15 01:11	200
1,1-Dichloroethene	ND		200	58	ug/L			12/18/15 01:11	200
1,2-Dichloroethane	ND		200	42	ug/L			12/18/15 01:11	200
1,2-Dichloroethene, Total	ND		400	160	ug/L			12/18/15 01:11	200
1,2-Dichloropropane	ND		200	140	ug/L			12/18/15 01:11	200
2-Hexanone	ND		1000	250	ug/L			12/18/15 01:11	200
2-Butanone (MEK)	ND		2000	260	ug/L			12/18/15 01:11	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			12/18/15 01:11	200
Acetone	ND		2000	600	ug/L			12/18/15 01:11	200
Benzene	6000		200	82	ug/L			12/18/15 01:11	200
Bromodichloromethane	ND		200		ug/L			12/18/15 01:11	200
Bromoform	ND		200	52	ug/L			12/18/15 01:11	200
Bromomethane	ND		200	140	ug/L			12/18/15 01:11	200
Carbon disulfide	ND		200		ug/L			12/18/15 01:11	200
Carbon tetrachloride	ND		200		ug/L			12/18/15 01:11	200
Chlorobenzene	ND		200	150	ug/L			12/18/15 01:11	200
Dibromochloromethane	ND		200		ug/L			12/18/15 01:11	200
Chloroethane	ND		200	64	ug/L			12/18/15 01:11	200
Chloroform	ND		200	68	ug/L			12/18/15 01:11	200
Chloromethane	ND		200	70	ug/L			12/18/15 01:11	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			12/18/15 01:11	200
Ethylbenzene	ND		200	150	ug/L			12/18/15 01:11	200
Methylene Chloride	ND		200	88	ug/L			12/18/15 01:11	200
Styrene	ND		200	150	ug/L			12/18/15 01:11	200
Tetrachloroethene	ND		200	72	ug/L			12/18/15 01:11	200
Toluene	800		200	100	ug/L			12/18/15 01:11	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			12/18/15 01:11	200
Trichloroethene	ND		200	92	ug/L			12/18/15 01:11	200
Vinyl chloride	ND		200		ug/L			12/18/15 01:11	200
Vinyl acetate	ND		1000		ug/L			12/18/15 01:11	200
Xylenes, Total	130	J	400	130	ug/L			12/18/15 01:11	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137			-		12/18/15 01:11	200
Toluene-d8 (Surr)	95		71 - 126					12/18/15 01:11	200
4-Bromofluorobenzene (Surr)	98		73 - 120					12/18/15 01:11	200

Surrogate	%Recovery 0	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104	66 - 137		12/18/15 01:11	200
Toluene-d8 (Surr)	95	71 - 126		12/18/15 01:11	200
4-Bromofluorobenzene (Surr)	98	73 - 120		12/18/15 01:11	200

Mothod: 8021B	Volatila Organia	Compounds (GC)
welliou: ouzib -	voiatile Ordanic	Compounds (GC)

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

TestAmerica Buffalo

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Client Sample ID: Pre-Carbon

Date Collected: 12/07/15 11:40 Date Received: 12/07/15 15:05

Alkalinity, Total

Lab Sample ID: 480-92248-3

Matrix: Wastewater

12/15/15 20:58

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		40	26	ug/L			12/08/15 14:32	200
o-Xylene	89		40	5.4	ug/L			12/08/15 14:32	200
p-Cymene	ND		40	5.9	ug/L			12/08/15 14:32	200
sec-Butylbenzene	ND		40	4.1	ug/L			12/08/15 14:32	200
Toluene	820		40	7.1	ug/L			12/08/15 14:32	200
Xylenes, Total	230		120	11	ug/L			12/08/15 14:32	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145					12/08/15 14:32	200
4-Bromofluorobenzene	95		64 - 141					12/08/15 14:32	200
Method: 200.7 Rev 4.4 -	Metals (ICP)	Qualifier	64 - 141 RL	MDL	Unit	D	Prepared	12/08/15 14:32 Analyzed	
Method: 200.7 Rev 4.4 - Analyte	Metals (ICP)					<u>D</u>	Prepared 12/08/15 10:15		Dil Fac
4-Bromofluorobenzene Method: 200.7 Rev 4.4 - Analyte Calcium Iron	Metals (ICP) Result		RL	100		<u>D</u>		Analyzed	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron	Metals (ICP) Result 123000		RL 500	100 19.3	ug/L	<u>D</u>	12/08/15 10:15	Analyzed 12/08/15 21:35	
Method: 200.7 Rev 4.4 - Analyte Calcium	Metals (ICP) Result 123000 736		RL 500 50.0	100 19.3 43.4	ug/L ug/L	<u>D</u>	12/08/15 10:15 12/08/15 10:15	Analyzed 12/08/15 21:35 12/08/15 21:35 12/08/15 21:35	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium	Metals (ICP) Result 123000 736 84400		RL 500 50.0 200	100 19.3 43.4 100	ug/L ug/L ug/L	<u>D</u>	12/08/15 10:15 12/08/15 10:15 12/08/15 10:15	Analyzed 12/08/15 21:35 12/08/15 21:35 12/08/15 21:35 12/08/15 21:35	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium Potassium Sodium	Metals (ICP) Result 123000 736 84400 4420		RL 500 50.0 200 500	100 19.3 43.4 100	ug/L ug/L ug/L ug/L	<u>D</u>	12/08/15 10:15 12/08/15 10:15 12/08/15 10:15 12/08/15 10:15	Analyzed 12/08/15 21:35 12/08/15 21:35 12/08/15 21:35 12/08/15 21:35	
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium Potassium	Metals (ICP) Result 123000 736 84400 4420 69600		RL 500 50.0 200 500	100 19.3 43.4 100	ug/L ug/L ug/L ug/L ug/L	D_	12/08/15 10:15 12/08/15 10:15 12/08/15 10:15 12/08/15 10:15	Analyzed 12/08/15 21:35 12/08/15 21:35 12/08/15 21:35 12/08/15 21:35	Dil Fac 1 1 1 1
Method: 200.7 Rev 4.4 - Analyte Calcium Iron Magnesium Potassium Sodium General Chemistry	Metals (ICP) Result 123000 736 84400 4420 69600	В	RL 500 50.0 200 500 1000	100 19.3 43.4 100 324	ug/L ug/L ug/L ug/L ug/L		12/08/15 10:15 12/08/15 10:15 12/08/15 10:15 12/08/15 10:15 12/08/15 10:15	Analyzed 12/08/15 21:35 12/08/15 21:35 12/08/15 21:35 12/08/15 21:35 12/08/15 21:35	

100

40.0 mg/L

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Lab Sample ID: 480-92248-4

Matrix: Wastewater

Client Sample ID: Inside/Outside Sump Date Collected: 12/07/15 11:45

Date Received: 12/07/15 15:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	35	J	40	6.9	ug/L			12/08/15 15:04	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			12/08/15 15:04	200
Benzene	11000		40	4.7	ug/L			12/08/15 15:04	200
Ethylbenzene	880		40	5.7	ug/L			12/08/15 15:04	200
Isopropylbenzene	ND		40	5.4	ug/L			12/08/15 15:04	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			12/08/15 15:04	200
m,p-Xylene	330		80	11	ug/L			12/08/15 15:04	200
n-Butylbenzene	ND		40	6.2	ug/L			12/08/15 15:04	200
n-Propylbenzene	ND		40	26	ug/L			12/08/15 15:04	200
o-Xylene	170		40	5.4	ug/L			12/08/15 15:04	200
p-Cymene	ND		40	5.9	ug/L			12/08/15 15:04	200
sec-Butylbenzene	ND		40	4.1	ug/L			12/08/15 15:04	200
Toluene	1800		40	7.1	ug/L			12/08/15 15:04	200
Xylenes, Total	500		120	11	ug/L			12/08/15 15:04	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145					12/08/15 15:04	200
4-Bromofluorobenzene	95		64 - 141					12/08/15 15:04	200

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-92248-1

Lab Sample ID: 480-92248-2

Lab Sample ID: 480-92248-3

Matrix: Water

Matrix: Wastewater

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 12/07/15 11:30 Date Received: 12/07/15 15:05

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

Client Sample ID: Post-Carbon 2

Date Collected: 12/07/15 11:35

Date Received: 12/07/15 15:05

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

Client Sample ID: Pre-Carbon

Date Collected: 12/07/15 11:40

Date Received: 12/07/15 15:05

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

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Inside/Outside Sump

TestAmerica Job ID: 480-92248-1

Lab Sample ID: 480-92248-4

Date Collected: 12/07/15 11:45 Matrix: Wastewater

Date Received: 12/07/15 15:05

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

Laboratory References:

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

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Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-16
The following analytes	s are included in this repor	t, but certification is n	ot offered by the g	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	pН		

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
3270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
08	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
00.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
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	рН	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: 480-92248-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record

Test	An	neri	CC

Amherst, NY 14228

THE LEADER IN ENVIRONMENTAL TESTING

phone 716.504.9852 fax 716.691.7991																							-	Laboratories, Inc.
Client Contact			nn May (N	YSDEC)		Site (mer				W	<u>t</u> 82	_	_			С	OC No:		
Groundwater & Environmental Services, Inc	Tel/Fax: (16) 851-72				Lab	Conta	ct: B.	Fisc	- 1 -		,	C	arrie	er:	_					<u> </u>		of_	COCs
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Cheektowaga, NY 14225	Calenda	r(C) or Wo	ork Days (W	<u></u>		11.	,	1	5	ځ اځ	1) 🖁	tick	man m		olids	M04						
(800) 287-7857 Phone		AT if different	from Below _			Filtered Sample	-		2007 - Iron	8200B - (MOD) STARS list - VOA - 802;			1664A_Calc - Oil & Grease	420,4 - 1 menores, 1 oral recordingle 608 Pest - Priority Pollutant Pesticides	5210B - Biochemical Oxygen Demand	lids	2540C_Calcd - Total Disolved Solids	8270C-(MOD) TCL SVOA - OLM04.2			L			
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Pre-Carbon	12/7	1140	Grab	w	9	N Z	xx	X	7	x x														
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Client: New York State D.E.C.

Job Number: 480-92248-1

Login Number: 92248 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

QuestionAnswerCommRadioactivity either was not measured or, if measured, is at or below backgroundTrueThe cooler's custody seal, if present, is intact.TrueThe cooler or samples do not appear to have been compromised or tampered with.TrueSamples were received on ice.TrueCooler Temperature is acceptable.TrueCooler Temperature is recorded.TrueCOC is present.TrueCOC is filled out in ink and legible.TrueCOC is filled out with all pertinent information.TrueIs the Field Sampler's name present on COC?TrueThere are no discrepancies between the sample IDs on the containers and the COC.TrueSamples are received within Holding Time.TrueSample containers have legible labels.TrueContainers are not broken or leaking.TrueSample collection date/times are provided.TrueAppropriate sample containers are used.TrueSample bottles are completely filled.True
background The cooler's custody seal, if present, is intact. True The cooler or samples do not appear to have been compromised or 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 the COC. Samples are received within Holding Time. True Sample containers have legible labels. True Containers are not broken or leaking. Sample collection date/times are provided. Appropriate sample containers are used.
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Containers are not broken or leaking. Sample collection date/times are provided. Appropriate sample containers are used. True True
Sample collection date/times are provided. Appropriate sample containers are used. 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 True diameter.
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.
Sampling Company provided. True ges
Samples received within 48 hours of sampling.
Samples requiring field filtration have been filtered in the field. N/A
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

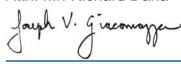
TestAmerica Job ID: 480-93299-1

Client Project/Site: Gastown WWTP #915171

For:

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

Attn: Mr. Richard Dana



Authorized for release by: 1/8/2016 12:52:32 PM

Joe Giacomazza, Project Management Assistant II 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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Joe Giacomazza Project Management Assistant II 1/8/2016 12:52:32 PM Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-93299-1

Table of Contents

Cover Page	1
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Method Summary	13
Sample Summary	14
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Receint Checklists	16

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

3

Qualifiers

GC/MS VOA

Qualifier Qualifier 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

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

Glossary

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

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

%R Percent Recovery

CFL Contains Free Liquid

CNF Contains no Free Liquid

DER Duplicate error ratio (normalized absolute difference)

Dil Fac Dilution Facto

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

DLC Decision level concentration

MDA Minimum detectable activity

EDL Estimated Detection Limit

MDC Minimum detectable concentration

MDL Method Detection Limit ML Minimum Level (Dioxin)

NC Not Calculated

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

PQL Practical Quantitation Limit

QC Quality Control
RER Relative error ratio

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TestAmerica Buffalo

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Job ID: 480-93299-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-93299-1

Receipt

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

GC/MS VOA

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

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

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

HPLC/IC

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

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

GC VOA

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

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

Metals

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

General Chemistry

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

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-93299-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 12/30/15 10:00 Date Received: 12/30/15 10:55

Analyte	Result Qu	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	1.0	0.82	-			01/06/16 12:54	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			01/06/16 12:54	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			01/06/16 12:54	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			01/06/16 12:54	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			01/06/16 12:54	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			01/06/16 12:54	1
1,2-Dichloroethene, Total	ND	2.0	0.81	ug/L			01/06/16 12:54	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			01/06/16 12:54	1
2-Hexanone	ND	5.0	1.2	ug/L			01/06/16 12:54	1
2-Butanone (MEK)	ND	10	1.3	ug/L			01/06/16 12:54	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			01/06/16 12:54	1
Acetone	ND *	10	3.0	ug/L			01/06/16 12:54	1
Benzene	ND	1.0	0.41	ug/L			01/06/16 12:54	1
Bromodichloromethane	ND	1.0	0.39	ug/L			01/06/16 12:54	1
Bromoform	ND	1.0	0.26	ug/L			01/06/16 12:54	1
Bromomethane	ND	1.0	0.69	ug/L			01/06/16 12:54	1
Carbon disulfide	ND	1.0	0.19	ug/L			01/06/16 12:54	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			01/06/16 12:54	1
Chlorobenzene	ND	1.0	0.75	ug/L			01/06/16 12:54	1
Dibromochloromethane	ND	1.0	0.32	ug/L			01/06/16 12:54	1
Chloroethane	ND	1.0	0.32	ug/L			01/06/16 12:54	1
Chloroform	ND	1.0	0.34	ug/L			01/06/16 12:54	1
Chloromethane	ND	1.0	0.35	ug/L			01/06/16 12:54	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			01/06/16 12:54	1
Ethylbenzene	ND	1.0	0.74	ug/L			01/06/16 12:54	1
Methylene Chloride	ND	1.0	0.44	ug/L			01/06/16 12:54	1
Styrene	ND	1.0	0.73	ug/L			01/06/16 12:54	1
Tetrachloroethene	ND	1.0	0.36	ug/L			01/06/16 12:54	1
Toluene	ND	1.0	0.51	ug/L			01/06/16 12:54	1
trans-1,3-Dichloropropene	ND	1.0	0.37	ug/L			01/06/16 12:54	1
Trichloroethene	ND	1.0	0.46	ug/L			01/06/16 12:54	1
Vinyl chloride	ND	1.0	0.90	ug/L			01/06/16 12:54	1
Vinyl acetate	ND *	5.0	0.85	ug/L			01/06/16 12:54	1
Xylenes, Total	ND	2.0	0.66	ug/L			01/06/16 12:54	1
Surrogate		alifier Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94	66 - 137			-		01/06/16 12:54	1
Toluene-d8 (Surr)	95	71 - 126					01/06/16 12:54	1
4-Bromofluorobenzene (Surr)	103	73 - 120					01/06/16 12:54	1

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

Method: 8021B - Volatile Or	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			01/04/16 16:46	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			01/04/16 16:46	1
Benzene	ND	0.20	0.023	ug/L			01/04/16 16:46	1
Ethylbenzene	ND	0.20	0.029	ug/L			01/04/16 16:46	1
Isopropylbenzene	ND	0.20	0.027	ug/L			01/04/16 16:46	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			01/04/16 16:46	1
m,p-Xylene	ND	0.40	0.054	ug/L			01/04/16 16:46	1
n-Butylbenzene	ND	0.20	0.031	ug/L			01/04/16 16:46	1

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Client: New York State D.E.C.

Date Collected: 12/30/15 10:00

Date Received: 12/30/15 10:55

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

TestAmerica Job ID: 480-93299-1

Lab Sample ID: 480-93299-1

Matrix: Wastewater

Method: 8021B - Volatile Analyte		Qualifier	(Continued) RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			01/04/16 16:46	1
o-Xylene	ND		0.20	0.027	ug/L			01/04/16 16:46	1
p-Cymene	ND		0.20	0.030	ug/L			01/04/16 16:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/04/16 16:46	1
Toluene	ND		0.20	0.036	ug/L			01/04/16 16:46	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/04/16 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 145					01/04/16 16:46	1
4-Bromofluorobenzene	97		64 - 141					01/04/16 16:46	1
Method: 200.7 Rev 4.4 -	Metals (ICP)								
Analyte	• •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	64.2		50.0	19.3	ug/L		12/31/15 06:57	12/31/15 12:36	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.10		0.010	0.0050	mg/L		12/31/15 10:00	01/02/16 11:21	1
Analyte pH	Result 7.73	Qualifier HF	RL 0.100	RL 0.100	Unit SU	<u>D</u>	Prepared	Analyzed 12/31/15 12:14	Dil Fac

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Lab Sample ID: 480-93299-2

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 12/30/15 10:05 Date Received: 12/30/15 10:55

Analyte	Result Qualif	ier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	0.20	0.035	ug/L			01/04/16 17:18	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			01/04/16 17:18	1
Benzene	0.18 J	0.20	0.023	ug/L			01/04/16 17:18	1
Ethylbenzene	ND	0.20	0.029	ug/L			01/04/16 17:18	1
Isopropylbenzene	ND	0.20	0.027	ug/L			01/04/16 17:18	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			01/04/16 17:18	1
m,p-Xylene	ND	0.40	0.054	ug/L			01/04/16 17:18	1
n-Butylbenzene	ND	0.20	0.031	ug/L			01/04/16 17:18	1
n-Propylbenzene	ND	0.20	0.13	ug/L			01/04/16 17:18	1
o-Xylene	ND	0.20	0.027	ug/L			01/04/16 17:18	1
p-Cymene	ND	0.20	0.030	ug/L			01/04/16 17:18	1
sec-Butylbenzene	ND	0.20	0.020	ug/L			01/04/16 17:18	1
Toluene	ND	0.20	0.036	ug/L			01/04/16 17:18	1
Xylenes, Total	ND	0.60	0.054	ug/L			01/04/16 17:18	1
Surrogate	%Recovery Qualif	ier Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105	63 - 145					01/04/16 17:18	1
4-Bromofluorobenzene	102	64 - 141					01/04/16 17:18	1

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Client: New York State D.E.C.

Date Received: 12/30/15 10:55

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Lab Sample ID: 480-93299-3

Matrix: Wastewater

CI	ien	t S	amp	le	ID:	Pr	e-C	arl	bon
Da	te C	oll	ected	: 12	2/30	/15	10:	15	

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

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

Method: 200.7 Rev 4.4	- Metals (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	95900		500	100	ug/L		12/31/15 06:57	12/31/15 13:02	1
Iron	192		50.0	19.3	ug/L		12/31/15 06:57	12/31/15 13:02	1
Magnesium	39700		200	43.4	ug/L		12/31/15 06:57	12/31/15 13:02	1
Potassium	3350		500	100	ug/L		12/31/15 06:57	12/31/15 13:02	1
Sodium	51400		1000	324	ug/L		12/31/15 06:57	12/31/15 13:02	1

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

1/8/2016

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Lab Sample ID: 480-93299-4

Matrix: Water

Client Sample ID: Inside/outside sump

Date Collected: 12/30/15 10:30 Date Received: 12/30/15 10:55

Method: 8021B - Volatile C	rganic Compo	unds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		40	6.9	ug/L			01/04/16 18:22	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			01/04/16 18:22	200
Benzene	1400		40	4.7	ug/L			01/04/16 18:22	200
Ethylbenzene	97		40	5.7	ug/L			01/04/16 18:22	200
Isopropylbenzene	ND		40	5.4	ug/L			01/04/16 18:22	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			01/04/16 18:22	200
m,p-Xylene	28	J	80	11	ug/L			01/04/16 18:22	200
n-Butylbenzene	ND		40	6.2	ug/L			01/04/16 18:22	200
n-Propylbenzene	ND		40	26	ug/L			01/04/16 18:22	200
o-Xylene	ND		40	5.4	ug/L			01/04/16 18:22	200
p-Cymene	ND		40	5.9	ug/L			01/04/16 18:22	200
sec-Butylbenzene	ND		40	4.1	ug/L			01/04/16 18:22	200
Toluene	220		40	7.1	ug/L			01/04/16 18:22	200
Xylenes, Total	28	J	120	11	ug/L			01/04/16 18:22	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145					01/04/16 18:22	200
4-Bromofluorobenzene	93		64 - 141					01/04/16 18:22	200

TestAmerica Buffalo

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-93299-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 12/30/15 10:00 Date Received: 12/30/15 10:55

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

Client Sample ID: Post-Carbon 2

Date Collected: 12/30/15 10:05 Date Received: 12/30/15 10:55 Lab Sample ID: 480-93299-2 **Matrix: Wastewater**

Lab Sample ID: 480-93299-3

Lab Sample ID: 480-93299-4

Matrix: Wastewater

Matrix: Water

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

Client Sample ID: Pre-Carbon

Date Collected: 12/30/15 10:15 Date Received: 12/30/15 10:55

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

Client Sample ID: Inside/outside sump

Date Collected: 12/30/15 10:30

Date Received: 12/30/15 10:55

ſ	_								
		Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total/NA	Analysis	8021B		200	282184	01/04/16 18:22	MRB	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-16
The following analytes	are included in this repor	rt, 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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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	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: 480-93299-1

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

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Buffalo

10 Hazelwood Drive

Amherst, NY 14228

Chain of Custody Record

phone 716.504.9852 fax 716.691.7991		Street.														_1.	. 1	Milli	III IIII	IIII III	n of Cu	stody	1111111111111111	Sc.
Client Contact	Project Ma	nager: Gle	nn May (N	YSDEC)	0.07 (1.7)	Sit	e Con	tact:	Tho	mas	Palm	er		Date:	1	4	. 4	180-93	3299	Chai	11 01 00	,0,,		
Groundwater & Environmental Services, Inc	Tel/Fax: (7	16) 851-72	20		THE STREET	La	b Con	ıtact:	B. F	isch	er			Carri	er:				-	T	1	of 1	COC	s
495 Aero Drive Suite 3		Analysis T	urnaround	Time		133					3021						Т		\Box	Jo	b No.			1275
Cheektowaga, NY 14225	Calendar	(C) or W	ork Days (W)		133	_		1	7.	4 - 8													
(800) 287-7857 Phone	TA	TAT if different from Below					thoc	_		M04	VO													
(866) 902-2187 FAX		2	2 weeks			1.	I We	etho	3	OL	list-									SI	DG No.			
Project Name: NYSDEC Gatown WWTP		1 week					roca	Ž		Llis	IRS	=								-				
Site: 915171		2 days				A'S	<u> </u>	E 003	5	TC	ST	To To	_					1 1	A L	- 1				
P O # Callout 120597			l day			jdni	(MC	alini		(ao	(do	mide	4											
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sa	300.0_28D (MOD) Local Method	200.7 - (MOD) Local Method 310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total	2014-200 H-4-pa								1	Sample	Specific l	Notes:
Post-Carbon 3	12/30	1000	Grab	W	9	N			X	X	X	X Z	X											
Post-Carbon 2	1230	1005	Grab	W	3	N					x								-					
Post Carbon I	12/30	1010	-Grab	W	-3-	N					X												200	
Pre-Carbon	12/30	1015	Grab	W	6	N	X	x x			x													
Inside / Outside Sump	12/30	1030	Grab	W	3	N					x							П						
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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3;	5=NaOH; 6= Other					Н	H	+	+			\pm	+				+	\vdash		+				
Possible Hazard Identification				/		\neg	Sam	ple D	ispo	osal	(Af	ee ma	ay be	asses	sed it	sam	ples	are re	etaino	ed lo	nger ti	han 1 m	nonth)	
Non-Hazard Flammable Skin Irritant	Poison B		Inknown	otag		£		Ret	um '	To C	lient		Ø	Dispos	al By	Lab		\Box	Archiv	ve Fo	r		Months	
Special Instructions/QC Requirements & Comments:				DAVAR.							6	1										r Collect		
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Form No. CA-C-WI-002, dated 04/07/2011



Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-93299-1

Login Number: 93299 List Source: TestAmerica Buffalo

List Number: 1

Creator: Wallace, Cameron

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

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