

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

**2012 LAB REPORTS  
FOR THE GROUNDWATER COLLECTION  
& TREATMENT SYSTEM**

The lab report is missing for January 2012.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-16253-1

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

Sampling Event: Qtrly Post-Carbon

Qtrly Pre-Carbon

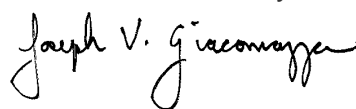
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

3/1/2012 2:30:54 PM

Joe Giacomazza

Project Administrator

[joe.giacomazza@testamericainc.com](mailto:joe.giacomazza@testamericainc.com)

Designee for

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

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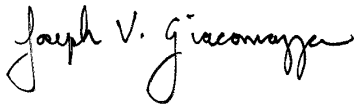
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*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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



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Joe Giacomazza  
Project Administrator  
3/1/2012 2:30:54 PM

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## Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-16253-1

### Qualifiers

#### GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits

#### GC VOA

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

#### Metals

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

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 480-16253-1

**Job ID: 480-16253-1**

**Laboratory: TestAmerica Buffalo**

### Narrative

#### Job Narrative 480-16253-1

#### Receipt

All samples were received in good condition within temperature requirements.

#### GC/MS VOA

Method 8260B: The following sample was diluted due to the abundance of target analytes: Pre-Carbon (480-16255-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC/MS Semi VOA

Method 8270C: The following sample contained one base surrogate outside acceptance limits: Post-Carbon (480-16253-1). The laboratory's SOP allows one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. This result has been reported and qualified.

No other analytical or quality issues were noted.

#### Ion Chromatography

Method 300.0: In batch 52511, the following samples were diluted due to the abundance of target analytes: Pre-Carbon (480-16255-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC VOA

Method 8021B: The following sample was diluted due to abundance of target analytes: Pre-Carbon (480-16255-1). Therefore, elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC Semi VOA

No analytical or quality issues were noted.

#### Metals

No other analytical or quality issues were noted.

#### 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(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon (480-16253-1)

No other analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

# Client Sample Results

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

TestAmerica Job ID: 480-16253-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-16253-1**

**Date Collected: 02/16/12 14:00**

**Matrix: Wastewater**

**Date Received: 02/16/12 15:10**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/21/12 18:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/21/12 18:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/21/12 18:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/21/12 18:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/21/12 18:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/21/12 18:06	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			02/21/12 18:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/21/12 18:06	1
2-Hexanone	ND		5.0	1.2	ug/L			02/21/12 18:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/21/12 18:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/21/12 18:06	1
Acetone	ND		10	3.0	ug/L			02/21/12 18:06	1
Benzene	ND		1.0	0.41	ug/L			02/21/12 18:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/21/12 18:06	1
Bromoform	ND		1.0	0.26	ug/L			02/21/12 18:06	1
Bromomethane	ND		1.0	0.69	ug/L			02/21/12 18:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/21/12 18:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/21/12 18:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/21/12 18:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/21/12 18:06	1
Chloroethane	ND		1.0	0.32	ug/L			02/21/12 18:06	1
<b>Chloroform</b>	<b>3.7</b>		1.0	0.34	ug/L			02/21/12 18:06	1
Chloromethane	ND		1.0	0.35	ug/L			02/21/12 18:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/21/12 18:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/21/12 18:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/21/12 18:06	1
Styrene	ND		1.0	0.73	ug/L			02/21/12 18:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/21/12 18:06	1
Toluene	ND		1.0	0.51	ug/L			02/21/12 18:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/21/12 18:06	1
Trichloroethene	ND		1.0	0.46	ug/L			02/21/12 18:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/21/12 18:06	1
Vinyl acetate	ND		5.0	0.85	ug/L			02/21/12 18:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/21/12 18:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137		02/21/12 18:06	1
Toluene-d8 (Surr)	105		71 - 126		02/21/12 18:06	1
4-Bromofluorobenzene (Surr)	102		73 - 120		02/21/12 18:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		4.7	0.57	ug/L		02/17/12 15:08	02/22/12 14:56	1
Acenaphthene	ND		4.7	0.39	ug/L		02/17/12 15:08	02/22/12 14:56	1
Acenaphthylene	ND		4.7	0.36	ug/L		02/17/12 15:08	02/22/12 14:56	1
Anthracene	ND		4.7	0.26	ug/L		02/17/12 15:08	02/22/12 14:56	1
Benzo[a]anthracene	ND		4.7	0.34	ug/L		02/17/12 15:08	02/22/12 14:56	1
Benzo[a]pyrene	ND		4.7	0.44	ug/L		02/17/12 15:08	02/22/12 14:56	1
Benzo[b]fluoranthene	ND		4.7	0.32	ug/L		02/17/12 15:08	02/22/12 14:56	1
Benzo[g,h,i]perylene	ND		4.7	0.33	ug/L		02/17/12 15:08	02/22/12 14:56	1
Benzo[k]fluoranthene	ND	*	4.7	0.69	ug/L		02/17/12 15:08	02/22/12 14:56	1



# Client Sample Results

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

TestAmerica Job ID: 480-16253-1

## Client Sample ID: Post-Carbon

Lab Sample ID: 480-16253-1

Date Collected: 02/16/12 14:00

Matrix: Wastewater

Date Received: 02/16/12 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.7	0.62	ug/L		02/17/12 15:08	02/22/12 14:56	1
Bis(2-ethylhexyl) phthalate	ND		4.7	1.7	ug/L		02/17/12 15:08	02/22/12 14:56	1
Carbazole	ND		4.7	0.28	ug/L		02/17/12 15:08	02/22/12 14:56	1
Chrysene	ND		4.7	0.31	ug/L		02/17/12 15:08	02/22/12 14:56	1
Dibenz(a,h)anthracene	ND		4.7	0.40	ug/L		02/17/12 15:08	02/22/12 14:56	1
Dibenzofuran	ND	*	9.4	0.48	ug/L		02/17/12 15:08	02/22/12 14:56	1
Fluoranthene	ND		4.7	0.38	ug/L		02/17/12 15:08	02/22/12 14:56	1
Fluorene	ND		4.7	0.34	ug/L		02/17/12 15:08	02/22/12 14:56	1
Indeno[1,2,3-cd]pyrene	ND		4.7	0.44	ug/L		02/17/12 15:08	02/22/12 14:56	1
Naphthalene	ND		4.7	0.72	ug/L		02/17/12 15:08	02/22/12 14:56	1
Pentachlorophenol	ND		9.4	2.1	ug/L		02/17/12 15:08	02/22/12 14:56	1
Phenanthrene	ND		4.7	0.42	ug/L		02/17/12 15:08	02/22/12 14:56	1
Phenol	ND		4.7	0.37	ug/L		02/17/12 15:08	02/22/12 14:56	1
Pyrene	ND		4.7	0.32	ug/L		02/17/12 15:08	02/22/12 14:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	97		52 - 132	02/17/12 15:08	02/22/12 14:56	1
2-Fluorobiphenyl	90		48 - 120	02/17/12 15:08	02/22/12 14:56	1
2-Fluorophenol	36		20 - 120	02/17/12 15:08	02/22/12 14:56	1
Nitrobenzene-d5	73		46 - 120	02/17/12 15:08	02/22/12 14:56	1
p-Terphenyl-d14	63	X	67 - 150	02/17/12 15:08	02/22/12 14:56	1
Phenol-d5	23		16 - 120	02/17/12 15:08	02/22/12 14:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/21/12 15:06	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/21/12 15:06	1
Benzene	0.49		0.20	0.023	ug/L			02/21/12 15:06	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/21/12 15:06	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/21/12 15:06	1
Methyl tert-butyl ether	0.20	J	0.40	0.044	ug/L			02/21/12 15:06	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/21/12 15:06	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/21/12 15:06	1
n-Propylbenzene	ND		0.20	0.13	ug/L			02/21/12 15:06	1
o-Xylene	ND		0.20	0.027	ug/L			02/21/12 15:06	1
p-Cymene	ND		0.20	0.030	ug/L			02/21/12 15:06	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/21/12 15:06	1
Toluene	0.098	J	0.20	0.036	ug/L			02/21/12 15:06	1
Xylenes, Total	ND		0.60	0.054	ug/L			02/21/12 15:06	1

### Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.047	0.0062	ug/L		02/18/12 08:07	02/21/12 19:18	1
alpha-BHC	ND		0.047	0.0062	ug/L		02/18/12 08:07	02/21/12 19:18	1
beta-BHC	ND		0.047	0.023	ug/L		02/18/12 08:07	02/21/12 19:18	1
delta-BHC	ND		0.047	0.0094	ug/L		02/18/12 08:07	02/21/12 19:18	1
gamma-BHC (Lindane)	ND		0.047	0.0057	ug/L		02/18/12 08:07	02/21/12 19:18	1
Chlordane (technical)	ND		0.47	0.027	ug/L		02/18/12 08:07	02/21/12 19:18	1
4,4'-DDD	ND		0.047	0.0087	ug/L		02/18/12 08:07	02/21/12 19:18	1
4,4'-DDE	ND		0.047	0.011	ug/L		02/18/12 08:07	02/21/12 19:18	1
4,4'-DDT	ND		0.047	0.010	ug/L		02/18/12 08:07	02/21/12 19:18	1
Dieldrin	ND		0.047	0.0092	ug/L		02/18/12 08:07	02/21/12 19:18	1

# Client Sample Results

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

TestAmerica Job ID: 480-16253-1

## Client Sample ID: Post-Carbon

Lab Sample ID: 480-16253-1

Date Collected: 02/16/12 14:00

Matrix: Wastewater

Date Received: 02/16/12 15:10

### Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	ND		0.047	0.010	ug/L		02/18/12 08:07	02/21/12 19:18	1
Endosulfan II	ND		0.047	0.011	ug/L		02/18/12 08:07	02/21/12 19:18	1
Endosulfan sulfate	ND		0.047	0.015	ug/L		02/18/12 08:07	02/21/12 19:18	1
Endrin	ND		0.047	0.013	ug/L		02/18/12 08:07	02/21/12 19:18	1
Endrin aldehyde	ND		0.047	0.015	ug/L		02/18/12 08:07	02/21/12 19:18	1
Heptachlor	ND		0.047	0.0080	ug/L		02/18/12 08:07	02/21/12 19:18	1
Heptachlor epoxide	ND		0.047	0.0050	ug/L		02/18/12 08:07	02/21/12 19:18	1
Toxaphene	ND		0.47	0.11	ug/L		02/18/12 08:07	02/21/12 19:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	62		15 - 125				02/18/12 08:07	02/21/12 19:18	1
Tetrachloro-m-xylene	84		36 - 121				02/18/12 08:07	02/21/12 19:18	1

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10.0	5.6	ug/L		02/20/12 09:00	02/20/12 16:35	1
Iron	137		50.0	19.3	ug/L		02/20/12 09:00	02/20/12 16:35	1
Manganese	166		3.0	0.30	ug/L		02/20/12 09:00	02/20/12 16:35	1
Zinc	3.4	J	10.0	1.7	ug/L		02/20/12 09:00	02/20/12 16:35	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	1.4	J	4.9	1.4	mg/L		02/17/12 09:04	02/17/12 11:38	1
Cyanide, Total	0.37		0.010	0.0050	mg/L		02/17/12 10:40	02/21/12 15:18	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		02/17/12 12:56	02/17/12 15:22	1
Total Dissolved Solids	818		10.0	4.0	mg/L			02/22/12 14:47	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			02/17/12 11:48	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			02/20/12 19:42	1
pH	7.52	HF	0.100	0.100	SU			02/16/12 23:22	1

# Client Sample Results

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

TestAmerica Job ID: 480-16253-1

**Client Sample ID: Pre-Carbon**

**Lab Sample ID: 480-16255-1**

**Date Collected: 02/16/12 13:45**

**Matrix: Wastewater**

**Date Received: 02/16/12 15:10**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			02/23/12 11:44	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			02/23/12 11:44	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			02/23/12 11:44	20
1,1-Dichloroethane	ND		20	7.6	ug/L			02/23/12 11:44	20
1,1-Dichloroethene	ND		20	5.8	ug/L			02/23/12 11:44	20
1,2-Dichloroethane	ND		20	4.2	ug/L			02/23/12 11:44	20
1,2-Dichloroethene, Total	ND		40	14	ug/L			02/23/12 11:44	20
1,2-Dichloropropane	ND		20	14	ug/L			02/23/12 11:44	20
2-Hexanone	ND		100	25	ug/L			02/23/12 11:44	20
2-Butanone (MEK)	ND		200	26	ug/L			02/23/12 11:44	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			02/23/12 11:44	20
Acetone	ND		200	60	ug/L			02/23/12 11:44	20
<b>Benzene</b>	<b>1600</b>		20	8.2	ug/L			02/23/12 11:44	20
Bromodichloromethane	ND		20	7.8	ug/L			02/23/12 11:44	20
Bromoform	ND		20	5.2	ug/L			02/23/12 11:44	20
Bromomethane	ND		20	14	ug/L			02/23/12 11:44	20
Carbon disulfide	ND		20	3.8	ug/L			02/23/12 11:44	20
Carbon tetrachloride	ND		20	5.4	ug/L			02/23/12 11:44	20
Chlorobenzene	ND		20	15	ug/L			02/23/12 11:44	20
Dibromochloromethane	ND		20	6.4	ug/L			02/23/12 11:44	20
Chloroethane	ND		20	6.4	ug/L			02/23/12 11:44	20
Chloroform	ND		20	6.8	ug/L			02/23/12 11:44	20
Chloromethane	ND		20	7.0	ug/L			02/23/12 11:44	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			02/23/12 11:44	20
<b>Ethylbenzene</b>	<b>69</b>		20	15	ug/L			02/23/12 11:44	20
Methylene Chloride	ND		20	8.8	ug/L			02/23/12 11:44	20
Styrene	ND		20	15	ug/L			02/23/12 11:44	20
Tetrachloroethene	ND		20	7.2	ug/L			02/23/12 11:44	20
<b>Toluene</b>	<b>310</b>		20	10	ug/L			02/23/12 11:44	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			02/23/12 11:44	20
Trichloroethene	ND		20	9.2	ug/L			02/23/12 11:44	20
Vinyl chloride	ND		20	18	ug/L			02/23/12 11:44	20
Vinyl acetate	ND		100	17	ug/L			02/23/12 11:44	20
<b>Xylenes, Total</b>	<b>120</b>		40	13	ug/L			02/23/12 11:44	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		66 - 137		02/23/12 11:44	20
Toluene-d8 (Surr)	101		71 - 126		02/23/12 11:44	20
4-Bromofluorobenzene (Surr)	105		73 - 120		02/23/12 11:44	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>4.9</b>		2.0	0.35	ug/L			02/21/12 13:44	10
<b>1,3,5-Trimethylbenzene</b>	<b>2.7</b>		2.0	1.5	ug/L			02/21/12 13:44	10
<b>Benzene</b>	<b>1200</b>		10	1.2	ug/L			02/21/12 14:26	50
<b>Ethylbenzene</b>	<b>43</b>		2.0	0.29	ug/L			02/21/12 13:44	10
Isopropylbenzene	ND		2.0	0.27	ug/L			02/21/12 13:44	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			02/21/12 13:44	10
<b>m,p-Xylene</b>	<b>48</b>		4.0	0.54	ug/L			02/21/12 13:44	10
n-Butylbenzene	ND		2.0	0.31	ug/L			02/21/12 13:44	10
n-Propylbenzene	ND		2.0	1.3	ug/L			02/21/12 13:44	10

# Client Sample Results

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

TestAmerica Job ID: 480-16253-1

**Client Sample ID: Pre-Carbon**

**Lab Sample ID: 480-16255-1**

**Date Collected: 02/16/12 13:45**

**Matrix: Wastewater**

**Date Received: 02/16/12 15:10**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>o-Xylene</b>	<b>51</b>		2.0	0.27	ug/L			02/21/12 13:44	10
p-Cymene	ND		2.0	0.30	ug/L			02/21/12 13:44	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			02/21/12 13:44	10
<b>Toluene</b>	<b>190</b>		2.0	0.36	ug/L			02/21/12 13:44	10
<b>Xylenes, Total</b>	<b>99</b>		6.0	0.54	ug/L			02/21/12 13:44	10

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>141000</b>	<b>B</b>	500	100	ug/L		02/20/12 09:00	02/20/12 17:53	1
<b>Iron</b>	<b>169</b>		50.0	19.3	ug/L		02/20/12 09:00	02/20/12 17:53	1
<b>Magnesium</b>	<b>64000</b>		200	43.4	ug/L		02/20/12 09:00	02/20/12 17:53	1
<b>Potassium</b>	<b>3990</b>		500	200	ug/L		02/20/12 09:00	02/20/12 17:53	1
<b>Sodium</b>	<b>62700</b>		1000	324	ug/L		02/20/12 09:00	02/20/12 17:53	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>105</b>		1.0	0.56	mg/L			02/22/12 16:57	2
<b>Sulfate</b>	<b>156</b>		4.0	0.70	mg/L			02/22/12 16:57	2
<b>Alkalinity, Total</b>	<b>425</b>	<b>B</b>	50.0	20.0	mg/L			02/20/12 21:07	5

# Lab Chronicle

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

TestAmerica Job ID: 480-16253-1

**Client Sample ID: Post-Carbon**

**Date Collected: 02/16/12 14:00**

**Date Received: 02/16/12 15:10**

**Lab Sample ID: 480-16253-1**

**Matrix: Wastewater**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	52309	02/21/12 18:06	RL	TAL BUF
Total/NA	Prep	3510C			52047	02/17/12 15:08	KB	TAL BUF
Total/NA	Analysis	8270C		1	52475	02/22/12 14:56	HTL	TAL BUF
Total/NA	Analysis	8021B		1	52264	02/21/12 15:06	DB	TAL BUF
Total/NA	Prep	3510C			52095	02/18/12 08:07	MRB	TAL BUF
Total/NA	Analysis	608		1	52284	02/21/12 19:18	DB	TAL BUF
Total/NA	Prep	200.7			52063	02/20/12 09:00	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	52293	02/20/12 16:35	MM	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	51932	02/16/12 23:22	KJ	TAL BUF
Total/NA	Prep	1664A			51965	02/17/12 09:04	JS	TAL BUF
Total/NA	Analysis	1664A		1	51976	02/17/12 11:38	JS	TAL BUF
Total/NA	Prep	Distill/Phenol			52028	02/17/12 12:56	AP	TAL BUF
Total/NA	Analysis	420.4		1	52056	02/17/12 15:22	JR	TAL BUF
Total/NA	Analysis	SM 5210B		1	52078	02/17/12 11:48	AP	TAL BUF
Total/NA	Analysis	SM 2540D		1	52247	02/20/12 19:42	KJ	TAL BUF
Total/NA	Prep	Distill/CN			52064	02/17/12 10:40	JR	TAL BUF
Total/NA	Analysis	335.4		1	52395	02/21/12 15:18	JR	TAL BUF
Total/NA	Analysis	SM 2540C		1	52555	02/22/12 14:47	KJ	TAL BUF

**Client Sample ID: Pre-Carbon**

**Date Collected: 02/16/12 13:45**

**Date Received: 02/16/12 15:10**

**Lab Sample ID: 480-16255-1**

**Matrix: Wastewater**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	52616	02/23/12 11:44	CDC	TAL BUF
Total/NA	Analysis	8021B		50	52264	02/21/12 14:26	DB	TAL BUF
Total/NA	Analysis	8021B		10	52264	02/21/12 13:44	DB	TAL BUF
Total/NA	Prep	200.7			52066	02/20/12 09:00	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	52294	02/20/12 17:53	AH	TAL BUF
Total/NA	Analysis	310.2		5	52262	02/20/12 21:07	KS	TAL BUF
Total/NA	Analysis	300.0		2	52511	02/22/12 16:57	KAC	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.

TestAmerica Job ID: 480-16253-1

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

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	USDA		P330-08-00242
TestAmerica Buffalo	Virginia	NELAC Secondary AB	3	460185
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-16253-1

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

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	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
420.4	Phenolics, Total Recoverable	MCAWW	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

### Protocol References:

1664A = EPA-821-98-002

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

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-16253-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-16253-1	Post-Carbon	Wastewater	02/16/12 14:00	02/16/12 15:10
480-16255-1	Pre-Carbon	Wastewater	02/16/12 13:45	02/16/12 15:10



**TestAmerica Buffalo**

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

**Chain of Custody Record**
**TestAmerica**
THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Samples: <u>Brent Miller</u> Lab PM: Fischer, Brian Carrier Tracking No(s):		COC No: 480-8769-1178.1 Page: 1 of 1 Job #:																																					
Client Contact: Thomas Palmer Company: Groundwater & Environmental Services Inc. Address: 158 Sonwill Drive City: Cheektowaga State, Zip: NY, 14225 Phone: Email: tpalmer@gesonline.com Project Name: NYSDEC - Gastown WWTP/Gastown <u>City job</u> Site: New York		Due Date Requested: TAT Requested (days): <u>10 DAY</u> PO #: Purchase Order not requir WO #: Project #: 48002525 SSOW#:		<b>Analysis Requested</b> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>200.7 - (MOD) Local Method</td> <td>✓</td> </tr> <tr> <td>1644A - Calc - CW &amp; Grease</td> <td>✓</td> </tr> <tr> <td>420A - Phenolics, Total Recoverable</td> <td>✓</td> </tr> <tr> <td>63008 - (MOD) TCL for OLAR-2</td> <td>✓</td> </tr> <tr> <td>8021B - (MOD) STARS List - VOA - 8021</td> <td>✓</td> </tr> <tr> <td>608 - Pest - Priority Pollutant Pesticides</td> <td>✓</td> </tr> <tr> <td>8270C - (MOD) TCL SVOA - OLAR-2</td> <td>✓</td> </tr> <tr> <td>8210B - Biochemical Oxygen Demand</td> <td>✓</td> </tr> <tr> <td>2540C - Calc'd - Total Dissolved Solids</td> <td>✓</td> </tr> <tr> <td>2540D - Total Suspended Solids</td> <td>✓</td> </tr> <tr> <td>335.4 - Cyanide, Total</td> <td>✓</td> </tr> <tr> <td>SM4500 - H+ - pH</td> <td>✓</td> </tr> </table>		200.7 - (MOD) Local Method	✓	1644A - Calc - CW & Grease	✓	420A - Phenolics, Total Recoverable	✓	63008 - (MOD) TCL for OLAR-2	✓	8021B - (MOD) STARS List - VOA - 8021	✓	608 - Pest - Priority Pollutant Pesticides	✓	8270C - (MOD) TCL SVOA - OLAR-2	✓	8210B - Biochemical Oxygen Demand	✓	2540C - Calc'd - Total Dissolved Solids	✓	2540D - Total Suspended Solids	✓	335.4 - Cyanide, Total	✓	SM4500 - H+ - pH	✓												
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✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																													
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																							
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:																																							
Empty Kit Relinquished by: <u>Brent Miller</u> Date/Time: <u>2-16-12 / 1510</u> Company: <u>GES</u>		Method of Shipment: Date/Time: <u>2/16/12 1510</u> Company: <u>FAL</u>																																							
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <u>2.9 #3</u>																																							

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[illegible]

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-16253-1

**Login Number: 16253**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Janish, Carl**

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	

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-16253-1

**Login Number: 16255**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: May, Joel 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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-17625-1

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:

4/5/2012 4:06:55 PM

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

### LINKS

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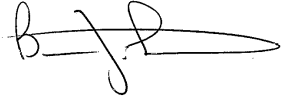
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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



---

Brian Fischer  
Project Manager II  
4/5/2012 4:06:55 PM

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## Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-17625-1

### 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
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes

### 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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 480-17625-1

**Job ID: 480-17625-1**

**Laboratory: TestAmerica Buffalo**

### Narrative

#### Job Narrative 480-17625-1

#### Receipt

All samples were received in good condition within temperature requirements.

#### GC/MS VOA

No analytical or quality issues were noted.

#### Ion Chromatography

Method 300.0: In batch 57492, the following samples were diluted due to the abundance of target analytes: Pre-Carbon (480-17625-1). Elevated reporting limits (RLs) are provided.

Method 300.0: In batch 58175, the following samples were diluted due to the abundance of target analytes: Pre-Carbon (480-17625-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC VOA

No analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

Method 310.2: The method blank for batch 57222 contained alkalinity above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Pre-Carbon (480-17625-1)

Method 9040B, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon (480-17626-1)

No other analytical or quality issues were noted.

# Client Sample Results

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

TestAmerica Job ID: 480-17625-1

**Client Sample ID: Pre-Carbon**

**Lab Sample ID: 480-17625-1**

**Date Collected: 03/23/12 09:35**

**Matrix: Wastewater**

**Date Received: 03/23/12 10:30**

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	149000		500	100	ug/L		03/27/12 08:40	03/27/12 19:21	1
Iron	212		50.0	19.3	ug/L		03/27/12 08:40	03/27/12 19:21	1
Magnesium	76700		200	43.4	ug/L		03/27/12 08:40	03/27/12 19:21	1
Potassium	4160		500	100	ug/L		03/27/12 08:40	03/27/12 19:21	1
Sodium	74100		1000	324	ug/L		03/27/12 08:40	03/27/12 19:21	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	105		1.0	0.56	mg/L			04/02/12 16:12	2
Sulfate	143		4.0	0.70	mg/L			04/04/12 20:03	2
Alkalinity, Total	423	B	50.0	20.0	mg/L			03/29/12 06:09	5

# Client Sample Results

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

TestAmerica Job ID: 480-17625-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-17626-1**

**Date Collected: 03/23/12 09:30**

**Matrix: Wastewater**

**Date Received: 03/23/12 10:30**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/24/12 23:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/24/12 23:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/24/12 23:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/24/12 23:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/24/12 23:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/24/12 23:59	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			03/24/12 23:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/24/12 23:59	1
2-Hexanone	ND		5.0	1.2	ug/L			03/24/12 23:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/24/12 23:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/24/12 23:59	1
Acetone	ND		10	3.0	ug/L			03/24/12 23:59	1
Benzene	ND		1.0	0.41	ug/L			03/24/12 23:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/24/12 23:59	1
Bromoform	ND		1.0	0.26	ug/L			03/24/12 23:59	1
Bromomethane	ND		1.0	0.69	ug/L			03/24/12 23:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/24/12 23:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/24/12 23:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/24/12 23:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/24/12 23:59	1
Chloroethane	ND		1.0	0.32	ug/L			03/24/12 23:59	1
<b>Chloroform</b>	<b>5.6</b>		1.0	0.34	ug/L			03/24/12 23:59	1
Chloromethane	ND		1.0	0.35	ug/L			03/24/12 23:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/24/12 23:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/24/12 23:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/24/12 23:59	1
Styrene	ND		1.0	0.73	ug/L			03/24/12 23:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/24/12 23:59	1
Toluene	ND		1.0	0.51	ug/L			03/24/12 23:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/24/12 23:59	1
Trichloroethene	ND		1.0	0.46	ug/L			03/24/12 23:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/24/12 23:59	1
Vinyl acetate	ND		5.0	0.85	ug/L			03/24/12 23:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/24/12 23:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		66 - 137		03/24/12 23:59	1
Toluene-d8 (Surr)	106		71 - 126		03/24/12 23:59	1
4-Bromofluorobenzene (Surr)	94		73 - 120		03/24/12 23:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			03/27/12 10:43	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/27/12 10:43	1
<b>Benzene</b>	<b>0.047</b>	<b>J</b>	0.20	0.023	ug/L			03/27/12 10:43	1
Ethylbenzene	ND		0.20	0.029	ug/L			03/27/12 10:43	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/27/12 10:43	1
<b>Methyl tert-butyl ether</b>	<b>0.31</b>	<b>J</b>	0.40	0.044	ug/L			03/27/12 10:43	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/27/12 10:43	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/27/12 10:43	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/27/12 10:43	1

# Client Sample Results

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

TestAmerica Job ID: 480-17625-1

## Client Sample ID: Post-Carbon

Date Collected: 03/23/12 09:30

Date Received: 03/23/12 10:30

## Lab Sample ID: 480-17626-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.20	0.027	ug/L			03/27/12 10:43	1
p-Cymene	ND		0.20	0.030	ug/L			03/27/12 10:43	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/27/12 10:43	1
Toluene	ND		0.20	0.036	ug/L			03/27/12 10:43	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/27/12 10:43	1

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	190		50.0	19.3	ug/L		03/27/12 08:40	03/27/12 19:19	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.39		0.010	0.0050	mg/L		03/27/12 16:55	03/28/12 17:00	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.30	HF	0.100	0.100	SU			03/24/12 16:00	1

## Lab Chronicle

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

TestAmerica Job ID: 480-17625-1

### Client Sample ID: Pre-Carbon

Date Collected: 03/23/12 09:35

Date Received: 03/23/12 10:30

### Lab Sample ID: 480-17625-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			56760	03/27/12 08:40	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	57023	03/27/12 19:21	MM	TAL BUF
Total/NA	Analysis	310.2		5	57222	03/29/12 06:09	PN	TAL BUF
Total/NA	Analysis	300.0		2	57492	04/02/12 16:12	KAC	TAL BUF
Total/NA	Analysis	300.0		2	58175	04/04/12 20:03	KAC	TAL BUF

### Client Sample ID: Post-Carbon

Date Collected: 03/23/12 09:30

Date Received: 03/23/12 10:30

### Lab Sample ID: 480-17626-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	56618	03/24/12 23:59	JMB	TAL BUF
Total/NA	Analysis	8021B		1	56810	03/27/12 10:43	DB	TAL BUF
Total/NA	Prep	200.7			56760	03/27/12 08:40	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	57023	03/27/12 19:19	MM	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	56642	03/24/12 16:00	PN	TAL BUF
Total/NA	Prep	Distill/CN			56968	03/27/12 16:55	PJQ	TAL BUF
Total/NA	Analysis	335.4		1	57171	03/28/12 17:00	PJQ	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.

TestAmerica Job ID: 480-17625-1

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

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas DEQ	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Georgia	State Program	4	N/A
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Kentucky (UST)	State Program	4	30
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
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TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
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TestAmerica Buffalo	Virginia	State Program	3	278
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TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-17625-1

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

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

### Protocol References:

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-17625-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-17625-1	Pre-Carbon	Wastewater	03/23/12 09:35	03/23/12 10:30
480-17626-1	Post-Carbon	Wastewater	03/23/12 09:30	03/23/12 10:30



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

## Chain of Custody Record

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

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

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-17625-1

**Login Number: 17625**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Janish, Carl**

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.	N/A	
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	

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-17625-1

**Login Number: 17626**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Janish, Carl**

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	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-19111-1

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:

5/9/2012 4:22:24 PM

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

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

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

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



---

Brian Fischer  
Project Manager II  
5/9/2012 4:22:24 PM



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## Definitions/Glossary

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

TestAmerica Job ID: 480-19111-1

### Qualifiers

#### GC VOA

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

#### Metals

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

#### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes

### 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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 480-19111-1

**Job ID: 480-19111-1**

**Laboratory: TestAmerica Buffalo**

### Narrative

#### Job Narrative 480-19111-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 4/25/2012 3:45 PM; the samples arrived in good conditions, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.10 C and 3.50 C.

#### GC/MS VOA

No analytical or quality issues were noted.

#### Ion Chromatography

Method(s) 300.0: The method blank for preparation batch 62316 contained Chloride and Sulfate above the reporting limit (RL). The associated sample contained detects for these analytes at concentrations greater than 10X the value found in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 300.0: In batch 62316 the following samples were diluted due to the abundance of target analytes: Pre-Carbon (480-19111-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC VOA

No analytical or quality issues were noted.

#### Metals

Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-61533 contained total potassium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of sample Pre-Carbon (480-19111-1) was not performed.

No other analytical or quality issues were noted.

#### General Chemistry

Method(s) 335.4, 9012A, SM 4500 CN E: The method blank for batch 62565 contained Cyanide above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Post-Carbon (480-19114-1)

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(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon (480-19114-1)

No other analytical or quality issues were noted.

# Client Sample Results

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

TestAmerica Job ID: 480-19111-1

**Client Sample ID: Pre-Carbon**

**Date Collected: 04/25/12 14:40**

**Date Received: 04/25/12 15:45**

**Lab Sample ID: 480-19111-1**

**Matrix: Wastewater**

## 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		04/26/12 09:00	04/26/12 16:35	1
Iron	505		50.0	19.3	ug/L		04/26/12 09:00	04/26/12 16:35	1
Magnesium	85800		200	43.4	ug/L		04/26/12 09:00	04/26/12 16:35	1
Potassium	4360	B	500	100	ug/L		04/26/12 09:00	04/26/12 16:35	1
Sodium	65400		1000	324	ug/L		04/26/12 09:00	04/26/12 16:35	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	103	B	1.0	0.56	mg/L			05/02/12 09:09	2
Sulfate	156	B	4.0	0.70	mg/L			05/02/12 09:09	2
Alkalinity, Total	465		100	40.0	mg/L			05/07/12 14:13	10

# Client Sample Results

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

TestAmerica Job ID: 480-19111-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-19114-1**

**Date Collected: 04/25/12 14:30**

**Matrix: Wastewater**

**Date Received: 04/25/12 15:45**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/02/12 00:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/12 00:09	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/02/12 00:09	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/02/12 00:09	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/02/12 00:09	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/02/12 00:09	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			05/02/12 00:09	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/02/12 00:09	1
2-Hexanone	ND		5.0	1.2	ug/L			05/02/12 00:09	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/02/12 00:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/02/12 00:09	1
Acetone	ND		10	3.0	ug/L			05/02/12 00:09	1
Benzene	ND		1.0	0.41	ug/L			05/02/12 00:09	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/12 00:09	1
Bromoform	ND		1.0	0.26	ug/L			05/02/12 00:09	1
Bromomethane	ND		1.0	0.69	ug/L			05/02/12 00:09	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/02/12 00:09	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/02/12 00:09	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/02/12 00:09	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/02/12 00:09	1
Chloroethane	ND		1.0	0.32	ug/L			05/02/12 00:09	1
<b>Chloroform</b>	<b>6.3</b>		1.0	0.34	ug/L			05/02/12 00:09	1
Chloromethane	ND		1.0	0.35	ug/L			05/02/12 00:09	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/02/12 00:09	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/02/12 00:09	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/02/12 00:09	1
Styrene	ND		1.0	0.73	ug/L			05/02/12 00:09	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/02/12 00:09	1
Toluene	ND		1.0	0.51	ug/L			05/02/12 00:09	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/02/12 00:09	1
Trichloroethene	ND		1.0	0.46	ug/L			05/02/12 00:09	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/02/12 00:09	1
Vinyl acetate	ND		5.0	0.85	ug/L			05/02/12 00:09	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/02/12 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 137		05/02/12 00:09	1
Toluene-d8 (Surr)	108		71 - 126		05/02/12 00:09	1
4-Bromofluorobenzene (Surr)	103		73 - 120		05/02/12 00:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			05/02/12 13:56	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/02/12 13:56	1
Benzene	ND		0.20	0.023	ug/L			05/02/12 13:56	1
Ethylbenzene	ND		0.20	0.029	ug/L			05/02/12 13:56	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/02/12 13:56	1
<b>Methyl tert-butyl ether</b>	<b>0.14</b>	<b>J B</b>	0.40	0.044	ug/L			05/02/12 13:56	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/02/12 13:56	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/02/12 13:56	1
n-Propylbenzene	ND		0.20	0.13	ug/L			05/02/12 13:56	1

# Client Sample Results

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

TestAmerica Job ID: 480-19111-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-19114-1**

**Date Collected: 04/25/12 14:30**

**Matrix: Wastewater**

**Date Received: 04/25/12 15:45**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.20	0.027	ug/L			05/02/12 13:56	1
p-Cymene	ND		0.20	0.030	ug/L			05/02/12 13:56	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/02/12 13:56	1
Toluene	ND		0.20	0.036	ug/L			05/02/12 13:56	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/02/12 13:56	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	110		50.0	19.3	ug/L		04/26/12 09:00	04/26/12 16:37	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.19	B	0.010	0.0050	mg/L		04/30/12 15:13	05/01/12 14:58	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.64	HF	0.100	0.100	SU			04/25/12 22:18	1

## Lab Chronicle

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

TestAmerica Job ID: 480-19111-1

### Client Sample ID: Pre-Carbon

Date Collected: 04/25/12 14:40

Date Received: 04/25/12 15:45

### Lab Sample ID: 480-19111-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			61533	04/26/12 09:00	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	61812	04/26/12 16:35	LH	TAL BUF
Total/NA	Analysis	300.0		2	62316	05/02/12 09:09	RMM	TAL BUF
Total/NA	Analysis	310.2		10	63426	05/07/12 14:13	PJQ	TAL BUF

### Client Sample ID: Post-Carbon

Date Collected: 04/25/12 14:30

Date Received: 04/25/12 15:45

### Lab Sample ID: 480-19114-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	62567	05/02/12 00:09	DC	TAL BUF
Total/NA	Analysis	8021B		1	62603	05/02/12 13:56	DB	TAL BUF
Total/NA	Prep	200.7			61533	04/26/12 09:00	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	61812	04/26/12 16:37	LH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	61553	04/25/12 22:18	KS	TAL BUF
Total/NA	Prep	Distill/CN			62395	04/30/12 15:13	LAW	TAL BUF
Total/NA	Analysis	335.4		1	62565	05/01/12 14:58	JR	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.

TestAmerica Job ID: 480-19111-1

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

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas DEQ	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Georgia	State Program	4	N/A
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Kentucky (UST)	State Program	4	30
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
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TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
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TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	Federal		P330-08-00242
TestAmerica Buffalo	Virginia	NELAC	3	460185
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	West Virginia DEP	State Program	3	252
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-19111-1

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

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

### Protocol References:

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-19111-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-19111-1	Pre-Carbon	Wastewater	04/25/12 14:40	04/25/12 15:45
480-19114-1	Post-Carbon	Wastewater	04/25/12 14:30	04/25/12 15:45





**TestAmerica**

**THE LEADER IN ENVIRONMENTAL TESTING**

[illegible]

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-19111-1

**Login Number: 19111**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Janish, Carl**

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.	N/A	
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	

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-19111-1

**Login Number: 19114**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Janish, Carl**

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	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-20198-1

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:

6/1/2012 9:38:50 AM

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

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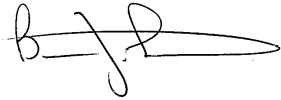
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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



---

Brian Fischer  
Project Manager II  
6/1/2012 9:38:50 AM

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## Definitions/Glossary

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

TestAmerica Job ID: 480-20198-1

### Qualifiers

#### GC/MS VOA

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

#### GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

#### GC VOA

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

#### Metals

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

#### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes
b	Result Detected in the USB
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 480-20198-1

### Job ID: 480-20198-1

#### Laboratory: TestAmerica Buffalo

#### Narrative

#### Job Narrative 480-20198-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 5/17/2012 11:10 AM; 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 4.2° C.

#### GC/MS VOA

Method(s) 8260B: The following sample(s) was diluted due to the abundance of target analytes: Pre-Carbon (480-20198-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The Matrix Spike Blank (LCS 480-65493/4) recovery was below TestAmerica's statistically developed internal laboratory QC limits, for Chloroethane. This analyte was not a requested spiking compound; therefore the recovery is being reported for advisory purposes only. All other quality control indicators, including the continuing calibration verification, were within method prescribed limits for this analyte.

No other analytical or quality issues were noted.

#### GC/MS Semi VOA

Method(s) 8270C: The following samples contained one acid and/or one base surrogate outside acceptance limits: Post-Carbon (480-20200-1). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

#### Ion Chromatography

Method(s) 300.0: In batch 65779, the following samples were diluted due to the abundance of target analytes: Pre-Carbon (480-20198-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC VOA

Method(s) 8021B: The following samples were diluted due to the abundance of target analytes: (480-20198-1 MS), (480-20198-1 MSD), (CCV 480-66181/12), Pre-Carbon (480-20198-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC Semi VOA

No analytical or quality issues were noted.

#### Metals

Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-64954 contained total manganese above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of sample Post-Carbon (480-20200-1) was not performed.

No other analytical or quality issues were noted.

#### General Chemistry

Method(s) 310.2: The method blank for batch 65392 contained Alkalinity above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Pre-Carbon (480-20198-1)

## Case Narrative

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

TestAmerica Job ID: 480-20198-1

### Job ID: 480-20198-1 (Continued)

#### Laboratory: TestAmerica Buffalo (Continued)

Method(s) 420.4, 9066: The method blank for batch 65874 contained Total Recoverable Phenolics above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Post-Carbon (480-20200-1)

Method(s) SM 5210B: The dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L for batch 64961. The associated sample results are reported.

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(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon (480-20200-1)

No other analytical or quality issues were noted.

#### Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 65446. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 3510C: The surrogate spiking solution was inadvertently omitted during the extraction process for the laboratory control sample duplicate (LCSD) associated with preparation batch 65446; therefore, percent recoveries are unavailable. The spike recoveries of the LCSD were within method limits and the surrogate recoveries of the MB and the LCS were within method limits. Several of the affected samples needed dilutions which affected the surrogate recoveries. The samples will not be re-prepared or re-analyzed, and the results have been reported.

No other analytical or quality issues were noted.

# Client Sample Results

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

TestAmerica Job ID: 480-20198-1

**Client Sample ID: Pre-Carbon**

**Lab Sample ID: 480-20198-1**

**Date Collected: 05/17/12 10:30**

**Matrix: Wastewater**

**Date Received: 05/17/12 11:10**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			05/19/12 19:24	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			05/19/12 19:24	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			05/19/12 19:24	5
1,1-Dichloroethane	ND		5.0	1.9	ug/L			05/19/12 19:24	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			05/19/12 19:24	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			05/19/12 19:24	5
1,2-Dichloroethene, Total	ND		10	3.5	ug/L			05/19/12 19:24	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			05/19/12 19:24	5
2-Hexanone	ND		25	6.2	ug/L			05/19/12 19:24	5
2-Butanone (MEK)	ND		50	6.6	ug/L			05/19/12 19:24	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			05/19/12 19:24	5
Acetone	ND		50	15	ug/L			05/19/12 19:24	5
Bromodichloromethane	ND		5.0	2.0	ug/L			05/19/12 19:24	5
Bromoform	ND		5.0	1.3	ug/L			05/19/12 19:24	5
Bromomethane	ND		5.0	3.5	ug/L			05/19/12 19:24	5
Carbon disulfide	ND		5.0	0.95	ug/L			05/19/12 19:24	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			05/19/12 19:24	5
Chlorobenzene	ND		5.0	3.8	ug/L			05/19/12 19:24	5
Dibromochloromethane	ND		5.0	1.6	ug/L			05/19/12 19:24	5
Chloroethane	ND		5.0	1.6	ug/L			05/19/12 19:24	5
Chloroform	ND		5.0	1.7	ug/L			05/19/12 19:24	5
Chloromethane	ND		5.0	1.8	ug/L			05/19/12 19:24	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			05/19/12 19:24	5
Ethylbenzene	300		5.0	3.7	ug/L			05/19/12 19:24	5
Methylene Chloride	ND		5.0	2.2	ug/L			05/19/12 19:24	5
Styrene	86		5.0	3.7	ug/L			05/19/12 19:24	5
Tetrachloroethene	ND		5.0	1.8	ug/L			05/19/12 19:24	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			05/19/12 19:24	5
Trichloroethene	ND		5.0	2.3	ug/L			05/19/12 19:24	5
Vinyl chloride	ND		5.0	4.5	ug/L			05/19/12 19:24	5
Vinyl acetate	ND		25	4.3	ug/L			05/19/12 19:24	5
Xylenes, Total	210		10	3.3	ug/L			05/19/12 19:24	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		66 - 137		05/19/12 19:24	5
Toluene-d8 (Surr)	113		71 - 126		05/19/12 19:24	5
4-Bromofluorobenzene (Surr)	113		73 - 120		05/19/12 19:24	5

## Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3300		40	16	ug/L			05/21/12 14:08	40
Toluene	810		40	20	ug/L			05/21/12 14:08	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		66 - 137		05/21/12 14:08	40
Toluene-d8 (Surr)	108		71 - 126		05/21/12 14:08	40
4-Bromofluorobenzene (Surr)	112		73 - 120		05/21/12 14:08	40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	9.5		2.0	0.35	ug/L			05/29/12 13:24	10
1,3,5-Trimethylbenzene	1.8 J		2.0	1.5	ug/L			05/29/12 13:24	10

# Client Sample Results

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

TestAmerica Job ID: 480-20198-1

## Client Sample ID: Pre-Carbon

Lab Sample ID: 480-20198-1

Date Collected: 05/17/12 10:30

Matrix: Wastewater

Date Received: 05/17/12 11:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	190		2.0	0.29	ug/L			05/29/12 13:24	10
Isopropylbenzene	ND		2.0	0.27	ug/L			05/29/12 13:24	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			05/29/12 13:24	10
m,p-Xylene	88		4.0	0.54	ug/L			05/29/12 13:24	10
n-Butylbenzene	ND		2.0	0.31	ug/L			05/29/12 13:24	10
n-Propylbenzene	ND		2.0	1.3	ug/L			05/29/12 13:24	10
o-Xylene	49		2.0	0.27	ug/L			05/29/12 13:24	10
p-Cymene	ND		2.0	0.30	ug/L			05/29/12 13:24	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			05/29/12 13:24	10
Toluene	460		2.0	0.36	ug/L			05/29/12 13:24	10
Xylenes, Total	220		6.0	0.54	ug/L			05/29/12 13:24	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1800	B	10	1.2	ug/L			05/29/12 14:17	50

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	148000		500	100	ug/L		05/18/12 09:00	05/18/12 21:16	1
Iron	654		50.0	19.3	ug/L		05/18/12 09:00	05/18/12 21:16	1
Magnesium	81600		200	43.4	ug/L		05/18/12 09:00	05/18/12 21:16	1
Potassium	4390		500	100	ug/L		05/18/12 09:00	05/18/12 21:16	1
Sodium	69300		1000	324	ug/L		05/18/12 09:00	05/18/12 21:16	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	108		1.0	0.56	mg/L			05/24/12 12:09	2
Sulfate	170		4.0	0.70	mg/L			05/24/12 12:09	2
Alkalinity, Total	518	B	100	40.0	mg/L			05/21/12 14:52	10

# Client Sample Results

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

TestAmerica Job ID: 480-20198-1

**Client Sample ID: Post-Carbon**

**Date Collected: 05/17/12 10:20**

**Date Received: 05/17/12 11:10**

**Lab Sample ID: 480-20200-1**

**Matrix: Wastewater**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/22/12 13:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/22/12 13:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/22/12 13:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/22/12 13:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/22/12 13:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/22/12 13:11	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			05/22/12 13:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/22/12 13:11	1
2-Hexanone	ND		5.0	1.2	ug/L			05/22/12 13:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/22/12 13:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/22/12 13:11	1
Acetone	ND		10	3.0	ug/L			05/22/12 13:11	1
<b>Benzene</b>	<b>1.6</b>		1.0	0.41	ug/L			05/22/12 13:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/22/12 13:11	1
Bromoform	ND		1.0	0.26	ug/L			05/22/12 13:11	1
Bromomethane	ND		1.0	0.69	ug/L			05/22/12 13:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/22/12 13:11	1
<b>Carbon tetrachloride</b>	<b>0.43</b>	<b>J</b>	1.0	0.27	ug/L			05/22/12 13:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/22/12 13:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/22/12 13:11	1
Chloroethane	ND		1.0	0.32	ug/L			05/22/12 13:11	1
<b>Chloroform</b>	<b>6.8</b>		1.0	0.34	ug/L			05/22/12 13:11	1
Chloromethane	ND		1.0	0.35	ug/L			05/22/12 13:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/22/12 13:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/22/12 13:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/22/12 13:11	1
Styrene	ND		1.0	0.73	ug/L			05/22/12 13:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/22/12 13:11	1
Toluene	ND		1.0	0.51	ug/L			05/22/12 13:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/22/12 13:11	1
Trichloroethene	ND		1.0	0.46	ug/L			05/22/12 13:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/22/12 13:11	1
Vinyl acetate	ND		5.0	0.85	ug/L			05/22/12 13:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/22/12 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137		05/22/12 13:11	1
Toluene-d8 (Surr)	106		71 - 126		05/22/12 13:11	1
4-Bromofluorobenzene (Surr)	104		73 - 120		05/22/12 13:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		4.7	0.57	ug/L		05/19/12 07:16	05/22/12 22:49	1
Acenaphthene	ND		4.7	0.39	ug/L		05/19/12 07:16	05/22/12 22:49	1
Acenaphthylene	ND		4.7	0.36	ug/L		05/19/12 07:16	05/22/12 22:49	1
Anthracene	ND		4.7	0.26	ug/L		05/19/12 07:16	05/22/12 22:49	1
Benzo[a]anthracene	ND		4.7	0.34	ug/L		05/19/12 07:16	05/22/12 22:49	1
Benzo[a]pyrene	ND		4.7	0.44	ug/L		05/19/12 07:16	05/22/12 22:49	1
Benzo[b]fluoranthene	ND		4.7	0.32	ug/L		05/19/12 07:16	05/22/12 22:49	1
Benzo[g,h,i]perylene	ND		4.7	0.33	ug/L		05/19/12 07:16	05/22/12 22:49	1
Benzo[k]fluoranthene	ND		4.7	0.69	ug/L		05/19/12 07:16	05/22/12 22:49	1

# Client Sample Results

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

TestAmerica Job ID: 480-20198-1

## Client Sample ID: Post-Carbon

Lab Sample ID: 480-20200-1

Date Collected: 05/17/12 10:20

Matrix: Wastewater

Date Received: 05/17/12 11:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.7	0.62	ug/L		05/19/12 07:16	05/22/12 22:49	1
Bis(2-ethylhexyl) phthalate	ND		4.7	1.7	ug/L		05/19/12 07:16	05/22/12 22:49	1
Carbazole	ND		4.7	0.28	ug/L		05/19/12 07:16	05/22/12 22:49	1
Chrysene	ND		4.7	0.31	ug/L		05/19/12 07:16	05/22/12 22:49	1
Dibenz(a,h)anthracene	ND		4.7	0.40	ug/L		05/19/12 07:16	05/22/12 22:49	1
Dibenzofuran	ND		9.4	0.48	ug/L		05/19/12 07:16	05/22/12 22:49	1
Fluoranthene	ND		4.7	0.38	ug/L		05/19/12 07:16	05/22/12 22:49	1
Fluorene	ND		4.7	0.34	ug/L		05/19/12 07:16	05/22/12 22:49	1
Indeno[1,2,3-cd]pyrene	ND		4.7	0.44	ug/L		05/19/12 07:16	05/22/12 22:49	1
Naphthalene	ND		4.7	0.72	ug/L		05/19/12 07:16	05/22/12 22:49	1
Pentachlorophenol	ND		9.4	2.1	ug/L		05/19/12 07:16	05/22/12 22:49	1
Phenanthrene	ND		4.7	0.42	ug/L		05/19/12 07:16	05/22/12 22:49	1
Phenol	ND		4.7	0.37	ug/L		05/19/12 07:16	05/22/12 22:49	1
Pyrene	ND		4.7	0.32	ug/L		05/19/12 07:16	05/22/12 22:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	26	X	52 - 132	05/19/12 07:16	05/22/12 22:49	1
2-Fluorobiphenyl	91		48 - 120	05/19/12 07:16	05/22/12 22:49	1
2-Fluorophenol	32		20 - 120	05/19/12 07:16	05/22/12 22:49	1
Nitrobenzene-d5	82		46 - 120	05/19/12 07:16	05/22/12 22:49	1
p-Terphenyl-d14	74		67 - 150	05/19/12 07:16	05/22/12 22:49	1
Phenol-d5	23		16 - 120	05/19/12 07:16	05/22/12 22:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			05/29/12 12:28	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/29/12 12:28	1
Benzene	1.2	B	0.20	0.023	ug/L			05/29/12 12:28	1
Ethylbenzene	ND		0.20	0.029	ug/L			05/29/12 12:28	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/29/12 12:28	1
Methyl tert-butyl ether	0.19	J	0.40	0.044	ug/L			05/29/12 12:28	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/29/12 12:28	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/29/12 12:28	1
n-Propylbenzene	ND		0.20	0.13	ug/L			05/29/12 12:28	1
o-Xylene	ND		0.20	0.027	ug/L			05/29/12 12:28	1
p-Cymene	ND		0.20	0.030	ug/L			05/29/12 12:28	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/29/12 12:28	1
Toluene	0.11	J	0.20	0.036	ug/L			05/29/12 12:28	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/29/12 12:28	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		05/22/12 07:17	05/26/12 14:21	1
alpha-BHC	ND		0.049	0.0064	ug/L		05/22/12 07:17	05/26/12 14:21	1
beta-BHC	ND		0.049	0.024	ug/L		05/22/12 07:17	05/26/12 14:21	1
delta-BHC	ND		0.049	0.0098	ug/L		05/22/12 07:17	05/26/12 14:21	1
gamma-BHC (Lindane)	ND		0.049	0.0059	ug/L		05/22/12 07:17	05/26/12 14:21	1
Chlordane (technical)	ND		0.49	0.028	ug/L		05/22/12 07:17	05/26/12 14:21	1
4,4'-DDD	ND		0.049	0.0090	ug/L		05/22/12 07:17	05/26/12 14:21	1
4,4'-DDE	ND		0.049	0.011	ug/L		05/22/12 07:17	05/26/12 14:21	1
4,4'-DDT	ND		0.049	0.011	ug/L		05/22/12 07:17	05/26/12 14:21	1
Dieldrin	ND		0.049	0.0096	ug/L		05/22/12 07:17	05/26/12 14:21	1

# Client Sample Results

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

TestAmerica Job ID: 480-20198-1

## Client Sample ID: Post-Carbon

Lab Sample ID: 480-20200-1

Date Collected: 05/17/12 10:20

Matrix: Wastewater

Date Received: 05/17/12 11:10

### Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	ND		0.049	0.011	ug/L		05/22/12 07:17	05/26/12 14:21	1
Endosulfan II	ND		0.049	0.012	ug/L		05/22/12 07:17	05/26/12 14:21	1
Endosulfan sulfate	ND		0.049	0.015	ug/L		05/22/12 07:17	05/26/12 14:21	1
Endrin	ND		0.049	0.013	ug/L		05/22/12 07:17	05/26/12 14:21	1
Endrin aldehyde	ND		0.049	0.016	ug/L		05/22/12 07:17	05/26/12 14:21	1
Heptachlor	ND		0.049	0.0083	ug/L		05/22/12 07:17	05/26/12 14:21	1
Heptachlor epoxide	ND		0.049	0.0052	ug/L		05/22/12 07:17	05/26/12 14:21	1
Toxaphene	ND		0.49	0.12	ug/L		05/22/12 07:17	05/26/12 14:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	66		15 - 125				05/22/12 07:17	05/26/12 14:21	1
Tetrachloro-m-xylene	81		36 - 121				05/22/12 07:17	05/26/12 14:21	1

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10.0	5.6	ug/L		05/18/12 09:00	05/18/12 21:31	1
Iron	232		50.0	19.3	ug/L		05/18/12 09:00	05/18/12 21:31	1
Manganese	680	B	3.0	0.40	ug/L		05/18/12 09:00	05/18/12 21:31	1
Zinc	3.4	J	10.0	1.5	ug/L		05/18/12 09:00	05/18/12 21:31	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	1.8	J	5.0	1.4	mg/L		05/21/12 09:55	05/21/12 10:00	1
Cyanide, Total	0.38		0.010	0.0050	mg/L		05/22/12 11:00	05/23/12 13:47	1
Phenolics, Total Recoverable	0.0080	J B	0.010	0.0050	mg/L		05/21/12 19:48	05/23/12 20:28	1
Total Dissolved Solids	948		10.0	4.0	mg/L			05/22/12 01:30	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			05/17/12 20:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			05/19/12 11:00	1
pH	7.48	HF	0.100	0.100	SU			05/17/12 19:50	1

# Lab Chronicle

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

TestAmerica Job ID: 480-20198-1

**Client Sample ID: Pre-Carbon**

**Date Collected: 05/17/12 10:30**

**Date Received: 05/17/12 11:10**

**Lab Sample ID: 480-20198-1**

**Matrix: Wastewater**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	65164	05/19/12 19:24	LH	TAL BUF
Total/NA	Analysis	8260B	DL	40	65291	05/21/12 14:08	RL	TAL BUF
Total/NA	Analysis	8021B		10	66181	05/29/12 13:24	DB	TAL BUF
Total/NA	Analysis	8021B	DL	50	66181	05/29/12 14:17	DB	TAL BUF
Total/NA	Prep	200.7			64954	05/18/12 09:00	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	65267	05/18/12 21:16	LH	TAL BUF
Total/NA	Analysis	310.2		10	65392	05/21/12 14:52	PJQ	TAL BUF
Total/NA	Analysis	300.0		2	65779	05/24/12 12:09	KAC	TAL BUF

**Client Sample ID: Post-Carbon**

**Date Collected: 05/17/12 10:20**

**Date Received: 05/17/12 11:10**

**Lab Sample ID: 480-20200-1**

**Matrix: Wastewater**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	65493	05/22/12 13:11	LH	TAL BUF
Total/NA	Prep	3510C			65152	05/19/12 07:16	MRB	TAL BUF
Total/NA	Analysis	8270C		1	65497	05/22/12 22:49	RMM	TAL BUF
Total/NA	Analysis	8021B		1	66181	05/29/12 12:28	DB	TAL BUF
Total/NA	Prep	3510C			65446	05/22/12 07:17	TR	TAL BUF
Total/NA	Analysis	608		1	66142	05/26/12 14:21	LW	TAL BUF
Total/NA	Prep	200.7			64954	05/18/12 09:00	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	65267	05/18/12 21:31	LH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	64955	05/17/12 19:50	JS	TAL BUF
Total/NA	Analysis	SM 5210B		1	64961	05/17/12 20:12	ML	TAL BUF
Total/NA	Analysis	SM 2540D		1	65184	05/19/12 11:00	EGN	TAL BUF
Total/NA	Prep	1664A			65300	05/21/12 09:55	LYW	TAL BUF
Total/NA	Analysis	1664A		1	65302	05/21/12 10:00	LYW	TAL BUF
Total/NA	Analysis	SM 2540C		1	65369	05/22/12 01:30	BM	TAL BUF
Total/NA	Prep	Distill/CN			65530	05/22/12 11:00	EGN	TAL BUF
Total/NA	Analysis	335.4		1	65745	05/23/12 13:47	NH	TAL BUF
Total/NA	Prep	Distill/Phenol			65429	05/21/12 19:48	KS	TAL BUF
Total/NA	Analysis	420.4		1	65874	05/23/12 20:28	PJQ	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.

TestAmerica Job ID: 480-20198-1

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

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas DEQ	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Georgia	State Program	4	N/A
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Kentucky (UST)	State Program	4	30
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	Federal		P330-08-00242
TestAmerica Buffalo	Virginia	NELAC	3	460185
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	West Virginia DEP	State Program	3	252
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-20198-1

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

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	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
420.4	Phenolics, Total Recoverable	MCAWW	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

### Protocol References:

1664A = EPA-821-98-002

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

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-20198-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-20198-1	Pre-Carbon	Wastewater	05/17/12 10:30	05/17/12 11:10
480-20200-1	Post-Carbon	Wastewater	05/17/12 10:20	05/17/12 11:10

## TestAmerica

**THE LEADER IN ENVIRONMENTAL TESTING**

[illegible]

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-20198-1

**Login Number: 20198**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: May, Joel 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	

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-20198-1

**Login Number: 20200**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: May, Joel 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	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-21624-1

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:

7/16/2012 4:44:01 PM

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

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

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

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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.



---

Brian Fischer  
Project Manager II  
7/16/2012 4:44:01 PM



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## Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-21624-1

### Qualifiers

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

### 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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 480-21624-1

### Job ID: 480-21624-1

#### Laboratory: TestAmerica Buffalo

#### Narrative

#### Job Narrative 480-21624-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 6/21/2012 11:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.8° C and 2.8° C.

#### GC/MS VOA

No analytical or quality issues were noted.

#### Ion Chromatography

Method(s) 300.0: In batch 71768 the following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-21625-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC VOA

Method(s) 8021B: The following samples were diluted due to the abundance of target analytes: (480-21635-5 MS), (480-21635-5 MSD), A3-ORC-3 (480-21635-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### 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(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon (480-21624-1)

No other analytical or quality issues were noted.

# Client Sample Results

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

TestAmerica Job ID: 480-21624-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-21624-1**

**Date Collected: 06/21/12 10:50**

**Matrix: Wastewater**

**Date Received: 06/21/12 11:15**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/30/12 15:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/30/12 15:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/30/12 15:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/30/12 15:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/30/12 15:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/30/12 15:06	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			06/30/12 15:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/30/12 15:06	1
2-Hexanone	ND		5.0	1.2	ug/L			06/30/12 15:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/30/12 15:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/30/12 15:06	1
Acetone	ND		10	3.0	ug/L			06/30/12 15:06	1
Benzene	ND		1.0	0.41	ug/L			06/30/12 15:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/30/12 15:06	1
Bromoform	ND		1.0	0.26	ug/L			06/30/12 15:06	1
Bromomethane	ND		1.0	0.69	ug/L			06/30/12 15:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/30/12 15:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/30/12 15:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/30/12 15:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/30/12 15:06	1
Chloroethane	ND		1.0	0.32	ug/L			06/30/12 15:06	1
Chloroform	ND		1.0	0.34	ug/L			06/30/12 15:06	1
Chloromethane	ND		1.0	0.35	ug/L			06/30/12 15:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/30/12 15:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/30/12 15:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/30/12 15:06	1
Styrene	ND		1.0	0.73	ug/L			06/30/12 15:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/30/12 15:06	1
Toluene	ND		1.0	0.51	ug/L			06/30/12 15:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/30/12 15:06	1
Trichloroethene	ND		1.0	0.46	ug/L			06/30/12 15:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/30/12 15:06	1
Vinyl acetate	ND		5.0	0.85	ug/L			06/30/12 15:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/30/12 15:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137		06/30/12 15:06	1
Toluene-d8 (Surr)	106		71 - 126		06/30/12 15:06	1
4-Bromofluorobenzene (Surr)	100		73 - 120		06/30/12 15:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			06/25/12 13:47	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			06/25/12 13:47	1
Benzene	ND		0.20	0.023	ug/L			06/25/12 13:47	1
Ethylbenzene	ND		0.20	0.029	ug/L			06/25/12 13:47	1
Isopropylbenzene	ND		0.20	0.027	ug/L			06/25/12 13:47	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			06/25/12 13:47	1
m,p-Xylene	ND		0.40	0.054	ug/L			06/25/12 13:47	1
n-Butylbenzene	ND		0.20	0.031	ug/L			06/25/12 13:47	1
n-Propylbenzene	ND		0.20	0.13	ug/L			06/25/12 13:47	1

# Client Sample Results

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

TestAmerica Job ID: 480-21624-1

## Client Sample ID: Post-Carbon

Date Collected: 06/21/12 10:50

Date Received: 06/21/12 11:15

## Lab Sample ID: 480-21624-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.20	0.027	ug/L			06/25/12 13:47	1
p-Cymene	ND		0.20	0.030	ug/L			06/25/12 13:47	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			06/25/12 13:47	1
Toluene	ND		0.20	0.036	ug/L			06/25/12 13:47	1
Xylenes, Total	ND		0.60	0.054	ug/L			06/25/12 13:47	1

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	338		50.0	19.3	ug/L		06/25/12 09:30	06/26/12 12:43	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.32		0.010	0.0050	mg/L		06/28/12 18:30	06/29/12 15:21	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.93	HF	0.100	0.100	SU			06/21/12 23:41	1

# Client Sample Results

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

TestAmerica Job ID: 480-21624-1

**Client Sample ID: Pre-Carbon**

**Lab Sample ID: 480-21625-1**

**Date Collected: 06/21/12 10:45**

**Matrix: Wastewater**

**Date Received: 06/21/12 11:15**

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		500	100	ug/L		06/25/12 09:30	06/26/12 12:45	1
Iron	3490		50.0	19.3	ug/L		06/25/12 09:30	06/26/12 12:45	1
Magnesium	65200		200	43.4	ug/L		06/25/12 09:30	06/26/12 12:45	1
Potassium	3520		500	100	ug/L		06/25/12 09:30	06/26/12 12:45	1
Sodium	52900		1000	324	ug/L		06/25/12 09:30	06/26/12 12:45	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.0		0.50	0.28	mg/L			07/06/12 15:33	1
Sulfate	120		4.0	0.70	mg/L			07/10/12 20:52	2
Alkalinity, Total	455		100	40.0	mg/L			07/02/12 11:32	10

## Lab Chronicle

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

TestAmerica Job ID: 480-21624-1

### Client Sample ID: Post-Carbon

Date Collected: 06/21/12 10:50

Date Received: 06/21/12 11:15

### Lab Sample ID: 480-21624-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	70710	06/30/12 15:06	ND	TAL BUF
Total/NA	Analysis	8021B		1	69796	06/25/12 13:47	DB	TAL BUF
Total/NA	Prep	200.7			69715	06/25/12 09:30	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	70170	06/26/12 12:43	AH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	69607	06/21/12 23:41	KS	TAL BUF
Total/NA	Prep	Distill/CN			70502	06/28/12 18:30	ML	TAL BUF
Total/NA	Analysis	335.4		1	70637	06/29/12 15:21	BM	TAL BUF

### Client Sample ID: Pre-Carbon

Date Collected: 06/21/12 10:45

Date Received: 06/21/12 11:15

### Lab Sample ID: 480-21625-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			69715	06/25/12 09:30	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	70170	06/26/12 12:45	AH	TAL BUF
Total/NA	Analysis	310.2		10	70946	07/02/12 11:32	NH	TAL BUF
Total/NA	Analysis	300.0		1	71267	07/06/12 15:33	KAC	TAL BUF
Total/NA	Analysis	300.0		2	71768	07/10/12 20:52	RMM	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.

TestAmerica Job ID: 480-21624-1

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

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas DEQ	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Georgia	State Program	4	N/A
TestAmerica Buffalo	Illinois	NELAC	5	200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Kentucky (UST)	State Program	4	30
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY00044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Hampshire	NELAC	1	2973
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-11-2
TestAmerica Buffalo	USDA	Federal		P330-11-00386
TestAmerica Buffalo	Virginia	NELAC	3	460185
TestAmerica Buffalo	Washington	State Program	10	C784
TestAmerica Buffalo	West Virginia DEP	State Program	3	252
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.



## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-21624-1

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

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

### Protocol References:

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-21624-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-21624-1	Post-Carbon	Wastewater	06/21/12 10:50	06/21/12 11:15
480-21625-1	Pre-Carbon	Wastewater	06/21/12 10:45	06/21/12 11:15

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**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-21624-1

**Login Number: 21624**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: May, Joel 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	

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-21624-1

**Login Number: 21625**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: May, Joel 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	

# TestAmerica

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## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-23048-1

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

Sampling Event: Mthly Post-Carbon

Mthly Pre-Carbon

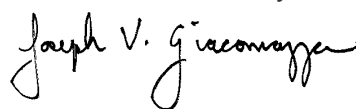
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

8/2/2012 2:59:56 PM

Joe Giacomazza

Project Administrator

[joe.giacomazza@testamericainc.com](mailto:joe.giacomazza@testamericainc.com)

Designee for

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

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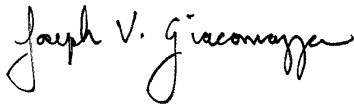
[www.testamericainc.com](http://www.testamericainc.com)

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

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



---

Joe Giacomazza  
Project Administrator  
8/2/2012 2:59:56 PM



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## Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-23048-1

### Qualifiers

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

### 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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 480-23048-1

**Job ID: 480-23048-1**

**Laboratory: TestAmerica Buffalo**

### Narrative

#### Job Narrative 480-23048-1

#### Receipt

The samples were received on 7/25/2012 11:20 AM; 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 3.8° C.

#### GC/MS VOA

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: INFLUENT PW7B (480-23169-6). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### Ion Chromatography

Method 300.0: In batch 74430 the following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-23048-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC VOA

No analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

Method 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 (480-23050-1)

No other analytical or quality issues were noted.

# Client Sample Results

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

TestAmerica Job ID: 480-23048-1

**Client Sample ID: Pre-Carbon**

**Lab Sample ID: 480-23048-1**

**Date Collected: 07/25/12 11:00**

**Matrix: Wastewater**

**Date Received: 07/25/12 11:20**

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	151000		500	100	ug/L		07/26/12 09:00	07/26/12 16:55	1
Iron	3700		50.0	19.3	ug/L		07/26/12 09:00	07/26/12 16:55	1
Magnesium	50800		200	43.4	ug/L		07/26/12 09:00	07/26/12 16:55	1
Potassium	2690		500	100	ug/L		07/26/12 09:00	07/26/12 16:55	1
Sodium	35200		1000	324	ug/L		07/26/12 09:00	07/26/12 16:55	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	156		1.0	0.56	mg/L			07/31/12 18:10	2
Sulfate	79.1		2.0	0.35	mg/L			07/27/12 14:40	1
Alkalinity, Total	380		50.0	20.0	mg/L			07/31/12 20:11	5

# Client Sample Results

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

TestAmerica Job ID: 480-23048-1

**Client Sample ID: Post-Carbon**

**Date Collected: 07/25/12 11:10**

**Date Received: 07/25/12 11:20**

**Lab Sample ID: 480-23050-1**

**Matrix: Wastewater**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/30/12 20:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/30/12 20:15	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/30/12 20:15	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/30/12 20:15	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/30/12 20:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/30/12 20:15	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			07/30/12 20:15	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/30/12 20:15	1
2-Hexanone	ND		5.0	1.2	ug/L			07/30/12 20:15	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/30/12 20:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/30/12 20:15	1
Acetone	ND		10	3.0	ug/L			07/30/12 20:15	1
Benzene	ND		1.0	0.41	ug/L			07/30/12 20:15	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/30/12 20:15	1
Bromoform	ND		1.0	0.26	ug/L			07/30/12 20:15	1
Bromomethane	ND		1.0	0.69	ug/L			07/30/12 20:15	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/30/12 20:15	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/30/12 20:15	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/30/12 20:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/30/12 20:15	1
Chloroethane	ND		1.0	0.32	ug/L			07/30/12 20:15	1
Chloroform	ND		1.0	0.34	ug/L			07/30/12 20:15	1
Chloromethane	ND		1.0	0.35	ug/L			07/30/12 20:15	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/30/12 20:15	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/30/12 20:15	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/30/12 20:15	1
Styrene	ND		1.0	0.73	ug/L			07/30/12 20:15	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/30/12 20:15	1
Toluene	ND		1.0	0.51	ug/L			07/30/12 20:15	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/30/12 20:15	1
Trichloroethene	ND		1.0	0.46	ug/L			07/30/12 20:15	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/30/12 20:15	1
Vinyl acetate	ND		5.0	0.85	ug/L			07/30/12 20:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/30/12 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		66 - 137		07/30/12 20:15	1
Toluene-d8 (Surr)	115		71 - 126		07/30/12 20:15	1
4-Bromofluorobenzene (Surr)	106		73 - 120		07/30/12 20:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			07/31/12 12:18	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			07/31/12 12:18	1
Benzene	ND		0.20	0.023	ug/L			07/31/12 12:18	1
Ethylbenzene	ND		0.20	0.029	ug/L			07/31/12 12:18	1
Isopropylbenzene	ND		0.20	0.027	ug/L			07/31/12 12:18	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			07/31/12 12:18	1
m,p-Xylene	ND		0.40	0.054	ug/L			07/31/12 12:18	1
n-Butylbenzene	ND		0.20	0.031	ug/L			07/31/12 12:18	1
n-Propylbenzene	ND		0.20	0.13	ug/L			07/31/12 12:18	1

# Client Sample Results

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

TestAmerica Job ID: 480-23048-1

## Client Sample ID: Post-Carbon

Lab Sample ID: 480-23050-1

Date Collected: 07/25/12 11:10

Matrix: Wastewater

Date Received: 07/25/12 11:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.20	0.027	ug/L			07/31/12 12:18	1
p-Cymene	ND		0.20	0.030	ug/L			07/31/12 12:18	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			07/31/12 12:18	1
Toluene	ND		0.20	0.036	ug/L			07/31/12 12:18	1
Xylenes, Total	ND		0.60	0.054	ug/L			07/31/12 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	109		63 - 132		07/31/12 12:18	1
4-Bromofluorobenzene	107		64 - 128		07/31/12 12:18	1

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	647		50.0	19.3	ug/L		07/26/12 09:00	07/26/12 15:51	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.70		0.020	0.010	mg/L		07/26/12 16:35	07/27/12 11:34	2
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.66	HF	0.100	0.100	SU			07/25/12 21:24	1

## Lab Chronicle

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

TestAmerica Job ID: 480-23048-1

### Client Sample ID: Pre-Carbon

Date Collected: 07/25/12 11:00

Date Received: 07/25/12 11:20

### Lab Sample ID: 480-23048-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			73942	07/26/12 09:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	74131	07/26/12 16:55	LH	TAL BUF
Total/NA	Analysis	300.0		1	74044	07/27/12 14:40	KAC	TAL BUF
Total/NA	Analysis	300.0		2	74430	07/31/12 18:10	RMM	TAL BUF
Total/NA	Analysis	310.2		5	74659	07/31/12 20:11	NH	TAL BUF

### Client Sample ID: Post-Carbon

Date Collected: 07/25/12 11:10

Date Received: 07/25/12 11:20

### Lab Sample ID: 480-23050-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	74450	07/30/12 20:15	RL	TAL BUF
Total/NA	Analysis	8021B		1	74501	07/31/12 12:18	DB	TAL BUF
Total/NA	Prep	200.7			73943	07/26/12 09:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	74115	07/26/12 15:51	LH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	73890	07/25/12 21:24	ML	TAL BUF
Total/NA	Prep	Distill/CN			74077	07/26/12 16:35	NH	TAL BUF
Total/NA	Analysis	335.4		2	74178	07/27/12 11:34	EGN	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.

TestAmerica Job ID: 480-23048-1

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

### Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAC	9	1169CA	09-30-12
Connecticut	State Program	1	PH-0568	09-30-12
Florida	NELAC	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	03-31-12
Illinois	NELAC	5	200003	09-30-12
Iowa	State Program	7	374	03-01-13
Kansas	NELAC	7	E-10187	01-31-13
Kentucky	State Program	4	90029	12-31-12
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAC	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-12
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAC	5	036-999-337	12-31-12
New Hampshire	NELAC	1	2973	09-11-12
New Hampshire	NELAC	1	2337	11-17-12
New Jersey	NELAC	2	NY455	06-30-13
New York	NELAC	2	10026	03-31-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-12
Oregon	NELAC	10	NY200003	06-09-13
Pennsylvania	NELAC	3	68-00281	07-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAC	6	T104704412-11-2	07-31-12
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAC	3	460185	09-14-12
Washington	State Program	10	C784	02-10-13
West Virginia DEP	State Program	3	252	09-30-12
Wisconsin	State Program	5	998310390	08-31-12



## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-23048-1

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

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

### Protocol References:

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-23048-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-23048-1	Pre-Carbon	Wastewater	07/25/12 11:00	07/25/12 11:20
480-23050-1	Post-Carbon	Wastewater	07/25/12 11:10	07/25/12 11:20

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING.

[illegible]

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8/2/2012

## TestAmerica

THE LEADER 10, EMULSION 22%, VIA 11, 5' 30"

[illegible]

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-23048-1

**Login Number: 23048**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: May, Joel 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	

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-23048-1

**Login Number: 23050**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: May, Joel 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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-24226-1

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

Sampling Event: Qtrly Post-Carbon

Qtrly Pre-Carbon

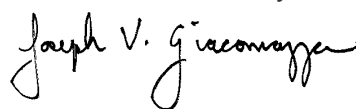
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

9/6/2012 4:37:50 PM

Joe Giacomazza

Project Administrator

[joe.giacomazza@testamericainc.com](mailto:joe.giacomazza@testamericainc.com)

Designee for

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

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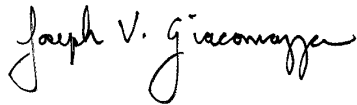
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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



---

Joe Giacomazza  
Project Administrator  
9/6/2012 4:37:50 PM



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## Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-24226-1

### Qualifiers

#### GC/MS VOA

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

#### GC/MS Semi VOA

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

#### Metals

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

#### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes
b	Result Detected in the USB

### 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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 480-24226-1

**Job ID: 480-24226-1**

**Laboratory: TestAmerica Buffalo**

### Narrative

#### Job Narrative 480-24226-1

#### Receipt

The samples were received on 8/22/2012 12:15 PM and 8/22/2012 12:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.1° C and 5.3° C.

#### GC/MS VOA

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-24226-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC/MS Semi VOA

Method 8270C: The following sample contained one acid and/or one base surrogate outside acceptance limits: Post-Carbon (480-24236-1). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

#### Ion Chromatography

Method 300.0: The following sample were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-24226-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC VOA

Method 8021B: The following sample was diluted to bring the concentration of target analyte within the calibration range: Pre-Carbon (480-24226-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC Semi VOA

No analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

Method 310.2: The method blank for batch 78228 contained alkalinity above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed Pre-Carbon (480-24226-1)

Method 335.4, 9012A, SM 4500 CN E: The method blank for batch 78679 contained cyanide above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Post-Carbon (480-24236-1)

Method SM 5210B: The dilution water D.O. depletion for batch 77975 was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results are reported.

Method 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 (480-24236-1)

No other analytical or quality issues were noted.

## Case Narrative

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

TestAmerica Job ID: 480-24226-1

---

### Job ID: 480-24226-1 (Continued)

---

#### Laboratory: TestAmerica Buffalo (Continued)

##### Organic Prep

No analytical or quality issues were noted.

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# Client Sample Results

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

TestAmerica Job ID: 480-24226-1

**Client Sample ID: Pre-Carbon**

**Lab Sample ID: 480-24226-1**

**Date Collected: 08/22/12 12:20**

**Matrix: Wastewater**

**Date Received: 08/22/12 12:25**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		40	33	ug/L			08/25/12 02:32	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			08/25/12 02:32	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			08/25/12 02:32	40
1,1-Dichloroethane	ND		40	15	ug/L			08/25/12 02:32	40
1,1-Dichloroethene	ND		40	12	ug/L			08/25/12 02:32	40
1,2-Dichloroethane	ND		40	8.4	ug/L			08/25/12 02:32	40
1,2-Dichloroethene, Total	ND		80	28	ug/L			08/25/12 02:32	40
1,2-Dichloropropane	ND		40	29	ug/L			08/25/12 02:32	40
2-Hexanone	ND		200	50	ug/L			08/25/12 02:32	40
2-Butanone (MEK)	ND		400	53	ug/L			08/25/12 02:32	40
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			08/25/12 02:32	40
Acetone	250	J	400	120	ug/L			08/25/12 02:32	40
Benzene	350		40	16	ug/L			08/25/12 02:32	40
Bromodichloromethane	20	J	40	16	ug/L			08/25/12 02:32	40
Bromoform	ND		40	10	ug/L			08/25/12 02:32	40
Bromomethane	ND		40	28	ug/L			08/25/12 02:32	40
Carbon disulfide	ND		40	7.6	ug/L			08/25/12 02:32	40
Carbon tetrachloride	ND		40	11	ug/L			08/25/12 02:32	40
Chlorobenzene	1600		40	30	ug/L			08/25/12 02:32	40
Dibromochloromethane	ND		40	13	ug/L			08/25/12 02:32	40
Chloroethane	ND		40	13	ug/L			08/25/12 02:32	40
Chloroform	540		40	14	ug/L			08/25/12 02:32	40
Chloromethane	45		40	14	ug/L			08/25/12 02:32	40
cis-1,3-Dichloropropene	ND		40	14	ug/L			08/25/12 02:32	40
Ethylbenzene	ND		40	30	ug/L			08/25/12 02:32	40
Methylene Chloride	ND		40	18	ug/L			08/25/12 02:32	40
Styrene	ND		40	29	ug/L			08/25/12 02:32	40
Tetrachloroethene	ND		40	14	ug/L			08/25/12 02:32	40
Toluene	ND		40	20	ug/L			08/25/12 02:32	40
trans-1,3-Dichloropropene	ND		40	15	ug/L			08/25/12 02:32	40
Trichloroethene	ND		40	18	ug/L			08/25/12 02:32	40
Vinyl chloride	ND		40	36	ug/L			08/25/12 02:32	40
Vinyl acetate	ND		200	34	ug/L			08/25/12 02:32	40
Xylenes, Total	ND		80	26	ug/L			08/25/12 02:32	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		66 - 137		08/25/12 02:32	40
Toluene-d8 (Surr)	85		71 - 126		08/25/12 02:32	40
4-Bromofluorobenzene (Surr)	99		73 - 120		08/25/12 02:32	40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/28/12 14:19	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/28/12 14:19	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/28/12 14:19	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/28/12 14:19	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/28/12 14:19	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/28/12 14:19	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/28/12 14:19	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/28/12 14:19	1
o-Xylene	ND		0.20	0.027	ug/L			08/28/12 14:19	1

# Client Sample Results

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

TestAmerica Job ID: 480-24226-1

## Client Sample ID: Pre-Carbon

Lab Sample ID: 480-24226-1

Date Collected: 08/22/12 12:20

Matrix: Wastewater

Date Received: 08/22/12 12:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Cymene	ND		0.20	0.030	ug/L			08/28/12 14:19	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/28/12 14:19	1
Toluene	ND		0.20	0.036	ug/L			08/28/12 14:19	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/28/12 14:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	125		63 - 132					08/28/12 14:19	1
4-Bromofluorobenzene	95		64 - 128					08/28/12 14:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	63		2.0	0.23	ug/L			08/28/12 15:06	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	123		63 - 132					08/28/12 15:06	10
4-Bromofluorobenzene	123		64 - 128					08/28/12 15:06	10

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	149000		500	100	ug/L		08/24/12 08:20	08/24/12 19:04	1
Iron	2510		50.0	19.3	ug/L		08/24/12 08:20	08/24/12 19:04	1
Magnesium	57100		200	43.4	ug/L		08/24/12 08:20	08/24/12 19:04	1
Potassium	2870		500	100	ug/L		08/24/12 08:20	08/24/12 19:04	1
Sodium	36500		1000	324	ug/L		08/24/12 08:20	08/24/12 19:04	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		2.5	1.4	mg/L			08/28/12 13:26	5
Sulfate	133		10.0	1.7	mg/L			08/28/12 13:26	5
Alkalinity, Total	18900	B	4000	1600	mg/L			08/27/12 03:27	400

# Client Sample Results

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

TestAmerica Job ID: 480-24226-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-24236-1**

**Date Collected: 08/22/12 12:00**

**Matrix: Wastewater**

**Date Received: 08/22/12 12:15**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/25/12 03:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/25/12 03:00	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/25/12 03:00	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/25/12 03:00	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/25/12 03:00	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/25/12 03:00	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			08/25/12 03:00	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/25/12 03:00	1
2-Hexanone	ND		5.0	1.2	ug/L			08/25/12 03:00	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/25/12 03:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/25/12 03:00	1
Acetone	ND		10	3.0	ug/L			08/25/12 03:00	1
Benzene	ND		1.0	0.41	ug/L			08/25/12 03:00	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/25/12 03:00	1
Bromoform	ND		1.0	0.26	ug/L			08/25/12 03:00	1
Bromomethane	ND		1.0	0.69	ug/L			08/25/12 03:00	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/25/12 03:00	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/25/12 03:00	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/25/12 03:00	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/25/12 03:00	1
Chloroethane	ND		1.0	0.32	ug/L			08/25/12 03:00	1
<b>Chloroform</b>	<b>0.55</b>	<b>J</b>	1.0	0.34	ug/L			08/25/12 03:00	1
Chloromethane	ND		1.0	0.35	ug/L			08/25/12 03:00	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/25/12 03:00	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/25/12 03:00	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/25/12 03:00	1
Styrene	ND		1.0	0.73	ug/L			08/25/12 03:00	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/25/12 03:00	1
Toluene	ND		1.0	0.51	ug/L			08/25/12 03:00	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/25/12 03:00	1
Trichloroethene	ND		1.0	0.46	ug/L			08/25/12 03:00	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/25/12 03:00	1
Vinyl acetate	ND		5.0	0.85	ug/L			08/25/12 03:00	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/25/12 03:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		66 - 137		08/25/12 03:00	1
Toluene-d8 (Surr)	91		71 - 126		08/25/12 03:00	1
4-Bromofluorobenzene (Surr)	100		73 - 120		08/25/12 03:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		5.0	0.59	ug/L		08/23/12 13:42	08/30/12 23:12	1
Acenaphthene	ND		5.0	0.41	ug/L		08/23/12 13:42	08/30/12 23:12	1
Acenaphthylene	ND		5.0	0.38	ug/L		08/23/12 13:42	08/30/12 23:12	1
Anthracene	ND		5.0	0.28	ug/L		08/23/12 13:42	08/30/12 23:12	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		08/23/12 13:42	08/30/12 23:12	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		08/23/12 13:42	08/30/12 23:12	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		08/23/12 13:42	08/30/12 23:12	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		08/23/12 13:42	08/30/12 23:12	1
Benzo[k]fluoranthene	ND		5.0	0.72	ug/L		08/23/12 13:42	08/30/12 23:12	1

# Client Sample Results

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

TestAmerica Job ID: 480-24226-1

## Client Sample ID: Post-Carbon

Lab Sample ID: 480-24236-1

Date Collected: 08/22/12 12:00

Matrix: Wastewater

Date Received: 08/22/12 12:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		08/23/12 13:42	08/30/12 23:12	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		08/23/12 13:42	08/30/12 23:12	1
Carbazole	ND		5.0	0.30	ug/L		08/23/12 13:42	08/30/12 23:12	1
Chrysene	ND		5.0	0.33	ug/L		08/23/12 13:42	08/30/12 23:12	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		08/23/12 13:42	08/30/12 23:12	1
Dibenzofuran	ND		9.9	0.50	ug/L		08/23/12 13:42	08/30/12 23:12	1
Fluoranthene	ND		5.0	0.40	ug/L		08/23/12 13:42	08/30/12 23:12	1
Fluorene	ND		5.0	0.36	ug/L		08/23/12 13:42	08/30/12 23:12	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		08/23/12 13:42	08/30/12 23:12	1
Naphthalene	ND		5.0	0.75	ug/L		08/23/12 13:42	08/30/12 23:12	1
Pentachlorophenol	ND		9.9	2.2	ug/L		08/23/12 13:42	08/30/12 23:12	1
Phenanthrene	ND		5.0	0.44	ug/L		08/23/12 13:42	08/30/12 23:12	1
Phenol	ND		5.0	0.39	ug/L		08/23/12 13:42	08/30/12 23:12	1
Pyrene	0.50	J	5.0	0.34	ug/L		08/23/12 13:42	08/30/12 23:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	99		52 - 132	08/23/12 13:42	08/30/12 23:12	1
2-Fluorobiphenyl	75		48 - 120	08/23/12 13:42	08/30/12 23:12	1
2-Fluorophenol	45		20 - 120	08/23/12 13:42	08/30/12 23:12	1
Nitrobenzene-d5	78		46 - 120	08/23/12 13:42	08/30/12 23:12	1
p-Terphenyl-d14	59	X	67 - 150	08/23/12 13:42	08/30/12 23:12	1
Phenol-d5	33		16 - 120	08/23/12 13:42	08/30/12 23:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/28/12 15:53	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/28/12 15:53	1
Benzene	ND		0.20	0.023	ug/L			08/28/12 15:53	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/28/12 15:53	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/28/12 15:53	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/28/12 15:53	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/28/12 15:53	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/28/12 15:53	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/28/12 15:53	1
o-Xylene	ND		0.20	0.027	ug/L			08/28/12 15:53	1
p-Cymene	ND		0.20	0.030	ug/L			08/28/12 15:53	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/28/12 15:53	1
Toluene	ND		0.20	0.036	ug/L			08/28/12 15:53	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/28/12 15:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	120		63 - 132		08/28/12 15:53	1
4-Bromofluorobenzene	120		64 - 128		08/28/12 15:53	1

### Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.050	0.0065	ug/L		08/23/12 13:54	08/25/12 00:50	1
alpha-BHC	ND		0.050	0.0065	ug/L		08/23/12 13:54	08/25/12 00:50	1
beta-BHC	ND		0.050	0.025	ug/L		08/23/12 13:54	08/25/12 00:50	1
delta-BHC	ND		0.050	0.0099	ug/L		08/23/12 13:54	08/25/12 00:50	1
gamma-BHC (Lindane)	ND		0.050	0.0059	ug/L		08/23/12 13:54	08/25/12 00:50	1
Chlordane (technical)	ND		0.50	0.029	ug/L		08/23/12 13:54	08/25/12 00:50	1



# Client Sample Results

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

TestAmerica Job ID: 480-24226-1

## Client Sample ID: Post-Carbon

Lab Sample ID: 480-24236-1

Date Collected: 08/22/12 12:00

Matrix: Wastewater

Date Received: 08/22/12 12:15

### Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0091	ug/L		08/23/12 13:54	08/25/12 00:50	1
4,4'-DDE	ND		0.050	0.011	ug/L		08/23/12 13:54	08/25/12 00:50	1
4,4'-DDT	ND		0.050	0.011	ug/L		08/23/12 13:54	08/25/12 00:50	1
Dieldrin	ND		0.050	0.0097	ug/L		08/23/12 13:54	08/25/12 00:50	1
Endosulfan I	ND		0.050	0.011	ug/L		08/23/12 13:54	08/25/12 00:50	1
Endosulfan II	ND		0.050	0.012	ug/L		08/23/12 13:54	08/25/12 00:50	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		08/23/12 13:54	08/25/12 00:50	1
Endrin	ND		0.050	0.014	ug/L		08/23/12 13:54	08/25/12 00:50	1
Endrin aldehyde	ND		0.050	0.016	ug/L		08/23/12 13:54	08/25/12 00:50	1
Heptachlor	ND		0.050	0.0084	ug/L		08/23/12 13:54	08/25/12 00:50	1
Heptachlor epoxide	ND		0.050	0.0052	ug/L		08/23/12 13:54	08/25/12 00:50	1
Toxaphene	ND		0.50	0.12	ug/L		08/23/12 13:54	08/25/12 00:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	53		15 - 125	08/23/12 13:54	08/25/12 00:50	1
Tetrachloro-m-xylene	72		36 - 121	08/23/12 13:54	08/25/12 00:50	1

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10.0	5.6	ug/L		08/24/12 08:20	08/24/12 19:02	1
Iron	43.1	J	50.0	19.3	ug/L		08/24/12 08:20	08/24/12 19:02	1
Manganese	261		3.0	0.40	ug/L		08/24/12 08:20	08/24/12 19:02	1
Zinc	1.6	J	10.0	1.5	ug/L		08/24/12 08:20	08/24/12 19:02	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		4.8	1.3	mg/L		08/24/12 18:30	08/25/12 01:49	1
Cyanide, Total	0.081	B	0.010	0.0050	mg/L		08/28/12 11:15	08/29/12 16:10	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		08/23/12 19:41	08/28/12 01:23	1
Total Dissolved Solids	566		10.0	4.0	mg/L			08/23/12 21:46	1
Biochemical Oxygen Demand	2.0	b	2.0	2.0	mg/L			08/23/12 17:39	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			08/23/12 05:15	1
pH	7.73	HF	0.100	0.100	SU			08/22/12 21:02	1

# Lab Chronicle

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

TestAmerica Job ID: 480-24226-1

## Client Sample ID: Pre-Carbon

Date Collected: 08/22/12 12:20

Date Received: 08/22/12 12:25

## Lab Sample ID: 480-24226-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		40	78164	08/25/12 02:32	JMB	TAL BUF
Total/NA	Analysis	8021B		1	78403	08/28/12 14:19	DB	TAL BUF
Total/NA	Analysis	8021B	DL	10	78403	08/28/12 15:06	DB	TAL BUF
Total/NA	Prep	200.7			77935	08/24/12 08:20	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	78287	08/24/12 19:04	MM	TAL BUF
Total/NA	Analysis	310.2		400	78228	08/27/12 03:27	PJQ	TAL BUF
Total/NA	Analysis	300.0		5	78334	08/28/12 13:26	KAC	TAL BUF

## Client Sample ID: Post-Carbon

Date Collected: 08/22/12 12:00

Date Received: 08/22/12 12:15

## Lab Sample ID: 480-24236-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	78164	08/25/12 03:00	JMB	TAL BUF
Total/NA	Prep	3510C			77914	08/23/12 13:42	KB	TAL BUF
Total/NA	Analysis	8270C		1	78669	08/30/12 23:12	RMM	TAL BUF
Total/NA	Analysis	8021B		1	78403	08/28/12 15:53	DB	TAL BUF
Total/NA	Prep	3510C			77921	08/23/12 13:54	KB	TAL BUF
Total/NA	Analysis	608		1	78091	08/25/12 00:50	MN	TAL BUF
Total/NA	Prep	200.7			77935	08/24/12 08:20	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	78287	08/24/12 19:02	MM	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	77783	08/22/12 21:02	KS	TAL BUF
Total/NA	Analysis	SM 2540C		1	77805	08/23/12 21:46	BM	TAL BUF
Total/NA	Analysis	SM 2540D		1	77809	08/23/12 05:15	BM	TAL BUF
Total/NA	Analysis	SM 5210B		1	77975	08/23/12 17:39	ML	TAL BUF
Total/NA	Prep	1664A			78170	08/24/12 18:30	LAW	TAL BUF
Total/NA	Analysis	1664A		1	78171	08/25/12 01:49	LAW	TAL BUF
Total/NA	Prep	Distill/Phenol			77967	08/23/12 19:41	KS	TAL BUF
Total/NA	Analysis	420.4		1	78384	08/28/12 01:23	PJQ	TAL BUF
Total/NA	Prep	Distill/CN			78480	08/28/12 11:15	KJ	TAL BUF
Total/NA	Analysis	335.4		1	78679	08/29/12 16:10	NH	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.

TestAmerica Job ID: 480-24226-1

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

## Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAC	9	1169CA	09-30-12
Connecticut	State Program	1	PH-0568	09-30-12
Florida	NELAC	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	03-31-12
Illinois	NELAC	5	200003	09-30-12
Iowa	State Program	7	374	03-01-13
Kansas	NELAC	7	E-10187	01-31-13
Kentucky	State Program	4	90029	12-31-12
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAC	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-12
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAC	5	036-999-337	12-31-12
New Hampshire	NELAC	1	2973	09-11-12
New Hampshire	NELAC	1	2337	11-17-12
New Jersey	NELAC	2	NY455	06-30-13
New York	NELAC	2	10026	03-31-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAC	10	NY200003	06-09-13
Pennsylvania	NELAC	3	68-00281	07-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAC	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAC	3	460185	09-14-12
Washington	State Program	10	C784	02-10-13
West Virginia DEP	State Program	3	252	09-30-12
Wisconsin	State Program	5	998310390	08-31-12

## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-24226-1

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

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	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
420.4	Phenolics, Total Recoverable	MCAWW	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

### Protocol References:

1664A = EPA-821-98-002

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

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-24226-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-24226-1	Pre-Carbon	Wastewater	08/22/12 12:20	08/22/12 12:25
480-24236-1	Post-Carbon	Wastewater	08/22/12 12:00	08/22/12 12:15



**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-24226-1

**Login Number: 24226**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Robitaille, Zach L**

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	



## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-24226-1

**Login Number: 24236**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Robitaille, Zach L**

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.	True	OK

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-25427-1

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

Sampling Event: Mthly Post-Carbon

Mthly Pre-Carbon

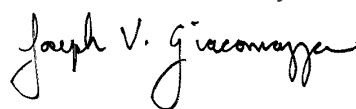
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

10/4/2012 3:48:54 PM

Joe Giacomazza

Project Administrator

[joe.giacomazza@testamericainc.com](mailto:joe.giacomazza@testamericainc.com)

Designee for

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

### LINKS

Review your project  
results through

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Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

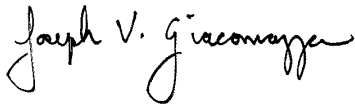
*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail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

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

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

- 1
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- 3
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- 9
- 10
- 11

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



---

Joe Giacomazza  
Project Administrator  
10/4/2012 3:48:54 PM



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## Definitions/Glossary

Client: New York State D.E.C.

TestAmerica Job ID: 480-25427-1

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

### Qualifiers

#### 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

### 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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 480-25427-1

**Job ID: 480-25427-1**

**Laboratory: TestAmerica Buffalo**

### Narrative

#### Job Narrative 480-25427-1

#### Receipt

The samples were received on 9/20/2012 8:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5° C and 2.5° C.

#### GC/MS VOA

No analytical or quality issues were noted.

#### Ion Chromatography

Method 300.0: The following samples in batch 82101 were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-25427-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC VOA

No analytical or quality issues were noted.

#### Metals

Method 200.7 Rev 4.4: The Method Blank for batch 480-81623 contained total calcium, iron and magnesium above the method detection limit. These target analyte concentrations were less than the reporting limits (RLs); therefore, re-extraction and/or re-analysis of samples Pre-Carbon (480-25427-1) was not performed.

Method 200.7 Rev 4.4: The Method Blank for batch 480-81623 contained total iron above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of sample Post-Carbon (480-25428-1) was not performed.

No other analytical or quality issues were noted.

#### General Chemistry

Method SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon (480-25428-1)

No other analytical or quality issues were noted.

# Client Sample Results

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

TestAmerica Job ID: 480-25427-1

**Client Sample ID: Pre-Carbon**

**Lab Sample ID: 480-25427-1**

**Date Collected: 09/20/12 07:40**

**Matrix: Wastewater**

**Date Received: 09/20/12 08:40**

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	92100	B	500	100	ug/L		09/21/12 11:35	09/21/12 19:45	1
Iron	544	B	50.0	19.3	ug/L		09/21/12 11:35	09/21/12 19:45	1
Magnesium	42800	B	200	43.4	ug/L		09/21/12 11:35	09/21/12 19:45	1
Potassium	3160		500	100	ug/L		09/21/12 11:35	09/21/12 19:45	1
Sodium	43900		1000	324	ug/L		09/21/12 11:35	09/21/12 19:45	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.4		0.50	0.28	mg/L			09/22/12 06:07	1
Sulfate	139		4.0	0.70	mg/L			09/26/12 03:14	2
Alkalinity, Total	277		100	40.0	mg/L			10/03/12 02:32	10

# Client Sample Results

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

TestAmerica Job ID: 480-25427-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-25428-1**

**Date Collected: 09/20/12 07:30**

**Matrix: Wastewater**

**Date Received: 09/20/12 08:40**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/24/12 23:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/24/12 23:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/24/12 23:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/24/12 23:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/24/12 23:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/24/12 23:03	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			09/24/12 23:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/24/12 23:03	1
2-Hexanone	ND		5.0	1.2	ug/L			09/24/12 23:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/24/12 23:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/24/12 23:03	1
Acetone	ND		10	3.0	ug/L			09/24/12 23:03	1
Benzene	ND		1.0	0.41	ug/L			09/24/12 23:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/24/12 23:03	1
Bromoform	ND		1.0	0.26	ug/L			09/24/12 23:03	1
Bromomethane	ND		1.0	0.69	ug/L			09/24/12 23:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/24/12 23:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/24/12 23:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/24/12 23:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/24/12 23:03	1
Chloroethane	ND		1.0	0.32	ug/L			09/24/12 23:03	1
Chloroform	ND		1.0	0.34	ug/L			09/24/12 23:03	1
Chloromethane	ND		1.0	0.35	ug/L			09/24/12 23:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/24/12 23:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/24/12 23:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/24/12 23:03	1
Styrene	ND		1.0	0.73	ug/L			09/24/12 23:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/24/12 23:03	1
Toluene	ND		1.0	0.51	ug/L			09/24/12 23:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/24/12 23:03	1
Trichloroethene	ND		1.0	0.46	ug/L			09/24/12 23:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/24/12 23:03	1
Vinyl acetate	ND		5.0	0.85	ug/L			09/24/12 23:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/24/12 23:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		66 - 137		09/24/12 23:03	1
Toluene-d8 (Surr)	109		71 - 126		09/24/12 23:03	1
4-Bromofluorobenzene (Surr)	101		73 - 120		09/24/12 23:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			09/21/12 13:36	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/21/12 13:36	1
Benzene	ND		0.20	0.023	ug/L			09/21/12 13:36	1
Ethylbenzene	ND		0.20	0.029	ug/L			09/21/12 13:36	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/21/12 13:36	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/21/12 13:36	1
m,p-Xylene	ND		0.40	0.054	ug/L			09/21/12 13:36	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/21/12 13:36	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/21/12 13:36	1



# Client Sample Results

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

TestAmerica Job ID: 480-25427-1

## Client Sample ID: Post-Carbon

Lab Sample ID: 480-25428-1

Date Collected: 09/20/12 07:30

Matrix: Wastewater

Date Received: 09/20/12 08:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.20	0.027	ug/L			09/21/12 13:36	1
p-Cymene	ND		0.20	0.030	ug/L			09/21/12 13:36	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/21/12 13:36	1
Toluene	ND		0.20	0.036	ug/L			09/21/12 13:36	1
Xylenes, Total	ND		0.60	0.054	ug/L			09/21/12 13:36	1

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	103	B	50.0	19.3	ug/L		09/21/12 11:35	09/21/12 19:36	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.24		0.010	0.0050	mg/L		09/21/12 10:35	09/21/12 16:20	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.93	HF	0.100	0.100	SU			09/20/12 23:35	1

## Lab Chronicle

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

TestAmerica Job ID: 480-25427-1

### Client Sample ID: Pre-Carbon

Date Collected: 09/20/12 07:40

Date Received: 09/20/12 08:40

### Lab Sample ID: 480-25427-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			81623	09/21/12 11:35	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	81829	09/21/12 19:45	MM	TAL BUF
Total/NA	Analysis	300.0		1	81705	09/22/12 06:07	KAC	TAL BUF
Total/NA	Analysis	300.0		2	82101	09/26/12 03:14	RMM	TAL BUF
Total/NA	Analysis	310.2		10	83639	10/03/12 02:32	PJQ	TAL BUF

### Client Sample ID: Post-Carbon

Date Collected: 09/20/12 07:30

Date Received: 09/20/12 08:40

### Lab Sample ID: 480-25428-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81986	09/24/12 23:03	RL	TAL BUF
Total/NA	Analysis	8021B		1	81657	09/21/12 13:36	DB	TAL BUF
Total/NA	Prep	200.7			81623	09/21/12 11:35	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	81829	09/21/12 19:36	MM	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	81578	09/20/12 23:35	ML	TAL BUF
Total/NA	Prep	Distill/CN			81726	09/21/12 10:35	EGN	TAL BUF
Total/NA	Analysis	335.4		1	81745	09/21/12 16:20	EGN	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: 480-25427-1

## Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAC	9	1169CA	09-30-12
Connecticut	State Program	1	PH-0568	09-30-12
Florida	NELAC	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	03-31-12
Illinois	NELAC	5	200003	09-30-12
Iowa	State Program	7	374	03-01-13
Kansas	NELAC	7	E-10187	01-31-13
Kentucky	State Program	4	90029	12-31-12
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAC	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-12
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAC	5	036-999-337	12-31-12
New Hampshire	NELAC	1	2973	09-11-13
New Hampshire	NELAC	1	2337	11-17-12
New Jersey	NELAC	2	NY455	06-30-13
New York	NELAC	2	10026	03-30-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAC	10	NY200003	06-09-13
Pennsylvania	NELAC	3	68-00281	07-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAC	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAC	3	460185	09-14-13
Washington	State Program	10	C784	02-10-13
West Virginia DEP	State Program	3	252	09-30-12
Wisconsin	State Program	5	998310390	08-31-13

## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-25427-1

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

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

### Protocol References:

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-25427-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-25427-1	Pre-Carbon	Wastewater	09/20/12 07:40	09/20/12 08:40
480-25428-1	Post-Carbon	Wastewater	09/20/12 07:30	09/20/12 08:40

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

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[illegible]

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10/4/2012

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## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-25427-1

**Login Number: 25427**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Robitaille, Zach L**

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.	N/A	
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	



## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-25427-1

**Login Number: 25428**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Robitaille, Zach L**

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	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-27007-1

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:

10/31/2012 4:02:58 PM

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

### LINKS

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results through

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Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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

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

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

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



---

Brian Fischer  
Project Manager II  
10/31/2012 4:02:58 PM

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## Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-27007-1

### 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

### 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
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
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: 480-27007-1

**Job ID: 480-27007-1**

**Laboratory: TestAmerica Buffalo**

### Narrative

#### Job Narrative 480-27007-1

### Comments

No additional comments.

### Receipt

The samples were received on 10/22/2012 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.9° C and 3.2° C.

### GC/MS VOA

No analytical or quality issues were noted.

### Ion Chromatography

Method(s) 300.0: In batch 87972, the following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-27007-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

### GC VOA

No analytical or quality issues were noted.

### Metals

No analytical or quality issues were noted.

### 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(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon (480-27008-1)

No other analytical or quality issues were noted.

# Client Sample Results

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

TestAmerica Job ID: 480-27007-1

**Client Sample ID: Pre-Carbon**

**Date Collected: 10/22/12 14:10**

**Date Received: 10/22/12 15:00**

**Lab Sample ID: 480-27007-1**

**Matrix: Wastewater**

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	97100	B	500	100	ug/L		10/24/12 09:00	10/24/12 21:17	1
Iron	770		50.0	19.3	ug/L		10/24/12 09:00	10/24/12 21:17	1
Magnesium	50400		200	43.4	ug/L		10/24/12 09:00	10/26/12 16:39	1
Potassium	5190		500	100	ug/L		10/24/12 09:00	10/24/12 21:17	1
Sodium	67600		1000	324	ug/L		10/24/12 09:00	10/24/12 21:17	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	116		1.0	0.56	mg/L			10/29/12 18:43	2
Sulfate	138		4.0	0.70	mg/L			10/29/12 18:43	2
Alkalinity, Total	827		100	40.0	mg/L			10/26/12 04:25	10

# Client Sample Results

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

TestAmerica Job ID: 480-27007-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-27008-1**

**Date Collected: 10/22/12 14:00**

**Matrix: Wastewater**

**Date Received: 10/22/12 15:00**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/23/12 23:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/23/12 23:50	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/23/12 23:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/23/12 23:50	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/23/12 23:50	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/23/12 23:50	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			10/23/12 23:50	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/23/12 23:50	1
2-Hexanone	ND		5.0	1.2	ug/L			10/23/12 23:50	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/23/12 23:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/23/12 23:50	1
Acetone	ND		10	3.0	ug/L			10/23/12 23:50	1
Benzene	ND		1.0	0.41	ug/L			10/23/12 23:50	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/23/12 23:50	1
Bromoform	ND		1.0	0.26	ug/L			10/23/12 23:50	1
Bromomethane	ND		1.0	0.69	ug/L			10/23/12 23:50	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/23/12 23:50	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/23/12 23:50	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/23/12 23:50	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/23/12 23:50	1
Chloroethane	ND		1.0	0.32	ug/L			10/23/12 23:50	1
Chloroform	ND		1.0	0.34	ug/L			10/23/12 23:50	1
Chloromethane	ND		1.0	0.35	ug/L			10/23/12 23:50	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/23/12 23:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/23/12 23:50	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/23/12 23:50	1
Styrene	ND		1.0	0.73	ug/L			10/23/12 23:50	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/23/12 23:50	1
Toluene	ND		1.0	0.51	ug/L			10/23/12 23:50	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/23/12 23:50	1
Trichloroethene	ND		1.0	0.46	ug/L			10/23/12 23:50	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/23/12 23:50	1
Vinyl acetate	ND		5.0	0.85	ug/L			10/23/12 23:50	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/23/12 23:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		66 - 137		10/23/12 23:50	1
Toluene-d8 (Surr)	86		71 - 126		10/23/12 23:50	1
4-Bromofluorobenzene (Surr)	84		73 - 120		10/23/12 23:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			10/30/12 13:25	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/30/12 13:25	1
<b>Benzene</b>	<b>0.092</b>	<b>J</b>	0.20	0.023	ug/L			10/30/12 13:25	1
Ethylbenzene	ND		0.20	0.029	ug/L			10/30/12 13:25	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/30/12 13:25	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/30/12 13:25	1
<b>m,p-Xylene</b>	<b>0.15</b>	<b>J</b>	0.40	0.054	ug/L			10/30/12 13:25	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/30/12 13:25	1
n-Propylbenzene	ND		0.20	0.13	ug/L			10/30/12 13:25	1



# Client Sample Results

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

TestAmerica Job ID: 480-27007-1

## Client Sample ID: Post-Carbon

Date Collected: 10/22/12 14:00

Date Received: 10/22/12 15:00

## Lab Sample ID: 480-27008-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.20	0.027	ug/L			10/30/12 13:25	1
p-Cymene	ND		0.20	0.030	ug/L			10/30/12 13:25	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/30/12 13:25	1
Toluene	0.14	J	0.20	0.036	ug/L			10/30/12 13:25	1
Xylenes, Total	0.15	J	0.60	0.054	ug/L			10/30/12 13:25	1

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	106		50.0	19.3	ug/L		10/24/12 09:00	10/24/12 21:20	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.22		0.010	0.0050	mg/L		10/25/12 12:42	10/26/12 15:29	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.13	HF	0.100	0.100	SU			10/23/12 22:17	1

## Lab Chronicle

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

TestAmerica Job ID: 480-27007-1

### Client Sample ID: Pre-Carbon

Date Collected: 10/22/12 14:10

Date Received: 10/22/12 15:00

### Lab Sample ID: 480-27007-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			86968	10/24/12 09:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	87397	10/24/12 21:17	MM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	87821	10/26/12 16:39	MM	TAL BUF
Total/NA	Analysis	310.2		10	87577	10/26/12 04:25	PJQ	TAL BUF
Total/NA	Analysis	300.0		2	87972	10/29/12 18:43	KC	TAL BUF

### Client Sample ID: Post-Carbon

Date Collected: 10/22/12 14:00

Date Received: 10/22/12 15:00

### Lab Sample ID: 480-27008-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	87103	10/23/12 23:50	JMB	TAL BUF
Total/NA	Analysis	8021B		1	88069	10/30/12 13:25	DB	TAL BUF
Total/NA	Prep	200.7			86968	10/24/12 09:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	87397	10/24/12 21:20	MM	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	87125	10/23/12 22:17	ML	TAL BUF
Total/NA	Prep	Distill/CN			87488	10/25/12 12:42	LK	TAL BUF
Total/NA	Analysis	335.4		1	87728	10/26/12 15:29	NH	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.

TestAmerica Job ID: 480-27007-1

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

### Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAC	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAC	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	06-30-13
Illinois	NELAC	5	200003	09-30-13
Iowa	State Program	7	374	03-01-13
Kansas	NELAC	7	E-10187	01-31-13
Kentucky	State Program	4	90029	12-31-12
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAC	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-12
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAC	5	036-999-337	12-31-12
New Hampshire	NELAC	1	2973	09-11-13
New Hampshire	NELAC	1	2337	11-17-12
New Jersey	NELAC	2	NY455	06-30-13
New York	NELAC	2	10026	03-31-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAC	10	NY200003	06-09-13
Pennsylvania	NELAC	3	68-00281	07-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAC	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAC	3	460185	09-14-13
Washington	State Program	10	C784	02-10-13
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-27007-1

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

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

### Protocol References:

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-27007-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-27007-1	Pre-Carbon	Wastewater	10/22/12 14:10	10/22/12 15:00
480-27008-1	Post-Carbon	Wastewater	10/22/12 14:00	10/22/12 15:00

## TestAmerica

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[illegible]

TestAmerica

### THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-27007-1

**Login Number: 27007**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Stau, Brandon**

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	



## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-27007-1

**Login Number: 27008**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Stau, Brandon**

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	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-29152-1

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

Sampling Event: Qtrly Post-Carbon

Qtrly Pre-Carbon

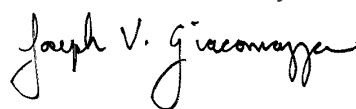
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

12/10/2012 12:01:17 PM

Joe Giacomazza

Project Administrator

[joe.giacomazza@testamericainc.com](mailto:joe.giacomazza@testamericainc.com)

Designee for

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

### LINKS

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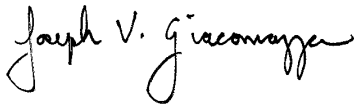
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Results relate only to the items tested and the sample(s) as received by the laboratory.

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



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Joe Giacomazza  
Project Administrator  
12/10/2012 12:01:17 PM

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## Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-29152-1

### Qualifiers

#### GC/MS VOA

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

#### GC VOA

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

#### GC Semi VOA

Qualifier	Qualifier Description
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.

#### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes
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 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
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: 480-29152-1

### Job ID: 480-29152-1

Laboratory: TestAmerica Buffalo

#### Narrative

#### Job Narrative 480-29152-1

##### Receipt

The samples were received on 11/28/2012 10:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.3° C and 2.3° C.

##### GC/MS VOA

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-29153-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

##### GC/MS Semi VOA

No analytical or quality issues were noted.

##### Ion Chromatography

No analytical or quality issues were noted.

##### GC VOA

Method 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-29153-1). Elevated reporting limits (RLs) are provided.

Method 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-29153-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

##### GC Semi VOA

No analytical or quality issues were noted.

##### Metals

No analytical or quality issues were noted.

##### General Chemistry

Method 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 (480-29152-1)

No other analytical or quality issues were noted.

##### Organic Prep

No analytical or quality issues were noted.

# Client Sample Results

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

TestAmerica Job ID: 480-29152-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-29152-1**

**Date Collected: 11/28/12 10:00**

**Matrix: Wastewater**

**Date Received: 11/28/12 10:45**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/05/12 13:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/05/12 13:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/05/12 13:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/05/12 13:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/05/12 13:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/05/12 13:59	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			12/05/12 13:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/05/12 13:59	1
2-Hexanone	ND		5.0	1.2	ug/L			12/05/12 13:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/05/12 13:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/05/12 13:59	1
Acetone	ND		10	3.0	ug/L			12/05/12 13:59	1
Benzene	ND		1.0	0.41	ug/L			12/05/12 13:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/05/12 13:59	1
Bromoform	ND		1.0	0.26	ug/L			12/05/12 13:59	1
Bromomethane	ND		1.0	0.69	ug/L			12/05/12 13:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/05/12 13:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/05/12 13:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/05/12 13:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/05/12 13:59	1
Chloroethane	ND		1.0	0.32	ug/L			12/05/12 13:59	1
<b>Chloroform</b>	<b>0.60</b>	<b>J</b>	1.0	0.34	ug/L			12/05/12 13:59	1
Chloromethane	ND		1.0	0.35	ug/L			12/05/12 13:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/05/12 13:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/05/12 13:59	1
<b>Methylene Chloride</b>	<b>0.50</b>	<b>J</b>	1.0	0.44	ug/L			12/05/12 13:59	1
Styrene	ND		1.0	0.73	ug/L			12/05/12 13:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/05/12 13:59	1
Toluene	ND		1.0	0.51	ug/L			12/05/12 13:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/05/12 13:59	1
Trichloroethene	ND		1.0	0.46	ug/L			12/05/12 13:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/05/12 13:59	1
Vinyl acetate	ND		5.0	0.85	ug/L			12/05/12 13:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/05/12 13:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		66 - 137		12/05/12 13:59	1
Toluene-d8 (Surr)	96		71 - 126		12/05/12 13:59	1
4-Bromofluorobenzene (Surr)	84		73 - 120		12/05/12 13:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		4.9	0.59	ug/L		11/30/12 06:39	12/03/12 22:48	1
Acenaphthene	ND		4.9	0.40	ug/L		11/30/12 06:39	12/03/12 22:48	1
Acenaphthylene	ND		4.9	0.37	ug/L		11/30/12 06:39	12/03/12 22:48	1
Anthracene	ND		4.9	0.27	ug/L		11/30/12 06:39	12/03/12 22:48	1
Benzo[a]anthracene	ND		4.9	0.35	ug/L		11/30/12 06:39	12/03/12 22:48	1
Benzo[a]pyrene	ND		4.9	0.46	ug/L		11/30/12 06:39	12/03/12 22:48	1
Benzo[b]fluoranthene	ND		4.9	0.33	ug/L		11/30/12 06:39	12/03/12 22:48	1
Benzo[g,h,i]perylene	ND		4.9	0.34	ug/L		11/30/12 06:39	12/03/12 22:48	1

TestAmerica Buffalo

# Client Sample Results

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

TestAmerica Job ID: 480-29152-1

## Client Sample ID: Post-Carbon

Lab Sample ID: 480-29152-1

Date Collected: 11/28/12 10:00

Matrix: Wastewater

Date Received: 11/28/12 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		4.9	0.72	ug/L		11/30/12 06:39	12/03/12 22:48	1
Biphenyl	ND		4.9	0.64	ug/L		11/30/12 06:39	12/03/12 22:48	1
Bis(2-ethylhexyl) phthalate	ND		4.9	1.8	ug/L		11/30/12 06:39	12/03/12 22:48	1
Carbazole	ND		4.9	0.29	ug/L		11/30/12 06:39	12/03/12 22:48	1
Chrysene	ND		4.9	0.32	ug/L		11/30/12 06:39	12/03/12 22:48	1
Dibenz(a,h)anthracene	ND		4.9	0.41	ug/L		11/30/12 06:39	12/03/12 22:48	1
Dibenzofuran	ND		9.8	0.50	ug/L		11/30/12 06:39	12/03/12 22:48	1
Fluoranthene	ND		4.9	0.39	ug/L		11/30/12 06:39	12/03/12 22:48	1
Fluorene	ND		4.9	0.35	ug/L		11/30/12 06:39	12/03/12 22:48	1
Indeno[1,2,3-cd]pyrene	ND		4.9	0.46	ug/L		11/30/12 06:39	12/03/12 22:48	1
Naphthalene	ND		4.9	0.75	ug/L		11/30/12 06:39	12/03/12 22:48	1
Pentachlorophenol	ND		9.8	2.2	ug/L		11/30/12 06:39	12/03/12 22:48	1
Phenanthrene	ND		4.9	0.43	ug/L		11/30/12 06:39	12/03/12 22:48	1
Phenol	ND		4.9	0.38	ug/L		11/30/12 06:39	12/03/12 22:48	1
Pyrene	ND		4.9	0.33	ug/L		11/30/12 06:39	12/03/12 22:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	116		52 - 132	11/30/12 06:39	12/03/12 22:48	1
2-Fluorobiphenyl	84		48 - 120	11/30/12 06:39	12/03/12 22:48	1
2-Fluorophenol	41		20 - 120	11/30/12 06:39	12/03/12 22:48	1
Nitrobenzene-d5	85		46 - 120	11/30/12 06:39	12/03/12 22:48	1
p-Terphenyl-d14	92		67 - 150	11/30/12 06:39	12/03/12 22:48	1
Phenol-d5	29		16 - 120	11/30/12 06:39	12/03/12 22:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			12/04/12 14:06	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			12/04/12 14:06	1
Benzene	0.083	J	0.20	0.023	ug/L			12/04/12 14:06	1
Ethylbenzene	ND		0.20	0.029	ug/L			12/04/12 14:06	1
Isopropylbenzene	ND		0.20	0.027	ug/L			12/04/12 14:06	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			12/04/12 14:06	1
m,p-Xylene	ND		0.40	0.054	ug/L			12/04/12 14:06	1
n-Butylbenzene	ND		0.20	0.031	ug/L			12/04/12 14:06	1
n-Propylbenzene	ND		0.20	0.13	ug/L			12/04/12 14:06	1
o-Xylene	ND		0.20	0.027	ug/L			12/04/12 14:06	1
p-Cymene	ND		0.20	0.030	ug/L			12/04/12 14:06	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			12/04/12 14:06	1
Toluene	ND		0.20	0.036	ug/L			12/04/12 14:06	1
Xylenes, Total	ND		0.60	0.054	ug/L			12/04/12 14:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		63 - 132		12/04/12 14:06	1
4-Bromofluorobenzene	93		64 - 128		12/04/12 14:06	1

### Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.050	0.0066	ug/L		11/29/12 08:05	11/30/12 16:04	1
alpha-BHC	ND		0.050	0.0066	ug/L		11/29/12 08:05	11/30/12 16:04	1
beta-BHC	ND		0.050	0.025	ug/L		11/29/12 08:05	11/30/12 16:04	1

TestAmerica Buffalo



# Client Sample Results

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

TestAmerica Job ID: 480-29152-1

## Client Sample ID: Post-Carbon

Lab Sample ID: 480-29152-1

Date Collected: 11/28/12 10:00

Matrix: Wastewater

Date Received: 11/28/12 10:45

### Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	0.017	J B	0.050	0.010	ug/L		11/29/12 08:05	11/30/12 16:04	1
gamma-BHC (Lindane)	ND		0.050	0.0060	ug/L		11/29/12 08:05	11/30/12 16:04	1
Chlordane (technical)	ND		0.50	0.029	ug/L		11/29/12 08:05	11/30/12 16:04	1
4,4'-DDD	ND		0.050	0.0092	ug/L		11/29/12 08:05	11/30/12 16:04	1
4,4'-DDE	ND		0.050	0.012	ug/L		11/29/12 08:05	11/30/12 16:04	1
4,4'-DDT	ND		0.050	0.011	ug/L		11/29/12 08:05	11/30/12 16:04	1
Dieldrin	ND		0.050	0.0098	ug/L		11/29/12 08:05	11/30/12 16:04	1
Endosulfan I	ND		0.050	0.011	ug/L		11/29/12 08:05	11/30/12 16:04	1
Endosulfan II	ND		0.050	0.012	ug/L		11/29/12 08:05	11/30/12 16:04	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		11/29/12 08:05	11/30/12 16:04	1
Endrin	ND		0.050	0.014	ug/L		11/29/12 08:05	11/30/12 16:04	1
Endrin aldehyde	ND		0.050	0.016	ug/L		11/29/12 08:05	11/30/12 16:04	1
Heptachlor	ND		0.050	0.0085	ug/L		11/29/12 08:05	11/30/12 16:04	1
Heptachlor epoxide	ND		0.050	0.0053	ug/L		11/29/12 08:05	11/30/12 16:04	1
Toxaphene	ND		0.50	0.12	ug/L		11/29/12 08:05	11/30/12 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	88		15 - 125	11/29/12 08:05	11/30/12 16:04	1
Tetrachloro-m-xylene	86		36 - 121	11/29/12 08:05	11/30/12 16:04	1

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10.0	5.6	ug/L		11/30/12 08:15	12/03/12 17:47	1
Iron	274		50.0	19.3	ug/L		11/30/12 08:15	12/03/12 17:47	1
Manganese	91.9		3.0	0.40	ug/L		11/30/12 08:15	12/03/12 17:47	1
Zinc	ND		10.0	1.5	ug/L		11/30/12 08:15	12/03/12 17:47	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		4.9	1.4	mg/L		11/29/12 19:06	11/29/12 19:26	1
Cyanide, Total	0.17		0.010	0.0050	mg/L		12/01/12 10:30	12/04/12 01:14	1
Phenolics, Total Recoverable	0.0098	J B	0.010	0.0050	mg/L		11/29/12 02:05	12/04/12 04:12	1
Total Dissolved Solids	523		10.0	4.0	mg/L			11/29/12 20:28	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			11/29/12 19:20	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			11/29/12 17:49	1
pH	7.87	HF	0.100	0.100	SU			11/28/12 19:41	1

TestAmerica Buffalo

# Client Sample Results

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

TestAmerica Job ID: 480-29152-1

**Client Sample ID: Pre-Carbon**

**Lab Sample ID: 480-29153-1**

**Date Collected: 11/28/12 10:30**

**Matrix: Wastewater**

**Date Received: 11/28/12 10:45**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		40	33	ug/L			12/05/12 14:27	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			12/05/12 14:27	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			12/05/12 14:27	40
1,1-Dichloroethane	ND		40	15	ug/L			12/05/12 14:27	40
1,1-Dichloroethene	ND		40	12	ug/L			12/05/12 14:27	40
1,2-Dichloroethane	ND		40	8.4	ug/L			12/05/12 14:27	40
1,2-Dichloroethene, Total	ND		80	28	ug/L			12/05/12 14:27	40
1,2-Dichloropropane	ND		40	29	ug/L			12/05/12 14:27	40
2-Hexanone	ND		200	50	ug/L			12/05/12 14:27	40
2-Butanone (MEK)	ND		400	53	ug/L			12/05/12 14:27	40
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			12/05/12 14:27	40
Acetone	ND		400	120	ug/L			12/05/12 14:27	40
<b>Benzene</b>	<b>1800</b>		40	16	ug/L			12/05/12 14:27	40
Bromodichloromethane	ND		40	16	ug/L			12/05/12 14:27	40
Bromoform	ND		40	10	ug/L			12/05/12 14:27	40
Bromomethane	ND		40	28	ug/L			12/05/12 14:27	40
Carbon disulfide	ND		40	7.6	ug/L			12/05/12 14:27	40
Carbon tetrachloride	ND		40	11	ug/L			12/05/12 14:27	40
Chlorobenzene	ND		40	30	ug/L			12/05/12 14:27	40
Dibromochloromethane	ND		40	13	ug/L			12/05/12 14:27	40
Chloroethane	ND		40	13	ug/L			12/05/12 14:27	40
<b>Chloroform</b>	<b>21</b>	<b>J</b>	40	14	ug/L			12/05/12 14:27	40
Chloromethane	ND		40	14	ug/L			12/05/12 14:27	40
cis-1,3-Dichloropropene	ND		40	14	ug/L			12/05/12 14:27	40
<b>Ethylbenzene</b>	<b>380</b>		40	30	ug/L			12/05/12 14:27	40
Methylene Chloride	ND		40	18	ug/L			12/05/12 14:27	40
Styrene	ND		40	29	ug/L			12/05/12 14:27	40
Tetrachloroethene	ND		40	14	ug/L			12/05/12 14:27	40
<b>Toluene</b>	<b>550</b>		40	20	ug/L			12/05/12 14:27	40
trans-1,3-Dichloropropene	ND		40	15	ug/L			12/05/12 14:27	40
Trichloroethene	ND		40	18	ug/L			12/05/12 14:27	40
Vinyl chloride	ND		40	36	ug/L			12/05/12 14:27	40
Vinyl acetate	ND		200	34	ug/L			12/05/12 14:27	40
<b>Xylenes, Total</b>	<b>140</b>		80	26	ug/L			12/05/12 14:27	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		66 - 137		12/05/12 14:27	40
Toluene-d8 (Surr)	97		71 - 126		12/05/12 14:27	40
4-Bromofluorobenzene (Surr)	87		73 - 120		12/05/12 14:27	40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,2,4-Trimethylbenzene</b>	<b>1.3</b>		0.20	0.035	ug/L			12/04/12 12:28	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			12/04/12 12:28	1
<b>Isopropylbenzene</b>	<b>2.1</b>		0.20	0.027	ug/L			12/04/12 12:28	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			12/04/12 12:28	1
<b>m,p-Xylene</b>	<b>67</b>		0.40	0.054	ug/L			12/04/12 12:28	1
n-Butylbenzene	ND		0.20	0.031	ug/L			12/04/12 12:28	1
<b>n-Propylbenzene</b>	<b>0.74</b>		0.20	0.13	ug/L			12/04/12 12:28	1
p-Cymene	ND		0.20	0.030	ug/L			12/04/12 12:28	1

TestAmerica Buffalo

# Client Sample Results

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

TestAmerica Job ID: 480-29152-1

## Client Sample ID: Pre-Carbon

Lab Sample ID: 480-29153-1

Date Collected: 11/28/12 10:30

Matrix: Wastewater

Date Received: 11/28/12 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.20	0.020	ug/L			12/04/12 12:28	1
<b>Xylenes, Total</b>	<b>130</b>		0.60	0.054	ug/L			12/04/12 12:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		63 - 132					12/04/12 12:28	1
4-Bromofluorobenzene	90		64 - 128					12/04/12 12:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Ethylbenzene</b>	<b>280</b>		2.0	0.29	ug/L			12/04/12 13:26	10
<b>o-Xylene</b>	<b>53</b>		2.0	0.27	ug/L			12/04/12 13:26	10
<b>Toluene</b>	<b>420</b>		2.0	0.36	ug/L			12/04/12 13:26	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		63 - 132					12/04/12 13:26	10
4-Bromofluorobenzene	93		64 - 128					12/04/12 13:26	10

### Method: 8021B - Volatile Organic Compounds (GC) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>1200</b>		10	1.2	ug/L			12/05/12 09:51	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 132					12/05/12 09:51	50
4-Bromofluorobenzene	98		64 - 128					12/05/12 09:51	50

### Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Calcium</b>	<b>81500</b>		500	100	ug/L		11/30/12 08:15	12/03/12 17:49	1
<b>Iron</b>	<b>1230</b>		50.0	19.3	ug/L		11/30/12 08:15	12/03/12 17:49	1
<b>Magnesium</b>	<b>45100</b>		200	43.4	ug/L		11/30/12 08:15	12/03/12 17:49	1
<b>Potassium</b>	<b>3190</b>		500	100	ug/L		11/30/12 08:15	12/03/12 17:49	1
<b>Sodium</b>	<b>45600</b>		1000	324	ug/L		11/30/12 08:15	12/03/12 17:49	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>76.2</b>		0.50	0.28	mg/L			11/30/12 00:48	1
<b>Sulfate</b>	<b>96.9</b>		2.0	0.35	mg/L			11/30/12 00:48	1
<b>Alkalinity, Total</b>	<b>286</b>		100	40.0	mg/L			12/03/12 16:23	10

TestAmerica Buffalo

# Lab Chronicle

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

TestAmerica Job ID: 480-29152-1

## Client Sample ID: Post-Carbon

Date Collected: 11/28/12 10:00

Date Received: 11/28/12 10:45

## Lab Sample ID: 480-29152-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	94142	12/05/12 13:59	CDC	TAL BUF
Total/NA	Prep	3510C			93486	11/30/12 06:39	TR	TAL BUF
Total/NA	Analysis	8270C		1	93884	12/03/12 22:48	RMM	TAL BUF
Total/NA	Analysis	8021B		1	93968	12/04/12 14:06	DB	TAL BUF
Total/NA	Prep	3510C			93286	11/29/12 08:05	ND	TAL BUF
Total/NA	Analysis	608		1	93523	11/30/12 16:04	MN	TAL BUF
Total/NA	Prep	200.7			93393	11/30/12 08:15	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	94078	12/03/12 17:47	AH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	93227	11/28/12 19:41	KS	TAL BUF
Total/NA	Analysis	SM 2540D		1	93429	11/29/12 17:49	KS	TAL BUF
Total/NA	Analysis	SM 2540C		1	93441	11/29/12 20:28	KS	TAL BUF
Total/NA	Prep	1664A			93440	11/29/12 19:06	LAW	TAL BUF
Total/NA	Analysis	1664A		1	93444	11/29/12 19:26	LAW	TAL BUF
Total/NA	Analysis	SM 5210B		1	93475	11/29/12 19:20	ML	TAL BUF
Total/NA	Prep	Distill/CN			93705	12/01/12 10:30	KJ	TAL BUF
Total/NA	Analysis	335.4		1	93940	12/04/12 01:14	BM	TAL BUF
Total/NA	Prep	Distill/Phenol			93261	11/29/12 02:05	LK	TAL BUF
Total/NA	Analysis	420.4		1	93952	12/04/12 04:12	PJQ	TAL BUF

## Client Sample ID: Pre-Carbon

Date Collected: 11/28/12 10:30

Date Received: 11/28/12 10:45

## Lab Sample ID: 480-29153-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		40	94142	12/05/12 14:27	CDC	TAL BUF
Total/NA	Analysis	8021B	DL	10	93968	12/04/12 13:26	DB	TAL BUF
Total/NA	Analysis	8021B		1	93968	12/04/12 12:28	DB	TAL BUF
Total/NA	Analysis	8021B	DL2	50	94135	12/05/12 09:51	DB	TAL BUF
Total/NA	Prep	200.7			93393	11/30/12 08:15	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	94078	12/03/12 17:49	AH	TAL BUF
Total/NA	Analysis	300.0		1	93360	11/30/12 00:48	KC	TAL BUF
Total/NA	Analysis	310.2		10	93914	12/03/12 16:23	NH	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.

TestAmerica Job ID: 480-29152-1

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

## Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAC	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAC	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	06-30-13
Illinois	NELAC	5	200003	09-30-13
Iowa	State Program	7	374	03-01-13
Kansas	NELAC	7	E-10187	01-31-13
Kentucky	State Program	4	90029	12-31-12
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAC	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAC	5	036-999-337	12-31-12
New Hampshire	NELAC	1	2973	09-11-13
New Hampshire	NELAC	1	2337	11-17-13
New Jersey	NELAC	2	NY455	06-30-13
New York	NELAC	2	10026	03-31-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAC	10	NY200003	06-09-13
Pennsylvania	NELAC	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAC	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAC	3	460185	09-14-13
Washington	State Program	10	C784	02-10-13
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-29152-1

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

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	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
420.4	Phenolics, Total Recoverable	MCAWW	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

### Protocol References:

1664A = EPA-821-98-002

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

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-29152-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-29152-1	Post-Carbon	Wastewater	11/28/12 10:00	11/28/12 10:45
480-29153-1	Pre-Carbon	Wastewater	11/28/12 10:30	11/28/12 10:45

**TestAmerica Buffalo**

107 Hazelwood Drive  
Amherst, NY 14228-2298  
Phone (716) 891-2000 Fax (716) 891-7991

**Chain of Custody Record**
**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b> Client Contact: Thomas Palmer Company: Groundwater & Environmental Services Inc Address: 495 Aero Drive Suite 3 City: Cheektowaga State, Zip: NY, 14225 Phone: Email: tpalmer@gesonline.com Project Name: NYSDEC - Gastown WWTP/Gastown Event Desc: Qltry Post-Car Site: New York				Sampler: <u>M. Reiser</u> Lab PM: Fischer, Brian E-Mail: brian.fischer@testamericainc.com		Carrier Tracking No(s): COC No: 480-8773-1178.1 Page: Page 1 of 1 Job #:	
				Due Date Requested: YAT Requested (days): PO #: Purchase Order not requir WO #: Project #: 48002525 SSOW#:		<b>Analysis Requested</b>	
<b>Sample Identification</b>				<b>Preservation Codes:</b>		<b>Special Instructions/Note:</b>	
Sample Date: <u>11/28/12</u> Sample Time: <u>1000</u> Sample Type: <u>G</u> Matrix: <u>Water</u>				A - HCL    M - Hexane B - NaOH    N - None C - Zn Acetate    O - AsNaO2 D - Nitric Acid    P - Na2O4S E - NaHSO4    Q - Na2SO3 F - MeOH    R - Na2S2SO3 G - Amchlor    S - H2SO4 H - Ascorbic Acid    T - TSP Dodecahydrate I - Ice    U - Acetone J - DI Water    V - MCAA K - EDTA    W - ph 4-5 L - EDA    Z - other (specify)		Other:	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological				Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:			
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <u>[Signature]</u>		Date/Time: <u>11/28/12 1045</u>		Company: <u>LG5</u>		Received by: <u>[Signature]</u>	
Relinquished by:		Date/Time:		Company:		Received by:	
Relinquished by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <u>73 Hz</u>			



**TestAmerica Buffalo**

10 Hazzardwood Drive  
Amherst, NY 14226-2268  
Phone (716) 691-2600 Fax (716) 691-7991

**Chain of Custody Record**
**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b> Client Contact: Thomas Palmer Company: Groundwater & Environmental Services Inc Address: 495 Aero Drive Suite 3 City: Cheektowaga State, Zip: NY, 14225 Phone: Email: tpalmer@gesonline.com Project Name: NYSDEC - Gastown WWTP/Gastown Event Desc: Qtrly Pre-Cart Site: New York				Sampler: <u>M. Kersil</u> Phone:		Lab PM: Fischer, Brian E-Mail: brian.fischer@testamericainc.com		Carrier Tracking No(s):		COC No: 480-8786-1179.1 Page: Page 1 of 1 Job #:	
				Due Date Requested:		<b>Analysis Requested</b>		<b>Preservation Codes:</b> A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hazane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - WCAA W - pH 4-5 Z - other (specify)			
<b>Sample Identification</b> Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (Residue, Suspended, On-surface, etc.)				PO #: Purchase Order not requir WO #: Project #: 48002525 SOW#:		300.9_2SD - (MOD) Local Method 200.7 - (MOD) Local Method 8260B - (MOD) TCL test OLMM4.2 8021B - (MOD) STAR33 Lix - VOA - 8021 310.2 - Alkalinity, Total		Special Instructions/Note:			
Pre-Carbon 11/28 1030 G Water				NN		NN		NN			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:							
Empty Kit Relinquished by:				Date:		Time:		Method of Shipment:			
Relinquished by: <u>CTR</u>				Date/Time: <u>11/28/12 1045</u>		Company: <u>GES</u>		Received by: <u>TR</u>		Date/Time: <u>11-28-12 1045</u>	
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: Δ Yes Δ No				Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <u>2.3#2</u>					

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-29152-1

**Login Number: 29152**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Robitaille, Zach L**

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.	True	OK

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-29152-1

**Login Number: 29153**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Robitaille, Zach L**

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	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-30885-1

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

Sampling Event: Mthly Post-Carbon

Mthly Pre-Carbon

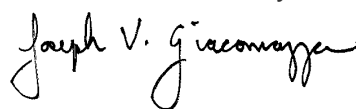
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

1/14/2013 5:34:33 PM

Joe Giacomazza

Project Administrator

[joe.giacomazza@testamericainc.com](mailto:joe.giacomazza@testamericainc.com)

Designee for

Brian Fischer

Project Manager II

[brian.fischer@testamericainc.com](mailto:brian.fischer@testamericainc.com)

### LINKS

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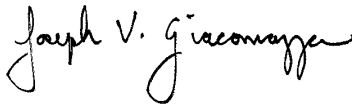
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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



---

Joe Giacomazza  
Project Administrator  
1/14/2013 5:34:33 PM

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## Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-30885-1

### Qualifiers

#### Metals

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

#### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes

### 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
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: 480-30885-1

**Job ID: 480-30885-1**

**Laboratory: TestAmerica Buffalo**

### Narrative

#### Job Narrative 480-30885-1

#### Receipt

The samples were received on 12/28/2012 10:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5° C and 3.1° C.

#### GC/MS VOA

No analytical or quality issues were noted.

#### Ion Chromatography

Method 300.0: In batch 98171, the following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-30885-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC VOA

No analytical or quality issues were noted.

#### Metals

Method 200.7 Rev 4.4: The Method Blank for batch 480-97913 contained total potassium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of sample Pre-Carbon (480-30885-1) was not performed.

No other analytical or quality issues were noted.

#### General Chemistry

Method 310.2: The method blank for batch 98746 contained Alkalinity above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Pre-Carbon (480-30885-1)

Method 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 (480-30886-1)

No other analytical or quality issues were noted.



# Client Sample Results

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

TestAmerica Job ID: 480-30885-1

**Client Sample ID: Pre-Carbon**

**Lab Sample ID: 480-30885-1**

**Date Collected: 12/28/12 10:20**

**Matrix: Wastewater**

**Date Received: 12/28/12 10:47**

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	133000		500	100	ug/L		01/02/13 08:00	01/02/13 19:46	1
Iron	1620		50.0	19.3	ug/L		01/02/13 08:00	01/02/13 19:46	1
Magnesium	66200		200	43.4	ug/L		01/02/13 08:00	01/02/13 19:46	1
Potassium	4540	B	500	100	ug/L		01/02/13 08:00	01/02/13 19:46	1
Sodium	74300		1000	324	ug/L		01/02/13 08:00	01/02/13 19:46	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		1.0	0.56	mg/L			01/03/13 16:03	2
Sulfate	146		4.0	0.70	mg/L			01/03/13 16:03	2
Alkalinity, Total	522	B	100	40.0	mg/L			01/08/13 17:35	10

# Client Sample Results

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

TestAmerica Job ID: 480-30885-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-30886-1**

**Date Collected: 12/28/12 10:15**

**Matrix: Wastewater**

**Date Received: 12/28/12 10:47**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/03/13 13:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/03/13 13:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/03/13 13:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/03/13 13:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/03/13 13:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/03/13 13:26	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			01/03/13 13:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/03/13 13:26	1
2-Hexanone	ND		5.0	1.2	ug/L			01/03/13 13:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/03/13 13:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/03/13 13:26	1
Acetone	ND		10	3.0	ug/L			01/03/13 13:26	1
Benzene	ND		1.0	0.41	ug/L			01/03/13 13:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/03/13 13:26	1
Bromoform	ND		1.0	0.26	ug/L			01/03/13 13:26	1
Bromomethane	ND		1.0	0.69	ug/L			01/03/13 13:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/03/13 13:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/03/13 13:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/03/13 13:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/03/13 13:26	1
Chloroethane	ND		1.0	0.32	ug/L			01/03/13 13:26	1
<b>Chloroform</b>	<b>2.2</b>		1.0	0.34	ug/L			01/03/13 13:26	1
Chloromethane	ND		1.0	0.35	ug/L			01/03/13 13:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/03/13 13:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/03/13 13:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/03/13 13:26	1
Styrene	ND		1.0	0.73	ug/L			01/03/13 13:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/03/13 13:26	1
Toluene	ND		1.0	0.51	ug/L			01/03/13 13:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/03/13 13:26	1
Trichloroethene	ND		1.0	0.46	ug/L			01/03/13 13:26	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/03/13 13:26	1
Vinyl acetate	ND		5.0	0.85	ug/L			01/03/13 13:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/03/13 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 137		01/03/13 13:26	1
Toluene-d8 (Surr)	95		71 - 126		01/03/13 13:26	1
4-Bromofluorobenzene (Surr)	91		73 - 120		01/03/13 13:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			01/02/13 16:20	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			01/02/13 16:20	1
Benzene	ND		0.20	0.023	ug/L			01/02/13 16:20	1
Ethylbenzene	ND		0.20	0.029	ug/L			01/02/13 16:20	1
Isopropylbenzene	ND		0.20	0.027	ug/L			01/02/13 16:20	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			01/02/13 16:20	1
m,p-Xylene	ND		0.40	0.054	ug/L			01/02/13 16:20	1
n-Butylbenzene	ND		0.20	0.031	ug/L			01/02/13 16:20	1

TestAmerica Buffalo

# Client Sample Results

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

TestAmerica Job ID: 480-30885-1

**Client Sample ID: Post-Carbon**

**Lab Sample ID: 480-30886-1**

**Date Collected: 12/28/12 10:15**

**Matrix: Wastewater**

**Date Received: 12/28/12 10:47**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			01/02/13 16:20	1
o-Xylene	ND		0.20	0.027	ug/L			01/02/13 16:20	1
p-Cymene	ND		0.20	0.030	ug/L			01/02/13 16:20	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/02/13 16:20	1
Toluene	ND		0.20	0.036	ug/L			01/02/13 16:20	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/02/13 16:20	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	184		50.0	19.3	ug/L		01/02/13 08:00	01/02/13 18:30	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.30		0.010	0.0050	mg/L		01/02/13 09:45	01/03/13 00:47	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.26	HF	0.100	0.100	SU			12/28/12 21:07	1

## Lab Chronicle

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

TestAmerica Job ID: 480-30885-1

### Client Sample ID: Pre-Carbon

Date Collected: 12/28/12 10:20

Date Received: 12/28/12 10:47

### Lab Sample ID: 480-30885-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			97913	01/02/13 08:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	98125	01/02/13 19:46	MM	TAL BUF
Total/NA	Analysis	300.0		2	98171	01/03/13 16:03	KC	TAL BUF
Total/NA	Analysis	310.2		10	98746	01/08/13 17:35	NH	TAL BUF

### Client Sample ID: Post-Carbon

Date Collected: 12/28/12 10:15

Date Received: 12/28/12 10:47

### Lab Sample ID: 480-30886-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	98139	01/03/13 13:26	CDC	TAL BUF
Total/NA	Analysis	8021B		1	98034	01/02/13 16:20	DB	TAL BUF
Total/NA	Prep	200.7			97911	01/02/13 08:00	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	98123	01/02/13 18:30	MM	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	97761	12/28/12 21:07	KS	TAL BUF
Total/NA	Prep	Distill/CN			98009	01/02/13 09:45	EGN	TAL BUF
Total/NA	Analysis	335.4		1	98115	01/03/13 00:47	BM	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.

TestAmerica Job ID: 480-30885-1

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

### Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	06-30-13
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-01-13
Kansas	NELAP	7	E-10187	01-31-13
Kentucky	State Program	4	90029	12-31-12
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	03-31-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAP	10	NY200003	06-09-13
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-13
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-30885-1

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

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

### Protocol References:

EPA = US Environmental Protection Agency

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

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

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

### Laboratory References:

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

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-30885-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-30885-1	Pre-Carbon	Wastewater	12/28/12 10:20	12/28/12 10:47
480-30886-1	Post-Carbon	Wastewater	12/28/12 10:15	12/28/12 10:47

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## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-30885-1

**Login Number: 30885**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Robitaille, Zach L**

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.	N/A	
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	

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-30885-1

**Login Number: 30886**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Robitaille, Zach L**

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	