

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

**2013 LAB REPORTS
FOR THE GROUNDWATER COLLECTION
& TREATMENT SYSTEM**

All lab reports for 2013 are available.

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: 480-32023-1

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

Sampling Event: Mthly Post-Carbon

Mthly Pre-Carbon

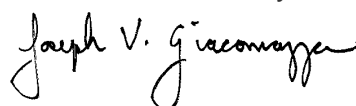
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

1/31/2013 9:50:55 AM

Joe Giacomazza

Project Administrator

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Designee for

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Project Manager II

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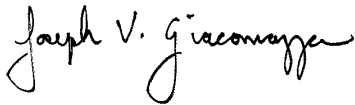
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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



Joe Giacomazza
Project Administrator
1/31/2013 9:50:55 AM

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Definitions/Glossary

Client: New York State D.E.C.

TestAmerica Job ID: 480-32023-1

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

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
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: 480-32023-1

Job ID: 480-32023-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-32023-1

Receipt

The samples were received on 1/24/2013 5:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.7° C and 1.1° C.

Except:

The following sample was received unpreserved and was preserved upon receipt to the laboratory on 01/24/13 at 1810 using a prepreserved HNO3 250mL bottle: Pre-Carbon (480-32024-1). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

GC/MS VOA

Method 8260B: The Matrix Spike Blank recovery for batch 480-101032 was outside TestAmerica's statistically developed internal laboratory QC limits some analytes. These analytes were not requested spiking compounds; 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 these analytes.

No other analytical or quality issues were noted.

Ion Chromatography

Method 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-32024-1). 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 has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon (480-32023-1)

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: 480-32023-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-32023-1

Date Collected: 01/24/13 17:00

Matrix: Wastewater

Date Received: 01/24/13 17:45

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			01/25/13 14:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/25/13 14:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/25/13 14:33	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/25/13 14:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/25/13 14:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/25/13 14:33	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			01/25/13 14:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/25/13 14:33	1
2-Hexanone	ND		5.0	1.2	ug/L			01/25/13 14:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/25/13 14:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/25/13 14:33	1
Acetone	ND		10	3.0	ug/L			01/25/13 14:33	1
Benzene	ND		1.0	0.41	ug/L			01/25/13 14:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/25/13 14:33	1
Bromoform	ND		1.0	0.26	ug/L			01/25/13 14:33	1
Bromomethane	ND		1.0	0.69	ug/L			01/25/13 14:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/25/13 14:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/25/13 14:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/25/13 14:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/25/13 14:33	1
Chloroethane	ND		1.0	0.32	ug/L			01/25/13 14:33	1
Chloroform	ND		1.0	0.34	ug/L			01/25/13 14:33	1
Chloromethane	ND		1.0	0.35	ug/L			01/25/13 14:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/25/13 14:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/25/13 14:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/25/13 14:33	1
Styrene	ND		1.0	0.73	ug/L			01/25/13 14:33	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/25/13 14:33	1
Toluene	ND		1.0	0.51	ug/L			01/25/13 14:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/25/13 14:33	1
Trichloroethene	ND		1.0	0.46	ug/L			01/25/13 14:33	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/25/13 14:33	1
Vinyl acetate	ND		5.0	0.85	ug/L			01/25/13 14:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/25/13 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		66 - 137		01/25/13 14:33	1
Toluene-d8 (Surr)	92		71 - 126		01/25/13 14:33	1
4-Bromofluorobenzene (Surr)	89		73 - 120		01/25/13 14:33	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			01/28/13 15:07	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			01/28/13 15:07	1
Benzene	ND		0.20	0.023	ug/L			01/28/13 15:07	1
Ethylbenzene	ND		0.20	0.029	ug/L			01/28/13 15:07	1
Isopropylbenzene	ND		0.20	0.027	ug/L			01/28/13 15:07	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			01/28/13 15:07	1
m,p-Xylene	ND		0.40	0.054	ug/L			01/28/13 15:07	1
n-Butylbenzene	ND		0.20	0.031	ug/L			01/28/13 15:07	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-32023-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-32023-1

Date Collected: 01/24/13 17:00

Matrix: Wastewater

Date Received: 01/24/13 17:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			01/28/13 15:07	1
o-Xylene	ND		0.20	0.027	ug/L			01/28/13 15:07	1
p-Cymene	ND		0.20	0.030	ug/L			01/28/13 15:07	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/28/13 15:07	1
Toluene	ND		0.20	0.036	ug/L			01/28/13 15:07	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/28/13 15:07	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	153		50.0	19.3	ug/L		01/25/13 09:05	01/25/13 14:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.27		0.010	0.0050	mg/L		01/25/13 17:49	01/27/13 23:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.92	HF	0.100	0.100	SU			01/25/13 19:56	1

Client Sample Results

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

TestAmerica Job ID: 480-32023-1

Client Sample ID: Pre-Carbon

Date Collected: 01/24/13 17:10

Date Received: 01/24/13 17:45

Lab Sample ID: 480-32024-1

Matrix: Wastewater

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	141000		500	100	ug/L		01/25/13 09:05	01/25/13 14:39	1
Iron	414		50.0	19.3	ug/L		01/25/13 09:05	01/25/13 14:39	1
Magnesium	75900		200	43.4	ug/L		01/25/13 09:05	01/25/13 14:39	1
Potassium	4580		500	100	ug/L		01/25/13 09:05	01/25/13 14:39	1
Sodium	94500		1000	324	ug/L		01/25/13 09:05	01/25/13 14:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.3		1.0	0.56	mg/L			01/29/13 14:33	2
Sulfate	134		4.0	0.70	mg/L			01/29/13 14:33	2
Alkalinity, Total	471		100	40.0	mg/L			01/25/13 01:01	10

Lab Chronicle

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

TestAmerica Job ID: 480-32023-1

Client Sample ID: Post-Carbon

Date Collected: 01/24/13 17:00

Date Received: 01/24/13 17:45

Lab Sample ID: 480-32023-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	101032	01/25/13 14:33	LH	TAL BUF
Total/NA	Analysis	8021B		1	101173	01/28/13 15:07	DB	TAL BUF
Total/NA	Prep	200.7			101004	01/25/13 09:05	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	101192	01/25/13 14:37	MM	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	101135	01/25/13 19:56	KS	TAL BUF
Total/NA	Prep	Distill/CN			101136	01/25/13 17:49	LAW	TAL BUF
Total/NA	Analysis	335.4		1	101163	01/27/13 23:32	BM	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 01/24/13 17:10

Date Received: 01/24/13 17:45

Lab Sample ID: 480-32024-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			101004	01/25/13 09:05	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	101192	01/25/13 14:39	MM	TAL BUF
Total/NA	Analysis	310.2		10	100984	01/25/13 01:01	PJQ	TAL BUF
Total/NA	Analysis	300.0		2	101364	01/29/13 14:33	KC	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: 480-32023-1

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	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	12-31-13
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: 480-32023-1

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: 480-32023-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-32023-1	Post-Carbon	Wastewater	01/24/13 17:00	01/24/13 17:45
480-32024-1	Pre-Carbon	Wastewater	01/24/13 17:10	01/24/13 17:45

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Client Information Client Contact: Thomas Palmer		Sampler: <u>T. Palmer</u> Phone: <u>(484) 325-0206</u>		Lab PM: Fischer, Brian E-Mail: <u>brian.fischer@testamericainc.com</u>		Carrier Tracking No(s): 480-30382-1177.1							
		Company: Groundwater & Environmental Services Inc. Address: 495 Aero Drive Suite 3 City: Cheektowaga State, Zip: NY, 14225 Phone: <u>(716) 287-7857</u> Email: <u>tpalmer@gesonline.com</u> Project Name: NYSDEC - Gastown WWTP/Gastown Event Desc: Mthly Post-Ca		Project #: 48002525 SSONW:		Job #: Preservation Codes: 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 - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)							
Analysis Requested		Due Date Requested: TAT Requested (days): <u>10</u> PO #: Purchase Order not requir WO #: Project #: 48002525 SSONW:		Special Instructions/Note:		Other:							
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, G=soil, O=organic, B=biological, BT=Thermal, A=air)		Analysis Results		Special Instructions/Note:	
Post-Carbon		1-24-13		1700		G		Water		NW		1 3 3 1 1	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input 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 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: _____ Date/Time: 1-24-13 / 1745 Company: GES Received by: _____ Date/Time: 1/24/13 1745 Company: TADLH6		Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		0.747		Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____		Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____		Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____	

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: 480-32023-1

Login Number: 32023

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: 480-32023-1

Login Number: 32024

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	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-33891-1

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:

3/20/2013 12:48:39 PM

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

LINKS

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results through

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www.testamericainc.com

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

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

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

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



Brian Fischer
Project Manager II
3/20/2013 12:48:39 PM

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Definitions/Glossary

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

TestAmerica Job ID: 480-33891-1

Qualifiers

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
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: 480-33891-1

Job ID: 480-33891-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-33891-1

Comments

No additional comments.

Receipt

The samples were received on 3/6/2013 1:40 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 4.2° C.

GC/MS VOA

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-33891-1). 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

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-33891-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-33891-1). 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(s) SM 5210B: For batch # 106138, the dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results are reported. (USB 480-106138/1)

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 (480-33891-1)

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: 480-33891-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-33891-1

Date Collected: 03/06/13 13:15

Matrix: Wastewater

Date Received: 03/06/13 13:40

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			03/13/13 02:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/13/13 02:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/13/13 02:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/13/13 02:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/13/13 02:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/13/13 02:03	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			03/13/13 02:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/13/13 02:03	1
2-Hexanone	ND		5.0	1.2	ug/L			03/13/13 02:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/13/13 02:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/13/13 02:03	1
Acetone	ND		10	3.0	ug/L			03/13/13 02:03	1
Benzene	2.0		1.0	0.41	ug/L			03/13/13 02:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/13/13 02:03	1
Bromoform	ND		1.0	0.26	ug/L			03/13/13 02:03	1
Bromomethane	ND		1.0	0.69	ug/L			03/13/13 02:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/13/13 02:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/13/13 02:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/13/13 02:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/13/13 02:03	1
Chloroethane	ND		1.0	0.32	ug/L			03/13/13 02:03	1
Chloroform	14		1.0	0.34	ug/L			03/13/13 02:03	1
Chloromethane	ND		1.0	0.35	ug/L			03/13/13 02:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/13/13 02:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/13/13 02:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/13/13 02:03	1
Styrene	ND		1.0	0.73	ug/L			03/13/13 02:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/13/13 02:03	1
Toluene	ND		1.0	0.51	ug/L			03/13/13 02:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/13/13 02:03	1
Trichloroethene	ND		1.0	0.46	ug/L			03/13/13 02:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/13/13 02:03	1
Vinyl acetate	ND		5.0	0.85	ug/L			03/13/13 02:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/13/13 02:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137		03/13/13 02:03	1
Toluene-d8 (Surr)	93		71 - 126		03/13/13 02:03	1
4-Bromofluorobenzene (Surr)	89		73 - 120		03/13/13 02:03	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		03/07/13 07:40	03/13/13 14:54	1
Acenaphthene	ND		4.7	0.39	ug/L		03/07/13 07:40	03/13/13 14:54	1
Acenaphthylene	ND		4.7	0.36	ug/L		03/07/13 07:40	03/13/13 14:54	1
Anthracene	ND		4.7	0.26	ug/L		03/07/13 07:40	03/13/13 14:54	1
Benzo[a]anthracene	ND		4.7	0.34	ug/L		03/07/13 07:40	03/13/13 14:54	1
Benzo[a]pyrene	ND		4.7	0.44	ug/L		03/07/13 07:40	03/13/13 14:54	1
Benzo[b]fluoranthene	ND		4.7	0.32	ug/L		03/07/13 07:40	03/13/13 14:54	1
Benzo[g,h,i]perylene	ND		4.7	0.33	ug/L		03/07/13 07:40	03/13/13 14:54	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-33891-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-33891-1

Date Collected: 03/06/13 13:15

Matrix: Wastewater

Date Received: 03/06/13 13:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		4.7	0.69	ug/L		03/07/13 07:40	03/13/13 14:54	1
Biphenyl	ND		4.7	0.62	ug/L		03/07/13 07:40	03/13/13 14:54	1
Bis(2-ethylhexyl) phthalate	ND		4.7	1.7	ug/L		03/07/13 07:40	03/13/13 14:54	1
Carbazole	ND		4.7	0.28	ug/L		03/07/13 07:40	03/13/13 14:54	1
Chrysene	ND		4.7	0.31	ug/L		03/07/13 07:40	03/13/13 14:54	1
Dibenz(a,h)anthracene	ND		4.7	0.40	ug/L		03/07/13 07:40	03/13/13 14:54	1
Dibenzofuran	ND		9.4	0.48	ug/L		03/07/13 07:40	03/13/13 14:54	1
Fluoranthene	ND		4.7	0.38	ug/L		03/07/13 07:40	03/13/13 14:54	1
Fluorene	ND		4.7	0.34	ug/L		03/07/13 07:40	03/13/13 14:54	1
Indeno[1,2,3-cd]pyrene	ND		4.7	0.44	ug/L		03/07/13 07:40	03/13/13 14:54	1
Naphthalene	ND		4.7	0.72	ug/L		03/07/13 07:40	03/13/13 14:54	1
Pentachlorophenol	ND		9.4	2.1	ug/L		03/07/13 07:40	03/13/13 14:54	1
Phenanthrene	ND		4.7	0.42	ug/L		03/07/13 07:40	03/13/13 14:54	1
Phenol	ND		4.7	0.37	ug/L		03/07/13 07:40	03/13/13 14:54	1
Pyrene	ND		4.7	0.32	ug/L		03/07/13 07:40	03/13/13 14:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	69		52 - 132	03/07/13 07:40	03/13/13 14:54	1
2-Fluorobiphenyl	74		48 - 120	03/07/13 07:40	03/13/13 14:54	1
2-Fluorophenol	31		20 - 120	03/07/13 07:40	03/13/13 14:54	1
Nitrobenzene-d5	60		46 - 120	03/07/13 07:40	03/13/13 14:54	1
p-Terphenyl-d14	74		67 - 150	03/07/13 07:40	03/13/13 14:54	1
Phenol-d5	22		16 - 120	03/07/13 07:40	03/13/13 14:54	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			03/07/13 13:43	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/07/13 13:43	1
Benzene	2.5		0.20	0.023	ug/L			03/07/13 13:43	1
Ethylbenzene	ND		0.20	0.029	ug/L			03/07/13 13:43	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/07/13 13:43	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/07/13 13:43	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/07/13 13:43	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/07/13 13:43	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/07/13 13:43	1
o-Xylene	ND		0.20	0.027	ug/L			03/07/13 13:43	1
p-Cymene	ND		0.20	0.030	ug/L			03/07/13 13:43	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/07/13 13:43	1
Toluene	ND		0.20	0.036	ug/L			03/07/13 13:43	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/07/13 13:43	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		03/08/13 07:19	03/08/13 14:31	1
alpha-BHC	ND		0.047	0.0062	ug/L		03/08/13 07:19	03/08/13 14:31	1
beta-BHC	ND		0.047	0.023	ug/L		03/08/13 07:19	03/08/13 14:31	1
delta-BHC	ND		0.047	0.0094	ug/L		03/08/13 07:19	03/08/13 14:31	1
gamma-BHC (Lindane)	ND		0.047	0.0057	ug/L		03/08/13 07:19	03/08/13 14:31	1
Chlordane (technical)	ND		0.47	0.027	ug/L		03/08/13 07:19	03/08/13 14:31	1
4,4'-DDD	ND		0.047	0.0087	ug/L		03/08/13 07:19	03/08/13 14:31	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-33891-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-33891-1

Date Collected: 03/06/13 13:15

Matrix: Wastewater

Date Received: 03/06/13 13:40

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDE	ND		0.047	0.011	ug/L		03/08/13 07:19	03/08/13 14:31	1
4,4'-DDT	ND		0.047	0.010	ug/L		03/08/13 07:19	03/08/13 14:31	1
Dieldrin	ND		0.047	0.0092	ug/L		03/08/13 07:19	03/08/13 14:31	1
Endosulfan I	ND		0.047	0.010	ug/L		03/08/13 07:19	03/08/13 14:31	1
Endosulfan II	ND		0.047	0.011	ug/L		03/08/13 07:19	03/08/13 14:31	1
Endosulfan sulfate	ND		0.047	0.015	ug/L		03/08/13 07:19	03/08/13 14:31	1
Endrin	ND		0.047	0.013	ug/L		03/08/13 07:19	03/08/13 14:31	1
Endrin aldehyde	ND		0.047	0.015	ug/L		03/08/13 07:19	03/08/13 14:31	1
Heptachlor	ND		0.047	0.0080	ug/L		03/08/13 07:19	03/08/13 14:31	1
Heptachlor epoxide	ND		0.047	0.0050	ug/L		03/08/13 07:19	03/08/13 14:31	1
Toxaphene	ND		0.47	0.11	ug/L		03/08/13 07:19	03/08/13 14:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	63		15 - 125				03/08/13 07:19	03/08/13 14:31	1
Tetrachloro-m-xylene	83		36 - 121				03/08/13 07:19	03/08/13 14:31	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		03/07/13 10:45	03/07/13 17:44	1
Iron	163		50.0	19.3	ug/L		03/07/13 10:45	03/07/13 17:44	1
Manganese	136		3.0	0.40	ug/L		03/07/13 10:45	03/07/13 17:44	1
Zinc	4.0	J	10.0	1.5	ug/L		03/07/13 10:45	03/07/13 17:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	3.9	J	4.8	1.3	mg/L		03/18/13 00:36	03/18/13 01:28	1
Cyanide, Total	0.32		0.010	0.0050	mg/L		03/12/13 22:26	03/14/13 17:45	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		03/13/13 15:58	03/16/13 12:11	1
Total Dissolved Solids	863		10.0	4.0	mg/L			03/06/13 22:21	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			03/06/13 17:18	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			03/07/13 15:34	1
pH	7.85	HF	0.100	0.100	SU			03/06/13 19:49	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-33891-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-33897-1

Date Collected: 03/06/13 13:25

Matrix: Wastewater

Date Received: 03/06/13 13:40

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			03/08/13 19:58	5
1,1,1,2-Tetrachloroethane	ND		5.0	1.1	ug/L			03/08/13 19:58	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			03/08/13 19:58	5
1,1-Dichloroethane	ND		5.0	1.9	ug/L			03/08/13 19:58	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			03/08/13 19:58	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			03/08/13 19:58	5
1,2-Dichloroethene, Total	ND		10	3.5	ug/L			03/08/13 19:58	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			03/08/13 19:58	5
2-Hexanone	ND		25	6.2	ug/L			03/08/13 19:58	5
2-Butanone (MEK)	ND		50	6.6	ug/L			03/08/13 19:58	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			03/08/13 19:58	5
Acetone	ND		50	15	ug/L			03/08/13 19:58	5
Bromodichloromethane	ND		5.0	2.0	ug/L			03/08/13 19:58	5
Bromoform	ND		5.0	1.3	ug/L			03/08/13 19:58	5
Bromomethane	ND		5.0	3.5	ug/L			03/08/13 19:58	5
Carbon disulfide	ND		5.0	0.95	ug/L			03/08/13 19:58	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			03/08/13 19:58	5
Chlorobenzene	ND		5.0	3.8	ug/L			03/08/13 19:58	5
Dibromochloromethane	ND		5.0	1.6	ug/L			03/08/13 19:58	5
Chloroethane	ND		5.0	1.6	ug/L			03/08/13 19:58	5
Chloroform	ND		5.0	1.7	ug/L			03/08/13 19:58	5
Chloromethane	ND		5.0	1.8	ug/L			03/08/13 19:58	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			03/08/13 19:58	5
Ethylbenzene	190		5.0	3.7	ug/L			03/08/13 19:58	5
Methylene Chloride	ND		5.0	2.2	ug/L			03/08/13 19:58	5
Styrene	90		5.0	3.7	ug/L			03/08/13 19:58	5
Tetrachloroethene	ND		5.0	1.8	ug/L			03/08/13 19:58	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			03/08/13 19:58	5
Trichloroethene	ND		5.0	2.3	ug/L			03/08/13 19:58	5
Vinyl chloride	ND		5.0	4.5	ug/L			03/08/13 19:58	5
Vinyl acetate	ND		25	4.3	ug/L			03/08/13 19:58	5
Xylenes, Total	220		10	3.3	ug/L			03/08/13 19:58	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		66 - 137		03/08/13 19:58	5
Toluene-d8 (Surr)	95		71 - 126		03/08/13 19:58	5
4-Bromofluorobenzene (Surr)	94		73 - 120		03/08/13 19:58	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3700		80	33	ug/L			03/09/13 18:36	80
Toluene	1000		80	41	ug/L			03/09/13 18:36	80

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 137		03/09/13 18:36	80
Toluene-d8 (Surr)	105		71 - 126		03/09/13 18:36	80
4-Bromofluorobenzene (Surr)	108		73 - 120		03/09/13 18:36	80

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-33891-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-33897-1

Date Collected: 03/06/13 13:25

Matrix: Wastewater

Date Received: 03/06/13 13:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	18		0.20	0.035	ug/L			03/07/13 12:08	1
1,3,5-Trimethylbenzene	6.9		0.20	0.15	ug/L			03/07/13 12:08	1
Isopropylbenzene	0.86		0.20	0.027	ug/L			03/07/13 12:08	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/07/13 12:08	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/07/13 12:08	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/07/13 12:08	1
p-Cymene	ND		0.20	0.030	ug/L			03/07/13 12:08	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/07/13 12:08	1
Xylenes, Total	360		0.60	0.054	ug/L			03/07/13 12:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2600		10	1.2	ug/L			03/07/13 13:09	50
Ethylbenzene	170		10	1.4	ug/L			03/07/13 13:09	50
m,p-Xylene	130		20	2.7	ug/L			03/07/13 13:09	50
o-Xylene	72		10	1.4	ug/L			03/07/13 13:09	50
Toluene	660		10	1.8	ug/L			03/07/13 13:09	50

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	146000		500	100	ug/L		03/07/13 10:45	03/07/13 17:46	1
Iron	674		50.0	19.3	ug/L		03/07/13 10:45	03/07/13 17:46	1
Magnesium	85000		200	43.4	ug/L		03/07/13 10:45	03/07/13 17:46	1
Potassium	4180		500	100	ug/L		03/07/13 10:45	03/07/13 17:46	1
Sodium	71000		1000	324	ug/L		03/07/13 10:45	03/07/13 17:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		1.0	0.56	mg/L			03/14/13 04:12	2
Sulfate	161		4.0	0.70	mg/L			03/14/13 04:12	2
Alkalinity, Total	572		100	40.0	mg/L			03/11/13 16:42	10

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-33891-1

Client Sample ID: Post-Carbon

Date Collected: 03/06/13 13:15

Date Received: 03/06/13 13:40

Lab Sample ID: 480-33891-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	107062	03/13/13 02:03	JMB	TAL BUF
Total/NA	Prep	3510C			106181	03/07/13 07:40	MZ	TAL BUF
Total/NA	Analysis	8270C		1	107133	03/13/13 14:54	RMM	TAL BUF
Total/NA	Analysis	8021B		1	106180	03/07/13 13:43	DB	TAL BUF
Total/NA	Prep	3510C			106430	03/08/13 07:19	DE	TAL BUF
Total/NA	Analysis	608		1	106478	03/08/13 14:31	LW	TAL BUF
Total/NA	Prep	200.7			106189	03/07/13 10:45	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	106467	03/07/13 17:44	LH	TAL BUF
Total/NA	Analysis	SM 5210B		1	106138	03/06/13 17:18	KS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	106150	03/06/13 19:49	KS	TAL BUF
Total/NA	Analysis	SM 2540C		1	106153	03/06/13 22:21	JB	TAL BUF
Total/NA	Analysis	SM 2540D		1	106347	03/07/13 15:34	JB	TAL BUF
Total/NA	Prep	Distill/CN			107070	03/12/13 22:26	JB	TAL BUF
Total/NA	Analysis	335.4		1	107480	03/14/13 17:45	NH	TAL BUF
Total/NA	Prep	Distill/Phenol			107198	03/13/13 15:58	KS	TAL BUF
Total/NA	Analysis	420.4		1	107807	03/16/13 12:11	EGN	TAL BUF
Total/NA	Prep	1664A			107839	03/18/13 00:36	LAW	TAL BUF
Total/NA	Analysis	1664A		1	107842	03/18/13 01:28	LAW	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 03/06/13 13:25

Date Received: 03/06/13 13:40

Lab Sample ID: 480-33891-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	106497	03/08/13 19:58	TRF	TAL BUF
Total/NA	Analysis	8260B	DL	80	106639	03/09/13 18:36	JMB	TAL BUF
Total/NA	Analysis	8021B		1	106180	03/07/13 12:08	DB	TAL BUF
Total/NA	Analysis	8021B	DL	50	106180	03/07/13 13:09	DB	TAL BUF
Total/NA	Prep	200.7			106189	03/07/13 10:45	JM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	106467	03/07/13 17:46	LH	TAL BUF
Total/NA	Analysis	310.2		10	106876	03/11/13 16:42	NH	TAL BUF
Total/NA	Analysis	300.0		2	107167	03/14/13 04:12	KAC	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-33891-1

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	01-31-14
Kentucky	State Program	4	90029	12-31-13
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	02-10-14
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: 480-33891-1

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: 480-33891-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-33891-1	Post-Carbon	Wastewater	03/06/13 13:15	03/06/13 13:40
480-33897-1	Pre-Carbon	Wastewater	03/06/13 13:25	03/06/13 13:40

[illegible]

[illegible]

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-33891-1

Login Number: 33891

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	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-33891-1

Login Number: 33897

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	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-35166-1

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

Sampling Event: Mthly Post-Carbon

Mthly Pre-Carbon

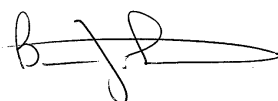
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

4/8/2013 2:49:50 PM

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

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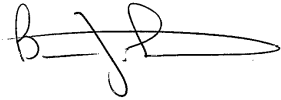
www.testamericainc.com

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

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

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



Brian Fischer
Project Manager II
4/8/2013 2:49:50 PM

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-35166-1

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.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
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: 480-35166-1

Job ID: 480-35166-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-35166-1

Comments

No additional comments.

Receipt

The samples were received on 3/28/2013 10:17 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.4° C and 3.4° C.

GC/MS VOA

No analytical or quality issues were noted.

Ion Chromatography

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-35167-1). 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) 310.2: The method blank for batch 110046 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.

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 (480-35166-1)

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: 480-35166-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-35166-1

Date Collected: 03/28/13 09:30

Matrix: Wastewater

Date Received: 03/28/13 10:17

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			03/29/13 13:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/29/13 13:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/29/13 13:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/29/13 13:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/29/13 13:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/29/13 13:03	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			03/29/13 13:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/29/13 13:03	1
2-Hexanone	ND		5.0	1.2	ug/L			03/29/13 13:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/29/13 13:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/29/13 13:03	1
Acetone	ND		10	3.0	ug/L			03/29/13 13:03	1
Benzene	33		1.0	0.41	ug/L			03/29/13 13:03	1
Bromodichloromethane	0.72	J	1.0	0.39	ug/L			03/29/13 13:03	1
Bromoform	ND		1.0	0.26	ug/L			03/29/13 13:03	1
Bromomethane	ND		1.0	0.69	ug/L			03/29/13 13:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/29/13 13:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/29/13 13:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/29/13 13:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/29/13 13:03	1
Chloroethane	ND		1.0	0.32	ug/L			03/29/13 13:03	1
Chloroform	18		1.0	0.34	ug/L			03/29/13 13:03	1
Chloromethane	ND		1.0	0.35	ug/L			03/29/13 13:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/29/13 13:03	1
Ethylbenzene	3.1		1.0	0.74	ug/L			03/29/13 13:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/29/13 13:03	1
Styrene	ND		1.0	0.73	ug/L			03/29/13 13:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/29/13 13:03	1
Toluene	5.1		1.0	0.51	ug/L			03/29/13 13:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/29/13 13:03	1
Trichloroethene	ND		1.0	0.46	ug/L			03/29/13 13:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/29/13 13:03	1
Vinyl acetate	ND		5.0	0.85	ug/L			03/29/13 13:03	1
Xylenes, Total	1.1	J	2.0	0.66	ug/L			03/29/13 13:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		66 - 137		03/29/13 13:03	1
Toluene-d8 (Surr)	98		71 - 126		03/29/13 13:03	1
4-Bromofluorobenzene (Surr)	98		73 - 120		03/29/13 13:03	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			04/05/13 10:54	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/05/13 10:54	1
Benzene	35		0.20	0.023	ug/L			04/05/13 10:54	1
Ethylbenzene	2.8		0.20	0.029	ug/L			04/05/13 10:54	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/05/13 10:54	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/05/13 10:54	1
m,p-Xylene	0.77		0.40	0.054	ug/L			04/05/13 10:54	1
n-Butylbenzene	ND		0.20	0.031	ug/L			04/05/13 10:54	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-35166-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-35166-1

Date Collected: 03/28/13 09:30

Matrix: Wastewater

Date Received: 03/28/13 10:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			04/05/13 10:54	1
o-Xylene	ND		0.20	0.027	ug/L			04/05/13 10:54	1
p-Cymene	ND		0.20	0.030	ug/L			04/05/13 10:54	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/05/13 10:54	1
Toluene	4.8		0.20	0.036	ug/L			04/05/13 10:54	1
Xylenes, Total	0.86		0.60	0.054	ug/L			04/05/13 10:54	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	170		50.0	19.3	ug/L		03/29/13 07:00	03/29/13 13:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.31		0.010	0.0050	mg/L		04/01/13 18:24	04/01/13 21:33	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.45	HF	0.100	0.100	SU			03/28/13 17:10	1

Client Sample Results

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

TestAmerica Job ID: 480-35166-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-35167-1

Date Collected: 03/28/13 09:45

Matrix: Wastewater

Date Received: 03/28/13 10:17

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		03/29/13 07:00	03/29/13 13:13	1
Iron	498		50.0	19.3	ug/L		03/29/13 07:00	03/29/13 13:13	1
Magnesium	69100		200	43.4	ug/L		03/29/13 07:00	04/02/13 18:06	1
Potassium	3650		500	100	ug/L		03/29/13 07:00	03/29/13 13:13	1
Sodium	61700		1000	324	ug/L		03/29/13 07:00	03/29/13 13:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	142		2.5	1.4	mg/L			04/03/13 17:14	5
Sulfate	174		10.0	1.7	mg/L			04/03/13 17:14	5
Alkalinity, Total	448	B	100	40.0	mg/L			03/29/13 21:02	10

Lab Chronicle

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

TestAmerica Job ID: 480-35166-1

Client Sample ID: Post-Carbon

Date Collected: 03/28/13 09:30

Date Received: 03/28/13 10:17

Lab Sample ID: 480-35166-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	109925	03/29/13 13:03	TRB	TAL BUF
Total/NA	Analysis	8021B		1	111055	04/05/13 10:54	DB	TAL BUF
Total/NA	Prep	200.7			109782	03/29/13 07:00	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	110063	03/29/13 13:20	LH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	109791	03/28/13 17:10	KS	TAL BUF
Total/NA	Prep	Distill/CN			110307	04/01/13 18:24	NH	TAL BUF
Total/NA	Analysis	335.4		1	110328	04/01/13 21:33	NH	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 03/28/13 09:45

Date Received: 03/28/13 10:17

Lab Sample ID: 480-35167-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			109782	03/29/13 07:00	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	110063	03/29/13 13:13	LH	TAL BUF
Total/NA	Prep	200.7			109782	03/29/13 07:00	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	110621	04/02/13 18:06	LH	TAL BUF
Total/NA	Analysis	310.2		10	110046	03/29/13 21:02	NH	TAL BUF
Total/NA	Analysis	300.0		5	110668	04/03/13 17:14	KC	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: 480-35166-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	04-01-14

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Wastewater	Magnesium
200.7 Rev 4.4	200.7	Water	Magnesium
300.0		Wastewater	Chloride
300.0		Wastewater	Sulfate
300.0		Water	Chloride
300.0		Water	Sulfate
335.4	Distill/CN	Wastewater	Cyanide, Total
335.4	Distill/CN	Water	Cyanide, Total
8021B		Wastewater	1,2,4-Trimethylbenzene
8021B		Wastewater	1,3,5-Trimethylbenzene
8021B		Wastewater	Benzene
8021B		Wastewater	Ethylbenzene
8021B		Wastewater	Isopropylbenzene
8021B		Wastewater	Methyl tert-butyl ether
8021B		Wastewater	n-Butylbenzene
8021B		Wastewater	n-Propylbenzene
8021B		Wastewater	p-Cymene
8021B		Wastewater	sec-Butylbenzene
8021B		Wastewater	Toluene
8021B		Wastewater	Xylenes, Total
8021B		Water	1,2,4-Trimethylbenzene
8021B		Water	1,3,5-Trimethylbenzene
8021B		Water	Benzene
8021B		Water	Ethylbenzene
8021B		Water	Isopropylbenzene
8021B		Water	Methyl tert-butyl ether
8021B		Water	n-Butylbenzene
8021B		Water	n-Propylbenzene
8021B		Water	p-Cymene
8021B		Water	sec-Butylbenzene
8021B		Water	Toluene
8021B		Water	Xylenes, Total

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

Analysis Method	Prep Method	Matrix	Analyte
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Water	pH

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-35166-1

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: 480-35166-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-35166-1	Post-Carbon	Wastewater	03/28/13 09:30	03/28/13 10:17
480-35167-1	Pre-Carbon	Wastewater	03/28/13 09:45	03/28/13 10:17

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

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: 480-35166-1

Login Number: 35166

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: 480-35166-1

Login Number: 35167

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	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-37392-1

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

Sampling Event: Mthly Post-Carbon

Mthly Pre-Carbon

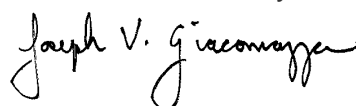
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

5/13/2013 10:26:24 AM

Joe Giacomazza, Project Administrator

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Project Manager II

brian.fischer@testamericainc.com

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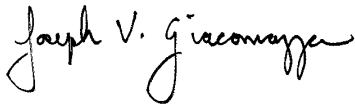
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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



Joe Giacomazza
Project Administrator
5/13/2013 10:26:24 AM



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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-37392-1

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.

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.
α	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, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
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: 480-37392-1

Job ID: 480-37392-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-37392-1

Receipt

The samples were received on 5/1/2013 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 17.6° C and 17.8° C.

GC/MS VOA

No analytical or quality issues were noted.

Ion Chromatography

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-37392-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Post-Carbon (480-37393-1). 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 (480-37393-1)

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: 480-37392-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-37392-1

Date Collected: 05/01/13 10:10

Matrix: Wastewater

Date Received: 05/01/13 10:30

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	97400		500	100	ug/L		05/02/13 10:50	05/02/13 22:47	1
Iron	616		50.0	19.3	ug/L		05/02/13 10:50	05/02/13 22:47	1
Magnesium	50700		200	43.4	ug/L		05/02/13 10:50	05/02/13 22:47	1
Potassium	3450		500	100	ug/L		05/02/13 10:50	05/02/13 22:47	1
Sodium	44200		1000	324	ug/L		05/02/13 10:50	05/02/13 22:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72.1		0.50	0.28	mg/L			05/02/13 20:34	1
Sulfate	104		4.0	0.70	mg/L			05/04/13 00:15	2
Alkalinity, Total	348		100	40.0	mg/L			05/02/13 16:47	10

Client Sample Results

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

TestAmerica Job ID: 480-37392-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-37393-1

Date Collected: 05/01/13 10:00

Matrix: Wastewater

Date Received: 05/01/13 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			05/10/13 13:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/10/13 13:18	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/10/13 13:18	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/10/13 13:18	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/10/13 13:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/10/13 13:18	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			05/10/13 13:18	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/10/13 13:18	1
2-Hexanone	ND		5.0	1.2	ug/L			05/10/13 13:18	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/10/13 13:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/10/13 13:18	1
Acetone	3.3	J	10	3.0	ug/L			05/10/13 13:18	1
Benzene	90		1.0	0.41	ug/L			05/10/13 13:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/10/13 13:18	1
Bromoform	ND		1.0	0.26	ug/L			05/10/13 13:18	1
Bromomethane	ND		1.0	0.69	ug/L			05/10/13 13:18	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/10/13 13:18	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/10/13 13:18	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/10/13 13:18	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/10/13 13:18	1
Chloroethane	ND		1.0	0.32	ug/L			05/10/13 13:18	1
Chloroform	6.7		1.0	0.34	ug/L			05/10/13 13:18	1
Chloromethane	ND		1.0	0.35	ug/L			05/10/13 13:18	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/10/13 13:18	1
Ethylbenzene	10		1.0	0.74	ug/L			05/10/13 13:18	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/10/13 13:18	1
Styrene	ND		1.0	0.73	ug/L			05/10/13 13:18	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/10/13 13:18	1
Toluene	22		1.0	0.51	ug/L			05/10/13 13:18	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/10/13 13:18	1
Trichloroethene	ND		1.0	0.46	ug/L			05/10/13 13:18	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/10/13 13:18	1
Vinyl acetate	ND		5.0	0.85	ug/L			05/10/13 13:18	1
Xylenes, Total	5.2		2.0	0.66	ug/L			05/10/13 13:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137		05/10/13 13:18	1
Toluene-d8 (Surr)	105		71 - 126		05/10/13 13:18	1
4-Bromofluorobenzene (Surr)	106		73 - 120		05/10/13 13:18	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			05/06/13 11:47	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/06/13 11:47	1
Benzene	130		1.0	0.12	ug/L			05/06/13 13:13	5
Ethylbenzene	13		0.20	0.029	ug/L			05/06/13 11:47	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/06/13 11:47	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			05/06/13 11:47	1
m,p-Xylene	4.2		0.40	0.054	ug/L			05/06/13 11:47	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/06/13 11:47	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-37392-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-37393-1

Date Collected: 05/01/13 10:00

Matrix: Wastewater

Date Received: 05/01/13 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			05/06/13 11:47	1
o-Xylene	2.6		0.20	0.027	ug/L			05/06/13 11:47	1
p-Cymene	ND		0.20	0.030	ug/L			05/06/13 11:47	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/06/13 11:47	1
Toluene	29		0.20	0.036	ug/L			05/06/13 11:47	1
Xylenes, Total	8.2		0.60	0.054	ug/L			05/06/13 11:47	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	435		50.0	19.3	ug/L		05/02/13 10:50	05/02/13 22:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.20		0.010	0.0050	mg/L		05/03/13 13:01	05/04/13 18:34	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.43	HF	0.100	0.100	SU			05/02/13 01:18	1

Lab Chronicle

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

TestAmerica Job ID: 480-37392-1

Client Sample ID: Pre-Carbon

Date Collected: 05/01/13 10:10

Date Received: 05/01/13 10:30

Lab Sample ID: 480-37392-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			116379	05/02/13 10:50	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	116596	05/02/13 22:47	LH	TAL BUF
Total/NA	Analysis	300.0		1	116466	05/02/13 20:34	KC	TAL BUF
Total/NA	Analysis	310.2		10	116572	05/02/13 16:47	LK	TAL BUF
Total/NA	Analysis	300.0		2	116746	05/04/13 00:15	KC	TAL BUF

Client Sample ID: Post-Carbon

Date Collected: 05/01/13 10:00

Date Received: 05/01/13 10:30

Lab Sample ID: 480-37393-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	117857	05/10/13 13:18	RL	TAL BUF
Total/NA	Analysis	8021B		1	116886	05/06/13 11:47	DB	TAL BUF
Total/NA	Analysis	8021B		5	116886	05/06/13 13:13	DB	TAL BUF
Total/NA	Prep	200.7			116379	05/02/13 10:50	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	116596	05/02/13 22:45	LH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	116291	05/02/13 01:18	KS	TAL BUF
Total/NA	Prep	Distill/CN			116717	05/03/13 13:01	KWJ	TAL BUF
Total/NA	Analysis	335.4		1	116855	05/04/13 18:34	KS	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: 480-37392-1

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	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
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	04-01-14
North Dakota	State Program	8	R-176	03-31-14
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	04-01-14
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	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-37392-1

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: 480-37392-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-37392-1	Pre-Carbon	Wastewater	05/01/13 10:10	05/01/13 10:30
480-37393-1	Post-Carbon	Wastewater	05/01/13 10:00	05/01/13 10:30

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

480-37392 Chain of Custody

THE UNIVERSITY OF CHICAGO

480-37393 Chain of Custody

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-37392-1

Login Number: 37392

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	Yes: Received same day of collection; chilling process has begun
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-37392-1

Login Number: 37393

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-38451-1

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

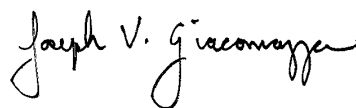
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

5/21/2013 4:55:29 PM

Joe Giacomazza, Project Administrator

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Designee for

Brian Fischer, Project Manager II

brian.fischer@testamericainc.com

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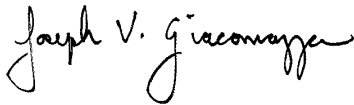
www.testamericainc.com

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

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

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



Joe Giacomazza
Project Administrator
5/21/2013 4:55:29 PM

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-38451-1

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
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: 480-38451-1

Job ID: 480-38451-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-38451-1

Receipt

The samples were received on 5/16/2013 5:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

GC/MS VOA

No analytical or quality issues were noted.

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Carbon 1 Effluent (480-38451-3), Carbon 2 Effluent (480-38451-2), Influent (480-38451-4). Elevated reporting limits (RLs) are provided.

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: (480-38451-3 MS), (480-38451-3 MSD), Carbon 1 Effluent (480-38451-3). Elevated reporting limits (RLs) are provided.

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: 480-38451-1

Client Sample ID: Carbon 3 Effluent

Lab Sample ID: 480-38451-1

Date Collected: 05/16/13 16:10

Matrix: Water

Date Received: 05/16/13 17:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			05/20/13 19:57	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/20/13 19:57	1
Benzene	ND		0.20	0.023	ug/L			05/20/13 19:57	1
Ethylbenzene	ND		0.20	0.029	ug/L			05/20/13 19:57	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/20/13 19:57	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			05/20/13 19:57	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/20/13 19:57	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/20/13 19:57	1
n-Propylbenzene	ND		0.20	0.13	ug/L			05/20/13 19:57	1
o-Xylene	ND		0.20	0.027	ug/L			05/20/13 19:57	1
p-Cymene	ND		0.20	0.030	ug/L			05/20/13 19:57	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/20/13 19:57	1
Toluene	ND		0.20	0.036	ug/L			05/20/13 19:57	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/20/13 19:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 145		05/20/13 19:57	1
4-Bromofluorobenzene	111		64 - 141		05/20/13 19:57	1

Client Sample Results

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

TestAmerica Job ID: 480-38451-1

Client Sample ID: Carbon 2 Effluent

Lab Sample ID: 480-38451-2

Date Collected: 05/16/13 16:15

Matrix: Water

Date Received: 05/16/13 17:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.17	ug/L			05/20/13 20:31	5
1,3,5-Trimethylbenzene	ND		1.0	0.75	ug/L			05/20/13 20:31	5
Benzene	140		1.0	0.12	ug/L			05/20/13 20:31	5
Ethylbenzene	11		1.0	0.14	ug/L			05/20/13 20:31	5
Isopropylbenzene	ND		1.0	0.14	ug/L			05/20/13 20:31	5
Methyl tert-butyl ether	ND		2.0	0.22	ug/L			05/20/13 20:31	5
m,p-Xylene	5.1		2.0	0.27	ug/L			05/20/13 20:31	5
n-Butylbenzene	ND		1.0	0.15	ug/L			05/20/13 20:31	5
n-Propylbenzene	ND		1.0	0.65	ug/L			05/20/13 20:31	5
o-Xylene	0.63	J	1.0	0.14	ug/L			05/20/13 20:31	5
p-Cymene	ND		1.0	0.15	ug/L			05/20/13 20:31	5
sec-Butylbenzene	ND		1.0	0.10	ug/L			05/20/13 20:31	5
Toluene	39		1.0	0.18	ug/L			05/20/13 20:31	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	113		63 - 145		05/20/13 20:31	5
<i>4-Bromofluorobenzene</i>	113		64 - 141		05/20/13 20:31	5

Client Sample Results

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

TestAmerica Job ID: 480-38451-1

Client Sample ID: Carbon 1 Effluent

Lab Sample ID: 480-38451-3

Date Collected: 05/16/13 16:20

Matrix: Water

Date Received: 05/16/13 17:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	17		4.0	0.69	ug/L			05/20/13 21:05	20
1,3,5-Trimethylbenzene	ND		4.0	3.0	ug/L			05/20/13 21:05	20
Ethylbenzene	300		4.0	0.57	ug/L			05/20/13 21:05	20
Isopropylbenzene	ND		4.0	0.54	ug/L			05/20/13 21:05	20
Methyl tert-butyl ether	ND		8.0	0.87	ug/L			05/20/13 21:05	20
m,p-Xylene	210		8.0	1.1	ug/L			05/20/13 21:05	20
n-Butylbenzene	ND		4.0	0.62	ug/L			05/20/13 21:05	20
n-Propylbenzene	ND		4.0	2.6	ug/L			05/20/13 21:05	20
o-Xylene	200		4.0	0.54	ug/L			05/20/13 21:05	20
p-Cymene	ND		4.0	0.59	ug/L			05/20/13 21:05	20
sec-Butylbenzene	ND		4.0	0.41	ug/L			05/20/13 21:05	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		63 - 145		05/20/13 21:05	20
4-Bromofluorobenzene	113		64 - 141		05/20/13 21:05	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2700		20	2.3	ug/L			05/21/13 11:29	100
Toluene	960		20	3.6	ug/L			05/21/13 11:29	100
Xylenes, Total	180		60	5.4	ug/L			05/21/13 11:29	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 145		05/21/13 11:29	100
4-Bromofluorobenzene	98		64 - 141		05/21/13 11:29	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-38451-1

Client Sample ID: Influent

Lab Sample ID: 480-38451-4

Date Collected: 05/16/13 16:25

Matrix: Water

Date Received: 05/16/13 17:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		20	3.5	ug/L			05/20/13 21:39	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			05/20/13 21:39	100
Benzene	3100		20	2.3	ug/L			05/20/13 21:39	100
Ethylbenzene	280		20	2.9	ug/L			05/20/13 21:39	100
Isopropylbenzene	ND		20	2.7	ug/L			05/20/13 21:39	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			05/20/13 21:39	100
m,p-Xylene	190		40	5.4	ug/L			05/20/13 21:39	100
n-Butylbenzene	ND		20	3.1	ug/L			05/20/13 21:39	100
n-Propylbenzene	ND		20	13	ug/L			05/20/13 21:39	100
o-Xylene	22		20	2.7	ug/L			05/20/13 21:39	100
p-Cymene	ND		20	3.0	ug/L			05/20/13 21:39	100
sec-Butylbenzene	ND		20	2.0	ug/L			05/20/13 21:39	100
Toluene	1200		20	3.6	ug/L			05/20/13 21:39	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 145		05/20/13 21:39	100
4-Bromofluorobenzene	111		64 - 141		05/20/13 21:39	100

Lab Chronicle

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

TestAmerica Job ID: 480-38451-1

Client Sample ID: Carbon 3 Effluent

Date Collected: 05/16/13 16:10

Date Received: 05/16/13 17:00

Lab Sample ID: 480-38451-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	119622	05/20/13 19:57	DB	TAL BUF

Client Sample ID: Carbon 2 Effluent

Date Collected: 05/16/13 16:15

Date Received: 05/16/13 17:00

Lab Sample ID: 480-38451-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		5	119622	05/20/13 20:31	DB	TAL BUF

Client Sample ID: Carbon 1 Effluent

Date Collected: 05/16/13 16:20

Date Received: 05/16/13 17:00

Lab Sample ID: 480-38451-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		20	119622	05/20/13 21:05	DB	TAL BUF
Total/NA	Analysis	8021B	DL	100	119715	05/21/13 11:29	DB	TAL BUF

Client Sample ID: Influent

Date Collected: 05/16/13 16:25

Date Received: 05/16/13 17:00

Lab Sample ID: 480-38451-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	119622	05/20/13 21:39	DB	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: 480-38451-1

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	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
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	04-01-14
North Dakota	State Program	8	R-176	03-31-14
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	04-01-14
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	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-38451-1

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

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-38451-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-38451-1	Carbon 3 Effluent	Water	05/16/13 16:10	05/16/13 17:00
480-38451-2	Carbon 2 Effluent	Water	05/16/13 16:15	05/16/13 17:00
480-38451-3	Carbon 1 Effluent	Water	05/16/13 16:20	05/16/13 17:00
480-38451-4	Influent	Water	05/16/13 16:25	05/16/13 17:00

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	NYSDCL Region 9	Project Manager	Glen Mann	Date	5-16-13	Chain of Custody Number	198971
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Address 270 Michigan Ave	Telephone Number (Area Code) Fax Number (714) 851-7220	Lab Number	Page 1 of 1
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City	State	Zip Code	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)
Buffalo	NY	14203	TEPher (665)		

Project Name and Location (State)	Carrier/Waybill Number	Special Instructions
Griffin	7557	

Contract/Purchase Order/Quote No. 52 # 915171	Project # 48002525	Matrix	Containers & Preservatives	Special Instructions: Conditions of Receipt
--	--------------------	--------	----------------------------	--

[illegible][illegible]

Carbon 2 Effluent	1	1615	1	1	3
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[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

Possible Hazard Identification										Sample Disposal										(A fee may be assessed if samples are retained longer than 3 months)									
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin-Irritant	<input type="checkbox"/> Poisonous	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposed By Lab	<input type="checkbox"/> Archive For																						

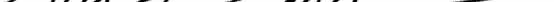

☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return to Client ☐ Disposal by Lab ☐ Archive For _____ months longer than 1 month)

Turn Around Time Required ☐ 1 ☐ 2 ☒ 3-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-30 ☐ 31-45 ☐ 46-60 ☐ 61-90 ☐ 91-120 ☐ 121-180 ☐ 181-240 ☐ 241-360 ☐ 361-480 ☐ 481-720 ☐ 721-960 ☐ 961-1440 ☐ 1441-2160 ☐ 2161-3600 ☐ 3601-5040 ☐ 5041-7200 ☐ 7201-10080 ☐ 10081-14400 ☐ 14401-21600 ☐ 21601-36000 ☐ 36001-50400 ☐ 50401-72000 ☐ 72001-100800 ☐ 100801-144000 ☐ 144001-216000 ☐ 216001-360000 ☐ 360001-504000 ☐ 504001-720000 ☐ 720001-1008000 ☐ 1008001-1440000 ☐ 1440001-2160000 ☐ 2160001-3600000 ☐ 3600001-5040000 ☐ 5040001-7200000 ☐ 7200001-10080000 ☐ 10080001-14400000 ☐ 14400001-21600000 ☐ 21600001-36000000 ☐ 36000001-50400000 ☐ 50400001-72000000 ☐ 72000001-100800000 ☐ 100800001-144000000 ☐ 144000001-216000000 ☐ 216000001-360000000 ☐ 360000001-504000000 ☐ 504000001-720000000 ☐ 720000001-1008000000 ☐ 1008000001-1440000000 ☐ 1440000001-2160000000 ☐ 2160000001-3600000000 ☐ 3600000001-5040000000 ☐ 5040000001-7200000000 ☐ 7200000001-10080000000 ☐ 10080000001-14400000000 ☐ 14400000001-21600000000 ☐ 21600000001-36000000000 ☐ 36000000001-50400000000 ☐ 50400000001-72000000000 ☐ 72000000001-100800000000 ☐ 100800000001-144000000000 ☐ 144000000001-216000000000 ☐ 216000000001-360000000000 ☐ 360000000001-504000000000 ☐ 504000000001-720000000000 ☐ 720000000001-1008000000000 ☐ 1008000000001-1440000000000 ☐ 1440000000001-2160000000000 ☐ 2160000000001-3600000000000 ☐ 3600000000001-5040000000000 ☐ 5040000000001-7200000000000 ☐ 7200000000001-10080000000000 ☐ 10080000000001-14400000000000 ☐ 14400000000001-21600000000000 ☐ 21600000000001-36000000000000 ☐ 36000000000001-50400000000000 ☐ 50400000000001-72000000000000 ☐ 72000000000001-100800000000000 ☐ 100800000000001-144000000000000 ☐ 144000000000001-216000000000000 ☐ 216000000000001-360000000000000 ☐ 360000000000001-504000000000000 ☐ 504000000000001-720000000000000 ☐ 720000000000001-1008000000000000 ☐ 1008000000000001-1440000000000000 ☐ 1440000000000001-2160000000000000 ☐ 2160000000000001-3600000000000000 ☐ 3600000000000001-5040000000000000 ☐ 5040000000000001-7200000000000000 ☐ 7200000000000001-10080000000000000 ☐ 10080000000000001-14400000000000000 ☐ 14400000000000001-21600000000000000 ☐ 21600000000000001-36000000000000000 ☐ 36000000000000001-50400000000000000 ☐ 50400000000000001-72000000000000000 ☐ 72000000000000001-100800000000000000 ☐ 100800000000000001-144000000000000000 ☐ 144000000000000001-216000000000000000 ☐ 216000000000000001-360000000000000000 ☐ 360000000000000001-504000000000000000 ☐ 504000000000000001-720000000000000000 ☐ 720000000000000001-1008000000000000000 ☐ 1008000000000000001-1440000000000000000 ☐ 1440000000000000001-2160000000000000000 ☐ 2160000000000000001-3600000000000000000 ☐ 3600000000000000001-5040000000000000000 ☐ 5040000000000000001-7200000000000000000 ☐ 7200000000000000001-10080000000000000000 ☐ 10080000000000000001-14400000000000000000 ☐ 14400000000000000001-21600000000000000000 ☐ 21600000000000000001-36000000000000000000 ☐ 36000000000000000001-50400000000000000000 ☐ 50400000000000000001-72000000000000000000 ☐ 72000000000000000001-100800000000000000000 ☐ 100800000000000000001-144000000000000000000 ☐ 144000000000000000001-216000000000000000000 ☐ 216000000000000000001-360000000000000000000 ☐ 360000000000000000001-504000000000000000000 ☐ 504000000000000000001-720000000000000000000 <

☐ 24 Hours
 ☐ 48 Hours
 ☐ 7 Days
 ☐ 14 Days
 ☐ 21 Days
 ☒ Other 30 Days

1. Relinquished By [Signature] Date 11/1/13 Time 1:30 PM

1. Received By [Signature] Date 11/1/13 Time 3:00 PM

	5-16-13	1:00		5/16/13	1:00
2. Relinquished By	Date	Time	2. Received By	Date	Time

3. Relinquished By		Date	Time	3. Received By		Date	Time

S. Relinquished By	Date	Time	S. Received By	Date	Time

Comments 3.8 #1

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Age Group	Number of People
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11

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5/21/2013

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-38451-1

Login Number: 38451

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-39619-1

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

Sampling Event: Mthly Post-Carbon

Mthly Pre-Carbon

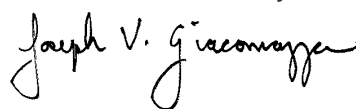
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

6/18/2013 8:54:39 AM

Joe Giacomazza, Project Administrator

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Project Manager II

brian.fischer@testamericainc.com

LINKS

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

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

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



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

A handwritten signature in black ink that reads "Joseph V. Giacomazza". The signature is written in a cursive style.

Joe Giacomazza
Project Administrator
6/18/2013 8:54:39 AM

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-39619-1

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.
α	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, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-39619-1

Job ID: 480-39619-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-39619-1

Receipt

The samples were received on 6/6/2013 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 5.3° C and 5.5° C.

GC/MS VOA

No analytical or quality issues were noted.

Ion Chromatography

No 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 (480-39619-1)

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: 480-39619-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-39619-1

Date Collected: 06/06/13 14:15

Matrix: Wastewater

Date Received: 06/06/13 14:40

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			06/09/13 00:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/09/13 00:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/09/13 00:13	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/09/13 00:13	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/09/13 00:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/09/13 00:13	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			06/09/13 00:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/09/13 00:13	1
2-Hexanone	ND		5.0	1.2	ug/L			06/09/13 00:13	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/09/13 00:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/09/13 00:13	1
Acetone	ND		10	3.0	ug/L			06/09/13 00:13	1
Benzene	ND		1.0	0.41	ug/L			06/09/13 00:13	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/09/13 00:13	1
Bromoform	ND		1.0	0.26	ug/L			06/09/13 00:13	1
Bromomethane	ND		1.0	0.69	ug/L			06/09/13 00:13	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/09/13 00:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/09/13 00:13	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/09/13 00:13	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/09/13 00:13	1
Chloroethane	ND		1.0	0.32	ug/L			06/09/13 00:13	1
Chloroform	ND		1.0	0.34	ug/L			06/09/13 00:13	1
Chloromethane	ND		1.0	0.35	ug/L			06/09/13 00:13	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/09/13 00:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/09/13 00:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/09/13 00:13	1
Styrene	ND		1.0	0.73	ug/L			06/09/13 00:13	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/09/13 00:13	1
Toluene	ND		1.0	0.51	ug/L			06/09/13 00:13	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/09/13 00:13	1
Trichloroethene	ND		1.0	0.46	ug/L			06/09/13 00:13	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/09/13 00:13	1
Vinyl acetate	ND		5.0	0.85	ug/L			06/09/13 00:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/09/13 00:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 137		06/09/13 00:13	1
Toluene-d8 (Surr)	99		71 - 126		06/09/13 00:13	1
4-Bromofluorobenzene (Surr)	97		73 - 120		06/09/13 00:13	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			06/14/13 12:50	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			06/14/13 12:50	1
Benzene	ND		0.20	0.023	ug/L			06/14/13 12:50	1
Ethylbenzene	ND		0.20	0.029	ug/L			06/14/13 12:50	1
Isopropylbenzene	ND		0.20	0.027	ug/L			06/14/13 12:50	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			06/14/13 12:50	1
m,p-Xylene	ND		0.40	0.054	ug/L			06/14/13 12:50	1
n-Butylbenzene	ND		0.20	0.031	ug/L			06/14/13 12:50	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-39619-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-39619-1

Date Collected: 06/06/13 14:15

Matrix: Wastewater

Date Received: 06/06/13 14:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			06/14/13 12:50	1
o-Xylene	ND		0.20	0.027	ug/L			06/14/13 12:50	1
p-Cymene	ND		0.20	0.030	ug/L			06/14/13 12:50	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			06/14/13 12:50	1
Toluene	ND		0.20	0.036	ug/L			06/14/13 12:50	1
Xylenes, Total	ND		0.60	0.054	ug/L			06/14/13 12:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		63 - 145		06/14/13 12:50	1
4-Bromofluorobenzene	110		64 - 141		06/14/13 12:50	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	78.2		50.0	19.3	ug/L		06/07/13 07:20	06/07/13 18:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.14		0.010	0.0050	mg/L		06/10/13 01:30	06/10/13 20:34	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.90	HF	0.100	0.100	SU			06/06/13 18:13	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-39619-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-39621-1

Date Collected: 06/06/13 14:25

Matrix: Wastewater

Date Received: 06/06/13 14:40

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	94400		500	100	ug/L		06/07/13 07:20	06/07/13 18:55	1
Iron	177		50.0	19.3	ug/L		06/07/13 07:20	06/07/13 18:55	1
Magnesium	47000		200	43.4	ug/L		06/07/13 07:20	06/07/13 18:55	1
Potassium	3610		500	100	ug/L		06/07/13 07:20	06/07/13 18:55	1
Sodium	42700		1000	324	ug/L		06/07/13 07:20	06/07/13 18:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.7		0.50	0.28	mg/L			06/09/13 12:17	1
Sulfate	93.0		2.0	0.35	mg/L			06/09/13 12:17	1
Alkalinity, Total	308		100	40.0	mg/L			06/11/13 11:11	10

Lab Chronicle

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

TestAmerica Job ID: 480-39619-1

Client Sample ID: Post-Carbon

Date Collected: 06/06/13 14:15

Date Received: 06/06/13 14:40

Lab Sample ID: 480-39619-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	122977	06/09/13 00:13	TRF	TAL BUF
Total/NA	Analysis	8021B		1	123919	06/14/13 12:50	DB	TAL BUF
Total/NA	Prep	200.7			122594	06/07/13 07:20	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	122922	06/07/13 18:58	LH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	122613	06/06/13 18:13	KS	TAL BUF
Total/NA	Prep	Distill/CN			123031	06/10/13 01:30	LAW	TAL BUF
Total/NA	Analysis	335.4		1	123186	06/10/13 20:34	JE	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 06/06/13 14:25

Date Received: 06/06/13 14:40

Lab Sample ID: 480-39621-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			122594	06/07/13 07:20	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	122922	06/07/13 18:55	LH	TAL BUF
Total/NA	Analysis	300.0		1	122820	06/09/13 12:17	KAC	TAL BUF
Total/NA	Analysis	310.2		10	123395	06/11/13 11:11	JE	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: 480-39619-1

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	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-14
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	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
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	02-10-14
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: 480-39619-1

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: 480-39619-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-39619-1	Post-Carbon	Wastewater	06/06/13 14:15	06/06/13 14:40
480-39621-1	Pre-Carbon	Wastewater	06/06/13 14:25	06/06/13 14:40

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/18/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-39621 Chain of Custody

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-39619-1

Login Number: 39619

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-39619-1

Login Number: 39621

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-40898-1

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

Sampling Event: Qtrly Post-Carbon

Qtrly Pre-Carbon

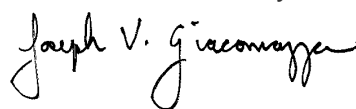
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

7/9/2013 2:19:36 PM

Joe Giacomazza, Project Administrator

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Project Manager II

brian.fischer@testamericainc.com

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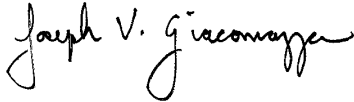
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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



Joe Giacomazza
Project Administrator
7/9/2013 2:19:36 PM

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-40898-1

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.

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

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, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-40898-1

Job ID: 480-40898-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-40898-1

Receipt

The samples were received on 6/26/2013 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 3.6° C and 3.6° C.

GC/MS VOA

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-40898-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-40898-1 MS), (480-40898-1 MSD), Pre-Carbon (480-40898-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 127325 was outside control limits.

No other analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

Ion Chromatography

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-40898-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8021B: The following sample were diluted to bring the concentration of target analytes within the calibration range: (480-40898-1 MS), (480-40898-1 MSD), Pre-Carbon (480-40898-1). 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 480-126324 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 (480-40899-1) was not performed.

No other analytical or quality issues were noted.

General Chemistry

Method(s) 310.2: The method blank for batch 126710 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 (480-40898-1)

Method(s) SM 5210B: For batch # 126224, the USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results are reported. (USB 480-126224/1)

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 (480-40899-1)

Case Narrative

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

TestAmerica Job ID: 480-40898-1

Job ID: 480-40898-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

No other analytical or quality issues were noted.

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: 480-40898-1

Client Sample ID: Pre-Carbon

Date Collected: 06/26/13 14:45

Date Received: 06/26/13 15:00

Lab Sample ID: 480-40898-1

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		40	33	ug/L			06/29/13 01:33	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			06/29/13 01:33	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			06/29/13 01:33	40
1,1-Dichloroethane	ND		40	15	ug/L			06/29/13 01:33	40
1,1-Dichloroethene	ND		40	12	ug/L			06/29/13 01:33	40
1,2-Dichloroethane	ND		40	8.4	ug/L			06/29/13 01:33	40
1,2-Dichloroethene, Total	ND		80	28	ug/L			06/29/13 01:33	40
1,2-Dichloropropane	ND		40	29	ug/L			06/29/13 01:33	40
2-Hexanone	ND		200	50	ug/L			06/29/13 01:33	40
2-Butanone (MEK)	ND		400	53	ug/L			06/29/13 01:33	40
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			06/29/13 01:33	40
Acetone	ND		400	120	ug/L			06/29/13 01:33	40
Bromodichloromethane	ND		40	16	ug/L			06/29/13 01:33	40
Bromoform	ND		40	10	ug/L			06/29/13 01:33	40
Bromomethane	ND		40	28	ug/L			06/29/13 01:33	40
Carbon disulfide	ND		40	7.6	ug/L			06/29/13 01:33	40
Carbon tetrachloride	ND		40	11	ug/L			06/29/13 01:33	40
Chlorobenzene	ND		40	30	ug/L			06/29/13 01:33	40
Dibromochloromethane	ND		40	13	ug/L			06/29/13 01:33	40
Chloroethane	ND		40	13	ug/L			06/29/13 01:33	40
Chloroform	17	J	40	14	ug/L			06/29/13 01:33	40
Chloromethane	ND		40	14	ug/L			06/29/13 01:33	40
cis-1,3-Dichloropropene	ND		40	14	ug/L			06/29/13 01:33	40
Ethylbenzene	1500		40	30	ug/L			06/29/13 01:33	40
Methylene Chloride	ND		40	18	ug/L			06/29/13 01:33	40
Styrene	ND		40	29	ug/L			06/29/13 01:33	40
Tetrachloroethene	ND		40	14	ug/L			06/29/13 01:33	40
Toluene	3700		40	20	ug/L			06/29/13 01:33	40
trans-1,3-Dichloropropene	ND		40	15	ug/L			06/29/13 01:33	40
Trichloroethene	ND		40	18	ug/L			06/29/13 01:33	40
Vinyl chloride	ND		40	36	ug/L			06/29/13 01:33	40
Vinyl acetate	ND		200	34	ug/L			06/29/13 01:33	40
Xylenes, Total	920		80	26	ug/L			06/29/13 01:33	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		06/29/13 01:33	40
Toluene-d8 (Surr)	101		71 - 126		06/29/13 01:33	40
4-Bromofluorobenzene (Surr)	103		73 - 120		06/29/13 01:33	40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	7600		200	82	ug/L			07/03/13 13:18	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137		07/03/13 13:18	200
Toluene-d8 (Surr)	98		71 - 126		07/03/13 13:18	200
4-Bromofluorobenzene (Surr)	97		73 - 120		07/03/13 13:18	200

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-40898-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-40898-1

Date Collected: 06/26/13 14:45

Matrix: Wastewater

Date Received: 06/26/13 15:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	27		2.0	0.35	ug/L			07/01/13 11:07	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			07/01/13 11:07	10
Isopropylbenzene	ND		2.0	0.27	ug/L			07/01/13 11:07	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			07/01/13 11:07	10
m,p-Xylene	390		4.0	0.54	ug/L			07/01/13 11:07	10
n-Butylbenzene	ND		2.0	0.31	ug/L			07/01/13 11:07	10
n-Propylbenzene	ND		2.0	1.3	ug/L			07/01/13 11:07	10
o-Xylene	210		2.0	0.27	ug/L			07/01/13 11:07	10
p-Cymene	ND		2.0	0.30	ug/L			07/01/13 11:07	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			07/01/13 11:07	10
Xylenes, Total	600		6.0	0.54	ug/L			07/01/13 11:07	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		63 - 145					07/01/13 11:07	10
4-Bromofluorobenzene	108		64 - 141					07/01/13 11:07	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	960		20	2.9	ug/L			07/01/13 12:00	100
Toluene	2600		20	3.6	ug/L			07/01/13 12:00	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145					07/01/13 12:00	100
4-Bromofluorobenzene	108		64 - 141					07/01/13 12:00	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6700		100	12	ug/L			07/01/13 13:34	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		63 - 145					07/01/13 13:34	500
4-Bromofluorobenzene	105		64 - 141					07/01/13 13:34	500

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	144000		500	100	ug/L		06/27/13 13:30	06/28/13 22:37	1
Iron	787		50.0	19.3	ug/L		06/27/13 13:30	06/28/13 22:37	1
Magnesium	96800		200	43.4	ug/L		06/27/13 13:30	06/28/13 22:37	1
Potassium	5940		500	100	ug/L		06/27/13 13:30	06/28/13 22:37	1
Sodium	75200		1000	324	ug/L		06/27/13 13:30	06/28/13 22:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	119		2.5	1.4	mg/L			06/29/13 00:40	5
Sulfate	167		10.0	1.7	mg/L			06/29/13 00:40	5
Alkalinity, Total	544	B	100	40.0	mg/L			06/28/13 19:39	10

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-40898-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-40899-1

Date Collected: 06/26/13 14:30

Matrix: Wastewater

Date Received: 06/26/13 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			07/01/13 15:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/01/13 15:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/01/13 15:24	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/01/13 15:24	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/01/13 15:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/01/13 15:24	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			07/01/13 15:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/01/13 15:24	1
2-Hexanone	ND		5.0	1.2	ug/L			07/01/13 15:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/01/13 15:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/01/13 15:24	1
Acetone	ND		10	3.0	ug/L			07/01/13 15:24	1
Benzene	ND		1.0	0.41	ug/L			07/01/13 15:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/01/13 15:24	1
Bromoform	ND		1.0	0.26	ug/L			07/01/13 15:24	1
Bromomethane	ND		1.0	0.69	ug/L			07/01/13 15:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/01/13 15:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/01/13 15:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/01/13 15:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/01/13 15:24	1
Chloroethane	ND		1.0	0.32	ug/L			07/01/13 15:24	1
Chloroform	ND		1.0	0.34	ug/L			07/01/13 15:24	1
Chloromethane	ND		1.0	0.35	ug/L			07/01/13 15:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/01/13 15:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/01/13 15:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/01/13 15:24	1
Styrene	ND		1.0	0.73	ug/L			07/01/13 15:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/01/13 15:24	1
Toluene	ND		1.0	0.51	ug/L			07/01/13 15:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/01/13 15:24	1
Trichloroethene	ND		1.0	0.46	ug/L			07/01/13 15:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/01/13 15:24	1
Vinyl acetate	ND		5.0	0.85	ug/L			07/01/13 15:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/01/13 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		07/01/13 15:24	1
Toluene-d8 (Surr)	104		71 - 126		07/01/13 15:24	1
4-Bromofluorobenzene (Surr)	100		73 - 120		07/01/13 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		5.1	0.62	ug/L		06/27/13 14:23	06/28/13 14:43	1
Acenaphthene	ND		5.1	0.42	ug/L		06/27/13 14:23	06/28/13 14:43	1
Acenaphthylene	ND		5.1	0.39	ug/L		06/27/13 14:23	06/28/13 14:43	1
Anthracene	ND		5.1	0.29	ug/L		06/27/13 14:23	06/28/13 14:43	1
Benzo[a]anthracene	ND		5.1	0.37	ug/L		06/27/13 14:23	06/28/13 14:43	1
Benzo[a]pyrene	ND		5.1	0.48	ug/L		06/27/13 14:23	06/28/13 14:43	1
Benzo[b]fluoranthene	ND		5.1	0.35	ug/L		06/27/13 14:23	06/28/13 14:43	1
Benzo[g,h,i]perylene	ND		5.1	0.36	ug/L		06/27/13 14:23	06/28/13 14:43	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-40898-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-40899-1

Date Collected: 06/26/13 14:30

Matrix: Wastewater

Date Received: 06/26/13 15:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		5.1	0.75	ug/L		06/27/13 14:23	06/28/13 14:43	1
Biphenyl	ND		5.1	0.67	ug/L		06/27/13 14:23	06/28/13 14:43	1
Bis(2-ethylhexyl) phthalate	ND		5.1	1.9	ug/L		06/27/13 14:23	06/28/13 14:43	1
Carbazole	ND		5.1	0.31	ug/L		06/27/13 14:23	06/28/13 14:43	1
Chrysene	ND		5.1	0.34	ug/L		06/27/13 14:23	06/28/13 14:43	1
Dibenz(a,h)anthracene	ND		5.1	0.43	ug/L		06/27/13 14:23	06/28/13 14:43	1
Dibenzofuran	ND		10	0.52	ug/L		06/27/13 14:23	06/28/13 14:43	1
Fluoranthene	ND		5.1	0.41	ug/L		06/27/13 14:23	06/28/13 14:43	1
Fluorene	ND		5.1	0.37	ug/L		06/27/13 14:23	06/28/13 14:43	1
Indeno[1,2,3-cd]pyrene	ND		5.1	0.48	ug/L		06/27/13 14:23	06/28/13 14:43	1
Naphthalene	ND		5.1	0.78	ug/L		06/27/13 14:23	06/28/13 14:43	1
Pentachlorophenol	ND		10	2.3	ug/L		06/27/13 14:23	06/28/13 14:43	1
Phenanthrene	ND		5.1	0.45	ug/L		06/27/13 14:23	06/28/13 14:43	1
Phenol	ND		5.1	0.40	ug/L		06/27/13 14:23	06/28/13 14:43	1
Pyrene	ND		5.1	0.35	ug/L		06/27/13 14:23	06/28/13 14:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		52 - 132				06/27/13 14:23	06/28/13 14:43	1
2-Fluorobiphenyl	62		48 - 120				06/27/13 14:23	06/28/13 14:43	1
2-Fluorophenol	30		20 - 120				06/27/13 14:23	06/28/13 14:43	1
Nitrobenzene-d5	55		46 - 120				06/27/13 14:23	06/28/13 14:43	1
p-Terphenyl-d14	67		67 - 150				06/27/13 14:23	06/28/13 14:43	1
Phenol-d5	25		16 - 120				06/27/13 14:23	06/28/13 14:43	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			07/01/13 12:40	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			07/01/13 12:40	1
Benzene	ND		0.20	0.023	ug/L			07/01/13 12:40	1
Ethylbenzene	ND		0.20	0.029	ug/L			07/01/13 12:40	1
Isopropylbenzene	ND		0.20	0.027	ug/L			07/01/13 12:40	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			07/01/13 12:40	1
m,p-Xylene	ND		0.40	0.054	ug/L			07/01/13 12:40	1
n-Butylbenzene	ND		0.20	0.031	ug/L			07/01/13 12:40	1
n-Propylbenzene	ND		0.20	0.13	ug/L			07/01/13 12:40	1
o-Xylene	ND		0.20	0.027	ug/L			07/01/13 12:40	1
p-Cymene	ND		0.20	0.030	ug/L			07/01/13 12:40	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			07/01/13 12:40	1
Toluene	ND		0.20	0.036	ug/L			07/01/13 12:40	1
Xylenes, Total	ND		0.60	0.054	ug/L			07/01/13 12:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145					07/01/13 12:40	1
4-Bromofluorobenzene	109		64 - 141					07/01/13 12:40	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.048	0.0064	ug/L		06/28/13 07:39	07/02/13 11:02	1
alpha-BHC	ND		0.048	0.0064	ug/L		06/28/13 07:39	07/02/13 11:02	1
beta-BHC	ND		0.048	0.024	ug/L		06/28/13 07:39	07/02/13 11:02	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-40898-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-40899-1

Date Collected: 06/26/13 14:30

Matrix: Wastewater

Date Received: 06/26/13 15:00

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.048	0.0096	ug/L		06/28/13 07:39	07/02/13 11:02	1
gamma-BHC (Lindane)	ND		0.048	0.0058	ug/L		06/28/13 07:39	07/02/13 11:02	1
Chlordane (technical)	ND		0.48	0.28	ug/L		06/28/13 07:39	07/02/13 11:02	1
4,4'-DDD	ND		0.048	0.0089	ug/L		06/28/13 07:39	07/02/13 11:02	1
4,4'-DDE	ND		0.048	0.011	ug/L		06/28/13 07:39	07/02/13 11:02	1
4,4'-DDT	ND		0.048	0.011	ug/L		06/28/13 07:39	07/02/13 11:02	1
Dieldrin	ND		0.048	0.0094	ug/L		06/28/13 07:39	07/02/13 11:02	1
Endosulfan I	ND		0.048	0.011	ug/L		06/28/13 07:39	07/02/13 11:02	1
Endosulfan II	ND		0.048	0.012	ug/L		06/28/13 07:39	07/02/13 11:02	1
Endosulfan sulfate	ND		0.048	0.015	ug/L		06/28/13 07:39	07/02/13 11:02	1
Endrin	ND		0.048	0.013	ug/L		06/28/13 07:39	07/02/13 11:02	1
Endrin aldehyde	ND		0.048	0.016	ug/L		06/28/13 07:39	07/02/13 11:02	1
Heptachlor	ND		0.048	0.0082	ug/L		06/28/13 07:39	07/02/13 11:02	1
Heptachlor epoxide	ND		0.048	0.0051	ug/L		06/28/13 07:39	07/02/13 11:02	1
Toxaphene	ND		0.48	0.12	ug/L		06/28/13 07:39	07/02/13 11:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	51		23 - 120	06/28/13 07:39	07/02/13 11:02	1
Tetrachloro-m-xylene	70		36 - 120	06/28/13 07:39	07/02/13 11:02	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		06/27/13 13:30	06/28/13 21:26	1
Iron	307		50.0	19.3	ug/L		06/27/13 13:30	06/28/13 21:26	1
Manganese	229	B	3.0	0.40	ug/L		06/27/13 13:30	06/28/13 21:26	1
Zinc	4.1	J	10.0	1.5	ug/L		06/27/13 13:30	06/28/13 21:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		4.8	1.3	mg/L		07/03/13 02:28	07/03/13 02:46	1
Cyanide, Total	0.56		0.020	0.010	mg/L		06/28/13 09:18	06/28/13 18:09	2
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		06/29/13 01:00	06/29/13 14:53	1
Total Dissolved Solids	995		10.0	4.0	mg/L			06/27/13 18:22	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			06/26/13 22:59	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			06/27/13 22:01	1
pH	7.90	HF	0.100	0.100	SU			06/27/13 14:36	1

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-40898-1

Client Sample ID: Pre-Carbon

Date Collected: 06/26/13 14:45

Date Received: 06/26/13 15:00

Lab Sample ID: 480-40898-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		40	126608	06/29/13 01:33	TRB	TAL BUF
Total/NA	Analysis	8260B	DL	200	127325	07/03/13 13:18	ND	TAL BUF
Total/NA	Analysis	8021B		10	126855	07/01/13 11:07	DB	TAL BUF
Total/NA	Analysis	8021B		10	126855	07/01/13 11:07	DB	TAL BUF
Total/NA	Analysis	8021B	DL	100	126855	07/01/13 12:00	DB	TAL BUF
Total/NA	Analysis	8021B	DL2	500	126855	07/01/13 13:34	DB	TAL BUF
Total/NA	Prep	200.7			126323	06/27/13 13:30	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	126732	06/28/13 22:37	LH	TAL BUF
Total/NA	Analysis	300.0		5	126597	06/29/13 00:40	KAC	TAL BUF
Total/NA	Analysis	310.2		10	126710	06/28/13 19:39	NH	TAL BUF

Client Sample ID: Post-Carbon

Date Collected: 06/26/13 14:30

Date Received: 06/26/13 15:00

Lab Sample ID: 480-40899-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	126871	07/01/13 15:24	RL	TAL BUF
Total/NA	Prep	3510C			126360	06/27/13 14:23	TG	TAL BUF
Total/NA	Analysis	8270C		1	126533	06/28/13 14:43	HTL	TAL BUF
Total/NA	Analysis	8021B		1	126855	07/01/13 12:40	DB	TAL BUF
Total/NA	Analysis	8021B		1	126855	07/01/13 12:40	DB	TAL BUF
Total/NA	Prep	3510C			126487	06/28/13 07:39	MZ	TAL BUF
Total/NA	Analysis	608		1	127051	07/02/13 11:02	LW	TAL BUF
Total/NA	Prep	3510C			126487	06/28/13 07:39	MZ	TAL BUF
Total/NA	Analysis	608		1	127051	07/02/13 11:02	LW	TAL BUF
Total/NA	Prep	200.7			126324	06/27/13 13:30	SS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	126731	06/28/13 21:26	LH	TAL BUF
Total/NA	Analysis	SM 5210B		1	126224	06/26/13 22:59	KS	TAL BUF
Total/NA	Analysis	SM 2540D		1	126395	06/27/13 22:01	KS	TAL BUF
Total/NA	Analysis	SM 2540C		1	126410	06/27/13 18:22	KS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	126418	06/27/13 14:36	ML	TAL BUF
Total/NA	Prep	Distill/CN			126527	06/28/13 09:18	KWJ	TAL BUF
Total/NA	Analysis	335.4		2	126687	06/28/13 18:09	KWJ	TAL BUF
Total/NA	Prep	Distill/Phenol			126744	06/29/13 01:00	JB	TAL BUF
Total/NA	Analysis	420.4		1	126806	06/29/13 14:53	RB	TAL BUF
Total/NA	Prep	1664A			127230	07/03/13 02:28	LAW	TAL BUF
Total/NA	Analysis	1664A		1	127231	07/03/13 02:46	LAW	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-40898-1

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	06-30-14
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
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	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
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	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-40898-1

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: 480-40898-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-40898-1	Pre-Carbon	Wastewater	06/26/13 14:45	06/26/13 15:00
480-40899-1	Post-Carbon	Wastewater	06/26/13 14:30	06/26/13 15:00

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480-40899 Chain of Custody

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-40898-1

Login Number: 40898

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-40898-1

Login Number: 40899

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

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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: 480-42936-1

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

Sampling Event: Mthly Post-Carbon

Mthly Pre-Carbon

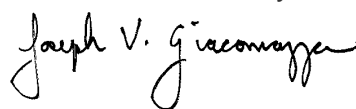
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

8/9/2013 11:31:33 AM

Joe Giacomazza, Project Administrator

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Project Manager II

brian.fischer@testamericainc.com

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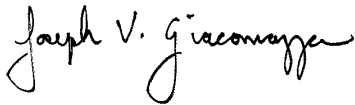
www.testamericainc.com

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

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

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

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



Joe Giacomazza
Project Administrator
8/9/2013 11:31:33 AM

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-42936-1

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.

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.
α	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, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-42936-1

Job ID: 480-42936-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-42936-1

Receipt

The samples were received on 7/31/2013 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt time was 5.2° C.

GC/MS VOA

No analytical or quality issues were noted.

Ion Chromatography

Method(s) 300.0: The following samples in batch 132087 were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-42936-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA

No analytical or quality issues were noted.

GC Semi VOA

Method(s) 8021B: The continuing calibration verification (CCV) for analytical batch 132895 recovered outside control limits for surrogates. The recovery in the sample is compliant, therefore, the data have been qualified and reported.

No other analytical or quality issues were noted.

Metals

Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-132007 contained total calcium 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 (480-42936-1) was not performed.

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 (480-42937-1)

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: 480-42936-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-42936-1

Date Collected: 07/31/13 15:10

Matrix: Wastewater

Date Received: 07/31/13 16:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	132000	B	500	100	ug/L		08/02/13 09:15	08/02/13 18:45	1
Iron	489		50.0	19.3	ug/L		08/02/13 09:15	08/02/13 18:45	1
Magnesium	89500		200	43.4	ug/L		08/02/13 09:15	08/02/13 18:45	1
Potassium	6330		500	100	ug/L		08/02/13 09:15	08/02/13 18:45	1
Sodium	78500		1000	324	ug/L		08/02/13 09:15	08/02/13 18:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	119		2.5	1.4	mg/L			08/02/13 14:31	5
Sulfate	163		10.0	1.7	mg/L			08/02/13 14:31	5
Alkalinity, Total	597		100	40.0	mg/L			08/01/13 12:27	10

Client Sample Results

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

TestAmerica Job ID: 480-42936-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-42937-1

Date Collected: 07/31/13 15:00

Matrix: Wastewater

Date Received: 07/31/13 16:00

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			08/05/13 02:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/05/13 02:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/05/13 02:22	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/05/13 02:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/05/13 02:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/05/13 02:22	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			08/05/13 02:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/05/13 02:22	1
2-Hexanone	ND		5.0	1.2	ug/L			08/05/13 02:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/05/13 02:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/05/13 02:22	1
Acetone	ND		10	3.0	ug/L			08/05/13 02:22	1
Benzene	0.42	J	1.0	0.41	ug/L			08/05/13 02:22	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/05/13 02:22	1
Bromoform	ND		1.0	0.26	ug/L			08/05/13 02:22	1
Bromomethane	ND		1.0	0.69	ug/L			08/05/13 02:22	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/05/13 02:22	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/05/13 02:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/05/13 02:22	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/05/13 02:22	1
Chloroethane	ND		1.0	0.32	ug/L			08/05/13 02:22	1
Chloroform	ND		1.0	0.34	ug/L			08/05/13 02:22	1
Chloromethane	ND		1.0	0.35	ug/L			08/05/13 02:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/05/13 02:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/05/13 02:22	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/05/13 02:22	1
Styrene	ND		1.0	0.73	ug/L			08/05/13 02:22	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/05/13 02:22	1
Toluene	ND		1.0	0.51	ug/L			08/05/13 02:22	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/05/13 02:22	1
Trichloroethene	ND		1.0	0.46	ug/L			08/05/13 02:22	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/05/13 02:22	1
Vinyl acetate	ND		5.0	0.85	ug/L			08/05/13 02:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/05/13 02:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137		08/05/13 02:22	1
Toluene-d8 (Surr)	98		71 - 126		08/05/13 02:22	1
4-Bromofluorobenzene (Surr)	101		73 - 120		08/05/13 02:22	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/08/13 11:34	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/08/13 11:34	1
Benzene	0.43		0.20	0.023	ug/L			08/08/13 11:34	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/08/13 11:34	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/08/13 11:34	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/08/13 11:34	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/08/13 11:34	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/08/13 11:34	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-42936-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-42937-1

Date Collected: 07/31/13 15:00

Matrix: Wastewater

Date Received: 07/31/13 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			08/08/13 11:34	1
o-Xylene	ND		0.20	0.027	ug/L			08/08/13 11:34	1
p-Cymene	ND		0.20	0.030	ug/L			08/08/13 11:34	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/08/13 11:34	1
Toluene	ND		0.20	0.036	ug/L			08/08/13 11:34	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/08/13 11:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	70		63 - 145		08/08/13 11:34	1
4-Bromofluorobenzene	76		64 - 141		08/08/13 11:34	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	192		50.0	19.3	ug/L		08/02/13 09:15	08/02/13 18:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.46		0.010	0.0050	mg/L		08/01/13 18:00	08/02/13 13:03	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.80	HF	0.100	0.100	SU			07/31/13 22:08	1

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-42936-1

Client Sample ID: Pre-Carbon

Date Collected: 07/31/13 15:10

Date Received: 07/31/13 16:00

Lab Sample ID: 480-42936-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			132007	08/02/13 09:15	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	132207	08/02/13 18:45	AMH	TAL BUF
Total/NA	Analysis	310.2		10	131902	08/01/13 12:27	RMB	TAL BUF
Total/NA	Analysis	300.0		5	132087	08/02/13 14:31	KRC	TAL BUF

Client Sample ID: Post-Carbon

Date Collected: 07/31/13 15:00

Date Received: 07/31/13 16:00

Lab Sample ID: 480-42937-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	132287	08/05/13 02:22	CDC	TAL BUF
Total/NA	Analysis	8021B		1	132895	08/08/13 11:34	DGB	TAL BUF
Total/NA	Prep	200.7			132007	08/02/13 09:15	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	132207	08/02/13 18:10	AMH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	131742	07/31/13 22:08	KS	TAL BUF
Total/NA	Prep	Distill/CN			131943	08/01/13 18:00	JMB	TAL BUF
Total/NA	Analysis	335.4		1	132128	08/02/13 13:03	KMF	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: 480-42936-1

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	06-30-14
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
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	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13 *
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13 *

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-42936-1

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: 480-42936-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-42936-1	Pre-Carbon	Wastewater	07/31/13 15:10	07/31/13 16:00
480-42937-1	Post-Carbon	Wastewater	07/31/13 15:00	07/31/13 16:00

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

Page 13 of 16

8/9/2013

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-42936-1

Login Number: 42936

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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



Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-42936-1

Login Number: 42937

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-44744-1

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:

9/6/2013 2:40:02 PM

Brian Fischer, Project Manager II

brian.fischer@testamericainc.com

LINKS

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results through

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www.testamericainc.com

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

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

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

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



Brian Fischer
Project Manager II
9/6/2013 2:40:02 PM

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Definitions/Glossary

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

TestAmerica Job ID: 480-44744-1

Qualifiers

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.
B	Compound was found in the blank and sample.

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
B7	Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the blank.
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

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-44744-1

Job ID: 480-44744-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-44744-1

Comments

No additional comments.

Receipt

The samples were received on 8/28/2013 1:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.2° C, 3.2° C, 3.5° C and 3.5° C.

Except:

Sample coc listed test methods, however, individual methods were not checked off for the sample point. Methods present in the project and on the id labels were used to select methods for the login.

GC/MS VOA

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-44744-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA

Method(s) 8270C: Surrogate recovery for the following sample was outside control limits: Post-Carbon (480-44745-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270C: The method blank for batch 136603 contained multiple analytes 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.

No other analytical or quality issues were noted.

Ion Chromatography

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-44744-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-44744-2). 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 480-136762 contained total zinc above the method detection limit. This target analyte concentration was less than the 2.2 times the method detection limit; therefore, re-extraction and/or re-analysis of sample Post-Carbon (480-44745-1) was not performed.

No other analytical or quality issues were noted.

General Chemistry

Method(s) 420.4, 9066: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 137156 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. (480-44745-1 MS)

Case Narrative

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

TestAmerica Job ID: 480-44744-1

Job ID: 480-44744-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results 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 (480-44745-1)

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: 480-44744-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-44744-2

Date Collected: 08/28/13 12:45

Matrix: Wastewater

Date Received: 08/28/13 13:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			09/05/13 13:24	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			09/05/13 13:24	50
1,1,2-Trichloroethane	ND		50	12	ug/L			09/05/13 13:24	50
1,1-Dichloroethane	ND		50	19	ug/L			09/05/13 13:24	50
1,1-Dichloroethene	ND		50	15	ug/L			09/05/13 13:24	50
1,2-Dichloroethane	ND		50	11	ug/L			09/05/13 13:24	50
1,2-Dichloroethene, Total	ND		100	35	ug/L			09/05/13 13:24	50
1,2-Dichloropropane	ND		50	36	ug/L			09/05/13 13:24	50
2-Hexanone	ND		250	62	ug/L			09/05/13 13:24	50
2-Butanone (MEK)	ND		500	66	ug/L			09/05/13 13:24	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			09/05/13 13:24	50
Acetone	ND		500	150	ug/L			09/05/13 13:24	50
Benzene	3100		50	21	ug/L			09/05/13 13:24	50
Bromodichloromethane	ND		50	20	ug/L			09/05/13 13:24	50
Bromoform	ND		50	13	ug/L			09/05/13 13:24	50
Bromomethane	ND		50	35	ug/L			09/05/13 13:24	50
Carbon disulfide	ND		50	9.5	ug/L			09/05/13 13:24	50
Carbon tetrachloride	ND		50	14	ug/L			09/05/13 13:24	50
Chlorobenzene	ND		50	38	ug/L			09/05/13 13:24	50
Dibromochloromethane	ND		50	16	ug/L			09/05/13 13:24	50
Chloroethane	ND		50	16	ug/L			09/05/13 13:24	50
Chloroform	ND		50	17	ug/L			09/05/13 13:24	50
Chloromethane	ND		50	18	ug/L			09/05/13 13:24	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			09/05/13 13:24	50
Ethylbenzene	530		50	37	ug/L			09/05/13 13:24	50
Methylene Chloride	ND		50	22	ug/L			09/05/13 13:24	50
Styrene	ND		50	37	ug/L			09/05/13 13:24	50
Tetrachloroethene	ND		50	18	ug/L			09/05/13 13:24	50
Toluene	1400		50	26	ug/L			09/05/13 13:24	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			09/05/13 13:24	50
Trichloroethene	ND		50	23	ug/L			09/05/13 13:24	50
Vinyl chloride	ND		50	45	ug/L			09/05/13 13:24	50
Vinyl acetate	ND		250	43	ug/L			09/05/13 13:24	50
Xylenes, Total	170		100	33	ug/L			09/05/13 13:24	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		09/05/13 13:24	50
Toluene-d8 (Surr)	112		71 - 126		09/05/13 13:24	50
4-Bromofluorobenzene (Surr)	109		73 - 120		09/05/13 13:24	50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			09/04/13 12:04	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/04/13 12:04	1
Isopropylbenzene	3.4		0.20	0.027	ug/L			09/04/13 12:04	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/04/13 12:04	1
m,p-Xylene	58		0.40	0.054	ug/L			09/04/13 12:04	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/04/13 12:04	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/04/13 12:04	1
p-Cymene	ND		0.20	0.030	ug/L			09/04/13 12:04	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-44744-1

Client Sample ID: Pre-Carbon

Date Collected: 08/28/13 12:45

Date Received: 08/28/13 13:15

Lab Sample ID: 480-44744-2

Matrix: Wastewater

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			09/04/13 12:04	1
Toluene	ND		0.20	0.036	ug/L			09/04/13 12:04	1
Xylenes, Total	140		0.60	0.054	ug/L			09/04/13 12:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145					09/04/13 12:04	1
4-Bromofluorobenzene	100		64 - 141					09/04/13 12:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3200		20	2.3	ug/L			09/04/13 12:50	100
Ethylbenzene	560		20	2.9	ug/L			09/04/13 12:50	100
o-Xylene	96		20	2.7	ug/L			09/04/13 12:50	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145					09/04/13 12:50	100
4-Bromofluorobenzene	100		64 - 141					09/04/13 12:50	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	33400	B7	500	100	ug/L		08/30/13 10:50	08/30/13 19:05	1
Iron	120		50.0	19.3	ug/L		08/30/13 10:50	08/30/13 19:05	1
Magnesium	8900		200	43.4	ug/L		08/30/13 10:50	08/30/13 19:05	1
Potassium	1820		500	100	ug/L		08/30/13 10:50	08/30/13 19:05	1
Sodium	12100		1000	324	ug/L		08/30/13 10:50	08/30/13 19:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.8		0.50	0.28	mg/L			08/30/13 05:18	1
Sulfate	112		10.0	1.7	mg/L			08/30/13 15:22	5
Alkalinity, Total	446		50.0	20.0	mg/L			09/03/13 17:07	5

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-44744-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-44745-1

Date Collected: 08/28/13 12:30

Matrix: Wastewater

Date Received: 08/28/13 13:15

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			09/05/13 14:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/05/13 14:18	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/05/13 14:18	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/05/13 14:18	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/05/13 14:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/05/13 14:18	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			09/05/13 14:18	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/05/13 14:18	1
2-Hexanone	ND		5.0	1.2	ug/L			09/05/13 14:18	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/05/13 14:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/05/13 14:18	1
Acetone	ND		10	3.0	ug/L			09/05/13 14:18	1
Benzene	3.3		1.0	0.41	ug/L			09/05/13 14:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/05/13 14:18	1
Bromoform	ND		1.0	0.26	ug/L			09/05/13 14:18	1
Bromomethane	ND		1.0	0.69	ug/L			09/05/13 14:18	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/05/13 14:18	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/05/13 14:18	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/05/13 14:18	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/05/13 14:18	1
Chloroethane	ND		1.0	0.32	ug/L			09/05/13 14:18	1
Chloroform	1.2		1.0	0.34	ug/L			09/05/13 14:18	1
Chloromethane	ND		1.0	0.35	ug/L			09/05/13 14:18	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/05/13 14:18	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/05/13 14:18	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/05/13 14:18	1
Styrene	ND		1.0	0.73	ug/L			09/05/13 14:18	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/05/13 14:18	1
Toluene	ND		1.0	0.51	ug/L			09/05/13 14:18	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/05/13 14:18	1
Trichloroethene	ND		1.0	0.46	ug/L			09/05/13 14:18	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/05/13 14:18	1
Vinyl acetate	ND		5.0	0.85	ug/L			09/05/13 14:18	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/05/13 14:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		66 - 137		09/05/13 14:18	1
Toluene-d8 (Surr)	97		71 - 126		09/05/13 14:18	1
4-Bromofluorobenzene (Surr)	93		73 - 120		09/05/13 14:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		5.0	0.60	ug/L		08/29/13 14:50	08/31/13 08:55	1
Acenaphthene	ND		5.0	0.41	ug/L		08/29/13 14:50	08/31/13 08:55	1
Acenaphthylene	ND		5.0	0.38	ug/L		08/29/13 14:50	08/31/13 08:55	1
Anthracene	ND		5.0	0.28	ug/L		08/29/13 14:50	08/31/13 08:55	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		08/29/13 14:50	08/31/13 08:55	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		08/29/13 14:50	08/31/13 08:55	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		08/29/13 14:50	08/31/13 08:55	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		08/29/13 14:50	08/31/13 08:55	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-44744-1

Client Sample ID: Post-Carbon

Date Collected: 08/28/13 12:30

Date Received: 08/28/13 13:15

Lab Sample ID: 480-44745-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		08/29/13 14:50	08/31/13 08:55	1
Biphenyl	ND		5.0	0.66	ug/L		08/29/13 14:50	08/31/13 08:55	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		08/29/13 14:50	08/31/13 08:55	1
Carbazole	ND		5.0	0.30	ug/L		08/29/13 14:50	08/31/13 08:55	1
Chrysene	ND		5.0	0.33	ug/L		08/29/13 14:50	08/31/13 08:55	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		08/29/13 14:50	08/31/13 08:55	1
Dibenzofuran	ND		10	0.51	ug/L		08/29/13 14:50	08/31/13 08:55	1
Fluoranthene	0.54	J	5.0	0.40	ug/L		08/29/13 14:50	08/31/13 08:55	1
Fluorene	ND		5.0	0.36	ug/L		08/29/13 14:50	08/31/13 08:55	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		08/29/13 14:50	08/31/13 08:55	1
Naphthalene	1.0	J	5.0	0.76	ug/L		08/29/13 14:50	08/31/13 08:55	1
Pentachlorophenol	ND		10	2.2	ug/L		08/29/13 14:50	08/31/13 08:55	1
Phenanthrene	1.3	J B	5.0	0.44	ug/L		08/29/13 14:50	08/31/13 08:55	1
Phenol	ND		5.0	0.39	ug/L		08/29/13 14:50	08/31/13 08:55	1
Pyrene	0.66	J B	5.0	0.34	ug/L		08/29/13 14:50	08/31/13 08:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	75		52 - 132	08/29/13 14:50	08/31/13 08:55	1
2-Fluorobiphenyl	42	X	48 - 120	08/29/13 14:50	08/31/13 08:55	1
2-Fluorophenol	22		20 - 120	08/29/13 14:50	08/31/13 08:55	1
Nitrobenzene-d5	42	X	46 - 120	08/29/13 14:50	08/31/13 08:55	1
p-Terphenyl-d14	64	X	67 - 150	08/29/13 14:50	08/31/13 08:55	1
Phenol-d5	17		16 - 120	08/29/13 14:50	08/31/13 08:55	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			09/04/13 13:34	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/04/13 13:34	1
Benzene	3.6		0.20	0.023	ug/L			09/04/13 13:34	1
Ethylbenzene	0.19	J	0.20	0.029	ug/L			09/04/13 13:34	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/04/13 13:34	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/04/13 13:34	1
m,p-Xylene	ND		0.40	0.054	ug/L			09/04/13 13:34	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/04/13 13:34	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/04/13 13:34	1
o-Xylene	ND		0.20	0.027	ug/L			09/04/13 13:34	1
p-Cymene	ND		0.20	0.030	ug/L			09/04/13 13:34	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/04/13 13:34	1
Toluene	0.26		0.20	0.036	ug/L			09/04/13 13:34	1
Xylenes, Total	ND		0.60	0.054	ug/L			09/04/13 13:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145		09/04/13 13:34	1
4-Bromofluorobenzene	101		64 - 141		09/04/13 13:34	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		08/29/13 14:46	08/30/13 12:24	1
alpha-BHC	ND		0.050	0.0066	ug/L		08/29/13 14:46	08/30/13 12:24	1
beta-BHC	ND		0.050	0.025	ug/L		08/29/13 14:46	08/30/13 12:24	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-44744-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-44745-1

Date Collected: 08/28/13 12:30

Matrix: Wastewater

Date Received: 08/28/13 13:15

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.050	0.010	ug/L		08/29/13 14:46	08/30/13 12:24	1
gamma-BHC (Lindane)	ND		0.050	0.0060	ug/L		08/29/13 14:46	08/30/13 12:24	1
Chlordane (technical)	ND		0.50	0.29	ug/L		08/29/13 14:46	08/30/13 12:24	1
4,4'-DDD	ND		0.050	0.0092	ug/L		08/29/13 14:46	08/30/13 12:24	1
4,4'-DDE	ND		0.050	0.012	ug/L		08/29/13 14:46	08/30/13 12:24	1
4,4'-DDT	ND		0.050	0.011	ug/L		08/29/13 14:46	08/30/13 12:24	1
Dieldrin	ND		0.050	0.0098	ug/L		08/29/13 14:46	08/30/13 12:24	1
Endosulfan I	ND		0.050	0.011	ug/L		08/29/13 14:46	08/30/13 12:24	1
Endosulfan II	ND		0.050	0.012	ug/L		08/29/13 14:46	08/30/13 12:24	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		08/29/13 14:46	08/30/13 12:24	1
Endrin	ND		0.050	0.014	ug/L		08/29/13 14:46	08/30/13 12:24	1
Endrin aldehyde	ND		0.050	0.016	ug/L		08/29/13 14:46	08/30/13 12:24	1
Heptachlor	ND		0.050	0.0085	ug/L		08/29/13 14:46	08/30/13 12:24	1
Heptachlor epoxide	ND		0.050	0.0053	ug/L		08/29/13 14:46	08/30/13 12:24	1
Toxaphene	ND		0.50	0.12	ug/L		08/29/13 14:46	08/30/13 12:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	77		23 - 120	08/29/13 14:46	08/30/13 12:24	1
Tetrachloro-m-xylene	78		36 - 120	08/29/13 14:46	08/30/13 12:24	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		08/30/13 10:50	08/30/13 18:35	1
Iron	106		50.0	19.3	ug/L		08/30/13 10:50	08/30/13 18:35	1
Manganese	144		3.0	0.40	ug/L		08/30/13 10:50	08/30/13 18:35	1
Zinc	2.8	J B	10.0	1.5	ug/L		08/30/13 10:50	08/30/13 18:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		09/04/13 01:21	09/04/13 01:21	1
Cyanide, Total	0.23		0.010	0.0050	mg/L		09/03/13 17:21	09/03/13 20:38	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		08/30/13 08:00	09/04/13 04:05	1
Total Dissolved Solids	721		10.0	4.0	mg/L			08/29/13 18:58	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			08/28/13 20:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			08/28/13 17:53	1
pH	7.86	HF	0.100	0.100	SU			08/29/13 19:22	1

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-44744-1

Client Sample ID: Pre-Carbon

Date Collected: 08/28/13 12:45

Date Received: 08/28/13 13:15

Lab Sample ID: 480-44744-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	137432	09/05/13 13:24	RAL	TAL BUF
Total/NA	Analysis	8021B		1	137042	09/04/13 12:04	DGB	TAL BUF
Total/NA	Analysis	8021B	DL	100	137042	09/04/13 12:50	DGB	TAL BUF
Total/NA	Prep	200.7			136762	08/30/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	137020	08/30/13 19:05	AMH	TAL BUF
Total/NA	Analysis	300.0		1	136548	08/30/13 05:18	KRC	TAL BUF
Total/NA	Analysis	300.0		5	136783	08/30/13 15:22	KRC	TAL BUF
Total/NA	Analysis	310.2		5	137135	09/03/13 17:07	NCH	TAL BUF

Client Sample ID: Post-Carbon

Date Collected: 08/28/13 12:30

Date Received: 08/28/13 13:15

Lab Sample ID: 480-44745-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	137408	09/05/13 14:18	CDC	TAL BUF
Total/NA	Prep	3510C			136603	08/29/13 14:50	TRG	TAL BUF
Total/NA	Analysis	8270C		1	136861	08/31/13 08:55	RMM	TAL BUF
Total/NA	Analysis	8021B		1	137042	09/04/13 13:34	DGB	TAL BUF
Total/NA	Prep	3510C			136598	08/29/13 14:46	TRG	TAL BUF
Total/NA	Analysis	608		1	136728	08/30/13 12:24	LMW	TAL BUF
Total/NA	Prep	200.7			136762	08/30/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	137020	08/30/13 18:35	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	136419	08/28/13 17:53	JMB	TAL BUF
Total/NA	Analysis	SM 5210B		1	136444	08/28/13 20:50	KS	TAL BUF
Total/NA	Analysis	SM 2540C		1	136636	08/29/13 18:58	JMB	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	136645	08/29/13 19:22	KS	TAL BUF
Total/NA	Prep	Distill/CN			137115	09/03/13 17:21	NCH	TAL BUF
Total/NA	Analysis	335.4		1	137128	09/03/13 20:38	JME	TAL BUF
Total/NA	Prep	1664A			137141	09/04/13 01:21	RMB	TAL BUF
Total/NA	Analysis	1664A		1	137144	09/04/13 01:21	RMB	TAL BUF
Total/NA	Prep	Distill/Phenol			136849	08/30/13 08:00	CLT	TAL BUF
Total/NA	Analysis	420.4		1	137156	09/04/13 04:05	RMB	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

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

TestAmerica Job ID: 480-44744-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	04-01-14

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	sec-Butylbenzene
8021B		Water	sec-Butylbenzene

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

Analysis Method	Prep Method	Matrix	Analyte
1664A	1664A	Wastewater	Oil & Grease
1664A	1664A	Water	Oil & Grease
608	3510C	Wastewater	4,4'-DDD
608	3510C	Wastewater	4,4'-DDT
608	3510C	Water	4,4'-DDD
608	3510C	Water	4,4'-DDT
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260B		Wastewater	1,2-Dichloroethene, Total
8260B		Water	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH
SM 4500 H+ B		Water	pH

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-44744-1

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: 480-44744-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-44744-2	Pre-Carbon	Wastewater	08/28/13 12:45	08/28/13 13:15
480-44745-1	Post-Carbon	Wastewater	08/28/13 12:30	08/28/13 13:15

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[illegible]

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480-44745 Chain of Custody

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-44744-1

Login Number: 44744

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	No: Analyses are listed on COC; individual samples are not designated Spec Analy
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.	N/A	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-44744-1

Login Number: 44745

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	No: Analyses are listed on COC; individual samples are not designated Spec Analy
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.	N/A	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	Yes: Samples checked, no residual chlorine detected

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-46484-1

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

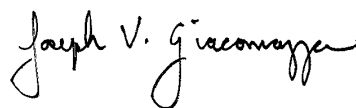
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

9/30/2013 3:17:25 PM

Joe Giacomazza, Project Administrator

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Designee for

Brian Fischer, Project Manager II

(716)504-9835

brian.fischer@testamericainc.com

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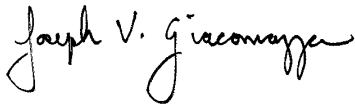
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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



Joe Giacomazza
Project Administrator
9/30/2013 3:17:25 PM

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Definitions/Glossary

Client: New York State D.E.C.

TestAmerica Job ID: 480-46484-1

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

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.

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-46484-1

Job ID: 480-46484-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-46484-1

Receipt

The samples were received on 9/25/2013 11:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA

No analytical or quality issues were noted.

GC VOA

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-46484-3). Elevated reporting limits (RLs) are provided.

Method(s) 8021B: These samples were reinjected to confirm the original results. The Testamerica labels as well as the client labels were verified for both the original and confirmatory analysis. The results did confirm and the original results are therefore reported.

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-46484-2 MS), (480-46484-2 MSD), Carbon 1 effluent (480-46484-2), Influent (480-46484-3). Elevated reporting limits (RLs) are provided.

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: 480-46484-1

Client Sample ID: Carbon 3 effluent

Lab Sample ID: 480-46484-1

Date Collected: 09/25/13 10:15

Matrix: Water

Date Received: 09/25/13 11:15

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			09/26/13 12:24	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/26/13 12:24	1
Benzene	1.1		0.20	0.023	ug/L			09/26/13 12:24	1
Ethylbenzene	0.14	J	0.20	0.029	ug/L			09/26/13 12:24	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/26/13 12:24	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/26/13 12:24	1
m,p-Xylene	0.11	J	0.40	0.054	ug/L			09/26/13 12:24	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/26/13 12:24	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/26/13 12:24	1
o-Xylene	ND		0.20	0.027	ug/L			09/26/13 12:24	1
p-Cymene	ND		0.20	0.030	ug/L			09/26/13 12:24	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/26/13 12:24	1
Toluene	0.38		0.20	0.036	ug/L			09/26/13 12:24	1
Xylenes, Total	0.27	J	0.60	0.054	ug/L			09/26/13 12:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	112		63 - 145		09/26/13 12:24	1
4-Bromofluorobenzene	114		64 - 141		09/26/13 12:24	1

Client Sample Results

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

TestAmerica Job ID: 480-46484-1

Client Sample ID: Carbon 1 effluent

Lab Sample ID: 480-46484-2

Date Collected: 09/25/13 10:30

Matrix: Water

Date Received: 09/25/13 11:15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	3.9		0.20	0.035	ug/L			09/26/13 11:45	1
1,3,5-Trimethylbenzene	1.4		0.20	0.15	ug/L			09/26/13 11:45	1
Isopropylbenzene	0.47		0.20	0.027	ug/L			09/26/13 11:45	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/26/13 11:45	1
m,p-Xylene	40		0.40	0.054	ug/L			09/26/13 11:45	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/26/13 11:45	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/26/13 11:45	1
o-Xylene	21		0.20	0.027	ug/L			09/26/13 11:45	1
p-Cymene	ND		0.20	0.030	ug/L			09/26/13 11:45	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/26/13 11:45	1
Xylenes, Total	78		0.60	0.054	ug/L			09/26/13 11:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		63 - 145		09/26/13 11:45	1
4-Bromofluorobenzene	114		64 - 141		09/26/13 11:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2200		20	2.3	ug/L			09/27/13 11:47	100
Ethylbenzene	59		20	2.9	ug/L			09/27/13 11:47	100
Toluene	310		20	3.6	ug/L			09/27/13 11:47	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-46484-1

Client Sample ID: Influent

Lab Sample ID: 480-46484-3

Date Collected: 09/25/13 10:40

Matrix: Water

Date Received: 09/25/13 11:15

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	33		1.0	0.17	ug/L			09/26/13 11:08	5
1,3,5-Trimethylbenzene	12		1.0	0.75	ug/L			09/26/13 11:08	5
Isopropylbenzene	3.6		1.0	0.14	ug/L			09/26/13 11:08	5
Methyl tert-butyl ether	ND		2.0	0.22	ug/L			09/26/13 11:08	5
m,p-Xylene	260		2.0	0.27	ug/L			09/26/13 11:08	5
n-Butylbenzene	0.82	J	1.0	0.15	ug/L			09/26/13 11:08	5
n-Propylbenzene	ND		1.0	0.65	ug/L			09/26/13 11:08	5
o-Xylene	120		1.0	0.14	ug/L			09/26/13 11:08	5
p-Cymene	ND		1.0	0.15	ug/L			09/26/13 11:08	5
sec-Butylbenzene	ND		1.0	0.10	ug/L			09/26/13 11:08	5
Xylenes, Total	530		3.0	0.27	ug/L			09/26/13 11:08	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	113		63 - 145		09/26/13 11:08	5
4-Bromofluorobenzene	116		64 - 141		09/26/13 11:08	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6700		50	5.8	ug/L			09/27/13 12:25	250
Ethylbenzene	580		50	7.2	ug/L			09/27/13 12:25	250
Toluene	2100		50	8.9	ug/L			09/27/13 12:25	250

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-46484-1

Client Sample ID: Carbon 3 effluent

Date Collected: 09/25/13 10:15

Date Received: 09/25/13 11:15

Lab Sample ID: 480-46484-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	141232	09/26/13 12:24	DGB	TAL BUF

Client Sample ID: Carbon 1 effluent

Date Collected: 09/25/13 10:30

Date Received: 09/25/13 11:15

Lab Sample ID: 480-46484-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	141232	09/26/13 11:45	DGB	TAL BUF
Total/NA	Analysis	8021B	DL	100	141464	09/27/13 11:47	DGB	TAL BUF

Client Sample ID: Influent

Date Collected: 09/25/13 10:40

Date Received: 09/25/13 11:15

Lab Sample ID: 480-46484-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		5	141232	09/26/13 11:08	DGB	TAL BUF
Total/NA	Analysis	8021B	DL	250	141464	09/27/13 12:25	DGB	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: 480-46484-1

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	10-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-14

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-46484-1

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

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-46484-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-46484-1	Carbon 3 effluent	Water	09/25/13 10:15	09/25/13 11:15
480-46484-2	Carbon 1 effluent	Water	09/25/13 10:30	09/25/13 11:15
480-46484-3	Influent	Water	09/25/13 10:40	09/25/13 11:15

Drinking Water? Yes ☐ No ☒

THE LEADER IN ENVIRONMENTAL TESTING

Client NYSDEC Region 9		Project Manager Glen May				Date 9-25-13		Chain of Custody Number 237500									
Address 270 Michigan Ave		Telephone Number (Area Code)/Fax Number				Lab Number		Page 1 of 1									
City Buffalo	State NY	Zip Code 14203	Site Contact T. Palmer (GLS)		Lab Contact BJF		Analysis (Attach list if more space is needed)										
Project Name and Location (State) Castroville			Carrier/Waybill Number				Special Instructions/ Conditions of Receipt										
Contract/Purchase Order/Quote No. Site # 915171 Project # 48002525			Matrix		Containers & Preservatives												
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Date	Time	Air	Aqueous	Sed.					Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH
Carbon 3 Effluent		9-25-13	1015		X										X		
Carbon 1 Effluent		1	1030		1						1						
Influent		1	1040		1						1						
Possible Hazard Identification				Sample Disposal				(A fee may be assessed if samples are retained longer than 1 month)									
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months													
Turn Around Time Required				QC Requirements (Specify)													
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input type="checkbox"/> Other _____																	
1. Relinquished By Thom like (GLS)		Date 9-25-13	Time 1115	1. Received By [Signature]		Date 9-25-13	Time 1115										
2. Relinquished By		Date	Time	2. Received By		Date	Time										
3. Relinquished By		Date	Time	3. Received By		Date	Time										

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

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9/30/2013

2 3.4

Age Group	Number of People
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-46484-1

Login Number: 46484

List Source: TestAmerica Buffalo

List Number: 1

Creator: Stau, Brandon 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	nysdec
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: 480-46482-1

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

Sampling Event: Mthly Post-Carbon

Mthly Pre-Carbon

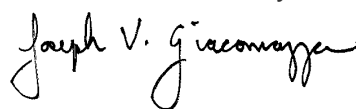
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

10/7/2013 10:41:18 AM

Joe Giacomazza, Project Administrator

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Project Manager II

(716)504-9835

brian.fischer@testamericainc.com

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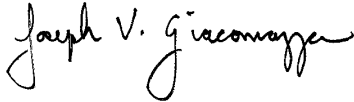
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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

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



Joe Giacomazza
Project Administrator
10/7/2013 10:41:18 AM

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-46482-1

Qualifiers

GC VOA

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

General Chemistry

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

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-46482-1

Job ID: 480-46482-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-46482-1

Receipt

The samples were received on 9/25/2013 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 3.1° C and 3.4° C.

GC/MS VOA

No analytical or quality issues were noted.

Ion Chromatography

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-46483-1 MS), Pre-Carbon (480-46483-1). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The method blank for batch 141528 contained Chloride 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.

Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 141528 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8021B: These samples were reinjected to confirm the original results. The TestAmericao labels as well as the client labels were verified for both the original and confirmatory analysis. The results did confirm and the original results are therefore reported.

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 (480-46482-1)

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: 480-46482-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-46482-1

Date Collected: 09/25/13 10:25

Matrix: Wastewater

Date Received: 09/25/13 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			10/04/13 05:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/04/13 05:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/04/13 05:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/04/13 05:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/04/13 05:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/04/13 05:29	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			10/04/13 05:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/04/13 05:29	1
2-Hexanone	ND		5.0	1.2	ug/L			10/04/13 05:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/04/13 05:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/04/13 05:29	1
Acetone	ND		10	3.0	ug/L			10/04/13 05:29	1
Benzene	19		1.0	0.41	ug/L			10/04/13 05:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/04/13 05:29	1
Bromoform	ND		1.0	0.26	ug/L			10/04/13 05:29	1
Bromomethane	ND		1.0	0.69	ug/L			10/04/13 05:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/04/13 05:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/04/13 05:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/04/13 05:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/04/13 05:29	1
Chloroethane	ND		1.0	0.32	ug/L			10/04/13 05:29	1
Chloroform	2.7		1.0	0.34	ug/L			10/04/13 05:29	1
Chloromethane	ND		1.0	0.35	ug/L			10/04/13 05:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/04/13 05:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/04/13 05:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/04/13 05:29	1
Styrene	ND		1.0	0.73	ug/L			10/04/13 05:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/04/13 05:29	1
Toluene	ND		1.0	0.51	ug/L			10/04/13 05:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/04/13 05:29	1
Trichloroethene	ND		1.0	0.46	ug/L			10/04/13 05:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/04/13 05:29	1
Vinyl acetate	ND		5.0	0.85	ug/L			10/04/13 05:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/04/13 05:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137		10/04/13 05:29	1
Toluene-d8 (Surr)	102		71 - 126		10/04/13 05:29	1
4-Bromofluorobenzene (Surr)	99		73 - 120		10/04/13 05:29	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			09/26/13 13:02	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/26/13 13:02	1
Benzene	19		0.20	0.023	ug/L			09/26/13 13:02	1
Ethylbenzene	0.094	J	0.20	0.029	ug/L			09/26/13 13:02	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/26/13 13:02	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/26/13 13:02	1
m,p-Xylene	0.063	J	0.40	0.054	ug/L			09/26/13 13:02	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/26/13 13:02	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-46482-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-46482-1

Date Collected: 09/25/13 10:25

Matrix: Wastewater

Date Received: 09/25/13 11:15

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			09/26/13 13:02	1
o-Xylene	ND		0.20	0.027	ug/L			09/26/13 13:02	1
p-Cymene	ND		0.20	0.030	ug/L			09/26/13 13:02	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/26/13 13:02	1
Toluene	0.51		0.20	0.036	ug/L			09/26/13 13:02	1
Xylenes, Total	0.10	J	0.60	0.054	ug/L			09/26/13 13:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	113		63 - 145		09/26/13 13:02	1
4-Bromofluorobenzene	114		64 - 141		09/26/13 13:02	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	173		50.0	19.3	ug/L		09/26/13 08:35	09/26/13 17:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.36		0.010	0.0050	mg/L		09/30/13 02:06	09/30/13 22:28	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.83	HF	0.100	0.100	SU			09/25/13 19:21	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-46482-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-46483-1

Date Collected: 09/25/13 10:35

Matrix: Wastewater

Date Received: 09/25/13 11:15

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	137000		500	100	ug/L		09/26/13 08:35	09/26/13 17:14	1
Iron	858		50.0	19.3	ug/L		09/26/13 08:35	09/26/13 17:14	1
Magnesium	78100		200	43.4	ug/L		09/26/13 08:35	09/26/13 17:14	1
Potassium	5890		500	100	ug/L		09/26/13 08:35	09/26/13 17:14	1
Sodium	78700		1000	324	ug/L		09/26/13 08:35	09/26/13 17:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99.0	B	2.5	1.4	mg/L			09/27/13 18:54	5
Sulfate	127		10.0	1.7	mg/L			09/27/13 18:54	5
Alkalinity, Total	521		100	40.0	mg/L			09/25/13 23:28	10

Lab Chronicle

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

TestAmerica Job ID: 480-46482-1

Client Sample ID: Post-Carbon

Date Collected: 09/25/13 10:25

Date Received: 09/25/13 11:15

Lab Sample ID: 480-46482-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	142633	10/04/13 05:29	NQN	TAL BUF
Total/NA	Analysis	8021B		1	141232	09/26/13 13:02	DGB	TAL BUF
Total/NA	Prep	200.7			141216	09/26/13 08:35	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	141493	09/26/13 17:12	AMH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	141173	09/25/13 19:21	KS	TAL BUF
Total/NA	Prep	Distill/CN			141780	09/30/13 02:06	KWJ	TAL BUF
Total/NA	Analysis	335.4		1	141947	09/30/13 22:28	JME	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 09/25/13 10:35

Date Received: 09/25/13 11:15

Lab Sample ID: 480-46483-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			141216	09/26/13 08:35	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	141493	09/26/13 17:14	AMH	TAL BUF
Total/NA	Analysis	310.2		10	141198	09/25/13 23:28	RMB	TAL BUF
Total/NA	Analysis	300.0		5	141528	09/27/13 18:54	KRC	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: 480-46482-1

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	11-06-13
California	NELAP	9	1169CA	10-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	10-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13
Wisconsin	State Program	5	998310390	08-31-14

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-46482-1

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: 480-46482-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-46482-1	Post-Carbon	Wastewater	09/25/13 10:25	09/25/13 11:15
480-46483-1	Pre-Carbon	Wastewater	09/25/13 10:35	09/25/13 11:15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

TestAmerica

THE UNIVERSITY OF TEXAS AT AUSTIN

[illegible]

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-46482-1

Login Number: 46482

List Source: TestAmerica Buffalo

List Number: 1

Creator: Stau, Brandon 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: 480-46482-1

Login Number: 46483

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robison, Zachary J

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	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-48789-1

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

Sampling Event: Mthly Pre-Carbon

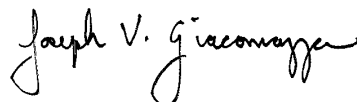
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

11/8/2013 4:07:16 PM

Joe Giacomazza, Project Administrator

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Designee for

Brian Fischer, Project Manager II

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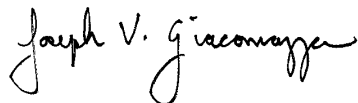
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

- 1
- 2
- 3
- 4
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- 7
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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
11/8/2013 4:07:16 PM

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-48789-1

Qualifiers

GC VOA

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

General Chemistry

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

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-48789-1

Job ID: 480-48789-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-48789-1

Receipt

The samples were received on 10/25/2013 5:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt time was 3.6° C.

GC/MS VOA

No analytical or quality issues were noted.

Ion Chromatography

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-48789-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: (480-48791-3 MS), (480-48791-3 MSD), Post-Carbon #1 (480-48791-3). Elevated reporting limits (RLs) are provided.

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Building Sump (480-48789-2), Pre-Carbon (480-48789-1). 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 #3 (480-48791-1)

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: 480-48789-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-48789-1

Date Collected: 10/25/13 10:50

Matrix: Wastewater

Date Received: 10/25/13 17:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	24		1.0	0.17	ug/L			10/31/13 11:07	5
1,3,5-Trimethylbenzene	7.2		1.0	0.75	ug/L			10/31/13 11:07	5
Isopropylbenzene	2.5		1.0	0.14	ug/L			10/31/13 11:07	5
Methyl tert-butyl ether	17		2.0	0.22	ug/L			10/31/13 11:07	5
m,p-Xylene	210		2.0	0.27	ug/L			10/31/13 11:07	5
n-Butylbenzene	ND		1.0	0.15	ug/L			10/31/13 11:07	5
n-Propylbenzene	ND		1.0	0.65	ug/L			10/31/13 11:07	5
o-Xylene	110		1.0	0.14	ug/L			10/31/13 11:07	5
p-Cymene	ND		1.0	0.15	ug/L			10/31/13 11:07	5
sec-Butylbenzene	ND		1.0	0.10	ug/L			10/31/13 11:07	5
Xylenes, Total	320		3.0	0.27	ug/L			10/31/13 11:07	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145		10/31/13 11:07	5
4-Bromofluorobenzene	99		64 - 141		10/31/13 11:07	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4200		20	2.3	ug/L			10/31/13 13:30	100
Ethylbenzene	350		20	2.9	ug/L			10/31/13 13:30	100
Toluene	1300		20	3.6	ug/L			10/31/13 13:30	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 145		10/31/13 13:30	100
4-Bromofluorobenzene	105		64 - 141		10/31/13 13:30	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	129000		500	100	ug/L		10/28/13 08:20	10/31/13 00:05	1
Iron	882		50.0	19.3	ug/L		10/28/13 08:20	10/31/13 16:21	1
Magnesium	77200		200	43.4	ug/L		10/28/13 08:20	10/31/13 00:05	1
Potassium	5980		500	100	ug/L		10/28/13 08:20	10/31/13 00:05	1
Sodium	75300		1000	324	ug/L		10/28/13 08:20	10/31/13 00:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		2.5	1.4	mg/L			10/29/13 20:20	5
Sulfate	154		10.0	1.7	mg/L			10/29/13 20:20	5
Alkalinity, Total	583		100	40.0	mg/L			10/31/13 14:53	10

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-48789-1

Client Sample ID: Building Sump

Lab Sample ID: 480-48789-2

Date Collected: 10/25/13 11:00

Matrix: Water

Date Received: 10/25/13 17:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	99		1.0	0.17	ug/L			10/31/13 12:35	5
1,3,5-Trimethylbenzene	29		1.0	0.75	ug/L			10/31/13 12:35	5
Isopropylbenzene	16		1.0	0.14	ug/L			10/31/13 12:35	5
Methyl tert-butyl ether	ND		2.0	0.22	ug/L			10/31/13 12:35	5
n-Butylbenzene	ND		1.0	0.15	ug/L			10/31/13 12:35	5
n-Propylbenzene	4.1		1.0	0.65	ug/L			10/31/13 12:35	5
p-Cymene	ND		1.0	0.15	ug/L			10/31/13 12:35	5
sec-Butylbenzene	ND		1.0	0.10	ug/L			10/31/13 12:35	5
Xylenes, Total	1300		3.0	0.27	ug/L			10/31/13 12:35	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145		10/31/13 12:35	5
4-Bromofluorobenzene	102		64 - 141		10/31/13 12:35	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	15000		100	12	ug/L			10/31/13 15:29	500
Ethylbenzene	1900		100	14	ug/L			10/31/13 15:29	500
m,p-Xylene	860		200	27	ug/L			10/31/13 15:29	500
o-Xylene	ND		100	14	ug/L			10/31/13 15:29	500
Toluene	6400		100	18	ug/L			10/31/13 15:29	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		10/31/13 15:29	500
4-Bromofluorobenzene	100		64 - 141		10/31/13 15:29	500

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-48789-1

Client Sample ID: Post-Carbon #3

Lab Sample ID: 480-48791-1

Date Collected: 10/25/13 10:30

Matrix: Wastewater

Date Received: 10/25/13 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/05/13 11:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/05/13 11:16	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/05/13 11:16	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/05/13 11:16	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/05/13 11:16	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/05/13 11:16	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			11/05/13 11:16	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/05/13 11:16	1
2-Hexanone	ND		5.0	1.2	ug/L			11/05/13 11:16	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/05/13 11:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/05/13 11:16	1
Acetone	ND		10	3.0	ug/L			11/05/13 11:16	1
Benzene	ND		1.0	0.41	ug/L			11/05/13 11:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/05/13 11:16	1
Bromoform	ND		1.0	0.26	ug/L			11/05/13 11:16	1
Bromomethane	ND		1.0	0.69	ug/L			11/05/13 11:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/05/13 11:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/05/13 11:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/05/13 11:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/05/13 11:16	1
Chloroethane	ND		1.0	0.32	ug/L			11/05/13 11:16	1
Chloroform	ND		1.0	0.34	ug/L			11/05/13 11:16	1
Chloromethane	ND		1.0	0.35	ug/L			11/05/13 11:16	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/05/13 11:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/05/13 11:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/05/13 11:16	1
Styrene	ND		1.0	0.73	ug/L			11/05/13 11:16	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/05/13 11:16	1
Toluene	ND		1.0	0.51	ug/L			11/05/13 11:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/05/13 11:16	1
Trichloroethene	ND		1.0	0.46	ug/L			11/05/13 11:16	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/05/13 11:16	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/05/13 11:16	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/05/13 11:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137		11/05/13 11:16	1
Toluene-d8 (Surr)	104		71 - 126		11/05/13 11:16	1
4-Bromofluorobenzene (Surr)	110		73 - 120		11/05/13 11:16	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			10/31/13 16:38	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/31/13 16:38	1
Benzene	ND		0.20	0.023	ug/L			10/31/13 16:38	1
Ethylbenzene	ND		0.20	0.029	ug/L			10/31/13 16:38	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/31/13 16:38	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/31/13 16:38	1
m,p-Xylene	ND		0.40	0.054	ug/L			10/31/13 16:38	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/31/13 16:38	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-48789-1

Client Sample ID: Post-Carbon #3

Lab Sample ID: 480-48791-1

Date Collected: 10/25/13 10:30

Matrix: Wastewater

Date Received: 10/25/13 17:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			10/31/13 16:38	1
o-Xylene	ND		0.20	0.027	ug/L			10/31/13 16:38	1
p-Cymene	ND		0.20	0.030	ug/L			10/31/13 16:38	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/31/13 16:38	1
Toluene	ND		0.20	0.036	ug/L			10/31/13 16:38	1
Xylenes, Total	ND		0.60	0.054	ug/L			10/31/13 16:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145		10/31/13 16:38	1
4-Bromofluorobenzene	98		64 - 141		10/31/13 16:38	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	174		50.0	19.3	ug/L		10/28/13 08:20	10/31/13 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.35		0.010	0.0050	mg/L		10/29/13 15:32	10/31/13 13:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.00	HF	0.100	0.100	SU			10/28/13 14:28	1

Client Sample Results

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

TestAmerica Job ID: 480-48789-1

Client Sample ID: Post-Carbon #2

Lab Sample ID: 480-48791-2

Date Collected: 10/25/13 10:35

Matrix: Wastewater

Date Received: 10/25/13 17:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			10/31/13 17:12	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/31/13 17:12	1
Benzene	2.2		0.20	0.023	ug/L			10/31/13 17:12	1
Ethylbenzene	ND		0.20	0.029	ug/L			10/31/13 17:12	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/31/13 17:12	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/31/13 17:12	1
m,p-Xylene	ND		0.40	0.054	ug/L			10/31/13 17:12	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/31/13 17:12	1
n-Propylbenzene	ND		0.20	0.13	ug/L			10/31/13 17:12	1
o-Xylene	ND		0.20	0.027	ug/L			10/31/13 17:12	1
p-Cymene	ND		0.20	0.030	ug/L			10/31/13 17:12	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/31/13 17:12	1
Toluene	0.12 J		0.20	0.036	ug/L			10/31/13 17:12	1
Xylenes, Total	ND		0.60	0.054	ug/L			10/31/13 17:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145		10/31/13 17:12	1
4-Bromofluorobenzene	99		64 - 141		10/31/13 17:12	1

Client Sample Results

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

TestAmerica Job ID: 480-48789-1

Client Sample ID: Post-Carbon #1

Lab Sample ID: 480-48791-3

Date Collected: 10/25/13 10:40

Matrix: Water

Date Received: 10/25/13 17:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.32		0.20	0.035	ug/L			10/31/13 17:46	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/31/13 17:46	1
Ethylbenzene	3.5		0.20	0.029	ug/L			10/31/13 17:46	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/31/13 17:46	1
Methyl tert-butyl ether	1.9		0.40	0.044	ug/L			10/31/13 17:46	1
m,p-Xylene	3.4		0.40	0.054	ug/L			10/31/13 17:46	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/31/13 17:46	1
n-Propylbenzene	ND		0.20	0.13	ug/L			10/31/13 17:46	1
o-Xylene	2.0		0.20	0.027	ug/L			10/31/13 17:46	1
p-Cymene	ND		0.20	0.030	ug/L			10/31/13 17:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/31/13 17:46	1
Toluene	27		0.20	0.036	ug/L			10/31/13 17:46	1
Xylenes, Total	5.4		0.60	0.054	ug/L			10/31/13 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		63 - 145		10/31/13 17:46	1
4-Bromofluorobenzene	97		64 - 141		10/31/13 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	250		2.0	0.23	ug/L			11/01/13 10:05	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		11/01/13 10:05	10
4-Bromofluorobenzene	99		64 - 141		11/01/13 10:05	10

Lab Chronicle

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

TestAmerica Job ID: 480-48789-1

Client Sample ID: Pre-Carbon

Date Collected: 10/25/13 10:50

Date Received: 10/25/13 17:00

Lab Sample ID: 480-48789-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		5	148842	10/31/13 11:07	DGB	TAL BUF
Total/NA	Analysis	8021B	DL	100	148842	10/31/13 13:30	DGB	TAL BUF
Total/NA	Prep	200.7			147965	10/28/13 08:20	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	148862	10/31/13 00:05	LMH	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	149154	10/31/13 16:21	LMH	TAL BUF
Total/NA	Analysis	300.0		5	148359	10/29/13 20:20	KRC	TAL BUF
Total/NA	Analysis	310.2		10	149005	10/31/13 14:53	NCH	TAL BUF

Client Sample ID: Building Sump

Date Collected: 10/25/13 11:00

Date Received: 10/25/13 17:00

Lab Sample ID: 480-48789-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B	DL	500	148842	10/31/13 15:29	DGB	TAL BUF
Total/NA	Analysis	8021B		5	148842	10/31/13 12:35	DGB	TAL BUF

Client Sample ID: Post-Carbon #3

Date Collected: 10/25/13 10:30

Date Received: 10/25/13 17:00

Lab Sample ID: 480-48791-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	149772	11/05/13 11:16	CDC	TAL BUF
Total/NA	Analysis	8021B		1	148842	10/31/13 16:38	DGB	TAL BUF
Total/NA	Prep	200.7			147965	10/28/13 08:20	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	149154	10/31/13 16:24	LMH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	148128	10/28/13 14:28	KS	TAL BUF
Total/NA	Prep	Distill/CN			148442	10/29/13 15:32	JMB	TAL BUF
Total/NA	Analysis	335.4		1	148960	10/31/13 13:22	KSW	TAL BUF

Client Sample ID: Post-Carbon #2

Date Collected: 10/25/13 10:35

Date Received: 10/25/13 17:00

Lab Sample ID: 480-48791-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	148842	10/31/13 17:12	DGB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-48789-1

Client Sample ID: Post-Carbon #1

Lab Sample ID: 480-48791-3

Date Collected: 10/25/13 10:40

Matrix: Water

Date Received: 10/25/13 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	148842	10/31/13 17:46	DGB	TAL BUF
Total/NA	Analysis	8021B	DL	10	149089	11/01/13 10:05	DGB	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: 480-48789-1

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	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13
Wisconsin	State Program	5	998310390	08-31-14

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-48789-1

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

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-48789-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-48789-1	Pre-Carbon	Wastewater	10/25/13 10:50	10/25/13 17:00
480-48789-2	Building Sump	Water	10/25/13 11:00	10/25/13 17:00
480-48791-1	Post-Carbon #3	Wastewater	10/25/13 10:30	10/25/13 17:00
480-48791-2	Post-Carbon #2	Wastewater	10/25/13 10:35	10/25/13 17:00
480-48791-3	Post-Carbon #1	Water	10/25/13 10:40	10/25/13 17:00

TestAmerica

SUBJECT: ENVIRONMENTAL TESTS.



480-48789 Chain of Custody

40 Hazelwood Drive

Amherst, NY 14228-2298

Phone (716) 691-2600 Fax (716) 691-7991

[illegible]

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-48789-1

Login Number: 48789

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-48789-1

Login Number: 48791

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-50510-1

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

Sampling Event: Qtrly Post-Carbon

Qtrly Pre-Carbon

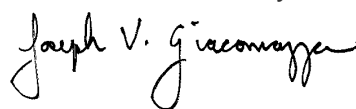
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

12/3/2013 1:09:15 PM

Joe Giacomazza, Project Management Assistant II

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Designee for

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

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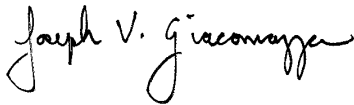
www.testamericainc.com

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

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

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



Joe Giacomazza
Project Management Assistant II
12/3/2013 1:09:16 PM

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Definitions/Glossary

Client: New York State D.E.C.

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

TestAmerica Job ID: 480-50510-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
*	RPD of the LCS and LCSD exceeds the 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.

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
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-50510-1

Job ID: 480-50510-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-50510-1

Receipt

The samples were received on 11/20/2013 12:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.6° C, 3.6° C, 4.2° C and 4.2° C.

Except:

Method(s) 300.0, 310.2: Limited volume recieved for 300.28 and 310.2 methods.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-50513-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for batch 154867 recovered outside control limits for the following analytes: Chloromethane and Bromoform. These analytes were not client requested spike compounds; therefore, the data have been qualified and reported.

Method(s) 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 154867 recovered outside control limits for the following analytes: trans-1,3-Dichloropropene, Chlorodibromomethane, Chloromethane, Bromoform and Bromomethane.

No other analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

Ion Chromatography

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-50513-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-50513-1). 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(s) 420.4, 9066: The method blank for batch 154106 contained phenols 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 (480-50510-1)

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 (480-50510-1)

Case Narrative

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

TestAmerica Job ID: 480-50510-1

Job ID: 480-50510-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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 153813. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

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: 480-50510-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-50510-1

Date Collected: 11/20/13 11:15

Matrix: Wastewater

Date Received: 11/20/13 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/29/13 14:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/29/13 14:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/29/13 14:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/29/13 14:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/29/13 14:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/29/13 14:40	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			11/29/13 14:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/29/13 14:40	1
2-Hexanone	ND		5.0	1.2	ug/L			11/29/13 14:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/29/13 14:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/29/13 14:40	1
Acetone	ND		10	3.0	ug/L			11/29/13 14:40	1
Benzene	28		1.0	0.41	ug/L			11/29/13 14:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/29/13 14:40	1
Bromoform	ND	*	1.0	0.26	ug/L			11/29/13 14:40	1
Bromomethane	ND	*	1.0	0.69	ug/L			11/29/13 14:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/29/13 14:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/29/13 14:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/29/13 14:40	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			11/29/13 14:40	1
Chloroethane	ND		1.0	0.32	ug/L			11/29/13 14:40	1
Chloroform	1.8		1.0	0.34	ug/L			11/29/13 14:40	1
Chloromethane	ND	*	1.0	0.35	ug/L			11/29/13 14:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/29/13 14:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/29/13 14:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/29/13 14:40	1
Styrene	ND		1.0	0.73	ug/L			11/29/13 14:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/29/13 14:40	1
Toluene	1.9		1.0	0.51	ug/L			11/29/13 14:40	1
trans-1,3-Dichloropropene	ND	*	1.0	0.37	ug/L			11/29/13 14:40	1
Trichloroethene	ND		1.0	0.46	ug/L			11/29/13 14:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/29/13 14:40	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/29/13 14:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/29/13 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137		11/29/13 14:40	1
Toluene-d8 (Surr)	104		71 - 126		11/29/13 14:40	1
4-Bromofluorobenzene (Surr)	97		73 - 120		11/29/13 14:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		4.8	0.58	ug/L		11/22/13 06:44	11/23/13 02:38	1
Acenaphthene	ND		4.8	0.40	ug/L		11/22/13 06:44	11/23/13 02:38	1
Acenaphthylene	ND		4.8	0.37	ug/L		11/22/13 06:44	11/23/13 02:38	1
Anthracene	ND		4.8	0.27	ug/L		11/22/13 06:44	11/23/13 02:38	1
Benzo[a]anthracene	ND		4.8	0.35	ug/L		11/22/13 06:44	11/23/13 02:38	1
Benzo[a]pyrene	ND		4.8	0.46	ug/L		11/22/13 06:44	11/23/13 02:38	1
Benzo[b]fluoranthene	ND		4.8	0.33	ug/L		11/22/13 06:44	11/23/13 02:38	1
Benzo[g,h,i]perylene	ND		4.8	0.34	ug/L		11/22/13 06:44	11/23/13 02:38	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-50510-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-50510-1

Date Collected: 11/20/13 11:15

Matrix: Wastewater

Date Received: 11/20/13 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		4.8	0.71	ug/L		11/22/13 06:44	11/23/13 02:38	1
Biphenyl	ND		4.8	0.63	ug/L		11/22/13 06:44	11/23/13 02:38	1
Bis(2-ethylhexyl) phthalate	ND		4.8	1.7	ug/L		11/22/13 06:44	11/23/13 02:38	1
Carbazole	ND		4.8	0.29	ug/L		11/22/13 06:44	11/23/13 02:38	1
Chrysene	ND		4.8	0.32	ug/L		11/22/13 06:44	11/23/13 02:38	1
Dibenz(a,h)anthracene	ND		4.8	0.41	ug/L		11/22/13 06:44	11/23/13 02:38	1
Dibenzofuran	ND		9.7	0.49	ug/L		11/22/13 06:44	11/23/13 02:38	1
Fluoranthene	ND		4.8	0.39	ug/L		11/22/13 06:44	11/23/13 02:38	1
Fluorene	ND		4.8	0.35	ug/L		11/22/13 06:44	11/23/13 02:38	1
Indeno[1,2,3-cd]pyrene	ND		4.8	0.46	ug/L		11/22/13 06:44	11/23/13 02:38	1
Naphthalene	ND		4.8	0.74	ug/L		11/22/13 06:44	11/23/13 02:38	1
Pentachlorophenol	ND		9.7	2.1	ug/L		11/22/13 06:44	11/23/13 02:38	1
Phenanthrene	ND		4.8	0.43	ug/L		11/22/13 06:44	11/23/13 02:38	1
Phenol	ND		4.8	0.38	ug/L		11/22/13 06:44	11/23/13 02:38	1
Pyrene	ND		4.8	0.33	ug/L		11/22/13 06:44	11/23/13 02:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	100		52 - 132	11/22/13 06:44	11/23/13 02:38	1
2-Fluorobiphenyl	87		48 - 120	11/22/13 06:44	11/23/13 02:38	1
2-Fluorophenol	48		20 - 120	11/22/13 06:44	11/23/13 02:38	1
Nitrobenzene-d5	89		46 - 120	11/22/13 06:44	11/23/13 02:38	1
p-Terphenyl-d14	94		67 - 150	11/22/13 06:44	11/23/13 02:38	1
Phenol-d5	31		16 - 120	11/22/13 06:44	11/23/13 02:38	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			11/26/13 13:55	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			11/26/13 13:55	1
Benzene	26		0.20	0.023	ug/L			11/26/13 13:55	1
Ethylbenzene	0.26		0.20	0.029	ug/L			11/26/13 13:55	1
Isopropylbenzene	ND		0.20	0.027	ug/L			11/26/13 13:55	1
Methyl tert-butyl ether	0.34 J		0.40	0.044	ug/L			11/26/13 13:55	1
m,p-Xylene	0.12 J		0.40	0.054	ug/L			11/26/13 13:55	1
n-Butylbenzene	ND		0.20	0.031	ug/L			11/26/13 13:55	1
n-Propylbenzene	ND		0.20	0.13	ug/L			11/26/13 13:55	1
o-Xylene	0.087 J		0.20	0.027	ug/L			11/26/13 13:55	1
p-Cymene	ND		0.20	0.030	ug/L			11/26/13 13:55	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			11/26/13 13:55	1
Toluene	1.8		0.20	0.036	ug/L			11/26/13 13:55	1
Xylenes, Total	0.21 J		0.60	0.054	ug/L			11/26/13 13:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		63 - 145		11/26/13 13:55	1
4-Bromofluorobenzene	94		64 - 141		11/26/13 13:55	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.047	0.0063	ug/L		11/22/13 06:58	11/25/13 15:46	1
alpha-BHC	ND		0.047	0.0063	ug/L		11/22/13 06:58	11/25/13 15:46	1
beta-BHC	ND		0.047	0.024	ug/L		11/22/13 06:58	11/25/13 15:46	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-50510-1

Client Sample ID: Post-Carbon

Lab Sample ID: 480-50510-1

Date Collected: 11/20/13 11:15

Matrix: Wastewater

Date Received: 11/20/13 12:30

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.047	0.0095	ug/L		11/22/13 06:58	11/25/13 15:46	1
gamma-BHC (Lindane)	ND		0.047	0.0057	ug/L		11/22/13 06:58	11/25/13 15:46	1
Chlordane (technical)	ND		0.47	0.28	ug/L		11/22/13 06:58	11/25/13 15:46	1
4,4'-DDD	ND		0.047	0.0087	ug/L		11/22/13 06:58	11/25/13 15:46	1
4,4'-DDE	ND		0.047	0.011	ug/L		11/22/13 06:58	11/25/13 15:46	1
4,4'-DDT	ND		0.047	0.010	ug/L		11/22/13 06:58	11/25/13 15:46	1
Dieldrin	ND		0.047	0.0093	ug/L		11/22/13 06:58	11/25/13 15:46	1
Endosulfan I	ND		0.047	0.010	ug/L		11/22/13 06:58	11/25/13 15:46	1
Endosulfan II	ND		0.047	0.011	ug/L		11/22/13 06:58	11/25/13 15:46	1
Endosulfan sulfate	ND		0.047	0.015	ug/L		11/22/13 06:58	11/25/13 15:46	1
Endrin	ND		0.047	0.013	ug/L		11/22/13 06:58	11/25/13 15:46	1
Endrin aldehyde	ND		0.047	0.015	ug/L		11/22/13 06:58	11/25/13 15:46	1
Heptachlor	ND		0.047	0.0081	ug/L		11/22/13 06:58	11/25/13 15:46	1
Heptachlor epoxide	ND		0.047	0.0050	ug/L		11/22/13 06:58	11/25/13 15:46	1
Toxaphene	ND		0.47	0.11	ug/L		11/22/13 06:58	11/25/13 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	74		23 - 120	11/22/13 06:58	11/25/13 15:46	1
Tetrachloro-m-xylene	74		36 - 120	11/22/13 06:58	11/25/13 15:46	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		11/21/13 08:40	11/22/13 16:04	1
Iron	174		50.0	19.3	ug/L		11/21/13 08:40	11/22/13 16:04	1
Manganese	240		3.0	0.40	ug/L		11/21/13 08:40	11/22/13 16:04	1
Zinc	2.0	J	10.0	1.5	ug/L		11/21/13 08:40	11/22/13 16:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	1.9	J	5.0	1.4	mg/L		11/21/13 04:55	11/21/13 04:55	1
Cyanide, Total	0.35		0.010	0.0050	mg/L		11/20/13 23:11	11/21/13 10:51	1
Phenolics, Total Recoverable	0.0068	J B	0.010	0.0050	mg/L		11/22/13 20:35	11/23/13 11:22	1
Total Dissolved Solids	862		10.0	4.0	mg/L			11/21/13 18:44	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			11/21/13 04:13	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			11/21/13 17:10	1
pH	7.35	HF	0.100	0.100	SU			11/21/13 00:50	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-50510-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-50513-1

Date Collected: 11/20/13 11:30

Matrix: Wastewater

Date Received: 11/20/13 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			11/28/13 00:34	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			11/28/13 00:34	100
1,1,2-Trichloroethane	ND		100	23	ug/L			11/28/13 00:34	100
1,1-Dichloroethane	ND		100	38	ug/L			11/28/13 00:34	100
1,1-Dichloroethene	ND		100	29	ug/L			11/28/13 00:34	100
1,2-Dichloroethane	ND		100	21	ug/L			11/28/13 00:34	100
1,2-Dichloroethene, Total	ND		200	70	ug/L			11/28/13 00:34	100
1,2-Dichloropropane	ND		100	72	ug/L			11/28/13 00:34	100
2-Hexanone	ND		500	120	ug/L			11/28/13 00:34	100
2-Butanone (MEK)	ND		1000	130	ug/L			11/28/13 00:34	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			11/28/13 00:34	100
Acetone	ND		1000	300	ug/L			11/28/13 00:34	100
Benzene	5700		100	41	ug/L			11/28/13 00:34	100
Bromodichloromethane	ND		100	39	ug/L			11/28/13 00:34	100
Bromoform	ND		100	26	ug/L			11/28/13 00:34	100
Bromomethane	ND		100	69	ug/L			11/28/13 00:34	100
Carbon disulfide	ND		100	19	ug/L			11/28/13 00:34	100
Carbon tetrachloride	ND		100	27	ug/L			11/28/13 00:34	100
Chlorobenzene	ND		100	75	ug/L			11/28/13 00:34	100
Dibromochloromethane	ND		100	32	ug/L			11/28/13 00:34	100
Chloroethane	ND		100	32	ug/L			11/28/13 00:34	100
Chloroform	ND		100	34	ug/L			11/28/13 00:34	100
Chloromethane	ND		100	35	ug/L			11/28/13 00:34	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			11/28/13 00:34	100
Ethylbenzene	470		100	74	ug/L			11/28/13 00:34	100
Methylene Chloride	ND		100	44	ug/L			11/28/13 00:34	100
Styrene	ND		100	73	ug/L			11/28/13 00:34	100
Tetrachloroethene	ND		100	36	ug/L			11/28/13 00:34	100
Toluene	1800		100	51	ug/L			11/28/13 00:34	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			11/28/13 00:34	100
Trichloroethene	ND		100	46	ug/L			11/28/13 00:34	100
Vinyl chloride	ND		100	90	ug/L			11/28/13 00:34	100
Vinyl acetate	ND		500	85	ug/L			11/28/13 00:34	100
Xylenes, Total	330		200	66	ug/L			11/28/13 00:34	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137		11/28/13 00:34	100
Toluene-d8 (Surr)	101		71 - 126		11/28/13 00:34	100
4-Bromofluorobenzene (Surr)	96		73 - 120		11/28/13 00:34	100

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	6.1	J	20	3.5	ug/L			11/26/13 13:05	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			11/26/13 13:05	100
Benzene	3100		20	2.3	ug/L			11/26/13 13:05	100
Ethylbenzene	280		20	2.9	ug/L			11/26/13 13:05	100
Isopropylbenzene	ND		20	2.7	ug/L			11/26/13 13:05	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			11/26/13 13:05	100
m,p-Xylene	120		40	5.4	ug/L			11/26/13 13:05	100
n-Butylbenzene	ND		20	3.1	ug/L			11/26/13 13:05	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-50510-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-50513-1

Date Collected: 11/20/13 11:30

Matrix: Wastewater

Date Received: 11/20/13 12:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		20	13	ug/L			11/26/13 13:05	100
o-Xylene	91		20	2.7	ug/L			11/26/13 13:05	100
p-Cymene	ND		20	3.0	ug/L			11/26/13 13:05	100
sec-Butylbenzene	ND		20	2.0	ug/L			11/26/13 13:05	100
Toluene	1000		20	3.6	ug/L			11/26/13 13:05	100
Xylenes, Total	210		60	5.4	ug/L			11/26/13 13:05	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		63 - 145		11/26/13 13:05	100
4-Bromofluorobenzene	94		64 - 141		11/26/13 13:05	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	139000		500	100	ug/L		11/21/13 08:40	11/22/13 16:23	1
Iron	2430		50.0	19.3	ug/L		11/21/13 08:40	11/22/13 16:23	1
Magnesium	77100		200	43.4	ug/L		11/21/13 08:40	11/22/13 16:23	1
Potassium	5500		500	100	ug/L		11/21/13 08:40	11/22/13 16:23	1
Sodium	67300		1000	324	ug/L		11/21/13 08:40	11/22/13 16:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.2		2.5	1.4	mg/L			11/21/13 23:00	5
Sulfate	149		10.0	1.7	mg/L			11/21/13 23:00	5
Alkalinity, Total	511		100	40.0	mg/L			11/26/13 10:56	10

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-50510-1

Client Sample ID: Post-Carbon

Date Collected: 11/20/13 11:15

Date Received: 11/20/13 12:30

Lab Sample ID: 480-50510-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	154867	11/29/13 14:40	NMD1	TAL BUF
Total/NA	Prep	3510C			153813	11/22/13 06:44	DLE	TAL BUF
Total/NA	Analysis	8270D		1	154000	11/23/13 02:38	RMM	TAL BUF
Total/NA	Analysis	8021B		1	154412	11/26/13 13:55	DGB	TAL BUF
Total/NA	Prep	3510C			153816	11/22/13 06:58	DLE	TAL BUF
Total/NA	Analysis	608		1	154164	11/25/13 15:46	LMW	TAL BUF
Total/NA	Prep	200.7			153573	11/21/13 08:40	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	154689	11/22/13 16:04	LMH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	153537	11/21/13 00:50	KS	TAL BUF
Total/NA	Prep	1664A			153543	11/21/13 04:55	RMB	TAL BUF
Total/NA	Analysis	1664A		1	153545	11/21/13 04:55	RMB	TAL BUF
Total/NA	Analysis	SM 5210B		1	153557	11/21/13 04:13	KWJ	TAL BUF
Total/NA	Prep	Distill/CN			153527	11/20/13 23:11	KWJ	TAL BUF
Total/NA	Analysis	335.4		1	153681	11/21/13 10:51	RS	TAL BUF
Total/NA	Analysis	SM 2540D		1	153740	11/21/13 17:10	KS	TAL BUF
Total/NA	Analysis	SM 2540C		1	153749	11/21/13 18:44	KS	TAL BUF
Total/NA	Prep	Distill/Phenol			154029	11/22/13 20:35	CLT	TAL BUF
Total/NA	Analysis	420.4		1	154106	11/23/13 11:22	KSW	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 11/20/13 11:30

Date Received: 11/20/13 12:30

Lab Sample ID: 480-50513-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	154794	11/28/13 00:34	RAL	TAL BUF
Total/NA	Analysis	8021B		100	154412	11/26/13 13:05	DGB	TAL BUF
Total/NA	Prep	200.7			153573	11/21/13 08:40	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	154689	11/22/13 16:23	LMH	TAL BUF
Total/NA	Analysis	300.0		5	153663	11/21/13 23:00	KRC	TAL BUF
Total/NA	Analysis	310.2		10	154509	11/26/13 10:56	NCH	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: 480-50510-1

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	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13 *
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13 *
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13
Wisconsin	State Program	5	998310390	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-50510-1

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

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
608	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
1664A	HEM and SGT-HEM	1664A	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
420.4	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: 480-50510-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-50510-1	Post-Carbon	Wastewater	11/20/13 11:15	11/20/13 12:30
480-50513-1	Pre-Carbon	Wastewater	11/20/13 11:30	11/20/13 12:30

TestAmerica

TABLE 11-2. *Continued*. RECOMMENDED TESTING[illegible]

TestAmerica

Received 11 June 2002; accepted 15 July 2002

[illegible]

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-50510-1

Login Number: 50510

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-50510-1

Login Number: 50513

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	limited volume for 300_28D and 310.2
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ges
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-52297-1

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:

1/6/2014 9:48:46 AM

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

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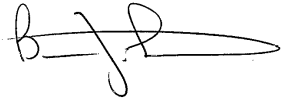
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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



Brian Fischer
Manager of Project Management
1/6/2014 9:48:46 AM

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Definitions/Glossary

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

TestAmerica Job ID: 480-52297-1

Qualifiers

GC VOA

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

General Chemistry

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

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-52297-1

Job ID: 480-52297-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-52297-1

Comments

No additional comments.

Receipt

The samples were received on 12/19/2013 2:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.2° C and 3.4° C.

GC/MS VOA

No analytical or quality issues were noted.

Ion Chromatography

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-52298-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-52297-3 MS), (480-52297-3 MSD), Outside Sump (480-52298-2), Post-Carbon-1 (480-52297-3), Pre-Carbon (480-52298-1). 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 time frame: Post-Carbon-3 (480-52297-1)

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: 480-52297-1

Client Sample ID: Post-Carbon-3

Date Collected: 12/19/13 10:10

Date Received: 12/19/13 14:20

Lab Sample ID: 480-52297-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/20/13 23:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/20/13 23:49	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/20/13 23:49	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/20/13 23:49	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/20/13 23:49	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/20/13 23:49	1
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L			12/20/13 23:49	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/20/13 23:49	1
2-Hexanone	ND		5.0	1.2	ug/L			12/20/13 23:49	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/20/13 23:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/20/13 23:49	1
Acetone	ND		10	3.0	ug/L			12/20/13 23:49	1
Benzene	ND		1.0	0.41	ug/L			12/20/13 23:49	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/20/13 23:49	1
Bromoform	ND		1.0	0.26	ug/L			12/20/13 23:49	1
Bromomethane	ND		1.0	0.69	ug/L			12/20/13 23:49	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/20/13 23:49	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/20/13 23:49	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/20/13 23:49	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/20/13 23:49	1
Chloroethane	ND		1.0	0.32	ug/L			12/20/13 23:49	1
Chloroform	ND		1.0	0.34	ug/L			12/20/13 23:49	1
Chloromethane	ND		1.0	0.35	ug/L			12/20/13 23:49	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/20/13 23:49	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/20/13 23:49	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/20/13 23:49	1
Styrene	ND		1.0	0.73	ug/L			12/20/13 23:49	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/20/13 23:49	1
Toluene	ND		1.0	0.51	ug/L			12/20/13 23:49	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/20/13 23:49	1
Trichloroethene	ND		1.0	0.46	ug/L			12/20/13 23:49	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/20/13 23:49	1
Vinyl acetate	ND		5.0	0.85	ug/L			12/20/13 23:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/20/13 23:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137		12/20/13 23:49	1
Toluene-d8 (Surr)	102		71 - 126		12/20/13 23:49	1
4-Bromofluorobenzene (Surr)	96		73 - 120		12/20/13 23:49	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			12/26/13 10:24	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			12/26/13 10:24	1
Benzene	ND		0.20	0.023	ug/L			12/26/13 10:24	1
Ethylbenzene	ND		0.20	0.029	ug/L			12/26/13 10:24	1
Isopropylbenzene	ND		0.20	0.027	ug/L			12/26/13 10:24	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			12/26/13 10:24	1
m,p-Xylene	ND		0.40	0.054	ug/L			12/26/13 10:24	1
n-Butylbenzene	ND		0.20	0.031	ug/L			12/26/13 10:24	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-52297-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-52297-1

Date Collected: 12/19/13 10:10

Matrix: Wastewater

Date Received: 12/19/13 14:20

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			12/26/13 10:24	1
o-Xylene	ND		0.20	0.027	ug/L			12/26/13 10:24	1
p-Cymene	ND		0.20	0.030	ug/L			12/26/13 10:24	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			12/26/13 10:24	1
Toluene	ND		0.20	0.036	ug/L			12/26/13 10:24	1
Xylenes, Total	ND		0.60	0.054	ug/L			12/26/13 10:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	89		63 - 145		12/26/13 10:24	1
4-Bromofluorobenzene	90		64 - 141		12/26/13 10:24	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	158		50.0	19.3	ug/L		12/20/13 09:30	12/22/13 01:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.30		0.010	0.0050	mg/L		12/23/13 02:19	12/23/13 21:32	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.69	HF	0.100	0.100	SU			12/20/13 21:02	1

Client Sample Results

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

TestAmerica Job ID: 480-52297-1

Client Sample ID: Post-Carbon-2

Lab Sample ID: 480-52297-2

Date Collected: 12/19/13 10:15

Matrix: Water

Date Received: 12/19/13 14:20

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			12/26/13 10:58	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			12/26/13 10:58	1
Benzene	0.12	J	0.20	0.023	ug/L			12/26/13 10:58	1
Ethylbenzene	ND		0.20	0.029	ug/L			12/26/13 10:58	1
Isopropylbenzene	ND		0.20	0.027	ug/L			12/26/13 10:58	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			12/26/13 10:58	1
m,p-Xylene	ND		0.40	0.054	ug/L			12/26/13 10:58	1
n-Butylbenzene	ND		0.20	0.031	ug/L			12/26/13 10:58	1
n-Propylbenzene	ND		0.20	0.13	ug/L			12/26/13 10:58	1
o-Xylene	ND		0.20	0.027	ug/L			12/26/13 10:58	1
p-Cymene	ND		0.20	0.030	ug/L			12/26/13 10:58	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			12/26/13 10:58	1
Toluene	0.16	J	0.20	0.036	ug/L			12/26/13 10:58	1
Xylenes, Total	ND		0.60	0.054	ug/L			12/26/13 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 145		12/26/13 10:58	1
4-Bromofluorobenzene	92		64 - 141		12/26/13 10:58	1

Client Sample Results

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

TestAmerica Job ID: 480-52297-1

Client Sample ID: Post-Carbon-1

Lab Sample ID: 480-52297-3

Date Collected: 12/19/13 10:20

Matrix: Water

Date Received: 12/19/13 14:20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1.4	J	2.0	0.35	ug/L			12/26/13 11:54	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			12/26/13 11:54	10
Benzene	180		2.0	0.23	ug/L			12/30/13 14:58	10
Ethylbenzene	43		2.0	0.29	ug/L			12/26/13 11:54	10
Isopropylbenzene	ND		2.0	0.27	ug/L			12/26/13 11:54	10
Methyl tert-butyl ether	6.7		4.0	0.44	ug/L			12/26/13 11:54	10
m,p-Xylene	15		4.0	0.54	ug/L			12/26/13 11:54	10
n-Butylbenzene	ND		2.0	0.31	ug/L			12/26/13 11:54	10
n-Propylbenzene	ND		2.0	1.3	ug/L			12/26/13 11:54	10
o-Xylene	10		2.0	0.27	ug/L			12/26/13 11:54	10
p-Cymene	ND		2.0	0.30	ug/L			12/26/13 11:54	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			12/26/13 11:54	10
Toluene	150		2.0	0.36	ug/L			12/26/13 11:54	10
Xylenes, Total	25		6.0	0.54	ug/L			12/26/13 11:54	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		63 - 145		12/26/13 11:54	10
4-Bromofluorobenzene	92		64 - 141		12/26/13 11:54	10

Client Sample Results

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

TestAmerica Job ID: 480-52297-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-52298-1

Date Collected: 12/19/13 10:25

Matrix: Wastewater

Date Received: 12/19/13 14:20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	43		4.0	0.69	ug/L			12/26/13 13:37	20
1,3,5-Trimethylbenzene	13		4.0	3.0	ug/L			12/26/13 13:37	20
Benzene	610		4.0	0.47	ug/L			12/30/13 16:40	20
Ethylbenzene	770		4.0	0.57	ug/L			12/26/13 13:37	20
Isopropylbenzene	5.1		4.0	0.54	ug/L			12/26/13 13:37	20
Methyl tert-butyl ether	46		8.0	0.87	ug/L			12/26/13 13:37	20
m,p-Xylene	350		8.0	1.1	ug/L			12/26/13 13:37	20
n-Butylbenzene	ND		4.0	0.62	ug/L			12/26/13 13:37	20
n-Propylbenzene	ND		4.0	2.6	ug/L			12/26/13 13:37	20
o-Xylene	ND		4.0	0.54	ug/L			12/26/13 13:37	20
p-Cymene	ND		4.0	0.59	ug/L			12/26/13 13:37	20
sec-Butylbenzene	ND		4.0	0.41	ug/L			12/26/13 13:37	20
Toluene	200		4.0	0.71	ug/L			12/30/13 16:40	20
Xylenes, Total	350		12	1.1	ug/L			12/26/13 13:37	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		63 - 145		12/26/13 13:37	20
4-Bromofluorobenzene	89		64 - 141		12/26/13 13:37	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	139000		500	100	ug/L		12/20/13 09:30	12/22/13 01:05	1
Iron	338		50.0	19.3	ug/L		12/20/13 09:30	12/22/13 01:05	1
Magnesium	89500		200	43.4	ug/L		12/20/13 09:30	12/22/13 01:05	1
Potassium	5230		500	100	ug/L		12/20/13 09:30	12/22/13 01:05	1
Sodium	72500		1000	324	ug/L		12/20/13 09:30	12/22/13 01:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	113		2.5	1.4	mg/L			12/23/13 19:03	5
Sulfate	166		10.0	1.7	mg/L			12/23/13 19:03	5
Alkalinity, Total	474		100	40.0	mg/L			12/31/13 10:50	10

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-52297-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-52298-2

Date Collected: 12/19/13 10:30

Matrix: Water

Date Received: 12/19/13 14:20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		4.0	0.69	ug/L			12/26/13 14:11	20
1,3,5-Trimethylbenzene	ND		4.0	3.0	ug/L			12/26/13 14:11	20
Benzene	740		4.0	0.47	ug/L			12/30/13 17:15	20
Ethylbenzene	590		4.0	0.57	ug/L			12/26/13 14:11	20
Isopropylbenzene	3.3 J		4.0	0.54	ug/L			12/26/13 14:11	20
Methyl tert-butyl ether	37		8.0	0.87	ug/L			12/26/13 14:11	20
m,p-Xylene	83		8.0	1.1	ug/L			12/26/13 14:11	20
n-Butylbenzene	ND		4.0	0.62	ug/L			12/26/13 14:11	20
n-Propylbenzene	ND		4.0	2.6	ug/L			12/26/13 14:11	20
o-Xylene	130		4.0	0.54	ug/L			12/26/13 14:11	20
p-Cymene	ND		4.0	0.59	ug/L			12/26/13 14:11	20
sec-Butylbenzene	ND		4.0	0.41	ug/L			12/26/13 14:11	20
Toluene	250		4.0	0.71	ug/L			12/30/13 17:15	20
Xylenes, Total	210		12	1.1	ug/L			12/26/13 14:11	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	87		63 - 145		12/26/13 14:11	20
4-Bromofluorobenzene	87		64 - 141		12/26/13 14:11	20

Lab Chronicle

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

TestAmerica Job ID: 480-52297-1

Client Sample ID: Post-Carbon-3

Date Collected: 12/19/13 10:10

Date Received: 12/19/13 14:20

Lab Sample ID: 480-52297-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	158907	12/20/13 23:49	NQN	TAL BUF
Total/NA	Analysis	8021B		1	159364	12/26/13 10:24	DGB	TAL BUF
Total/NA	Prep	200.7			158691	12/20/13 09:30	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	159038	12/22/13 01:07	AMH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	158928	12/20/13 21:02	KS	TAL BUF
Total/NA	Prep	Distill/CN			159010	12/23/13 02:19	KWJ	TAL BUF
Total/NA	Analysis	335.4		1	159213	12/23/13 21:32	JME	TAL BUF

Client Sample ID: Post-Carbon-2

Date Collected: 12/19/13 10:15

Date Received: 12/19/13 14:20

Lab Sample ID: 480-52297-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	159364	12/26/13 10:58	DGB	TAL BUF

Client Sample ID: Post-Carbon-1

Date Collected: 12/19/13 10:20

Date Received: 12/19/13 14:20

Lab Sample ID: 480-52297-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	159364	12/26/13 11:54	DGB	TAL BUF
Total/NA	Analysis	8021B		10	159770	12/30/13 14:58	DGB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 12/19/13 10:25

Date Received: 12/19/13 14:20

Lab Sample ID: 480-52298-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		20	159364	12/26/13 13:37	DGB	TAL BUF
Total/NA	Analysis	8021B		20	159770	12/30/13 16:40	DGB	TAL BUF
Total/NA	Prep	200.7			158691	12/20/13 09:30	NMD2	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	159038	12/22/13 01:05	AMH	TAL BUF
Total/NA	Analysis	300.0		5	158795	12/23/13 19:03	KRC	TAL BUF
Total/NA	Analysis	310.2		10	160079	12/31/13 10:50	NCH	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 12/19/13 10:30

Date Received: 12/19/13 14:20

Lab Sample ID: 480-52298-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		20	159364	12/26/13 14:11	DGB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-52297-1

Client Sample ID: Outside Sump
Date Collected: 12/19/13 10:30
Date Received: 12/19/13 14:20

Lab Sample ID: 480-52298-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		20	159770	12/30/13 17:15	DGB	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: 480-52297-1

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

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	04-01-14

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	sec-Butylbenzene
8021B		Water	sec-Butylbenzene

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

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

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-52297-1

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

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-52297-1

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


Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-52297-1	Post-Carbon-3	Wastewater	12/19/13 10:10	12/19/13 14:20
480-52297-2	Post-Carbon-2	Water	12/19/13 10:15	12/19/13 14:20
480-52297-3	Post-Carbon-1	Water	12/19/13 10:20	12/19/13 14:20
480-52298-1	Pre-Carbon	Wastewater	12/19/13 10:25	12/19/13 14:20
480-52298-2	Outside Sump	Water	12/19/13 10:30	12/19/13 14:20

TestAmerica

THE LASER IN ENVIRONMENTAL TESTING

[illegible]

THE LEADER'S ENVIRONMENTAL TESTING



480-52298 Chain of Custody

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-52297-1

Login Number: 52297

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-52297-1

Login Number: 52298

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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