October 2012
Off-site Bedrock Groundwater Investigation

Site No. 932151
915 Cleveland Avenue Off-site Bedrock Groundwater Plume
Niagara Falls, Niagara County

The 915 Cleveland Ave. Site is located in an urban area at the southeast intersection of Cleveland Ave. and Main St. in the City of Niagara Falls. The surrounding area is predominately commercial however there are residential properties to the east. The site had been home to auto repair and dry cleaning businesses. It was the original parcel of a BCP site (#C932133), which was expanded to include six additional parcels. The site was redeveloped and now forms a portion of the Niagara Falls Municipal Complex which houses a public safety building and court room facility. The building was opened in May 2009. The multiple parcels were combined and the current street address of the site is 1925 Main Street. A Certificate of Completion for the BCP site was issued on September 20, 2011.

Prior to remediation significant concentrations of tetrachloroethene (PCE) up to 17 parts per million (ppm) and associated breakdown products were detected in the overburden groundwater immediately above the bedrock surface. PCE was detected in bedrock groundwater samples, both on-site and at adjacent off-site locations, detected PCE at concentrations from < 1 to 550 parts per billion (ppb). Only limited soils data was available at that time. No soils data was available from beneath the on-site buildings which occupied the majority of the site. Volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were detected in the soil but were within Recommended Soil Cleanup Objectives (RSCOs) with the exception of 1,2,4-trimethylbenzene (9.5 ppm). Metals (arsenic, mercury and lead) were detected in the soil exceeding RSCOs.

Remediation at the site is complete. The buildings were removed and all on-site impacted soils were excavated to the top of the dolostone bedrock at approximately 15 feet below grade (bgs). Four underground storage tanks (USTs) were uncovered along the south side of Cleveland Ave. and were removed during the excavation work. Subsequent sampling confirmed significant concentrations of PCE, trichloroethene (TCE) and petroleum constituents in the excavated site soils. Post excavation confirmation soil sampling confirmed that remaining on-site soils meet Part 375 Unrestricted Use Soil Cleanup Objectives. One small area of off-site soils near the former UST field could not be excavated due to the proximity of the street. These off-site soils contained PCE up to 6ppm (below Part 375 Restricted Use- Restricted Residential SCOs). Groundwater monitoring wells BRMW-1 and BRMW-2, located off-site near the former UST field, detected residual PCE in the bedrock groundwater at 550 ppb and 360 ppb, respectively.

The BCP applicant is a volunteer and they were not obligated to undertake off-site characterizations of the bedrock groundwater. As such, the Department, in consultation with the Department of Health (DOH), has undertaken the appropriate off-site bedrock groundwater characterizations.

Prior investigation determined the bedrock groundwater flow direction was to the northwest. A standby contractor was called out and installed two additional off-site bedrock wells (BRMW-7 & BRMW-8) on the north side of Cleveland Ave., north and west of the former UST locations. The overburden materials, encountered during the well installations consisted of silty clay with gravelly silt and were consistent with those found on-site. Depth to bedrock ranged from 23.7 feet at BRMW-7 to 17.8 feet at BRMW-8. The wells were developed and latter sampled, along with all available previously installed bedrock wells, on July 25, 2011 and again on October 1,

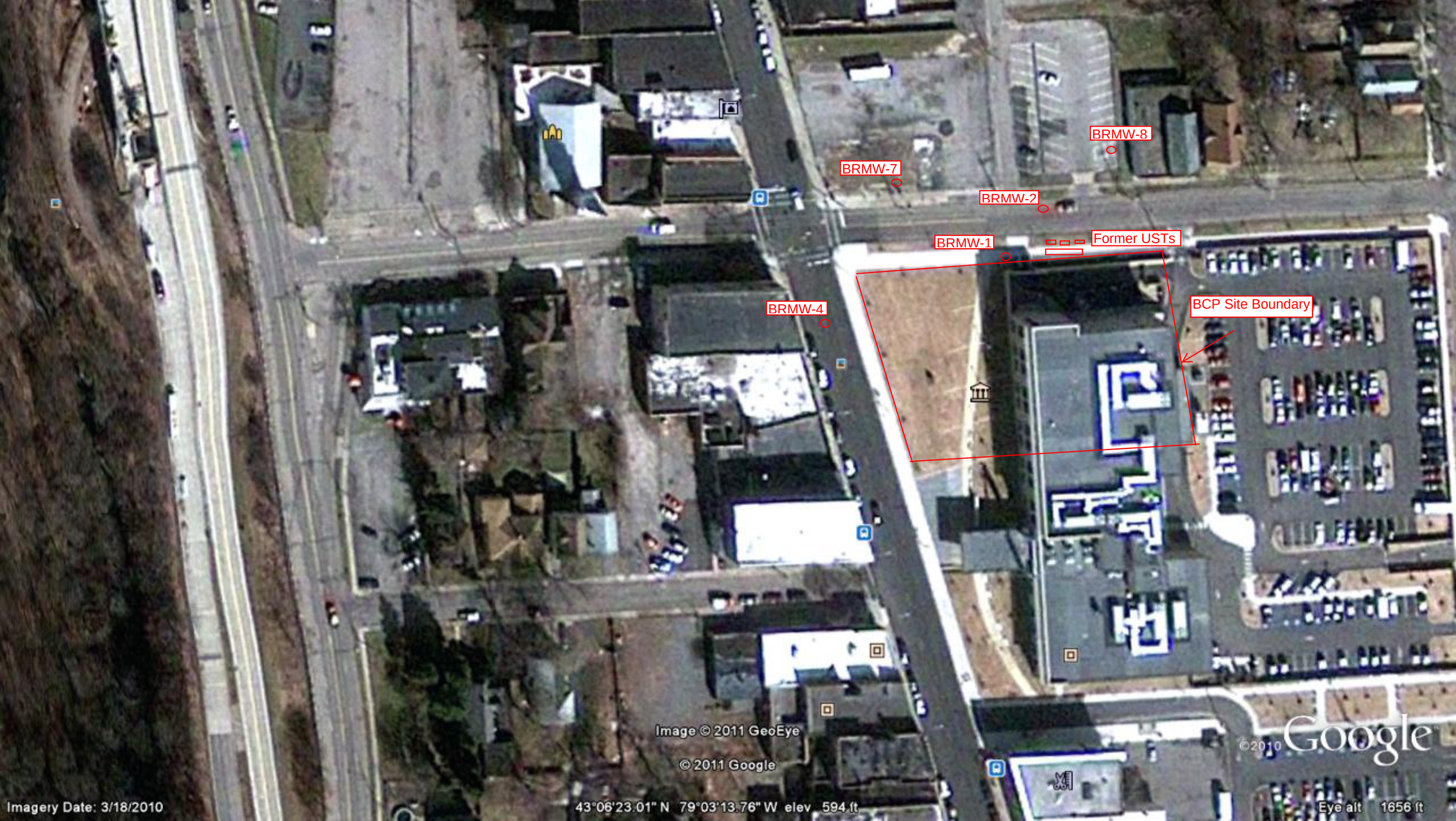
2012. A report summarizing the October 1, 2012 well sampling with the laboratory analytical report is attached.

As listed in the attached table, PCE groundwater concentrations continued to exhibit a downward trend ranging from <1 to 120 ppb in October 2012. A greater than 50 % decrease in PCE concentrations occurred at both wells BRMW-1 and BRMW-2 currently ranging from 85 and 120 ppb, respectively.

Site # 932151 - 915 Cleveland Off-Site Bedrock Groundwater Plume

Bedrock Monitoring Well PCE Concentration (ug/l)

	BRMW-1	BRMW-2	BRMW-3	BRMW-4	BRMW-5	BRMW-6	BRMW-7	BRMW-8
10/31/2007	550	360	<10	45	<10	<10		
8/19/2010		250		7.3	<1			
7/25/2011	180	250		1.4			29	<1
10/1/2012	85	120		5.5			21	0.6


BRMW-8
BRMW-7
BRMW-2
BRMW-1
Former USTs
BRMW-4
BCP Site Boundary
Image © 2011 GeoEye
© 2011 Google
©2010 Google
Imagery Date: 3/18/2010
43°06'23.01" N 79°03'13.76" W elev 594 ft
Eye alt 1656 ft

EMPIRE GEO SERVICES, INC.
A SUBSIDIARY OF SJB SERVICES, INC.

CORPORATE/
BUFFALO OFFICE
5167 South Park Avenue
Hamburg, NY 14075
Phone: (716) 649-8110
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MEMBER
ACEC New York

October 17, 2012
Empire GeoServices Project No. BEV-11-023

New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

Phone: (716) 851-7220
Fax: (716) 851-7252

Attention: Timothy E. Dieffenbach, Engineering Geologist 2

Reference: October 2012 Groundwater Sampling
Off-Site Bedrock Groundwater Plume
915 Cleveland Avenue, Niagara Falls, New York
NYSDEC Site Number 932151

Dear Mr. Dieffenbach:

Empire GeoServices, Inc. (Empire) sampled groundwater from five monitoring wells at the above referenced site, as requested and authorized by the New York State Department of Environmental Conservation (NYSDEC). The purpose of this work was to assess bedrock groundwater quality downgradient of the 915 Cleveland Avenue site where previous remedial activities were completed by others.

GROUNDWATER SAMPLING

Monitoring wells BRMW-1, BRMW-2, BRMW-4, BRMW-7 and BRMW-8 were purged and sampled on October 1, 2012. The wells were purged by surging a disposable polyethylene bailer in the water column prior to purging the water from the well with the same bailer. Three well volumes were removed from each well prior to groundwater sampling. Physical characteristics of the purged and sampled groundwater were noted on the groundwater purging and sampling field forms which are attached.

ENVIRONMENTAL LABORATORY ANALYSIS

The collected groundwater samples were placed into pre-cleaned appropriate glass containers, labeled with the date, time, location of the project, and placed in an iced cooler at approximately 4-degrees Celsius for transport to TestAmerica

Laboratories, Inc. (TestAmerica) in Amherst, New York. TestAmerica is a New York State Department of Health (NYSDOH) certified analytical testing laboratory. Chain-of-custody documentation accompanied the samples. The groundwater samples were analyzed for volatile organic compounds (VOCs) utilizing EPA Method 8260 for the Target Compound List. Test America's analytical report is attached.

This report has been prepared for the exclusive use of the New York State Department of Environmental Conservation for specific application to this project site in accordance with generally accepted environmental practices. If you have any questions or require further assistance, please contact our office at 716-649-8110.

Respectfully submitted,
EMPIRE GEOSERVICES, INC.

Stephen J. Bochenek
Engineering Geologist

David R. Steiner
Environmental Services Manager

Attachments:

Groundwater Purging and Sampling Field Forms

TestAmerica, Inc. Laboratory Report

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: 480-25897-1
Client Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

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

Attn: Timothy Dieffenbach

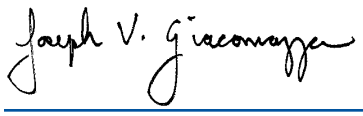
Joseph V. Giacomazza

Authorized for release by:
10/11/2012 3:36:47 PM
Joe Giacomazza
Project Administrator
joe.giacomazza@testamericainc.com

Designee for

Brian Fischer
Project Manager II
brian.fischer@testamericainc.com

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
10/11/2012 3:36:47 PM

Table of Contents

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.

Glossary

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

Job ID: 480-25897-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-25897-1

Receipt
The samples were received on 10/1/2012 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4º C.

GC/MS VOA
Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: BRMW-2 (480-25897-2). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-4
Date Collected: 10/01/12 10:30
Date Received: 10/01/12 14:40

Lab Sample ID: 480-25897-1
Matrix: Water

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			10/06/12 15:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/06/12 15:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/06/12 15:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/06/12 15:44	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/06/12 15:44	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/06/12 15:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/06/12 15:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/06/12 15:44	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/06/12 15:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/06/12 15:44	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/06/12 15:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/06/12 15:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/06/12 15:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/06/12 15:44	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/06/12 15:44	1
2-Hexanone	ND		5.0	1.2	ug/L			10/06/12 15:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/06/12 15:44	1
Acetone	ND		10	3.0	ug/L			10/06/12 15:44	1
Benzene	ND		1.0	0.41	ug/L			10/06/12 15:44	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/06/12 15:44	1
Bromoform	ND		1.0	0.26	ug/L			10/06/12 15:44	1
Bromomethane	ND		1.0	0.69	ug/L			10/06/12 15:44	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/06/12 15:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/06/12 15:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/06/12 15:44	1
Chloroethane	ND		1.0	0.32	ug/L			10/06/12 15:44	1
Chloroform	ND		1.0	0.34	ug/L			10/06/12 15:44	1
Chloromethane	ND		1.0	0.35	ug/L			10/06/12 15:44	1
cis-1,2-Dichloroethene	**7.6**		1.0	0.81	ug/L			10/06/12 15:44	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/06/12 15:44	1
Cyclohexane	ND		1.0	0.18	ug/L			10/06/12 15:44	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/06/12 15:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/06/12 15:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/06/12 15:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/06/12 15:44	1
Methyl acetate	ND		1.0	0.50	ug/L			10/06/12 15:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/06/12 15:44	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/06/12 15:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/06/12 15:44	1
Styrene	ND		1.0	0.73	ug/L			10/06/12 15:44	1
Tetrachloroethene	**5.5**		1.0	0.36	ug/L			10/06/12 15:44	1
Toluene	ND		1.0	0.51	ug/L			10/06/12 15:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/06/12 15:44	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/06/12 15:44	1
Trichloroethene	**1.0**		1.0	0.46	ug/L			10/06/12 15:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/06/12 15:44	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/06/12 15:44	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/06/12 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*		*10/06/12 15:44*	*1*

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-4
Date Collected: 10/01/12 10:30
Date Received: 10/01/12 14:40

Lab Sample ID: 480-25897-1
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		73 - 120		10/06/12 15:44	1
Toluene-d8 (Surr)	105		71 - 126		10/06/12 15:44	1

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-2
Date Collected: 10/01/12 11:20
Date Received: 10/01/12 14:40

Lab Sample ID: 480-25897-2
Matrix: Water

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			10/06/12 16:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/06/12 16:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/06/12 16:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/06/12 16:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/06/12 16:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/06/12 16:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/06/12 16:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/06/12 16:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/06/12 16:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/06/12 16:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/06/12 16:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/06/12 16:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/06/12 16:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/06/12 16:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/06/12 16:06	1
2-Hexanone	ND		5.0	1.2	ug/L			10/06/12 16:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/06/12 16:06	1
Acetone	ND		10	3.0	ug/L			10/06/12 16:06	1
Benzene	ND		1.0	0.41	ug/L			10/06/12 16:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/06/12 16:06	1
Bromoform	ND		1.0	0.26	ug/L			10/06/12 16:06	1
Bromomethane	ND		1.0	0.69	ug/L			10/06/12 16:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/06/12 16:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/06/12 16:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/06/12 16:06	1
Chloroethane	ND		1.0	0.32	ug/L			10/06/12 16:06	1
Chloroform	ND		1.0	0.34	ug/L			10/06/12 16:06	1
Chloromethane	ND		1.0	0.35	ug/L			10/06/12 16:06	1
cis-1,2-Dichloroethene	**2.0**		1.0	0.81	ug/L			10/06/12 16:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/06/12 16:06	1
Cyclohexane	ND		1.0	0.18	ug/L			10/06/12 16:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/06/12 16:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/06/12 16:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/06/12 16:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/06/12 16:06	1
Methyl acetate	ND		1.0	0.50	ug/L			10/06/12 16:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/06/12 16:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/06/12 16:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/06/12 16:06	1
Styrene	ND		1.0	0.73	ug/L			10/06/12 16:06	1
Toluene	ND		1.0	0.51	ug/L			10/06/12 16:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/06/12 16:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/06/12 16:06	1
Trichloroethene	**2.5**		1.0	0.46	ug/L			10/06/12 16:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/06/12 16:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/06/12 16:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/06/12 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*10/06/12 16:06*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/06/12 16:06*	*1*

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-2
Date Collected: 10/01/12 11:20
Date Received: 10/01/12 14:40

Lab Sample ID: 480-25897-2
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*108*		*71 - 126*		*10/06/12 16:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	120		2.0	0.72	ug/L			10/08/12 13:04	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*		*10/08/12 13:04*	*2*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/08/12 13:04*	*2*
Toluene-d8 (Surr)	*104*		*71 - 126*		*10/08/12 13:04*	*2*

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-7
Date Collected: 10/01/12 12:14
Date Received: 10/01/12 14:40

Lab Sample ID: 480-25897-3
Matrix: Water

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			10/06/12 16:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/06/12 16:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/06/12 16:28	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/06/12 16:28	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/06/12 16:28	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/06/12 16:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/06/12 16:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/06/12 16:28	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/06/12 16:28	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/06/12 16:28	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/06/12 16:28	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/06/12 16:28	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/06/12 16:28	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/06/12 16:28	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/06/12 16:28	1
2-Hexanone	ND		5.0	1.2	ug/L			10/06/12 16:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/06/12 16:28	1
Acetone	ND		10	3.0	ug/L			10/06/12 16:28	1
Benzene	ND		1.0	0.41	ug/L			10/06/12 16:28	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/06/12 16:28	1
Bromoform	ND		1.0	0.26	ug/L			10/06/12 16:28	1
Bromomethane	ND		1.0	0.69	ug/L			10/06/12 16:28	1
Carbon disulfide	**1.2**		1.0	0.19	ug/L			10/06/12 16:28	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/06/12 16:28	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/06/12 16:28	1
Chloroethane	ND		1.0	0.32	ug/L			10/06/12 16:28	1
Chloroform	ND		1.0	0.34	ug/L			10/06/12 16:28	1
Chloromethane	ND		1.0	0.35	ug/L			10/06/12 16:28	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.81	ug/L			10/06/12 16:28	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/06/12 16:28	1
Cyclohexane	ND		1.0	0.18	ug/L			10/06/12 16:28	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/06/12 16:28	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/06/12 16:28	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/06/12 16:28	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/06/12 16:28	1
Methyl acetate	ND		1.0	0.50	ug/L			10/06/12 16:28	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/06/12 16:28	1
Methylcyclohexane	**0.71**	**J**	1.0	0.16	ug/L			10/06/12 16:28	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/06/12 16:28	1
Styrene	ND		1.0	0.73	ug/L			10/06/12 16:28	1
Tetrachloroethene	**21**		1.0	0.36	ug/L			10/06/12 16:28	1
Toluene	ND		1.0	0.51	ug/L			10/06/12 16:28	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/06/12 16:28	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/06/12 16:28	1
Trichloroethene	**2.8**		1.0	0.46	ug/L			10/06/12 16:28	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/06/12 16:28	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/06/12 16:28	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/06/12 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*		*10/06/12 16:28*	*1*

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-7
Date Collected: 10/01/12 12:14
Date Received: 10/01/12 14:40

Lab Sample ID: 480-25897-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		73 - 120		10/06/12 16:28	1
Toluene-d8 (Surr)	107		71 - 126		10/06/12 16:28	1

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-1
Date Collected: 10/01/12 13:02
Date Received: 10/01/12 14:40

Lab Sample ID: 480-25897-4
Matrix: Water

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			10/06/12 16:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/06/12 16:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/06/12 16:50	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/06/12 16:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/06/12 16:50	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/06/12 16:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/06/12 16:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/06/12 16:50	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/06/12 16:50	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/06/12 16:50	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/06/12 16:50	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/06/12 16:50	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/06/12 16:50	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/06/12 16:50	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/06/12 16:50	1
2-Hexanone	ND		5.0	1.2	ug/L			10/06/12 16:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/06/12 16:50	1
Acetone	ND		10	3.0	ug/L			10/06/12 16:50	1
Benzene	ND		1.0	0.41	ug/L			10/06/12 16:50	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/06/12 16:50	1
Bromoform	ND		1.0	0.26	ug/L			10/06/12 16:50	1
Bromomethane	ND		1.0	0.69	ug/L			10/06/12 16:50	1
Carbon disulfide	**0.37**	**J**	1.0	0.19	ug/L			10/06/12 16:50	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/06/12 16:50	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/06/12 16:50	1
Chloroethane	ND		1.0	0.32	ug/L			10/06/12 16:50	1
Chloroform	ND		1.0	0.34	ug/L			10/06/12 16:50	1
Chloromethane	ND		1.0	0.35	ug/L			10/06/12 16:50	1
cis-1,2-Dichloroethene	**6.1**		1.0	0.81	ug/L			10/06/12 16:50	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/06/12 16:50	1
Cyclohexane	ND		1.0	0.18	ug/L			10/06/12 16:50	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/06/12 16:50	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/06/12 16:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/06/12 16:50	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/06/12 16:50	1
Methyl acetate	ND		1.0	0.50	ug/L			10/06/12 16:50	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/06/12 16:50	1
Methylcyclohexane	**0.69**	**J**	1.0	0.16	ug/L			10/06/12 16:50	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/06/12 16:50	1
Styrene	ND		1.0	0.73	ug/L			10/06/12 16:50	1
Tetrachloroethene	**85**		1.0	0.36	ug/L			10/06/12 16:50	1
Toluene	ND		1.0	0.51	ug/L			10/06/12 16:50	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/06/12 16:50	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/06/12 16:50	1
Trichloroethene	**5.0**		1.0	0.46	ug/L			10/06/12 16:50	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/06/12 16:50	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/06/12 16:50	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/06/12 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 137*		*10/06/12 16:50*	*1*

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-1
Date Collected: 10/01/12 13:02
Date Received: 10/01/12 14:40

Lab Sample ID: 480-25897-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		73 - 120		10/06/12 16:50	1
Toluene-d8 (Surr)	104		71 - 126		10/06/12 16:50	1

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-8
Date Collected: 10/01/12 14:12
Date Received: 10/01/12 14:40

Lab Sample ID: 480-25897-5
Matrix: Water

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			10/06/12 17:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/06/12 17:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/06/12 17:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/06/12 17:13	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/06/12 17:13	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/06/12 17:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/06/12 17:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/06/12 17:13	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/06/12 17:13	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/06/12 17:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/06/12 17:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/06/12 17:13	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/06/12 17:13	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/06/12 17:13	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/06/12 17:13	1
2-Hexanone	ND		5.0	1.2	ug/L			10/06/12 17:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/06/12 17:13	1
Acetone	ND		10	3.0	ug/L			10/06/12 17:13	1
Benzene	ND		1.0	0.41	ug/L			10/06/12 17:13	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/06/12 17:13	1
Bromoform	ND		1.0	0.26	ug/L			10/06/12 17:13	1
Bromomethane	ND		1.0	0.69	ug/L			10/06/12 17:13	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/06/12 17:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/06/12 17:13	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/06/12 17:13	1
Chloroethane	ND		1.0	0.32	ug/L			10/06/12 17:13	1
Chloroform	ND		1.0	0.34	ug/L			10/06/12 17:13	1
Chloromethane	ND		1.0	0.35	ug/L			10/06/12 17:13	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/06/12 17:13	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/06/12 17:13	1
Cyclohexane	ND		1.0	0.18	ug/L			10/06/12 17:13	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/06/12 17:13	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/06/12 17:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/06/12 17:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/06/12 17:13	1
Methyl acetate	ND		1.0	0.50	ug/L			10/06/12 17:13	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/06/12 17:13	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/06/12 17:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/06/12 17:13	1
Styrene	ND		1.0	0.73	ug/L			10/06/12 17:13	1
Tetrachloroethene	**0.63**	**J**	1.0	0.36	ug/L			10/06/12 17:13	1
Toluene	ND		1.0	0.51	ug/L			10/06/12 17:13	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/06/12 17:13	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/06/12 17:13	1
Trichloroethene	ND		1.0	0.46	ug/L			10/06/12 17:13	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/06/12 17:13	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/06/12 17:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/06/12 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*		*10/06/12 17:13*	*1*

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-8
Date Collected: 10/01/12 14:12
Date Received: 10/01/12 14:40

Lab Sample ID: 480-25897-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		73 - 120		10/06/12 17:13	1
Toluene-d8 (Surr)	107		71 - 126		10/06/12 17:13	1

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Client Sample ID: BRMW-4

Lab Sample ID: 480-25897-1

Date Collected: 10/01/12 10:30
Matrix: Water
Date Received: 10/01/12 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	84219	10/06/12 15:44	TRF	TAL BUF

Client Sample ID: BRMW-2

Lab Sample ID: 480-25897-2

Date Collected: 10/01/12 11:20
Matrix: Water
Date Received: 10/01/12 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	84219	10/06/12 16:06	TRF	TAL BUF
Total/NA	Analysis	8260B	DL	2	84362	10/08/12 13:04	RL	TAL BUF

Client Sample ID: BRMW-7

Lab Sample ID: 480-25897-3

Date Collected: 10/01/12 12:14
Matrix: Water
Date Received: 10/01/12 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	84219	10/06/12 16:28	TRF	TAL BUF

Client Sample ID: BRMW-1

Lab Sample ID: 480-25897-4

Date Collected: 10/01/12 13:02
Matrix: Water
Date Received: 10/01/12 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	84219	10/06/12 16:50	TRF	TAL BUF

Client Sample ID: BRMW-8

Lab Sample ID: 480-25897-5

Date Collected: 10/01/12 14:12
Matrix: Water
Date Received: 10/01/12 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	84219	10/06/12 17:13	TRF	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 - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Laboratory: TestAmerica Buffalo

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

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

Method Summary

Client: New York State D.E.C.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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.
Project/Site: NYSDEC - 915 Cleveland Ave:Site# 932151

TestAmerica Job ID: 480-25897-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-25897-1	BRMW-4	Water	10/01/12 10:30	10/01/12 14:40
480-25897-2	BRMW-2	Water	10/01/12 11:20	10/01/12 14:40
480-25897-3	BRMW-7	Water	10/01/12 12:14	10/01/12 14:40
480-25897-4	BRMW-1	Water	10/01/12 13:02	10/01/12 14:40
480-25897-5	BRMW-8	Water	10/01/12 14:12	10/01/12 14:40

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
NYSDEC - Region 9	Tim Dieffenbach / Dave Steiner (Empire Geoservices)	10.1.12	215696
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 1
270 Michigan Avenue	716-851-7220 / 716-649-8110		
City Buffalo	**State** NY	**Zip Code**	**Site Contact**	**Lab Contact**
Project Name and Location (State) NYSDEC Spill No. 932151 Cleveland Avenue, Niagara Falls	**Carrier/Waybill Number**	
Contract/Purchase Order/Quote No.		

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260 Filtrd
BRMW-4	10.1.12	1030		X						X			X
BRMW-2	10.1.12	1120		X						X			X
BRMW-7	10.1.12	1214		X						X			X
BRMW-1	10.1.12 (10.1.12 1353)	1302		X						X			X
BRMW-8	10.1.12 (10.1.12)	1412		X						X			X

Special Instructions/ Conditions of Receipt

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Per NYSDEC Contract

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	10.1.12	1440	1. Received By	10/1/12	1440
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

4 4 #1

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

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-25897-1

Login Number: 25897

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl

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

SJB SERVICES, INC.

10-1-12 *Well Purging and Sample Collection*

915 Cleveland Avenue, Niagara Falls

Project No.: BEV-11-023 Well No. BRMW-1 Site: NYSDEC Site No. 932151

Purging Method: Pumped ☒ Bailed ☐ Other: _____

Pump Type: _____ Bailer Type: Polyethylene

Weather Conditions: Sunny, Few Clouds, ~60°F

Volume Calculation: 3.34' x .1632 gals/Ft = 0.55 gals

(D.T.B. – D.T.W. x vol./ft. = Gals./well vol.)
(Gals./well vol. x 5 = Total Volume to be removed)

Gals./well vol.: 0.55 gals 3 vols = 1.65 gals

Time	Depth to Water (D.T.W.)	Depth to Bottom (D.T.B.)	Volume Removed (gal.)	pH	Cond.	Temp.	Color	Odor Y/N	Turbidity
1232	19.92	23.26							
1251			2.0						
1302	Collect Sample								
	Sample - Turbid, Brown								
	Riser Is Damaged, Road Sand Present In Curb Box, Road Sand Present On/In Bailer During Purging								
		Sample Readings							

Comments: Initial & Final Purged Water - Turbid, Brown

Inside Diameter	vol./ft.
1"	0.04
1.25"	0.06
2"	0.16
4"	0.65

Field Blank Taken ☐ Time: _____

Well Duplicate ☐ No.: _____

Signature: D. Ball

Date: 10/1/12

HNu/PPM	LEL/%	O2/%	H2S/PPM	CO/PPM	

SJB SERVICES, INC.

10-1-12 *Well Purging and Sample Collection*

915 Cleveland Avenue, Niagara Falls

Project No.: BEV-11-023 Well No. BRMW-2 Site: NYSDEC Site No 932151

Purging Method: Pumped [X] Bailed [ ] Other: _____

Pump Type: _____ Bailer Type: Polyethylene

Weather Conditions: Sunny; Few Clouds; ~60°F

Volume Calculation: 10.90' x .1632 gals/Ft = 1.78 gals

(D.T.B. – D.T.W. x vol./ft. = Gals./well vol.)
(Gals./well vol. x 5 = Total Volume to be removed)

Gals./well vol.: 1.78 gals 3 vol = 5.34 gals

Time	Depth to Water (D.T.W.)	Depth to Bottom (D.T.B.)	Volume Removed (gal.)	pH	Cond.	Temp.	Color	Odor Y/N	Turbidity
1047	23.77	34.67							
1110			5.5						
1120	Collect Sample								
	Sample - Vy Sl Turbid To Clear								
	Riser May Have A Slight Bend; Bailer Sometime								
	Stop In The Riser								
		Sample Readings							

Comments: Initial Purge Water - Vy Sl Turbid; Brown Tint; Final Purge Water - Vy Sl Turbid; Brown Tint; No Odor; No Sheen

Inside Diameter	vol./ft.
1"	0.04
1.25"	0.06
2"	0.16
4"	0.65

Field Blank Taken [ ] Time: _____

Well Duplicate [ ] No.: _____

Signature: DJ Ball

Date: 10 / 1 / 12

HNu/PPM	LEL/%	O2/%	H2S/PPM	CO/PPM	

SJB SERVICES, INC.

10-1-12 *Well Purging and Sample Collection*

915 Cleveland Avenue, Niagara Falls

Project No.: BEv-11-023 Well No. BRMW-4 Site: NYSDEC Site No. 932151

Purging Method: Pumped ☒ Bailed ☐ Other: _____

Pump Type: _____ Bailer Type: Polyethylene

Weather Conditions: Sunny; Few Clouds; ~60°F

Volume Calculation: 4.90' x .1632 gals/Ft = 0.80 gals

(D.T.B. – D.T.W. x vol./ft. = Gals./well vol.)
(Gals./well vol. x 5 = Total Volume to be removed)

Gals./well vol.: 0.8 gals 3 vol = 2.4 gals

Time	Depth to Water (D.T.W.)	Depth to Bottom (D.T.B.)	Volume Removed (gal.)	pH	Cond.	Temp.	Color	Odor Y/N	Turbidity
0951	43.62	48.52							
1020			3.0						
1030	Collect Sample								
	Sample - Clear; vy Sl. Brown Tint; Few "Floc-Like" Particulates								
	Note: 2" Riser Loose In 4" Casing								
		Sample Readings							

Comments: Initial Purge Water - Turbid; Dark Brown; Significant "Floc-Like" Particulates
Final Purge Water - vy Sl. Turbid - Clear; vy Sl Brown Tint; Few "Floc-Like" Particulates; No Odor, No Sheen

Inside Diameter	vol./ft.
1"	0.04
1.25"	0.06
2"	0.16
4"	0.65

Field Blank Taken ☐ Time: _____

Well Duplicate ☐ No.: _____

Signature: [signature]

Date: 10/1/12

HNu/PPM	LEL/%	O2/%	H2S/PPM	CO/PPM	

SB SERVICES, INC.

10-1-12 *Well Purging and Sample Collection*

915 Cleveland Avenue, Niagara Falls

Project No.: BEV-11-023 Well No. BRMW-7 Site: NYSDEC Site No. 932151

Purging Method: Pumped ☒ Bailed ☐ Other: _____

Pump Type: _____ Bailer Type: Polyethylene

Weather Conditions: Sunny, Few Clouds, ~60°F

Volume Calculation: 12.69' x 0.1632 = 2.07 gals

(D.T.B. – D.T.W. x vol./ft. = Gals./well vol.)
(Gals./well vol. x 5 = Total Volume to be removed)

Gals./well vol.: 2.07 gals 3 wv = 6.21 gals

Time	Depth to Water (D.T.W.)	Depth to Bottom (D.T.B.)	Volume Removed (gal.)	pH	Cond.	Temp.	Color	Odor Y/N	Turbidity
1131	22.70	35.39							
1205			6.5						
1214	Collect Sample								
	Sample- Sl. Cloudy, Sl. Brown Tint								
		Sample Readings							

Comments: Initial Purged Water- Clear: Final Purged Water- V. Sl. Turbid; Sl. Brown Tint No Odor, No Sheen

Inside Diameter	vol./ft.
1"	0.04
1.25"	0.06
2"	0.16
4"	0.65

Field Blank Taken ☐ Time: _____

Well Duplicate ☐ No.: _____

Signature: [signature]

Date: 10/1/12

HNu/PPM	LEL/%	O2/%	H2S/PPM	CO/PPM	

SJB SERVICES, INC.

10-1-12 *Well Purging and Sample Collection*

915 Cleveland Avenue, Niagara Falls

Project No.: BEV11-023 Well No. BRMW-8 Site: NYSDEC Site No. 932151

Purging Method: Pumped [X] Bailed [ ] Other: _____

Pump Type: _____ Bailer Type: Polyethylene

Weather Conditions: Sunny, Few Clouds/Clouds; ~60°F

Volume Calculation: 1604' x .1632 gals/ft (SJB 10-1-12) = 2.62 gals

(D.T.B. – D.T.W. x vol./ft. = Gals./well vol.)
(Gals./well vol. x 5 = Total Volume to be removed)

Gals./well vol.: 2.62 gals 3 vol = 7.86 gal

Time	Depth to Water (D.T.W.)	Depth to Bottom (D.T.B.)	Volume Removed (gal.)	pH	Cond.	Temp.	Color	Odor Y/N	Turbidity
1318	15.24	31.29							
1400			8.0						
1412	Collect Sample								
	Sample - Cloudy; White								
		Sample Readings							

Comments: Initial & Final Purged Water - Cloudy; White, No Sheen, No Odor

Inside Diameter	vol./ft.
1"	0.04
1.25"	0.06
2"	0.16
4"	0.65

Field Blank Taken [ ] Time: _____

Well Duplicate [ ] No.: _____

Signature: DeBall

Date: 10/1/12

HNu/PPM	LEL/%	O2/%	H2S/PPM	CO/PPM	