



**CBS Corporation**

Environmental Remediation  
PNC Center  
20 Stanwix Street, 10<sup>th</sup> Floor  
Pittsburgh, PA 15222

Via Electronic and First-Class Mail

April 29, 2016

Mr. David P. Loey  
New York State Department of Environmental Conservation  
Division of Hazardous Waste Remediation  
Region 9  
270 Michigan Avenue  
Buffalo, NY 14203-2999

**Re:    Quarterly Progress Report, January 1 through March 31, 2016  
NYSDEC Site 9-15-066, Cheektowaga, New York**

Dear Mr. Loey:

On behalf of CBS Corporation (CBS) and the Niagara Frontier Transportation Authority (NFTA), CBS submits this progress report on activities undertaken during the first quarter of 2016 at New York State Department of Environmental Conservation (NYSDEC) Site No. 9-15-066 in Cheektowaga, New York (the Site) pursuant to the Order on Consent and Settlement Agreement, Index No. B9-0381-91-8, entered with NYSDEC (the Order). Under agreements among the Respondents to the Order, CBS is managing the Remedial Program, including the post-closure monitoring related to the Operable Unit 2 (OU2) groundwater collection and treatment system. This progress report also provides the results from the sixth round of post-closure groundwater and storm sewer (surface water) monitoring.

**1.    Site Activities and Status**

- A.    On January 19, 2016, CBS submitted to NYSDEC a progress report on the status of activities at the Site during the fourth quarter of 2015 (*i.e.*, October 1 through December 31, 2015).
- B.    On March 17, 2016, GHD Services, Inc. (GHD) conducted the sixth round of quarterly post-closure groundwater and storm sewer (surface water) sampling.
- C.    TestAmerica Laboratories, Inc. (TestAmerica) completed the analyses of the groundwater and storm sewer (surface water) samples that were collected on March 17, 2016. GHD conducted data validation and usability evaluations.

## 2. Sampling Results and Other Site Data

- A. Table 1 presents groundwater elevations over the course of post-closure groundwater monitoring, including the most recent (March 17, 2016) measurements. Historical data from April 2008 and June 2011 are also included in this table for reference.
- B. Table 2 presents the results of the groundwater sampling over the course of post-closure monitoring, including the most recent (March 17, 2016) sampling. Monitoring well sampling locations are shown in Figure 1.
- C. As shown in Table 2, except for vinyl chloride at well MW-32, none of the monitored volatile organic compounds (VOCs) or metals was detected in the March 2016 sampling at concentrations above their respective remedial action objectives (RAOs). Well MW-32 historically exhibited elevated VOC concentrations, and groundwater at this location was the focus of an *in situ* chemical oxidation treatment program that resulted in substantial decreases in VOC concentrations. Well MW-32 was not within the zone of influence of the former groundwater collection and treatment system.
- D. Tables 3 through 5 present the results of the March 2016 surface water sampling over the course of post-closure monitoring, including the most recent (March 17, 2016) sampling. The table also includes the results of baseline sampling collected in July 2014. Manhole and catch basin sampling locations are shown in Figure 1.
- E. As indicated in Tables 3 through 5, low constituent concentrations are evident in the area of the 001 segment of the former collection system and the western portion of the 003 segment (*i.e.*, Manholes MH-3B and MH-3C). Higher constituent concentrations are present in the area of the 002 segment and the eastern portion of the 003 segment (*i.e.*, Manhole MH-3A).
- F. Attachments A and B provide the analytical laboratory reports for the groundwater and storm sewer samples, respectively, collected in March 2016.
- G. Attachment C provides the data validation and usability evaluation for the samples collected in March 2016.

## 3. Upcoming Activities

- A. CBS will continue the quarterly OU2 post-closure groundwater and storm sewer monitoring.

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- B. As analytical data are developed and evaluated, GHD will submit electronic data deliverables (EDDs) for incorporation of Site data into the NYSDEC EQuIS database.<sup>1</sup>

**4. Technical and Schedule Issues**

- A. There are no unresolved technical or operational issues affecting the OU2 post-closure groundwater and storm sewer monitoring.

We trust this submittal satisfies your requirements at this time. If you have questions regarding this progress report or other project matters, please do not hesitate to contact me.

Respectfully submitted,



Leo M. Brausch  
Consultant/Project Engineer  
Environmental Remediation

LMB:  
Attachments

cc: Tim Carvana, NFTA  
Clair Quadri  
M. G. Graham, Esq.  
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S. J. Ricca, Esq.  
W. D. Wall, Esq.

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<sup>1</sup> The EDD for the March 2016 groundwater and surface water sampling data was submitted to NYSDEC on April 14, 2016.

## **TABLES**

**Table 1**  
**Groundwater Elevations**  
**Site No. 9-15-066, Cheektowaga, New York**

Date of Measurement	MW-2	MW-5	MW-28	MW-30	MW-31	MW-32	MW-33	MW-34	MW-34D	MW-35
<b>Depth to Groundwater (ft-TOC)</b>										
04/24/08	NM	2.91	5.94	5.33	3.18	NM	NM	3.51	5.4	NM
06/14/11	7.10	2.81	5.86	4.82	4.05	1.60	5.04	3.78	6.23	13.29
11/24/14	6.28	1.90	5.50	5.17	3.46	0.25	5.11	3.37	0.25	12.91
04/01/15	6.87	2.59	5.85	3.92	5.01	0.44	5.18	2.65	0.06	12.22
06/18/15	6.70	2.30	5.76	3.32	3.32	0.96	5.02	2.90	3.38	12.90
09/10/15	7.34	2.60	5.89	5.82	3.88	1.48	5.22	3.80	5.22	13.69
12/10/15	7.50	2.67	5.95	5.74	5.39	1.37	5.40	3.77	5.18	13.62
03/17/16	6.64	2.39	5.77	4.42	3.51	0.55	4.89	2.97	2.40	12.68
<b>Groundwater Elevation (ft-msl)</b>										
04/24/08	NA	683.02	682.33	689.48	684.04	NA	NA	699.42	696.39	NA
06/14/11	684.71	683.12	682.41	689.99	683.17	709.11	707.46	699.15	695.56	685.17
11/24/14	685.53	684.03	682.77	689.64	683.76	710.46	707.39	699.56	701.54	685.55
04/01/15	684.94	683.34	682.42	690.89	682.21	710.27	707.32	700.28	701.73	686.24
06/18/15	685.11	683.63	682.51	691.49	683.90	709.75	707.48	700.03	698.41	685.56
09/10/15	684.47	683.33	682.38	688.99	683.34	709.23	707.28	699.13	696.57	684.77
12/10/15	684.31	683.26	682.32	689.07	681.83	709.34	707.10	699.16	696.61	684.84
03/17/16	685.17	683.54	682.50	690.39	683.71	710.16	707.61	699.96	699.39	685.78

Notes:

1. "NM" indicates water level not measured.
2. "NA" indicates groundwater elevation data not available.

**Table 2**  
**Summary of Post-Closure Groundwater Monitoring Data**  
**NYSDEC Site No. 9-15-066, Cheektowaga, New York**

Well Number	Date of Sampling	Constituent Concentration ( $\mu\text{g/L}$ )						
		cis-1,2-dichloroethylene	Toluene	1,1-trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead
Remedial Action Objective		5	5	5	5	2	5	25
MW-2	11/24/14	0.47 J	1 U	1 U	1 U	0.54 J	5 U	3.6 J
	04/01/15	0.32 J	1 U	1 U	1 U	1 U	0.52 J	10 U
	06/18/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	09/10/15	0.32 J	1 U	1 U	1 U	1 U	5 U	10 U
	12/10/15	0.75 J	1 U	1 U	1 U	0.76 J	5 U	20 U
	03/17/16	0.32 J	1 U	1 U	1 U	1 U	0.27 J	20 U
MW-5	11/24/14	1 U	1 U	1 U	0.71 J	1 U	5 U	2.6 J
	11/24/14 (dup)	1 U	1 U	1 U	0.66 J	1 U	5 U	2.6 J
	04/01/15	1 U	1 U	1 U	0.88 J	1 U	0.21 J	10 U
	06/18/15	1 U	1 U	1 U	1 U	1 U	5 U	120
	09/10/15	1 U	1 U	1 U	0.80 J	1 U	5 U	10 U
	12/10/15	1 U	1 U	1 U	1.3	1 U	5 U	10 U
	03/17/16	1 U	1 U	1 U	1.1	1 U	5 U	10 U
MW-28	11/24/14	1 U	1 U	1 U	1 U	1 U	5 U	11 J
	04/01/15	1 U	1 U	1 U	1 U	1 U	0.55 J	17 B
	06/18/15	1 U	1 U	1 U	1 U	1 U	5 U	3.4 J
	09/10/15	1 U	1 U	1 U	1 U	1 U	5 U	4.9 J
	12/10/15	1 U	1 U	1 U	1 U	1 U	5 U	5.3 J
	03/17/16	1 U	1 U	1 U	1 U	1 U	5 U	4.8 J
MW-30	11/24/14	1 U	1 U	1 U	0.23 J	1 U	5 U	1.5 J
	04/01/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	06/18/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	09/10/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	12/10/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	03/17/16	1 U	1 U	1 U	1 U	1 U	5 U	10 U

**Table 2**  
**Summary of Post-Closure Groundwater Monitoring Data**  
**NYSDEC Site No. 9-15-066, Cheektowaga, New York**

Well Number	Date of Sampling	Constituent Concentration (µg/L)						
		cis-1,2-dichloroethylene	Toluene	1,1,1-trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead
Remedial Action Objective		5	5	5	5	2	5	25
MW-31	11/24/14	1 U	1 U	1 U	1 U	1 U	5 U	<b>6.0 J</b>
	04/01/15	1 U	1 U	1 U	1 U	1 U	<b>0.43 J</b>	20 U
	06/18/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	09/10/15	1 U	1 U	1 U	1 U	1 U	5 U	20 U
	12/10/15	1 U	1 U	1 U	1 U	1 U	5 U	20 U
	03/17/16	1 U	1 U	1 U	1 U	1 U	5 U	20 U
MW-32	11/24/14	<b>1.9</b>	1 U	1 U	1.1	<b>1.0</b>	5 U	<b>1.6 J</b>
	04/01/15	<b>5.2</b>	1 U	1 U	<b>0.66 J</b>	<b>6.0</b>	<b>0.17 J</b>	10 U
	06/18/15	<b>0.45 J</b>	1 U	1 U	1 U	1 U	5 U	10 U
	09/10/15	<b>4.5</b>	1 U	1 U	<b>0.65 J</b>	<b>7.4</b>	5 U	10 U
	09/10/15 (dup)	<b>4.5</b>	1 U	1 U	<b>0.61 J</b>	<b>6.4</b>	5 U	10 U
	12/10/15	<b>4.5</b>	1 U	1 U	<b>0.49 J</b>	<b>4.3</b>	5 U	10 U
	12/10/15 (dup)	<b>4.6</b>	1 U	1 U	<b>0.49 J</b>	<b>4.1</b>	5 U	10 U
	03/17/16	<b>3.5</b>	1 U	1 U	<b>0.30 J</b>	<b>5.6</b>	5 U	10 U
MW-33	11/24/14	1 U	1 U	1 U	1 U	1 U	5 U	<b>1.6 J</b>
	04/01/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	06/18/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	09/10/15	1 U	1 U	1 U	<b>0.18 J</b>	1 U	5 U	10 U
	12/10/15	1 U	1 U	1 U	<b>0.18 J</b>	1 U	5 U	10 U
	03/17/16	1 U	1 U	1 U	<b>0.20 J</b>	1 U	5 U	10 U
MW-34	11/24/14	1 U	1 U	1 U	1 U	1 U	5 U	<b>1.2 J</b>
	04/01/15	1 U	1 U	1 U	1 U	1 U	<b>0.23 J</b>	10 U
	06/18/15	1 U	1 U	1 U	1 U	1 U	5 U	<b>1.8 J</b>
	09/10/15	1 U	1 U	1 U	1 U	1 U	5 U	<b>2.0 J</b>
	12/10/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	03/17/16	1 U	1 U	1 U	1 U	1 U	5 U	10 U

**Table 2**  
**Summary of Post-Closure Groundwater Monitoring Data**  
**NYSDEC Site No. 9-15-066, Cheektowaga, New York**

Well Number	Date of Sampling	Constituent Concentration ( $\mu\text{g/L}$ )						
		cis-1,2-dichloroethylene	Toluene	1,1,1-trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead
Remedial Action Objective		5	5	5	5	2	5	25
MW-34D	12/02/14	1 U	1 U	1 U	1 U	1 U	<b>0.13 J</b>	10 U
	04/01/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	06/18/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	09/10/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	12/10/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	03/17/16	1 U	1 U	1 U	1 U	1 U	5 U	10 U
MW-35	11/24/14	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	04/01/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	04/01/15 (dup)	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	06/18/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	06/18/15 (dup)	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	09/10/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	12/10/15	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	03/17/16	1 U	1 U	1 U	1 U	1 U	5 U	10 U
	03/17/16 (dup)	1 U	1 U	1 U	1 U	1 U	5 U	10 U

Data Legend:

"NA" - indicates not analyzed

Concentrations above Remedial Action Objectives are highlighted in yellow.

For clarity, the results of the most-recent sampling round are highlighted in light green.

Data qualifiers:

U - not detected at indicated reporting limit (RL)

J - estimated concentration.

B - analyte detected in corresponding blank sample.

**Table 3**  
**NFTA Storm Sewer Sampling Results - 001 System Area**  
**Site No. 9-15-066, Cheektowaga, New York**

Manhole Designation	Date of Sampling	pH (s.u.)	Total Suspended Solids (mg/L)	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	1,2-dichlorobenzene (µg/L)	cis-1,2-dichloroethylene (µg/L)	Methylene Chloride (µg/L)	Toluene (µg/L)	Tetrachloroethylene (µg/L)	Trichloroethylene (µg/L)	Vinyl Chloride (µg/L)
MH-1A	07/14/14	<b>7.90 J</b>	<b>2.4</b>	<b>0.61 J</b>	<b>1.4 J</b>	NA	1 U	1 U	1 U	1 U	<b>1.9</b>	1 U	NA
	11/24/14	<b>7.64 J</b>	<b>46</b>	<b>0.54 J</b>	<b>3.8 J</b>	<b>3.1 J</b>	1 U	1 U	1 U	1 U	<b>0.25 J</b>	<b>0.22 J</b>	1 U
	04/01/15	<b>8.01 J</b>	<b>13 J</b>	<b>1.1 J</b>	<b>1.9 J</b>	<b>10 U</b>	1 U	<b>0.24 J</b>	1 U	1 U	<b>1.2</b>	<b>0.25 J</b>	1 U
	06/18/15	<b>7.71 J</b>	<b>3.2</b>	<b>2.3 J</b>	<b>5 U</b>	<b>10 U</b>	1 U	1 U	1 U	1 U	<b>2.4</b>	<b>0.25 J</b>	1 U
	09/10/15	<b>7.90 J</b>	<b>3.6</b>	<b>1.3 J</b>	<b>5 U</b>	<b>2.2 J</b>	1 U	1 U	1 U	1 U	<b>1.0</b>	1 U	1 U
	12/10/15	<b>7.64 J</b>	<b>6.3</b>	<b>3.8 J</b>	<b>1.5 J</b>	<b>2.0 J</b>	1 U	1 U	1 U	1 U	<b>1.7</b>	<b>0.20 J</b>	1 U
	03/17/16	<b>7.91 J</b>	<b>7.7</b>	<b>1.5 J</b>	<b>1.0 J</b>	<b>10 U</b>	1 U	1 U	1 U	1 U	<b>1.3</b>	<b>0.17 J</b>	1 U
MH-1B	07/14/14	<b>8.06 J</b>	<b>7.6</b>	5 U	5 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA
	11/24/14	<b>7.69 J</b>	<b>5.6</b>	5 U	<b>1.1 J</b>	<b>1.6 J</b>	1 U	1 U	1 U	1 U	<b>0.20 J</b>	1 U	
	04/01/15	<b>7.96 J</b>	<b>66</b>	<b>0.97 J</b>	<b>3.7 J</b>	<b>50 U</b>	1 U	<b>0.32 J</b>	1 U	1 U	<b>0.53 J</b>	1 U	
	06/18/15	<b>8.12 J</b>	<b>0.5</b>	5 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	
	09/10/15	<b>8.16 J</b>	<b>1.1</b>	5 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	
	12/10/15	<b>7.90 J</b>	<b>1.2</b>	5 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	
	03/17/16	<b>8.08 J</b>	<b>0.8</b>	5 U	<b>1.1 J</b>	<b>10 U</b>	1 U	<b>0.66 J</b>	1 U	1 U	1 U	<b>0.45 J</b>	1 U
MH-1C	07/14/14	<b>8.18 J</b>	<b>8.0</b>	5 U	5 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA
	11/24/14	<b>7.82 J</b>	<b>8.0</b>	5 U	<b>0.78 J</b>	<b>10 U</b>	1 U	1 U	1 U	1 U	<b>0.24 J</b>	1 U	
	04/01/15	<b>8.10 J</b>	<b>41</b>	<b>0.18 J</b>	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	
	06/18/15	<b>8.08 J</b>	<b>7.3</b>	5 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	
	09/10/15	<b>8.29 J</b>	<b>1.5</b>	5 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	
	12/10/15	<b>8.19 J</b>	<b>54</b>	5 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	
	03/17/16	<b>8.25 J</b>	<b>180</b>	5 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	

See notes on following page.

**Table 3**  
**NFTA Storm Sewer Sampling Results - 001 System Area**  
**Site No. 9-15-066, Cheektowaga, New York**

Notes:

1. For manhole locations, see Figure 1.

2. "NA" indicates not available.

3. Data Legend:

Detections and estimated values are in **bold-face** type.

Data Qualifiers:

*U* - not detected at indicated reporting limit (RL).

*J* - estimated concentration.

**Table 4**  
**NFTA Storm Sewer Sampling Results - 002 System Area**  
**Site No. 9-15-066, Cheektowaga, New York**

Manhole Designation	Date of Sampling	pH (s.u.)	Total Suspended Solids (mg/L)	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	1,2-dichlorobenzene (µg/L)	cis-1,2-dichloroethylene (µg/L)	Methylene Chloride (µg/L)	Toluene (µg/L)	Tetrachloroethylene (µg/L)	Trichloroethylene (µg/L)	Vinyl Chloride (µg/L)
MH-2A	07/11/14	<b>8.69 J</b>	<b>30</b>	5 U	<b>2.2 J</b>	NA	1 U	2.3	<b>0.50 JB</b>	1 U	1 U	<b>18</b>	NA
	11/24/14	<b>8.32 J</b>	2 U	<b>0.21 J</b>	<b>3.0 J</b>	10 U	1 U	<b>21</b>	<b>4.9 JB</b>	1 U	<b>0.98 J</b>	<b>120</b>	1.6
	04/01/15	<b>8.33 J</b>	3.5	5 U	<b>3.2 J</b>	<b>1.2 J</b>	5 U	<b>19</b>	5 U	5 U	<b>1.0 J</b>	<b>70</b>	5 U
	06/18/15	<b>8.36 J</b>	<b>0.5</b>	5 U	<b>1.9 J</b>	<b>1.2 J</b>	1 U	<b>11</b>	1 U	1 U	1.2	<b>74</b>	1 U
	09/10/15	<b>8.29 J</b>	1.2	5 U	5 U	<b>2.6 J</b>	1 U	<b>4.0</b>	1 U	1 U	<b>0.55 J</b>	<b>16</b>	1 U
	12/10/15	<b>7.89 J</b>	<b>2.9</b>	5 U	<b>1.5 J</b>	<b>2.2 J</b>	1 U	<b>13</b>	1 U	1 U	<b>2.7</b>	<b>25</b>	1 U
	03/17/16	<b>8.25 J</b>	0.5 U	5 U	<b>2.5 J</b>	10 U	5 U	<b>18</b>	5 U	5 U	5 U	<b>93</b>	5 U
MH-2B	07/11/14	<b>11.7 J</b>	<b>6.4</b>	5 U	<b>5.7</b>	NA	2 U	<b>25</b>	<b>1.4 JB</b>	2 U	<b>5.7</b>	<b>41</b>	NA
	11/24/14	<b>10.4 J</b>	<b>97</b>	5 U	<b>7.1</b>	10 U	2 U	<b>27</b>	2 U	2 U	<b>7.9</b>	<b>44</b>	1.6 J
	04/01/15	<b>11.2 J</b>	<b>160</b>	<b>0.21 J</b>	<b>7.1</b>	50 U	5 U	<b>23</b>	1 U	5 U	<b>7.0</b>	<b>82</b>	1.7 J
	06/18/15	<b>11.4 J</b>	<b>36</b>	5 U	<b>5.5</b>	10 U	1 U	<b>31</b>	1 U	<b>0.16 J</b>	<b>10</b>	<b>57</b>	1.1
	09/10/15	<b>11.6 J</b>	<b>39</b>	5 U	<b>5.0</b>	<b>11</b>	2 U	<b>29</b>	1 U	2 U	<b>9.4</b>	<b>59</b>	<b>1.0 J</b>
	12/10/15	<b>11.6 J</b>	<b>57</b>	5 U	<b>5.2</b>	<b>8.4 J</b>	5 U	<b>33</b>	5 U	5 U	<b>8.6</b>	<b>58</b>	5 U
	03/17/16	<b>11.0 J</b>	<b>100</b>	5 U	<b>6.6</b>	<b>2.2 J</b>	3 U	<b>26</b>	3 U	3 U	<b>7.5</b>	<b>52</b>	<b>0.84 J</b>
MH-2C	07/11/14	<b>9.14 J</b>	<b>310</b>	5 U	<b>6.0</b>	NA	2 U	<b>25</b>	<b>1.2 JB</b>	2 U	<b>6.6</b>	<b>46</b>	NA
	11/24/14	<b>9.17 J</b>	<b>150</b>	<b>0.34 J</b>	<b>15</b>	<b>9.5 J</b>	1 U	<b>18 J</b>	1 U	1 U	<b>6.3 J</b>	<b>30 J</b>	1.4
	04/01/15	<b>10.6 J</b>	<b>170</b>	<b>0.41 J</b>	<b>9.0</b>	<b>7.4 J</b>	1 U	<b>29 J</b>	<b>0.18 J</b>	<b>0.26 J</b>	<b>15</b>	<b>66 J</b>	3.1
	06/18/15	<b>11.5 J</b>	<b>18</b>	5 U	<b>5.3</b>	<b>1.9 J</b>	1 U	<b>32</b>	1 U	<b>0.16 J</b>	<b>12</b>	<b>55</b>	1.2
	09/10/15	<b>11.7 J</b>	<b>22</b>	5 U	<b>2.6 J</b>	<b>6.6 J</b>	1 U	<b>25</b>	1 U	1 U	<b>8.9</b>	<b>56</b>	<b>0.77 J</b>
	09/10/15	<b>11.7 J</b>	<b>20</b>	5 U	<b>2.5 J</b>	<b>6.4 J</b>	1 U	<b>25</b>	1 U	1 U	<b>8.8</b>	<b>56</b>	<b>0.76 J</b>
	12/10/15	<b>11.7 J</b>	<b>11</b>	5 U	<b>3.2 J</b>	<b>3.6 J</b>	3 U	<b>37</b>	3 U	3 U	<b>9.2</b>	<b>69</b>	<b>1.1 J</b>
	12/10/15	<b>11.6 J</b>	<b>6.8</b>	5 U	<b>2.7 J</b>	<b>4.6 J</b>	3 U	<b>36</b>	3 U	3 U	<b>9.5</b>	<b>68</b>	<b>1.1 J</b>
	03/17/16	<b>11.0 J</b>	<b>55</b>	5 U	<b>6.5</b>	10 U	1 U	<b>19 J</b>	1 U	1 U	<b>6.8</b>	<b>37 J</b>	1.1

**Table 4**  
**NFTA Storm Sewer Sampling Results - 002 System Area**  
**Site No. 9-15-066, Cheektowaga, New York**

Manhole Designation	Date of Sampling	pH (s.u.)	Total Suspended Solids (mg/L)	Cadmium ( $\mu\text{g}/\text{L}$ )	Chromium ( $\mu\text{g}/\text{L}$ )	Lead ( $\mu\text{g}/\text{L}$ )	1,2-dichlorobenzene ( $\mu\text{g}/\text{L}$ )	cis-1,2-dichloroethylene ( $\mu\text{g}/\text{L}$ )	Methylene Chloride ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Tetrachloroethylene ( $\mu\text{g}/\text{L}$ )	Trichloroethylene ( $\mu\text{g}/\text{L}$ )	Vinyl Chloride ( $\mu\text{g}/\text{L}$ )
MH-2D	07/11/14	<b>8.80 J</b>	<b>62</b>	5 U	<b>4.0 J</b>	NA	1 U	2.9	<b>0.51 JB</b>	1 U	<b>0.2 J</b>	20	NA
	11/24/14	<b>8.76 J</b>	<b>22</b>	5 U	<b>5.0</b>	10 U	1 U	<b>53</b>	<b>2.5 JB</b>	1 U	<b>1.0</b>	130	<b>4.9</b>
	04/01/15	<b>8.29 J</b>	<b>50</b>	<b>0.26 J</b>	<b>6.2</b>	<b>7.2 J</b>	1 U	<b>28</b>	1 U	1 U	<b>2.3</b>	100	<b>1.3</b>
	06/18/15	<b>7.93 J</b>	<b>1.2</b>	5 U	<b>0.88 J</b>	<b>1.3 J</b>	1 U	<b>73</b>	1 U	1 U	<b>0.87 J</b>	1,300	<b>0.44 J</b>
	09/10/15	<b>8.14 J</b>	<b>24</b>	5 U	<b>5 U</b>	10 U	1 U	<b>5.7</b>	1 U	1 U	<b>0.75 J</b>	24	1 U
	12/10/15	<b>7.85 J</b>	<b>120</b>	5 U	<b>3.2 J</b>	<b>2.1 J</b>	1 U	<b>25</b>	1 U	1 U	<b>4.4</b>	46	<b>0.26 J</b>
	03/17/16	<b>8.34 J</b>	<b>1,300</b>	<b>0.41 J</b>	<b>35</b>	<b>49</b>	5 U	<b>23</b>	5 U	5 U	5 U	<b>130</b>	5 U

Notes:

1. For manhole locations, see Figure 1.
2. "NA" indicates not available.
3. Data Legend:

Detections and estimated values are in **bold-face** type.

Data Qualifiers:

U - not detected at indicated reporting limit (RL).

J - estimated concentration.

B - constituent detected in corresponding blank sample.

**Table 5**  
**NFTA Storm Sewer Sampling Results - 003 System Area**  
**Site No. 9-15-066, Cheektowaga, New York**

Manhole Designation	Date of Sampling	pH (s.u.)	Total Suspended Solids (mg/L)	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	1,2-dichlorobenzene (µg/L)	cis-1,2-dichloroethylene (µg/L)	Methylene Chloride (µg/L)	Toluene (µg/L)	Tetrachloroethylene (µg/L)	Trichloroethylene (µg/L)	Vinyl Chloride (µg/L)
MH-3A	07/11/14	<b>9.56 J</b>	<b>2.4</b>	5 U	5.6	NA	25 U	<b>52</b>	<b>16 JB</b>	25 U	25 U	<b>370</b>	NA
	11/24/14	<b>8.84 J</b>	<b>25</b>	5 U	<b>4.2 J</b>	10 U	3 U	<b>30</b>	3 U	3 U	3 U	<b>110</b>	<b>0.84 J</b>
	04/01/15	<b>9.03 J</b>	<b>1.4</b>	<b>0.25 J</b>	<b>10</b>	50 U	10 U	<b>15</b>	10 U	10 U	10 U	<b>71</b>	10 U
	06/18/15	<b>8.96 J</b>	<b>33</b>	5 U	<b>5.6</b>	<b>1.7 J</b>	1 U	<b>16</b>	1 U	1 U	<b>0.91 J</b>	<b>110</b>	1 U
	06/18/15	<b>8.94 J</b>	<b>24</b>	5 U	<b>5.8</b>	<b>2.8 J</b>	1 U	<b>16</b>	1 U	1 U	<b>0.96 J</b>	<b>110</b>	<b>0.90 J</b>
	09/10/15	<b>9.55 J</b>	<b>19</b>	5 U	<b>2.7 J</b>	<b>4.5 J</b>	2 U	<b>16</b>	1 U	2 U	2.0	<b>64</b>	<b>1.6 J</b>
	12/10/15	<b>9.44 J</b>	<b>64</b>	5 U	<b>3.5 J</b>	<b>4.8 J</b>	5 U	<b>30</b>	5 U	5 U	<b>1.7 J</b>	<b>84</b>	<b>1.5 J</b>
	03/17/16	<b>8.94 J</b>	<b>330</b>	5 U	<b>13</b>	<b>6.5 J</b>	5 U	<b>20</b>	5 U	5 U	5 U	<b>77</b>	5 U
MH-3B	07/11/14	<b>8.88 J</b>	<b>13</b>	5 U	<b>1.4 J</b>	NA	1 U	1 U	<b>0.48 JB</b>	1 U	1 U	<b>0.95 J</b>	NA
	11/24/14	<b>8.05 J</b>	<b>150</b>	<b>0.31 J</b>	<b>13</b>	<b>43</b>	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	11/24/14	<b>8.01 J</b>	<b>160</b>	<b>0.20 J</b>	<b>15</b>	<b>48</b>	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	04/01/15	<b>8.89 J</b>	<b>7.3</b>	<b>0.21 J</b>	<b>13</b>	50 U	1 U	1 U	1 U	1 U	1 U	<b>0.54 J</b>	1 U
	06/18/15	<b>7.81 J</b>	<b>4.0</b>	5 U	<b>7.5</b>	<b>1.2 J</b>	1 U	1 U	1 U	1 U	1 U	<b>0.60 J</b>	1 U
	09/10/15	<b>7.52 J</b>	<b>150</b>	5 U	<b>4.6 J</b>	<b>3.7 J</b>	1 U	1 U	1 U	1 U	1 U	1.7	1 U
	12/10/15	<b>7.22 J</b>	<b>14</b>	5 U	<b>1.6 J</b>	<b>2.1 J</b>	1 U	1 U	1 U	1 U	1 U	<b>0.22 J</b>	1 U
	03/17/16	<b>8.20 J</b>	<b>11</b>	5 U	<b>5.2</b>	<b>4.7 J</b>	1 U	1 U	1 U	1 U	1 U	<b>0.21 J</b>	1 U

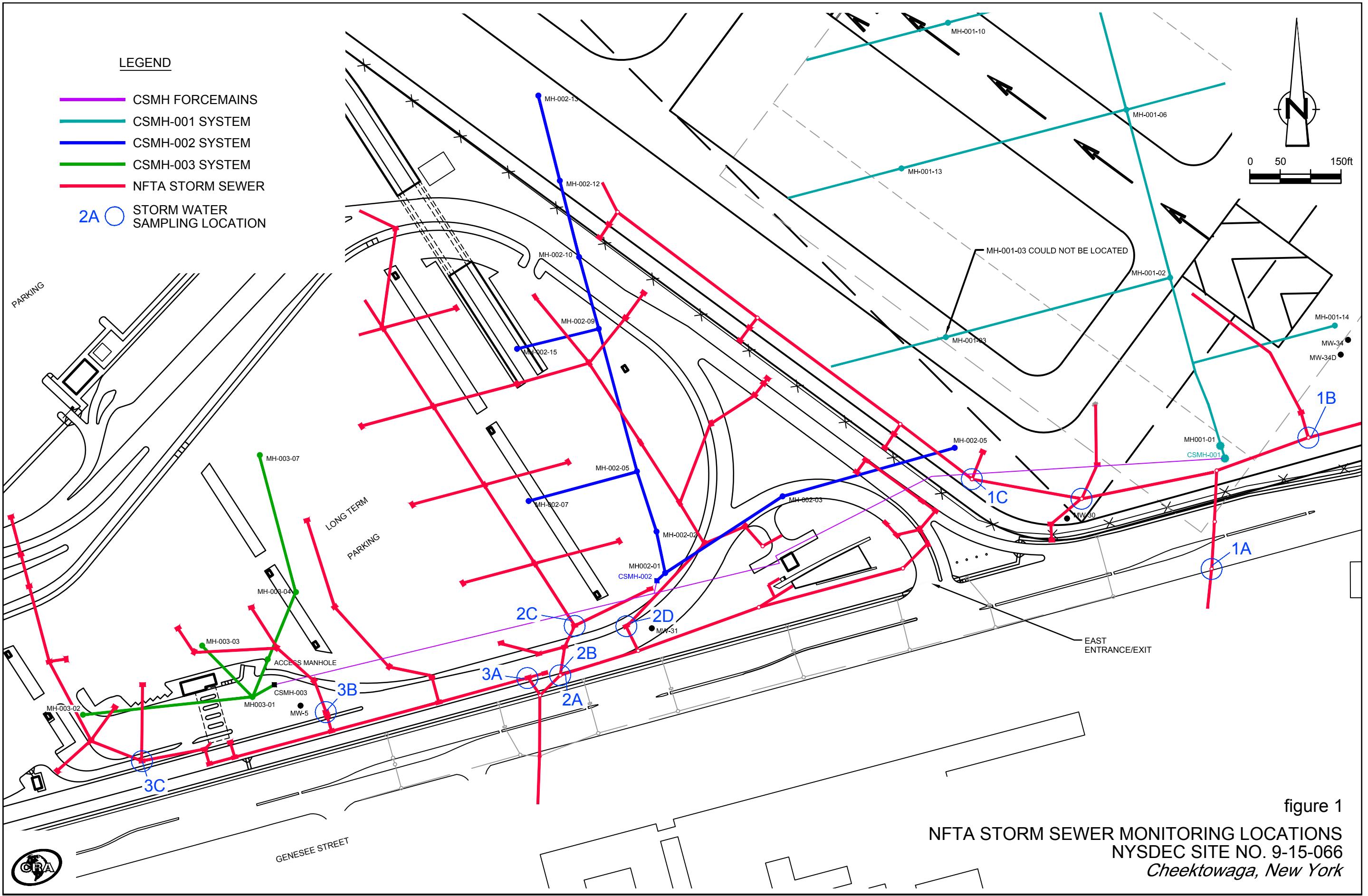
**Table 5**  
**NFTA Storm Sewer Sampling Results - 003 System Area**  
**Site No. 9-15-066, Cheektowaga, New York**

Manhole Designation	Date of Sampling	pH (s.u.)	Total Suspended Solids (mg/L)	Cadmium ( $\mu\text{g}/\text{L}$ )	Chromium ( $\mu\text{g}/\text{L}$ )	Lead ( $\mu\text{g}/\text{L}$ )	1,2-dichlorobenzene ( $\mu\text{g}/\text{L}$ )	cis-1,2-dichloroethylene ( $\mu\text{g}/\text{L}$ )	Methylene Chloride ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Tetrachloroethylene ( $\mu\text{g}/\text{L}$ )	Trichloroethylene ( $\mu\text{g}/\text{L}$ )	Vinyl Chloride ( $\mu\text{g}/\text{L}$ )
MH-3C	07/11/14	<b>8.67 J</b>	<b>160</b>	5 U	3.1 J	NA	1 U	1 U	<b>0.48 JB</b>	1 U	1 U	1 U	NA
	11/24/14	<b>7.84 J</b>	<b>260</b>	<b>0.50 J</b>	21	<b>25</b>	1 U	1 U	1 U	1 U	1 U	<b>1.8</b>	1 U
	04/01/15	<b>7.70 J</b>	<b>1,300 J</b>	<b>8.9 J</b>	27	<b>100</b>	1 U	1 U	1 U	<b>0.39 J</b>	1 U	<b>0.62 J</b>	1 U
	04/01/15	<b>7.57 J</b>	<b>750</b>	<b>5.4 J</b>	31	<b>91</b>	1 U	1 U	1 U	<b>0.63 J</b>	1 U	<b>0.62 J</b>	1 U
	06/18/15	<b>7.68 J</b>	<b>330</b>	5 U	<b>3.9 J</b>	<b>2.3 J</b>	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/10/15	<b>7.62 J</b>	<b>320</b>	5 U	9.0	<b>9.9 J</b>	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/10/15	<b>7.14 J</b>	72	5 U	<b>1.9 J</b>	<b>3.3 J</b>	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	03/17/16	<b>8.10 J</b>	<b>170 J</b>	5 U	13	<b>15</b>	1 U	1 U	1 U	<b>0.18 J</b>	1 U	<b>0.18 J</b>	1 U
	03/17/16	<b>7.84 J</b>	<b>660 J</b>	<b>0.32 J</b>	16	<b>21</b>	1 U	1 U	1 U	<b>0.16 J</b>	1 U	<b>0.14 J</b>	1 U

Notes:

1. For manhole locations, see Figure 1.
2. "NA" indicates not available.
3. Data Legend:  
*Detections and estimated values are in **bold-face** type.*  
*Data Qualifiers:*  
*U - not detected at indicated reporting limit (RL).*  
*J - estimated concentration.*  
*B - constituent detected in corresponding blank sample.*

## **FIGURE**



**ATTACHMENT A**

**ANALYTICAL LABORATORY REPORT**

**MARCH 2016 GROUNDWATER SAMPLING**

**Groundwater Sampling Key**  
**March 17, 2016**  
**NYSDEC Site No. 9-15-066, Cheektowaga, New York**

Well No.	Sample No.
MW-34D	WG-18036-031716-DT-001
MW-34	WG-18036-031716-002-SG
MW-30	WG-18036-031716-DT-003
MW-35	WG-18036-031716-004-SG
MW-33	WG-18036-031716-DT-005
MW-35	WG-18036-031716-006-SG
MW-32	WG-18036-031716-DT-007
MW-2	WG-18036-031716-008-SG
MW-5	WG-18036-031716-009-SG
MW-28	WG-18036-031716-010-SG
MW-31	WG-18036-031716-011-SG
Trip Blank	TB-18036-031716-DT

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-53149-1

Client Project/Site: Buffalo Airport

For:

Brausch Environmental LLC

5318 Alexa Road

Charlotte, North Carolina 28277

Attn: Leo Brausch



---

Authorized for release by:

3/31/2016 1:47:36 PM

Jill Colussy, Project Manager I

(412)963-2444

jill.colussy@testamericainc.com

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Expert

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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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# Case Narrative

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

## Job ID: 180-53149-1

Laboratory: TestAmerica Pittsburgh

### Narrative

#### Job Narrative

### Receipt

The samples were received on 3/18/2016 2:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

The chain of custody did not list a sampling time for the TRIP BLANK. The earliest sample time was logged in.

### GC/MS VOA

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

### Metals

Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following samples: WG-18036-031716-008-SG (180-53149-8), WG-18036-031716-010-SG (180-53149-10), WG-18036-031716-011-SG (180-53149-11). All analytes referencing the indium internal standards required dilution due to the indium counts being low and outside the 70%-130% control limits.

# Definitions/Glossary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
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
U	Indicates the analyte was analyzed for but not detected.
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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Certification Summary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

## Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	11182	03-31-16 *

1

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\* Certification renewal pending - certification considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: Brausch Environmental LLC  
 Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-53149-1	WG-18036-031716-DT-001	Water	03/17/16 08:40	03/18/16 14:15
180-53149-2	WG-18036-031716-002-SG	Water	03/17/16 08:15	03/18/16 14:15
180-53149-3	WG-18036-031716-DT-003	Water	03/17/16 09:35	03/18/16 14:15
180-53149-4	WG-18036-031716-004-SG	Water	03/17/16 08:55	03/18/16 14:15
180-53149-5	WG-18036-031716-DT-005	Water	03/17/16 10:25	03/18/16 14:15
180-53149-6	WG-18036-031716-006-SG	Water	03/17/16 08:55	03/18/16 14:15
180-53149-7	WG-18036-031716-DT-007	Water	03/17/16 11:30	03/18/16 14:15
180-53149-8	WG-18036-031716-008-SG	Water	03/17/16 10:45	03/18/16 14:15
180-53149-9	WG-18036-031716-009-SG	Water	03/17/16 12:35	03/18/16 14:15
180-53149-10	WG-18036-031716-010-SG	Water	03/17/16 11:35	03/18/16 14:15
180-53149-11	WG-18036-031716-011-SG	Water	03/17/16 13:35	03/18/16 14:15
180-53149-12	TB-18036-031716-DT	Water	03/17/16 08:15	03/18/16 14:15

## Method Summary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL PIT
200.7 Rev 4.4	Metals (ICP)	EPA	TAL PIT

### Protocol References:

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

**Client Sample ID: WG-18036-031716-DT-001**

Date Collected: 03/17/16 08:40

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 16:19	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 17:23	RJG	TAL PIT
		Instrument ID: C								

**Client Sample ID: WG-18036-031716-002-SG**

Date Collected: 03/17/16 08:15

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 16:43	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 17:28	RJG	TAL PIT
		Instrument ID: C								

**Client Sample ID: WG-18036-031716-DT-003**

Date Collected: 03/17/16 09:35

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 17:07	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 17:33	RJG	TAL PIT
		Instrument ID: C								

**Client Sample ID: WG-18036-031716-004-SG**

Date Collected: 03/17/16 08:55

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 17:31	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 17:38	RJG	TAL PIT
		Instrument ID: C								

TestAmerica Pittsburgh

# Lab Chronicle

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

**Client Sample ID: WG-18036-031716-DT-005**

Date Collected: 03/17/16 10:25  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 18:20	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 17:43	RJG	TAL PIT
		Instrument ID: C								

**Client Sample ID: WG-18036-031716-006-SG**

Date Collected: 03/17/16 08:55  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 18:44	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 17:48	RJG	TAL PIT
		Instrument ID: C								

**Client Sample ID: WG-18036-031716-DT-007**

Date Collected: 03/17/16 11:30  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-7**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 12:28	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 17:54	RJG	TAL PIT
		Instrument ID: C								

**Client Sample ID: WG-18036-031716-008-SG**

Date Collected: 03/17/16 10:45  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-8**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 19:08	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 18:24	RJG	TAL PIT
		Instrument ID: C								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		2	50 mL	50 mL	171840	03/25/16 11:36	RJG	TAL PIT
		Instrument ID: C								

TestAmerica Pittsburgh

# Lab Chronicle

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

**Client Sample ID: WG-18036-031716-009-SG**

Date Collected: 03/17/16 12:35

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 19:32	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 18:30	RJG	TAL PIT
		Instrument ID: C								

**Client Sample ID: WG-18036-031716-010-SG**

Date Collected: 03/17/16 11:35

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-10**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 19:56	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 18:35	RJG	TAL PIT
		Instrument ID: C								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		2	50 mL	50 mL	171840	03/25/16 11:41	RJG	TAL PIT
		Instrument ID: C								

**Client Sample ID: WG-18036-031716-011-SG**

Date Collected: 03/17/16 13:35

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-11**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 20:20	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 18:40	RJG	TAL PIT
		Instrument ID: C								
Total Recoverable	Prep	200.7			50 mL	50 mL	171312	03/21/16 07:28	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		2	50 mL	50 mL	171840	03/25/16 11:47	RJG	TAL PIT
		Instrument ID: C								

**Client Sample ID: TB-18036-031716-DT**

Date Collected: 03/17/16 08:15

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-12**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 12:52	DLF	TAL PIT
		Instrument ID: CHHP5								

## Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

ANA = Alexis Anderson

Batch Type: Analysis

DLF = Donald Ferguson

RJG = Rob Good

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# Client Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

**Client Sample ID: WG-18036-031716-DT-001**

**Lab Sample ID: 180-53149-1**

Date Collected: 03/17/16 08:40

Matrix: Water

Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 16:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		58 - 135					03/23/16 16:19	1
4-Bromofluorobenzene (Surr)	93		62 - 123					03/23/16 16:19	1
Dibromofluoromethane (Surr)	104		64 - 128					03/23/16 16:19	1
Toluene-d8 (Surr)	104		71 - 118					03/23/16 16:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:28	03/23/16 17:23	1
Lead	10	U	10	2.0	ug/L		03/21/16 07:28	03/23/16 17:23	1

**Client Sample ID: WG-18036-031716-002-SG**

**Lab Sample ID: 180-53149-2**

Matrix: Water

Date Collected: 03/17/16 08:15

Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 16:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/23/16 16:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		58 - 135					03/23/16 16:43	1
4-Bromofluorobenzene (Surr)	87		62 - 123					03/23/16 16:43	1
Dibromofluoromethane (Surr)	103		64 - 128					03/23/16 16:43	1
Toluene-d8 (Surr)	100		71 - 118					03/23/16 16:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:28	03/23/16 17:28	1
Lead	10	U	10	2.0	ug/L		03/21/16 07:28	03/23/16 17:28	1

**Client Sample ID: WG-18036-031716-DT-003**

**Lab Sample ID: 180-53149-3**

Matrix: Water

Date Collected: 03/17/16 09:35

Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 17:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/23/16 17:07	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 17:07	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/23/16 17:07	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 17:07	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Brausch Environmental LLC  
 Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
			58 - 135	62 - 123			
1,2-Dichloroethane-d4 (Surr)	99		58 - 135		03/23/16 17:07	03/23/16 17:07	1
4-Bromofluorobenzene (Surr)	82		62 - 123		03/23/16 17:07	03/23/16 17:07	1
Dibromofluoromethane (Surr)	104		64 - 128		03/23/16 17:07	03/23/16 17:07	1
Toluene-d8 (Surr)	96		71 - 118		03/23/16 17:07	03/23/16 17:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L	D	03/21/16 07:28	03/23/16 17:33	1
Lead	10	U	10	2.0	ug/L	D	03/21/16 07:28	03/23/16 17:33	1

Client Sample ID: WG-18036-031716-004-SG

Lab Sample ID: 180-53149-4

Matrix: Water

Date Collected: 03/17/16 08:55

Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 17:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/23/16 17:31	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 17:31	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/23/16 17:31	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		58 - 135		03/23/16 17:31	1
4-Bromofluorobenzene (Surr)	89		62 - 123		03/23/16 17:31	1
Dibromofluoromethane (Surr)	104		64 - 128		03/23/16 17:31	1
Toluene-d8 (Surr)	103		71 - 118		03/23/16 17:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L	D	03/21/16 07:28	03/23/16 17:38	1
Lead	10	U	10	2.0	ug/L	D	03/21/16 07:28	03/23/16 17:38	1

Client Sample ID: WG-18036-031716-DT-005

Lab Sample ID: 180-53149-5

Matrix: Water

Date Collected: 03/17/16 10:25

Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 18:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/23/16 18:20	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 18:20	1
Trichloroethene	0.20	J	1.0	0.14	ug/L			03/23/16 18:20	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 18:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		58 - 135		03/23/16 18:20	1
4-Bromofluorobenzene (Surr)	88		62 - 123		03/23/16 18:20	1
Dibromofluoromethane (Surr)	106		64 - 128		03/23/16 18:20	1
Toluene-d8 (Surr)	103		71 - 118		03/23/16 18:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L	D	03/21/16 07:28	03/23/16 17:43	1
Lead	10	U	10	2.0	ug/L	D	03/21/16 07:28	03/23/16 17:43	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

**Client Sample ID: WG-18036-031716-006-SG**  
Date Collected: 03/17/16 08:55  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-6**  
Matrix: Water

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 18:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/23/16 18:44	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 18:44	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/23/16 18:44	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 18:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		58 - 135		03/23/16 18:44	1
4-Bromofluorobenzene (Surr)	93		62 - 123		03/23/16 18:44	1
Dibromofluoromethane (Surr)	103		64 - 128		03/23/16 18:44	1
Toluene-d8 (Surr)	103		71 - 118		03/23/16 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:28	03/23/16 17:48	1
Lead	10	U	10	2.0	ug/L		03/21/16 07:28	03/23/16 17:48	1

**Client Sample ID: WG-18036-031716-DT-007**

**Lab Sample ID: 180-53149-7**  
Matrix: Water

Date Collected: 03/17/16 11:30  
Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 12:28	1
cis-1,2-Dichloroethene	3.5		1.0	0.24	ug/L			03/23/16 12:28	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 12:28	1
Trichloroethene	0.30	J	1.0	0.14	ug/L			03/23/16 12:28	1
Vinyl chloride	5.6		1.0	0.23	ug/L			03/23/16 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		58 - 135		03/23/16 12:28	1
4-Bromofluorobenzene (Surr)	83		62 - 123		03/23/16 12:28	1
Dibromofluoromethane (Surr)	102		64 - 128		03/23/16 12:28	1
Toluene-d8 (Surr)	102		71 - 118		03/23/16 12:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:28	03/23/16 17:54	1
Lead	10	U	10	2.0	ug/L		03/21/16 07:28	03/23/16 17:54	1

**Client Sample ID: WG-18036-031716-008-SG**

**Lab Sample ID: 180-53149-8**  
Matrix: Water

Date Collected: 03/17/16 10:45  
Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 19:08	1
cis-1,2-Dichloroethene	0.32	J	1.0	0.24	ug/L			03/23/16 19:08	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 19:08	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/23/16 19:08	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 19:08	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

**Client Sample ID: WG-18036-031716-008-SG**

**Lab Sample ID: 180-53149-8**

Matrix: Water

Date Collected: 03/17/16 10:45  
Date Received: 03/18/16 14:15

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		58 - 135		03/23/16 19:08	1
4-Bromofluorobenzene (Surr)	93		62 - 123		03/23/16 19:08	1
Dibromofluoromethane (Surr)	104		64 - 128		03/23/16 19:08	1
Toluene-d8 (Surr)	103		71 - 118		03/23/16 19:08	1

**Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.27	J	5.0	0.25	ug/L		03/21/16 07:28	03/23/16 18:24	1
Lead	20	U	20	4.0	ug/L		03/21/16 07:28	03/25/16 11:36	2

**Client Sample ID: WG-18036-031716-009-SG**

**Lab Sample ID: 180-53149-9**

Matrix: Water

Date Collected: 03/17/16 12:35  
Date Received: 03/18/16 14:15

**Method: 624 - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L		03/23/16 19:32		1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L		03/23/16 19:32		1
Toluene	1.0	U	1.0	0.15	ug/L		03/23/16 19:32		1
Trichloroethylene	1.1		1.0	0.14	ug/L		03/23/16 19:32		1
Vinyl chloride	1.0	U	1.0	0.23	ug/L		03/23/16 19:32		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		58 - 135		03/23/16 19:32	1
4-Bromofluorobenzene (Surr)	91		62 - 123		03/23/16 19:32	1
Dibromofluoromethane (Surr)	105		64 - 128		03/23/16 19:32	1
Toluene-d8 (Surr)	103		71 - 118		03/23/16 19:32	1

**Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:28	03/23/16 18:30	1
Lead	10	U	10	2.0	ug/L		03/21/16 07:28	03/23/16 18:30	1

**Client Sample ID: WG-18036-031716-010-SG**

**Lab Sample ID: 180-53149-10**

Matrix: Water

Date Collected: 03/17/16 11:35  
Date Received: 03/18/16 14:15

**Method: 624 - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L		03/23/16 19:56		1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L		03/23/16 19:56		1
Toluene	1.0	U	1.0	0.15	ug/L		03/23/16 19:56		1
Trichloroethylene	1.0	U	1.0	0.14	ug/L		03/23/16 19:56		1
Vinyl chloride	1.0	U	1.0	0.23	ug/L		03/23/16 19:56		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		58 - 135		03/23/16 19:56	1
4-Bromofluorobenzene (Surr)	91		62 - 123		03/23/16 19:56	1
Dibromofluoromethane (Surr)	101		64 - 128		03/23/16 19:56	1
Toluene-d8 (Surr)	101		71 - 118		03/23/16 19:56	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

**Client Sample ID: WG-18036-031716-010-SG**  
Date Collected: 03/17/16 11:35  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53149-10**  
Matrix: Water

**Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:28	03/23/16 18:35	1
Lead	4.8	J	20	4.0	ug/L		03/21/16 07:28	03/25/16 11:41	2

**Client Sample ID: WG-18036-031716-011-SG**

**Lab Sample ID: 180-53149-11**  
Matrix: Water

Date Collected: 03/17/16 13:35  
Date Received: 03/18/16 14:15

**Method: 624 - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 20:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/23/16 20:20	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 20:20	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/23/16 20:20	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 20:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		58 - 135		03/23/16 20:20	1
4-Bromofluorobenzene (Surr)	93		62 - 123		03/23/16 20:20	1
Dibromofluoromethane (Surr)	109		64 - 128		03/23/16 20:20	1
Toluene-d8 (Surr)	103		71 - 118		03/23/16 20:20	1

**Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:28	03/23/16 18:40	1
Lead	20	U	20	4.0	ug/L		03/21/16 07:28	03/25/16 11:47	2

**Client Sample ID: TB-18036-031716-DT**

**Lab Sample ID: 180-53149-12**

Date Collected: 03/17/16 08:15  
Date Received: 03/18/16 14:15

**Method: 624 - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 12:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/23/16 12:52	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 12:52	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/23/16 12:52	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 12:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		58 - 135		03/23/16 12:52	1
4-Bromofluorobenzene (Surr)	90		62 - 123		03/23/16 12:52	1
Dibromofluoromethane (Surr)	102		64 - 128		03/23/16 12:52	1
Toluene-d8 (Surr)	100		71 - 118		03/23/16 12:52	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

## Method: 624 - Volatile Organic Compounds (GC/MS)

**Lab Sample ID:** MB 180-171549/6

**Matrix:** Water

**Analysis Batch:** 171549

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			03/23/16 11:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/23/16 11:49	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 11:49	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/23/16 11:49	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 11:49	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
1,2-Dichloroethane-d4 (Surr)	92		58 - 135				03/23/16 11:49	1
4-Bromofluorobenzene (Surr)	85		62 - 123				03/23/16 11:49	1
Dibromofluoromethane (Surr)	100		64 - 128				03/23/16 11:49	1
Toluene-d8 (Surr)	102		71 - 118				03/23/16 11:49	1

**Lab Sample ID:** LCS 180-171549/1002

**Matrix:** Water

**Analysis Batch:** 171549

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike Added	LCSS	LCSS	Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
1,1,1-Trichloroethane	10.0	9.72		ug/L		97	75 - 125	
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	69 - 127	
Toluene	10.0	11.6		ug/L		116	74 - 126	
Trichloroethene	10.0	11.4		ug/L		114	73 - 125	
Vinyl chloride	10.0	8.77		ug/L		88	30 - 140	

Surrogate	LCSS	LCSS	%Recovery	Qualifier	Limits
	%Recovery	Qualifier			
1,2-Dichloroethane-d4 (Surr)	88		58 - 135		
4-Bromofluorobenzene (Surr)	93		62 - 123		
Dibromofluoromethane (Surr)	99		64 - 128		
Toluene-d8 (Surr)	108		71 - 118		

**Lab Sample ID:** 180-53149-7 MS

**Matrix:** Water

**Analysis Batch:** 171549

**Client Sample ID:** WG-18036-031716-DT-007  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
1,1,1-Trichloroethane	1.0	U	10.0	9.13		ug/L		91	75 - 125	
cis-1,2-Dichloroethene	3.5		10.0	12.3		ug/L		88	69 - 127	
Toluene	1.0	U	10.0	10.4		ug/L		104	74 - 126	
Trichloroethene	0.30	J	10.0	9.94		ug/L		96	73 - 125	
Vinyl chloride	5.6		10.0	13.5		ug/L		79	30 - 140	

Surrogate	MS Result	MS Qualifier	%Recovery	Qualifier	Limits
	%Recovery	Qualifier			
1,2-Dichloroethane-d4 (Surr)	90		58 - 135		
4-Bromofluorobenzene (Surr)	90		62 - 123		
Dibromofluoromethane (Surr)	99		64 - 128		
Toluene-d8 (Surr)	103		71 - 118		

TestAmerica Pittsburgh

# QC Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

## Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 180-53149-7 MSD**

**Matrix: Water**

**Analysis Batch: 171549**

**Client Sample ID: WG-18036-031716-DT-007**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1-Trichloroethane	1.0	U	10.0	8.43		ug/L	84	75 - 125	8	25	
cis-1,2-Dichloroethene	3.5		10.0	12.0		ug/L	85	69 - 127	3	20	
Toluene	1.0	U	10.0	9.68		ug/L	97	74 - 126	7	25	
Trichloroethene	0.30	J	10.0	9.23		ug/L	89	73 - 125	7	25	
Vinyl chloride	5.6		10.0	12.2		ug/L	66	30 - 140	11	35	
<b>Surrogate</b>											
	MSD	MSD									
	%Recovery	Qualifier		Limits							
1,2-Dichloroethane-d4 (Surr)	86			58 - 135							
4-Bromofluorobenzene (Surr)	88			62 - 123							
Dibromofluoromethane (Surr)	93			64 - 128							
Toluene-d8 (Surr)	102			71 - 118							

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

**Lab Sample ID: MB 180-171312/1-A**

**Matrix: Water**

**Analysis Batch: 171626**

**Client Sample ID: Method Blank**

**Prep Type: Total Recoverable**

**Prep Batch: 171312**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:28	03/23/16 17:08	1
Lead	10	U	10	2.0	ug/L		03/21/16 07:28	03/23/16 17:08	1

**Lab Sample ID: LCS 180-171312/2-A**

**Matrix: Water**

**Analysis Batch: 171626**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 171312**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added						
Cadmium	50.0	50.6		ug/L		101	85 - 115
Lead	500	485		ug/L		97	85 - 115

**Lab Sample ID: 180-53149-7 MS**

**Matrix: Water**

**Analysis Batch: 171626**

**Client Sample ID: WG-18036-031716-DT-007**

**Prep Type: Total Recoverable**

**Prep Batch: 171312**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Cadmium	5.0	U	50.0	51.3		ug/L	103	70 - 130	
Lead	10	U	500	489		ug/L	98	70 - 130	

**Lab Sample ID: 180-53149-7 MSD**

**Matrix: Water**

**Analysis Batch: 171626**

**Client Sample ID: WG-18036-031716-DT-007**

**Prep Type: Total Recoverable**

**Prep Batch: 171312**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Cadmium	5.0	U	50.0	52.0		ug/L	104	70 - 130	1	20	
Lead	10	U	500	493		ug/L	99	70 - 130	1	20	

TestAmerica Pittsburgh

# QC Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

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

**Lab Sample ID: 180-53149-11 MS**

**Matrix: Water**

**Analysis Batch: 171626**

**Client Sample ID: WG-18036-031716-011-SG**

**Prep Type: Total Recoverable**

**Prep Batch: 171312**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Cadmium	5.0	U	50.0	53.7		ug/L	107		70 - 130

**Lab Sample ID: 180-53149-11 MS**

**Matrix: Water**

**Analysis Batch: 171840**

**Client Sample ID: WG-18036-031716-011-SG**

**Prep Type: Total Recoverable**

**Prep Batch: 171312**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Lead	20	U	500	480		ug/L	96		70 - 130

**Lab Sample ID: 180-53149-11 MSD**

**Matrix: Water**

**Analysis Batch: 171626**

**Client Sample ID: WG-18036-031716-011-SG**

**Prep Type: Total Recoverable**

**Prep Batch: 171312**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	Limit
Cadmium	5.0	U	50.0	53.1		ug/L	106		70 - 130	1 20

**Lab Sample ID: 180-53149-11 MSD**

**Matrix: Water**

**Analysis Batch: 171840**

**Client Sample ID: WG-18036-031716-011-SG**

**Prep Type: Total Recoverable**

**Prep Batch: 171312**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	Limit
Lead	20	U	500	475		ug/L	95		70 - 130	1 20

# QC Association Summary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

## GC/MS VOA

### Analysis Batch: 171549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53149-1	WG-18036-031716-DT-001	Total/NA	Water	624	
180-53149-2	WG-18036-031716-002-SG	Total/NA	Water	624	
180-53149-3	WG-18036-031716-DT-003	Total/NA	Water	624	
180-53149-4	WG-18036-031716-004-SG	Total/NA	Water	624	
180-53149-5	WG-18036-031716-DT-005	Total/NA	Water	624	
180-53149-6	WG-18036-031716-006-SG	Total/NA	Water	624	
180-53149-7	WG-18036-031716-DT-007	Total/NA	Water	624	
180-53149-7 MS	WG-18036-031716-DT-007	Total/NA	Water	624	
180-53149-7 MSD	WG-18036-031716-DT-007	Total/NA	Water	624	
180-53149-8	WG-18036-031716-008-SG	Total/NA	Water	624	
180-53149-9	WG-18036-031716-009-SG	Total/NA	Water	624	
180-53149-10	WG-18036-031716-010-SG	Total/NA	Water	624	
180-53149-11	WG-18036-031716-011-SG	Total/NA	Water	624	
180-53149-12	TB-18036-031716-DT	Total/NA	Water	624	
LCS 180-171549/1002	Lab Control Sample	Total/NA	Water	624	
MB 180-171549/6	Method Blank	Total/NA	Water	624	

## Metals

### Prep Batch: 171312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53149-1	WG-18036-031716-DT-001	Total Recoverable	Water	200.7	
180-53149-2	WG-18036-031716-002-SG	Total Recoverable	Water	200.7	
180-53149-3	WG-18036-031716-DT-003	Total Recoverable	Water	200.7	
180-53149-4	WG-18036-031716-004-SG	Total Recoverable	Water	200.7	
180-53149-5	WG-18036-031716-DT-005	Total Recoverable	Water	200.7	
180-53149-6	WG-18036-031716-006-SG	Total Recoverable	Water	200.7	
180-53149-7	WG-18036-031716-DT-007	Total Recoverable	Water	200.7	
180-53149-7 MS	WG-18036-031716-DT-007	Total Recoverable	Water	200.7	
180-53149-7 MSD	WG-18036-031716-DT-007	Total Recoverable	Water	200.7	
180-53149-8	WG-18036-031716-008-SG	Total Recoverable	Water	200.7	
180-53149-9	WG-18036-031716-009-SG	Total Recoverable	Water	200.7	
180-53149-10	WG-18036-031716-010-SG	Total Recoverable	Water	200.7	
180-53149-11	WG-18036-031716-011-SG	Total Recoverable	Water	200.7	
180-53149-11 MS	WG-18036-031716-011-SG	Total Recoverable	Water	200.7	
180-53149-11 MSD	WG-18036-031716-011-SG	Total Recoverable	Water	200.7	
LCS 180-171312/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-171312/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 171626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53149-1	WG-18036-031716-DT-001	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-2	WG-18036-031716-002-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-3	WG-18036-031716-DT-003	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-4	WG-18036-031716-004-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-5	WG-18036-031716-DT-005	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-6	WG-18036-031716-006-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-7	WG-18036-031716-DT-007	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-7 MS	WG-18036-031716-DT-007	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-7 MSD	WG-18036-031716-DT-007	Total Recoverable	Water	200.7 Rev 4.4	171312

TestAmerica Pittsburgh

# QC Association Summary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53149-1

## Metals (Continued)

### Analysis Batch: 171626 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53149-8	WG-18036-031716-008-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-9	WG-18036-031716-009-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-10	WG-18036-031716-010-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-11	WG-18036-031716-011-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-11 MS	WG-18036-031716-011-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-11 MSD	WG-18036-031716-011-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
LCS 180-171312/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	171312
MB 180-171312/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	171312

### Analysis Batch: 171840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53149-8	WG-18036-031716-008-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-10	WG-18036-031716-010-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-11	WG-18036-031716-011-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-11 MS	WG-18036-031716-011-SG	Total Recoverable	Water	200.7 Rev 4.4	171312
180-53149-11 MSD	WG-18036-031716-011-SG	Total Recoverable	Water	200.7 Rev 4.4	171312

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# CHAIN OF CUSTODY RECORD

COC NO.: 53205

Address: 2055 Niagara Falls Blvd NE NY 14304 PAGE \_\_\_\_ OF \_\_\_\_  
 Phone: 716-297-6150 Fax: \_\_\_\_\_

Project No/ Phase/Task Code: 18036-2014			Laboratory Name: Test America			Lab Location: Pittsburgh			SSOW ID:	
Project Name: BNIA Quarterly Post Closure Monitoring			Lab Contact: Jill Colussy						Cooler No:	
Project Location: Buffalo Airport									Carrier:	
GHD Chemistry Contact:									Airbill No:	
Sampler(s): S. Gardner D. Tyran									Total # of Containers:	
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)		Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	ANALYSIS REQUESTED (See Back of COC for Definitions)			Sample	Airbill No:
	DATE (mm/dd/yy)	TIME (hh:mm)				VOCs	Metals			
PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)										
1	WG-18036-031716-DT-001	3-17-16	0840	WG G N	X X					4
2	WG-18036-031716-002-SG	3-17-16	0845	WG G N	X X					4
3	WG-18036-031716-DT-003	3-17-16	0935	WG G N	X X					4
4	WG-18036-031716-004-SG	3-17-16	0955	WG G N	X X					4
5	WG-18036-031716-DT-005	3-17-16	1025	WG G N	X X					4
6	WG-18036-031716-006-SG	3-17-16	0855	WG G N	X X					4
7	WG-18036-031716-DT-007	3-17-16	1130	WG G N	X X				12	X
8	WG-18036-031716-008-SG	3-17-16	1045	WG G N	X X					4
9	WG-18036-031716-009-SG	3-17-16	1235	WG G N	X X					4
10	WG-18036-031716-010-SG	3-17-16	1135	WG G N	X X					4
11	WG-18036-031716-011-SG	3-17-16	1335	WG G N	X X					4
12	TB-18036-031716-DT	3-17-16		TB G N	X					2

TAT Required in business days (use separate COCs for different TATs):

 1 Day  2 Days  3 Days  1 Week  2 Weeks  Other:

Notes/ Special Requirements:

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1. <i>Dave O'Gorman</i>	GHD	3/17/16	1522	1. <i>Debbie Walters - AP</i>	2. <i></i>	3/18/16	14:15
2. <i></i>							
3. <i></i>							

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE - Fully Executed Copy (CRA)

YELLOW - Receiving Laboratory Copy

Page 22 of 23

PINK - Shipper

GOLDENROD - Sampling Crew

GHD Form: COC 10B (20140804)  
3/31/2016

## Login Sample Receipt Checklist

Client: Brausch Environmental LLC

Job Number: 180-53149-1

**Login Number:** 53149

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Watson, Debbie

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**ATTACHMENT B**

**ANALYTICAL LABORATORY REPORT**

**MARCH 2016 SURFACE WATER SAMPLING**

**Surface Water Sampling Key**  
**March 17, 2016**  
**NYSDEC Site No. 9-15-066, Cheektowaga, New York**

Manhole No.	Sample No.
1B	SW-18036-031716-01
1C	SW-18036-031716-02
2A	SW-18036-031716-03
2B	SW-18036-031716-04
3A	SW-18036-031716-05
2C	SW-18036-031716-06
2D	SW-18036-031716-09
3C	SW-18036-031716-10
3C	SW-18036-031716-11
3B	SW-18036-031716-12
1A	SW-18036-031716-13
Trip Blank	TB-18036-031716-01

Notes:

1. Sample numbers SW-18036-121015-10 and SW-18036-121015-11 were taken from manhole 3C for

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-53155-1

Client Project/Site: Buffalo Airport

For:

Brausch Environmental LLC

5318 Alexa Road

Charlotte, North Carolina 28277

Attn: Leo Brausch



---

Authorized for release by:

3/31/2016 2:18:10 PM

Jill Colussy, Project Manager I

(412)963-2444

jill.colussy@testamericainc.com

### LINKS

Review your project  
results through

TotalAccess

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The  
Expert

Visit us at:

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

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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# Case Narrative

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## Job ID: 180-53155-1

### Laboratory: TestAmerica Pittsburgh

#### Narrative

#### Job Narrative 180-53155-1

#### Receipt

The samples were received on 3/18/2016 2:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.1° C and 1.3° C.

The chain of custody did not list a sampling time for the TRIP BLANK. The earliest sample time was logged in.

#### GC/MS VOA

The following samples were diluted to bring the concentration of target analytes within the calibration range: SW-18036-031716-003 (180-53155-3), SW-18036-031716-004 (180-53155-4), SW-18036-031716-005 (180-53155-5) and SW-18036-031716-009 (180-53155-9). Elevated reporting limits (RLs) are provided.

#### Metals

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

#### General Chemistry

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

# Definitions/Glossary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
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.
F1	MS and/or MSD Recovery is outside acceptance limits.

### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates the analyte was analyzed for but not detected.

## Glossary

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

# Certification Summary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## Laboratory: TestAmerica Pittsburgh

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	11182	03-31-16 *

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		Water	pH

\* Certification renewal pending - certification considered valid.

TestAmerica Pittsburgh

## Sample Summary

Client: Brausch Environmental LLC  
 Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-53155-1	SW-18036-031716-001	Water	03/17/16 07:45	03/18/16 14:15
180-53155-2	SW-18036-031716-002	Water	03/17/16 08:20	03/18/16 14:15
180-53155-3	SW-18036-031716-003	Water	03/17/16 08:45	03/18/16 14:15
180-53155-4	SW-18036-031716-004	Water	03/17/16 09:00	03/18/16 14:15
180-53155-5	SW-18036-031716-005	Water	03/17/16 09:15	03/18/16 14:15
180-53155-6	SW-18036-031716-006	Water	03/17/16 09:45	03/18/16 14:15
180-53155-9	SW-18036-031716-009	Water	03/17/16 10:15	03/18/16 14:15
180-53155-10	SW-18036-031716-010	Water	03/17/16 11:00	03/18/16 14:15
180-53155-11	SW-18036-031716-011	Water	03/17/16 11:00	03/18/16 14:15
180-53155-12	SW-18036-031716-012	Water	03/17/16 11:15	03/18/16 14:15
180-53155-13	SW-10836-031716-013	Water	03/17/16 11:45	03/18/16 14:15
180-53155-14	TB-18036-031716-001	Water	03/17/16 07:45	03/18/16 14:15

TestAmerica Pittsburgh

## Method Summary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL PIT
200.7 Rev 4.4	Metals (ICP)	EPA	TAL PIT
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PIT
SM 4500 H+ B	pH	SM	TAL PIT

### Protocol References:

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

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

### Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-18036-031716-001**

**Date Collected: 03/17/16 07:45**

**Date Received: 03/18/16 14:15**

**Lab Sample ID: 180-53155-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 21:08	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 15:18	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+ B		1		20.0 mL	171884	03/28/16 14:41	JLR	TAL PIT
		Instrument ID: NOEQUIP								

**Client Sample ID: SW-18036-031716-002**

**Date Collected: 03/17/16 08:20**

**Date Received: 03/18/16 14:15**

**Lab Sample ID: 180-53155-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171549	03/23/16 21:32	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 15:24	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	100 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+ B		1		20.0 mL	171884	03/28/16 14:44	JLR	TAL PIT
		Instrument ID: NOEQUIP								

**Client Sample ID: SW-18036-031716-003**

**Date Collected: 03/17/16 08:45**

**Date Received: 03/18/16 14:15**

**Lab Sample ID: 180-53155-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		5	5 mL	5 mL	171549	03/23/16 22:21	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 15:29	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+ B		1		20.0 mL	171884	03/28/16 14:48	JLR	TAL PIT
		Instrument ID: NOEQUIP								

TestAmerica Pittsburgh

# Lab Chronicle

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-18036-031716-004**

Date Collected: 03/17/16 09:00

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		3	5 mL	5 mL	171549	03/23/16 22:45	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 15:34	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	500 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+B		1		20.0 mL	171884	03/28/16 14:52	JLR	TAL PIT
		Instrument ID: NOEQUIP								

**Client Sample ID: SW-18036-031716-005**

Date Collected: 03/17/16 09:15

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		5	5 mL	5 mL	171549	03/23/16 23:09	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 15:40	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	100 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+B		1		20.0 mL	171884	03/28/16 14:55	JLR	TAL PIT
		Instrument ID: NOEQUIP								

**Client Sample ID: SW-18036-031716-006**

Date Collected: 03/17/16 09:45

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171696	03/24/16 13:30	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 15:45	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+B		1		20.0 mL	171884	03/28/16 14:59	JLR	TAL PIT
		Instrument ID: NOEQUIP								

TestAmerica Pittsburgh

# Lab Chronicle

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-18036-031716-009**

**Date Collected:** 03/17/16 10:15  
**Date Received:** 03/18/16 14:15

**Lab Sample ID: 180-53155-9**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		5	5 mL	5 mL	171549	03/23/16 23:33	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 16:16	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	25 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+B		1		20.0 mL	171884	03/28/16 15:03	JLR	TAL PIT
		Instrument ID: NOEQUIP								

**Client Sample ID: SW-18036-031716-010**

**Date Collected:** 03/17/16 11:00  
**Date Received:** 03/18/16 14:15

**Lab Sample ID: 180-53155-10**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171696	03/24/16 20:49	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 16:21	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	100 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+B		1		20.0 mL	171884	03/28/16 15:06	JLR	TAL PIT
		Instrument ID: NOEQUIP								

**Client Sample ID: SW-18036-031716-011**

**Date Collected:** 03/17/16 11:00  
**Date Received:** 03/18/16 14:15

**Lab Sample ID: 180-53155-11**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171696	03/24/16 21:13	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 16:26	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	50 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+B		1		20.0 mL	171884	03/28/16 15:14	JLR	TAL PIT
		Instrument ID: NOEQUIP								

TestAmerica Pittsburgh

# Lab Chronicle

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-18036-031716-012**

**Date Collected:** 03/17/16 11:15  
**Date Received:** 03/18/16 14:15

**Lab Sample ID: 180-53155-12**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171696	03/24/16 21:37	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 16:32	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	250 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+B		1		20.0 mL	171884	03/28/16 15:17	JLR	TAL PIT
		Instrument ID: NOEQUIP								

**Client Sample ID: SW-10836-031716-013**

**Date Collected:** 03/17/16 11:45  
**Date Received:** 03/18/16 14:15

**Lab Sample ID: 180-53155-13**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171696	03/24/16 22:01	DLF	TAL PIT
		Instrument ID: CHHP5								
Total Recoverable	Prep	200.7			50 mL	50 mL	171313	03/21/16 07:30	ANA	TAL PIT
Total Recoverable	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	171626	03/23/16 16:37	RJG	TAL PIT
		Instrument ID: C								
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	171504	03/22/16 16:21	JWS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 4500 H+B		1		20.0 mL	171884	03/28/16 15:25	JLR	TAL PIT
		Instrument ID: NOEQUIP								

**Client Sample ID: TB-18036-031716-001**

**Date Collected:** 03/17/16 07:45  
**Date Received:** 03/18/16 14:15

**Lab Sample ID: 180-53155-14**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	5 mL	5 mL	171696	03/24/16 13:54	DLF	TAL PIT
		Instrument ID: CHHP5								

## Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

## Lab Chronicle

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

ANA = Alexis Anderson

Batch Type: Analysis

DLF = Donald Ferguson

JLR = Jennifer Rumble

JWS = Jim Swanson

RJG = Rob Good

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# Client Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-18036-031716-001**

Date Collected: 03/17/16 07:45

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-1**

Matrix: Water

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.15	ug/L			03/23/16 21:08	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/23/16 21:08	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 21:08	1
<b>Trichloroethene</b>	<b>0.45</b>	<b>J</b>	1.0	0.14	ug/L			03/23/16 21:08	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 21:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/23/16 21:08	1
<b>cis-1,2-Dichloroethene</b>	<b>0.66</b>	<b>J</b>	1.0	0.24	ug/L			03/23/16 21:08	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		58 - 135		03/23/16 21:08	1
4-Bromofluorobenzene (Surr)	94		62 - 123		03/23/16 21:08	1
Toluene-d8 (Surr)	103		71 - 118		03/23/16 21:08	1
Dibromofluoromethane (Surr)	106		64 - 128		03/23/16 21:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:30	03/23/16 15:18	1
<b>Chromium</b>	<b>1.1</b>	<b>J</b>	5.0	0.93	ug/L		03/21/16 07:30	03/23/16 15:18	1
Lead	10	U	10	2.0	ug/L		03/21/16 07:30	03/23/16 15:18	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	0.80		0.50	0.50	mg/L			03/22/16 16:21	1
pH	8.08	HF	0.100	0.100	SU			03/28/16 14:41	1

**Client Sample ID: SW-18036-031716-002**

**Lab Sample ID: 180-53155-2**

Matrix: Water

Date Collected: 03/17/16 08:20

Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.15	ug/L			03/23/16 21:32	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/23/16 21:32	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 21:32	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/23/16 21:32	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 21:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/23/16 21:32	1
<b>cis-1,2-Dichloroethene</b>	<b>1.0</b>	<b>U</b>	1.0	0.24	ug/L			03/23/16 21:32	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		58 - 135		03/23/16 21:32	1
4-Bromofluorobenzene (Surr)	91		62 - 123		03/23/16 21:32	1
Toluene-d8 (Surr)	101		71 - 118		03/23/16 21:32	1
Dibromofluoromethane (Surr)	105		64 - 128		03/23/16 21:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:30	03/23/16 15:24	1
Chromium	5.0	U	5.0	0.93	ug/L		03/21/16 07:30	03/23/16 15:24	1
Lead	10	U	10	2.0	ug/L		03/21/16 07:30	03/23/16 15:24	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-18036-031716-002**

Date Collected: 03/17/16 08:20

Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-2**

Matrix: Water

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	180		5.0	5.0	mg/L			03/22/16 16:21	1
pH	8.25	HF	0.100	0.100	SU			03/28/16 14:44	1

**Client Sample ID: SW-18036-031716-003**

Date Collected: 03/17/16 08:45  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-3**

Matrix: Water

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.4	J B	5.0	0.75	ug/L			03/23/16 22:21	5
Tetrachloroethene	5.0	U	5.0	0.74	ug/L			03/23/16 22:21	5
Toluene	5.0	U	5.0	0.75	ug/L			03/23/16 22:21	5
Trichloroethene	93		5.0	0.72	ug/L			03/23/16 22:21	5
Vinyl chloride	5.0	U	5.0	1.1	ug/L			03/23/16 22:21	5
1,2-Dichlorobenzene	5.0	U	5.0	0.76	ug/L			03/23/16 22:21	5
cis-1,2-Dichloroethene	18		5.0	1.2	ug/L			03/23/16 22:21	5
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	97			58 - 135				03/23/16 22:21	5
4-Bromofluorobenzene (Surr)	92			62 - 123				03/23/16 22:21	5
Toluene-d8 (Surr)	106			71 - 118				03/23/16 22:21	5
Dibromofluoromethane (Surr)	104			64 - 128				03/23/16 22:21	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:30	03/23/16 15:29	1
Chromium	2.5	J	5.0	0.93	ug/L		03/21/16 07:30	03/23/16 15:29	1
Lead	10	U	10	2.0	ug/L		03/21/16 07:30	03/23/16 15:29	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	0.50	U	0.50	0.50	mg/L			03/22/16 16:21	1
pH	8.25	HF	0.100	0.100	SU			03/28/16 14:48	1

**Client Sample ID: SW-18036-031716-004**

Date Collected: 03/17/16 09:00  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-4**

Matrix: Water

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	J B	3.0	0.45	ug/L			03/23/16 22:45	3
Tetrachloroethene	7.5		3.0	0.45	ug/L			03/23/16 22:45	3
Toluene	3.0	U	3.0	0.45	ug/L			03/23/16 22:45	3
Trichloroethene	52		3.0	0.43	ug/L			03/23/16 22:45	3
Vinyl chloride	0.84	J	3.0	0.68	ug/L			03/23/16 22:45	3
1,2-Dichlorobenzene	3.0	U	3.0	0.46	ug/L			03/23/16 22:45	3
cis-1,2-Dichloroethene	26		3.0	0.71	ug/L			03/23/16 22:45	3
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	99			58 - 135				03/23/16 22:45	3
4-Bromofluorobenzene (Surr)	92			62 - 123				03/23/16 22:45	3

TestAmerica Pittsburgh

# Client Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-18036-031716-004**  
Date Collected: 03/17/16 09:00  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-4**  
Matrix: Water

## Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		71 - 118		03/23/16 22:45	3
Dibromofluoromethane (Surr)	106		64 - 128		03/23/16 22:45	3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:30	03/23/16 15:34	1
Chromium	6.6		5.0	0.93	ug/L		03/21/16 07:30	03/23/16 15:34	1
Lead	2.2	J	10	2.0	ug/L		03/21/16 07:30	03/23/16 15:34	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	100		1.0	1.0	mg/L			03/22/16 16:21	1
pH	11.0	HF	0.100	0.100	SU			03/28/16 14:52	1

**Client Sample ID: SW-18036-031716-005**

**Lab Sample ID: 180-53155-5**  
Matrix: Water

Date Collected: 03/17/16 09:15  
Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.5	J B	5.0	0.75	ug/L			03/23/16 23:09	5
Tetrachloroethene	5.0	U	5.0	0.74	ug/L			03/23/16 23:09	5
Toluene	5.0	U	5.0	0.75	ug/L			03/23/16 23:09	5
Trichloroethene	77		5.0	0.72	ug/L			03/23/16 23:09	5
Vinyl chloride	5.0	U	5.0	1.1	ug/L			03/23/16 23:09	5
1,2-Dichlorobenzene	5.0	U	5.0	0.76	ug/L			03/23/16 23:09	5
cis-1,2-Dichloroethene	20		5.0	1.2	ug/L			03/23/16 23:09	5

## Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		58 - 135		03/23/16 23:09	5
4-Bromofluorobenzene (Surr)	88		62 - 123		03/23/16 23:09	5
Toluene-d8 (Surr)	102		71 - 118		03/23/16 23:09	5
Dibromofluoromethane (Surr)	105		64 - 128		03/23/16 23:09	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:30	03/23/16 15:40	1
Chromium	13		5.0	0.93	ug/L		03/21/16 07:30	03/23/16 15:40	1
Lead	6.5	J	10	2.0	ug/L		03/21/16 07:30	03/23/16 15:40	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	330		5.0	5.0	mg/L			03/22/16 16:21	1
pH	8.94	HF	0.100	0.100	SU			03/28/16 14:55	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Brausch Environmental LLC  
 Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-18036-031716-006**  
**Date Collected: 03/17/16 09:45**  
**Date Received: 03/18/16 14:15**

**Lab Sample ID: 180-53155-6**  
**Matrix: Water**

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.15	ug/L			03/24/16 13:30	1
<b>Tetrachloroethene</b>	<b>6.8</b>		1.0	0.15	ug/L			03/24/16 13:30	1
Toluene	1.0	U	1.0	0.15	ug/L			03/24/16 13:30	1
<b>Trichloroethene</b>	<b>37 F1</b>		1.0	0.14	ug/L			03/24/16 13:30	1
<b>Vinyl chloride</b>	<b>1.1</b>		1.0	0.23	ug/L			03/24/16 13:30	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/24/16 13:30	1
<b>cis-1,2-Dichloroethene</b>	<b>19 F1</b>		1.0	0.24	ug/L			03/24/16 13:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	97		58 - 135					03/24/16 13:30	1
4-Bromofluorobenzene (Surr)	90		62 - 123					03/24/16 13:30	1
Toluene-d8 (Surr)	97		71 - 118					03/24/16 13:30	1
Dibromofluoromethane (Surr)	102		64 - 128					03/24/16 13:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L			03/21/16 07:30	03/23/16 15:45
<b>Chromium</b>	<b>6.5</b>		5.0	0.93	ug/L			03/21/16 07:30	03/23/16 15:45
Lead	10	U	10	2.0	ug/L			03/21/16 07:30	03/23/16 15:45

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	55		0.50	0.50	mg/L			03/22/16 16:21	1
pH	11.0	HF	0.100	0.100	SU			03/28/16 14:59	1

**Client Sample ID: SW-18036-031716-009**

Date Collected: 03/17/16 10:15  
 Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-9**

Matrix: Water

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Methylene Chloride</b>	<b>1.7 JB</b>		5.0	0.75	ug/L			03/23/16 23:33	5
Tetrachloroethene	5.0	U	5.0	0.74	ug/L			03/23/16 23:33	5
Toluene	5.0	U	5.0	0.75	ug/L			03/23/16 23:33	5
<b>Trichloroethene</b>	<b>130</b>		5.0	0.72	ug/L			03/23/16 23:33	5
Vinyl chloride	5.0	U	5.0	1.1	ug/L			03/23/16 23:33	5
1,2-Dichlorobenzene	5.0	U	5.0	0.76	ug/L			03/23/16 23:33	5
<b>cis-1,2-Dichloroethene</b>	<b>23</b>		5.0	1.2	ug/L			03/23/16 23:33	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	98		58 - 135					03/23/16 23:33	5
4-Bromofluorobenzene (Surr)	94		62 - 123					03/23/16 23:33	5
Toluene-d8 (Surr)	104		71 - 118					03/23/16 23:33	5
Dibromofluoromethane (Surr)	105		64 - 128					03/23/16 23:33	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.41	J	5.0	0.25	ug/L			03/21/16 07:30	03/23/16 16:16
<b>Chromium</b>	<b>35</b>		5.0	0.93	ug/L			03/21/16 07:30	03/23/16 16:16
Lead	49		10	2.0	ug/L			03/21/16 07:30	03/23/16 16:16

TestAmerica Pittsburgh

# Client Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-18036-031716-009**

Date Collected: 03/17/16 10:15  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-9**

Matrix: Water

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1300		20	20	mg/L			03/22/16 16:21	1
pH	8.34	HF	0.100	0.100	SU			03/28/16 15:03	1

**Client Sample ID: SW-18036-031716-010**

Date Collected: 03/17/16 11:00  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-10**

Matrix: Water

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.15	ug/L			03/24/16 20:49	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/24/16 20:49	1
Toluene	0.18	J	1.0	0.15	ug/L			03/24/16 20:49	1
Trichloroethene	0.18	J	1.0	0.14	ug/L			03/24/16 20:49	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/24/16 20:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/24/16 20:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/24/16 20:49	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		58 - 135		03/24/16 20:49	1
4-Bromofluorobenzene (Surr)	96		62 - 123		03/24/16 20:49	1
Toluene-d8 (Surr)	104		71 - 118		03/24/16 20:49	1
Dibromofluoromethane (Surr)	105		64 - 128		03/24/16 20:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:30	03/23/16 16:21	1
Chromium	13		5.0	0.93	ug/L		03/21/16 07:30	03/23/16 16:21	1
Lead	15		10	2.0	ug/L		03/21/16 07:30	03/23/16 16:21	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	170		5.0	5.0	mg/L			03/22/16 16:21	1
pH	8.10	HF	0.100	0.100	SU			03/28/16 15:06	1

**Client Sample ID: SW-18036-031716-011**

Date Collected: 03/17/16 11:00  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-11**

Matrix: Water

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.15	ug/L			03/24/16 21:13	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/24/16 21:13	1
Toluene	0.16	J	1.0	0.15	ug/L			03/24/16 21:13	1
Trichloroethene	0.14	J	1.0	0.14	ug/L			03/24/16 21:13	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/24/16 21:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/24/16 21:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/24/16 21:13	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		58 - 135		03/24/16 21:13	1
4-Bromofluorobenzene (Surr)	91		62 - 123		03/24/16 21:13	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-18036-031716-011**  
Date Collected: 03/17/16 11:00  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-11**  
Matrix: Water

## Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		71 - 118				03/24/16 21:13	1
Dibromofluoromethane (Surr)	104		64 - 128				03/24/16 21:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.32	J	5.0	0.25	ug/L		03/21/16 07:30	03/23/16 16:26	1
Chromium	16		5.0	0.93	ug/L		03/21/16 07:30	03/23/16 16:26	1
Lead	21		10	2.0	ug/L		03/21/16 07:30	03/23/16 16:26	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	660		10	10	mg/L			03/22/16 16:21	1
pH	7.84	HF	0.100	0.100	SU			03/28/16 15:14	1

**Client Sample ID: SW-18036-031716-012**

**Lab Sample ID: 180-53155-12**  
Matrix: Water

Date Collected: 03/17/16 11:15  
Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.15	ug/L			03/24/16 21:37	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/24/16 21:37	1
Toluene	1.0	U	1.0	0.15	ug/L			03/24/16 21:37	1
Trichloroethene	0.21	J	1.0	0.14	ug/L			03/24/16 21:37	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/24/16 21:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/24/16 21:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/24/16 21:37	1

## Surrogate

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		58 - 135				03/24/16 21:37	1
4-Bromofluorobenzene (Surr)	95		62 - 123				03/24/16 21:37	1
Toluene-d8 (Surr)	104		71 - 118				03/24/16 21:37	1
Dibromofluoromethane (Surr)	105		64 - 128				03/24/16 21:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L		03/21/16 07:30	03/23/16 16:32	1
Chromium	5.2		5.0	0.93	ug/L		03/21/16 07:30	03/23/16 16:32	1
Lead	4.7	J	10	2.0	ug/L		03/21/16 07:30	03/23/16 16:32	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	11		2.0	2.0	mg/L			03/22/16 16:21	1
pH	8.20	HF	0.100	0.100	SU			03/28/16 15:17	1

TestAmerica Pittsburgh

# Client Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

**Client Sample ID: SW-10836-031716-013**  
Date Collected: 03/17/16 11:45  
Date Received: 03/18/16 14:15

**Lab Sample ID: 180-53155-13**  
Matrix: Water

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.15	ug/L			03/24/16 22:01	1
<b>Tetrachloroethene</b>	<b>1.3</b>		1.0	0.15	ug/L			03/24/16 22:01	1
Toluene	1.0	U	1.0	0.15	ug/L			03/24/16 22:01	1
<b>Trichloroethene</b>	<b>0.17</b>	<b>J</b>	1.0	0.14	ug/L			03/24/16 22:01	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/24/16 22:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/24/16 22:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/24/16 22:01	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)		99		58 - 135				03/24/16 22:01	1
4-Bromofluorobenzene (Surr)		88		62 - 123				03/24/16 22:01	1
Toluene-d8 (Surr)		101		71 - 118				03/24/16 22:01	1
Dibromofluoromethane (Surr)		105		64 - 128				03/24/16 22:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.5	J	5.0	0.25	ug/L			03/21/16 07:30	03/23/16 16:37
Chromium	0.97	J	5.0	0.93	ug/L			03/21/16 07:30	03/23/16 16:37
Lead	10	U	10	2.0	ug/L			03/21/16 07:30	03/23/16 16:37

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	7.7		0.50	0.50	mg/L			03/22/16 16:21	1
pH	7.91	HF	0.100	0.100	SU			03/28/16 15:25	1

**Client Sample ID: TB-18036-031716-001**

**Lab Sample ID: 180-53155-14**

Matrix: Water

Date Collected: 03/17/16 07:45  
Date Received: 03/18/16 14:15

## Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.54	J	1.0	0.15	ug/L			03/24/16 13:54	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/24/16 13:54	1
Toluene	1.0	U	1.0	0.15	ug/L			03/24/16 13:54	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/24/16 13:54	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/24/16 13:54	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/24/16 13:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/24/16 13:54	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)		97		58 - 135				03/24/16 13:54	1
4-Bromofluorobenzene (Surr)		96		62 - 123				03/24/16 13:54	1
Toluene-d8 (Surr)		102		71 - 118				03/24/16 13:54	1
Dibromofluoromethane (Surr)		106		64 - 128				03/24/16 13:54	1

TestAmerica Pittsburgh

# QC Sample Results

Client: Brausch Environmental LLC  
 Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## Method: 624 - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 180-171549/6**

**Matrix: Water**

**Analysis Batch: 171549**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methylene Chloride	0.307	J	1.0	0.15	ug/L			03/23/16 11:49	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/23/16 11:49	1
Toluene	1.0	U	1.0	0.15	ug/L			03/23/16 11:49	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			03/23/16 11:49	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			03/23/16 11:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			03/23/16 11:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/23/16 11:49	1

**MB MB**

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	92		58 - 135		03/23/16 11:49	1
4-Bromofluorobenzene (Surr)	85		62 - 123		03/23/16 11:49	1
Toluene-d8 (Surr)	102		71 - 118		03/23/16 11:49	1
Dibromofluoromethane (Surr)	100		64 - 128		03/23/16 11:49	1

**Lab Sample ID: LCS 180-171549/1002**

**Matrix: Water**

**Analysis Batch: 171549**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Methylene Chloride	10.0	10.4		ug/L		104	60 - 140
Tetrachloroethene	10.0	11.2		ug/L		112	73 - 127
Toluene	10.0	11.6		ug/L		116	74 - 126
Trichloroethene	10.0	11.4		ug/L		114	73 - 125
Vinyl chloride	10.0	8.77		ug/L		88	30 - 140
1,2-Dichlorobenzene	10.0	9.36		ug/L		94	68 - 127
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	69 - 127

**LCS LCS**

Surrogate	LCs	LCs	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	88		58 - 135		03/23/16 11:49	1
4-Bromofluorobenzene (Surr)	93		62 - 123		03/23/16 11:49	1
Toluene-d8 (Surr)	108		71 - 118		03/23/16 11:49	1
Dibromofluoromethane (Surr)	99		64 - 128		03/23/16 11:49	1

**Lab Sample ID: 180-53149-B-7 MSD**

**Matrix: Water**

**Analysis Batch: 171549**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Methylene Chloride	1.0	U	10.0	7.63		ug/L		76	60 - 140	9	25
Tetrachloroethene	1.0	U	10.0	9.51		ug/L		95	73 - 127	6	25
Toluene	1.0	U	10.0	9.68		ug/L		97	74 - 126	7	25
Trichloroethene	0.30	J	10.0	9.23		ug/L		89	73 - 125	7	25
Vinyl chloride	5.6		10.0	12.2		ug/L		66	30 - 140	11	35
1,2-Dichlorobenzene	1.0	U	10.0	8.85		ug/L		88	68 - 127	4	35
cis-1,2-Dichloroethene	3.5		10.0	12.0		ug/L		85	69 - 127	3	20

TestAmerica Pittsburgh

# QC Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 180-53149-B-7 MSD**

**Matrix: Water**

**Analysis Batch: 171549**

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		58 - 135
4-Bromofluorobenzene (Surr)	88		62 - 123
Toluene-d8 (Surr)	102		71 - 118
Dibromofluoromethane (Surr)	93		64 - 128

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

**Lab Sample ID: 180-53149-C-7 MS**

**Matrix: Water**

**Analysis Batch: 171549**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	1.0	U	10.0	8.38		ug/L	84	60 - 140	
Tetrachloroethene	1.0	U	10.0	10.1		ug/L	101	73 - 127	
Toluene	1.0	U	10.0	10.4		ug/L	104	74 - 126	
Trichloroethene	0.30	J	10.0	9.94		ug/L	96	73 - 125	
Vinyl chloride	5.6		10.0	13.5		ug/L	79	30 - 140	
1,2-Dichlorobenzene	1.0	U	10.0	9.17		ug/L	92	68 - 127	
cis-1,2-Dichloroethene	3.5		10.0	12.3		ug/L	88	69 - 127	

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		58 - 135
4-Bromofluorobenzene (Surr)	90		62 - 123
Toluene-d8 (Surr)	103		71 - 118
Dibromofluoromethane (Surr)	99		64 - 128

**Lab Sample ID: MB 180-171696/4**

**Matrix: Water**

**Analysis Batch: 171696**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.15	ug/L		03/24/16 12:51		1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L		03/24/16 12:51		1
Toluene	1.0	U	1.0	0.15	ug/L		03/24/16 12:51		1
Trichloroethene	1.0	U	1.0	0.14	ug/L		03/24/16 12:51		1
Vinyl chloride	1.0	U	1.0	0.23	ug/L		03/24/16 12:51		1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L		03/24/16 12:51		1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L		03/24/16 12:51		1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		58 - 135		03/24/16 12:51	1
4-Bromofluorobenzene (Surr)	94		62 - 123		03/24/16 12:51	1
Toluene-d8 (Surr)	101		71 - 118		03/24/16 12:51	1
Dibromofluoromethane (Surr)	104		64 - 128		03/24/16 12:51	1

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

# QC Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 180-171696/1002**

**Matrix: Water**

**Analysis Batch: 171696**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
				ug/L		Limits	Limits
Methylene Chloride	10.0	8.98				90	60 - 140
Tetrachloroethene	10.0	10.7		ug/L		107	73 - 127
Toluene	10.0	11.2		ug/L		112	74 - 126
Trichloroethene	10.0	10.2		ug/L		102	73 - 125
Vinyl chloride	10.0	8.30		ug/L		83	30 - 140
1,2-Dichlorobenzene	10.0	9.25		ug/L		92	68 - 127
cis-1,2-Dichloroethene	10.0	9.96		ug/L		100	69 - 127

**LCS LCS**

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		58 - 135
4-Bromofluorobenzene (Surr)	98		62 - 123
Toluene-d8 (Surr)	109		71 - 118
Dibromofluoromethane (Surr)	101		64 - 128

**Lab Sample ID: 180-53155-6 MS**

**Matrix: Water**

**Analysis Batch: 171696**

**Client Sample ID: SW-18036-031716-007**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
						ug/L		Limits	Limits
Methylene Chloride	1.0	U	10.0	9.04				90	60 - 140
Tetrachloroethene	6.8		10.0	18.0		ug/L		111	73 - 127
Toluene	1.0	U	10.0	11.2		ug/L		112	74 - 126
Trichloroethene	37	F1	10.0	44.8		ug/L		76	73 - 125
Vinyl chloride	1.1		10.0	9.10		ug/L		80	30 - 140
1,2-Dichlorobenzene	1.0	U	10.0	9.02		ug/L		90	68 - 127
cis-1,2-Dichloroethene	19	F1	10.0	28.7		ug/L		101	69 - 127

**MS MS**

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	83		58 - 135
4-Bromofluorobenzene (Surr)	91		62 - 123
Toluene-d8 (Surr)	104		71 - 118
Dibromofluoromethane (Surr)	97		64 - 128

**Lab Sample ID: 180-53155-6 MSD**

**Matrix: Water**

**Analysis Batch: 171696**

**Client Sample ID: SW-18036-031716-008**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limit
						ug/L		Limits	Limits		
Methylene Chloride	1.0	U	10.0	9.65				96	60 - 140	7	25
Tetrachloroethene	6.8		10.0	15.4		ug/L		86	73 - 127	15	25
Toluene	1.0	U	10.0	10.4		ug/L		104	74 - 126	7	25
Trichloroethene	37	F1	10.0	38.7	F1	ug/L		15	73 - 125	15	25
Vinyl chloride	1.1		10.0	8.40		ug/L		73	30 - 140	8	35
1,2-Dichlorobenzene	1.0	U	10.0	9.11		ug/L		91	68 - 127	1	35
cis-1,2-Dichloroethene	19	F1	10.0	25.0	F1	ug/L		64	69 - 127	14	20

TestAmerica Pittsburgh

# QC Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID:** 180-53155-6 MSD

**Matrix:** Water

**Analysis Batch:** 171696

**Client Sample ID:** SW-18036-031716-008

**Prep Type:** Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		58 - 135
4-Bromofluorobenzene (Surr)	92		62 - 123
Toluene-d8 (Surr)	98		71 - 118
Dibromofluoromethane (Surr)	93		64 - 128

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

**Lab Sample ID:** MB 180-171313/1-A

**Matrix:** Water

**Analysis Batch:** 171626

**Client Sample ID:** Method Blank

**Prep Type:** Total Recoverable

**Prep Batch:** 171313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.25	ug/L	03/21/16 07:30	03/23/16 15:09		1
Chromium	5.0	U	5.0	0.93	ug/L	03/21/16 07:30	03/23/16 15:09		1
Lead	10	U	10	2.0	ug/L	03/21/16 07:30	03/23/16 15:09		1

**Lab Sample ID:** LCS 180-171313/2-A

**Matrix:** Water

**Analysis Batch:** 171626

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total Recoverable

**Prep Batch:** 171313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cadmium	50.0	50.9		ug/L	102	85 - 115	
Chromium	200	195		ug/L	97	85 - 115	
Lead	500	491		ug/L	98	85 - 115	

**Lab Sample ID:** 180-53155-6 MS

**Matrix:** Water

**Analysis Batch:** 171626

**Client Sample ID:** SW-18036-031716-007

**Prep Type:** Total Recoverable

**Prep Batch:** 171313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cadmium	5.0	U	50.0	53.0		ug/L	106	70 - 130	
Chromium	6.5		200	201		ug/L	97	70 - 130	
Lead	10	U	500	502		ug/L	100	70 - 130	

**Lab Sample ID:** 180-53155-6 MSD

**Matrix:** Water

**Analysis Batch:** 171626

**Client Sample ID:** SW-18036-031716-008

**Prep Type:** Total Recoverable

**Prep Batch:** 171313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cadmium	5.0	U	50.0	53.1		ug/L	106	70 - 130		0	20
Chromium	6.5		200	200		ug/L	97	70 - 130		1	20
Lead	10	U	500	502		ug/L	100	70 - 130		0	20

**Lab Sample ID:** 180-53155-13 MS

**Matrix:** Water

**Analysis Batch:** 171626

**Client Sample ID:** SW-10836-031716-013

**Prep Type:** Total Recoverable

**Prep Batch:** 171313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cadmium	1.5	J	50.0	54.5		ug/L	106	70 - 130	

TestAmerica Pittsburgh

# QC Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

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

**Lab Sample ID: 180-53155-13 MS**

**Matrix: Water**

**Analysis Batch: 171626**

**Client Sample ID: SW-10836-031716-013**

**Prep Type: Total Recoverable**

**Prep Batch: 171313**

**%Rec.**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits		
	Result	Qualifier	Added	Result	Qualifier						
Chromium	0.97	J	200	194		ug/L		97	70 - 130		
Lead	10	U	500	504		ug/L		101	70 - 130		

**Lab Sample ID: 180-53155-13 MSD**

**Matrix: Water**

**Analysis Batch: 171626**

**Client Sample ID: SW-10836-031716-013**

**Prep Type: Total Recoverable**

**Prep Batch: 171313**

**%Rec.**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Cadmium	1.5	J	50.0	53.7		ug/L		104	70 - 130	1	20
Chromium	0.97	J	200	194		ug/L		96	70 - 130	0	20
Lead	10	U	500	495		ug/L		99	70 - 130	2	20

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 180-171504/2**

**Matrix: Water**

**Analysis Batch: 171504**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Suspended Solids	0.50	U	0.50	0.50	mg/L			03/22/16 16:21	1

**Lab Sample ID: LCS 180-171504/1**

**Matrix: Water**

**Analysis Batch: 171504**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Total Suspended Solids		58.0	56.0	mg/L		97	80 - 120

**Lab Sample ID: 180-53155-4 DU**

**Matrix: Water**

**Analysis Batch: 171504**

**Client Sample ID: SW-18036-031716-004**

**Prep Type: Total/NA**

Analyte	Sample	Sample	DU	DU	Unit	D					RPD	Limit
	Result	Qualifier										
Total Suspended Solids	100		101		mg/L						0.6	10

**Lab Sample ID: 180-53155-6 DU**

**Matrix: Water**

**Analysis Batch: 171504**

**Client Sample ID: SW-18036-031716-006**

**Prep Type: Total/NA**

Analyte	Sample	Sample	DU	DU	Unit	D					RPD	Limit
	Result	Qualifier										
Total Suspended Solids	55		55.6		mg/L						2	10

TestAmerica Pittsburgh

# QC Sample Results

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 180-171884/1

Matrix: Water

Analysis Batch: 171884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
pH	7.00	7.040		SU		101	99 - 101	

Lab Sample ID: 180-53155-12 DU

Matrix: Water

Analysis Batch: 171884

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.20	HF	8.340		SU		2	2

# QC Association Summary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## GC/MS VOA

### Analysis Batch: 171549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53149-B-7 MSD	Matrix Spike Duplicate	Total/NA	Water	624	
180-53149-C-7 MS	Matrix Spike	Total/NA	Water	624	
180-53155-1	SW-18036-031716-001	Total/NA	Water	624	
180-53155-2	SW-18036-031716-002	Total/NA	Water	624	
180-53155-3	SW-18036-031716-003	Total/NA	Water	624	
180-53155-4	SW-18036-031716-004	Total/NA	Water	624	
180-53155-5	SW-18036-031716-005	Total/NA	Water	624	
180-53155-9	SW-18036-031716-009	Total/NA	Water	624	
LCS 180-171549/1002	Lab Control Sample	Total/NA	Water	624	
MB 180-171549/6	Method Blank	Total/NA	Water	624	

### Analysis Batch: 171696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53155-6	SW-18036-031716-006	Total/NA	Water	624	
180-53155-6 MS	SW-18036-031716-007	Total/NA	Water	624	
180-53155-6 MSD	SW-18036-031716-008	Total/NA	Water	624	
180-53155-10	SW-18036-031716-010	Total/NA	Water	624	
180-53155-11	SW-18036-031716-011	Total/NA	Water	624	
180-53155-12	SW-18036-031716-012	Total/NA	Water	624	
180-53155-13	SW-10836-031716-013	Total/NA	Water	624	
180-53155-14	TB-18036-031716-001	Total/NA	Water	624	
LCS 180-171696/1002	Lab Control Sample	Total/NA	Water	624	
MB 180-171696/4	Method Blank	Total/NA	Water	624	

## Metals

### Prep Batch: 171313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53155-1	SW-18036-031716-001	Total Recoverable	Water	200.7	
180-53155-2	SW-18036-031716-002	Total Recoverable	Water	200.7	
180-53155-3	SW-18036-031716-003	Total Recoverable	Water	200.7	
180-53155-4	SW-18036-031716-004	Total Recoverable	Water	200.7	
180-53155-5	SW-18036-031716-005	Total Recoverable	Water	200.7	
180-53155-6	SW-18036-031716-006	Total Recoverable	Water	200.7	
180-53155-6 MS	SW-18036-031716-007	Total Recoverable	Water	200.7	
180-53155-6 MSD	SW-18036-031716-008	Total Recoverable	Water	200.7	
180-53155-9	SW-18036-031716-009	Total Recoverable	Water	200.7	
180-53155-10	SW-18036-031716-010	Total Recoverable	Water	200.7	
180-53155-11	SW-18036-031716-011	Total Recoverable	Water	200.7	
180-53155-12	SW-18036-031716-012	Total Recoverable	Water	200.7	
180-53155-13	SW-10836-031716-013	Total Recoverable	Water	200.7	
180-53155-13 MS	SW-10836-031716-013	Total Recoverable	Water	200.7	
180-53155-13 MSD	SW-10836-031716-013	Total Recoverable	Water	200.7	
LCS 180-171313/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-171313/1-A	Method Blank	Total Recoverable	Water	200.7	

### Analysis Batch: 171626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53155-1	SW-18036-031716-001	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-2	SW-18036-031716-002	Total Recoverable	Water	200.7 Rev 4.4	171313

TestAmerica Pittsburgh

# QC Association Summary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## Metals (Continued)

### Analysis Batch: 171626 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53155-3	SW-18036-031716-003	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-4	SW-18036-031716-004	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-5	SW-18036-031716-005	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-6	SW-18036-031716-006	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-6 MS	SW-18036-031716-007	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-6 MSD	SW-18036-031716-008	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-9	SW-18036-031716-009	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-10	SW-18036-031716-010	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-11	SW-18036-031716-011	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-12	SW-18036-031716-012	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-13	SW-10836-031716-013	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-13 MS	SW-10836-031716-013	Total Recoverable	Water	200.7 Rev 4.4	171313
180-53155-13 MSD	SW-10836-031716-013	Total Recoverable	Water	200.7 Rev 4.4	171313
LCS 180-171313/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	171313
MB 180-171313/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	171313

## General Chemistry

### Analysis Batch: 171504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53155-1	SW-18036-031716-001	Total/NA	Water	SM 2540D	
180-53155-2	SW-18036-031716-002	Total/NA	Water	SM 2540D	
180-53155-3	SW-18036-031716-003	Total/NA	Water	SM 2540D	
180-53155-4	SW-18036-031716-004	Total/NA	Water	SM 2540D	
180-53155-4 DU	SW-18036-031716-004	Total/NA	Water	SM 2540D	
180-53155-5	SW-18036-031716-005	Total/NA	Water	SM 2540D	
180-53155-6	SW-18036-031716-006	Total/NA	Water	SM 2540D	
180-53155-6 DU	SW-18036-031716-006	Total/NA	Water	SM 2540D	
180-53155-9	SW-18036-031716-009	Total/NA	Water	SM 2540D	
180-53155-10	SW-18036-031716-010	Total/NA	Water	SM 2540D	
180-53155-11	SW-18036-031716-011	Total/NA	Water	SM 2540D	
180-53155-12	SW-18036-031716-012	Total/NA	Water	SM 2540D	
180-53155-13	SW-10836-031716-013	Total/NA	Water	SM 2540D	
LCS 180-171504/1	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 180-171504/2	Method Blank	Total/NA	Water	SM 2540D	

### Analysis Batch: 171884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-53155-1	SW-18036-031716-001	Total/NA	Water	SM 4500 H+ B	
180-53155-2	SW-18036-031716-002	Total/NA	Water	SM 4500 H+ B	
180-53155-3	SW-18036-031716-003	Total/NA	Water	SM 4500 H+ B	
180-53155-4	SW-18036-031716-004	Total/NA	Water	SM 4500 H+ B	
180-53155-5	SW-18036-031716-005	Total/NA	Water	SM 4500 H+ B	
180-53155-6	SW-18036-031716-006	Total/NA	Water	SM 4500 H+ B	
180-53155-9	SW-18036-031716-009	Total/NA	Water	SM 4500 H+ B	
180-53155-10	SW-18036-031716-010	Total/NA	Water	SM 4500 H+ B	
180-53155-11	SW-18036-031716-011	Total/NA	Water	SM 4500 H+ B	
180-53155-12	SW-18036-031716-012	Total/NA	Water	SM 4500 H+ B	
180-53155-12 DU	SW-18036-031716-012	Total/NA	Water	SM 4500 H+ B	
180-53155-13	SW-10836-031716-013	Total/NA	Water	SM 4500 H+ B	

# QC Association Summary

Client: Brausch Environmental LLC  
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-53155-1

## General Chemistry (Continued)

### Analysis Batch: 171884 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-171884/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

1

2

3

4

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11

12

13



**CONESTOGA-ROVERS  
& ASSOCIATES**  
GHD Services Inc.

# CHAIN OF CUSTODY RECORD

Address: 2055 Niagara Falls Blvd, Niagara Falls, NY

Phone: 716 297 6150 Fax: 716 297 2265

COC NO.: 48146

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/Phase/Task Code:

18036 - 2014

Project Name:

Quarterly Storm Sewer Sampling-CBS

Project Location:

Buffalo - Niagara International Airport

Chemistry Contact:

Sue Scrocchi

Sampler(s):

Kevin Lynch Doug Oscar

Laboratory Name:

Test America

Lab Contact:

Jill Colussy

Lab Location:

Pittsburgh, PA

Lab Quote No.:

18006817

SSOW ID:

2 Coolers

Carrier:

FedEx

Airbill No.:

Date Shipped:  
3/17/16

MSD Request

Comments:

Item SAMPLE IDENTIFICATION  
(Containers for each sample may be combined on one line)

DATE  
(mm/dd/yy)

TIME  
(hh:mm)

Matrix Code  
(see back of COC)

Grab (G) or Comp (C)

Unpreserved

Hydrochloric Acid (HCl)

Nitric Acid (HNO<sub>3</sub>)

Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>)

Sodium Hydroxide  
(NaOH)

Methanol/Water  
(Soil VOC)

EnvCores 3:5g, 1x25g

Other:

Total Containers/Sample

- 1 SW-18036-031716-001
- 2 SW-18036-031716-002
- 3 SW-18036-031716-003
- 4 SW-18036-031716-004
- 5 SW-18036-031716-005
- 6 SW-18036-031716-006
- 7 SW-18036-031716-007
- 8 SW-18036-031716-008
- 9 SW-18036-031716-009
- 10 SW-18036-031716-010
- 11 SW-18036-031716-011
- 12 SW-18036-031716-012
- 13 SW-18036-031716-013
- 14 TB-18036-031716-001
- 15 Temp blank in Cooler

3/17/16 0745 W G

0820 | |

0845 | |

0900 | |

0915 | |

0945 | |

0945 | |

1015 | |

1100 | |

1100 | |

1115 | |

1145 | |

1145 | |

3/17/16 ←

W G

- 2 -

6 3 1 1 1

6 3 1 1 1

6 3 1 1 1

6 3 1 1 1

6 3 1 1 1

6 3 1 1 1

6 3 1 1 1

TAT Required in business days (use separate COCs for different TATs):

1 Day  2 Days  3 Days  1 Week  2 Week  Other: Per CBS Contract

Total Number of Containers: 78

All Samples in Cooler must be on COC

Notes/ Special Requirements: NO QC FOR pH  
pH Field measured also  
Elevated pH noted may affect preservation

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
<i>[Signature]</i>	GHD	3/17/16	1300 *	<i>Dennis Watson</i>	TAP	3/18/16	1415
2.							
3.							

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution:

WHITE - Fully Executed Copy (CRA)

YELLOW - Receiving Laboratory Copy

PINK - Shipper

GOLDENROD - Sampling Crew

CRA Form: COC-10B (20110804)

\* Cooler sealed for shipment

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3/31/2016

## Login Sample Receipt Checklist

Client: Brausch Environmental LLC

Job Number: 180-53155-1

**Login Number:** 53155

**List Source:** TestAmerica Pittsburgh

**List Number:** 1

**Creator:** Watson, Debbie

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**ATTACHMENT C**

**DATA VALIDATION AND USABILITY EVALUATION  
MARCH 2016 GROUNDWATER AND SURFACE WATER SAMPLING**



# Memorandum

To: Leo Brausch [lbrausch@brauschenv.com], Jim Kay Ref. No.: 018036

From: Paul McMahon/adh/6 *Pm* Date: April 4, 2016  
Rev. April 13, 2016

CC: Kevin Lynch

**Re:** Analytical Results and Reduced Validation  
Groundwater and Surface Water Monitoring Program  
CBS Corporation Airport Site – Cheektowaga, New York  
March 2016

---

## 1. Introduction

This document details a reduced validation of analytical results for surface water and groundwater samples collected at the Cheektowaga, New York Site on March 17, 2016. Samples were submitted to TestAmerica Laboratories, Inc. (TA), located in Pittsburgh, Pennsylvania. A sample collection and analysis summary is presented in Table 1. A summary of the analytical methodology is presented in Table 2.

Standard GHD deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, duplicate data, recovery data from surrogate spikes/laboratory control samples (LCS)/matrix spikes (MS), and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 2 and applicable guidance from the documents entitled:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review", United States Environmental Protection Agency (USEPA) 540 R 10 011, January 2010
- ii) "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review", USEPA 540 R 08 01, June 2008
- iii) "Groundwater and Surface Water Monitoring Program Quality Assurance Project Plan", September 2014

## 2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 2. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were analyzed

within the required holding times except pH. pH is a field parameter, and the associated laboratory results were qualified as estimated (see Table 3).

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

### 3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Most method blank results were non-detect. Methylene chloride was detected in one method blank; associated detected sample results with similar concentrations were qualified as non-detect (see Table 4).

### 4. Surrogate Spike Recoveries - Organic Analyses

In accordance with the method employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compound (VOC) determinations were spiked with the appropriate number of surrogate compounds prior to sample analysis.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries were acceptable, demonstrating good analytical efficiency.

### 5. Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

#### 5.1 Organic Analyses

The LCS contained all compounds of interest. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy.

#### 5.2 Inorganic Analyses

The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the control limits, demonstrating acceptable analytical accuracy.

## **6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses**

To evaluate the effects of sample matrices on the preparatory procedures, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1. The laboratory performed additional site-specific MS/MSD analyses internally.

### **6.1      Organic Analyses**

The MS/MSD samples were spiked with all compounds of interest. Most percent recoveries and all RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision. Two low MSD recoveries were reported; the results were judged acceptable without qualification based on the acceptable MS recoveries and RPDs.

### **6.2      Inorganic Analyses**

The MS/MSD samples were spiked with the analytes of interest, and the results were evaluated using the "Guidelines". All percent recoveries and RPD values were within the control limits, demonstrating acceptable analytical accuracy and precision.

## **7. Duplicate Sample Analyses – Inorganic Analyses**

Analytical precision is evaluated based on the analysis of laboratory duplicate samples. For this study, duplicate samples were prepared and analyzed by the laboratory as specified in Table 1. The laboratory performed additional site-specific duplicate analyses internally. The duplicate results were evaluated per the "Guidelines". All duplicate analyses performed were acceptable, demonstrating acceptable analytical precision.

## **8. Field QA/QC Samples**

The field QA/QC consisted of two trip blank samples and two field duplicate sample sets.

### **8.1      Trip Blank Sample Analysis**

To evaluate contamination from sample collection, transportation, storage, and analytical activities, two trip blanks were submitted to the laboratory for VOC analysis. Most results were non-detect for the compounds of interest. Methylene chloride was detected in the surface water trip blank. All associated sample results were either non-detect or were previously qualified as non-detect, and no further action was necessary.

### **8.2      Field Duplicate Sample Analysis**

To assess the analytical and sampling protocol precision, two field duplicate sample sets were collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 percent for water samples. If the reported concentration in either the

investigative sample or its duplicate is less than five times the practical quantitation limit (PQL), the evaluation criterion is one times the PQL value.

Most field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision. Some variability was noted in the total suspended solids results, and the associated data were qualified as estimated (see Table 5).

## 9. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the reporting limit (RL) but greater than the MDL were qualified as estimated (J) unless qualified otherwise in this memorandum.

Due to matrix interferences, dilutions were required for the lead analysis for samples collected from locations MW-2, MW-28, and MW-31. The reporting limit for lead was adjusted accordingly by the laboratory.

## 10. Conclusion

Based on the assessment detailed in the foregoing, the data are acceptable with the noted qualifications. These qualifications have been applied to the electronic files provided by the laboratory.

Table 1

**Sample Collection and Analysis Summary  
Groundwater and Surface Water Monitoring Program  
CBS Corporation Airport Site  
Cheektowaga, New York  
March 2016**

Sample ID	Location ID	Collection Date (mm/dd/yy)	Collection Time (hr:min)	Analysis/Parameters			Comments
				VOCs	Metals	pH/TSS	
<b>Surface Water</b>							
SW-18036-031716-001	1B	03/17/2016	7:45	X	X	X	
SW-18036-031716-002	1C	03/17/2016	8:20	X	X	X	
SW-18036-031716-003	2A	03/17/2016	8:45	X	X	X	
SW-18036-031716-004	2B	03/17/2016	9:00	X	X	X	
SW-18036-031716-005	3A	03/17/2016	9:15	X	X	X	
SW-18036-031716-006	2C	03/17/2016	9:45	X	X	X	MS/MSD/DUP
SW-18036-031716-009	2D	03/17/2016	10:15	X	X	X	
SW-18036-031716-010	3C	03/17/2016	11:00	X	X	X	
SW-18036-031716-011	3C	03/17/2016	11:00	X	X	X	Duplicate of SW-18036-031716-10
SW-18036-031716-012	3B	03/17/2016	11:15	X	X	X	
SW-18036-031716-013	1A	03/17/2016	11:45	X	X	X	
TB-18036-031716-001	-	03/17/2016	-	X			Trip Blank
<b>Groundwater</b>							
WG-18036-031716-DT-001	MW-34D	03/17/2016	8:40	X	X		
WG-18036-031716-002-SG	MW-34	03/17/2016	8:15	X	X		
WG-18036-031716-DT-003	MW-30	03/17/2016	9:35	X	X		
WG-18036-031716-004-SG	MW-35	03/17/2016	8:55	X	X		
WG-18036-031716-006-SG	MW-35	03/17/2016	8:55	X	X		Duplicate of WG-18036-031716-004-SG
WG-18036-031716-DT-005	MW-33	03/17/2016	10:25	X	X		
WG-18036-031716-DT-007	MW-32	03/17/2016	11:30	X	X		MS/MSD
WG-18036-031716-008-SG	MW-2	03/17/2016	10:45	X	X		
WG-18036-031716-009-SG	MW-5	03/17/2016	12:35	X	X		
WG-18036-031716-010-SG	MW-28	03/17/2016	11:35	X	X		
WG-18036-031716-011-SG	MW-31	03/17/2016	13:35	X	X		
TB-18036-031716-DT	-	03/17/2016	-	X			Trip Blank

Notes:

- Not applicable
- DUP - Laboratory Duplicate
- MS - Matrix Spike
- MSD - Matrix Spike Duplicate
- VOCs - Volatile Organic Compounds
- TSS - Total Suspended Solids

**Table 2**

**Sample Holding Time Criteria and Analytical Method Summary**  
**Groundwater and Surface Water Monitoring Program**  
**CBS Corporation Airport Site**  
**Cheektowaga, New York**  
**March 2016**

<b>Parameter</b>	<b>Matrix</b>	<b>Analytical Method</b>	<b>Collection to Analysis</b>
Total Metals	Water	200.7 <sup>(1)</sup>	180 Days
Volatile Organic Compounds	Water	624 <sup>(2)</sup>	14 Days
pH	Water	SM 4500 H+ B <sup>(3)</sup>	Immediate
Total Suspended Solids	Water	SM 2540D <sup>(3)</sup>	7 Days

**Notes:**

- (1) - Referenced from "Methods for the Chemical Analysis of Water and Wastes", (MCAWW), USEPA-600/4-79-020, March 1983 and subsequent revisions
- (2) - Referenced from "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", USEPA-600/4-82-057, July 1982 and subsequent revisions
- (3) - "Standard Methods for the Examination of Water and Wastewater", 20th Edition, (with subsequent revisions)

**Table 3**

**Qualified Sample Results Due to Holding Time Exceedances**  
**Groundwater and Surface Water Monitoring Program**  
**CBS Corporation Airport Site**  
**Cheektowaga, New York**  
**March 2016**

Parameter	Holding Time	Holding Time Criteria	Sample ID	Qualified Sample Results	Units
pH	11 days	15 minutes	SW-18036-031716-001	8.08 J	S.U.
			SW-18036-031716-002	8.25 J	S.U.
			SW-18036-031716-003	8.25 J	S.U.
			SW-18036-031716-004	11.0 J	S.U.
			SW-18036-031716-005	8.94 J	S.U.
			SW-18036-031716-006	11.0 J	S.U.
			SW-18036-031716-009	8.34 J	S.U.
			SW-18036-031716-010	8.10 J	S.U.
			SW-18036-031716-011	7.84 J	S.U.
			SW-18036-031716-012	8.20 J	S.U.
			SW-18036-031716-013	7.91 J	S.U.

Notes:

J - Estimated concentration  
 S.U. - Standard Units

**Table 4**

**Qualified Sample Results Due to Analyte Concentrations in the Method Blank**  
**Groundwater and Surface Water Monitoring Program**  
**CBS Corporation Airport Site**  
**Cheektowaga, New York**  
**March 2016**

Parameter	Analysis Date	Analyte	Blank Result (1)	Sample ID	Original Sample Result	Qualified Sample Result	Units
VOCs	03/23/2016	Methylene Chloride	1.5 J	SW-18036-031716-003	1.4 J	5.0 U	µg/L
			0.92 J	SW-18036-031716-004	1.0 J	3.0 U	µg/L
			1.5 J	SW-18036-031716-005	1.5 J	5.0 U	µg/L
			1.5 J	SW-18036-031716-009	1.7 J	5.0 U	µg/L

Notes:

J - Estimated concentration

U - Not detected at the associated reporting limit

VOCs - Volatile Organic Compounds

(1) - Blank results corrected for individual sample dilution factors

**Table 5**

**Qualified Sample Results Due to Variability in Field Duplicate Results**  
**Groundwater and Surface Water Monitoring Program**  
**CBS Corporation Airport Site**  
**Cheektowaga, New York**  
**March 2016**

Parameter	Analyte	RPD	Sample ID	Qualified Result	Field Duplicate Sample ID	Qualified Result	Units
General Chemistry	TSS	118	SW-18036-031716-010	170 J	SW-18036-031716-011	660 J	mg/L

Notes:

RPD - Relative Percent Difference

J - Estimated concentration

TSS - Total Suspended Solids