

#### **CBS** Corporation

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

*Via Electronic and First-Class Mail*October 12, 2012

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

Re: Monthly Operation and Maintenance Report NYSDEC Site 9-15-066, Cheektowaga, New York

Dear Mr. Locey:

On behalf of the Respondents to the Order on Consent and Settlement Agreement, Index No. B9-0381-91-8 (the "Order"), CBS Corporation (CBS) submits this monthly status report regarding operation and maintenance (O&M) activities at New York State Department of Environmental Conservation (NYSDEC) Site No. 9-15-066 in Cheektowaga, New York (the "Site"). Under an Agreement among the Respondents, CBS has managed the Remedial Program pursuant to the Order. This report addresses activities conducted in September 2012 and transmits the discharge monitoring report for this period.

#### 1. Site Activities and Status

- A. The collection and treatment system operated throughout September 2012.
- B. On behalf of CBS, Conestoga-Rovers & Associates (CRA) conducted routine and non-routine O&M, and TestAmerica Laboratories, Inc. provided required analytical laboratory services.
- C. On September 7, 2012, CBS submitted the report, *Termination of Operation*, *Maintenance*, *and Monitoring Activities*, which provides the technical basis and rationale for the proposed closure of the groundwater collection and treatment system installed and operated as part of Operable Unit 2 at the Site.

- D. On September 12, 2012, representatives of CBS, NYSDEC, and the Niagara Frontier Transportation Authority (NFTA) met to discuss proposed plans and procedures to close the Operable Unit 2 groundwater collection and treatment system.
- E. On September 20, 2012, CBS submitted to NYSDEC a monthly report on the status of O&M activities at the Site for August 2012. That status report also transmitted the discharge monitoring data for August 2012.
- F. On September 27, 2012, CRA conducted the quarterly sampling of groundwater at monitoring well MW-32 located in Area P of the Site.
- G. CRA submitted electronic data deliverables to NYSDEC for the Site sampling as follows:
  - <u>September 20, 2012</u>: June 2012 semi-annual groundwater monitoring and August 2012 system effluent; and
  - <u>September 24, 2012</u>: July 2012 system effluent.
- H. CBS prepared the final closure plan for the Operable Unit 2 groundwater collection and treatment system.

#### 2. Sampling Results and Other Site Data

- A. In September 2012, the groundwater system recovered and treated an estimated 44,000 gallons.<sup>1</sup>
- B. Attachment A provides the discharge monitoring report for September 2012 based on the effluent sample collected on September 19, 2012. Attachment B provides the analytical laboratory report for this effluent sample.<sup>2</sup>
- C. In reviewing the treatment system effluent monitoring information, please note the following:
  - Flow data are provided via periodic on-site readings. The maximum daily flow was calculated from these data.

<sup>1</sup> Based on additional information and recalculation, the estimated total discharge for August 2012 has been revised to 37,000 gallons from the 36,000 gallons as indicated in the August 2012 monthly status report. Also, the maximum daily flow for August 2012, has been revised to 2,005 gallons per day (gpd) from the 1,926 gpd reported in the previously submitted discharge monitoring report. This adjustment in the maximum daily flow rate does not materially affect the calculated mass loadings of constituents in the discharge.

<sup>&</sup>lt;sup>2</sup> CRA submitted to NYSDEC the electronic deliverables for these data on October 1, 2012.

- The pH data are provided via periodic on-site readings. Effluent pH data are reported only for measurements taken while the treatment pump is operating and the system is actively discharging.
- The reported daily maximum values (pounds per day) are calculated using the maximum observed daily flow and the results of the monthly effluent monitoring, irrespective of whether the actual maximum daily flow occurred on the day of sampling.
- D. For the September 2012 reporting period, the effluent complied with all discharge limitations.
- E. Table 1 presents the results of influent sampling, including the data from the most-recent influent sample collected on September 19, 2012. No flow was observed from Sump 001 at the time of sampling, and this latest influent sample is a composite of the influent from the 002 and 003 portions of the system only. Attachment B includes the analytical laboratory report for this influent sample.
- F. Table 2 presents the results of quarterly monitoring of well MW-32 located in Area P at the northern portion of the Site, including the most-recent sample collected on September 27, 2012. Attachment C provides the analytical laboratory report for this groundwater sample.
- G. Figure 1 shows target volatile organic compound (VOC) concentrations over time at well MW-32. As shown in Figure 1, total target VOC concentrations decreased significantly at well MW-32 follow the *in-situ* chemical oxidation treatment that was conducted after the source removal specified in the June 1995 Record of Decision failed to result in low residual VOC concentrations in groundwater at this well. Following this decrease, and a brief rebound period, the VOC concentrations at well MW-32 have been relatively stable over the past 19 quarters of monitoring.

## 3. Upcoming Activities

A. CBS will submit its plan for closure of the groundwater collection and treatment system and submit this plan for NYSDEC approval.<sup>3</sup>

B. CBS will implement the groundwater collection and treatment system closure plan upon NYSDEC approval and assuming NFTA cooperation. The timing of the field work is, however, weather-dependent.

<sup>&</sup>lt;sup>3</sup> CBS submitted this plan on October 10, 2012.

C. In accordance with prior communications with NYSDEC and NFTA, CBS will continue Site O&M activities through October 12, 2012, at which time CBS will look to NFTA to assume those activities.

## 4. Operational Problems

A. CBS' work plan for shutdown and closure of the collection and treatment system includes a review of potential operational problems related to the shutdown and closure.

\* \* \* \*

Please contact me if you have questions regarding this status report.

Very truly yours,

Leo M. Brausch

Consultant/Project Engineer

LMB:

Attachments

cc (via electronic mail):

W. D. Wall, Esq.

M. G. Graham, Esq.

K. P. Lynch, CRA

T. Carvana, NFTA

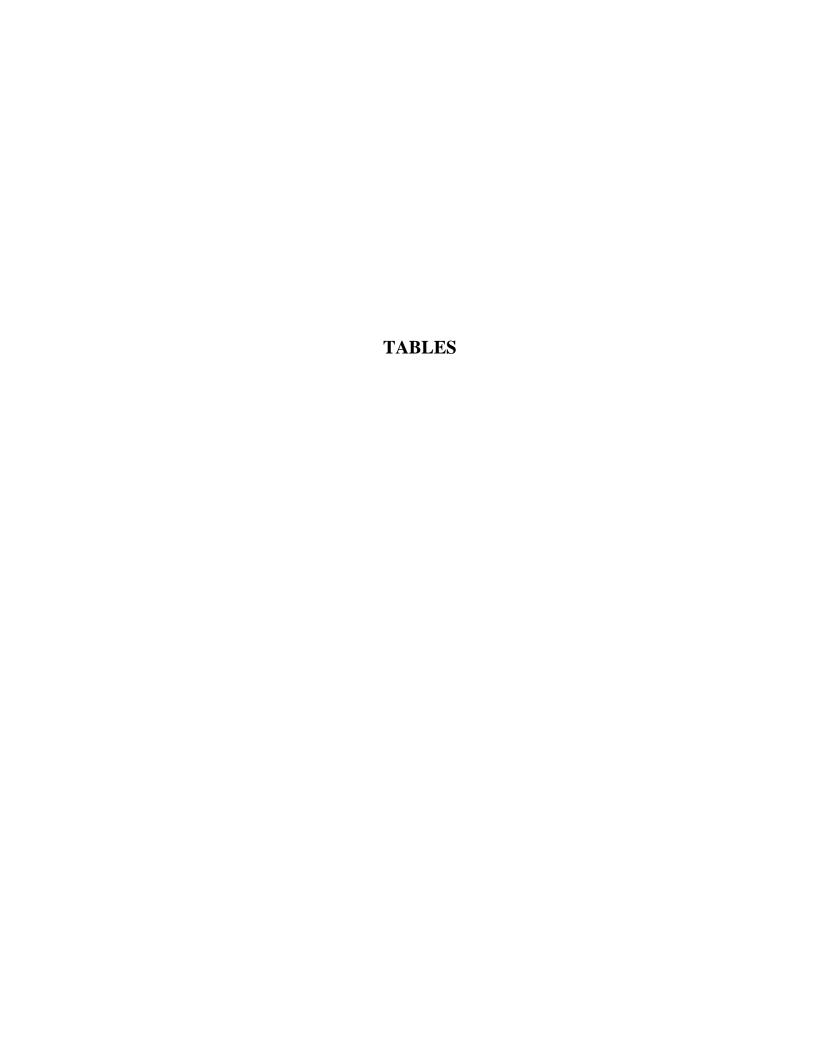


Table 1
Summary of Treatment System Influent Monitoring Data
NYSDEC Site No. 9-15-066, Cheektowaga, New York

			Constituent Concentration (ug/L)					
Date of Sampling	Outfall	cis-1,2-dichloroethylene	Toluene	1,1,1-trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead
08/21/00	Composite	200 U	200 U	200 U	3,100	200 U	1.5	NA
08/29/00	Composite	200 U	200 U	200 U	8,500	200 U	0.7	NA
09/06/00	Composite	200 U	200 U	200 U	4,100	200 U	0.7 U	NA
09/13/00	Composite	400 U	400 U	400 U	9,600	400 U	1.6	NA
09/20/00	Composite	54 J	100 U	100 U	2,500	100 U	0.6 U	NA
09/27/00	Composite	100 U	100 U	100 U	2,200	100 U	0.68 J	NA
10/04/00	Composite	60 J	100 U	100 U	2,500	100 U	0.69 J	NA
10/10/00	Composite	23 J	25 U	25 U	430	25 U	0.5 U	NA
03/29/01	Composite	9.1 J	10 U	1.4 J	16	10 U	1.5	2.5 U
06/26/01	001	25	4.5 U	0.9 J	37	4.5 U	448	NA
06/26/01	002	16	4.5 U	2.3 J	280	4.5 U	3.0 U	NA
06/26/01	003	510	4.5 U	4.5 J	1,700	4.5 U	3.0 U	NA
09/29/01	Comp - Perm	18	25 U	4 J	8.3 J	10 U	0.25 U	7.4
09/29/01	Comp - Temp	14 J	25 U	25 U	350	25 U	0.25 U	8.7
12/21/01	Composite	14	10 U	10 U	130	10 U	1.7	4.1 U
03/14/02	Composite	18	10 U	10 U	130	10 U	0.29	4.5
10/15/02	Composite	11.3	530	9.0	990	16	5 U	NA
12/15/02	Composite	7.3	19	0.16	46	1.3	8.4	50 U
03/15/03	Composite	7.8	14	1.0	29	NA	21	3 U
06/11/03	Composite	11.0	130	64	570	25 U	4.2	5.5
09/09/03	Composite	8.6	290	25 U	620	15	3.0	3.5
12/10/03	Composite	8.6	54	25 U	430	25 U	2.5	3.0
03/12/04	Composite	7.7	51	2.0 U	3.9	2.0 U	1.4	1.6
06/09/04	Composite	8.3	54	40 U	650	40 U	1.8	6.8

Table 1
Summary of Treatment System Influent Monitoring Data
NYSDEC Site No. 9-15-066, Cheektowaga, New York

			Constituent Concentration (ug/L)					
Date of Sampling	Outfall	cis-1,2-dichloroethylene	Toluene	1,1,1-trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead
09/13/04	Composite	10.3	98	10 U	250	10 U	1.8	2.2
12/13/04	Composite	140	4.4 J	20 U	470	20 U	0.81 J	1.6 J
03/23/05	Composite	46	15 U	15 U	250	15 U	2.1 J	1.5 U
06/09/05	Composite	100	15 U	15 U	1,200	5.4 J	1.2 J	3.0 U
10/03/05	Composite	26	1.0 U	2.0	8.6	11	5.0 U	3.0 U
12/16/05	Composite	34	5.0 U	5.0 U	140	3.5 J	0.68 J	3.0 U
03/13/06	Composite	36	10 U	10 U	190	2.6 J	0.95 J	2.0 J
05/09/06	Composite	87	10 U	10 U	710	5.6 J	1.0 J	3.0 U
06/12/06	Composite	72	3.3 U	3.3 U	190	4.0 J	0.72 J	3.0 U
09/11/06	Composite	16	5.0 U	5.0 U	85	5 U	0.47 J	2.0 J
12/11/06	Composite	14	5.0 U	5.0 U	71	1.8 J	5.0 U	3.0 U
03/22/07	Composite	32	5.0 U	2.7 J	130	4.6 J	1.2 J	3.0 U
06/20/07	Composite	31	0.45 J	0.76 J	210	1.7 J	0.44 J	3.0 U
09/17/07	Composite	89	20 U	20 U	730	7.0 J	5.0 U	3.0 U
12/18/07	Composite	18	2.0 U	2.0 U	90	1.5 J	5.0 U	3.0 U
03/19/08	Composite	12	0.38 J	1.0 J	120	1.2 J	5.0 U	3.0 U
06/17/08	Composite	20	4.0 U	4.0 U	190	2.3 J	5.0 U	3.0 U
09/18/08	Composite	20	2.0 U	2.0 U	180	4.4	5.0 U	3.0 U
12/18/08	Composite	19	0.17 J	2.0 U	98	2.8	5.0 U	3.0 U
03/30/09	Composite	5.2	1.0 U	1.0 U	73	1.6	5.0 U	3.0 U
06/12/09	Composite	18	5.0 U	1.1 J	180	2.5 J	5.0 U	3.0 U
09/30/09	Composite (002 & 003)	43	10 U	10 U	310	4.4 J	0.85 J	3.0 U
12/29/09	Composite (002 & 003)	19	2.0 U	0.51 J	120	1.1 J	0.56 J	1.9 J

Table 1
Summary of Treatment System Influent Monitoring Data
NYSDEC Site No. 9-15-066, Cheektowaga, New York

			Constituent Concentration (ug/L)					
Date of Sampling	Outfall	cis-1,2-dichloroethylene	Toluene	1,1,1-trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead
03/17/10	Composite (002 & 003)	13	0.29 J	0.56 J	93	2.2	5.0 U	1.8 J
06/30/10	Composite (002 & 003)	24	3.3 U	3.3 U	310	1.2 J	5.0 U	5.0 U
09/28/10	Composite (002 & 003)	18	2.0 U	2.0 U	140	0.77 J	5.0 U	5.0 U
01/19/11	Composite (002 & 003)	79	5.0 U	5.0 U	340	6.3	5.0 U	3.0 U
03/30/11	Composite (002 & 003)	76	5.0 U	5.0 U	180	3.7 J	5.0 U	15 U
06/09/11	Composite (002 & 003)	37	13 U	13 U	230	13 U	5.0 U	3.0 U
09/15/11	Composite (002 & 003)	160	110	13 U	460	13 J	5.0 U	3.0 U
12/12/11	Composite (002 & 003)	56	10 U	10 U	200	10 U	5.0 U	1.3 J
03/14/12	Composite (002 & 003)	15	10 U	10 U	120	10 U	5.0 U	3.0 U
06/12/12	Composite (002 & 003)	20	10 U	10 U	170	10 U	2.0 J	3.0 U
09/19/12	Composite (002 & 003)	46	25 U	25 U	310	25 U	5.0 U	6.0 U

### Data Legend:

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

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

<sup>&</sup>quot;NA" - indicates not analyzed

U - not detected at indicated detection limit

 $<sup>\</sup>emph{J}$  - estimated concentration below reporting limit but above minimum detection limit.

Table 2
Summary of Groundwater Monitoring Data, Well MW-32
NYSDEC Site No. 9-15-066, Cheektowaga, New York

5	Constituent Concentration (ug/L)						
Date of Sampling	cis-1,2- dichloroethylene	Toluene	1,1,1- trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead
05/11/00	1,500	5 U	5 U	3,700	540	5 U	3 U
12/01/00	2,200	5 U	5 U	1,200	110	1 U	10 U
12/01/00 (Dup)	2,300	10 U	10 U	1,900	230 J	NA	NA
03/30/01	1,600	100 U	100 U	650	340	5 U	3 U
03/30/01 (Dup)	1,500	100 U	100 U	610	310	5 U	3 U
06/21/01	2,800	250 U	250 U	4,100	890	5 U	3 U
06/21/01 (Dup)	2,700	250 U	250 U	4,000	830	5 U	3 U
09/13/01	4,000	250 U	250 U	2,900	1,000	0.70 J	3 U
09/13/01 (Dup)	4,100	250 U	250 U	2,800	1,100	0.83 J	3 U
12/13/01	2,300	200 U	200 U	2,500	590	5 U	3 U
12/31/01 (Dup)	2,200	200 U	200 U	2,400	560	5 U	3 U
03/14/02	560	250 U	250 U	730	98	5 U	3 U
03/14/02 (Dup)	570	250 U	250 U	710	100	5 U	3 U
07/10/02	1,200	NA	NA	2,000	190	NA	NA
12/31/02	480	NA	50 U	530	66	0.34 J	4.9
12/31/02 (Dup)	510	NA	50 U	580	77	5 U	4.7
03/29/03	1,000	80 U	80 U	740	150	5 U	3 U
06/17/03	1,100	200 U	200 U	2,400	130 J	0.34 J	4.9
06/17/03 (Dup)	1,100	100 U	100 U	1,700	110	5 U	3 U
09/26/03	2,800	100 U	100 U	8,100	310 J	5 U	3 U
12/22/03	1,000	100 U	100 U	1,300	97 J	5 U	1.1 J
03/29/04	460	10 U	10 U	570	20 J	5 U	3 U
06/30/04	620	200 U	200 U	1,900	200 U	5 U	3 U
09/13/04	2,100	200 U	200 U	2,900	130 J	5 U	1.8 J
12/17/04	640	10 U	10 U	420	45	5 U	3 U
12/17/04 (Dup)	760	50 U	50 U	790	50 J	5 U	2.3 J
03/31/05	570	50 U	50 U	680	49 J	5 U	3 U
06/22/05	540	10 U	10 U	810	100	5 U	3 U
06/22/05 (Dup)	1,100	100 U	100 U	880	140	5 U	3 U
09/09/05	1,400	330 U	330 U	1,700	96 J	5 U	3 U
12/14/05	900	10 U	10 U	700	56	5 U	3 U
12/14/05 (Dup)	1,200	100 U	100 U	750	68 J	5 U	3 U

Table 2
Summary of Groundwater Monitoring Data, Well MW-32
NYSDEC Site No. 9-15-066, Cheektowaga, New York

<b>D</b>	Constituent Concentration (ug/L)							
Date of Sampling	cis-1,2- dichloroethylene	Toluene	1,1,1- trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead	
03/23/06	350	30 U	30 U	290	36	5 U	3 U	
06/13/06	410	50 U	50 U	440	13 J	5 U	3 U	
06/13/06 (Dup)	540	50 U	50 U	880	51	5 U	3 U	
09/11/06	1,400	150 U	150 U	2,000	85 J	0.34 J	4.9 J	
12/12/06	290	40 U	40 U	67	42 J	5 U	1.2 B	
12/12/06 (Dup)	590	50 U	50 U	240	75 J	5 U	3.1	
03/27/07	380	10 U	10 U	22	36 J	5 U	2.4 J	
06/26/07	1,700	150 U	150 U	23 J	710	5 U	1.5 J	
09/17/07	2,500	150 U	150 U	410	140	5 U	1.5 J	
12/19/07	1,500	150 U	150 U	160	200	0.29 J	3.0	
12/19/07 (Dup)	1,500	100 U	100 U	170	200	5 U	3 U	
03/19/08	530	40 U	40 U	110	53	0.38 J	2.2 J	
06/26/08	520	50 U	50 U	310	27 J	5 U	1 U	
09/30/08	420	50 U	50 U	120	48	5 U	1 U	
12/11/08	200	20 U	20 U	200	9.9 J	5 U	5.4	
12/11/08 (Dup)	170	10 U	10 U	180	9.0 J	5 U	3.5	
03/05/09	280	20 U	20 U	170	25	0.090 J	4.1	
06/22/09	430	40 U	40 U	590	22 J	5 U	1.6 J	
06/22/09 (Dup)	410	40 U	40 U	540	24 J	5 U	3.4	
09/10/09	320	25 U	25 U	330	26	5 U	3.8	
12/07/09	390	50 U	50 U	370	17 J	5 U	2.5 J	
12/07/09 (Dup)	380	50 U	50 U	370	16 J	5 U	1.1 J	
03/22/10	360	25 U	25 U	160	25 J	5 U	3.1	
06/14/10	260	20 U	20 U	250	18 J	5 U	2.5 J	
09/03/10	240	20 U	20 U	240	17 J	5 U	3 U	
12/21/10	400	50 U	50 U	290	22 J	5 U	3 U	
03/24/11	210	20 U	20 U	130	11 J	5 U	3 U	
06/14/11	190	5 U	5 U	210	11	5 U	1.6 J	

Table 2
Summary of Groundwater Monitoring Data, Well MW-32
NYSDEC Site No. 9-15-066, Cheektowaga, New York

D		Constituent Concentration (ug/L)							
Date of Sampling	cis-1,2- dichloroethylene	Toluene	1,1,1- trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead		
09/09/11	330	10 U	10 U	410	32	5 U	3 U		
12/16/11	230	13 U	13 U	280	19	5 U	3 U		
03/13/12	230	5 U	5 U	260	13	0.19 J	3 U		
06/19/12	210	25 U	25 U	200	11 J	5 U	1.4 J		
09/27/12	540	25 U	25 U	430	45	0.13 J	3.0		

#### Data Legend:

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

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

<sup>&</sup>quot;NA" - indicates not analyzed

U - not detected at indicated reporting limit

J - estimated concentration above minimum detection limit (MDL), but below RL.

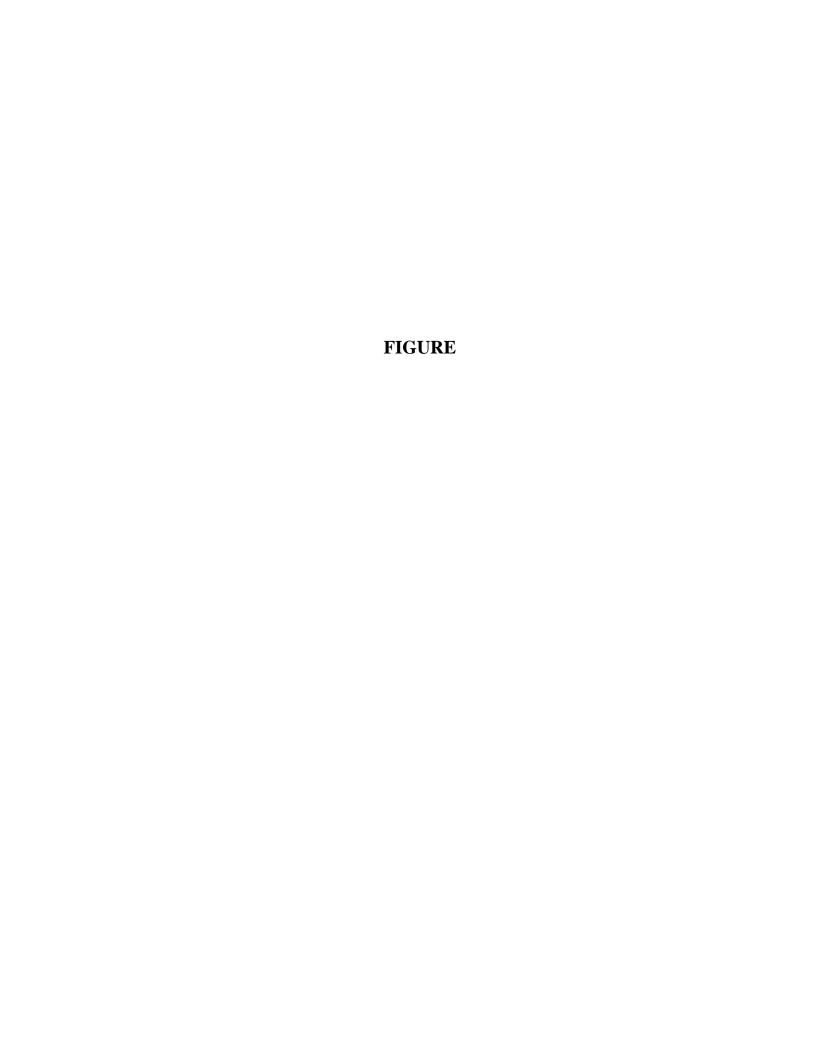
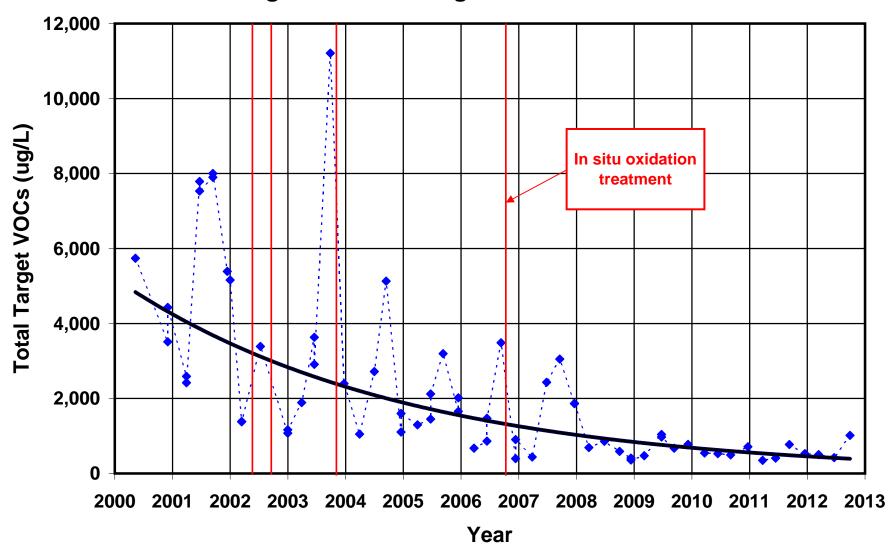


Figure 1: Total Target VOCs at MW-32



# ATTACHMENT A DISCHARGE MONITORING REPORT SEPTEMBER 2012

Discharge Monitoring Data
Outfall 001 - Treated Groundwater Remediation Discharge
NYSDEC Site No. 9-15-006
Cheektowaga, New York

Reporting Month & Year Sep-12

Parameter		Daily Minimum	Daily Maximum	Units	Daily Maximum (Ibs/day)	Measurement Frequency	Sample Type
Flow	Monitoring Result		2,103	gpd		Continuous	Meter
	Discharge Limitation		28,800	gpd		Continuous	Meter
pН	Monitoring Result	7.15	7.29	s.u.		8	Grab
	Discharge Limitation	6.5	8.5	s.u.		Weekly	Grab
Total suspended solids	Monitoring Result		< 4.0	mg/L	< 0.07	1	Grab
	Discharge Limitation		20	mg/L		Monthly	Grab
Toluene	Monitoring Result		< 1.0	ug/L	< 0.00002	1	Grab
	Discharge Limitation		5	ug/L		Monthly	Grab
Methylene chloride	Monitoring Result		< 1.0	ug/L	< 0.00002	1	Grab
	Discharge Limitation		10	ug/L		Monthly	Grab
1,2-dichlorobenzene	Monitoring Result		< 1.0	ug/L	< 0.00002	1	Grab
	Discharge Limitation		5	ug/L		Monthly	Grab
cis-1,2-dichloroethylene	Monitoring Result		< 1.0	ug/L	< 0.00002	1	Grab
	Discharge Limitation		10	ug/L		Monthly	Grab
Trichloroethylene	Monitoring Result		< 1.0	ug/L	< 0.00002	1	Grab
	Discharge Limitation		10	ug/L		Monthly	Grab
Tetrachloroethylene	Monitoring Result		< 1.0	ug/L	< 0.00002	1	Grab
	Discharge Limitation		50	ug/L		Monthly	Grab
Cadmium	Monitoring Result		< 1.0	ug/L	< 0.00002	1	Grab
	Discharge Limitation		3	ug/L		Monthly	Grab
Chromium	Monitoring Result		< 5.0	ug/L	< 0.00009	1	Grab
	Discharge Limitation		99	ug/L		Monthly	Grab

10/12/2012 Page 1 of 1

# ATTACHMENT B ANALYTICAL LABORATORY REPORT SEPTEMBER 2012 EFFLUENT AND INFLUENT SAMPLES



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: 180-14617-1 Client Project/Site: Buffalo Airport

#### For:

Leo Brausch Consulting 131 Wedgewood Drive Gibsonia, Pennsylvania 15044

Attn: Mr. Leo Brausch



Authorized for release by: 9/28/2012 7:36:32 PM

Jill Colussy
Project Manager I
jill.colussy@testamericainc.com

----- LINKS -----

Review your project results through
Total Access

**Have a Question?** 



Visit us at: 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.

Client: Leo Brausch Consulting Project/Site: Buffalo Airport TestAmerica Job ID: 180-14617-1

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#### **Case Narrative**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14617-1

Job ID: 180-14617-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative 180-14617-1

#### Receipt

The samples were received on 9/20/2012 @ 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

#### GC/MS VOA

Due to the concentration of target compounds detected, sample INFLUENT (180-14617-2) was analyzed at a dilution. Elevated reporting limits (RLs) are provided.

#### Metals

Sample INFLUENT (180-14617-2) was analyzed at dilution for lead. This analyte was reported from the 6500ICP, for which internal standards, indium and yttrium, are added to all standards and samples during analysis. The indium counts in this sample was outside of QC criteria (70-130% of the indium counts in the ICB), therefore, the analytes referencing indium were diluted for analysis. Elevated reporting limits (RLs) are provided.

#### **General Chemistry**

pH is a field parameter. Laboratory pH analysis was completed at the request of the client. .

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## **Definitions/Glossary**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

**Qualifier Description** 

Toxicity Equivalent Quotient (Dioxin)

TestAmerica Job ID: 180-14617-1

#### **Qualifiers**

#### **GC/MS VOA**

U	Indicates the analyte was analyzed for but not detected.
В	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### Metals

Qualifier

Qualitier	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
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

TEQ

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

## **Certification Summary**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14617-1

#### **Laboratory: TestAmerica Pittsburgh**

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

Authority	Program	EPA Region	Certification ID	<b>Expiration Date</b>
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAC	9	4224CA	03-31-13
Connecticut	State Program	1	PH-0688	09-30-12
Florida	NELAC	4	E871008	06-30-13
Illinois	NELAC	5	002602	06-30-13
Kansas	NELAC	7	E-10350	01-31-13
L-A-B	DoD ELAP		L2314	02-24-13
Louisiana	NELAC	6	04041	06-30-13
New Hampshire	NELAC	1	203011	04-04-13
New Jersey	NELAC	2	PA005	06-30-13
New York	NELAC	2	11182	04-01-13
North Carolina DENR	State Program	4	434	12-31-12
Pennsylvania	NELAC	3	02-00416	04-30-13
South Carolina	State Program	4	89014	04-30-13
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	04-28-13
Utah	NELAC	8	STLP	04-30-13
Virginia	NELAC	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-13
Wisconsin	State Program	5	998027800	08-31-13

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## **Sample Summary**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14617-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-14617-1	EFFLUENT	Water	09/19/12 13:00	09/20/12 09:00
180-14617-2	INFLUENT	Water	09/19/12 13:00	09/20/12 09:00

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## **Method Summary**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14617-1

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

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TestAmerica Job ID: 180-14617-1

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

**Client Sample ID: EFFLUENT** 

Date Collected: 09/19/12 13:00 Date Received: 09/20/12 09:00

Lab Sample ID: 180-14617-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.15	ug/L			09/26/12 14:20	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/26/12 14:20	1
Toluene	1.0	U	1.0	0.15	ug/L			09/26/12 14:20	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			09/26/12 14:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/26/12 14:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			09/26/12 14:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		58 - 135			-		09/26/12 14:20	1
4-Bromofluorobenzene (Surr)	92		62 - 123					09/26/12 14:20	1
Toluene-d8 (Surr)	90		71 - 118					09/26/12 14:20	1
Dibromofluoromethane (Surr)	97		64 - 128					09/26/12 14:20	1

Method: 200.7 Rev 4.4 - Metals (IC	P) - Total Red	coverable							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.15	ug/L		09/24/12 09:55	09/26/12 17:20	1
Chromium	5.0	U	5.0	0.51	ug/L		09/24/12 09:55	09/26/12 17:20	1
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4.0	U	4.0	2.0	mg/L			09/26/12 14:28	1
pH	7.15	HF	0.100	0.100	SU			09/25/12 09:43	1

**Client Sample ID: INFLUENT** Lab Sample ID: 180-14617-2

Date Collected: 09/19/12 13:00 Matrix: Water Date Received: 09/20/12 09:00

nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
lethylene Chloride	9.8	J B	25	3.7	ug/L			09/26/12 14:44	25
etrachloroethene	25	U	25	3.7	ug/L			09/26/12 14:44	25
oluene	25	U	25	3.8	ug/L			09/26/12 14:44	25
,1,1-Trichloroethane	25	U	25	7.2	ug/L			09/26/12 14:44	25
richloroethene	310		25	3.6	ug/L			09/26/12 14:44	25
inyl chloride	25	U	25	5.7	ug/L			09/26/12 14:44	25
,2-Dichlorobenzene	25	U	25	3.8	ug/L			09/26/12 14:44	25
is-1,2-Dichloroethene	46		25	5.9	ug/L			09/26/12 14:44	25
urrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
,2-Dichloroethane-d4 (Surr)	123		58 - 135			-		09/26/12 14:44	25
-Bromofluorobenzene (Surr)	90		62 - 123					09/26/12 14:44	25
oluene-d8 (Surr)	91		71 - 118					09/26/12 14:44	25
ibromofluoromethane (Surr)	98		64 - 128					09/26/12 14:44	25

Method: 200.7 Rev 4.4 - Metals (ICF	) - Total Rec	overable							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.15	ug/L		09/24/12 09:55	09/26/12 17:41	1
Chromium	4.3	J	5.0	0.51	ug/L		09/24/12 09:55	09/26/12 17:41	1
Lead	6.0	U	6.0	2.5	ug/L		09/24/12 09:55	09/27/12 13:38	2

## **Client Sample Results**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14617-1

Client Sample ID: INFLUENT

Lab Sample ID: 180-14617-2

Matrix: Water

Date Collected: 09/19/12 13:00 Date Received: 09/20/12 09:00

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.82	HF	0.100	0.100	SU			09/25/12 09:49	1

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TestAmerica Job ID: 180-14617-1

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

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

Lab Sample ID: MB 180-49751/4

**Matrix: Water** 

Analysis Batch: 49751

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB Result Qualifier RL MDL Unit D Prepared Dil Fac Analyte Analyzed Methylene Chloride 0.162 J 1.0 0.15 ug/L 09/26/12 10:00 Tetrachloroethene 09/26/12 10:00 1.0 U 1.0 0.15 ug/L 1.0 U 09/26/12 10:00 Toluene 1.0 0.15 ug/L 1,1,1-Trichloroethane 1.0 U 09/26/12 10:00 1.0 0.29 ug/L Trichloroethene 1.0 U 1.0 0.14 ug/L 09/26/12 10:00 Vinyl chloride 1.0 U 1.0 0.23 ug/L 09/26/12 10:00 1.0 U 1,2-Dichlorobenzene 1.0 0.15 ug/L 09/26/12 10:00 cis-1,2-Dichloroethene 1.0 U 1.0 0.24 ug/L 09/26/12 10:00

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		58 - 135		09/26/12 10:00	1
4-Bromofluorobenzene (Surr)	89		62 - 123		09/26/12 10:00	1
Toluene-d8 (Surr)	91		71 - 118		09/26/12 10:00	1
Dibromofluoromethane (Surr)	101		64 - 128		09/26/12 10:00	1

Lab Sample ID: LCS 180-49751/3

**Matrix: Water** 

Analysis Batch: 49751

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Methylene Chloride	20.0	15.2		ug/L		76	60 - 140	
Tetrachloroethene	20.0	22.0		ug/L		110	73 - 127	
Toluene	20.0	19.0		ug/L		95	74 - 126	
1,1,1-Trichloroethane	20.0	18.7		ug/L		93	75 - 125	
Trichloroethene	20.0	20.0		ug/L		100	73 - 125	
Vinyl chloride	20.0	19.2		ug/L		96	30 - 140	
1,2-Dichlorobenzene	20.0	19.5		ug/L		98	68 - 127	
cis-1,2-Dichloroethene	20.0	18.1		ug/L		91	69 - 127	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	112		58 - 135
4-Bromofluorobenzene (Surr)	95		62 - 123
Toluene-d8 (Surr)	99		71 - 118
Dibromofluoromethane (Surr)	101		64 - 128

Lab Sample ID: 180-14617-1 MS

**Matrix: Water** 

Analysis Batch: 49751

Client Sample ID: EFFLUEN I
Prep Type: Total/NA
%Rec.

Limits
60 - 140
73 - 127
74 - 126
75 <sub>-</sub> 125
73 - 125
30 - 140
68 - 127
69 - 127

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

Lab Sample ID: 180-14617-1 MS

**Matrix: Water** 

Analysis Batch: 49751

**Client Sample ID: EFFLUENT** Prep Type: Total/NA

Lab Sample ID: 180-14617-1 MSD

	IVIS	WS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		58 - 135
4-Bromofluorobenzene (Surr)	87		62 - 123
Toluene-d8 (Surr)	99		71 - 118
Dibromofluoromethane (Surr)	97		64 - 128

**Client Sample ID: EFFLUENT** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 49751

7 mary or Datom 10101											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Methylene Chloride	1.0	U	20.0	15.9		ug/L		80	60 - 140	0	25
Tetrachloroethene	1.0	U	20.0	22.7		ug/L		113	73 - 127	5	25
Toluene	1.0	U	20.0	19.8		ug/L		99	74 - 126	1	25
1,1,1-Trichloroethane	1.0		20.0	19.9		ug/L		99	75 - 125	3	25
Trichloroethene	1.0	U	20.0	18.4		ug/L		92	73 - 125	2	25
Vinyl chloride	1.0		20.0	21.1		ug/L		100	30 - 140	5	35
1,2-Dichlorobenzene	1.0	U	20.0	18.1		ug/L		90	68 - 127	0	35
cis-1,2-Dichloroethene	1.0	U	20.0	18.1		ug/L		91	69 - 127	1	20

MSD MSD Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 110 58 - 135 4-Bromofluorobenzene (Surr) 85 62 - 123 Toluene-d8 (Surr) 98 71 - 118 Dibromofluoromethane (Surr) 97 64 - 128

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 180-49394/1-A

**Matrix: Water** 

Analysis Batch: 49857

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 49394

%Rec.

	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Cadmium	5.0	U	5.0	0.15	ug/L		09/24/12 09:55	09/26/12 16:24	1
١	Chromium	5.0	U	5.0	0.51	ug/L		09/24/12 09:55	09/26/12 16:24	1
ı	Lead	3.0	U	3.0	1.3	ug/L		09/24/12 09:55	09/26/12 16:24	1

Lab Sample ID: LCS 180-49394/2-A **Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Matrix: Water** 

MB MB

Analysis Batch: 49857

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec

Limits Cadmium 50.0 51.1 ug/L 102 85 - 115 Chromium 200 85 - 115 201 ug/L 100 Lead 500 527 ug/L 85 - 115

Prep Batch: 49394

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

Lab Sample ID: 180-14617-1 MS **Client Sample ID: EFFLUENT Matrix: Water Prep Type: Total Recoverable** Analysis Batch: 49857 Prep Batch: 49394

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Cadmium	5.0	U	50.0	49.4		ug/L		99	70 - 130	
Chromium	5.0	U	200	198		ug/L		99	70 - 130	

Lab Sample ID: 180-14617-1 MS **Client Sample ID: EFFLUENT Matrix: Water Prep Type: Total Recoverable** Analysis Batch: 50046 Prep Batch: 49394 Sample Sample MS MS Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Lead 3.0 500 518 ug/L 104 70 - 130 Lab Sample ID: 180-14617-1 MSD **Client Sample ID: EFFLUENT** 

Matrix: Water								Prep	Type: Total	Recov	erable
Analysis Batch: 49857									Prep	Batch:	49394
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cadmium	5.0	U	50.0	49.1		ug/L		98	70 - 130	1	20
Chromium	5.0	U	200	198		ug/L		99	70 - 130	0	20

Lab Sample ID: 180-14617-1 MSD **Client Sample ID: EFFLUENT Matrix: Water Prep Type: Total Recoverable** Analysis Batch: 50046 Prep Batch: 49394 %Rec. Sample Sample Spike MSD MSD RPD Analyte Result Qualifier Added Result Qualifier %Rec Limits Unit Limit Lead 3.0 500 515 ug/L 103 70 - 130

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

Lab Sample ID: MB 180-49779/2 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 49779** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4.0	U	4.0	2.0	mg/L			09/26/12 14:28	1

Lab Sample ID: LCS 180-49779/1 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 49779** 

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Total Suspended Solids	83.9	92.0		mg/L		110	80 - 120	

Lab Sample ID: 180-14674-A-74 DU Client Sample ID: Duplicate **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 49779								
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	4.0	U	 2.40	J	mg/L		 NC	20

## **QC Sample Results**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14617-1

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 180-49539/1 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 49539

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec SU рН 7.00 7.020 100 99 - 101

Lab Sample ID: 180-14617-1 DU **Client Sample ID: EFFLUENT** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 49539

Sample Sample DU DU RPD Result Qualifier Limit Analyte Result Qualifier **RPD** Unit SU рН 7.15 HF 7.170 0.3 2

TestAmerica Job ID: 180-14617-1

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

**GC/MS VOA** 

Analysis Batch: 49751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-14617-1	EFFLUENT	Total/NA	Water	624	
180-14617-1 MS	EFFLUENT	Total/NA	Water	624	
180-14617-1 MSD	EFFLUENT	Total/NA	Water	624	
180-14617-2	INFLUENT	Total/NA	Water	624	
LCS 180-49751/3	Lab Control Sample	Total/NA	Water	624	
MB 180-49751/4	Method Blank	Total/NA	Water	624	

**Metals** 

Prep Batch: 49394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-14617-1	EFFLUENT	Total Recoverable	Water	200.7	
180-14617-1 MS	EFFLUENT	Total Recoverable	Water	200.7	
180-14617-1 MSD	EFFLUENT	Total Recoverable	Water	200.7	
180-14617-2	INFLUENT	Total Recoverable	Water	200.7	
LCS 180-49394/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 180-49394/1-A	Method Blank	Total Recoverable	Water	200.7	

Analysis Batch: 49857

Lab San	nnie ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146	<u> </u>	EFFLUENT	Total Recoverable	Water	200.7 Rev 4.4	49394
180-146	17-1 MS	EFFLUENT	Total Recoverable	Water	200.7 Rev 4.4	49394
180-146	17-1 MSD	EFFLUENT	Total Recoverable	Water	200.7 Rev 4.4	49394
180-146	17-2	INFLUENT	Total Recoverable	Water	200.7 Rev 4.4	49394
LCS 180	)-49394/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	49394
MB 180-	49394/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	49394

Analysis Batch: 50046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-14617-1 MS	EFFLUENT	Total Recoverable	Water	200.7 Rev 4.4	49394
180-14617-1 MSD	EFFLUENT	Total Recoverable	Water	200.7 Rev 4.4	49394
180-14617-2	INFLUENT	Total Recoverable	Water	200.7 Rev 4.4	49394

**General Chemistry** 

Analysis Batch: 49539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-14617-1	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
180-14617-1 DU	EFFLUENT	Total/NA	Water	SM 4500 H+ B	
180-14617-2	INFLUENT	Total/NA	Water	SM 4500 H+ B	
LCS 180-49539/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 49779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
180-14617-1	EFFLUENT	Total/NA	Water	SM 2540D
180-14674-A-74 DU	Duplicate	Total/NA	Water	SM 2540D
LCS 180-49779/1	Lab Control Sample	Total/NA	Water	SM 2540D
MB 180-49779/2	Method Blank	Total/NA	Water	SM 2540D

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Job Number: 180-14617-1

Client: Leo Brausch Consulting

Appropriate sample containers are used.

There is sufficient vol. for all requested analyses, incl. any requested

Containers requiring zero headspace have no headspace or bubble is

Sample bottles are completely filled.

Multiphasic samples are not present.

Samples do not require splitting or compositing.

Sample Preservation Verified.

Residual Chlorine Checked.

MS/MSDs

<6mm (1/4").

List Source: TestAmerica Pittsburgh

Login Number: 14617 List Number: 1

Overland Construction		
Creator: Gamber, Tom		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
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.	True	
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.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	

True

True

True

True

True

True

True

N/A

Client: Leo Brausch Consulting

List Source: TestAmerica Pittsburgh

Job Number: 180-14617-1

Login Number: 14617 List Number: 1 Creator: Gamber, Tom

,		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
he cooler or samples do not appear to have been compromised or ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
cooler Temperature is recorded.	True	
COC is present.	True	
OC is filled out in ink and legible.	True	
OC is filled out with all pertinent information.	True	
the Field Sampler's name present on COC?	True	
here are no discrepancies between the containers received and the COC.	True	
amples are received within Holding Time.	True	
ample containers have legible labels.	True	
ontainers are not broken or leaking.	True	
Sample collection date/times are provided.	True	

True

True

True

True

True

True

True

N/A

TestAmerica Pittsburgh

Appropriate sample containers are used.

There is sufficient vol. for all requested analyses, incl. any requested

Containers requiring zero headspace have no headspace or bubble is

Sample bottles are completely filled.

Multiphasic samples are not present.

Samples do not require splitting or compositing.

Sample Preservation Verified.

Residual Chlorine Checked.

MS/MSDs

<6mm (1/4").

# ATTACHMENT C ANALYTICAL LABORATORY REPORT MW-32 QUARTERLY MONITORING



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: 180-14896-1 Client Project/Site: Buffalo Airport

### For:

Leo Brausch Consulting 131 Wedgewood Drive Gibsonia, Pennsylvania 15044

Attn: Mr. Leo Brausch



Authorized for release by: 10/12/2012 9:36:17 AM

Jill Colussy Project Manager I

jill.colussy@testamericainc.com

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**Have a Question?** 



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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.

Client: Leo Brausch Consulting Project/Site: Buffalo Airport TestAmerica Job ID: 180-14896-1

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## **Case Narrative**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport TestAmerica Job ID: 180-14896-1

Job ID: 180-14896-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative 180-14896-1

#### Receipt

The samples were received on 9/28/2012 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

#### **GC/MS VOA**

Due to the concentration of target compounds detected, sample WG-18036-092712-001 (180-14896-1) was analyzed at a dilution. Elevated reporting limits (RLs) are provided.

The laboratory control standard and the laboratory control duplicate for batch 180-50689 recovered high and outside of the control limits for 1,1,1-trichloroethane. As the recoveries were high and the associated sample was non-detect for this compound, all results were reported.

#### Metals

No analytical or quality issues were noted.

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# **Definitions/Glossary**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14896-1

## **Qualifiers**

## **GC/MS VOA**

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
U	Indicates the analyte was analyzed for but not detected.
88-4-1-	

#### **Metals**

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

# Glossary

RL

RPD

TEF

TEQ

Reporting Limit

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

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

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

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# **Certification Summary**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14896-1

## **Laboratory: TestAmerica Pittsburgh**

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAC	9	4224CA	03-31-13
Connecticut	State Program	1	PH-0688	09-30-12
Florida	NELAC	4	E871008	06-30-13
Illinois	NELAC	5	002602	06-30-13
Kansas	NELAC	7	E-10350	01-31-13
L-A-B	DoD ELAP		L2314	02-24-13
Louisiana	NELAC	6	04041	06-30-13
New Hampshire	NELAC	1	203011	04-04-13
New Jersey	NELAC	2	PA005	06-30-13
New York	NELAC	2	11182	04-01-13
North Carolina DENR	State Program	4	434	12-31-12
Pennsylvania	NELAC	3	02-00416	04-30-13
South Carolina	State Program	4	89014	04-30-13
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	04-28-13
Utah	NELAC	8	STLP	04-30-13
Virginia	NELAC	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-13
Wisconsin	State Program	5	998027800	08-31-13

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# **Sample Summary**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14896-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-14896-1	WG-18036-092712-001	Water	09/27/12 09:45	09/28/12 09:30
180-14896-2	TB-18036-092712	Water	09/27/12 00:00	09/28/12 09:30

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# **Method Summary**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14896-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
6010B	Metals (ICP)	SW846	TAL PIT

### Protocol References:

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

### Laboratory References:

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

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TestAmerica Job ID: 180-14896-1

Lab Sample ID: 180-14896-1

Client: Leo Brausch Consulting

Project/Site: Buffalo Airport

Client Sample ID: WG-18036-092712-001

Date Collected: 09/27/12 09:45 Matrix: Water

Date Received: 09/28/12 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	25	U	25	4.2	ug/L			10/03/12 19:48	5
Vinyl chloride	35		25	6.5	ug/L			10/03/12 19:48	5
cis-1,2-Dichloroethene	430		25	3.3	ug/L			10/03/12 19:48	5
1,1,1-Trichloroethane	25	U *	25	5.1	ug/L			10/03/12 19:48	5
Trichloroethene	540		25	4.0	ug/L			10/03/12 19:48	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		62 - 123			=		10/03/12 19:48	5
Toluene-d8 (Surr)	98		80 - 120					10/03/12 19:48	5
4-Bromofluorobenzene (Surr)	109		75 - 120					10/03/12 19:48	5
Dibromofluoromethane (Surr)	112		80 - 120					10/03/12 19:48	5

Method: 6010B - Metals (ICP) Analyte Result Qualifier RLMDL Unit Prepared Analyzed Dil Fac 0.13 J 5.0 0.13 ug/L 10/03/12 15:30 10/05/12 19:42 Cadmium 10/03/12 15:30 10/05/12 19:42 Lead 3.0 3.0 1.3 ug/L

Client Sample ID: TB-18036-092712 Lab Sample ID: 180-14896-2 Matrix: Water

Date Collected: 09/27/12 00:00

Date Received: 09/28/12 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	5.0	U	5.0	0.85	ug/L			10/02/12 16:02	1
Vinyl chloride	5.0	U	5.0	1.3	ug/L			10/02/12 16:02	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.67	ug/L			10/02/12 16:02	1
1,1,1-Trichloroethane	5.0	U	5.0	1.0	ug/L			10/02/12 16:02	1
Trichloroethene	5.0	U	5.0	0.80	ug/L			10/02/12 16:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		62 - 123			-		10/02/12 16:02	1
Toluene-d8 (Surr)	97		80 - 120					10/02/12 16:02	1
4-Bromofluorobenzene (Surr)	83		75 - 120					10/02/12 16:02	1
Dibromofluoromethane (Surr)	102		80 - 120					10/02/12 16:02	1

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

Lab Sample ID: MB 180-50510/3

**Matrix: Water** 

Analysis Batch: 50510

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	5.0	U	5.0	0.85	ug/L			10/02/12 10:31	1
Vinyl chloride	5.0	U	5.0	1.3	ug/L			10/02/12 10:31	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.67	ug/L			10/02/12 10:31	1
1,1,1-Trichloroethane	5.0	U	5.0	1.0	ug/L			10/02/12 10:31	1
Trichloroethene	5.0	U	5.0	0.80	ug/L			10/02/12 10:31	1

	IVID	IVID					
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		62 - 123	<del>-</del>		10/02/12 10:31	1
Toluene-d8 (Surr)	94		80 - 120			10/02/12 10:31	1
4-Bromofluorobenzene (Surr)	85		75 - 120			10/02/12 10:31	1
Dibromofluoromethane (Surr)	95		80 - 120			10/02/12 10:31	1

Lab Sample ID: LCS 180-50510/4

**Matrix: Water** 

Analyte Toluene Vinyl chloride cis-1,2-Dichloroethene 1,1,1-Trichloroethane Trichloroethene

Analysis Batch: 50510

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

	Spike	LCS	LCS				%Rec.
	Added	Result	Qualifier	Unit	D	%Rec	Limits
·	40.0	41.9		ug/L		105	80 - 124
	40.0	30.0		ug/L		75	57 - 128
	40.0	33.2		ug/L		83	82 - 116
	40.0	31.6		ug/L		79	69 - 134
	40.0	37.0		ua/L		93	80 - 120

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		62 - 123
Toluene-d8 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	91		75 - 120
Dibromofluoromethane (Surr)	86		80 - 120

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Water

**Analysis Batch: 50510** 

Lab Sample ID: LCSD 180-50510/5

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	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Toluene	40.0	42.4		ug/L		106	80 - 124	1	20	
Vinyl chloride	40.0	29.9		ug/L		75	57 - 128	0	26	
cis-1,2-Dichloroethene	40.0	33.5		ug/L		84	82 - 116	1	20	
1,1,1-Trichloroethane	40.0	31.1		ug/L		78	69 - 134	2	24	
Trichloroethene	40.0	36.9		ua/l		92	80 - 120	0	20	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		62 - 123
Toluene-d8 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	88		75 - 120
Dibromofluoromethane (Surr)	82		80 - 120

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

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

Lab Sample ID: MB 180-50689/3

**Matrix: Water** 

Analysis Batch: 50689

Client Sa	mple ID: Me	thod Blank
	Prep Typ	e: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	5.0	U	5.0	0.85	ug/L			10/03/12 15:19	1
Vinyl chloride	5.0	U	5.0	1.3	ug/L			10/03/12 15:19	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.67	ug/L			10/03/12 15:19	1
1,1,1-Trichloroethane	5.0	U	5.0	1.0	ug/L			10/03/12 15:19	1
Trichloroethene	5.0	U	5.0	0.80	ug/L			10/03/12 15:19	1

	IND	IVID					
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		62 - 123	_		10/03/12 15:19	1
Toluene-d8 (Surr)	95		80 - 120			10/03/12 15:19	1
4-Bromofluorobenzene (Surr)	99		75 - 120			10/03/12 15:19	1
Dibromofluoromethane (Surr)	100		80 - 120			10/03/12 15:19	1

Lab Sample ID: LCS 180-50689/6

**Matrix: Water** 

Analysis Batch: 50689

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Toluene	40.0	37.7		ug/L		94	80 - 124	
Vinyl chloride	40.0	42.1		ug/L		105	57 - 128	
cis-1,2-Dichloroethene	40.0	40.1		ug/L		100	82 - 116	
1,1,1-Trichloroethane	40.0	59.6	*	ug/L		149	69 - 134	
Trichloroethene	40.0	37.3		ug/L		93	80 - 120	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	121		62 - 123
Toluene-d8 (Surr)	95		80 - 120
4-Bromofluorobenzene (Surr)	109		75 <sub>-</sub> 120
Dibromofluoromethane (Surr)	109		80 - 120

Lab Sample ID: LCSD 180-50689/7

**Matrix: Water** 

Analysis Batch: 50689

Client Sample ID: L	_ab Control Sample Dup
	Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	40.0	37.2	-	ug/L		93	80 - 124	1	20
Vinyl chloride	40.0	42.5		ug/L		106	57 - 128	1	26
cis-1,2-Dichloroethene	40.0	41.6		ug/L		104	82 - 116	4	20
1,1,1-Trichloroethane	40.0	59.9	*	ug/L		150	69 - 134	0	24
Trichloroethene	40.0	38.0		ug/L		95	80 - 120	2	20

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	118		62 - 123				
Toluene-d8 (Surr)	94		80 - 120				
4-Bromofluorobenzene (Surr)	111		75 - 120				
Dibromofluoromethane (Surr)	110		80 - 120				

TestAmerica Pittsburgh 10/12/2012

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14896-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 180-50674/1-A

**Matrix: Water** 

**Analysis Batch: 51081** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 50674

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.0	U	5.0	0.13	ug/L		10/03/12 15:30	10/05/12 19:27	1
Lead	3.0	U	3.0	1.3	ug/L		10/03/12 15:30	10/05/12 19:27	1

Lab Sample ID: LCS 180-50674/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 51081** 

Prep Batch: 50674 LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Cadmium 50.0 46.8 94 80 - 120 ug/L 97 Lead 500 484 ug/L 80 - 120

Lab Sample ID: 180-14963-A-5-B MS Client Sample ID: Matrix Spike Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 51081

Prep Batch: 50674 Sample Sample Spike MS MS %Rec. Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits Cadmium 5.0 U 50.0 46.5 93 75 - 125 ug/L Lead 3.0 U 500 488 ug/L 98 75 - 125

Lab Sample ID: 180-14963-A-5-C MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Water** 

Analysis Batch: 51081

Prep Batch: 50674 Sample Sample Spike MSD MSD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec 5.0 U 50.0 20 Cadmium 45.8 ug/L 92 75 - 125 3.0 U 500 481 96 75 - 125 2 20 Lead ug/L

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# **QC Association Summary**

Client: Leo Brausch Consulting Project/Site: Buffalo Airport

TestAmerica Job ID: 180-14896-1

# **GC/MS VOA**

# Analysis Batch: 50510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Bato	ch
180-14896-2	TB-18036-092712	Total/NA	Water	8260B	_
LCS 180-50510/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 180-50510/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 180-50510/3	Method Blank	Total/NA	Water	8260B	

## Analysis Batch: 50689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-14896-1	WG-18036-092712-001	Total/NA	Water	8260B	
LCS 180-50689/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 180-50689/7	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 180-50689/3	Method Blank	Total/NA	Water	8260B	

### **Metals**

# Prep Batch: 50674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-14896-1	WG-18036-092712-001	Total/NA	Water	3010A	
180-14963-A-5-B MS	Matrix Spike	Total/NA	Water	3010A	
180-14963-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 180-50674/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 180-50674/1-A	Method Blank	Total/NA	Water	3010A	

## Analysis Batch: 51081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-14896-1	WG-18036-092712-001	Total/NA	Water	6010B	50674
180-14963-A-5-B MS	Matrix Spike	Total/NA	Water	6010B	50674
180-14963-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	50674
LCS 180-50674/2-A	Lab Control Sample	Total/NA	Water	6010B	50674
MB 180-50674/1-A	Method Blank	Total/NA	Water	6010B	50674

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Client: Leo Brausch Consulting

Job Number: 180-14896-1

Login Number: 14896 List Source: TestAmerica Pittsburgh

List Number: 1

Creator: O'Donnell, Brandon R

ordator. O Bornion, Brandon R		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
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.	True	
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.	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	

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