**CBS Corporation**

Environmental Remediation
PNC Center
20 Stanwix Street, 10th Floor
Pittsburgh, PA 15222

*Via Electronic and First-Class Mail*
October 7, 2011

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 for 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 is managing the Remedial Program pursuant to the Order. This report covers activities during September 2011 and transmits the discharge monitoring report for this reporting period.

## 1. Site Activities and Status

A. On September 15, 2011, CBS submitted to NYSDEC the monthly report on the status of O&M activities at the Site for the August 2011 operating period. That status report also transmitted the discharge monitoring data for August 2011.

B. The recovery and treatment system operated throughout September 2011.

C. Conestoga-Rovers & Associates (CRA) conducted routine and non-routine O&M on behalf of CBS, and TestAmerica Laboratories, Inc. (TestAmerica) provided required analytical laboratory services.

D. On September 30, 2011, on behalf of CBS, CRA submitted electronic data deliverables to NYSDEC for the July and August 2011 effluent sampling.

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

A. In September 2011, the groundwater system recovered and treated an estimated 146,000 gallons.

B. Attachment A provides the discharge monitoring report for September 2011 based on the effluent sample collected on September 15, 2011, and Attachment B includes the analytical laboratory report for this effluent sample.

C. In reviewing the treatment system effluent monitoring information, please note the following:

- The flow data are provided via periodic on-site readings. The monthly total and maximum daily flows are calculated from these data.

- The pH data are provided via periodic on-site readings and laboratory analysis of the monthly effluent sample. 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 (interpolated) 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 2011 reporting period, the effluent sampling results complied with all discharge limitations.

E. Table 1 presents the results of influent sampling and includes the data from the most recent influent sample collected on September 15, 2011. No flow was observed from Sump 001 at the time of sampling. Accordingly, 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 9, 2011. Attachment C includes the analytical laboratory report for this monitoring well sample.

G. Figure 1 shows the relationship between target volatile organic compound (VOC) concentrations over time at well MW-32. As shown in Figure 1, total target VOC concentrations have decreased significantly at well MW-32 following the in situ chemical oxidation treatment that was conducted after the source removal specified in the March 1995 Record of Decision failed to result in low residual VOC concentrations at this well.

**3. Upcoming Activities**

A. CBS will continue required O&M activities.

B. With NYSDEC approval, CBS will complete the Phase 1 closure of the 002 system by filling and sealing manholes MH-002-09 and MH-002-10.

C. After closing MH-002-09, and MH-002-10, CRA will conduct additional water level measurements, surface water monitoring, and groundwater monitoring per the *Revised Work Plan* (Rev. 1, November 7, 2008).

**4. Operational Problems**

A. Previously reported operational problems associated with elevated pH, pH control, and hardness continue. These operational problems are expected to be largely resolved with the phased shutdown of the collection system and limitation of inflows to those associated with Sump 003.

B. Previously reported operational problems associated system inflows are lessened with the minimal flows associated with Sump 001 now that the 001 portion of the groundwater collection system has been partially closed.

C. The post-closure monitoring data indicate that the Phase 1 closure of the 001 groundwater collection system addressed the previously observed high water levels at Sump 001, which had led to periodic overtopping of that manhole. The ongoing periodic overtopping at Sump 002 will be addressed through the partial closure of that portion of the groundwater collection system.

D. The Phase 1 closure of the 002 system is expected to reduce the conveyance of groundwater containing VOCs via storm sewers installed by the Niagara Frontier Transportation Authority (NFTA) as part of airport development.

E. CBS is unaware of any ongoing or unresolved issues that would reasonably delay the implementation the Phase 1 closure of the 002 system under the *Revised Work Plan* (Rev. 1, November 7, 2008), and CBS continues to seek resolution of any such issues.

We trust this submittal satisfies your requirements at this time. If you have questions regarding this status report, please contact me.

Respectfully submitted,

Leo M. Brausch
Consultant/Project Engineer

LMB:
Attachments

cc: K. P. Lynch, CRA
F. Cefalu, NFTA

# TABLES

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

| Date of Sampling | Outfall | Constituent Concentration (ug/L) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 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**

| Date of Sampling | Outfall | Constituent Concentration (ug/L) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 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**

| Date of Sampling | Outfall | Constituent Concentration (ug/L) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 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 |

*Data Legend* :

*"NA" - indicates not analyzed*

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

*Data qualifiers:*

*U - not detected at indicated detection limit*

*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**

| Date of Sampling | Constituent Concentration (ug/L) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 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**

| Date of Sampling | Constituent Concentration (ug/L) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 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** |
| 09/09/11 | **330** | 10 U | 10 U | **410** | **32** | 5 U | 3 U |

*Data Legend* :

*"NA" - indicates not analyzed*

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

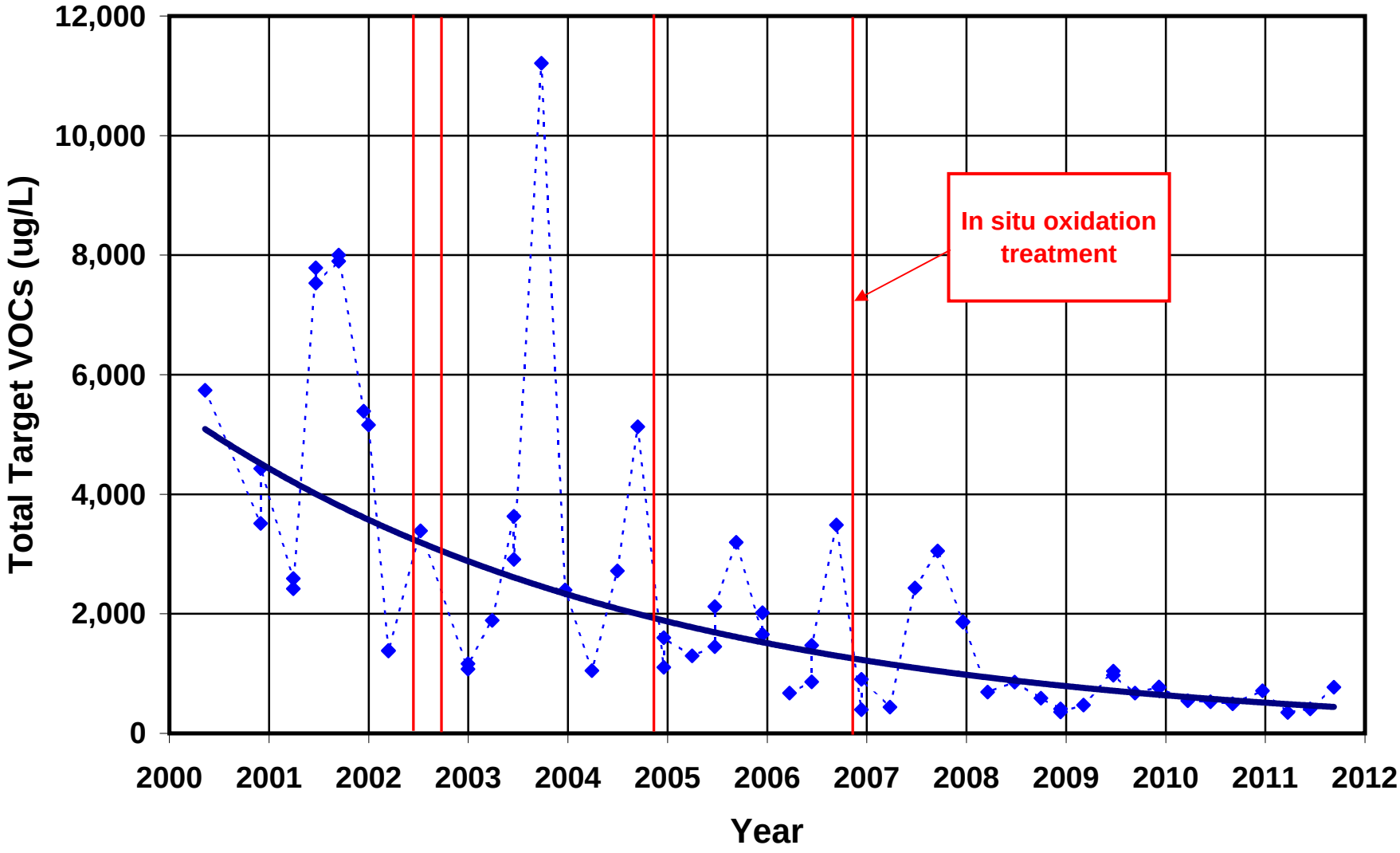
*Data qualifiers:*

*U - not detected at indicated reporting limit*

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

**FIGURE**

## Figure 1: Total Target VOCs at MW-32



# ATTACHMENT A

# DISCHARGE MONITORING REPORT
# SEPTEMBER 2011

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

**Reporting Month & Year** **Sep-11**

| Parameter | | Daily Minimum | Daily Maximum | Units | Daily Maximum (lbs/day) | Measurement Frequency | Sample Type |
|---|---|---|---|---|---|---|---|
| Flow | Monitoring Result | | **5,580** | **gpd** | | **Continuous** | **Meter** |
| | Discharge Limitation | | 28,800 | gpd | | Continuous | Meter |
| pH | Monitoring Result | **7.08** | **7.71** | **s.u.** | | **11** | **Grab** |
| | Discharge Limitation | 6.5 | 8.5 | s.u. | | Weekly | Grab |
| Total suspended solids | Monitoring Result | | **< 6.7** | **mg/L** | **< 0.31** | **1** | **Grab** |
| | Discharge Limitation | | 20 | mg/L | | Monthly | Grab |
| Toluene | Monitoring Result | | **< 1.0** | **ug/L** | **< 0.00005** | **1** | **Grab** |
| | Discharge Limitation | | 5 | ug/L | | Monthly | Grab |
| Methylene chloride | Monitoring Result | | **< 1.0** | **ug/L** | **< 0.00005** | **1** | **Grab** |
| | Discharge Limitation | | 10 | ug/L | | Monthly | Grab |
| 1,2-dichlorobenzene | Monitoring Result | | **< 1.0** | **ug/L** | **< 0.00005** | **1** | **Grab** |
| | Discharge Limitation | | 5 | ug/L | | Monthly | Grab |
| cis-1,2-dichloroethylene | Monitoring Result | | **< 1.0** | **ug/L** | **< 0.00005** | **1** | **Grab** |
| | Discharge Limitation | | 10 | ug/L | | Monthly | Grab |
| Trichloroethylene | Monitoring Result | | **< 1.0** | **ug/L** | **< 0.00005** | **1** | **Grab** |
| | Discharge Limitation | | 10 | ug/L | | Monthly | Grab |
| Tetrachloroethylene | Monitoring Result | | **< 1.0** | **ug/L** | **< 0.00005** | **1** | **Grab** |
| | Discharge Limitation | | 50 | ug/L | | Monthly | Grab |
| Cadmium | Monitoring Result | | **< 0.15** | **ug/L** | **< 0.000007** | **1** | **Grab** |
| | Discharge Limitation | | 3 | ug/L | | Monthly | Grab |
| Chromium | Monitoring Result | | **1.9** | **ug/L** | **0.00009** | **1** | **Grab** |
| | Discharge Limitation | | 99 | ug/L | | Monthly | Grab |

# ATTACHMENT B

# ANALYTICAL LABORATORY REPORT
# INFLUENT AND EFFLUENT SAMPLING – SEPTEMBER 2011

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: 180-3978-1
Client Project/Site: Buffalo Airport

For:
Leo Brausch Consulting
131 Wedgewood Drive
Gibsonia, Pennsylvania 15044

Attn: Mr. Leo Brausch

*Authorized for release by:*
*09/27/2011 07:52:34 AM*

Carrie Gamber
Project Manager II
carrie.gamber@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.*

# Table of Contents

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3978-1

## Job ID: 180-3978-1

### Laboratory: TestAmerica Pittsburgh

**Narrative**

**Job Narrative**
**180-3978-1**

**Comments**
No additional comments.

**Receipt**
All samples were received in good condition within temperature requirements.

**GC/MS VOA**
Method(s) 624: The following sample(s) was diluted due to the abundance of target analytes: IFF0911 (180-3978-2). Elevated reporting limits (RLs) are provided. Batch #15179.

No other analytical or quality issues were noted.

**Metals**
No analytical or quality issues were noted.

**General Chemistry**
Method(s) SM 2540D: Elevated reporting limits are provided for the following sample due to insufficient sample provided for analysis for method 2540D in batch 14422: EFF0911 (180-3978-1)

No other analytical or quality issues were noted.

# Definitions/Glossary

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3978-1

## 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. |

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |
| HF | Field parameter with a holding time of 15 minutes |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| 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 |
| RL | Reporting Limit |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Certification Summary

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3978-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Pittsburgh | ACLASS | DoD ELAP | | ADE-1422 |
| TestAmerica Pittsburgh | Arkansas | State Program | 6 | 88-0690 |
| TestAmerica Pittsburgh | California | NELAC | 9 | 4224CA |
| TestAmerica Pittsburgh | Connecticut | State Program | 1 | PH-0688 |
| TestAmerica Pittsburgh | Florida | NELAC | 4 | E871008 |
| TestAmerica Pittsburgh | Illinois | NELAC | 5 | 002602 |
| TestAmerica Pittsburgh | Kansas | NELAC | 7 | E-10350 |
| TestAmerica Pittsburgh | Louisiana | NELAC | 6 | 04041 |
| TestAmerica Pittsburgh | New Hampshire | NELAC | 1 | 203011 |
| TestAmerica Pittsburgh | New Jersey | NELAC | 2 | PA005 |
| TestAmerica Pittsburgh | New York | NELAC | 2 | 11182 |
| TestAmerica Pittsburgh | North Carolina | North Carolina DENR | 4 | 434 |
| TestAmerica Pittsburgh | Pennsylvania | NELAC | 3 | 02-00416 |
| TestAmerica Pittsburgh | Pennsylvania | State Program | 3 | 02-416 |
| TestAmerica Pittsburgh | South Carolina | State Program | 4 | 89014002 |
| TestAmerica Pittsburgh | USDA | USDA | | P-Soil-01 |
| TestAmerica Pittsburgh | USDA | USDA | | P330-10-00139 |
| TestAmerica Pittsburgh | Utah | NELAC | 8 | STLP |
| TestAmerica Pittsburgh | West Virginia | West Virginia DEP | 3 | 142 |
| TestAmerica Pittsburgh | Wisconsin | State Program | 5 | 998027800 |

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

# Sample Summary

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3978-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 180-3978-1 | EFF0911 | Water | 09/15/11 09:00 | 09/16/11 10:00 |
| 180-3978-2 | IFF0911 | Water | 09/15/11 09:00 | 09/16/11 10:00 |

# Method Summary

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3978-1

| 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

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3978-1

## Client Sample ID: EFF0911

**Date Collected: 09/15/11 09:00**
**Date Received: 09/16/11 10:00**

## Lab Sample ID: 180-3978-1

**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 | | | 09/23/11 21:10 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.15 | ug/L | | | 09/23/11 21:10 | 1 |
| Toluene | 1.0 | U | 1.0 | 0.15 | ug/L | | | 09/23/11 21:10 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.14 | ug/L | | | 09/23/11 21:10 | 1 |
| 1,2-Dichlorobenzene | 1.0 | U | 1.0 | 0.15 | ug/L | | | 09/23/11 21:10 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.24 | ug/L | | | 09/23/11 21:10 | 1 |

| *Surrogate* | *% Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *58 - 135* | | *09/23/11 21:10* | *1* |
| *4-Bromofluorobenzene (Surr)* | *90* | | *62 - 123* | | *09/23/11 21:10* | *1* |
| *Toluene-d8 (Surr)* | *90* | | *71 - 118* | | *09/23/11 21:10* | *1* |
| *Dibromofluoromethane (Surr)* | *110* | | *64 - 128* | | *09/23/11 21:10* | *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 | 0.15 | ug/L | | 09/20/11 11:02 | 09/21/11 15:02 | 1 |
| **Chromium** | **1.9** | **J** | 5.0 | 0.51 | ug/L | | 09/20/11 11:02 | 09/21/11 15:02 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 6.7 | U | 6.7 | 3.3 | mg/L | | | 09/17/11 16:43 | 1 |
| **pH** | **7.44** | **HF** | 0.100 | 0.100 | SU | | | 09/17/11 16:23 | 1 |

## Client Sample ID: IFF0911

**Date Collected: 09/15/11 09:00**
**Date Received: 09/16/11 10:00**

## Lab Sample ID: 180-3978-2

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Methylene Chloride** | **14** | **J** | 25 | 3.7 | ug/L | | | 09/23/11 21:34 | 25 |
| Tetrachloroethene | 25 | U | 25 | 3.7 | ug/L | | | 09/23/11 21:34 | 25 |
| **Toluene** | **110** | | 25 | 3.8 | ug/L | | | 09/23/11 21:34 | 25 |
| 1,1,1-Trichloroethane | 25 | U | 25 | 7.2 | ug/L | | | 09/23/11 21:34 | 25 |
| **Trichloroethene** | **460** | | 25 | 3.6 | ug/L | | | 09/23/11 21:34 | 25 |
| **Vinyl chloride** | **13** | **J** | 25 | 5.7 | ug/L | | | 09/23/11 21:34 | 25 |
| 1,2-Dichlorobenzene | 25 | U | 25 | 3.8 | ug/L | | | 09/23/11 21:34 | 25 |
| **cis-1,2-Dichloroethene** | **160** | | 25 | 5.9 | ug/L | | | 09/23/11 21:34 | 25 |

| *Surrogate* | *% Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *119* | | *58 - 135* | | *09/23/11 21:34* | *25* |
| *4-Bromofluorobenzene (Surr)* | *89* | | *62 - 123* | | *09/23/11 21:34* | *25* |
| *Toluene-d8 (Surr)* | *93* | | *71 - 118* | | *09/23/11 21:34* | *25* |
| *Dibromofluoromethane (Surr)* | *112* | | *64 - 128* | | *09/23/11 21:34* | *25* |

### 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 | 0.15 | ug/L | | 09/20/11 11:02 | 09/21/11 15:22 | 1 |
| **Chromium** | **4.1** | **J** | 5.0 | 0.51 | ug/L | | 09/20/11 11:02 | 09/21/11 15:22 | 1 |
| Lead | 3.0 | U | 3.0 | 1.3 | ug/L | | 09/20/11 11:02 | 09/21/11 15:22 | 1 |

# Client Sample Results

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3978-1

**Client Sample ID: IFF0911**
**Date Collected: 09/15/11 09:00**
**Date Received: 09/16/11 10:00**

**Lab Sample ID: 180-3978-2**
**Matrix: Water**

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 8.67 | HF | 0.100 | 0.100 | SU | | | 09/17/11 16:26 | 1 |

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

**Lab Sample ID: MB 180-15179/3**
**Matrix: Water**
**Analysis Batch: 15179**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | 1.0 | U | 1.0 | 0.15 | ug/L | | | 09/23/11 19:58 | 1 |
| Tetrachloroethene | 1.0 | U | 1.0 | 0.15 | ug/L | | | 09/23/11 19:58 | 1 |
| Toluene | 1.0 | U | 1.0 | 0.15 | ug/L | | | 09/23/11 19:58 | 1 |
| Trichloroethene | 1.0 | U | 1.0 | 0.14 | ug/L | | | 09/23/11 19:58 | 1 |
| 1,2-Dichlorobenzene | 1.0 | U | 1.0 | 0.15 | ug/L | | | 09/23/11 19:58 | 1 |
| cis-1,2-Dichloroethene | 1.0 | U | 1.0 | 0.24 | ug/L | | | 09/23/11 19:58 | 1 |

| *Surrogate* | *MB % Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *112* | | *58 - 135* | | *09/23/11 19:58* | *1* |
| *4-Bromofluorobenzene (Surr)* | *83* | | *62 - 123* | | *09/23/11 19:58* | *1* |
| *Toluene-d8 (Surr)* | *87* | | *71 - 118* | | *09/23/11 19:58* | *1* |
| *Dibromofluoromethane (Surr)* | *111* | | *64 - 128* | | *09/23/11 19:58* | *1* |

**Lab Sample ID: LCS 180-15179/5**
**Matrix: Water**
**Analysis Batch: 15179**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | % Rec | % Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methylene Chloride | 20.0 | 21.3 | | ug/L | | 107 | 60 - 140 |
| Tetrachloroethene | 20.0 | 22.3 | | ug/L | | 111 | 73 - 127 |
| Toluene | 20.0 | 20.0 | | ug/L | | 100 | 74 - 126 |
| Trichloroethene | 20.0 | 21.2 | | ug/L | | 106 | 73 - 125 |
| 1,2-Dichlorobenzene | 20.0 | 19.8 | | ug/L | | 99 | 68 - 127 |
| cis-1,2-Dichloroethene | 20.0 | 21.8 | | ug/L | | 109 | 69 - 127 |

| *Surrogate* | *LCS % Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *108* | | *58 - 135* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *62 - 123* |
| *Toluene-d8 (Surr)* | *102* | | *71 - 118* |
| *Dibromofluoromethane (Surr)* | *111* | | *64 - 128* |

**Lab Sample ID: 180-3978-1 MS**
**Matrix: Water**
**Analysis Batch: 15179**

**Client Sample ID: EFF0911**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | % Rec | % Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | 1.0 | U | 20.0 | 19.5 | | ug/L | | 98 | 60 - 140 |
| Tetrachloroethene | 1.0 | U | 20.0 | 20.8 | | ug/L | | 104 | 73 - 127 |
| Toluene | 1.0 | U | 20.0 | 18.6 | | ug/L | | 93 | 74 - 126 |
| Trichloroethene | 1.0 | U | 20.0 | 20.9 | | ug/L | | 104 | 73 - 125 |
| 1,2-Dichlorobenzene | 1.0 | U | 20.0 | 20.0 | | ug/L | | 100 | 68 - 127 |
| cis-1,2-Dichloroethene | 1.0 | U | 20.0 | 20.2 | | ug/L | | 101 | 69 - 127 |

| *Surrogate* | *MS % Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *58 - 135* |
| *4-Bromofluorobenzene (Surr)* | *87* | | *62 - 123* |
| *Toluene-d8 (Surr)* | *93* | | *71 - 118* |
| *Dibromofluoromethane (Surr)* | *93* | | *64 - 128* |

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

**Lab Sample ID: 180-3978-1 MSD**
**Matrix: Water**
**Analysis Batch: 15179**

**Client Sample ID: EFF0911**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | % Rec | % Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | 1.0 | U | 20.0 | 19.3 | | ug/L | | 97 | 60 - 140 | 1 | 25 |
| Tetrachloroethene | 1.0 | U | 20.0 | 22.4 | | ug/L | | 112 | 73 - 127 | 7 | 25 |
| Toluene | 1.0 | U | 20.0 | 19.8 | | ug/L | | 99 | 74 - 126 | 6 | 25 |
| 1,1,1-Trichloroethane | 1.0 | | 20.0 | 22.5 | | ug/L | | 113 | 75 - 125 | 4 | 25 |
| Trichloroethene | 1.0 | U | 20.0 | 22.0 | | ug/L | | 110 | 73 - 125 | 5 | 25 |
| Vinyl chloride | 1.2 | | 20.0 | 19.7 | | ug/L | | 92 | 30 - 140 | 4 | 35 |
| 1,2-Dichlorobenzene | 1.0 | U | 20.0 | 20.3 | | ug/L | | 102 | 68 - 127 | 2 | 35 |
| cis-1,2-Dichloroethene | 1.0 | U | 20.0 | 20.7 | | ug/L | | 103 | 69 - 127 | 2 | 20 |

| *Surrogate* | *MSD % Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *104* | | *58 - 135* |
| *4-Bromofluorobenzene (Surr)* | *93* | | *62 - 123* |
| *Toluene-d8 (Surr)* | *98* | | *71 - 118* |
| *Dibromofluoromethane (Surr)* | *100* | | *64 - 128* |

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

**Lab Sample ID: MB 180-14638/1-A**
**Matrix: Water**
**Analysis Batch: 14915**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 14638**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 5.0 | U | 5.0 | 0.15 | ug/L | | 09/20/11 11:02 | 09/21/11 13:15 | 1 |
| Chromium | 5.0 | U | 5.0 | 0.51 | ug/L | | 09/20/11 11:02 | 09/21/11 13:15 | 1 |
| Lead | 3.0 | U | 3.0 | 1.3 | ug/L | | 09/20/11 11:02 | 09/21/11 13:15 | 1 |

**Lab Sample ID: LCS 180-14638/2-A**
**Matrix: Water**
**Analysis Batch: 14915**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 14638**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | % Rec | % Rec. Limits |
|---|---|---|---|---|---|---|---|
| Cadmium | 50.0 | 50.6 | | ug/L | | 101 | 85 - 115 |
| Chromium | 200 | 204 | | ug/L | | 102 | 85 - 115 |
| Lead | 500 | 525 | | ug/L | | 105 | 85 - 115 |

**Lab Sample ID: 180-3978-1 MS**
**Matrix: Water**
**Analysis Batch: 14915**

**Client Sample ID: EFF0911**
**Prep Type: Total Recoverable**
**Prep Batch: 14638**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | % Rec | % Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 5.0 | U | 50.0 | 49.3 | | ug/L | | 99 | 70 - 130 |
| Chromium | 1.9 | J | 200 | 206 | | ug/L | | 102 | 70 - 130 |
| Lead | 3.0 | | 500 | 530 | | ug/L | | 106 | 70 - 130 |

**Lab Sample ID: 180-3978-1 MSD**
**Matrix: Water**
**Analysis Batch: 14915**

**Client Sample ID: EFF0911**
**Prep Type: Total Recoverable**
**Prep Batch: 14638**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | % Rec | % Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 5.0 | U | 50.0 | 50.3 | | ug/L | | 101 | 70 - 130 | 2 | 20 |

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

**Lab Sample ID: 180-3978-1 MSD** — **Client Sample ID: EFF0911**
**Matrix: Water** — **Prep Type: Total Recoverable**
**Analysis Batch: 14915** — **Prep Batch: 14638**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | % Rec | % Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chromium | 1.9 | J | 200 | 208 | | ug/L | | 103 | 70 - 130 | 1 | 20 |
| Lead | 3.0 | | 500 | 542 | | ug/L | | 108 | 70 - 130 | 2 | 20 |

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

**Lab Sample ID: MB 180-14422/2** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 14422**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 4.0 | U | 4.0 | 2.0 | mg/L | | | 09/17/11 15:08 | 1 |

**Lab Sample ID: LCS 180-14422/1** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 14422**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | % Rec | % Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 73.7 | 84.0 | | mg/L | | 114 | 80 - 120 |

**Lab Sample ID: 180-3971-D-5 DU** — **Client Sample ID: Duplicate**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 14422**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 4.0 | U | 4.0 | U | mg/L | | NC | 20 |

## Method: SM 4500 H+ B - pH

**Lab Sample ID: LCS 180-14428/1** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 14428**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | % Rec | % Rec. Limits |
|---|---|---|---|---|---|---|---|
| pH | 7.00 | 7.010 | | SU | | 100 | 99 - 101 |

**Lab Sample ID: 180-3978-1 DU** — **Client Sample ID: EFF0911**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 14428**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| pH | 7.44 | HF | 7.470 | | SU | | 0.4 | 2 |

# QC Association Summary

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3978-1

## GC/MS VOA

### Analysis Batch: 15179

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-3978-1 | EFF0911 | Total/NA | Water | 624 | |
| 180-3978-1 MS | EFF0911 | Total/NA | Water | 624 | |
| 180-3978-1 MSD | EFF0911 | Total/NA | Water | 624 | |
| 180-3978-2 | IFF0911 | Total/NA | Water | 624 | |
| LCS 180-15179/5 | Lab Control Sample | Total/NA | Water | 624 | |
| MB 180-15179/3 | Method Blank | Total/NA | Water | 624 | |

## Metals

### Prep Batch: 14638

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-3978-1 | EFF0911 | Total Recoverable | Water | 200.7 | |
| 180-3978-1 MS | EFF0911 | Total Recoverable | Water | 200.7 | |
| 180-3978-1 MSD | EFF0911 | Total Recoverable | Water | 200.7 | |
| 180-3978-2 | IFF0911 | Total Recoverable | Water | 200.7 | |
| LCS 180-14638/2-A | Lab Control Sample | Total Recoverable | Water | 200.7 | |
| MB 180-14638/1-A | Method Blank | Total Recoverable | Water | 200.7 | |

### Analysis Batch: 14915

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-3978-1 | EFF0911 | Total Recoverable | Water | 200.7 Rev 4.4 | 14638 |
| 180-3978-1 MS | EFF0911 | Total Recoverable | Water | 200.7 Rev 4.4 | 14638 |
| 180-3978-1 MSD | EFF0911 | Total Recoverable | Water | 200.7 Rev 4.4 | 14638 |
| 180-3978-2 | IFF0911 | Total Recoverable | Water | 200.7 Rev 4.4 | 14638 |
| LCS 180-14638/2-A | Lab Control Sample | Total Recoverable | Water | 200.7 Rev 4.4 | 14638 |
| MB 180-14638/1-A | Method Blank | Total Recoverable | Water | 200.7 Rev 4.4 | 14638 |

## General Chemistry

### Analysis Batch: 14422

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-3971-D-5 DU | Duplicate | Total/NA | Water | SM 2540D | |
| 180-3978-1 | EFF0911 | Total/NA | Water | SM 2540D | |
| LCS 180-14422/1 | Lab Control Sample | Total/NA | Water | SM 2540D | |
| MB 180-14422/2 | Method Blank | Total/NA | Water | SM 2540D | |

### Analysis Batch: 14428

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-3978-1 | EFF0911 | Total/NA | Water | SM 4500 H+ B | |
| 180-3978-1 DU | EFF0911 | Total/NA | Water | SM 4500 H+ B | |
| 180-3978-2 | IFF0911 | Total/NA | Water | SM 4500 H+ B | |
| LCS 180-14428/1 | Lab Control Sample | Total/NA | Water | SM 4500 H+ B | |


INFOTRAC 800-535-5053
ORIGIN ID: DKKA (716) 297-2160
BRITT GEBHARDT
CRA SERVICES
2055 NIAGARA FALLS BLVD
NIAGARA FALLS, NY 14304
UNITED STATES US
SHIP DATE: 15SEP11
ACTWGT: 25.0 LB MAN
CAD: 68417/CAFE2507
DIMS: 25x14x10 IN
BILL SENDER
TO DAVE DUNLOP
TESTAMERICA
301 ALPHA DRIVE
PITTSBURGH PA 152381330
(412) 963-7058
REF: 018036 BOLLER
FedEx
Express
FRI - 16 SEP A2
STANDARD OVERNIGHT
TRK# 0201 9803 8534 8995
XH AGCA
15238
PA-US PIT
Part # 154254-354 RITZ 06/11

3978 0.8

# CHAIN OF CUSTODY RECORD

**CONESTOGA-ROVERS & ASSOCIATES**
2055 Niagara Falls Blvd
Niagara Falls NY 14304

**SHIPPED TO (Laboratory Name):** Test America

**REFERENCE NUMBER:** 018036
Buffalo Airport
Via Con

SAMPLER'S SIGNATURE: _____ PRINTED NAME: _____

| SEQ. No. | DATE | TIME | SAMPLE No. | SAMPLE TYPE | No. of Containers | 624 VOCs PARAMETERS | pH | TSS | Cd Cr | pH | Cd Cr | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9-15-11 | 900 | EFF09 11 | wtr | | 3 | 1 | 1 | | | | |
| | 9-15-11 | 900 | IFF09 11 | wtr | | 3 | | | 1 | | | |
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| | | | | | | | | | | | | |

TOTAL NUMBER OF CONTAINERS | HEALTH/CHEMICAL HAZARDS

| | | | |
|---|---|---|---|
| RELINQUISHED BY: ① Chad Bell | DATE: 9-15-11 TIME: 900 | RECEIVED BY: ① | DATE: TIME: |
| RELINQUISHED BY: ② | DATE: TIME: | RECEIVED BY: ② | DATE: TIME: |
| RELINQUISHED BY: ③ | DATE: TIME: | RECEIVED BY: ③ | DATE: TIME: |

METHOD OF SHIPMENT: WAY BILL No.

White —Fully Executed Copy
Yellow —Receiving Laboratory Copy
Pink —Shipper Copy
Goldenrod —Sampler Copy

SAMPLE TEAM:

RECEIVED FOR LABORATORY BY:
DATE: 9/16/11 TIME: 1000

**Nº CRA 25335**

1001 (D) APR 28/97(NF) REV. 0 (F-15)

09/27/2011

# Login Sample Receipt Checklist

Client: Leo Brausch Consulting

Job Number: 180-3978-1

**Login Number: 3978**

**List Number: 1**

**Creator: Oakley, Jason**

**List Source: TestAmerica Pittsburgh**

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

# ATTACHMENT C

# ANALYTICAL LABORATORY REPORT
# MW-32 SAMPLING – SEPTEMBER 2011

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: 180-3787-1
Client Project/Site: Buffalo Airport

For:
Leo Brausch Consulting
131 Wedgewood Drive
Gibsonia, Pennsylvania 15044

Attn: Mr. Leo Brausch

*Authorized for release by:*
*09/27/2011 07:08:31 AM*

Carrie Gamber
Project Manager II
carrie.gamber@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.*

# Table of Contents

## Job ID: 180-3787-1

**Laboratory: TestAmerica Pittsburgh**

**Narrative**

**Job Narrative**
**180-3787-1**

**Comments**
No additional comments.

**Receipt**
All samples were received in good condition within temperature requirements.

**GC/MS VOA**
Sample WG-18036-090911-MW32 was analyzed undilted and at a dilution. Both sets of data are reported.

No other analytical or quality issues were noted.

**Metals**
No analytical or quality issues were noted.

# Definitions/Glossary

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3787-1

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |
| E | Result exceeded calibration range. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| 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 |
| 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 |
| RL | Reporting Limit |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Certification Summary

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3787-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Pittsburgh | ACLASS | DoD ELAP | | ADE-1422 |
| TestAmerica Pittsburgh | Arkansas | State Program | 6 | 88-0690 |
| TestAmerica Pittsburgh | California | NELAC | 9 | 4224CA |
| TestAmerica Pittsburgh | Connecticut | State Program | 1 | PH-0688 |
| TestAmerica Pittsburgh | Florida | NELAC | 4 | E871008 |
| TestAmerica Pittsburgh | Illinois | NELAC | 5 | 002602 |
| TestAmerica Pittsburgh | Kansas | NELAC | 7 | E-10350 |
| TestAmerica Pittsburgh | Louisiana | NELAC | 6 | 04041 |
| TestAmerica Pittsburgh | New Hampshire | NELAC | 1 | 203011 |
| TestAmerica Pittsburgh | New Jersey | NELAC | 2 | PA005 |
| TestAmerica Pittsburgh | New York | NELAC | 2 | 11182 |
| TestAmerica Pittsburgh | North Carolina | North Carolina DENR | 4 | 434 |
| TestAmerica Pittsburgh | Pennsylvania | NELAC | 3 | 02-00416 |
| TestAmerica Pittsburgh | Pennsylvania | State Program | 3 | 02-416 |
| TestAmerica Pittsburgh | South Carolina | State Program | 4 | 89014002 |
| TestAmerica Pittsburgh | USDA | USDA | | P-Soil-01 |
| TestAmerica Pittsburgh | USDA | USDA | | P330-10-00139 |
| TestAmerica Pittsburgh | Utah | NELAC | 8 | STLP |
| TestAmerica Pittsburgh | West Virginia | West Virginia DEP | 3 | 142 |
| TestAmerica Pittsburgh | Wisconsin | State Program | 5 | 998027800 |

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

# Sample Summary

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3787-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 180-3787-1 | WG-18036-090911-MW32 | Water | 09/09/11 08:00 | 09/10/11 09:30 |
| 180-3787-2 | TB-18036-090911 | Water | 09/09/11 00:00 | 09/10/11 09:30 |

# Method Summary

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3787-1

| 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

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3787-1

## Client Sample ID: WG-18036-090911-MW32

**Date Collected: 09/09/11 08:00**
**Date Received: 09/10/11 09:30**

## Lab Sample ID: 180-3787-1

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | 5.0 | U | 5.0 | 0.85 | ug/L | | | 09/19/11 15:20 | 1 |
| **Vinyl chloride** | **32** | | 5.0 | 1.3 | ug/L | | | 09/19/11 15:20 | 1 |
| **cis-1,2-Dichloroethene** | **330** | **E** | 5.0 | 0.67 | ug/L | | | 09/19/11 15:20 | 1 |
| 1,1,1-Trichloroethane | 5.0 | U | 5.0 | 1.0 | ug/L | | | 09/19/11 15:20 | 1 |
| **Trichloroethene** | **410** | **E** | 5.0 | 0.80 | ug/L | | | 09/19/11 15:20 | 1 |

| *Surrogate* | *% Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *106* | | *62 - 123* | | *09/19/11 15:20* | *1* |
| *Toluene-d8 (Surr)* | *107* | | *80 - 120* | | *09/19/11 15:20* | *1* |
| *4-Bromofluorobenzene (Surr)* | *109* | | *75 - 120* | | *09/19/11 15:20* | *1* |
| *Dibromofluoromethane (Surr)* | *109* | | *80 - 120* | | *09/19/11 15:20* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | 10 | U | 10 | 1.7 | ug/L | | | 09/19/11 16:12 | 2 |
| **Vinyl chloride** | **31** | | 10 | 2.6 | ug/L | | | 09/19/11 16:12 | 2 |
| **cis-1,2-Dichloroethene** | **330** | | 10 | 1.3 | ug/L | | | 09/19/11 16:12 | 2 |
| 1,1,1-Trichloroethane | 10 | U | 10 | 2.1 | ug/L | | | 09/19/11 16:12 | 2 |
| **Trichloroethene** | **410** | | 10 | 1.6 | ug/L | | | 09/19/11 16:12 | 2 |

| *Surrogate* | *% Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *110* | | *62 - 123* | | *09/19/11 16:12* | *2* |
| *Toluene-d8 (Surr)* | *105* | | *80 - 120* | | *09/19/11 16:12* | *2* |
| *4-Bromofluorobenzene (Surr)* | *107* | | *75 - 120* | | *09/19/11 16:12* | *2* |
| *Dibromofluoromethane (Surr)* | *111* | | *80 - 120* | | *09/19/11 16:12* | *2* |

### Method: 6010B - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 5.0 | U | 5.0 | 0.13 | ug/L | | 09/13/11 11:24 | 09/15/11 20:03 | 1 |
| Lead | 3.0 | U | 3.0 | 1.3 | ug/L | | 09/13/11 11:24 | 09/15/11 20:03 | 1 |

## Client Sample ID: TB-18036-090911

**Date Collected: 09/09/11 00:00**
**Date Received: 09/10/11 09:30**

## Lab Sample ID: 180-3787-2

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | 5.0 | U | 5.0 | 0.85 | ug/L | | | 09/19/11 17:00 | 1 |
| Vinyl chloride | 5.0 | U | 5.0 | 1.3 | ug/L | | | 09/19/11 17:00 | 1 |
| cis-1,2-Dichloroethene | 5.0 | U | 5.0 | 0.67 | ug/L | | | 09/19/11 17:00 | 1 |
| 1,1,1-Trichloroethane | 5.0 | U | 5.0 | 1.0 | ug/L | | | 09/19/11 17:00 | 1 |
| Trichloroethene | 5.0 | U | 5.0 | 0.80 | ug/L | | | 09/19/11 17:00 | 1 |

| *Surrogate* | *% Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *111* | | *62 - 123* | | *09/19/11 17:00* | *1* |
| *Toluene-d8 (Surr)* | *109* | | *80 - 120* | | *09/19/11 17:00* | *1* |
| *4-Bromofluorobenzene (Surr)* | *108* | | *75 - 120* | | *09/19/11 17:00* | *1* |
| *Dibromofluoromethane (Surr)* | *113* | | *80 - 120* | | *09/19/11 17:00* | *1* |

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

**Lab Sample ID: MB 180-14534/3**
**Matrix: Water**
**Analysis Batch: 14534**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | 5.0 | U | 5.0 | 0.85 | ug/L | | | 09/19/11 12:52 | 1 |
| Vinyl chloride | 5.0 | U | 5.0 | 1.3 | ug/L | | | 09/19/11 12:52 | 1 |
| cis-1,2-Dichloroethene | 5.0 | U | 5.0 | 0.67 | ug/L | | | 09/19/11 12:52 | 1 |
| 1,1,1-Trichloroethane | 5.0 | U | 5.0 | 1.0 | ug/L | | | 09/19/11 12:52 | 1 |
| Trichloroethene | 5.0 | U | 5.0 | 0.80 | ug/L | | | 09/19/11 12:52 | 1 |

| *Surrogate* | *MB % Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *62 - 123* | | *09/19/11 12:52* | *1* |
| *Toluene-d8 (Surr)* | *110* | | *80 - 120* | | *09/19/11 12:52* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *75 - 120* | | *09/19/11 12:52* | *1* |
| *Dibromofluoromethane (Surr)* | *97* | | *80 - 120* | | *09/19/11 12:52* | *1* |

**Lab Sample ID: LCS 180-14534/5**
**Matrix: Water**
**Analysis Batch: 14534**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | % Rec | % Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | | | 40.0 | 44.3 | | ug/L | | 111 | 80 - 124 | | |
| Vinyl chloride | | | 40.0 | 49.0 | | ug/L | | 122 | 57 - 128 | | |
| cis-1,2-Dichloroethene | | | 40.0 | 42.6 | | ug/L | | 107 | 82 - 116 | | |
| 1,1,1-Trichloroethane | | | 40.0 | 45.5 | | ug/L | | 114 | 69 - 134 | | |
| Trichloroethene | | | 40.0 | 40.5 | | ug/L | | 101 | 80 - 120 | | |

| *Surrogate* | *LCS % Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *62 - 123* |
| *Toluene-d8 (Surr)* | *110* | | *80 - 120* |
| *4-Bromofluorobenzene (Surr)* | *104* | | *75 - 120* |
| *Dibromofluoromethane (Surr)* | *106* | | *80 - 120* |

**Lab Sample ID: 180-3785-I-1 MS**
**Matrix: Water**
**Analysis Batch: 14534**

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

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | % Rec | % Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | 1.4 | J | 40.0 | 44.7 | | ug/L | | 108 | 80 - 124 | | |
| Vinyl chloride | 5.0 | U | 40.0 | 43.8 | | ug/L | | 110 | 57 - 128 | | |
| cis-1,2-Dichloroethene | 5.0 | U | 40.0 | 40.4 | | ug/L | | 101 | 82 - 116 | | |
| 1,1,1-Trichloroethane | 5.0 | U | 40.0 | 36.6 | | ug/L | | 91 | 69 - 134 | | |
| Trichloroethene | 5.0 | U | 40.0 | 38.9 | | ug/L | | 97 | 80 - 120 | | |

| *Surrogate* | *MS % Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *62 - 123* |
| *Toluene-d8 (Surr)* | *107* | | *80 - 120* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *75 - 120* |
| *Dibromofluoromethane (Surr)* | *103* | | *80 - 120* |

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

**Lab Sample ID: 180-3785-I-1 MSD**
**Matrix: Water**
**Analysis Batch: 14534**

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

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | % Rec | % Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Toluene | 1.4 | J | 40.0 | 44.1 | | ug/L | | 107 | 80 - 124 | 1 | 20 |
| Vinyl chloride | 5.0 | U | 40.0 | 45.4 | | ug/L | | 113 | 57 - 128 | 4 | 26 |
| cis-1,2-Dichloroethene | 5.0 | U | 40.0 | 40.6 | | ug/L | | 102 | 82 - 116 | 1 | 20 |
| 1,1,1-Trichloroethane | 5.0 | U | 40.0 | 37.7 | | ug/L | | 94 | 69 - 134 | 3 | 24 |
| Trichloroethene | 5.0 | U | 40.0 | 38.4 | | ug/L | | 96 | 80 - 120 | 1 | 20 |

| *Surrogate* | *MSD % Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *98* | | *62 - 123* |
| *Toluene-d8 (Surr)* | *106* | | *80 - 120* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *75 - 120* |
| *Dibromofluoromethane (Surr)* | *102* | | *80 - 120* |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 180-13834/1-A**
**Matrix: Water**
**Analysis Batch: 14247**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 13834**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 5.0 | U | 5.0 | 0.13 | ug/L | | 09/13/11 11:24 | 09/15/11 18:16 | 1 |
| Lead | 3.0 | U | 3.0 | 1.3 | ug/L | | 09/13/11 11:24 | 09/15/11 18:16 | 1 |

**Lab Sample ID: LCS 180-13834/2-A**
**Matrix: Water**
**Analysis Batch: 14247**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 13834**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | % Rec | % Rec. Limits |
|---|---|---|---|---|---|---|---|
| Cadmium | 50.0 | 49.8 | | ug/L | | 100 | 80 - 120 |
| Lead | 500 | 519 | | ug/L | | 104 | 80 - 120 |

**Lab Sample ID: 180-3749-B-7-E MS**
**Matrix: Water**
**Analysis Batch: 14247**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 13834**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | % Rec | % Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 5.0 | U | 50.0 | 49.4 | | ug/L | | 99 | 75 - 125 |
| Lead | 3.0 | U | 500 | 528 | | ug/L | | 106 | 75 - 125 |

**Lab Sample ID: 180-3749-B-7-F MSD**
**Matrix: Water**
**Analysis Batch: 14247**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 13834**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | % Rec | % Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 5.0 | U | 50.0 | 49.2 | | ug/L | | 98 | 75 - 125 | 1 | 20 |
| Lead | 3.0 | U | 500 | 524 | | ug/L | | 105 | 75 - 125 | 1 | 20 |

# QC Association Summary

Client: Leo Brausch Consulting
Project/Site: Buffalo Airport

TestAmerica Job ID: 180-3787-1

## GC/MS VOA

### Analysis Batch: 14534

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-3785-I-1 MS | Matrix Spike | Total/NA | Water | 8260B | |
| 180-3785-I-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 8260B | |
| 180-3787-1 - DL | WG-18036-090911-MW32 | Total/NA | Water | 8260B | |
| 180-3787-1 | WG-18036-090911-MW32 | Total/NA | Water | 8260B | |
| 180-3787-2 | TB-18036-090911 | Total/NA | Water | 8260B | |
| LCS 180-14534/5 | Lab Control Sample | Total/NA | Water | 8260B | |
| MB 180-14534/3 | Method Blank | Total/NA | Water | 8260B | |

## Metals

### Prep Batch: 13834

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-3749-B-7-E MS | Matrix Spike | Total/NA | Water | 3010A | |
| 180-3749-B-7-F MSD | Matrix Spike Duplicate | Total/NA | Water | 3010A | |
| 180-3787-1 | WG-18036-090911-MW32 | Total/NA | Water | 3010A | |
| LCS 180-13834/2-A | Lab Control Sample | Total/NA | Water | 3010A | |
| MB 180-13834/1-A | Method Blank | Total/NA | Water | 3010A | |

### Analysis Batch: 14247

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-3749-B-7-E MS | Matrix Spike | Total/NA | Water | 6010B | 13834 |
| 180-3749-B-7-F MSD | Matrix Spike Duplicate | Total/NA | Water | 6010B | 13834 |
| 180-3787-1 | WG-18036-090911-MW32 | Total/NA | Water | 6010B | 13834 |
| LCS 180-13834/2-A | Lab Control Sample | Total/NA | Water | 6010B | 13834 |
| MB 180-13834/1-A | Method Blank | Total/NA | Water | 6010B | 13834 |

# Login Sample Receipt Checklist

Client: Leo Brausch Consulting

Job Number: 180-3787-1

**Login Number: 3787**

**List Number: 1**

**Creator: Blotzer, Tristan**

**List Source: TestAmerica Pittsburgh**

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