

SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT

TRACT I SITE
3123 HIGHLAND AVENUE
NIAGARA FALLS, NIAGARA COUNTY, NEW YORK
SITE NO. C932157

SUBMITTED TO:

THE NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION

Prepared for:



BRIGHTFIELDS, Inc.
333 Ganson Street
Buffalo, New York 14203

Prepared by



AMEC Environment & Infrastructure, Inc.
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Project 3410130921
May 2013



May 17, 2013

Mr. Timothy Dieffenbach
Engineering Geologist 2
Division of Environmental Remediation
NYS Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, NY 14203

**Subject Transmittal of the Supplemental Remedial Investigation Report
Tract I Site (Site No. C932157)
Niagara Falls, New York
Amec Project No. 3410130921**

Dear Mr. Dieffenbach:

Enclosed, please find two hard copies and one electronic copy of the Supplemental Remedial Investigation Report (SRIR) dated May 2013 for the Tract I Site (Site No. C932157) located at 3123 Highland Avenue in the City of Niagara Falls, New York. This report details the field activities and results of work conducted in accordance with the Supplemental Remedial Investigation Work Plan (SRIWP) Rev. 2 dated June 2012, which was approved for use by the New York State Department of Environmental Conservation (NYSDEC) in a letter to Brighfields, Inc. dated June 22, 2012. This SRIR (and associated SRIWP) were completed to address the data gaps identified in the May 2012 Consolidated Remedial Investigation Report (CRIR).

The enclosed report has been finalized with consideration to your May 3, 2013 comments on the Draft SRIR submitted to the NYSDEC on April 12, 2013. The formal written responses to these comments have also been enclosed. In addition, this SRIR has been revised to incorporate the results of the Data Validation Report.

If you have any questions regarding the submittal, please feel free to contact me at (412) 279-6661 or via email at robert.crowley@amec.com.

Respectfully Submitted,

Amec Environment & Infrastructure, Inc.

Robert E. Crowley
Senior Principal Scientist/Project Manager

cc: Matthew Forcucci (NYSDOH) – One Copy
Doris Jones Family Resource Center – One Copy
John Yensan (Brightfields) – Electronic Copy
Rich Galloway (Honeywell) – Electronic Copy

Enclosures

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May 17, 2013

Mr. Timothy Dieffenbach

Engineering Geologist 2
Division of Environmental Remediation
NYS Department of Environmental Conservation, Region 9
270 Michigan Avenue
Buffalo, NY 14203

**Subject: Written Responses to NYSDEC Comments on the
April 12, 2013 Draft Supplemental Remedial Investigation Report
Addressed to Mr. Jon Williams
Tract I Site, Niagara Falls, Niagara County, New York
NYSDEC Site Nos. C932157
Amec Project No. 3410130921**

Dear Mr. Dieffenbach:

In response to your letter to Mr. Jon Williams of Brightfields Corporation dated May 3, 2013, Amec Environment and Infrastructure, Inc. (Amec) is providing written responses to comments provided on the April 12, 2013 Draft Supplemental Remedial Investigation Report submitted to the NYSDEC. The following provides the NYSDEC comments, followed by our written response. These responses have been incorporated into the Supplemental Remedial Investigation Report for Tract I.

Comment: *Appendix B – The test pit logs are not included.*

Response: The test pit logs for B-35 and B-36 have been incorporated into Appendix B.

Comment: *Section 3.1.1.1 Groundwater Elevation Gauging – As noted in the cover letter to the SRIR, groundwater gauging data from the Tulip Corporation facility, adjacent to the north side of the Tract I Site, will be incorporated into the SRIR pending receipt of top of well casing data from Tulip Corp.*

Response: Top of casing elevations have been received from the Tulip Corporation. These elevations were utilized to obtain groundwater elevations at Tulip wells during the April 2, 2013 groundwater gauging event. These additional groundwater elevation data have been used to revise **Sections 2.2.2** and **3.1.1.1** of the text as well as **Figure 6B**. No conclusions have been altered; the newly obtained data support current interpretations of groundwater flow.

Comment: *Section 4.2.2 Subslab Soil – Lead was also detected above Commercial Soil Cleanup Objectives (SCOs) in Ecology and Environment (E&E) composite sample SS-PCW-07 beneath the concrete slab in the northern portion of the Power City Warehouse (PCW). Additionally, lead was detected above Commercial SCOs in E & E composite sample SS-PCW-09 obtained from beneath the concrete slab in the southern portion of the PCW and from a 2-inch drain and beneath the brick floor in the northern portion of the PCW.*

Response: **Section 4.2.2** has been revised to include results of E & E composite samples SS-PCW-07 and SS-PCW-09. It must be noted that the composite sample denoted as SS-PCW-09 contained aliquots from three locations, one of which was not surface soil (aliquot 9b); this aliquot was collected from debris contained in a 2-inch floor drain. It is not the intent of this Supplemental Remedial Investigation to characterize the extent of debris containing concentrations above Commercial SCOs; however, two of the aliquots were collected from surface soils underneath the concrete slab. To remain conservative in the approach to sufficiently characterize the extent of surface soils containing concentrations above Commercial SCOs, all aliquot locations of SS-PCW-09 have been considered and included within the investigation.

Comment: *Section 6.1.4 Subslab Soil – The E & E sample results for SS-PCW-07 and SS-PCW-09 should be included in the discussion of elevated lead results.*

Response: **Section 6.1.4** has been revised to include discussion of the E & E composite sample results for SS-PCW-07 and SS-PCW-09. As stated in the response to the previous comment, the composite sample denoted as SS-PCW-09 contained aliquots from three locations, one of which was not surface soil (aliquot 9b); this aliquot was collected from debris contained in a 2-inch floor drain. It is not the intent of this Supplemental Remedial Investigation to characterize the extent of debris containing concentrations above Commercial SCOs; however, two of the aliquots were collected from surface soils underneath the concrete slab. To remain conservative in the approach to sufficiently characterize the extent of surface soils containing concentrations above Commercial SCOs, all aliquot locations of SS-PCW-09 have been considered and included in this supplemental investigation.

Comment: *Fill Thickness Isopach Map – This map utilizes only data obtained during AMEC site investigations. Soil boring data obtained during the EA Engineering investigation (SB-17 and SB-18) indicates a fill thickness of 8 feet between AMEC boring B-16 and well T1-MW-02.*

Response: The fill thickness isopach map was generated utilizing only data obtained during Amec investigations to ensure consistency of the fill and native soil interface. Amec is not discarding data obtained during the EA Engineering investigation; however, interpretation of the fill and native soil interface is not entirely clear in each of the soil logs. As such, EA Engineering investigation data was not initially considered. Upon further review, the locations of SB-17 and SB-18 are proximal to the underground storage tanks discovered during installation of monitoring well T1-MW-01. Based on this information, it is possible that the fill and native soil interface is eight feet deep in this area. As such, the fill thickness isopach map has been revised to include data from EA borings SB-17 and SB-18; **Section 3.2.1** has also been revised.

Comment: *Figure 12 Sample Results – Sample locations for 7a & 7b and 9a, 9b, and 9c should be added to the figure.*

Response: **Figure 12** has been revised to include the results of E & E composite samples SS-PCW-07 (aliquots 7a and 7b) and SS-PCW-09 (aliquots 9a, 9b, and 9c).

Comment: *Figure 13 EA and AMEC Subsurface Sample Results Detected Above Commercial SCOs and TCLP Standards – No EA sample results are shown and a number of EA sample locations are not included.*

Response: **Figure 13** only displays the locations and results of samples collected from depths greater than two feet below ground surface. The results and locations of EA samples collected from the shallow subsurface interval of 0-2 feet below ground surface have been included on **Figure 12** (Surface, Subslab, and **Shallow Subsurface** Sample Results Detected Above Commercial SCOs and TCLP Standards). The results and locations of EA samples collected at depths of greater than two feet below ground surface were obtained from Tables 6 and 7 of the 2009 EA Site Characterization report (also summarized on Table 4 of the 2012 Amec Consolidated Remedial Investigation Report). As can be seen on these tables, samples were only collected at depths greater than two feet below ground surface at the EA borings denoted as SB-01, SB-06, SB-09, SB-12, SB-13, SB-17, SB-18, SB-19, and SB-23. In addition, none of the analyzed parameters were detected at concentrations above their respective Commercial SCO; as such, the results not been included on **Figure 13**. Further review of **Figure 13** indicates that boring SB-12 was not initially included; **Figure 13** has been revised to include the location of SB-12.

CLOSING

The Supplemental Remedial Investigation Report has also been revised to incorporate the results of the Data Validation Report for data collected in 2013 (included in Appendix D). We trust that this submittal satisfies NYSDEC's needs at this time. Should you have any questions regarding this submittal, please contact Rich Galloway at (973) 455-4064.

Sincerely,

Amec Environment & Infrastructure, Inc.



Robert E. Crowley
Senior Principal Scientist



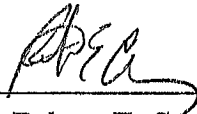
Sean Condie
Technical Professional III

cc: Rich Galloway – Honeywell
Jon Williams – Brightfields

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TRACT I SITE
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ACRONYMS

ACM	Asbestos Containing Material
Amec	Amec Environment & Infrastructure, Inc.
BCP	Brownfield Cleanup Program
bgs	Below Ground Surface
Brightfields	Brightfields, Inc.
City	City of Niagara Falls, New York
CLP	Contract Laboratory Program
COCs	Constituents of Concern
COPCs	Constituents of Potential Concern
CRIR	Consolidated Remedial Investigation Report
CSM	Conceptual Site Model
DUSR	Data Usability Summary Report
EA	EA Science and Technology
EDR	Environmental Data Resources
E&E	Ecology and Environment Engineering, P.C.
ft-bgs	Feet Below Ground Surface
ft/sec	Feet per Second
FWIA	Fish and Wildlife Impact Analysis
HHEA	Human Health Exposure Assessment
IRMWP	Interim Remedial Measures Work Plan
J	Estimated value due to detection below reporting limit
K	Hydraulic Conductivity
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
mL/min	Milliliters per Minute
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NFWB	Niagara Falls Water Board
NYCRR	New York Code of Rules and Regulations
NYSDEC	New York Department of Environmental Conservation
NYWQS	New York Water Quality Standard

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OSC	Ontario Specialty Contracting, Inc.
PAHs	Polynuclear Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PID	Photoionization Detector
QA/QC	Quality Assurance/Quality Control
RI	Remedial Investigation
ROD	Record of Decision
SCOs	Soil Cleanup Objectives
Site	Tract I Site
SMP	Site Management Plan
SRIR	Supplemental Remedial Investigation Report
SRIWP	Supplemental Remedial Investigation Work Plan
S.U.	Standard Units
SVOCs	Semivolatile Organic Compounds
TAL	Target Analyte List
TCE	Trichloroethene
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TestAmerica	TestAmerica Laboratories
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VOCs	Volatile Organic Compounds
µg/L	Micrograms per Liter

1.0 INTRODUCTION

Amec Environment & Infrastructure, Inc. (Amec) has prepared this Supplemental Remedial Investigation Report (SRIR) on behalf of Brightfields, Inc. (Brightfields) for the Tract I Site (Site) located at 3123 Highland Avenue, in the City of Niagara Falls (City), Niagara County, New York. **Figure 1** shows the location of the Site on a United States Geological Survey (USGS) topographic map and **Figure 2** shows the existing layout of the Site in plan view.

The Site is a former lead/acid battery manufacturing plant and has been the subject of historic site characterization activities by the New York State Department of Environmental Conservation (NYSDEC), and a removal action by the United States Environmental Protection Agency (USEPA) between 1999 and 2010. Adjacent to the Site to the south and east is the Tract II property, which is being remediated under the State of New York Inactive Hazardous Waste Site program. The Tulip Corporation site is located to the north of the Site.

The City has endeavored to redevelop both the Site and the Tract II property since closure of the industrial facilities in the early 1970's. In order to support a viable redevelopment on the Tract II property, Brightfields has elected to also remediate and redevelop the Site. The Site will be remediated under the New York State Brownfield Cleanup Program (BCP).

1.1 PURPOSE OF REPORT

The purpose of this SRIR is to address data gaps identified in the May 2012 Consolidated Remedial Investigation Report (CRIR). A NYSDEC-approved Supplemental Remedial Investigation Work Plan (SRIWP; Amec, 2012) was developed for the Site to address the CRIR data gaps. The following data gaps were addressed during supplemental investigations in accordance with the SRIWP:

1. Collection of waste characterization samples of the remaining debris/sediment in the eastern portion of the building during demolition;
2. Characterization of on-site groundwater;
3. Delineation of the horizontal extent of Polynuclear Aromatic Hydrocarbons (PAHs) and Polychlorinated Biphenyls (PCBs) in surface soil contained in the eastern end of the Site;

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4. Delineation of the extent of lead beneath the building slab in the vicinity of soil borings SB-08 and SB-12; and
5. Characterization of the bedding material beneath the brick floors in specific areas of the Power City Warehouse.

This report documents the results and observations from the above described investigations and presents recommendations for additional actions (if any) to facilitate redevelopment of the Site.

1.2 SITE BACKGROUND

The following subsections provide a brief description of the Site location and history along with a physical description of the Site, including geology and hydrogeology.

1.2.1 Site Location and History

The Site is located at 3123 Highland Avenue in the City of Niagara Falls, New York in a multi-use area comprised of industrial, commercial, and residential properties. The Site consists of approximately 5.9 acres located east of Highland Avenue, north and west of the Tract II property, and south of the active Tulip Corporation (**Figures 1 and 2**).



The Site was first developed for industrial use in approximately 1910 as a battery manufacturing facility for U.S. Light and Heat Co., and later Autolite Co. The facility was acquired by Prestolite Co. in the 1960s for the

manufacture of hard rubber battery cases along with battery charging and filling. Battery manufacturing activities ceased in the early 1970s and the Site was sold and reportedly used as a warehouse and an automotive body shop until the 1980s. By

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the late 1980s, the Site had been abandoned and various portions were in disrepair. In 1990, the City acquired the property via tax foreclosure.

1.2.2 Site Description

The Site consists of approximately 5.9 acres of property and is covered mainly by the footprint of the former Power City Warehouse building. Portions of the building are currently being demolished, and preparation activities for the remediation and redevelopment have removed all wooded and grassy growth on the Site. The western portion of the Site consists of an open, former grassy area and a gravel drive to a loading dock area. The southern boundary of the Site consists of an open, formerly wooded area that once contained rail sidings. The eastern portion of the Site consists of an open, former grassy area intermixed with broken asphalt and sections of concrete pavement.

The footprint of the former Power City Warehouse building covers approximately 3.3 acres of the Site and is a three-story masonry building with a small basement area under the structure. The building has had numerous additions to the original structure. Previous investigations of the warehouse building have reported that the majority of the structure is constructed on concrete floors, approximately six-inches thick. The concrete floors were noted to be in good condition with no major cracking or deterioration (EA, 2009). Several areas of the warehouse have brick flooring over the concrete floor, and a drain system collecting into sumps was present throughout the building.

A second, considerably smaller, one-story building (approximately 462 square feet) is located at the northeast corner of the Site. The smaller building is constructed of brick with a concrete floor. Past investigations have suggested that this building may have been used for chemical storage (E&E, 2000).

1.2.3 Site Geology and Hydrogeology

The Geologic Map of New York, Niagara Sheet, published by the University of the State of New York indicates that the Site lies in the Silurian-aged Lockport Group. The Lockport Group consists of Geulph, Oak Orchard, Eramosa, and Goat Island Dolostones and the Gasport Limestone. Tract II property investigations have revealed that bedrock is between 12.5 and 23.5 feet below ground surface (ft-bgs) in the vicinity of the Site. The unconsolidated material at the Site consists of various

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fill materials at the surface, underlain by silty clay that grades into a till unit. Dolostone bedrock is present below the till.

Groundwater flow in the overburden soils and fill above bedrock at the Site appears to be generally southwest, toward the Niagara River; however, this water is believed to be perched at the top of bedrock. More specific hydrogeology based on supplemental investigations presented in this report is presented in subsequent **Section 2.1**.

The NYSDEC concluded, in the initial Tract II site characterization report, (E&E, 2000) and in the 2003 Tract II Record of Decision (ROD) that groundwater in the vicinity of the Site is not a source of potable water, nor is such a use anticipated (NYSDEC, 2003). The report and ROD cited that there is no significant groundwater aquifer in the overburden soils and fill above the bedrock and the fact that a public drinking water supply system is available throughout the area as justification for this conclusion. A local ordinance also prohibits the use of groundwater as a potable water supply in the City.

1.3 SITE INVESTIGATION/REMEDIATION HISTORY

In May 1999, an initial investigation was conducted on the Site by Ecology and Environment Engineering, P.C. (E&E) for the City under a grant from the NYSDEC. Results from this investigation were presented in a May 2000 Site investigation report (E&E, 2000). In late 2007, the NYSDEC contracted EA Engineering, P.C. and its affiliate EA Science and Technology (EA) to perform an additional Site characterization. Results of that investigation were presented in a May 2009 Site characterization report (EA, 2009).

In late 2009 and in 2010, the USEPA conducted a removal action at the Site. These activities included fencing the Site, removal/cleanup and disposal of lead-contaminated debris including sediments and sludge from in the warehouse building, and removal and disposal of some asbestos containing building materials from the Site. Additionally, paint-related materials, PCB light ballasts, batteries, mercury switches, piping and other miscellaneous debris located on the Site were removed and disposed of by the USEPA.

In July 2011, Amec implemented a NYSDEC-approved pre-design study work plan (Mactec, 2011) on the Site. This study was performed to refine the extent of lead

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identified in surface soil at the Site and to obtain additional data to support anticipated Site remediation. Results of that investigation were presented in the May 2012 Consolidated Remedial Investigation Report (Amec, 2012).

In July through August 2012 and February through April 2013, Amec implemented the SRIWP for the Tract I Site (Amec, 2012), which was approved by the NYSDEC in a letter to Brighfields dated June 22, 2012. This study was performed to address the data gaps identified in the CRIR.

1.4 REPORT ORGANIZATION

This report is organized into six sections following this introduction, as follows:

- **Section 2** provides a description of the investigations performed at the Site to address the data gaps in the CRIR.
- **Section 3** provides the results and observations from the above described investigations conducted at the Site.
- **Section 4** provides a comprehensive summary of the analytical results and associated impacts at the Site derived from all previous investigations.
- **Section 5** presents a limited qualitative exposure assessment for the Site.
- **Section 6** presents the findings for the investigations performed at the Site and presents recommendations for a path forward.
- **Section 7** provides a list of references cited in this report.

1.5 LIMITATIONS

This SRIR presents a summary of information known to Amec concerning the Site that Amec considered pertinent to the scope of work and stated project objectives. Amec has performed this work with the care and skill ordinarily used by members of the profession practicing under similar conditions. The conclusions presented herein are those that are deemed pertinent by Amec based upon the implicit accuracy of the available information. No other warranty, expressed or implied, is made as to the professional advice included in this report. The information present in this report is not intended for any use other than the stated objectives of the project. This document was prepared for the sole use of Brightfields, Inc., Honeywell, Inc., and the NYSDEC, who are the only intended beneficiaries of the work.

2.0 FIELD INVESTIGATIONS

This section provides a description of the supplemental investigations conducted at the Site to address the data gaps identified in the Consolidated Remedial Investigation Report. The investigations took place between July 2012 and April 2013.

2.1 DEBRIS CHARACTERIZATION

Remaining debris in the eastern portion of the Power City Warehouse (**Data Gap 1**) was consolidated and appropriately sampled for disposal by Ontario Specialty Contracting (OSC) in late 2012. The debris was collected into roll-off boxes, characterized and shipped off-site for disposal.

2.2 GROUNDWATER CHARACTERIZATION

On-site groundwater in the overburden soil and fill above bedrock was characterized (**Data Gap 2**) through installation and subsequent sampling of three temporary monitoring wells. The locations of these wells are presented on **Figure 3**. As discussed in Section 1.2.3, groundwater at and in the vicinity of the Site is not a source of potable water, nor is such a use anticipated. The following section provides the details of the characterization event.

2.2.1 Temporary Monitoring Well Installation

Three temporary monitoring wells, identified as T1-MW-01 through T1-MW-03, were installed by SJB Services, Inc. with oversight by Amec in July and August 2012. The wells were advanced via hollow stem auger drilling techniques to a depth designed to monitor the overburden soil and fill above bedrock (initial water bearing zone underlying the Site). Wells were constructed with utilizing a 10 foot long, 0.010-inch machine slotted Polyvinyl chloride (PVC) screen and a two-inch diameter PVC riser. Appropriately graded sand packs were installed to a depth of approximately one foot above the top of the screen, and two-feet of bentonite was placed atop of the sand pack to create a seal. The boreholes were then backfilled to the original grade utilizing soil cuttings removed from the boring. Further details are provided on in the monitoring well logs, included in **Appendix A**.

Following installation, each well was sufficiently developed on August 8, 2012 by utilizing a new, dedicated bailer to remove fine grained sediment and other materials introduced into the well during installation. Development was considered

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complete when the pH, conductivity, and temperature were stabilized (in $\pm 10\%$ of previous measurements) and the turbidity levels were observed to be less than 50 Nephelometric Turbidity Units (NTUs), or until four standing volumes of water were removed. Well development forms are included in **Appendix A**.

Soil sampling was also conducted during installation of monitoring wells. Details of the soil sampling are provided in Section 2.2.1.

2.2.2 Groundwater Elevation Gauging

Following installation, the groundwater elevations were gauged at each of the monitoring wells. This gauging event was conducted on August 8, 2012. An additional gauging event was conducted on April 2, 2013 to include the adjacent Tract II and Tulip Corporation sites. Tract I monitoring wells T1-MW-02 and T1-MW-03; Tract II wells MW-01, MW-02, and MW-03; and Tulip Corporation wells TU-MW-01 and TU-MW-02 were gauged during this event. T1-MW-01 was damaged during demolition activities in late 2012 and MW-04 (Tract II) was unable to be located; as such, these two wells were not gauged during the April 2013 event.

2.2.3 Groundwater Sampling

A groundwater sampling event was conducted on August 9, 2012. Each Tract I well was purged via low flow sampling techniques prior to analytical sample collection. Low-flow sampling was conducted utilizing a peristaltic pump and dedicated tubing at a flow rate no greater than 500 milliliters per minute (mL/min). Purging was deemed complete when the following water quality parameters were stabilized (in $\pm 10\%$ of previous measurement) over three consecutive readings (taken every five minutes):

- pH;
- Temperature;
- Conductivity;
- Dissolved Oxygen;
- Turbidity; and
- Oxidation Reduction Potential (ORP).

Field notes documenting sufficient purging at each well are included in **Appendix A**. Once purging was completed, groundwater grab samples were collected utilizing the

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peristaltic pump and dedicated tubing. Samples were placed into appropriately labeled laboratory provided sample jars. The samples were then logged onto a chain of custody form, placed onto ice, and delivered to TestAmerica in Amherst, NY for analysis of the following parameters:

- Total and dissolved Target Analyte List (TAL) metals by USEPA SW-846 Method 6010 and mercury by Method 7471;
- Target Compound List (TCL) Volatile Organic Compounds (VOCs) by USEPA SW-846 Method 8260;
- TCL Semivolatile Organic Compounds (SVOCs) by USEPA SW-846 Method 8270;
- TCL Organochlorine Pesticides by 8081A; and
- PCBs by USEPA SW-846 Method 8082.

The analytical samples collected for dissolved TAL metals were field filtered through a new, disposable 0.45 micron (μm) field filter prior to preservation.

2.2.4 Field Testing

Following groundwater sampling, slug tests were completed at each well on August 17, 2012 to determine the hydraulic conductivity of the local overburden soils and fill above bedrock. The slug tests were performed using a disposable bailer to quickly remove a “slug” of groundwater along with a Mini-Troll pressure transducer connected to a Trimble Pocket PC data logger (to measure and record changes in groundwater level). First, the pressure transducer was lowered to approximately one foot above the bottom of the well. Second, the bailer was gently lowered until it was completely submerged. Once the water level had stabilized, as evidenced by water level readings shown on the data logger, the bailer (approximately 1 liter of water) was quickly withdrawn from the well. Groundwater recovery was measured and recorded by the Mini-Troll on a logarithmic time scale.

The slug test data were reduced and the estimated hydraulic conductivity was calculated using the Bower and Rice Method published in “A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely of Partially Penetrating Wells”, Water Resources Research, Vol 12. #3, 1976.

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From that, the following equation has been used to calculate hydraulic conductivity:

$$K = \frac{r_c^2 * \ln\left(\frac{R_e}{r_w}\right)}{2L} * \frac{1}{t} * \ln\left(\frac{Y_o}{Y_t}\right)$$

Where:

$$\ln\left(\frac{R_e}{r_w}\right) = \left[\frac{1.1}{\ln\left(\frac{H}{r_w}\right)} + \frac{A + B * \ln\left[\frac{D - H}{r_w}\right]}{\frac{L}{r_w}} \right]^{-1}$$

r_c = casing radius

L = length of intake

r_w = radial distance between undisturbed aquifer and well center

R_e = effective radius of well

Y_o = initial drawdown

Y_t = vertical distance between the water level in well at time t and equilibrium level

H = distance from water table to the bottom of intake

D = saturated aquifer thickness

A and B = dimensionless coefficients that are a function of $\frac{L}{r_w}$; see Bower and Rice: Groundwater Hydraulics, page 7.

2.3 SOIL CHARACTERIZATION

Soil sampling events were conducted in July and August 2012 and in February 2013 to address some of the identified data gaps. The soil data gaps included the unknown horizontal extent of PAHs and PCBs in surface soil in the eastern end of the property (**Data Gap 3**) and the unknown extent of lead beneath the building slab in the vicinity of soil borings SB-08 and SB-12 (**Data Gap 4**). The following section summarizes the details of the sampling events.

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2.3.1 Monitoring Well Soil Sampling

During installation of the temporary monitoring wells (discussed in Section 2.1.1), soils were continuously sampled via two-inch diameter split-spoons. The soil was logged via the Unified Soil Classification System (USCS). In addition, samples were scanned with a photoionization detector (PID) for the presence of VOCs and visually inspected for evidence of impacts such as odor, discoloration, staining, trash, debris, or liquid-phase contaminants. Borings logs are included in **Appendix A**.

Analytical samples were collected at two intervals from each boring; the first was collected from the surface soil interval (0 to 0.5 ft-bgs) and the second from the final six inches of fill material located above the native soils. Additional samples were collected at T1-MW-01 (4.5 to 5.0 ft-bgs and 8.5 to 9.0 ft-bgs) and at T1-MW-02 (5.0 to 6.0 ft-bgs) due to elevated PID readings.

Prior to collection of each analytical sample, the entire sample interval was homogenized in a decontaminated stainless steel bowl; samples containing elevated PID readings were not homogenized prior to collection in an effort to minimize possible volatilization. Samples were placed into appropriately labeled, laboratory provided bottle-ware, logged onto a chain of custody form, placed onto ice, and delivered to TestAmerica Laboratories, Inc. (TestAmerica) in Amherst, NY to be analyzed. Surface soil samples were analyzed for the following parameters:

- TAL metals by USEPA SW-846 Method 6010;
- Toxicity Characteristic Leaching Procedure (TCLP) lead by USEPA SW-846 Method 1311;
- TCL Organochlorine Pesticides by 8081A;
- TCL Semivolatile Organic Compounds (SVOCs) by USEPA SW-846 Method 8270; and
- PCBs by USEPA SW-846 Method 8082.

Note that the samples collected for TCLP lead were only analyzed if the results from the total lead analysis exceeded 1,000 milligrams per kilogram (mg/Kg). Samples collected from the final six inches of fill material located above the native soils were only analyzed for total lead and the additional samples collected based on elevated PID readings were only analyzed for TCL VOCs by USEPA SW-846 Method 8260.

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A concrete slab was present at the location of T1-MW-01, and the “surface soil” sample was collected immediately beneath the slab at this location (subslab sample). At location T1-MW-01, there was insufficient recovery to collect the sample from the final six inches of fill material, and only the TCL VOC sample was collected because the soil contained elevated PID readings. Additionally, insufficient recovery in the final six inches of fill (4.5 to 5.0 ft-bgs) at T1-MW-02 prevented sample collection at this interval; as such, a sample was collected as close to the final six inches of fill material as possible (1.0 to 1.5 ft-bgs).

During drilling of monitoring well T1-MW-02 in the southeast corner of the building, an Underground Storage Tank (UST) was discovered. Two USTs were present on a 1914 Sandborn Map and apparently, had since been partially covered by the building slab. One of the USTs appeared to contain water; however, no petroleum product was observed.

2.3.2 Soil Borings/Test Pits

Soil borings and test pits were advanced in July 2012 and February 2013. Samples were collected utilizing direct push drilling methods provided by SJB Services, Inc. with oversight by Amec. Each boring was advanced to at least the depth of native soils. Borings were identified as B-22 through B-34, B-38, and B-39; the locations are depicted on **Figure 4**. Two test pits (B-35 and B-36) were completed utilizing a backhoe operated by OSC with oversight by Amec. The proposed boring location identified as B-37 was not drilled because soil was sampled in close proximity to the proposed location of B-37 during installation of temporary monitoring well T1-MW-03.

Prior to analytical sample collection, each boring and test pit was continuously sampled and soils were classified using the USCS; logs for the borings have been included as **Appendix B**. In addition, each sample was screened with a PID and visually inspected for evidence of impacts such as odor, discoloration, staining, trash, debris, or liquid-phase contaminants. Following homogenization (samples containing elevated PID readings were not homogenized prior to collection in an effort to minimize possible volatilization), the samples were placed into appropriately labeled, laboratory provided sample jars, logged onto a chain of custody, placed onto ice, and delivered to TestAmerica in Amherst NY for analysis. Specific analysis and number of samples collected were dependent upon the vertical

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location of each sample. The following sections provide the analyses and specific data associated with each sampling interval.

2.3.2.1 Surface Soil Samples

Surface soil samples were collected from the 0 to 0.5 ft-bgs interval. Samples were collected from seven locations, denoted as B-22 through B-26, B-35, and B-36 (**Figure 4**) to the east and south of the building to further delineate the horizontal extent of metals, PCBs, and PAHs detected above the Commercial Soil Cleanup Objectives (SCOs) in the outdoor area at the eastern and southern side of the Site. These samples were analyzed for the following parameters:

- TAL metals or total lead by USEPA SW-846 Method 6010;
- TCLP lead by USEPA SW-846 Method 1311;
- TCL SVOCs by USEPA SW-846 Method 8270;
- TCL Organochlorine Pesticides by 8081A ; and
- PCBs by USEPA SW-846 Method 8082.

It must be noted that for each respective boring and test pit, the analysis for TCLP lead was only conducted if total lead results were reported to be greater than 1,000 mg/Kg. An additional two surface soil samples were collected along the western edge of the property. These boring locations were denoted as B-38 and B-39 (**Figure 4**) and were only analyzed for total lead via USEPA SW-846 Method 6010.

2.3.2.2 Subslab Soil Sampling

Following demolition of the eastern portion of the Power City Warehouse, the area surrounding the previous EA soil borings denoted as SB-08 and SB-12 was further evaluated to delineate the extent of lead. A total of six borings (B-27 through B-32) were advanced in the vicinity of the EA borings and two were advanced in the eastern portion of the former building (B-33 and 34); locations are shown on **Figure 4**. Analytical samples were collected from the six inch interval of soil immediately underlying the slab and bedding material (rock or gravel) via direct push drilling. Samples were then analyzed for total lead by USEPA SW-846 Method 6010; analysis for TCLP lead by USEPA SW-846 Method 1311 was also completed on samples with total lead concentrations exceeding 1,000 mg/Kg.

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2.3.2.3 Subsurface Soil Sampling

Subsurface soil samples (intervals greater than 0.5 ft-bgs/slab) were collected at the locations identified as B-22 through B-26, B-28 through B-30, B-32, B-33, B-35, B-36, B-38, and B-39 (**Figure 4**) to further delineate the vertical extent of lead exceeding the Commercial SCOs located directly above the native soil interval. Analytical samples were collected from the last six inch interval of fill material encountered directly above native soils and analyzed for total lead by USEPA SW-846 Method 6010; analysis for TCLP lead by USEPA SW-846 Method 1311 was also completed on samples with total lead concentrations exceeding 1,000 mg/Kg. Since the final six inches of fill material at B-27, B-31, and B-34 was contained in the subslab soil sample interval (0.5-1.0 ft-bgs), no subsurface samples were collected at these locations. Additional samples were collected at B-22 (6.5 to 7.0 and 9.5 to 10.0 ft-bgs) and B-23 (2.0 to 4.0 ft-bgs) due to elevated PID readings; these samples were only analyzed for TCL VOCs via USEPA SW-846 Method 8260.

2.4 BRICK BEDDING MATERIAL CHARACTERIZATION

The bedding material in areas containing brick flooring, identified in the 2009 EA Site Characterization Report, was characterized in February 2013 (**Data Gap 5**). The original area presented in the above-mentioned report was not consistent with Amec field observations; the flooring configuration of interest was only observed to be present in the eastern portion of the former Power City Warehouse and a small area along the northern perimeter of the western portion of the former warehouse. **Figure 5** displays the areas observed to contain brick flooring.

Because the brick area was smaller than anticipated, Amec and the NYSDEC agreed that fewer samples were necessary to characterize the bedding material. The bedding material was sampled at seven locations (BB-1 through BB-7) instead of the 10 that were planned in the SRIWP. Additionally, samples collected at BB-1 and BB-6 were initially placed on hold pending proximal analytical results; With concurrence from NYSDEC, samples from these locations were ultimately not analyzed due to the small size of the brick-covered area. Samples were collected on February 25, 2013 by removing the bricks utilizing a pneumatic jackhammer excavator attachment and collecting a representative sample of the bedding material via hand. Samples were then submitted for analysis of the following parameters:

- TCL VOCs by USEPA SW-846 Method 8260;
- TCL SVOCs by USEPA SW-846 Method 8270;

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- TAL Metals by USEPA SW-846 Methods 6010 and 7471; and
- PCBs by USEPA SW-846 Method 8082.

In addition, samples displaying concentrations of total lead above 1,000 mg/Kg were also analyzed for TCLP lead via USEPA SW-846 Method 1311/6010.

2.5 QUALITY ASSURANCE/QUALITY CONTROL SAMPLING

In addition to the characterization samples, 13 samples were also collected for quality assurance/quality control (QA/QC) purposes. Samples collected for VOC analysis were accompanied by trip blanks at the rate of one trip blank per sample cooler containing VOC samples. The trip blanks were prepared by the laboratory by placing analyte free water into 40-mL VOC vials and properly sealing them; all empty bottles intended for VOC analysis were accompanied by a trip blank during transport to the Site. Trip blanks were analyzed for the same suite of VOCs as the samples they accompanied; a total of six trip blanks were analyzed during the supplemental investigation.

Replicate samples were proposed to be collected at a frequency of one replicate per matrix (soil or water) per 10 characterization samples collected; actual frequencies for each of the analyzed parameters are summarized in the following table:

Sample Matrix	Analysis	Samples Analyzed	Replicates Analyzed
Soil/Brick Bedding Material	VOCs	17	2
	SVOCs	21	3
	PCBs	17	2
	Pesticides	12	0
	TAL Metals	17	2
	Total Lead Only	29	3
Groundwater	VOCs	3	1
	SVOCs	3	1
	PCBs	3	1
	Pesticides	3	1
	Total Metals	3	1
	Dissolved Metals	3	1

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As can be seen from the above table, the proposed frequency has been met for all of the analyzed parameters aside from pesticides in soils.

Soil replicates were collected by obtaining enough sample volume for at least two samples and homogenizing the soil. The sample was then split into two equal portions and placed into appropriate sample jars for the same analysis. In the case of VOC samples, the sample was not homogenized in an effort to minimize volatilization. Water replicates were collected by alternately filling sample jars for each analytical suite from the same water source. Each replicate sample was submitted as a separate, uniquely numbered sample for analysis.

Matrix spike/matrix duplicate samples (MS/MSD) samples were proposed to be analyzed at the rate of one MS/MSD sample per 20 samples submitted per matrix; actual frequencies for each of the analyzed parameters are summarized in the following table:

Sample Matrix	Analysis	Samples Analyzed	MS/MSDs Analyzed
Soil/Brick Bedding Material	VOCs	17	1
	SVOCs	21	2
	PCBs	17	2
	Pesticides	12	1
	TAL Metals	17	2
	Total Lead Only	29	2
Groundwater	VOCs	3	1
	SVOCs	3	1
	PCBs	3	1
	Pesticides	3	1
	Total Metals	3	1
	Dissolved Metals	3	1

As can be seen from the above table, the proposed frequency has been met for all of the analyzed parameters.

2.6 DECONTAMINATION

Non-disposable equipment coming into contact with samples during field investigation events was decontaminated prior to use. Field decontamination of

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sampling and monitoring equipment/tools (e.g., split spoon samplers, hand augers, water level meters, etc.) consisted of a non-phosphorous detergent cleansing via brush followed by a distilled water rinse. The equipment was then allowed to air dry prior to use for sample collection. Wash and rinse water were collected and containerized with the other IDW for characterization and disposal.

Drilling equipment (e.g., drill bits, augers, drill rods, etc.), although not directly contacting samples, was decontaminated before and after drilling utilizing a pressure washer and potable water rinse.

2.7 SURVEY

Following installation of monitoring wells and advancement of soil borings and test pits, the locations were surveyed in October 2012 and February 2013 by the licensed, New York State Surveyor, Niagara Boundary. The locations were surveyed to the nearest 0.1 feet horizontally and vertically. Additionally, each monitoring well was surveyed vertically to the nearest 0.01 feet relative to mean sea level at a measurement reference point on the top of the riser pipe.

3.0 SITE INVESTIGATION RESULTS

This section provides observations and results from the supplemental investigations conducted at the Site. For comparison purposes, analytical results for on-site groundwater have been compared to the New York Water Quality Standards (NYWQS) values for Surface Waters and Groundwater: Class GA. Analytical results for soil samples presented in this section are compared to 6 New York Code of Rules and Regulations (NYCRR) Part 375 Soil Cleanup Objectives (SCOs) for “Restricted Commercial” use (hereafter referred to as “Commercial SCOs”); these standards were selected based upon the requirements of the Brownfield Cleanup Agreement and the City’s Master Plan to redevelop the Site for commercial use.

3.1 GROUNDWATER CHARACTERIZATION RESULTS

Groundwater in the vicinity of the Site is not a source of potable water, and given the local and county ordinances prohibiting the installation of potable wells, it is not likely to become one in the future. In addition, shallow groundwater at the Site is present in the overburden soil and fill above bedrock, which is not considered an aquifer. At the request of the NYSDEC, general flow patterns and groundwater quality of this shallow, water bearing unit of soil and fill above bedrock have been characterized (**Data Gap 2**) through field testing and the collection of analytical samples. The following section summarizes the results of the field investigations.

3.1.1 Groundwater Elevations and Slug Testing

Perched groundwater characteristics in the overburden soil and fill above the bedrock were evaluated at the Site through conduction of groundwater gauging events and completion of slug-testing at each of the on-site monitoring wells. The following section summarizes the results of the gauging events and slug tests.

3.1.1.1 Groundwater Elevation Gauging

The groundwater elevation at each of the onsite wells was gauged on August 8, 2012 and an additional gauging event that included Tract II and up gradient Tulip Corporation wells was conducted on April 2, 2013. The groundwater elevation contour map generated during the August 2012 event has been included as **Figure 6A**. As can be seen from the contour map, the groundwater elevation at the Site on August 8, 2012 ranged from 577.57 ft-msl at T1-MW-01 to 573.93 ft-msl at T1-MW-

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03; a general flow trend towards the southwest at approximate gradient of 0.01 is present in the shallow water bearing overburden soil and fill.

The groundwater elevation map generated during the April 2013 event is included as **Figure 6B**. As can be seen from this map, groundwater elevations ranged from 579.09 ft-msl at MW-3 (Tract II) to 572.12 ft-msl at MW-2 (Tract II).

3.1.1.2 Slug Testing Results

Slug testing at each of the onsite monitoring wells was completed utilizing the Bower and Rice method on August 17, 2012. A summary of each test has been included in **Appendix A**. The hydraulic conductivities (K) have been calculated as 1.063×10^{-5} feet per second (ft/sec), 8.812×10^{-5} ft/sec, and 8.786×10^{-6} ft/sec at T1-MW-01, T1-MW-02, and T1-MW-03, respectively. As such, the average hydraulic conductivity of the on-site shallow water bearing overburden soil and fill is 3.585×10^{-5} ft/sec. However, more specifically, it appears that groundwater flows at a rate one order of magnitude higher in the eastern portion of the Site than the southwestern portion of the site.

3.1.2 Analytical Results

Three samples were collected during the groundwater sampling event conducted on August 9, 2012. Analytical results are summarized on **Table 1**; the full laboratory data report is provided in **Appendix C**. **Figure 6A** shows the compounds detected in groundwater that are above the NYWQS for Class GA groundwater.

3.1.2.1 VOC Results

Only one VOC was above the NYWQS for Class GA in groundwater. Trichloroethene (TCE) exceeded its standard of 5 micrograms per liter ($\mu\text{g/L}$) in the sample collected from T1-MW-03 ($8.7 \mu\text{g/L}$). Acetone and carbon disulfide were reported at levels above the laboratory reporting limit but below their respective NYWQS for Class GA groundwater in the sample collected at T1-MW-01.

3.1.2.2 SVOC Results

No SVOCs were above the NYWQS for Class GA groundwater in on-site groundwater samples. Samples did contain detections of several SVOCs above the laboratory reporting limit but below their respective NYWQS for Class GA groundwater. Phenanthrene was detected in the sample collected at T1-MW-01; 2-

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methylnaphthene, acenaphthene, acetophenone, diethyl phthalate, fluorene, naphthalene, and phenanthrene were detected in the sample collected at T1-MW-02; and di-n-butyl phthalate was detected in the sample collected at T1-MW-03.

3.1.2.3 Pesticide Results

Three of the analyzed pesticides were detected at concentrations above their respective NYWQS for Class GA groundwater. Beta hexachlorocyclohexane was above the NYWQS of 0.04 µg/L in sample T1-MW-03 (0.20 µg/L); endrin was above the NYWQS of “Not Detectable” in sample T1-MW-01 (0.018 J µg/L); and gamma chlordane was above the NYWQS of 0.05 µg/L in sample T1-MW-01 (0.16 µg/L). Several pesticide compounds were detected at concentrations above the laboratory reporting limit, but below their respective NYWQS. The compounds 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, beta endosulfan, and heptachlor epoxide were detected at T1-MW-03; and the compound methoxychlor was detected at T1-MW-01.

3.1.2.4 Total Metals Results

Five metals (total) were detected at concentrations above their respective NYWQS for Class GA groundwater. Samples collected at each of the monitoring wells were above the NYWQS for sodium and combined iron and manganese; samples from T1-MW-02 and T1-MW-03 were above the NYWQS for lead; and the sample from T1-MW-03 was above the NYWQS for antimony. The detected concentrations compared to the NYWQS for Class GA groundwater are summarized in the following table:

Compound	NYWQS	T1-MW-01	T1-MW-02	T1-MW-03
Antimony	0.003	0.020 U ⁽³⁾	0.020 U	0.021
Iron	0.3 ⁽²⁾	0.21⁽⁴⁾	6.1	0.13
Manganese	0.3 ⁽²⁾	0.34	1.5	0.91
Lead	0.025	0.0050 U	0.033	0.027
Sodium	20	42.0	58.5	58.8

Notes:

(1)-All values reported in mg/L.

(2)-The standards for iron and manganese apply to the sum of total iron and manganese.

(3) –“U” indicates that the parameter was not detected above the laboratory reporting limit.

(4)- **Bold** indicates standard exceeded.

Several other metals (total) were detected at concentrations above the laboratory reporting limit but below their respective NYWQS for Class GA groundwater. Barium, calcium, magnesium, and potassium were detected in samples from each of

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the wells; aluminum was detected in samples from T1-MW-01 and T1-MW-02; vanadium was detected in the sample from T1-MW-02; and zinc was detected in samples from T1-MW-02 and T1-MW-03.

3.1.2.5 Dissolved Metals Results

Three dissolved metals were detected at concentrations above their respective NYWQS for Class GA groundwater. Sodium and manganese were detected in samples collected at each of the wells above their respective NYWQS of 20mg/L and 0.3 mg/L (combined iron and manganese). Sodium was detected at concentrations of 42.7 mg/L, 60.2 mg/L, and 57.6 mg/L in samples collected at T1-MW-01, T1-MW-02, and T1-MW-03, respectively and manganese was detected in samples from the three wells at concentrations of 0.34 mg/L, 1.5 mg/L, and 0.84 mg/L, respectively. The sample collected at T1-MW-03 (0.020 mg/L) was above the NYWQS of 0.003 mg/L for antimony.

Several of the dissolved metals analyzed were detected at concentrations above the laboratory reporting limit but below their respective NYQWS. Barium, calcium, magnesium, potassium, and zinc were detected in samples collected at each of the monitoring wells.

3.2 SOIL CHARACTERIZATION RESULTS

On-site soils have been characterized through geological logs and the collection of analytical samples. The following section summarizes the results of the field investigations. Boring logs are included in **Appendix B**.

3.2.1 Soil Classification

Soils underlying the Site can be summarized as varying thicknesses of fill underlain by a native silty clay unit that grades into a till unit. More specifically, the fill can be described as a dark hue (brown, gray, and black), dry, loose, sand and silt with varying amounts of coal, cinders, ash, wood, concrete, brick, and slag. Fill thickness ranged from approximately eight feet in the southeastern portion of the Site to approximately one foot underlying portions of the former Power City Warehouse. An isopach map of fill thicknesses has been included as **Figure 7** and a cross section of subsurface soil has been included as **Figure 8**. To ensure the consistency of interpretation of the fill and native soil interface, the isopach fill thickness map was generated utilizing mainly data obtained during this Supplemental Remedial

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Investigation. However, select data obtained during the 2009 EA Site investigation was utilized to aid in defining the fill and native soil interface proximal to the location of the underground storage tanks discovered during installation of monitoring well T1-MW-02. Specifically, only data from EA borings SB-17 and SB-18 were considered.

3.2.2 Analytical Results

A total of 41 soil samples were collected during the field investigation events conducted in July through August 2012 and February 2013. Analytical results (detections only) are summarized on **Tables 2** through **4**; the full laboratory data reports are provided in **Appendix C**.

3.2.2.1 Surface Soil Samples

A total of 11 surface soil samples were collected during the investigation (**Data Gap 3**). Samples were collected from the borings identified as B-22 through B-26, B-38 and B-39; test pits B-35 and B-36; and monitoring wells T1-MW-02 and T1-MW-03. Surface soil samples collected from each of the locations except B-38 contained concentrations of compounds above their respective Commercial SCOs. The analytical results (detections only) are summarized on **Table 2**. **Figure 9** shows the compounds and concentrations that are above the SCOs at each location.

3.2.2.1.1 SVOC Results

Nine samples were analyzed for SVOCs. Eight of these samples contained SVOCs above the Commercial SCOs. The following table summarizes the compounds detected at concentrations above their respective Commercial SCOs in micrograms per kilogram ($\mu\text{g/Kg}$):

Compound	SCO	Locations Exceeded	Range (mg/Kg)
Benzo(a)anthracene	5,600	B-24, B-35, B-36, T1-MW-03	7,800 to 57,000
Benzo(a)pyrene	1,000	B-22 through B-25, B-35, B-36, T1-MW-01, T1-MW-02	1,100 to 59,000
Benzo(b)fluoranthene	5,600	B-24, B-35, B-36, T1-MW-03	12,000 to 84,000
Dibenzo(a,h)anthracene	560	B-24, B-35, B-36, T1-MW-03	680 to 3,300
Indeno(1,2,3-cd)pyrene	5,600	B-35, B-36, T1-MW-03	7,200 to 20,000

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Several SVOCs were detected at concentrations above the laboratory reporting limits but below their respective Commercial SCOs. The following table summarizes these SVOCs and the locations the samples were collected:

Compound	Locations Detected
2-Methylnaphthene	B-24, B-35, B-36, T1-MW-03
Acenaphthene	B-22 through B-25 B-35, B-36, T1-MW-03
Acenaphthylene	B-24, B-25, B-35, B-36, T1-MW-03
Anthracene	B-22 through B-25, B-35, B-36, T1-MW-03
Benzo(a)anthracene	B-22, B-23, B-25, T1-MW-02
Benzo(b)fluoranthene	B-22, B-23, B-25, T1-MW-02
Benzo(g,h,i)perylene	B-22 through B-25, B-35, B-36, T1-MW-02, T1-MW-03
Benzo(k)fluoranthene	B-22 through B-25, B-35, B-36, T1-MW-02, T1-MW-03
Biphenyl	B-35, B-36
Carbazole	B-24, B-25, B-35, B-36, T1-MW-03
Chrysene	B-22 through B-25, B-35, B-36, T1-MW-02, T1-MW-03
Dibenzo(a,h)anthracene	B-22, B-23, B-25
Dibenzofuran	B-24 B-35, B-36, T1-MW-03
Fluoranthene	B-22 through B-25, B-35, B-36, T1-MW-02, T1-MW-03
Fluorene	B-24, B-35, B-36, T1-MW-03
Indeno(1,2,3-cd)pyrene	B-22 through B-25, T1-MW-02
Napthalene	B-22, B-23, B-26, B-35, B-36, T1-MW-03
n-Nitrosodiphenylamine	B-22
Phenanthrene	B-22 through B-25, B-35, B-36, T1-MW-02, T1-MW-03
Pyrene	B-22 through B-25, B-35, B-36, T1-MW-02, T1-MW-03

The laboratory reported detections of several SVOCs in the sample collected at B-26; however, these compounds were also detected in the laboratory method blank. The data validation report indicated that these detections were invalid and assigned validation qualifiers to each of the compounds indicating that they were undetected in the sample. The following laboratory detected SVOCs in the sample from B-26 were indicated to be invalid according to the data validation report: 2-methylnaphthalene, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, carbazole, chrysene, dibenz(a,h)anthracene, dibenzofuran, di-n-octyl phthalate, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.

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3.2.2.1.2 Pesticide Results

The nine surface soil samples analyzed for pesticides were all below their respective Commercial SCOs. Several of the analyzed pesticide compounds were detected in these samples at concentrations above the laboratory reporting limit. The compound 4,4'-DDE was detected in samples collected at B-25, B-35, and B-36; 4,4'-DDT was detected in samples collected at B-22 through B-26, B-35, B-36, T1-MW-02, and T1-MW-03; endrin aldehyde was detected in the sample collected at B-36; and methoxychlor was detected in the samples collected at B-25 and T1-MW-03.

3.2.2.1.3 PCB Results

The nine surface soil samples analyzed for PCBs were all below their respective Commercial SCOs. Two of the analyzed PCB compounds were detected in these samples at concentrations above the laboratory reporting limit. PCB-1254 was detected in samples collected at B-25 and B-26 and PCB-1260 was detected in samples collected at B-26, T1-MW-02, and T1-MW-03.

3.2.2.1.4 Total Metals

Eight out of the nine samples analyzed for total metals contained at least one metal above its Commercial SCO; in addition, one of the two samples analyzed for just total lead contained concentrations above the Commercial SCO. The following table summarizes the compounds detected at concentrations above their respective Commercial SCOs in milligrams per kilogram (mg/Kg):

Compound	SCO	Locations Exceeded	Range (mg/Kg)
Arsenic	16	B-22, B-26, B-35, B-36, T1-MW-03	19.7 to 128
Barium	400	B-25, T1-MW-03	419 to 744
Copper	270	B-22, T1-MW-02, T1-MW-03	350 to 634
Lead	1,000	B-22, B-23, B-26, B-35, B-36, B-39, T1-MW-02, T1-MW-03	1,060 to 11,600

Several metals were detected at concentrations above the laboratory reporting limit but below their respective Commercial SCOs. The following table summarizes these metals and the locations the samples were collected:

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Compound	Locations Detected
Aluminum	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Antimony	B-22, B-23, B-35, B-36, T1-MW-02, T1-MW-03
Arsenic	B-23, B-24, B-25, T1-MW-02
Barium	B-22, B-23, B-24, B-26, B-35, B-36, T1-MW-02
Beryllium	B-22, B-24, B-25, B-26, B-35, B-36, T1-MW-03
Cadmium	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Calcium	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Chromium	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Cobalt	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Copper	B-23 through B-26, B-35, B-36
Iron	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Lead	B-24, B-25, B-38
Magnesium	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Manganese	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Mercury	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Nickel	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Potassium	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Silver	B-22, B-23, T1-MW-02, T1-MW-03
Sodium	B-24, B-25, B-26, T1-MW-03
Vanadium	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03
Zinc	B-22 through B-26, B-35, B-36, T1-MW-02, T1-MW-03

3.2.2.1.5 TCLP Lead

Samples containing lead concentrations above 1,000 mg/Kg were also analyzed for TCLP lead to further characterize the material as hazardous or non-hazardous. As can be seen on the initial summary table in Section 3.2.2.1.4, eight of the surface soil samples collected contained total lead concentrations above 1,000 mg/Kg (Commercial SCO); seven of these samples were then analyzed for TCLP lead. TCLP lead was not analyzed for the surface soil sample collected at T1-MW-03 (total lead concentration of 11,600 mg/kg); however, this sample will be treated as if it is above the 5 mg/L TCLP standard.

Five of the seven samples analyzed for TCLP lead were above the standard of 5.0 mg/L. These samples were collected at B-22, B-23, B-35, B-36, and T1-MW-02 and contained concentrations reported at 300 mg/L, 69.1 mg/L, 8.5 mg/L, 20.4 mg/L, and 62.4 mg/L, respectively.

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3.2.2.2 Subslab Soil Samples

Nine subslab soil samples were collected during the supplemental investigation and analyzed for total lead (**Data Gap 4**). Samples were collected from the borings identified as B-27 through B-34 and T1-MW-01. Lead was detected in each of the samples collected; with two of the samples above the commercial SCO of 1,000 mg/Kg. The samples collected at B-27 and B-33 contained concentrations of 3,570 J mg/kg and 25,000 mg/kg, respectively. The sample collected at B-27 was also analyzed for TCLP lead with a result of 1.3 J mg/L. The sample collected at B-33 was not analyzed for TCLP lead; however, this sample will be treated as if it is above the 5 mg/L TCLP standard.

The sample collected at T1-MW-01 was also analyzed for VOCs, SVOCs, PCBs, pesticides, and metals. All parameters were below their respective Commercial SCOs. Concentrations of Aroclor 1260 (PCB-1260), aluminum, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, magnesium, manganese, mercury, nickel, potassium, sodium, vanadium, and zinc were detected in the sample.

The analytical results (detections only) are summarized on **Table 3**; results above the Commercial SCO are shown on **Figure 9**.

The laboratory reported detections of several SVOCs in the sample collected at T1-MW-01; however, these compounds were also detected in the laboratory method blank. The data validation report indicated that these detections were invalid and assigned validation qualifiers to each of the compounds indicating that they were undetected in the sample. The following laboratory detected SVOCs in the sample from T1-MW-01 were indicated to be invalid according to the data validation report: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.

3.2.2.3 Subsurface Soil Samples

Twenty one subsurface soil samples (depths greater than 0.5 ft-bgs) were collected during the supplemental investigation. Lead was detected in each of the 16 subsurface samples collected in the bottom six inches of fill material (B-22 through 26, B-28, through B-30, B-32, B-33, B-35, B-36, B-38, B-39, T1-MW-02, and T1-MW-

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03); samples collected at B-22, B-23, B-36, T1-MW-02 and T1-MW-03 were above the commercial SCO with concentrations of 6,710 mg/Kg, 1,450 mg/Kg, 6,490 mg/Kg, 4,570 mg/Kg, and 1,340 mg/Kg, respectively. Concentrations above the TCLP lead standard of 5 mg/L were present in the northeastern portion of the Site at B-22 (50.2 mg/L) and B-23 (13.1 mg/L). The sample collected from 1.5 to 2.0 ft-bgs at T1-MW-03 with a total lead concentration of 1,340 mg/Kg was not analyzed for TCLP lead; however, this sample will be treated as if it is above the TCLP standard based on a previous TCLP sample result obtained near T1-MW-03. Analytical results (detections only) are summarized on **Table 4** and detections above the SCO and TCLP standard are shown on **Figure 10**.

Six samples analyzed for VOCs were all below their respective Commercial SCOs. Several VOCs were detected in the samples. The following table summarizes detected VOCs in the subsurface samples:

Compound	Locations Detected
Acetone	B-22 (6.5-7.0), B-22 (9.5-10.0), T1-MW-01 (4.5-5.0), T1-MW-01 (8.5-9.0)
Cyclohexane	B-22 (9.5-10.0), T1-MW-01 (4.5-5.0), T1-MW-01 (8.5-9.0)
Isopropylbenzene	T1-MW-01 (4.5-5.0), T1-MW-01 (8.5-9.0)
MEK	B-22 (6.5-7.0), B-22 (9.5-10.0), T1-MW-01 (4.5-5.0), T1-MW-01 (8.5-9.0)
MIBK	B-22 (6.5-7.0), T1-MW-01 (8.5-9.0)
Methylcyclohexane	B-22 (6.5-7.0), B-22 (9.5-10.0), T1-MW-01 (4.5-5.0), T1-MW-01 (8.5-9.0)
Tetrachloroethene	B-22 (6.5-7.0), B-23 (2-4), T1-MW-01 (8.5-9.0)
Toluene	B-22 (6.5-7.0), T1-MW-01 (4.5-5.0)
Xylene	T1-MW-01 (4.5-5.0)

3.3 BRICK BEDDING MATERIAL SAMPLES

Seven brick bedding samples were collected during the supplemental investigation (**Data Gap 5**). Samples from two of these locations, BB-1 and BB-6, were initially placed on hold and ultimately not analyzed based on the analytical results reported below. Two of the samples analyzed contained detections above their respective Commercial SCOs. PCB-1254 was detected in the samples collected at BB-4 and BB-7 at laboratory estimated (J) concentrations of 1.7 J mg/Kg, and PCB-1260 was detected in the sample collected at BB-4 at a concentration of 1.3 J mg/Kg. Lead was detected in the sample and duplicate sample collected at BB-4 at concentrations of 4,090 J mg/Kg and 1,950 J mg/Kg, respectively. In addition, TCLP lead was

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analyzed for both the sample and duplicate sample collected at BB-4; analytical results yielded concentrations of 116 J mg/L and 47.0 J mg/L, respectively.

Several SVOCs and metals were detected in the samples at concentrations below their respective commercial SCOs. The following table summarizes the compounds detected at concentrations less than their respective Commercial SCO at each sample location.

Compound	Locations Detected
Acetone	BB-2, BB-2 (Duplicate), BB-3 (Duplicate Only), BB-4, BB-4 (Duplicate), BB-5, BB-7
Carbon Disulfide	BB-5
Toluene	BB-2, BB-2 (Duplicate), BB-3, BB-3 (Duplicate), BB-5, BB-7
Xylene(Total)	BB-3
Acenaphthene	BB-3
Anthracene	BB-3, BB-4, BB-7
Benzo(a)anthracene	BB-3
Benzo(a)pyrene	BB-3, BB-4
Benzo(b)fluoranthene	BB-3, BB-4, BB-4 (Duplicate)
Benzo(g,h,i)perylene	BB-3
Benzo(k)fluoranthene	BB-3, BB-4
Carbazole	BB-3
Chrysene	BB-3
Dibenzofuran	BB-3
Fluoranthene	BB-2 (Duplicate Only), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Fluorene	BB-3, BB-4
Indeno(1,2,3-cd)pyrene	BB-3
Phenanthrene	BB-3, BB-4 (Duplicate Only), BB-5, BB-7
Pyrene	BB-2 (Duplicate Only), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Aluminum	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Arsenic	BB-2, BB-3, BB-4
Barium	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Cadmium	BB-3
Calcium	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Chromium	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Cobalt	BB-3
Copper	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Iron	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7

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Lead	BB-2, BB-2 (Duplicate), BB-3, BB-5, BB-7
Magnesium	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Manganese	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Mercury	BB-2 (Duplicate Only), BB-4, BB-4 (Duplicate)
Potassium	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Vanadium	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7
Zinc	BB-2, BB-2 (Duplicate), BB-3, BB-4, BB-4 (Duplicate), BB-5, BB-7

Analytical results for detections are summarized on **Table 5**; the laboratory report is provided in **Appendix C**. **Figure 11** shows the locations of the brick bedding material samples above their respective Commercial SCOs.

3.4 DATA VALADATION

Data from the samples have been validated in accordance with the Honeywell Remediation program Level II data validation procedures and the NYSDEC Data Usability Summary Report (DUSR) guidelines (NYSDEC, 2010). The Data Validation Summary Reports have been included in Appendix D. Any revisions to laboratory reported analytical data have been reflected in this report.

3.5 SURVEY

Each of the borings, test pits, and monitoring wells installed during the supplemental investigation were surveyed following completion; surveyed locations are shown on **Figure 4**.

4.0 SUMMARY OF SITE CONDITIONS

This section provides a summary of the observed conditions of Site environmental media. The summary considers the data collected in all of the previous investigations as well as those collected in the SRI to provide one comprehensive evaluation of the known current Site conditions.

4.1 GROUNDWATER

Three groundwater samples were collected onsite (**Data Gap 2**); one from each temporary monitoring well. A summary of the analytical results detected above the reference NYWQS is provided on **Figure 6A**. As can be seen on the figure, samples collected at each of the wells were above the respective NYWQS values for total sodium, combined total iron and total manganese, dissolved sodium, and dissolved manganese. Samples collected at T1-MW-02 and T1-MW-03 were above the respective NYWQS values for total lead. The sample collected at T1-MW-01 contained concentrations of endrin and gamma chlordane above their respective NYWQS values, and the sample collected at T1-MW-03 contained concentrations of TCE, beta hexachlorocyclohexane, and total antimony above their respective NYWQS values.

It should be noted that groundwater on and in the vicinity of the Site is not a source of potable water, nor is it likely to become one in the future. No significant groundwater aquifer exists in the overburden soil and fill above the bedrock, and a public drinking water supply system is available throughout the area (NYSDEC, 2003). In addition, a local ordinance is in place that prohibits the use of groundwater by the installation or use of water supply wells in the City.

4.2 SOIL

On-site soil has been characterized through the collection of surface (defined as 0 to 0.5 ft-bgs), subslab (defined as the 0 to 0.5 foot interval beneath a concrete slab), and subsurface (defined as an interval greater than 0.5 ft-bgs) samples. The following section provides a summary of the on-site soil characterization activities.

4.2.1 Building Exterior Surface Soil

Twenty seven surface soil samples were collected from the Site (**Data Gap 3**). In addition, 10 shallow surface/subsurface soil samples were collected from the 0 to 2 ft-bgs interval. Due to the overlap of this sample interval with the surface soil

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interval, these samples have also been included in this section of discussion. A summary of these samples, and the analyses conducted, is provided in the following table:

Company	Collection Date	Number of Samples	Sample Location	Analysis
E&E	1999	5	Surface	Two samples for SVOCs; Four samples for lead; and Three samples for Pesticides/PCBs
EA	2008	10	Surface/ Subsurface	Metals
Amec	2011	11	Surface	Metals (antimony, lead, tin) and TCLP lead
	2012	11	Surface	Nine samples for SVOCs, pesticides/PCBs, and total metals; Two samples for total lead only; and 11 samples for TCLP lead

A summary of the compounds detected above their respective Commercial SCOs and TCLP Standards is provided on **Figure 12**. The following compounds were found above their respective standards in one or more samples:

- Metals: arsenic, barium, copper, lead;
- TCLP lead;
- PAHs: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene); and
- PCBs: Aroclor 1254.

Metals. Lead concentrations were above the Commercial SCO of 1,000 mg/Kg in several soil samples collected around the building exterior except in the southwestern portion of the Site. A more detailed discussion of the lead results is provided in the following bullets:

- Surface soil samples collected in the eastern portion of the Site (east of B-16) contained concentrations of lead ranging from 1,210 mg/Kg (B-14) to 11,300 mg/Kg (SS-PCW-04). Elevated lead concentrations were observed in samples

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collected from outside the southeastern corner of the former Power City Warehouse (samples SS-PCW-04 [11,300 mg/Kg] and T1-MW-02 [10,100 mg/Kg]. Elevated concentrations of lead were also present in the northeastern corner of the Site in samples B-10, B-11, B-23, and SS-PCW-11 (7,940 mg/Kg, 6,430 mg/Kg, 9,340 mg/Kg, and 8,240 mg/Kg, respectively.)

- The southern portion of the Site (south of the former Power City Warehouse and north of the Tract II Site) contained concentrations of lead ranging from 1,230 mg/Kg (B-16) to 16,900 mg/Kg (B-18).
- West of the warehouse building, surface soil samples from B-19, B-20, and B-39 contained concentrations of lead at 1,730 mg/Kg, 2,630 mg/Kg, and 1,060 mg/Kg, respectively.

Lead above the TCLP standard was identified in samples collected from borings B-10 (18.4 mg/L), B-11 (46.5 mg/L), B-22 (300 mg/L), and B-23 (69.1 mg/L) in the northeastern portion of the Site, T1-MW-02 (62.4 mg/L) at the southeast corner of the building, and from borings B-17 (21 mg/L) and B-18 (69.7 mg/L) and test pits B-35 (8.5 mg/L) and B-36 (20.4 mg/L) located in the southern portion of the Site.

Arsenic and copper were only detected above their respective Commercial SCOs at locations containing lead above the 1,000 mg/Kg SCO. Concentrations of arsenic above the SCO ranged from 19.7 mg/Kg at B-35 to 128 mg/Kg at T1-MW-03. Concentrations of copper above its SCO ranged from 350 mg/Kg at B-22 to 634 mg/Kg at T1-MW-02. Barium was present in concentrations above its SCO in samples collected from T1-MW-03 (744 mg/Kg) and B-25 (419 mg/Kg).

PAHs. Samples containing concentrations of PAHs above their respective Commercial SCOs were collected throughout all areas of the building exterior surface soil aside from the western portion of the Site. More specifically, the distribution of PAH concentrations above their respective Commercial SCOs is summarized in the following table:

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Location	Exceeding Parameter	Concentration Range (mg/Kg)
Eastern Portion	Benzo(a)pyrene	1.1 to 8.2
	Benzo(a)anthracene	6.5 to 9.9
	Benzo(b)fluoranthene	6.3 to 12
	Dibenzo(a,h)anthracene	0.82 J to 1.1 J
Southern Portion	Benzo(a)pyrene	10 to 59
	Benzo(a)anthracene	7.8 to 57
	Benzo(b)fluoranthene	16 to 84
	Dibenzo(a,h)anthracene	0.680 J to 3.3 J
	Indeno(1,2,3-cd)pyrene	7.2 to 20
Western Portion	None	Not Applicable

Most of the elevated PAH detections were in samples collected from the southern portion of the Site. Benzo(a)pyrene was the most frequently detected PAH above its respective Commercial SCO; none of the other compounds were detected above their respective Commercial SCO independently of benzo(a)pyrene.

PCBs. Only one sample analyzed for PCBs contained a concentration above its respective Commercial SCO. Aroclor-1260 was detected above the Commercial SCO in the sample collected from SS-PCW-11.

Pesticides. The samples analyzed for pesticides were all below their respective Commercial SCOs.

4.2.2 Subslab Soil

Nine subslab soil samples (defined as the 0 to 0.5 ft interval directly beneath the concrete slab) and two composite samples were collected underlying the former Power City Warehouse concrete slab (**Data Gap 4**). In addition, 13 shallow subsurface samples were collected from the 0 to 2 ft-bgs interval underlying the concrete slab. Due to overlap of this sample interval with the subslab sample interval, these 13 samples have also been included in this section of discussion. A summary of these samples and analyses conducted is provided in the following table:

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Company	Collection Date	# of Samples	Sample Location	Analysis
E&E	2000	2	Subslab-Composite	SS-PCW-07: TAL Total Lead
				SS-PCW-09: TAL Total Lead, TCL BNAs, and PCBs
EA	2008	13	Subslab/Subsurface	Total Metals
Amec	2012	1	Subslab	VOCs, PAHs, Pesticides, PCBs, Total Metals
	2013	8	Subslab	Total Lead and TCLP Lead

A summary of the analytical results detected above respective Commercial SCO and TCLP Standards is provided on **Figure 12**. The following parameters were found to be above their respective standards:

- Metals: Chromium, Lead;
- TCLP Lead;
- PAHs: Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, and Dibenzo(a,h)anthracene; and
- PCB: Aroclor-1254

As can be seen on **Figure 12**, lead was detected above its respective Commercial SCO in samples collected underlying the northern portion of the concrete slab, more specifically, in samples from borings B-27 (3,570 J mg/Kg), B-33 (25,000 mg/Kg), SB-08 (9,410 J mg/Kg) and SB-12 (1,160 mg/Kg). Lead was also detected above its respective Commercial SCO in composite samples collected underlying the western portion of the concrete slab, more specifically, in samples from SS-PCW-07 (178,000 mg/Kg) and SS-PCW-09 (31,800 mg/kg). Chromium was only detected in the sample collected from SB-11 (2,060 J mg/Kg).

The sample collected at B-33 and composite samples collected at SS-PCW-07 and SS-PCW-09 were not analyzed for TCLP lead; however, these samples are assumed to be above the 5 mg/L TCLP standard due to the elevated concentrations of total lead. All of the other subslab samples analyzed for TCLP lead yielded concentrations below the standard.

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PAHs were only detected at concentrations above their respective Commercial SCOs in the composite sample collected at SS-PCW-09. Benzo(a)anthracene (29 mg/kg), Benzo(b)fluoranthene (35 J mg/kg), Benzo(a)pyrene (31 J mg/kg), Indeno(1,2,3-cd)pyrene (7.5 J mg/kg), and Dibenzo(a,h)anthracene (2.7 J mg/kg) were detected at concentrations above their respective Commercial SCOs.

Only one PCB sample contained a concentration above its respective Commercial SCO. PCB Aroclor-1254 was detected at a concentration of 17 mg/kg at composite sample SS-PCW-09.

All of the analyzed VOCs and additional metals were below their respective Commercial SCOs in subsurface samples.

It must be noted that the composite sample denoted as SS-PCW-09 contained aliquots from three locations, one of which was not surface soil (aliquot 9b). This aliquot was collected from debris contained in a 2-inch floor drain. It is not the intent of this Supplemental Remedial Investigation to characterize the extent of debris containing concentrations above Commercial SCOs; however, two of the aliquots were collected from surface soils underneath the concrete slab. To remain conservative in the approach to sufficiently characterize the extent of surface soils containing concentrations above Commercial SCOs, all aliquot locations of SS-PCW-09 have been considered and included in this investigation.

4.2.3 Subsurface Soils

Thirty subsurface soil samples (defined as collected from greater than 0.5 ft-bgs) were collected on-site. The 23 shallow subsurface soils (0 to 2 ft-bgs) have already been discussed in previous sections and will thus be omitted from this section. A summary of subsurface samples and analyses conducted is provided in the following table:

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Company	Collection Date	# of Samples	Subsurface Sample Location	Analysis
EA	2008	5	In Building Footprint	VOCs and SVOCs
		4	Outside Building Footprint	VOCs and SVOCs
Amec	2012	2	In Building Footprint	VOCs
		14	Outside Building Footprint	VOCs and Total Lead
	2013	5	In Building Footprint	Total Lead

A summary of the analytical results detected above respective Commercial SCOs and TCLP Standards is provided on **Figure 13**. The following parameters were found to exceed their respective standards:

- Lead
- TCLP Lead

As can be seen on **Figure 13**, samples containing elevated lead concentrations were collected in the southern and northeastern portions of the Site and along the southeastern corner of the former Power City Warehouse. In addition, samples collected from the northeastern portion of the Site also contained elevated TCLP lead concentrations. Elevated lead concentrations in the southern portion of the Site and along the southeastern corner of the building were detected in samples from depths of 1.5 to 2.0 ft-bgs and 1.0-1.5 ft-bgs, respectively. The maximum concentration detected in each area was 6,490 mg/Kg (B-36) and 4,570 mg/Kg (T1-MW-02). Concentrations of lead above the Commercial SCO as well as the TCLP standard were present in the northeastern portion of the Site at depths of 5.5 to 6.0 ft-bgs and 6.5 to 7.0 ft-bgs at a maximum lead concentration of 6,710 mg/Kg (B-22) and a maximum TCLP lead concentration of 50.2 mg/L (B-22). The sample collected from 1.5 to 2.0 ft-bgs at T1-MW-03 with a total lead concentration of 1,340 mg/Kg was not analyzed for TCLP lead; however, this sample will be treated as if it is above the TCLP standard based on the adjacent surface soil TCLP result from B-18.

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All of the analyzed VOCs or SVOCs were below their respective Commercial SCO in subsurface soil samples.

4.3 BRICK BEDDING MATERIAL

As shown on **Figure 11**, a total of seven brick bedding material locations were sampled during the supplemental investigation (**Data Gap 5**). Two of the locations, BB-1 and BB-6, were initially placed on hold and ultimately not analyzed. Two of the analyzed samples contained detections above the Commercial SCOs. Aroclor 1254 was detected in the samples collected at both BB-4 and BB-7 at a concentration of 1.7 J mg/Kg and Aroclor 1260 was detected in the sample collected at BB-4 at a concentration of 1.3 J mg/Kg. Lead was detected in the sample and the duplicate sample collected at BB-4 at concentrations of 4,090 J mg/Kg and 1,950 J mg/Kg, respectively; TCLP lead concentrations were reported at 116 J mg/L and 47.0 J mg/L, respectively.

5.0 REVISED QUALITATIVE EXPOSURE ASSESSMENT

An initial qualitative exposure assessment was provided in the 2012 CRIR. This assessment has been revised based on additional data obtained during this supplemental remedial investigation including groundwater data. In addition, the debris contained in the former Power City Warehouse has been removed from the Site; as such, associated samples have been excluded from this assessment.

This section generally follows the guidelines presented in NYSDEC *DER-10 Technical Guidance for Site Investigation and Remediation* (NYSDEC, May 2010) to conduct a qualitative human health exposure assessment (HHEA). This assessment is being conducted to consider potential exposure to Site-related constituents of potential concern (COPCs) by human receptors and is limited to the data presented in this report.

For the purposes of this assessment, constituents detected above Commercial SCOs in Site media are defined as COPCs. This is based upon the City's Master Plan to develop the Site for commercial use, even though the previous/current use of the Site is industrial. Investigations have identified COPCs in Site media at concentrations above Commercial SCOs (**Figures 6, 11, 12 and 13**). The main COPCs identified in groundwater at this Site include:

- **Total Metals, including:**
 - o Antimony;
 - o Combined Iron and Manganese;
 - o Lead; and
 - o Sodium.
- **Dissolved Metals, including:**
 - o Manganese; and
 - o Sodium.
- **Pesticides, including:**
 - o Beta Hexachlorocyclohexane;
 - o Endrin; and
 - o Gamma Chlordane.

REVISED QUALITATIVE EXPOSURE ASSESSMENT

- **VOCs, including:**
 - o TCE.

The main COPCs identified in soil and/or brick bedding material at this Site include:

- **Metals, including:**
 - o Arsenic;
 - o Barium;
 - o Chromium;
 - o Copper; and
 - o Lead.
- **PAHs, including:**
 - o Benzo(a)anthracene;
 - o Benzo(a)pyrene;
 - o Benzo(b)fluoranthene;
 - o Dibenzo(a,h)anthracene; and
 - o Indeno(1,2,3-cd)pyrene.
- **PCBs, including:**
 - o Aroclor 1254; and
 - o Aroclor 1260.

Human exposure to COPCs can occur via several possible routes, including ingestion, dermal contact, and inhalation. Exposure assessment is the process of describing, measuring, or estimating the intensity, frequency, and duration of potential human exposure to COPCs in environmental media (e.g., soil, air) at a site. This section discusses the mechanisms by which people (receptors) might come in contact with COPCs. The assessment includes the following:

- Description of the exposure setting;
- Identification of potential receptors;
- Identification of release mechanisms; and
- Identification of potential sources and exposure pathways.

A conceptual site model (CSM) was developed based on the history, conditions, analytical results, and the anticipated future commercial use scenario of the Site.

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The CSM identifies the relationship among sources, release mechanisms, exposure media, exposure routes, and potential receptors. **Figure 14** depicts the CSM for the Site.

5.1 EXPOSURE SETTING

Potential exposure to COPCs at a site depends on a number of factors related to the physical characteristics of a site and its surroundings. These factors include location, surrounding land use, surface topography, hydrogeology, meteorology, and vegetation. They also include factors related to the current and anticipated future use(s) of the property. These factors determine the types of activities that might occur at the Site, the degree to which the Site is accessible to the general public, and the mechanisms that might result in migration of COPCs to on-Site and off-Site populations.

5.1.1 Physical Setting and Land Use

The Site is located in a multi-use area comprised of industrial, commercial, and residential properties. Properties immediately surrounding the Site include an industrial facility to the north, the former industrial Tract II property to the east and south, and Highland Avenue to the west. Beyond these properties to the north are mainly industrial facilities and to the east, south, and west are mainly residential properties with some commercial areas to the west. Additionally, schools are present west of the Site beyond Highland Avenue and east-southeast of the Site past the Tract II property.

The Site consists of approximately 5.9-acres of relatively level land; the majority of which is covered by the footprint of the former Power City Warehouse building. The building is currently in the process of being demolished and recent activities at the Site have removed all wooded and grassy areas. The western portion of the Site consists of an open, former grassy area and a gravel drive to the loading dock area. The southern boundary of the Site consists of an open, former wooded area along with a segment of a retaining wall, and the eastern portion of the Site consists of an open, former grassy area intermixed with broken asphalt and sections of concrete pavement. It is estimated that once the warehouse building is demolished, the Site will consist of approximately less than 30 percent concrete surface and approximately 70 percent open, unvegetated areas. Access to the Site is currently restricted by a chain link fence that surrounds the majority of the property.

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The planned future use of the Site is commercial. Currently, the City's Master Plan is to redevelop the Site to include commercial facilities and an adult educational incubator, which would also be consistent with a commercial use scenario.

In addition to land use, water use also contributes to the degree of potential exposure to COPCs at a site. Groundwater at the Site is located approximately 4.0 to 5.5 ft-bgs during the dry season (August 2012) and approximately 1.0 to 5.0 ft-bgs during the wet season (April 2013). A general flow toward the southwest is present, toward the Niagara River.

The NYSDEC concluded (in the Tract II Site Characterization Reports and the 2003 ROD) that groundwater in the vicinity of the Site is not a source of potable water, nor is it likely to become one in the future due to: 1) the small amount of water available in the overburden soils or fill above the bedrock, and 2) the fact that a public drinking water supply system is available throughout the area. In addition, a local ordinance prohibits the use of groundwater by the installation or use of water supply wells in the City. Based on this information and the assumed depth to groundwater at the Site, exposure pathways to potential COPCs in groundwater are not considered to be potentially complete.

5.2 CHARACTERIZATION OF POTENTIAL RECEPTORS

The identification of potential human receptors is based on the characteristics of the Site, the surrounding land uses, and the anticipated future land use.

5.2.1 Current On-Site Receptors

Active demolition is currently being performed at the Site; as such, workers and construction workers are currently onsite full time and are considered receptors. Access to the Site is restricted by a fence that surrounds the property and by a Site security guard that is present during non-working hours of active demolition and will continue through remediation of the Site. It is possible that an adult or adolescent trespasser could access the Site; thus, this population is considered a potential receptor. However, since access to the Site is restricted by a maintained chain link fence and through Site security, the frequency of exposure to the potential trespasser scenario is considered to be minimal.

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5.2.2 Future On-Site Receptors

As indicated previously, the planned future use of the Site will include commercial facilities and an adult educational incubator, which would also be consistent with a commercial use scenario. The post-redevelopment occupants on the Site would be considered potential receptors.

Under the anticipated future commercial use scenario, the need to perform subsurface maintenance and/or construction activities at the Site is possible. Although this work would be completed following a Site Management Plan (SMP) to mitigate potential risks, the future construction worker and/or on-Site site worker involved with subsurface disturbance or excavation activities is considered a potential receptor.

5.3 IDENTIFICATION OF POTENTIAL EXPOSURE PATHWAYS

This section identifies the potential pathways by which the receptors described above could be exposed to COPCs potentially at the Site. An exposure pathway is the mechanism by which an individual may come into contact with COPCs in the environment. An exposure pathway is defined by four elements:

1. A source and mechanism of COPC release to the environment;
2. An environmental receiving or transport medium (e.g., air, soil) for the released COPC;
3. A point of potential contact with the medium of concern; and
4. An exposure route (e.g., ingestion) at the contact point.

An exposure pathway is considered "complete" only if all four elements are present. A discussion of the potential exposure pathways is presented below.

5.3.1 Sources, Mechanisms of Releases, and Mechanisms of Transport

COPCs at the Site are likely derived from historical operations. COPCs could have been released to soil through spills or operational practices during these operations.

Metals. Investigations have identified metals as COPCs in groundwater, surface soil and subsurface soil samples, and brick bedding material samples. In general, most inorganic constituents (metals) have a tendency to bind to soil and the primary transport mechanisms for these constituents tend to be dispersion of particulates in

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air upon disturbance of soil, and migration through erosion/runoff during storm events.

PAHs. PAHs have also been identified as COPCs in surface soils at the Site. PAHs are considered to be one of the more widespread organic pollutants and are known to be present in organized areas through various anthropogenic activities.

The PAHs identified as COPCs at the Site consist of the heavier molecular weight PAHs that contain four or more rings in their structure and PAHs that have three rings. PAHs with four or more rings are considered to have very low water solubility, are strongly sorbed to soils, and do not tend to move in soil from their point of release. Three-ring PAHs are slightly more mobile, but still resist movement in soil (WVDEP 1999). Both the four-ring and three-ring PAHs would be expected to have the greatest potential to migrate by mechanical means in the soil medium through dispersion of particulates in air upon disturbance of the soil, and by erosion/runoff during storm events.

PCBs. PCBs (Aroclor 1254 and Aroclor 1260) have also been identified as COPCs in brick bedding material samples and in soils at the Site. According to the USEPA, PCBs have historically been used in numerous applications including; heat transfer, hydraulic and electrical equipment; as plasticizers in rubber products, paints and plastics; in dyes, pigments, and carbonless copy paper; as stabilizing additives in flexible PVC coatings of electrical wiring and electronic components; and in several additional industrial applications (“Polychlorinated Biphenyls [PCBs] - Basic Information”).

The heavier PCBs (i.e., Aroclor 1254 and 1260) are very stable compounds and do not decompose readily. These PCBs exhibit fairly low mobility in soils due to their tendency to be strongly sorbed to soils and relatively low solubility in aqueous solutions (Haasbeek, 1994). The primary transport mechanism for these constituents tends to be dispersion of particulates in air upon disturbance of soil, and migration through erosion/runoff during storm events.

Pesticides. The pesticides denoted as beta-BHC, endrin, and gamma chlordane have been identified as COPCs in groundwater.

VOCs. The VOC denoted as TCE has been identified as a COPC in groundwater.

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Fugitive Dust Generation - Non-volatile chemicals present in soil can be released to ambient air as a result of fugitive dust generation. It is estimated that once the warehouse building is demolished, the Site will consist of approximately 60-70 percent concrete surface and approximately 30-40 percent open, unvegetated areas. The concrete surface features would mitigate airborne suspension of surface soil particles resulting from either construction vehicles or pedestrian traffic; however, the percentage of open, unvegetated areas may result in fugitive dust generation. Fugitive dust is considered to be a source of exposure.

Vapor Phase Transport - Volatile chemicals are not present in Site soils at levels of concern; COPCs including PAHs and PCBs detected in Site soils have low volatility are not considered to represent a significant source of vapors to be released into ambient air. However, TCE was detected in onsite groundwater and is considered a COPC; groundwater at the Site exists in a relatively impermeable silty clay unit atop bedrock. As such, this migration pathway is not considered to represent a significant exposure pathway.

Erosion/Surface Water Runoff - COPCs present in shallow Site soils can be eroded and be transported off-site as a result of surface water runoff. Due to the removal of vegetated areas, COPCs may be transported off site following significant rain events via storm water runoff or snow melt. However, the presence of concrete at the Site should minimize the erosion of the ground surface and should mitigate migration of COPCs from erosion.

Leaching (percolation) - COPCs present in shallow soil at the Site could migrate downward to groundwater with infiltrating precipitation. Since open, unvegetated areas are present at the Site, infiltration of rain water and snow melt is possible. However, COPCs at the Site tend to bind to soil, so the transport mechanism is not considered a significant pathway for potential COPC transport at the Site.

Groundwater Transport - Constituents in groundwater could migrate in the direction of groundwater flow and be affected by the chemical properties of the water-bearing matrix (i.e., dissolved oxygen, reduction potential, and organic content). As described above, several COPCs exist in onsite groundwater; as such, transport of COPCs in groundwater may occur.

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5.3.2 Exposure Media and Routes

Based upon the known or potential presence of COPCs in Site media and the potential migration pathways discussed above, Site receptors could potentially contact COPCs in the following environmental media:

- Surface Soil
- Soils down to 10 ft-bgs (practical subsurface depth interval for utility/construction excavations)
- Ambient air in an excavation
- Groundwater in an excavation

Potential exposure routes associated with these media would include: incidental ingestion, dermal contact, and inhalation of soil particulates.

5.3.3 Exposure Scenarios

Given the characteristics of the identified COPCs, and the relevant release processes, the potential exposure pathways for the current and anticipated future land use of the Site (exposure scenarios) are described below.

As discussed above, active demolition is currently being performed at the Site; as such, workers and construction workers are currently onsite full time and are considered receptors. Although the frequency of exposure is considered to be minimal, the Site trespasser (pre-remediation) is also considered a current potential receptor.

5.3.3.1 On-Site Workers

In the absence of remedial action, on-site workers may potentially be exposed to COPCs in surface soil. Potential exposure routes include incidental ingestion, dermal contact, and inhalation of particulates (**Figure 14**).

5.3.3.2 On-Site Construction Worker

On-Site construction workers involved with subsurface disturbance or excavation for repair activities of on-Site utilities may potentially be exposed to COPCs in surface and subsurface soil as well as groundwater. Potential exposure routes include incidental ingestion, dermal contact, and inhalation of soil particulates associated

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with the subsurface disturbance or excavation (**Figure 14**). Subsurface disturbance or excavation work would require proper methods to minimize worker exposure (i.e., such as those defined in a SMP).

5.3.3.3 Current (Pre-remediation) Trespasser

Current (pre-remediation) trespassers may potentially be exposed to COPCs in building debris and surface soil via incidental ingestion, dermal contact, and inhalation of particles if they engage in activities that disturb the ground surface. Concentrations of COPCs were detected in surface soil samples above Commercial SCOs. Therefore, a current (pre-remediation) trespasser could potentially be exposed via dermal contact, ingestion, or inhalation of particulates (**Figure 14**). However, since access to the Site is restricted by a maintained chain link fence and through security present at the Site, any exposure to surface soil or remaining building debris by a current trespasser is considered to be minimal.

5.4 POTENTIAL ECOLOGICAL IMPACTS

Based upon the investigations conducted at the Site, it does not appear that a Fish and Wildlife Impact Analysis (FWIA) is necessary. The Site is located in an urban area and is surrounded by industrial, commercial, and residential areas with minimal ecological habitat. COPCs have been identified in surface soil; however the potential for Site related COPCs to migrate to potential fish and wildlife resources is considered minimal. No surface water bodies are located in the immediate vicinity of the Site and Site groundwater does not have the ability to impact ecological receptors.

6.0 FINDINGS AND RECOMMENDATIONS

6.1 FINDINGS

A comprehensive review of the four investigations conducted at the Site yields the following findings:

6.1.1 *Building Debris*

Some of the debris located throughout the Power City Warehouse building has been found to be above the Commercial SCOs for several metals (arsenic, copper, lead, and mercury), several SVOCs (mainly PAHs), and PCBs (Aroclor 1254 and Aroclor 1260). Additionally, some TCLP metals samples collected in the eastern portion of the building were found to be above the TCLP standard for lead. The USEPA removal action performed in 2010 removed some of the debris and other hazardous material from the Power City Warehouse Building, but did not address the eastern portion of the building, due to safety concerns. Remaining debris in the eastern portion of the Power City Warehouse (**Data Gap 1**) was consolidated and appropriately sampled for disposal by OSC in late 2012. This material was shipped for offsite disposal or recycling via roll off boxes following waste characterization.

6.1.2 *Groundwater*

On-site groundwater characterization (**Data Gap 2**) has established quality and elevation data of the groundwater contained in the shallow overburden soil and fill above bedrock. Groundwater contained in the deeper, local aquifer has not been characterized during this SRI. Three groundwater samples (one from each of the temporary monitoring wells) were collected on-site. Elevated concentrations for total sodium, combined total iron and manganese, dissolved sodium, and dissolved manganese above the respective NYWQS values were observed in samples collected at each of the wells. In addition total lead samples collected at T1-MW-02 and T1-MW-03, were above the respective NYWQS values. The sample collected at T1-MW-01 contained concentrations of endrin and gamma chlordane above their respective NYWQS values and the sample collected at T1-MW-03 contained concentrations of TCE, beta hexachlorocyclohexane, and total antimony above their respective NYWQS values.

Groundwater elevations recorded at monitoring wells screened in the shallow overburden soil and fill suggest a general flow toward the southwest (toward the Tract II site) at an approximate gradient of 0.01 ft/ft; however, given the calculated

FINDINGS AND RECOMMENDATIONS

average hydraulic conductivity is 3.585×10^{-5} ft/sec, the water is likely perched at the top of bedrock.

6.1.3 *Surface Soil*

A total of 27 surface soil (0 to 0.5 ft-bgs) and 10 shallow subsurface soil (0 to 2 ft-bgs) samples have been collected at the Site; as discussed in previous sections, shallow subsurface samples (which were only analyzed for total metals) have been included in discussions with surface soil samples due to overlap of intervals. Sample results for several metals (arsenic, barium, copper, and lead), TCLP lead, several PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene); and PCB Aroclor 1254 were above their respective Commercial SCOs.

Concentrations of total lead were detected in surface soil and shallow subsurface samples throughout the entire Site aside from the southwestern corner above the applicable Commercial SCO. TCLP lead concentrations above the 5 mg/L standard were detected in samples collected in the northeastern and southern portions of the Site as well as at the southeastern corner of the former building. Arsenic and copper were only detected above their respective Commercial SCOs concurrently with elevated lead concentrations; these areas are confined to the southern portion of the Site, the southeastern corner of the former warehouse, and B-22. Barium was detected concurrently with each of the metals mentioned previously at T1-MW-03 above the Commercial SCO; however, it was also detected independently at B-25.

PAHs above the Commercial SCOs were only detected concurrently with elevated total lead concentrations. Surface soil samples containing elevated PAH concentrations were distributed throughout the eastern and southern portions of the Site; samples from the western portion (**Data Gap 3**) were all below their respective Commercial SCOs. Benzo(a)pyrene was the most frequently elevated PAH; none of the other compounds were detected above their respective Commercial SCO independent of benzo(a)pyrene.

Only one surface soil sample analyzed for PCBs contained concentrations above their respective Commercial SCOs; PCB Aroclor-1260 was detected in the sample collected at SS-PCW-11 (northeastern corner of Site) (**Data Gap 3**).

FINDINGS AND RECOMMENDATIONS

6.1.4 *Subslab Soil*

Nine subslab soil samples (0 to 0.5 ft interval directly underlying a concrete slab and associated bedding materials), two composite samples, and 13 shallow subsurface samples (0 to 2 ft-bgs) were collected underlying the former Power City Warehouse concrete slab; the shallow subsurface samples have been included in this discussion due to overlap of intervals. Elevated total lead and total chromium concentrations were detected in samples underlying the slab. Elevated total lead concentrations were detected in the area along the north-central and northeastern portion of the slab (B-27, SB-08, SB-12, B-33, SS-PCW-07, and aliquots 9b and 9c of SS-PCW-09) (**Data Gap 4**) as well as the south-central portion of the slab (aliquot 9a of SS-PCW-09). Chromium was only detected at a concentration above its respective Commercial SCO in the sample collected at SB-11.

All subslab lead samples that were analyzed for TCLP were below the TCLP standard. The sample collected at B-33 and composite samples SS-PCW-07 and SS-PCW-09 were not analyzed for TCLP lead; however, these samples will be treated as if the results are above the 5 mg/L TCLP standard due to the elevated concentrations of total lead (25,000 mg/Kg, 178,000 mg/Kg, and 31,800 mg/Kg, respectively).

PAHs and PCBs were only detected at concentrations above their respective Commercial SCOs in the composite sample collected at SS-PCW-09. Concentrations of benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene, and PCB Aroclor-1254 were detected at concentrations above their respective Commercial SCOs.

As stated within **Section 4.2.2**, one of the aliquots of composite sample SS-PCW-09 (aliquot 9b) contained debris from a 2-inch floor drain. It is not the intent of this Supplemental Remedial Investigation to characterize the extent of debris containing concentrations above Commercial SCOs; however, two of the aliquots were collected from surface soils underneath the concrete slab. To remain conservative in the approach to sufficiently characterize the extent of surface soils containing concentrations above Commercial SCOs, all aliquot locations of SS-PCW-09 have been considered and included in this investigation.

6.1.5 *Subsurface Soil*

Thirty subsurface soil samples were collected onsite. The 23 shallow subsurface soils (0 to 2 ft-bgs) have already been discussed in previous sections and will thus be

FINDINGS AND RECOMMENDATIONS

omitted from this section. Samples containing elevated lead concentrations were collected in the southern and northeastern portions of the Site and along the southeastern corner of the former Power City Warehouse. In addition, samples collected from the northeastern portion of the Site also contained elevated concentrations of TCLP lead. Lead concentrations above the Commercial SCO were detected in samples collected in the southern portion of the Site and at the southeastern corner of the former warehouse at depths of 1.5 to 2.0 ft-bgs and 1.0-1.5 ft-bgs, respectively. Elevated concentrations of lead as well as TCLP lead in the northeastern portion of the Site were detected at depths of 5.5 to 6.0 ft-bgs (B-23) and 6.5 to 7.0 ft-bgs (B-22). The sample collected from 1.5 to 2.0 ft-bgs at T1-MW-03 located on the southern portion of the Site was not analyzed for TCLP lead; however, will be treated as if it is above the TCLP standard.

6.1.6 Brick Bedding Material

A total of seven brick bedding material locations were sampled during the supplemental investigation (**Data Gap 5**); two of the locations, BB-1 and BB-6, were initially placed on hold and ultimately not analyzed based on proximal analytical results. Two of the analyzed sample locations displayed detections above the respective Commercial SCOs. PCB Aroclor 1254 was detected at concentrations above its respective Commercial SCOs in the samples collected at BB-4 and BB-7; PCB-1260 (Aroclor 1260) was detected at concentrations above its respective Commercial SCOs in the sample collected at BB-4. Lead was detected at elevated concentrations in the sample and the duplicate sample collected at BB-4; TCLP lead concentrations were also reported above its respective standard in the sample and duplicate sample collected at BB-4.

6.1.7 Qualitative Exposure Assessment

The qualitative HHEA, which was limited to the findings presented in this report, identified the potential for human exposure to COPCs in Site media (surface and subsurface soils, brick bedding material, and groundwater) through dermal contact, incidental ingestion, and inhalation of particulates. The potentially exposed current on-Site receptors include workers and construction workers as well as those that may trespass onto the Site; however since access to the Site is restricted by a maintained fence and by the presence of Site security, trespasser exposure is expected to be minimal.

Based on the investigations conducted, it does not appear that an FWIA is necessary. The Site is located in an urban area with minimal ecological habitat. The potential for Site related COPCs to migrate to potential fish and wildlife

FINDINGS AND RECOMMENDATIONS

resources is considered minimal and no surface water bodies are located in the immediate vicinity of the Site.

6.2 RECOMMENDATIONS

Based upon the findings presented in this report, it is recommended that an Addendum to the Interim Remedial Measures Work Plan (IRMWP) be developed to address Site media containing concentrations of analyzed compounds above their respective Commercial SCOs, most notably lead. The Addendum to the IRMWP should consider similar remedial actions to those proposed on the Tract II site in the Tract II Remedial Design Work Plan (Amec, August 2012). Aside from chromium at SB-11, four PAHs at B-24, and benzo(a)pyrene and barium at B-25, none of the other compounds detected above their respective Commercial SCOs were detected independently of elevated concentrations of lead in Site soils. As such, the IRMWP will pay particular attention to soils containing lead.

Although groundwater samples did yield results above their respective standards, the NYSDEC concluded (in the Tract II Site Characterization Reports and the 2003 ROD) that groundwater in the vicinity of the Site is not a source of potable water, nor is it likely to become one in the future due to: 1) the lack of a significant groundwater aquifer in overburden soils and fill above the bedrock and 2) the fact that a public drinking water supply system is available throughout the area. Furthermore, a local ordinance prohibits the use of groundwater as a potable water supply in the City. As such, no onsite groundwater remediation measures are recommended.

7.0 REFERENCES

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TABLES

Table 1
Groundwater Analytical Results: Detections Only
Tract I Supplemental Site Investigation

		Well ID	T1-MW-01		T1-MW-02				T1-MW-03	
		Sample ID	TI-MW01_08/09/12		TI-MW02_08/09/12		DUP_08/09/12		TI-MW03_08/09/12	
		Sample Date/Time	8/9/12 13:30		8/9/12 10:45		8/9/12 0:00		8/9/12 12:05	
Parameter	Units	NY Water Quality Standards Surface Waters and Groundwater - Class GA ⁽³⁾	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Volatile Organic Compounds										
Acetone	µg/L ⁽¹⁾		3.4	J ^(6,7)	40	U	40	U	50	U
Carbon disulfide	µg/L	60	0.51	J	4.0	U	4.0	U	5.0	U
Trichloroethene (TCE)	µg/L	5	1.0	U ⁽⁸⁾	4.0	U	4.0	U	8.7	
Semivolatile Organic Compounds										
2-Methylnaphthalene	µg/L		4.8	U	1.9	J	2.0	J	4.8	U
Acenaphthene	µg/L		4.8	U	0.42	J	0.47	J	4.8	U
Acetophenone	µg/L		4.8	U	1.8	J	4.7	U	4.8	U
Diethyl phthalate	µg/L		4.8	U	0.31	J	0.41	J	4.8	U
Di-n-butyl phthalate	µg/L	50	4.8	U	4.8	U	4.7	U	0.40	J
Fluorene	µg/L		4.8	U	0.55	J	0.55	J	4.8	U
Naphthalene	µg/L		4.8	U	1.3	J	1.5	J	4.8	U
Phenanthrene	µg/L		0.83	J	0.77	J	0.82	J	4.8	U
Pesticides										
4,4'-DDD (p,p'-DDD)	µg/L	0.3	0.047	U	0.047	U	0.047	U	0.18	
4,4'-DDE (p,p'-DDE)	µg/L	0.2	0.047	U	0.047	U	0.047	U	0.042	J
4,4'-DDT (p,p'-DDT)	µg/L	0.2	0.047	U	0.047	U	0.047	U	0.16	
beta-BHC (beta Hexachlorocyclohexane)	µg/L	0.04	0.047	U	0.047	U	0.047	U	0.20	
beta Endosulfan	µg/L		0.017	J	0.047	U	0.047	U	0.064	
Endrin	µg/L	Not Detectable	0.018	J ⁽⁹⁾	0.047	U	0.047	U	0.048	U
gamma-Chlordane	µg/L	0.05 ⁽⁴⁾	0.16		0.047	U	0.047	U	0.048	U
Heptachlor Epoxide	µg/L	0.03	0.047	U	0.047	U	0.047	U	0.020	J
Methoxychlor	µg/L	35	0.018	J	0.047	U	0.047	U	0.048	U
Total Metals										
Aluminum	mg/L ⁽²⁾		0.20		1.1		1.2		0.20	U
Antimony	mg/L	0.003	0.020	U	0.020	U	0.020	U	0.021	
Barium	mg/L	1.000	0.028		0.16		0.14		0.072	
Calcium	mg/L		147		249		254		114	
Iron	mg/L	0.3 ⁽⁵⁾	0.21		6.1		6.5		0.13	
Lead	mg/L	0.025	0.0050	U	0.033		0.033		0.027	
Magnesium	mg/L		123		144		126		87.6	
Manganese	mg/L	0.3 ⁽⁵⁾	0.34		1.5		1.4		0.91	
Potassium	mg/L		4.0		4.6		4.8		8.7	
Sodium	mg/L	20.000	42.0		58.5		60.9		58.8	
Vanadium	mg/L		0.0050	U	0.0053		0.0050		0.0050	U
Zinc	mg/L		0.010	U	0.044		0.042		0.012	
Dissolved Metals										
Antimony	mg/L	0.003	0.020	U	0.020	U	0.020	U	0.020	
Barium	mg/L	1.000	0.027		0.14		0.14		0.077	
Calcium	mg/L		149		241		239		110	
Magnesium	mg/L		126		142		139		82.1	
Manganese	mg/L	0.3 ⁽⁵⁾	0.34		1.5		1.4		0.84	
Potassium	mg/L		4.2		4.3		4.3		8.1	
Sodium	mg/L	20.000	42.7		60.2		60.7		57.6	
Zinc	mg/L		0.011		0.033	J	0.053		0.030	

Notes:

(1)-"µg/L" -micrograms per liter.

(2)-"mg/L"-milligrams per liter.

(3)-Standards taken from New York Water Quality Standards: Surface Waters and Groundwater (Table 1, cf. section 703.5); blank space indicates that no standard is listed for respective parameter.

(4)-Standard not listed for gamma-Chlordane; standard for Chlordane presented.

(5)-The sum of Iron and Manganese must be less than 0.5 mg/L; samples with exceeding sums shaded gray.

(6)-"J"-indicates that parameter was detected at a value less than laboratory reporting limit; as such, the concentration is estimated.

(7)-**Bold**-indicates laboratory detection.

(8)-"U" indicates that parameter was not detected above laboratory reporting limit.

(9)-Yellow Shading indicates that concentration exceeds Standard.

Table 2
Surface Soil Sample Results: Detections Only
Tract I Supplemental Site Investigation

	Boring Location		B-22		B-23		B-24		B-25		B-26		B-35		B-36		B-38		B-39		T1-MW-02		T1-MW-03			
			Sample ID		B-22 (0-0.5) 07/17/12		B-23 (0-0.5) 07/17/12		B-24 (0-0.5) 07/17/12		B-25 (0-0.5) 07/17/12		B-26 (0-0.5) 07/18/12		B-35 (0-5) 07/24/12		B-36 (0-5) 07/24/12		B-38 (0-0.5) 07/18/12		B-39 (0-0.5) 07/18/12		T1-MW-02 (0-5) 07/24/12		T1-MW-03 (0-0.5)	
			Sample Date		7/17/2012 11:00		7/17/2012 10:00		7/17/2012 13:00		7/17/2012 14:00		7/18/2012 13:45		7/24/2012 12:15		7/24/2012 13:45		7/18/2012 8:10		7/18/2012 7:45		7/24/2012 11:30		8/1/2012 10:30	
			Sample Depth (ft)		0.0-0.5		0.0-0.5		0.0-0.5		0.0-0.5		0.0-0.5		0.0-0.5		0.0-0.5		0.0-0.5		0.0-0.5		0.0-0.5		0.0-0.5	
Parameter	Units	Restricted Use Soil Cleanup Objectives - Commercial Standard ⁽⁴⁾		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier			
Semivolatile Organic Compounds																										
2-Methylnaphthalene	µg/Kg			1900	J ⁽¹²⁾	1800	U	77	J	3800	U	1800	U	1700	J	3000	J					3900	U	260	J	
Acenaphthene	µg/Kg	500,000	b	76	J ^(13,14)	57	J	180	J	140	J	1800	U	7800		7300						3900	U	480	J	
Acenaphthylene	µg/Kg	500,000	b	1900	U	1800	U	1200	J	3800	U	1800	U	4200	U	3700	J					3900	U	1200	J	
Anthracene	µg/Kg	500,000	b	250	J	190	J	2200	J	600	J	1800	U	13000		17000						3900	U	1700		
Benzo(a)anthracene	µg/Kg	5,600		1000	J	1000	J	9900		3200	J	1800	U	42000		57000						1500	J	7800		
Benzo(a)pyrene	µg/Kg	1,000	f ⁽⁶⁾	1200	J ⁽¹⁵⁾	1100	J	8200		3100	J	1900	U	46000		59000						2000	J	10000		
Benzo(b)fluoranthene	µg/Kg	5,600		2000		1300	J	12000		5100		3000	U	61000		84000						2800	J	16000		
Benzo(g,h,i)perylene	µg/Kg	500,000	b	760	J	410	J	2300		1000	J	1800	U	3400	J	16000						820	J	6700		
Benzo(k)fluoranthene	µg/Kg	56,000		850	J	690	J	5400		1600	J	1800	U	22000		29000						1200	J	5800		
Biphenyl (Diphenyl)	µg/Kg			1900	U	1800	U	1800	U	3800	U	1800	U	400	J	560	J					3900	U	1700	U	
Carbazole	µg/Kg			1900	U	1800	U	330	J	250	J	1800	U	8900		12000						3900	U	950	J	
Chrysene	µg/Kg	56,000		1400	J	980	J	9200		3400	J	2000	U	37000		56000						1800	J	9300		
Dibenzo(a,h)anthracene	µg/Kg	560		280	J	140	J	1100	J	420	J	1800	U	3300	J	2400	J					3900	U	680	J	
Dibenzofuran	µg/Kg	350,000		1900	U	1800	U	210	J	3800	U	1800	U	3600	J	4000	J					3900	U	280	J	
Fluoranthene	µg/Kg	500,000	b	1900	J	1700	J	16000		5200		2900	U	73000		100000						2300	J	12000		
Fluorene	µg/Kg	500,000	b	1900	U	1800	U	620	J	3800	U	1800	U	5100		6700						3900	U	340	J	
Indeno(1,2,3-cd)pyrene	µg/Kg	5,600		710	J	420	J	2600		1000	J	1800	U	16000		20000						790	J	7200		
Naphthalene	µg/Kg	500,000	b	160	J	200	J	1800	U	3800	U	200	J	7300		9300						3900	U	530	J	
n-Nitrosodiphenylamine	µg/Kg			190	J	1800	U	1800	U	3800	U	1800	U ⁽¹⁶⁾	4200	U	4400	U					3900	U	1700	U	
Phenanthrene	µg/Kg	500,000	b	1300	J	900	J	7000		2400	J	1800	U	52000		74000						980	J	5300		
Pyrene	µg/Kg	500,000	b	1500	J	1500	J	12000		4000		2400	U	59000		81000						1900	J	11000		
Target Compound List (TCL) Pesticides																										
4,4'-DDE (p,p'-DDE)	µg/Kg	62,000		91	U	90	U	87	U	43	J	87	U	30	J	11	J					96	U	29	J	
4,4'-DDT (p,p'-DDT)	µg/Kg	47,000		54	J	33	J	27	J	180	J	29	J	34	J	19	J					45	J	120		
Endrin Aldehyde	µg/Kg			91	U	90	U	87	U	190	U	87	U	100	U	20	J					96	U	86	U	
Methoxychlor	µg/Kg			91	U	90	U	87	U	1600	J	87	U	100	U	43	U					96	U	160		
TCL Polychlorinated Biphenyls																										
PCB-1254 (Aroclor 1254)	µg/Kg	1,000		240	U	240	U	240	U	260		240		280	U	240	U					280	U	240	U	
PCB-1260 (Aroclor 1260)	µg/Kg	1,000		240	U	240	U	240	U	240	U	320		280	U	240	U					100	J	330		
Target Analyte List (TAL) Metals (Total)																										
Aluminum	mg/Kg ⁽²⁾			5680	J	1850	J	8120	J	9600	J	9390		5430	J	4540	J					1520	J	6300	J	
Antimony	mg/Kg			177	J	31.1	J	15.1	U	17.6	U	16.8	U	86.6	J	153	J					90.7	J	166	J	
Arsenic	mg/Kg	16	f	44.0		2.6		8.0		7.4		103.0		19.7		45.1						15.7		128		
Barium	mg/Kg	400		221		78.6		141		419		216		227		233						276		744		
Beryllium	mg/Kg	590		0.55		0.23	U	0.60		0.65		1.2		0.59		0.47						0.23	U	0.67		
Cadmium	mg/Kg	9.3		0.89		0.46		0.58		2.3		1.2		4.3		1.9						1.5		4.1		
Calcium	mg/Kg			9950		39700		71900		44300		24400		11200		31600						16600		25800		
Chromium	mg/Kg	400	k ⁽⁷⁾	14.2		6.8		17.5		195		30.6		21.4	B7 ⁽¹⁷⁾	33.0	B7					16.5	B7	38.4		
Cobalt	mg/Kg			5.7		1.5		5.5		5.5		6.5		7.2		7.4						2.6		8.7		
Copper	mg/Kg	270		350		30.4		39.5		209		101		214		244						634		431		
Iron	mg/Kg			15500	J	5190	J	18200	J	15700	J	31400		32600	J	76800	J					26200	J	30200	J	
Lead	mg/Kg	1,000		1420		9340		653		962		1260		4390		9550		362		1060		10100		11600		
Magnesium	mg/Kg			5090		11300		5940		14600		7070		2620		18100						6930		7520		
Manganese	mg/Kg	10,000	d ⁽⁸⁾	394		157		411		1460		390		328		499						148		1030		
Mercury	mg/Kg	2.8	j ⁽⁹⁾	0.49		0.27		0.94		1.7		2.6		1.7		0.74						2.0		1.0		
Nickel	mg/Kg	310		18.6		5.7		16.0		28.1		24.4		19.1		35.7						12.6		32.6		
Potassium	mg/Kg			1390		676		1400		1070		1160		800		635						916		1020		
Selenium	mg/Kg	1,500		4.7	U	4.6	U	4.0	U	4.7	U	4.5	U	5.6	U	4.8	U					4.6	U	4.4	U	
Silver	mg/Kg	1,500		1.2		1.1		0.50	U	0.59	U	0.56	U	0.70	U	0.60	U					0.97		1.1		
Sodium	mg/Kg			165	U	160	U	222		387		389		196	U	169	U					161	U	172		
Thallium	mg/Kg			7.1	U	6.9	U	6.0	U	7.0	U	6.7	U	8.4	U	7.2	U					6.9	U	6.7	U ⁽¹⁸⁾	
Vanadium	mg/Kg			14.3		5.1		20.5		16.3		22.0		16.8		24.5						8.2		17.2		
Zinc	mg/Kg	10,000	d	218		73.4		230		483		221		752		485						190		855		
Toxicity Characteristic Leaching Procedure (TCLP) Metals																										
Lead	mg/L ⁽³⁾	5.0	f ⁽¹⁰⁾	300		69.1						0.48		8.5		20.4				0.073		62.4				
Physical Parameters																										
Percent Moisture	Percent			10.2		7.9		6.4		12.7		5.0		21.4		23.5		7.3		10.7		15.4		3.5		

Notes:
(1)-"µg/Kg"-micrograms per kilogram.
(2)-"mg/Kg"-milligrams per kilogram.
(3)-"mg/L"-milligrams per liter.
(4)-Standards taken from New York Code of Rules and Regulations (NYCRR) Part 375. Blank Space indicates that no Standard is listed.
(5)-"b"-denotes that the Site Cleanup Objectives (SCOs) for commercial use were capped at a maximum value of 500ppm.
(6)-"f"-denotes that calculated SCO was lower than the rural soil background concentration as determined by a

Table 3
Subslab Soil Sample Results: Detections Only
Tract I Supplemental Site Investigation

	Boring Location		B-27				B-28		B-29				B-30	
	Sample ID		B-27 (0.5-1.0) 2/21/13		B-27 (0.5-1.0) DUP 2/21/13		B-28 (0.5-1.0) 2/21/13		B-29 (0.5-1.0) 2/21/13		B-29 (0.5-1.0) DUP 2/21/13		B-30 (1.0-1.5) 2/21/13	
	Sample Date		2/21/2013 10:25		2/21/2013 10:25		2/21/2013 11:40		2/21/2013 13:05		2/21/2013 13:05		2/21/2013 9:40	
	Sample Location		Subslab		Subslab		Subslab		Subslab		Subslab		Subslab	
	Sample Depth (ft)		0.5-1.0		0.5-1.0		0.5-1.0		0.5-1.0		0.5-1.0		1.0-1.5	
Parameter	Units	Restricted Use Soil Cleanup Objectives - Commercial Standard ⁽⁴⁾	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TCL Polychlorinated Biphenyls														
PCB-1260 (Aroclor 1260)	µg/Kg	1,000		⁽⁹⁾										
Target Analyte List (TAL) Metals (Total)														
Aluminum	mg/Kg ⁽²⁾													
Arsenic	mg/Kg	16	f											
Barium	mg/Kg	400												
Beryllium	mg/Kg	590												
Cadmium	mg/Kg	9.3												
Calcium	mg/Kg													
Chromium	mg/Kg	400	k ⁽⁵⁾											
Cobalt	mg/Kg													
Copper	mg/Kg	270												
Iron	mg/Kg													
Lead	mg/Kg	1,000	3570	J ^(10,11,12)	12.1	J	48.7		27.6		17.3		47.0	
Magnesium	mg/Kg													
Manganese	mg/Kg	10,000	d ⁽⁶⁾											
Mercury	mg/Kg	2.8	j ⁽⁷⁾											
Nickel	mg/Kg	310												
Potassium	mg/Kg													
Sodium	mg/Kg													
Vanadium	mg/Kg													
Zinc	mg/Kg	10,000	d											
Toxicity Characteristic Leaching Procedure (TCLP) Metals														
Lead	mg/L ⁽³⁾	5.0	⁽⁸⁾	1.3	J	0.11	J							
Physical Parameters														
Percent Moisture	Percent			21.5		21.2		27.6		12.2		17.8		18.0

Notes:
(1)-"µg/Kg"-micrograms per kilogram.
(2)-"mg/Kg"-milligrams per kilogram.
(3)-"mg/L"-milligrams per liter.
(4)-Standards taken from New York Code of Rules and Regulations (NYCRR) Part 375. Blank Space indicates that no Standard is listed.
(5)-"k"-denotes that standard for hexavalent chromium was used for total chromium.
(6)-"d" denotes that the SCOs for metals were capped at a maximum value of 10,000 ppm.
(7)-"j"-denotes that this SCO is the lower of the values between mercury (elemental) and mercury (inorganic salts).
(8)-denotes that TCLP Regulatory Levels i.e. Standards, were obtained from 40 CFR 261.24, Table 1.
(9)-Blank space indicates that respective parameter was not analyzed within sample.
(10)-"J"-indicates that parameter was detected at a value less than laboratory reporting limit; as such, the concentration is estimated.
(11)-**Bold**-indicates laboratory detection.
(12)-Yellow Shading indicates that concentration exceeds Standard.

Table 3
Subslab Soil Sample Results: Detections Only
Tract I Supplemental Site Investigation

	Boring Location		B-31		B-32		B-33		B-34		T1-MW-01		
	Sample ID		B-31 (0.5-1.0)_ 2/21/13		B-32 (0.5-1.0)_ 2/21/13		B-33 (0.5-1.0)_ 2/21/13		B-34 (0.5-1.0)_ 2/21/13		T1-MW-01 (.5-1.0)_ 07/18/12		
	Sample Date		2/21/2013 10:40		2/21/2013 11:15		2/21/2013 13:40		2/21/2013 14:00		7/18/2012 9:00		
	Sample Location		Subslab		Subslab		Subslab		Subslab		Subslab		
	Sample Depth (ft)		0.5-1.0		0.5-1.0		0.5-1.0		0.5-1.0		0.5-1.0		
Parameter	Units	Restricted Use Soil Cleanup Objectives - Commercial Standard ⁽⁴⁾		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TCL Polychlorinated Biphenyls													
PCB-1260 (Aroclor 1260)	µg/Kg	1,000										280	
Target Analyte List (TAL) Metals (Total)													
Aluminum	mg/Kg ⁽²⁾											17500	
Arsenic	mg/Kg	16	f									6.1	
Barium	mg/Kg	400										281	
Beryllium	mg/Kg	590										1.10	
Cadmium	mg/Kg	9.3										0.46	
Calcium	mg/Kg											33500	
Chromium	mg/Kg	400	k ⁽⁵⁾									20.4	
Cobalt	mg/Kg											13.1	
Copper	mg/Kg	270										28.1	
Iron	mg/Kg											25200	
Lead	mg/Kg	1,000		9.0		165		25000		26.3		180	
Magnesium	mg/Kg											7900	
Manganese	mg/Kg	10,000	d ⁽⁶⁾									795	
Mercury	mg/Kg	2.8	j ⁽⁷⁾									0.037	
Nickel	mg/Kg	310										25.1	
Potassium	mg/Kg											2470	
Sodium	mg/Kg											247	
Vanadium	mg/Kg											29.9	
Zinc	mg/Kg	10,000	d									211	
Toxicity Characteristic Leaching Procedure (TCLP) Metals													
Lead	mg/L ⁽³⁾	5.0	⁽⁸⁾										
Physical Parameters													
Percent Moisture	Percent			19.0		19.3		15.5		19.9		12.5	

Notes:
(1)-"µg/Kg"-micrograms per kilogram.
(2)-"mg/Kg"-milligrams per kilogram.
(3)-"mg/L"-milligrams per liter.
(4)-Standards taken from New York Code of Rules and Regulations (NYCRR) Part 375. Blank Space indicates that no Standard is listed.
(5)-"k"-denotes that standard for hexavalent chromium was used for total chromium.
(6)-"d" denotes that the SCOs for metals were capped at a maximum value of 10,000 ppm.
(7)-"j"-denotes that this SCO is the lower of the values between mercury (elemental) and mercury (inorganic salts).
(8)-denotes that TCLP Regulatory Levels i.e. Standards, were obtained from 40 CFR 261.24, Table 1.
(9)-Blank space indicates that respective parameter was not analyzed within sample.
(10)-"J"-indicates that parameter was detected at a value less than laboratory reporting limit; as such, the concentration is estimated.
(11)-**Bold**-indicates laboratory detection.
(12)-Yellow Shading indicates that concentration exceeds Standard.

Table 4
Subsurface Soil Sample Results: Detections Only
Tract I Supplemental Site Investigation

	Boring Location		B-22				B-23				B-24		B-25	
	Sample ID		B-22 (6.5-7.0)_07/17/12		B-22 (9.5-10.0)_07/17/12		B-23 (2-4)_07/17/12		B-23 (5.5-6.0)_07/17/12		B-24 (6.5-7.0)_07/17/12		B-25 (4.5-5.0)_07/17/12	
	Sample Date		7/17/2012 11:30		7/17/2012 11:45		7/17/2012 10:30		7/17/2012 10:45		7/17/2012 13:45		7/17/2012 14:15	
	Sample Depth (ft)		6.5-7.0		9.5-10.0		2.0-4.0		5.5-6.0		6.5-7.0		4.5-5.0	
Parameter	Units	Restricted Use Soil Cleanup Objectives - Commercial Standard ⁽⁴⁾	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Volatile Organic Compounds														
Acetone	µg/Kg ⁽¹⁾	500,000 b ⁽⁵⁾	23	J	34		20	U						
Cyclohexane	µg/Kg		5.3	U	34		4.0	U						
Isopropylbenzene (Cumene)	µg/Kg		5.3	U	5.3	U	4.0	U						
Methyl Ethyl Ketone (2-Butanone, MEK)	µg/Kg	500,000 b	4.3	J	4.4	J	20	U						
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone, MIK)	µg/Kg		27	U	27	U	20	U						
Methylcyclohexane	µg/Kg		0.82	J	64	J	4.0	U						
Tetrachloroethylene (Tetrachloroethene, PCE)	µg/Kg	150,000	1.2	J	5.3	U	0.61	J						
Toluene	µg/Kg	500,000 b	0.50	J	5.3	U	4.0	U						
Xylene (Total)	µg/Kg	500,000 b	11	U	11	U	8.1	U						
Target Analyte List (TAL) Metals (Total)														
Lead	mg/Kg	1,000	6710						1450		37.5		672	
Toxicity Characteristic Leaching Procedure (TCLP) Metals														
Lead	mg/L ⁽³⁾	5.0 ⁽¹⁰⁾	50.2						13.1					
Physical Parameters														
Percent Moisture	Percent		15.2		18.6		12.2		21.0		26.7		12.3	

- Notes:
- (1)-"µg/Kg"-micrograms per kilogram.
 - (2)-"mg/Kg"-milligrams per kilogram.
 - (3)-"mg/L"-milligrams per liter.
 - (4)-Standards taken from New York Code of Rules and Regulations (NYCRR) Part 375. Blank Space indicates that no Standard is listed.
 - (5)-"b"-denotes that the Site Cleanup Objectives (SCOs) for commercial use were capped at a maximum value of 500ppm.
 - (6)-"f"-denotes that calculated SCO was lower than the rural soil background concentration as determined by a rural soil survey; as such, the rural soil background concentration is used as the SCO for use at the Site.
 - (7)-"k"-denotes that standard for hexavalent chromium was used for total chromium.
 - (8)-"d" denotes that the SCOs for metals were capped at a maximum value of 10,000 ppm.
 - (9)-"j"-denotes that this SCO is the lower of the values between mercury (elemental) and mercury (inorganic salts).
 - (10)-denotes that TCLP Regulatory Levels i.e. Standards, were obtained from 40 CFR 261.24, Table 1.
 - (11)-Blank space indicates that respective parameter was not analyzed within sample.
 - (12)-"U" indicates that parameter was not detected above laboratory reporting limit.
 - (13)-**Bold**-indicates laboratory detection.
 - (14)-"J"-indicates that parameter was detected at a value less than laboratory reporting limit; as such, the concentration is estimated.
 - (15)-Yellow Shading indicates that concentration exceeds Standard.
 - (16)-"B"-Indicates that compound was found within method blank and sample.
 - (17)-"U""-indicates that LCS or LCSD exceeds the control limits.
 - (18)-"B7"-Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above theconcentration found in the blank.
 - (19)-"U^"-indicates that instrument related QC exceeds the control limits.

Table 4
Subsurface Soil Sample Results: Detections Only
Tract I Supplemental Site Investigation

	Boring Location		B-26		B-28		B-29		B-30		B-32			
	Sample ID		B-26 (4-4.5) 07/18/12		B-28 (7.0-7.5) 2/21/13		B-29 (7.0-7.5) 2/21/13		B-30 (3.5-4.0) 2/21/13		B-32 (6.5-7.0) 2/21/13		B-32 (6.5-7.0) DUP 2/21/13	
	Sample Date		7/18/2012 13:50		2/21/2013 11:45		2/21/2013 13:10		2/21/2013 9:45		2/21/2013 11:20		2/21/2013 11:20	
	Sample Depth (ft)		4-4.5		7.0-7.5		7.0-7.5		3.5-4.0		6.5-7.0		6.5-7.0	
Parameter	Units	Restricted Use Soil Cleanup Objectives - Commercial Standard ⁽⁴⁾	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Volatile Organic Compounds														
Acetone	µg/Kg ⁽¹⁾	500,000 b ⁽⁵⁾												
Cyclohexane	µg/Kg													
Isopropylbenzene (Cumene)	µg/Kg													
Methyl Ethyl Ketone (2-Butanone, MEK)	µg/Kg	500,000 b												
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone, MIK)	µg/Kg													
Methylcyclohexane	µg/Kg													
Tetrachloroethylene (Tetrachloroethene, PCE)	µg/Kg	150,000												
Toluene	µg/Kg	500,000 b												
Xylene (Total)	µg/Kg	500,000 b												
Target Analyte List (TAL) Metals (Total)														
Lead	mg/Kg	1,000	347		8.6		9.7		15.6		12.8		10.4	
Toxicity Characteristic Leaching Procedure (TCLP) Metals														
Lead	mg/L ⁽³⁾	5.0 ⁽¹⁰⁾												
Physical Parameters														
Percent Moisture	Percent		12.8		22.2		19.0		20.8		23.7		20.6	

- Notes:
- (1)-"µg/Kg"-micrograms per kilogram.
 - (2)-"mg/Kg"-milligrams per kilogram.
 - (3)-"mg/L"-milligrams per liter.
 - (4)-Standards taken from New York Code of Rules and Regulations (NYCRR) Part 375. Blank Space indicates that no Standard is listed.
 - (5)-"b"-denotes that the Site Cleanup Objectives (SCOs) for commercial use were capped at a maximum value of 500ppm.
 - (6)-"f"-denotes that calculated SCO was lower than the rural soil background concentration as determined by a rural soil survey; as such, the rural soil background concentration is used as the SCO for use at the Site.
 - (7)-"k"-denotes that standard for hexavalent chromium was used for total chromium.
 - (8)-"d" denotes that the SCOs for metals were capped at a maximum value of 10,000 ppm.
 - (9)-"j"-denotes that this SCO is the lower of the values between mercury (elemental) and mercury (inorganic salts).
 - (10)-denotes that TCLP Regulatory Levels i.e. Standards, were obtained from 40 CFR 261.24, Table 1.
 - (11)-Blank space indicates that respective parameter was not analyzed within sample.
 - (12)-"U" indicates that parameter was not detected above laboratory reporting limit.
 - (13)-**Bold**-indicates laboratory detection.
 - (14)-"J"-indicates that parameter was detected at a value less than laboratory reporting limit; as such, the concentration is estimated.
 - (15)-Yellow Shading indicates that concentration exceeds Standard.
 - (16)-"B"-Indicates that compound was found within method blank and sample.
 - (17)-"U""-indicates that LCS or LCSD exceeds the control limits.
 - (18)-"B7"-Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above theconcentration found in the blank.
 - (19)-"U^"-indicates that instrument related QC exceeds the control limits.

Table 4
Subsurface Soil Sample Results: Detections Only
Tract I Supplemental Site Investigation

			Boring Location		B-33		B-35		B-36		B-38		B-39		T1-MW-01			
			Sample ID		B-33 (5.0-5.5)_2/21/13		B-35 (1.5-2)_07/24/12		B-36 (1.5-2)_07/24/12		B-38 (3.5-4.0)_07/18/12		B-39 (2.5-3.0)_07/18/12		T1-MW-01 (4.5-5.0)_07/18/12		T1-MW-01 (8.5-9.0)_07/18/12	
			Sample Date		2/21/2013 13:45		7/24/2012 12:20		7/24/2012 13:50		7/18/2012 8:15		7/18/2012 7:50		7/18/2012 9:15		7/18/2012 9:25	
			Sample Depth (ft)		5.0-5.5		1.5-2.0		1.5-2.0		3.5-4.0		2.5-3.0		4.5-5.0		8.5-9.0	
Parameter	Units	Restricted Use Soil Cleanup Objectives - Commercial Standard ⁽⁴⁾	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Volatile Organic Compounds																		
Acetone	µg/Kg ⁽¹⁾	500,000 b ⁽⁵⁾													100		22	J
Cyclohexane	µg/Kg														13		61	
Isopropylbenzene (Cumene)	µg/Kg														6.8		31	
Methyl Ethyl Ketone (2-Butanone, MEK)	µg/Kg	500,000 b													33		4.5	J
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone, MIK)	µg/Kg														27	U	24	U
Methylcyclohexane	µg/Kg														46		200	
Tetrachloroethylene (Tetrachloroethene, PCE)	µg/Kg	150,000													5.4	U	1.1	J
Toluene	µg/Kg	500,000 b													0.48	J	4.8	U
Xylene (Total)	µg/Kg	500,000 b													3.2	J	9.6	U
Target Analyte List (TAL) Metals (Total)																		
Lead	mg/Kg	1,000	204		431		6490		17.6		20.2							
Toxicity Characteristic Leaching Procedure (TCLP) Metals																		
Lead	mg/L ⁽³⁾	5.0 ⁽¹⁰⁾					0.23											
Physical Parameters																		
Percent Moisture	Percent		21.7		19.2		17.6		15.5		14.6		23.1		18.6			

Notes:

(1)-"µg/Kg"-micrograms per kilogram.

(2)-"mg/Kg"-milligrams per kilogram.

(3)-"mg/L"-milligrams per liter.

(4)-Standards taken from New York Code of Rules and Regulations (NYCRR) Part 375. Blank Space indicates that no Standard is listed.

(5)-"b"-denotes that the Site Cleanup Objectives (SCOs) for commercial use were capped at a maximum value of 500ppm.

(6)-"f"-denotes that calculated SCO was lower than the rural soil background concentration as determined by a rural soil survey; as such, the rural soil background concentration is used as the SCO for use at the Site.

(7)-"k"-denotes that standard for hexavalent chromium was used for total chromium.

(8)-"d" denotes that the SCOs for metals were capped at a maximum value of 10,000 ppm.

(9)-"j"-denotes that this SCO is the lower of the values between mercury (elemental) and mercury (inorganic salts).

(10)-denotes that TCLP Regulatory Levels i.e. Standards, were obtained from 40 CFR 261.24, Table 1.

(11)-Blank space indicates that respective parameter was not analyzed within sample.

(12)-"U" indicates that parameter was not detected above laboratory reporting limit.

(13)-**Bold**-indicates laboratory detection.

(14)-"J"-indicates that parameter was detected at a value less than laboratory reporting limit; as such, the concentration is estimated.

(15)-Yellow Shading indicates that concentration exceeds Standard.

(16)-"B"-Indicates that compound was found within method blank and sample.

(17)-"U""-indicates that LCS or LCSD exceeds the control limits.

(18)-"B7"-Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above theconcentration found in the blank.

(19)-"U^"-indicates that instrument related QC exceeds the control limits.

Table 4
Subsurface Soil Sample Results: Detections Only
Tract I Supplemental Site Investigation

	Boring Location		T1-MW-02				T1-MW-03	
	Sample ID		T1-MW-02 (1-1.5) 07/24/12		T1-MW-02 (5-6)		T1-MW-03 (1.5-2)	
	Sample Date		7/24/2012 11:40		8/1/2012 13:35:00 AM		8/1/2012 10:40	
	Sample Depth (ft)		1.0-1.5		5.0-6.0		1.5-2.0	
Parameter	Units	Restricted Use Soil Cleanup Objectives - Commercial Standard ⁽⁴⁾	Result	Qualifier	Result	Qualifier	Result	Qualifier
Volatile Organic Compounds								
Acetone	µg/Kg ⁽¹⁾	500,000 b ⁽⁵⁾			31	U		
Cyclohexane	µg/Kg				6.2	U		
Isopropylbenzene (Cumene)	µg/Kg				6.2	U		
Methyl Ethyl Ketone (2-Butanone, MEK)	µg/Kg	500,000 b			31	U		
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone, MİK)	µg/Kg				31	U		
Methylcyclohexane	µg/Kg				6.2	U		
Tetrachloroethylene (Tetrachloroethene, PCE)	µg/Kg	150,000			6.2	U		
Toluene	µg/Kg	500,000 b			6.2	U		
Xylene (Total)	µg/Kg	500,000 b			12	U		
Target Analyte List (TAL) Metals (Total)								
Lead	mg/Kg	1,000	4570				1340	
Toxicity Characteristic Leaching Procedure (TCLP) Metals								
Lead	mg/L ⁽³⁾	5.0 ⁽¹⁰⁾	1.3					
Physical Parameters								
Percent Moisture	Percent		14.4		21.3		11.0	

Notes:

(1)-"µg/Kg"-micrograms per kilogram.

(2)-"mg/Kg"-milligrams per kilogram.

(3)-"mg/L"-milligrams per liter.

(4)-Standards taken from New York Code of Rules and Regulations (NYCRR) Part 375. Blank Space indicates that no Standard is listed.

(5)-"b"-denotes that the Site Cleanup Objectives (SCOs) for commercial use were capped at a maximum value of 500ppm.

(6)-"f"-denotes that calculated SCO was lower than the rural soil background concentration as determined by a rural soil survey; as such, the rural soil background concentration is used as the SCO for use at the Site.

(7)-"k"-denotes that standard for hexavalent chromium was used for total chromium.

(8)-"d" denotes that the SCOs for metals were capped at a maximum value of 10,000 ppm.

(9)-"j"-denotes that this SCO is the lower of the values between mercury (elemental) and mercury (inorganic salts).

(10)-denotes that TCLP Regulatory Levels i.e. Standards, were obtained from 40 CFR 261.24, Table 1.

(11)-Blank space indicates that respective parameter was not analyzed within sample.

(12)-"U" indicates that parameter was not detected above laboratory reporting limit.

(13)-**Bold**-indicates laboratory detection.

(14)-"J"-indicates that parameter was detected at a value less than laboratory reporting limit; as such, the concentration is estimated.

(15)-Yellow Shading indicates that concentration exceeds Standard.

(16)-"B"-Indicates that compound was found within method blank and sample.

(17)-"U""-indicates that LCS or LCSD exceeds the control limits.

(18)-"B7"-Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above theconcentration found in the blank.

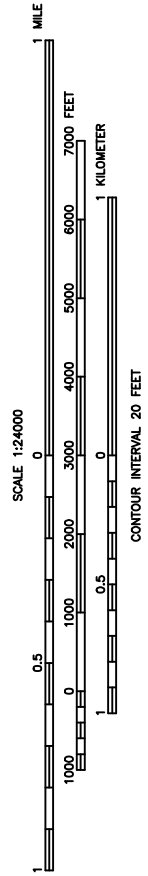
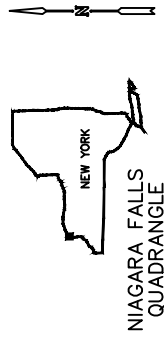
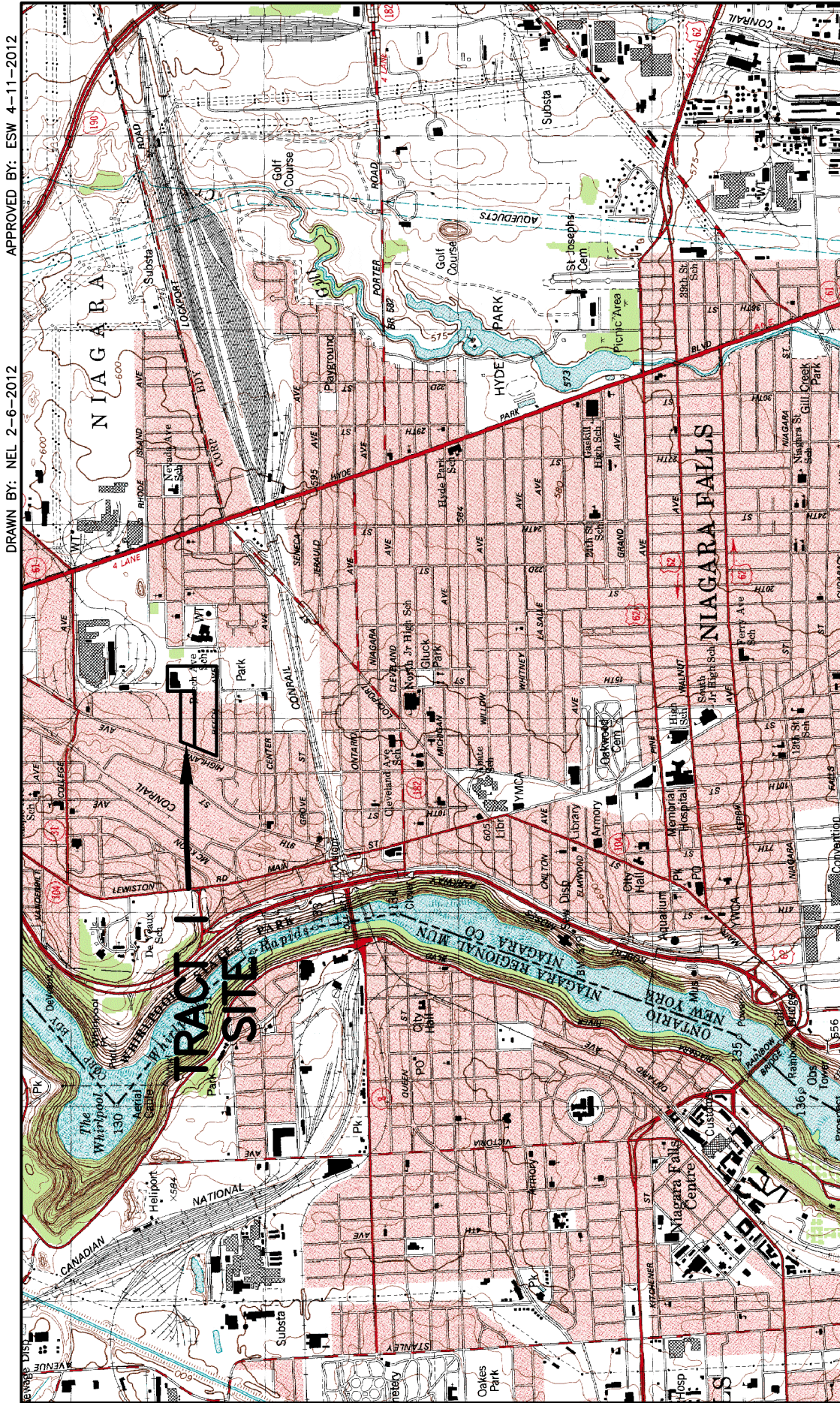
(19)-"U^"-indicates that instrument related QC exceeds the control limits.

Table 5
Brick Bedding Material Sample Results: Detections Only
Tract I Supplemental Site Investigation

Sample Location/Boring I.D. Laboratory Sample Number Sample Date			BB-2 480-33480-2 2/26/2013 11:00		BB-2-DUP 480-33480-3 2/26/2013 11:00		BB-3 480-33480-4 2/26/2013 11:25		BB-3-DUP 480-33480-5 2/26/2013 11:25		BB-4 480-33480-6 2/26/2013 12:20		BB-4-DUP 480-33480-7 2/26/2013 12:20		BB-5 480-33480-8 2/26/2013 12:50		BB-7 480-33480-10 2/26/2013 13:25	
Parameter	Units	Restricted Use Soil Cleanup Objectives - Commercial Standard ⁽¹⁾	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs																		
Acetone	ug/Kg	500,000 b	31 J ^(9,10)		21 J		43 U		8.6 J		5.4 J		5.2 J		41 J		44	
Carbon Disulfide	ug/Kg		14 U ⁽¹¹⁾		13 U		8.5 U		10 U		6.2 U		5.8 U		5.1 J		8.2 U	
Toluene	ug/Kg	500,000 b	14 U		2.6 J		8.5 U		10 U		6.2 U		5.8 U		3.5 J		1.2 J	
Xylene (Total)	ug/Kg	500,000 b	28 U		26 U		1.8 J		20 U		12 U		12 U		18 U		16 U	
Semivolatile Organic Compounds																		
Acenaphthene	µg/Kg ⁽²⁾	500,000 b ⁽⁴⁾	450000 U		370000 U		110 J				14000 U		39000 U		300000 U		300000 U	
Anthracene	µg/Kg	500,000 b	450000 U		370000 U		260 J				430 J		39000 U		300000 U		8900 J	
Benzo(a)anthracene	µg/Kg	5,600	450000 U		370000 U		410 J				14000 U		39000 U		300000 U		300000 U	
Benzo(a)pyrene	µg/Kg	1,000 f ⁽⁵⁾	450000 U		370000 U		350 J				600 J		39000 U		300000 U		300000 U	
Benzo(b)fluoranthene	µg/Kg	5,600	450000 U		370000 U		530 J				790 J		1400 J		300000 U		300000 U	
Benzo(g,h,i)perylene	µg/Kg	500,000 b	450000 U		370000 U		100 J				14000 U		39000 U		300000 U		300000 U	
Benzo(k)fluoranthene	µg/Kg	56,000	450000 U		370000 U		170 J				440 J		39000 U		300000 U		300000 U	
Carbazole	µg/Kg		450000 U		370000 U		130 J				14000 U		39000 U		300000 U		300000 U	
Chrysene	µg/Kg	56,000	450000 U		370000 U		350 J				14000 U		39000 U		300000 U		300000 U	
Dibenzofuran	µg/Kg	350,000	450000 U		370000 U		86 J				14000 U		39000 U		300000 U		300000 U	
Fluoranthene	µg/Kg	500,000 b	450000 U		7500 J		1000 J				1500 J		2500 J		9400 J		28000 J	
Fluorene	µg/Kg	500,000 b	450000 U		370000 U		120 J				14000 U		39000 U		300000 U		300000 U	
Indeno(1,2,3-cd)pyrene	µg/Kg	5,600	450000 U		370000 U		92 J				14000 U		39000 U		300000 U		300000 U	
Phenanthrene	µg/Kg	500,000 b	450000 U		370000 U		990 J				1700 J		2700 J		9600 J		26000 J	
Pyrene	µg/Kg	500,000 b	450000 U		11000 J		710 J				1200 J		1800 J		12000 J		25000 J	
Target Compound List Polychlorinated Biphenyls																		
PCB-1254 (Aroclor 1254)	µg/Kg	1,000	2400 U		2400 U		230 U				1700 J ⁽¹⁴⁾		2800 U		2400 U		1700 J	
PCB-1260 (Aroclor 1260)	ug/Kg	1,000	2400 U		2400 U		230 U				1300 J		2800 U		2400 U		2700 U	
Target Analyte List Metals (Total)																		
Aluminum	mg/Kg ⁽³⁾		352 J		181 J		3750				758		926		428		240	
Arsenic	mg/Kg	16 f	6.9 J		2.1 UJ		3.4				2.4		2.3 U		2.4 U		2.4 U	
Barium	mg/Kg	400	24.1 J		9.8 J		292				49.6 J		27.3 J		18.0		39.5	
Cadmium	mg/Kg	9.3	0.22 U		0.21 U		0.35				0.23 U		0.23 U		0.24 U		0.24 U	
Calcium	mg/Kg		47600 J		9170 J		57200				11600		7550		3590		1940	
Chromium	mg/Kg	400 k ⁽⁶⁾	2.8		1.8		4.0				2.6		2.3		5.2		2.2	
Cobalt	mg/Kg		0.55 U		0.52 U		2.2				0.57 U		0.57 U		0.60 U		0.59 U	
Copper	mg/Kg	270	32.0 J		8.2 J		13.5				30.3		24.3		28.3		2.6	
Iron	mg/Kg		28900 J		8480 J		6020 B7 ⁽¹³⁾				5700 B7		4540 B7		7140 B7		1930 B7	
Lead	mg/Kg	1,000	130		83.3		66.4				4090 J		1950 J		234		51.8	
Magnesium	mg/Kg		325 J		181 J		5310				541		747		73.3		167	
Manganese	mg/Kg	10,000 d ⁽⁷⁾	27.8 J		11.1 J		347				32.3		33.6		13.9		21.8	
Mercury	mg/Kg	2.8 j ⁽⁸⁾	0.022 U		0.060		0.025 U				0.12		0.17		0.024 U		0.023 U	
Potassium	mg/Kg		5220 J		1180 J		840				1280		967		1020		155	
Vanadium	mg/Kg		20.3		15.4		6.3				4.1		3.0		14.7		16.2	
Zinc	mg/Kg	10,000 d	38.1 J		14.0 J		158				14.3		12.2		22.5		19.4	
TCLP Metals ²																		
Lead	mg/L	5.0	(12)								116 J		47.0 J					

Notes:
(1)-Standards taken from New York Code of Rules and Regulations (NYCRR) Part 375. Blank Space indicates that no Standard is listed.
(2)-"µg/Kg"-micrograms per kilogram.
(3)-"mg/Kg"-milligrams per kilogram.
(4)-"b"-denotes that the Site Cleanup Objectives (SCOs) for commercial use were capped at a maximum value of 500 mg/kg.
(5)-"f"-denotes that calculated SCO was lower than the rural soil background concentration as determined by a rural soil survey; as such, the rural soil background concentration is used as the SCO for use at the Site.
(6)-"k"-denotes that standard for hexavalent chromium was used for total chromium.
(7)-"d" denotes that the SCOs for metals were capped at a maximum value of 10,000 mg/kg.
(8)-"j"-denotes that this SCO is the lower of the values between mercury (elemental) and mercury (inorganic salts).
(9)-"J"-indicates that parameter was detected at a value less than laboratory reporting limit; as such, the concentration is estimated.
(10)-**Bold**-indicates laboratory detection.
(11)-"U" indicates that parameter was not detected above laboratory reporting limit.
(12)-Blank Space indicates that compound was not analyzed.
(13)-"B7"-Denotes that target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above theconcentration found in the blank.
(14)-Yellow Shading indicates that concentration exceeds Standard.

FIGURES



DRAWN BY: NEL 2-6-2012

APPROVED BY: ESW 4-11-2012

BRIGHTFIELDS, INC.
TRACT I SITE
NIAGARA FALLS, NEW YORK



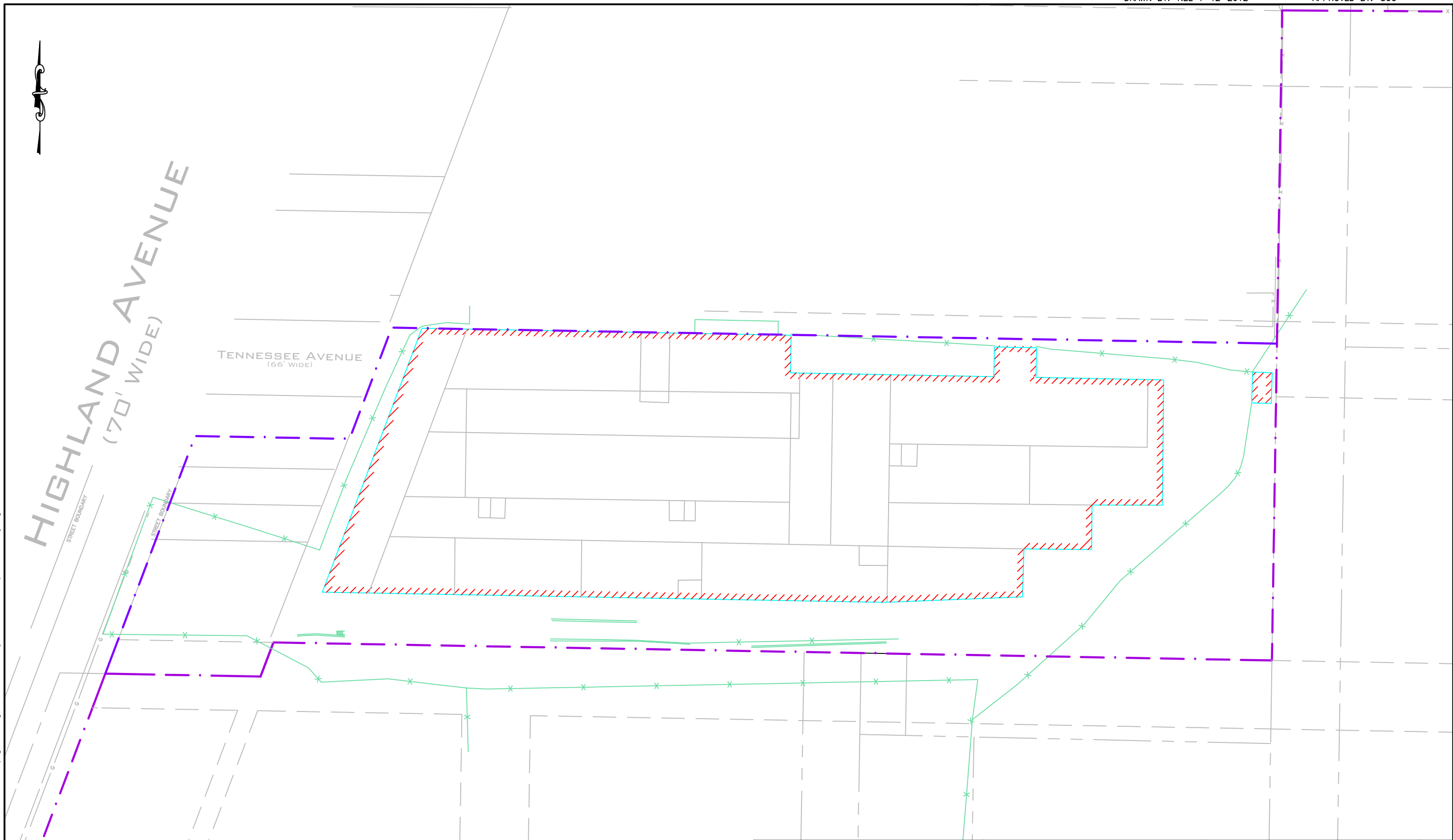
Environment & Infrastructure
800 North Bell Avenue, Suite 200
Pittsburgh, Pennsylvania 15106

SUPPLEMENTAL REMEDIAL
INVESTIGATION
SITE LOCATION MAP

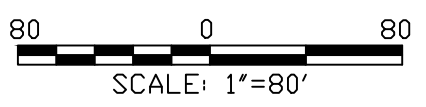
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Figure: 1

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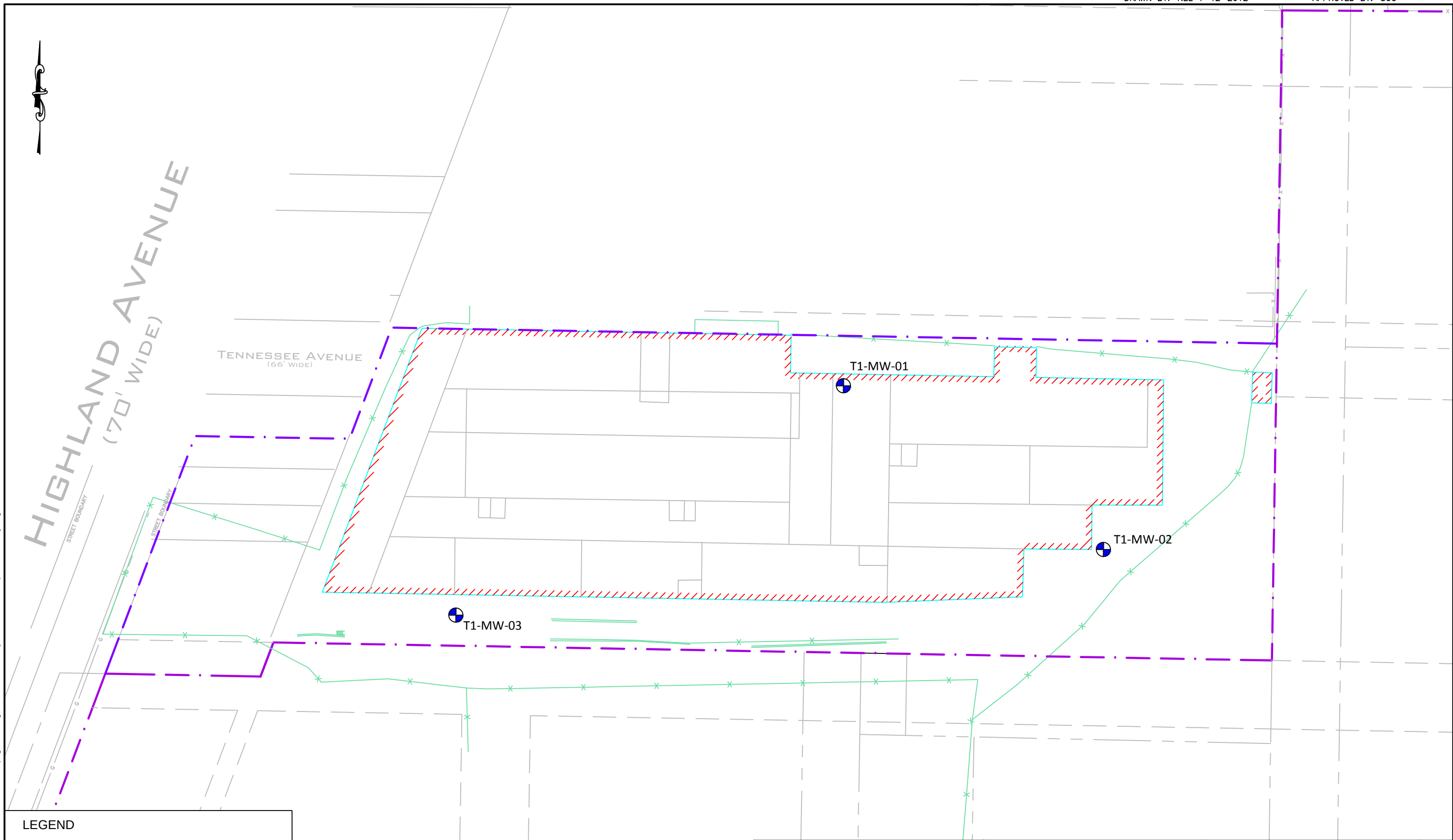


- LEGEND**
- PROPERTY BOUNDARY
 - EXISTING STRUCTURE
 - x--- FENCE



BRIGHTFIELDS, INC. TRACT I SITE NIAGARA FALLS, NEW YORK Project No.: 3410130921	amec Environment & Infrastructure 800 North Bell Avenue, Suite 200 Pittsburgh, Pennsylvania 15106	SUPPLEMENTAL REMEDIAL INVESTIGATION SITE PLAN Figure: 2	2

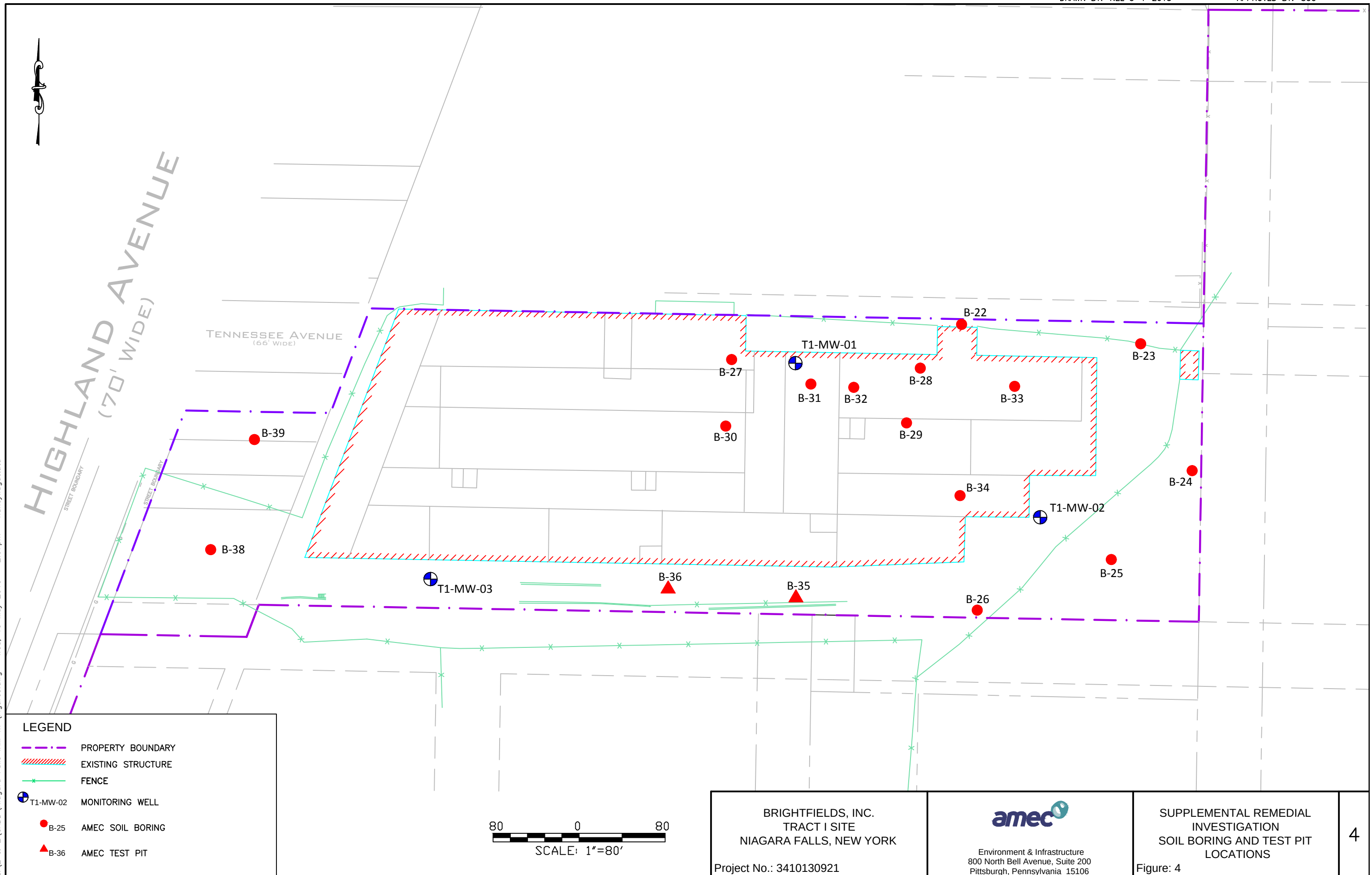
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- LEGEND**
- PROPERTY BOUNDARY
 - EXISTING STRUCTURE
 - FENCE
 - T1-MW-02 MONITORING WELL

80 0 80
SCALE: 1"=80'

BRIGHTFIELDS, INC. TRACT I SITE NIAGARA FALLS, NEW YORK Project No.: 3410130921	amec Environment & Infrastructure 800 North Bell Avenue, Suite 200 Pittsburgh, Pennsylvania 15106	SUPPLEMENTAL REMEDIAL INVESTIGATION MONITORING WELL LOCATIONS Figure: 3	3





HIGHLAND AVENUE
(70' WIDE)

TENNESSEE AVENUE
(66' WIDE)

BB3

BB2

BB5

BB6

BB1

BB7

BB4

LEGEND

- . - PROPERTY BOUNDARY
- / / / EXISTING STRUCTURE
- x FENCE
- BRICK BEDDING MATERIAL SAMPLE LOCATION
- BB4
- AREA REPORTED BY EA(2009) TO CONTAIN BRICK FLOOR OVER CONCRETE SUBFLOOR
- AREA OBSERVED BY AMEC(2013) TO ACTUALLY CONTAIN BRICK FLOOR OVER CONCRETE SUBFLOOR

80 0 80
SCALE: 1"=80'

BRIGHTFIELDS, INC.
TRACT I SITE
NIAGARA FALLS, NEW YORK

Project No.: 3410130921



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SUPPLEMENTAL REMEDIAL
INVESTIGATION
BRICK BEDDING MATERIAL
SAMPLE LOCATIONS

Figure: 5

HIGHLAND AVENUE
(70' WIDE)

TENNESSEE AVENUE
(66' WIDE)

LEGEND

- - - PROPERTY BOUNDARY
- / / / EXISTING STRUCTURE
- x FENCE
- T1-MW-02 576.31 MONITORING WELL GROUNDWATER ELEVATION
- 574 GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- J ESTIMATED VALUE

RESULTS REPORT IN $\mu\text{g/L}$

TI-MW-03	8/9/12
TCE	8.7
Beta Hexachlorocyclohexane	0.20
Total Antimony	21
Total Sodium	58,800
Combined Total Iron and Total Manganese	1,040
Total Lead	27
Dissolved Sodium	57,600
Dissolved Manganese	840
Dissolved Antimony	20

TI-MW-01	8/9/12
Endrin	0.018J
Gamma Chlordane	0.16
Total Sodium	42,000
Combined Total Iron and Total Manganese	550
Dissolved Sodium	42,700
Dissolved Manganese	340

TI-MW-02	8/9/12
Total Sodium	58,500
Combined Total Iron and Total Manganese	7,600
Total Lead	33
Dissolved Sodium	60,200
Dissolved Manganese	1,500

80 0 80
SCALE: 1"=80'

BRIGHTFIELDS, INC.
TRACT I SITE
NIAGARA FALLS, NEW YORK

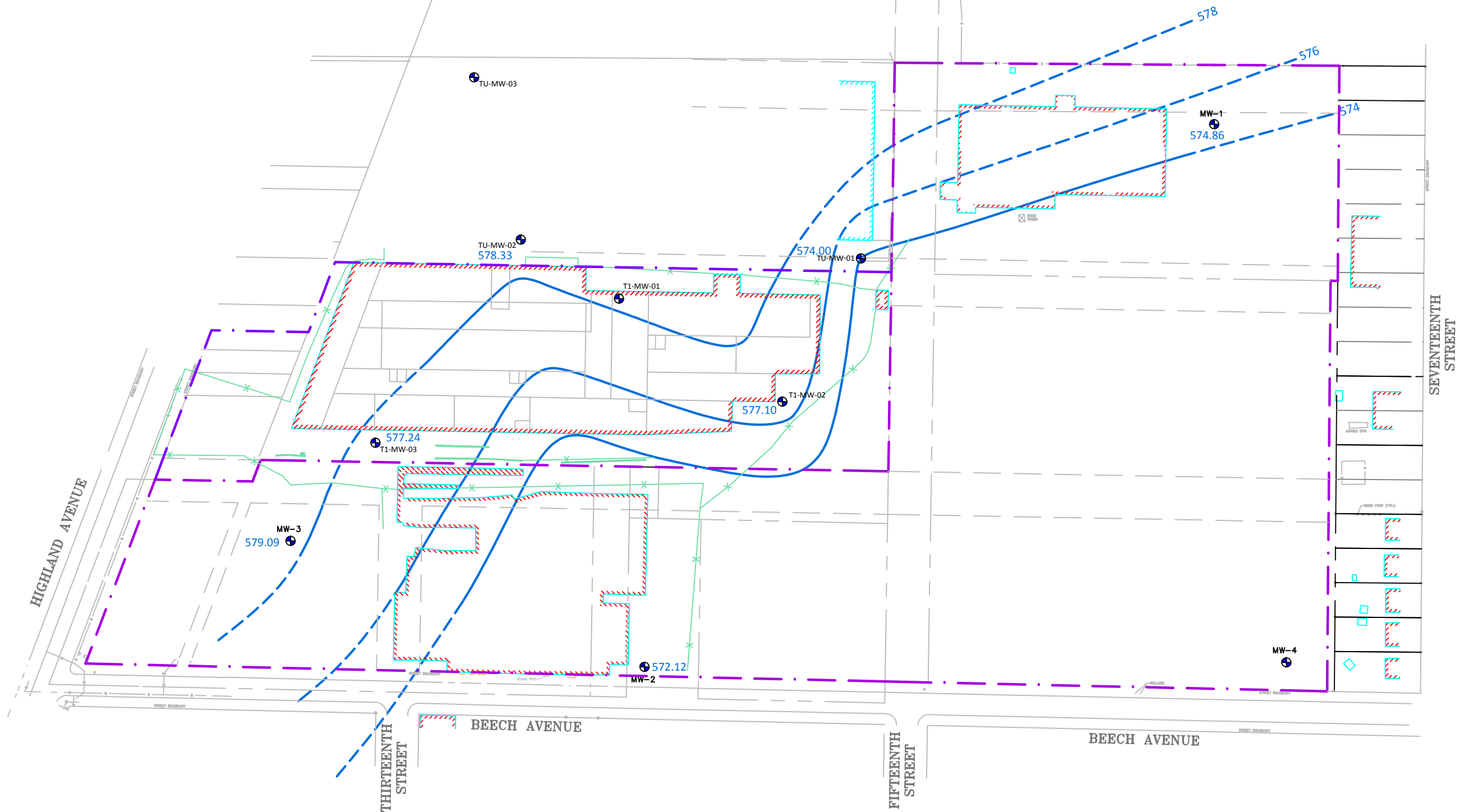
Project No.: 3410130921



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SRI
GROUNDWATER CONTOUR MAP
AUGUST 8, 2012
CONCENTRATIONS EXCEEDING
REFERENCE NYWQS VALUES
Figure: 6A

6A



LEGEND

- . - PROPERTY BOUNDARY
- / / / EXISTING STRUCTURE
- x - FENCE
- T1-MW-02
577.10 MONITORING WELL
GROUNDWATER ELEVATION
- - - 574 GROUNDWATER CONTOUR
(DASHED WHERE INFERRED)

150 0 150
SCALE: 1"=150'

BRIGHTFIELDS, INC.
TRACT I SITE
NIAGARA FALLS, NEW YORK

Project No.: 3410130921



Environment & Infrastructure
800 North Bell Avenue, Suite 200
Pittsburgh, Pennsylvania 15106

SUPPLEMENTAL REMEDIAL
INVESTIGATION
TRACTS I & II
GROUNDWATER CONTOUR MAP
APRIL 2, 2013

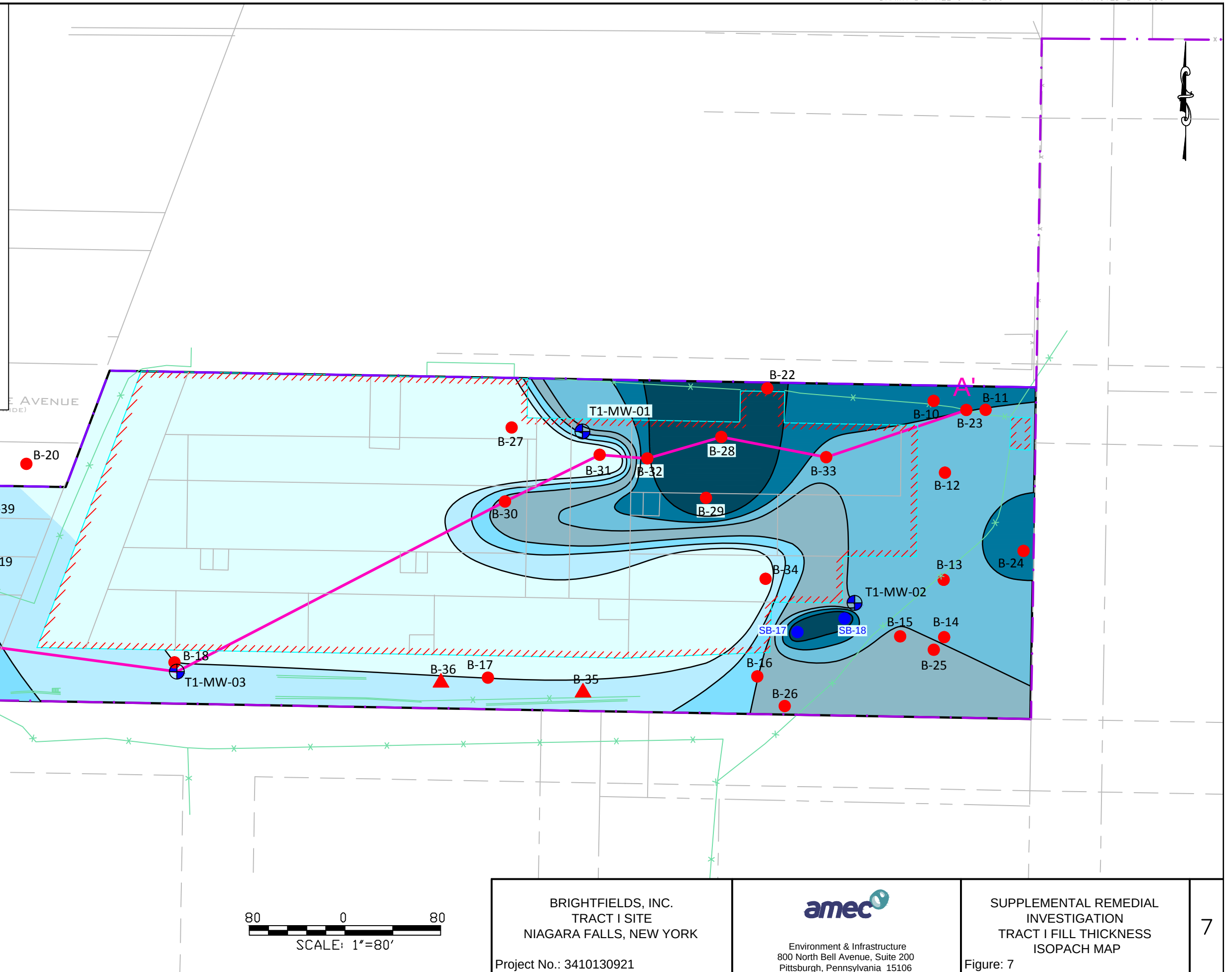
Figure: 6B

6B

LEGEND

- PROPERTY BOUNDARY
- EXISTING STRUCTURE
- FENCE
- T1-MW-02 MONITORING WELL
- B-25 AMEC SOIL BORING
- ▲ B-36 AMEC TEST PIT
- SB-02 EA SUBSURFACE SOIL SAMPLE LOCATION
- CROSS SECTION LOCATION

	1-2'
	2-3'
	3-4'
	4-5'
	5-6'
	6-7'
	7-8'
- FILL THICKNESS IN FEET



80 0 80
SCALE: 1"=80'

BRIGHTFIELDS, INC.
TRACT I SITE
NIAGARA FALLS, NEW YORK

Project No.: 3410130921

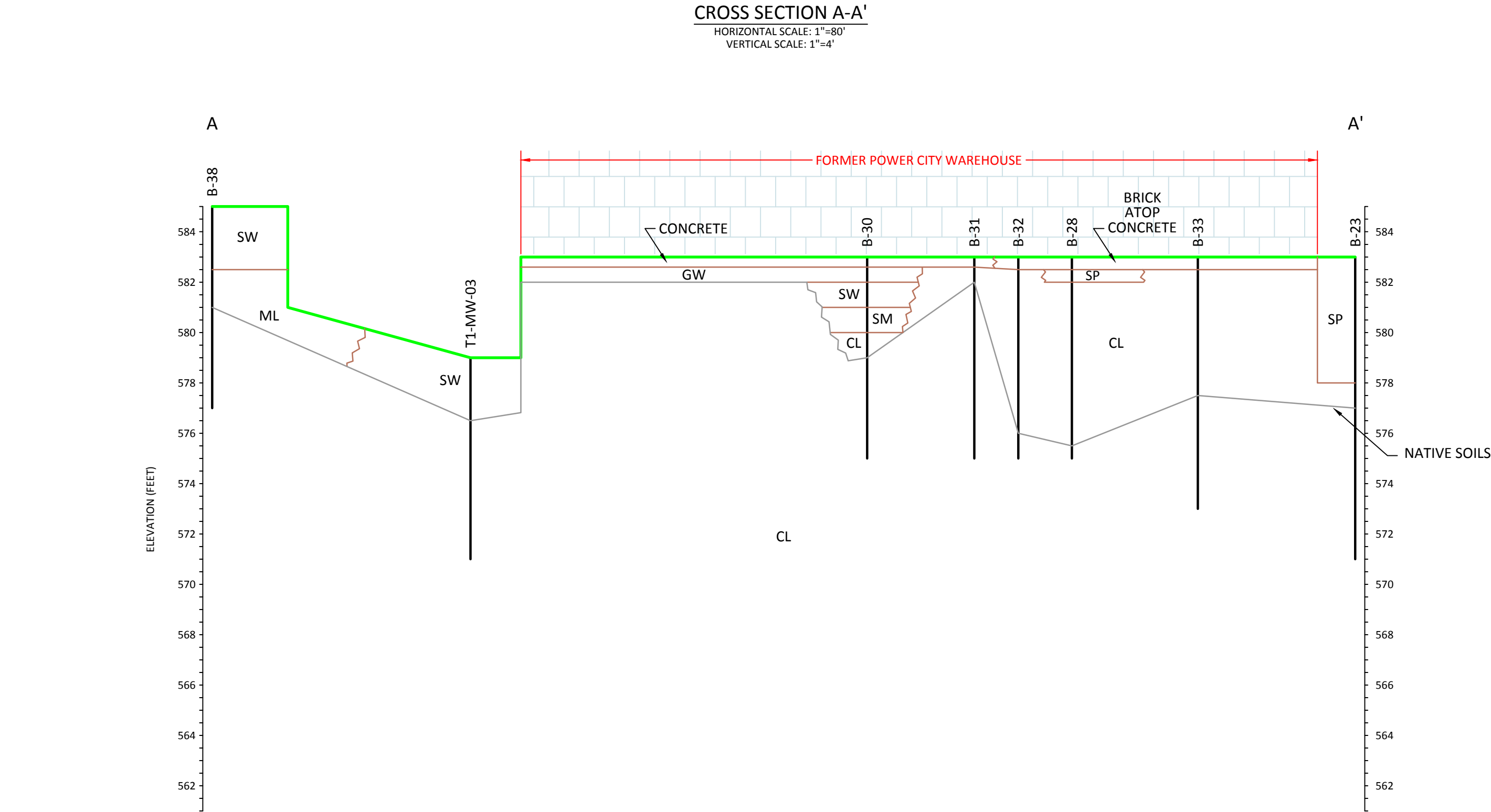


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Pittsburgh, Pennsylvania 15106

SUPPLEMENTAL REMEDIAL
INVESTIGATION
TRACT I FILL THICKNESS
ISOPACH MAP

Figure: 7

Z:\E & E\CADD\Niagara Falls IRM WP\Cross Section AA.dwg Wed, 15 May 2013 2:22pm nancy.lagattuta



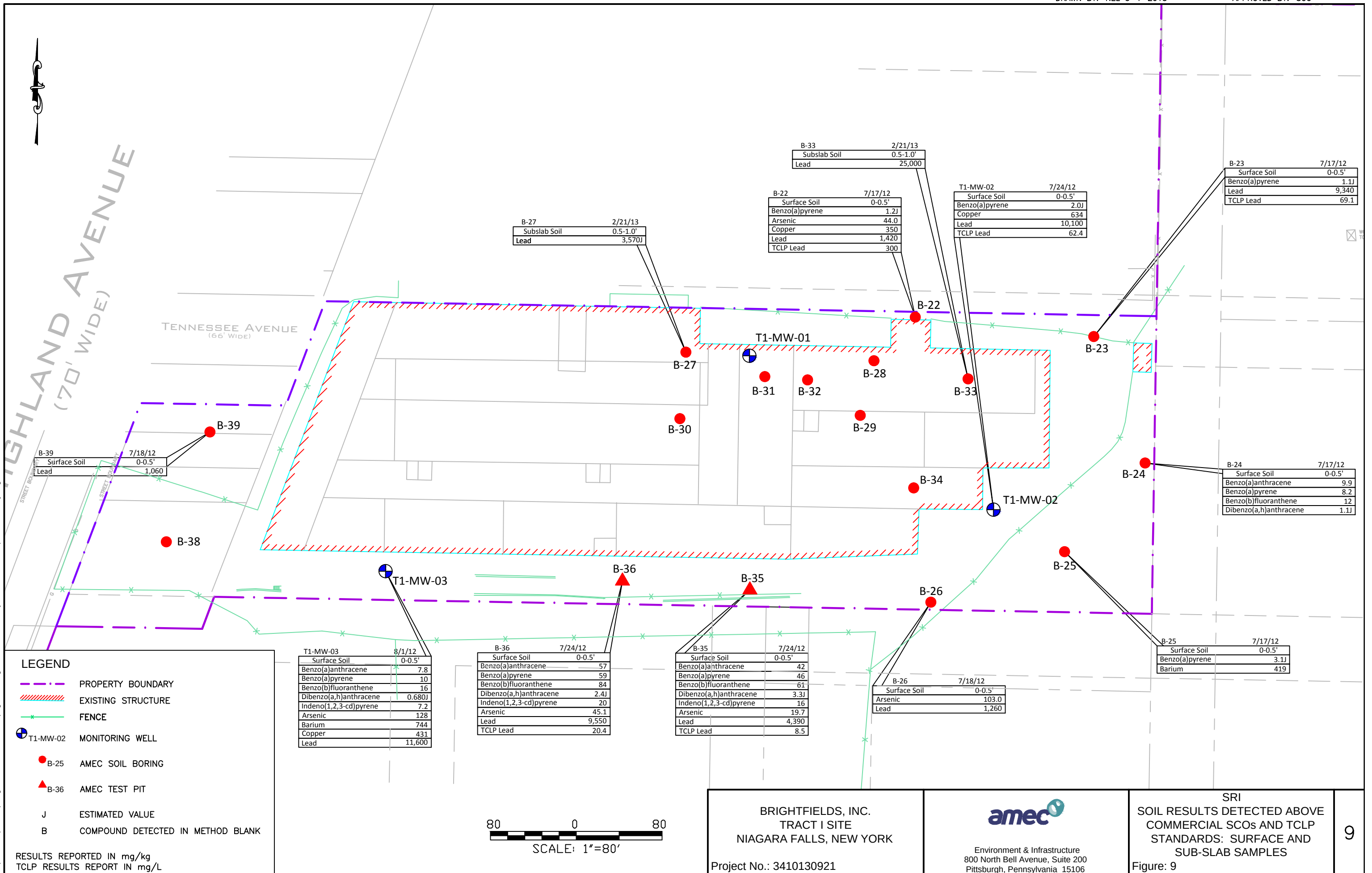
LEGEND

B-38
SOIL BORING LOCATION

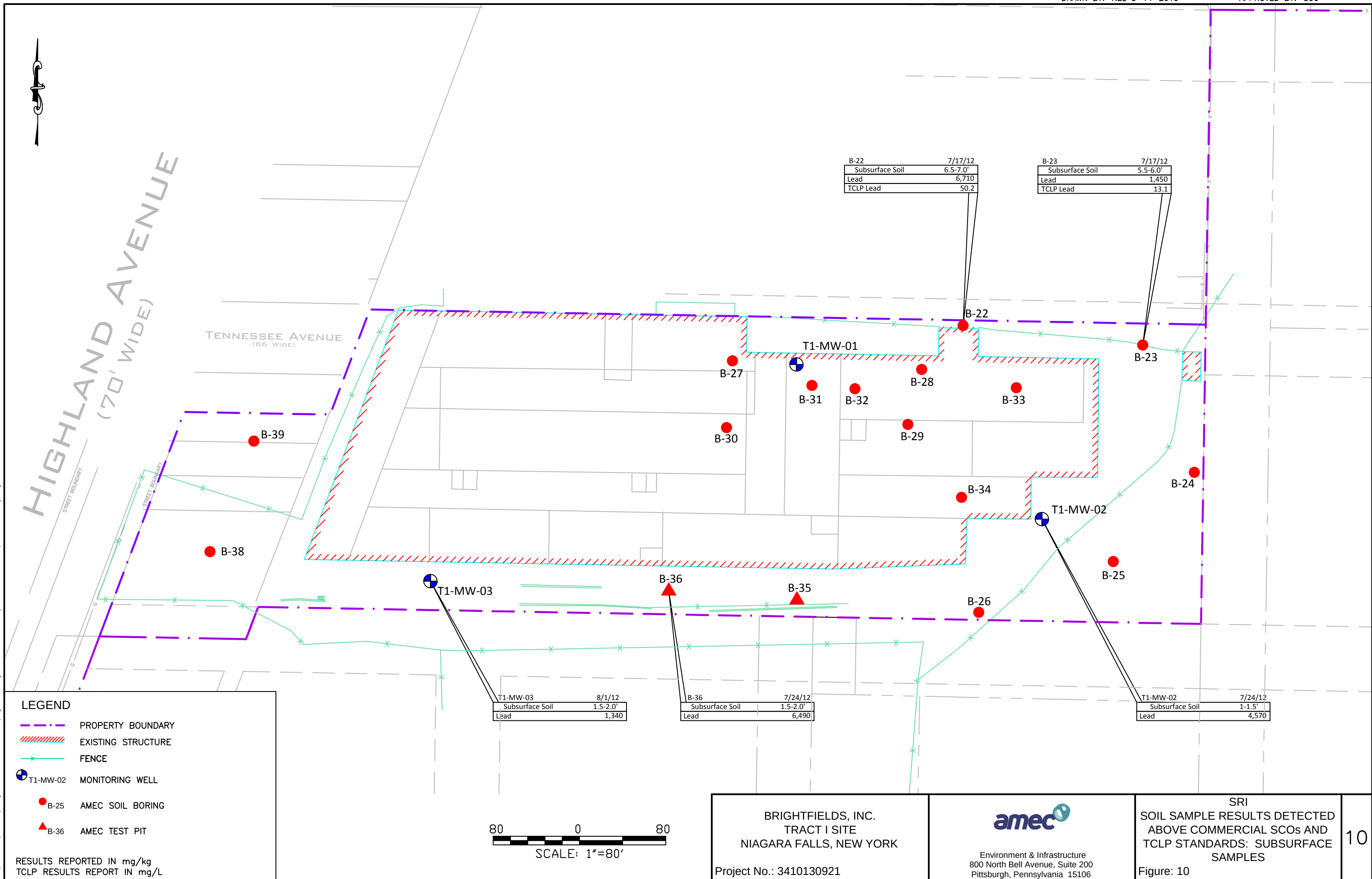
NOTE

1. SOIL TYPES (SW,GW,ML, etc.) WERE CLASSIFIED USING THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS).

BRIGHTFIELDS, INC. TRACT I SITE NIAGARA FALLS, NEW YORK Project No.: 3410130921	Environment & Infrastructure 800 North Bell Avenue, Suite 200 Pittsburgh, Pennsylvania 15106	SUPPLEMENTAL REMEDIAL INVESTIGATION CROSS SECTION A-A' Figure: 8	8



Z:\E & E\CADD\Niagara Falls IRM WP\Figures.dwg Wed, 15 May 2013 - 2:08pm nancy.lagattuta





HIGHLAND AVENUE
(70' WIDE)

TENNESSEE AVENUE
(66' WIDE)

BB3

BB2

BB5

BB6

BB1

BB7

BB4

BB7

AROCOR 1254

2/26/13

1.7J

BB4	2/26/13
Lead	4,090J
TCLP Lead	116J
AROCOR 1254	1.7J
AROCOR 1260	1.3J

LEGEND

- PROPERTY BOUNDARY
- EXISTING STRUCTURE
- FENCE
- BB4 BRICK BEDDING MATERIAL SAMPLE LOCATION
- AREA REPORTED BY EA(2009) TO CONTAIN BRICK FLOOR OVER CONCRETE SUBFLOOR
- AREA OBSERVED BY AMEC(2013) TO ACTUALLY CONTAIN BRICK FLOOR OVER CONCRETE SUBFLOOR
- J ESTIMATED VALUE

RESULTS REPORTED IN mg/kg
TCLP RESULTS REPORT IN mg/L

80 0 80
SCALE: 1"=80'

BRIGHTFIELDS, INC.
TRACT I SITE
NIAGARA FALLS, NEW YORK

Project No.: 3410130921



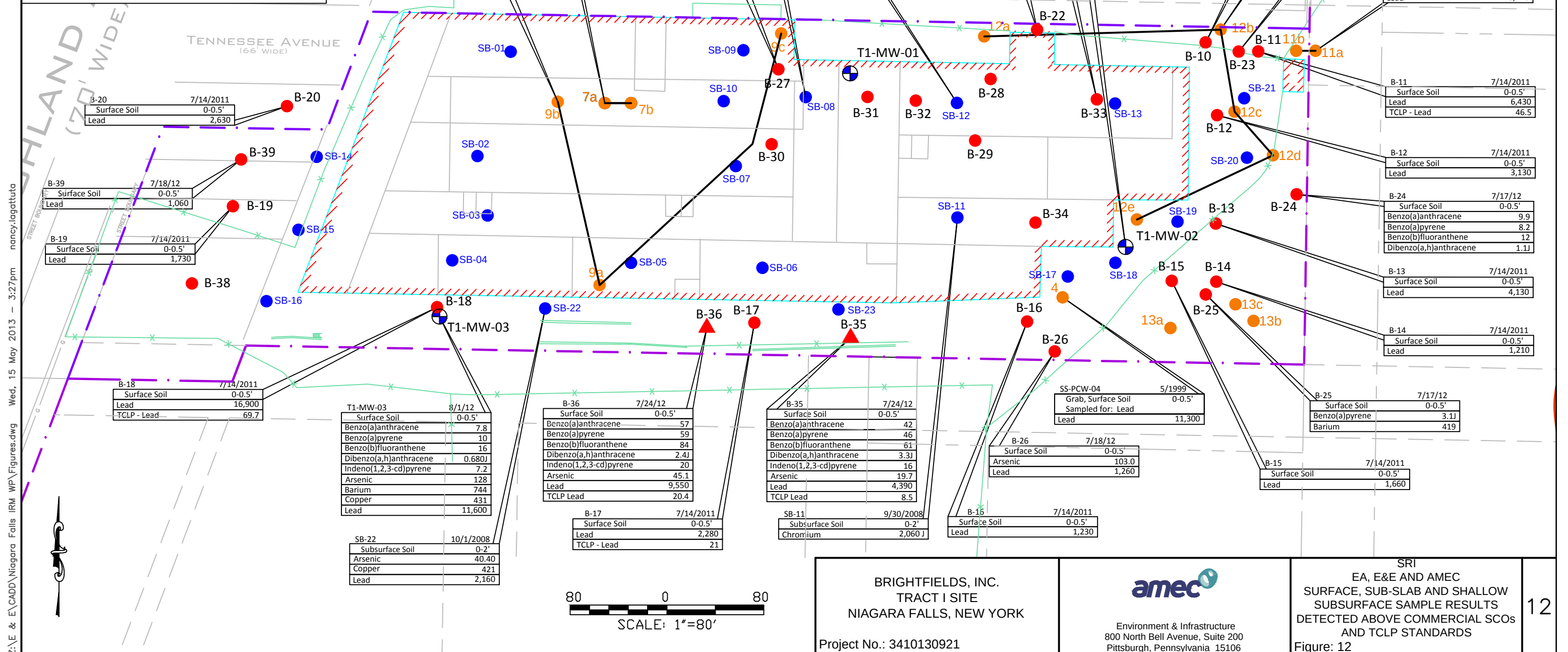
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SRI
BRICK BEDDING MATERIAL
SAMPLE LOCATIONS
RESULTS DETECTED ABOVE
COMMERCIAL SCOs

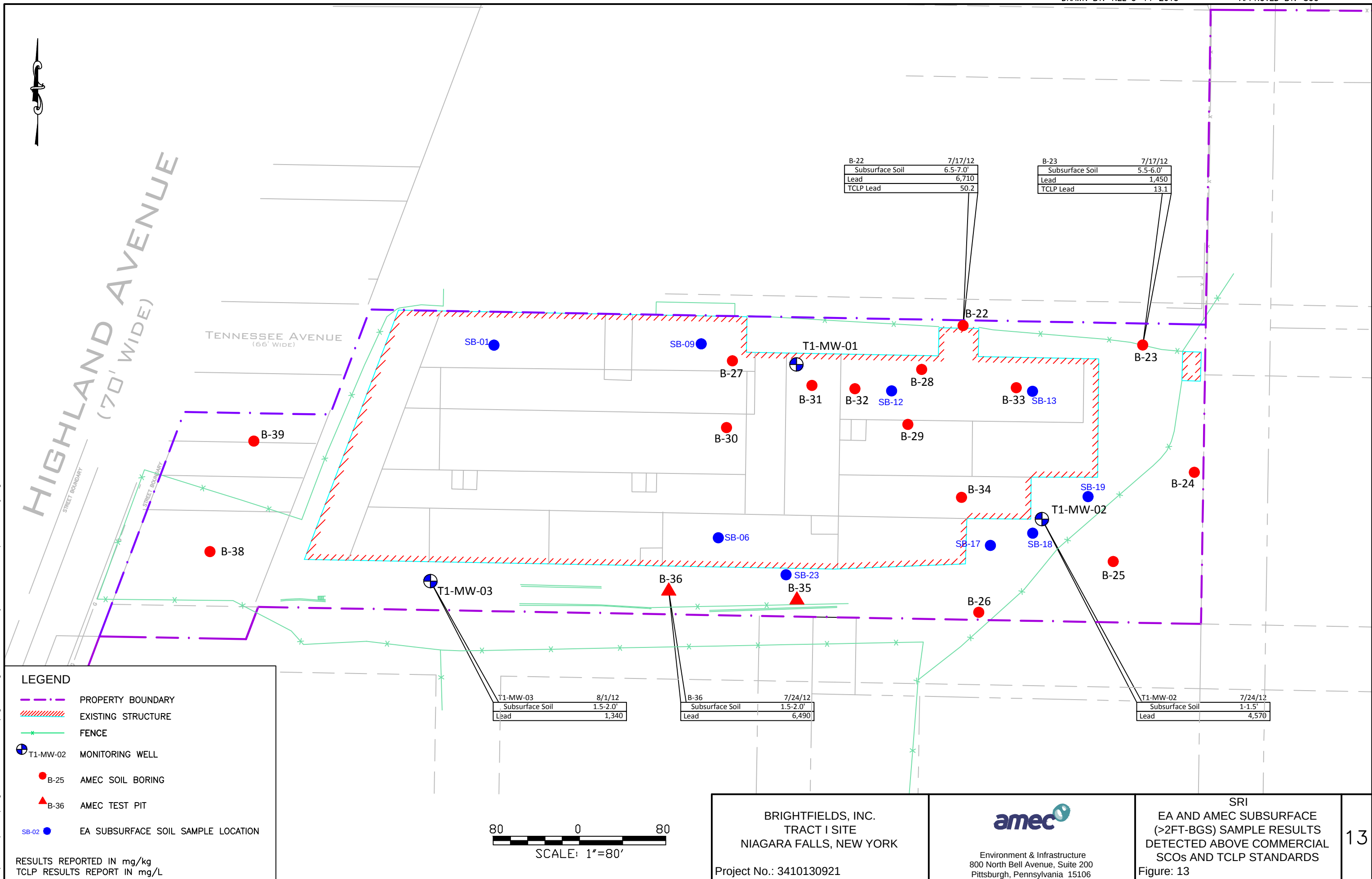
Figure: 11

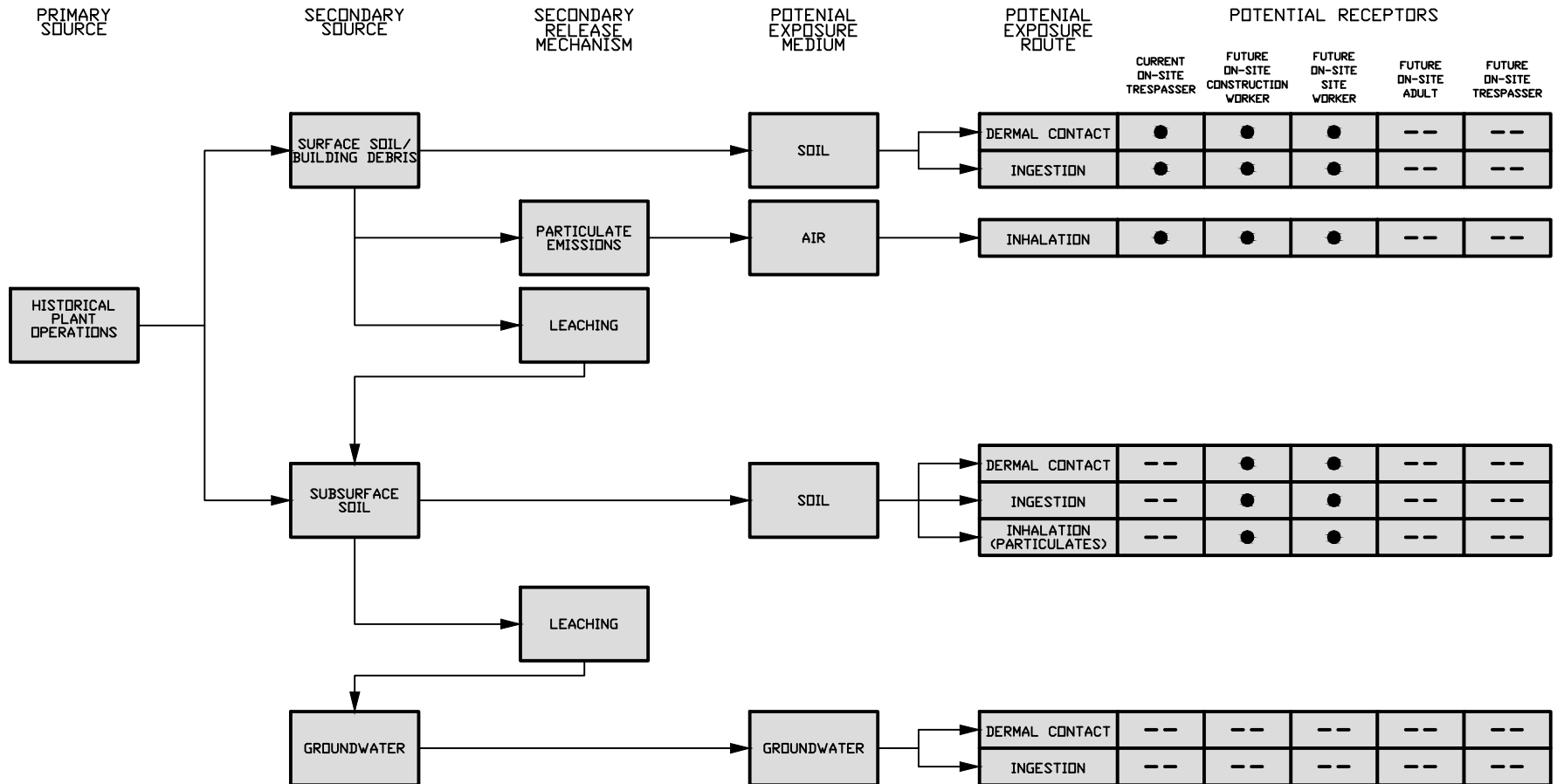
	PROPERTY BOUNDARY
	EXISTING STRUCTURE
	FENCE
	T1-MW-02 MONITORING WELL
	B-25 AMEC SOIL BORING
	B-36 AMEC TEST PIT
	10b E&E COMPOSITE SOIL SAMPLE LOCATION
	SB-02 EA SUBSURFACE SOIL SAMPLE LOCATION
J	ESTIMATED VALUE
B	COMPOUND DETECTED IN METHOD BLANK
D	DILUTED SAMPLE ANALYSIS RESULT

RESULTS REPORTED IN mg/kg
TCLP RESULTS REPORT IN mg/L



Z:\E & E\CADD\Niagara Falls IRM WP\Figures.dwg Wed, 15 May 2013 - 2:08pm nancy.logottuta





- INDICATES POTENTIALLY COMPLETE EXPOSURE PATHWAY
- INDICATES INCOMPLETE EXPOSURE PATHWAY BASED ON CURRENT SITE USE AND THE ANTICIPATED FUTURE COMMERCIAL USE SCENARIO

BRIGHTFIELDS, INC.
TRACT I SITE
NIAGARA FALLS, NEW YORK

Project No.: 3410130921



Environment & Infrastructure
800 North Bell Avenue, Suite 200
Pittsburgh, Pennsylvania 15106

SUPPLEMENTAL REMEDIAL
INVESTIGATION
CONCEPTUAL SITE MODEL

Figure: 14

APPENDIX A

Monitoring Well Installation and Testing Data

PROJECT: Honeywell- Tract 1 Site Niagara Falls, New York					Log of Well No. T1-MW01					
BORING LOCATION: See Figure ____.					TOP OF RISER ELEVATION: fmsl			DATUM:		
DRILLING CONTRACTOR: SJB Services, Inc.					DATE STARTED: 7/17/12			DATE FINISHED: 7/17/12		
DRILLING METHOD: 4 1/4" dia. HSA					TOTAL DEPTH: 22.0 fbgs			SCREEN INTERVAL: 5-15 fbgs		
DRILLING EQUIPMENT: CME 750 ATV					DEPTH TO WATER:		FIRST 17 ft		COMPL. CASING: 2" PVC	
SAMPLING METHOD: 2" dia. split spoons					LOGGED BY: MAC					
HAMMER WEIGHT: 140#			DROP: Autohammer		RESPONSIBLE PROFESSIONAL: Robert Crowley				REG. NO.	

DEPTH (feet)	SAMPLES				OVM (ppm)	DESCRIPTION	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
	Sample No.	Sample	Blows/ foot	Blows/ foot		NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	
						Surface Elevation: fmsl	
1	1		1	1	0	Advance 4 1/4" diameter HSA through concrete pad to 6".	
2			2	2	FILL brown fine sand, ash-like material, coal dust, cinders, moist, loose.		
3	2		2	2	0	Poor recovery, little fill returned in sampling shoe.	
4			2	2			
5	3		2	2	71.2	(CL, NATIVE) grey silty clay with trace rootlets. Moderate petroleum-like odor, firm to hard throughout, moist.	
6			2	2			
7	4		1	2	56.1		
8			3	3		grading to red-brown silty clay, few rootlets, moist, light petroleum-type odor.	
9	5		3	4	85.2		
10			6	11		as above (CL) with no odors below 10.0' bgs.	
11	6		11	14	0		
12			14	10			
13	7		10	17	0		
14			14	17			
15	8		10	14	0	thin 6" thick perched groundwater zone at 15' bgs, saturated at 17' bgs.	
16			18	14			
17	9		14	12	0		
18			15	10			
19	10		10	11	0		
20			16	20			
21	11		20	18	0	(SP-SM) fine to medium sand with little fine rounded to angular gravel and little silt, firm throughout, no odors. (Sandy Till)	
22			17				
23							
24							
25							

WELL_OVM HONEYWELL NF MW-SB LOGS.GPJ (8/12)

Project No.	AMEC E&I	Page 1 of 1

PROJECT: Honeywell- Tract 1 Site Niagara Falls, New York					Log of Well No. T1-MW02					
BORING LOCATION: See Figure ____.					TOP OF RISER ELEVATION: fmsl			DATUM:		
DRILLING CONTRACTOR: SJB Services, Inc.					DATE STARTED: 8/1/12			DATE FINISHED: 8/1/12		
DRILLING METHOD: 4 1/4" dia. HSA					TOTAL DEPTH: 14.0 fbgs			SCREEN INTERVAL: 3-13 fbgs		
DRILLING EQUIPMENT: CME 750 ATV					DEPTH TO WATER:		FIRST 12 ft		COMPL. CASING: 2" PVC	
SAMPLING METHOD: 2" dia. split spoons					LOGGED BY: JL					
HAMMER WEIGHT: 140#			DROP: Autohammer		RESPONSIBLE PROFESSIONAL: Robert Crowley				REG. NO.	

DEPTH (feet)	SAMPLES				OVM (ppm)	DESCRIPTION	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
	Sample No.	Sample	Blows/ foot	ft		NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	
						Surface Elevation: fmsl	
1						Advance 4 1/4" diameter HSA to 4.0' bgs without sampling. Fill material (brown sand, silt, brick, concrete) returned in cuttings.	
2							
3							
4							
5	1		6		43	(CL, NATIVE) grey silty clay exhibiting black staining. Strong petroleum-like odor, firm to hard throughout, moist.	
6							
7	2		4		24		
8							
9	3		3		4	As above (CL) grading to dark brown. Less staining, with moderate petroleum-type odor. Saturated at 9.0' bgs.	
10							
11	4		6		21		
12							
13	5		12		17.7	(GC) red, clayey gravel, saturated, slight petroleum-type odor.	
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

WELL_OVM HONEYWELL NF MW-SB LOGS.GPJ (8/12)

Project No.	AMEC E&I	Page 1 of 1

PROJECT: Honeywell- Tract 1 Site Niagara Falls, New York					Log of Well No. T1-MW03					
BORING LOCATION: See Figure ____.					TOP OF RISER ELEVATION: fmsl			DATUM:		
DRILLING CONTRACTOR: SJB Services, Inc.					DATE STARTED: 8/1/12			DATE FINISHED: 8/1/12		
DRILLING METHOD: 4 1/4" dia. HSA					TOTAL DEPTH: 14.0 fbgs			SCREEN INTERVAL: 4-14 fbgs		
DRILLING EQUIPMENT: CME 750 ATV					DEPTH TO WATER:		FIRST 5 ft		COMPL. CASING: 2" PVC	
SAMPLING METHOD: 2" dia. split spoons					LOGGED BY: JL					
HAMMER WEIGHT: 140#			DROP: Autohammer		RESPONSIBLE PROFESSIONAL: Robert Crowley				REG. NO.	

DEPTH (feet)	SAMPLES				OVM (ppm)	DESCRIPTION	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
	Sample No.	Sample	Blows/ foot	Blows/ foot		NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.	
						Surface Elevation: fmsl	
1	1		3 4 4 5		0	FILL brown fine sand with vegetative matter, ash-like material, cinders, some coal fragments, dry , loose.	
2					0	(CL, NATIVE) light brown silty clay, firm throughout, moist.	
3	2		4 3 3 4		0		
4					0		
5	3		2 1 1 1 1		0	Saturated at 5.0' bgs.	
6					0		
7	4		4 3 4 5		0		
8					0		
9	5		5 6 7 7		0	as above, becoming slightly coarser grained with little fine to medium sand content. (CL/ML)	
10					0		
11	6		12 16 22 37		0	(GC) tan/light brown clayey gravel (TILL) , dry to damp, firm to hard.	
12					0		
13	7		21 33 36 50/0.4		0		
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

WELL_OVM HONEYWELL NF MW-SB LOGS.GPJ (8/12)



WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: TL-MW-01 Initial Depth to Water: 8.33 (dw)
 Sample ID: _____ Duplicate ID: _____ Depth to Water after Sampling: _____
 Sample Depth: _____ Total Depth to Well: 23.7
 Project and Task No.: _____ Well Diameter: 8"
 Project Name: Heavywell - Nimmer Faces 1 Casing/Borehole Volume: 2.5g
 Date: 8/8/12 (Circle one)
 Sampled By: Moe/JL 2 Casing/Borehole Volumes: 13.5g
 Method of Purging: Similar (deducted) (dw) (Circle one)
 Method of Sampling: _____ Total Casing/Borehole Volumes Removed: TURB ↓

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal)	Temp (°C)	pH (Units)	Specific Electrical Conductance (µS/cm)	Dissolved Oxygen (mg/l)	Redox Potential (mV, SSCE)	Remarks (color, turbidity, and sediment)
12:30			initial	14.1	7.17	1.252	2.30↓	-113	OK First 5 min 1/2 clear
12:35			2.5	13.7	6.89	1.227	2.20	-96	OK 1/2 turbid
12:41			5.0	12.8	6.80	1.240	1.64	-104	OK
12:48			7.5	12.2	6.78	1.204	1.70	-123	OK ↑
12:54			10.0	11.9	6.83	1.180	1.91	-96.4	OK TURBID
13:05			12.5	12.2	7.00	1.18	1.87	-43.5	OK "
13:10		200%	14.0	12.25↓	7.28	1.28	7.26↓	78.4↓	12.6 clear
13:15			15.5	16.08	6.80	1.25	5.74	28.6	11.2 "
13:15			0.5	15.90	6.84	1.25	5.76	16.6	8.71
13:20			0.75	16.01	6.84	1.25	5.48	7.3	7.25
13:25			1.00	16.09	6.85	1.25	5.20	2.3	7.92

Page 8/9 →

pH CALIBRATION (choose two)				Model or Unit No.:	
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	Sample collected @ 13:30	
Field Temperature °C					
Instrument Reading					
SPECIFIC ELECTRICAL CONDUCTANCE - CALIBRATION				Model or Unit No.:	
KCL Solution (µS/cm=µmhos/cm)	1413 at 25°C	12880 at 25°C			
Field Temperature °C					
Instrument Reading					
REDOX CALIBRATION		DISSOLVED OXYGEN CALIBRATION		Notes:	
Standard Solution	468 mV	Salinity %			
Field Temperature °C		Altitude			
Instrument Reading		Instrument Reading			
Model or Unit No.:		Model or Unit No.:			
Ag/AgCl Electrode (SSCE)					



WELL SAMPLING AND/OR DEVELOPMENT RECORD

(DJP)

Well ID: TL-MW 02 Initial Depth to Water: 9.43 (dw)
 Sample ID: _____ Duplicate ID: DJP Depth to Water after Sampling: _____
 Sample Depth: _____ Total Depth to Well: 15.85
 Project and Task No.: _____ Well Diameter: 2"
 Project Name: Honeywell - Nitroxy Envs 1 Casing/Borehole Volume: 1.02
 Date: 8/8/12 (dw) (Circle one)
 Sampled By: ML/SL 4 Casing/Borehole Volumes: _____
 Method of Purging: dedicated sampler (dw) (Circle one)
 Method of Sampling: peristaltic pump (low flow) Total Casing/Borehole Volumes Removed: turned

Time	Intake Depth	Rate (gpm)	Cum. Vol (gal)	Temp (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Dissolved Oxygen (mg/l)	Redox Potential (mv SSCE)	Remarks (color, turbidity, and sediment)
9:38			2.5	13.5	7.26	1.49 mS/cm	0.90 ↓	-22.	OR light stream
9:42			3.5	12.9	7.10	1.40	0.70 ↓	-36.3	OR petio - odor
9:47			5.0	12.74	6.89	1.43	0.82 ↓	-51.4	OR - increasingly stream
9:52			7.5	12.80	7.04	1.39	0.96 ↓	-49.5	OR light separate NAPL phase
PURGE → 9:53			initial	14.09	6.61	1.48	0.69	-31.6	664
9:58			0.5	14.71	6.69	1.50	0.79	-34.4	364
10:03			0.75	14.9	6.85	1.51	0.61	-41.1	255
10:09			1.0	14.5	6.83	1.5	0.44	-38.1	165
10:15			1.25	14.55	6.82	1.5	0.48	-41.5	90.4
10:20			1.50	14.4	6.8	1.5	0.47	-57.0	58.3
10:25			1.75	14.18	6.8	1.5	0.35	-34.6	40.1

pH CALIBRATION (choose two)

Buffer Solution	pH 4.0	pH 7.0	pH 10.0
Field Temperature °C			
Instrument Reading			

Model or Unit No.:

Duplicate

VOLUME COLLECTED

SPECIFIC ELECTRICAL CONDUCTANCE CALIBRATION

KCL Solution (µS/cm=µmhos/cm)	1413 at 25°C	12880 at 25°C
Field Temperature °C		
Instrument Reading		

Model or Unit No.:

SAMPLE COLLECTED @

10:45

REDOX CALIBRATION

Standard Solution	468 mV
Field Temperature °C	
Instrument Reading	

DISSOLVED OXYGEN CALIBRATION

Salinity %	
Altitude	
Instrument Reading	

Notes:

Model or Unit No.: _____
 Ag/AgCl Electrode (SSCE)



WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: T1-MW 03
 Sample ID: _____ Duplicate ID: _____
 Sample Depth: _____
 Project and Task No.: _____
 Project Name: Wetland - Wetmore Falls
 Date: 8/8/12
 Sampled By: ME/SZ
 Method of Purging: deductible water (dev.)
 Method of Sampling: peristaltic pump (low flow)

Initial Depth to Water: 8.15 (dev)
 Depth to Water after Sampling: _____
 Total Depth to Well: 16.8
 Well Diameter: 2"
 1 Casing/Borehole Volume: 1.4
 (Circle one)
 4 Casing/Borehole Volumes: 1.4 x 5 = 7.0
 (Circle one)
 Total Casing/Borehole Volumes Removed: 7.0

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Dissolved Oxygen (mg/l)	Redox Potential (mV, SSCE)	Remarks (color, turbidity, and sediment)
10:07			1.0	15.0	7.38	1.085	1.20	18.5	95.2
10:13			3.0	13.4	6.81	1.025	1.38	-54.0	374
10:17			5.0	12.5	6.78	1.035	1.64	-22.4	OR
10:29			7.0	12.8	6.87	1.045	1.54	-14.2	OR
11:42		250 ^{mL} /min	initial	16.2	7.51	1.13	1.98	-44.0	19.8
11:47			0.25	15.3	7.11	1.06	1.98	-15.1	5.44
11:52			0.50	15.0	7.10	1.28	3.30	-0.3	3.44
11:57			0.75	14.9	7.09	1.03	3.51	-0.4	3.22
12:02			1.00	15.1	7.10	1.03	3.30	-1.5	3.15

pH CALIBRATION (choose two)

Buffer Solution	pH 4.0	pH 7.0	pH 10.0
Field Temperature °C			
Instrument Reading			

Model or Unit No.:

Sample collected @ 12:05

SPECIFIC ELECTRICAL CONDUCTANCE CALIBRATION

KCL Solution (µS/cm=µmhos/cm)	1413 at 25°C	12880 at 25°C
Field Temperature °C		
Instrument Reading		

Model or Unit No.:

REDOX CALIBRATION

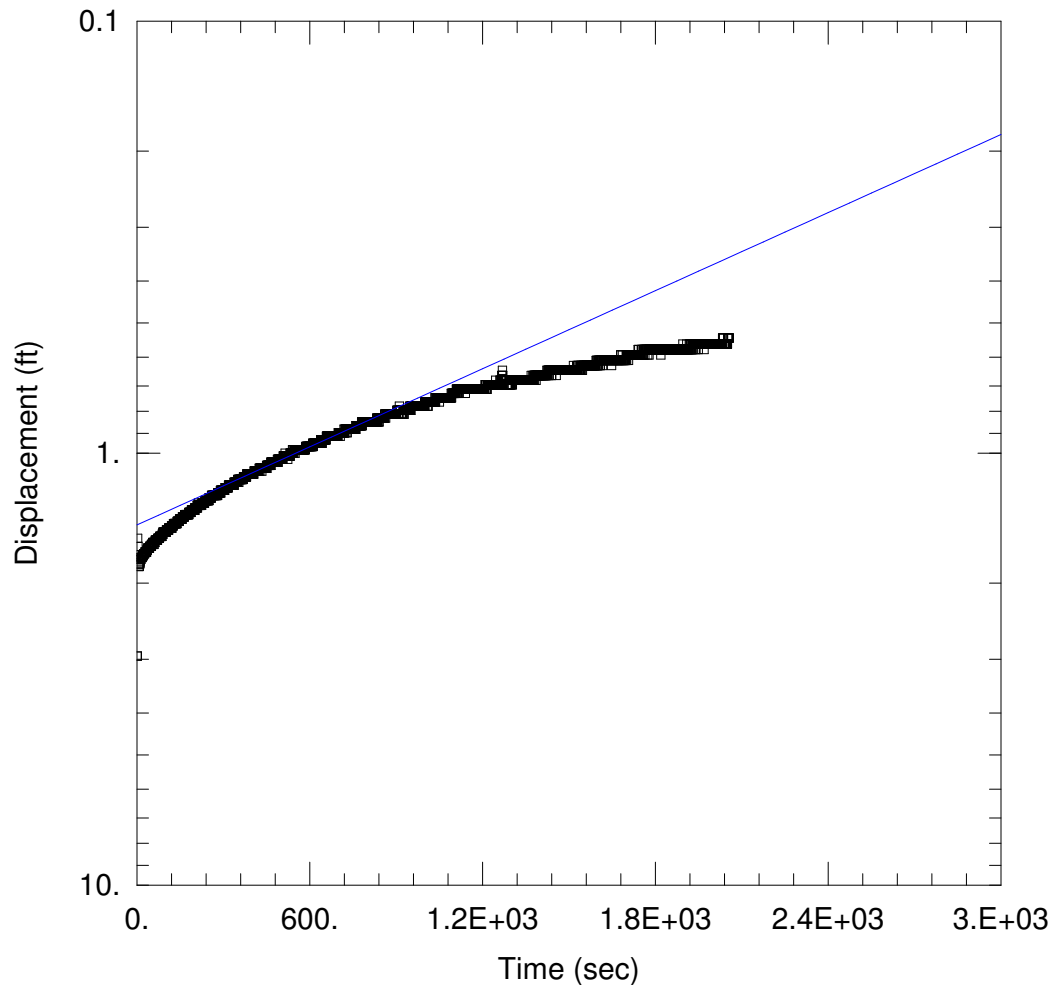
Standard Solution	468 mV
Field Temperature °C	
Instrument Reading	

DISSOLVED OXYGEN CALIBRATION

Salinity %	
Altitude	
Instrument Reading	

Notes:

Model or Unit No.:
 Ag/AgCl Electrode (SSCE)



WELL TEST ANALYSIS

Data Set: P:\Project\Honeywell Niagara Falls\T1-MW01.aqt

Date: 08/17/12

Time: 12:24:02

PROJECT INFORMATION

Company: AMEC E&I

Client: Honeywell

Test Location: Tract 1 Site

Test Well: T1-MW01

Test Date: 8/16/12

AQUIFER DATA

Saturated Thickness: 16.5 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (T1-MW01)

Initial Displacement: 2.95 ft

Water Column Height: 16.5 ft

Casing Radius: 0.08 ft

Wellbore Radius: 0.66 ft

Screen Length: 10. ft

Gravel Pack Porosity: 0.3

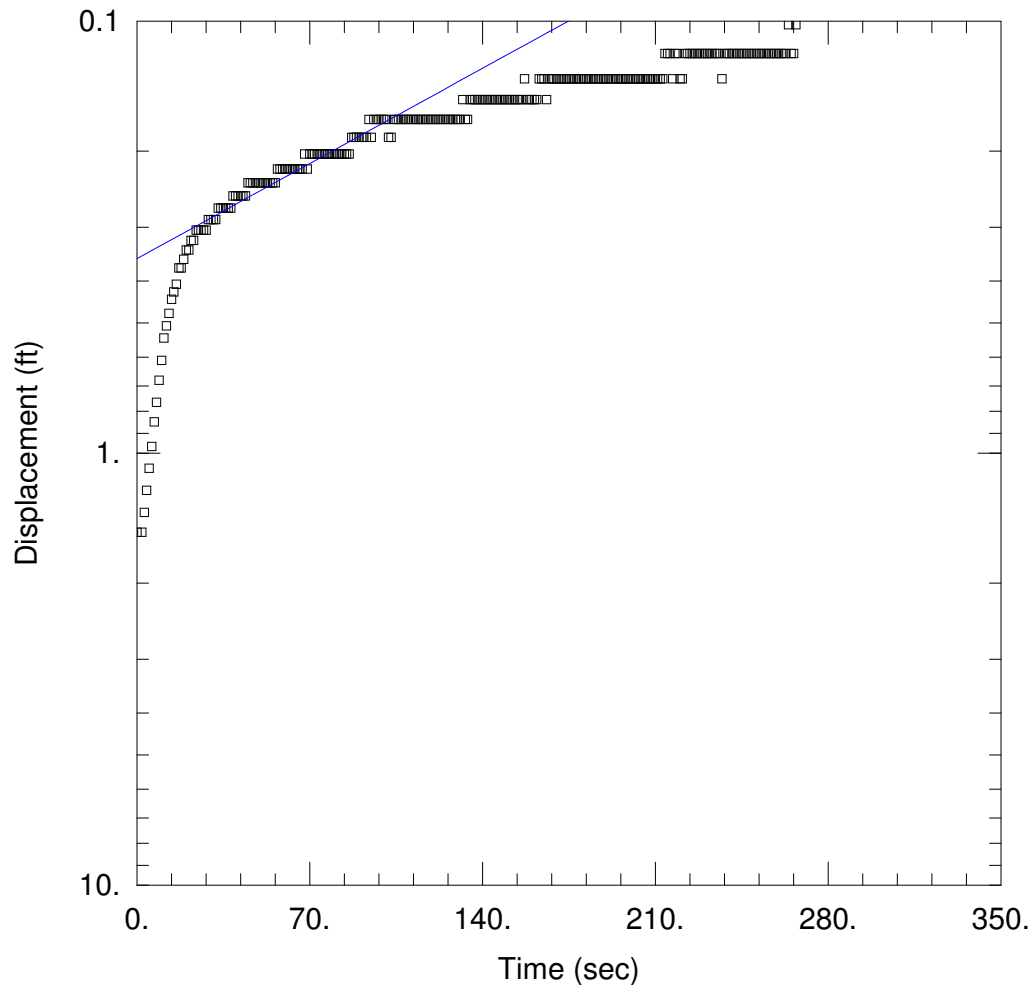
SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 1.063E-05$ ft/sec

$y_0 = 1.468$ ft



WELL TEST ANALYSIS

Data Set: P:\Project\Honeywell Niagara Falls\T1-MW02.aqt

Date: 08/17/12

Time: 12:25:48

PROJECT INFORMATION

Company: AMEC E&I

Client: Honeywell

Test Location: Tract 1 Site

Test Well: T1-MW02

Test Date: 8/16/12

AQUIFER DATA

Saturated Thickness: 6.64 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (T1-MW01)

Initial Displacement: 1.525 ft

Water Column Height: 6.64 ft

Casing Radius: 0.08 ft

Wellbore Radius: 0.66 ft

Screen Length: 10. ft

Gravel Pack Porosity: 0.3

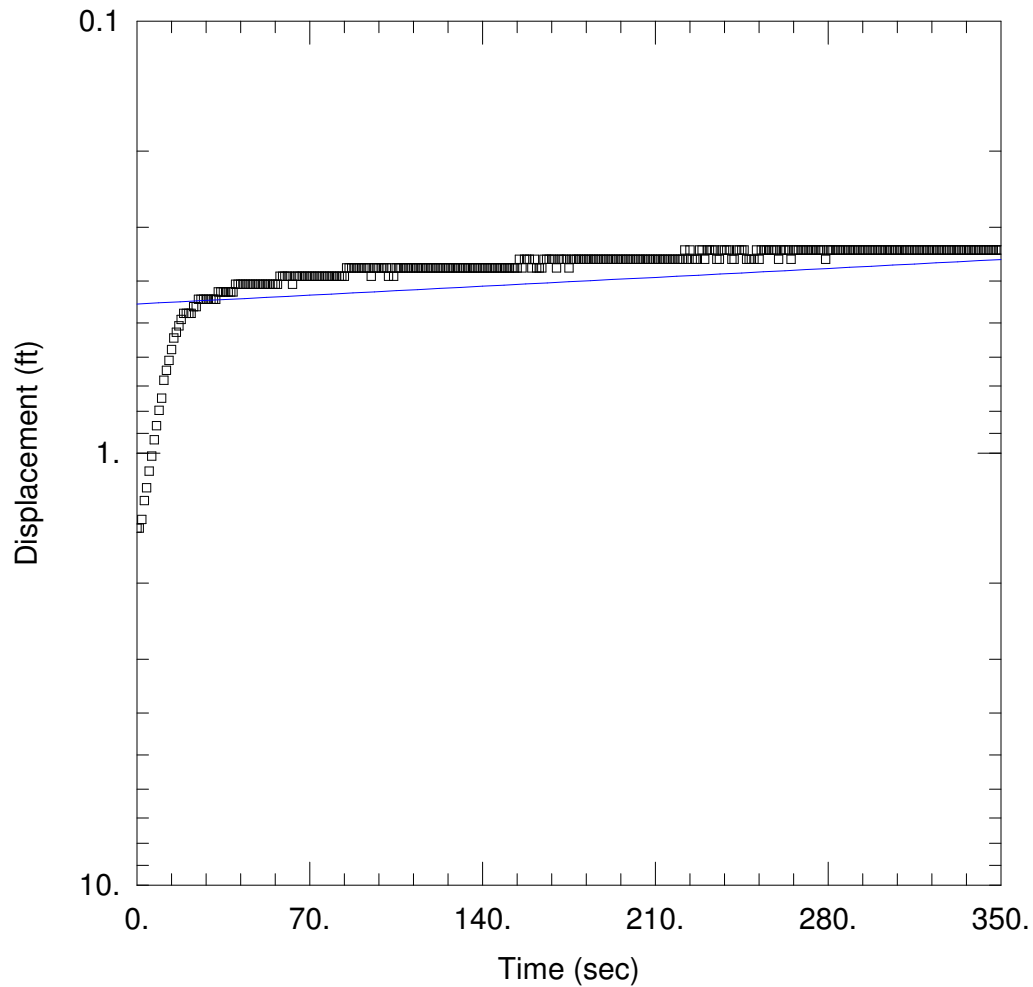
SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 8.512E-05$ ft/sec

$y_0 = 0.3551$ ft



WELL TEST ANALYSIS

Data Set: P:\Project\Honeywell Niagara Falls\T1-MW03.aqt

Date: 08/17/12

Time: 12:48:36

PROJECT INFORMATION

Company: AMEC E&I

Client: Honeywell

Test Location: Tract 1 Site

Test Well: T1-MW03

Test Date: 8/16/12

AQUIFER DATA

Saturated Thickness: 8.98 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (T1-MW03)

Initial Displacement: 1.491 ft

Water Column Height: 8.98 ft

Casing Radius: 0.08 ft

Wellbore Radius: 0.66 ft

Screen Length: 10. ft

Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 8.786E-06$ ft/sec

$y_0 = 0.4519$ ft

APPENDIX B

Soil Boring and Test Pit Logs

PROJECT: Honeywell- Tract 1 Site Niagara Falls, New York					Log of Boring No. B-23				
BORING LOCATION: See Figure ____.					ELEVATION: fmsl			DATUM:	
DRILLING CONTRACTOR: SJB Services, Inc.					DATE STARTED: 7/17/12			DATE FINISHED: 7/17/12	
DRILLING METHOD: 4 1/4" dia. HSA					TOTAL DEPTH: 12.0 fbg			MEASURING POINT: ground surface	
DRILLING EQUIPMENT: CME 750 ATV					DEPTH TO WATER:		FIRST	COMPL.	
SAMPLING METHOD: 2" dia. split spoons					LOGGED BY: MAC				
HAMMER WEIGHT: 140#			DROP: Autohammer		RESPONSIBLE PROFESSIONAL: Robert Crowley			REG. NO.	
DEPTH (feet)	SAMPLES				OVM (ppm)	DESCRIPTION		DRILLING REMARKS	
	Sample No.	Sample	Blows/ foot			NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.			
						Surface Elevation: fmsl			
1	1		9 26 50/0.3	0	FILL grey to black fine sand, silt, brick, weathered concrete, coal fragments, crushed limestone gravel. Dry, loose throughout. No odors.			—	
2								—	
3	2		8 11 6 6	36.8	Little slag and ash-like material. No odors despite PID reading of 36.8 ppm.			—	
4								—	
5	3		6 6 8 6	0	Fill material mixed with reworked native silty clay.			—	
6								—	
7	4		6 8 10 10	0	(CL, NATIVE) grey silty clay with trace rootlets. Moist, firm throughout, no odors.			—	
8								—	
9	5		6 5 5 5	0	As above (CL), with color grading to reddish brown.			—	
10								—	
11	6		4 6 9 6	0				—	
12								—	
13								—	
14								—	
15								—	
16								—	
17								—	
18								—	
19								—	
20								—	
21								—	
22								—	
23								—	
24								—	
25								—	
					BORING HONEYWELL NF MW-SB LOGS.GPJ (8/12)				
Project No.		AMEC E&I					Page 1 of 1		

PROJECT: Honeywell- Tract 1 Site Niagara Falls, New York					Log of Boring No. B-24				
BORING LOCATION: See Figure ____.					ELEVATION: fmsl		DATUM:		
DRILLING CONTRACTOR: SJB Services, Inc.					DATE STARTED: 7/17/12		DATE FINISHED: 7/17/12		
DRILLING METHOD: 4 1/4" dia. HSA					TOTAL DEPTH: 8.0 fbgs		MEASURING POINT: ground surface		
DRILLING EQUIPMENT: CME 750 ATV					DEPTH TO WATER:		FIRST		COMPL.
SAMPLING METHOD: 2" dia. split spoons					LOGGED BY: MAC				
HAMMER WEIGHT: 140#			DROP: Autohammer		RESPONSIBLE PROFESSIONAL: Robert Crowley			REG. NO.	
DEPTH (feet)	SAMPLES				OVM (ppm)	DESCRIPTION	DRILLING REMARKS		
	Sample No.	Sample	Blows/ foot	NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.					
Surface Elevation: fmsl									
1	1		2	0	FILL brown fine sand with silt, vegetative matter, brick, weathered concrete, dry, loose.				
2									
3	2		3	0	Poor recovery 2-6' bgs. Second boring advanced to collect analytical sample volume.				
4			1						
5	3		6	0					
6			8						
7	4		17	0	(CL, NATIVE) grey silty clay with trace rootlets. Moist, firm throughout, no odors.				
8			14						
9			15						
10			16						
11			17						
12			18						
13			19						
14			20						
15			21						
16			22						
17			23						
18			24						
19			25						
20									
21									
22									
23									
24									
25									
Project No.					AMEC E&I			Page 1 of 1	

PROJECT: Honeywell- Tract 1 Site Niagara Falls, New York					Log of Boring No. B-25				
BORING LOCATION: See Figure ____.					ELEVATION: fmsl		DATUM:		
DRILLING CONTRACTOR: SJB Services, Inc.					DATE STARTED: 7/17/12		DATE FINISHED: 7/17/12		
DRILLING METHOD: 4 1/4" dia. HSA					TOTAL DEPTH: 6.0 fbgs		MEASURING POINT: ground surface		
DRILLING EQUIPMENT: CME 750 ATV					DEPTH TO WATER:		FIRST		COMPL.
SAMPLING METHOD: 2" dia. split spoons					LOGGED BY: MAC				
HAMMER WEIGHT: 140#			DROP: Autohammer		RESPONSIBLE PROFESSIONAL: Robert Crowley			REG. NO.	
DEPTH (feet)	SAMPLES			OVM (ppm)	DESCRIPTION		DRILLING REMARKS		
	Sample No.	Sample	Blows/ foot		NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.				
					Surface Elevation: fmsl				
1	1		0	0	FILL brick, gravel, cinders, some fine sand and silt, loose, slight musty odor, dry.				
2									
3	2		0	0	As above, with increasing brown fine sand content.				
4									
5	3		0	0	-----				
6					(CL, NATIVE) grey silty clay with trace rootlets. Moist, firm throughout, no odors.				
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
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Project No.

AMEC E&I

BORING HONEYWELL NF MW-SB LOGS.GPJ (8/12)

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PROJECT: Honeywell- Tract 1 Site Niagara Falls, New York					Log of Boring No. B-26				
BORING LOCATION: See Figure ____.					ELEVATION: fmsl		DATUM:		
DRILLING CONTRACTOR: SJB Services, Inc.					DATE STARTED: 7/18/12		DATE FINISHED: 7/18/12		
DRILLING METHOD: 4 1/4" dia. HSA					TOTAL DEPTH: 6.0 fbgs		MEASURING POINT: ground surface		
DRILLING EQUIPMENT: CME 750 ATV					DEPTH TO WATER:		FIRST		COMPL.
SAMPLING METHOD: 2" dia. split spoons					LOGGED BY: MAC				
HAMMER WEIGHT: 140#			DROP: Autohammer		RESPONSIBLE PROFESSIONAL: Robert Crowley			REG. NO.	
DEPTH (feet)	SAMPLES				OVM (ppm)	DESCRIPTION	DRILLING REMARKS		
	Sample No.	Sample	Blows/ foot	NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.					
Surface Elevation: fmsl									
1	1		3 3 3 3	0	FILL brown fine sand with silt, coarse limestone gravel, brick, little coal dust, slag and ash-like material, dry, loose.				
2									
3	2		3 3 3 3 4	0					
4									
5	3		2 3 3 3 4	0	(CL, NATIVE) grey silty clay grading to red-brown silty clay at 5.5' bgs. Moist, firm throughout, no odors.				
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
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Project No.					AMEC E&I			Page 1 of 1	

				PROJECT: Niagara Falls		BORING: B-27	
				LOCATION: Niagara Falls, NY		WELL:	
				JOB NUMBER: 3410110832		START: 1015	
				CLIENT: Honeywell		DATE: 2/21/2013	
Driller: SJB Services, Inc.				Drilling Method: Direct Push via Geoprobe 6620 DT			
Field Scientist: Sean Condie				Bore Hole Diameter: 2"			
Surveyor:				Auger Size: Not Applicable (NA)			
Ground Elevation:				Sampling Device: Acetate Sleeve			
Northing:				Total Depth: 8.0 Feet Below Ground Surface (ft-bgs)			
Easting:				Depth to Water: Groundwater not encountered.		Date:	
Ref. Elevation:				GW Elevation:		Date:	
DEPTH (ft-bgs)	ANALYTICAL SAMPLE	Photoionization Detector Reading (ppm)	% RECOVERY	SOIL DESCRIPTION	SOIL CLASSIFICATION	Comments:	
1	B-27 (0.5-1.0)	0.1	55	Concrete Slab (0-4")	SP	Collect Duplicate.	
2		0.0		Black, Dry, Loose, C. SAND and Ang. GRAVEL			
3				Brown Grades to Gray, Damp Grades to Moist, Soft, CLAY with Trace Silt (NATIVE)			
4							
5		0.0	100		CL		
6							
7							
8							
9				Boring Completed at 8.0 ft-bgs.			
10							
11							
12							
13							
14							
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19							
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CREATED BY: SCC				PAGE: 1 of 1			
CHECKED BY: GSO							

				PROJECT: Niagara Falls		BORING: B-28	
				LOCATION: Niagara Falls, NY		WELL:	
				JOB NUMBER: 3410110832		START: 1130	
				CLIENT: Honeywell		DATE: 2/21/2013	
Driller: SJB Services, Inc.				Drilling Method: Direct Push via Geoprobe 6620 DT			
Field Scientist: Sean Condie				Bore Hole Diameter: 2"			
Surveyor:				Auger Size: Not Applicable (NA)			
Ground Elevation:				Sampling Device: Acetate Sleeve			
Northing:				Total Depth: 8.0 Feet Below Ground Surface (ft-bgs)			
Easting:				Depth to Water: Groundwater not encountered.		Date:	
Ref. Elevation:				GW Elevation:		Date:	
DEPTH (ft-bgs)	ANALYTICAL SAMPLE	Photoionization Detector Reading (ppm)	% RECOVERY	SOIL DESCRIPTION	SOIL CLASSIFICATION	Comments:	
1	B-28 (0.5-1.0)	0.0	70	Brick (0-3"); Concrete Slab (3-7")	SP	Coal and Fine Glass Present	
2		0.0		Black, Gray, and L. Brown, Damp, Loose to M. Dense, C. SAND Grades to M. SAND and SILT			
3				Brown and Red, Damp, M. Stiff, SILTY CLAY with Trace F. Sand; Fine Glass Present			
4				Glass Ceases			
5		0.0	50		CL		
6							
7							
8	B-28 (7.0-7.5)	0.0		Gray, Damp, Stiff, SILTY CLAY; Initial 1" is Dark-Hued, Organic, Silty Clay (NATIVE)	CL		
9				Boring Completed at 8.0 ft-bgs.			
10							
11							
12							
13							
14							
15							
16							
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18							
19							
20							
CREATED BY: SCC CHECKED BY: GSO							

				PROJECT: Niagara Falls		BORING: B-29	
				LOCATION: Niagara Falls, NY		WELL:	
				JOB NUMBER: 3410110832		START: 1250	
				CLIENT: Honeywell		DATE: 2/21/2013	
Driller: SJB Services, Inc.				Drilling Method: Direct Push via Geoprobe 6620 DT			
Field Scientist: Sean Condie				Bore Hole Diameter: 2"			
Surveyor:				Auger Size: Not Applicable (NA)			
Ground Elevation:				Sampling Device: Acetate Sleeve			
Northing:				Total Depth: 8.0 Feet Below Ground Surface (ft-bgs)			
Easting:				Depth to Water: Groundwater not encountered.		Date:	
Ref. Elevation:				GW Elevation:		Date:	
DEPTH (ft-bgs)	ANALYTICAL SAMPLE	Photoionization Detector Reading (ppm)	% RECOVERY	SOIL DESCRIPTION		SOIL CLASSIFICATION	Comments:
1	B-29 (0.5-1.0)	0.0	60	Brick (0-3"); Concrete Slab (3-7")		CL	Collect Duplicate.
2				Brown, Damp, M. Stiff, SILTY CLAY with Trace C. Sand; Coal and Organics Present			
3							
4							
5		0.0	75				
6							
7							
8	B-29 (7.0-7.5)	0.0					
8						Gray, Damp, Stiff, SILTY CLAY; Initial 2" is Dark-Hued, Organic, Silty Clay (NATIVE)	
9				Boring Completed at 8.0 ft-bgs.			
10							
11							
12							
13							
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17							
18							
19							
20							
CREATED BY: SCC CHECKED BY: GSO							

				PROJECT: Niagara Falls		BORING: B-30	
				LOCATION: Niagara Falls, NY		WELL:	
				JOB NUMBER: 3410110832		START: 0930	
				CLIENT: Honeywell		DATE: 2/21/2013	
Driller: SJB Services, Inc.				Drilling Method: Direct Push via Geoprobe 6620 DT			
Field Scientist: Sean Condie				Bore Hole Diameter: 2"			
Surveyor:				Auger Size: Not Applicable (NA)			
Ground Elevation:				Sampling Device: Acetate Sleeve			
Northing:				Total Depth: 8.0 Feet Below Ground Surface (ft-bgs)			
Easting:				Depth to Water: Groundwater not encountered.		Date:	
Ref. Elevation:				GW Elevation:		Date:	
DEPTH (ft-bgs)	ANALYTICAL SAMPLE	Photoionization Detector Reading (ppm)	% RECOVERY	SOIL DESCRIPTION	SOIL CLASSIFICATION	Comments:	
1		0.0	80	Concrete Slab (0-4")			
2	B-30 (1.0-1.5)	0.0		Black, Dry, Angular, Poorly Graded, Coal-Slag GRAVEL (Subbase Material)	GW		
3		0.0		Black, Dry, Loose, C. SAND and GRAVEL; Concrete and Brick Present	SW		
4		0.0		L. Brown, Damp, Soft, F. SAND and SILT with Trace Brick Gravel	SM		
5	B-30 (3.0-3.5)	0.0		Brown grades to Gray, Damp to Dry, CLAY with Little Silt; Coal Present	CL		
6		0.0	75	Gray, Damp, Soft, CLAY with Little Silt; Initial 1" is Dark-Hued, Organic, Silty Sand (NATIVE)	CL		
7							
8							
9				Boring Completed at 8.0 ft-bgs.			
10							
11							
12							
13							
14							
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16							
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18							
19							
20							
CREATED BY: SCC CHECKED BY: GSO							

				PROJECT: Niagara Falls		BORING: B-31	
				LOCATION: Niagara Falls, NY		WELL:	
				JOB NUMBER: 3410110832		START: 1035	
				CLIENT: Honeywell		DATE: 2/21/2013	
Driller: SJB Services, Inc.				Drilling Method: Direct Push via Geoprobe 6620 DT			
Field Scientist: Sean Condie				Bore Hole Diameter: 2"			
Surveyor:				Auger Size: Not Applicable (NA)			
Ground Elevation:				Sampling Device: Acetate Sleeve			
Northing:				Total Depth: 8.0 Feet Below Ground Surface (ft-bgs)			
Easting:				Depth to Water: Groundwater not encountered.		Date:	
Ref. Elevation:				GW Elevation:		Date:	
DEPTH (ft-bgs)	ANALYTICAL SAMPLE	Photoionization Detector Reading (ppm)	% RECOVERY	SOIL DESCRIPTION	SOIL CLASSIFICATION	Comments:	
1	B-31 (0.5-1.0)	0.0	60	Concrete Slab (0-4")	CL	Collect MS/MSD Sample.	
2		0.0		Black to Red-Brown, Dry to Damp, Soft, SILTY CLAY with Little Angular Gravel			
3				Gray, Damp, Stiff, SILTY CLAY (NATIVE)			
4							
5		0.0	100		CL		
6							
7							
8							
9				Boring Completed at 8.0 ft-bgs.			
10							
11							
12							
13							
14							
15							
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20							
CREATED BY: SCC				PAGE: 1 of 1			
CHECKED BY: GSO							

				PROJECT: Niagara Falls		BORING: B-32	
				LOCATION: Niagara Falls, NY		WELL:	
				JOB NUMBER: 3410110832		START: 1100	
				CLIENT: Honeywell		DATE: 2/21/2013	
Driller: SJB Services, Inc.				Drilling Method: Direct Push via Geoprobe 6620 DT			
Field Scientist: Sean Condie				Bore Hole Diameter: 2"			
Surveyor:				Auger Size: Not Applicable (NA)			
Ground Elevation:				Sampling Device: Acetate Sleeve			
Northing:				Total Depth: 8.0 Feet Below Ground Surface (ft-bgs)			
Easting:				Depth to Water: Wet soils encountered from 4.0 to 7.0 ft-bgs.		Date:	
Ref. Elevation:				GW Elevation:		Date:	
DEPTH (ft-bgs)	ANALYTICAL SAMPLE	Photoionization Detector Reading (ppm)	% RECOVERY	SOIL DESCRIPTION	SOIL CLASSIFICATION	Comments:	
1	B-32 (0.5-1.0)	0.0	60	Brick (0-3"); Concrete Slab (3-7")	CL		
2				Brown-Red, Damp, Stiff, CLAY with Some Silt and Little Gravel; Coal Present			
3							
4		0.0					
5		0.0	90	Brown-Gray, Moist, Soft, CLAY with Some Silt, F. Sand and R. to Ang. Carbonate Gravel	CL		
6				Wet			
7	B-32 (6.5-7.0)						
8		0.0		Gray, Damp, Stiff, SILTY CLAY; Initial 3" is Dark-Hued, Organic, Silty Clay (NATIVE)		CL	Collect Duplicate
9				Boring Completed at 8.0 ft-bgs.			
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
CREATED BY: SCC				PAGE: 1 of 1			
CHECKED BY: GSO							

				PROJECT: Niagara Falls		BORING: B-33	
				LOCATION: Niagara Falls, NY		WELL:	
				JOB NUMBER: 3410110832		START: 1315	
				CLIENT: Honeywell		DATE: 2/21/2013	
Driller: SJB Services, Inc.				Drilling Method: Direct Push via Geoprobe 6620 DT			
Field Scientist: Sean Condie				Bore Hole Diameter: 2"			
Surveyor:				Auger Size: Not Applicable (NA)			
Ground Elevation:				Sampling Device: Acetate Sleeve			
Northing:				Total Depth: 10.0 Feet Below Ground Surface (ft-bgs)			
Easting:				Depth to Water: Groundwater not encountered.		Date:	
Ref. Elevation:				GW Elevation:		Date:	
DEPTH (ft-bgs)	ANALYTICAL SAMPLE	Photoionization Detector Reading (ppm)	% RECOVERY	SOIL DESCRIPTION		SOIL CLASSIFICATION	Comments:
1	B-33 (0.5-1.0)	0.0	40	Brick (0-3"); Concrete Slab (3-7") D. Brown to Black, Damp, M. Stiff, SILTY CLAY with Few Ang. Gravel; Coal Present		CL	Collect MS/MSD Sample.
2							
3							
4							
5		0.0	50	Color Grades to L. Brown-Red, Moist, Gravel Grades to Little		CL	
6	B-33 (5.0-5.5)	0.0		Gray, Damp, Stiff, SILTY CLAY (NATIVE)			
7							
8							
9		1.2	100	Moist, Higher Plasticity, Slight Organic Odor		CL	
10							
11				Refusal at 10.0 ft-bgs.			
12							
13							
14							
15							
16							
17							
18							
19							
20							
CREATED BY: SCC CHECKED BY: GSO							

				PROJECT: Niagara Falls		BORING: B-34	
				LOCATION: Niagara Falls, NY		WELL:	
				JOB NUMBER: 3410110832		START: 1350	
				CLIENT: Honeywell		DATE: 2/21/2013	
Driller: SJB Services, Inc.				Drilling Method: Direct Push via Geoprobe 6620 DT			
Field Scientist: Sean Condie				Bore Hole Diameter: 2"			
Surveyor:				Auger Size: Not Applicable (NA)			
Ground Elevation:				Sampling Device: Acetate Sleeve			
Northing:				Total Depth: 8.0 Feet Below Ground Surface (ft-bgs)			
Easting:				Depth to Water: Groundwater not encountered.		Date:	
Ref. Elevation:				GW Elevation:		Date:	
DEPTH (ft-bgs)	ANALYTICAL SAMPLE	Photoionization Detector Reading (ppm)	% RECOVERY	SOIL DESCRIPTION	SOIL CLASSIFICATION	Comments:	
1	B-34 (0.5-1.0)	0.0	75	Brick (0-3"); Concrete Slab (3-7")	SW		
2				Brown, Damp, C. SAND and Rounded GRAVEL with Little Silt			
3				Gray, Damp, Stiff, SILTY CLAY (NATIVE)			
4							
5		0.0	80		CL		
6							
7							
8							
9				Boring Completed at 8.0 ft-bgs.			
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
CREATED BY: SCC CHECKED BY: GSO							

		PROJECT: Niagara Falls		Test Pit: B-35	
		LOCATION: Niagara Falls, NY		WELL:	
		JOB NUMBER: 3410110832		START: 1200	
		CLIENT: Honeywell		DATE: 7/24/2012	
Operator: OSC, Inc.		Method: Backhoe			
Field Scientist: John Luttinger					
Surveyor:					
Ground Elevation:					
Northing:		Total Depth: 4.0 Feet Below Ground Surface (ft-bgs)			
Easting:		Depth to Water: Groundwater not encountered.		Date:	
Ref. Elevation:		GW Elevation:		Date:	
DEPTH (ft-bgs)	ANALYTICAL SAMPLE	SOIL DESCRIPTION	SOIL CLASSIFICATION	Comments:	
1	B-35 (0-0.5)	Dark, Organic (Roots), Small Pebbles Present (Fill)	FILL		
2	B-35 (1.5-2.0)	Coarse Fill Material, Cinders, Brick, Slag Present			
3		Tan, SILTY CLAY (Native)	CL		
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
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18					
19					
20					
CREATED BY: SCC		PAGE: 1 of 1			
CHECKED BY: JL					

		PROJECT: Niagara Falls		Test Pit: B-36	
		LOCATION: Niagara Falls, NY		WELL:	
		JOB NUMBER: 3410110832		START: 1340	
		CLIENT: Honeywell		DATE: 7/24/2012	
Operator: OSC, Inc.		Method: Backhoe			
Field Scientist: John Luttinger					
Surveyor:					
Ground Elevation:					
Northing:		Total Depth: 4.0 Feet Below Ground Surface (ft-bgs)			
Easting:		Depth to Water: Groundwater not encountered.		Date:	
Ref. Elevation:		GW Elevation:		Date:	
DEPTH (ft-bgs)	ANALYTICAL SAMPLE	SOIL DESCRIPTION	SOIL CLASSIFICATION	Comments:	
1	B-36 (0-0.5)	Fill Material	FILL		
2	B-36 (1.5-2.0)				
3					
4		Tan, SILTY CLAY (Native)	CL		
5					
6					
7					
8					
9					
10					
11					
12					
13					
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16					
17					
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19					
20					
CREATED BY: SCC		PAGE: 1 of 1			
CHECKED BY: JL					

PROJECT: Honeywell- Tract 1 Site Niagara Falls, New York					Log of Boring No. B-38				
BORING LOCATION: See Figure ____.					ELEVATION: fmsl			DATUM:	
DRILLING CONTRACTOR: SJB Services, Inc.					DATE STARTED: 7/18/12			DATE FINISHED: 7/18/12	
DRILLING METHOD: 4 1/4" dia. HSA					TOTAL DEPTH: 8.0 fbgs			MEASURING POINT: ground surface	
DRILLING EQUIPMENT: CME 750 ATV					DEPTH TO WATER:		FIRST	COMPL.	
SAMPLING METHOD: 2" dia. split spoons					LOGGED BY: MAC				
HAMMER WEIGHT: 140#			DROP: Autohammer		RESPONSIBLE PROFESSIONAL: Robert Crowley				REG. NO.
DEPTH (feet)	SAMPLES				OVM (ppm)	DESCRIPTION		DRILLING REMARKS	
	Sample No.	Sample	Blows/ foot			NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.			
						Surface Elevation: fmsl			
1	1		4		0	FILL brown to dark brown fine to medium sand with silt, slag, cinders, coal, trace brick, dry, soft.			
2			6						
3	2		9		0	grading to weak red silt with little clay, trace crushed limestone gravel, rootlets (FILL with reworked NATIVE material), dry, firm.			
4			12						
5	3		15		0	(CL, NATIVE) grey silty clay with trace rootlets. Moist, firm throughout, no odors.			
6			20						
7	4		23		0				
8			38						
9			30						
10			36						
11									
12									
13									
14									
15									
16									
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					BORING HONEYWELL NF MW-SB LOGS.GPJ (8/12)				
Project No.					AMEC E&I				Page 1 of 1

PROJECT: Honeywell- Tract 1 Site Niagara Falls, New York					Log of Boring No. B-39				
BORING LOCATION: See Figure ____.					ELEVATION: fmsl			DATUM:	
DRILLING CONTRACTOR: SJB Services, Inc.					DATE STARTED: 7/18/12			DATE FINISHED: 7/18/12	
DRILLING METHOD: 4 1/4" dia. HSA					TOTAL DEPTH: 8.0 fbgs			MEASURING POINT: ground surface	
DRILLING EQUIPMENT: CME 750 ATV					DEPTH TO WATER:		FIRST	COMPL.	
SAMPLING METHOD: 2" dia. split spoons					LOGGED BY: MAC				
HAMMER WEIGHT: 140#			DROP: Autohammer		RESPONSIBLE PROFESSIONAL: Robert Crowley				REG. NO.
DEPTH (feet)	SAMPLES				OVM (ppm)	DESCRIPTION		DRILLING REMARKS	
	Sample No.	Sample	Blows/ foot			NAME (USCS Symbol): color, moist, % by weight, plast., structure, cementation, react. w/HCl, geo. inter.			
						Surface Elevation: fmsl			
1	1		3		0	FILL brown fine sand with silt, trace coal fragments, cinders, little ash-like material.			
2			8						
3	2		7		0	(CL, NATIVE) grey silty clay with trace rootlets and trace ash-like material and cinders near top of sample. Dry, hard.			
4			12						
5	3		15		0				
6			21						
7	4		6		0	As above (CL-NATIVE) lacking ash-like material/ cinders, with increasing fine sand content. Becoming moist at 7' bgs.			
8			10						
9			15						
10			21						
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
					BORING HONEYWELL NF MW-SB LOGS.GPJ (8/12)				
Project No.			AMEC E&I				Page 1 of 1		

APPENDIX C

Supplemental Remedial Investigation Laboratory Data Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-22688-1

Client Project/Site: Niagara Falls site

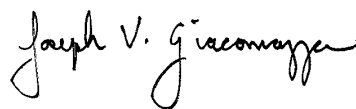
For:

AMEC Environment & Infrastructure, Inc.

800 North Bell Avenue, Suite 200

Carnegie, Pennsylvania 15106

Attn: Eric Weiler



Authorized for release by:

7/25/2012 11:46:41 AM

Joe Giacomazza

Project Administrator

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

LINKS

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Visit us at:

www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	RPD of the MS and MSD exceeds the control limits

Glossary

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

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Job ID: 480-22688-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-22688-1

Receipt

The samples were received on 7/17/2012 4:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.7° C.

GC/MS VOA

No analytical or quality issues were noted.

GC/MS Semi VOA

Method 8270C: The laboratory control sample (LCS) for preparation batch 480-72894 exceeded control limits for the following analyte: Butyl benzyl phthalate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8270C: The following samples were diluted due to viscosity: B-22 (0-0.5) (480-22688-1), B-23 (0-0.5) (480-22688-4), B-24 (0-0.5) (480-22688-6), B-25 (0-0.5) (480-22688-8). Elevated reporting limits (RL) are provided.

No other analytical or quality issues were noted.

GC Semi VOA

Method 8081A: The laboratory control sample (LCS) for batch 72959 exceeded control limits for the following analytes: 4,4'-DDD, Endrin ketone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8081A: The following samples were diluted due to the nature of the sample matrix (color- dark brown): (480-22637-2 MS), (480-22637-2 MSD), B-22 (0-0.5) (480-22688-1), B-23 (0-0.5) (480-22688-4), B-24 (0-0.5) (480-22688-6), B-25 (0-0.5) (480-22688-8), MW-4-0-6 (480-22637-2). Therefore, surrogate recoveries are not representative, and elevated reporting limits (RLs) are provided.

Method 8081A: In the ending CCV, Decachlorobiphenyl is below the acceptable limits. Due to the high dilution of samples quantitation of surrogate is not needed, Therefore, data is reported.

No other analytical or quality issues were noted.

Metals

Method 6010B: The Matrix Spike / Matrix Spike Duplicate (480-22688-9 MS), (480-22688-9 MSD) precision for batch 480-72847 was outside control limits for total lead. Non-homogeneity of the sample matrix is suspected. The associated Laboratory Control Sample met acceptance criteria, therefore, no corrective action was necessary.

Method 6010B: The following sample was diluted to bring the concentration of target analyte total lead within the calibration range: B-22 (0-0.5) (480-22688-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Organic Prep

Method 3550B: The following samples required a Florisil clean-up, 3620C, to reduce matrix interferences: B-22 (0-0.5) (480-22688-1), B-23 (0-0.5) (480-22688-4), B-24 (0-0.5) (480-22688-6), B-25 (0-0.5) (480-22688-8).

Method 3550B: Due to the matrix, the following sample could not be concentrated to the final method required volume: B-25 (0-0.5) (480-22688-8). The reporting limits (RLs) are elevated proportionately.

No other analytical or quality issues were noted.

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-22 (0-0.5)

Lab Sample ID: 480-22688-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	76	J	1900	22	ug/Kg	10	✱	8270C	Total/NA
Anthracene	250	J	1900	48	ug/Kg	10	✱	8270C	Total/NA
Benzo(a)anthracene	1000	J	1900	32	ug/Kg	10	✱	8270C	Total/NA
Benzo(a)pyrene	1200	J	1900	45	ug/Kg	10	✱	8270C	Total/NA
Benzo(b)fluoranthene	2000		1900	36	ug/Kg	10	✱	8270C	Total/NA
Benzo(g,h,i)perylene	760	J	1900	22	ug/Kg	10	✱	8270C	Total/NA
Benzo(k)fluoranthene	850	J	1900	20	ug/Kg	10	✱	8270C	Total/NA
Chrysene	1400	J	1900	19	ug/Kg	10	✱	8270C	Total/NA
Dibenz(a,h)anthracene	280	J	1900	22	ug/Kg	10	✱	8270C	Total/NA
Fluoranthene	1900		1900	27	ug/Kg	10	✱	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	710	J	1900	52	ug/Kg	10	✱	8270C	Total/NA
Naphthalene	160	J	1900	31	ug/Kg	10	✱	8270C	Total/NA
N-Nitrosodiphenylamine	190	J	1900	100	ug/Kg	10	✱	8270C	Total/NA
Phenanthrene	1300	J	1900	39	ug/Kg	10	✱	8270C	Total/NA
Pyrene	1500	J	1900	12	ug/Kg	10	✱	8270C	Total/NA
4,4'-DDT	54	J	91	9.3	ug/Kg	50	✱	8081A	Total/NA
Aluminum	5680		11.8		mg/Kg	1	✱	6010B	Total/NA
Antimony	177		17.7		mg/Kg	1	✱	6010B	Total/NA
Arsenic	44.0		2.4		mg/Kg	1	✱	6010B	Total/NA
Barium	221		0.59		mg/Kg	1	✱	6010B	Total/NA
Beryllium	0.55		0.24		mg/Kg	1	✱	6010B	Total/NA
Cadmium	0.89		0.24		mg/Kg	1	✱	6010B	Total/NA
Calcium	9950		59.0		mg/Kg	1	✱	6010B	Total/NA
Chromium	14.2		0.59		mg/Kg	1	✱	6010B	Total/NA
Cobalt	5.7		0.59		mg/Kg	1	✱	6010B	Total/NA
Copper	350		1.2		mg/Kg	1	✱	6010B	Total/NA
Iron	15500		11.8		mg/Kg	1	✱	6010B	Total/NA
Lead	1420		5.9		mg/Kg	5	✱	6010B	Total/NA
Magnesium	5090		23.6		mg/Kg	1	✱	6010B	Total/NA
Manganese	394		0.24		mg/Kg	1	✱	6010B	Total/NA
Nickel	18.6		5.9		mg/Kg	1	✱	6010B	Total/NA
Potassium	1390		35.4		mg/Kg	1	✱	6010B	Total/NA
Silver	1.2		0.59		mg/Kg	1	✱	6010B	Total/NA
Vanadium	14.3		0.59		mg/Kg	1	✱	6010B	Total/NA
Zinc	218		2.4		mg/Kg	1	✱	6010B	Total/NA
Mercury	0.49		0.023		mg/Kg	1	✱	7471A	Total/NA

Client Sample ID: B-22 (6.5-7.0)

Lab Sample ID: 480-22688-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.3	J	27	1.9	ug/Kg	1	✱	8260B	Total/NA
Acetone	23	J	27	4.5	ug/Kg	1	✱	8260B	Total/NA
Methylcyclohexane	0.82	J	5.3	0.81	ug/Kg	1	✱	8260B	Total/NA
Tetrachloroethene	1.2	J	5.3	0.71	ug/Kg	1	✱	8260B	Total/NA
Toluene	0.50	J	5.3	0.40	ug/Kg	1	✱	8260B	Total/NA
Lead	6710		1.2		mg/Kg	1	✱	6010B	Total/NA

Client Sample ID: B-22 (9.5-10.0)

Lab Sample ID: 480-22688-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.4	J	27	1.9	ug/Kg	1	✱	8260B	Total/NA
Acetone	34		27	4.5	ug/Kg	1	✱	8260B	Total/NA
Cyclohexane	34		5.3	0.74	ug/Kg	1	✱	8260B	Total/NA

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-22 (9.5-10.0) (Continued)

Lab Sample ID: 480-22688-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	64		5.3	0.81	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: B-23 (0-0.5)

Lab Sample ID: 480-22688-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	57	J	1800	21	ug/Kg	10	☼	8270C	Total/NA
Anthracene	190	J	1800	47	ug/Kg	10	☼	8270C	Total/NA
Benzo(a)anthracene	1000	J	1800	31	ug/Kg	10	☼	8270C	Total/NA
Benzo(a)pyrene	1100	J	1800	44	ug/Kg	10	☼	8270C	Total/NA
Benzo(b)fluoranthene	1300	J	1800	35	ug/Kg	10	☼	8270C	Total/NA
Benzo(g,h,i)perylene	410	J	1800	22	ug/Kg	10	☼	8270C	Total/NA
Benzo(k)fluoranthene	690	J	1800	20	ug/Kg	10	☼	8270C	Total/NA
Chrysene	980	J	1800	18	ug/Kg	10	☼	8270C	Total/NA
Dibenz(a,h)anthracene	140	J	1800	21	ug/Kg	10	☼	8270C	Total/NA
Fluoranthene	1700	J	1800	26	ug/Kg	10	☼	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	420	J	1800	50	ug/Kg	10	☼	8270C	Total/NA
Naphthalene	200	J	1800	30	ug/Kg	10	☼	8270C	Total/NA
Phenanthrene	900	J	1800	38	ug/Kg	10	☼	8270C	Total/NA
Pyrene	1500	J	1800	12	ug/Kg	10	☼	8270C	Total/NA
4,4'-DDT	33	J	90	9.1	ug/Kg	50	☼	8081A	Total/NA
Aluminum	1850		11.4		mg/Kg	1	☼	6010B	Total/NA
Antimony	31.1		17.2		mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.6		2.3		mg/Kg	1	☼	6010B	Total/NA
Barium	78.6		0.57		mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.46		0.23		mg/Kg	1	☼	6010B	Total/NA
Calcium	39700		57.2		mg/Kg	1	☼	6010B	Total/NA
Chromium	6.8		0.57		mg/Kg	1	☼	6010B	Total/NA
Cobalt	1.5		0.57		mg/Kg	1	☼	6010B	Total/NA
Copper	30.4		1.1		mg/Kg	1	☼	6010B	Total/NA
Iron	5190		11.4		mg/Kg	1	☼	6010B	Total/NA
Lead	9340		1.1		mg/Kg	1	☼	6010B	Total/NA
Magnesium	11300		22.9		mg/Kg	1	☼	6010B	Total/NA
Manganese	157		0.23		mg/Kg	1	☼	6010B	Total/NA
Nickel	5.7		5.7		mg/Kg	1	☼	6010B	Total/NA
Potassium	676		34.3		mg/Kg	1	☼	6010B	Total/NA
Silver	1.1		0.57		mg/Kg	1	☼	6010B	Total/NA
Vanadium	5.1		0.57		mg/Kg	1	☼	6010B	Total/NA
Zinc	73.4		2.3		mg/Kg	1	☼	6010B	Total/NA
Mercury	0.27		0.022		mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: B-23 (5.5-6.0)

Lab Sample ID: 480-22688-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	1450		1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-24 (0-0.5)

Lab Sample ID: 480-22688-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	77	J	1800	22	ug/Kg	10	☼	8270C	Total/NA
Acenaphthene	180	J	1800	21	ug/Kg	10	☼	8270C	Total/NA
Acenaphthylene	1200	J	1800	15	ug/Kg	10	☼	8270C	Total/NA
Anthracene	2200		1800	46	ug/Kg	10	☼	8270C	Total/NA
Benzo(a)anthracene	9900		1800	31	ug/Kg	10	☼	8270C	Total/NA

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-24 (0-0.5) (Continued)

Lab Sample ID: 480-22688-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)pyrene	8200		1800	43	ug/Kg	10	✱	8270C	Total/NA
Benzo(b)fluoranthene	12000		1800	35	ug/Kg	10	✱	8270C	Total/NA
Benzo(g,h,i)perylene	2300		1800	21	ug/Kg	10	✱	8270C	Total/NA
Benzo(k)fluoranthene	5400		1800	20	ug/Kg	10	✱	8270C	Total/NA
Carbazole	330	J	1800	21	ug/Kg	10	✱	8270C	Total/NA
Chrysene	9200		1800	18	ug/Kg	10	✱	8270C	Total/NA
Dibenz(a,h)anthracene	1100	J	1800	21	ug/Kg	10	✱	8270C	Total/NA
Dibenzofuran	210	J	1800	19	ug/Kg	10	✱	8270C	Total/NA
Fluoranthene	16000		1800	26	ug/Kg	10	✱	8270C	Total/NA
Fluorene	620	J	1800	41	ug/Kg	10	✱	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	2600		1800	49	ug/Kg	10	✱	8270C	Total/NA
Phenanthrene	7000		1800	37	ug/Kg	10	✱	8270C	Total/NA
Pyrene	12000		1800	12	ug/Kg	10	✱	8270C	Total/NA
4,4'-DDT	27	J	87	8.8	ug/Kg	50	✱	8081A	Total/NA
Aluminum	8120		10.0		mg/Kg	1	✱	6010B	Total/NA
Arsenic	8.0		2.0		mg/Kg	1	✱	6010B	Total/NA
Barium	141		0.50		mg/Kg	1	✱	6010B	Total/NA
Beryllium	0.60		0.20		mg/Kg	1	✱	6010B	Total/NA
Cadmium	0.58		0.20		mg/Kg	1	✱	6010B	Total/NA
Calcium	71900		50.2		mg/Kg	1	✱	6010B	Total/NA
Chromium	17.5		0.50		mg/Kg	1	✱	6010B	Total/NA
Cobalt	5.5		0.50		mg/Kg	1	✱	6010B	Total/NA
Copper	39.5		1.0		mg/Kg	1	✱	6010B	Total/NA
Iron	18200		10.0		mg/Kg	1	✱	6010B	Total/NA
Lead	653		1.0		mg/Kg	1	✱	6010B	Total/NA
Magnesium	5940		20.1		mg/Kg	1	✱	6010B	Total/NA
Manganese	411		0.20		mg/Kg	1	✱	6010B	Total/NA
Nickel	16.0		5.0		mg/Kg	1	✱	6010B	Total/NA
Potassium	1400		30.1		mg/Kg	1	✱	6010B	Total/NA
Sodium	222		141		mg/Kg	1	✱	6010B	Total/NA
Vanadium	20.5		0.50		mg/Kg	1	✱	6010B	Total/NA
Zinc	230		2.0		mg/Kg	1	✱	6010B	Total/NA
Mercury	0.94		0.11		mg/Kg	5	✱	7471A	Total/NA

Client Sample ID: B-24 (6.5-7.0)

Lab Sample ID: 480-22688-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	37.5		1.5		mg/Kg	1	✱	6010B	Total/NA

Client Sample ID: B-25 (0-0.5)

Lab Sample ID: 480-22688-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	140	J	3800	45	ug/Kg	10	✱	8270C	Total/NA
Anthracene	600	J	3800	98	ug/Kg	10	✱	8270C	Total/NA
Benzo(a)anthracene	3200	J	3800	66	ug/Kg	10	✱	8270C	Total/NA
Benzo(a)pyrene	3100	J	3800	92	ug/Kg	10	✱	8270C	Total/NA
Benzo(b)fluoranthene	5100		3800	74	ug/Kg	10	✱	8270C	Total/NA
Benzo(g,h,i)perylene	1000	J	3800	46	ug/Kg	10	✱	8270C	Total/NA
Benzo(k)fluoranthene	1600	J	3800	42	ug/Kg	10	✱	8270C	Total/NA
Carbazole	250	J	3800	44	ug/Kg	10	✱	8270C	Total/NA
Chrysene	3400	J	3800	38	ug/Kg	10	✱	8270C	Total/NA
Dibenz(a,h)anthracene	420	J	3800	45	ug/Kg	10	✱	8270C	Total/NA
Fluoranthene	5200		3800	55	ug/Kg	10	✱	8270C	Total/NA

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-25 (0-0.5) (Continued)

Lab Sample ID: 480-22688-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Indeno(1,2,3-cd)pyrene	1000	J	3800	110	ug/Kg	10		✱	8270C	Total/NA
Phenanthrene	2400	J	3800	80	ug/Kg	10		✱	8270C	Total/NA
Pyrene	4000		3800	25	ug/Kg	10		✱	8270C	Total/NA
4,4'-DDE	43	J	190	28	ug/Kg	100		✱	8081A	Total/NA
4,4'-DDT	180	J	190	19	ug/Kg	100		✱	8081A	Total/NA
Methoxychlor	1600		190	26	ug/Kg	100		✱	8081A	Total/NA
PCB-1254	260		240	110	ug/Kg	1		✱	8082	Total/NA
Aluminum	9600		11.7		mg/Kg	1		✱	6010B	Total/NA
Arsenic	7.4		2.3		mg/Kg	1		✱	6010B	Total/NA
Barium	419		0.59		mg/Kg	1		✱	6010B	Total/NA
Beryllium	0.65		0.23		mg/Kg	1		✱	6010B	Total/NA
Cadmium	2.3		0.23		mg/Kg	1		✱	6010B	Total/NA
Calcium	44300		58.6		mg/Kg	1		✱	6010B	Total/NA
Chromium	195		0.59		mg/Kg	1		✱	6010B	Total/NA
Cobalt	5.5		0.59		mg/Kg	1		✱	6010B	Total/NA
Copper	209		1.2		mg/Kg	1		✱	6010B	Total/NA
Iron	15700		11.7		mg/Kg	1		✱	6010B	Total/NA
Lead	962		1.2		mg/Kg	1		✱	6010B	Total/NA
Magnesium	14600		23.4		mg/Kg	1		✱	6010B	Total/NA
Manganese	1460		0.23		mg/Kg	1		✱	6010B	Total/NA
Nickel	28.1		5.9		mg/Kg	1		✱	6010B	Total/NA
Potassium	1070		35.2		mg/Kg	1		✱	6010B	Total/NA
Sodium	387		164		mg/Kg	1		✱	6010B	Total/NA
Vanadium	16.3		0.59		mg/Kg	1		✱	6010B	Total/NA
Zinc	483		2.3		mg/Kg	1		✱	6010B	Total/NA
Mercury	1.7		0.11		mg/Kg	5		✱	7471A	Total/NA

Client Sample ID: B-25 (4.5-5.0)

Lab Sample ID: 480-22688-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Lead	672		1.1		mg/Kg	1		✱	6010B	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-22688-10

No Detections

Client Sample ID: B-23 (2-4)

Lab Sample ID: 480-22688-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Tetrachloroethene	0.61	J	4.0	0.54	ug/Kg	1		✱	8260B	Total/NA

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-22 (0-0.5)

Lab Sample ID: 480-22688-1

Date Collected: 07/17/12 11:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 89.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1900	410	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2,4,6-Trichlorophenol	ND		1900	120	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2,4-Dichlorophenol	ND		1900	98	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2,4-Dimethylphenol	ND		1900	500	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2,4-Dinitrophenol	ND		3600	650	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2,4-Dinitrotoluene	ND		1900	290	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2,6-Dinitrotoluene	ND		1900	460	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2-Chloronaphthalene	ND		1900	120	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2-Chlorophenol	ND		1900	95	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2-Methylnaphthalene	ND		1900	23	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2-Methylphenol	ND		1900	57	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2-Nitroaniline	ND		3600	600	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
2-Nitrophenol	ND		1900	85	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
3,3'-Dichlorobenzidine	ND		1900	1600	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
3-Nitroaniline	ND		3600	430	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
4,6-Dinitro-2-methylphenol	ND		3600	640	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
4-Bromophenyl phenyl ether	ND		1900	590	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
4-Chloro-3-methylphenol	ND		1900	77	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
4-Chloroaniline	ND		1900	550	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
4-Chlorophenyl phenyl ether	ND		1900	40	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
4-Methylphenol	ND		3600	100	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
4-Nitroaniline	ND		3600	210	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
4-Nitrophenol	ND		3600	450	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Acenaphthene	76	J	1900	22	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Acenaphthylene	ND		1900	15	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Acetophenone	ND		1900	96	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Anthracene	250	J	1900	48	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Atrazine	ND		1900	83	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Benzaldehyde	ND		1900	200	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Benzo(a)anthracene	1000	J	1900	32	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Benzo(a)pyrene	1200	J	1900	45	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Benzo(b)fluoranthene	2000		1900	36	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Benzo(g,h,i)perylene	760	J	1900	22	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Benzo(k)fluoranthene	850	J	1900	20	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Biphenyl	ND		1900	120	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
bis (2-chloroisopropyl) ether	ND		1900	190	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Bis(2-chloroethoxy)methane	ND		1900	100	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Bis(2-chloroethyl)ether	ND		1900	160	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Bis(2-ethylhexyl) phthalate	ND		1900	600	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Butyl benzyl phthalate	ND *		1900	500	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Caprolactam	ND		1900	810	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Carbazole	ND		1900	22	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Chrysene	1400	J	1900	19	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Dibenz(a,h)anthracene	280	J	1900	22	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Dibenzofuran	ND		1900	19	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Diethyl phthalate	ND		1900	56	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Dimethyl phthalate	ND		1900	49	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Di-n-butyl phthalate	ND		1900	640	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Di-n-octyl phthalate	ND		1900	44	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Fluoranthene	1900		1900	27	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Fluorene	ND		1900	43	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-22 (0-0.5)

Lab Sample ID: 480-22688-1

Date Collected: 07/17/12 11:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 89.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		1900	93	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Hexachlorobutadiene	ND		1900	95	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Hexachlorocyclopentadiene	ND		1900	560	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Hexachloroethane	ND		1900	140	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Indeno(1,2,3-cd)pyrene	710	J	1900	52	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Isophorone	ND		1900	93	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Naphthalene	160	J	1900	31	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Nitrobenzene	ND		1900	83	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
N-Nitrosodi-n-propylamine	ND		1900	150	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
N-Nitrosodiphenylamine	190	J	1900	100	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Pentachlorophenol	ND		3600	640	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Phenanthrene	1300	J	1900	39	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Phenol	ND		1900	200	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10
Pyrene	1500	J	1900	12	ug/Kg	☼	07/18/12 13:26	07/19/12 17:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	67		39 - 146	07/18/12 13:26	07/19/12 17:47	10
2-Fluorobiphenyl	86		37 - 120	07/18/12 13:26	07/19/12 17:47	10
2-Fluorophenol	67		18 - 120	07/18/12 13:26	07/19/12 17:47	10
Nitrobenzene-d5	69		34 - 132	07/18/12 13:26	07/19/12 17:47	10
Phenol-d5	75		11 - 120	07/18/12 13:26	07/19/12 17:47	10
p-Terphenyl-d14	120		65 - 153	07/18/12 13:26	07/19/12 17:47	10

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	*	91	18	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
4,4'-DDE	ND		91	14	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
4,4'-DDT	54	J	91	9.3	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Aldrin	ND		91	22	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
alpha-BHC	ND		91	16	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
alpha-Chlordane	ND		91	45	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
beta-BHC	ND		91	9.8	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
delta-BHC	ND		91	12	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Dieldrin	ND		91	22	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Endosulfan I	ND		91	11	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Endosulfan II	ND		91	16	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Endosulfan sulfate	ND		91	17	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Endrin	ND		91	13	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Endrin aldehyde	ND		91	23	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Endrin ketone	ND	*	91	22	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
gamma-BHC (Lindane)	ND		91	66	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
gamma-Chlordane	ND		91	29	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Heptachlor	ND		91	14	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Heptachlor epoxide	ND		91	23	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Methoxychlor	ND		91	13	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50
Toxaphene	ND		910	530	ug/Kg	☼	07/18/12 21:39	07/19/12 20:37	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	62 - 137	07/18/12 21:39	07/19/12 20:37	50
Tetrachloro-m-xylene	0	X	30 - 124	07/18/12 21:39	07/19/12 20:37	50

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-22 (0-0.5)

Lab Sample ID: 480-22688-1

Date Collected: 07/17/12 11:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 89.8

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		240	47	ug/Kg	☼	07/18/12 17:30	07/19/12 09:31	1
PCB-1221	ND		240	47	ug/Kg	☼	07/18/12 17:30	07/19/12 09:31	1
PCB-1232	ND		240	47	ug/Kg	☼	07/18/12 17:30	07/19/12 09:31	1
PCB-1242	ND		240	47	ug/Kg	☼	07/18/12 17:30	07/19/12 09:31	1
PCB-1248	ND		240	47	ug/Kg	☼	07/18/12 17:30	07/19/12 09:31	1
PCB-1254	ND		240	110	ug/Kg	☼	07/18/12 17:30	07/19/12 09:31	1
PCB-1260	ND		240	110	ug/Kg	☼	07/18/12 17:30	07/19/12 09:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	96		36 - 182	07/18/12 17:30	07/19/12 09:31	1
Tetrachloro-m-xylene	91		24 - 172	07/18/12 17:30	07/19/12 09:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5680		11.8		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Antimony	177		17.7		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Arsenic	44.0		2.4		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Barium	221		0.59		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Beryllium	0.55		0.24		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Cadmium	0.89		0.24		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Calcium	9950		59.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Chromium	14.2		0.59		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Cobalt	5.7		0.59		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Copper	350		1.2		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Iron	15500		11.8		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Lead	1420		5.9		mg/Kg	☼	07/18/12 08:50	07/20/12 14:56	5
Magnesium	5090		23.6		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Manganese	394		0.24		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Nickel	18.6		5.9		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Potassium	1390		35.4		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Selenium	ND		4.7		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Silver	1.2		0.59		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Sodium	ND		165		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Thallium	ND		7.1		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Vanadium	14.3		0.59		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1
Zinc	218		2.4		mg/Kg	☼	07/18/12 08:50	07/18/12 17:38	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.49		0.023		mg/Kg	☼	07/18/12 10:35	07/18/12 12:46	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-22 (6.5-7.0)

Lab Sample ID: 480-22688-2

Date Collected: 07/17/12 11:30

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.3	0.39	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,1,1,2-Tetrachloroethane	ND		5.3	0.86	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,1,2-Trichloroethane	ND		5.3	0.69	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	1.2	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,1-Dichloroethane	ND		5.3	0.65	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,1-Dichloroethene	ND		5.3	0.65	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,2,4-Trichlorobenzene	ND		5.3	0.32	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,2-Dibromo-3-Chloropropane	ND		5.3	2.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,2-Dibromoethane	ND		5.3	0.68	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,2-Dichlorobenzene	ND		5.3	0.42	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,2-Dichloroethane	ND		5.3	0.27	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,2-Dichloropropane	ND		5.3	2.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
1,4-Dichlorobenzene	ND		5.3	0.74	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
2-Butanone (MEK)	4.3	J	27	1.9	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
4-Methyl-2-pentanone (MIBK)	ND		27	1.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Acetone	23	J	27	4.5	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Benzene	ND		5.3	0.26	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Bromodichloromethane	ND		5.3	0.71	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Bromoform	ND		5.3	2.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Bromomethane	ND		5.3	0.48	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Carbon disulfide	ND		5.3	2.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Carbon tetrachloride	ND		5.3	0.51	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Chlorobenzene	ND		5.3	0.70	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Dibromochloromethane	ND		5.3	0.68	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Chloroethane	ND		5.3	1.2	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Chloroform	ND		5.3	0.33	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Chloromethane	ND		5.3	0.32	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
cis-1,2-Dichloroethene	ND		5.3	0.68	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
cis-1,3-Dichloropropene	ND		5.3	0.77	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Cyclohexane	ND		5.3	0.74	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Dichlorodifluoromethane	ND		5.3	0.44	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Ethylbenzene	ND		5.3	0.37	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Isopropylbenzene	ND		5.3	0.80	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Methyl acetate	ND		5.3	0.99	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Methylcyclohexane	0.82	J	5.3	0.81	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Methylene Chloride	ND		5.3	2.4	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Styrene	ND		5.3	0.27	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Tetrachloroethene	1.2	J	5.3	0.71	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Toluene	0.50	J	5.3	0.40	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
trans-1,2-Dichloroethene	ND		5.3	0.55	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
trans-1,3-Dichloropropene	ND		5.3	2.3	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Trichlorofluoromethane	ND		5.3	0.50	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Vinyl chloride	ND		5.3	0.65	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1
Xylenes, Total	ND		11	0.89	ug/Kg	☼	07/18/12 14:21	07/19/12 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		64 - 126	07/18/12 14:21	07/19/12 04:16	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-22 (6.5-7.0)

Date Collected: 07/17/12 11:30

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-2

Matrix: Solid

Percent Solids: 84.8

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	90		71 - 125	07/18/12 14:21	07/19/12 04:16	1
4-Bromofluorobenzene (Surr)	104		72 - 126	07/18/12 14:21	07/19/12 04:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6710		1.2		mg/Kg	☼	07/18/12 08:50	07/18/12 17:40	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-22 (9.5-10.0)

Lab Sample ID: 480-22688-3

Date Collected: 07/17/12 11:45

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.3	0.39	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,1,1,2-Tetrachloroethane	ND		5.3	0.86	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,1,2-Trichloroethane	ND		5.3	0.69	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	1.2	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,1-Dichloroethane	ND		5.3	0.65	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,1-Dichloroethene	ND		5.3	0.65	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,2,4-Trichlorobenzene	ND		5.3	0.32	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,2-Dibromo-3-Chloropropane	ND		5.3	2.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,2-Dibromoethane	ND		5.3	0.68	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,2-Dichlorobenzene	ND		5.3	0.41	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,2-Dichloroethane	ND		5.3	0.27	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,2-Dichloropropane	ND		5.3	2.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
1,4-Dichlorobenzene	ND		5.3	0.74	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
2-Butanone (MEK)	4.4	J	27	1.9	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
4-Methyl-2-pentanone (MIBK)	ND		27	1.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Acetone	34		27	4.5	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Benzene	ND		5.3	0.26	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Bromodichloromethane	ND		5.3	0.71	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Bromoform	ND		5.3	2.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Bromomethane	ND		5.3	0.48	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Carbon disulfide	ND		5.3	2.7	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Carbon tetrachloride	ND		5.3	0.51	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Chlorobenzene	ND		5.3	0.70	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Dibromochloromethane	ND		5.3	0.68	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Chloroethane	ND		5.3	1.2	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Chloroform	ND		5.3	0.33	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Chloromethane	ND		5.3	0.32	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
cis-1,2-Dichloroethene	ND		5.3	0.68	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
cis-1,3-Dichloropropene	ND		5.3	0.76	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Cyclohexane	34		5.3	0.74	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Dichlorodifluoromethane	ND		5.3	0.44	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Ethylbenzene	ND		5.3	0.37	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Isopropylbenzene	ND		5.3	0.80	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Methyl acetate	ND		5.3	0.99	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Methylcyclohexane	64		5.3	0.81	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Methylene Chloride	ND		5.3	2.4	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Styrene	ND		5.3	0.27	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Tetrachloroethene	ND		5.3	0.71	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Toluene	ND		5.3	0.40	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
trans-1,2-Dichloroethene	ND		5.3	0.55	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
trans-1,3-Dichloropropene	ND		5.3	2.3	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Trichlorofluoromethane	ND		5.3	0.50	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Vinyl chloride	ND		5.3	0.65	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1
Xylenes, Total	ND		11	0.89	ug/Kg	☼	07/18/12 14:21	07/19/12 04:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		64 - 126	07/18/12 14:21	07/19/12 04:41	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-22 (9.5-10.0)

Lab Sample ID: 480-22688-3

Date Collected: 07/17/12 11:45

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 81.4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	89		71 - 125	07/18/12 14:21	07/19/12 04:41	1
4-Bromofluorobenzene (Surr)	102		72 - 126	07/18/12 14:21	07/19/12 04:41	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-23 (0-0.5)

Lab Sample ID: 480-22688-4

Date Collected: 07/17/12 10:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1800	400	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2,4,6-Trichlorophenol	ND		1800	120	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2,4-Dichlorophenol	ND		1800	96	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2,4-Dimethylphenol	ND		1800	490	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2,4-Dinitrophenol	ND		3600	640	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2,4-Dinitrotoluene	ND		1800	280	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2,6-Dinitrotoluene	ND		1800	450	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2-Chloronaphthalene	ND		1800	120	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2-Chlorophenol	ND		1800	93	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2-Methylnaphthalene	ND		1800	22	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2-Methylphenol	ND		1800	56	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2-Nitroaniline	ND		3600	580	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
2-Nitrophenol	ND		1800	83	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
3,3'-Dichlorobenzidine	ND		1800	1600	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
3-Nitroaniline	ND		3600	420	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
4,6-Dinitro-2-methylphenol	ND		3600	630	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
4-Bromophenyl phenyl ether	ND		1800	580	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
4-Chloro-3-methylphenol	ND		1800	75	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
4-Chloroaniline	ND		1800	530	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
4-Chlorophenyl phenyl ether	ND		1800	39	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
4-Methylphenol	ND		3600	100	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
4-Nitroaniline	ND		3600	200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
4-Nitrophenol	ND		3600	440	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Acenaphthene	57	J	1800	21	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Acenaphthylene	ND		1800	15	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Acetophenone	ND		1800	94	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Anthracene	190	J	1800	47	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Atrazine	ND		1800	81	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Benzaldehyde	ND		1800	200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Benzo(a)anthracene	1000	J	1800	31	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Benzo(a)pyrene	1100	J	1800	44	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Benzo(b)fluoranthene	1300	J	1800	35	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Benzo(g,h,i)perylene	410	J	1800	22	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Benzo(k)fluoranthene	690	J	1800	20	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Biphenyl	ND		1800	110	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
bis (2-chloroisopropyl) ether	ND		1800	190	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Bis(2-chloroethoxy)methane	ND		1800	99	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Bis(2-chloroethyl)ether	ND		1800	160	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Bis(2-ethylhexyl) phthalate	ND		1800	590	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Butyl benzyl phthalate	ND *		1800	490	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Caprolactam	ND		1800	790	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Carbazole	ND		1800	21	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Chrysene	980	J	1800	18	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Dibenz(a,h)anthracene	140	J	1800	21	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Dibenzofuran	ND		1800	19	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Diethyl phthalate	ND		1800	55	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Dimethyl phthalate	ND		1800	48	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Di-n-butyl phthalate	ND		1800	630	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Di-n-octyl phthalate	ND		1800	43	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Fluoranthene	1700	J	1800	26	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Fluorene	ND		1800	42	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-23 (0-0.5)

Lab Sample ID: 480-22688-4

Date Collected: 07/17/12 10:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		1800	91	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Hexachlorobutadiene	ND		1800	93	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Hexachlorocyclopentadiene	ND		1800	550	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Hexachloroethane	ND		1800	140	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Indeno(1,2,3-cd)pyrene	420	J	1800	50	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Isophorone	ND		1800	91	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Naphthalene	200	J	1800	30	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Nitrobenzene	ND		1800	81	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
N-Nitrosodi-n-propylamine	ND		1800	140	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
N-Nitrosodiphenylamine	ND		1800	100	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Pentachlorophenol	ND		3600	630	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Phenanthrene	900	J	1800	38	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Phenol	ND		1800	190	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10
Pyrene	1500	J	1800	12	ug/Kg	☼	07/18/12 13:26	07/19/12 18:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	65		39 - 146	07/18/12 13:26	07/19/12 18:11	10
2-Fluorobiphenyl	84		37 - 120	07/18/12 13:26	07/19/12 18:11	10
2-Fluorophenol	71		18 - 120	07/18/12 13:26	07/19/12 18:11	10
Nitrobenzene-d5	71		34 - 132	07/18/12 13:26	07/19/12 18:11	10
Phenol-d5	77		11 - 120	07/18/12 13:26	07/19/12 18:11	10
p-Terphenyl-d14	112		65 - 153	07/18/12 13:26	07/19/12 18:11	10

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	*	90	17	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
4,4'-DDE	ND		90	13	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
4,4'-DDT	33	J	90	9.1	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Aldrin	ND		90	22	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
alpha-BHC	ND		90	16	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
alpha-Chlordane	ND		90	45	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
beta-BHC	ND		90	9.7	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
delta-BHC	ND		90	12	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Dieldrin	ND		90	22	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Endosulfan I	ND		90	11	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Endosulfan II	ND		90	16	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Endosulfan sulfate	ND		90	17	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Endrin	ND		90	12	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Endrin aldehyde	ND		90	23	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Endrin ketone	ND	*	90	22	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
gamma-BHC (Lindane)	ND		90	65	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
gamma-Chlordane	ND		90	28	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Heptachlor	ND		90	14	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Heptachlor epoxide	ND		90	23	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Methoxychlor	ND		90	12	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50
Toxaphene	ND		900	520	ug/Kg	☼	07/18/12 21:39	07/19/12 21:18	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	62 - 137	07/18/12 21:39	07/19/12 21:18	50
Tetrachloro-m-xylene	0	X	30 - 124	07/18/12 21:39	07/19/12 21:18	50

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-23 (0-0.5)

Lab Sample ID: 480-22688-4

Date Collected: 07/17/12 10:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 92.1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		240	46	ug/Kg	☼	07/18/12 17:30	07/19/12 09:46	1
PCB-1221	ND		240	46	ug/Kg	☼	07/18/12 17:30	07/19/12 09:46	1
PCB-1232	ND		240	46	ug/Kg	☼	07/18/12 17:30	07/19/12 09:46	1
PCB-1242	ND		240	46	ug/Kg	☼	07/18/12 17:30	07/19/12 09:46	1
PCB-1248	ND		240	46	ug/Kg	☼	07/18/12 17:30	07/19/12 09:46	1
PCB-1254	ND		240	110	ug/Kg	☼	07/18/12 17:30	07/19/12 09:46	1
PCB-1260	ND		240	110	ug/Kg	☼	07/18/12 17:30	07/19/12 09:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	107		36 - 182	07/18/12 17:30	07/19/12 09:46	1
Tetrachloro-m-xylene	103		24 - 172	07/18/12 17:30	07/19/12 09:46	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1850		11.4		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Antimony	31.1		17.2		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Arsenic	2.6		2.3		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Barium	78.6		0.57		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Beryllium	ND		0.23		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Cadmium	0.46		0.23		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Calcium	39700		57.2		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Chromium	6.8		0.57		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Cobalt	1.5		0.57		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Copper	30.4		1.1		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Iron	5190		11.4		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Lead	9340		1.1		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Magnesium	11300		22.9		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Manganese	157		0.23		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Nickel	5.7		5.7		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Potassium	676		34.3		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Selenium	ND		4.6		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Silver	1.1		0.57		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Sodium	ND		160		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Thallium	ND		6.9		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Vanadium	5.1		0.57		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1
Zinc	73.4		2.3		mg/Kg	☼	07/18/12 08:50	07/18/12 17:42	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.27		0.022		mg/Kg	☼	07/18/12 10:35	07/18/12 12:47	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-23 (5.5-6.0)

Lab Sample ID: 480-22688-5

Date Collected: 07/17/12 10:45

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 79.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1450		1.2		mg/Kg	☼	07/18/12 08:50	07/18/12 17:45	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-24 (0-0.5)

Lab Sample ID: 480-22688-6

Date Collected: 07/17/12 13:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1800	390	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2,4,6-Trichlorophenol	ND		1800	120	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2,4-Dichlorophenol	ND		1800	93	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2,4-Dimethylphenol	ND		1800	480	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2,4-Dinitrophenol	ND		3500	620	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2,4-Dinitrotoluene	ND		1800	280	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2,6-Dinitrotoluene	ND		1800	440	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2-Chloronaphthalene	ND		1800	120	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2-Chlorophenol	ND		1800	91	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2-Methylnaphthalene	77	J	1800	22	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2-Methylphenol	ND		1800	55	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2-Nitroaniline	ND		3500	570	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
2-Nitrophenol	ND		1800	81	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
3,3'-Dichlorobenzidine	ND		1800	1600	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
3-Nitroaniline	ND		3500	410	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
4,6-Dinitro-2-methylphenol	ND		3500	610	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
4-Bromophenyl phenyl ether	ND		1800	570	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
4-Chloro-3-methylphenol	ND		1800	73	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
4-Chloroaniline	ND		1800	520	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
4-Chlorophenyl phenyl ether	ND		1800	38	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
4-Methylphenol	ND		3500	99	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
4-Nitroaniline	ND		3500	200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
4-Nitrophenol	ND		3500	430	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Acenaphthene	180	J	1800	21	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Acenaphthylene	1200	J	1800	15	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Acetophenone	ND		1800	91	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Anthracene	2200		1800	46	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Atrazine	ND		1800	79	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Benzaldehyde	ND		1800	200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Benzo(a)anthracene	9900		1800	31	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Benzo(a)pyrene	8200		1800	43	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Benzo(b)fluoranthene	12000		1800	35	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Benzo(g,h,i)perylene	2300		1800	21	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Benzo(k)fluoranthene	5400		1800	20	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Biphenyl	ND		1800	110	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
bis (2-chloroisopropyl) ether	ND		1800	190	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Bis(2-chloroethoxy)methane	ND		1800	97	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Bis(2-chloroethyl)ether	ND		1800	150	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Bis(2-ethylhexyl) phthalate	ND		1800	570	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Butyl benzyl phthalate	ND	*	1800	480	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Caprolactam	ND		1800	770	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Carbazole	330	J	1800	21	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Chrysene	9200		1800	18	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Dibenz(a,h)anthracene	1100	J	1800	21	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Dibenzofuran	210	J	1800	19	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Diethyl phthalate	ND		1800	54	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Dimethyl phthalate	ND		1800	46	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Di-n-butyl phthalate	ND		1800	620	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Di-n-octyl phthalate	ND		1800	42	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Fluoranthene	16000		1800	26	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Fluorene	620	J	1800	41	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-24 (0-0.5)

Lab Sample ID: 480-22688-6

Date Collected: 07/17/12 13:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 93.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		1800	88	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Hexachlorobutadiene	ND		1800	91	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Hexachlorocyclopentadiene	ND		1800	540	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Hexachloroethane	ND		1800	140	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Indeno(1,2,3-cd)pyrene	2600		1800	49	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Isophorone	ND		1800	89	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Naphthalene	ND		1800	30	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Nitrobenzene	ND		1800	79	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
N-Nitrosodi-n-propylamine	ND		1800	140	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
N-Nitrosodiphenylamine	ND		1800	97	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Pentachlorophenol	ND		3500	610	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Phenanthrene	7000		1800	37	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Phenol	ND		1800	190	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10
Pyrene	12000		1800	12	ug/Kg	☼	07/18/12 13:26	07/19/12 18:35	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	85		39 - 146	07/18/12 13:26	07/19/12 18:35	10
2-Fluorobiphenyl	109		37 - 120	07/18/12 13:26	07/19/12 18:35	10
2-Fluorophenol	92		18 - 120	07/18/12 13:26	07/19/12 18:35	10
Nitrobenzene-d5	86		34 - 132	07/18/12 13:26	07/19/12 18:35	10
Phenol-d5	99		11 - 120	07/18/12 13:26	07/19/12 18:35	10
p-Terphenyl-d14	132		65 - 153	07/18/12 13:26	07/19/12 18:35	10

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	*	87	17	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
4,4'-DDE	ND		87	13	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
4,4'-DDT	27	J	87	8.8	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Aldrin	ND		87	21	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
alpha-BHC	ND		87	16	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
alpha-Chlordane	ND		87	43	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
beta-BHC	ND		87	9.4	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
delta-BHC	ND		87	11	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Dieldrin	ND		87	21	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Endosulfan I	ND		87	11	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Endosulfan II	ND		87	16	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Endosulfan sulfate	ND		87	16	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Endrin	ND		87	12	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Endrin aldehyde	ND		87	22	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Endrin ketone	ND	*	87	21	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
gamma-BHC (Lindane)	ND		87	63	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
gamma-Chlordane	ND		87	28	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Heptachlor	ND		87	14	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Heptachlor epoxide	ND		87	22	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Methoxychlor	ND		87	12	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50
Toxaphene	ND		870	500	ug/Kg	☼	07/18/12 21:39	07/19/12 21:59	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	62 - 137	07/18/12 21:39	07/19/12 21:59	50
Tetrachloro-m-xylene	0	X	30 - 124	07/18/12 21:39	07/19/12 21:59	50

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-24 (0-0.5)

Lab Sample ID: 480-22688-6

Date Collected: 07/17/12 13:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 93.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		240	46	ug/Kg	☼	07/18/12 17:30	07/19/12 10:16	1
PCB-1221	ND		240	46	ug/Kg	☼	07/18/12 17:30	07/19/12 10:16	1
PCB-1232	ND		240	46	ug/Kg	☼	07/18/12 17:30	07/19/12 10:16	1
PCB-1242	ND		240	46	ug/Kg	☼	07/18/12 17:30	07/19/12 10:16	1
PCB-1248	ND		240	46	ug/Kg	☼	07/18/12 17:30	07/19/12 10:16	1
PCB-1254	ND		240	110	ug/Kg	☼	07/18/12 17:30	07/19/12 10:16	1
PCB-1260	ND		240	110	ug/Kg	☼	07/18/12 17:30	07/19/12 10:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	95		36 - 182	07/18/12 17:30	07/19/12 10:16	1
Tetrachloro-m-xylene	89		24 - 172	07/18/12 17:30	07/19/12 10:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8120		10.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Antimony	ND		15.1		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Arsenic	8.0		2.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Barium	141		0.50		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Beryllium	0.60		0.20		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Cadmium	0.58		0.20		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Calcium	71900		50.2		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Chromium	17.5		0.50		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Cobalt	5.5		0.50		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Copper	39.5		1.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Iron	18200		10.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Lead	653		1.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Magnesium	5940		20.1		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Manganese	411		0.20		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Nickel	16.0		5.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Potassium	1400		30.1		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Selenium	ND		4.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Silver	ND		0.50		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Sodium	222		141		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Thallium	ND		6.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Vanadium	20.5		0.50		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1
Zinc	230		2.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:47	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.94		0.11		mg/Kg	☼	07/18/12 10:35	07/18/12 14:47	5

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-24 (6.5-7.0)

Lab Sample ID: 480-22688-7

Date Collected: 07/17/12 13:45

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 73.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	37.5		1.5		mg/Kg	☼	07/18/12 08:50	07/18/12 17:49	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-25 (0-0.5)

Lab Sample ID: 480-22688-8

Date Collected: 07/17/12 14:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		3800	830	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2,4,6-Trichlorophenol	ND		3800	250	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2,4-Dichlorophenol	ND		3800	200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2,4-Dimethylphenol	ND		3800	1000	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2,4-Dinitrophenol	ND		7500	1300	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2,4-Dinitrotoluene	ND		3800	590	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2,6-Dinitrotoluene	ND		3800	940	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2-Chloronaphthalene	ND		3800	260	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2-Chlorophenol	ND		3800	190	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2-Methylnaphthalene	ND		3800	46	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2-Methylphenol	ND		3800	120	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2-Nitroaniline	ND		7500	1200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
2-Nitrophenol	ND		3800	170	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
3,3'-Dichlorobenzidine	ND		3800	3400	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
3-Nitroaniline	ND		7500	880	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
4,6-Dinitro-2-methylphenol	ND		7500	1300	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
4-Bromophenyl phenyl ether	ND		3800	1200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
4-Chloro-3-methylphenol	ND		3800	160	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
4-Chloroaniline	ND		3800	1100	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
4-Chlorophenyl phenyl ether	ND		3800	81	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
4-Methylphenol	ND		7500	210	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
4-Nitroaniline	ND		7500	430	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
4-Nitrophenol	ND		7500	930	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Acenaphthene	140	J	3800	45	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Acenaphthylene	ND		3800	31	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Acetophenone	ND		3800	200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Anthracene	600	J	3800	98	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Atrazine	ND		3800	170	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Benzaldehyde	ND		3800	420	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Benzo(a)anthracene	3200	J	3800	66	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Benzo(a)pyrene	3100	J	3800	92	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Benzo(b)fluoranthene	5100		3800	74	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Benzo(g,h,i)perylene	1000	J	3800	46	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Benzo(k)fluoranthene	1600	J	3800	42	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Biphenyl	ND		3800	240	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
bis (2-chloroisopropyl) ether	ND		3800	400	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Bis(2-chloroethoxy)methane	ND		3800	210	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Bis(2-chloroethyl)ether	ND		3800	330	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Bis(2-ethylhexyl) phthalate	ND		3800	1200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Butyl benzyl phthalate	ND *		3800	1000	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Caprolactam	ND		3800	1700	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Carbazole	250	J	3800	44	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Chrysene	3400	J	3800	38	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Dibenz(a,h)anthracene	420	J	3800	45	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Dibenzofuran	ND		3800	40	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Diethyl phthalate	ND		3800	120	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Dimethyl phthalate	ND		3800	100	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Di-n-butyl phthalate	ND		3800	1300	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Di-n-octyl phthalate	ND		3800	89	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Fluoranthene	5200		3800	55	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Fluorene	ND		3800	88	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-25 (0-0.5)

Lab Sample ID: 480-22688-8

Date Collected: 07/17/12 14:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		3800	190	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Hexachlorobutadiene	ND		3800	200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Hexachlorocyclopentadiene	ND		3800	1200	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Hexachloroethane	ND		3800	300	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Indeno(1,2,3-cd)pyrene	1000	J	3800	110	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Isophorone	ND		3800	190	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Naphthalene	ND		3800	64	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Nitrobenzene	ND		3800	170	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
N-Nitrosodi-n-propylamine	ND		3800	300	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
N-Nitrosodiphenylamine	ND		3800	210	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Pentachlorophenol	ND		7500	1300	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Phenanthrene	2400	J	3800	80	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Phenol	ND		3800	400	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10
Pyrene	4000		3800	25	ug/Kg	☼	07/18/12 13:26	07/19/12 18:59	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	75		39 - 146	07/18/12 13:26	07/19/12 18:59	10
2-Fluorobiphenyl	103		37 - 120	07/18/12 13:26	07/19/12 18:59	10
2-Fluorophenol	93		18 - 120	07/18/12 13:26	07/19/12 18:59	10
Nitrobenzene-d5	81		34 - 132	07/18/12 13:26	07/19/12 18:59	10
Phenol-d5	98		11 - 120	07/18/12 13:26	07/19/12 18:59	10
p-Terphenyl-d14	132		65 - 153	07/18/12 13:26	07/19/12 18:59	10

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	*	190	37	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
4,4'-DDE	43	J	190	28	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
4,4'-DDT	180	J	190	19	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Aldrin	ND		190	47	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
alpha-BHC	ND		190	34	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
alpha-Chlordane	ND		190	94	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
beta-BHC	ND		190	20	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
delta-BHC	ND		190	25	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Dieldrin	ND		190	46	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Endosulfan I	ND		190	24	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Endosulfan II	ND		190	34	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Endosulfan sulfate	ND		190	35	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Endrin	ND		190	26	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Endrin aldehyde	ND		190	48	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Endrin ketone	ND	*	190	47	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
gamma-BHC (Lindane)	ND		190	140	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
gamma-Chlordane	ND		190	60	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Heptachlor	ND		190	30	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Heptachlor epoxide	ND		190	49	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Methoxychlor	1600		190	26	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100
Toxaphene	ND		1900	1100	ug/Kg	☼	07/18/12 21:39	07/19/12 22:40	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	62 - 137	07/18/12 21:39	07/19/12 22:40	100
Tetrachloro-m-xylene	0	X	30 - 124	07/18/12 21:39	07/19/12 22:40	100

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-25 (0-0.5)

Lab Sample ID: 480-22688-8

Date Collected: 07/17/12 14:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 87.3

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		240	47	ug/Kg	☼	07/18/12 17:30	07/19/12 10:31	1
PCB-1221	ND		240	47	ug/Kg	☼	07/18/12 17:30	07/19/12 10:31	1
PCB-1232	ND		240	47	ug/Kg	☼	07/18/12 17:30	07/19/12 10:31	1
PCB-1242	ND		240	47	ug/Kg	☼	07/18/12 17:30	07/19/12 10:31	1
PCB-1248	ND		240	47	ug/Kg	☼	07/18/12 17:30	07/19/12 10:31	1
PCB-1254	260		240	110	ug/Kg	☼	07/18/12 17:30	07/19/12 10:31	1
PCB-1260	ND		240	110	ug/Kg	☼	07/18/12 17:30	07/19/12 10:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	68		36 - 182	07/18/12 17:30	07/19/12 10:31	1
Tetrachloro-m-xylene	66		24 - 172	07/18/12 17:30	07/19/12 10:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9600		11.7		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Antimony	ND		17.6		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Arsenic	7.4		2.3		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Barium	419		0.59		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Beryllium	0.65		0.23		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Cadmium	2.3		0.23		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Calcium	44300		58.6		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Chromium	195		0.59		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Cobalt	5.5		0.59		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Copper	209		1.2		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Iron	15700		11.7		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Lead	962		1.2		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Magnesium	14600		23.4		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Manganese	1460		0.23		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Nickel	28.1		5.9		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Potassium	1070		35.2		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Selenium	ND		4.7		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Silver	ND		0.59		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Sodium	387		164		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Thallium	ND		7.0		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Vanadium	16.3		0.59		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1
Zinc	483		2.3		mg/Kg	☼	07/18/12 08:50	07/18/12 17:56	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.7		0.11		mg/Kg	☼	07/18/12 10:35	07/18/12 14:48	5

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-25 (4.5-5.0)

Lab Sample ID: 480-22688-9

Date Collected: 07/17/12 14:15

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 87.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	672		1.1		mg/Kg	☼	07/18/12 08:50	07/18/12 17:59	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-22688-10

Date Collected: 07/17/12 00:00

Matrix: Water

Date Received: 07/17/12 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/18/12 01:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/12 01:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/12 01:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/12 01:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/18/12 01:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/18/12 01:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/12 01:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/12 01:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/12 01:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/12 01:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/12 01:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/12 01:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/12 01:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/12 01:32	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/12 01:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/12 01:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/12 01:32	1
Acetone	ND		10	3.0	ug/L			07/18/12 01:32	1
Benzene	ND		1.0	0.41	ug/L			07/18/12 01:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/12 01:32	1
Bromoform	ND		1.0	0.26	ug/L			07/18/12 01:32	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/12 01:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/12 01:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/12 01:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/12 01:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/18/12 01:32	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/12 01:32	1
Chloroform	ND		1.0	0.34	ug/L			07/18/12 01:32	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/12 01:32	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/12 01:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/12 01:32	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/12 01:32	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/12 01:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/12 01:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/12 01:32	1
Methyl acetate	ND		1.0	0.50	ug/L			07/18/12 01:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/12 01:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/12 01:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/12 01:32	1
Styrene	ND		1.0	0.73	ug/L			07/18/12 01:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/12 01:32	1
Toluene	ND		1.0	0.51	ug/L			07/18/12 01:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/12 01:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/12 01:32	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/12 01:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/12 01:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/12 01:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/12 01:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		66 - 137		07/18/12 01:32	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: TRIP BLANK

Date Collected: 07/17/12 00:00

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-10

Matrix: Water

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

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	84		71 - 126		07/18/12 01:32	1
<i>4-Bromofluorobenzene (Surr)</i>	94		73 - 120		07/18/12 01:32	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-23 (2-4)

Lab Sample ID: 480-22688-11

Date Collected: 07/17/12 10:30

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	0.29	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,1,2,2-Tetrachloroethane	ND		4.0	0.65	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,1,2-Trichloroethane	ND		4.0	0.52	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	0.92	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,1-Dichloroethane	ND		4.0	0.49	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,1-Dichloroethene	ND		4.0	0.49	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,2,4-Trichlorobenzene	ND		4.0	0.24	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,2-Dibromo-3-Chloropropane	ND		4.0	2.0	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,2-Dibromoethane	ND		4.0	0.52	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,2-Dichlorobenzene	ND		4.0	0.31	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,2-Dichloroethane	ND		4.0	0.20	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,2-Dichloropropane	ND		4.0	2.0	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,3-Dichlorobenzene	ND		4.0	0.21	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
1,4-Dichlorobenzene	ND		4.0	0.56	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
2-Butanone (MEK)	ND		20	1.5	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Acetone	ND		20	3.4	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Benzene	ND		4.0	0.20	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Bromodichloromethane	ND		4.0	0.54	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Bromoform	ND		4.0	2.0	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Bromomethane	ND		4.0	0.36	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Carbon disulfide	ND		4.0	2.0	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Carbon tetrachloride	ND		4.0	0.39	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Chlorobenzene	ND		4.0	0.53	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Dibromochloromethane	ND		4.0	0.52	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Chloroethane	ND		4.0	0.91	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Chloroform	ND		4.0	0.25	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Chloromethane	ND		4.0	0.24	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
cis-1,2-Dichloroethene	ND		4.0	0.52	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
cis-1,3-Dichloropropene	ND		4.0	0.58	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Cyclohexane	ND		4.0	0.56	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Dichlorodifluoromethane	ND		4.0	0.33	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Ethylbenzene	ND		4.0	0.28	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Isopropylbenzene	ND		4.0	0.61	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Methyl acetate	ND		4.0	0.75	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Methyl tert-butyl ether	ND		4.0	0.40	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Methylcyclohexane	ND		4.0	0.61	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Methylene Chloride	ND		4.0	1.9	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Styrene	ND		4.0	0.20	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Tetrachloroethene	0.61	J	4.0	0.54	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Toluene	ND		4.0	0.30	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
trans-1,2-Dichloroethene	ND		4.0	0.42	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
trans-1,3-Dichloropropene	ND		4.0	1.8	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Trichloroethene	ND		4.0	0.89	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Trichlorofluoromethane	ND		4.0	0.38	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Vinyl chloride	ND		4.0	0.49	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1
Xylenes, Total	ND		8.1	0.68	ug/Kg	☼	07/18/12 14:21	07/19/12 05:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		64 - 126	07/18/12 14:21	07/19/12 05:07	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-23 (2-4)

Date Collected: 07/17/12 10:30

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-11

Matrix: Solid

Percent Solids: 87.8

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		71 - 125	07/18/12 14:21	07/19/12 05:07	1
4-Bromofluorobenzene (Surr)	110		72 - 126	07/18/12 14:21	07/19/12 05:07	1

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (64-126)	TOL (71-125)	BFB (72-126)
480-22688-2	B-22 (6.5-7.0)	85	90	104
480-22688-3	B-22 (9.5-10.0)	92	89	102
480-22688-11	B-23 (2-4)	87	95	110
LCS 480-72957/22	Lab Control Sample	87	94	110
MB 480-72957/6	Method Blank	85	94	109
Surrogate Legend				
12DCE = 1,2-Dichloroethane-d4 (Surr)				
TOL = Toluene-d8 (Surr)				
BFB = 4-Bromofluorobenzene (Surr)				

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	TOL (71-126)	BFB (73-120)
480-22688-10	TRIP BLANK	80	84	94
LCS 480-72793/5	Lab Control Sample	78	81	93
MB 480-72793/6	Method Blank	80	87	96
Surrogate Legend				
12DCE = 1,2-Dichloroethane-d4 (Surr)				
TOL = Toluene-d8 (Surr)				
BFB = 4-Bromofluorobenzene (Surr)				

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (39-146)	FBP (37-120)	2FP (18-120)	NBZ (34-132)	PHL (11-120)	TPH (65-153)
480-22688-1	B-22 (0-0.5)	67	86	67	69	75	120
480-22688-4	B-23 (0-0.5)	65	84	71	71	77	112
480-22688-6	B-24 (0-0.5)	85	109	92	86	99	132
480-22688-8	B-25 (0-0.5)	75	103	93	81	98	132
LCS 480-72894/2-A	Lab Control Sample	96	95	76	85	88	126
MB 480-72894/1-A	Method Blank	85	83	73	76	80	108
Surrogate Legend							
TBP = 2,4,6-Tribromophenol							
FBP = 2-Fluorobiphenyl							
2FP = 2-Fluorophenol							
NBZ = Nitrobenzene-d5							
PHL = Phenol-d5							
TPH = p-Terphenyl-d14							

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB2 (62-137)	TCX2 (30-124)
480-22688-1	B-22 (0-0.5)	0 X	0 X
480-22688-4	B-23 (0-0.5)	0 X	0 X
480-22688-6	B-24 (0-0.5)	0 X	0 X
480-22688-8	B-25 (0-0.5)	0 X	0 X
LCS 480-72959/2-A	Lab Control Sample	125	95
MB 480-72959/1-A	Method Blank	113	73

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB1 (36-182)	TCX1 (24-172)
480-22688-1	B-22 (0-0.5)	96	91
480-22688-4	B-23 (0-0.5)	107	103
480-22688-6	B-24 (0-0.5)	95	89
480-22688-8	B-25 (0-0.5)	68	66
LCS 480-72938/2-A	Lab Control Sample	124	132
MB 480-72938/1-A	Method Blank	110	113

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

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

Lab Sample ID: MB 480-72793/6

Matrix: Water

Analysis Batch: 72793

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/18/12 00:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/12 00:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/12 00:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/12 00:53	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/18/12 00:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/18/12 00:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/12 00:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/12 00:53	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/12 00:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/12 00:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/12 00:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/12 00:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/12 00:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/12 00:53	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/12 00:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/12 00:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/12 00:53	1
Acetone	ND		10	3.0	ug/L			07/18/12 00:53	1
Benzene	ND		1.0	0.41	ug/L			07/18/12 00:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/12 00:53	1
Bromoform	ND		1.0	0.26	ug/L			07/18/12 00:53	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/12 00:53	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/12 00:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/12 00:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/12 00:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/18/12 00:53	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/12 00:53	1
Chloroform	ND		1.0	0.34	ug/L			07/18/12 00:53	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/12 00:53	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/12 00:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/12 00:53	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/12 00:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/12 00:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/12 00:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/12 00:53	1
Methyl acetate	ND		1.0	0.50	ug/L			07/18/12 00:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/12 00:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/12 00:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/12 00:53	1
Styrene	ND		1.0	0.73	ug/L			07/18/12 00:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/12 00:53	1
Toluene	ND		1.0	0.51	ug/L			07/18/12 00:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/12 00:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/12 00:53	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/12 00:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/12 00:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/12 00:53	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/12 00:53	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

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

Lab Sample ID: MB 480-72793/6

Matrix: Water

Analysis Batch: 72793

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		66 - 137		07/18/12 00:53	1
Toluene-d8 (Surr)	87		71 - 126		07/18/12 00:53	1
4-Bromofluorobenzene (Surr)	96		73 - 120		07/18/12 00:53	1

Lab Sample ID: LCS 480-72793/5

Matrix: Water

Analysis Batch: 72793

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	27.3		ug/L		109	71 - 129
1,1-Dichloroethene	25.0	28.0		ug/L		112	65 - 138
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	77 - 120
1,2-Dichloroethane	25.0	26.8		ug/L		107	75 - 127
Benzene	25.0	26.7		ug/L		107	71 - 124
Chlorobenzene	25.0	26.3		ug/L		105	72 - 120
cis-1,2-Dichloroethene	25.0	27.9		ug/L		112	74 - 124
Ethylbenzene	25.0	26.7		ug/L		107	77 - 123
Methyl tert-butyl ether	25.0	24.6		ug/L		98	64 - 127
Tetrachloroethene	25.0	27.3		ug/L		109	74 - 122
Toluene	25.0	26.1		ug/L		104	70 - 122
trans-1,2-Dichloroethene	25.0	27.9		ug/L		112	73 - 127
Trichloroethene	25.0	27.6		ug/L		110	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	78		66 - 137
Toluene-d8 (Surr)	81		71 - 126
4-Bromofluorobenzene (Surr)	93		73 - 120

Lab Sample ID: MB 480-72957/6

Matrix: Solid

Analysis Batch: 72957

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			07/19/12 00:07	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			07/19/12 00:07	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			07/19/12 00:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			07/19/12 00:07	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			07/19/12 00:07	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			07/19/12 00:07	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			07/19/12 00:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			07/19/12 00:07	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			07/19/12 00:07	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			07/19/12 00:07	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			07/19/12 00:07	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			07/19/12 00:07	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			07/19/12 00:07	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			07/19/12 00:07	1
2-Hexanone	ND		25	2.5	ug/Kg			07/19/12 00:07	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			07/19/12 00:07	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

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

Lab Sample ID: MB 480-72957/6

Matrix: Solid

Analysis Batch: 72957

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			07/19/12 00:07	1
Acetone	ND		25	4.2	ug/Kg			07/19/12 00:07	1
Benzene	ND		5.0	0.25	ug/Kg			07/19/12 00:07	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			07/19/12 00:07	1
Bromoform	ND		5.0	2.5	ug/Kg			07/19/12 00:07	1
Bromomethane	ND		5.0	0.45	ug/Kg			07/19/12 00:07	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			07/19/12 00:07	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			07/19/12 00:07	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			07/19/12 00:07	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			07/19/12 00:07	1
Chloroethane	ND		5.0	1.1	ug/Kg			07/19/12 00:07	1
Chloroform	ND		5.0	0.31	ug/Kg			07/19/12 00:07	1
Chloromethane	ND		5.0	0.30	ug/Kg			07/19/12 00:07	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			07/19/12 00:07	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			07/19/12 00:07	1
Cyclohexane	ND		5.0	0.70	ug/Kg			07/19/12 00:07	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			07/19/12 00:07	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			07/19/12 00:07	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg			07/19/12 00:07	1
Methyl acetate	ND		5.0	0.93	ug/Kg			07/19/12 00:07	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			07/19/12 00:07	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			07/19/12 00:07	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			07/19/12 00:07	1
Styrene	ND		5.0	0.25	ug/Kg			07/19/12 00:07	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			07/19/12 00:07	1
Toluene	ND		5.0	0.38	ug/Kg			07/19/12 00:07	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			07/19/12 00:07	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			07/19/12 00:07	1
Trichloroethene	ND		5.0	1.1	ug/Kg			07/19/12 00:07	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			07/19/12 00:07	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			07/19/12 00:07	1
Xylenes, Total	ND		10	0.84	ug/Kg			07/19/12 00:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		64 - 126		07/19/12 00:07	1
Toluene-d8 (Surr)	94		71 - 125		07/19/12 00:07	1
4-Bromofluorobenzene (Surr)	109		72 - 126		07/19/12 00:07	1

Lab Sample ID: LCS 480-72957/22

Matrix: Solid

Analysis Batch: 72957

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	52.4		ug/Kg		105	79 - 126
1,1-Dichloroethene	50.0	49.5		ug/Kg		99	65 - 153
1,2-Dichlorobenzene	50.0	49.9		ug/Kg		100	75 - 120
1,2-Dichloroethane	50.0	49.1		ug/Kg		98	77 - 122
Benzene	50.0	53.7		ug/Kg		107	79 - 127
Chlorobenzene	50.0	52.3		ug/Kg		105	76 - 124

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

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

Lab Sample ID: LCS 480-72957/22

Matrix: Solid

Analysis Batch: 72957

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	50.0	51.2		ug/Kg		102	81 - 117
Ethylbenzene	50.0	54.1		ug/Kg		108	80 - 120
Methyl tert-butyl ether	50.0	47.6		ug/Kg		95	63 - 125
Tetrachloroethene	50.0	59.0		ug/Kg		118	74 - 122
Toluene	50.0	53.4		ug/Kg		107	74 - 128
trans-1,2-Dichloroethene	50.0	55.2		ug/Kg		110	78 - 126
Trichloroethene	50.0	52.6		ug/Kg		105	77 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	87		64 - 126
Toluene-d8 (Surr)	94		71 - 125
4-Bromofluorobenzene (Surr)	110		72 - 126

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

Lab Sample ID: MB 480-72894/1-A

Matrix: Solid

Analysis Batch: 73048

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 72894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	36	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2,4-Dichlorophenol	ND		170	8.8	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2,4-Dimethylphenol	ND		170	45	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2,4-Dinitrophenol	ND		330	59	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2,6-Dinitrotoluene	ND		170	41	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2-Chloronaphthalene	ND		170	11	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2-Chlorophenol	ND		170	8.5	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2-Methylnaphthalene	ND		170	2.0	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2-Methylphenol	ND		170	5.1	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2-Nitroaniline	ND		330	54	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
2-Nitrophenol	ND		170	7.6	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
3-Nitroaniline	ND		330	38	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
4,6-Dinitro-2-methylphenol	ND		330	58	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
4-Bromophenyl phenyl ether	ND		170	53	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
4-Chloro-3-methylphenol	ND		170	6.9	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
4-Chloroaniline	ND		170	49	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
4-Chlorophenyl phenyl ether	ND		170	3.6	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
4-Methylphenol	ND		330	9.3	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
4-Nitroaniline	ND		330	19	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
4-Nitrophenol	ND		330	41	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Acenaphthene	ND		170	2.0	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Acenaphthylene	ND		170	1.4	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Acetophenone	ND		170	8.6	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Anthracene	ND		170	4.3	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Atrazine	ND		170	7.4	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Benzaldehyde	ND		170	18	ug/Kg		07/18/12 13:26	07/19/12 11:41	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

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

Lab Sample ID: MB 480-72894/1-A

Matrix: Solid

Analysis Batch: 73048

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 72894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)anthracene	ND		170	2.9	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Benzo(b)fluoranthene	ND		170	3.2	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Benzo(k)fluoranthene	ND		170	1.8	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Biphenyl	ND		170	10	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
bis (2-chloroisopropyl) ether	ND		170	17	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Bis(2-chloroethoxy)methane	ND		170	9.1	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Bis(2-chloroethyl)ether	ND		170	14	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Bis(2-ethylhexyl) phthalate	ND		170	54	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Butyl benzyl phthalate	ND		170	45	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Caprolactam	ND		170	72	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Carbazole	ND		170	1.9	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Chrysene	ND		170	1.7	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Dibenzofuran	ND		170	1.7	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Diethyl phthalate	ND		170	5.1	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Dimethyl phthalate	ND		170	4.4	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Di-n-butyl phthalate	ND		170	58	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Di-n-octyl phthalate	ND		170	3.9	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Fluoranthene	ND		170	2.4	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Fluorene	ND		170	3.9	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Hexachlorobenzene	ND		170	8.3	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Hexachlorobutadiene	ND		170	8.6	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Hexachlorocyclopentadiene	ND		170	51	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Hexachloroethane	ND		170	13	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Isophorone	ND		170	8.4	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Naphthalene	ND		170	2.8	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Nitrobenzene	ND		170	7.4	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
N-Nitrosodiphenylamine	ND		170	9.1	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Pentachlorophenol	ND		330	57	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Phenanthrene	ND		170	3.5	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Phenol	ND		170	18	ug/Kg		07/18/12 13:26	07/19/12 11:41	1
Pyrene	ND		170	1.1	ug/Kg		07/18/12 13:26	07/19/12 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	85		39 - 146	07/18/12 13:26	07/19/12 11:41	1
2-Fluorobiphenyl	83		37 - 120	07/18/12 13:26	07/19/12 11:41	1
2-Fluorophenol	73		18 - 120	07/18/12 13:26	07/19/12 11:41	1
Nitrobenzene-d5	76		34 - 132	07/18/12 13:26	07/19/12 11:41	1
Phenol-d5	80		11 - 120	07/18/12 13:26	07/19/12 11:41	1
p-Terphenyl-d14	108		65 - 153	07/18/12 13:26	07/19/12 11:41	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

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

Lab Sample ID: LCS 480-72894/2-A

Matrix: Solid

Analysis Batch: 73048

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 72894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	3290	3820		ug/Kg		116	55 - 125
2-Chlorophenol	3290	2650		ug/Kg		80	38 - 120
4-Chloro-3-methylphenol	3290	3520		ug/Kg		107	49 - 125
4-Nitrophenol	3290	3290		ug/Kg		100	43 - 137
Acenaphthene	3290	3220		ug/Kg		98	53 - 120
Bis(2-ethylhexyl) phthalate	3290	4350		ug/Kg		132	61 - 133
Fluorene	3290	3310		ug/Kg		101	63 - 126
Hexachloroethane	3290	2430		ug/Kg		74	41 - 120
N-Nitrosodi-n-propylamine	3290	3110		ug/Kg		95	46 - 120
Pentachlorophenol	3290	3120		ug/Kg		95	33 - 136
Phenol	3290	2890		ug/Kg		88	36 - 120
Pyrene	3290	3670		ug/Kg		112	51 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	96		39 - 146
2-Fluorobiphenyl	95		37 - 120
2-Fluorophenol	76		18 - 120
Nitrobenzene-d5	85		34 - 132
Phenol-d5	88		11 - 120
p-Terphenyl-d14	126		65 - 153

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-72959/1-A

Matrix: Solid

Analysis Batch: 73020

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 72959

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.32	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
4,4'-DDE	ND		1.6	0.25	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
4,4'-DDT	ND		1.6	0.17	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Aldrin	ND		1.6	0.40	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
alpha-BHC	ND		1.6	0.29	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
alpha-Chlordane	ND		1.6	0.82	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
beta-BHC	ND		1.6	0.18	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
delta-BHC	ND		1.6	0.22	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Dieldrin	ND		1.6	0.39	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Endosulfan I	ND		1.6	0.21	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Endosulfan II	ND		1.6	0.29	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Endosulfan sulfate	ND		1.6	0.31	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Endrin	ND		1.6	0.23	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Endrin aldehyde	ND		1.6	0.42	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Endrin ketone	ND		1.6	0.40	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
gamma-BHC (Lindane)	ND		1.6	1.2	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
gamma-Chlordane	ND		1.6	0.52	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Heptachlor	ND		1.6	0.26	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Heptachlor epoxide	ND		1.6	0.42	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Methoxychlor	ND		1.6	0.23	ug/Kg		07/18/12 21:39	07/19/12 09:36	1
Toxaphene	ND		16	9.5	ug/Kg		07/18/12 21:39	07/19/12 09:36	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-72959/1-A

Matrix: Solid

Analysis Batch: 73020

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 72959

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	113		62 - 137	07/18/12 21:39	07/19/12 09:36	1
Tetrachloro-m-xylene	73		30 - 124	07/18/12 21:39	07/19/12 09:36	1

Lab Sample ID: LCS 480-72959/2-A

Matrix: Solid

Analysis Batch: 73020

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 72959

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.5	22.2	*	ug/Kg		134	45 - 129
4,4'-DDE	16.5	18.8		ug/Kg		114	49 - 120
4,4'-DDT	16.5	20.3		ug/Kg		123	47 - 145
Aldrin	16.5	16.5		ug/Kg		100	35 - 120
alpha-BHC	16.5	17.0		ug/Kg		103	49 - 120
alpha-Chlordane	16.5	19.4		ug/Kg		118	44 - 127
beta-BHC	16.5	19.5		ug/Kg		118	58 - 123
delta-BHC	16.5	18.2		ug/Kg		110	45 - 123
Dieldrin	16.5	20.0		ug/Kg		121	53 - 128
Endosulfan I	16.5	17.6		ug/Kg		107	29 - 125
Endosulfan II	16.5	20.7		ug/Kg		125	56 - 127
Endosulfan sulfate	16.5	21.6		ug/Kg		131	53 - 135
Endrin	16.5	20.3		ug/Kg		123	58 - 129
Endrin aldehyde	16.5	20.4		ug/Kg		123	39 - 133
Endrin ketone	16.5	22.5	*	ug/Kg		136	61 - 133
gamma-BHC (Lindane)	16.5	17.5		ug/Kg		106	50 - 120
gamma-Chlordane	16.5	18.5		ug/Kg		112	54 - 124
Heptachlor	16.5	18.1		ug/Kg		110	49 - 122
Heptachlor epoxide	16.5	19.5		ug/Kg		118	47 - 128
Methoxychlor	16.5	23.7		ug/Kg		143	61 - 146

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	125		62 - 137
Tetrachloro-m-xylene	95		30 - 124

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-72938/1-A

Matrix: Solid

Analysis Batch: 72990

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 72938

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		230	44	ug/Kg		07/18/12 17:30	07/19/12 08:17	1
PCB-1221	ND		230	44	ug/Kg		07/18/12 17:30	07/19/12 08:17	1
PCB-1232	ND		230	44	ug/Kg		07/18/12 17:30	07/19/12 08:17	1
PCB-1242	ND		230	44	ug/Kg		07/18/12 17:30	07/19/12 08:17	1
PCB-1248	ND		230	44	ug/Kg		07/18/12 17:30	07/19/12 08:17	1
PCB-1254	ND		230	110	ug/Kg		07/18/12 17:30	07/19/12 08:17	1
PCB-1260	ND		230	110	ug/Kg		07/18/12 17:30	07/19/12 08:17	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 480-72938/1-A

Matrix: Solid

Analysis Batch: 72990

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 72938

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	110		36 - 182	07/18/12 17:30	07/19/12 08:17	1
Tetrachloro-m-xylene	113		24 - 172	07/18/12 17:30	07/19/12 08:17	1

Lab Sample ID: LCS 480-72938/2-A

Matrix: Solid

Analysis Batch: 72990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 72938

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2310	2410		ug/Kg		104	51 - 185
PCB-1260	2310	2550		ug/Kg		110	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	124		36 - 182
Tetrachloro-m-xylene	132		24 - 172

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-72847/1-A

Matrix: Solid

Analysis Batch: 73011

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 72847

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Antimony	ND		15.0		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Arsenic	ND		2.0		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Barium	ND		0.50		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Beryllium	ND		0.20		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Cadmium	ND		0.20		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Calcium	ND		49.9		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Chromium	ND		0.50		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Cobalt	ND		0.50		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Copper	ND		1.0		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Iron	ND		10		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Lead	ND		1.0		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Magnesium	ND		20.0		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Manganese	ND		0.20		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Nickel	ND		5.0		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Potassium	ND		29.9		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Selenium	ND		4.0		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Silver	ND		0.50		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Sodium	ND		140		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Thallium	ND		6.0		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Vanadium	ND		0.50		mg/Kg		07/18/12 08:50	07/18/12 17:20	1
Zinc	ND		2.0		mg/Kg		07/18/12 08:50	07/18/12 17:20	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

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

Lab Sample ID: LCSSRM 480-72847/2-A

Matrix: Solid

Analysis Batch: 73011

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 72847

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8390	6374		mg/Kg		76.0	40.6 - 159.5
Antimony	93.2	57.21		mg/Kg		61.4	24.8 - 272.2
Arsenic	94.4	84.38		mg/Kg		89.4	69.2 - 131.2
Barium	167	140.7		mg/Kg		84.3	72.5 - 126.9
Beryllium	57.5	52.93		mg/Kg		92.0	73.3 - 126.7
Cadmium	60.4	56.11		mg/Kg		92.8	73.2 - 126.8
Calcium	6130	5600		mg/Kg		91.3	73.9 - 126.4
Chromium	70.3	59.91		mg/Kg		85.2	68.5 - 131.5
Cobalt	102	94.27		mg/Kg		92.5	74.5 - 125.5
Copper	79.5	73.33		mg/Kg		92.2	73.6 - 125.6
Iron	12500	8837		mg/Kg		70.8	31.0 - 168.8
Lead	91.7	81.87		mg/Kg		89.3	70.3 - 129.6
Magnesium	2580	2096		mg/Kg		81.3	63.6 - 136.0
Manganese	283	247.1		mg/Kg		87.4	73.9 - 125.4
Nickel	57.5	54.23		mg/Kg		94.2	70.0 - 130.2
Potassium	2490	2095		mg/Kg		84.2	60.6 - 139.0
Selenium	86.3	80.88		mg/Kg		93.7	64.0 - 136.6
Silver	34.4	32.54		mg/Kg		94.7	65.7 - 134.6
Sodium	215	189.8		mg/Kg		88.4	26.7 - 174.0
Thallium	120	111.4		mg/Kg		92.9	67.3 - 131.7
Vanadium	56.9	47.82		mg/Kg		84.0	53.7 - 146.1
Zinc	140	117.9		mg/Kg		84.3	67.4 - 132.9

Lab Sample ID: 480-22688-9 MS

Matrix: Solid

Analysis Batch: 73011

Client Sample ID: B-25 (4.5-5.0)

Prep Type: Total/NA

Prep Batch: 72847

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	672		47.8	530.3	4	mg/Kg	✱	-297	75 - 125

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

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

Lab Sample ID: 480-22688-9 MSD

Matrix: Solid

Analysis Batch: 73011

Client Sample ID: B-25 (4.5-5.0)

Prep Type: Total/NA

Prep Batch: 72847

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	672		43.1	421.1	4 F	mg/Kg	✱	-584	75 - 125	23	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-72874/1-A

Matrix: Solid

Analysis Batch: 72914

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 72874

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		07/18/12 10:35	07/18/12 12:35	1

Lab Sample ID: LCSSRM 480-72874/2-A

Matrix: Solid

Analysis Batch: 72914

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 72874

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	3.93		mg/Kg		104.3	71.6 - 128.4

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

GC/MS VOA

Analysis Batch: 72793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-10	TRIP BLANK	Total/NA	Water	8260B	
LCS 480-72793/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-72793/6	Method Blank	Total/NA	Water	8260B	

Prep Batch: 72910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-2	B-22 (6.5-7.0)	Total/NA	Solid	5035	
480-22688-3	B-22 (9.5-10.0)	Total/NA	Solid	5035	
480-22688-11	B-23 (2-4)	Total/NA	Solid	5035	

Analysis Batch: 72957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-2	B-22 (6.5-7.0)	Total/NA	Solid	8260B	72910
480-22688-3	B-22 (9.5-10.0)	Total/NA	Solid	8260B	72910
480-22688-11	B-23 (2-4)	Total/NA	Solid	8260B	72910
LCS 480-72957/22	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-72957/6	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 72894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	3550B	
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	3550B	
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	3550B	
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	3550B	
LCS 480-72894/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-72894/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 73048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	8270C	72894
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	8270C	72894
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	8270C	72894
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	8270C	72894
LCS 480-72894/2-A	Lab Control Sample	Total/NA	Solid	8270C	72894
MB 480-72894/1-A	Method Blank	Total/NA	Solid	8270C	72894

GC Semi VOA

Prep Batch: 72938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	3550B	
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	3550B	
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	3550B	
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	3550B	
LCS 480-72938/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-72938/1-A	Method Blank	Total/NA	Solid	3550B	

Prep Batch: 72959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	3550B	

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

GC Semi VOA (Continued)

Prep Batch: 72959 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	3550B	
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	3550B	
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	3550B	
LCS 480-72959/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-72959/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 72990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	8082	72938
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	8082	72938
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	8082	72938
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	8082	72938
LCS 480-72938/2-A	Lab Control Sample	Total/NA	Solid	8082	72938
MB 480-72938/1-A	Method Blank	Total/NA	Solid	8082	72938

Analysis Batch: 73020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	8081A	72959
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	8081A	72959
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	8081A	72959
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	8081A	72959
LCS 480-72959/2-A	Lab Control Sample	Total/NA	Solid	8081A	72959
MB 480-72959/1-A	Method Blank	Total/NA	Solid	8081A	72959

Metals

Prep Batch: 72847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	3050B	
480-22688-2	B-22 (6.5-7.0)	Total/NA	Solid	3050B	
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	3050B	
480-22688-5	B-23 (5.5-6.0)	Total/NA	Solid	3050B	
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	3050B	
480-22688-7	B-24 (6.5-7.0)	Total/NA	Solid	3050B	
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	3050B	
480-22688-9	B-25 (4.5-5.0)	Total/NA	Solid	3050B	
480-22688-9 MS	B-25 (4.5-5.0)	Total/NA	Solid	3050B	
480-22688-9 MSD	B-25 (4.5-5.0)	Total/NA	Solid	3050B	
LCSSRM 480-72847/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-72847/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 72874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	7471A	
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	7471A	
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	7471A	
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	7471A	
LCSSRM 480-72874/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-72874/1-A	Method Blank	Total/NA	Solid	7471A	

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Metals (Continued)

Analysis Batch: 72914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	7471A	72874
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	7471A	72874
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	7471A	72874
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	7471A	72874
LCSSRM 480-72874/2-A	Lab Control Sample	Total/NA	Solid	7471A	72874
MB 480-72874/1-A	Method Blank	Total/NA	Solid	7471A	72874

Analysis Batch: 73011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	6010B	72847
480-22688-2	B-22 (6.5-7.0)	Total/NA	Solid	6010B	72847
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	6010B	72847
480-22688-5	B-23 (5.5-6.0)	Total/NA	Solid	6010B	72847
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	6010B	72847
480-22688-7	B-24 (6.5-7.0)	Total/NA	Solid	6010B	72847
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	6010B	72847
480-22688-9	B-25 (4.5-5.0)	Total/NA	Solid	6010B	72847
480-22688-9 MS	B-25 (4.5-5.0)	Total/NA	Solid	6010B	72847
480-22688-9 MSD	B-25 (4.5-5.0)	Total/NA	Solid	6010B	72847
LCSSRM 480-72847/2-A	Lab Control Sample	Total/NA	Solid	6010B	72847
MB 480-72847/1-A	Method Blank	Total/NA	Solid	6010B	72847

Analysis Batch: 73399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	6010B	72847

General Chemistry

Analysis Batch: 72889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22688-1	B-22 (0-0.5)	Total/NA	Solid	Moisture	
480-22688-2	B-22 (6.5-7.0)	Total/NA	Solid	Moisture	
480-22688-3	B-22 (9.5-10.0)	Total/NA	Solid	Moisture	
480-22688-4	B-23 (0-0.5)	Total/NA	Solid	Moisture	
480-22688-5	B-23 (5.5-6.0)	Total/NA	Solid	Moisture	
480-22688-6	B-24 (0-0.5)	Total/NA	Solid	Moisture	
480-22688-7	B-24 (6.5-7.0)	Total/NA	Solid	Moisture	
480-22688-8	B-25 (0-0.5)	Total/NA	Solid	Moisture	
480-22688-9	B-25 (4.5-5.0)	Total/NA	Solid	Moisture	
480-22688-11	B-23 (2-4)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-22 (0-0.5)

Date Collected: 07/17/12 11:00

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-1

Matrix: Solid

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			72894	07/18/12 13:26	KB	TAL BUF
Total/NA	Analysis	8270C		10	73048	07/19/12 17:47	HTL	TAL BUF
Total/NA	Prep	3550B			72938	07/18/12 17:30	KB	TAL BUF
Total/NA	Analysis	8082		1	72990	07/19/12 09:31	JM	TAL BUF
Total/NA	Prep	3550B			72959	07/18/12 21:39	KB	TAL BUF
Total/NA	Analysis	8081A		50	73020	07/19/12 20:37	DB	TAL BUF
Total/NA	Prep	7471A			72874	07/18/12 10:35	JRK	TAL BUF
Total/NA	Analysis	7471A		1	72914	07/18/12 12:46	JRK	TAL BUF
Total/NA	Prep	3050B			72847	07/18/12 08:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	73011	07/18/12 17:38	LH	TAL BUF
Total/NA	Analysis	6010B		5	73399	07/20/12 14:56	MM	TAL BUF
Total/NA	Analysis	Moisture		1	72889	07/18/12 12:08	ZLR	TAL BUF

Client Sample ID: B-22 (6.5-7.0)

Date Collected: 07/17/12 11:30

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-2

Matrix: Solid

Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			72910	07/18/12 14:21	JMB	TAL BUF
Total/NA	Analysis	8260B		1	72957	07/19/12 04:16	JMB	TAL BUF
Total/NA	Prep	3050B			72847	07/18/12 08:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	73011	07/18/12 17:40	LH	TAL BUF
Total/NA	Analysis	Moisture		1	72889	07/18/12 12:08	ZLR	TAL BUF

Client Sample ID: B-22 (9.5-10.0)

Date Collected: 07/17/12 11:45

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-3

Matrix: Solid

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			72910	07/18/12 14:21	JMB	TAL BUF
Total/NA	Analysis	8260B		1	72957	07/19/12 04:41	JMB	TAL BUF
Total/NA	Analysis	Moisture		1	72889	07/18/12 12:08	ZLR	TAL BUF

Client Sample ID: B-23 (0-0.5)

Date Collected: 07/17/12 10:00

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-4

Matrix: Solid

Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			72894	07/18/12 13:26	KB	TAL BUF
Total/NA	Analysis	8270C		10	73048	07/19/12 18:11	HTL	TAL BUF
Total/NA	Prep	3550B			72938	07/18/12 17:30	KB	TAL BUF
Total/NA	Analysis	8082		1	72990	07/19/12 09:46	JM	TAL BUF
Total/NA	Prep	3550B			72959	07/18/12 21:39	KB	TAL BUF
Total/NA	Analysis	8081A		50	73020	07/19/12 21:18	DB	TAL BUF

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-23 (0-0.5)

Lab Sample ID: 480-22688-4

Date Collected: 07/17/12 10:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			72874	07/18/12 10:35	JRK	TAL BUF
Total/NA	Analysis	7471A		1	72914	07/18/12 12:47	JRK	TAL BUF
Total/NA	Prep	3050B			72847	07/18/12 08:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	73011	07/18/12 17:42	LH	TAL BUF
Total/NA	Analysis	Moisture		1	72889	07/18/12 12:08	ZLR	TAL BUF

Client Sample ID: B-23 (5.5-6.0)

Lab Sample ID: 480-22688-5

Date Collected: 07/17/12 10:45

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			72847	07/18/12 08:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	73011	07/18/12 17:45	LH	TAL BUF
Total/NA	Analysis	Moisture		1	72889	07/18/12 12:08	ZLR	TAL BUF

Client Sample ID: B-24 (0-0.5)

Lab Sample ID: 480-22688-6

Date Collected: 07/17/12 13:00

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			72894	07/18/12 13:26	KB	TAL BUF
Total/NA	Analysis	8270C		10	73048	07/19/12 18:35	HTL	TAL BUF
Total/NA	Prep	3550B			72938	07/18/12 17:30	KB	TAL BUF
Total/NA	Analysis	8082		1	72990	07/19/12 10:16	JM	TAL BUF
Total/NA	Prep	3550B			72959	07/18/12 21:39	KB	TAL BUF
Total/NA	Analysis	8081A		50	73020	07/19/12 21:59	DB	TAL BUF
Total/NA	Prep	7471A			72874	07/18/12 10:35	JRK	TAL BUF
Total/NA	Analysis	7471A		5	72914	07/18/12 14:47	JRK	TAL BUF
Total/NA	Prep	3050B			72847	07/18/12 08:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	73011	07/18/12 17:47	LH	TAL BUF
Total/NA	Analysis	Moisture		1	72889	07/18/12 12:08	ZLR	TAL BUF

Client Sample ID: B-24 (6.5-7.0)

Lab Sample ID: 480-22688-7

Date Collected: 07/17/12 13:45

Matrix: Solid

Date Received: 07/17/12 16:45

Percent Solids: 73.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			72847	07/18/12 08:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	73011	07/18/12 17:49	LH	TAL BUF
Total/NA	Analysis	Moisture		1	72889	07/18/12 12:08	ZLR	TAL BUF

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Client Sample ID: B-25 (0-0.5)

Date Collected: 07/17/12 14:00

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-8

Matrix: Solid

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			72894	07/18/12 13:26	KB	TAL BUF
Total/NA	Analysis	8270C		10	73048	07/19/12 18:59	HTL	TAL BUF
Total/NA	Prep	3550B			72938	07/18/12 17:30	KB	TAL BUF
Total/NA	Analysis	8082		1	72990	07/19/12 10:31	JM	TAL BUF
Total/NA	Prep	3550B			72959	07/18/12 21:39	KB	TAL BUF
Total/NA	Analysis	8081A		100	73020	07/19/12 22:40	DB	TAL BUF
Total/NA	Prep	7471A			72874	07/18/12 10:35	JRK	TAL BUF
Total/NA	Analysis	7471A		5	72914	07/18/12 14:48	JRK	TAL BUF
Total/NA	Prep	3050B			72847	07/18/12 08:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	73011	07/18/12 17:56	LH	TAL BUF
Total/NA	Analysis	Moisture		1	72889	07/18/12 12:08	ZLR	TAL BUF

Client Sample ID: B-25 (4.5-5.0)

Date Collected: 07/17/12 14:15

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-9

Matrix: Solid

Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			72847	07/18/12 08:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	73011	07/18/12 17:59	LH	TAL BUF
Total/NA	Analysis	Moisture		1	72889	07/18/12 12:08	ZLR	TAL BUF

Client Sample ID: TRIP BLANK

Date Collected: 07/17/12 00:00

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	72793	07/18/12 01:32	JMB	TAL BUF

Client Sample ID: B-23 (2-4)

Date Collected: 07/17/12 10:30

Date Received: 07/17/12 16:45

Lab Sample ID: 480-22688-11

Matrix: Solid

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			72910	07/18/12 14:21	JMB	TAL BUF
Total/NA	Analysis	8260B		1	72957	07/19/12 05:07	JMB	TAL BUF
Total/NA	Analysis	Moisture		1	72889	07/18/12 12:08	ZLR	TAL BUF

Laboratory References:

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

Certification Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Laboratory: TestAmerica Buffalo

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

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

Method Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081A	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22688-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-22688-1	B-22 (0-0.5)	Solid	07/17/12 11:00	07/17/12 16:45
480-22688-2	B-22 (6.5-7.0)	Solid	07/17/12 11:30	07/17/12 16:45
480-22688-3	B-22 (9.5-10.0)	Solid	07/17/12 11:45	07/17/12 16:45
480-22688-4	B-23 (0-0.5)	Solid	07/17/12 10:00	07/17/12 16:45
480-22688-5	B-23 (5.5-6.0)	Solid	07/17/12 10:45	07/17/12 16:45
480-22688-6	B-24 (0-0.5)	Solid	07/17/12 13:00	07/17/12 16:45
480-22688-7	B-24 (6.5-7.0)	Solid	07/17/12 13:45	07/17/12 16:45
480-22688-8	B-25 (0-0.5)	Solid	07/17/12 14:00	07/17/12 16:45
480-22688-9	B-25 (4.5-5.0)	Solid	07/17/12 14:15	07/17/12 16:45
480-22688-10	TRIP BLANK	Water	07/17/12 00:00	07/17/12 16:45
480-22688-11	B-23 (2-4)	Solid	07/17/12 10:30	07/17/12 16:45

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

Chain of Custody Record

TAL-4124 (1007)

Client AMEC E&I	Project Manager Robert Connolly	Date 7/17/12	Chain of Custody Number 215281
Address 800 N. BRU. AVE. SUITE 220	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
City CARNEGIE	State PA	Zip Code 15106	
Project Name and Location (State) Highway - Niagara Falls	Site Contact M. Cunningham	Lab Contact B. Fisher	
Contract/Purchase Order/Quote No. TA: 48004523 AMEC-3410110832	Carrier/Waybill Number	Hand Delivery	

City	State	Zip Code	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt							
CARNEGIE	PA	15106	M. Cunningham	B. Fisher	REPORT ONLY TOTAL LEAD.								
Project Name and Location (State)			Carrier/Waybill Number	Containers & Preservatives	Matrix								
Horseshoe - N. A. 6004 FAX													
Contract/Purchase Order Quote No.													
TA: 48004523 ANAL-3410110832													
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Metals
B-22 (0-0.5)	7/17/12	1100			X	X	X						X
B-22 (6.5-7.0)		1130			X	X	X	X	X	X	X	X	X
B-22 (4.5-10.0)		1145			X	X	X	X	X	X	X	X	X
B-23 (0-0.5)		1000			X	X	X	X	X	X	X	X	X
B-23 (5.5-6.0)		1045			X	X	X	X	X	X	X	X	X
B-24 (0-0.5)		1300			X	X	X	X	X	X	X	X	X
B-24 (6.5-7.0)		1345			X	X	X	X	X	X	X	X	X
B-25 (0-0.5)		1400			X	X	X	X	X	X	X	X	X
B-25 (4.5-5.0)		1415			X	X	X	X	X	X	X	X	X
TRIP BLANK				X									
B-23 (2-4')		1030			X	X	X	X	X	X	X	X	X
						7/18/12							

Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown	Sample Disposal ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months	(A fee may be assessed if samples are retained longer than 1 month)
Turn Around Time Required ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days	QC Requirements (Specify)	
1. Relinquished By [Signature] Date 7/17/12 Time 1645	1. Received By [Signature] Date 7/17/12 Time 1645	
2. Relinquished By [Signature] Date 7/17/12 Time 1645	2. Received By [Signature] Date 7/17/12 Time 1645	
3. Relinquished By [Signature] Date 7/17/12 Time 1645	3. Received By [Signature] Date 7/17/12 Time 1645	
Comments 5.7 #2		

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

Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 480-22688-1

Login Number: 22688

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robitaille, Zach L

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-22767-1

Client Project/Site: Niagara Falls site

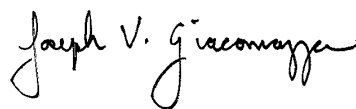
For:

AMEC Environment & Infrastructure, Inc.

800 North Bell Avenue, Suite 200

Carnegie, Pennsylvania 15106

Attn: Eric Weiler



Authorized for release by:

8/1/2012 4:21:35 PM

Joe Giacomazza

Project Administrator

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

LINKS

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www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	MS or MSD exceeds the control limits

Glossary

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

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Job ID: 480-22767-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-22767-1

Receipt

The samples were received on 7/18/2012 4:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

GC/MS VOA

Method 8260B: The following compounds were outside control limits in the continuing calibration verification (CCV) associated with batch Bromomethane: 73047. These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for 8 analytes to be outside limits; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 73047 exceeded control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The following sample was analyzed at a medium level dilution due to matrix and to bring the concentration of target analytes within the calibration range: T1-MW-01 (8.5-9.0) (480-22767-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA

Method 8270C: The following samples were diluted due to viscosity. B-26 (0-0.5) (480-22767-6), B-26 (0-0.5) (480-22767-6 MS), B-26 (0-0.5) (480-22767-6 MSD), T1-MW-01 (.5-1.0) (480-22767-3). Elevated reporting limits (RL) are provided.

Method 8270C: The following compounds were outside control limits in the continuing calibration verification (CCV) associated with analytical batch 480-73210: Bis(2-ethylhexyl) phthalate and Butyl benzyl phthalate. These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for four analytes to be outside limits; therefore, the data have been reported.

Method 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-73105 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8270C: The matrix spike duplicate (MSD) precision for preparation batch 480-73210 was outside control limits. The associated laboratory control sample(LCS) precision met acceptance criteria.

Method 8270C: The laboratory control sample (LCS) for preparation batch 480-73105 exceeded control limits for the following analyte: N-Nitrosodiphenylamine. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8270C: The method blank for preparation batch 480-73105 contained several analytes above the method detection limit. These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No other analytical or quality issues were noted.

GC Semi VOA

Method 8081A: The following samples were diluted due to the nature of the sample matrix : B-26 (0-0.5) (480-22767-6), T1-MW-01 (.5-1.0) (480-22767-3). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: The following samples were diluted due to the nature of the sample matrix : B-26 (0-0.5) (480-22767-6 MS), B-26 (0-0.5) (480-22767-6 MSD). As such, surrogate and spike recoveries were diluted out and are not reported.

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Job ID: 480-22767-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

No other analytical or quality issues were noted.

Metals

Method 6010B: The Serial Dilution (480-22767-6 SD) in batch 480-73033, exhibited results outside the quality control limits for total aluminum, arsenic, beryllium, calcium, cadmium, chromium, copper, iron, potassium, magnesium, sodium, vanadium and zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method 6010B: The Serial Dilution and Post Spike (480-22767-6 PDS), (480-22767-6 SD) exceeded the quality control limits for total barium and manganese. Sample matrix is suspected, therefore, no corrective action was necessary.

Method 6010B: The Matrix Spike (B-26 (0-0.5) (480-22767-6 MS)) recovery for total antimony in batch 480-73033 was outside control limits. Non-homogeneity of the sample matrix is suspected. The associated Laboratory Control Sample (LCSSRM) recovery met acceptance criteria, therefore no corrective action was necessary.

Method 7471A: The following samples were diluted to bring the concentration of target analyte total mercury within the calibration range: (480-22767-6 SD), B-26 (0-0.5) (480-22767-6), B-26 (0-0.5) (480-22767-6 MS), B-26 (0-0.5) (480-22767-6 MSD). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Organic Prep

Method 3550B: The following samples required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: B-26 (0-0.5) (480-22767-6), B-26 (0-0.5) (480-22767-6 MS), B-26 (0-0.5) (480-22767-6 MSD), T1-MW-01 (.5-1.0) (480-22767-3).

No other analytical or quality issues were noted.

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-38 (0-0.5)

Lab Sample ID: 480-22767-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	362		1.0		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-39 (0-0.5)

Lab Sample ID: 480-22767-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	1060		1.1		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: T1-MW-01 (.5-1.0)

Lab Sample ID: 480-22767-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	850	J B	1900	33	ug/Kg	10	☼	8270C	Total/NA
Benzo(a)pyrene	1000	J B	1900	46	ug/Kg	10	☼	8270C	Total/NA
Benzo(b)fluoranthene	1400	J B	1900	37	ug/Kg	10	☼	8270C	Total/NA
Benzo(g,h,i)perylene	380	J B	1900	23	ug/Kg	10	☼	8270C	Total/NA
Benzo(k)fluoranthene	500	J B	1900	21	ug/Kg	10	☼	8270C	Total/NA
Chrysene	770	J B	1900	19	ug/Kg	10	☼	8270C	Total/NA
Fluoranthene	1400	J B	1900	27	ug/Kg	10	☼	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	350	J B	1900	52	ug/Kg	10	☼	8270C	Total/NA
Phenanthrene	510	J B	1900	40	ug/Kg	10	☼	8270C	Total/NA
Pyrene	1300	J B	1900	12	ug/Kg	10	☼	8270C	Total/NA
PCB-1260	280		280	130	ug/Kg	1	☼	8082	Total/NA
Aluminum	17500		10.6		mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.1		2.1		mg/Kg	1	☼	6010B	Total/NA
Barium	281		0.53		mg/Kg	1	☼	6010B	Total/NA
Beryllium	1.1		0.21		mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.46		0.21		mg/Kg	1	☼	6010B	Total/NA
Calcium	33500		53.0		mg/Kg	1	☼	6010B	Total/NA
Chromium	20.4		0.53		mg/Kg	1	☼	6010B	Total/NA
Cobalt	13.1		0.53		mg/Kg	1	☼	6010B	Total/NA
Copper	28.1		1.1		mg/Kg	1	☼	6010B	Total/NA
Iron	25200		10.6		mg/Kg	1	☼	6010B	Total/NA
Lead	180		1.1		mg/Kg	1	☼	6010B	Total/NA
Magnesium	7900		21.2		mg/Kg	1	☼	6010B	Total/NA
Manganese	795		0.21		mg/Kg	1	☼	6010B	Total/NA
Nickel	25.1		5.3		mg/Kg	1	☼	6010B	Total/NA
Potassium	2470		31.8		mg/Kg	1	☼	6010B	Total/NA
Sodium	247		148		mg/Kg	1	☼	6010B	Total/NA
Vanadium	29.9		0.53		mg/Kg	1	☼	6010B	Total/NA
Zinc	211		2.1		mg/Kg	1	☼	6010B	Total/NA
Mercury	0.037		0.021		mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: T1-MW-01 (4.5-5.0)

Lab Sample ID: 480-22767-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	33		27	2.0	ug/Kg	1	☼	8260B	Total/NA
Acetone	100		27	4.5	ug/Kg	1	☼	8260B	Total/NA
Cyclohexane	13		5.4	0.75	ug/Kg	1	☼	8260B	Total/NA
Isopropylbenzene	6.8		5.4	0.81	ug/Kg	1	☼	8260B	Total/NA
Methylcyclohexane	46		5.4	0.82	ug/Kg	1	☼	8260B	Total/NA
Toluene	0.48	J	5.4	0.41	ug/Kg	1	☼	8260B	Total/NA
Xylenes, Total	3.2	J	11	0.90	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: T1-MW-01 (8.5-9.0)

Lab Sample ID: 480-22767-5

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: T1-MW-01 (8.5-9.0) (Continued)

Lab Sample ID: 480-22767-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Butanone (MEK)	4.5	J	24	1.8	ug/Kg	1		✱	8260B	Total/NA
Acetone	22	J	24	4.0	ug/Kg	1		✱	8260B	Total/NA
Cyclohexane	61		4.8	0.67	ug/Kg	1		✱	8260B	Total/NA
Isopropylbenzene	31		4.8	0.72	ug/Kg	1		✱	8260B	Total/NA
Tetrachloroethene	1.1	J	4.8	0.64	ug/Kg	1		✱	8260B	Total/NA
Methylcyclohexane - DL	200		46	22	ug/Kg	1		✱	8260B	Total/NA

Client Sample ID: B-26 (0-0.5)

Lab Sample ID: 480-22767-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Methylnaphthalene	280	J	1800	21	ug/Kg	10		✱	8270C	Total/NA
Acenaphthene	79	J	1800	20	ug/Kg	10		✱	8270C	Total/NA
Acenaphthylene	120	J	1800	14	ug/Kg	10		✱	8270C	Total/NA
Anthracene	300	J B	1800	45	ug/Kg	10		✱	8270C	Total/NA
Benzo(a)anthracene	1700	J B	1800	30	ug/Kg	10		✱	8270C	Total/NA
Benzo(a)pyrene	1900	B	1800	42	ug/Kg	10		✱	8270C	Total/NA
Benzo(b)fluoranthene	3000	B	1800	34	ug/Kg	10		✱	8270C	Total/NA
Benzo(g,h,i)perylene	700	J B	1800	21	ug/Kg	10		✱	8270C	Total/NA
Benzo(k)fluoranthene	1300	J B	1800	19	ug/Kg	10		✱	8270C	Total/NA
Carbazole	160	J B	1800	20	ug/Kg	10		✱	8270C	Total/NA
Chrysene	2000	B	1800	17	ug/Kg	10		✱	8270C	Total/NA
Dibenz(a,h)anthracene	310	J	1800	20	ug/Kg	10		✱	8270C	Total/NA
Dibenzofuran	98	J	1800	18	ug/Kg	10		✱	8270C	Total/NA
Di-n-octyl phthalate	950	J	1800	41	ug/Kg	10		✱	8270C	Total/NA
Fluoranthene	2900	B	1800	25	ug/Kg	10		✱	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	730	J B	1800	48	ug/Kg	10		✱	8270C	Total/NA
Naphthalene	200	J	1800	29	ug/Kg	10		✱	8270C	Total/NA
Phenanthrene	1400	J B	1800	37	ug/Kg	10		✱	8270C	Total/NA
Pyrene	2400	B	1800	11	ug/Kg	10		✱	8270C	Total/NA
4,4'-DDT	29	J	87	8.9	ug/Kg	50		✱	8081A	Total/NA
PCB-1254	240		230	110	ug/Kg	1		✱	8082	Total/NA
PCB-1260	320		230	110	ug/Kg	1		✱	8082	Total/NA
Aluminum	9390		11.2		mg/Kg	1		✱	6010B	Total/NA
Arsenic	103		2.2		mg/Kg	1		✱	6010B	Total/NA
Barium	216		0.56		mg/Kg	1		✱	6010B	Total/NA
Beryllium	1.2		0.22		mg/Kg	1		✱	6010B	Total/NA
Cadmium	1.2		0.22		mg/Kg	1		✱	6010B	Total/NA
Calcium	24400		56.1		mg/Kg	1		✱	6010B	Total/NA
Chromium	30.6		0.56		mg/Kg	1		✱	6010B	Total/NA
Cobalt	6.5		0.56		mg/Kg	1		✱	6010B	Total/NA
Copper	101		1.1		mg/Kg	1		✱	6010B	Total/NA
Iron	31400		11.2		mg/Kg	1		✱	6010B	Total/NA
Lead	1260		1.1		mg/Kg	1		✱	6010B	Total/NA
Magnesium	7070		22.4		mg/Kg	1		✱	6010B	Total/NA
Manganese	390		0.22		mg/Kg	1		✱	6010B	Total/NA
Nickel	24.4		5.6		mg/Kg	1		✱	6010B	Total/NA
Potassium	1160		33.7		mg/Kg	1		✱	6010B	Total/NA
Sodium	389		157		mg/Kg	1		✱	6010B	Total/NA
Vanadium	22.0		0.56		mg/Kg	1		✱	6010B	Total/NA
Zinc	221		2.2		mg/Kg	1		✱	6010B	Total/NA
Mercury	2.6		0.11		mg/Kg	5		✱	7471A	Total/NA

Client Sample ID: B-38 (3.5-4.0)

Lab Sample ID: 480-22767-9

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-38 (3.5-4.0) (Continued)

Lab Sample ID: 480-22767-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	17.6		1.3		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-39 (2.5-3.0)

Lab Sample ID: 480-22767-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	20.2		1.3		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-26 (4-4.5)

Lab Sample ID: 480-22767-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	347		1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-22767-12

No Detections

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-38 (0-0.5)

Lab Sample ID: 480-22767-1

Date Collected: 07/18/12 08:10

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 92.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	362		1.0		mg/Kg	☼	07/19/12 11:30	07/19/12 16:13	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-39 (0-0.5)

Lab Sample ID: 480-22767-2

Date Collected: 07/18/12 07:45

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 89.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1060		1.1		mg/Kg	☼	07/19/12 11:30	07/19/12 16:21	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: T1-MW-01 (.5-1.0)

Lab Sample ID: 480-22767-3

Date Collected: 07/18/12 09:00

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 87.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1900	410	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2,4,6-Trichlorophenol	ND		1900	120	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2,4-Dichlorophenol	ND		1900	99	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2,4-Dimethylphenol	ND		1900	510	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2,4-Dinitrophenol	ND		3700	660	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2,4-Dinitrotoluene	ND		1900	290	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2,6-Dinitrotoluene	ND		1900	460	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2-Chloronaphthalene	ND		1900	130	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2-Chlorophenol	ND		1900	96	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2-Methylnaphthalene	ND		1900	23	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2-Methylphenol	ND		1900	58	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2-Nitroaniline	ND		3700	610	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
2-Nitrophenol	ND		1900	86	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
3,3'-Dichlorobenzidine	ND		1900	1700	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
3-Nitroaniline	ND		3700	430	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
4,6-Dinitro-2-methylphenol	ND		3700	650	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
4-Bromophenyl phenyl ether	ND		1900	600	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
4-Chloro-3-methylphenol	ND		1900	78	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
4-Chloroaniline	ND		1900	550	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
4-Chlorophenyl phenyl ether	ND		1900	40	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
4-Methylphenol	ND		3700	110	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
4-Nitroaniline	ND		3700	210	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
4-Nitrophenol	ND		3700	460	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Acenaphthene	ND		1900	22	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Acenaphthylene	ND		1900	15	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Acetophenone	ND		1900	97	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Anthracene	ND		1900	48	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Atrazine	ND		1900	84	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Benzaldehyde	ND		1900	210	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Benzo(a)anthracene	850	J B	1900	33	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Benzo(a)pyrene	1000	J B	1900	46	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Benzo(b)fluoranthene	1400	J B	1900	37	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Benzo(g,h,i)perylene	380	J B	1900	23	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Benzo(k)fluoranthene	500	J B	1900	21	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Biphenyl	ND		1900	120	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
bis (2-chloroisopropyl) ether	ND		1900	200	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Bis(2-chloroethoxy)methane	ND		1900	100	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Bis(2-chloroethyl)ether	ND		1900	160	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Bis(2-ethylhexyl) phthalate	ND		1900	610	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Butyl benzyl phthalate	ND		1900	510	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Caprolactam	ND		1900	820	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Carbazole	ND		1900	22	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Chrysene	770	J B	1900	19	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Dibenz(a,h)anthracene	ND		1900	22	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Dibenzofuran	ND		1900	20	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Diethyl phthalate	ND		1900	57	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Dimethyl phthalate	ND		1900	49	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Di-n-butyl phthalate	ND		1900	650	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Di-n-octyl phthalate	ND		1900	44	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Fluoranthene	1400	J B	1900	27	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Fluorene	ND		1900	44	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: T1-MW-01 (.5-1.0)

Lab Sample ID: 480-22767-3

Date Collected: 07/18/12 09:00

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 87.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		1900	94	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Hexachlorobutadiene	ND		1900	97	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Hexachlorocyclopentadiene	ND		1900	570	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Hexachloroethane	ND		1900	150	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Indeno(1,2,3-cd)pyrene	350	J B	1900	52	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Isophorone	ND		1900	94	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Naphthalene	ND		1900	31	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Nitrobenzene	ND		1900	84	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
N-Nitrosodi-n-propylamine	ND		1900	150	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
N-Nitrosodiphenylamine	ND	*	1900	100	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Pentachlorophenol	ND		3700	650	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Phenanthrene	510	J B	1900	40	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Phenol	ND		1900	200	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10
Pyrene	1300	J B	1900	12	ug/Kg	☼	07/19/12 15:12	07/20/12 20:36	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	56		39 - 146	07/19/12 15:12	07/20/12 20:36	10
2-Fluorobiphenyl	83		37 - 120	07/19/12 15:12	07/20/12 20:36	10
2-Fluorophenol	67		18 - 120	07/19/12 15:12	07/20/12 20:36	10
Nitrobenzene-d5	59		34 - 132	07/19/12 15:12	07/20/12 20:36	10
Phenol-d5	73		11 - 120	07/19/12 15:12	07/20/12 20:36	10
p-Terphenyl-d14	104		65 - 153	07/19/12 15:12	07/20/12 20:36	10

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		94	18	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
4,4'-DDE	ND		94	14	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
4,4'-DDT	ND		94	9.6	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Aldrin	ND		94	23	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
alpha-BHC	ND		94	17	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
alpha-Chlordane	ND		94	47	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
beta-BHC	ND		94	10	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
delta-BHC	ND		94	12	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Dieldrin	ND		94	23	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Endosulfan I	ND		94	12	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Endosulfan II	ND		94	17	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Endosulfan sulfate	ND		94	18	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Endrin	ND		94	13	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Endrin aldehyde	ND		94	24	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Endrin ketone	ND		94	23	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
gamma-BHC (Lindane)	ND		94	68	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
gamma-Chlordane	ND		94	30	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Heptachlor	ND		94	15	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Heptachlor epoxide	ND		94	24	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Methoxychlor	ND		94	13	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50
Toxaphene	ND		940	550	ug/Kg	☼	07/25/12 13:37	07/27/12 15:27	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	62 - 137	07/25/12 13:37	07/27/12 15:27	50
Tetrachloro-m-xylene	0	X	30 - 124	07/25/12 13:37	07/27/12 15:27	50

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: T1-MW-01 (.5-1.0)

Lab Sample ID: 480-22767-3

Date Collected: 07/18/12 09:00

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 87.5

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		280	54	ug/Kg	☼	07/20/12 14:34	07/22/12 17:45	1
PCB-1221	ND		280	54	ug/Kg	☼	07/20/12 14:34	07/22/12 17:45	1
PCB-1232	ND		280	54	ug/Kg	☼	07/20/12 14:34	07/22/12 17:45	1
PCB-1242	ND		280	54	ug/Kg	☼	07/20/12 14:34	07/22/12 17:45	1
PCB-1248	ND		280	54	ug/Kg	☼	07/20/12 14:34	07/22/12 17:45	1
PCB-1254	ND		280	130	ug/Kg	☼	07/20/12 14:34	07/22/12 17:45	1
PCB-1260	280		280	130	ug/Kg	☼	07/20/12 14:34	07/22/12 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	113		36 - 182	07/20/12 14:34	07/22/12 17:45	1
Tetrachloro-m-xylene	101		24 - 172	07/20/12 14:34	07/22/12 17:45	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17500		10.6		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Antimony	ND		15.9		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Arsenic	6.1		2.1		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Barium	281		0.53		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Beryllium	1.1		0.21		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Cadmium	0.46		0.21		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Calcium	33500		53.0		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Chromium	20.4		0.53		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Cobalt	13.1		0.53		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Copper	28.1		1.1		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Iron	25200		10.6		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Lead	180		1.1		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Magnesium	7900		21.2		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Manganese	795		0.21		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Nickel	25.1		5.3		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Potassium	2470		31.8		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Selenium	ND		4.2		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Silver	ND		0.53		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Sodium	247		148		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Thallium	ND		6.4		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Vanadium	29.9		0.53		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1
Zinc	211		2.1		mg/Kg	☼	07/19/12 11:30	07/19/12 16:23	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037		0.021		mg/Kg	☼	08/01/12 11:00	08/01/12 13:32	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: T1-MW-01 (4.5-5.0)

Lab Sample ID: 480-22767-4

Date Collected: 07/18/12 09:15

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 76.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.4	0.39	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,1,2,2-Tetrachloroethane	ND		5.4	0.87	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,1,2-Trichloroethane	ND		5.4	0.70	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.4	1.2	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,1-Dichloroethane	ND		5.4	0.66	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,1-Dichloroethene	ND		5.4	0.66	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,2,4-Trichlorobenzene	ND		5.4	0.33	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,2-Dibromo-3-Chloropropane	ND		5.4	2.7	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,2-Dibromoethane	ND		5.4	0.69	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,2-Dichlorobenzene	ND		5.4	0.42	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,2-Dichloroethane	ND		5.4	0.27	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,2-Dichloropropane	ND		5.4	2.7	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,3-Dichlorobenzene	ND		5.4	0.28	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
1,4-Dichlorobenzene	ND		5.4	0.75	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
2-Butanone (MEK)	33		27	2.0	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
4-Methyl-2-pentanone (MIBK)	ND		27	1.8	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Acetone	100		27	4.5	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Benzene	ND		5.4	0.26	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Bromodichloromethane	ND		5.4	0.72	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Bromoform	ND		5.4	2.7	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Bromomethane	ND		5.4	0.48	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Carbon disulfide	ND		5.4	2.7	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Carbon tetrachloride	ND		5.4	0.52	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Chlorobenzene	ND		5.4	0.71	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Dibromochloromethane	ND		5.4	0.69	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Chloroethane	ND		5.4	1.2	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Chloroform	ND		5.4	0.33	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Chloromethane	ND		5.4	0.33	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
cis-1,2-Dichloroethene	ND		5.4	0.69	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
cis-1,3-Dichloropropene	ND		5.4	0.77	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Cyclohexane	13		5.4	0.75	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Dichlorodifluoromethane	ND		5.4	0.44	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Ethylbenzene	ND		5.4	0.37	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Isopropylbenzene	6.8		5.4	0.81	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Methyl acetate	ND		5.4	1.0	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Methyl tert-butyl ether	ND		5.4	0.53	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Methylcyclohexane	46		5.4	0.82	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Methylene Chloride	ND		5.4	2.5	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Styrene	ND		5.4	0.27	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Tetrachloroethene	ND		5.4	0.72	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Toluene	0.48 J		5.4	0.41	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
trans-1,2-Dichloroethene	ND		5.4	0.56	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
trans-1,3-Dichloropropene	ND		5.4	2.4	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Trichloroethene	ND		5.4	1.2	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Trichlorofluoromethane	ND		5.4	0.51	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Vinyl chloride	ND		5.4	0.66	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1
Xylenes, Total	3.2 J		11	0.90	ug/Kg	☼	07/19/12 15:43	07/20/12 00:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		64 - 126	07/19/12 15:43	07/20/12 00:55	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: T1-MW-01 (4.5-5.0)

Date Collected: 07/18/12 09:15

Date Received: 07/18/12 16:05

Lab Sample ID: 480-22767-4

Matrix: Solid

Percent Solids: 76.9

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		71 - 125	07/19/12 15:43	07/20/12 00:55	1
4-Bromofluorobenzene (Surr)	112		72 - 126	07/19/12 15:43	07/20/12 00:55	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: T1-MW-01 (8.5-9.0)

Lab Sample ID: 480-22767-5

Date Collected: 07/18/12 09:25

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 81.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.8	0.35	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,1,2,2-Tetrachloroethane	ND		4.8	0.78	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,1,2-Trichloroethane	ND		4.8	0.62	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	1.1	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,1-Dichloroethane	ND		4.8	0.59	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,1-Dichloroethene	ND		4.8	0.59	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,2,4-Trichlorobenzene	ND		4.8	0.29	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,2-Dibromo-3-Chloropropane	ND		4.8	2.4	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,2-Dibromoethane	ND		4.8	0.62	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,2-Dichlorobenzene	ND		4.8	0.38	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,2-Dichloroethane	ND		4.8	0.24	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,2-Dichloropropane	ND		4.8	2.4	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,3-Dichlorobenzene	ND		4.8	0.25	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
1,4-Dichlorobenzene	ND		4.8	0.67	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
2-Butanone (MEK)	4.5	J	24	1.8	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Acetone	22	J	24	4.0	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Benzene	ND		4.8	0.24	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Bromodichloromethane	ND		4.8	0.64	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Bromoform	ND		4.8	2.4	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Bromomethane	ND		4.8	0.43	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Carbon disulfide	ND		4.8	2.4	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Carbon tetrachloride	ND		4.8	0.46	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Chlorobenzene	ND		4.8	0.63	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Dibromochloromethane	ND		4.8	0.61	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Chloroethane	ND		4.8	1.1	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Chloroform	ND		4.8	0.30	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Chloromethane	ND		4.8	0.29	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
cis-1,2-Dichloroethene	ND		4.8	0.61	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
cis-1,3-Dichloropropene	ND		4.8	0.69	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Cyclohexane	61		4.8	0.67	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Dichlorodifluoromethane	ND		4.8	0.40	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Ethylbenzene	ND		4.8	0.33	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Isopropylbenzene	31		4.8	0.72	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Methyl acetate	ND		4.8	0.89	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Methyl tert-butyl ether	ND		4.8	0.47	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Methylene Chloride	ND		4.8	2.2	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Styrene	ND		4.8	0.24	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Tetrachloroethene	1.1	J	4.8	0.64	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Toluene	ND		4.8	0.36	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
trans-1,2-Dichloroethene	ND		4.8	0.49	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
trans-1,3-Dichloropropene	ND		4.8	2.1	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Trichloroethene	ND		4.8	1.1	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Trichlorofluoromethane	ND		4.8	0.45	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Vinyl chloride	ND		4.8	0.59	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1
Xylenes, Total	ND		9.6	0.81	ug/Kg	☼	07/19/12 15:43	07/20/12 01:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		64 - 126	07/19/12 15:43	07/20/12 01:21	1
Toluene-d8 (Surr)	118		71 - 125	07/19/12 15:43	07/20/12 01:21	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: T1-MW-01 (8.5-9.0)

Lab Sample ID: 480-22767-5

Date Collected: 07/18/12 09:25

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 81.4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		72 - 126	07/19/12 15:43	07/20/12 01:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	200		46	22	ug/Kg	☼	07/26/12 19:10	07/27/12 04:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		53 - 146	07/26/12 19:10	07/27/12 04:47	1
Toluene-d8 (Surr)	111		50 - 149	07/26/12 19:10	07/27/12 04:47	1
4-Bromofluorobenzene (Surr)	105		49 - 148	07/26/12 19:10	07/27/12 04:47	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-26 (0-0.5)

Lab Sample ID: 480-22767-6

Date Collected: 07/18/12 13:45

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 95.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1800	380	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2,4,6-Trichlorophenol	ND		1800	110	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2,4-Dichlorophenol	ND		1800	91	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2,4-Dimethylphenol	ND		1800	470	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2,4-Dinitrophenol	ND		3400	610	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2,4-Dinitrotoluene	ND		1800	270	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2,6-Dinitrotoluene	ND		1800	430	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2-Chloronaphthalene	ND		1800	120	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2-Chlorophenol	ND		1800	89	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2-Methylnaphthalene	280	J	1800	21	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2-Methylphenol	ND		1800	54	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2-Nitroaniline	ND		3400	560	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
2-Nitrophenol	ND		1800	80	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
3,3'-Dichlorobenzidine	ND		1800	1500	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
3-Nitroaniline	ND		3400	400	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
4,6-Dinitro-2-methylphenol	ND		3400	600	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
4-Bromophenyl phenyl ether	ND		1800	550	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
4-Chloro-3-methylphenol	ND		1800	72	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
4-Chloroaniline	ND		1800	510	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
4-Chlorophenyl phenyl ether	ND		1800	37	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
4-Methylphenol	ND		3400	97	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
4-Nitroaniline	ND		3400	190	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
4-Nitrophenol	ND		3400	420	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Acenaphthene	79	J	1800	20	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Acenaphthylene	120	J	1800	14	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Acetophenone	ND		1800	89	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Anthracene	300	J B	1800	45	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Atrazine	ND		1800	77	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Benzaldehyde	ND		1800	190	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Benzo(a)anthracene	1700	J B	1800	30	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Benzo(a)pyrene	1900	B	1800	42	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Benzo(b)fluoranthene	3000	B	1800	34	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Benzo(g,h,i)perylene	700	J B	1800	21	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Benzo(k)fluoranthene	1300	J B	1800	19	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Biphenyl	ND		1800	110	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
bis (2-chloroisopropyl) ether	ND		1800	180	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Bis(2-chloroethoxy)methane	ND		1800	95	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Bis(2-chloroethyl)ether	ND		1800	150	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Bis(2-ethylhexyl) phthalate	ND		1800	560	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Butyl benzyl phthalate	ND		1800	470	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Caprolactam	ND		1800	750	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Carbazole	160	J B	1800	20	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Chrysene	2000	B	1800	17	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Dibenz(a,h)anthracene	310	J	1800	20	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Dibenzofuran	98	J	1800	18	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Diethyl phthalate	ND		1800	53	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Dimethyl phthalate	ND		1800	45	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Di-n-butyl phthalate	ND		1800	600	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Di-n-octyl phthalate	950	J	1800	41	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Fluoranthene	2900	B	1800	25	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Fluorene	ND		1800	40	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-26 (0-0.5)

Lab Sample ID: 480-22767-6

Date Collected: 07/18/12 13:45

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 95.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		1800	86	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Hexachlorobutadiene	ND		1800	89	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Hexachlorocyclopentadiene	ND		1800	530	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Hexachloroethane	ND		1800	130	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Indeno(1,2,3-cd)pyrene	730	J B	1800	48	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Isophorone	ND		1800	87	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Naphthalene	200	J	1800	29	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Nitrobenzene	ND		1800	77	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
N-Nitrosodi-n-propylamine	ND		1800	140	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
N-Nitrosodiphenylamine	ND	*	1800	95	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Pentachlorophenol	ND		3400	600	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Phenanthrene	1400	J B	1800	37	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Phenol	ND		1800	180	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10
Pyrene	2400	B	1800	11	ug/Kg	☼	07/19/12 15:12	07/20/12 21:00	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		39 - 146	07/19/12 15:12	07/20/12 21:00	10
2-Fluorobiphenyl	98		37 - 120	07/19/12 15:12	07/20/12 21:00	10
2-Fluorophenol	79		18 - 120	07/19/12 15:12	07/20/12 21:00	10
Nitrobenzene-d5	77		34 - 132	07/19/12 15:12	07/20/12 21:00	10
Phenol-d5	85		11 - 120	07/19/12 15:12	07/20/12 21:00	10
p-Terphenyl-d14	118		65 - 153	07/19/12 15:12	07/20/12 21:00	10

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		87	17	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
4,4'-DDE	ND		87	13	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
4,4'-DDT	29	J	87	8.9	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Aldrin	ND		87	21	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
alpha-BHC	ND		87	16	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
alpha-Chlordane	ND		87	43	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
beta-BHC	ND		87	9.4	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
delta-BHC	ND		87	11	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Dieldrin	ND		87	21	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Endosulfan I	ND		87	11	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Endosulfan II	ND		87	16	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Endosulfan sulfate	ND		87	16	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Endrin	ND		87	12	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Endrin aldehyde	ND		87	22	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Endrin ketone	ND		87	21	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
gamma-BHC (Lindane)	ND		87	63	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
gamma-Chlordane	ND		87	28	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Heptachlor	ND		87	14	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Heptachlor epoxide	ND		87	22	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Methoxychlor	ND		87	12	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50
Toxaphene	ND		870	510	ug/Kg	☼	07/25/12 13:37	07/27/12 16:09	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	62 - 137	07/25/12 13:37	07/27/12 16:09	50
Tetrachloro-m-xylene	0	X	30 - 124	07/25/12 13:37	07/27/12 16:09	50

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-26 (0-0.5)

Lab Sample ID: 480-22767-6

Date Collected: 07/18/12 13:45

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 95.0

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		230	46	ug/Kg	☼	07/20/12 14:34	07/22/12 18:01	1
PCB-1221	ND		230	46	ug/Kg	☼	07/20/12 14:34	07/22/12 18:01	1
PCB-1232	ND		230	46	ug/Kg	☼	07/20/12 14:34	07/22/12 18:01	1
PCB-1242	ND		230	46	ug/Kg	☼	07/20/12 14:34	07/22/12 18:01	1
PCB-1248	ND		230	46	ug/Kg	☼	07/20/12 14:34	07/22/12 18:01	1
PCB-1254	240		230	110	ug/Kg	☼	07/20/12 14:34	07/22/12 18:01	1
PCB-1260	320		230	110	ug/Kg	☼	07/20/12 14:34	07/22/12 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	105		36 - 182	07/20/12 14:34	07/22/12 18:01	1
Tetrachloro-m-xylene	78		24 - 172	07/20/12 14:34	07/22/12 18:01	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9390		11.2		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Antimony	ND		16.8		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Arsenic	103		2.2		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Barium	216		0.56		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Beryllium	1.2		0.22		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Cadmium	1.2		0.22		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Calcium	24400		56.1		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Chromium	30.6		0.56		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Cobalt	6.5		0.56		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Copper	101		1.1		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Iron	31400		11.2		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Lead	1260		1.1		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Magnesium	7070		22.4		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Manganese	390		0.22		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Nickel	24.4		5.6		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Potassium	1160		33.7		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Selenium	ND		4.5		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Silver	ND		0.56		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Sodium	389		157		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Thallium	ND		6.7		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Vanadium	22.0		0.56		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1
Zinc	221		2.2		mg/Kg	☼	07/19/12 11:30	07/19/12 16:26	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.6		0.11		mg/Kg	☼	08/01/12 11:00	08/01/12 13:59	5

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-38 (3.5-4.0)

Lab Sample ID: 480-22767-9

Date Collected: 07/18/12 08:15

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 84.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	17.6		1.3		mg/Kg	☼	07/19/12 11:30	07/19/12 16:38	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-39 (2.5-3.0)

Lab Sample ID: 480-22767-10

Date Collected: 07/18/12 07:50

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 85.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	20.2		1.3		mg/Kg	☼	07/19/12 11:30	07/19/12 16:40	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-26 (4-4.5)

Lab Sample ID: 480-22767-11

Date Collected: 07/18/12 13:50

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 87.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	347		1.2		mg/Kg	☼	07/19/12 11:30	07/19/12 16:43	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-22767-12

Date Collected: 07/18/12 00:00

Matrix: Water

Date Received: 07/18/12 16:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/19/12 19:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/19/12 19:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/19/12 19:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/19/12 19:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/19/12 19:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/19/12 19:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/19/12 19:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/19/12 19:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/19/12 19:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/19/12 19:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/19/12 19:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/19/12 19:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/19/12 19:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/19/12 19:26	1
2-Hexanone	ND		5.0	1.2	ug/L			07/19/12 19:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/19/12 19:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/19/12 19:26	1
Acetone	ND		10	3.0	ug/L			07/19/12 19:26	1
Benzene	ND		1.0	0.41	ug/L			07/19/12 19:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/19/12 19:26	1
Bromoform	ND		1.0	0.26	ug/L			07/19/12 19:26	1
Bromomethane	ND		1.0	0.69	ug/L			07/19/12 19:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/19/12 19:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/19/12 19:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/19/12 19:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/19/12 19:26	1
Chloroethane	ND		1.0	0.32	ug/L			07/19/12 19:26	1
Chloroform	ND		1.0	0.34	ug/L			07/19/12 19:26	1
Chloromethane	ND		1.0	0.35	ug/L			07/19/12 19:26	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/19/12 19:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/19/12 19:26	1
Cyclohexane	ND		1.0	0.18	ug/L			07/19/12 19:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/19/12 19:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/19/12 19:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/19/12 19:26	1
Methyl acetate	ND		1.0	0.50	ug/L			07/19/12 19:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/19/12 19:26	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/19/12 19:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/19/12 19:26	1
Styrene	ND		1.0	0.73	ug/L			07/19/12 19:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/19/12 19:26	1
Toluene	ND		1.0	0.51	ug/L			07/19/12 19:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/19/12 19:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/19/12 19:26	1
Trichloroethene	ND		1.0	0.46	ug/L			07/19/12 19:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/19/12 19:26	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/19/12 19:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/19/12 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		66 - 137		07/19/12 19:26	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-22767-12

Date Collected: 07/18/12 00:00

Matrix: Water

Date Received: 07/18/12 16:05

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

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	92		71 - 126		07/19/12 19:26	1
<i>4-Bromofluorobenzene (Surr)</i>	93		73 - 120		07/19/12 19:26	1

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (64-126)	TOL (71-125)	BFB (72-126)
480-22767-4	T1-MW-01 (4.5-5.0)	93	95	112
480-22767-5	T1-MW-01 (8.5-9.0)	94	118	125
LCS 480-73142/4	Lab Control Sample	82	92	106
MB 480-73142/5	Method Blank	84	92	105

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (53-146)	TOL (50-149)	BFB (49-148)
480-22767-5 - DL	T1-MW-01 (8.5-9.0)	108	111	105
LCS 480-74089/1-A	Lab Control Sample	108	115	110
MB 480-74089/2-A	Method Blank	111	115	107

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	TOL (71-126)	BFB (73-120)
480-22767-12	TRIP BLANK	92	92	93
LCS 480-73047/5	Lab Control Sample	97	92	100
MB 480-73047/6	Method Blank	92	90	93

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (39-146)	FBP (37-120)	2FP (18-120)	NBZ (34-132)	PHL (11-120)	TPH (65-153)
480-22767-3	T1-MW-01 (.5-1.0)	56	83	67	59	73	104
480-22767-6	B-26 (0-0.5)	72	98	79	77	85	118
480-22767-6 MS	B-26 (0-0.5)	77	85	66	71	75	108
480-22767-6 MSD	B-26 (0-0.5)	92	103	89	92	96	134

Surrogate Legend

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB2 (62-137)	TCX2 (30-124)
480-22767-3	T1-MW-01 (.5-1.0)	0 X	0 X
480-22767-6	B-26 (0-0.5)	0 X	0 X
480-22767-6 MS	B-26 (0-0.5)	0 X	0 X
480-22767-6 MSD	B-26 (0-0.5)	0 X	0 X
LCS 480-73838/2-A	Lab Control Sample	96	79
MB 480-73838/1-A	Method Blank	94	80

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB2 (36-182)	TCX2 (24-172)
480-22767-3	T1-MW-01 (.5-1.0)	113	101
480-22767-6	B-26 (0-0.5)	105	78
480-22767-6 MS	B-26 (0-0.5)	151	124
480-22767-6 MSD	B-26 (0-0.5)	145	119
LCS 480-73272/2-A	Lab Control Sample	163	137

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

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

Lab Sample ID: MB 480-73047/6

Matrix: Water

Analysis Batch: 73047

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/19/12 12:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/19/12 12:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/19/12 12:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/19/12 12:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/19/12 12:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/19/12 12:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/19/12 12:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/19/12 12:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/19/12 12:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/19/12 12:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/19/12 12:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/19/12 12:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/19/12 12:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/19/12 12:37	1
2-Hexanone	ND		5.0	1.2	ug/L			07/19/12 12:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/19/12 12:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/19/12 12:37	1
Acetone	ND		10	3.0	ug/L			07/19/12 12:37	1
Benzene	ND		1.0	0.41	ug/L			07/19/12 12:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/19/12 12:37	1
Bromoform	ND		1.0	0.26	ug/L			07/19/12 12:37	1
Bromomethane	ND		1.0	0.69	ug/L			07/19/12 12:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/19/12 12:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/19/12 12:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/19/12 12:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/19/12 12:37	1
Chloroethane	ND		1.0	0.32	ug/L			07/19/12 12:37	1
Chloroform	ND		1.0	0.34	ug/L			07/19/12 12:37	1
Chloromethane	ND		1.0	0.35	ug/L			07/19/12 12:37	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/19/12 12:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/19/12 12:37	1
Cyclohexane	ND		1.0	0.18	ug/L			07/19/12 12:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/19/12 12:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/19/12 12:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/19/12 12:37	1
Methyl acetate	ND		1.0	0.50	ug/L			07/19/12 12:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/19/12 12:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/19/12 12:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/19/12 12:37	1
Styrene	ND		1.0	0.73	ug/L			07/19/12 12:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/19/12 12:37	1
Toluene	ND		1.0	0.51	ug/L			07/19/12 12:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/19/12 12:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/19/12 12:37	1
Trichloroethene	ND		1.0	0.46	ug/L			07/19/12 12:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/19/12 12:37	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/19/12 12:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/19/12 12:37	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

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

Lab Sample ID: MB 480-73047/6

Matrix: Water

Analysis Batch: 73047

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		66 - 137		07/19/12 12:37	1
Toluene-d8 (Surr)	90		71 - 126		07/19/12 12:37	1
4-Bromofluorobenzene (Surr)	93		73 - 120		07/19/12 12:37	1

Lab Sample ID: LCS 480-73047/5

Matrix: Water

Analysis Batch: 73047

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	26.4		ug/L		106	71 - 129
1,1-Dichloroethene	25.0	26.9		ug/L		108	65 - 138
1,2-Dichlorobenzene	25.0	25.6		ug/L		102	77 - 120
1,2-Dichloroethane	25.0	28.2		ug/L		113	75 - 127
Benzene	25.0	25.4		ug/L		102	71 - 124
Chlorobenzene	25.0	25.5		ug/L		102	72 - 120
cis-1,2-Dichloroethene	25.0	27.3		ug/L		109	74 - 124
Ethylbenzene	25.0	25.7		ug/L		103	77 - 123
Methyl tert-butyl ether	25.0	25.7		ug/L		103	64 - 127
Tetrachloroethene	25.0	26.2		ug/L		105	74 - 122
Toluene	25.0	24.6		ug/L		98	70 - 122
trans-1,2-Dichloroethene	25.0	27.2		ug/L		109	73 - 127
Trichloroethene	25.0	26.7		ug/L		107	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		66 - 137
Toluene-d8 (Surr)	92		71 - 126
4-Bromofluorobenzene (Surr)	100		73 - 120

Lab Sample ID: MB 480-73142/5

Matrix: Solid

Analysis Batch: 73142

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			07/19/12 23:21	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			07/19/12 23:21	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			07/19/12 23:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			07/19/12 23:21	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			07/19/12 23:21	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			07/19/12 23:21	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			07/19/12 23:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			07/19/12 23:21	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			07/19/12 23:21	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			07/19/12 23:21	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			07/19/12 23:21	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			07/19/12 23:21	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			07/19/12 23:21	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			07/19/12 23:21	1
2-Hexanone	ND		25	2.5	ug/Kg			07/19/12 23:21	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			07/19/12 23:21	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

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

Lab Sample ID: MB 480-73142/5

Matrix: Solid

Analysis Batch: 73142

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			07/19/12 23:21	1
Acetone	ND		25	4.2	ug/Kg			07/19/12 23:21	1
Benzene	ND		5.0	0.25	ug/Kg			07/19/12 23:21	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			07/19/12 23:21	1
Bromoform	ND		5.0	2.5	ug/Kg			07/19/12 23:21	1
Bromomethane	ND		5.0	0.45	ug/Kg			07/19/12 23:21	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			07/19/12 23:21	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			07/19/12 23:21	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			07/19/12 23:21	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			07/19/12 23:21	1
Chloroethane	ND		5.0	1.1	ug/Kg			07/19/12 23:21	1
Chloroform	ND		5.0	0.31	ug/Kg			07/19/12 23:21	1
Chloromethane	ND		5.0	0.30	ug/Kg			07/19/12 23:21	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			07/19/12 23:21	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			07/19/12 23:21	1
Cyclohexane	ND		5.0	0.70	ug/Kg			07/19/12 23:21	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			07/19/12 23:21	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			07/19/12 23:21	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg			07/19/12 23:21	1
Methyl acetate	ND		5.0	0.93	ug/Kg			07/19/12 23:21	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			07/19/12 23:21	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			07/19/12 23:21	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			07/19/12 23:21	1
Styrene	ND		5.0	0.25	ug/Kg			07/19/12 23:21	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			07/19/12 23:21	1
Toluene	ND		5.0	0.38	ug/Kg			07/19/12 23:21	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			07/19/12 23:21	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			07/19/12 23:21	1
Trichloroethene	ND		5.0	1.1	ug/Kg			07/19/12 23:21	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			07/19/12 23:21	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			07/19/12 23:21	1
Xylenes, Total	ND		10	0.84	ug/Kg			07/19/12 23:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		64 - 126		07/19/12 23:21	1
Toluene-d8 (Surr)	92		71 - 125		07/19/12 23:21	1
4-Bromofluorobenzene (Surr)	105		72 - 126		07/19/12 23:21	1

Lab Sample ID: LCS 480-73142/4

Matrix: Solid

Analysis Batch: 73142

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	47.4		ug/Kg		95	79 - 126
1,1-Dichloroethene	50.0	43.3		ug/Kg		87	65 - 153
1,2-Dichlorobenzene	50.0	45.8		ug/Kg		92	75 - 120
1,2-Dichloroethane	50.0	46.1		ug/Kg		92	77 - 122
Benzene	50.0	49.0		ug/Kg		98	79 - 127
Chlorobenzene	50.0	48.0		ug/Kg		96	76 - 124

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

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

Lab Sample ID: LCS 480-73142/4

Matrix: Solid

Analysis Batch: 73142

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	50.0	47.3		ug/Kg		95	81 - 117
Ethylbenzene	50.0	48.3		ug/Kg		97	80 - 120
Methyl tert-butyl ether	50.0	43.0		ug/Kg		86	63 - 125
Tetrachloroethene	50.0	53.3		ug/Kg		107	74 - 122
Toluene	50.0	48.7		ug/Kg		97	74 - 128
trans-1,2-Dichloroethene	50.0	49.4		ug/Kg		99	78 - 126
Trichloroethene	50.0	47.0		ug/Kg		94	77 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		64 - 126
Toluene-d8 (Surr)	92		71 - 125
4-Bromofluorobenzene (Surr)	106		72 - 126

Lab Sample ID: MB 480-74089/2-A

Matrix: Solid

Analysis Batch: 74071

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74089

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	14	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,1,2,2-Tetrachloroethane	ND		50	8.1	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,1,2-Trichloroethane	ND		50	11	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	25	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,1-Dichloroethane	ND		50	15	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,1-Dichloroethene	ND		50	17	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,2,4-Trichlorobenzene	ND		50	19	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,2-Dibromo-3-Chloropropane	ND		50	25	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,2-Dibromoethane	ND		50	1.9	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,2-Dichlorobenzene	ND		50	13	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,2-Dichloroethane	ND		50	20	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,2-Dichloropropane	ND		50	8.1	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,3-Dichlorobenzene	ND		50	13	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
1,4-Dichlorobenzene	ND		50	7.0	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
2-Hexanone	ND		250	100	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
2-Butanone (MEK)	ND		250	150	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
4-Methyl-2-pentanone (MIBK)	ND		250	16	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Acetone	ND		250	210	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Benzene	ND		50	2.4	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Bromodichloromethane	ND		50	10	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Bromoform	ND		50	25	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Bromomethane	ND		50	11	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Carbon disulfide	ND		50	23	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Carbon tetrachloride	ND		50	13	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Chlorobenzene	ND		50	6.6	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Dibromochloromethane	ND		50	24	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Chloroethane	ND		50	10	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Chloroform	ND		50	34	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Chloromethane	ND		50	12	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
cis-1,2-Dichloroethene	ND		50	14	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
cis-1,3-Dichloropropene	ND		50	12	ug/Kg		07/26/12 19:10	07/26/12 19:55	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

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

Lab Sample ID: MB 480-74089/2-A

Matrix: Solid

Analysis Batch: 74071

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74089

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		50	11	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Dichlorodifluoromethane	ND		50	22	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Ethylbenzene	ND		50	15	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Isopropylbenzene	ND		50	7.5	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Methyl acetate	ND		50	24	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Methyl tert-butyl ether	ND		50	19	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Methylcyclohexane	ND		50	23	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Methylene Chloride	ND		50	9.9	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Styrene	ND		50	12	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Tetrachloroethene	ND		50	6.7	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Toluene	ND		50	13	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
trans-1,2-Dichloroethene	ND		50	12	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
trans-1,3-Dichloropropene	ND		50	2.4	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Trichloroethene	ND		50	14	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Trichlorofluoromethane	ND		50	23	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Vinyl chloride	ND		50	17	ug/Kg		07/26/12 19:10	07/26/12 19:55	1
Xylenes, Total	ND		100	8.4	ug/Kg		07/26/12 19:10	07/26/12 19:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		53 - 146	07/26/12 19:10	07/26/12 19:55	1
Toluene-d8 (Surr)	115		50 - 149	07/26/12 19:10	07/26/12 19:55	1
4-Bromofluorobenzene (Surr)	107		49 - 148	07/26/12 19:10	07/26/12 19:55	1

Lab Sample ID: LCS 480-74089/1-A

Matrix: Solid

Analysis Batch: 74071

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74089

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	1250	1210		ug/Kg		97	
1,1-Dichloroethene	1250	1240		ug/Kg		100	54 - 144
1,2-Dichlorobenzene	1250	1220		ug/Kg		98	
1,2-Dichloroethane	1250	1170		ug/Kg		94	
Benzene	1250	1270		ug/Kg		101	75 - 131
Chlorobenzene	1250	1230		ug/Kg		99	80 - 127
cis-1,2-Dichloroethene	1250	1270		ug/Kg		101	
Ethylbenzene	1250	1230		ug/Kg		98	
Methyl tert-butyl ether	1250	1140		ug/Kg		92	
Tetrachloroethene	1250	1250		ug/Kg		100	
Toluene	1250	1230		ug/Kg		99	76 - 133
trans-1,2-Dichloroethene	1250	1240		ug/Kg		99	
Trichloroethene	1250	1240		ug/Kg		99	77 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		53 - 146
Toluene-d8 (Surr)	115		50 - 149
4-Bromofluorobenzene (Surr)	110		49 - 148

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

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

Lab Sample ID: 480-22767-6 MS

Matrix: Solid

Analysis Batch: 73210

Client Sample ID: B-26 (0-0.5)

Prep Type: Total/NA

Prep Batch: 73105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	ND		3480	2920		ug/Kg	☼	84	55 - 125
2-Chlorophenol	ND		3480	2520		ug/Kg	☼	73	38 - 120
4-Chloro-3-methylphenol	ND		3480	2850		ug/Kg	☼	82	49 - 125
4-Nitrophenol	ND		3480	3210	J	ug/Kg	☼	92	43 - 137
Acenaphthene	79	J	3480	3240		ug/Kg	☼	91	53 - 120
Bis(2-ethylhexyl) phthalate	ND		3480	3790		ug/Kg	☼	109	61 - 133
Fluorene	ND		3480	3310		ug/Kg	☼	95	63 - 126
Hexachloroethane	ND		3480	2370		ug/Kg	☼	68	41 - 120
N-Nitrosodi-n-propylamine	ND		3480	2740		ug/Kg	☼	79	46 - 120
Pentachlorophenol	ND		3480	3400		ug/Kg	☼	98	33 - 136
Phenol	ND		3480	2610		ug/Kg	☼	75	36 - 120
Pyrene	2400	B	3480	4830		ug/Kg	☼	70	51 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol	77		39 - 146
2-Fluorobiphenyl	85		37 - 120
2-Fluorophenol	66		18 - 120
Nitrobenzene-d5	71		34 - 132
Phenol-d5	75		11 - 120
p-Terphenyl-d14	108		65 - 153

Lab Sample ID: 480-22767-6 MSD

Matrix: Solid

Analysis Batch: 73210

Client Sample ID: B-26 (0-0.5)

Prep Type: Total/NA

Prep Batch: 73105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	ND		3440	3540		ug/Kg	☼	103	55 - 125	19	20
2-Chlorophenol	ND		3440	3080		ug/Kg	☼	89	38 - 120	20	25
4-Chloro-3-methylphenol	ND		3440	3370		ug/Kg	☼	98	49 - 125	17	27
4-Nitrophenol	ND		3440	4130		ug/Kg	☼	120	43 - 137	25	25
Acenaphthene	79	J	3440	3850		ug/Kg	☼	110	53 - 120	17	35
Bis(2-ethylhexyl) phthalate	ND		3440	4510	F	ug/Kg	☼	131	61 - 133	17	15
Fluorene	ND		3440	3850		ug/Kg	☼	112	63 - 126	15	15
Hexachloroethane	ND		3440	2940		ug/Kg	☼	85	41 - 120	21	46
N-Nitrosodi-n-propylamine	ND		3440	3280		ug/Kg	☼	95	46 - 120	18	31
Pentachlorophenol	ND		3440	3650		ug/Kg	☼	106	33 - 136	7	35
Phenol	ND		3440	3210		ug/Kg	☼	93	36 - 120	21	35
Pyrene	2400	B	3440	6370		ug/Kg	☼	115	51 - 133	27	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol	92		39 - 146
2-Fluorobiphenyl	103		37 - 120
2-Fluorophenol	89		18 - 120
Nitrobenzene-d5	92		34 - 132
Phenol-d5	96		11 - 120
p-Terphenyl-d14	134		65 - 153

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-73838/1-A

Matrix: Solid

Analysis Batch: 74125

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 73838

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
4,4'-DDE	ND		1.7	0.25	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
4,4'-DDT	ND		1.7	0.17	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Aldrin	ND		1.7	0.41	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
alpha-BHC	ND		1.7	0.30	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
alpha-Chlordane	ND		1.7	0.82	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
beta-BHC	ND		1.7	0.18	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
delta-BHC	0.574	J	1.7	0.22	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Dieldrin	ND		1.7	0.40	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Endosulfan I	ND		1.7	0.21	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Endosulfan II	ND		1.7	0.30	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Endrin	ND		1.7	0.23	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Endrin aldehyde	ND		1.7	0.42	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Endrin ketone	ND		1.7	0.41	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
gamma-BHC (Lindane)	ND		1.7	1.2	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
gamma-Chlordane	ND		1.7	0.53	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Heptachlor	ND		1.7	0.26	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Heptachlor epoxide	ND		1.7	0.43	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Methoxychlor	ND		1.7	0.23	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Toxaphene	ND		17	9.6	ug/Kg		07/25/12 13:36	07/27/12 09:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	94		62 - 137				07/25/12 13:36	07/27/12 09:44	1
Tetrachloro-m-xylene	80		30 - 124				07/25/12 13:36	07/27/12 09:44	1

Lab Sample ID: LCS 480-73838/2-A

Matrix: Solid

Analysis Batch: 74125

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 73838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.6	16.6		ug/Kg		100	45 - 129
4,4'-DDE	16.6	16.0		ug/Kg		96	49 - 120
4,4'-DDT	16.6	16.4		ug/Kg		99	47 - 145
Aldrin	16.6	14.6		ug/Kg		88	35 - 120
alpha-BHC	16.6	13.7		ug/Kg		83	49 - 120
alpha-Chlordane	16.6	16.4		ug/Kg		99	44 - 127
beta-BHC	16.6	15.7		ug/Kg		95	58 - 123
delta-BHC	16.6	15.9		ug/Kg		95	45 - 123
Dieldrin	16.6	15.7		ug/Kg		94	53 - 128
Endosulfan I	16.6	14.4		ug/Kg		86	29 - 125
Endosulfan II	16.6	15.3		ug/Kg		92	56 - 127
Endosulfan sulfate	16.6	16.7		ug/Kg		101	53 - 135
Endrin	16.6	16.7		ug/Kg		100	58 - 129
Endrin aldehyde	16.6	16.2		ug/Kg		97	39 - 133
Endrin ketone	16.6	16.2		ug/Kg		98	61 - 133
gamma-BHC (Lindane)	16.6	14.7		ug/Kg		88	50 - 120
gamma-Chlordane	16.6	15.4		ug/Kg		93	54 - 124
Heptachlor	16.6	15.4		ug/Kg		93	49 - 122

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 480-73838/2-A

Matrix: Solid

Analysis Batch: 74125

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 73838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor epoxide	16.6	15.7		ug/Kg		94	47 - 128
Methoxychlor	16.6	19.1		ug/Kg		115	61 - 146

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	96		62 - 137
Tetrachloro-m-xylene	79		30 - 124

Lab Sample ID: 480-22767-6 MS

Matrix: Solid

Analysis Batch: 74125

Client Sample ID: B-26 (0-0.5)

Prep Type: Total/NA

Prep Batch: 73838

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		17.5	35.5	J F	ug/Kg	✱	203	53 - 124
4,4'-DDE	ND		17.5	37.9	J F	ug/Kg	✱	217	44 - 123
4,4'-DDT	29	J	17.5	96.4	F	ug/Kg	✱	388	36 - 132
Aldrin	ND		17.5	39.6	J	ug/Kg	✱	NC	35 - 120
alpha-BHC	ND		17.5	43.1	J F	ug/Kg	✱	247	35 - 114
alpha-Chlordane	ND		17.5	ND		ug/Kg	✱	NC	47 - 121
beta-BHC	ND		17.5	ND	F	ug/Kg	✱	0	50 - 121
delta-BHC	ND		17.5	43.5	J F	ug/Kg	✱	249	45 - 123
Dieldrin	ND		17.5	37.5	J	ug/Kg	✱	NC	47 - 120
Endosulfan I	ND		17.5	28.3	J F	ug/Kg	✱	162	29 - 125
Endosulfan II	ND		17.5	ND	F	ug/Kg	✱	0	21 - 137
Endosulfan sulfate	ND		17.5	30.8	J F	ug/Kg	✱	176	34 - 136
Endrin	ND		17.5	34.4	J F	ug/Kg	✱	197	53 - 120
Endrin aldehyde	ND		17.5	73.2	J	ug/Kg	✱	NC	33 - 120
Endrin ketone	ND		17.5	ND		ug/Kg	✱	NC	49 - 131
gamma-BHC (Lindane)	ND		17.5	ND		ug/Kg	✱	NC	50 - 120
gamma-Chlordane	ND		17.5	32.3	J	ug/Kg	✱	NC	51 - 120
Heptachlor	ND		17.5	40.6	J F	ug/Kg	✱	232	47 - 120
Heptachlor epoxide	ND		17.5	ND		ug/Kg	✱	NC	44 - 122
Methoxychlor	ND		17.5	99.1	F	ug/Kg	✱	567	53 - 143

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	0	X	62 - 137
Tetrachloro-m-xylene	0	X	30 - 124

Lab Sample ID: 480-22767-6 MSD

Matrix: Solid

Analysis Batch: 74125

Client Sample ID: B-26 (0-0.5)

Prep Type: Total/NA

Prep Batch: 73838

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
4,4'-DDD	ND		17.4	36.2	J F	ug/Kg	✱	208	53 - 124	2	21
4,4'-DDE	ND		17.4	36.0	J F	ug/Kg	✱	207	44 - 123	5	18
4,4'-DDT	29	J	17.4	40.8	J F	ug/Kg	✱	70	36 - 132	81	25
Aldrin	ND		17.4	39.5	J	ug/Kg	✱	NC	35 - 120	0	12
alpha-BHC	ND		17.4	43.2	J F	ug/Kg	✱	249	35 - 114	0	15
alpha-Chlordane	ND		17.4	ND		ug/Kg	✱	NC	47 - 121	NC	23
beta-BHC	ND		17.4	ND	F	ug/Kg	✱	0	50 - 121	NC	19

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-22767-6 MSD

Matrix: Solid

Analysis Batch: 74125

Client Sample ID: B-26 (0-0.5)

Prep Type: Total/NA

Prep Batch: 73838

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
delta-BHC	ND		17.4	44.3	J F	ug/Kg	✱	255	45 - 123	2	14
Dieldrin	ND		17.4	34.0	J	ug/Kg	✱	NC	47 - 120	10	12
Endosulfan I	ND		17.4	28.7	J F	ug/Kg	✱	165	29 - 125	2	18
Endosulfan II	ND		17.4	ND	F	ug/Kg	✱	0	21 - 137	NC	26
Endosulfan sulfate	ND		17.4	32.8	J F	ug/Kg	✱	188	34 - 136	6	35
Endrin	ND		17.4	34.5	J F	ug/Kg	✱	199	53 - 120	0	20
Endrin aldehyde	ND		17.4	49.2	J	ug/Kg	✱	NC	33 - 120	39	47
Endrin ketone	ND		17.4	ND		ug/Kg	✱	NC	49 - 131	NC	37
gamma-BHC (Lindane)	ND		17.4	ND		ug/Kg	✱	NC	50 - 120	NC	12
gamma-Chlordane	ND		17.4	31.4	J	ug/Kg	✱	NC	51 - 120	3	15
Heptachlor	ND		17.4	37.3	J F	ug/Kg	✱	215	47 - 120	8	22
Heptachlor epoxide	ND		17.4	ND		ug/Kg	✱	NC	44 - 122	NC	15
Methoxychlor	ND		17.4	154	F	ug/Kg	✱	884	53 - 143	43	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	0	X	62 - 137
Tetrachloro-m-xylene	0	X	30 - 124

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: LCS 480-73272/2-A

Matrix: Solid

Analysis Batch: 73373

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 73272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2250	2900		ug/Kg		129	51 - 185
PCB-1260	2250	3160		ug/Kg		140	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	163		36 - 182
Tetrachloro-m-xylene	137		24 - 172

Lab Sample ID: 480-22767-6 MS

Matrix: Solid

Analysis Batch: 73373

Client Sample ID: B-26 (0-0.5)

Prep Type: Total/NA

Prep Batch: 73272

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		2480	2940		ug/Kg	✱	119	42 - 159
PCB-1260	320		2480	3530		ug/Kg	✱	129	47 - 153

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	151		36 - 182
Tetrachloro-m-xylene	124		24 - 172

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-22767-6 MSD

Matrix: Solid

Analysis Batch: 73373

Client Sample ID: B-26 (0-0.5)

Prep Type: Total/NA

Prep Batch: 73272

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		2460	3080		ug/Kg	✱	125	42 - 159	4	50
PCB-1260	320		2460	3700		ug/Kg	✱	138	47 - 153	5	50
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
DCB Decachlorobiphenyl	145		36 - 182								
Tetrachloro-m-xylene	119		24 - 172								

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-73033/1-A

Matrix: Solid

Analysis Batch: 73187

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 73033

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.7		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Antimony	ND		14.5		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Arsenic	ND		1.9		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Barium	ND		0.48		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Beryllium	ND		0.19		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Cadmium	ND		0.19		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Calcium	ND		48.4		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Chromium	ND		0.48		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Cobalt	ND		0.48		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Copper	ND		0.97		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Iron	ND		9.7		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Lead	ND		0.97		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Magnesium	ND		19.4		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Manganese	ND		0.19		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Nickel	ND		4.8		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Potassium	ND		29.0		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Selenium	ND		3.9		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Silver	ND		0.48		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Sodium	ND		136		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Thallium	ND		5.8		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Vanadium	ND		0.48		mg/Kg		07/19/12 11:30	07/19/12 16:09	1
Zinc	ND		1.9		mg/Kg		07/19/12 11:30	07/19/12 16:09	1

Lab Sample ID: LCSSRM 480-73033/2-A

Matrix: Solid

Analysis Batch: 73187

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 73033

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8400	7117		mg/Kg		84.7	40.6 - 159.5
Antimony	93.3	73.86		mg/Kg		79.2	24.8 - 272.2
Arsenic	94.5	90.81		mg/Kg		96.1	69.2 - 131.2
Barium	167	162.5		mg/Kg		97.3	72.5 - 126.9

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

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

Lab Sample ID: LCSSRM 480-73033/2-A

Matrix: Solid

Analysis Batch: 73187

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 73033

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	57.6	59.13		mg/Kg		102.7	73.3 - 126.7
Cadmium	60.5	59.34		mg/Kg		98.1	73.2 - 126.8
Calcium	6140	6072		mg/Kg		98.9	73.9 - 126.4
Chromium	70.4	65.80		mg/Kg		93.5	68.5 - 131.5
Cobalt	102	104.7		mg/Kg		102.6	74.5 - 125.5
Copper	79.6	81.09		mg/Kg		101.9	73.6 - 125.6
Iron	12500	10530		mg/Kg		84.2	31.0 - 168.8
Lead	91.8	91.72		mg/Kg		99.9	70.3 - 129.6
Magnesium	2580	2268		mg/Kg		87.9	63.6 - 136.0
Manganese	283	268.1		mg/Kg		94.7	73.9 - 125.4
Nickel	57.6	59.29		mg/Kg		102.9	70.0 - 130.2
Potassium	2490	2312		mg/Kg		92.9	60.6 - 139.0
Selenium	86.4	85.87		mg/Kg		99.4	64.0 - 136.6
Silver	34.4	33.66		mg/Kg		97.9	65.7 - 134.6
Sodium	215	207.9		mg/Kg		96.7	26.7 - 174.0
Thallium	120	120.1		mg/Kg		100.1	67.3 - 131.7
Vanadium	57.0	52.90		mg/Kg		92.8	53.7 - 146.1
Zinc	140	131.5		mg/Kg		93.9	67.4 - 132.9

Lab Sample ID: 480-22767-6 MS

Matrix: Solid

Analysis Batch: 73187

Client Sample ID: B-26 (0-0.5)

Prep Type: Total/NA

Prep Batch: 73033

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	9390		2270	12020	4	mg/Kg	☼	116	75 - 125
Antimony	ND		45.4	46.00	F	mg/Kg	☼	74	75 - 125
Arsenic	103		45.4	139.6		mg/Kg	☼	80	75 - 125
Barium	216		45.4	289.0	4	mg/Kg	☼	161	75 - 125
Beryllium	1.2		45.4	42.49		mg/Kg	☼	91	75 - 125
Cadmium	1.2		45.4	42.69		mg/Kg	☼	91	75 - 125
Calcium	24400		2270	25970	4	mg/Kg	☼	70	75 - 125
Chromium	30.6		45.4	73.07		mg/Kg	☼	93	75 - 125
Cobalt	6.5		45.4	54.01		mg/Kg	☼	105	75 - 125
Copper	101		45.4	141.4		mg/Kg	☼	89	75 - 125
Iron	31400		2270	26010	4	mg/Kg	☼	-237	75 - 125
Lead	1260		45.4	1224	4	mg/Kg	☼	-77	75 - 125

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

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

Lab Sample ID: 480-22767-6 MS

Matrix: Solid

Analysis Batch: 73187

Client Sample ID: B-26 (0-0.5)

Prep Type: Total/NA

Prep Batch: 73033

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Magnesium	7070		2270	9156		mg/Kg	✱	92	75 - 125
Manganese	390		45.4	384.7	4	mg/Kg	✱	-12	75 - 125
Nickel	24.4		45.4	69.72		mg/Kg	✱	100	75 - 125
Potassium	1160		2270	3402		mg/Kg	✱	99	75 - 125
Selenium	ND		45.4	41.78		mg/Kg	✱	85	75 - 125
Silver	ND		11.4	10.73		mg/Kg	✱	94	75 - 125
Sodium	389		2270	2432		mg/Kg	✱	90	75 - 125
Thallium	ND		45.4	44.92		mg/Kg	✱	95	75 - 125
Vanadium	22.0		45.4	62.55		mg/Kg	✱	89	75 - 125
Zinc	221		45.4	261.2	4	mg/Kg	✱	88	75 - 125

Lab Sample ID: 480-22767-6 MSD

Matrix: Solid

Analysis Batch: 73187

Client Sample ID: B-26 (0-0.5)

Prep Type: Total/NA

Prep Batch: 73033

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	9390		2190	12110	4	mg/Kg	✱	124	75 - 125	1	20
Antimony	ND		43.7	48.38		mg/Kg	✱	82	75 - 125	5	20
Arsenic	103		43.7	157.8		mg/Kg	✱	125	75 - 125	12	20
Barium	216		43.7	275.0	4	mg/Kg	✱	135	75 - 125	5	20
Beryllium	1.2		43.7	41.37		mg/Kg	✱	92	75 - 125	3	20
Cadmium	1.2		43.7	42.33		mg/Kg	✱	94	75 - 125	1	20
Calcium	24400		2190	25270	4	mg/Kg	✱	40	75 - 125	3	20
Chromium	30.6		43.7	66.19		mg/Kg	✱	81	75 - 125	10	20
Cobalt	6.5		43.7	54.29		mg/Kg	✱	109	75 - 125	1	20
Copper	101		43.7	150.1		mg/Kg	✱	112	75 - 125	6	20
Iron	31400		2190	31780	4	mg/Kg	✱	18	75 - 125	20	20
Lead	1260		43.7	1368	4	mg/Kg	✱	250	75 - 125	11	20
Magnesium	7070		2190	8920		mg/Kg	✱	85	75 - 125	3	20
Manganese	390		43.7	434.8	4	mg/Kg	✱	102	75 - 125	12	20
Nickel	24.4		43.7	73.78		mg/Kg	✱	113	75 - 125	6	20
Potassium	1160		2190	3345		mg/Kg	✱	100	75 - 125	2	20
Selenium	ND		43.7	40.51		mg/Kg	✱	86	75 - 125	3	20
Silver	ND		10.9	10.41		mg/Kg	✱	95	75 - 125	3	20
Sodium	389		2190	2424		mg/Kg	✱	93	75 - 125	0	20
Thallium	ND		43.7	43.41		mg/Kg	✱	96	75 - 125	3	20
Vanadium	22.0		43.7	63.76		mg/Kg	✱	95	75 - 125	2	20
Zinc	221		43.7	276.9	4	mg/Kg	✱	128	75 - 125	6	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-74716/1-A

Matrix: Solid

Analysis Batch: 74745

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019		mg/Kg		08/01/12 11:00	08/01/12 13:29	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-74716/2-A
Matrix: Solid
Analysis Batch: 74745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74716

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	3.56		mg/Kg		94.3	71.6 - 128.4

Lab Sample ID: 480-22767-6 MS
Matrix: Solid
Analysis Batch: 74745

Client Sample ID: B-26 (0-0.5)
Prep Type: Total/NA
Prep Batch: 74716

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.6		0.356	2.67	4	mg/Kg	⚠	30	75 - 125

Lab Sample ID: 480-22767-6 MSD
Matrix: Solid
Analysis Batch: 74745

Client Sample ID: B-26 (0-0.5)
Prep Type: Total/NA
Prep Batch: 74716

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	2.6		0.343	3.03	4	mg/Kg	⚠	136	75 - 125	13	20

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

GC/MS VOA

Analysis Batch: 73047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-12	TRIP BLANK	Total/NA	Water	8260B	
LCS 480-73047/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-73047/6	Method Blank	Total/NA	Water	8260B	

Prep Batch: 73119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-4	T1-MW-01 (4.5-5.0)	Total/NA	Solid	5035	
480-22767-5	T1-MW-01 (8.5-9.0)	Total/NA	Solid	5035	

Analysis Batch: 73142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-4	T1-MW-01 (4.5-5.0)	Total/NA	Solid	8260B	73119
480-22767-5	T1-MW-01 (8.5-9.0)	Total/NA	Solid	8260B	73119
LCS 480-73142/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-73142/5	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 74071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-5 - DL	T1-MW-01 (8.5-9.0)	Total/NA	Solid	8260B	74089
LCS 480-74089/1-A	Lab Control Sample	Total/NA	Solid	8260B	74089
MB 480-74089/2-A	Method Blank	Total/NA	Solid	8260B	74089

Prep Batch: 74089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-5 - DL	T1-MW-01 (8.5-9.0)	Total/NA	Solid	5035	
LCS 480-74089/1-A	Lab Control Sample	Total/NA	Solid	5035	
MB 480-74089/2-A	Method Blank	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 73105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	3550B	
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	3550B	
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	3550B	
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	3550B	

Analysis Batch: 73210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	8270C	73105
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	8270C	73105
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	8270C	73105
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	8270C	73105

GC Semi VOA

Prep Batch: 73272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	3550B	
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	3550B	
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	3550B	
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	3550B	

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

GC Semi VOA (Continued)

Prep Batch: 73272 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-73272/2-A	Lab Control Sample	Total/NA	Solid	3550B	

Analysis Batch: 73373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	8082	73272
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	8082	73272
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	8082	73272
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	8082	73272
LCS 480-73272/2-A	Lab Control Sample	Total/NA	Solid	8082	73272

Prep Batch: 73838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	3550B	
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	3550B	
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	3550B	
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	3550B	
LCS 480-73838/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-73838/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 74125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	8081A	73838
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	8081A	73838
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	8081A	73838
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	8081A	73838
LCS 480-73838/2-A	Lab Control Sample	Total/NA	Solid	8081A	73838
MB 480-73838/1-A	Method Blank	Total/NA	Solid	8081A	73838

Metals

Prep Batch: 73033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-1	B-38 (0-0.5)	Total/NA	Solid	3050B	
480-22767-2	B-39 (0-0.5)	Total/NA	Solid	3050B	
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	3050B	
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	3050B	
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	3050B	
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	3050B	
480-22767-9	B-38 (3.5-4.0)	Total/NA	Solid	3050B	
480-22767-10	B-39 (2.5-3.0)	Total/NA	Solid	3050B	
480-22767-11	B-26 (4-4.5)	Total/NA	Solid	3050B	
LCSSRM 480-73033/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-73033/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 73187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-1	B-38 (0-0.5)	Total/NA	Solid	6010B	73033
480-22767-2	B-39 (0-0.5)	Total/NA	Solid	6010B	73033
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	6010B	73033
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	6010B	73033
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	6010B	73033
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	6010B	73033

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Metals (Continued)

Analysis Batch: 73187 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-9	B-38 (3.5-4.0)	Total/NA	Solid	6010B	73033
480-22767-10	B-39 (2.5-3.0)	Total/NA	Solid	6010B	73033
480-22767-11	B-26 (4-4.5)	Total/NA	Solid	6010B	73033
LCSSRM 480-73033/2-A	Lab Control Sample	Total/NA	Solid	6010B	73033
MB 480-73033/1-A	Method Blank	Total/NA	Solid	6010B	73033

Prep Batch: 74716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	7471A	
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	7471A	
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	7471A	
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	7471A	
LCSSRM 480-74716/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-74716/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 74745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	7471A	74716
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	7471A	74716
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	7471A	74716
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	7471A	74716
LCSSRM 480-74716/2-A	Lab Control Sample	Total/NA	Solid	7471A	74716
MB 480-74716/1-A	Method Blank	Total/NA	Solid	7471A	74716

General Chemistry

Analysis Batch: 73124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22767-1	B-38 (0-0.5)	Total/NA	Solid	Moisture	
480-22767-2	B-39 (0-0.5)	Total/NA	Solid	Moisture	
480-22767-3	T1-MW-01 (.5-1.0)	Total/NA	Solid	Moisture	
480-22767-4	T1-MW-01 (4.5-5.0)	Total/NA	Solid	Moisture	
480-22767-5	T1-MW-01 (8.5-9.0)	Total/NA	Solid	Moisture	
480-22767-6	B-26 (0-0.5)	Total/NA	Solid	Moisture	
480-22767-6 MS	B-26 (0-0.5)	Total/NA	Solid	Moisture	
480-22767-6 MSD	B-26 (0-0.5)	Total/NA	Solid	Moisture	
480-22767-9	B-38 (3.5-4.0)	Total/NA	Solid	Moisture	
480-22767-10	B-39 (2.5-3.0)	Total/NA	Solid	Moisture	
480-22767-11	B-26 (4-4.5)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-38 (0-0.5)

Date Collected: 07/18/12 08:10

Date Received: 07/18/12 16:05

Lab Sample ID: 480-22767-1

Matrix: Solid

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			73033	07/19/12 11:30	SS	TAL BUF
Total/NA	Analysis	6010B		1	73187	07/19/12 16:13	AH	TAL BUF
Total/NA	Analysis	Moisture		1	73124	07/19/12 16:12	ZLR	TAL BUF

Client Sample ID: B-39 (0-0.5)

Date Collected: 07/18/12 07:45

Date Received: 07/18/12 16:05

Lab Sample ID: 480-22767-2

Matrix: Solid

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			73033	07/19/12 11:30	SS	TAL BUF
Total/NA	Analysis	6010B		1	73187	07/19/12 16:21	AH	TAL BUF
Total/NA	Analysis	Moisture		1	73124	07/19/12 16:12	ZLR	TAL BUF

Client Sample ID: T1-MW-01 (.5-1.0)

Date Collected: 07/18/12 09:00

Date Received: 07/18/12 16:05

Lab Sample ID: 480-22767-3

Matrix: Solid

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			73105	07/19/12 15:12	KB	TAL BUF
Total/NA	Analysis	8270C		10	73210	07/20/12 20:36	HTL	TAL BUF
Total/NA	Prep	3550B			73272	07/20/12 14:34	KB	TAL BUF
Total/NA	Analysis	8082		1	73373	07/22/12 17:45	JM	TAL BUF
Total/NA	Prep	3550B			73838	07/25/12 13:37	DE	TAL BUF
Total/NA	Analysis	8081A		50	74125	07/27/12 15:27	LW	TAL BUF
Total/NA	Prep	3050B			73033	07/19/12 11:30	SS	TAL BUF
Total/NA	Analysis	6010B		1	73187	07/19/12 16:23	AH	TAL BUF
Total/NA	Prep	7471A			74716	08/01/12 11:00	MM	TAL BUF
Total/NA	Analysis	7471A		1	74745	08/01/12 13:32	MM	TAL BUF
Total/NA	Analysis	Moisture		1	73124	07/19/12 16:12	ZLR	TAL BUF

Client Sample ID: T1-MW-01 (4.5-5.0)

Date Collected: 07/18/12 09:15

Date Received: 07/18/12 16:05

Lab Sample ID: 480-22767-4

Matrix: Solid

Percent Solids: 76.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			73119	07/19/12 15:43	JMB	TAL BUF
Total/NA	Analysis	8260B		1	73142	07/20/12 00:55	JMB	TAL BUF
Total/NA	Analysis	Moisture		1	73124	07/19/12 16:12	ZLR	TAL BUF

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: T1-MW-01 (8.5-9.0)

Lab Sample ID: 480-22767-5

Date Collected: 07/18/12 09:25

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			73119	07/19/12 15:43	JMB	TAL BUF
Total/NA	Analysis	8260B		1	73142	07/20/12 01:21	JMB	TAL BUF
Total/NA	Prep	5035	DL		74089	07/26/12 19:10	RL	TAL BUF
Total/NA	Analysis	8260B	DL	1	74071	07/27/12 04:47	JMB	TAL BUF
Total/NA	Analysis	Moisture		1	73124	07/19/12 16:12	ZLR	TAL BUF

Client Sample ID: B-26 (0-0.5)

Lab Sample ID: 480-22767-6

Date Collected: 07/18/12 13:45

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			73105	07/19/12 15:12	KB	TAL BUF
Total/NA	Analysis	8270C		10	73210	07/20/12 21:00	HTL	TAL BUF
Total/NA	Prep	3550B			73272	07/20/12 14:34	KB	TAL BUF
Total/NA	Analysis	8082		1	73373	07/22/12 18:01	JM	TAL BUF
Total/NA	Prep	3550B			73838	07/25/12 13:37	DE	TAL BUF
Total/NA	Analysis	8081A		50	74125	07/27/12 16:09	LW	TAL BUF
Total/NA	Prep	3050B			73033	07/19/12 11:30	SS	TAL BUF
Total/NA	Analysis	6010B		1	73187	07/19/12 16:26	AH	TAL BUF
Total/NA	Prep	7471A			74716	08/01/12 11:00	MM	TAL BUF
Total/NA	Analysis	7471A		5	74745	08/01/12 13:59	MM	TAL BUF
Total/NA	Analysis	Moisture		1	73124	07/19/12 16:12	ZLR	TAL BUF

Client Sample ID: B-38 (3.5-4.0)

Lab Sample ID: 480-22767-9

Date Collected: 07/18/12 08:15

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			73033	07/19/12 11:30	SS	TAL BUF
Total/NA	Analysis	6010B		1	73187	07/19/12 16:38	AH	TAL BUF
Total/NA	Analysis	Moisture		1	73124	07/19/12 16:12	ZLR	TAL BUF

Client Sample ID: B-39 (2.5-3.0)

Lab Sample ID: 480-22767-10

Date Collected: 07/18/12 07:50

Matrix: Solid

Date Received: 07/18/12 16:05

Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			73033	07/19/12 11:30	SS	TAL BUF
Total/NA	Analysis	6010B		1	73187	07/19/12 16:40	AH	TAL BUF
Total/NA	Analysis	Moisture		1	73124	07/19/12 16:12	ZLR	TAL BUF

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Client Sample ID: B-26 (4-4.5)

Date Collected: 07/18/12 13:50

Date Received: 07/18/12 16:05

Lab Sample ID: 480-22767-11

Matrix: Solid

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			73033	07/19/12 11:30	SS	TAL BUF
Total/NA	Analysis	6010B		1	73187	07/19/12 16:43	AH	TAL BUF
Total/NA	Analysis	Moisture		1	73124	07/19/12 16:12	ZLR	TAL BUF

Client Sample ID: TRIP BLANK

Date Collected: 07/18/12 00:00

Date Received: 07/18/12 16:05

Lab Sample ID: 480-22767-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	73047	07/19/12 19:26	CDC	TAL BUF

Laboratory References:

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

Certification Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Laboratory: TestAmerica Buffalo

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

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

Method Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081A	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-22767-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-22767-1	B-38 (0-0.5)	Solid	07/18/12 08:10	07/18/12 16:05
480-22767-2	B-39 (0-0.5)	Solid	07/18/12 07:45	07/18/12 16:05
480-22767-3	T1-MW-01 (.5-1.0)	Solid	07/18/12 09:00	07/18/12 16:05
480-22767-4	T1-MW-01 (4.5-5.0)	Solid	07/18/12 09:15	07/18/12 16:05
480-22767-5	T1-MW-01 (8.5-9.0)	Solid	07/18/12 09:25	07/18/12 16:05
480-22767-6	B-26 (0-0.5)	Solid	07/18/12 13:45	07/18/12 16:05
480-22767-9	B-38 (3.5-4.0)	Solid	07/18/12 08:15	07/18/12 16:05
480-22767-10	B-39 (2.5-3.0)	Solid	07/18/12 07:50	07/18/12 16:05
480-22767-11	B-26 (4-4.5)	Solid	07/18/12 13:50	07/18/12 16:05
480-22767-12	TRIP BLANK	Water	07/18/12 00:00	07/18/12 16:05

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

Chain of Custody Record

TAL-4124 (1007)

Client AMEC E&T		Project Manager Robert Crumley		Date 7/18/12		Chain of Custody Number 215295	
Address 800 North Barr Ave Suite 200		Telephone Number (Area Code)/Fax Number		Lab Number		Page 1 of 1	
City CARLETON		State PA		Zip Code 15106			
Project Name and Location (State) Niagara Falls - Honeywell		Site Contact M. Cummings		Lab Contact B. Fisher			
Contract/Purchase Order/Quote No. TA: 48004523 AMEC: 3410110832		Carrier/Waybill Number HAND DELIVERY		Containers & Preservatives		Special Instructions/Conditions of Receipt	
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Date		Time		Analysis (Attach list if more space is needed)	
B-38 (0-0.5)		7/18/12		8:10		VOC, 8260 PCB, 8082 60106 PCB, 8260 60106 LEAD TLC, 8260 SOLG, 8230	
B-39 (0-0.5)				7:45		X	
T1-MW-01 (0.5-1.0)				9:00		X	
T1-MW-01 (4.5-5.0)				9:15		X	
T1-MW-01 (8.5-9.0)				9:25		X	
B-26 (0-0.5)				13:45		X	
B-26 (0-0.5) MS				13:55		X	
B-26 (0-0.5) MS				13:55		X	
B-38 (3.5-4.0)				8:15		X	
B-39 (2.5-3.0)				7:50		X	
B-26 (4-4.5)				13:50		X	
TRIP BLANK				---		X	

Sample Disposal		Disposal By Lab ☒ Archive For _____ Months		(A fee may be assessed if samples are retained longer than 1 month)	
Return To Client ☐ Unknown ☐		QC Requirements (Specify)			
Turn Around Time Required		1. Relinquished By John Fisher		Date 7/18/12 Time 16:05	
2. Relinquished By		2. Relinquished By		Date _____ Time _____	
3. Relinquished By		3. Relinquished By		Date _____ Time _____	
Comments 3.8 #2					

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

Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 480-22767-1

Login Number: 22767

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robitaille, Zach L

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-23055-1

Client Project/Site: Niagara Falls site

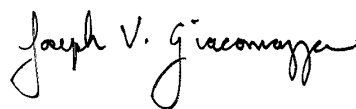
For:

AMEC Environment & Infrastructure, Inc.

800 North Bell Avenue, Suite 200

Carnegie, Pennsylvania 15106

Attn: Eric Weiler



Authorized for release by:

8/3/2012 3:29:55 PM

Joe Giacomazza

Project Administrator

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

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www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Qualifiers

GC/MS Semi VOA

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

GC Semi VOA

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

Metals

Qualifier	Qualifier Description
B7	Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the blank.
F	MS or MSD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	RPD of the MS and MSD exceeds the control limits

Glossary

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

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Job ID: 480-23055-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-23055-1

Receipt

The samples were received on 7/25/2012 3:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8° C.

GC/MS Semi VOA

Method 8270C: The following samples were diluted due to the nature of the sample matrix and viscosity: B-35 (0-.5) (480-23055-3), B-36 (0-.5) (480-23055-5), TI-MW-02 (0-.5) (480-23055-1). As such, surrogate recoveries were reduced to a level in which they do not provide useful information. Elevated reporting limits (RLs) are provided.

Method 8270C: The following compound was outside control limits in the continuing calibration verification (CCV) associated with batch 74414: Hexachlorocyclopentadiene. This compound is not classified as Calibration Check Compound (CCC) in the reference method. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for four analytes to be outside limits; therefore, the data have been reported.

No other analytical or quality issues were noted.

GC Semi VOA

Method 8081A: The following samples were diluted due to the nature of the sample matrix: B-35 (0-.5) (480-23055-3), B-36 (0-.5) (480-23055-5), TI-MW-02 (0-.5) (480-23055-1). Therefore, surrogate recoveries are not representative, and elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals

Method 6010B: The Serial Dilution and Post Spike (480-23055-5 PDS), (480-23055-5 SD) exceeded the quality control limits for total copper and magnesium. Sample matrix is suspected, therefore, no corrective action was necessary.

Method 6010B: The Serial Dilution (480-23055-5 SD) in batch 480-73959, exhibited results outside the quality control limits for total aluminum, arsenic, barium, calcium, cadmium, cobalt, chromium, iron, potassium, manganese, nickel, lead, antimony, vanadium, and zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method 6010B: The Matrix Spike/ Matrix Spike Duplicate (480-23055-5 MS), (480-23055-5 MSD) recoveries for total aluminum was outside control limits. The MSD was also outside quality control limits for total antimony. Non-homogeneity of the sample matrix is suspected. The associated Laboratory Control Sample (LCS) met acceptance criteria, therefore no corrective action was necessary.

Method 6010B: The Matrix Spike / Matrix Spike Duplicate (480-23055-5 MS), (480-23055-5 MSD) precision for batch 480-73959 was outside control limits for total barium, calcium, magnesium, manganese, lead, and zinc. Non-homogeneity of the sample matrix is suspected. The associated Laboratory Control Sample met acceptance criteria, therefore, no corrective action was necessary.

Method 7471A: The following samples were diluted to bring the concentration of target analytes within the calibration range: B-35 (0-.5) (480-23055-3), TI-MW-02 (0-.5) (480-23055-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: TI-MW-02 (0-5)

Lab Sample ID: 480-23055-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	1500	J	3900	67	ug/Kg	20	✱	8270C	Total/NA
Benzo(a)pyrene	2000	J	3900	93	ug/Kg	20	✱	8270C	Total/NA
Benzo(b)fluoranthene	2800	J	3900	75	ug/Kg	20	✱	8270C	Total/NA
Benzo(g,h,i)perylene	820	J	3900	47	ug/Kg	20	✱	8270C	Total/NA
Benzo(k)fluoranthene	1200	J	3900	43	ug/Kg	20	✱	8270C	Total/NA
Chrysene	1800	J	3900	39	ug/Kg	20	✱	8270C	Total/NA
Fluoranthene	2300	J	3900	56	ug/Kg	20	✱	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	790	J	3900	110	ug/Kg	20	✱	8270C	Total/NA
Phenanthrene	980	J	3900	81	ug/Kg	20	✱	8270C	Total/NA
Pyrene	1900	J	3900	25	ug/Kg	20	✱	8270C	Total/NA
4,4'-DDT	45	J	96	9.8	ug/Kg	50	✱	8081A	Total/NA
PCB-1260	0.10	J	0.28	0.00013	mg/Kg	1	✱	8082	Total/NA
Aluminum	1520		11.5		mg/Kg	1	✱	6010B	Total/NA
Antimony	90.7		17.3		mg/Kg	1	✱	6010B	Total/NA
Arsenic	15.7		2.3		mg/Kg	1	✱	6010B	Total/NA
Barium	276		0.58		mg/Kg	1	✱	6010B	Total/NA
Cadmium	1.5		0.23		mg/Kg	1	✱	6010B	Total/NA
Calcium	16600		57.5		mg/Kg	1	✱	6010B	Total/NA
Chromium	16.5	B7	0.58		mg/Kg	1	✱	6010B	Total/NA
Cobalt	2.6		0.58		mg/Kg	1	✱	6010B	Total/NA
Copper	634		1.2		mg/Kg	1	✱	6010B	Total/NA
Iron	26200		11.5		mg/Kg	1	✱	6010B	Total/NA
Lead	10100		1.2		mg/Kg	1	✱	6010B	Total/NA
Magnesium	6930		23.0		mg/Kg	1	✱	6010B	Total/NA
Manganese	148		0.23		mg/Kg	1	✱	6010B	Total/NA
Nickel	12.6		5.8		mg/Kg	1	✱	6010B	Total/NA
Potassium	916		34.5		mg/Kg	1	✱	6010B	Total/NA
Silver	0.97		0.58		mg/Kg	1	✱	6010B	Total/NA
Vanadium	8.2		0.58		mg/Kg	1	✱	6010B	Total/NA
Zinc	190		2.3		mg/Kg	1	✱	6010B	Total/NA
Mercury	2.0		0.12		mg/Kg	5	✱	7471A	Total/NA

Client Sample ID: TI-MW-02 (1-1.5)

Lab Sample ID: 480-23055-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4570		1.2		mg/Kg	1	✱	6010B	Total/NA

Client Sample ID: B-35 (0-5)

Lab Sample ID: 480-23055-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	1700	J	4200	51	ug/Kg	20	✱	8270C	Total/NA
Acenaphthene	7800		4200	50	ug/Kg	20	✱	8270C	Total/NA
Anthracene	13000		4200	110	ug/Kg	20	✱	8270C	Total/NA
Benzo(a)anthracene	42000		4200	73	ug/Kg	20	✱	8270C	Total/NA
Benzo(a)pyrene	46000		4200	100	ug/Kg	20	✱	8270C	Total/NA
Benzo(b)fluoranthene	61000		4200	82	ug/Kg	20	✱	8270C	Total/NA
Benzo(g,h,i)perylene	3400	J	4200	51	ug/Kg	20	✱	8270C	Total/NA
Benzo(k)fluoranthene	22000		4200	46	ug/Kg	20	✱	8270C	Total/NA
Biphenyl	400	J	4200	260	ug/Kg	20	✱	8270C	Total/NA
Carbazole	8900		4200	49	ug/Kg	20	✱	8270C	Total/NA
Chrysene	37000		4200	42	ug/Kg	20	✱	8270C	Total/NA
Dibenz(a,h)anthracene	3300	J	4200	50	ug/Kg	20	✱	8270C	Total/NA
Dibenzofuran	3600	J	4200	44	ug/Kg	20	✱	8270C	Total/NA

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-35 (0-5) (Continued)

Lab Sample ID: 480-23055-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	73000		4200	61	ug/Kg	20	☼	8270C	Total/NA
Fluorene	5100		4200	97	ug/Kg	20	☼	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	16000		4200	120	ug/Kg	20	☼	8270C	Total/NA
Naphthalene	7300		4200	70	ug/Kg	20	☼	8270C	Total/NA
Phenanthrene	52000		4200	88	ug/Kg	20	☼	8270C	Total/NA
Pyrene	59000		4200	27	ug/Kg	20	☼	8270C	Total/NA
4,4'-DDE	30	J	100	16	ug/Kg	50	☼	8081A	Total/NA
4,4'-DDT	34	J	100	11	ug/Kg	50	☼	8081A	Total/NA
Aluminum	5430		14.0		mg/Kg	1	☼	6010B	Total/NA
Antimony	86.6		21.0		mg/Kg	1	☼	6010B	Total/NA
Arsenic	19.7		2.8		mg/Kg	1	☼	6010B	Total/NA
Barium	227		0.70		mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.59		0.28		mg/Kg	1	☼	6010B	Total/NA
Cadmium	4.3		0.28		mg/Kg	1	☼	6010B	Total/NA
Calcium	11200		70.0		mg/Kg	1	☼	6010B	Total/NA
Chromium	21.4	B7	0.70		mg/Kg	1	☼	6010B	Total/NA
Cobalt	7.2		0.70		mg/Kg	1	☼	6010B	Total/NA
Copper	214		1.4		mg/Kg	1	☼	6010B	Total/NA
Iron	32600		14.0		mg/Kg	1	☼	6010B	Total/NA
Lead	4390		1.4		mg/Kg	1	☼	6010B	Total/NA
Magnesium	2620		28.0		mg/Kg	1	☼	6010B	Total/NA
Manganese	328		0.28		mg/Kg	1	☼	6010B	Total/NA
Nickel	19.1		7.0		mg/Kg	1	☼	6010B	Total/NA
Potassium	800		42.0		mg/Kg	1	☼	6010B	Total/NA
Vanadium	16.8		0.70		mg/Kg	1	☼	6010B	Total/NA
Zinc	752		2.8		mg/Kg	1	☼	6010B	Total/NA
Mercury	1.7		0.053		mg/Kg	2	☼	7471A	Total/NA

Client Sample ID: B-35 (1.5-2)

Lab Sample ID: 480-23055-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	431		1.3		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-36 (0-5)

Lab Sample ID: 480-23055-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	3000	J	4400	53	ug/Kg	20	☼	8270C	Total/NA
Acenaphthene	7300		4400	51	ug/Kg	20	☼	8270C	Total/NA
Acenaphthylene	3700	J	4400	36	ug/Kg	20	☼	8270C	Total/NA
Anthracene	17000		4400	110	ug/Kg	20	☼	8270C	Total/NA
Benzo(a)anthracene	57000		4400	76	ug/Kg	20	☼	8270C	Total/NA
Benzo(a)pyrene	59000		4400	110	ug/Kg	20	☼	8270C	Total/NA
Benzo(b)fluoranthene	84000		4400	85	ug/Kg	20	☼	8270C	Total/NA
Benzo(g,h,i)perylene	16000		4400	53	ug/Kg	20	☼	8270C	Total/NA
Benzo(k)fluoranthene	29000		4400	48	ug/Kg	20	☼	8270C	Total/NA
Biphenyl	560	J	4400	270	ug/Kg	20	☼	8270C	Total/NA
Carbazole	12000		4400	51	ug/Kg	20	☼	8270C	Total/NA
Chrysene	56000		4400	44	ug/Kg	20	☼	8270C	Total/NA
Dibenz(a,h)anthracene	2400	J	4400	51	ug/Kg	20	☼	8270C	Total/NA
Dibenzofuran	4000	J	4400	46	ug/Kg	20	☼	8270C	Total/NA
Fluoranthene	100000		4400	63	ug/Kg	20	☼	8270C	Total/NA
Fluorene	6700		4400	100	ug/Kg	20	☼	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	20000		4400	120	ug/Kg	20	☼	8270C	Total/NA

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-36 (0-5) (Continued)

Lab Sample ID: 480-23055-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	9300		4400	73	ug/Kg	20		✱	8270C	Total/NA
Phenanthrene	74000		4400	92	ug/Kg	20		✱	8270C	Total/NA
Pyrene	81000		4400	28	ug/Kg	20		✱	8270C	Total/NA
4,4'-DDE	11	J	43	6.4	ug/Kg	20		✱	8081A	Total/NA
4,4'-DDT	19	J	43	4.4	ug/Kg	20		✱	8081A	Total/NA
Endrin aldehyde	20	J	43	11	ug/Kg	20		✱	8081A	Total/NA
Aluminum	4540		12.0		mg/Kg	1		✱	6010B	Total/NA
Antimony	153		18.1		mg/Kg	1		✱	6010B	Total/NA
Arsenic	45.1		2.4		mg/Kg	1		✱	6010B	Total/NA
Barium	233		0.60		mg/Kg	1		✱	6010B	Total/NA
Beryllium	0.47		0.24		mg/Kg	1		✱	6010B	Total/NA
Cadmium	1.9		0.24		mg/Kg	1		✱	6010B	Total/NA
Calcium	31600		60.2		mg/Kg	1		✱	6010B	Total/NA
Chromium	33.0	B7	0.60		mg/Kg	1		✱	6010B	Total/NA
Cobalt	7.4		0.60		mg/Kg	1		✱	6010B	Total/NA
Copper	244		1.2		mg/Kg	1		✱	6010B	Total/NA
Iron	76800		12.0		mg/Kg	1		✱	6010B	Total/NA
Lead	9550		1.2		mg/Kg	1		✱	6010B	Total/NA
Magnesium	18100		24.1		mg/Kg	1		✱	6010B	Total/NA
Manganese	499		0.24		mg/Kg	1		✱	6010B	Total/NA
Nickel	35.7		6.0		mg/Kg	1		✱	6010B	Total/NA
Potassium	635		36.1		mg/Kg	1		✱	6010B	Total/NA
Vanadium	24.5		0.60		mg/Kg	1		✱	6010B	Total/NA
Zinc	485		2.4		mg/Kg	1		✱	6010B	Total/NA
Mercury	0.74		0.026		mg/Kg	1		✱	7471A	Total/NA

Client Sample ID: B-36 (1.5-2)

Lab Sample ID: 480-23055-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Lead	6490		1.2		mg/Kg	1		✱	6010B	Total/NA

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: TI-MW-02 (0-5)

Lab Sample ID: 480-23055-1

Date Collected: 07/24/12 11:30

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		3900	850	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2,4,6-Trichlorophenol	ND		3900	260	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2,4-Dichlorophenol	ND		3900	200	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2,4-Dimethylphenol	ND		3900	1000	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2,4-Dinitrophenol	ND		7600	1400	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2,4-Dinitrotoluene	ND		3900	600	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2,6-Dinitrotoluene	ND		3900	950	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2-Chloronaphthalene	ND		3900	260	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2-Chlorophenol	ND		3900	200	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2-Methylnaphthalene	ND		3900	47	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2-Methylphenol	ND		3900	120	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2-Nitroaniline	ND		7600	1200	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
2-Nitrophenol	ND		3900	180	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
3,3'-Dichlorobenzidine	ND		3900	3400	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
3-Nitroaniline	ND		7600	890	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
4,6-Dinitro-2-methylphenol	ND		7600	1300	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
4-Bromophenyl phenyl ether	ND		3900	1200	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
4-Chloro-3-methylphenol	ND		3900	160	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
4-Chloroaniline	ND		3900	1100	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
4-Chlorophenyl phenyl ether	ND		3900	83	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
4-Methylphenol	ND		7600	220	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
4-Nitroaniline	ND		7600	430	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
4-Nitrophenol	ND		7600	940	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Acenaphthene	ND		3900	46	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Acenaphthylene	ND		3900	32	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Acetophenone	ND		3900	200	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Anthracene	ND		3900	99	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Atrazine	ND		3900	170	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Benzaldehyde	ND		3900	430	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Benzo(a)anthracene	1500	J	3900	67	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Benzo(a)pyrene	2000	J	3900	93	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Benzo(b)fluoranthene	2800	J	3900	75	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Benzo(g,h,i)perylene	820	J	3900	47	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Benzo(k)fluoranthene	1200	J	3900	43	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Biphenyl	ND		3900	240	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
bis (2-chloroisopropyl) ether	ND		3900	410	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Bis(2-chloroethoxy)methane	ND		3900	210	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Bis(2-chloroethyl)ether	ND		3900	330	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Bis(2-ethylhexyl) phthalate	ND		3900	1200	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Butyl benzyl phthalate	ND		3900	1000	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Caprolactam	ND		3900	1700	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Carbazole	ND		3900	45	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Chrysene	1800	J	3900	39	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Dibenz(a,h)anthracene	ND		3900	46	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Dibenzofuran	ND		3900	40	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Diethyl phthalate	ND		3900	120	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Dimethyl phthalate	ND		3900	100	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Di-n-butyl phthalate	ND		3900	1300	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Di-n-octyl phthalate	ND		3900	91	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Fluoranthene	2300	J	3900	56	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Fluorene	ND		3900	89	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: TI-MW-02 (0-.5)

Lab Sample ID: 480-23055-1

Date Collected: 07/24/12 11:30

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		3900	190	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Hexachlorobutadiene	ND		3900	200	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Hexachlorocyclopentadiene	ND		3900	1200	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Hexachloroethane	ND		3900	300	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Indeno(1,2,3-cd)pyrene	790	J	3900	110	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Isophorone	ND		3900	190	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Naphthalene	ND		3900	65	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Nitrobenzene	ND		3900	170	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
N-Nitrosodi-n-propylamine	ND		3900	310	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
N-Nitrosodiphenylamine	ND		3900	210	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Pentachlorophenol	ND		7600	1300	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Phenanthrene	980	J	3900	81	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Phenol	ND		3900	410	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20
Pyrene	1900	J	3900	25	ug/Kg	☼	07/27/12 13:43	07/31/12 07:46	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	48		39 - 146	07/27/12 13:43	07/31/12 07:46	20
2-Fluorobiphenyl	71		37 - 120	07/27/12 13:43	07/31/12 07:46	20
2-Fluorophenol	45		18 - 120	07/27/12 13:43	07/31/12 07:46	20
Nitrobenzene-d5	49		34 - 132	07/27/12 13:43	07/31/12 07:46	20
Phenol-d5	47		11 - 120	07/27/12 13:43	07/31/12 07:46	20
p-Terphenyl-d14	99		65 - 153	07/27/12 13:43	07/31/12 07:46	20

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		96	19	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
4,4'-DDE	ND		96	14	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
4,4'-DDT	45	J	96	9.8	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Aldrin	ND		96	24	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
alpha-BHC	ND		96	17	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
alpha-Chlordane	ND		96	48	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
beta-BHC	ND		96	10	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
delta-BHC	ND		96	13	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Dieldrin	ND		96	23	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Endosulfan I	ND		96	12	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Endosulfan II	ND		96	17	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Endosulfan sulfate	ND		96	18	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Endrin	ND		96	13	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Endrin aldehyde	ND		96	25	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Endrin ketone	ND		96	24	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
gamma-BHC (Lindane)	ND		96	70	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
gamma-Chlordane	ND		96	31	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Heptachlor	ND		96	15	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Heptachlor epoxide	ND		96	25	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Methoxychlor	ND		96	13	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50
Toxaphene	ND		960	560	ug/Kg	☼	07/27/12 20:11	07/30/12 13:46	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	62 - 137	07/27/12 20:11	07/30/12 13:46	50
Tetrachloro-m-xylene	0	X	30 - 124	07/27/12 20:11	07/30/12 13:46	50

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: TI-MW-02 (0-.5)

Lab Sample ID: 480-23055-1

Date Collected: 07/24/12 11:30

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 84.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.000054	mg/Kg	☼	07/27/12 13:37	07/29/12 17:12	1
PCB-1221	ND		0.28	0.000054	mg/Kg	☼	07/27/12 13:37	07/29/12 17:12	1
PCB-1232	ND		0.28	0.000054	mg/Kg	☼	07/27/12 13:37	07/29/12 17:12	1
PCB-1242	ND		0.28	0.000054	mg/Kg	☼	07/27/12 13:37	07/29/12 17:12	1
PCB-1248	ND		0.28	0.000054	mg/Kg	☼	07/27/12 13:37	07/29/12 17:12	1
PCB-1254	ND		0.28	0.00013	mg/Kg	☼	07/27/12 13:37	07/29/12 17:12	1
PCB-1260	0.10	J	0.28	0.00013	mg/Kg	☼	07/27/12 13:37	07/29/12 17:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	92		36 - 182	07/27/12 13:37	07/29/12 17:12	1
Tetrachloro-m-xylene	126		24 - 172	07/27/12 13:37	07/29/12 17:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1520		11.5		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Antimony	90.7		17.3		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Arsenic	15.7		2.3		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Barium	276		0.58		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Beryllium	ND		0.23		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Cadmium	1.5		0.23		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Calcium	16600		57.5		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Chromium	16.5	B7	0.58		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Cobalt	2.6		0.58		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Copper	634		1.2		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Iron	26200		11.5		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Lead	10100		1.2		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Magnesium	6930		23.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Manganese	148		0.23		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Nickel	12.6		5.8		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Potassium	916		34.5		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Selenium	ND		4.6		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Silver	0.97		0.58		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Sodium	ND		161		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Thallium	ND		6.9		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Vanadium	8.2		0.58		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1
Zinc	190		2.3		mg/Kg	☼	07/26/12 10:00	07/26/12 16:15	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.0		0.12		mg/Kg	☼	07/27/12 11:40	07/27/12 16:03	5

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: TI-MW-02 (1-1.5)

Lab Sample ID: 480-23055-2

Date Collected: 07/24/12 11:40

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 85.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4570		1.2		mg/Kg	☼	07/26/12 10:00	07/26/12 16:17	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-35 (0-5)

Lab Sample ID: 480-23055-3

Date Collected: 07/24/12 12:15

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		4200	920	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2,4,6-Trichlorophenol	ND		4200	280	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2,4-Dichlorophenol	ND		4200	220	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2,4-Dimethylphenol	ND		4200	1100	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2,4-Dinitrophenol	ND		8200	1500	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2,4-Dinitrotoluene	ND		4200	650	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2,6-Dinitrotoluene	ND		4200	1000	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2-Chloronaphthalene	ND		4200	280	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2-Chlorophenol	ND		4200	210	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2-Methylnaphthalene	1700	J	4200	51	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2-Methylphenol	ND		4200	130	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2-Nitroaniline	ND		8200	1400	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
2-Nitrophenol	ND		4200	190	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
3,3'-Dichlorobenzidine	ND		4200	3700	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
3-Nitroaniline	ND		8200	970	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
4,6-Dinitro-2-methylphenol	ND		8200	1500	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
4-Bromophenyl phenyl ether	ND		4200	1300	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
4-Chloro-3-methylphenol	ND		4200	170	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
4-Chloroaniline	ND		4200	1200	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
4-Chlorophenyl phenyl ether	ND		4200	90	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
4-Methylphenol	ND		8200	230	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
4-Nitroaniline	ND		8200	470	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
4-Nitrophenol	ND		8200	1000	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Acenaphthene	7800		4200	50	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Acenaphthylene	ND		4200	34	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Acetophenone	ND		4200	220	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Anthracene	13000		4200	110	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Atrazine	ND		4200	190	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Benzaldehyde	ND		4200	460	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Benzo(a)anthracene	42000		4200	73	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Benzo(a)pyrene	46000		4200	100	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Benzo(b)fluoranthene	61000		4200	82	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Benzo(g,h,i)perylene	3400	J	4200	51	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Benzo(k)fluoranthene	22000		4200	46	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Biphenyl	400	J	4200	260	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
bis (2-chloroisopropyl) ether	ND		4200	440	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Bis(2-chloroethoxy)methane	ND		4200	230	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Bis(2-chloroethyl)ether	ND		4200	360	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Bis(2-ethylhexyl) phthalate	ND		4200	1400	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Butyl benzyl phthalate	ND		4200	1100	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Caprolactam	ND		4200	1800	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Carbazole	8900		4200	49	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Chrysene	37000		4200	42	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Dibenz(a,h)anthracene	3300	J	4200	50	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Dibenzofuran	3600	J	4200	44	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Diethyl phthalate	ND		4200	130	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Dimethyl phthalate	ND		4200	110	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Di-n-butyl phthalate	ND		4200	1500	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Di-n-octyl phthalate	ND		4200	99	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Fluoranthene	73000		4200	61	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Fluorene	5100		4200	97	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-35 (0-.5)

Lab Sample ID: 480-23055-3

Date Collected: 07/24/12 12:15

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		4200	210	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Hexachlorobutadiene	ND		4200	220	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Hexachlorocyclopentadiene	ND		4200	1300	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Hexachloroethane	ND		4200	330	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Indeno(1,2,3-cd)pyrene	16000		4200	120	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Isophorone	ND		4200	210	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Naphthalene	7300		4200	70	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Nitrobenzene	ND		4200	190	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
N-Nitrosodi-n-propylamine	ND		4200	330	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
N-Nitrosodiphenylamine	ND		4200	230	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Pentachlorophenol	ND		8200	1400	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Phenanthrene	52000		4200	88	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Phenol	ND		4200	440	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20
Pyrene	59000		4200	27	ug/Kg	☼	07/27/12 13:43	07/31/12 08:09	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	70		39 - 146	07/27/12 13:43	07/31/12 08:09	20
2-Fluorobiphenyl	93		37 - 120	07/27/12 13:43	07/31/12 08:09	20
2-Fluorophenol	55		18 - 120	07/27/12 13:43	07/31/12 08:09	20
Nitrobenzene-d5	62		34 - 132	07/27/12 13:43	07/31/12 08:09	20
Phenol-d5	62		11 - 120	07/27/12 13:43	07/31/12 08:09	20
p-Terphenyl-d14	114		65 - 153	07/27/12 13:43	07/31/12 08:09	20

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		100	20	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
4,4'-DDE	30	J	100	16	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
4,4'-DDT	34	J	100	11	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Aldrin	ND		100	26	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
alpha-BHC	ND		100	19	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
alpha-Chlordane	ND		100	52	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
beta-BHC	ND		100	11	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
delta-BHC	ND		100	14	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Dieldrin	ND		100	25	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Endosulfan I	ND		100	13	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Endosulfan II	ND		100	19	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Endosulfan sulfate	ND		100	19	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Endrin	ND		100	14	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Endrin aldehyde	ND		100	27	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Endrin ketone	ND		100	26	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
gamma-BHC (Lindane)	ND		100	75	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
gamma-Chlordane	ND		100	33	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Heptachlor	ND		100	16	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Heptachlor epoxide	ND		100	27	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Methoxychlor	ND		100	14	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50
Toxaphene	ND		1000	600	ug/Kg	☼	07/27/12 20:11	07/30/12 14:27	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	62 - 137	07/27/12 20:11	07/30/12 14:27	50
Tetrachloro-m-xylene	0	X	30 - 124	07/27/12 20:11	07/30/12 14:27	50

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-35 (0-.5)

Lab Sample ID: 480-23055-3

Date Collected: 07/24/12 12:15

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 78.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.000056	mg/Kg	☼	07/27/12 13:37	07/29/12 17:28	1
PCB-1221	ND		0.28	0.000056	mg/Kg	☼	07/27/12 13:37	07/29/12 17:28	1
PCB-1232	ND		0.28	0.000056	mg/Kg	☼	07/27/12 13:37	07/29/12 17:28	1
PCB-1242	ND		0.28	0.000056	mg/Kg	☼	07/27/12 13:37	07/29/12 17:28	1
PCB-1248	ND		0.28	0.000056	mg/Kg	☼	07/27/12 13:37	07/29/12 17:28	1
PCB-1254	ND		0.28	0.00013	mg/Kg	☼	07/27/12 13:37	07/29/12 17:28	1
PCB-1260	ND		0.28	0.00013	mg/Kg	☼	07/27/12 13:37	07/29/12 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	90		36 - 182	07/27/12 13:37	07/29/12 17:28	1
Tetrachloro-m-xylene	138		24 - 172	07/27/12 13:37	07/29/12 17:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5430		14.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Antimony	86.6		21.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Arsenic	19.7		2.8		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Barium	227		0.70		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Beryllium	0.59		0.28		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Cadmium	4.3		0.28		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Calcium	11200		70.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Chromium	21.4	B7	0.70		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Cobalt	7.2		0.70		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Copper	214		1.4		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Iron	32600		14.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Lead	4390		1.4		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Magnesium	2620		28.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Manganese	328		0.28		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Nickel	19.1		7.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Potassium	800		42.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Selenium	ND		5.6		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Silver	ND		0.70		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Sodium	ND		196		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Thallium	ND		8.4		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Vanadium	16.8		0.70		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1
Zinc	752		2.8		mg/Kg	☼	07/26/12 10:00	07/26/12 16:19	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.7		0.053		mg/Kg	☼	07/27/12 11:40	07/27/12 16:05	2

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-35 (1.5-2)

Lab Sample ID: 480-23055-4

Date Collected: 07/24/12 12:20

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 80.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	431		1.3		mg/Kg	☼	07/26/12 10:00	07/26/12 16:26	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-36 (0-5)

Lab Sample ID: 480-23055-5

Date Collected: 07/24/12 13:45

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		4400	950	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2,4,6-Trichlorophenol	ND		4400	290	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2,4-Dichlorophenol	ND		4400	230	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2,4-Dimethylphenol	ND		4400	1200	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2,4-Dinitrophenol	ND		8600	1500	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2,4-Dinitrotoluene	ND		4400	680	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2,6-Dinitrotoluene	ND		4400	1100	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2-Chloronaphthalene	ND		4400	290	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2-Chlorophenol	ND		4400	220	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2-Methylnaphthalene	3000	J	4400	53	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2-Methylphenol	ND		4400	130	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2-Nitroaniline	ND		8600	1400	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
2-Nitrophenol	ND		4400	200	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
3,3'-Dichlorobenzidine	ND		4400	3800	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
3-Nitroaniline	ND		8600	1000	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
4,6-Dinitro-2-methylphenol	ND		8600	1500	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
4-Bromophenyl phenyl ether	ND		4400	1400	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
4-Chloro-3-methylphenol	ND		4400	180	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
4-Chloroaniline	ND		4400	1300	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
4-Chlorophenyl phenyl ether	ND		4400	93	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
4-Methylphenol	ND		8600	240	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
4-Nitroaniline	ND		8600	490	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
4-Nitrophenol	ND		8600	1100	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Acenaphthene	7300		4400	51	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Acenaphthylene	3700	J	4400	36	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Acetophenone	ND		4400	220	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Anthracene	17000		4400	110	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Atrazine	ND		4400	190	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Benzaldehyde	ND		4400	480	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Benzo(a)anthracene	57000		4400	76	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Benzo(a)pyrene	59000		4400	110	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Benzo(b)fluoranthene	84000		4400	85	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Benzo(g,h,i)perylene	16000		4400	53	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Benzo(k)fluoranthene	29000		4400	48	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Biphenyl	560	J	4400	270	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
bis (2-chloroisopropyl) ether	ND		4400	460	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Bis(2-chloroethoxy)methane	ND		4400	240	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Bis(2-chloroethyl)ether	ND		4400	380	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Bis(2-ethylhexyl) phthalate	ND		4400	1400	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Butyl benzyl phthalate	ND		4400	1200	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Caprolactam	ND		4400	1900	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Carbazole	12000		4400	51	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Chrysene	56000		4400	44	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Dibenz(a,h)anthracene	2400	J	4400	51	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Dibenzofuran	4000	J	4400	46	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Diethyl phthalate	ND		4400	130	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Dimethyl phthalate	ND		4400	110	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Di-n-butyl phthalate	ND		4400	1500	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Di-n-octyl phthalate	ND		4400	100	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Fluoranthene	100000		4400	63	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Fluorene	6700		4400	100	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-36 (0-.5)

Lab Sample ID: 480-23055-5

Date Collected: 07/24/12 13:45

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		4400	220	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Hexachlorobutadiene	ND		4400	220	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Hexachlorocyclopentadiene	ND		4400	1300	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Hexachloroethane	ND		4400	340	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Indeno(1,2,3-cd)pyrene	20000		4400	120	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Isophorone	ND		4400	220	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Naphthalene	9300		4400	73	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Nitrobenzene	ND		4400	190	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
N-Nitrosodi-n-propylamine	ND		4400	350	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
N-Nitrosodiphenylamine	ND		4400	240	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Pentachlorophenol	ND		8600	1500	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Phenanthrene	74000		4400	92	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Phenol	ND		4400	460	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20
Pyrene	81000		4400	28	ug/Kg	☼	07/27/12 13:43	07/31/12 08:33	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	77		39 - 146	07/27/12 13:43	07/31/12 08:33	20
2-Fluorobiphenyl	98		37 - 120	07/27/12 13:43	07/31/12 08:33	20
2-Fluorophenol	63		18 - 120	07/27/12 13:43	07/31/12 08:33	20
Nitrobenzene-d5	60		34 - 132	07/27/12 13:43	07/31/12 08:33	20
Phenol-d5	65		11 - 120	07/27/12 13:43	07/31/12 08:33	20
p-Terphenyl-d14	111		65 - 153	07/27/12 13:43	07/31/12 08:33	20

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		43	8.3	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
4,4'-DDE	11	J	43	6.4	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
4,4'-DDT	19	J	43	4.4	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Aldrin	ND		43	11	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
alpha-BHC	ND		43	7.7	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
alpha-Chlordane	ND		43	21	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
beta-BHC	ND		43	4.6	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
delta-BHC	ND		43	5.7	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Dieldrin	ND		43	10	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Endosulfan I	ND		43	5.4	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Endosulfan II	ND		43	7.7	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Endosulfan sulfate	ND		43	8.0	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Endrin	ND		43	5.9	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Endrin aldehyde	20	J	43	11	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Endrin ketone	ND		43	11	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
gamma-BHC (Lindane)	ND		43	31	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
gamma-Chlordane	ND		43	14	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Heptachlor	ND		43	6.7	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Heptachlor epoxide	ND		43	11	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Methoxychlor	ND		43	5.9	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20
Toxaphene	ND		430	250	ug/Kg	☼	07/27/12 09:03	07/30/12 21:17	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	62 - 137	07/27/12 09:03	07/30/12 21:17	20
Tetrachloro-m-xylene	0	X	30 - 124	07/27/12 09:03	07/30/12 21:17	20

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-36 (0-.5)

Lab Sample ID: 480-23055-5

Date Collected: 07/24/12 13:45

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 76.5

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.000046	mg/Kg	☼	07/27/12 13:37	07/29/12 17:43	1
PCB-1221	ND		0.24	0.000046	mg/Kg	☼	07/27/12 13:37	07/29/12 17:43	1
PCB-1232	ND		0.24	0.000046	mg/Kg	☼	07/27/12 13:37	07/29/12 17:43	1
PCB-1242	ND		0.24	0.000046	mg/Kg	☼	07/27/12 13:37	07/29/12 17:43	1
PCB-1248	ND		0.24	0.000046	mg/Kg	☼	07/27/12 13:37	07/29/12 17:43	1
PCB-1254	ND		0.24	0.00011	mg/Kg	☼	07/27/12 13:37	07/29/12 17:43	1
PCB-1260	ND		0.24	0.00011	mg/Kg	☼	07/27/12 13:37	07/29/12 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	87		36 - 182	07/27/12 13:37	07/29/12 17:43	1
Tetrachloro-m-xylene	120		24 - 172	07/27/12 13:37	07/29/12 17:43	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4540		12.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Antimony	153		18.1		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Arsenic	45.1		2.4		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Barium	233		0.60		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Beryllium	0.47		0.24		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Cadmium	1.9		0.24		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Calcium	31600		60.2		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Chromium	33.0	B7	0.60		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Cobalt	7.4		0.60		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Copper	244		1.2		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Iron	76800		12.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Lead	9550		1.2		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Magnesium	18100		24.1		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Manganese	499		0.24		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Nickel	35.7		6.0		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Potassium	635		36.1		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Selenium	ND		4.8		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Silver	ND		0.60		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Sodium	ND		169		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Thallium	ND		7.2		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Vanadium	24.5		0.60		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1
Zinc	485		2.4		mg/Kg	☼	07/26/12 10:00	07/26/12 16:28	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.74		0.026		mg/Kg	☼	07/27/12 11:40	07/27/12 15:21	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-36 (1.5-2)

Lab Sample ID: 480-23055-6

Date Collected: 07/24/12 13:50

Matrix: Solid

Date Received: 07/25/12 15:25

Percent Solids: 82.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6490		1.2		mg/Kg	☼	07/26/12 10:00	07/26/12 16:39	1

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (39-146)	FBP (37-120)	2FP (18-120)	NBZ (34-132)	PHL (11-120)	TPH (65-153)
480-23055-1	TI-MW-02 (0-.5)	48	71	45	49	47	99
480-23055-3	B-35 (0-.5)	70	93	55	62	62	114
480-23055-5	B-36 (0-.5)	77	98	63	60	65	111
LCS 480-74211/2-A	Lab Control Sample	104	91	82	95	92	119
MB 480-74211/1-A	Method Blank	92	73	42	80	30	99
Surrogate Legend							
TBP = 2,4,6-Tribromophenol							
FBP = 2-Fluorobiphenyl							
2FP = 2-Fluorophenol							
NBZ = Nitrobenzene-d5							
PHL = Phenol-d5							
TPH = p-Terphenyl-d14							

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB2 (62-137)	TCX2 (30-124)
480-23055-1	TI-MW-02 (0-.5)	0 X	0 X
480-23055-3	B-35 (0-.5)	0 X	0 X
480-23055-5	B-36 (0-.5)	0 X	0 X
LCS 480-74269/2-A	Lab Control Sample	98	73
MB 480-74269/1-A	Method Blank	98	90
Surrogate Legend			
DCB = DCB Decachlorobiphenyl			
TCX = Tetrachloro-m-xylene			

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (36-182)	TCX1 (24-172)
480-23055-1	TI-MW-02 (0-.5)	92	126
480-23055-3	B-35 (0-.5)	90	138
480-23055-5	B-36 (0-.5)	87	120
Surrogate Legend			
DCB = DCB Decachlorobiphenyl			
TCX = Tetrachloro-m-xylene			

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

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

Lab Sample ID: MB 480-74211/1-A

Matrix: Solid

Analysis Batch: 74551

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	36	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2,4-Dichlorophenol	ND		170	8.7	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2,4-Dimethylphenol	ND		170	45	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2,4-Dinitrophenol	ND		320	58	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2,6-Dinitrotoluene	ND		170	40	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2-Chloronaphthalene	ND		170	11	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2-Chlorophenol	ND		170	8.4	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2-Methylnaphthalene	ND		170	2.0	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2-Methylphenol	ND		170	5.1	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2-Nitroaniline	ND		320	53	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
2-Nitrophenol	ND		170	7.5	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
3,3'-Dichlorobenzidine	ND		170	140	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
3-Nitroaniline	ND		320	38	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
4,6-Dinitro-2-methylphenol	ND		320	57	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
4-Bromophenyl phenyl ether	ND		170	52	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
4-Chloro-3-methylphenol	ND		170	6.8	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
4-Chloroaniline	ND		170	48	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
4-Chlorophenyl phenyl ether	ND		170	3.5	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
4-Methylphenol	ND		320	9.2	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
4-Nitroaniline	ND		320	18	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
4-Nitrophenol	ND		320	40	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Acenaphthene	ND		170	1.9	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Acenaphthylene	ND		170	1.3	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Acetophenone	ND		170	8.5	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Anthracene	ND		170	4.2	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Atrazine	ND		170	7.3	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Benzaldehyde	ND		170	18	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Benzo(a)anthracene	ND		170	2.8	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Benzo(b)fluoranthene	ND		170	3.2	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Benzo(k)fluoranthene	ND		170	1.8	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Biphenyl	ND		170	10	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
bis (2-chloroisopropyl) ether	ND		170	17	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Bis(2-chloroethoxy)methane	ND		170	9.0	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Bis(2-chloroethyl)ether	ND		170	14	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Bis(2-ethylhexyl) phthalate	ND		170	53	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Butyl benzyl phthalate	ND		170	44	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Caprolactam	ND		170	71	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Carbazole	ND		170	1.9	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Chrysene	ND		170	1.6	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Dibenz(a,h)anthracene	ND		170	1.9	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Dibenzofuran	ND		170	1.7	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Diethyl phthalate	ND		170	5.0	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Dimethyl phthalate	ND		170	4.3	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Di-n-butyl phthalate	ND		170	57	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Di-n-octyl phthalate	ND		170	3.9	ug/Kg		07/27/12 13:43	07/31/12 12:58	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

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

Lab Sample ID: MB 480-74211/1-A

Matrix: Solid

Analysis Batch: 74551

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		170	2.4	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Fluorene	ND		170	3.8	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Hexachlorobenzene	ND		170	8.2	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Hexachlorobutadiene	ND		170	8.4	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Hexachlorocyclopentadiene	ND		170	50	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Hexachloroethane	ND		170	13	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Isophorone	ND		170	8.2	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Naphthalene	ND		170	2.7	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Nitrobenzene	ND		170	7.3	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
N-Nitrosodiphenylamine	ND		170	9.0	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Pentachlorophenol	ND		320	57	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Phenanthrene	ND		170	3.5	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Phenol	ND		170	17	ug/Kg		07/27/12 13:43	07/31/12 12:58	1
Pyrene	ND		170	1.1	ug/Kg		07/27/12 13:43	07/31/12 12:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	92		39 - 146	07/27/12 13:43	07/31/12 12:58	1
2-Fluorobiphenyl	73		37 - 120	07/27/12 13:43	07/31/12 12:58	1
2-Fluorophenol	42		18 - 120	07/27/12 13:43	07/31/12 12:58	1
Nitrobenzene-d5	80		34 - 132	07/27/12 13:43	07/31/12 12:58	1
Phenol-d5	30		11 - 120	07/27/12 13:43	07/31/12 12:58	1
p-Terphenyl-d14	99		65 - 153	07/27/12 13:43	07/31/12 12:58	1

Lab Sample ID: LCS 480-74211/2-A

Matrix: Solid

Analysis Batch: 74414

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	3240	3430		ug/Kg		106	55 - 125
2-Chlorophenol	3240	2840		ug/Kg		88	38 - 120
4-Chloro-3-methylphenol	3240	3500		ug/Kg		108	49 - 125
4-Nitrophenol	3240	3110		ug/Kg		96	43 - 137
Acenaphthene	3240	3190		ug/Kg		99	53 - 120
Bis(2-ethylhexyl) phthalate	3240	3690		ug/Kg		114	61 - 133
Fluorene	3240	3310		ug/Kg		102	63 - 126
Hexachloroethane	3240	2730		ug/Kg		84	41 - 120
N-Nitrosodi-n-propylamine	3240	3270		ug/Kg		101	46 - 120
Pentachlorophenol	3240	3020		ug/Kg		93	33 - 136
Phenol	3240	3000		ug/Kg		93	36 - 120
Pyrene	3240	3270		ug/Kg		101	51 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	104		39 - 146
2-Fluorobiphenyl	91		37 - 120
2-Fluorophenol	82		18 - 120
Nitrobenzene-d5	95		34 - 132
Phenol-d5	92		11 - 120

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

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

Lab Sample ID: LCS 480-74211/2-A

Matrix: Solid

Analysis Batch: 74414

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74211

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl-d14	119		65 - 153

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-74269/1-A

Matrix: Solid

Analysis Batch: 74369

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.6	0.32	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
4,4'-DDE	ND		1.6	0.25	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
4,4'-DDT	ND		1.6	0.17	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Aldrin	ND		1.6	0.40	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
alpha-BHC	ND		1.6	0.29	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
alpha-Chlordane	ND		1.6	0.81	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
beta-BHC	ND		1.6	0.18	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
delta-BHC	ND		1.6	0.22	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Dieldrin	ND		1.6	0.39	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Endosulfan I	ND		1.6	0.21	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Endosulfan II	ND		1.6	0.29	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Endosulfan sulfate	ND		1.6	0.31	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Endrin	ND		1.6	0.23	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Endrin aldehyde	ND		1.6	0.42	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Endrin ketone	ND		1.6	0.40	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
gamma-BHC (Lindane)	ND		1.6	1.2	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
gamma-Chlordane	ND		1.6	0.52	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Heptachlor	ND		1.6	0.26	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Heptachlor epoxide	ND		1.6	0.42	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Methoxychlor	ND		1.6	0.23	ug/Kg		07/27/12 20:11	07/30/12 09:39	1
Toxaphene	ND		16	9.5	ug/Kg		07/27/12 20:11	07/30/12 09:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	98		62 - 137	07/27/12 20:11	07/30/12 09:39	1
Tetrachloro-m-xylene	90		30 - 124	07/27/12 20:11	07/30/12 09:39	1

Lab Sample ID: LCS 480-74269/2-A

Matrix: Solid

Analysis Batch: 74369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.6	15.3		ug/Kg		92	45 - 129
4,4'-DDE	16.6	14.8		ug/Kg		89	49 - 120
4,4'-DDT	16.6	15.0		ug/Kg		90	47 - 145
Aldrin	16.6	14.3		ug/Kg		86	35 - 120
alpha-BHC	16.6	13.2		ug/Kg		79	49 - 120
alpha-Chlordane	16.6	15.1		ug/Kg		91	44 - 127
beta-BHC	16.6	14.3		ug/Kg		86	58 - 123
delta-BHC	16.6	14.4		ug/Kg		87	45 - 123
Dieldrin	16.6	14.9		ug/Kg		89	53 - 128

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 480-74269/2-A

Matrix: Solid

Analysis Batch: 74369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Endosulfan I	16.6	15.1		ug/Kg		91	29 - 125
Endosulfan II	16.6	14.8		ug/Kg		89	56 - 127
Endosulfan sulfate	16.6	11.0		ug/Kg		66	53 - 135
Endrin	16.6	15.4		ug/Kg		92	58 - 129
Endrin aldehyde	16.6	10.4		ug/Kg		62	39 - 133
Endrin ketone	16.6	13.7		ug/Kg		83	61 - 133
gamma-BHC (Lindane)	16.6	13.6		ug/Kg		82	50 - 120
gamma-Chlordane	16.6	14.3		ug/Kg		86	54 - 124
Heptachlor	16.6	14.5		ug/Kg		87	49 - 122
Heptachlor epoxide	16.6	14.7		ug/Kg		89	47 - 128
Methoxychlor	16.6	15.5		ug/Kg		93	61 - 146

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	98		62 - 137
Tetrachloro-m-xylene	73		30 - 124

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-73959/1-A

Matrix: Solid

Analysis Batch: 74117

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 73959

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10.2		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Antimony	ND		15.2		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Arsenic	ND		2.0		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Barium	ND		0.51		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Beryllium	ND		0.20		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Cadmium	ND		0.20		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Calcium	ND		50.8		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Chromium	0.524		0.51		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Cobalt	ND		0.51		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Copper	ND		1.0		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Iron	ND		10.2		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Lead	ND		1.0		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Magnesium	ND		20.3		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Manganese	ND		0.20		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Nickel	ND		5.1		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Potassium	ND		30.5		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Selenium	ND		4.1		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Silver	ND		0.51		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Sodium	ND		142		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Thallium	ND		6.1		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Vanadium	ND		0.51		mg/Kg		07/26/12 10:00	07/26/12 16:11	1
Zinc	ND		2.0		mg/Kg		07/26/12 10:00	07/26/12 16:11	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

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

Lab Sample ID: LCSSRM 480-73959/2-A

Matrix: Solid

Analysis Batch: 74117

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 73959

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8410	6572		mg/Kg		78.2	40.6 - 159.5
Antimony	93.4	71.07		mg/Kg		76.1	24.8 - 272.2
Arsenic	94.6	93.64		mg/Kg		99.0	69.2 - 131.2
Barium	167	161.4		mg/Kg		96.6	72.5 - 126.9
Beryllium	57.6	56.72		mg/Kg		98.4	73.3 - 126.7
Cadmium	60.5	61.19		mg/Kg		101.1	73.2 - 126.8
Calcium	6140	5833		mg/Kg		94.9	73.9 - 126.4
Chromium	70.4	67.82		mg/Kg		96.3	68.5 - 131.5
Cobalt	102	107.9		mg/Kg		105.7	74.5 - 125.5
Copper	79.6	77.95		mg/Kg		97.9	73.6 - 125.6
Iron	12500	9902		mg/Kg		79.2	31.0 - 168.8
Lead	91.9	92.61		mg/Kg		100.8	70.3 - 129.6
Magnesium	2580	2277		mg/Kg		88.2	63.6 - 136.0
Manganese	283	260.3		mg/Kg		91.9	73.9 - 125.4
Nickel	57.6	59.66		mg/Kg		103.5	70.0 - 130.2
Potassium	2490	2306		mg/Kg		92.5	60.6 - 139.0
Selenium	86.5	87.80		mg/Kg		101.6	64.0 - 136.6
Silver	34.4	33.71		mg/Kg		97.9	65.7 - 134.6
Sodium	215	200.5		mg/Kg		93.2	26.7 - 174.0
Thallium	120	124.0		mg/Kg		103.3	67.3 - 131.7
Vanadium	57.0	53.37		mg/Kg		93.6	53.7 - 146.1
Zinc	140	133.0		mg/Kg		95.0	67.4 - 132.9

Lab Sample ID: 480-23055-5 MS

Matrix: Solid

Analysis Batch: 74117

Client Sample ID: B-36 (0-.5)

Prep Type: Total/NA

Prep Batch: 73959

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	4540		2770	8686	F	mg/Kg	☼	150	75 - 125
Antimony	153		55.2	215.0		mg/Kg	☼	112	75 - 125
Arsenic	45.1		55.2	99.77		mg/Kg	☼	99	75 - 125
Barium	233		55.2	253.7	4	mg/Kg	☼	37	75 - 125
Beryllium	0.47		55.2	52.79		mg/Kg	☼	95	75 - 125

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

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

Lab Sample ID: 480-23055-5 MS

Matrix: Solid

Analysis Batch: 74117

Client Sample ID: B-36 (0-.5)

Prep Type: Total/NA

Prep Batch: 73959

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	1.9		55.2	55.37		mg/Kg	✱	97	75 - 125
Calcium	31600		2760	10580	4	mg/Kg	✱	-762	75 - 125
Chromium	33.0	B7	55.2	77.33		mg/Kg	✱	80	75 - 125
Cobalt	7.4		55.2	64.07		mg/Kg	✱	103	75 - 125
Copper	244		55.2	323.5	4	mg/Kg	✱	144	75 - 125
Iron	76800		2760	59840	4	mg/Kg	✱	-615	75 - 125
Lead	9550		55.2	9317	4	mg/Kg	✱	-419	75 - 125
Magnesium	18100		2760	6161	4	mg/Kg	✱	-434	75 - 125
Manganese	499		55.2	282.7	4	mg/Kg	✱	-391	75 - 125
Nickel	35.7		55.2	81.38		mg/Kg	✱	83	75 - 125
Potassium	635		2770	3711		mg/Kg	✱	111	75 - 125
Selenium	ND		55.2	52.31		mg/Kg	✱	92	75 - 125
Silver	ND		13.8	14.57		mg/Kg	✱	103	75 - 125
Sodium	ND		2770	2939		mg/Kg	✱	102	75 - 125
Thallium	ND		55.2	52.76		mg/Kg	✱	95	75 - 125
Vanadium	24.5		55.2	78.24		mg/Kg	✱	97	75 - 125
Zinc	485		55.2	328.9	4	mg/Kg	✱	-283	75 - 125

Lab Sample ID: 480-23055-5 MSD

Matrix: Solid

Analysis Batch: 74117

Client Sample ID: B-36 (0-.5)

Prep Type: Total/NA

Prep Batch: 73959

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	4540		2420	8756	F	mg/Kg	✱	174	75 - 125	1	20
Antimony	153		48.4	228.3	F	mg/Kg	✱	156	75 - 125	6	20
Arsenic	45.1		48.4	87.86		mg/Kg	✱	88	75 - 125	13	20
Barium	233		48.4	338.9	4 F	mg/Kg	✱	218	75 - 125	29	20
Beryllium	0.47		48.4	47.50		mg/Kg	✱	97	75 - 125	11	20
Cadmium	1.9		48.4	50.03		mg/Kg	✱	99	75 - 125	10	20
Calcium	31600		2420	21880	4 F	mg/Kg	✱	-403	75 - 125	70	20
Chromium	33.0	B7	48.4	78.90		mg/Kg	✱	95	75 - 125	2	20
Cobalt	7.4		48.4	59.89		mg/Kg	✱	108	75 - 125	7	20
Copper	244		48.4	280.3	4	mg/Kg	✱	76	75 - 125	14	20
Iron	76800		2420	67740	4	mg/Kg	✱	-376	75 - 125	12	20
Lead	9550		48.4	15180	4 F	mg/Kg	✱	11624	75 - 125	48	20
Magnesium	18100		2420	12560	4 F	mg/Kg	✱	-231	75 - 125	68	20
Manganese	499		48.4	392.2	4 F	mg/Kg	✱	-221	75 - 125	32	20
Nickel	35.7		48.4	85.93		mg/Kg	✱	104	75 - 125	5	20
Potassium	635		2420	3468		mg/Kg	✱	117	75 - 125	7	20
Selenium	ND		48.4	47.08		mg/Kg	✱	94	75 - 125	11	20
Silver	ND		12.1	13.07		mg/Kg	✱	105	75 - 125	11	20
Sodium	ND		2420	2605		mg/Kg	✱	102	75 - 125	12	20
Thallium	ND		48.4	47.11		mg/Kg	✱	97	75 - 125	11	20
Vanadium	24.5		48.4	73.88		mg/Kg	✱	102	75 - 125	6	20
Zinc	485		48.4	404.8	4 F	mg/Kg	✱	-167	75 - 125	21	20

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-74160/1-A

Matrix: Solid

Analysis Batch: 74254

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		07/27/12 11:40	07/27/12 14:36	1

Lab Sample ID: LCSSRM 480-74160/2-A

Matrix: Solid

Analysis Batch: 74254

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74160

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	3.33		mg/Kg		88.4	71.6 - 128. 4

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

GC/MS Semi VOA

Prep Batch: 74211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	3550B	
480-23055-3	B-35 (0-.5)	Total/NA	Solid	3550B	
480-23055-5	B-36 (0-.5)	Total/NA	Solid	3550B	
LCS 480-74211/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-74211/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 74414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	8270C	74211
480-23055-3	B-35 (0-.5)	Total/NA	Solid	8270C	74211
480-23055-5	B-36 (0-.5)	Total/NA	Solid	8270C	74211
LCS 480-74211/2-A	Lab Control Sample	Total/NA	Solid	8270C	74211

Analysis Batch: 74551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-74211/1-A	Method Blank	Total/NA	Solid	8270C	74211

GC Semi VOA

Prep Batch: 74148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-5	B-36 (0-.5)	Total/NA	Solid	3550B	

Prep Batch: 74210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	3550B	
480-23055-3	B-35 (0-.5)	Total/NA	Solid	3550B	
480-23055-5	B-36 (0-.5)	Total/NA	Solid	3550B	

Prep Batch: 74269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	3550B	
480-23055-3	B-35 (0-.5)	Total/NA	Solid	3550B	
LCS 480-74269/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-74269/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 74325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	8082	74210
480-23055-3	B-35 (0-.5)	Total/NA	Solid	8082	74210
480-23055-5	B-36 (0-.5)	Total/NA	Solid	8082	74210

Analysis Batch: 74369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	8081A	74269
480-23055-3	B-35 (0-.5)	Total/NA	Solid	8081A	74269
480-23055-5	B-36 (0-.5)	Total/NA	Solid	8081A	74148
LCS 480-74269/2-A	Lab Control Sample	Total/NA	Solid	8081A	74269
MB 480-74269/1-A	Method Blank	Total/NA	Solid	8081A	74269

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Metals

Prep Batch: 73959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	3050B	
480-23055-2	TI-MW-02 (1-1.5)	Total/NA	Solid	3050B	
480-23055-3	B-35 (0-.5)	Total/NA	Solid	3050B	
480-23055-4	B-35 (1.5-2)	Total/NA	Solid	3050B	
480-23055-5	B-36 (0-.5)	Total/NA	Solid	3050B	
480-23055-5 MS	B-36 (0-.5)	Total/NA	Solid	3050B	
480-23055-5 MSD	B-36 (0-.5)	Total/NA	Solid	3050B	
480-23055-6	B-36 (1.5-2)	Total/NA	Solid	3050B	
LCSSRM 480-73959/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-73959/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 74117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	6010B	73959
480-23055-2	TI-MW-02 (1-1.5)	Total/NA	Solid	6010B	73959
480-23055-3	B-35 (0-.5)	Total/NA	Solid	6010B	73959
480-23055-4	B-35 (1.5-2)	Total/NA	Solid	6010B	73959
480-23055-5	B-36 (0-.5)	Total/NA	Solid	6010B	73959
480-23055-5 MS	B-36 (0-.5)	Total/NA	Solid	6010B	73959
480-23055-5 MSD	B-36 (0-.5)	Total/NA	Solid	6010B	73959
480-23055-6	B-36 (1.5-2)	Total/NA	Solid	6010B	73959
LCSSRM 480-73959/2-A	Lab Control Sample	Total/NA	Solid	6010B	73959
MB 480-73959/1-A	Method Blank	Total/NA	Solid	6010B	73959

Prep Batch: 74160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	7471A	
480-23055-3	B-35 (0-.5)	Total/NA	Solid	7471A	
480-23055-5	B-36 (0-.5)	Total/NA	Solid	7471A	
LCSSRM 480-74160/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-74160/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 74254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	7471A	74160
480-23055-3	B-35 (0-.5)	Total/NA	Solid	7471A	74160
480-23055-5	B-36 (0-.5)	Total/NA	Solid	7471A	74160
LCSSRM 480-74160/2-A	Lab Control Sample	Total/NA	Solid	7471A	74160
MB 480-74160/1-A	Method Blank	Total/NA	Solid	7471A	74160

General Chemistry

Analysis Batch: 74000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23055-1	TI-MW-02 (0-.5)	Total/NA	Solid	Moisture	
480-23055-2	TI-MW-02 (1-1.5)	Total/NA	Solid	Moisture	
480-23055-3	B-35 (0-.5)	Total/NA	Solid	Moisture	
480-23055-4	B-35 (1.5-2)	Total/NA	Solid	Moisture	
480-23055-5	B-36 (0-.5)	Total/NA	Solid	Moisture	
480-23055-6	B-36 (1.5-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: TI-MW-02 (0-.5)

Date Collected: 07/24/12 11:30

Date Received: 07/25/12 15:25

Lab Sample ID: 480-23055-1

Matrix: Solid

Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			74211	07/27/12 13:43	DE	TAL BUF
Total/NA	Analysis	8270C		20	74414	07/31/12 07:46	RMM	TAL BUF
Total/NA	Prep	3550B			74210	07/27/12 13:37	DE	TAL BUF
Total/NA	Analysis	8082		1	74325	07/29/12 17:12	JM	TAL BUF
Total/NA	Prep	3550B			74269	07/27/12 20:11	MRB	TAL BUF
Total/NA	Analysis	8081A		50	74369	07/30/12 13:46	DB	TAL BUF
Total/NA	Prep	3050B			73959	07/26/12 10:00	SS	TAL BUF
Total/NA	Analysis	6010B		1	74117	07/26/12 16:15	LH	TAL BUF
Total/NA	Prep	7471A			74160	07/27/12 11:40	MM	TAL BUF
Total/NA	Analysis	7471A		5	74254	07/27/12 16:03	MM	TAL BUF
Total/NA	Analysis	Moisture		1	74000	07/26/12 11:47	ZLR	TAL BUF

Client Sample ID: TI-MW-02 (1-1.5)

Date Collected: 07/24/12 11:40

Date Received: 07/25/12 15:25

Lab Sample ID: 480-23055-2

Matrix: Solid

Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			73959	07/26/12 10:00	SS	TAL BUF
Total/NA	Analysis	6010B		1	74117	07/26/12 16:17	LH	TAL BUF
Total/NA	Analysis	Moisture		1	74000	07/26/12 11:47	ZLR	TAL BUF

Client Sample ID: B-35 (0-.5)

Date Collected: 07/24/12 12:15

Date Received: 07/25/12 15:25

Lab Sample ID: 480-23055-3

Matrix: Solid

Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			74211	07/27/12 13:43	DE	TAL BUF
Total/NA	Analysis	8270C		20	74414	07/31/12 08:09	RMM	TAL BUF
Total/NA	Prep	3550B			74210	07/27/12 13:37	DE	TAL BUF
Total/NA	Analysis	8082		1	74325	07/29/12 17:28	JM	TAL BUF
Total/NA	Prep	3550B			74269	07/27/12 20:11	MRB	TAL BUF
Total/NA	Analysis	8081A		50	74369	07/30/12 14:27	DB	TAL BUF
Total/NA	Prep	3050B			73959	07/26/12 10:00	SS	TAL BUF
Total/NA	Analysis	6010B		1	74117	07/26/12 16:19	LH	TAL BUF
Total/NA	Prep	7471A			74160	07/27/12 11:40	MM	TAL BUF
Total/NA	Analysis	7471A		2	74254	07/27/12 16:05	MM	TAL BUF
Total/NA	Analysis	Moisture		1	74000	07/26/12 11:47	ZLR	TAL BUF

Client Sample ID: B-35 (1.5-2)

Date Collected: 07/24/12 12:20

Date Received: 07/25/12 15:25

Lab Sample ID: 480-23055-4

Matrix: Solid

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			73959	07/26/12 10:00	SS	TAL BUF

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Client Sample ID: B-35 (1.5-2)

Date Collected: 07/24/12 12:20

Date Received: 07/25/12 15:25

Lab Sample ID: 480-23055-4

Matrix: Solid

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	74117	07/26/12 16:26	LH	TAL BUF
Total/NA	Analysis	Moisture		1	74000	07/26/12 11:47	ZLR	TAL BUF

Client Sample ID: B-36 (0-.5)

Date Collected: 07/24/12 13:45

Date Received: 07/25/12 15:25

Lab Sample ID: 480-23055-5

Matrix: Solid

Percent Solids: 76.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			74211	07/27/12 13:43	DE	TAL BUF
Total/NA	Analysis	8270C		20	74414	07/31/12 08:33	RMM	TAL BUF
Total/NA	Prep	3550B			74210	07/27/12 13:37	DE	TAL BUF
Total/NA	Analysis	8082		1	74325	07/29/12 17:43	JM	TAL BUF
Total/NA	Prep	3550B			74148	07/27/12 09:03	KB	TAL BUF
Total/NA	Analysis	8081A		20	74369	07/30/12 21:17	DB	TAL BUF
Total/NA	Prep	3050B			73959	07/26/12 10:00	SS	TAL BUF
Total/NA	Analysis	6010B		1	74117	07/26/12 16:28	LH	TAL BUF
Total/NA	Prep	7471A			74160	07/27/12 11:40	MM	TAL BUF
Total/NA	Analysis	7471A		1	74254	07/27/12 15:21	MM	TAL BUF
Total/NA	Analysis	Moisture		1	74000	07/26/12 11:47	ZLR	TAL BUF

Client Sample ID: B-36 (1.5-2)

Date Collected: 07/24/12 13:50

Date Received: 07/25/12 15:25

Lab Sample ID: 480-23055-6

Matrix: Solid

Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			73959	07/26/12 10:00	SS	TAL BUF
Total/NA	Analysis	6010B		1	74117	07/26/12 16:39	LH	TAL BUF
Total/NA	Analysis	Moisture		1	74000	07/26/12 11:47	ZLR	TAL BUF

Laboratory References:

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

Certification Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Laboratory: TestAmerica Buffalo

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

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

Method Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081A	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23055-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-23055-1	TI-MW-02 (0-.5)	Solid	07/24/12 11:30	07/25/12 15:25
480-23055-2	TI-MW-02 (1-1.5)	Solid	07/24/12 11:40	07/25/12 15:25
480-23055-3	B-35 (0-.5)	Solid	07/24/12 12:15	07/25/12 15:25
480-23055-4	B-35 (1.5-2)	Solid	07/24/12 12:20	07/25/12 15:25
480-23055-5	B-36 (0-.5)	Solid	07/24/12 13:45	07/25/12 15:25
480-23055-6	B-36 (1.5-2)	Solid	07/24/12 13:50	07/25/12 15:25

TestAmerica

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Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt _____
Drinking Water? Yes ☐ No ☒

Client AMEC E&I		Project Manager Robert Crowley		Date 7/25/12	Chain of Custody Number 215288								
Address 800 North Bell Ave		Telephone Number (Area Code)/Fax Number 412 279 6661		Lab Number	Page 1 of 1								
City Pittsburgh	State PA	Zip Code 15106	Site Contact M. Connors	Lab Contact B. Fisher									
Project Name and Location (State) Honeywell - Niagara Falls			Carrier/Manifest Number Hand Delivered										
Contract/Purchase Order/Quote No. TA 48004523 AMEC 3410110832			Special Instructions/ Conditions of Receipt										
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix			Containers & Preservatives			Analysis (Attach list if more space is needed)			Special Instructions/ Conditions of Receipt	
			Aqueous	Sed	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		
TW-MW-02 (0-5)	7/24/12	11:30										X	* Report told lead only
T1-MW-02 (1-1.5)		11:40										X	
B-35 (0-5)		12:15										X	* TAN Mely to include 74710 mercury analysis
B-35 (1.5-2)		12:20										X	
B-36 (0-5)		13:45										X	
B-36 (1.5-2)		13:50										X	

Possible Hazard Identification		Sample Disposal		(A fee may be assessed if samples are retained longer than 1 month)	
☒ Non-Hazard	☐ Flammable	☐ Skin Irritant	☐ Poison B	☐ Unknown	☒ Disposal By Lab
Turn Around Time Required		QC Requirements (Specify)			
☐ 24 Hours	☐ 48 Hours	☐ 7 Days	☐ 14 Days	☐ 21 Days	☒ Other STD - 10 days
1. Relinquished By [Signature]		Date 7/25/12		Time 15:25	
2. Relinquished By		Date		Time	
3. Relinquished By		Date		Time	
Comments 2, 6, 8, 3					

Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 480-23055-1

Login Number: 23055

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl

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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-23600-1

Client Project/Site: Niagara Falls site

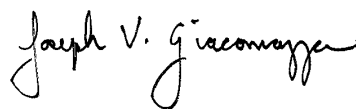
For:

AMEC Environment & Infrastructure, Inc.

800 North Bell Avenue, Suite 200

Carnegie, Pennsylvania 15106

Attn: Eric Weiler



Authorized for release by:

8/15/2012 11:47:10 AM

Joe Giacomazza

Project Administrator

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

LINKS

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

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

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

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Definitions/Glossary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Glossary

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

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Job ID: 480-23600-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-23600-1

Receipt

The samples were originally received on 7/17/12 @16:45, 7/18/12 @16:05, 7/25/12 @15:25. The samples arrived in good condition, properly preserved and, where required, on ice.:

Samples were removed from HOLD on 08/08/12.

Metals

Method 6010B: The following sample were diluted to bring the concentration of target analyte total lead within the linear range: B-22(0-0.5) (480-23600-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Organic Prep

Method 1311: Elevated reporting limits are provided for the following samples due to insufficient sample provided for preparation: B-23(5.5-6) (480-23600-4), T1-MW-02(1-1.5) (480-23600-8)

Method 1311: Elevated reporting limits are provided for the following sample due to insufficient sample provided for preparation: B-36(1.5-2) (480-23600-11)

No other analytical or quality issues were noted.

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-22(0-0.5)

Lab Sample ID: 480-23600-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	300		0.025		mg/L	5		6010B	TCLP

Client Sample ID: B-22(6.5-7)

Lab Sample ID: 480-23600-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	50.2		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: B-23(0-0.5)

Lab Sample ID: 480-23600-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	69.1		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: B-23(5.5-6)

Lab Sample ID: 480-23600-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	13.1		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: B-39(0-0.5)

Lab Sample ID: 480-23600-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.073		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: B-26(0-0.5)

Lab Sample ID: 480-23600-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.48		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: T1-MW-02(0-0.5)

Lab Sample ID: 480-23600-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	62.4		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: T1-MW-02(1-1.5)

Lab Sample ID: 480-23600-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	1.3		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: B-35(0-0.5)

Lab Sample ID: 480-23600-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.5		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: B-36(0-0.5)

Lab Sample ID: 480-23600-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	20.4		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: B-36(1.5-2)

Lab Sample ID: 480-23600-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.23		0.0050		mg/L	1		6010B	TCLP

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-22(0-0.5)

Date Collected: 07/17/12 11:00

Date Received: 07/17/12 16:45

Lab Sample ID: 480-23600-1

Matrix: Solid

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	300		0.025		mg/L		08/10/12 11:30	08/13/12 11:43	5

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-22(6.5-7)

Lab Sample ID: 480-23600-2

Date Collected: 07/17/12 11:30

Matrix: Solid

Date Received: 07/17/12 16:45

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	50.2		0.0050		mg/L		08/10/12 11:30	08/13/12 11:45	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-23(0-0.5)

Date Collected: 07/17/12 10:00

Date Received: 07/17/12 16:45

Lab Sample ID: 480-23600-3

Matrix: Solid

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	69.1		0.0050		mg/L		08/10/12 11:30	08/13/12 11:48	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-23(5.5-6)

Date Collected: 07/17/12 10:45

Date Received: 07/17/12 16:45

Lab Sample ID: 480-23600-4

Matrix: Solid

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	13.1		0.0050		mg/L		08/10/12 11:30	08/13/12 11:55	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-39(0-0.5)

Date Collected: 07/18/12 07:45

Date Received: 07/18/12 16:05

Lab Sample ID: 480-23600-5

Matrix: Solid

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.073		0.0050		mg/L		08/10/12 11:30	08/13/12 11:58	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-26(0-0.5)

Date Collected: 07/18/12 13:45

Date Received: 07/18/12 16:05

Lab Sample ID: 480-23600-6

Matrix: Solid

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.48		0.0050		mg/L		08/10/12 11:30	08/13/12 12:00	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: T1-MW-02(0-0.5)

Lab Sample ID: 480-23600-7

Date Collected: 07/24/12 11:30

Matrix: Solid

Date Received: 07/25/12 15:25

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	62.4		0.0050		mg/L		08/10/12 11:30	08/13/12 12:03	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: T1-MW-02(1-1.5)

Lab Sample ID: 480-23600-8

Date Collected: 07/24/12 11:40

Matrix: Solid

Date Received: 07/25/12 15:25

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.3		0.0050		mg/L		08/10/12 11:30	08/13/12 12:05	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-35(0-0.5)

Lab Sample ID: 480-23600-9

Date Collected: 07/24/12 12:15

Matrix: Solid

Date Received: 07/25/12 15:25

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.5		0.0050		mg/L		08/10/12 11:30	08/13/12 12:08	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-36(0-0.5)

Lab Sample ID: 480-23600-10

Date Collected: 07/24/12 13:45

Matrix: Solid

Date Received: 07/25/12 15:25

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	20.4		0.0050		mg/L		08/10/12 11:30	08/13/12 12:10	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-36(1.5-2)

Lab Sample ID: 480-23600-11

Date Collected: 07/24/12 13:50

Matrix: Solid

Date Received: 07/25/12 15:25

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.23		0.0050		mg/L		08/10/12 11:30	08/13/12 12:13	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-76087/2-A
Matrix: Solid
Analysis Batch: 76263

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76087

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0050		mg/L		08/10/12 11:30	08/10/12 20:37	1

Lab Sample ID: LCS 480-76087/3-A
Matrix: Solid
Analysis Batch: 76263

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76087

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.00	1.06		mg/L		106	80 - 120

Lab Sample ID: LB 480-75890/1-B LB
Matrix: Solid
Analysis Batch: 76263

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 76087

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0050		mg/L		08/10/12 11:30	08/10/12 20:34	1

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Metals

Leach Batch: 75890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23600-1	B-22(0-0.5)	TCLP	Solid	1311	
480-23600-2	B-22(6.5-7)	TCLP	Solid	1311	
480-23600-3	B-23(0-0.5)	TCLP	Solid	1311	
480-23600-4	B-23(5.5-6)	TCLP	Solid	1311	
480-23600-5	B-39(0-0.5)	TCLP	Solid	1311	
480-23600-6	B-26(0-0.5)	TCLP	Solid	1311	
480-23600-7	T1-MW-02(0-0.5)	TCLP	Solid	1311	
480-23600-8	T1-MW-02(1-1.5)	TCLP	Solid	1311	
480-23600-9	B-35(0-0.5)	TCLP	Solid	1311	
480-23600-10	B-36(0-0.5)	TCLP	Solid	1311	
480-23600-11	B-36(1.5-2)	TCLP	Solid	1311	
LB 480-75890/1-B LB	Method Blank	TCLP	Solid	1311	

Prep Batch: 76087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23600-1	B-22(0-0.5)	TCLP	Solid	3010A	75890
480-23600-2	B-22(6.5-7)	TCLP	Solid	3010A	75890
480-23600-3	B-23(0-0.5)	TCLP	Solid	3010A	75890
480-23600-4	B-23(5.5-6)	TCLP	Solid	3010A	75890
480-23600-5	B-39(0-0.5)	TCLP	Solid	3010A	75890
480-23600-6	B-26(0-0.5)	TCLP	Solid	3010A	75890
480-23600-7	T1-MW-02(0-0.5)	TCLP	Solid	3010A	75890
480-23600-8	T1-MW-02(1-1.5)	TCLP	Solid	3010A	75890
480-23600-9	B-35(0-0.5)	TCLP	Solid	3010A	75890
480-23600-10	B-36(0-0.5)	TCLP	Solid	3010A	75890
480-23600-11	B-36(1.5-2)	TCLP	Solid	3010A	75890
LB 480-75890/1-B LB	Method Blank	TCLP	Solid	3010A	75890
LCS 480-76087/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 480-76087/2-A	Method Blank	Total/NA	Solid	3010A	

Analysis Batch: 76263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 480-75890/1-B LB	Method Blank	TCLP	Solid	6010B	76087
LCS 480-76087/3-A	Lab Control Sample	Total/NA	Solid	6010B	76087
MB 480-76087/2-A	Method Blank	Total/NA	Solid	6010B	76087

Analysis Batch: 76360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23600-1	B-22(0-0.5)	TCLP	Solid	6010B	76087
480-23600-2	B-22(6.5-7)	TCLP	Solid	6010B	76087
480-23600-3	B-23(0-0.5)	TCLP	Solid	6010B	76087
480-23600-4	B-23(5.5-6)	TCLP	Solid	6010B	76087
480-23600-5	B-39(0-0.5)	TCLP	Solid	6010B	76087
480-23600-6	B-26(0-0.5)	TCLP	Solid	6010B	76087
480-23600-7	T1-MW-02(0-0.5)	TCLP	Solid	6010B	76087
480-23600-8	T1-MW-02(1-1.5)	TCLP	Solid	6010B	76087
480-23600-9	B-35(0-0.5)	TCLP	Solid	6010B	76087
480-23600-10	B-36(0-0.5)	TCLP	Solid	6010B	76087
480-23600-11	B-36(1.5-2)	TCLP	Solid	6010B	76087

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-22(0-0.5)

Date Collected: 07/17/12 11:00

Date Received: 07/17/12 16:45

Lab Sample ID: 480-23600-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		5	76360	08/13/12 11:43	MM	TAL BUF

Client Sample ID: B-22(6.5-7)

Date Collected: 07/17/12 11:30

Date Received: 07/17/12 16:45

Lab Sample ID: 480-23600-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		1	76360	08/13/12 11:45	MM	TAL BUF

Client Sample ID: B-23(0-0.5)

Date Collected: 07/17/12 10:00

Date Received: 07/17/12 16:45

Lab Sample ID: 480-23600-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		1	76360	08/13/12 11:48	MM	TAL BUF

Client Sample ID: B-23(5.5-6)

Date Collected: 07/17/12 10:45

Date Received: 07/17/12 16:45

Lab Sample ID: 480-23600-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		1	76360	08/13/12 11:55	MM	TAL BUF

Client Sample ID: B-39(0-0.5)

Date Collected: 07/18/12 07:45

Date Received: 07/18/12 16:05

Lab Sample ID: 480-23600-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		1	76360	08/13/12 11:58	MM	TAL BUF

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-26(0-0.5)

Lab Sample ID: 480-23600-6

Date Collected: 07/18/12 13:45

Matrix: Solid

Date Received: 07/18/12 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		1	76360	08/13/12 12:00	MM	TAL BUF

Client Sample ID: T1-MW-02(0-0.5)

Lab Sample ID: 480-23600-7

Date Collected: 07/24/12 11:30

Matrix: Solid

Date Received: 07/25/12 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		1	76360	08/13/12 12:03	MM	TAL BUF

Client Sample ID: T1-MW-02(1-1.5)

Lab Sample ID: 480-23600-8

Date Collected: 07/24/12 11:40

Matrix: Solid

Date Received: 07/25/12 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		1	76360	08/13/12 12:05	MM	TAL BUF

Client Sample ID: B-35(0-0.5)

Lab Sample ID: 480-23600-9

Date Collected: 07/24/12 12:15

Matrix: Solid

Date Received: 07/25/12 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		1	76360	08/13/12 12:08	MM	TAL BUF

Client Sample ID: B-36(0-0.5)

Lab Sample ID: 480-23600-10

Date Collected: 07/24/12 13:45

Matrix: Solid

Date Received: 07/25/12 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		1	76360	08/13/12 12:10	MM	TAL BUF

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Client Sample ID: B-36(1.5-2)
Date Collected: 07/24/12 13:50
Date Received: 07/25/12 15:25

Lab Sample ID: 480-23600-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			75890	08/09/12 11:31	TR	TAL BUF
TCLP	Prep	3010A			76087	08/10/12 11:30	SS	TAL BUF
TCLP	Analysis	6010B		1	76360	08/13/12 12:13	MM	TAL BUF

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

Certification Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Laboratory: TestAmerica Buffalo

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

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

Method Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23600-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-23600-1	B-22(0-0.5)	Solid	07/17/12 11:00	07/17/12 16:45
480-23600-2	B-22(6.5-7)	Solid	07/17/12 11:30	07/17/12 16:45
480-23600-3	B-23(0-0.5)	Solid	07/17/12 10:00	07/17/12 16:45
480-23600-4	B-23(5.5-6)	Solid	07/17/12 10:45	07/17/12 16:45
480-23600-5	B-39(0-0.5)	Solid	07/18/12 07:45	07/18/12 16:05
480-23600-6	B-26(0-0.5)	Solid	07/18/12 13:45	07/18/12 16:05
480-23600-7	T1-MW-02(0-0.5)	Solid	07/24/12 11:30	07/25/12 15:25
480-23600-8	T1-MW-02(1-1.5)	Solid	07/24/12 11:40	07/25/12 15:25
480-23600-9	B-35(0-0.5)	Solid	07/24/12 12:15	07/25/12 15:25
480-23600-10	B-36(0-0.5)	Solid	07/24/12 13:45	07/25/12 15:25
480-23600-11	B-36(1.5-2)	Solid	07/24/12 13:50	07/25/12 15:25

TestAmerica

Temperature on Receipt _____

Chain of Custody Record

THE LEADER IN ENVIRONMENTAL TESTING

Drinking Water? Yes ☐ No ☒

Client AMEC E&T		Project Manager Robert Connerley		Date 7/17/12		Quality of Custody Number 215281	
Address 800 N. Bell Ave. Suite 200		Telephone Number (Area Code)/Fax Number 717/1712		Lab Number 717/1712		Page 1 of 1	
City CARNEGIE		State PA		Zip Code 15106			
Project Name and Location (State) ROCKWELL - N. A. 4004 FALLS		Site Contact M. Cunningham		Lab Contact B. Fisher			
Contract/Purchase Order/Quote No. TA: 48004523 AMEL-3410110832		Carrier/Trailer Number HAUS DELIVERY		Containers & Preservatives		Special Instructions/Conditions of Receipt	
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Date		Time			
* B-22 (0-0.5)		7/17/12		1100			
* B-22 (6.5-7.0)				1130			
* B-22 (4.5-10.0)				1145			
* B-23 (0-0.5)				1000			
* B-23 (5.5-6.0)				1045			
B-24 (0-0.5)				1300			
B-24 (6.5-7.0)				1345			
B-25 (0-0.5)				1400			
B-25 (4.5-9.0)				1415			
TRIP BLANK							
B-23 (2-4')				1030			

Possible Hazard Identification		Sample Disposal		Disposal By Lab		Archive For		(A fee may be assessed if samples are retained longer than 1 month)	
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown		☐ Return To Client ☒ STD 1004		☐ Disposal By Lab ☒ Archive For		☐ Months ☐ Months			
Turn Around Time Required		QC Requirements (Specify)		1. Received By		2. Received By		3. Received By	
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days		☐ Other ☒ STD 1004		Date 7/17/12		Date 7/17/12		Date 7/17/12	
1. Relinquished By		2. Relinquished By		3. Relinquished By		4. Relinquished By		5. Relinquished By	
Date 7/17/12		Date 7/17/12		Date 7/17/12		Date 7/17/12		Date 7/17/12	
Time		Time		Time		Time		Time	
Time 1645		Time 1645		Time 1645		Time 1645		Time 1645	
Date 7/17/12		Date 7/17/12		Date 7/17/12		Date 7/17/12		Date 7/17/12	
Time 1645		Time 1645		Time 1645		Time 1645		Time 1645	
Date 7/17/12		Date 7/17/12		Date 7/17/12		Date 7/17/12		Date 7/17/12	
Time 1645		Time 1645		Time 1645		Time 1645		Time 1645	

Comments

5.7 #2

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

Chain of Custody Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

Client AMEC E&I		Project Manager Robert Crowley		Date 7/18/12		Chain of Custody Number 215296	
Address 800 North Bell Ave. Suite 200		Telephone Number (Area Code)/Fax Number (313) 570-1506		Lab Number 71812		Page 1 of 1	
City CARNEGIE		Site Contact N. Gunnings		Lab Contact B. Fisher		Analysis (Attach list if more space is needed)	
Project Name and Location (State) Honolulu - Nihoa Reef		Carrier/Vendor Number Woods Delivery		Containers & Preservatives		Special Instructions/Conditions of Receipt	
Contract/Purchase Order/Quote No. TA: 48004523 AMEC 3410110832		Matrix		Containers & Preservatives		Special Instructions/Conditions of Receipt	
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Date		Time		Analysis (Attach list if more space is needed)	
B-38 (3.5-4.0)		7/18/12		8:15		HOLD all samples for this CAC study results of TAC metals analysis	
B-39 (2.5-3.0)				7:50			
B-38 (0-0.5)				8:10			
B-39 (0-0.5)				7:45			
T1-MW-01 (0.5-1.0)				9:00			
T1-MW-01 (4-4.5)				9:15			
B-26 (4-4.5)				13:50			
B-26 (0-0.5)				13:45			
Possible Hazard Identification		Sample Disposal		Archive For		(A fee may be assessed if samples are retained longer than 1 month)	
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown		☐ Return to Client ☒ Disposal By Lab ☐ Archive For		Months			
Turn Around Time Required		QC Requirements (Specify)		1. Received By		Date	
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other		HOLD 1. Received By 2. Received By 3. Received By		Date 7/18/12 1605		Time	
1. Relinquished By		2. Relinquished By		3. Relinquished By		Date	
Date		Date		Date		Time	
Date		Date		Date		Time	
Comments 3.842							

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

Chain of Custody Record

TAL-4124 (1/00/7)

Client: **AMEL E&E** Date: **7/25/12** Chain of Custody Number: **215289**

Address: **800 North Bell Ave** Lab Number: **1** of **1**

City: **Pittsburgh** State: **PA** Zip Code: **15106**

Project Name and Location (State): **Honeywell - Niagara Falls**

Project Manager: **Robert Crowley** Telephone Number (Area Code)/Fax Number: **412 279 6661**

Site Contact: **M. Cummings** Lab Contact: **B. Fidler**

Contract/Purchase Order/Quote No.: **TA:48004523 AMEL 341010832**

Containers for each sample may be combined on one line:

Sample I.D. No. and Description	Date	Time	Matrix	Containers & Preservatives	Analysis (Attach list if more space is needed)	Special Instructions/Conditions of Receipt
T1-MW-02 (0-.5)	7/24/12	11:30	Aqueous	LiPres, H2SO4, HNO3, HCl, NaOH, ZnAc	X	HOLD all
T1-AW-02 (1-1.5)		11:40	Soil		X	Samples on this col
B-35 (0-.5)		12:15	Soil		X	pending results of the metals analysis
B-35 (0.15-2)		12:20	Soil		X	
B-36 (0-.5)		13:45	Soil		X	
B-36 (1.5-2)		13:50	Soil		X	

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months _____ (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other: **HOLD**

1. Relinquished By: **John Fidler** Date: **7/25/12** Time: **15:25**

2. Relinquished By: **John Fidler** Date: **7/25/12** Time: **15:25**

3. Relinquished By: **John Fidler** Date: **7/25/12** Time: **15:25**

Comments: **28 #3**

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

Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 480-23600-1

Login Number: 23600

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	Removed from HOLD on 08/08/12
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-23380-1

Client Project/Site: Niagara Falls site

For:

AMEC Environment & Infrastructure, Inc.

800 North Bell Avenue, Suite 200

Carnegie, Pennsylvania 15106

Attn: Eric Weiler



Authorized for release by:

8/16/2012 4:18:14 PM

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

LINKS

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results through

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www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

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

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS or MSD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	RPD of the MS and MSD exceeds the control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

Glossary

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

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Job ID: 480-23380-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-23380-1

Receipt

The samples were received on 8/2/2012 12:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA

Method 8260B: Due to multiple injections needed, the following sample was analyzed with headspace in the sample vial: TB (480-23380-4).

Method 8260B: The method blank for batch 480-75363 contained several analytes above the method detection limit. The target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260B: The laboratory control sample (LCS) for batch 480-75363 exceeded control limits for the following analyte: Methyl acetate. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) associated with batch 480-76308 contained an analyte outside control limits. This compound is not classified as Calibration Check Compounds (CCCs) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for six analytes to be outside limits; therefore, the data have been reported.

No other analytical or quality issues were noted.

GC/MS Semi VOA

Method 8270C: The following sample was diluted to bring the concentration of target analytes within the calibration range: T1-MW-03 (0-.5) (480-23380-1DL). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC Semi VOA

Method 8081A: All primary data is reported from the RTX-CLPII column.

Method 8081A: The following samples were diluted due to the nature of the sample matrix : (480-23380-1 MS), (480-23380-1 MSD). As such, surrogate and spike recoveries were diluted out and are not reported.

Method 8081A: The following sample was diluted due to the nature of the sample matrix : T1-MW-03 (0-.5) (480-23380-1). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

Method 8081A: For method 8081 Pesticides, the majority of the peaks present in the sample extracts are biphenyls indicating the presence of Aroclors. The results of several confirmed positive peaks may be enhanced and due to the biphenyl peaks present, and may be considered estimated.

Method 8082: All primary data is reported from the ZB-5 column.

Method 8082: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

Method 8082: The surrogate percent difference in the associated continuing calibration verification (CCV 480-75402/48) for Tetrachloro-m-xylene exceeded 15% on the ZB-5 column, indicating a high bias.

No other analytical or quality issues were noted.

Metals

Method 6010B: The Continuing Calibration Verification, CCV 480-75333/35 recovered above the upper control limit for total thallium. The

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Job ID: 480-23380-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

sample T1-MW-03 (0-.5) (480-23380-1) associated with this CCV was non-detect for the affected analyte; therefore, the data have been reported.

Method 7471A: The following sample was diluted to bring the concentration of target analyte total mercury within the calibration range: T1-MW-03 (0-.5) (480-23380-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-03 (0-.5)

Lab Sample ID: 480-23380-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Methylnaphthalene	270		170	2.1	ug/Kg	1		✱	8270C	Total/NA
Acenaphthene	440		170	2.0	ug/Kg	1		✱	8270C	Total/NA
Acenaphthylene	1200		170	1.4	ug/Kg	1		✱	8270C	Total/NA
Anthracene	1500		170	4.4	ug/Kg	1		✱	8270C	Total/NA
Benzo(a)anthracene	6800	E	170	2.9	ug/Kg	1		✱	8270C	Total/NA
Benzo(a)pyrene	8300	E	170	4.1	ug/Kg	1		✱	8270C	Total/NA
Benzo(b)fluoranthene	15000	E	170	3.3	ug/Kg	1		✱	8270C	Total/NA
Benzo(g,h,i)perylene	2900		170	2.0	ug/Kg	1		✱	8270C	Total/NA
Benzo(k)fluoranthene	6000	E	170	1.9	ug/Kg	1		✱	8270C	Total/NA
Biphenyl	57	J	170	11	ug/Kg	1		✱	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	230		170	55	ug/Kg	1		✱	8270C	Total/NA
Butyl benzyl phthalate	61	J	170	46	ug/Kg	1		✱	8270C	Total/NA
Carbazole	870		170	2.0	ug/Kg	1		✱	8270C	Total/NA
Chrysene	7400	E	170	1.7	ug/Kg	1		✱	8270C	Total/NA
Dibenz(a,h)anthracene	1000		170	2.0	ug/Kg	1		✱	8270C	Total/NA
Dibenzofuran	290		170	1.8	ug/Kg	1		✱	8270C	Total/NA
Di-n-butyl phthalate	79	J	170	59	ug/Kg	1		✱	8270C	Total/NA
Fluoranthene	9100	E	170	2.5	ug/Kg	1		✱	8270C	Total/NA
Fluorene	340		170	3.9	ug/Kg	1		✱	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	3100		170	4.7	ug/Kg	1		✱	8270C	Total/NA
Naphthalene	470		170	2.8	ug/Kg	1		✱	8270C	Total/NA
Phenanthrene	4200		170	3.6	ug/Kg	1		✱	8270C	Total/NA
Pyrene	8100	E	170	1.1	ug/Kg	1		✱	8270C	Total/NA
2-Methylnaphthalene - DL	260	J	1700	21	ug/Kg	10		✱	8270C	Total/NA
Acenaphthene - DL	480	J	1700	20	ug/Kg	10		✱	8270C	Total/NA
Acenaphthylene - DL	1200	J	1700	14	ug/Kg	10		✱	8270C	Total/NA
Anthracene - DL	1700		1700	44	ug/Kg	10		✱	8270C	Total/NA
Benzo(a)anthracene - DL	7800		1700	29	ug/Kg	10		✱	8270C	Total/NA
Benzo(a)pyrene - DL	10000		1700	41	ug/Kg	10		✱	8270C	Total/NA
Benzo(b)fluoranthene - DL	16000		1700	33	ug/Kg	10		✱	8270C	Total/NA
Benzo(g,h,i)perylene - DL	6700		1700	20	ug/Kg	10		✱	8270C	Total/NA
Benzo(k)fluoranthene - DL	5800		1700	19	ug/Kg	10		✱	8270C	Total/NA
Carbazole - DL	950	J	1700	20	ug/Kg	10		✱	8270C	Total/NA
Chrysene - DL	9300		1700	17	ug/Kg	10		✱	8270C	Total/NA
Dibenz(a,h)anthracene - DL	680	J	1700	20	ug/Kg	10		✱	8270C	Total/NA
Dibenzofuran - DL	280	J	1700	18	ug/Kg	10		✱	8270C	Total/NA
Fluoranthene - DL	12000		1700	25	ug/Kg	10		✱	8270C	Total/NA
Fluorene - DL	340	J	1700	39	ug/Kg	10		✱	8270C	Total/NA
Indeno(1,2,3-cd)pyrene - DL	7200		1700	47	ug/Kg	10		✱	8270C	Total/NA
Naphthalene - DL	530	J	1700	28	ug/Kg	10		✱	8270C	Total/NA
Phenanthrene - DL	5300		1700	36	ug/Kg	10		✱	8270C	Total/NA
Pyrene - DL	11000		1700	11	ug/Kg	10		✱	8270C	Total/NA
4,4'-DDE	29	J	86	13	ug/Kg	50		✱	8081A	Total/NA
4,4'-DDT	120		86	8.8	ug/Kg	50		✱	8081A	Total/NA
Methoxychlor	160		86	12	ug/Kg	50		✱	8081A	Total/NA
PCB-1260	330		240	110	ug/Kg	1		✱	8082	Total/NA
Aluminum	6300		11.1		mg/Kg	1		✱	6010B	Total/NA
Antimony	166		16.6		mg/Kg	1		✱	6010B	Total/NA
Arsenic	128		2.2		mg/Kg	1		✱	6010B	Total/NA
Barium	744		0.55		mg/Kg	1		✱	6010B	Total/NA
Beryllium	0.67		0.22		mg/Kg	1		✱	6010B	Total/NA
Cadmium	4.1		0.22		mg/Kg	1		✱	6010B	Total/NA
Calcium	25800		55.5		mg/Kg	1		✱	6010B	Total/NA

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-03 (0-.5) (Continued)

Lab Sample ID: 480-23380-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chromium	38.4		0.55		mg/Kg	1		☼	6010B	Total/NA
Cobalt	8.7		0.55		mg/Kg	1		☼	6010B	Total/NA
Copper	431		1.1		mg/Kg	1		☼	6010B	Total/NA
Iron	30200		11.1		mg/Kg	1		☼	6010B	Total/NA
Lead	11600		1.1		mg/Kg	1		☼	6010B	Total/NA
Magnesium	7520		22.2		mg/Kg	1		☼	6010B	Total/NA
Manganese	1030		0.22		mg/Kg	1		☼	6010B	Total/NA
Nickel	32.6		5.5		mg/Kg	1		☼	6010B	Total/NA
Potassium	1020		33.3		mg/Kg	1		☼	6010B	Total/NA
Silver	1.1		0.55		mg/Kg	1		☼	6010B	Total/NA
Sodium	172		155		mg/Kg	1		☼	6010B	Total/NA
Vanadium	17.2		0.55		mg/Kg	1		☼	6010B	Total/NA
Zinc	855		2.2		mg/Kg	1		☼	6010B	Total/NA
Mercury	1.0		0.044		mg/Kg	2		☼	7471A	Total/NA

Client Sample ID: T1-MW-03 (1.5-2)

Lab Sample ID: 480-23380-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Lead	1340		1.2		mg/Kg	1		☼	6010B	Total/NA

Client Sample ID: T1-MW-02 (5-6)

Lab Sample ID: 480-23380-3

No Detections

Client Sample ID: TB

Lab Sample ID: 480-23380-4

No Detections

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-03 (0-.5)

Lab Sample ID: 480-23380-1

Date Collected: 08/01/12 10:30

Matrix: Solid

Date Received: 08/02/12 12:35

Percent Solids: 96.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	37	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2,4-Dichlorophenol	ND		170	8.9	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2,4-Dimethylphenol	ND		170	46	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2,4-Dinitrophenol	ND		330	60	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2,6-Dinitrotoluene	ND		170	42	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2-Chloronaphthalene	ND		170	11	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2-Chlorophenol	ND		170	8.7	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2-Methylnaphthalene	270		170	2.1	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2-Methylphenol	ND		170	5.2	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2-Nitroaniline	ND		330	55	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
2-Nitrophenol	ND		170	7.8	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
3-Nitroaniline	ND		330	39	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
4,6-Dinitro-2-methylphenol	ND		330	59	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
4-Bromophenyl phenyl ether	ND		170	54	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
4-Chloro-3-methylphenol	ND		170	7.0	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
4-Chloroaniline	ND		170	50	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
4-Chlorophenyl phenyl ether	ND		170	3.6	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
4-Methylphenol	ND		330	9.5	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
4-Nitroaniline	ND		330	19	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
4-Nitrophenol	ND		330	41	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Acenaphthene	440		170	2.0	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Acenaphthylene	1200		170	1.4	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Acetophenone	ND		170	8.8	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Anthracene	1500		170	4.4	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Atrazine	ND		170	7.6	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Benzaldehyde	ND		170	19	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Benzo(a)anthracene	6800	E	170	2.9	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Benzo(a)pyrene	8300	E	170	4.1	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Benzo(b)fluoranthene	15000	E	170	3.3	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Benzo(g,h,i)perylene	2900		170	2.0	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Benzo(k)fluoranthene	6000	E	170	1.9	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Biphenyl	57	J	170	11	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
bis (2-chloroisopropyl) ether	ND		170	18	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Bis(2-chloroethoxy)methane	ND		170	9.3	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Bis(2-chloroethyl)ether	ND		170	15	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Bis(2-ethylhexyl) phthalate	230		170	55	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Butyl benzyl phthalate	61	J	170	46	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Caprolactam	ND		170	74	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Carbazole	870		170	2.0	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Chrysene	7400	E	170	1.7	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Dibenz(a,h)anthracene	1000		170	2.0	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Dibenzofuran	290		170	1.8	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Diethyl phthalate	ND		170	5.2	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Dimethyl phthalate	ND		170	4.5	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Di-n-butyl phthalate	79	J	170	59	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Di-n-octyl phthalate	ND		170	4.0	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Fluoranthene	9100	E	170	2.5	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Fluorene	340		170	3.9	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-03 (0-.5)

Lab Sample ID: 480-23380-1

Date Collected: 08/01/12 10:30

Matrix: Solid

Date Received: 08/02/12 12:35

Percent Solids: 96.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		170	8.5	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Hexachlorobutadiene	ND		170	8.7	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Hexachlorocyclopentadiene	ND		170	52	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Hexachloroethane	ND		170	13	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Indeno(1,2,3-cd)pyrene	3100		170	4.7	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Isophorone	ND		170	8.5	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Naphthalene	470		170	2.8	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Nitrobenzene	ND		170	7.6	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
N-Nitrosodi-n-propylamine	ND		170	14	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
N-Nitrosodiphenylamine	ND		170	9.3	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Pentachlorophenol	ND		330	59	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Phenanthrene	4200		170	3.6	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Phenol	ND		170	18	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1
Pyrene	8100	E	170	1.1	ug/Kg	☼	08/03/12 09:13	08/03/12 22:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	85		39 - 146	08/03/12 09:13	08/03/12 22:53	1
2-Fluorobiphenyl	74		37 - 120	08/03/12 09:13	08/03/12 22:53	1
2-Fluorophenol	55		18 - 120	08/03/12 09:13	08/03/12 22:53	1
Nitrobenzene-d5	75		34 - 132	08/03/12 09:13	08/03/12 22:53	1
Phenol-d5	68		11 - 120	08/03/12 09:13	08/03/12 22:53	1
p-Terphenyl-d14	94		65 - 153	08/03/12 09:13	08/03/12 22:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1700	370	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2,4,6-Trichlorophenol	ND		1700	110	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2,4-Dichlorophenol	ND		1700	89	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2,4-Dimethylphenol	ND		1700	460	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2,4-Dinitrophenol	ND		3300	600	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2,4-Dinitrotoluene	ND		1700	260	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2,6-Dinitrotoluene	ND		1700	420	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2-Chloronaphthalene	ND		1700	110	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2-Chlorophenol	ND		1700	87	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2-Methylnaphthalene	260	J	1700	21	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2-Methylphenol	ND		1700	52	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2-Nitroaniline	ND		3300	550	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
2-Nitrophenol	ND		1700	78	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
3,3'-Dichlorobenzidine	ND		1700	1500	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
3-Nitroaniline	ND		3300	390	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
4,6-Dinitro-2-methylphenol	ND		3300	590	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
4-Bromophenyl phenyl ether	ND		1700	540	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
4-Chloro-3-methylphenol	ND		1700	70	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
4-Chloroaniline	ND		1700	500	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
4-Chlorophenyl phenyl ether	ND		1700	36	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
4-Methylphenol	ND		3300	95	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
4-Nitroaniline	ND		3300	190	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
4-Nitrophenol	ND		3300	410	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Acenaphthene	480	J	1700	20	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Acenaphthylene	1200	J	1700	14	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Acetophenone	ND		1700	88	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-03 (0-.5)

Lab Sample ID: 480-23380-1

Date Collected: 08/01/12 10:30

Matrix: Solid

Date Received: 08/02/12 12:35

Percent Solids: 96.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	1700		1700	44	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Atrazine	ND		1700	76	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Benzaldehyde	ND		1700	190	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Benzo(a)anthracene	7800		1700	29	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Benzo(a)pyrene	10000		1700	41	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Benzo(b)fluoranthene	16000		1700	33	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Benzo(g,h,i)perylene	6700		1700	20	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Benzo(k)fluoranthene	5800		1700	19	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Biphenyl	ND		1700	110	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
bis (2-chloroisopropyl) ether	ND		1700	180	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Bis(2-chloroethoxy)methane	ND		1700	93	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Bis(2-chloroethyl)ether	ND		1700	150	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Bis(2-ethylhexyl) phthalate	ND		1700	550	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Butyl benzyl phthalate	ND		1700	460	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Caprolactam	ND		1700	740	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Carbazole	950 J		1700	20	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Chrysene	9300		1700	17	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Dibenz(a,h)anthracene	680 J		1700	20	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Dibenzofuran	280 J		1700	18	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Diethyl phthalate	ND		1700	52	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Dimethyl phthalate	ND		1700	45	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Di-n-butyl phthalate	ND		1700	590	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Di-n-octyl phthalate	ND		1700	40	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Fluoranthene	12000		1700	25	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Fluorene	340 J		1700	39	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Hexachlorobenzene	ND		1700	85	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Hexachlorobutadiene	ND		1700	87	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Hexachlorocyclopentadiene	ND		1700	520	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Hexachloroethane	ND		1700	130	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Indeno(1,2,3-cd)pyrene	7200		1700	47	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Isophorone	ND		1700	85	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Naphthalene	530 J		1700	28	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Nitrobenzene	ND		1700	76	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
N-Nitrosodi-n-propylamine	ND		1700	140	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
N-Nitrosodiphenylamine	ND		1700	93	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Pentachlorophenol	ND		3300	590	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Phenanthrene	5300		1700	36	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Phenol	ND		1700	180	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10
Pyrene	11000		1700	11	ug/Kg	☼	08/03/12 09:13	08/06/12 12:31	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	79		39 - 146	08/03/12 09:13	08/06/12 12:31	10
2-Fluorobiphenyl	85		37 - 120	08/03/12 09:13	08/06/12 12:31	10
2-Fluorophenol	53		18 - 120	08/03/12 09:13	08/06/12 12:31	10
Nitrobenzene-d5	67		34 - 132	08/03/12 09:13	08/06/12 12:31	10
Phenol-d5	58		11 - 120	08/03/12 09:13	08/06/12 12:31	10
p-Terphenyl-d14	109		65 - 153	08/03/12 09:13	08/06/12 12:31	10

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		86	17	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-03 (0-.5)

Lab Sample ID: 480-23380-1

Date Collected: 08/01/12 10:30

Matrix: Solid

Date Received: 08/02/12 12:35

Percent Solids: 96.5

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDE	29	J	86	13	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
4,4'-DDT	120		86	8.8	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Aldrin	ND		86	21	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
alpha-BHC	ND		86	15	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
alpha-Chlordane	ND		86	43	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
beta-BHC	ND		86	9.3	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
delta-BHC	ND		86	11	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Dieldrin	ND		86	21	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Endosulfan I	ND		86	11	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Endosulfan II	ND		86	15	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Endosulfan sulfate	ND		86	16	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Endrin	ND		86	12	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Endrin aldehyde	ND		86	22	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Endrin ketone	ND		86	21	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
gamma-BHC (Lindane)	ND		86	62	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
gamma-Chlordane	ND		86	27	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Heptachlor	ND		86	13	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Heptachlor epoxide	ND		86	22	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Methoxychlor	160		86	12	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50
Toxaphene	ND		860	500	ug/Kg	☼	08/09/12 14:43	08/11/12 17:14	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	62 - 137	08/09/12 14:43	08/11/12 17:14	50
DCB Decachlorobiphenyl	0	X	62 - 137	08/09/12 14:43	08/11/12 17:14	50
Tetrachloro-m-xylene	0	X	30 - 124	08/09/12 14:43	08/11/12 17:14	50
Tetrachloro-m-xylene	0	X	30 - 124	08/09/12 14:43	08/11/12 17:14	50

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		240	48	ug/Kg	☼	08/06/12 10:52	08/07/12 15:33	1
PCB-1221	ND		240	48	ug/Kg	☼	08/06/12 10:52	08/07/12 15:33	1
PCB-1232	ND		240	48	ug/Kg	☼	08/06/12 10:52	08/07/12 15:33	1
PCB-1242	ND		240	48	ug/Kg	☼	08/06/12 10:52	08/07/12 15:33	1
PCB-1248	ND		240	48	ug/Kg	☼	08/06/12 10:52	08/07/12 15:33	1
PCB-1254	ND		240	110	ug/Kg	☼	08/06/12 10:52	08/07/12 15:33	1
PCB-1260	330		240	110	ug/Kg	☼	08/06/12 10:52	08/07/12 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	90		36 - 182	08/06/12 10:52	08/07/12 15:33	1
DCB Decachlorobiphenyl	92		36 - 182	08/06/12 10:52	08/07/12 15:33	1
Tetrachloro-m-xylene	96		24 - 172	08/06/12 10:52	08/07/12 15:33	1
Tetrachloro-m-xylene	96		24 - 172	08/06/12 10:52	08/07/12 15:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6300		11.1		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Antimony	166		16.6		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Arsenic	128		2.2		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Barium	744		0.55		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Beryllium	0.67		0.22		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Cadmium	4.1		0.22		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Calcium	25800		55.5		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-03 (0-.5)

Lab Sample ID: 480-23380-1

Date Collected: 08/01/12 10:30

Matrix: Solid

Date Received: 08/02/12 12:35

Percent Solids: 96.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	38.4		0.55		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Cobalt	8.7		0.55		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Copper	431		1.1		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Iron	30200		11.1		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Lead	11600		1.1		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Magnesium	7520		22.2		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Manganese	1030		0.22		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Nickel	32.6		5.5		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Potassium	1020		33.3		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Selenium	ND		4.4		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Silver	1.1		0.55		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Sodium	172		155		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Thallium	ND	^	6.7		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Vanadium	17.2		0.55		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1
Zinc	855		2.2		mg/Kg	☼	08/02/12 14:10	08/06/12 11:38	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.0		0.044		mg/Kg	☼	08/03/12 11:40	08/03/12 15:10	2

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-03 (1.5-2)

Lab Sample ID: 480-23380-2

Date Collected: 08/01/12 10:40

Matrix: Solid

Date Received: 08/02/12 12:35

Percent Solids: 89.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1340		1.2		mg/Kg	☼	08/02/12 14:10	08/06/12 11:41	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-02 (5-6)

Lab Sample ID: 480-23380-3

Date Collected: 08/01/12 13:35

Matrix: Solid

Date Received: 08/02/12 12:35

Percent Solids: 78.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.2	0.45	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,1,2,2-Tetrachloroethane	ND		6.2	1.0	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,1,2-Trichloroethane	ND		6.2	0.81	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.2	1.4	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,1-Dichloroethane	ND		6.2	0.76	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,1-Dichloroethene	ND		6.2	0.76	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,2,4-Trichlorobenzene	ND		6.2	0.38	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,2-Dibromo-3-Chloropropane	ND		6.2	3.1	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,2-Dibromoethane	ND		6.2	0.80	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,2-Dichlorobenzene	ND		6.2	0.49	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,2-Dichloroethane	ND		6.2	0.31	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,2-Dichloropropane	ND		6.2	3.1	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,3-Dichlorobenzene	ND		6.2	0.32	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
1,4-Dichlorobenzene	ND		6.2	0.87	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
2-Hexanone	ND		31	3.1	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
2-Butanone (MEK)	ND		31	2.3	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
4-Methyl-2-pentanone (MIBK)	ND		31	2.0	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Acetone	ND		31	5.3	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Benzene	ND		6.2	0.31	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Bromodichloromethane	ND		6.2	0.84	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Bromoform	ND		6.2	3.1	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Bromomethane	ND		6.2	0.56	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Carbon disulfide	ND		6.2	3.1	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Carbon tetrachloride	ND		6.2	0.60	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Chlorobenzene	ND		6.2	0.82	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Dibromochloromethane	ND		6.2	0.80	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Chloroethane	ND		6.2	1.4	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Chloroform	ND		6.2	0.39	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Chloromethane	ND		6.2	0.38	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
cis-1,2-Dichloroethene	ND		6.2	0.80	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
cis-1,3-Dichloropropene	ND		6.2	0.90	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Cyclohexane	ND		6.2	0.87	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Dichlorodifluoromethane	ND		6.2	0.52	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Ethylbenzene	ND		6.2	0.43	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Isopropylbenzene	ND		6.2	0.94	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Methyl acetate	ND *		6.2	1.2	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Methyl tert-butyl ether	ND		6.2	0.61	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Methylcyclohexane	ND		6.2	0.95	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Methylene Chloride	ND		6.2	2.9	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Styrene	ND		6.2	0.31	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Tetrachloroethene	ND		6.2	0.84	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Toluene	ND		6.2	0.47	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
trans-1,2-Dichloroethene	ND		6.2	0.64	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
trans-1,3-Dichloropropene	ND		6.2	2.7	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Trichloroethene	ND		6.2	1.4	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Trichlorofluoromethane	ND		6.2	0.59	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Vinyl chloride	ND		6.2	0.76	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1
Xylenes, Total	ND		12	1.0	ug/Kg	☆	08/06/12 17:58	08/06/12 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		64 - 126	08/06/12 17:58	08/06/12 22:58	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-02 (5-6)

Date Collected: 08/01/12 13:35

Date Received: 08/02/12 12:35

Lab Sample ID: 480-23380-3

Matrix: Solid

Percent Solids: 78.7

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	107		71 - 125	08/06/12 17:58	08/06/12 22:58	1
4-Bromofluorobenzene (Surr)	99		72 - 126	08/06/12 17:58	08/06/12 22:58	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: TB

Date Collected: 08/01/12 00:00

Date Received: 08/02/12 12:35

Lab Sample ID: 480-23380-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/13/12 13:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/13/12 13:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/13/12 13:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/13/12 13:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/13/12 13:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/13/12 13:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/13/12 13:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/13/12 13:11	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/13/12 13:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/13/12 13:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/13/12 13:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/13/12 13:11	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/13/12 13:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/13/12 13:11	1
2-Hexanone	ND		5.0	1.2	ug/L			08/13/12 13:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/13/12 13:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/13/12 13:11	1
Acetone	ND		10	3.0	ug/L			08/13/12 13:11	1
Benzene	ND		1.0	0.41	ug/L			08/13/12 13:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/13/12 13:11	1
Bromoform	ND		1.0	0.26	ug/L			08/13/12 13:11	1
Bromomethane	ND		1.0	0.69	ug/L			08/13/12 13:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/13/12 13:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/13/12 13:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/13/12 13:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/13/12 13:11	1
Chloroethane	ND		1.0	0.32	ug/L			08/13/12 13:11	1
Chloroform	ND		1.0	0.34	ug/L			08/13/12 13:11	1
Chloromethane	ND		1.0	0.35	ug/L			08/13/12 13:11	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/13/12 13:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/13/12 13:11	1
Cyclohexane	ND		1.0	0.18	ug/L			08/13/12 13:11	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/13/12 13:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/13/12 13:11	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/13/12 13:11	1
Methyl acetate	ND		1.0	0.50	ug/L			08/13/12 13:11	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/13/12 13:11	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/13/12 13:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/13/12 13:11	1
Styrene	ND		1.0	0.73	ug/L			08/13/12 13:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/13/12 13:11	1
Toluene	ND		1.0	0.51	ug/L			08/13/12 13:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/13/12 13:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/13/12 13:11	1
Trichloroethene	ND		1.0	0.46	ug/L			08/13/12 13:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/13/12 13:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/13/12 13:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/13/12 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137		08/13/12 13:11	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: TB

Date Collected: 08/01/12 00:00

Date Received: 08/02/12 12:35

Lab Sample ID: 480-23380-4

Matrix: Water

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

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	95		71 - 126		08/13/12 13:11	1
<i>4-Bromofluorobenzene (Surr)</i>	90		73 - 120		08/13/12 13:11	1

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (64-126)	TOL (71-125)	BFB (72-126)
480-23380-3	T1-MW-02 (5-6)	104	107	99
LCS 480-75363/3	Lab Control Sample	93	103	99
MB 480-75363/4	Method Blank	93	107	99
Surrogate Legend				
12DCE = 1,2-Dichloroethane-d4 (Surr)				
TOL = Toluene-d8 (Surr)				
BFB = 4-Bromofluorobenzene (Surr)				

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	TOL (71-126)	BFB (73-120)
480-23380-4	TB	106	95	90
LCS 480-76308/3	Lab Control Sample	104	91	91
MB 480-76308/5	Method Blank	105	93	86
Surrogate Legend				
12DCE = 1,2-Dichloroethane-d4 (Surr)				
TOL = Toluene-d8 (Surr)				
BFB = 4-Bromofluorobenzene (Surr)				

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (39-146)	FBP (37-120)	2FP (18-120)	NBZ (34-132)	PHL (11-120)	TPH (65-153)
480-23380-1	T1-MW-03 (0-.5)	85	74	55	75	68	94
480-23380-1 - DL	T1-MW-03 (0-.5)	79	85	53	67	58	109
LCS 480-75031/2-A	Lab Control Sample	104	91	81	93	88	126
MB 480-75031/1-A	Method Blank	88	79	71	83	76	103
Surrogate Legend							
TBP = 2,4,6-Tribromophenol							
FBP = 2-Fluorobiphenyl							
2FP = 2-Fluorophenol							
NBZ = Nitrobenzene-d5							
PHL = Phenol-d5							
TPH = p-Terphenyl-d14							

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCB1 (62-137)	DCB2 (62-137)	TCX1 (30-124)	TCX2 (30-124)
480-23380-1	T1-MW-03 (0-.5)	0 X	0 X	0 X	0 X
480-23380-1 MS	T1-MW-03 (0-.5)	0 X	0 X	0 X	0 X
480-23380-1 MSD	T1-MW-03 (0-.5)	0 X	0 X	0 X	0 X

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCB1 (62-137)	DCB2 (62-137)	TCX1 (30-124)	TCX2 (30-124)
LCS 480-75940/2-A	Lab Control Sample	93	94	74	75
MB 480-75940/1-A	Method Blank	91	94	74	75
Surrogate Legend					
DCB = DCB Decachlorobiphenyl					
TCX = Tetrachloro-m-xylene					

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCB1 (36-182)	DCB2 (36-182)	TCX1 (24-172)	TCX2 (24-172)
480-23380-1	T1-MW-03 (0-.5)	90	92	96	96
LCS 480-75246/2-A	Lab Control Sample	119	131	138	69
MB 480-75246/1-A	Method Blank	107	117	117	120
Surrogate Legend					
DCB = DCB Decachlorobiphenyl					
TCX = Tetrachloro-m-xylene					

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

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

Lab Sample ID: MB 480-75363/4

Matrix: Solid

Analysis Batch: 75363

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			08/06/12 18:53	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			08/06/12 18:53	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			08/06/12 18:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			08/06/12 18:53	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			08/06/12 18:53	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			08/06/12 18:53	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			08/06/12 18:53	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			08/06/12 18:53	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			08/06/12 18:53	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			08/06/12 18:53	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			08/06/12 18:53	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			08/06/12 18:53	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			08/06/12 18:53	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			08/06/12 18:53	1
2-Hexanone	3.80	J	25	2.5	ug/Kg			08/06/12 18:53	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			08/06/12 18:53	1
4-Methyl-2-pentanone (MIBK)	2.49	J	25	1.6	ug/Kg			08/06/12 18:53	1
Acetone	5.02	J	25	4.2	ug/Kg			08/06/12 18:53	1
Benzene	ND		5.0	0.25	ug/Kg			08/06/12 18:53	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			08/06/12 18:53	1
Bromoform	ND		5.0	2.5	ug/Kg			08/06/12 18:53	1
Bromomethane	ND		5.0	0.45	ug/Kg			08/06/12 18:53	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			08/06/12 18:53	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			08/06/12 18:53	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			08/06/12 18:53	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			08/06/12 18:53	1
Chloroethane	ND		5.0	1.1	ug/Kg			08/06/12 18:53	1
Chloroform	ND		5.0	0.31	ug/Kg			08/06/12 18:53	1
Chloromethane	ND		5.0	0.30	ug/Kg			08/06/12 18:53	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			08/06/12 18:53	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			08/06/12 18:53	1
Cyclohexane	ND		5.0	0.70	ug/Kg			08/06/12 18:53	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			08/06/12 18:53	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			08/06/12 18:53	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg			08/06/12 18:53	1
Methyl acetate	ND		5.0	0.93	ug/Kg			08/06/12 18:53	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			08/06/12 18:53	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			08/06/12 18:53	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			08/06/12 18:53	1
Styrene	ND		5.0	0.25	ug/Kg			08/06/12 18:53	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/06/12 18:53	1
Toluene	ND		5.0	0.38	ug/Kg			08/06/12 18:53	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			08/06/12 18:53	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			08/06/12 18:53	1
Trichloroethene	ND		5.0	1.1	ug/Kg			08/06/12 18:53	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			08/06/12 18:53	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			08/06/12 18:53	1
Xylenes, Total	ND		10	0.84	ug/Kg			08/06/12 18:53	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

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

Lab Sample ID: MB 480-75363/4

Matrix: Solid

Analysis Batch: 75363

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		64 - 126		08/06/12 18:53	1
Toluene-d8 (Surr)	107		71 - 125		08/06/12 18:53	1
4-Bromofluorobenzene (Surr)	99		72 - 126		08/06/12 18:53	1

Lab Sample ID: LCS 480-75363/3

Matrix: Solid

Analysis Batch: 75363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	50.7		ug/Kg		101	79 - 126
1,1-Dichloroethene	50.0	47.8		ug/Kg		96	65 - 153
1,2-Dichlorobenzene	50.0	51.8		ug/Kg		104	75 - 120
1,2-Dichloroethane	50.0	49.2		ug/Kg		98	77 - 122
Benzene	50.0	52.1		ug/Kg		104	79 - 127
Chlorobenzene	50.0	51.4		ug/Kg		103	76 - 124
cis-1,2-Dichloroethene	50.0	51.9		ug/Kg		104	81 - 117
Ethylbenzene	50.0	51.6		ug/Kg		103	80 - 120
Methyl tert-butyl ether	50.0	52.9		ug/Kg		106	63 - 125
Tetrachloroethene	50.0	50.5		ug/Kg		101	74 - 122
Toluene	50.0	51.7		ug/Kg		103	74 - 128
trans-1,2-Dichloroethene	50.0	50.8		ug/Kg		102	78 - 126
Trichloroethene	50.0	50.6		ug/Kg		101	77 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		64 - 126
Toluene-d8 (Surr)	103		71 - 125
4-Bromofluorobenzene (Surr)	99		72 - 126

Lab Sample ID: MB 480-76308/5

Matrix: Water

Analysis Batch: 76308

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/13/12 12:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/13/12 12:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/13/12 12:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/13/12 12:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/13/12 12:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/13/12 12:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/13/12 12:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/13/12 12:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/13/12 12:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/13/12 12:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/13/12 12:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/13/12 12:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/13/12 12:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/13/12 12:36	1
2-Hexanone	ND		5.0	1.2	ug/L			08/13/12 12:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/13/12 12:36	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

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

Lab Sample ID: MB 480-76308/5

Matrix: Water

Analysis Batch: 76308

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/13/12 12:36	1
Acetone	ND		10	3.0	ug/L			08/13/12 12:36	1
Benzene	ND		1.0	0.41	ug/L			08/13/12 12:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/13/12 12:36	1
Bromoform	ND		1.0	0.26	ug/L			08/13/12 12:36	1
Bromomethane	ND		1.0	0.69	ug/L			08/13/12 12:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/13/12 12:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/13/12 12:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/13/12 12:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/13/12 12:36	1
Chloroethane	ND		1.0	0.32	ug/L			08/13/12 12:36	1
Chloroform	ND		1.0	0.34	ug/L			08/13/12 12:36	1
Chloromethane	ND		1.0	0.35	ug/L			08/13/12 12:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/13/12 12:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/13/12 12:36	1
Cyclohexane	ND		1.0	0.18	ug/L			08/13/12 12:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/13/12 12:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/13/12 12:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/13/12 12:36	1
Methyl acetate	ND		1.0	0.50	ug/L			08/13/12 12:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/13/12 12:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/13/12 12:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/13/12 12:36	1
Styrene	ND		1.0	0.73	ug/L			08/13/12 12:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/13/12 12:36	1
Toluene	ND		1.0	0.51	ug/L			08/13/12 12:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/13/12 12:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/13/12 12:36	1
Trichloroethene	ND		1.0	0.46	ug/L			08/13/12 12:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/13/12 12:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/13/12 12:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/13/12 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137		08/13/12 12:36	1
Toluene-d8 (Surr)	93		71 - 126		08/13/12 12:36	1
4-Bromofluorobenzene (Surr)	86		73 - 120		08/13/12 12:36	1

Lab Sample ID: LCS 480-76308/3

Matrix: Water

Analysis Batch: 76308

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	26.8		ug/L		107	71 - 129
1,1-Dichloroethene	25.0	21.7		ug/L		87	65 - 138
1,2-Dichlorobenzene	25.0	25.6		ug/L		103	77 - 120
1,2-Dichloroethane	25.0	28.5		ug/L		114	75 - 127
Benzene	25.0	27.1		ug/L		108	71 - 124
Chlorobenzene	25.0	24.4		ug/L		98	72 - 120

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

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

Lab Sample ID: LCS 480-76308/3

Matrix: Water

Analysis Batch: 76308

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	25.0	24.9		ug/L		100	74 - 124
Ethylbenzene	25.0	24.3		ug/L		97	77 - 123
Methyl tert-butyl ether	25.0	25.8		ug/L		103	64 - 127
Tetrachloroethene	25.0	23.6		ug/L		94	74 - 122
Toluene	25.0	24.5		ug/L		98	70 - 122
trans-1,2-Dichloroethene	25.0	26.5		ug/L		106	73 - 127
Trichloroethene	25.0	26.8		ug/L		107	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		66 - 137
Toluene-d8 (Surr)	91		71 - 126
4-Bromofluorobenzene (Surr)	91		73 - 120

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

Lab Sample ID: MB 480-75031/1-A

Matrix: Solid

Analysis Batch: 75110

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 75031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	36	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2,4-Dichlorophenol	ND		170	8.7	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2,4-Dimethylphenol	ND		170	45	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2,4-Dinitrophenol	ND		330	58	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2,6-Dinitrotoluene	ND		170	41	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2-Chloronaphthalene	ND		170	11	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2-Chlorophenol	ND		170	8.5	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2-Methylnaphthalene	ND		170	2.0	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2-Methylphenol	ND		170	5.1	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2-Nitroaniline	ND		330	53	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
2-Nitrophenol	ND		170	7.6	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
3-Nitroaniline	ND		330	38	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
4,6-Dinitro-2-methylphenol	ND		330	58	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
4-Bromophenyl phenyl ether	ND		170	53	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
4-Chloro-3-methylphenol	ND		170	6.9	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
4-Chloroaniline	ND		170	49	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
4-Chlorophenyl phenyl ether	ND		170	3.5	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
4-Methylphenol	ND		330	9.3	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
4-Nitroaniline	ND		330	19	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
4-Nitrophenol	ND		330	40	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Acenaphthene	ND		170	2.0	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Acenaphthylene	ND		170	1.4	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Acetophenone	ND		170	8.5	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Anthracene	ND		170	4.3	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Atrazine	ND		170	7.4	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Benzaldehyde	ND		170	18	ug/Kg		08/03/12 09:13	08/03/12 18:32	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

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

Lab Sample ID: MB 480-75031/1-A

Matrix: Solid

Analysis Batch: 75110

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 75031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(a)anthracene	ND		170	2.9	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Benzo(b)fluoranthene	ND		170	3.2	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Benzo(k)fluoranthene	ND		170	1.8	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Biphenyl	ND		170	10	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
bis (2-chloroisopropyl) ether	ND		170	17	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Bis(2-chloroethoxy)methane	ND		170	9.1	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Bis(2-chloroethyl)ether	ND		170	14	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Bis(2-ethylhexyl) phthalate	ND		170	54	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Butyl benzyl phthalate	ND		170	45	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Caprolactam	ND		170	72	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Carbazole	ND		170	1.9	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Chrysene	ND		170	1.7	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Dibenzofuran	ND		170	1.7	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Diethyl phthalate	ND		170	5.0	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Dimethyl phthalate	ND		170	4.3	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Di-n-butyl phthalate	ND		170	58	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Di-n-octyl phthalate	ND		170	3.9	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Fluoranthene	ND		170	2.4	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Fluorene	ND		170	3.8	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Hexachlorobenzene	ND		170	8.3	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Hexachlorobutadiene	ND		170	8.5	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Hexachlorocyclopentadiene	ND		170	50	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Hexachloroethane	ND		170	13	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Isophorone	ND		170	8.3	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Naphthalene	ND		170	2.8	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Nitrobenzene	ND		170	7.4	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
N-Nitrosodiphenylamine	ND		170	9.1	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Pentachlorophenol	ND		330	57	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Phenanthrene	ND		170	3.5	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Phenol	ND		170	18	ug/Kg		08/03/12 09:13	08/03/12 18:32	1
Pyrene	ND		170	1.1	ug/Kg		08/03/12 09:13	08/03/12 18:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	88		39 - 146	08/03/12 09:13	08/03/12 18:32	1
2-Fluorobiphenyl	79		37 - 120	08/03/12 09:13	08/03/12 18:32	1
2-Fluorophenol	71		18 - 120	08/03/12 09:13	08/03/12 18:32	1
Nitrobenzene-d5	83		34 - 132	08/03/12 09:13	08/03/12 18:32	1
Phenol-d5	76		11 - 120	08/03/12 09:13	08/03/12 18:32	1
p-Terphenyl-d14	103		65 - 153	08/03/12 09:13	08/03/12 18:32	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

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

Lab Sample ID: LCS 480-75031/2-A

Matrix: Solid

Analysis Batch: 75110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 75031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	3300	3530		ug/Kg		107	55 - 125
2-Chlorophenol	3300	2790		ug/Kg		85	38 - 120
4-Chloro-3-methylphenol	3300	3510		ug/Kg		106	49 - 125
4-Nitrophenol	3300	3280		ug/Kg		99	43 - 137
Acenaphthene	3300	3180		ug/Kg		96	53 - 120
Bis(2-ethylhexyl) phthalate	3300	3980		ug/Kg		121	61 - 133
Fluorene	3300	3350		ug/Kg		101	63 - 126
Hexachloroethane	3300	2780		ug/Kg		84	41 - 120
N-Nitrosodi-n-propylamine	3300	3240		ug/Kg		98	46 - 120
Pentachlorophenol	3300	2920		ug/Kg		88	33 - 136
Phenol	3300	2910		ug/Kg		88	36 - 120
Pyrene	3300	3400		ug/Kg		103	51 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	104		39 - 146
2-Fluorobiphenyl	91		37 - 120
2-Fluorophenol	81		18 - 120
Nitrobenzene-d5	93		34 - 132
Phenol-d5	88		11 - 120
p-Terphenyl-d14	126		65 - 153

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-75940/1-A

Matrix: Solid

Analysis Batch: 76253

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 75940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.32	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
4,4'-DDE	ND		1.7	0.25	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
4,4'-DDT	ND		1.7	0.17	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Aldrin	ND		1.7	0.41	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
alpha-BHC	ND		1.7	0.30	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
alpha-Chlordane	ND		1.7	0.82	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
beta-BHC	ND		1.7	0.18	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
delta-BHC	ND		1.7	0.22	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Dieldrin	ND		1.7	0.40	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Endosulfan I	ND		1.7	0.21	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Endosulfan II	ND		1.7	0.30	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Endrin	ND		1.7	0.23	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Endrin aldehyde	ND		1.7	0.42	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Endrin ketone	ND		1.7	0.41	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
gamma-BHC (Lindane)	ND		1.7	1.2	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
gamma-Chlordane	ND		1.7	0.53	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Heptachlor	ND		1.7	0.26	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Heptachlor epoxide	ND		1.7	0.43	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Methoxychlor	ND		1.7	0.23	ug/Kg		08/09/12 14:42	08/11/12 14:29	1
Toxaphene	ND		17	9.6	ug/Kg		08/09/12 14:42	08/11/12 14:29	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-75940/1-A

Matrix: Solid

Analysis Batch: 76253

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 75940

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	91		62 - 137	08/09/12 14:42	08/11/12 14:29	1
DCB Decachlorobiphenyl	94		62 - 137	08/09/12 14:42	08/11/12 14:29	1
Tetrachloro-m-xylene	74		30 - 124	08/09/12 14:42	08/11/12 14:29	1
Tetrachloro-m-xylene	75		30 - 124	08/09/12 14:42	08/11/12 14:29	1

Lab Sample ID: LCS 480-75940/2-A

Matrix: Solid

Analysis Batch: 76253

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 75940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.6	14.8		ug/Kg		89	45 - 129
4,4'-DDE	16.6	14.8		ug/Kg		89	49 - 120
4,4'-DDT	16.6	14.3		ug/Kg		87	47 - 145
Aldrin	16.6	13.3		ug/Kg		81	35 - 120
alpha-BHC	16.6	12.5		ug/Kg		76	49 - 120
alpha-Chlordane	16.6	14.8		ug/Kg		89	44 - 127
beta-BHC	16.6	13.1		ug/Kg		79	58 - 123
delta-BHC	16.6	13.3		ug/Kg		80	45 - 123
Dieldrin	16.6	14.4		ug/Kg		87	53 - 128
Endosulfan I	16.6	14.2		ug/Kg		86	29 - 125
Endosulfan II	16.6	14.4		ug/Kg		87	56 - 127
Endosulfan sulfate	16.6	14.3		ug/Kg		86	53 - 135
Endrin	16.6	15.4		ug/Kg		93	58 - 129
Endrin aldehyde	16.6	13.8		ug/Kg		83	39 - 133
Endrin ketone	16.6	15.1		ug/Kg		91	61 - 133
gamma-BHC (Lindane)	16.6	12.7		ug/Kg		77	50 - 120
gamma-Chlordane	16.6	14.1		ug/Kg		85	54 - 124
Heptachlor	16.6	13.6		ug/Kg		82	49 - 122
Heptachlor epoxide	16.6	14.2		ug/Kg		86	47 - 128
Methoxychlor	16.6	15.8		ug/Kg		95	61 - 146

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	93		62 - 137
DCB Decachlorobiphenyl	94		62 - 137
Tetrachloro-m-xylene	74		30 - 124
Tetrachloro-m-xylene	75		30 - 124

Lab Sample ID: 480-23380-1 MS

Matrix: Solid

Analysis Batch: 76253

Client Sample ID: T1-MW-03 (0-.5)

Prep Type: Total/NA

Prep Batch: 75940

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		17.2	31.6	J F	ug/Kg	☼	184	53 - 124
4,4'-DDE	29	J	17.2	29.9	J F	ug/Kg	☼	7	44 - 123
4,4'-DDT	120		17.2	124	4	ug/Kg	☼	46	36 - 132
Aldrin	ND		17.2	ND		ug/Kg	☼	NC	35 - 120
alpha-BHC	ND		17.2	ND	F	ug/Kg	☼	0	35 - 114
alpha-Chlordane	ND		17.2	ND		ug/Kg	☼	NC	47 - 121
beta-BHC	ND		17.2	ND	F	ug/Kg	☼	0	50 - 121

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-23380-1 MS

Matrix: Solid

Analysis Batch: 76253

Client Sample ID: T1-MW-03 (0-.5)

Prep Type: Total/NA

Prep Batch: 75940

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
delta-BHC	ND		17.2	ND	F	ug/Kg	✱	0	45 - 123
Dieldrin	ND		17.2	ND		ug/Kg	✱	NC	47 - 120
Endosulfan I	ND		17.2	ND	F	ug/Kg	✱	0	29 - 125
Endosulfan II	ND		17.2	ND	F	ug/Kg	✱	0	21 - 137
Endosulfan sulfate	ND		17.2	ND	F	ug/Kg	✱	0	34 - 136
Endrin	ND		17.2	ND	F	ug/Kg	✱	0	53 - 120
Endrin aldehyde	ND		17.2	ND		ug/Kg	✱	NC	33 - 120
Endrin ketone	ND		17.2	ND		ug/Kg	✱	NC	49 - 131
gamma-BHC (Lindane)	ND		17.2	ND		ug/Kg	✱	NC	50 - 120
gamma-Chlordane	ND		17.2	ND		ug/Kg	✱	NC	51 - 120
Heptachlor	ND		17.2	ND	F	ug/Kg	✱	0	47 - 120
Heptachlor epoxide	ND		17.2	ND		ug/Kg	✱	NC	44 - 122
Methoxychlor	160		17.2	107	4	ug/Kg	✱	-284	53 - 143

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	0	X	62 - 137
DCB Decachlorobiphenyl	0	X	62 - 137
Tetrachloro-m-xylene	0	X	30 - 124
Tetrachloro-m-xylene	0	X	30 - 124

Lab Sample ID: 480-23380-1 MSD

Matrix: Solid

Analysis Batch: 76253

Client Sample ID: T1-MW-03 (0-.5)

Prep Type: Total/NA

Prep Batch: 75940

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		17.2	29.8	J F	ug/Kg	✱	174	53 - 124	6	21
4,4'-DDE	29	J	17.2	26.2	J F	ug/Kg	✱	-15	44 - 123	13	18
4,4'-DDT	120		17.2	80.3	J 4 F	ug/Kg	✱	-210	36 - 132	43	25
Aldrin	ND		17.2	ND		ug/Kg	✱	NC	35 - 120	NC	12
alpha-BHC	ND		17.2	ND	F	ug/Kg	✱	0	35 - 114	NC	15
alpha-Chlordane	ND		17.2	ND		ug/Kg	✱	NC	47 - 121	NC	23
beta-BHC	ND		17.2	ND	F	ug/Kg	✱	0	50 - 121	NC	19
delta-BHC	ND		17.2	ND	F	ug/Kg	✱	0	45 - 123	NC	14
Dieldrin	ND		17.2	ND		ug/Kg	✱	NC	47 - 120	NC	12
Endosulfan I	ND		17.2	ND	F	ug/Kg	✱	0	29 - 125	NC	18
Endosulfan II	ND		17.2	ND	F	ug/Kg	✱	0	21 - 137	NC	26
Endosulfan sulfate	ND		17.2	ND	F	ug/Kg	✱	0	34 - 136	NC	35
Endrin	ND		17.2	ND	F	ug/Kg	✱	0	53 - 120	NC	20
Endrin aldehyde	ND		17.2	ND		ug/Kg	✱	NC	33 - 120	NC	47
Endrin ketone	ND		17.2	ND		ug/Kg	✱	NC	49 - 131	NC	37
gamma-BHC (Lindane)	ND		17.2	ND		ug/Kg	✱	NC	50 - 120	NC	12
gamma-Chlordane	ND		17.2	ND		ug/Kg	✱	NC	51 - 120	NC	15
Heptachlor	ND		17.2	ND	F	ug/Kg	✱	0	47 - 120	NC	22
Heptachlor epoxide	ND		17.2	ND		ug/Kg	✱	NC	44 - 122	NC	15
Methoxychlor	160		17.2	99.0	4	ug/Kg	✱	-330	53 - 143	8	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	0	X	62 - 137
DCB Decachlorobiphenyl	0	X	62 - 137

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-23380-1 MSD

Matrix: Solid

Analysis Batch: 76253

Client Sample ID: T1-MW-03 (0-.5)

Prep Type: Total/NA

Prep Batch: 75940

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	0	X	30 - 124
Tetrachloro-m-xylene	0	X	30 - 124

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-75246/1-A

Matrix: Solid

Analysis Batch: 75402

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 75246

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		240	47	ug/Kg		08/06/12 10:52	08/07/12 13:58	1
PCB-1221	ND		240	47	ug/Kg		08/06/12 10:52	08/07/12 13:58	1
PCB-1232	ND		240	47	ug/Kg		08/06/12 10:52	08/07/12 13:58	1
PCB-1242	ND		240	47	ug/Kg		08/06/12 10:52	08/07/12 13:58	1
PCB-1248	ND		240	47	ug/Kg		08/06/12 10:52	08/07/12 13:58	1
PCB-1254	ND		240	110	ug/Kg		08/06/12 10:52	08/07/12 13:58	1
PCB-1260	ND		240	110	ug/Kg		08/06/12 10:52	08/07/12 13:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	107		36 - 182	08/06/12 10:52	08/07/12 13:58	1
DCB Decachlorobiphenyl	117		36 - 182	08/06/12 10:52	08/07/12 13:58	1
Tetrachloro-m-xylene	117		24 - 172	08/06/12 10:52	08/07/12 13:58	1
Tetrachloro-m-xylene	120		24 - 172	08/06/12 10:52	08/07/12 13:58	1

Lab Sample ID: LCS 480-75246/2-A

Matrix: Solid

Analysis Batch: 75402

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 75246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2440	2830		ug/Kg		116	51 - 185
PCB-1260	2440	2610		ug/Kg		107	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	119		36 - 182
DCB Decachlorobiphenyl	131		36 - 182
Tetrachloro-m-xylene	138		24 - 172
Tetrachloro-m-xylene	69		24 - 172

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-74854/1-A

Matrix: Solid

Analysis Batch: 75333

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.6		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Antimony	ND		14.5		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Arsenic	ND		1.9		mg/Kg		08/02/12 14:10	08/06/12 10:59	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

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

Lab Sample ID: MB 480-74854/1-A

Matrix: Solid

Analysis Batch: 75333

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.48		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Beryllium	ND		0.19		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Cadmium	ND		0.19		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Calcium	ND		48.2		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Chromium	ND		0.48		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Cobalt	ND		0.48		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Copper	ND		0.96		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Iron	ND		9.6		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Lead	ND		0.96		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Magnesium	ND		19.3		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Manganese	ND		0.19		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Nickel	ND		4.8		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Potassium	ND		28.9		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Selenium	ND		3.9		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Silver	ND		0.48		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Sodium	ND		135		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Thallium	ND		5.8		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Vanadium	ND		0.48		mg/Kg		08/02/12 14:10	08/06/12 10:59	1
Zinc	ND		1.9		mg/Kg		08/02/12 14:10	08/06/12 10:59	1

Lab Sample ID: LCSSRM 480-74854/2-A

Matrix: Solid

Analysis Batch: 75333

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74854

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8410	6285		mg/Kg		74.7	40.6 - 159.5
Antimony	93.4	74.11		mg/Kg		79.3	24.8 - 272.2
Arsenic	94.7	92.42		mg/Kg		97.6	69.2 - 131.2
Barium	167	164.2		mg/Kg		98.2	72.5 - 126.9
Beryllium	57.7	55.65		mg/Kg		96.5	73.3 - 126.7
Cadmium	60.6	61.76		mg/Kg		101.9	73.2 - 126.8
Calcium	6150	5829		mg/Kg		94.8	73.9 - 126.4
Chromium	70.5	66.24		mg/Kg		93.9	68.5 - 131.5
Cobalt	102	109.1		mg/Kg		106.8	74.5 - 125.5
Copper	79.7	80.45		mg/Kg		100.9	73.6 - 125.6
Iron	12500	9237		mg/Kg		73.8	31.0 - 168.8
Lead	91.9	95.50		mg/Kg		103.9	70.3 - 129.6
Magnesium	2580	2280		mg/Kg		88.2	63.6 - 136.0
Manganese	283	239.5		mg/Kg		84.5	73.9 - 125.4

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

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

Lab Sample ID: LCSSRM 480-74854/2-A

Matrix: Solid

Analysis Batch: 75333

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74854

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	57.7	60.34		mg/Kg		104.6	70.0 - 130.2
Potassium	2490	2320		mg/Kg		93.0	60.6 - 139.0
Selenium	86.5	84.16		mg/Kg		97.2	64.0 - 136.6
Silver	34.5	35.97		mg/Kg		104.4	65.7 - 134.6
Sodium	215	223.0		mg/Kg		103.5	26.7 - 174.0
Thallium	120	130.3		mg/Kg		108.4	67.3 - 131.7
Vanadium	57.1	48.97		mg/Kg		85.8	53.7 - 146.1
Zinc	140	127.6		mg/Kg		91.0	67.4 - 132.9

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-75040/1-A

Matrix: Solid

Analysis Batch: 75108

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 75040

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021		mg/Kg		08/03/12 11:40	08/03/12 13:26	1

Lab Sample ID: LCSSRM 480-75040/2-A

Matrix: Solid

Analysis Batch: 75108

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 75040

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	3.22		mg/Kg		85.3	71.6 - 128.4

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

GC/MS VOA

Analysis Batch: 75363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-3	T1-MW-02 (5-6)	Total/NA	Solid	8260B	75907
LCS 480-75363/3	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-75363/4	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 75907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-3	T1-MW-02 (5-6)	Total/NA	Solid	5035	

Analysis Batch: 76308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-4	TB	Total/NA	Water	8260B	
LCS 480-76308/3	Lab Control Sample	Total/NA	Water	8260B	
MB 480-76308/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 75031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	3550B	
480-23380-1 - DL	T1-MW-03 (0-.5)	Total/NA	Solid	3550B	
LCS 480-75031/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-75031/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 75110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	8270C	75031
LCS 480-75031/2-A	Lab Control Sample	Total/NA	Solid	8270C	75031
MB 480-75031/1-A	Method Blank	Total/NA	Solid	8270C	75031

Analysis Batch: 75239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1 - DL	T1-MW-03 (0-.5)	Total/NA	Solid	8270C	75031

GC Semi VOA

Prep Batch: 75246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	3550B	
LCS 480-75246/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-75246/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 75402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	8082	75246
LCS 480-75246/2-A	Lab Control Sample	Total/NA	Solid	8082	75246
MB 480-75246/1-A	Method Blank	Total/NA	Solid	8082	75246

Prep Batch: 75940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	3550B	
480-23380-1 MS	T1-MW-03 (0-.5)	Total/NA	Solid	3550B	
480-23380-1 MSD	T1-MW-03 (0-.5)	Total/NA	Solid	3550B	

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

GC Semi VOA (Continued)

Prep Batch: 75940 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-75940/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-75940/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 76253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	8081A	75940
480-23380-1 MS	T1-MW-03 (0-.5)	Total/NA	Solid	8081A	75940
480-23380-1 MSD	T1-MW-03 (0-.5)	Total/NA	Solid	8081A	75940
LCS 480-75940/2-A	Lab Control Sample	Total/NA	Solid	8081A	75940
MB 480-75940/1-A	Method Blank	Total/NA	Solid	8081A	75940

Metals

Prep Batch: 74854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	3050B	
480-23380-2	T1-MW-03 (1.5-2)	Total/NA	Solid	3050B	
LCSSRM 480-74854/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-74854/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 75040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	7471A	
LCSSRM 480-75040/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-75040/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 75108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	7471A	75040
LCSSRM 480-75040/2-A	Lab Control Sample	Total/NA	Solid	7471A	75040
MB 480-75040/1-A	Method Blank	Total/NA	Solid	7471A	75040

Analysis Batch: 75333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	6010B	74854
480-23380-2	T1-MW-03 (1.5-2)	Total/NA	Solid	6010B	74854
LCSSRM 480-74854/2-A	Lab Control Sample	Total/NA	Solid	6010B	74854
MB 480-74854/1-A	Method Blank	Total/NA	Solid	6010B	74854

General Chemistry

Analysis Batch: 75052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23380-1	T1-MW-03 (0-.5)	Total/NA	Solid	Moisture	
480-23380-2	T1-MW-03 (1.5-2)	Total/NA	Solid	Moisture	
480-23380-3	T1-MW-02 (5-6)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Client Sample ID: T1-MW-03 (0-.5)

Date Collected: 08/01/12 10:30

Date Received: 08/02/12 12:35

Lab Sample ID: 480-23380-1

Matrix: Solid

Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			75031	08/03/12 09:13	CM	TAL BUF
Total/NA	Analysis	8270C		1	75110	08/03/12 22:53	RMM	TAL BUF
Total/NA	Prep	3550B	DL		75031	08/03/12 09:13	CM	TAL BUF
Total/NA	Analysis	8270C	DL	10	75239	08/06/12 12:31	RMM	TAL BUF
Total/NA	Prep	3550B			75246	08/06/12 10:52	CM	TAL BUF
Total/NA	Analysis	8082		1	75402	08/07/12 15:33	JM	TAL BUF
Total/NA	Prep	3550B			75940	08/09/12 14:43	DE	TAL BUF
Total/NA	Analysis	8081A		50	76253	08/11/12 17:14	LW	TAL BUF
Total/NA	Prep	7471A			75040	08/03/12 11:40	MM	TAL BUF
Total/NA	Analysis	7471A		2	75108	08/03/12 15:10	MM	TAL BUF
Total/NA	Prep	3050B			74854	08/02/12 14:10	SS	TAL BUF
Total/NA	Analysis	6010B		1	75333	08/06/12 11:38	MM	TAL BUF
Total/NA	Analysis	Moisture		1	75052	08/03/12 11:39	ZLR	TAL BUF

Client Sample ID: T1-MW-03 (1.5-2)

Date Collected: 08/01/12 10:40

Date Received: 08/02/12 12:35

Lab Sample ID: 480-23380-2

Matrix: Solid

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			74854	08/02/12 14:10	SS	TAL BUF
Total/NA	Analysis	6010B		1	75333	08/06/12 11:41	MM	TAL BUF
Total/NA	Analysis	Moisture		1	75052	08/03/12 11:39	ZLR	TAL BUF

Client Sample ID: T1-MW-02 (5-6)

Date Collected: 08/01/12 13:35

Date Received: 08/02/12 12:35

Lab Sample ID: 480-23380-3

Matrix: Solid

Percent Solids: 78.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			75907	08/06/12 17:58	RJ	TAL BUF
Total/NA	Analysis	8260B		1	75363	08/06/12 22:58	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	75052	08/03/12 11:39	ZLR	TAL BUF

Client Sample ID: TB

Date Collected: 08/01/12 00:00

Date Received: 08/02/12 12:35

Lab Sample ID: 480-23380-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	76308	08/13/12 13:11	TRB	TAL BUF

Laboratory References:

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

Certification Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Laboratory: TestAmerica Buffalo

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

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

Method Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081A	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23380-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-23380-1	T1-MW-03 (0-.5)	Solid	08/01/12 10:30	08/02/12 12:35
480-23380-2	T1-MW-03 (1.5-2)	Solid	08/01/12 10:40	08/02/12 12:35
480-23380-3	T1-MW-02 (5-6)	Solid	08/01/12 13:35	08/02/12 12:35
480-23380-4	TB	Water	08/01/12 00:00	08/02/12 12:35

Chain of Custody Record

Temperature on Receipt _____

THE LEADER IN ENVIRONMENTAL TESTING

Drinking Water? Yes ☐ No ☒

TAL-4124 (1007)

[illegible]

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

L'H

Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 480-23380-1

Login Number: 23380

List Source: TestAmerica Buffalo

List Number: 1

Creator: May, Joel M

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-23756-1

Client Project/Site: Niagara Falls site

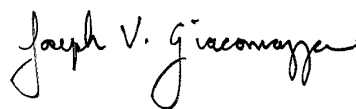
For:

AMEC Environment & Infrastructure, Inc.

800 North Bell Avenue, Suite 200

Carnegie, Pennsylvania 15106

Attn: Eric Weiler



Authorized for release by:

8/23/2012 9:41:43 AM

Joe Giacomazza

Project Administrator

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

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

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

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

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Definitions/Glossary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
F	RPD of the MS and MSD exceeds the control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Job ID: 480-23756-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-23756-1

Receipt

The samples were received on 8/10/2012 12:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.6° C, 3.9° C, 4.0° C and 4.1° C.

GC/MS VOA

Method 8260B: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: DUP (480-23756-4), TI-MW02 (480-23756-2), TI-MW03 (480-23756-3). Elevated reporting limits (RLs) are provided.

No analytical or quality issues were noted.

GC/MS Semi VOA

Method 8270C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 76353 exceeded control limits for the following analyte: N-Nitrosodiphenylamine. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8270C: The following samples contained one acid and/or one base surrogate outside acceptance limits: DUP (480-23756-4), TI-MW01 (480-23756-1), TI-MW02 (480-23756-2), TI-MW03 (480-23756-3). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

GC Semi VOA

Method 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 76529 was outside control limits, though the individual spike recoveries were compliant.

Method 8081A: All primary data is reported from the RTX-CLPI column.

Method 8082: All primary data is reported from the ZB-5 column.

Method 8082: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

No other analytical or quality issues were noted.

Metals

Method 3005A: The following samples were received unpreserved and were preserved upon receipt to the laboratory: DUP (480-23756-4), TI-MW01 (480-23756-1), TI-MW01 (480-23756-1 MS), TI-MW01 (480-23756-1 MSD), TI-MW02 (480-23756-2), TI-MW03 (480-23756-3). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW01

Lab Sample ID: 480-23756-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.4	J	10	3.0	ug/L	1		8260B	Total/NA
Carbon disulfide	0.51	J	1.0	0.19	ug/L	1		8260B	Total/NA
Phenanthrene	0.83	J	4.8	0.42	ug/L	1		8270C	Total/NA
Endosulfan II	0.017	J	0.047	0.011	ug/L	1		8081A	Total/NA
Endrin	0.018	J	0.047	0.013	ug/L	1		8081A	Total/NA
gamma-Chlordane	0.16		0.047	0.010	ug/L	1		8081A	Total/NA
Methoxychlor	0.018	J	0.047	0.013	ug/L	1		8081A	Total/NA
Aluminum	0.20		0.20		mg/L	1		6010B	Total/NA
Barium	0.028		0.0020		mg/L	1		6010B	Total/NA
Calcium	147		0.50		mg/L	1		6010B	Total/NA
Iron	0.21		0.050		mg/L	1		6010B	Total/NA
Magnesium	123		0.20		mg/L	1		6010B	Total/NA
Manganese	0.34		0.0030		mg/L	1		6010B	Total/NA
Potassium	4.0		0.50		mg/L	1		6010B	Total/NA
Sodium	42.0		1.0		mg/L	1		6010B	Total/NA
Barium, Dissolved	0.027		0.0020		mg/L	1		6010B	Dissolved
Calcium, Dissolved	149		0.50		mg/L	1		6010B	Dissolved
Magnesium, Dissolved	126		0.20		mg/L	1		6010B	Dissolved
Manganese, Dissolved	0.34		0.0030		mg/L	1		6010B	Dissolved
Potassium, Dissolved	4.2		0.50		mg/L	1		6010B	Dissolved
Sodium, Dissolved	42.7		1.0		mg/L	1		6010B	Dissolved
Zinc, Dissolved	0.011		0.010		mg/L	1		6010B	Dissolved

Client Sample ID: TI-MW02

Lab Sample ID: 480-23756-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	1.9	J	4.8	0.57	ug/L	1		8270C	Total/NA
Acenaphthene	0.42	J	4.8	0.39	ug/L	1		8270C	Total/NA
Acetophenone	1.8	J	4.8	0.51	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.31	J	4.8	0.21	ug/L	1		8270C	Total/NA
Fluorene	0.55	J	4.8	0.34	ug/L	1		8270C	Total/NA
Naphthalene	1.3	J	4.8	0.72	ug/L	1		8270C	Total/NA
Phenanthrene	0.77	J	4.8	0.42	ug/L	1		8270C	Total/NA
Aluminum	1.1		0.20		mg/L	1		6010B	Total/NA
Barium	0.16		0.0020		mg/L	1		6010B	Total/NA
Calcium	249		0.50		mg/L	1		6010B	Total/NA
Iron	6.1		0.050		mg/L	1		6010B	Total/NA
Lead	0.033		0.0050		mg/L	1		6010B	Total/NA
Magnesium	144		0.20		mg/L	1		6010B	Total/NA
Manganese	1.5		0.0030		mg/L	1		6010B	Total/NA
Potassium	4.6		0.50		mg/L	1		6010B	Total/NA
Sodium	58.5		1.0		mg/L	1		6010B	Total/NA
Vanadium	0.0053		0.0050		mg/L	1		6010B	Total/NA
Zinc	0.044		0.010		mg/L	1		6010B	Total/NA
Barium, Dissolved	0.14		0.0020		mg/L	1		6010B	Dissolved
Calcium, Dissolved	241		0.50		mg/L	1		6010B	Dissolved
Magnesium, Dissolved	142		0.20		mg/L	1		6010B	Dissolved
Manganese, Dissolved	1.5		0.0030		mg/L	1		6010B	Dissolved
Potassium, Dissolved	4.3		0.50		mg/L	1		6010B	Dissolved
Sodium, Dissolved	60.2		1.0		mg/L	1		6010B	Dissolved
Zinc, Dissolved	0.033		0.010		mg/L	1		6010B	Dissolved

Client Sample ID: TI-MW03

Lab Sample ID: 480-23756-3

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW03 (Continued)

Lab Sample ID: 480-23756-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Trichloroethene	8.7		5.0	2.3	ug/L		5		8260B	Total/NA
Di-n-butyl phthalate	0.40	J	4.8	0.30	ug/L		1		8270C	Total/NA
4,4'-DDD	0.18		0.048	0.0088	ug/L		1		8081A	Total/NA
4,4'-DDE	0.042	J	0.048	0.011	ug/L		1		8081A	Total/NA
4,4'-DDT	0.16		0.048	0.010	ug/L		1		8081A	Total/NA
beta-BHC	0.20		0.048	0.024	ug/L		1		8081A	Total/NA
Endosulfan II	0.064		0.048	0.011	ug/L		1		8081A	Total/NA
Heptachlor epoxide	0.020	J	0.048	0.0050	ug/L		1		8081A	Total/NA
Antimony	0.021		0.020		mg/L		1		6010B	Total/NA
Barium	0.072		0.0020		mg/L		1		6010B	Total/NA
Calcium	114		0.50		mg/L		1		6010B	Total/NA
Iron	0.13		0.050		mg/L		1		6010B	Total/NA
Lead	0.027		0.0050		mg/L		1		6010B	Total/NA
Magnesium	87.6		0.20		mg/L		1		6010B	Total/NA
Manganese	0.91		0.0030		mg/L		1		6010B	Total/NA
Potassium	8.7		0.50		mg/L		1		6010B	Total/NA
Sodium	58.8		1.0		mg/L		1		6010B	Total/NA
Zinc	0.012		0.010		mg/L		1		6010B	Total/NA
Antimony, Dissolved	0.020		0.020		mg/L		1		6010B	Dissolved
Barium, Dissolved	0.077		0.0020		mg/L		1		6010B	Dissolved
Calcium, Dissolved	110		0.50		mg/L		1		6010B	Dissolved
Magnesium, Dissolved	82.1		0.20		mg/L		1		6010B	Dissolved
Manganese, Dissolved	0.84		0.0030		mg/L		1		6010B	Dissolved
Potassium, Dissolved	8.1		0.50		mg/L		1		6010B	Dissolved
Sodium, Dissolved	57.6		1.0		mg/L		1		6010B	Dissolved
Zinc, Dissolved	0.030		0.010		mg/L		1		6010B	Dissolved

Client Sample ID: DUP

Lab Sample ID: 480-23756-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Methylnaphthalene	2.0	J	4.7	0.57	ug/L		1		8270C	Total/NA
Acenaphthene	0.47	J	4.7	0.39	ug/L		1		8270C	Total/NA
Diethyl phthalate	0.41	J	4.7	0.21	ug/L		1		8270C	Total/NA
Fluorene	0.55	J	4.7	0.34	ug/L		1		8270C	Total/NA
Naphthalene	1.5	J	4.7	0.72	ug/L		1		8270C	Total/NA
Phenanthrene	0.82	J	4.7	0.42	ug/L		1		8270C	Total/NA
Aluminum	1.2		0.20		mg/L		1		6010B	Total/NA
Barium	0.14		0.0020		mg/L		1		6010B	Total/NA
Calcium	254		0.50		mg/L		1		6010B	Total/NA
Iron	6.5		0.050		mg/L		1		6010B	Total/NA
Lead	0.033		0.0050		mg/L		1		6010B	Total/NA
Magnesium	126		0.20		mg/L		1		6010B	Total/NA
Manganese	1.4		0.0030		mg/L		1		6010B	Total/NA
Potassium	4.8		0.50		mg/L		1		6010B	Total/NA
Sodium	60.9		1.0		mg/L		1		6010B	Total/NA
Vanadium	0.0050		0.0050		mg/L		1		6010B	Total/NA
Zinc	0.042		0.010		mg/L		1		6010B	Total/NA
Barium, Dissolved	0.14		0.0020		mg/L		1		6010B	Dissolved
Calcium, Dissolved	239		0.50		mg/L		1		6010B	Dissolved
Magnesium, Dissolved	139		0.20		mg/L		1		6010B	Dissolved
Manganese, Dissolved	1.4		0.0030		mg/L		1		6010B	Dissolved
Potassium, Dissolved	4.3		0.50		mg/L		1		6010B	Dissolved
Sodium, Dissolved	60.7		1.0		mg/L		1		6010B	Dissolved

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: DUP (Continued)

Lab Sample ID: 480-23756-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc, Dissolved	0.053		0.010		mg/L	1		6010B	Dissolved

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-23756-5

No Detections

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW01

Lab Sample ID: 480-23756-1

Date Collected: 08/09/12 13:30

Matrix: Water

Date Received: 08/10/12 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/17/12 18:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/17/12 18:09	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/17/12 18:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/17/12 18:09	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/17/12 18:09	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/17/12 18:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/17/12 18:09	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/17/12 18:09	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/17/12 18:09	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/17/12 18:09	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/17/12 18:09	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/17/12 18:09	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/17/12 18:09	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/17/12 18:09	1
2-Hexanone	ND		5.0	1.2	ug/L			08/17/12 18:09	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/17/12 18:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/17/12 18:09	1
Acetone	3.4	J	10	3.0	ug/L			08/17/12 18:09	1
Benzene	ND		1.0	0.41	ug/L			08/17/12 18:09	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/17/12 18:09	1
Bromoform	ND		1.0	0.26	ug/L			08/17/12 18:09	1
Bromomethane	ND		1.0	0.69	ug/L			08/17/12 18:09	1
Carbon disulfide	0.51	J	1.0	0.19	ug/L			08/17/12 18:09	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/17/12 18:09	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/17/12 18:09	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/17/12 18:09	1
Chloroethane	ND		1.0	0.32	ug/L			08/17/12 18:09	1
Chloroform	ND		1.0	0.34	ug/L			08/17/12 18:09	1
Chloromethane	ND		1.0	0.35	ug/L			08/17/12 18:09	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/17/12 18:09	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/17/12 18:09	1
Cyclohexane	ND		1.0	0.18	ug/L			08/17/12 18:09	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/17/12 18:09	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/17/12 18:09	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/17/12 18:09	1
Methyl acetate	ND		1.0	0.50	ug/L			08/17/12 18:09	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/17/12 18:09	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/17/12 18:09	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/17/12 18:09	1
Styrene	ND		1.0	0.73	ug/L			08/17/12 18:09	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/17/12 18:09	1
Toluene	ND		1.0	0.51	ug/L			08/17/12 18:09	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/17/12 18:09	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/17/12 18:09	1
Trichloroethene	ND		1.0	0.46	ug/L			08/17/12 18:09	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/17/12 18:09	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/17/12 18:09	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/17/12 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137		08/17/12 18:09	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW01

Lab Sample ID: 480-23756-1

Date Collected: 08/09/12 13:30

Matrix: Water

Date Received: 08/10/12 12:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		71 - 126		08/17/12 18:09	1
4-Bromofluorobenzene (Surr)	104		73 - 120		08/17/12 18:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.8	0.62	ug/L		08/13/12 13:42	08/15/12 19:44	1
bis (2-chloroisopropyl) ether	ND		4.8	0.50	ug/L		08/13/12 13:42	08/15/12 19:44	1
2,4,5-Trichlorophenol	ND		4.8	0.46	ug/L		08/13/12 13:42	08/15/12 19:44	1
2,4,6-Trichlorophenol	ND		4.8	0.58	ug/L		08/13/12 13:42	08/15/12 19:44	1
2,4-Dichlorophenol	ND		4.8	0.49	ug/L		08/13/12 13:42	08/15/12 19:44	1
2,4-Dimethylphenol	ND		4.8	0.48	ug/L		08/13/12 13:42	08/15/12 19:44	1
2,4-Dinitrophenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 19:44	1
2,4-Dinitrotoluene	ND		4.8	0.43	ug/L		08/13/12 13:42	08/15/12 19:44	1
2,6-Dinitrotoluene	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 19:44	1
2-Chloronaphthalene	ND		4.8	0.44	ug/L		08/13/12 13:42	08/15/12 19:44	1
2-Chlorophenol	ND		4.8	0.50	ug/L		08/13/12 13:42	08/15/12 19:44	1
2-Methylnaphthalene	ND		4.8	0.57	ug/L		08/13/12 13:42	08/15/12 19:44	1
2-Methylphenol	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 19:44	1
2-Nitroaniline	ND		9.5	0.40	ug/L		08/13/12 13:42	08/15/12 19:44	1
2-Nitrophenol	ND		4.8	0.46	ug/L		08/13/12 13:42	08/15/12 19:44	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 19:44	1
3-Nitroaniline	ND		9.5	0.46	ug/L		08/13/12 13:42	08/15/12 19:44	1
4,6-Dinitro-2-methylphenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 19:44	1
4-Bromophenyl phenyl ether	ND		4.8	0.43	ug/L		08/13/12 13:42	08/15/12 19:44	1
4-Chloro-3-methylphenol	ND		4.8	0.43	ug/L		08/13/12 13:42	08/15/12 19:44	1
4-Chloroaniline	ND		4.8	0.56	ug/L		08/13/12 13:42	08/15/12 19:44	1
4-Chlorophenyl phenyl ether	ND		4.8	0.33	ug/L		08/13/12 13:42	08/15/12 19:44	1
4-Methylphenol	ND		9.5	0.34	ug/L		08/13/12 13:42	08/15/12 19:44	1
4-Nitroaniline	ND		9.5	0.24	ug/L		08/13/12 13:42	08/15/12 19:44	1
4-Nitrophenol	ND		9.5	1.4	ug/L		08/13/12 13:42	08/15/12 19:44	1
Acenaphthene	ND		4.8	0.39	ug/L		08/13/12 13:42	08/15/12 19:44	1
Acenaphthylene	ND		4.8	0.36	ug/L		08/13/12 13:42	08/15/12 19:44	1
Acetophenone	ND		4.8	0.51	ug/L		08/13/12 13:42	08/15/12 19:44	1
Anthracene	ND		4.8	0.27	ug/L		08/13/12 13:42	08/15/12 19:44	1
Atrazine	ND		4.8	0.44	ug/L		08/13/12 13:42	08/15/12 19:44	1
Benzaldehyde	ND		4.8	0.25	ug/L		08/13/12 13:42	08/15/12 19:44	1
Benzo(a)anthracene	ND		4.8	0.34	ug/L		08/13/12 13:42	08/15/12 19:44	1
Benzo(a)pyrene	ND		4.8	0.45	ug/L		08/13/12 13:42	08/15/12 19:44	1
Benzo(b)fluoranthene	ND		4.8	0.32	ug/L		08/13/12 13:42	08/15/12 19:44	1
Benzo(g,h,i)perylene	ND		4.8	0.33	ug/L		08/13/12 13:42	08/15/12 19:44	1
Benzo(k)fluoranthene	ND		4.8	0.70	ug/L		08/13/12 13:42	08/15/12 19:44	1
Bis(2-chloroethoxy)methane	ND		4.8	0.33	ug/L		08/13/12 13:42	08/15/12 19:44	1
Bis(2-chloroethyl)ether	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 19:44	1
Bis(2-ethylhexyl) phthalate	ND		4.8	1.7	ug/L		08/13/12 13:42	08/15/12 19:44	1
Butyl benzyl phthalate	ND		4.8	0.40	ug/L		08/13/12 13:42	08/15/12 19:44	1
Caprolactam	ND		4.8	2.1	ug/L		08/13/12 13:42	08/15/12 19:44	1
Carbazole	ND		4.8	0.29	ug/L		08/13/12 13:42	08/15/12 19:44	1
Chrysene	ND		4.8	0.31	ug/L		08/13/12 13:42	08/15/12 19:44	1
Di-n-butyl phthalate	ND		4.8	0.30	ug/L		08/13/12 13:42	08/15/12 19:44	1
Di-n-octyl phthalate	ND		4.8	0.45	ug/L		08/13/12 13:42	08/15/12 19:44	1
Dibenz(a,h)anthracene	ND		4.8	0.40	ug/L		08/13/12 13:42	08/15/12 19:44	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW01

Lab Sample ID: 480-23756-1

Date Collected: 08/09/12 13:30

Matrix: Water

Date Received: 08/10/12 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		9.5	0.49	ug/L		08/13/12 13:42	08/15/12 19:44	1
Diethyl phthalate	ND		4.8	0.21	ug/L		08/13/12 13:42	08/15/12 19:44	1
Dimethyl phthalate	ND		4.8	0.34	ug/L		08/13/12 13:42	08/15/12 19:44	1
Fluoranthene	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 19:44	1
Fluorene	ND		4.8	0.34	ug/L		08/13/12 13:42	08/15/12 19:44	1
Hexachlorobenzene	ND		4.8	0.49	ug/L		08/13/12 13:42	08/15/12 19:44	1
Hexachlorobutadiene	ND		4.8	0.65	ug/L		08/13/12 13:42	08/15/12 19:44	1
Hexachlorocyclopentadiene	ND		4.8	0.56	ug/L		08/13/12 13:42	08/15/12 19:44	1
Hexachloroethane	ND		4.8	0.56	ug/L		08/13/12 13:42	08/15/12 19:44	1
Indeno(1,2,3-cd)pyrene	ND		4.8	0.45	ug/L		08/13/12 13:42	08/15/12 19:44	1
Isophorone	ND		4.8	0.41	ug/L		08/13/12 13:42	08/15/12 19:44	1
N-Nitrosodi-n-propylamine	ND		4.8	0.51	ug/L		08/13/12 13:42	08/15/12 19:44	1
N-Nitrosodiphenylamine	ND	*	4.8	0.49	ug/L		08/13/12 13:42	08/15/12 19:44	1
Naphthalene	ND		4.8	0.72	ug/L		08/13/12 13:42	08/15/12 19:44	1
Nitrobenzene	ND		4.8	0.28	ug/L		08/13/12 13:42	08/15/12 19:44	1
Pentachlorophenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 19:44	1
Phenanthrene	0.83	J	4.8	0.42	ug/L		08/13/12 13:42	08/15/12 19:44	1
Phenol	ND		4.8	0.37	ug/L		08/13/12 13:42	08/15/12 19:44	1
Pyrene	ND		4.8	0.32	ug/L		08/13/12 13:42	08/15/12 19:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	116		52 - 132	08/13/12 13:42	08/15/12 19:44	1
2-Fluorobiphenyl	84		48 - 120	08/13/12 13:42	08/15/12 19:44	1
2-Fluorophenol	39		20 - 120	08/13/12 13:42	08/15/12 19:44	1
Nitrobenzene-d5	84		46 - 120	08/13/12 13:42	08/15/12 19:44	1
p-Terphenyl-d14	43	X	67 - 150	08/13/12 13:42	08/15/12 19:44	1
Phenol-d5	28		16 - 120	08/13/12 13:42	08/15/12 19:44	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.047	0.0087	ug/L		08/14/12 14:30	08/15/12 18:16	1
4,4'-DDE	ND		0.047	0.011	ug/L		08/14/12 14:30	08/15/12 18:16	1
4,4'-DDT	ND		0.047	0.010	ug/L		08/14/12 14:30	08/15/12 18:16	1
Aldrin	ND		0.047	0.0063	ug/L		08/14/12 14:30	08/15/12 18:16	1
alpha-BHC	ND		0.047	0.0063	ug/L		08/14/12 14:30	08/15/12 18:16	1
alpha-Chlordane	ND		0.047	0.014	ug/L		08/14/12 14:30	08/15/12 18:16	1
beta-BHC	ND		0.047	0.024	ug/L		08/14/12 14:30	08/15/12 18:16	1
delta-BHC	ND		0.047	0.0095	ug/L		08/14/12 14:30	08/15/12 18:16	1
Dieldrin	ND		0.047	0.0093	ug/L		08/14/12 14:30	08/15/12 18:16	1
Endosulfan I	ND		0.047	0.010	ug/L		08/14/12 14:30	08/15/12 18:16	1
Endosulfan II	0.017	J	0.047	0.011	ug/L		08/14/12 14:30	08/15/12 18:16	1
Endosulfan sulfate	ND		0.047	0.015	ug/L		08/14/12 14:30	08/15/12 18:16	1
Endrin	0.018	J	0.047	0.013	ug/L		08/14/12 14:30	08/15/12 18:16	1
Endrin aldehyde	ND		0.047	0.015	ug/L		08/14/12 14:30	08/15/12 18:16	1
Endrin ketone	ND		0.047	0.011	ug/L		08/14/12 14:30	08/15/12 18:16	1
gamma-BHC (Lindane)	ND		0.047	0.0057	ug/L		08/14/12 14:30	08/15/12 18:16	1
gamma-Chlordane	0.16		0.047	0.010	ug/L		08/14/12 14:30	08/15/12 18:16	1
Heptachlor	ND		0.047	0.0081	ug/L		08/14/12 14:30	08/15/12 18:16	1
Heptachlor epoxide	ND		0.047	0.0050	ug/L		08/14/12 14:30	08/15/12 18:16	1
Methoxychlor	0.018	J	0.047	0.013	ug/L		08/14/12 14:30	08/15/12 18:16	1
Toxaphene	ND		0.47	0.11	ug/L		08/14/12 14:30	08/15/12 18:16	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW01

Lab Sample ID: 480-23756-1

Date Collected: 08/09/12 13:30

Matrix: Water

Date Received: 08/10/12 12:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	57		16 - 120	08/14/12 14:30	08/15/12 18:16	1
DCB Decachlorobiphenyl	56		16 - 120	08/14/12 14:30	08/15/12 18:16	1
Tetrachloro-m-xylene	77		35 - 120	08/14/12 14:30	08/15/12 18:16	1
Tetrachloro-m-xylene	70		35 - 120	08/14/12 14:30	08/15/12 18:16	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 15:47	1
PCB-1221	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 15:47	1
PCB-1232	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 15:47	1
PCB-1242	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 15:47	1
PCB-1248	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 15:47	1
PCB-1254	ND		0.47	0.24	ug/L		08/14/12 14:14	08/17/12 15:47	1
PCB-1260	ND		0.47	0.24	ug/L		08/14/12 14:14	08/17/12 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	81		19 - 120	08/14/12 14:14	08/17/12 15:47	1
DCB Decachlorobiphenyl	77		19 - 120	08/14/12 14:14	08/17/12 15:47	1
Tetrachloro-m-xylene	125		23 - 127	08/14/12 14:14	08/17/12 15:47	1
Tetrachloro-m-xylene	135	X	23 - 127	08/14/12 14:14	08/17/12 15:47	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.20		0.20		mg/L		08/13/12 08:10	08/13/12 16:01	1
Antimony	ND		0.020		mg/L		08/13/12 08:10	08/13/12 16:01	1
Arsenic	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:01	1
Barium	0.028		0.0020		mg/L		08/13/12 08:10	08/13/12 16:01	1
Beryllium	ND		0.0020		mg/L		08/13/12 08:10	08/13/12 16:01	1
Cadmium	ND		0.0010		mg/L		08/13/12 08:10	08/13/12 16:01	1
Calcium	147		0.50		mg/L		08/13/12 08:10	08/13/12 16:01	1
Chromium	ND		0.0040		mg/L		08/13/12 08:10	08/13/12 16:01	1
Cobalt	ND		0.0040		mg/L		08/13/12 08:10	08/13/12 16:01	1
Copper	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:01	1
Iron	0.21		0.050		mg/L		08/13/12 08:10	08/13/12 16:01	1
Lead	ND		0.0050		mg/L		08/13/12 08:10	08/13/12 16:01	1
Magnesium	123		0.20		mg/L		08/13/12 08:10	08/13/12 16:01	1
Manganese	0.34		0.0030		mg/L		08/13/12 08:10	08/13/12 16:01	1
Nickel	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:01	1
Potassium	4.0		0.50		mg/L		08/13/12 08:10	08/13/12 16:01	1
Selenium	ND		0.015		mg/L		08/13/12 08:10	08/13/12 16:01	1
Silver	ND		0.0030		mg/L		08/13/12 08:10	08/13/12 16:01	1
Sodium	42.0		1.0		mg/L		08/13/12 08:10	08/13/12 16:01	1
Thallium	ND		0.020		mg/L		08/13/12 08:10	08/13/12 16:01	1
Vanadium	ND		0.0050		mg/L		08/13/12 08:10	08/13/12 16:01	1
Zinc	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:01	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20		mg/L		08/15/12 07:45	08/15/12 17:08	1
Antimony, Dissolved	ND		0.020		mg/L		08/15/12 07:45	08/15/12 17:08	1
Arsenic, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:08	1
Barium, Dissolved	0.027		0.0020		mg/L		08/15/12 07:45	08/15/12 17:08	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW01

Lab Sample ID: 480-23756-1

Date Collected: 08/09/12 13:30

Matrix: Water

Date Received: 08/10/12 12:00

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium, Dissolved	ND		0.0020		mg/L		08/15/12 07:45	08/15/12 17:08	1
Cadmium, Dissolved	ND		0.0010		mg/L		08/15/12 07:45	08/15/12 17:08	1
Calcium, Dissolved	149		0.50		mg/L		08/15/12 07:45	08/15/12 17:08	1
Chromium, Dissolved	ND		0.0040		mg/L		08/15/12 07:45	08/15/12 17:08	1
Cobalt, Dissolved	ND		0.0040		mg/L		08/15/12 07:45	08/15/12 17:08	1
Copper, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:08	1
Iron, Dissolved	ND		0.050		mg/L		08/15/12 07:45	08/15/12 17:08	1
Lead, Dissolved	ND		0.0050		mg/L		08/15/12 07:45	08/15/12 17:08	1
Magnesium, Dissolved	126		0.20		mg/L		08/15/12 07:45	08/15/12 17:08	1
Manganese, Dissolved	0.34		0.0030		mg/L		08/15/12 07:45	08/15/12 17:08	1
Nickel, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:08	1
Potassium, Dissolved	4.2		0.50		mg/L		08/15/12 07:45	08/15/12 17:08	1
Selenium, Dissolved	ND		0.015		mg/L		08/15/12 07:45	08/15/12 17:08	1
Silver, Dissolved	ND		0.0030		mg/L		08/15/12 07:45	08/15/12 17:08	1
Sodium, Dissolved	42.7		1.0		mg/L		08/15/12 07:45	08/15/12 17:08	1
Thallium, Dissolved	ND		0.020		mg/L		08/15/12 07:45	08/15/12 17:08	1
Vanadium, Dissolved	ND		0.0050		mg/L		08/15/12 07:45	08/15/12 17:08	1
Zinc, Dissolved	0.011		0.010		mg/L		08/15/12 07:45	08/15/12 17:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/14/12 08:20	08/14/12 13:47	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020		mg/L		08/15/12 08:05	08/15/12 12:56	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW02

Date Collected: 08/09/12 10:45

Date Received: 08/10/12 12:00

Lab Sample ID: 480-23756-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			08/17/12 19:21	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			08/17/12 19:21	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			08/17/12 19:21	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			08/17/12 19:21	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			08/17/12 19:21	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			08/17/12 19:21	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			08/17/12 19:21	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			08/17/12 19:21	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			08/17/12 19:21	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			08/17/12 19:21	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			08/17/12 19:21	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			08/17/12 19:21	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			08/17/12 19:21	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			08/17/12 19:21	4
2-Hexanone	ND		20	5.0	ug/L			08/17/12 19:21	4
2-Butanone (MEK)	ND		40	5.3	ug/L			08/17/12 19:21	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			08/17/12 19:21	4
Acetone	ND		40	12	ug/L			08/17/12 19:21	4
Benzene	ND		4.0	1.6	ug/L			08/17/12 19:21	4
Bromodichloromethane	ND		4.0	1.6	ug/L			08/17/12 19:21	4
Bromoform	ND		4.0	1.0	ug/L			08/17/12 19:21	4
Bromomethane	ND		4.0	2.8	ug/L			08/17/12 19:21	4
Carbon disulfide	ND		4.0	0.76	ug/L			08/17/12 19:21	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			08/17/12 19:21	4
Chlorobenzene	ND		4.0	3.0	ug/L			08/17/12 19:21	4
Dibromochloromethane	ND		4.0	1.3	ug/L			08/17/12 19:21	4
Chloroethane	ND		4.0	1.3	ug/L			08/17/12 19:21	4
Chloroform	ND		4.0	1.4	ug/L			08/17/12 19:21	4
Chloromethane	ND		4.0	1.4	ug/L			08/17/12 19:21	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			08/17/12 19:21	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			08/17/12 19:21	4
Cyclohexane	ND		4.0	0.72	ug/L			08/17/12 19:21	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			08/17/12 19:21	4
Ethylbenzene	ND		4.0	3.0	ug/L			08/17/12 19:21	4
Isopropylbenzene	ND		4.0	3.2	ug/L			08/17/12 19:21	4
Methyl acetate	ND		4.0	2.0	ug/L			08/17/12 19:21	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			08/17/12 19:21	4
Methylcyclohexane	ND		4.0	0.64	ug/L			08/17/12 19:21	4
Methylene Chloride	ND		4.0	1.8	ug/L			08/17/12 19:21	4
Styrene	ND		4.0	2.9	ug/L			08/17/12 19:21	4
Tetrachloroethene	ND		4.0	1.4	ug/L			08/17/12 19:21	4
Toluene	ND		4.0	2.0	ug/L			08/17/12 19:21	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			08/17/12 19:21	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			08/17/12 19:21	4
Trichloroethene	ND		4.0	1.8	ug/L			08/17/12 19:21	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			08/17/12 19:21	4
Vinyl chloride	ND		4.0	3.6	ug/L			08/17/12 19:21	4
Xylenes, Total	ND		8.0	2.6	ug/L			08/17/12 19:21	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		08/17/12 19:21	4

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW02

Lab Sample ID: 480-23756-2

Date Collected: 08/09/12 10:45

Matrix: Water

Date Received: 08/10/12 12:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		71 - 126		08/17/12 19:21	4
4-Bromofluorobenzene (Surr)	107		73 - 120		08/17/12 19:21	4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.8	0.62	ug/L		08/13/12 13:42	08/15/12 20:09	1
bis (2-chloroisopropyl) ether	ND		4.8	0.50	ug/L		08/13/12 13:42	08/15/12 20:09	1
2,4,5-Trichlorophenol	ND		4.8	0.46	ug/L		08/13/12 13:42	08/15/12 20:09	1
2,4,6-Trichlorophenol	ND		4.8	0.58	ug/L		08/13/12 13:42	08/15/12 20:09	1
2,4-Dichlorophenol	ND		4.8	0.49	ug/L		08/13/12 13:42	08/15/12 20:09	1
2,4-Dimethylphenol	ND		4.8	0.48	ug/L		08/13/12 13:42	08/15/12 20:09	1
2,4-Dinitrophenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 20:09	1
2,4-Dinitrotoluene	ND		4.8	0.43	ug/L		08/13/12 13:42	08/15/12 20:09	1
2,6-Dinitrotoluene	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 20:09	1
2-Chloronaphthalene	ND		4.8	0.44	ug/L		08/13/12 13:42	08/15/12 20:09	1
2-Chlorophenol	ND		4.8	0.50	ug/L		08/13/12 13:42	08/15/12 20:09	1
2-Methylnaphthalene	1.9	J	4.8	0.57	ug/L		08/13/12 13:42	08/15/12 20:09	1
2-Methylphenol	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 20:09	1
2-Nitroaniline	ND		9.5	0.40	ug/L		08/13/12 13:42	08/15/12 20:09	1
2-Nitrophenol	ND		4.8	0.46	ug/L		08/13/12 13:42	08/15/12 20:09	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 20:09	1
3-Nitroaniline	ND		9.5	0.46	ug/L		08/13/12 13:42	08/15/12 20:09	1
4,6-Dinitro-2-methylphenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 20:09	1
4-Bromophenyl phenyl ether	ND		4.8	0.43	ug/L		08/13/12 13:42	08/15/12 20:09	1
4-Chloro-3-methylphenol	ND		4.8	0.43	ug/L		08/13/12 13:42	08/15/12 20:09	1
4-Chloroaniline	ND		4.8	0.56	ug/L		08/13/12 13:42	08/15/12 20:09	1
4-Chlorophenyl phenyl ether	ND		4.8	0.33	ug/L		08/13/12 13:42	08/15/12 20:09	1
4-Methylphenol	ND		9.5	0.34	ug/L		08/13/12 13:42	08/15/12 20:09	1
4-Nitroaniline	ND		9.5	0.24	ug/L		08/13/12 13:42	08/15/12 20:09	1
4-Nitrophenol	ND		9.5	1.4	ug/L		08/13/12 13:42	08/15/12 20:09	1
Acenaphthene	0.42	J	4.8	0.39	ug/L		08/13/12 13:42	08/15/12 20:09	1
Acenaphthylene	ND		4.8	0.36	ug/L		08/13/12 13:42	08/15/12 20:09	1
Acetophenone	1.8	J	4.8	0.51	ug/L		08/13/12 13:42	08/15/12 20:09	1
Anthracene	ND		4.8	0.27	ug/L		08/13/12 13:42	08/15/12 20:09	1
Atrazine	ND		4.8	0.44	ug/L		08/13/12 13:42	08/15/12 20:09	1
Benzaldehyde	ND		4.8	0.25	ug/L		08/13/12 13:42	08/15/12 20:09	1
Benzo(a)anthracene	ND		4.8	0.34	ug/L		08/13/12 13:42	08/15/12 20:09	1
Benzo(a)pyrene	ND		4.8	0.45	ug/L		08/13/12 13:42	08/15/12 20:09	1
Benzo(b)fluoranthene	ND		4.8	0.32	ug/L		08/13/12 13:42	08/15/12 20:09	1
Benzo(g,h,i)perylene	ND		4.8	0.33	ug/L		08/13/12 13:42	08/15/12 20:09	1
Benzo(k)fluoranthene	ND		4.8	0.70	ug/L		08/13/12 13:42	08/15/12 20:09	1
Bis(2-chloroethoxy)methane	ND		4.8	0.33	ug/L		08/13/12 13:42	08/15/12 20:09	1
Bis(2-chloroethyl)ether	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 20:09	1
Bis(2-ethylhexyl) phthalate	ND		4.8	1.7	ug/L		08/13/12 13:42	08/15/12 20:09	1
Butyl benzyl phthalate	ND		4.8	0.40	ug/L		08/13/12 13:42	08/15/12 20:09	1
Caprolactam	ND		4.8	2.1	ug/L		08/13/12 13:42	08/15/12 20:09	1
Carbazole	ND		4.8	0.29	ug/L		08/13/12 13:42	08/15/12 20:09	1
Chrysene	ND		4.8	0.31	ug/L		08/13/12 13:42	08/15/12 20:09	1
Di-n-butyl phthalate	ND		4.8	0.30	ug/L		08/13/12 13:42	08/15/12 20:09	1
Di-n-octyl phthalate	ND		4.8	0.45	ug/L		08/13/12 13:42	08/15/12 20:09	1
Dibenz(a,h)anthracene	ND		4.8	0.40	ug/L		08/13/12 13:42	08/15/12 20:09	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW02

Lab Sample ID: 480-23756-2

Date Collected: 08/09/12 10:45

Matrix: Water

Date Received: 08/10/12 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		9.5	0.49	ug/L		08/13/12 13:42	08/15/12 20:09	1
Diethyl phthalate	0.31	J	4.8	0.21	ug/L		08/13/12 13:42	08/15/12 20:09	1
Dimethyl phthalate	ND		4.8	0.34	ug/L		08/13/12 13:42	08/15/12 20:09	1
Fluoranthene	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 20:09	1
Fluorene	0.55	J	4.8	0.34	ug/L		08/13/12 13:42	08/15/12 20:09	1
Hexachlorobenzene	ND		4.8	0.49	ug/L		08/13/12 13:42	08/15/12 20:09	1
Hexachlorobutadiene	ND		4.8	0.65	ug/L		08/13/12 13:42	08/15/12 20:09	1
Hexachlorocyclopentadiene	ND		4.8	0.56	ug/L		08/13/12 13:42	08/15/12 20:09	1
Hexachloroethane	ND		4.8	0.56	ug/L		08/13/12 13:42	08/15/12 20:09	1
Indeno(1,2,3-cd)pyrene	ND		4.8	0.45	ug/L		08/13/12 13:42	08/15/12 20:09	1
Isophorone	ND		4.8	0.41	ug/L		08/13/12 13:42	08/15/12 20:09	1
N-Nitrosodi-n-propylamine	ND		4.8	0.51	ug/L		08/13/12 13:42	08/15/12 20:09	1
N-Nitrosodiphenylamine	ND	*	4.8	0.49	ug/L		08/13/12 13:42	08/15/12 20:09	1
Naphthalene	1.3	J	4.8	0.72	ug/L		08/13/12 13:42	08/15/12 20:09	1
Nitrobenzene	ND		4.8	0.28	ug/L		08/13/12 13:42	08/15/12 20:09	1
Pentachlorophenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 20:09	1
Phenanthrene	0.77	J	4.8	0.42	ug/L		08/13/12 13:42	08/15/12 20:09	1
Phenol	ND		4.8	0.37	ug/L		08/13/12 13:42	08/15/12 20:09	1
Pyrene	ND		4.8	0.32	ug/L		08/13/12 13:42	08/15/12 20:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	119		52 - 132	08/13/12 13:42	08/15/12 20:09	1
2-Fluorobiphenyl	86		48 - 120	08/13/12 13:42	08/15/12 20:09	1
2-Fluorophenol	40		20 - 120	08/13/12 13:42	08/15/12 20:09	1
Nitrobenzene-d5	88		46 - 120	08/13/12 13:42	08/15/12 20:09	1
p-Terphenyl-d14	38	X	67 - 150	08/13/12 13:42	08/15/12 20:09	1
Phenol-d5	28		16 - 120	08/13/12 13:42	08/15/12 20:09	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.047	0.0087	ug/L		08/14/12 14:30	08/15/12 18:57	1
4,4'-DDE	ND		0.047	0.011	ug/L		08/14/12 14:30	08/15/12 18:57	1
4,4'-DDT	ND		0.047	0.010	ug/L		08/14/12 14:30	08/15/12 18:57	1
Aldrin	ND		0.047	0.0062	ug/L		08/14/12 14:30	08/15/12 18:57	1
alpha-BHC	ND		0.047	0.0062	ug/L		08/14/12 14:30	08/15/12 18:57	1
alpha-Chlordane	ND		0.047	0.014	ug/L		08/14/12 14:30	08/15/12 18:57	1
beta-BHC	ND		0.047	0.023	ug/L		08/14/12 14:30	08/15/12 18:57	1
delta-BHC	ND		0.047	0.0094	ug/L		08/14/12 14:30	08/15/12 18:57	1
Dieldrin	ND		0.047	0.0092	ug/L		08/14/12 14:30	08/15/12 18:57	1
Endosulfan I	ND		0.047	0.010	ug/L		08/14/12 14:30	08/15/12 18:57	1
Endosulfan II	ND		0.047	0.011	ug/L		08/14/12 14:30	08/15/12 18:57	1
Endosulfan sulfate	ND		0.047	0.015	ug/L		08/14/12 14:30	08/15/12 18:57	1
Endrin	ND		0.047	0.013	ug/L		08/14/12 14:30	08/15/12 18:57	1
Endrin aldehyde	ND		0.047	0.015	ug/L		08/14/12 14:30	08/15/12 18:57	1
Endrin ketone	ND		0.047	0.011	ug/L		08/14/12 14:30	08/15/12 18:57	1
gamma-BHC (Lindane)	ND		0.047	0.0057	ug/L		08/14/12 14:30	08/15/12 18:57	1
gamma-Chlordane	ND		0.047	0.010	ug/L		08/14/12 14:30	08/15/12 18:57	1
Heptachlor	ND		0.047	0.0080	ug/L		08/14/12 14:30	08/15/12 18:57	1
Heptachlor epoxide	ND		0.047	0.0050	ug/L		08/14/12 14:30	08/15/12 18:57	1
Methoxychlor	ND		0.047	0.013	ug/L		08/14/12 14:30	08/15/12 18:57	1
Toxaphene	ND		0.47	0.11	ug/L		08/14/12 14:30	08/15/12 18:57	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW02

Lab Sample ID: 480-23756-2

Date Collected: 08/09/12 10:45

Matrix: Water

Date Received: 08/10/12 12:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	44		16 - 120	08/14/12 14:30	08/15/12 18:57	1
DCB Decachlorobiphenyl	49		16 - 120	08/14/12 14:30	08/15/12 18:57	1
Tetrachloro-m-xylene	72		35 - 120	08/14/12 14:30	08/15/12 18:57	1
Tetrachloro-m-xylene	63		35 - 120	08/14/12 14:30	08/15/12 18:57	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 16:35	1
PCB-1221	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 16:35	1
PCB-1232	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 16:35	1
PCB-1242	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 16:35	1
PCB-1248	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 16:35	1
PCB-1254	ND		0.47	0.24	ug/L		08/14/12 14:14	08/17/12 16:35	1
PCB-1260	ND		0.47	0.24	ug/L		08/14/12 14:14	08/17/12 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	50		19 - 120	08/14/12 14:14	08/17/12 16:35	1
DCB Decachlorobiphenyl	48		19 - 120	08/14/12 14:14	08/17/12 16:35	1
Tetrachloro-m-xylene	87		23 - 127	08/14/12 14:14	08/17/12 16:35	1
Tetrachloro-m-xylene	91		23 - 127	08/14/12 14:14	08/17/12 16:35	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.1		0.20		mg/L		08/13/12 08:10	08/13/12 16:11	1
Antimony	ND		0.020		mg/L		08/13/12 08:10	08/13/12 16:11	1
Arsenic	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:11	1
Barium	0.16		0.0020		mg/L		08/13/12 08:10	08/13/12 16:11	1
Beryllium	ND		0.0020		mg/L		08/13/12 08:10	08/13/12 16:11	1
Cadmium	ND		0.0010		mg/L		08/13/12 08:10	08/13/12 16:11	1
Calcium	249		0.50		mg/L		08/13/12 08:10	08/13/12 16:11	1
Chromium	ND		0.0040		mg/L		08/13/12 08:10	08/13/12 16:11	1
Cobalt	ND		0.0040		mg/L		08/13/12 08:10	08/13/12 16:11	1
Copper	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:11	1
Iron	6.1		0.050		mg/L		08/13/12 08:10	08/13/12 16:11	1
Lead	0.033		0.0050		mg/L		08/13/12 08:10	08/13/12 16:11	1
Magnesium	144		0.20		mg/L		08/13/12 08:10	08/13/12 16:11	1
Manganese	1.5		0.0030		mg/L		08/13/12 08:10	08/13/12 16:11	1
Nickel	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:11	1
Potassium	4.6		0.50		mg/L		08/13/12 08:10	08/13/12 16:11	1
Selenium	ND		0.015		mg/L		08/13/12 08:10	08/13/12 16:11	1
Silver	ND		0.0030		mg/L		08/13/12 08:10	08/13/12 16:11	1
Sodium	58.5		1.0		mg/L		08/13/12 08:10	08/13/12 16:11	1
Thallium	ND		0.020		mg/L		08/13/12 08:10	08/13/12 16:11	1
Vanadium	0.0053		0.0050		mg/L		08/13/12 08:10	08/13/12 16:11	1
Zinc	0.044		0.010		mg/L		08/13/12 08:10	08/13/12 16:11	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20		mg/L		08/15/12 07:45	08/15/12 17:23	1
Antimony, Dissolved	ND		0.020		mg/L		08/15/12 07:45	08/15/12 17:23	1
Arsenic, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:23	1
Barium, Dissolved	0.14		0.0020		mg/L		08/15/12 07:45	08/15/12 17:23	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW02

Lab Sample ID: 480-23756-2

Date Collected: 08/09/12 10:45

Matrix: Water

Date Received: 08/10/12 12:00

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium, Dissolved	ND		0.0020		mg/L		08/15/12 07:45	08/15/12 17:23	1
Cadmium, Dissolved	ND		0.0010		mg/L		08/15/12 07:45	08/15/12 17:23	1
Calcium, Dissolved	241		0.50		mg/L		08/15/12 07:45	08/15/12 17:23	1
Chromium, Dissolved	ND		0.0040		mg/L		08/15/12 07:45	08/15/12 17:23	1
Cobalt, Dissolved	ND		0.0040		mg/L		08/15/12 07:45	08/15/12 17:23	1
Copper, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:23	1
Iron, Dissolved	ND		0.050		mg/L		08/15/12 07:45	08/15/12 17:23	1
Lead, Dissolved	ND		0.0050		mg/L		08/15/12 07:45	08/15/12 17:23	1
Magnesium, Dissolved	142		0.20		mg/L		08/15/12 07:45	08/15/12 17:23	1
Manganese, Dissolved	1.5		0.0030		mg/L		08/15/12 07:45	08/15/12 17:23	1
Nickel, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:23	1
Potassium, Dissolved	4.3		0.50		mg/L		08/15/12 07:45	08/15/12 17:23	1
Selenium, Dissolved	ND		0.015		mg/L		08/15/12 07:45	08/15/12 17:23	1
Silver, Dissolved	ND		0.0030		mg/L		08/15/12 07:45	08/15/12 17:23	1
Sodium, Dissolved	60.2		1.0		mg/L		08/15/12 07:45	08/15/12 17:23	1
Thallium, Dissolved	ND		0.020		mg/L		08/15/12 07:45	08/15/12 17:23	1
Vanadium, Dissolved	ND		0.0050		mg/L		08/15/12 07:45	08/15/12 17:23	1
Zinc, Dissolved	0.033		0.010		mg/L		08/15/12 07:45	08/15/12 17:23	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/14/12 08:20	08/14/12 13:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020		mg/L		08/15/12 08:05	08/15/12 13:03	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW03

Lab Sample ID: 480-23756-3

Date Collected: 08/09/12 12:05

Matrix: Water

Date Received: 08/10/12 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			08/17/12 19:45	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			08/17/12 19:45	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			08/17/12 19:45	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			08/17/12 19:45	5
1,1-Dichloroethane	ND		5.0	1.9	ug/L			08/17/12 19:45	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			08/17/12 19:45	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			08/17/12 19:45	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			08/17/12 19:45	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			08/17/12 19:45	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			08/17/12 19:45	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			08/17/12 19:45	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			08/17/12 19:45	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			08/17/12 19:45	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			08/17/12 19:45	5
2-Hexanone	ND		25	6.2	ug/L			08/17/12 19:45	5
2-Butanone (MEK)	ND		50	6.6	ug/L			08/17/12 19:45	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			08/17/12 19:45	5
Acetone	ND		50	15	ug/L			08/17/12 19:45	5
Benzene	ND		5.0	2.1	ug/L			08/17/12 19:45	5
Bromodichloromethane	ND		5.0	2.0	ug/L			08/17/12 19:45	5
Bromoform	ND		5.0	1.3	ug/L			08/17/12 19:45	5
Bromomethane	ND		5.0	3.5	ug/L			08/17/12 19:45	5
Carbon disulfide	ND		5.0	0.95	ug/L			08/17/12 19:45	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			08/17/12 19:45	5
Chlorobenzene	ND		5.0	3.8	ug/L			08/17/12 19:45	5
Dibromochloromethane	ND		5.0	1.6	ug/L			08/17/12 19:45	5
Chloroethane	ND		5.0	1.6	ug/L			08/17/12 19:45	5
Chloroform	ND		5.0	1.7	ug/L			08/17/12 19:45	5
Chloromethane	ND		5.0	1.8	ug/L			08/17/12 19:45	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			08/17/12 19:45	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			08/17/12 19:45	5
Cyclohexane	ND		5.0	0.90	ug/L			08/17/12 19:45	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			08/17/12 19:45	5
Ethylbenzene	ND		5.0	3.7	ug/L			08/17/12 19:45	5
Isopropylbenzene	ND		5.0	4.0	ug/L			08/17/12 19:45	5
Methyl acetate	ND		5.0	2.5	ug/L			08/17/12 19:45	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			08/17/12 19:45	5
Methylcyclohexane	ND		5.0	0.80	ug/L			08/17/12 19:45	5
Methylene Chloride	ND		5.0	2.2	ug/L			08/17/12 19:45	5
Styrene	ND		5.0	3.7	ug/L			08/17/12 19:45	5
Tetrachloroethene	ND		5.0	1.8	ug/L			08/17/12 19:45	5
Toluene	ND		5.0	2.6	ug/L			08/17/12 19:45	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			08/17/12 19:45	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			08/17/12 19:45	5
Trichloroethene	8.7		5.0	2.3	ug/L			08/17/12 19:45	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			08/17/12 19:45	5
Vinyl chloride	ND		5.0	4.5	ug/L			08/17/12 19:45	5
Xylenes, Total	ND		10	3.3	ug/L			08/17/12 19:45	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		08/17/12 19:45	5

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW03

Lab Sample ID: 480-23756-3

Date Collected: 08/09/12 12:05

Matrix: Water

Date Received: 08/10/12 12:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		71 - 126		08/17/12 19:45	5
4-Bromofluorobenzene (Surr)	101		73 - 120		08/17/12 19:45	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.8	0.62	ug/L		08/13/12 13:42	08/15/12 20:33	1
bis (2-chloroisopropyl) ether	ND		4.8	0.50	ug/L		08/13/12 13:42	08/15/12 20:33	1
2,4,5-Trichlorophenol	ND		4.8	0.46	ug/L		08/13/12 13:42	08/15/12 20:33	1
2,4,6-Trichlorophenol	ND		4.8	0.58	ug/L		08/13/12 13:42	08/15/12 20:33	1
2,4-Dichlorophenol	ND		4.8	0.49	ug/L		08/13/12 13:42	08/15/12 20:33	1
2,4-Dimethylphenol	ND		4.8	0.48	ug/L		08/13/12 13:42	08/15/12 20:33	1
2,4-Dinitrophenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 20:33	1
2,4-Dinitrotoluene	ND		4.8	0.43	ug/L		08/13/12 13:42	08/15/12 20:33	1
2,6-Dinitrotoluene	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 20:33	1
2-Chloronaphthalene	ND		4.8	0.44	ug/L		08/13/12 13:42	08/15/12 20:33	1
2-Chlorophenol	ND		4.8	0.50	ug/L		08/13/12 13:42	08/15/12 20:33	1
2-Methylnaphthalene	ND		4.8	0.57	ug/L		08/13/12 13:42	08/15/12 20:33	1
2-Methylphenol	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 20:33	1
2-Nitroaniline	ND		9.5	0.40	ug/L		08/13/12 13:42	08/15/12 20:33	1
2-Nitrophenol	ND		4.8	0.46	ug/L		08/13/12 13:42	08/15/12 20:33	1
3,3'-Dichlorobenzidine	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 20:33	1
3-Nitroaniline	ND		9.5	0.46	ug/L		08/13/12 13:42	08/15/12 20:33	1
4,6-Dinitro-2-methylphenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 20:33	1
4-Bromophenyl phenyl ether	ND		4.8	0.43	ug/L		08/13/12 13:42	08/15/12 20:33	1
4-Chloro-3-methylphenol	ND		4.8	0.43	ug/L		08/13/12 13:42	08/15/12 20:33	1
4-Chloroaniline	ND		4.8	0.56	ug/L		08/13/12 13:42	08/15/12 20:33	1
4-Chlorophenyl phenyl ether	ND		4.8	0.33	ug/L		08/13/12 13:42	08/15/12 20:33	1
4-Methylphenol	ND		9.5	0.34	ug/L		08/13/12 13:42	08/15/12 20:33	1
4-Nitroaniline	ND		9.5	0.24	ug/L		08/13/12 13:42	08/15/12 20:33	1
4-Nitrophenol	ND		9.5	1.4	ug/L		08/13/12 13:42	08/15/12 20:33	1
Acenaphthene	ND		4.8	0.39	ug/L		08/13/12 13:42	08/15/12 20:33	1
Acenaphthylene	ND		4.8	0.36	ug/L		08/13/12 13:42	08/15/12 20:33	1
Acetophenone	ND		4.8	0.51	ug/L		08/13/12 13:42	08/15/12 20:33	1
Anthracene	ND		4.8	0.27	ug/L		08/13/12 13:42	08/15/12 20:33	1
Atrazine	ND		4.8	0.44	ug/L		08/13/12 13:42	08/15/12 20:33	1
Benzaldehyde	ND		4.8	0.25	ug/L		08/13/12 13:42	08/15/12 20:33	1
Benzo(a)anthracene	ND		4.8	0.34	ug/L		08/13/12 13:42	08/15/12 20:33	1
Benzo(a)pyrene	ND		4.8	0.45	ug/L		08/13/12 13:42	08/15/12 20:33	1
Benzo(b)fluoranthene	ND		4.8	0.32	ug/L		08/13/12 13:42	08/15/12 20:33	1
Benzo(g,h,i)perylene	ND		4.8	0.33	ug/L		08/13/12 13:42	08/15/12 20:33	1
Benzo(k)fluoranthene	ND		4.8	0.70	ug/L		08/13/12 13:42	08/15/12 20:33	1
Bis(2-chloroethoxy)methane	ND		4.8	0.33	ug/L		08/13/12 13:42	08/15/12 20:33	1
Bis(2-chloroethyl)ether	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 20:33	1
Bis(2-ethylhexyl) phthalate	ND		4.8	1.7	ug/L		08/13/12 13:42	08/15/12 20:33	1
Butyl benzyl phthalate	ND		4.8	0.40	ug/L		08/13/12 13:42	08/15/12 20:33	1
Caprolactam	ND		4.8	2.1	ug/L		08/13/12 13:42	08/15/12 20:33	1
Carbazole	ND		4.8	0.29	ug/L		08/13/12 13:42	08/15/12 20:33	1
Chrysene	ND		4.8	0.31	ug/L		08/13/12 13:42	08/15/12 20:33	1
Di-n-butyl phthalate	0.40	J	4.8	0.30	ug/L		08/13/12 13:42	08/15/12 20:33	1
Di-n-octyl phthalate	ND		4.8	0.45	ug/L		08/13/12 13:42	08/15/12 20:33	1
Dibenz(a,h)anthracene	ND		4.8	0.40	ug/L		08/13/12 13:42	08/15/12 20:33	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW03

Lab Sample ID: 480-23756-3

Date Collected: 08/09/12 12:05

Matrix: Water

Date Received: 08/10/12 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		9.5	0.49	ug/L		08/13/12 13:42	08/15/12 20:33	1
Diethyl phthalate	ND		4.8	0.21	ug/L		08/13/12 13:42	08/15/12 20:33	1
Dimethyl phthalate	ND		4.8	0.34	ug/L		08/13/12 13:42	08/15/12 20:33	1
Fluoranthene	ND		4.8	0.38	ug/L		08/13/12 13:42	08/15/12 20:33	1
Fluorene	ND		4.8	0.34	ug/L		08/13/12 13:42	08/15/12 20:33	1
Hexachlorobenzene	ND		4.8	0.49	ug/L		08/13/12 13:42	08/15/12 20:33	1
Hexachlorobutadiene	ND		4.8	0.65	ug/L		08/13/12 13:42	08/15/12 20:33	1
Hexachlorocyclopentadiene	ND		4.8	0.56	ug/L		08/13/12 13:42	08/15/12 20:33	1
Hexachloroethane	ND		4.8	0.56	ug/L		08/13/12 13:42	08/15/12 20:33	1
Indeno(1,2,3-cd)pyrene	ND		4.8	0.45	ug/L		08/13/12 13:42	08/15/12 20:33	1
Isophorone	ND		4.8	0.41	ug/L		08/13/12 13:42	08/15/12 20:33	1
N-Nitrosodi-n-propylamine	ND		4.8	0.51	ug/L		08/13/12 13:42	08/15/12 20:33	1
N-Nitrosodiphenylamine	ND	*	4.8	0.49	ug/L		08/13/12 13:42	08/15/12 20:33	1
Naphthalene	ND		4.8	0.72	ug/L		08/13/12 13:42	08/15/12 20:33	1
Nitrobenzene	ND		4.8	0.28	ug/L		08/13/12 13:42	08/15/12 20:33	1
Pentachlorophenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 20:33	1
Phenanthrene	ND		4.8	0.42	ug/L		08/13/12 13:42	08/15/12 20:33	1
Phenol	ND		4.8	0.37	ug/L		08/13/12 13:42	08/15/12 20:33	1
Pyrene	ND		4.8	0.32	ug/L		08/13/12 13:42	08/15/12 20:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	120		52 - 132	08/13/12 13:42	08/15/12 20:33	1
2-Fluorobiphenyl	92		48 - 120	08/13/12 13:42	08/15/12 20:33	1
2-Fluorophenol	45		20 - 120	08/13/12 13:42	08/15/12 20:33	1
Nitrobenzene-d5	94		46 - 120	08/13/12 13:42	08/15/12 20:33	1
p-Terphenyl-d14	42	X	67 - 150	08/13/12 13:42	08/15/12 20:33	1
Phenol-d5	32		16 - 120	08/13/12 13:42	08/15/12 20:33	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.18		0.048	0.0088	ug/L		08/14/12 14:30	08/15/12 19:39	1
4,4'-DDE	0.042	J	0.048	0.011	ug/L		08/14/12 14:30	08/15/12 19:39	1
4,4'-DDT	0.16		0.048	0.010	ug/L		08/14/12 14:30	08/15/12 19:39	1
Aldrin	ND		0.048	0.0063	ug/L		08/14/12 14:30	08/15/12 19:39	1
alpha-BHC	ND		0.048	0.0063	ug/L		08/14/12 14:30	08/15/12 19:39	1
alpha-Chlordane	ND		0.048	0.014	ug/L		08/14/12 14:30	08/15/12 19:39	1
beta-BHC	0.20		0.048	0.024	ug/L		08/14/12 14:30	08/15/12 19:39	1
delta-BHC	ND		0.048	0.0095	ug/L		08/14/12 14:30	08/15/12 19:39	1
Dieldrin	ND		0.048	0.0093	ug/L		08/14/12 14:30	08/15/12 19:39	1
Endosulfan I	ND		0.048	0.010	ug/L		08/14/12 14:30	08/15/12 19:39	1
Endosulfan II	0.064		0.048	0.011	ug/L		08/14/12 14:30	08/15/12 19:39	1
Endosulfan sulfate	ND		0.048	0.015	ug/L		08/14/12 14:30	08/15/12 19:39	1
Endrin	ND		0.048	0.013	ug/L		08/14/12 14:30	08/15/12 19:39	1
Endrin aldehyde	ND		0.048	0.016	ug/L		08/14/12 14:30	08/15/12 19:39	1
Endrin ketone	ND		0.048	0.011	ug/L		08/14/12 14:30	08/15/12 19:39	1
gamma-BHC (Lindane)	ND		0.048	0.0057	ug/L		08/14/12 14:30	08/15/12 19:39	1
gamma-Chlordane	ND		0.048	0.010	ug/L		08/14/12 14:30	08/15/12 19:39	1
Heptachlor	ND		0.048	0.0081	ug/L		08/14/12 14:30	08/15/12 19:39	1
Heptachlor epoxide	0.020	J	0.048	0.0050	ug/L		08/14/12 14:30	08/15/12 19:39	1
Methoxychlor	ND		0.048	0.013	ug/L		08/14/12 14:30	08/15/12 19:39	1
Toxaphene	ND		0.48	0.11	ug/L		08/14/12 14:30	08/15/12 19:39	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW03

Lab Sample ID: 480-23756-3

Date Collected: 08/09/12 12:05

Matrix: Water

Date Received: 08/10/12 12:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	70		16 - 120	08/14/12 14:30	08/15/12 19:39	1
DCB Decachlorobiphenyl	43		16 - 120	08/14/12 14:30	08/15/12 19:39	1
Tetrachloro-m-xylene	102		35 - 120	08/14/12 14:30	08/15/12 19:39	1
Tetrachloro-m-xylene	52		35 - 120	08/14/12 14:30	08/15/12 19:39	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.48	0.17	ug/L		08/14/12 14:14	08/17/12 16:50	1
PCB-1221	ND		0.48	0.17	ug/L		08/14/12 14:14	08/17/12 16:50	1
PCB-1232	ND		0.48	0.17	ug/L		08/14/12 14:14	08/17/12 16:50	1
PCB-1242	ND		0.48	0.17	ug/L		08/14/12 14:14	08/17/12 16:50	1
PCB-1248	ND		0.48	0.17	ug/L		08/14/12 14:14	08/17/12 16:50	1
PCB-1254	ND		0.48	0.24	ug/L		08/14/12 14:14	08/17/12 16:50	1
PCB-1260	ND		0.48	0.24	ug/L		08/14/12 14:14	08/17/12 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	49		19 - 120	08/14/12 14:14	08/17/12 16:50	1
DCB Decachlorobiphenyl	46		19 - 120	08/14/12 14:14	08/17/12 16:50	1
Tetrachloro-m-xylene	82		23 - 127	08/14/12 14:14	08/17/12 16:50	1
Tetrachloro-m-xylene	87		23 - 127	08/14/12 14:14	08/17/12 16:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		08/13/12 08:10	08/13/12 16:13	1
Antimony	0.021		0.020		mg/L		08/13/12 08:10	08/13/12 16:13	1
Arsenic	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:13	1
Barium	0.072		0.0020		mg/L		08/13/12 08:10	08/13/12 16:13	1
Beryllium	ND		0.0020		mg/L		08/13/12 08:10	08/13/12 16:13	1
Cadmium	ND		0.0010		mg/L		08/13/12 08:10	08/13/12 16:13	1
Calcium	114		0.50		mg/L		08/13/12 08:10	08/13/12 16:13	1
Chromium	ND		0.0040		mg/L		08/13/12 08:10	08/13/12 16:13	1
Cobalt	ND		0.0040		mg/L		08/13/12 08:10	08/13/12 16:13	1
Copper	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:13	1
Iron	0.13		0.050		mg/L		08/13/12 08:10	08/13/12 16:13	1
Lead	0.027		0.0050		mg/L		08/13/12 08:10	08/13/12 16:13	1
Magnesium	87.6		0.20		mg/L		08/13/12 08:10	08/13/12 16:13	1
Manganese	0.91		0.0030		mg/L		08/13/12 08:10	08/13/12 16:13	1
Nickel	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:13	1
Potassium	8.7		0.50		mg/L		08/13/12 08:10	08/13/12 16:13	1
Selenium	ND		0.015		mg/L		08/13/12 08:10	08/13/12 16:13	1
Silver	ND		0.0030		mg/L		08/13/12 08:10	08/13/12 16:13	1
Sodium	58.8		1.0		mg/L		08/13/12 08:10	08/13/12 16:13	1
Thallium	ND		0.020		mg/L		08/13/12 08:10	08/13/12 16:13	1
Vanadium	ND		0.0050		mg/L		08/13/12 08:10	08/13/12 16:13	1
Zinc	0.012		0.010		mg/L		08/13/12 08:10	08/13/12 16:13	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20		mg/L		08/15/12 07:45	08/15/12 17:25	1
Antimony, Dissolved	0.020		0.020		mg/L		08/15/12 07:45	08/15/12 17:25	1
Arsenic, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:25	1
Barium, Dissolved	0.077		0.0020		mg/L		08/15/12 07:45	08/15/12 17:25	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW03

Lab Sample ID: 480-23756-3

Date Collected: 08/09/12 12:05

Matrix: Water

Date Received: 08/10/12 12:00

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium, Dissolved	ND		0.0020		mg/L		08/15/12 07:45	08/15/12 17:25	1
Cadmium, Dissolved	ND		0.0010		mg/L		08/15/12 07:45	08/15/12 17:25	1
Calcium, Dissolved	110		0.50		mg/L		08/15/12 07:45	08/15/12 17:25	1
Chromium, Dissolved	ND		0.0040		mg/L		08/15/12 07:45	08/15/12 17:25	1
Cobalt, Dissolved	ND		0.0040		mg/L		08/15/12 07:45	08/15/12 17:25	1
Copper, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:25	1
Iron, Dissolved	ND		0.050		mg/L		08/15/12 07:45	08/15/12 17:25	1
Lead, Dissolved	ND		0.0050		mg/L		08/15/12 07:45	08/15/12 17:25	1
Magnesium, Dissolved	82.1		0.20		mg/L		08/15/12 07:45	08/15/12 17:25	1
Manganese, Dissolved	0.84		0.0030		mg/L		08/15/12 07:45	08/15/12 17:25	1
Nickel, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:25	1
Potassium, Dissolved	8.1		0.50		mg/L		08/15/12 07:45	08/15/12 17:25	1
Selenium, Dissolved	ND		0.015		mg/L		08/15/12 07:45	08/15/12 17:25	1
Silver, Dissolved	ND		0.0030		mg/L		08/15/12 07:45	08/15/12 17:25	1
Sodium, Dissolved	57.6		1.0		mg/L		08/15/12 07:45	08/15/12 17:25	1
Thallium, Dissolved	ND		0.020		mg/L		08/15/12 07:45	08/15/12 17:25	1
Vanadium, Dissolved	ND		0.0050		mg/L		08/15/12 07:45	08/15/12 17:25	1
Zinc, Dissolved	0.030		0.010		mg/L		08/15/12 07:45	08/15/12 17:25	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/14/12 08:20	08/14/12 13:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020		mg/L		08/15/12 08:05	08/15/12 13:04	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: DUP

Date Collected: 08/09/12 00:00

Date Received: 08/10/12 12:00

Lab Sample ID: 480-23756-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			08/17/12 20:08	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			08/17/12 20:08	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			08/17/12 20:08	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			08/17/12 20:08	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			08/17/12 20:08	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			08/17/12 20:08	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			08/17/12 20:08	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			08/17/12 20:08	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			08/17/12 20:08	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			08/17/12 20:08	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			08/17/12 20:08	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			08/17/12 20:08	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			08/17/12 20:08	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			08/17/12 20:08	4
2-Hexanone	ND		20	5.0	ug/L			08/17/12 20:08	4
2-Butanone (MEK)	ND		40	5.3	ug/L			08/17/12 20:08	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			08/17/12 20:08	4
Acetone	ND		40	12	ug/L			08/17/12 20:08	4
Benzene	ND		4.0	1.6	ug/L			08/17/12 20:08	4
Bromodichloromethane	ND		4.0	1.6	ug/L			08/17/12 20:08	4
Bromoform	ND		4.0	1.0	ug/L			08/17/12 20:08	4
Bromomethane	ND		4.0	2.8	ug/L			08/17/12 20:08	4
Carbon disulfide	ND		4.0	0.76	ug/L			08/17/12 20:08	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			08/17/12 20:08	4
Chlorobenzene	ND		4.0	3.0	ug/L			08/17/12 20:08	4
Dibromochloromethane	ND		4.0	1.3	ug/L			08/17/12 20:08	4
Chloroethane	ND		4.0	1.3	ug/L			08/17/12 20:08	4
Chloroform	ND		4.0	1.4	ug/L			08/17/12 20:08	4
Chloromethane	ND		4.0	1.4	ug/L			08/17/12 20:08	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			08/17/12 20:08	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			08/17/12 20:08	4
Cyclohexane	ND		4.0	0.72	ug/L			08/17/12 20:08	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			08/17/12 20:08	4
Ethylbenzene	ND		4.0	3.0	ug/L			08/17/12 20:08	4
Isopropylbenzene	ND		4.0	3.2	ug/L			08/17/12 20:08	4
Methyl acetate	ND		4.0	2.0	ug/L			08/17/12 20:08	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			08/17/12 20:08	4
Methylcyclohexane	ND		4.0	0.64	ug/L			08/17/12 20:08	4
Methylene Chloride	ND		4.0	1.8	ug/L			08/17/12 20:08	4
Styrene	ND		4.0	2.9	ug/L			08/17/12 20:08	4
Tetrachloroethene	ND		4.0	1.4	ug/L			08/17/12 20:08	4
Toluene	ND		4.0	2.0	ug/L			08/17/12 20:08	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			08/17/12 20:08	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			08/17/12 20:08	4
Trichloroethene	ND		4.0	1.8	ug/L			08/17/12 20:08	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			08/17/12 20:08	4
Vinyl chloride	ND		4.0	3.6	ug/L			08/17/12 20:08	4
Xylenes, Total	ND		8.0	2.6	ug/L			08/17/12 20:08	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137		08/17/12 20:08	4

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: DUP

Lab Sample ID: 480-23756-4

Date Collected: 08/09/12 00:00

Matrix: Water

Date Received: 08/10/12 12:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		71 - 126		08/17/12 20:08	4
4-Bromofluorobenzene (Surr)	103		73 - 120		08/17/12 20:08	4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.7	0.62	ug/L		08/13/12 13:42	08/15/12 20:58	1
bis (2-chloroisopropyl) ether	ND		4.7	0.49	ug/L		08/13/12 13:42	08/15/12 20:58	1
2,4,5-Trichlorophenol	ND		4.7	0.45	ug/L		08/13/12 13:42	08/15/12 20:58	1
2,4,6-Trichlorophenol	ND		4.7	0.58	ug/L		08/13/12 13:42	08/15/12 20:58	1
2,4-Dichlorophenol	ND		4.7	0.48	ug/L		08/13/12 13:42	08/15/12 20:58	1
2,4-Dimethylphenol	ND		4.7	0.47	ug/L		08/13/12 13:42	08/15/12 20:58	1
2,4-Dinitrophenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 20:58	1
2,4-Dinitrotoluene	ND		4.7	0.42	ug/L		08/13/12 13:42	08/15/12 20:58	1
2,6-Dinitrotoluene	ND		4.7	0.38	ug/L		08/13/12 13:42	08/15/12 20:58	1
2-Chloronaphthalene	ND		4.7	0.44	ug/L		08/13/12 13:42	08/15/12 20:58	1
2-Chlorophenol	ND		4.7	0.50	ug/L		08/13/12 13:42	08/15/12 20:58	1
2-Methylnaphthalene	2.0	J	4.7	0.57	ug/L		08/13/12 13:42	08/15/12 20:58	1
2-Methylphenol	ND		4.7	0.38	ug/L		08/13/12 13:42	08/15/12 20:58	1
2-Nitroaniline	ND		9.5	0.40	ug/L		08/13/12 13:42	08/15/12 20:58	1
2-Nitrophenol	ND		4.7	0.45	ug/L		08/13/12 13:42	08/15/12 20:58	1
3,3'-Dichlorobenzidine	ND		4.7	0.38	ug/L		08/13/12 13:42	08/15/12 20:58	1
3-Nitroaniline	ND		9.5	0.45	ug/L		08/13/12 13:42	08/15/12 20:58	1
4,6-Dinitro-2-methylphenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 20:58	1
4-Bromophenyl phenyl ether	ND		4.7	0.43	ug/L		08/13/12 13:42	08/15/12 20:58	1
4-Chloro-3-methylphenol	ND		4.7	0.43	ug/L		08/13/12 13:42	08/15/12 20:58	1
4-Chloroaniline	ND		4.7	0.56	ug/L		08/13/12 13:42	08/15/12 20:58	1
4-Chlorophenyl phenyl ether	ND		4.7	0.33	ug/L		08/13/12 13:42	08/15/12 20:58	1
4-Methylphenol	ND		9.5	0.34	ug/L		08/13/12 13:42	08/15/12 20:58	1
4-Nitroaniline	ND		9.5	0.24	ug/L		08/13/12 13:42	08/15/12 20:58	1
4-Nitrophenol	ND		9.5	1.4	ug/L		08/13/12 13:42	08/15/12 20:58	1
Acenaphthene	0.47	J	4.7	0.39	ug/L		08/13/12 13:42	08/15/12 20:58	1
Acenaphthylene	ND		4.7	0.36	ug/L		08/13/12 13:42	08/15/12 20:58	1
Acetophenone	ND		4.7	0.51	ug/L		08/13/12 13:42	08/15/12 20:58	1
Anthracene	ND		4.7	0.27	ug/L		08/13/12 13:42	08/15/12 20:58	1
Atrazine	ND		4.7	0.44	ug/L		08/13/12 13:42	08/15/12 20:58	1
Benzaldehyde	ND		4.7	0.25	ug/L		08/13/12 13:42	08/15/12 20:58	1
Benzo(a)anthracene	ND		4.7	0.34	ug/L		08/13/12 13:42	08/15/12 20:58	1
Benzo(a)pyrene	ND		4.7	0.45	ug/L		08/13/12 13:42	08/15/12 20:58	1
Benzo(b)fluoranthene	ND		4.7	0.32	ug/L		08/13/12 13:42	08/15/12 20:58	1
Benzo(g,h,i)perylene	ND		4.7	0.33	ug/L		08/13/12 13:42	08/15/12 20:58	1
Benzo(k)fluoranthene	ND		4.7	0.69	ug/L		08/13/12 13:42	08/15/12 20:58	1
Bis(2-chloroethoxy)methane	ND		4.7	0.33	ug/L		08/13/12 13:42	08/15/12 20:58	1
Bis(2-chloroethyl)ether	ND		4.7	0.38	ug/L		08/13/12 13:42	08/15/12 20:58	1
Bis(2-ethylhexyl) phthalate	ND		4.7	1.7	ug/L		08/13/12 13:42	08/15/12 20:58	1
Butyl benzyl phthalate	ND		4.7	0.40	ug/L		08/13/12 13:42	08/15/12 20:58	1
Caprolactam	ND		4.7	2.1	ug/L		08/13/12 13:42	08/15/12 20:58	1
Carbazole	ND		4.7	0.28	ug/L		08/13/12 13:42	08/15/12 20:58	1
Chrysene	ND		4.7	0.31	ug/L		08/13/12 13:42	08/15/12 20:58	1
Di-n-butyl phthalate	ND		4.7	0.29	ug/L		08/13/12 13:42	08/15/12 20:58	1
Di-n-octyl phthalate	ND		4.7	0.45	ug/L		08/13/12 13:42	08/15/12 20:58	1
Dibenz(a,h)anthracene	ND		4.7	0.40	ug/L		08/13/12 13:42	08/15/12 20:58	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: DUP

Lab Sample ID: 480-23756-4

Date Collected: 08/09/12 00:00

Matrix: Water

Date Received: 08/10/12 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		9.5	0.48	ug/L		08/13/12 13:42	08/15/12 20:58	1
Diethyl phthalate	0.41	J	4.7	0.21	ug/L		08/13/12 13:42	08/15/12 20:58	1
Dimethyl phthalate	ND		4.7	0.34	ug/L		08/13/12 13:42	08/15/12 20:58	1
Fluoranthene	ND		4.7	0.38	ug/L		08/13/12 13:42	08/15/12 20:58	1
Fluorene	0.55	J	4.7	0.34	ug/L		08/13/12 13:42	08/15/12 20:58	1
Hexachlorobenzene	ND		4.7	0.48	ug/L		08/13/12 13:42	08/15/12 20:58	1
Hexachlorobutadiene	ND		4.7	0.64	ug/L		08/13/12 13:42	08/15/12 20:58	1
Hexachlorocyclopentadiene	ND		4.7	0.56	ug/L		08/13/12 13:42	08/15/12 20:58	1
Hexachloroethane	ND		4.7	0.56	ug/L		08/13/12 13:42	08/15/12 20:58	1
Indeno(1,2,3-cd)pyrene	ND		4.7	0.45	ug/L		08/13/12 13:42	08/15/12 20:58	1
Isophorone	ND		4.7	0.41	ug/L		08/13/12 13:42	08/15/12 20:58	1
N-Nitrosodi-n-propylamine	ND		4.7	0.51	ug/L		08/13/12 13:42	08/15/12 20:58	1
N-Nitrosodiphenylamine	ND	*	4.7	0.48	ug/L		08/13/12 13:42	08/15/12 20:58	1
Naphthalene	1.5	J	4.7	0.72	ug/L		08/13/12 13:42	08/15/12 20:58	1
Nitrobenzene	ND		4.7	0.27	ug/L		08/13/12 13:42	08/15/12 20:58	1
Pentachlorophenol	ND		9.5	2.1	ug/L		08/13/12 13:42	08/15/12 20:58	1
Phenanthrene	0.82	J	4.7	0.42	ug/L		08/13/12 13:42	08/15/12 20:58	1
Phenol	ND		4.7	0.37	ug/L		08/13/12 13:42	08/15/12 20:58	1
Pyrene	ND		4.7	0.32	ug/L		08/13/12 13:42	08/15/12 20:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	120		52 - 132	08/13/12 13:42	08/15/12 20:58	1
2-Fluorobiphenyl	87		48 - 120	08/13/12 13:42	08/15/12 20:58	1
2-Fluorophenol	40		20 - 120	08/13/12 13:42	08/15/12 20:58	1
Nitrobenzene-d5	86		46 - 120	08/13/12 13:42	08/15/12 20:58	1
p-Terphenyl-d14	47	X	67 - 150	08/13/12 13:42	08/15/12 20:58	1
Phenol-d5	28		16 - 120	08/13/12 13:42	08/15/12 20:58	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.047	0.0087	ug/L		08/14/12 14:30	08/15/12 20:19	1
4,4'-DDE	ND		0.047	0.011	ug/L		08/14/12 14:30	08/15/12 20:19	1
4,4'-DDT	ND		0.047	0.010	ug/L		08/14/12 14:30	08/15/12 20:19	1
Aldrin	ND		0.047	0.0062	ug/L		08/14/12 14:30	08/15/12 20:19	1
alpha-BHC	ND		0.047	0.0062	ug/L		08/14/12 14:30	08/15/12 20:19	1
alpha-Chlordane	ND		0.047	0.014	ug/L		08/14/12 14:30	08/15/12 20:19	1
beta-BHC	ND		0.047	0.023	ug/L		08/14/12 14:30	08/15/12 20:19	1
delta-BHC	ND		0.047	0.0094	ug/L		08/14/12 14:30	08/15/12 20:19	1
Dieldrin	ND		0.047	0.0092	ug/L		08/14/12 14:30	08/15/12 20:19	1
Endosulfan I	ND		0.047	0.010	ug/L		08/14/12 14:30	08/15/12 20:19	1
Endosulfan II	ND		0.047	0.011	ug/L		08/14/12 14:30	08/15/12 20:19	1
Endosulfan sulfate	ND		0.047	0.015	ug/L		08/14/12 14:30	08/15/12 20:19	1
Endrin	ND		0.047	0.013	ug/L		08/14/12 14:30	08/15/12 20:19	1
Endrin aldehyde	ND		0.047	0.015	ug/L		08/14/12 14:30	08/15/12 20:19	1
Endrin ketone	ND		0.047	0.011	ug/L		08/14/12 14:30	08/15/12 20:19	1
gamma-BHC (Lindane)	ND		0.047	0.0057	ug/L		08/14/12 14:30	08/15/12 20:19	1
gamma-Chlordane	ND		0.047	0.010	ug/L		08/14/12 14:30	08/15/12 20:19	1
Heptachlor	ND		0.047	0.0080	ug/L		08/14/12 14:30	08/15/12 20:19	1
Heptachlor epoxide	ND		0.047	0.0050	ug/L		08/14/12 14:30	08/15/12 20:19	1
Methoxychlor	ND		0.047	0.013	ug/L		08/14/12 14:30	08/15/12 20:19	1
Toxaphene	ND		0.47	0.11	ug/L		08/14/12 14:30	08/15/12 20:19	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: DUP

Lab Sample ID: 480-23756-4

Date Collected: 08/09/12 00:00

Matrix: Water

Date Received: 08/10/12 12:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	17		16 - 120	08/14/12 14:30	08/15/12 20:19	1
DCB Decachlorobiphenyl	26		16 - 120	08/14/12 14:30	08/15/12 20:19	1
Tetrachloro-m-xylene	71		35 - 120	08/14/12 14:30	08/15/12 20:19	1
Tetrachloro-m-xylene	62		35 - 120	08/14/12 14:30	08/15/12 20:19	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 17:06	1
PCB-1221	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 17:06	1
PCB-1232	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 17:06	1
PCB-1242	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 17:06	1
PCB-1248	ND		0.47	0.17	ug/L		08/14/12 14:14	08/17/12 17:06	1
PCB-1254	ND		0.47	0.24	ug/L		08/14/12 14:14	08/17/12 17:06	1
PCB-1260	ND		0.47	0.24	ug/L		08/14/12 14:14	08/17/12 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	26		19 - 120	08/14/12 14:14	08/17/12 17:06	1
DCB Decachlorobiphenyl	26		19 - 120	08/14/12 14:14	08/17/12 17:06	1
Tetrachloro-m-xylene	83		23 - 127	08/14/12 14:14	08/17/12 17:06	1
Tetrachloro-m-xylene	81		23 - 127	08/14/12 14:14	08/17/12 17:06	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.2		0.20		mg/L		08/13/12 08:10	08/13/12 16:15	1
Antimony	ND		0.020		mg/L		08/13/12 08:10	08/13/12 16:15	1
Arsenic	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:15	1
Barium	0.14		0.0020		mg/L		08/13/12 08:10	08/13/12 16:15	1
Beryllium	ND		0.0020		mg/L		08/13/12 08:10	08/13/12 16:15	1
Cadmium	ND		0.0010		mg/L		08/13/12 08:10	08/13/12 16:15	1
Calcium	254		0.50		mg/L		08/13/12 08:10	08/13/12 16:15	1
Chromium	ND		0.0040		mg/L		08/13/12 08:10	08/13/12 16:15	1
Cobalt	ND		0.0040		mg/L		08/13/12 08:10	08/13/12 16:15	1
Copper	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:15	1
Iron	6.5		0.050		mg/L		08/13/12 08:10	08/13/12 16:15	1
Lead	0.033		0.0050		mg/L		08/13/12 08:10	08/13/12 16:15	1
Magnesium	126		0.20		mg/L		08/13/12 08:10	08/13/12 16:15	1
Manganese	1.4		0.0030		mg/L		08/13/12 08:10	08/13/12 16:15	1
Nickel	ND		0.010		mg/L		08/13/12 08:10	08/13/12 16:15	1
Potassium	4.8		0.50		mg/L		08/13/12 08:10	08/13/12 16:15	1
Selenium	ND		0.015		mg/L		08/13/12 08:10	08/13/12 16:15	1
Silver	ND		0.0030		mg/L		08/13/12 08:10	08/13/12 16:15	1
Sodium	60.9		1.0		mg/L		08/13/12 08:10	08/13/12 16:15	1
Thallium	ND		0.020		mg/L		08/13/12 08:10	08/13/12 16:15	1
Vanadium	0.0050		0.0050		mg/L		08/13/12 08:10	08/13/12 16:15	1
Zinc	0.042		0.010		mg/L		08/13/12 08:10	08/13/12 16:15	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20		mg/L		08/15/12 07:45	08/15/12 17:27	1
Antimony, Dissolved	ND		0.020		mg/L		08/15/12 07:45	08/15/12 17:27	1
Arsenic, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:27	1
Barium, Dissolved	0.14		0.0020		mg/L		08/15/12 07:45	08/15/12 17:27	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: DUP

Lab Sample ID: 480-23756-4

Date Collected: 08/09/12 00:00

Matrix: Water

Date Received: 08/10/12 12:00

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium, Dissolved	ND		0.0020		mg/L		08/15/12 07:45	08/15/12 17:27	1
Cadmium, Dissolved	ND		0.0010		mg/L		08/15/12 07:45	08/15/12 17:27	1
Calcium, Dissolved	239		0.50		mg/L		08/15/12 07:45	08/15/12 17:27	1
Chromium, Dissolved	ND		0.0040		mg/L		08/15/12 07:45	08/15/12 17:27	1
Cobalt, Dissolved	ND		0.0040		mg/L		08/15/12 07:45	08/15/12 17:27	1
Copper, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:27	1
Iron, Dissolved	ND		0.050		mg/L		08/15/12 07:45	08/15/12 17:27	1
Lead, Dissolved	ND		0.0050		mg/L		08/15/12 07:45	08/15/12 17:27	1
Magnesium, Dissolved	139		0.20		mg/L		08/15/12 07:45	08/15/12 17:27	1
Manganese, Dissolved	1.4		0.0030		mg/L		08/15/12 07:45	08/15/12 17:27	1
Nickel, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:27	1
Potassium, Dissolved	4.3		0.50		mg/L		08/15/12 07:45	08/15/12 17:27	1
Selenium, Dissolved	ND		0.015		mg/L		08/15/12 07:45	08/15/12 17:27	1
Silver, Dissolved	ND		0.0030		mg/L		08/15/12 07:45	08/15/12 17:27	1
Sodium, Dissolved	60.7		1.0		mg/L		08/15/12 07:45	08/15/12 17:27	1
Thallium, Dissolved	ND		0.020		mg/L		08/15/12 07:45	08/15/12 17:27	1
Vanadium, Dissolved	ND		0.0050		mg/L		08/15/12 07:45	08/15/12 17:27	1
Zinc, Dissolved	0.053		0.010		mg/L		08/15/12 07:45	08/15/12 17:27	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/14/12 08:20	08/14/12 14:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020		mg/L		08/15/12 08:05	08/15/12 13:06	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-23756-5

Date Collected: 08/09/12 00:00

Matrix: Water

Date Received: 08/10/12 12:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/17/12 20:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/17/12 20:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/17/12 20:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/17/12 20:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/17/12 20:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/17/12 20:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/17/12 20:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/17/12 20:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/17/12 20:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/17/12 20:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/17/12 20:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/17/12 20:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/17/12 20:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/17/12 20:32	1
2-Hexanone	ND		5.0	1.2	ug/L			08/17/12 20:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/17/12 20:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/17/12 20:32	1
Acetone	ND		10	3.0	ug/L			08/17/12 20:32	1
Benzene	ND		1.0	0.41	ug/L			08/17/12 20:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/17/12 20:32	1
Bromoform	ND		1.0	0.26	ug/L			08/17/12 20:32	1
Bromomethane	ND		1.0	0.69	ug/L			08/17/12 20:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/17/12 20:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/17/12 20:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/17/12 20:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/17/12 20:32	1
Chloroethane	ND		1.0	0.32	ug/L			08/17/12 20:32	1
Chloroform	ND		1.0	0.34	ug/L			08/17/12 20:32	1
Chloromethane	ND		1.0	0.35	ug/L			08/17/12 20:32	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/17/12 20:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/17/12 20:32	1
Cyclohexane	ND		1.0	0.18	ug/L			08/17/12 20:32	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/17/12 20:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/17/12 20:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/17/12 20:32	1
Methyl acetate	ND		1.0	0.50	ug/L			08/17/12 20:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/17/12 20:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/17/12 20:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/17/12 20:32	1
Styrene	ND		1.0	0.73	ug/L			08/17/12 20:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/17/12 20:32	1
Toluene	ND		1.0	0.51	ug/L			08/17/12 20:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/17/12 20:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/17/12 20:32	1
Trichloroethene	ND		1.0	0.46	ug/L			08/17/12 20:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/17/12 20:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/17/12 20:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/17/12 20:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137		08/17/12 20:32	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TRIP BLANK

Date Collected: 08/09/12 00:00

Date Received: 08/10/12 12:00

Lab Sample ID: 480-23756-5

Matrix: Water

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

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 126		08/17/12 20:32	1
<i>4-Bromofluorobenzene (Surr)</i>	105		73 - 120		08/17/12 20:32	1

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	TOL (71-126)	BFB (73-120)
480-23756-1	TI-MW01	99	103	104
480-23756-1 MS	TI-MW01	101	101	103
480-23756-1 MSD	TI-MW01	100	101	100
480-23756-2	TI-MW02	100	103	107
480-23756-3	TI-MW03	100	99	101
480-23756-4	DUP	101	100	103
480-23756-5	TRIP BLANK	98	100	105
LCS 480-77017/4	Lab Control Sample	99	101	102
MB 480-77017/5	Method Blank	101	101	104

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (52-132)	FBP (48-120)	2FP (20-120)	NBZ (46-120)	TPH (67-150)	PHL (16-120)
480-23756-1	TI-MW01	116	84	39	84	43 X	28
480-23756-1 MS	TI-MW01	124	95	52	98	78	36
480-23756-1 MSD	TI-MW01	122	96	53	96	81	37
480-23756-2	TI-MW02	119	86	40	88	38 X	28
480-23756-3	TI-MW03	120	92	45	94	42 X	32
480-23756-4	DUP	120	87	40	86	47 X	28
LCS 480-76353/2-A	Lab Control Sample	121	100	58	104	130	41
MB 480-76353/1-A	Method Blank	121	81	45	84	99	31

Surrogate Legend

TBP = 2,4,6-Tribromophenol

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

NBZ = Nitrobenzene-d5

TPH = p-Terphenyl-d14

PHL = Phenol-d5

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCB1 (16-120)	DCB2 (16-120)	TCX1 (35-120)	TCX2 (35-120)
480-23756-1	TI-MW01	57	56	77	70
480-23756-1 MS	TI-MW01	30	33	69	68
480-23756-1 MSD	TI-MW01	33	30	68	65
480-23756-2	TI-MW02	44	49	72	63
480-23756-3	TI-MW03	70	43	102	52
480-23756-4	DUP	17	26	71	62
LCS 480-76529/2-A	Lab Control Sample	44	45	64	66

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCB1 (16-120)	DCB2 (16-120)	TCX1 (35-120)	TCX2 (35-120)
MB 480-76529/1-A	Method Blank	50	52	56	62
Surrogate Legend					
DCB = DCB Decachlorobiphenyl					
TCX = Tetrachloro-m-xylene					

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCB1 (19-120)	DCB2 (19-120)	TCX1 (23-127)	TCX2 (23-127)
480-23756-1	TI-MW01	81	77	125	135 X
480-23756-1 MS	TI-MW01	36	36	88	90
480-23756-1 MSD	TI-MW01	38	38	83	85
480-23756-2	TI-MW02	50	48	87	91
480-23756-3	TI-MW03	49	46	82	87
480-23756-4	DUP	26	26	83	81
LCS 480-76525/2-A	Lab Control Sample	43	41	72	73
MB 480-76525/1-A	Method Blank	52	53	68	73
Surrogate Legend					
DCB = DCB Decachlorobiphenyl					
TCX = Tetrachloro-m-xylene					

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Lab Sample ID: MB 480-77017/5

Matrix: Water

Analysis Batch: 77017

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/17/12 12:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/17/12 12:28	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/17/12 12:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/17/12 12:28	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/17/12 12:28	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/17/12 12:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/17/12 12:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/17/12 12:28	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/17/12 12:28	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/17/12 12:28	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/17/12 12:28	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/17/12 12:28	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/17/12 12:28	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/17/12 12:28	1
2-Hexanone	ND		5.0	1.2	ug/L			08/17/12 12:28	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/17/12 12:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/17/12 12:28	1
Acetone	ND		10	3.0	ug/L			08/17/12 12:28	1
Benzene	ND		1.0	0.41	ug/L			08/17/12 12:28	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/17/12 12:28	1
Bromoform	ND		1.0	0.26	ug/L			08/17/12 12:28	1
Bromomethane	ND		1.0	0.69	ug/L			08/17/12 12:28	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/17/12 12:28	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/17/12 12:28	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/17/12 12:28	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/17/12 12:28	1
Chloroethane	ND		1.0	0.32	ug/L			08/17/12 12:28	1
Chloroform	ND		1.0	0.34	ug/L			08/17/12 12:28	1
Chloromethane	ND		1.0	0.35	ug/L			08/17/12 12:28	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/17/12 12:28	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/17/12 12:28	1
Cyclohexane	ND		1.0	0.18	ug/L			08/17/12 12:28	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/17/12 12:28	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/17/12 12:28	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/17/12 12:28	1
Methyl acetate	ND		1.0	0.50	ug/L			08/17/12 12:28	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/17/12 12:28	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/17/12 12:28	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/17/12 12:28	1
Styrene	ND		1.0	0.73	ug/L			08/17/12 12:28	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/17/12 12:28	1
Toluene	ND		1.0	0.51	ug/L			08/17/12 12:28	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/17/12 12:28	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/17/12 12:28	1
Trichloroethene	ND		1.0	0.46	ug/L			08/17/12 12:28	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/17/12 12:28	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/17/12 12:28	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/17/12 12:28	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Lab Sample ID: MB 480-77017/5

Matrix: Water

Analysis Batch: 77017

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137		08/17/12 12:28	1
Toluene-d8 (Surr)	101		71 - 126		08/17/12 12:28	1
4-Bromofluorobenzene (Surr)	104		73 - 120		08/17/12 12:28	1

Lab Sample ID: LCS 480-77017/4

Matrix: Water

Analysis Batch: 77017

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.8		ug/L		103	71 - 129
1,1-Dichloroethene	25.0	23.1		ug/L		92	65 - 138
1,2-Dichlorobenzene	25.0	27.2		ug/L		109	77 - 120
1,2-Dichloroethane	25.0	26.6		ug/L		106	75 - 127
Benzene	25.0	26.0		ug/L		104	71 - 124
Chlorobenzene	25.0	26.8		ug/L		107	72 - 120
cis-1,2-Dichloroethene	25.0	25.9		ug/L		104	74 - 124
Ethylbenzene	25.0	26.4		ug/L		106	77 - 123
Methyl tert-butyl ether	25.0	26.4		ug/L		106	64 - 127
Tetrachloroethene	25.0	27.0		ug/L		108	74 - 122
Toluene	25.0	25.7		ug/L		103	70 - 122
trans-1,2-Dichloroethene	25.0	27.4		ug/L		109	73 - 127
Trichloroethene	25.0	25.3		ug/L		101	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		66 - 137
Toluene-d8 (Surr)	101		71 - 126
4-Bromofluorobenzene (Surr)	102		73 - 120

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 77017

Client Sample ID: TI-MW01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	ND		25.0	22.5		ug/L		90	71 - 129
1,1-Dichloroethene	ND		25.0	19.2		ug/L		77	65 - 138
1,2-Dichlorobenzene	ND		25.0	20.7		ug/L		83	77 - 120
1,2-Dichloroethane	ND		25.0	22.4		ug/L		90	75 - 127
Benzene	ND		25.0	22.0		ug/L		88	71 - 124
Chlorobenzene	ND		25.0	21.3		ug/L		85	72 - 120
cis-1,2-Dichloroethene	ND		25.0	22.6		ug/L		91	74 - 124
Ethylbenzene	ND		25.0	21.0		ug/L		84	77 - 123
Methyl tert-butyl ether	ND		25.0	21.8		ug/L		87	64 - 127
Tetrachloroethene	ND		25.0	20.4		ug/L		82	74 - 122
Toluene	ND		25.0	21.2		ug/L		85	70 - 122
trans-1,2-Dichloroethene	ND		25.0	23.3		ug/L		93	73 - 127
Trichloroethene	ND		25.0	21.2		ug/L		85	74 - 123

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		66 - 137

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 77017

Client Sample ID: TI-MW01

Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	101		71 - 126
4-Bromofluorobenzene (Surr)	103		73 - 120

Lab Sample ID: 480-23756-1 MSD

Matrix: Water

Analysis Batch: 77017

Client Sample ID: TI-MW01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	ND		25.0	19.6		ug/L		78	71 - 129	14	20
1,1-Dichloroethene	ND		25.0	17.2		ug/L		69	65 - 138	11	16
1,2-Dichlorobenzene	ND		25.0	19.5		ug/L		78	77 - 120	6	20
1,2-Dichloroethane	ND		25.0	20.1		ug/L		81	75 - 127	11	20
Benzene	ND		25.0	19.5		ug/L		78	71 - 124	12	13
Chlorobenzene	ND		25.0	20.2		ug/L		81	72 - 120	6	25
cis-1,2-Dichloroethene	ND		25.0	19.9		ug/L		79	74 - 124	13	15
Ethylbenzene	ND		25.0	19.5		ug/L		78	77 - 123	7	15
Methyl tert-butyl ether	ND		25.0	19.1		ug/L		76	64 - 127	13	37
Tetrachloroethene	ND		25.0	19.9		ug/L		79	74 - 122	3	20
Toluene	ND		25.0	19.5		ug/L		78	70 - 122	8	15
trans-1,2-Dichloroethene	ND		25.0	20.8		ug/L		83	73 - 127	12	20
Trichloroethene	ND		25.0	19.9		ug/L		79	74 - 123	7	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
Toluene-d8 (Surr)	101		71 - 126
4-Bromofluorobenzene (Surr)	100		73 - 120

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

Lab Sample ID: MB 480-76353/1-A

Matrix: Water

Analysis Batch: 76679

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		08/13/12 13:42	08/15/12 15:40	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		08/13/12 13:42	08/15/12 15:40	1
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		08/13/12 13:42	08/15/12 15:40	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		08/13/12 13:42	08/15/12 15:40	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		08/13/12 13:42	08/15/12 15:40	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		08/13/12 13:42	08/15/12 15:40	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		08/13/12 13:42	08/15/12 15:40	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		08/13/12 13:42	08/15/12 15:40	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		08/13/12 13:42	08/15/12 15:40	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		08/13/12 13:42	08/15/12 15:40	1
2-Chlorophenol	ND		5.0	0.53	ug/L		08/13/12 13:42	08/15/12 15:40	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		08/13/12 13:42	08/15/12 15:40	1
2-Methylphenol	ND		5.0	0.40	ug/L		08/13/12 13:42	08/15/12 15:40	1
2-Nitroaniline	ND		10	0.42	ug/L		08/13/12 13:42	08/15/12 15:40	1
2-Nitrophenol	ND		5.0	0.48	ug/L		08/13/12 13:42	08/15/12 15:40	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Lab Sample ID: MB 480-76353/1-A

Matrix: Water

Analysis Batch: 76679

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		08/13/12 13:42	08/15/12 15:40	1
3-Nitroaniline	ND		10	0.48	ug/L		08/13/12 13:42	08/15/12 15:40	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		08/13/12 13:42	08/15/12 15:40	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		08/13/12 13:42	08/15/12 15:40	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		08/13/12 13:42	08/15/12 15:40	1
4-Chloroaniline	ND		5.0	0.59	ug/L		08/13/12 13:42	08/15/12 15:40	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		08/13/12 13:42	08/15/12 15:40	1
4-Methylphenol	ND		10	0.36	ug/L		08/13/12 13:42	08/15/12 15:40	1
4-Nitroaniline	ND		10	0.25	ug/L		08/13/12 13:42	08/15/12 15:40	1
4-Nitrophenol	ND		10	1.5	ug/L		08/13/12 13:42	08/15/12 15:40	1
Acenaphthene	ND		5.0	0.41	ug/L		08/13/12 13:42	08/15/12 15:40	1
Acenaphthylene	ND		5.0	0.38	ug/L		08/13/12 13:42	08/15/12 15:40	1
Acetophenone	ND		5.0	0.54	ug/L		08/13/12 13:42	08/15/12 15:40	1
Anthracene	ND		5.0	0.28	ug/L		08/13/12 13:42	08/15/12 15:40	1
Atrazine	ND		5.0	0.46	ug/L		08/13/12 13:42	08/15/12 15:40	1
Benzaldehyde	ND		5.0	0.27	ug/L		08/13/12 13:42	08/15/12 15:40	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		08/13/12 13:42	08/15/12 15:40	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		08/13/12 13:42	08/15/12 15:40	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		08/13/12 13:42	08/15/12 15:40	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		08/13/12 13:42	08/15/12 15:40	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		08/13/12 13:42	08/15/12 15:40	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		08/13/12 13:42	08/15/12 15:40	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		08/13/12 13:42	08/15/12 15:40	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		08/13/12 13:42	08/15/12 15:40	1
Butyl benzyl phthalate	ND		5.0	0.42	ug/L		08/13/12 13:42	08/15/12 15:40	1
Caprolactam	ND		5.0	2.2	ug/L		08/13/12 13:42	08/15/12 15:40	1
Carbazole	ND		5.0	0.30	ug/L		08/13/12 13:42	08/15/12 15:40	1
Chrysene	ND		5.0	0.33	ug/L		08/13/12 13:42	08/15/12 15:40	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		08/13/12 13:42	08/15/12 15:40	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		08/13/12 13:42	08/15/12 15:40	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		08/13/12 13:42	08/15/12 15:40	1
Dibenzofuran	ND		10	0.51	ug/L		08/13/12 13:42	08/15/12 15:40	1
Diethyl phthalate	ND		5.0	0.22	ug/L		08/13/12 13:42	08/15/12 15:40	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		08/13/12 13:42	08/15/12 15:40	1
Fluoranthene	ND		5.0	0.40	ug/L		08/13/12 13:42	08/15/12 15:40	1
Fluorene	ND		5.0	0.36	ug/L		08/13/12 13:42	08/15/12 15:40	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		08/13/12 13:42	08/15/12 15:40	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		08/13/12 13:42	08/15/12 15:40	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		08/13/12 13:42	08/15/12 15:40	1
Hexachloroethane	ND		5.0	0.59	ug/L		08/13/12 13:42	08/15/12 15:40	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		08/13/12 13:42	08/15/12 15:40	1
Isophorone	ND		5.0	0.43	ug/L		08/13/12 13:42	08/15/12 15:40	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		08/13/12 13:42	08/15/12 15:40	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		08/13/12 13:42	08/15/12 15:40	1
Naphthalene	ND		5.0	0.76	ug/L		08/13/12 13:42	08/15/12 15:40	1
Nitrobenzene	ND		5.0	0.29	ug/L		08/13/12 13:42	08/15/12 15:40	1
Pentachlorophenol	ND		10	2.2	ug/L		08/13/12 13:42	08/15/12 15:40	1
Phenanthrene	ND		5.0	0.44	ug/L		08/13/12 13:42	08/15/12 15:40	1
Phenol	ND		5.0	0.39	ug/L		08/13/12 13:42	08/15/12 15:40	1
Pyrene	ND		5.0	0.34	ug/L		08/13/12 13:42	08/15/12 15:40	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Lab Sample ID: MB 480-76353/1-A

Matrix: Water

Analysis Batch: 76679

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76353

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	121		52 - 132	08/13/12 13:42	08/15/12 15:40	1
2-Fluorobiphenyl	81		48 - 120	08/13/12 13:42	08/15/12 15:40	1
2-Fluorophenol	45		20 - 120	08/13/12 13:42	08/15/12 15:40	1
Nitrobenzene-d5	84		46 - 120	08/13/12 13:42	08/15/12 15:40	1
p-Terphenyl-d14	99		67 - 150	08/13/12 13:42	08/15/12 15:40	1
Phenol-d5	31		16 - 120	08/13/12 13:42	08/15/12 15:40	1

Lab Sample ID: LCS 480-76353/2-A

Matrix: Water

Analysis Batch: 76821

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 76353

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	100	115		ug/L		115	59 - 125
2-Chlorophenol	100	88.5		ug/L		89	48 - 120
4-Chloro-3-methylphenol	100	112		ug/L		112	64 - 120
4-Nitrophenol	100	46.1		ug/L		46	16 - 120
Acenaphthene	100	94.2		ug/L		94	60 - 120
Bis(2-ethylhexyl) phthalate	100	125		ug/L		125	69 - 136
Fluorene	100	104		ug/L		104	66 - 129
Hexachloroethane	100	51.3		ug/L		51	25 - 120
N-Nitrosodi-n-propylamine	100	103		ug/L		103	56 - 120
Pentachlorophenol	100	99.1		ug/L		99	39 - 136
Phenol	100	46.9		ug/L		47	17 - 120
Pyrene	100	112		ug/L		112	58 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	121		52 - 132
2-Fluorobiphenyl	100		48 - 120
2-Fluorophenol	58		20 - 120
Nitrobenzene-d5	104		46 - 120
p-Terphenyl-d14	130		67 - 150
Phenol-d5	41		16 - 120

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 76679

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76353

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	ND		94.3	102		ug/L		108	59 - 125
2-Chlorophenol	ND		94.3	80.3		ug/L		85	48 - 120
4-Chloro-3-methylphenol	ND		94.3	100		ug/L		106	64 - 120
4-Nitrophenol	ND		94.3	48.1		ug/L		51	16 - 120
Acenaphthene	ND		94.3	92.6		ug/L		98	60 - 120
Bis(2-ethylhexyl) phthalate	ND		94.3	101		ug/L		107	69 - 136
Fluorene	ND		94.3	96.3		ug/L		102	66 - 129
Hexachloroethane	ND		94.3	73.1		ug/L		77	25 - 120
N-Nitrosodi-n-propylamine	ND		94.3	91.7		ug/L		97	56 - 120
Pentachlorophenol	ND		94.3	114		ug/L		120	39 - 136
Phenol	ND		94.3	39.2		ug/L		42	17 - 120

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 76679

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76353

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Pyrene	ND		94.3	87.2		ug/L		92	58 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
2,4,6-Tribromophenol	124		52 - 132						
2-Fluorobiphenyl	95		48 - 120						
2-Fluorophenol	52		20 - 120						
Nitrobenzene-d5	98		46 - 120						
p-Terphenyl-d14	78		67 - 150						
Phenol-d5	36		16 - 120						

Lab Sample ID: 480-23756-1 MSD

Matrix: Water

Analysis Batch: 76679

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76353

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	ND		96.2	103		ug/L		107	59 - 125	1	20
2-Chlorophenol	ND		96.2	81.6		ug/L		85	48 - 120	2	25
4-Chloro-3-methylphenol	ND		96.2	101		ug/L		106	64 - 120	1	27
4-Nitrophenol	ND		96.2	69.0		ug/L		72	16 - 120	36	48
Acenaphthene	ND		96.2	94.6		ug/L		98	60 - 120	2	24
Bis(2-ethylhexyl) phthalate	ND		96.2	101		ug/L		105	69 - 136	0	15
Fluorene	ND		96.2	97.5		ug/L		101	66 - 129	1	15
Hexachloroethane	ND		96.2	73.5		ug/L		76	25 - 120	1	46
N-Nitrosodi-n-propylamine	ND		96.2	92.6		ug/L		96	56 - 120	1	31
Pentachlorophenol	ND		96.2	111		ug/L		116	39 - 136	2	37
Phenol	ND		96.2	40.4		ug/L		42	17 - 120	3	34
Pyrene	ND		96.2	88.9		ug/L		92	58 - 136	2	19
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
2,4,6-Tribromophenol	122		52 - 132								
2-Fluorobiphenyl	96		48 - 120								
2-Fluorophenol	53		20 - 120								
Nitrobenzene-d5	96		46 - 120								
p-Terphenyl-d14	81		67 - 150								
Phenol-d5	37		16 - 120								

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-76529/1-A

Matrix: Water

Analysis Batch: 76643

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76529

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.050	0.0092	ug/L		08/14/12 14:30	08/15/12 10:19	1
4,4'-DDE	ND		0.050	0.012	ug/L		08/14/12 14:30	08/15/12 10:19	1
4,4'-DDT	ND		0.050	0.011	ug/L		08/14/12 14:30	08/15/12 10:19	1
Aldrin	ND		0.050	0.0066	ug/L		08/14/12 14:30	08/15/12 10:19	1
alpha-BHC	ND		0.050	0.0066	ug/L		08/14/12 14:30	08/15/12 10:19	1
alpha-Chlordane	ND		0.050	0.015	ug/L		08/14/12 14:30	08/15/12 10:19	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 480-76529/1-A

Matrix: Water

Analysis Batch: 76643

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76529

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	ND		0.050	0.025	ug/L		08/14/12 14:30	08/15/12 10:19	1
delta-BHC	ND		0.050	0.010	ug/L		08/14/12 14:30	08/15/12 10:19	1
Dieldrin	ND		0.050	0.0098	ug/L		08/14/12 14:30	08/15/12 10:19	1
Endosulfan I	ND		0.050	0.011	ug/L		08/14/12 14:30	08/15/12 10:19	1
Endosulfan II	ND		0.050	0.012	ug/L		08/14/12 14:30	08/15/12 10:19	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		08/14/12 14:30	08/15/12 10:19	1
Endrin	ND		0.050	0.014	ug/L		08/14/12 14:30	08/15/12 10:19	1
Endrin aldehyde	ND		0.050	0.016	ug/L		08/14/12 14:30	08/15/12 10:19	1
Endrin ketone	ND		0.050	0.012	ug/L		08/14/12 14:30	08/15/12 10:19	1
gamma-BHC (Lindane)	ND		0.050	0.0060	ug/L		08/14/12 14:30	08/15/12 10:19	1
gamma-Chlordane	ND		0.050	0.011	ug/L		08/14/12 14:30	08/15/12 10:19	1
Heptachlor	ND		0.050	0.0085	ug/L		08/14/12 14:30	08/15/12 10:19	1
Heptachlor epoxide	ND		0.050	0.0053	ug/L		08/14/12 14:30	08/15/12 10:19	1
Methoxychlor	ND		0.050	0.014	ug/L		08/14/12 14:30	08/15/12 10:19	1
Toxaphene	ND		0.50	0.12	ug/L		08/14/12 14:30	08/15/12 10:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	50		16 - 120	08/14/12 14:30	08/15/12 10:19	1
DCB Decachlorobiphenyl	52		16 - 120	08/14/12 14:30	08/15/12 10:19	1
Tetrachloro-m-xylene	56		35 - 120	08/14/12 14:30	08/15/12 10:19	1
Tetrachloro-m-xylene	62		35 - 120	08/14/12 14:30	08/15/12 10:19	1

Lab Sample ID: LCS 480-76529/2-A

Matrix: Water

Analysis Batch: 76643

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 76529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.500	0.430		ug/L		86	59 - 135
4,4'-DDE	0.500	0.399		ug/L		80	52 - 123
4,4'-DDT	0.500	0.413		ug/L		83	60 - 129
Aldrin	0.500	0.310		ug/L		62	40 - 120
alpha-BHC	0.500	0.398		ug/L		80	52 - 122
alpha-Chlordane	0.500	0.428		ug/L		86	56 - 123
beta-BHC	0.500	0.432		ug/L		86	57 - 134
delta-BHC	0.500	0.424		ug/L		85	56 - 128
Dieldrin	0.500	0.427		ug/L		85	58 - 125
Endosulfan I	0.500	0.412		ug/L		82	55 - 126
Endosulfan II	0.500	0.435		ug/L		87	60 - 120
Endosulfan sulfate	0.500	0.430		ug/L		86	55 - 138
Endrin	0.500	0.466		ug/L		93	57 - 130
Endrin aldehyde	0.500	0.422		ug/L		84	56 - 131
Endrin ketone	0.500	0.450		ug/L		90	65 - 137
gamma-BHC (Lindane)	0.500	0.407		ug/L		81	57 - 128
gamma-Chlordane	0.500	0.390		ug/L		78	54 - 128
Heptachlor	0.500	0.366		ug/L		73	46 - 121
Heptachlor epoxide	0.500	0.409		ug/L		82	53 - 120
Methoxychlor	0.500	0.449		ug/L		90	48 - 165

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 480-76529/2-A

Matrix: Water

Analysis Batch: 76643

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 76529

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	44		16 - 120
DCB Decachlorobiphenyl	45		16 - 120
Tetrachloro-m-xylene	64		35 - 120
Tetrachloro-m-xylene	66		35 - 120

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 76643

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76529

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		0.472	0.386		ug/L		82	26 - 146
4,4'-DDE	ND		0.472	0.309		ug/L		65	15 - 136
4,4'-DDT	ND		0.472	0.388		ug/L		82	12 - 150
Aldrin	ND		0.472	0.278		ug/L		59	14 - 120
alpha-BHC	ND		0.472	0.344		ug/L		73	39 - 121
alpha-Chlordane	ND		0.472	0.352		ug/L		75	40 - 160
beta-BHC	ND		0.472	0.424		ug/L		90	26 - 141
delta-BHC	ND		0.472	0.342		ug/L		73	29 - 129
Dieldrin	ND		0.472	0.373		ug/L		79	42 - 129
Endosulfan I	ND		0.472	0.360		ug/L		76	41 - 126
Endosulfan II	0.017	J	0.472	0.382		ug/L		79	16 - 140
Endosulfan sulfate	ND		0.472	0.395		ug/L		84	37 - 144
Endrin	0.018	J	0.472	0.423		ug/L		79	44 - 129
Endrin aldehyde	ND		0.472	0.391		ug/L		83	39 - 128
Endrin ketone	ND		0.472	0.382		ug/L		81	46 - 141
gamma-BHC (Lindane)	ND		0.472	0.344		ug/L		73	53 - 120
gamma-Chlordane	0.16		0.472	0.677		ug/L		101	33 - 119
Heptachlor	ND		0.472	0.316		ug/L		67	31 - 122
Heptachlor epoxide	ND		0.472	0.357		ug/L		76	27 - 138
Methoxychlor	0.018	J	0.472	0.465		ug/L		94	31 - 160

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	30		16 - 120
DCB Decachlorobiphenyl	33		16 - 120
Tetrachloro-m-xylene	69		35 - 120
Tetrachloro-m-xylene	68		35 - 120

Lab Sample ID: 480-23756-1 MSD

Matrix: Water

Analysis Batch: 76643

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76529

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
4,4'-DDD	ND		0.474	0.374		ug/L		79	26 - 146	3	12
4,4'-DDE	ND		0.474	0.233	F	ug/L		49	15 - 136	28	14
4,4'-DDT	ND		0.474	0.379		ug/L		80	12 - 150	2	17
Aldrin	ND		0.474	0.267		ug/L		56	14 - 120	4	13
alpha-BHC	ND		0.474	0.329		ug/L		69	39 - 121	5	15
alpha-Chlordane	ND		0.474	0.262	F	ug/L		55	40 - 160	29	12
beta-BHC	ND		0.474	0.408		ug/L		86	26 - 141	4	22

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 480-23756-1 MSD

Matrix: Water

Analysis Batch: 76643

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76529

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
delta-BHC	ND		0.474	0.340		ug/L		72	29 - 129	1	10
Dieldrin	ND		0.474	0.351		ug/L		74	42 - 129	6	12
Endosulfan I	ND		0.474	0.270	F	ug/L		57	41 - 126	29	10
Endosulfan II	0.017	J	0.474	0.378		ug/L		77	16 - 140	1	11
Endosulfan sulfate	ND		0.474	0.411		ug/L		87	37 - 144	4	18
Endrin	0.018	J	0.474	0.402		ug/L		74	44 - 129	5	13
Endrin aldehyde	ND		0.474	0.444		ug/L		94	39 - 128	13	18
Endrin ketone	ND		0.474	0.405		ug/L		85	46 - 141	6	33
gamma-BHC (Lindane)	ND		0.474	0.332		ug/L		70	53 - 120	3	15
gamma-Chlordane	0.16		0.474	0.685		ug/L		102	33 - 119	1	11
Heptachlor	ND		0.474	0.313		ug/L		66	31 - 122	1	10
Heptachlor epoxide	ND		0.474	0.281	F	ug/L		59	27 - 138	24	11
Methoxychlor	0.018	J	0.474	0.476		ug/L		96	31 - 160	2	10
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
DCB Decachlorobiphenyl	33		16 - 120								
DCB Decachlorobiphenyl	30		16 - 120								
Tetrachloro-m-xylene	68		35 - 120								
Tetrachloro-m-xylene	65		35 - 120								

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-76525/1-A

Matrix: Water

Analysis Batch: 76990

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76525

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		08/14/12 14:14	08/17/12 15:15	1
PCB-1221	ND		0.50	0.18	ug/L		08/14/12 14:14	08/17/12 15:15	1
PCB-1232	ND		0.50	0.18	ug/L		08/14/12 14:14	08/17/12 15:15	1
PCB-1242	ND		0.50	0.18	ug/L		08/14/12 14:14	08/17/12 15:15	1
PCB-1248	ND		0.50	0.18	ug/L		08/14/12 14:14	08/17/12 15:15	1
PCB-1254	ND		0.50	0.25	ug/L		08/14/12 14:14	08/17/12 15:15	1
PCB-1260	ND		0.50	0.25	ug/L		08/14/12 14:14	08/17/12 15:15	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	52		19 - 120				08/14/12 14:14	08/17/12 15:15	1
DCB Decachlorobiphenyl	53		19 - 120				08/14/12 14:14	08/17/12 15:15	1
Tetrachloro-m-xylene	68		23 - 127				08/14/12 14:14	08/17/12 15:15	1
Tetrachloro-m-xylene	73		23 - 127				08/14/12 14:14	08/17/12 15:15	1

Lab Sample ID: LCS 480-76525/2-A

Matrix: Water

Analysis Batch: 76990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 76525

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	5.00	3.85		ug/L		77	61 - 120
PCB-1260	5.00	3.22		ug/L		64	45 - 120

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 480-76525/2-A

Matrix: Water

Analysis Batch: 76990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 76525

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	43		19 - 120
DCB Decachlorobiphenyl	41		19 - 120
Tetrachloro-m-xylene	72		23 - 127
Tetrachloro-m-xylene	73		23 - 127

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 76990

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		4.76	4.18		ug/L		88	52 - 134
PCB-1260	ND		4.76	2.44		ug/L		51	19 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	36		19 - 120
DCB Decachlorobiphenyl	36		19 - 120
Tetrachloro-m-xylene	88		23 - 127
Tetrachloro-m-xylene	90		23 - 127

Lab Sample ID: 480-23756-1 MSD

Matrix: Water

Analysis Batch: 76990

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76525

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		4.72	3.90		ug/L		83	52 - 134	7	50
PCB-1260	ND		4.72	2.15		ug/L		46	19 - 136	12	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	38		19 - 120
DCB Decachlorobiphenyl	38		19 - 120
Tetrachloro-m-xylene	83		23 - 127
Tetrachloro-m-xylene	85		23 - 127

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-76137/1-A

Matrix: Water

Analysis Batch: 76436

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76137

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		08/13/12 08:10	08/13/12 15:35	1
Antimony	ND		0.020		mg/L		08/13/12 08:10	08/13/12 15:35	1
Arsenic	ND		0.010		mg/L		08/13/12 08:10	08/13/12 15:35	1
Barium	ND		0.0020		mg/L		08/13/12 08:10	08/13/12 15:35	1
Beryllium	ND		0.0020		mg/L		08/13/12 08:10	08/13/12 15:35	1
Cadmium	ND		0.0010		mg/L		08/13/12 08:10	08/13/12 15:35	1
Calcium	ND		0.50		mg/L		08/13/12 08:10	08/13/12 15:35	1
Chromium	ND		0.0040		mg/L		08/13/12 08:10	08/13/12 15:35	1
Cobalt	ND		0.0040		mg/L		08/13/12 08:10	08/13/12 15:35	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Lab Sample ID: MB 480-76137/1-A

Matrix: Water

Analysis Batch: 76436

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76137

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.010		mg/L		08/13/12 08:10	08/13/12 15:35	1
Iron	ND		0.050		mg/L		08/13/12 08:10	08/13/12 15:35	1
Lead	ND		0.0050		mg/L		08/13/12 08:10	08/13/12 15:35	1
Magnesium	ND		0.20		mg/L		08/13/12 08:10	08/13/12 15:35	1
Manganese	ND		0.0030		mg/L		08/13/12 08:10	08/13/12 15:35	1
Nickel	ND		0.010		mg/L		08/13/12 08:10	08/13/12 15:35	1
Potassium	ND		0.50		mg/L		08/13/12 08:10	08/13/12 15:35	1
Selenium	ND		0.015		mg/L		08/13/12 08:10	08/13/12 15:35	1
Silver	ND		0.0030		mg/L		08/13/12 08:10	08/13/12 15:35	1
Sodium	ND		1.0		mg/L		08/13/12 08:10	08/13/12 15:35	1
Thallium	ND		0.020		mg/L		08/13/12 08:10	08/13/12 15:35	1
Vanadium	ND		0.0050		mg/L		08/13/12 08:10	08/13/12 15:35	1
Zinc	ND		0.010		mg/L		08/13/12 08:10	08/13/12 15:35	1

Lab Sample ID: LCS 480-76137/2-A

Matrix: Water

Analysis Batch: 76436

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 76137

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.85		mg/L		98	80 - 120
Antimony	0.200	0.200		mg/L		100	80 - 120
Arsenic	0.200	0.202		mg/L		101	80 - 120
Barium	0.200	0.207		mg/L		103	80 - 120
Beryllium	0.200	0.203		mg/L		101	80 - 120
Cadmium	0.200	0.202		mg/L		101	80 - 120
Calcium	10.0	10.11		mg/L		101	80 - 120
Chromium	0.200	0.199		mg/L		99	80 - 120
Cobalt	0.200	0.200		mg/L		100	80 - 120
Copper	0.200	0.204		mg/L		102	80 - 120
Iron	10.0	9.98		mg/L		100	80 - 120
Lead	0.200	0.196		mg/L		98	80 - 120
Magnesium	10.0	10.08		mg/L		101	80 - 120
Manganese	0.200	0.205		mg/L		103	80 - 120
Nickel	0.200	0.198		mg/L		99	80 - 120
Potassium	10.0	10.09		mg/L		101	80 - 120
Selenium	0.200	0.196		mg/L		98	80 - 120
Silver	0.0500	0.0495		mg/L		99	80 - 120
Sodium	10.0	10.12		mg/L		101	80 - 120
Thallium	0.200	0.194		mg/L		97	80 - 120
Vanadium	0.200	0.201		mg/L		101	80 - 120
Zinc	0.200	0.216		mg/L		108	80 - 120

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 76436

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76137

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.20		10.0	10.36		mg/L		101	75 - 125
Antimony	ND		0.200	0.206		mg/L		103	75 - 125
Arsenic	ND		0.200	0.214		mg/L		107	75 - 125

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 76436

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76137

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.028		0.200	0.235		mg/L		104	75 - 125
Beryllium	ND		0.200	0.207		mg/L		103	75 - 125
Cadmium	ND		0.200	0.209		mg/L		104	75 - 125
Calcium	147		10.0	161.3	4	mg/L		139	75 - 125
Chromium	ND		0.200	0.203		mg/L		102	75 - 125
Cobalt	ND		0.200	0.207		mg/L		103	75 - 125
Copper	ND		0.200	0.209		mg/L		104	75 - 125
Iron	0.21		10.0	10.10		mg/L		99	75 - 125
Lead	ND		0.200	0.205		mg/L		102	75 - 125
Magnesium	123		10.0	139.1	4	mg/L		159	75 - 125
Manganese	0.34		0.200	0.567		mg/L		111	75 - 125
Nickel	ND		0.200	0.206		mg/L		102	75 - 125
Potassium	4.0		10.0	14.46		mg/L		104	75 - 125
Selenium	ND		0.200	0.203		mg/L		101	75 - 125
Silver	ND		0.0500	0.0521		mg/L		104	75 - 125
Sodium	42.0		10.0	52.95	4	mg/L		109	75 - 125
Thallium	ND		0.200	0.194		mg/L		97	75 - 125
Vanadium	ND		0.200	0.211		mg/L		104	75 - 125
Zinc	ND		0.200	0.224		mg/L		109	75 - 125

Lab Sample ID: 480-23756-1 MSD

Matrix: Water

Analysis Batch: 76436

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76137

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.20		10.0	10.29		mg/L		101	75 - 125	1	20
Antimony	ND		0.200	0.201		mg/L		101	75 - 125	2	20
Arsenic	ND		0.200	0.207		mg/L		104	75 - 125	3	20
Barium	0.028		0.200	0.234		mg/L		103	75 - 125	0	20
Beryllium	ND		0.200	0.204		mg/L		102	75 - 125	1	20
Cadmium	ND		0.200	0.205		mg/L		102	75 - 125	2	20
Calcium	147		10.0	159.0	4	mg/L		116	75 - 125	1	20
Chromium	ND		0.200	0.202		mg/L		101	75 - 125	1	20
Cobalt	ND		0.200	0.201		mg/L		100	75 - 125	3	20
Copper	ND		0.200	0.206		mg/L		103	75 - 125	1	20
Iron	0.21		10.0	9.98		mg/L		98	75 - 125	1	20
Lead	ND		0.200	0.197		mg/L		99	75 - 125	4	20
Magnesium	123		10.0	137.5	4	mg/L		143	75 - 125	1	20
Manganese	0.34		0.200	0.565		mg/L		110	75 - 125	0	20
Nickel	ND		0.200	0.199		mg/L		99	75 - 125	3	20
Potassium	4.0		10.0	14.23		mg/L		102	75 - 125	2	20
Selenium	ND		0.200	0.200		mg/L		100	75 - 125	1	20
Silver	ND		0.0500	0.0519		mg/L		104	75 - 125	0	20
Sodium	42.0		10.0	51.98	4	mg/L		100	75 - 125	2	20
Thallium	ND		0.200	0.190		mg/L		95	75 - 125	2	20
Vanadium	ND		0.200	0.211		mg/L		104	75 - 125	0	20
Zinc	ND		0.200	0.222		mg/L		108	75 - 125	1	20

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Lab Sample ID: MB 480-76363/1-B

Matrix: Water

Analysis Batch: 76799

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 76537

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20		mg/L		08/15/12 07:45	08/15/12 17:04	1
Antimony, Dissolved	ND		0.020		mg/L		08/15/12 07:45	08/15/12 17:04	1
Arsenic, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:04	1
Barium, Dissolved	ND		0.0020		mg/L		08/15/12 07:45	08/15/12 17:04	1
Beryllium, Dissolved	ND		0.0020		mg/L		08/15/12 07:45	08/15/12 17:04	1
Cadmium, Dissolved	ND		0.0010		mg/L		08/15/12 07:45	08/15/12 17:04	1
Calcium, Dissolved	ND		0.50		mg/L		08/15/12 07:45	08/15/12 17:04	1
Chromium, Dissolved	ND		0.0040		mg/L		08/15/12 07:45	08/15/12 17:04	1
Cobalt, Dissolved	ND		0.0040		mg/L		08/15/12 07:45	08/15/12 17:04	1
Copper, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:04	1
Iron, Dissolved	ND		0.050		mg/L		08/15/12 07:45	08/15/12 17:04	1
Lead, Dissolved	ND		0.0050		mg/L		08/15/12 07:45	08/15/12 17:04	1
Magnesium, Dissolved	ND		0.20		mg/L		08/15/12 07:45	08/15/12 17:04	1
Manganese, Dissolved	ND		0.0030		mg/L		08/15/12 07:45	08/15/12 17:04	1
Nickel, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:04	1
Potassium, Dissolved	ND		0.50		mg/L		08/15/12 07:45	08/15/12 17:04	1
Selenium, Dissolved	ND		0.015		mg/L		08/15/12 07:45	08/15/12 17:04	1
Silver, Dissolved	ND		0.0030		mg/L		08/15/12 07:45	08/15/12 17:04	1
Sodium, Dissolved	ND		1.0		mg/L		08/15/12 07:45	08/15/12 17:04	1
Thallium, Dissolved	ND		0.020		mg/L		08/15/12 07:45	08/15/12 17:04	1
Vanadium, Dissolved	ND		0.0050		mg/L		08/15/12 07:45	08/15/12 17:04	1
Zinc, Dissolved	ND		0.010		mg/L		08/15/12 07:45	08/15/12 17:04	1

Lab Sample ID: LCS 480-76363/2-B

Matrix: Water

Analysis Batch: 76799

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 76537

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum, Dissolved	10.0	10.10		mg/L		101	80 - 120
Antimony, Dissolved	0.200	0.202		mg/L		101	80 - 120
Arsenic, Dissolved	0.200	0.203		mg/L		101	80 - 120
Barium, Dissolved	0.200	0.209		mg/L		104	80 - 120
Beryllium, Dissolved	0.200	0.205		mg/L		103	80 - 120
Cadmium, Dissolved	0.200	0.203		mg/L		102	80 - 120
Calcium, Dissolved	10.0	10.20		mg/L		102	80 - 120
Chromium, Dissolved	0.200	0.201		mg/L		100	80 - 120
Cobalt, Dissolved	0.200	0.200		mg/L		100	80 - 120
Copper, Dissolved	0.200	0.204		mg/L		102	80 - 120
Iron, Dissolved	10.0	10.11		mg/L		101	80 - 120
Lead, Dissolved	0.200	0.198		mg/L		99	80 - 120
Magnesium, Dissolved	10.0	10.13		mg/L		101	80 - 120
Manganese, Dissolved	0.200	0.210		mg/L		105	80 - 120
Nickel, Dissolved	0.200	0.199		mg/L		99	80 - 120
Potassium, Dissolved	10.0	10.21		mg/L		102	80 - 120
Selenium, Dissolved	0.200	0.196		mg/L		98	80 - 120
Silver, Dissolved	0.0500	0.0523		mg/L		105	80 - 120
Sodium, Dissolved	10.0	10.19		mg/L		102	80 - 120
Thallium, Dissolved	0.200	0.194		mg/L		97	80 - 120
Vanadium, Dissolved	0.200	0.202		mg/L		101	80 - 120
Zinc, Dissolved	0.200	0.219		mg/L		110	80 - 120

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

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

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 76799

Client Sample ID: TI-MW01

Prep Type: Dissolved

Prep Batch: 76537

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum, Dissolved	ND		10.0	10.30		mg/L		103	75 - 125
Antimony, Dissolved	ND		0.200	0.211		mg/L		106	75 - 125
Arsenic, Dissolved	ND		0.200	0.215		mg/L		108	75 - 125
Barium, Dissolved	0.027		0.200	0.233		mg/L		103	75 - 125
Beryllium, Dissolved	ND		0.200	0.209		mg/L		104	75 - 125
Cadmium, Dissolved	ND		0.200	0.212		mg/L		106	75 - 125
Calcium, Dissolved	149		10.0	158.6	4	mg/L		97	75 - 125
Chromium, Dissolved	ND		0.200	0.202		mg/L		101	75 - 125
Cobalt, Dissolved	ND		0.200	0.211		mg/L		104	75 - 125
Copper, Dissolved	ND		0.200	0.211		mg/L		105	75 - 125
Iron, Dissolved	ND		10.0	10.17		mg/L		102	75 - 125
Lead, Dissolved	ND		0.200	0.209		mg/L		104	75 - 125
Magnesium, Dissolved	126		10.0	135.2	4	mg/L		96	75 - 125
Manganese, Dissolved	0.34		0.200	0.543		mg/L		103	75 - 125
Nickel, Dissolved	ND		0.200	0.208		mg/L		103	75 - 125
Potassium, Dissolved	4.2		10.0	14.56		mg/L		103	75 - 125
Selenium, Dissolved	ND		0.200	0.211		mg/L		105	75 - 125
Silver, Dissolved	ND		0.0500	0.0536		mg/L		107	75 - 125
Sodium, Dissolved	42.7		10.0	52.66	4	mg/L		100	75 - 125
Thallium, Dissolved	ND		0.200	0.201		mg/L		101	75 - 125
Vanadium, Dissolved	ND		0.200	0.210		mg/L		105	75 - 125
Zinc, Dissolved	0.011		0.200	0.225		mg/L		107	75 - 125

Lab Sample ID: 480-23756-1 MSD

Matrix: Water

Analysis Batch: 76799

Client Sample ID: TI-MW01

Prep Type: Dissolved

Prep Batch: 76537

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Aluminum, Dissolved	ND		10.0	10.27		mg/L		103	75 - 125	0	20
Antimony, Dissolved	ND		0.200	0.210		mg/L		105	75 - 125	1	20
Arsenic, Dissolved	ND		0.200	0.215		mg/L		108	75 - 125	0	20
Barium, Dissolved	0.027		0.200	0.233		mg/L		103	75 - 125	0	20
Beryllium, Dissolved	ND		0.200	0.208		mg/L		104	75 - 125	0	20
Cadmium, Dissolved	ND		0.200	0.211		mg/L		105	75 - 125	1	20
Calcium, Dissolved	149		10.0	159.5	4	mg/L		106	75 - 125	1	20
Chromium, Dissolved	ND		0.200	0.201		mg/L		101	75 - 125	0	20
Cobalt, Dissolved	ND		0.200	0.210		mg/L		104	75 - 125	0	20
Copper, Dissolved	ND		0.200	0.208		mg/L		104	75 - 125	1	20
Iron, Dissolved	ND		10.0	10.17		mg/L		102	75 - 125	0	20
Lead, Dissolved	ND		0.200	0.207		mg/L		104	75 - 125	1	20
Magnesium, Dissolved	126		10.0	135.3	4	mg/L		97	75 - 125	0	20
Manganese, Dissolved	0.34		0.200	0.540		mg/L		101	75 - 125	1	20
Nickel, Dissolved	ND		0.200	0.208		mg/L		103	75 - 125	0	20
Potassium, Dissolved	4.2		10.0	14.72		mg/L		105	75 - 125	1	20
Selenium, Dissolved	ND		0.200	0.205		mg/L		103	75 - 125	3	20
Silver, Dissolved	ND		0.0500	0.0541		mg/L		108	75 - 125	1	20
Sodium, Dissolved	42.7		10.0	53.73	4	mg/L		110	75 - 125	2	20
Thallium, Dissolved	ND		0.200	0.200		mg/L		100	75 - 125	1	20
Vanadium, Dissolved	ND		0.200	0.207		mg/L		103	75 - 125	2	20
Zinc, Dissolved	0.011		0.200	0.229		mg/L		109	75 - 125	2	20

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-76432/1-A

Matrix: Water

Analysis Batch: 76522

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 76432

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		08/14/12 08:20	08/14/12 13:39	1

Lab Sample ID: LCS 480-76432/2-A

Matrix: Water

Analysis Batch: 76522

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 76432

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00692		mg/L		104	80 - 120

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 76522

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76432

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00667	0.00552		mg/L		83	75 - 125

Lab Sample ID: 480-23756-1 MSD

Matrix: Water

Analysis Batch: 76522

Client Sample ID: TI-MW01

Prep Type: Total/NA

Prep Batch: 76432

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00562		mg/L		84	75 - 125	2	20

Lab Sample ID: MB 480-76363/1-C

Matrix: Water

Analysis Batch: 76714

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 76608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020		mg/L		08/15/12 08:05	08/15/12 12:52	1

Lab Sample ID: LCS 480-76363/2-C

Matrix: Water

Analysis Batch: 76714

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 76608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury, Dissolved	0.00667	0.00650		mg/L		97	80 - 120

Lab Sample ID: 480-23756-1 MS

Matrix: Water

Analysis Batch: 76714

Client Sample ID: TI-MW01

Prep Type: Dissolved

Prep Batch: 76608

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury, Dissolved	ND		0.00667	0.00527		mg/L		79	75 - 125

Lab Sample ID: 480-23756-1 MSD

Matrix: Water

Analysis Batch: 76714

Client Sample ID: TI-MW01

Prep Type: Dissolved

Prep Batch: 76608

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury, Dissolved	ND		0.00667	0.00547		mg/L		82	75 - 125	4	20

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

GC/MS VOA

Analysis Batch: 77017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	8260B	
480-23756-1 MS	TI-MW01	Total/NA	Water	8260B	
480-23756-1 MSD	TI-MW01	Total/NA	Water	8260B	
480-23756-2	TI-MW02	Total/NA	Water	8260B	
480-23756-3	TI-MW03	Total/NA	Water	8260B	
480-23756-4	DUP	Total/NA	Water	8260B	
480-23756-5	TRIP BLANK	Total/NA	Water	8260B	
LCS 480-77017/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-77017/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 76353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	3510C	
480-23756-1 MS	TI-MW01	Total/NA	Water	3510C	
480-23756-1 MSD	TI-MW01	Total/NA	Water	3510C	
480-23756-2	TI-MW02	Total/NA	Water	3510C	
480-23756-3	TI-MW03	Total/NA	Water	3510C	
480-23756-4	DUP	Total/NA	Water	3510C	
LCS 480-76353/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-76353/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 76679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	8270C	76353
480-23756-1 MS	TI-MW01	Total/NA	Water	8270C	76353
480-23756-1 MSD	TI-MW01	Total/NA	Water	8270C	76353
480-23756-2	TI-MW02	Total/NA	Water	8270C	76353
480-23756-3	TI-MW03	Total/NA	Water	8270C	76353
480-23756-4	DUP	Total/NA	Water	8270C	76353
MB 480-76353/1-A	Method Blank	Total/NA	Water	8270C	76353

Analysis Batch: 76821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-76353/2-A	Lab Control Sample	Total/NA	Water	8270C	76353

GC Semi VOA

Prep Batch: 76525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	3510C	
480-23756-1 MS	TI-MW01	Total/NA	Water	3510C	
480-23756-1 MSD	TI-MW01	Total/NA	Water	3510C	
480-23756-2	TI-MW02	Total/NA	Water	3510C	
480-23756-3	TI-MW03	Total/NA	Water	3510C	
480-23756-4	DUP	Total/NA	Water	3510C	
LCS 480-76525/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-76525/1-A	Method Blank	Total/NA	Water	3510C	

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

GC Semi VOA (Continued)

Prep Batch: 76529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	3510C	
480-23756-1 MS	TI-MW01	Total/NA	Water	3510C	
480-23756-1 MSD	TI-MW01	Total/NA	Water	3510C	
480-23756-2	TI-MW02	Total/NA	Water	3510C	
480-23756-3	TI-MW03	Total/NA	Water	3510C	
480-23756-4	DUP	Total/NA	Water	3510C	
LCS 480-76529/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-76529/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 76643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	8081A	76529
480-23756-1 MS	TI-MW01	Total/NA	Water	8081A	76529
480-23756-1 MSD	TI-MW01	Total/NA	Water	8081A	76529
480-23756-2	TI-MW02	Total/NA	Water	8081A	76529
480-23756-3	TI-MW03	Total/NA	Water	8081A	76529
480-23756-4	DUP	Total/NA	Water	8081A	76529
LCS 480-76529/2-A	Lab Control Sample	Total/NA	Water	8081A	76529
MB 480-76529/1-A	Method Blank	Total/NA	Water	8081A	76529

Analysis Batch: 76990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	8082	76525
480-23756-1 MS	TI-MW01	Total/NA	Water	8082	76525
480-23756-1 MSD	TI-MW01	Total/NA	Water	8082	76525
480-23756-2	TI-MW02	Total/NA	Water	8082	76525
480-23756-3	TI-MW03	Total/NA	Water	8082	76525
480-23756-4	DUP	Total/NA	Water	8082	76525
LCS 480-76525/2-A	Lab Control Sample	Total/NA	Water	8082	76525
MB 480-76525/1-A	Method Blank	Total/NA	Water	8082	76525

Metals

Prep Batch: 76137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	3005A	
480-23756-1 MS	TI-MW01	Total/NA	Water	3005A	
480-23756-1 MSD	TI-MW01	Total/NA	Water	3005A	
480-23756-2	TI-MW02	Total/NA	Water	3005A	
480-23756-3	TI-MW03	Total/NA	Water	3005A	
480-23756-4	DUP	Total/NA	Water	3005A	
LCS 480-76137/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 480-76137/1-A	Method Blank	Total/NA	Water	3005A	

Prep Batch: 76432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	7470A	
480-23756-1 MS	TI-MW01	Total/NA	Water	7470A	
480-23756-1 MSD	TI-MW01	Total/NA	Water	7470A	
480-23756-2	TI-MW02	Total/NA	Water	7470A	
480-23756-3	TI-MW03	Total/NA	Water	7470A	
480-23756-4	DUP	Total/NA	Water	7470A	

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Metals (Continued)

Prep Batch: 76432 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-76432/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 480-76432/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 76436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	6010B	76137
480-23756-1 MS	TI-MW01	Total/NA	Water	6010B	76137
480-23756-1 MSD	TI-MW01	Total/NA	Water	6010B	76137
480-23756-2	TI-MW02	Total/NA	Water	6010B	76137
480-23756-3	TI-MW03	Total/NA	Water	6010B	76137
480-23756-4	DUP	Total/NA	Water	6010B	76137
LCS 480-76137/2-A	Lab Control Sample	Total/NA	Water	6010B	76137
MB 480-76137/1-A	Method Blank	Total/NA	Water	6010B	76137

Analysis Batch: 76522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Total/NA	Water	7470A	76432
480-23756-1 MS	TI-MW01	Total/NA	Water	7470A	76432
480-23756-1 MSD	TI-MW01	Total/NA	Water	7470A	76432
480-23756-2	TI-MW02	Total/NA	Water	7470A	76432
480-23756-3	TI-MW03	Total/NA	Water	7470A	76432
480-23756-4	DUP	Total/NA	Water	7470A	76432
LCS 480-76432/2-A	Lab Control Sample	Total/NA	Water	7470A	76432
MB 480-76432/1-A	Method Blank	Total/NA	Water	7470A	76432

Prep Batch: 76537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Dissolved	Water	3005A	
480-23756-1 MS	TI-MW01	Dissolved	Water	3005A	
480-23756-1 MSD	TI-MW01	Dissolved	Water	3005A	
480-23756-2	TI-MW02	Dissolved	Water	3005A	
480-23756-3	TI-MW03	Dissolved	Water	3005A	
480-23756-4	DUP	Dissolved	Water	3005A	
LCS 480-76363/2-B	Lab Control Sample	Dissolved	Water	3005A	
MB 480-76363/1-B	Method Blank	Dissolved	Water	3005A	

Prep Batch: 76608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Dissolved	Water	7470A	
480-23756-1 MS	TI-MW01	Dissolved	Water	7470A	
480-23756-1 MSD	TI-MW01	Dissolved	Water	7470A	
480-23756-2	TI-MW02	Dissolved	Water	7470A	
480-23756-3	TI-MW03	Dissolved	Water	7470A	
480-23756-4	DUP	Dissolved	Water	7470A	
LCS 480-76363/2-C	Lab Control Sample	Dissolved	Water	7470A	
MB 480-76363/1-C	Method Blank	Dissolved	Water	7470A	

Analysis Batch: 76714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Dissolved	Water	7470A	76608
480-23756-1 MS	TI-MW01	Dissolved	Water	7470A	76608
480-23756-1 MSD	TI-MW01	Dissolved	Water	7470A	76608

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Metals (Continued)

Analysis Batch: 76714 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-2	TI-MW02	Dissolved	Water	7470A	76608
480-23756-3	TI-MW03	Dissolved	Water	7470A	76608
480-23756-4	DUP	Dissolved	Water	7470A	76608
LCS 480-76363/2-C	Lab Control Sample	Dissolved	Water	7470A	76608
MB 480-76363/1-C	Method Blank	Dissolved	Water	7470A	76608

Analysis Batch: 76799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-23756-1	TI-MW01	Dissolved	Water	6010B	76537
480-23756-1 MS	TI-MW01	Dissolved	Water	6010B	76537
480-23756-1 MSD	TI-MW01	Dissolved	Water	6010B	76537
480-23756-2	TI-MW02	Dissolved	Water	6010B	76537
480-23756-3	TI-MW03	Dissolved	Water	6010B	76537
480-23756-4	DUP	Dissolved	Water	6010B	76537
LCS 480-76363/2-B	Lab Control Sample	Dissolved	Water	6010B	76537
MB 480-76363/1-B	Method Blank	Dissolved	Water	6010B	76537

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW01

Date Collected: 08/09/12 13:30

Date Received: 08/10/12 12:00

Lab Sample ID: 480-23756-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	77017	08/17/12 18:09	RL	TAL BUF
Total/NA	Prep	3510C			76353	08/13/12 13:42	KB	TAL BUF
Total/NA	Analysis	8270C		1	76679	08/15/12 19:44	AM	TAL BUF
Total/NA	Prep	3510C			76529	08/14/12 14:30	DE	TAL BUF
Total/NA	Analysis	8081A		1	76643	08/15/12 18:16	LW	TAL BUF
Total/NA	Prep	3510C			76525	08/14/12 14:14	DE	TAL BUF
Total/NA	Analysis	8082		1	76990	08/17/12 15:47	JM	TAL BUF
Total/NA	Prep	3005A			76137	08/13/12 08:10	SS	TAL BUF
Total/NA	Analysis	6010B		1	76436	08/13/12 16:01	LH	TAL BUF
Total/NA	Prep	7470A			76432	08/14/12 08:20	JRK	TAL BUF
Total/NA	Analysis	7470A		1	76522	08/14/12 13:47	JRK	TAL BUF
Dissolved	Prep	7470A			76608	08/15/12 08:05	JRK	TAL BUF
Dissolved	Analysis	7470A		1	76714	08/15/12 12:56	JRK	TAL BUF
Dissolved	Prep	3005A			76537	08/15/12 07:45	SS	TAL BUF
Dissolved	Analysis	6010B		1	76799	08/15/12 17:08	LH	TAL BUF

Client Sample ID: TI-MW02

Date Collected: 08/09/12 10:45

Date Received: 08/10/12 12:00

Lab Sample ID: 480-23756-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	77017	08/17/12 19:21	RL	TAL BUF
Total/NA	Prep	3510C			76353	08/13/12 13:42	KB	TAL BUF
Total/NA	Analysis	8270C		1	76679	08/15/12 20:09	AM	TAL BUF
Total/NA	Prep	3510C			76529	08/14/12 14:30	DE	TAL BUF
Total/NA	Analysis	8081A		1	76643	08/15/12 18:57	LW	TAL BUF
Total/NA	Prep	3510C			76525	08/14/12 14:14	DE	TAL BUF
Total/NA	Analysis	8082		1	76990	08/17/12 16:35	JM	TAL BUF
Total/NA	Prep	3005A			76137	08/13/12 08:10	SS	TAL BUF
Total/NA	Analysis	6010B		1	76436	08/13/12 16:11	LH	TAL BUF
Total/NA	Prep	7470A			76432	08/14/12 08:20	JRK	TAL BUF
Total/NA	Analysis	7470A		1	76522	08/14/12 13:55	JRK	TAL BUF
Dissolved	Prep	7470A			76608	08/15/12 08:05	JRK	TAL BUF
Dissolved	Analysis	7470A		1	76714	08/15/12 13:03	JRK	TAL BUF
Dissolved	Prep	3005A			76537	08/15/12 07:45	SS	TAL BUF
Dissolved	Analysis	6010B		1	76799	08/15/12 17:23	LH	TAL BUF

Client Sample ID: TI-MW03

Date Collected: 08/09/12 12:05

Date Received: 08/10/12 12:00

Lab Sample ID: 480-23756-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	77017	08/17/12 19:45	RL	TAL BUF
Total/NA	Prep	3510C			76353	08/13/12 13:42	KB	TAL BUF

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Client Sample ID: TI-MW03

Lab Sample ID: 480-23756-3

Date Collected: 08/09/12 12:05

Matrix: Water

Date Received: 08/10/12 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	76679	08/15/12 20:33	AM	TAL BUF
Total/NA	Prep	3510C			76529	08/14/12 14:30	DE	TAL BUF
Total/NA	Analysis	8081A		1	76643	08/15/12 19:39	LW	TAL BUF
Total/NA	Prep	3510C			76525	08/14/12 14:14	DE	TAL BUF
Total/NA	Analysis	8082		1	76990	08/17/12 16:50	JM	TAL BUF
Total/NA	Prep	3005A			76137	08/13/12 08:10	SS	TAL BUF
Total/NA	Analysis	6010B		1	76436	08/13/12 16:13	LH	TAL BUF
Total/NA	Prep	7470A			76432	08/14/12 08:20	JRK	TAL BUF
Total/NA	Analysis	7470A		1	76522	08/14/12 13:57	JRK	TAL BUF
Dissolved	Prep	7470A			76608	08/15/12 08:05	JRK	TAL BUF
Dissolved	Analysis	7470A		1	76714	08/15/12 13:04	JRK	TAL BUF
Dissolved	Prep	3005A			76537	08/15/12 07:45	SS	TAL BUF
Dissolved	Analysis	6010B		1	76799	08/15/12 17:25	LH	TAL BUF

Client Sample ID: DUP

Lab Sample ID: 480-23756-4

Date Collected: 08/09/12 00:00

Matrix: Water

Date Received: 08/10/12 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	77017	08/17/12 20:08	RL	TAL BUF
Total/NA	Prep	3510C			76353	08/13/12 13:42	KB	TAL BUF
Total/NA	Analysis	8270C		1	76679	08/15/12 20:58	AM	TAL BUF
Total/NA	Prep	3510C			76529	08/14/12 14:30	DE	TAL BUF
Total/NA	Analysis	8081A		1	76643	08/15/12 20:19	LW	TAL BUF
Total/NA	Prep	3510C			76525	08/14/12 14:14	DE	TAL BUF
Total/NA	Analysis	8082		1	76990	08/17/12 17:06	JM	TAL BUF
Total/NA	Prep	3005A			76137	08/13/12 08:10	SS	TAL BUF
Total/NA	Analysis	6010B		1	76436	08/13/12 16:15	LH	TAL BUF
Total/NA	Prep	7470A			76432	08/14/12 08:20	JRK	TAL BUF
Total/NA	Analysis	7470A		1	76522	08/14/12 14:02	JRK	TAL BUF
Dissolved	Prep	7470A			76608	08/15/12 08:05	JRK	TAL BUF
Dissolved	Analysis	7470A		1	76714	08/15/12 13:06	JRK	TAL BUF
Dissolved	Prep	3005A			76537	08/15/12 07:45	SS	TAL BUF
Dissolved	Analysis	6010B		1	76799	08/15/12 17:27	LH	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-23756-5

Date Collected: 08/09/12 00:00

Matrix: Water

Date Received: 08/10/12 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	77017	08/17/12 20:32	RL	TAL BUF

Laboratory References:

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

Certification Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Laboratory: TestAmerica Buffalo

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

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

Method Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081A	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-23756-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-23756-1	TI-MW01	Water	08/09/12 13:30	08/10/12 12:00
480-23756-2	TI-MW02	Water	08/09/12 10:45	08/10/12 12:00
480-23756-3	TI-MW03	Water	08/09/12 12:05	08/10/12 12:00
480-23756-4	DUP	Water	08/09/12 00:00	08/10/12 12:00
480-23756-5	TRIP BLANK	Water	08/09/12 00:00	08/10/12 12:00

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

Chain of Custody Record

TAL-4124 (1007)

Client AMEC E&I		Project Manager Robert Crowley		Date 8/9/10		Chain of Custody Number 215234	
Address 800 NORTH BELL AVE SUITE 200		Telephone Number (Area Code/Fax Number)		Lab Number		Page 1 of 1	
City CARNEGIE		Site Contact M. Gammig		Lab Contact B. Fischer			
State PA		Zip Code 15106		Carrier/Vehicle Number			
Project Name and Location (State) Honeywell - Niagara Falls		Matrix HAND DELIVERY		Containers & Preservatives			
Contract/Purchase Order/Quote No. TA: 48004523 AMEC: 3410110832		Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Time		Date	
TI-MW01		8/9/12		13:30			
TI-MW02				10:45			
TI-MW03				12:05			
TI-MW01-MS				13:30			
TI-MW01-MSD				13:30			
DOP				-			
TRIP BLANK				-			

Sample Disposal	Sample Disposal			Disposal By Lab			Archive For			Months		
	Return To Client	Unknown	Poison B	Non-Hazard	Flammable	Skid Irritant	Disposal By Lab	Archive For	Months	Disposal By Lab	Archive For	Months
TI-MW01	☒	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐
TI-MW02	☒	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐
TI-MW03	☒	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐
TI-MW01-MS	☒	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐
TI-MW01-MSD	☒	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐
DOP	☒	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐
TRIP BLANK	☒	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐

Turn Around Time Required	Turn Around Time Required			QC Requirements (Specify)		
	24 Hours	48 Hours	7 Days	14 Days	21 Days	Other
1. Relinquished By	☒	☐	☐	☐	☐	☐
2. Relinquished By	☐	☐	☐	☐	☐	☐
3. Relinquished By	☐	☐	☐	☐	☐	☐

1. Received By		2. Received By		3. Received By	
Date	Time	Date	Time	Date	Time
8/10/12	1700	8/10/12	1200	8/10/12	1200

Comments	
3,641, 410, 3,9	

Comments

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

Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 480-23756-1

Login Number: 23756

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl

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

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-33395-1

Client Project/Site: Niagara Falls site

For:

AMEC Environment & Infrastructure, Inc.

800 North Bell Avenue, Suite 200

Carnegie, Pennsylvania 15106

Attn: Rob Crowley



Authorized for release by:

3/7/2013 1:15:44 PM

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

LINKS

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results through

TotalAccess

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www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	RPD of the MS and MSD exceeds the control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

Glossary

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

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Job ID: 480-33395-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-33395-1

Comments

No additional comments.

Receipt

The samples were received on 2/21/2013 5:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

Metals

Method(s) 6010B: The Continuing Calibration Blank, CCB 480-105044/47, contained total lead above the reporting limit (RL). The associated samples B-33 (5.0-5.5') (480-33395-15), B-34 (0.5-1.0') (480-33395-16), B-40 (1.0-1.5') (480-33395-17), B-42 (0.5-1.0') (480-33395-19), B-43 (0.5-1.0') (480-33395-20) contained detects for this analyte at concentrations greater than 10X the value found in the Continuing Calibration Blank; therefore, re-analysis of samples was not performed.

Method(s) 6010B: The following samples were diluted to bring the concentration of target analyte total lead within the linear range: B-33 (0.5-1.0') (480-33395-14), B-33 (0.5-1.0') (480-33395-14 MS), B-33 (0.5-1.0') (480-33395-14 MSD), B-41 (0.5-1.0') (480-33395-18). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The Matrix Spike / Matrix Spike Duplicate (B-33 (0.5-1.0') (480-33395-14 MS), B-33 (0.5-1.0') (480-33395-14 MSD)) precision for batch 480-104615 was outside control limits for total lead. Non-homogeneity of the sample matrix is suspected. The associated Laboratory Control Sample met acceptance criteria, therefore, no corrective action was necessary.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-30 (1.0-1.5')

Lab Sample ID: 480-33395-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	47.0		1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-30 (3.5-4.0')

Lab Sample ID: 480-33395-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	15.6		1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-27 (0.5-1.0')

Lab Sample ID: 480-33395-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	3570		1.3		mg/Kg	1	☼	6010B	Total/NA
Lead	1.3		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: B-27 (0.5-1.0') DUP

Lab Sample ID: 480-33395-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	12.1		1.3		mg/Kg	1	☼	6010B	Total/NA
Lead	0.11		0.0050		mg/L	1		6010B	TCLP

Client Sample ID: B-31 (0.5-1.0')

Lab Sample ID: 480-33395-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.0		1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-32 (0.5-1.0')

Lab Sample ID: 480-33395-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	165		1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-32 (6.5-7.0')

Lab Sample ID: 480-33395-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	12.8		1.3		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-32 (6.5-7.0') DUP

Lab Sample ID: 480-33395-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	10.4		1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-28 (0.5-1.0')

Lab Sample ID: 480-33395-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	48.7		1.3		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-28 (7.0-7.5')

Lab Sample ID: 480-33395-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.6		1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-29 (0.5-1.0')

Lab Sample ID: 480-33395-11

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-29 (0.5-1.0') (Continued)

Lab Sample ID: 480-33395-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	27.6		1.1		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-29 (0.5-1.0') DUP

Lab Sample ID: 480-33395-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	17.3		1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-29 (7.0-7.5')

Lab Sample ID: 480-33395-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.7		1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-33 (0.5-1.0')

Lab Sample ID: 480-33395-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	25000		11.8		mg/Kg	10	☼	6010B	Total/NA

Client Sample ID: B-33 (5.0-5.5')

Lab Sample ID: 480-33395-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	204	^	1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-34 (0.5-1.0')

Lab Sample ID: 480-33395-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	26.3	^	1.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-40 (1.0-1.5')

Lab Sample ID: 480-33395-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	22.0	^	1.3		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-41 (0.5-1.0')

Lab Sample ID: 480-33395-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	154000		24.2		mg/Kg	20	☼	6010B	Total/NA

Client Sample ID: B-42 (0.5-1.0')

Lab Sample ID: 480-33395-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	30.4	^	1.3		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: B-43 (0.5-1.0')

Lab Sample ID: 480-33395-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	43.7	^	1.3		mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-30 (1.0-1.5')

Lab Sample ID: 480-33395-1

Date Collected: 02/21/13 09:40

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 82.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	47.0		1.2		mg/Kg	☼	02/25/13 11:50	02/26/13 13:07	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-30 (3.5-4.0')

Lab Sample ID: 480-33395-2

Date Collected: 02/21/13 09:45

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 79.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	15.6		1.2		mg/Kg	☼	02/25/13 11:50	02/26/13 13:10	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-27 (0.5-1.0')

Lab Sample ID: 480-33395-3

Date Collected: 02/21/13 10:25

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 78.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3570		1.3		mg/Kg	☆	02/25/13 11:50	02/26/13 13:12	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.3		0.0050		mg/L		03/06/13 06:20	03/06/13 15:46	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-27 (0.5-1.0') DUP

Lab Sample ID: 480-33395-4

Date Collected: 02/21/13 10:25

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 78.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12.1		1.3		mg/Kg	☼	02/25/13 11:50	02/26/13 13:15	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.11		0.0050		mg/L		03/06/13 06:20	03/06/13 15:48	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-31 (0.5-1.0')

Lab Sample ID: 480-33395-5

Date Collected: 02/21/13 10:40

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 81.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.0		1.2		mg/Kg	☼	02/25/13 11:50	02/26/13 13:17	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-32 (0.5-1.0')

Lab Sample ID: 480-33395-6

Date Collected: 02/21/13 11:15

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 80.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	165		1.2		mg/Kg	☼	02/25/13 11:50	02/26/13 13:33	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-32 (6.5-7.0')

Lab Sample ID: 480-33395-7

Date Collected: 02/21/13 11:20

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 76.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12.8		1.3		mg/Kg	☼	02/25/13 11:50	02/26/13 13:35	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-32 (6.5-7.0') DUP

Lab Sample ID: 480-33395-8

Date Collected: 02/21/13 11:20

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 79.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10.4		1.2		mg/Kg	☼	02/25/13 11:50	02/26/13 13:38	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-28 (0.5-1.0')

Lab Sample ID: 480-33395-9

Date Collected: 02/21/13 11:40

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 72.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	48.7		1.3		mg/Kg	☼	02/25/13 11:50	02/26/13 13:40	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-28 (7.0-7.5')

Lab Sample ID: 480-33395-10

Date Collected: 02/21/13 11:45

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 77.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.6		1.2		mg/Kg	☼	02/25/13 11:50	02/26/13 13:43	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-29 (0.5-1.0')

Lab Sample ID: 480-33395-11

Date Collected: 02/21/13 13:05

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 87.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	27.6		1.1		mg/Kg	☼	02/25/13 11:50	02/26/13 13:45	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-29 (0.5-1.0') DUP

Lab Sample ID: 480-33395-12

Date Collected: 02/21/13 13:05

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 82.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	17.3		1.2		mg/Kg	☼	02/25/13 11:50	02/26/13 13:48	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-29 (7.0-7.5')

Lab Sample ID: 480-33395-13

Date Collected: 02/21/13 13:10

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 81.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.7		1.2		mg/Kg	☼	02/25/13 11:50	02/26/13 13:50	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-33 (0.5-1.0')

Lab Sample ID: 480-33395-14

Date Collected: 02/21/13 13:40

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 84.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	25000		11.8		mg/Kg	☼	02/25/13 11:50	02/27/13 16:27	10

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-33 (5.0-5.5')

Lab Sample ID: 480-33395-15

Date Collected: 02/21/13 13:45

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 78.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	204	^	1.2		mg/Kg	☼	02/25/13 11:50	02/26/13 14:05	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-34 (0.5-1.0')

Lab Sample ID: 480-33395-16

Date Collected: 02/21/13 14:00

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 80.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	26.3	^	1.2		mg/Kg	☼	02/25/13 11:50	02/26/13 14:07	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-40 (1.0-1.5')

Lab Sample ID: 480-33395-17

Date Collected: 02/21/13 16:05

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 76.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	22.0	^	1.3		mg/Kg	☼	02/25/13 11:50	02/26/13 14:10	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-41 (0.5-1.0')

Lab Sample ID: 480-33395-18

Date Collected: 02/21/13 16:20

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 79.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	154000		24.2		mg/Kg	☼	02/25/13 11:50	02/27/13 16:38	20

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-42 (0.5-1.0')

Lab Sample ID: 480-33395-19

Date Collected: 02/21/13 16:25

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 73.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	30.4	^	1.3		mg/Kg	☼	02/25/13 11:50	02/26/13 14:15	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-43 (0.5-1.0')

Lab Sample ID: 480-33395-20

Date Collected: 02/21/13 16:45

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 75.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	43.7	^	1.3		mg/Kg	☼	02/25/13 11:50	02/26/13 14:17	1

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-104615/1-A

Matrix: Solid

Analysis Batch: 105044

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 104615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0		mg/Kg		02/25/13 11:50	02/26/13 13:03	1

Lab Sample ID: LCSSRM 480-104615/2-A

Matrix: Solid

Analysis Batch: 105044

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 104615

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	136	137.9		mg/Kg		101.5	73.1 - 127.2

Lab Sample ID: 480-33395-5 MS

Matrix: Solid

Analysis Batch: 105044

Client Sample ID: B-31 (0.5-1.0')

Prep Type: Total/NA

Prep Batch: 104615

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	9.0		49.1	65.38		mg/Kg	☼	115	75 - 125

Lab Sample ID: 480-33395-5 MSD

Matrix: Solid

Analysis Batch: 105044

Client Sample ID: B-31 (0.5-1.0')

Prep Type: Total/NA

Prep Batch: 104615

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	9.0		49.0	60.33		mg/Kg	☼	105	75 - 125	8	20

Lab Sample ID: 480-33395-14MS

Matrix: Solid

Analysis Batch: 105267

Client Sample ID: B-33 (0.5-1.0')

Prep Type: Total/NA

Prep Batch: 104615

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	25000		45.8	42650	4	mg/Kg	☼	38687	75 - 125

Lab Sample ID: 480-33395-14MSD

Matrix: Solid

Analysis Batch: 105267

Client Sample ID: B-33 (0.5-1.0')

Prep Type: Total/NA

Prep Batch: 104615

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	25000		47.2	28320	4 F	mg/Kg	☼	7137	75 - 125	40	20

Lab Sample ID: MB 480-105918/2-A

Matrix: Solid

Analysis Batch: 106199

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 105918

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0050		mg/L		03/06/13 06:20	03/06/13 15:36	1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

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

Lab Sample ID: LCS 480-105918/3-A

Matrix: Solid

Analysis Batch: 106199

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 105918

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.00	1.06		mg/L		106	80 - 120

Lab Sample ID: LB 480-105724/1-B LB

Matrix: Solid

Analysis Batch: 106199

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 105918

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0050		mg/L		03/06/13 06:20	03/06/13 15:34	1

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Metals

Prep Batch: 104615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33395-1	B-30 (1.0-1.5')	Total/NA	Solid	3050B	
480-33395-2	B-30 (3.5-4.0')	Total/NA	Solid	3050B	
480-33395-3	B-27 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-4	B-27 (0.5-1.0') DUP	Total/NA	Solid	3050B	
480-33395-5	B-31 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-5 MS	B-31 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-5 MSD	B-31 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-6	B-32 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-7	B-32 (6.5-7.0')	Total/NA	Solid	3050B	
480-33395-8	B-32 (6.5-7.0') DUP	Total/NA	Solid	3050B	
480-33395-9	B-28 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-10	B-28 (7.0-7.5')	Total/NA	Solid	3050B	
480-33395-11	B-29 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-12	B-29 (0.5-1.0') DUP	Total/NA	Solid	3050B	
480-33395-13	B-29 (7.0-7.5')	Total/NA	Solid	3050B	
480-33395-14	B-33 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-14MS	B-33 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-14MSD	B-33 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-15	B-33 (5.0-5.5')	Total/NA	Solid	3050B	
480-33395-16	B-34 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-17	B-40 (1.0-1.5')	Total/NA	Solid	3050B	
480-33395-18	B-41 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-19	B-42 (0.5-1.0')	Total/NA	Solid	3050B	
480-33395-20	B-43 (0.5-1.0')	Total/NA	Solid	3050B	
LCSSRM 480-104615/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-104615/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 105044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33395-1	B-30 (1.0-1.5')	Total/NA	Solid	6010B	104615
480-33395-2	B-30 (3.5-4.0')	Total/NA	Solid	6010B	104615
480-33395-3	B-27 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-4	B-27 (0.5-1.0') DUP	Total/NA	Solid	6010B	104615
480-33395-5	B-31 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-5 MS	B-31 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-5 MSD	B-31 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-6	B-32 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-7	B-32 (6.5-7.0')	Total/NA	Solid	6010B	104615
480-33395-8	B-32 (6.5-7.0') DUP	Total/NA	Solid	6010B	104615
480-33395-9	B-28 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-10	B-28 (7.0-7.5')	Total/NA	Solid	6010B	104615
480-33395-11	B-29 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-12	B-29 (0.5-1.0') DUP	Total/NA	Solid	6010B	104615
480-33395-13	B-29 (7.0-7.5')	Total/NA	Solid	6010B	104615
480-33395-15	B-33 (5.0-5.5')	Total/NA	Solid	6010B	104615
480-33395-16	B-34 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-17	B-40 (1.0-1.5')	Total/NA	Solid	6010B	104615
480-33395-19	B-42 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-20	B-43 (0.5-1.0')	Total/NA	Solid	6010B	104615
LCSSRM 480-104615/2-A	Lab Control Sample	Total/NA	Solid	6010B	104615
MB 480-104615/1-A	Method Blank	Total/NA	Solid	6010B	104615

TestAmerica Buffalo

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Metals (Continued)

Analysis Batch: 105267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33395-14	B-33 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-14MS	B-33 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-14MSD	B-33 (0.5-1.0')	Total/NA	Solid	6010B	104615
480-33395-18	B-41 (0.5-1.0')	Total/NA	Solid	6010B	104615

Leach Batch: 105724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33395-3	B-27 (0.5-1.0')	TCLP	Solid	1311	
480-33395-4	B-27 (0.5-1.0') DUP	TCLP	Solid	1311	
LB 480-105724/1-B LB	Method Blank	TCLP	Solid	1311	

Prep Batch: 105918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33395-3	B-27 (0.5-1.0')	TCLP	Solid	3010A	105724
480-33395-4	B-27 (0.5-1.0') DUP	TCLP	Solid	3010A	105724
LB 480-105724/1-B LB	Method Blank	TCLP	Solid	3010A	105724
LCS 480-105918/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 480-105918/2-A	Method Blank	Total/NA	Solid	3010A	

Analysis Batch: 106199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33395-3	B-27 (0.5-1.0')	TCLP	Solid	6010B	105918
480-33395-4	B-27 (0.5-1.0') DUP	TCLP	Solid	6010B	105918
LB 480-105724/1-B LB	Method Blank	TCLP	Solid	6010B	105918
LCS 480-105918/3-A	Lab Control Sample	Total/NA	Solid	6010B	105918
MB 480-105918/2-A	Method Blank	Total/NA	Solid	6010B	105918

General Chemistry

Analysis Batch: 104582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33395-1	B-30 (1.0-1.5')	Total/NA	Solid	Moisture	
480-33395-2	B-30 (3.5-4.0')	Total/NA	Solid	Moisture	
480-33395-3	B-27 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-4	B-27 (0.5-1.0') DUP	Total/NA	Solid	Moisture	
480-33395-5	B-31 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-5 MS	B-31 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-5 MSD	B-31 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-6	B-32 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-7	B-32 (6.5-7.0')	Total/NA	Solid	Moisture	
480-33395-8	B-32 (6.5-7.0') DUP	Total/NA	Solid	Moisture	
480-33395-9	B-28 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-10	B-28 (7.0-7.5')	Total/NA	Solid	Moisture	
480-33395-11	B-29 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-12	B-29 (0.5-1.0') DUP	Total/NA	Solid	Moisture	
480-33395-13	B-29 (7.0-7.5')	Total/NA	Solid	Moisture	
480-33395-14	B-33 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-14MS	B-33 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-14MSD	B-33 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-15	B-33 (5.0-5.5')	Total/NA	Solid	Moisture	

TestAmerica Buffalo

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

General Chemistry (Continued)

Analysis Batch: 104582 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33395-16	B-34 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-17	B-40 (1.0-1.5')	Total/NA	Solid	Moisture	
480-33395-18	B-41 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-19	B-42 (0.5-1.0')	Total/NA	Solid	Moisture	
480-33395-20	B-43 (0.5-1.0')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-30 (1.0-1.5')

Date Collected: 02/21/13 09:40

Date Received: 02/21/13 17:45

Lab Sample ID: 480-33395-1

Matrix: Solid

Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:07	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-30 (3.5-4.0')

Date Collected: 02/21/13 09:45

Date Received: 02/21/13 17:45

Lab Sample ID: 480-33395-2

Matrix: Solid

Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:10	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-27 (0.5-1.0')

Date Collected: 02/21/13 10:25

Date Received: 02/21/13 17:45

Lab Sample ID: 480-33395-3

Matrix: Solid

Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:12	LH	TAL BUF
TCLP	Leach	1311			105724	03/04/13 15:23	DE	TAL BUF
TCLP	Prep	3010A			105918	03/06/13 06:20	JM	TAL BUF
TCLP	Analysis	6010B		1	106199	03/06/13 15:46	AH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-27 (0.5-1.0') DUP

Date Collected: 02/21/13 10:25

Date Received: 02/21/13 17:45

Lab Sample ID: 480-33395-4

Matrix: Solid

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:15	LH	TAL BUF
TCLP	Leach	1311			105724	03/04/13 15:23	DE	TAL BUF
TCLP	Prep	3010A			105918	03/06/13 06:20	JM	TAL BUF
TCLP	Analysis	6010B		1	106199	03/06/13 15:48	AH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-31 (0.5-1.0')

Lab Sample ID: 480-33395-5

Date Collected: 02/21/13 10:40

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:17	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-32 (0.5-1.0')

Lab Sample ID: 480-33395-6

Date Collected: 02/21/13 11:15

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:33	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-32 (6.5-7.0')

Lab Sample ID: 480-33395-7

Date Collected: 02/21/13 11:20

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:35	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-32 (6.5-7.0') DUP

Lab Sample ID: 480-33395-8

Date Collected: 02/21/13 11:20

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:38	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-28 (0.5-1.0')

Lab Sample ID: 480-33395-9

Date Collected: 02/21/13 11:40

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 72.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:40	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-28 (7.0-7.5')

Lab Sample ID: 480-33395-10

Date Collected: 02/21/13 11:45

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:43	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-29 (0.5-1.0')

Lab Sample ID: 480-33395-11

Date Collected: 02/21/13 13:05

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:45	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-29 (0.5-1.0') DUP

Lab Sample ID: 480-33395-12

Date Collected: 02/21/13 13:05

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:48	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-29 (7.0-7.5')

Lab Sample ID: 480-33395-13

Date Collected: 02/21/13 13:10

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 13:50	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-33 (0.5-1.0')

Lab Sample ID: 480-33395-14

Date Collected: 02/21/13 13:40

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		10	105267	02/27/13 16:27	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-33 (5.0-5.5')

Lab Sample ID: 480-33395-15

Date Collected: 02/21/13 13:45

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 14:05	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-34 (0.5-1.0')

Lab Sample ID: 480-33395-16

Date Collected: 02/21/13 14:00

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 14:07	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-40 (1.0-1.5')

Lab Sample ID: 480-33395-17

Date Collected: 02/21/13 16:05

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 76.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 14:10	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-41 (0.5-1.0')

Lab Sample ID: 480-33395-18

Date Collected: 02/21/13 16:20

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		20	105267	02/27/13 16:38	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

Client Sample ID: B-42 (0.5-1.0')

Lab Sample ID: 480-33395-19

Date Collected: 02/21/13 16:25

Matrix: Solid

Date Received: 02/21/13 17:45

Percent Solids: 73.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 14:15	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Client Sample ID: B-43 (0.5-1.0')
Date Collected: 02/21/13 16:45
Date Received: 02/21/13 17:45

Lab Sample ID: 480-33395-20
Matrix: Solid
Percent Solids: 75.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			104615	02/25/13 11:50	JM	TAL BUF
Total/NA	Analysis	6010B		1	105044	02/26/13 14:17	LH	TAL BUF
Total/NA	Analysis	Moisture		1	104582	02/22/13 21:25	ZLR	TAL BUF

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

Certification Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	06-30-13
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-01-13
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	03-31-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAP	10	NY200003	06-09-13
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Method Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33395-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-33395-1	B-30 (1.0-1.5')	Solid	02/21/13 09:40	02/21/13 17:45
480-33395-2	B-30 (3.5-4.0')	Solid	02/21/13 09:45	02/21/13 17:45
480-33395-3	B-27 (0.5-1.0')	Solid	02/21/13 10:25	02/21/13 17:45
480-33395-4	B-27 (0.5-1.0') DUP	Solid	02/21/13 10:25	02/21/13 17:45
480-33395-5	B-31 (0.5-1.0')	Solid	02/21/13 10:40	02/21/13 17:45
480-33395-6	B-32 (0.5-1.0')	Solid	02/21/13 11:15	02/21/13 17:45
480-33395-7	B-32 (6.5-7.0')	Solid	02/21/13 11:20	02/21/13 17:45
480-33395-8	B-32 (6.5-7.0') DUP	Solid	02/21/13 11:20	02/21/13 17:45
480-33395-9	B-28 (0.5-1.0')	Solid	02/21/13 11:40	02/21/13 17:45
480-33395-10	B-28 (7.0-7.5')	Solid	02/21/13 11:45	02/21/13 17:45
480-33395-11	B-29 (0.5-1.0')	Solid	02/21/13 13:05	02/21/13 17:45
480-33395-12	B-29 (0.5-1.0') DUP	Solid	02/21/13 13:05	02/21/13 17:45
480-33395-13	B-29 (7.0-7.5')	Solid	02/21/13 13:10	02/21/13 17:45
480-33395-14	B-33 (0.5-1.0')	Solid	02/21/13 13:40	02/21/13 17:45
480-33395-15	B-33 (5.0-5.5')	Solid	02/21/13 13:45	02/21/13 17:45
480-33395-16	B-34 (0.5-1.0')	Solid	02/21/13 14:00	02/21/13 17:45
480-33395-17	B-40 (1.0-1.5')	Solid	02/21/13 16:05	02/21/13 17:45
480-33395-18	B-41 (0.5-1.0')	Solid	02/21/13 16:20	02/21/13 17:45
480-33395-19	B-42 (0.5-1.0')	Solid	02/21/13 16:25	02/21/13 17:45
480-33395-20	B-43 (0.5-1.0')	Solid	02/21/13 16:45	02/21/13 17:45

TestAmerica

Temperature on Receipt _____

Chain of Custody Record

Drinking Water? Yes ☐ No ☒

THE LEADER IN ENVIRONMENTAL TESTING

Client AMEC E1		Project Manager Robert Crowley		Date 2/22/13		Chain of Custody Number 233941	
Address 800 N. BULL AVE. STE 200		Telephone Number (Area Code)/Fax Number		Lab Number		Page 1 of 2	
City Carnegie		State PA		Zip Code 15106		Analysis (Attach list if more space is needed)	
Project Name and Location (State) WONGMETH - NIAGARA FALLS		Site Contact S. Condie		Lab Contact B. Fischer		Special Instructions/ Conditions of Receipt	
Contract/Order Number PA 12-01109085		Carrier/Trailer Number Grand Delivery		Containers & Preservatives			
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Matrix		Sample Disposal			
Date		Time		Return To Client			
B-30 (1.0-1.5')		2/21/13 0940		Unknown			
B-30 (1.5-4.0')		0945		Poison B			
B-27 (0.5-1.0')		1025		Skin Irritant			
B-27 (0.5-1.0') DWP		1026		Flammable			
B-31 (0.5-1.0')		1040		Non-Hazard			
B-31 (0.5-1.0') MS/MSD		1040		Turn Around Time Required			
B-32 (0.5-1.0')		1115		24 Hours			
B-32 (0.5-1.0')		1120		48 Hours			
B-32 (0.5-1.0') DWP		1120		7 Days			
B-28 (0.5-1.0')		1140		14 Days			
B-28 (7.0-7.5')		1145		21 Days			
B-29 (0.5-1.0')		1305		Other			
Possible Hazard Identification		Date		Time			
1. Relinquished By Robert Crowley		2/21/13		1745		1. Relinquished By Robert Crowley	
2. Relinquished By		Date		Time		2. Relinquished By	
3. Relinquished By		Date		Time		3. Relinquished By	
Comments							

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

TestAmerica

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: AMEC E&I

Address: 800 N. Bell Ave #200

City: Carnegie

State: PA Zip Code: 15106

Project Name and Location (State): Jonesport-Niagara Falls

Contract/Purchase Order/Quote No: MD1104895

Project Manager: Robert Crowley

Telephone Number (Area Code)/Fax Number: 716-211-1213

Date: 2/21/13

Chain of Custody Number: 233944

Page 2 of 2

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives				Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt		
			Air	Soil	Water	Sludge	Unpres.	H2SO4	HNO3	HCl			NaOH	ZnAc
B-29 (0.5-1.0') DNP	2/21/13	1305		X										
B-29 (7.0-7.5')		1310		X										
B-33 (0.5-1.0')		1340		X										
B-33 (0.5-1.0') NS/MSD		1340		X										
B-33 (5.0-5.5')		1345		X										
B-34 (0.5-1.0')		1400		X										
B-40 (1.0-1.5')		1605		X										
B-41 (0.5-1.0')		1620		X										
B-42 (0.5-1.0')		1625		X										
B-43 (0.5-1.0')		1645		X										

Hand delivery

Special Instructions/Conditions of Receipt: LEAD ONLY, HOLD, NS/MSD

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

1. Relinquished By: [Signature] Date: 2/21/13 Time: 1305

2. Relinquished By: [Signature] Date: 2/21/13 Time: 1745

3. Relinquished By: [Signature] Date: 2/21/13 Time: 1745

Comments:

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

Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 480-33395-1

Login Number: 33395

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robitaille, Zach L

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

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-33480-1

Client Project/Site: Niagara Falls site

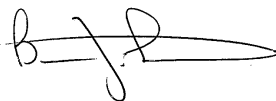
For:

AMEC Environment & Infrastructure, Inc.

800 North Bell Avenue, Suite 200

Carnegie, Pennsylvania 15106

Attn: Rob Crowley



Authorized for release by:

3/22/2013 8:46:20 AM

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

LINKS

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results through

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Visit us at:

www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

GC Semi VOA

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

Metals

Qualifier	Qualifier Description
B7	Target analyte detected in method blank at or above method reporting limit . Concentration found in the sample was 10 times above the concentration found in the blank.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

Glossary

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

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Job ID: 480-33480-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-33480-1

Comments

No additional comments.

Receipt

The samples were received on 2/26/2013 3:28 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.3° C and 2.6° C.

Except:

<<EXPLANATION REQUIRED>>

GC/MS VOA

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample(s): BB-5 (480-33480-8), BB-5 (480-33480-8 MS), BB-5 (480-33480-8 MSD), BB-7 (480-33480-10). The sample(s) shows evidence of matrix interference.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 105255 was outside control limits.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 105255 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8260B: The laboratory control sample (LCS) for batch 105072 exceeded control limits for the following analyte(s): 2-Butanone. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8260B: The method blank for batch 106590 contained Toluene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 106691 exceeded control limits for the following analytes: Methyl Acetate. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) for batch 105255 was analyzed with the wrong spike compound list.

No other analytical or quality issues were noted.

GC/MS Semi VOA

Method(s) 8270C: The following samples were diluted due to the nature of the sample matrix : BB-2 (480-33480-2), BB-2 (DUP) (480-33480-3), BB-4 (DUP) (480-33480-7). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8270C: The following sample was diluted due to the nature of the sample matrix: BB-3 (480-33480-4). Elevated reporting limits (RLs) are provided.

Method(s) 8270C: The continuing calibration verification (CCV) for 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol associated with analytical batch 480-105281 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C: The following samples were diluted due to the nature of the sample matrix: BB-5 (480-33480-8), BB-7 (480-33480-10). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8270C: The continuing calibration verification (CCV) for 2,4-Dinitrophenol associated with analytical batch 105643 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have

Case Narrative

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Job ID: 480-33480-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

been reported.

Method(s) 8270C: The continuing calibration verification (CCV) for 2,4-Dinitrophenol associated with batch 106764 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8270C: The following compound was outside control limits in the continuing calibration verification (CCV) associated with batch 106764: 4,6-Dinitro-2-methylphenol. This compound is not classified as Calibration Check Compounds (CCCs) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for 4 analytes to be outside limits; therefore, the data have been reported.

Method(s) 8270C: The following sample was diluted due to color and viscosity, etc.>>: BB-4 (480-33480-6). Elevated reporting limits (RL) are provided.

Method(s) 8270C: Surrogate recovery for the following sample was outside control limits: BB-4 (480-33480-6). Evidence of matrix interferences is not obvious.

No other analytical or quality issues were noted.

GC Semi VOA

Method(s) 8082: The following samples were diluted due to the nature of the sample matrix: (480-33480-2 MS), (480-33480-2 MSD), BB-2 (480-33480-2), BB-2 (DUP) (480-33480-3), BB-4 (DUP) (480-33480-7), BB-5 (480-33480-8), BB-7 (480-33480-10). As such, surrogate and spike recoveries were diluted out and are not representative.

Method(s) 8082: The following sample was diluted due to the nature of the sample matrix: BB-4 (480-33480-6). As such, surrogate recoveries are not representative, and elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals

Method(s) 6010B: The Continuing Calibration Blank, 480-106934/19, contained total lead above the reporting limit (RL). The associated samples BB-4 (480-33480-6), BB-4 (DUP) (480-33480-7) contained detects for this analyte at concentrations greater than 10X the value found in the Continuing Calibration Blank; therefore, re-analysis of samples was not performed.

No other analytical or quality issues were noted.

Organic Prep

Method(s) 3550B: Due to the matrix, the initial volumes used for the following samples deviated from the standard procedure: BB-2 (480-33480-2), BB-2 (DUP) (480-33480-3), BB-5 (480-33480-8), BB-7 (480-33480-10). The reporting limits (RLs) have been adjusted proportionately.

Method(s) 3550B: Due to the matrix, the following samples could not be concentrated to the final method required volume: BB-2 (480-33480-2), BB-2 (DUP) (480-33480-3), BB-4 (DUP) (480-33480-7), BB-5 (480-33480-8), BB-7 (480-33480-10). The reporting limits (RLs) are elevated proportionately.

Method(s) 3550B: Due to the matrix, the following sample could not be concentrated to the final method required volume: BB-4 (480-33480-6). The reporting limits (RLs) are elevated proportionately.

No other analytical or quality issues were noted.

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-1

Lab Sample ID: 480-33480-1

No Detections.

Client Sample ID: BB-2

Lab Sample ID: 480-33480-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	31	J	71	12	ug/Kg	1	☼	8260B	Total/NA
Toluene	3.3	J B	14	1.1	ug/Kg	1	☼	8260B	Total/NA
Aluminum	352		11.1		mg/Kg	1	☼	6010B	Total/NA
Arsenic	6.9		2.2		mg/Kg	1	☼	6010B	Total/NA
Barium	24.1		0.55		mg/Kg	1	☼	6010B	Total/NA
Calcium	47600		55.3		mg/Kg	1	☼	6010B	Total/NA
Chromium	2.8		0.55		mg/Kg	1	☼	6010B	Total/NA
Copper	32.0		1.1		mg/Kg	1	☼	6010B	Total/NA
Iron	28900	B7	11.1		mg/Kg	1	☼	6010B	Total/NA
Lead	130		1.1		mg/Kg	1	☼	6010B	Total/NA
Magnesium	325		22.1		mg/Kg	1	☼	6010B	Total/NA
Manganese	27.8		0.22		mg/Kg	1	☼	6010B	Total/NA
Potassium	5220		33.2		mg/Kg	1	☼	6010B	Total/NA
Vanadium	20.3		0.55		mg/Kg	1	☼	6010B	Total/NA
Zinc	38.1		2.2		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: BB-2 (DUP)

Lab Sample ID: 480-33480-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	21	J	66	11	ug/Kg	1	☼	8260B	Total/NA
Toluene	2.6	J	13	0.99	ug/Kg	1	☼	8260B	Total/NA
Fluoranthene	7500	J	370000	5300	ug/Kg	20	☼	8270C	Total/NA
Pyrene	11000	J	370000	2400	ug/Kg	20	☼	8270C	Total/NA
Aluminum	181		10.5		mg/Kg	1	☼	6010B	Total/NA
Barium	9.8		0.52		mg/Kg	1	☼	6010B	Total/NA
Calcium	9170		52.3		mg/Kg	1	☼	6010B	Total/NA
Chromium	1.8		0.52		mg/Kg	1	☼	6010B	Total/NA
Copper	8.2		1.0		mg/Kg	1	☼	6010B	Total/NA
Iron	8480	B7	10.5		mg/Kg	1	☼	6010B	Total/NA
Lead	83.3		1.0		mg/Kg	1	☼	6010B	Total/NA
Magnesium	181		20.9		mg/Kg	1	☼	6010B	Total/NA
Manganese	11.1		0.21		mg/Kg	1	☼	6010B	Total/NA
Potassium	1180		31.4		mg/Kg	1	☼	6010B	Total/NA
Vanadium	15.4		0.52		mg/Kg	1	☼	6010B	Total/NA
Zinc	14.0		2.1		mg/Kg	1	☼	6010B	Total/NA
Mercury	0.060		0.021		mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: BB-3

Lab Sample ID: 480-33480-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.71	J B	8.5	0.64	ug/Kg	1	☼	8260B	Total/NA
Xylenes, Total	1.8	J	17	1.4	ug/Kg	1	☼	8260B	Total/NA
Acenaphthene	110	J	1100	12	ug/Kg	5	☼	8270C	Total/NA
Anthracene	260	J	1100	27	ug/Kg	5	☼	8270C	Total/NA
Benzo(a)anthracene	410	J	1100	18	ug/Kg	5	☼	8270C	Total/NA
Benzo(a)pyrene	350	J	1100	25	ug/Kg	5	☼	8270C	Total/NA
Benzo(b)fluoranthene	530	J	1100	20	ug/Kg	5	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-3 (Continued)

Lab Sample ID: 480-33480-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(g,h,i)perylene	100	J	1100	13	ug/Kg	5	☼	8270C	Total/NA
Benzo(k)fluoranthene	170	J	1100	11	ug/Kg	5	☼	8270C	Total/NA
Carbazole	130	J	1100	12	ug/Kg	5	☼	8270C	Total/NA
Chrysene	350	J	1100	10	ug/Kg	5	☼	8270C	Total/NA
Dibenzofuran	86	J	1100	11	ug/Kg	5	☼	8270C	Total/NA
Fluoranthene	1000	J	1100	15	ug/Kg	5	☼	8270C	Total/NA
Fluorene	120	J	1100	24	ug/Kg	5	☼	8270C	Total/NA
Indeno(1,2,3-cd)pyrene	92	J	1100	29	ug/Kg	5	☼	8270C	Total/NA
Phenanthrene	990	J	1100	22	ug/Kg	5	☼	8270C	Total/NA
Pyrene	710	J	1100	6.8	ug/Kg	5	☼	8270C	Total/NA
Aluminum	3750		12.6		mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.4		2.5		mg/Kg	1	☼	6010B	Total/NA
Barium	292		0.63		mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.35		0.25		mg/Kg	1	☼	6010B	Total/NA
Calcium	57200		62.8		mg/Kg	1	☼	6010B	Total/NA
Chromium	4.0		0.63		mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.2		0.63		mg/Kg	1	☼	6010B	Total/NA
Copper	13.5		1.3		mg/Kg	1	☼	6010B	Total/NA
Iron	6020	B7	12.6		mg/Kg	1	☼	6010B	Total/NA
Lead	66.4		1.3		mg/Kg	1	☼	6010B	Total/NA
Magnesium	5310		25.1		mg/Kg	1	☼	6010B	Total/NA
Manganese	347		0.25		mg/Kg	1	☼	6010B	Total/NA
Potassium	840		37.7		mg/Kg	1	☼	6010B	Total/NA
Vanadium	6.3		0.63		mg/Kg	1	☼	6010B	Total/NA
Zinc	158		2.5		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: BB-3 (DUP)

Lab Sample ID: 480-33480-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.6	J	51	8.5	ug/Kg	1	☼	8260B	Total/NA
Toluene	1.5	J B	10	0.77	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: BB-4

Lab Sample ID: 480-33480-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.4	J	31	5.2	ug/Kg	1	☼	8260B	Total/NA
Anthracene	430	J	14000	340	ug/Kg	10	☼	8270C	Total/NA
Benzo(a)pyrene	600	J	14000	320	ug/Kg	10	☼	8270C	Total/NA
Benzo(b)fluoranthene	790	J	14000	260	ug/Kg	10	☼	8270C	Total/NA
Benzo(k)fluoranthene	440	J	14000	150	ug/Kg	10	☼	8270C	Total/NA
Fluoranthene	1500	J	14000	190	ug/Kg	10	☼	8270C	Total/NA
Phenanthrene	1700	J	14000	280	ug/Kg	10	☼	8270C	Total/NA
Pyrene	1200	J	14000	87	ug/Kg	10	☼	8270C	Total/NA
PCB-1254	1700	J	2700	1300	ug/Kg	10	☼	8082	Total/NA
PCB-1260	1300	J	2700	1300	ug/Kg	10	☼	8082	Total/NA
Aluminum	758		11.5		mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.4		2.3		mg/Kg	1	☼	6010B	Total/NA
Barium	49.6		0.57		mg/Kg	1	☼	6010B	Total/NA
Calcium	11600		57.4		mg/Kg	1	☼	6010B	Total/NA
Chromium	2.6		0.57		mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-4 (Continued)

Lab Sample ID: 480-33480-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	30.3		1.1		mg/Kg	1	☼	6010B	Total/NA
Iron	5700	B7	11.5		mg/Kg	1	☼	6010B	Total/NA
Lead	4090		1.1		mg/Kg	1	☼	6010B	Total/NA
Magnesium	541		22.9		mg/Kg	1	☼	6010B	Total/NA
Manganese	32.3		0.23		mg/Kg	1	☼	6010B	Total/NA
Potassium	1280		34.4		mg/Kg	1	☼	6010B	Total/NA
Vanadium	4.1		0.57		mg/Kg	1	☼	6010B	Total/NA
Zinc	14.3		2.3		mg/Kg	1	☼	6010B	Total/NA
Lead	116	^	0.0050		mg/L	1		6010B	TCLP
Mercury	0.12		0.022		mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: BB-4 (DUP)

Lab Sample ID: 480-33480-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.2	J	29	4.9	ug/Kg	1	☼	8260B	Total/NA
Benzo(b)fluoranthene	1400	J	39000	750	ug/Kg	20	☼	8270C	Total/NA
Fluoranthene	2500	J	39000	560	ug/Kg	20	☼	8270C	Total/NA
Phenanthrene	2700	J	39000	810	ug/Kg	20	☼	8270C	Total/NA
Pyrene	1800	J	39000	250	ug/Kg	20	☼	8270C	Total/NA
Aluminum	926		11.4		mg/Kg	1	☼	6010B	Total/NA
Barium	27.3		0.57		mg/Kg	1	☼	6010B	Total/NA
Calcium	7550		56.8		mg/Kg	1	☼	6010B	Total/NA
Chromium	2.3		0.57		mg/Kg	1	☼	6010B	Total/NA
Copper	24.3		1.1		mg/Kg	1	☼	6010B	Total/NA
Iron	4540	B7	11.4		mg/Kg	1	☼	6010B	Total/NA
Lead	1950		1.1		mg/Kg	1	☼	6010B	Total/NA
Magnesium	747		22.7		mg/Kg	1	☼	6010B	Total/NA
Manganese	33.6		0.23		mg/Kg	1	☼	6010B	Total/NA
Potassium	967		34.1		mg/Kg	1	☼	6010B	Total/NA
Vanadium	3.0		0.57		mg/Kg	1	☼	6010B	Total/NA
Zinc	12.2		2.3		mg/Kg	1	☼	6010B	Total/NA
Lead	47.0	^	0.0050		mg/L	1		6010B	TCLP
Mercury	0.17		0.023		mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: BB-5

Lab Sample ID: 480-33480-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	41	J	46	7.7	ug/Kg	1	☼	8260B	Total/NA
Carbon disulfide	5.1	J	9.2	4.6	ug/Kg	1	☼	8260B	Total/NA
Toluene	3.5	J	9.2	0.69	ug/Kg	1	☼	8260B	Total/NA
Fluoranthene	9400	J	300000	4400	ug/Kg	20	☼	8270C	Total/NA
Phenanthrene	9600	J	300000	6300	ug/Kg	20	☼	8270C	Total/NA
Pyrene	12000	J	300000	2000	ug/Kg	20	☼	8270C	Total/NA
Aluminum	428		12.1		mg/Kg	1	☼	6010B	Total/NA
Barium	18.0		0.60		mg/Kg	1	☼	6010B	Total/NA
Calcium	3590		60.3		mg/Kg	1	☼	6010B	Total/NA
Chromium	5.2		0.60		mg/Kg	1	☼	6010B	Total/NA
Copper	28.3		1.2		mg/Kg	1	☼	6010B	Total/NA
Iron	7140	B7	12.1		mg/Kg	1	☼	6010B	Total/NA
Lead	234		1.2		mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-5 (Continued)

Lab Sample ID: 480-33480-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	73.3		24.1		mg/Kg	1	☼	6010B	Total/NA
Manganese	13.9		0.24		mg/Kg	1	☼	6010B	Total/NA
Potassium	1020		36.2		mg/Kg	1	☼	6010B	Total/NA
Vanadium	14.7		0.60		mg/Kg	1	☼	6010B	Total/NA
Zinc	22.5		2.4		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: BB-6

Lab Sample ID: 480-33480-9

No Detections.

Client Sample ID: BB-7

Lab Sample ID: 480-33480-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	44		41	6.9	ug/Kg	1	☼	8260B	Total/NA
Toluene	1.2	J	8.2	0.62	ug/Kg	1	☼	8260B	Total/NA
Anthracene	8900	J	300000	7500	ug/Kg	20	☼	8270C	Total/NA
Fluoranthene	28000	J	300000	4200	ug/Kg	20	☼	8270C	Total/NA
Phenanthrene	26000	J	300000	6200	ug/Kg	20	☼	8270C	Total/NA
Pyrene	25000	J	300000	1900	ug/Kg	20	☼	8270C	Total/NA
PCB-1254	1700	J	2700	1300	ug/Kg	10	☼	8082	Total/NA
Aluminum	240		11.8		mg/Kg	1	☼	6010B	Total/NA
Barium	39.5		0.59		mg/Kg	1	☼	6010B	Total/NA
Calcium	1940		58.8		mg/Kg	1	☼	6010B	Total/NA
Chromium	2.2		0.59		mg/Kg	1	☼	6010B	Total/NA
Copper	2.6		1.2		mg/Kg	1	☼	6010B	Total/NA
Iron	1930	B7	11.8		mg/Kg	1	☼	6010B	Total/NA
Lead	51.8		1.2		mg/Kg	1	☼	6010B	Total/NA
Magnesium	167		23.5		mg/Kg	1	☼	6010B	Total/NA
Manganese	21.8		0.24		mg/Kg	1	☼	6010B	Total/NA
Potassium	155		35.3		mg/Kg	1	☼	6010B	Total/NA
Vanadium	16.2		0.59		mg/Kg	1	☼	6010B	Total/NA
Zinc	19.4		2.4		mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-33480-11

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-2

Lab Sample ID: 480-33480-2

Date Collected: 02/26/13 11:00

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		14	1.0	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,1,2,2-Tetrachloroethane	ND		14	2.3	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,1,2-Trichloroethane	ND		14	1.8	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		14	3.2	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,1-Dichloroethane	ND		14	1.7	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,1-Dichloroethene	ND		14	1.7	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,2,4-Trichlorobenzene	ND		14	0.86	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,2-Dibromo-3-Chloropropane	ND		14	7.1	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,2-Dibromoethane	ND		14	1.8	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,2-Dichlorobenzene	ND		14	1.1	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,2-Dichloroethane	ND		14	0.71	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,2-Dichloropropane	ND		14	7.1	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,3-Dichlorobenzene	ND		14	0.73	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
1,4-Dichlorobenzene	ND		14	2.0	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
2-Hexanone	ND		71	7.1	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
2-Butanone (MEK)	ND		71	5.2	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
4-Methyl-2-pentanone (MIBK)	ND		71	4.7	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Acetone	31	J	71	12	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Benzene	ND		14	0.69	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Bromodichloromethane	ND		14	1.9	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Bromoform	ND		14	7.1	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Bromomethane	ND		14	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Carbon disulfide	ND		14	7.1	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Carbon tetrachloride	ND		14	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Chlorobenzene	ND		14	1.9	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Dibromochloromethane	ND		14	1.8	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Chloroethane	ND		14	3.2	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Chloroform	ND		14	0.88	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Chloromethane	ND		14	0.86	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
cis-1,2-Dichloroethene	ND		14	1.8	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
cis-1,3-Dichloropropene	ND		14	2.0	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Cyclohexane	ND		14	2.0	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Dichlorodifluoromethane	ND		14	1.2	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Ethylbenzene	ND		14	0.98	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Isopropylbenzene	ND		14	2.1	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Methyl acetate	ND		14	2.6	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Methyl tert-butyl ether	ND		14	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Methylcyclohexane	ND		14	2.2	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Methylene Chloride	ND		14	6.5	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Styrene	ND		14	0.71	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Tetrachloroethene	ND		14	1.9	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Toluene	3.3	J B	14	1.1	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
trans-1,2-Dichloroethene	ND		14	1.5	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
trans-1,3-Dichloropropene	ND		14	6.2	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Trichloroethene	ND		14	3.1	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Trichlorofluoromethane	ND		14	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Vinyl chloride	ND		14	1.7	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1
Xylenes, Total	ND		28	2.4	ug/Kg	☼	03/08/13 19:06	03/08/13 21:39	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-2

Lab Sample ID: 480-33480-2

Date Collected: 02/26/13 11:00

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 90.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 126	03/08/13 19:06	03/08/13 21:39	1
Toluene-d8 (Surr)	106		71 - 125	03/08/13 19:06	03/08/13 21:39	1
4-Bromofluorobenzene (Surr)	91		72 - 126	03/08/13 19:06	03/08/13 21:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		450000	98000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2,4,6-Trichlorophenol	ND		450000	30000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2,4-Dichlorophenol	ND		450000	24000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2,4-Dimethylphenol	ND		450000	120000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2,4-Dinitrophenol	ND		880000	160000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2,4-Dinitrotoluene	ND		450000	69000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2,6-Dinitrotoluene	ND		450000	110000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2-Chloronaphthalene	ND		450000	30000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2-Chlorophenol	ND		450000	23000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2-Methylnaphthalene	ND		450000	5400	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2-Methylphenol	ND		450000	14000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2-Nitroaniline	ND		880000	140000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
2-Nitrophenol	ND		450000	21000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
3,3'-Dichlorobenzidine	ND		450000	390000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
3-Nitroaniline	ND		880000	100000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
4,6-Dinitro-2-methylphenol	ND		880000	150000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
4-Bromophenyl phenyl ether	ND		450000	140000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
4-Chloro-3-methylphenol	ND		450000	18000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
4-Chloroaniline	ND		450000	130000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
4-Chlorophenyl phenyl ether	ND		450000	9600	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
4-Methylphenol	ND		880000	25000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
4-Nitroaniline	ND		880000	50000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
4-Nitrophenol	ND		880000	110000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Acenaphthene	ND		450000	5300	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Acenaphthylene	ND		450000	3700	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Acetophenone	ND		450000	23000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Anthracene	ND		450000	11000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Atrazine	ND		450000	20000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Benzaldehyde	ND		450000	49000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Benzo(a)anthracene	ND		450000	7700	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Benzo(a)pyrene	ND		450000	11000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Benzo(b)fluoranthene	ND		450000	8700	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Benzo(g,h,i)perylene	ND		450000	5400	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Benzo(k)fluoranthene	ND		450000	4900	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Biphenyl	ND		450000	28000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
bis (2-chloroisopropyl) ether	ND		450000	47000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Bis(2-chloroethoxy)methane	ND		450000	24000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Bis(2-chloroethyl)ether	ND		450000	39000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Bis(2-ethylhexyl) phthalate	ND		450000	140000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Butyl benzyl phthalate	ND		450000	120000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Caprolactam	ND		450000	190000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Carbazole	ND		450000	5200	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Chrysene	ND		450000	4500	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Dibenz(a,h)anthracene	ND		450000	5300	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-2

Lab Sample ID: 480-33480-2

Date Collected: 02/26/13 11:00

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		450000	4700	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Diethyl phthalate	ND		450000	14000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Dimethyl phthalate	ND		450000	12000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Di-n-butyl phthalate	ND		450000	160000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Di-n-octyl phthalate	ND		450000	10000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Fluoranthene	ND		450000	6500	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Fluorene	ND		450000	10000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Hexachlorobenzene	ND		450000	22000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Hexachlorobutadiene	ND		450000	23000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Hexachlorocyclopentadiene	ND		450000	140000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Hexachloroethane	ND		450000	35000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Indeno(1,2,3-cd)pyrene	ND		450000	12000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Isophorone	ND		450000	22000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Naphthalene	ND		450000	7500	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Nitrobenzene	ND		450000	20000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
N-Nitrosodi-n-propylamine	ND		450000	36000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
N-Nitrosodiphenylamine	ND		450000	25000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Pentachlorophenol	ND		880000	150000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Phenanthrene	ND		450000	9400	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Phenol	ND		450000	47000	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20
Pyrene	ND		450000	2900	ug/Kg	☼	02/27/13 08:04	02/28/13 18:58	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	0	X	39 - 146	02/27/13 08:04	02/28/13 18:58	20
2-Fluorobiphenyl	0	X	37 - 120	02/27/13 08:04	02/28/13 18:58	20
2-Fluorophenol	0	X	18 - 120	02/27/13 08:04	02/28/13 18:58	20
Nitrobenzene-d5	0	X	34 - 132	02/27/13 08:04	02/28/13 18:58	20
Phenol-d5	0	X	11 - 120	02/27/13 08:04	02/28/13 18:58	20
p-Terphenyl-d14	0	X	65 - 153	02/27/13 08:04	02/28/13 18:58	20

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2400	460	ug/Kg	☼	02/27/13 08:07	02/27/13 19:10	10
PCB-1221	ND		2400	460	ug/Kg	☼	02/27/13 08:07	02/27/13 19:10	10
PCB-1232	ND		2400	460	ug/Kg	☼	02/27/13 08:07	02/27/13 19:10	10
PCB-1242	ND		2400	460	ug/Kg	☼	02/27/13 08:07	02/27/13 19:10	10
PCB-1248	ND		2400	460	ug/Kg	☼	02/27/13 08:07	02/27/13 19:10	10
PCB-1254	ND		2400	1100	ug/Kg	☼	02/27/13 08:07	02/27/13 19:10	10
PCB-1260	ND		2400	1100	ug/Kg	☼	02/27/13 08:07	02/27/13 19:10	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	81		47 - 176	02/27/13 08:07	02/27/13 19:10	10
Tetrachloro-m-xylene	117		46 - 175	02/27/13 08:07	02/27/13 19:10	10

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	352		11.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Antimony	ND		16.6		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Arsenic	6.9		2.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Barium	24.1		0.55		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-2

Lab Sample ID: 480-33480-2

Date Collected: 02/26/13 11:00

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.22		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Cadmium	ND		0.22		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Calcium	47600		55.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Chromium	2.8		0.55		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Cobalt	ND		0.55		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Copper	32.0		1.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Iron	28900	B7	11.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Lead	130		1.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Magnesium	325		22.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Manganese	27.8		0.22		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Nickel	ND		5.5		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Potassium	5220		33.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Selenium	ND		4.4		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Silver	ND		0.55		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Sodium	ND		155		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Thallium	ND		6.6		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Vanadium	20.3		0.55		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1
Zinc	38.1		2.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:10	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.022		mg/Kg	☼	02/27/13 09:30	02/27/13 14:37	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-2 (DUP)

Lab Sample ID: 480-33480-3

Date Collected: 02/26/13 11:00

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 94.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		13	0.95	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,1,2,2-Tetrachloroethane	ND		13	2.1	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,1,2-Trichloroethane	ND		13	1.7	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		13	3.0	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,1-Dichloroethane	ND		13	1.6	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,1-Dichloroethene	ND		13	1.6	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,2,4-Trichlorobenzene	ND		13	0.80	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,2-Dibromo-3-Chloropropane	ND		13	6.6	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,2-Dibromoethane	ND		13	1.7	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,2-Dichlorobenzene	ND		13	1.0	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,2-Dichloroethane	ND		13	0.66	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,2-Dichloropropane	ND		13	6.6	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,3-Dichlorobenzene	ND		13	0.67	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
1,4-Dichlorobenzene	ND		13	1.8	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
2-Hexanone	ND		66	6.6	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
2-Butanone (MEK)	ND		66	4.8	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
4-Methyl-2-pentanone (MIBK)	ND		66	4.3	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Acetone	21	J	66	11	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Benzene	ND		13	0.64	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Bromodichloromethane	ND		13	1.8	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Bromoform	ND		13	6.6	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Bromomethane	ND		13	1.2	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Carbon disulfide	ND		13	6.6	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Carbon tetrachloride	ND		13	1.3	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Chlorobenzene	ND		13	1.7	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Dibromochloromethane	ND		13	1.7	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Chloroethane	ND		13	3.0	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Chloroform	ND		13	0.81	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Chloromethane	ND		13	0.79	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
cis-1,2-Dichloroethene	ND		13	1.7	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
cis-1,3-Dichloropropene	ND		13	1.9	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Cyclohexane	ND		13	1.8	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Dichlorodifluoromethane	ND		13	1.1	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Ethylbenzene	ND		13	0.91	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Isopropylbenzene	ND		13	2.0	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Methyl acetate	ND		13	2.4	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Methyl tert-butyl ether	ND		13	1.3	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Methylcyclohexane	ND		13	2.0	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Methylene Chloride	ND		13	6.0	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Styrene	ND		13	0.66	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Tetrachloroethene	ND		13	1.8	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Toluene	2.6	J	13	0.99	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
trans-1,2-Dichloroethene	ND		13	1.4	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
trans-1,3-Dichloropropene	ND		13	5.8	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Trichloroethene	ND		13	2.9	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Trichlorofluoromethane	ND		13	1.2	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Vinyl chloride	ND		13	1.6	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1
Xylenes, Total	ND		26	2.2	ug/Kg	☼	02/27/13 09:50	02/27/13 13:44	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-2 (DUP)

Lab Sample ID: 480-33480-3

Date Collected: 02/26/13 11:00

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 94.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	02/27/13 09:50	02/27/13 13:44	1
Toluene-d8 (Surr)	109		71 - 125	02/27/13 09:50	02/27/13 13:44	1
4-Bromofluorobenzene (Surr)	90		72 - 126	02/27/13 09:50	02/27/13 13:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		370000	81000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2,4,6-Trichlorophenol	ND		370000	24000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2,4-Dichlorophenol	ND		370000	19000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2,4-Dimethylphenol	ND		370000	100000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2,4-Dinitrophenol	ND		720000	130000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2,4-Dinitrotoluene	ND		370000	57000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2,6-Dinitrotoluene	ND		370000	90000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2-Chloronaphthalene	ND		370000	25000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2-Chlorophenol	ND		370000	19000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2-Methylnaphthalene	ND		370000	4500	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2-Methylphenol	ND		370000	11000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2-Nitroaniline	ND		720000	120000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
2-Nitrophenol	ND		370000	17000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
3,3'-Dichlorobenzidine	ND		370000	320000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
3-Nitroaniline	ND		720000	85000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
4,6-Dinitro-2-methylphenol	ND		720000	130000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
4-Bromophenyl phenyl ether	ND		370000	120000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
4-Chloro-3-methylphenol	ND		370000	15000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
4-Chloroaniline	ND		370000	110000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
4-Chlorophenyl phenyl ether	ND		370000	7900	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
4-Methylphenol	ND		720000	21000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
4-Nitroaniline	ND		720000	41000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
4-Nitrophenol	ND		720000	89000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Acenaphthene	ND		370000	4300	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Acenaphthylene	ND		370000	3000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Acetophenone	ND		370000	19000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Anthracene	ND		370000	9500	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Atrazine	ND		370000	16000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Benzaldehyde	ND		370000	40000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Benzo(a)anthracene	ND		370000	6400	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Benzo(a)pyrene	ND		370000	8900	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Benzo(b)fluoranthene	ND		370000	7200	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Benzo(g,h,i)perylene	ND		370000	4400	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Benzo(k)fluoranthene	ND		370000	4100	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Biphenyl	ND		370000	23000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
bis (2-chloroisopropyl) ether	ND		370000	39000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Bis(2-chloroethoxy)methane	ND		370000	20000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Bis(2-chloroethyl)ether	ND		370000	32000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Bis(2-ethylhexyl) phthalate	ND		370000	120000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Butyl benzyl phthalate	ND		370000	99000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Caprolactam	ND		370000	160000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Carbazole	ND		370000	4300	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Chrysene	ND		370000	3700	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Dibenz(a,h)anthracene	ND		370000	4300	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-2 (DUP)

Lab Sample ID: 480-33480-3

Date Collected: 02/26/13 11:00

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 94.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		370000	3800	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Diethyl phthalate	ND		370000	11000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Dimethyl phthalate	ND		370000	9600	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Di-n-butyl phthalate	ND		370000	130000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Di-n-octyl phthalate	ND		370000	8600	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Fluoranthene	7500	J	370000	5300	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Fluorene	ND		370000	8500	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Hexachlorobenzene	ND		370000	18000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Hexachlorobutadiene	ND		370000	19000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Hexachlorocyclopentadiene	ND		370000	110000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Hexachloroethane	ND		370000	29000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Indeno(1,2,3-cd)pyrene	ND		370000	10000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Isophorone	ND		370000	18000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Naphthalene	ND		370000	6100	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Nitrobenzene	ND		370000	16000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
N-Nitrosodi-n-propylamine	ND		370000	29000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
N-Nitrosodiphenylamine	ND		370000	20000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Pentachlorophenol	ND		720000	130000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Phenanthrene	ND		370000	7700	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Phenol	ND		370000	39000	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20
Pyrene	11000	J	370000	2400	ug/Kg	☼	02/27/13 08:04	02/28/13 19:23	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	0	X	39 - 146	02/27/13 08:04	02/28/13 19:23	20
2-Fluorobiphenyl	0	X	37 - 120	02/27/13 08:04	02/28/13 19:23	20
2-Fluorophenol	0	X	18 - 120	02/27/13 08:04	02/28/13 19:23	20
Nitrobenzene-d5	0	X	34 - 132	02/27/13 08:04	02/28/13 19:23	20
Phenol-d5	0	X	11 - 120	02/27/13 08:04	02/28/13 19:23	20
p-Terphenyl-d14	0	X	65 - 153	02/27/13 08:04	02/28/13 19:23	20

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2400	480	ug/Kg	☼	02/27/13 08:07	02/27/13 20:25	10
PCB-1221	ND		2400	480	ug/Kg	☼	02/27/13 08:07	02/27/13 20:25	10
PCB-1232	ND		2400	480	ug/Kg	☼	02/27/13 08:07	02/27/13 20:25	10
PCB-1242	ND		2400	480	ug/Kg	☼	02/27/13 08:07	02/27/13 20:25	10
PCB-1248	ND		2400	480	ug/Kg	☼	02/27/13 08:07	02/27/13 20:25	10
PCB-1254	ND		2400	1100	ug/Kg	☼	02/27/13 08:07	02/27/13 20:25	10
PCB-1260	ND		2400	1100	ug/Kg	☼	02/27/13 08:07	02/27/13 20:25	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	132		47 - 176	02/27/13 08:07	02/27/13 20:25	10
Tetrachloro-m-xylene	149		46 - 175	02/27/13 08:07	02/27/13 20:25	10

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	181		10.5		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Antimony	ND		15.7		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Arsenic	ND		2.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Barium	9.8		0.52		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-2 (DUP)

Lab Sample ID: 480-33480-3

Date Collected: 02/26/13 11:00

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 94.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.21		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Cadmium	ND		0.21		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Calcium	9170		52.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Chromium	1.8		0.52		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Cobalt	ND		0.52		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Copper	8.2		1.0		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Iron	8480	B7	10.5		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Lead	83.3		1.0		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Magnesium	181		20.9		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Manganese	11.1		0.21		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Nickel	ND		5.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Potassium	1180		31.4		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Selenium	ND		4.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Silver	ND		0.52		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Sodium	ND		146		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Thallium	ND		6.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Vanadium	15.4		0.52		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1
Zinc	14.0		2.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:12	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.060		0.021		mg/Kg	☼	02/27/13 09:30	02/27/13 14:40	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-3

Lab Sample ID: 480-33480-4

Date Collected: 02/26/13 11:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		8.5	0.62	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,1,2,2-Tetrachloroethane	ND		8.5	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,1,2-Trichloroethane	ND		8.5	1.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.5	1.9	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,1-Dichloroethane	ND		8.5	1.0	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,1-Dichloroethene	ND		8.5	1.0	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,2,4-Trichlorobenzene	ND		8.5	0.52	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,2-Dibromo-3-Chloropropane	ND		8.5	4.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,2-Dibromoethane	ND		8.5	1.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,2-Dichlorobenzene	ND		8.5	0.67	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,2-Dichloroethane	ND		8.5	0.43	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,2-Dichloropropane	ND		8.5	4.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,3-Dichlorobenzene	ND		8.5	0.44	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
1,4-Dichlorobenzene	ND		8.5	1.2	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
2-Hexanone	ND		43	4.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
2-Butanone (MEK)	ND		43	3.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
4-Methyl-2-pentanone (MIBK)	ND		43	2.8	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Acetone	ND		43	7.2	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Benzene	ND		8.5	0.42	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Bromodichloromethane	ND		8.5	1.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Bromoform	ND		8.5	4.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Bromomethane	ND		8.5	0.77	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Carbon disulfide	ND		8.5	4.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Carbon tetrachloride	ND		8.5	0.83	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Chlorobenzene	ND		8.5	1.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Dibromochloromethane	ND		8.5	1.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Chloroethane	ND		8.5	1.9	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Chloroform	ND		8.5	0.53	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Chloromethane	ND		8.5	0.52	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
cis-1,2-Dichloroethene	ND		8.5	1.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
cis-1,3-Dichloropropene	ND		8.5	1.2	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Cyclohexane	ND		8.5	1.2	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Dichlorodifluoromethane	ND		8.5	0.70	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Ethylbenzene	ND		8.5	0.59	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Isopropylbenzene	ND		8.5	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Methyl acetate	ND		8.5	1.6	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Methyl tert-butyl ether	ND		8.5	0.84	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Methylcyclohexane	ND		8.5	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Methylene Chloride	ND		8.5	3.9	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Styrene	ND		8.5	0.43	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Tetrachloroethene	ND		8.5	1.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Toluene	0.71	J B	8.5	0.64	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
trans-1,2-Dichloroethene	ND		8.5	0.88	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
trans-1,3-Dichloropropene	ND		8.5	3.8	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Trichloroethene	ND		8.5	1.9	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Trichlorofluoromethane	ND		8.5	0.81	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Vinyl chloride	ND		8.5	1.0	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1
Xylenes, Total	1.8	J	17	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 22:30	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-3

Lab Sample ID: 480-33480-4

Date Collected: 02/26/13 11:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 78.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		64 - 126	03/08/13 19:06	03/08/13 22:30	1
Toluene-d8 (Surr)	100		71 - 125	03/08/13 19:06	03/08/13 22:30	1
4-Bromofluorobenzene (Surr)	101		72 - 126	03/08/13 19:06	03/08/13 22:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1100	230	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2,4,6-Trichlorophenol	ND		1100	69	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2,4-Dichlorophenol	ND		1100	55	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2,4-Dimethylphenol	ND		1100	280	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2,4-Dinitrophenol	ND		2000	360	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2,4-Dinitrotoluene	ND		1100	160	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2,6-Dinitrotoluene	ND		1100	260	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2-Chloronaphthalene	ND		1100	70	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2-Chlorophenol	ND		1100	53	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2-Methylnaphthalene	ND		1100	13	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2-Methylphenol	ND		1100	32	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2-Nitroaniline	ND		2000	330	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
2-Nitrophenol	ND		1100	48	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
3,3'-Dichlorobenzidine	ND		1100	910	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
3-Nitroaniline	ND		2000	240	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
4,6-Dinitro-2-methylphenol	ND		2000	360	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
4-Bromophenyl phenyl ether	ND		1100	330	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
4-Chloro-3-methylphenol	ND		1100	43	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
4-Chloroaniline	ND		1100	310	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
4-Chlorophenyl phenyl ether	ND		1100	22	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
4-Methylphenol	ND		2000	58	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
4-Nitroaniline	ND		2000	120	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
4-Nitrophenol	ND		2000	250	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Acenaphthene	110	J	1100	12	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Acenaphthylene	ND		1100	8.5	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Acetophenone	ND		1100	54	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Anthracene	260	J	1100	27	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Atrazine	ND		1100	46	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Benzaldehyde	ND		1100	110	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Benzo(a)anthracene	410	J	1100	18	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Benzo(a)pyrene	350	J	1100	25	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Benzo(b)fluoranthene	530	J	1100	20	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Benzo(g,h,i)perylene	100	J	1100	13	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Benzo(k)fluoranthene	170	J	1100	11	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Biphenyl	ND		1100	65	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
bis (2-chloroisopropyl) ether	ND		1100	110	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Bis(2-chloroethoxy)methane	ND		1100	57	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Bis(2-chloroethyl)ether	ND		1100	90	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Bis(2-ethylhexyl) phthalate	ND		1100	340	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Butyl benzyl phthalate	ND		1100	280	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Caprolactam	ND		1100	450	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Carbazole	130	J	1100	12	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Chrysene	350	J	1100	10	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Dibenz(a,h)anthracene	ND		1100	12	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-3

Lab Sample ID: 480-33480-4

Date Collected: 02/26/13 11:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	86	J	1100	11	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Diethyl phthalate	ND		1100	32	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Dimethyl phthalate	ND		1100	27	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Di-n-butyl phthalate	ND		1100	360	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Di-n-octyl phthalate	ND		1100	24	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Fluoranthene	1000	J	1100	15	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Fluorene	120	J	1100	24	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Hexachlorobenzene	ND		1100	52	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Hexachlorobutadiene	ND		1100	53	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Hexachlorocyclopentadiene	ND		1100	320	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Hexachloroethane	ND		1100	81	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Indeno(1,2,3-cd)pyrene	92	J	1100	29	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Isophorone	ND		1100	52	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Naphthalene	ND		1100	17	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Nitrobenzene	ND		1100	46	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
N-Nitrosodi-n-propylamine	ND		1100	83	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
N-Nitrosodiphenylamine	ND		1100	57	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Pentachlorophenol	ND		2000	360	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Phenanthrene	990	J	1100	22	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Phenol	ND		1100	110	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5
Pyrene	710	J	1100	6.8	ug/Kg	☼	02/27/13 08:04	02/28/13 19:48	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	80		39 - 146	02/27/13 08:04	02/28/13 19:48	5
2-Fluorobiphenyl	82		37 - 120	02/27/13 08:04	02/28/13 19:48	5
2-Fluorophenol	80		18 - 120	02/27/13 08:04	02/28/13 19:48	5
Nitrobenzene-d5	82		34 - 132	02/27/13 08:04	02/28/13 19:48	5
Phenol-d5	79		11 - 120	02/27/13 08:04	02/28/13 19:48	5
p-Terphenyl-d14	84		65 - 153	02/27/13 08:04	02/28/13 19:48	5

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		230	45	ug/Kg	☼	02/27/13 08:07	02/27/13 21:14	1
PCB-1221	ND		230	45	ug/Kg	☼	02/27/13 08:07	02/27/13 21:14	1
PCB-1232	ND		230	45	ug/Kg	☼	02/27/13 08:07	02/27/13 21:14	1
PCB-1242	ND		230	45	ug/Kg	☼	02/27/13 08:07	02/27/13 21:14	1
PCB-1248	ND		230	45	ug/Kg	☼	02/27/13 08:07	02/27/13 21:14	1
PCB-1254	ND		230	110	ug/Kg	☼	02/27/13 08:07	02/27/13 21:14	1
PCB-1260	ND		230	110	ug/Kg	☼	02/27/13 08:07	02/27/13 21:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	84		47 - 176	02/27/13 08:07	02/27/13 21:14	1
Tetrachloro-m-xylene	103		46 - 175	02/27/13 08:07	02/27/13 21:14	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	3750		12.6		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Antimony	ND		18.8		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Arsenic	3.4		2.5		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Barium	292		0.63		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-3

Lab Sample ID: 480-33480-4

Date Collected: 02/26/13 11:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.25		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Cadmium	0.35		0.25		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Calcium	57200		62.8		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Chromium	4.0		0.63		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Cobalt	2.2		0.63		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Copper	13.5		1.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Iron	6020	B7	12.6		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Lead	66.4		1.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Magnesium	5310		25.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Manganese	347		0.25		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Nickel	ND		6.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Potassium	840		37.7		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Selenium	ND		5.0		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Silver	ND		0.63		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Sodium	ND		176		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Thallium	ND		7.5		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Vanadium	6.3		0.63		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1
Zinc	158		2.5		mg/Kg	☼	02/27/13 14:20	02/28/13 15:14	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.025		mg/Kg	☼	02/27/13 09:30	02/27/13 14:42	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-3 (DUP)

Lab Sample ID: 480-33480-5

Date Collected: 02/26/13 11:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 76.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	0.74	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,1,1,2-Tetrachloroethane	ND		10	1.6	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,1,2-Trichloroethane	ND		10	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	2.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,1-Dichloroethane	ND		10	1.2	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,1-Dichloroethene	ND		10	1.2	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,2,4-Trichlorobenzene	ND		10	0.62	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,2-Dibromo-3-Chloropropane	ND		10	5.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,2-Dibromoethane	ND		10	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,2-Dichlorobenzene	ND		10	0.79	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,2-Dichloroethane	ND		10	0.51	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,2-Dichloropropane	ND		10	5.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,3-Dichlorobenzene	ND		10	0.52	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
1,4-Dichlorobenzene	ND		10	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
2-Hexanone	ND		51	5.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
2-Butanone (MEK)	ND		51	3.7	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
4-Methyl-2-pentanone (MIBK)	ND		51	3.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Acetone	8.6	J	51	8.5	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Benzene	ND		10	0.50	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Bromodichloromethane	ND		10	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Bromoform	ND		10	5.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Bromomethane	ND		10	0.91	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Carbon disulfide	ND		10	5.1	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Carbon tetrachloride	ND		10	0.98	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Chlorobenzene	ND		10	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Dibromochloromethane	ND		10	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Chloroethane	ND		10	2.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Chloroform	ND		10	0.63	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Chloromethane	ND		10	0.61	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
cis-1,2-Dichloroethene	ND		10	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
cis-1,3-Dichloropropene	ND		10	1.5	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Cyclohexane	ND		10	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Dichlorodifluoromethane	ND		10	0.84	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Ethylbenzene	ND		10	0.70	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Isopropylbenzene	ND		10	1.5	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Methyl acetate	ND		10	1.9	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Methyl tert-butyl ether	ND		10	1.0	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Methylcyclohexane	ND		10	1.5	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Methylene Chloride	ND		10	4.7	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Styrene	ND		10	0.51	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Tetrachloroethene	ND		10	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Toluene	1.5	J B	10	0.77	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
trans-1,2-Dichloroethene	ND		10	1.0	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
trans-1,3-Dichloropropene	ND		10	4.5	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Trichloroethene	ND		10	2.2	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Trichlorofluoromethane	ND		10	0.96	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Vinyl chloride	ND		10	1.2	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1
Xylenes, Total	ND		20	1.7	ug/Kg	☼	03/08/13 19:06	03/08/13 22:56	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-3 (DUP)

Date Collected: 02/26/13 11:25

Date Received: 02/26/13 15:28

Lab Sample ID: 480-33480-5

Matrix: Solid

Percent Solids: 76.2

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	03/08/13 19:06	03/08/13 22:56	1
Toluene-d8 (Surr)	99		71 - 125	03/08/13 19:06	03/08/13 22:56	1
4-Bromofluorobenzene (Surr)	102		72 - 126	03/08/13 19:06	03/08/13 22:56	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-4

Lab Sample ID: 480-33480-6

Date Collected: 02/26/13 12:20

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.2	0.45	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,1,1,2-Tetrachloroethane	ND		6.2	1.0	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,1,2-Trichloroethane	ND		6.2	0.81	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.2	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,1-Dichloroethane	ND		6.2	0.76	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,1-Dichloroethene	ND		6.2	0.76	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,2,4-Trichlorobenzene	ND		6.2	0.38	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,2-Dibromo-3-Chloropropane	ND		6.2	3.1	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,2-Dibromoethane	ND		6.2	0.80	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,2-Dichlorobenzene	ND		6.2	0.48	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,2-Dichloroethane	ND		6.2	0.31	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,2-Dichloropropane	ND		6.2	3.1	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,3-Dichlorobenzene	ND		6.2	0.32	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
1,4-Dichlorobenzene	ND		6.2	0.87	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
2-Hexanone	ND		31	3.1	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
2-Butanone (MEK)	ND		31	2.3	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
4-Methyl-2-pentanone (MIBK)	ND		31	2.0	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Acetone	5.4	J	31	5.2	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Benzene	ND		6.2	0.30	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Bromodichloromethane	ND		6.2	0.83	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Bromoform	ND		6.2	3.1	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Bromomethane	ND		6.2	0.56	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Carbon disulfide	ND		6.2	3.1	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Carbon tetrachloride	ND		6.2	0.60	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Chlorobenzene	ND		6.2	0.82	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Dibromochloromethane	ND		6.2	0.79	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Chloroethane	ND		6.2	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Chloroform	ND		6.2	0.38	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Chloromethane	ND		6.2	0.37	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
cis-1,2-Dichloroethene	ND		6.2	0.79	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
cis-1,3-Dichloropropene	ND		6.2	0.89	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Cyclohexane	ND		6.2	0.87	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Dichlorodifluoromethane	ND		6.2	0.51	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Ethylbenzene	ND		6.2	0.43	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Isopropylbenzene	ND		6.2	0.93	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Methyl acetate	ND		6.2	1.2	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Methyl tert-butyl ether	ND		6.2	0.61	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Methylcyclohexane	ND		6.2	0.94	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Methylene Chloride	ND		6.2	2.9	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Styrene	ND		6.2	0.31	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Tetrachloroethene	ND		6.2	0.83	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Toluene	ND		6.2	0.47	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
trans-1,2-Dichloroethene	ND		6.2	0.64	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
trans-1,3-Dichloropropene	ND		6.2	2.7	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Trichloroethene	ND		6.2	1.4	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Trichlorofluoromethane	ND		6.2	0.59	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Vinyl chloride	ND		6.2	0.76	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	03/08/13 19:06	03/08/13 23:21	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-4

Lab Sample ID: 480-33480-6

Date Collected: 02/26/13 12:20

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 87.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		64 - 126	03/08/13 19:06	03/08/13 23:21	1
Toluene-d8 (Surr)	102		71 - 125	03/08/13 19:06	03/08/13 23:21	1
4-Bromofluorobenzene (Surr)	93		72 - 126	03/08/13 19:06	03/08/13 23:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		14000	2900	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2,4,6-Trichlorophenol	ND		14000	890	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2,4-Dichlorophenol	ND		14000	710	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2,4-Dimethylphenol	ND		14000	3600	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2,4-Dinitrophenol	ND		26000	4700	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2,4-Dinitrotoluene	ND		14000	2100	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2,6-Dinitrotoluene	ND		14000	3300	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2-Chloronaphthalene	ND		14000	900	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2-Chlorophenol	ND		14000	690	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2-Methylnaphthalene	ND		14000	160	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2-Methylphenol	ND		14000	410	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2-Nitroaniline	ND		26000	4300	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
2-Nitrophenol	ND		14000	620	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
3,3'-Dichlorobenzidine	ND		14000	12000	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
3-Nitroaniline	ND		26000	3100	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
4,6-Dinitro-2-methylphenol	ND		26000	4600	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
4-Bromophenyl phenyl ether	ND		14000	4300	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
4-Chloro-3-methylphenol	ND		14000	550	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
4-Chloroaniline	ND		14000	3900	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
4-Chlorophenyl phenyl ether	ND		14000	290	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
4-Methylphenol	ND		26000	750	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
4-Nitroaniline	ND		26000	1500	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
4-Nitrophenol	ND		26000	3300	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Acenaphthene	ND		14000	160	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Acenaphthylene	ND		14000	110	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Acetophenone	ND		14000	690	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Anthracene	430	J	14000	340	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Atrazine	ND		14000	600	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Benzaldehyde	ND		14000	1500	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Benzo(a)anthracene	ND		14000	230	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Benzo(a)pyrene	600	J	14000	320	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Benzo(b)fluoranthene	790	J	14000	260	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Benzo(g,h,i)perylene	ND		14000	160	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Benzo(k)fluoranthene	440	J	14000	150	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Biphenyl	ND		14000	840	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
bis (2-chloroisopropyl) ether	ND		14000	1400	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Bis(2-chloroethoxy)methane	ND		14000	730	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Bis(2-chloroethyl)ether	ND		14000	1200	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Bis(2-ethylhexyl) phthalate	ND		14000	4300	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Butyl benzyl phthalate	ND		14000	3600	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Caprolactam	ND		14000	5800	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Carbazole	ND		14000	160	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Chrysene	ND		14000	130	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Dibenz(a,h)anthracene	ND		14000	160	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-4

Lab Sample ID: 480-33480-6

Date Collected: 02/26/13 12:20

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		14000	140	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Diethyl phthalate	ND		14000	410	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Dimethyl phthalate	ND		14000	350	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Di-n-butyl phthalate	ND		14000	4700	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Di-n-octyl phthalate	ND		14000	310	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Fluoranthene	1500	J	14000	190	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Fluorene	ND		14000	310	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Hexachlorobenzene	ND		14000	670	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Hexachlorobutadiene	ND		14000	690	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Hexachlorocyclopentadiene	ND		14000	4100	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Hexachloroethane	ND		14000	1000	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Indeno(1,2,3-cd)pyrene	ND		14000	370	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Isophorone	ND		14000	670	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Naphthalene	ND		14000	220	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Nitrobenzene	ND		14000	600	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
N-Nitrosodi-n-propylamine	ND		14000	1100	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
N-Nitrosodiphenylamine	ND		14000	740	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Pentachlorophenol	ND		26000	4600	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Phenanthrene	1700	J	14000	280	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Phenol	ND		14000	1400	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10
Pyrene	1200	J	14000	87	ug/Kg	☼	03/08/13 14:48	03/11/13 12:52	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	0	X	39 - 146	03/08/13 14:48	03/11/13 12:52	10
2-Fluorobiphenyl	69		37 - 120	03/08/13 14:48	03/11/13 12:52	10
2-Fluorophenol	0	X	18 - 120	03/08/13 14:48	03/11/13 12:52	10
Nitrobenzene-d5	45		34 - 132	03/08/13 14:48	03/11/13 12:52	10
Phenol-d5	0	X	11 - 120	03/08/13 14:48	03/11/13 12:52	10
p-Terphenyl-d14	74		65 - 153	03/08/13 14:48	03/11/13 12:52	10

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2700	520	ug/Kg	☼	03/08/13 09:13	03/10/13 18:51	10
PCB-1221	ND		2700	520	ug/Kg	☼	03/08/13 09:13	03/10/13 18:51	10
PCB-1232	ND		2700	520	ug/Kg	☼	03/08/13 09:13	03/10/13 18:51	10
PCB-1242	ND		2700	520	ug/Kg	☼	03/08/13 09:13	03/10/13 18:51	10
PCB-1248	ND		2700	520	ug/Kg	☼	03/08/13 09:13	03/10/13 18:51	10
PCB-1254	1700	J	2700	1300	ug/Kg	☼	03/08/13 09:13	03/10/13 18:51	10
PCB-1260	1300	J	2700	1300	ug/Kg	☼	03/08/13 09:13	03/10/13 18:51	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	125		47 - 176	03/08/13 09:13	03/10/13 18:51	10
Tetrachloro-m-xylene	160		46 - 175	03/08/13 09:13	03/10/13 18:51	10

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	758		11.5		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Antimony	ND		17.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Arsenic	2.4		2.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Barium	49.6		0.57		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-4

Lab Sample ID: 480-33480-6

Date Collected: 02/26/13 12:20

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.23		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Cadmium	ND		0.23		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Calcium	11600		57.4		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Chromium	2.6		0.57		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Cobalt	ND		0.57		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Copper	30.3		1.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Iron	5700	B7	11.5		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Lead	4090		1.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Magnesium	541		22.9		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Manganese	32.3		0.23		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Nickel	ND		5.7		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Potassium	1280		34.4		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Selenium	ND		4.6		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Silver	ND		0.57		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Sodium	ND		161		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Thallium	ND		6.9		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Vanadium	4.1		0.57		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1
Zinc	14.3		2.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	116	^	0.0050		mg/L		03/09/13 12:10	03/11/13 12:48	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.022		mg/Kg	☼	02/27/13 09:30	02/27/13 14:44	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-4 (DUP)

Lab Sample ID: 480-33480-7

Date Collected: 02/26/13 12:20

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.8	0.42	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,1,2,2-Tetrachloroethane	ND		5.8	0.94	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,1,2-Trichloroethane	ND		5.8	0.75	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.8	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,1-Dichloroethane	ND		5.8	0.71	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,1-Dichloroethene	ND		5.8	0.71	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,2,4-Trichlorobenzene	ND		5.8	0.35	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,2-Dibromo-3-Chloropropane	ND		5.8	2.9	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,2-Dibromoethane	ND		5.8	0.75	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,2-Dichlorobenzene	ND		5.8	0.45	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,2-Dichloroethane	ND		5.8	0.29	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,2-Dichloropropane	ND		5.8	2.9	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,3-Dichlorobenzene	ND		5.8	0.30	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
1,4-Dichlorobenzene	ND		5.8	0.81	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
2-Hexanone	ND		29	2.9	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
2-Butanone (MEK)	ND		29	2.1	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
4-Methyl-2-pentanone (MIBK)	ND		29	1.9	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Acetone	5.2	J	29	4.9	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Benzene	ND		5.8	0.28	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Bromodichloromethane	ND		5.8	0.78	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Bromoform	ND		5.8	2.9	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Bromomethane	ND		5.8	0.52	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Carbon disulfide	ND		5.8	2.9	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Carbon tetrachloride	ND		5.8	0.56	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Chlorobenzene	ND		5.8	0.77	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Dibromochloromethane	ND		5.8	0.74	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Chloroethane	ND		5.8	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Chloroform	ND		5.8	0.36	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Chloromethane	ND		5.8	0.35	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
cis-1,2-Dichloroethene	ND		5.8	0.74	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
cis-1,3-Dichloropropene	ND		5.8	0.84	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Cyclohexane	ND		5.8	0.81	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Dichlorodifluoromethane	ND		5.8	0.48	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Ethylbenzene	ND		5.8	0.40	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Isopropylbenzene	ND		5.8	0.88	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Methyl acetate	ND		5.8	1.1	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Methyl tert-butyl ether	ND		5.8	0.57	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Methylcyclohexane	ND		5.8	0.88	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Methylene Chloride	ND		5.8	2.7	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Styrene	ND		5.8	0.29	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Tetrachloroethene	ND		5.8	0.78	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Toluene	ND		5.8	0.44	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
trans-1,2-Dichloroethene	ND		5.8	0.60	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
trans-1,3-Dichloropropene	ND		5.8	2.6	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Trichloroethene	ND		5.8	1.3	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Trichlorofluoromethane	ND		5.8	0.55	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Vinyl chloride	ND		5.8	0.71	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1
Xylenes, Total	ND		12	0.98	ug/Kg	☼	03/08/13 19:06	03/08/13 23:46	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-4 (DUP)

Lab Sample ID: 480-33480-7

Date Collected: 02/26/13 12:20

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 85.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 126	03/08/13 19:06	03/08/13 23:46	1
Toluene-d8 (Surr)	104		71 - 125	03/08/13 19:06	03/08/13 23:46	1
4-Bromofluorobenzene (Surr)	97		72 - 126	03/08/13 19:06	03/08/13 23:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		39000	8500	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2,4,6-Trichlorophenol	ND		39000	2600	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2,4-Dichlorophenol	ND		39000	2000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2,4-Dimethylphenol	ND		39000	10000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2,4-Dinitrophenol	ND		76000	14000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2,4-Dinitrotoluene	ND		39000	6000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2,6-Dinitrotoluene	ND		39000	9500	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2-Chloronaphthalene	ND		39000	2600	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2-Chlorophenol	ND		39000	2000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2-Methylnaphthalene	ND		39000	470	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2-Methylphenol	ND		39000	1200	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2-Nitroaniline	ND		76000	12000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
2-Nitrophenol	ND		39000	1800	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
3,3'-Dichlorobenzidine	ND		39000	34000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
3-Nitroaniline	ND		76000	8900	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
4,6-Dinitro-2-methylphenol	ND		76000	13000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
4-Bromophenyl phenyl ether	ND		39000	12000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
4-Chloro-3-methylphenol	ND		39000	1600	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
4-Chloroaniline	ND		39000	11000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
4-Chlorophenyl phenyl ether	ND		39000	830	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
4-Methylphenol	ND		76000	2200	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
4-Nitroaniline	ND		76000	4300	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
4-Nitrophenol	ND		76000	9400	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Acenaphthene	ND		39000	460	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Acenaphthylene	ND		39000	320	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Acetophenone	ND		39000	2000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Anthracene	ND		39000	990	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Atrazine	ND		39000	1700	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Benzaldehyde	ND		39000	4300	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Benzo(a)anthracene	ND		39000	670	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Benzo(a)pyrene	ND		39000	930	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Benzo(b)fluoranthene	1400 J		39000	750	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Benzo(g,h,i)perylene	ND		39000	470	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Benzo(k)fluoranthene	ND		39000	430	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Biphenyl	ND		39000	2400	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
bis (2-chloroisopropyl) ether	ND		39000	4100	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Bis(2-chloroethoxy)methane	ND		39000	2100	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Bis(2-chloroethyl)ether	ND		39000	3300	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Bis(2-ethylhexyl) phthalate	ND		39000	12000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Butyl benzyl phthalate	ND		39000	10000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Caprolactam	ND		39000	17000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Carbazole	ND		39000	450	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Chrysene	ND		39000	390	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Dibenz(a,h)anthracene	ND		39000	460	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-4 (DUP)

Lab Sample ID: 480-33480-7

Date Collected: 02/26/13 12:20

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		39000	400	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Diethyl phthalate	ND		39000	1200	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Dimethyl phthalate	ND		39000	1000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Di-n-butyl phthalate	ND		39000	13000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Di-n-octyl phthalate	ND		39000	910	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Fluoranthene	2500	J	39000	560	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Fluorene	ND		39000	890	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Hexachlorobenzene	ND		39000	1900	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Hexachlorobutadiene	ND		39000	2000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Hexachlorocyclopentadiene	ND		39000	12000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Hexachloroethane	ND		39000	3000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Indeno(1,2,3-cd)pyrene	ND		39000	1100	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Isophorone	ND		39000	1900	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Naphthalene	ND		39000	650	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Nitrobenzene	ND		39000	1700	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
N-Nitrosodi-n-propylamine	ND		39000	3100	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
N-Nitrosodiphenylamine	ND		39000	2100	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Pentachlorophenol	ND		76000	13000	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Phenanthrene	2700	J	39000	810	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Phenol	ND		39000	4100	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20
Pyrene	1800	J	39000	250	ug/Kg	☼	02/27/13 08:04	02/28/13 20:13	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	0	X	39 - 146	02/27/13 08:04	02/28/13 20:13	20
2-Fluorobiphenyl	72		37 - 120	02/27/13 08:04	02/28/13 20:13	20
2-Fluorophenol	0	X	18 - 120	02/27/13 08:04	02/28/13 20:13	20
Nitrobenzene-d5	0	X	34 - 132	02/27/13 08:04	02/28/13 20:13	20
Phenol-d5	0	X	11 - 120	02/27/13 08:04	02/28/13 20:13	20
p-Terphenyl-d14	0	X	65 - 153	02/27/13 08:04	02/28/13 20:13	20

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2800	560	ug/Kg	☼	02/27/13 08:07	02/27/13 20:50	10
PCB-1221	ND		2800	560	ug/Kg	☼	02/27/13 08:07	02/27/13 20:50	10
PCB-1232	ND		2800	560	ug/Kg	☼	02/27/13 08:07	02/27/13 20:50	10
PCB-1242	ND		2800	560	ug/Kg	☼	02/27/13 08:07	02/27/13 20:50	10
PCB-1248	ND		2800	560	ug/Kg	☼	02/27/13 08:07	02/27/13 20:50	10
PCB-1254	ND		2800	1300	ug/Kg	☼	02/27/13 08:07	02/27/13 20:50	10
PCB-1260	ND		2800	1300	ug/Kg	☼	02/27/13 08:07	02/27/13 20:50	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	158		47 - 176	02/27/13 08:07	02/27/13 20:50	10
Tetrachloro-m-xylene	148		46 - 175	02/27/13 08:07	02/27/13 20:50	10

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	926		11.4		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Antimony	ND		17.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Arsenic	ND		2.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Barium	27.3		0.57		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-4 (DUP)

Lab Sample ID: 480-33480-7

Date Collected: 02/26/13 12:20

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.23		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Cadmium	ND		0.23		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Calcium	7550		56.8		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Chromium	2.3		0.57		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Cobalt	ND		0.57		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Copper	24.3		1.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Iron	4540	B7	11.4		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Lead	1950		1.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Magnesium	747		22.7		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Manganese	33.6		0.23		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Nickel	ND		5.7		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Potassium	967		34.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Selenium	ND		4.5		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Silver	ND		0.57		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Sodium	ND		159		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Thallium	ND		6.8		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Vanadium	3.0		0.57		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1
Zinc	12.2		2.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:19	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	47.0	^	0.0050		mg/L		03/09/13 12:10	03/11/13 12:55	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17		0.023		mg/Kg	☼	02/27/13 09:30	02/27/13 14:49	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-5

Lab Sample ID: 480-33480-8

Date Collected: 02/26/13 12:50

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		9.2	0.67	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,1,2,2-Tetrachloroethane	ND		9.2	1.5	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,1,2-Trichloroethane	ND		9.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.2	2.1	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,1-Dichloroethane	ND		9.2	1.1	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,1-Dichloroethene	ND		9.2	1.1	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,2,4-Trichlorobenzene	ND		9.2	0.56	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,2-Dibromo-3-Chloropropane	ND		9.2	4.6	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,2-Dibromoethane	ND		9.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,2-Dichlorobenzene	ND		9.2	0.72	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,2-Dichloroethane	ND		9.2	0.46	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,2-Dichloropropane	ND		9.2	4.6	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,3-Dichlorobenzene	ND		9.2	0.47	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
1,4-Dichlorobenzene	ND		9.2	1.3	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
2-Hexanone	ND		46	4.6	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
2-Butanone (MEK)	ND		46	3.4	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
4-Methyl-2-pentanone (MIBK)	ND		46	3.0	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Acetone	41	J	46	7.7	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Benzene	ND		9.2	0.45	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Bromodichloromethane	ND		9.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Bromoform	ND		9.2	4.6	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Bromomethane	ND		9.2	0.83	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Carbon disulfide	5.1	J	9.2	4.6	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Carbon tetrachloride	ND		9.2	0.89	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Chlorobenzene	ND		9.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Dibromochloromethane	ND		9.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Chloroethane	ND		9.2	2.1	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Chloroform	ND		9.2	0.57	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Chloromethane	ND		9.2	0.56	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
cis-1,2-Dichloroethene	ND		9.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
cis-1,3-Dichloropropene	ND		9.2	1.3	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Cyclohexane	ND		9.2	1.3	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Dichlorodifluoromethane	ND		9.2	0.76	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Ethylbenzene	ND		9.2	0.63	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Isopropylbenzene	ND		9.2	1.4	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Methyl acetate	ND		9.2	1.7	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Methyl tert-butyl ether	ND		9.2	0.90	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Methylcyclohexane	ND		9.2	1.4	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Methylene Chloride	ND		9.2	4.2	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Styrene	ND		9.2	0.46	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Tetrachloroethene	ND		9.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Toluene	3.5	J	9.2	0.69	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
trans-1,2-Dichloroethene	ND		9.2	0.95	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
trans-1,3-Dichloropropene	ND		9.2	4.0	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Trichloroethene	ND		9.2	2.0	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Trichlorofluoromethane	ND		9.2	0.87	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Vinyl chloride	ND		9.2	1.1	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1
Xylenes, Total	ND		18	1.5	ug/Kg	☼	02/28/13 11:02	02/28/13 16:51	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-5

Lab Sample ID: 480-33480-8

Date Collected: 02/26/13 12:50

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 82.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		64 - 126	02/28/13 11:02	02/28/13 16:51	1
Toluene-d8 (Surr)	119		71 - 125	02/28/13 11:02	02/28/13 16:51	1
4-Bromofluorobenzene (Surr)	79		72 - 126	02/28/13 11:02	02/28/13 16:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		300000	66000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2,4,6-Trichlorophenol	ND		300000	20000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2,4-Dichlorophenol	ND		300000	16000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2,4-Dimethylphenol	ND		300000	81000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2,4-Dinitrophenol	ND		590000	110000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2,4-Dinitrotoluene	ND		300000	47000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2,6-Dinitrotoluene	ND		300000	74000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2-Chloronaphthalene	ND		300000	20000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2-Chlorophenol	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2-Methylnaphthalene	ND		300000	3700	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2-Methylphenol	ND		300000	9300	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2-Nitroaniline	ND		590000	97000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
2-Nitrophenol	ND		300000	14000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
3,3'-Dichlorobenzidine	ND		300000	260000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
3-Nitroaniline	ND		590000	69000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
4,6-Dinitro-2-methylphenol	ND		590000	100000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
4-Bromophenyl phenyl ether	ND		300000	96000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
4-Chloro-3-methylphenol	ND		300000	12000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
4-Chloroaniline	ND		300000	88000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
4-Chlorophenyl phenyl ether	ND		300000	6400	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
4-Methylphenol	ND		590000	17000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
4-Nitroaniline	ND		590000	34000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
4-Nitrophenol	ND		590000	73000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Acenaphthene	ND		300000	3500	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Acenaphthylene	ND		300000	2500	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Acetophenone	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Anthracene	ND		300000	7700	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Atrazine	ND		300000	13000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Benzaldehyde	ND		300000	33000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Benzo(a)anthracene	ND		300000	5200	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Benzo(a)pyrene	ND		300000	7300	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Benzo(b)fluoranthene	ND		300000	5800	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Benzo(g,h,i)perylene	ND		300000	3600	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Benzo(k)fluoranthene	ND		300000	3300	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Biphenyl	ND		300000	19000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
bis (2-chloroisopropyl) ether	ND		300000	32000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Bis(2-chloroethoxy)methane	ND		300000	16000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Bis(2-chloroethyl)ether	ND		300000	26000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Bis(2-ethylhexyl) phthalate	ND		300000	97000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Butyl benzyl phthalate	ND		300000	81000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Caprolactam	ND		300000	130000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Carbazole	ND		300000	3500	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Chrysene	ND		300000	3000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Dibenz(a,h)anthracene	ND		300000	3500	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-5

Lab Sample ID: 480-33480-8

Date Collected: 02/26/13 12:50

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		300000	3100	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Diethyl phthalate	ND		300000	9100	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Dimethyl phthalate	ND		300000	7900	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Di-n-butyl phthalate	ND		300000	100000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Di-n-octyl phthalate	ND		300000	7100	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Fluoranthene	9400	J	300000	4400	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Fluorene	ND		300000	6900	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Hexachlorobenzene	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Hexachlorobutadiene	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Hexachlorocyclopentadiene	ND		300000	91000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Hexachloroethane	ND		300000	23000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Indeno(1,2,3-cd)pyrene	ND		300000	8300	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Isophorone	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Naphthalene	ND		300000	5000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Nitrobenzene	ND		300000	13000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
N-Nitrosodi-n-propylamine	ND		300000	24000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
N-Nitrosodiphenylamine	ND		300000	16000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Pentachlorophenol	ND		590000	100000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Phenanthrene	9600	J	300000	6300	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Phenol	ND		300000	32000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20
Pyrene	12000	J	300000	2000	ug/Kg	☼	02/27/13 08:04	03/04/13 14:55	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	0	X	39 - 146	02/27/13 08:04	03/04/13 14:55	20
2-Fluorobiphenyl	0	X	37 - 120	02/27/13 08:04	03/04/13 14:55	20
2-Fluorophenol	0	X	18 - 120	02/27/13 08:04	03/04/13 14:55	20
Nitrobenzene-d5	0	X	34 - 132	02/27/13 08:04	03/04/13 14:55	20
Phenol-d5	0	X	11 - 120	02/27/13 08:04	03/04/13 14:55	20
p-Terphenyl-d14	0	X	65 - 153	02/27/13 08:04	03/04/13 14:55	20

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2400	470	ug/Kg	☼	02/27/13 08:07	02/27/13 21:39	10
PCB-1221	ND		2400	470	ug/Kg	☼	02/27/13 08:07	02/27/13 21:39	10
PCB-1232	ND		2400	470	ug/Kg	☼	02/27/13 08:07	02/27/13 21:39	10
PCB-1242	ND		2400	470	ug/Kg	☼	02/27/13 08:07	02/27/13 21:39	10
PCB-1248	ND		2400	470	ug/Kg	☼	02/27/13 08:07	02/27/13 21:39	10
PCB-1254	ND		2400	1100	ug/Kg	☼	02/27/13 08:07	02/27/13 21:39	10
PCB-1260	ND		2400	1100	ug/Kg	☼	02/27/13 08:07	02/27/13 21:39	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	111		47 - 176	02/27/13 08:07	02/27/13 21:39	10
Tetrachloro-m-xylene	126		46 - 175	02/27/13 08:07	02/27/13 21:39	10

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	428		12.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Antimony	ND		18.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Arsenic	ND		2.4		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Barium	18.0		0.60		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-5

Lab Sample ID: 480-33480-8

Date Collected: 02/26/13 12:50

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.24		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Cadmium	ND		0.24		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Calcium	3590		60.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Chromium	5.2		0.60		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Cobalt	ND		0.60		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Copper	28.3		1.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Iron	7140	B7	12.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Lead	234		1.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Magnesium	73.3		24.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Manganese	13.9		0.24		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Nickel	ND		6.0		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Potassium	1020		36.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Selenium	ND		4.8		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Silver	ND		0.60		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Sodium	ND		169		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Thallium	ND		7.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Vanadium	14.7		0.60		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1
Zinc	22.5		2.4		mg/Kg	☼	02/27/13 14:20	02/28/13 15:21	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.024		mg/Kg	☼	02/27/13 09:30	02/27/13 14:51	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-7

Lab Sample ID: 480-33480-10

Date Collected: 02/26/13 13:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		8.2	0.60	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,1,2,2-Tetrachloroethane	ND		8.2	1.3	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,1,2-Trichloroethane	ND		8.2	1.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.2	1.9	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,1-Dichloroethane	ND		8.2	1.0	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,1-Dichloroethene	ND		8.2	1.0	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,2,4-Trichlorobenzene	ND		8.2	0.50	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,2-Dibromo-3-Chloropropane	ND		8.2	4.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,2-Dibromoethane	ND		8.2	1.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,2-Dichlorobenzene	ND		8.2	0.64	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,2-Dichloroethane	ND		8.2	0.41	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,2-Dichloropropane	ND		8.2	4.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,3-Dichlorobenzene	ND		8.2	0.42	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
1,4-Dichlorobenzene	ND		8.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
2-Hexanone	ND		41	4.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
2-Butanone (MEK)	ND		41	3.0	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
4-Methyl-2-pentanone (MIBK)	ND		41	2.7	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Acetone	44		41	6.9	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Benzene	ND		8.2	0.40	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Bromodichloromethane	ND		8.2	1.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Bromoform	ND		8.2	4.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Bromomethane	ND		8.2	0.74	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Carbon disulfide	ND		8.2	4.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Carbon tetrachloride	ND		8.2	0.80	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Chlorobenzene	ND		8.2	1.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Dibromochloromethane	ND		8.2	1.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Chloroethane	ND		8.2	1.9	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Chloroform	ND		8.2	0.51	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Chloromethane	ND		8.2	0.50	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
cis-1,2-Dichloroethene	ND		8.2	1.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
cis-1,3-Dichloropropene	ND		8.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Cyclohexane	ND		8.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Dichlorodifluoromethane	ND		8.2	0.68	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Ethylbenzene	ND		8.2	0.57	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Isopropylbenzene	ND		8.2	1.2	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Methyl acetate	ND		8.2	1.5	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Methyl tert-butyl ether	ND		8.2	0.81	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Methylcyclohexane	ND		8.2	1.3	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Methylene Chloride	ND		8.2	3.8	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Styrene	ND		8.2	0.41	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Tetrachloroethene	ND		8.2	1.1	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Toluene	1.2 J		8.2	0.62	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
trans-1,2-Dichloroethene	ND		8.2	0.85	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
trans-1,3-Dichloropropene	ND		8.2	3.6	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Trichloroethene	ND		8.2	1.8	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Trichlorofluoromethane	ND		8.2	0.78	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Vinyl chloride	ND		8.2	1.0	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1
Xylenes, Total	ND		16	1.4	ug/Kg	☼	02/28/13 11:02	02/28/13 19:24	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-7

Lab Sample ID: 480-33480-10

Date Collected: 02/26/13 13:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 84.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		64 - 126	02/28/13 11:02	02/28/13 19:24	1
Toluene-d8 (Surr)	118		71 - 125	02/28/13 11:02	02/28/13 19:24	1
4-Bromofluorobenzene (Surr)	75		72 - 126	02/28/13 11:02	02/28/13 19:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		300000	64000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2,4,6-Trichlorophenol	ND		300000	19000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2,4-Dichlorophenol	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2,4-Dimethylphenol	ND		300000	79000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2,4-Dinitrophenol	ND		570000	100000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2,4-Dinitrotoluene	ND		300000	45000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2,6-Dinitrotoluene	ND		300000	72000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2-Chloronaphthalene	ND		300000	20000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2-Chlorophenol	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2-Methylnaphthalene	ND		300000	3600	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2-Methylphenol	ND		300000	9000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2-Nitroaniline	ND		570000	94000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
2-Nitrophenol	ND		300000	13000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
3,3'-Dichlorobenzidine	ND		300000	260000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
3-Nitroaniline	ND		570000	67000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
4,6-Dinitro-2-methylphenol	ND		570000	100000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
4-Bromophenyl phenyl ether	ND		300000	93000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
4-Chloro-3-methylphenol	ND		300000	12000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
4-Chloroaniline	ND		300000	86000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
4-Chlorophenyl phenyl ether	ND		300000	6200	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
4-Methylphenol	ND		570000	16000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
4-Nitroaniline	ND		570000	33000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
4-Nitrophenol	ND		570000	71000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Acenaphthene	ND		300000	3400	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Acenaphthylene	ND		300000	2400	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Acetophenone	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Anthracene	8900	J	300000	7500	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Atrazine	ND		300000	13000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Benzaldehyde	ND		300000	32000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Benzo(a)anthracene	ND		300000	5100	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Benzo(a)pyrene	ND		300000	7100	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Benzo(b)fluoranthene	ND		300000	5700	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Benzo(g,h,i)perylene	ND		300000	3500	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Benzo(k)fluoranthene	ND		300000	3200	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Biphenyl	ND		300000	18000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
bis (2-chloroisopropyl) ether	ND		300000	31000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Bis(2-chloroethoxy)methane	ND		300000	16000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Bis(2-chloroethyl)ether	ND		300000	25000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Bis(2-ethylhexyl) phthalate	ND		300000	94000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Butyl benzyl phthalate	ND		300000	79000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Caprolactam	ND		300000	130000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Carbazole	ND		300000	3400	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Chrysene	ND		300000	2900	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Dibenz(a,h)anthracene	ND		300000	3400	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-7

Lab Sample ID: 480-33480-10

Date Collected: 02/26/13 13:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	ND		300000	3100	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Diethyl phthalate	ND		300000	8900	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Dimethyl phthalate	ND		300000	7600	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Di-n-butyl phthalate	ND		300000	100000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Di-n-octyl phthalate	ND		300000	6900	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Fluoranthene	28000	J	300000	4200	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Fluorene	ND		300000	6800	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Hexachlorobenzene	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Hexachlorobutadiene	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Hexachlorocyclopentadiene	ND		300000	89000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Hexachloroethane	ND		300000	23000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Indeno(1,2,3-cd)pyrene	ND		300000	8100	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Isophorone	ND		300000	15000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Naphthalene	ND		300000	4900	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Nitrobenzene	ND		300000	13000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
N-Nitrosodi-n-propylamine	ND		300000	23000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
N-Nitrosodiphenylamine	ND		300000	16000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Pentachlorophenol	ND		570000	100000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Phenanthrene	26000	J	300000	6200	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Phenol	ND		300000	31000	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20
Pyrene	25000	J	300000	1900	ug/Kg	☼	02/27/13 08:04	03/04/13 15:20	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	0	X	39 - 146	02/27/13 08:04	03/04/13 15:20	20
2-Fluorobiphenyl	0	X	37 - 120	02/27/13 08:04	03/04/13 15:20	20
2-Fluorophenol	0	X	18 - 120	02/27/13 08:04	03/04/13 15:20	20
Nitrobenzene-d5	0	X	34 - 132	02/27/13 08:04	03/04/13 15:20	20
Phenol-d5	0	X	11 - 120	02/27/13 08:04	03/04/13 15:20	20
p-Terphenyl-d14	0	X	65 - 153	02/27/13 08:04	03/04/13 15:20	20

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2700	530	ug/Kg	☼	02/27/13 08:07	02/27/13 22:04	10
PCB-1221	ND		2700	530	ug/Kg	☼	02/27/13 08:07	02/27/13 22:04	10
PCB-1232	ND		2700	530	ug/Kg	☼	02/27/13 08:07	02/27/13 22:04	10
PCB-1242	ND		2700	530	ug/Kg	☼	02/27/13 08:07	02/27/13 22:04	10
PCB-1248	ND		2700	530	ug/Kg	☼	02/27/13 08:07	02/27/13 22:04	10
PCB-1254	1700	J	2700	1300	ug/Kg	☼	02/27/13 08:07	02/27/13 22:04	10
PCB-1260	ND		2700	1300	ug/Kg	☼	02/27/13 08:07	02/27/13 22:04	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	110		47 - 176	02/27/13 08:07	02/27/13 22:04	10
Tetrachloro-m-xylene	163		46 - 175	02/27/13 08:07	02/27/13 22:04	10

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	240		11.8		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Antimony	ND		17.6		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Arsenic	ND		2.4		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Barium	39.5		0.59		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-7

Lab Sample ID: 480-33480-10

Date Collected: 02/26/13 13:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.24		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Cadmium	ND		0.24		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Calcium	1940		58.8		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Chromium	2.2		0.59		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Cobalt	ND		0.59		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Copper	2.6		1.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Iron	1930	B7	11.8		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Lead	51.8		1.2		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Magnesium	167		23.5		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Manganese	21.8		0.24		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Nickel	ND		5.9		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Potassium	155		35.3		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Selenium	ND		4.7		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Silver	ND		0.59		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Sodium	ND		165		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Thallium	ND		7.1		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Vanadium	16.2		0.59		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1
Zinc	19.4		2.4		mg/Kg	☼	02/27/13 14:20	02/28/13 15:26	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023		mg/Kg	☼	02/27/13 09:30	02/27/13 14:55	1

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-33480-11

Date Collected: 02/26/13 00:00

Matrix: Water

Date Received: 02/26/13 15:28

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/10/13 15:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/10/13 15:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/10/13 15:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/10/13 15:53	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/10/13 15:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/10/13 15:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/10/13 15:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/10/13 15:53	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/10/13 15:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/10/13 15:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/10/13 15:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/10/13 15:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/10/13 15:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/10/13 15:53	1
2-Hexanone	ND		5.0	1.2	ug/L			03/10/13 15:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/10/13 15:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/10/13 15:53	1
Acetone	ND		10	3.0	ug/L			03/10/13 15:53	1
Benzene	ND		1.0	0.41	ug/L			03/10/13 15:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/10/13 15:53	1
Bromoform	ND		1.0	0.26	ug/L			03/10/13 15:53	1
Bromomethane	ND		1.0	0.69	ug/L			03/10/13 15:53	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/10/13 15:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/10/13 15:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/10/13 15:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/10/13 15:53	1
Chloroethane	ND		1.0	0.32	ug/L			03/10/13 15:53	1
Chloroform	ND		1.0	0.34	ug/L			03/10/13 15:53	1
Chloromethane	ND		1.0	0.35	ug/L			03/10/13 15:53	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/10/13 15:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/10/13 15:53	1
Cyclohexane	ND		1.0	0.18	ug/L			03/10/13 15:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/10/13 15:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/10/13 15:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/10/13 15:53	1
Methyl acetate	ND *		1.0	0.50	ug/L			03/10/13 15:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/10/13 15:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/10/13 15:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/10/13 15:53	1
Styrene	ND		1.0	0.73	ug/L			03/10/13 15:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/10/13 15:53	1
Toluene	ND		1.0	0.51	ug/L			03/10/13 15:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/10/13 15:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/10/13 15:53	1
Trichloroethene	ND		1.0	0.46	ug/L			03/10/13 15:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/10/13 15:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/10/13 15:53	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/10/13 15:53	1

TestAmerica Buffalo

Client Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-33480-11

Date Collected: 02/26/13 00:00

Matrix: Water

Date Received: 02/26/13 15:28

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	109		66 - 137		03/10/13 15:53	1
Toluene-d8 (Surr)	118		71 - 126		03/10/13 15:53	1
4-Bromofluorobenzene (Surr)	111		73 - 120		03/10/13 15:53	1

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (64-126)	TOL (71-125)	BFB (72-126)
480-33480-2	BB-2	105	106	91
480-33480-3	BB-2 (DUP)	101	109	90
480-33480-4	BB-3	102	100	101
480-33480-5	BB-3 (DUP)	101	99	102
480-33480-6	BB-4	104	102	93
480-33480-7	BB-4 (DUP)	105	104	97
480-33480-8	BB-5	102	119	79
480-33480-8 MS	BB-5	89	116	79
480-33480-8 MSD	BB-5	89	112	80
480-33480-10	BB-7	100	118	75
LCS 480-105072/5	Lab Control Sample	102	101	103
LCS 480-105255/5	Lab Control Sample	98	100	101
LCS 480-106590/4	Lab Control Sample	99	99	103
MB 480-105072/7	Method Blank	85	100	97
MB 480-105255/6	Method Blank	92	99	98
MB 480-106590/5	Method Blank	98	99	101

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	TOL (71-126)	BFB (73-120)
480-33480-11	TRIP BLANK	109	118	111
LCS 480-106691/5	Lab Control Sample	103	114	112
MB 480-106691/6	Method Blank	104	113	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (39-146)	FBP (37-120)	2FP (18-120)	NBZ (34-132)	PHL (11-120)	TPH (65-153)
480-33480-2	BB-2	0 X	0 X	0 X	0 X	0 X	0 X
480-33480-3	BB-2 (DUP)	0 X	0 X	0 X	0 X	0 X	0 X
480-33480-4	BB-3	80	82	80	82	79	84
480-33480-6	BB-4	0 X	69	0 X	45	0 X	74
480-33480-7	BB-4 (DUP)	0 X	72	0 X	0 X	0 X	0 X
480-33480-8	BB-5	0 X	0 X	0 X	0 X	0 X	0 X
480-33480-10	BB-7	0 X	0 X	0 X	0 X	0 X	0 X

TestAmerica Buffalo

Surrogate Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (39-146)	FBP (37-120)	2FP (18-120)	NBZ (34-132)	PHL (11-120)	TPH (65-153)
LCS 480-105056/2-A	Lab Control Sample	100	85	79	88	81	95
LCS 480-106567/2-A	Lab Control Sample	102	81	70	81	75	89
LCS 480-106567/3-A	Lab Control Sample Dup	105	80	71	81	77	92
MB 480-105056/1-A	Method Blank	86	85	85	89	87	93
MB 480-106567/1-A	Method Blank	93	87	80	86	84	95
Surrogate Legend							
TBP = 2,4,6-Tribromophenol							
FBP = 2-Fluorobiphenyl							
2FP = 2-Fluorophenol							
NBZ = Nitrobenzene-d5							
PHL = Phenol-d5							
TPH = p-Terphenyl-d14							

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB2 (47-176)	TCX2 (46-175)
480-33480-2	BB-2	81	117
480-33480-2 MS	BB-2	102	130
480-33480-2 MSD	BB-2	121	179 X
480-33480-3	BB-2 (DUP)	132	149
480-33480-4	BB-3	84	103
480-33480-6	BB-4	125	160
480-33480-7	BB-4 (DUP)	158	148
480-33480-8	BB-5	111	126
480-33480-10	BB-7	110	163
LCS 480-105058/2-A	Lab Control Sample	111	136
LCS 480-106492/2-A	Lab Control Sample	121	128
MB 480-105058/1-A	Method Blank	100	124
MB 480-106492/1-A	Method Blank	110	122
Surrogate Legend			
DCB = DCB Decachlorobiphenyl			
TCX = Tetrachloro-m-xylene			

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: MB 480-105072/7

Matrix: Solid

Analysis Batch: 105072

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			02/27/13 11:32	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			02/27/13 11:32	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			02/27/13 11:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			02/27/13 11:32	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			02/27/13 11:32	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			02/27/13 11:32	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			02/27/13 11:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			02/27/13 11:32	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			02/27/13 11:32	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			02/27/13 11:32	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			02/27/13 11:32	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			02/27/13 11:32	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			02/27/13 11:32	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			02/27/13 11:32	1
2-Hexanone	ND		25	2.5	ug/Kg			02/27/13 11:32	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			02/27/13 11:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			02/27/13 11:32	1
Acetone	ND		25	4.2	ug/Kg			02/27/13 11:32	1
Benzene	ND		5.0	0.25	ug/Kg			02/27/13 11:32	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			02/27/13 11:32	1
Bromoform	ND		5.0	2.5	ug/Kg			02/27/13 11:32	1
Bromomethane	ND		5.0	0.45	ug/Kg			02/27/13 11:32	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			02/27/13 11:32	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			02/27/13 11:32	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			02/27/13 11:32	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			02/27/13 11:32	1
Chloroethane	ND		5.0	1.1	ug/Kg			02/27/13 11:32	1
Chloroform	ND		5.0	0.31	ug/Kg			02/27/13 11:32	1
Chloromethane	ND		5.0	0.30	ug/Kg			02/27/13 11:32	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			02/27/13 11:32	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			02/27/13 11:32	1
Cyclohexane	ND		5.0	0.70	ug/Kg			02/27/13 11:32	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			02/27/13 11:32	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			02/27/13 11:32	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg			02/27/13 11:32	1
Methyl acetate	ND		5.0	0.93	ug/Kg			02/27/13 11:32	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			02/27/13 11:32	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			02/27/13 11:32	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			02/27/13 11:32	1
Styrene	ND		5.0	0.25	ug/Kg			02/27/13 11:32	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			02/27/13 11:32	1
Toluene	ND		5.0	0.38	ug/Kg			02/27/13 11:32	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			02/27/13 11:32	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			02/27/13 11:32	1
Trichloroethene	ND		5.0	1.1	ug/Kg			02/27/13 11:32	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			02/27/13 11:32	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			02/27/13 11:32	1
Xylenes, Total	ND		10	0.84	ug/Kg			02/27/13 11:32	1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: MB 480-105072/7

Matrix: Solid

Analysis Batch: 105072

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		64 - 126		02/27/13 11:32	1
Toluene-d8 (Surr)	100		71 - 125		02/27/13 11:32	1
4-Bromofluorobenzene (Surr)	97		72 - 126		02/27/13 11:32	1

Lab Sample ID: LCS 480-105072/5

Matrix: Solid

Analysis Batch: 105072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	46.7		ug/Kg		93	77 - 121
1,1,2,2-Tetrachloroethane	50.0	53.0		ug/Kg		106	80 - 120
1,1,2-Trichloroethane	50.0	48.5		ug/Kg		97	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	100	85.9		ug/Kg		86	60 - 140
1,1-Dichloroethane	50.0	47.1		ug/Kg		94	73 - 126
1,1-Dichloroethene	50.0	44.5		ug/Kg		89	59 - 125
1,2,4-Trichlorobenzene	50.0	52.4		ug/Kg		105	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	55.0		ug/Kg		110	63 - 124
1,2-Dibromoethane	50.0	52.0		ug/Kg		104	78 - 120
1,2-Dichlorobenzene	50.0	48.8		ug/Kg		98	75 - 120
1,2-Dichloroethane	50.0	48.3		ug/Kg		97	77 - 122
1,2-Dichloropropane	50.0	46.0		ug/Kg		92	75 - 124
1,3-Dichlorobenzene	50.0	48.8		ug/Kg		98	74 - 120
1,4-Dichlorobenzene	50.0	47.1		ug/Kg		94	73 - 120
2-Hexanone	250	273		ug/Kg		109	59 - 130
2-Butanone (MEK)	250	377	*	ug/Kg		151	70 - 134
4-Methyl-2-pentanone (MIBK)	250	263		ug/Kg		105	65 - 133
Acetone	250	238		ug/Kg		95	61 - 137
Benzene	50.0	45.3		ug/Kg		91	79 - 127
Bromodichloromethane	50.0	52.0		ug/Kg		104	80 - 122
Bromoform	50.0	47.9		ug/Kg		96	68 - 126
Bromomethane	50.0	40.4		ug/Kg		81	37 - 149
Carbon disulfide	50.0	50.5		ug/Kg		101	64 - 131
Carbon tetrachloride	50.0	46.7		ug/Kg		93	75 - 135
Chlorobenzene	50.0	47.3		ug/Kg		95	76 - 124
Dibromochloromethane	50.0	48.4		ug/Kg		97	76 - 125
Chloroethane	50.0	41.9		ug/Kg		84	69 - 135
Chloroform	50.0	46.6		ug/Kg		93	80 - 118
Chloromethane	50.0	39.6		ug/Kg		79	63 - 127
cis-1,2-Dichloroethene	50.0	45.6		ug/Kg		91	81 - 117
cis-1,3-Dichloropropene	50.0	52.5		ug/Kg		105	82 - 120
Cyclohexane	50.0	41.8		ug/Kg		84	70 - 130
Dichlorodifluoromethane	100	79.5		ug/Kg		80	57 - 142
Ethylbenzene	50.0	46.6		ug/Kg		93	80 - 120
Isopropylbenzene	50.0	48.9		ug/Kg		98	72 - 120
Methyl acetate	50.0	51.6		ug/Kg		103	60 - 140
Methyl tert-butyl ether	50.0	50.3		ug/Kg		101	63 - 125
Methylcyclohexane	50.0	42.1		ug/Kg		84	60 - 140

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCS 480-105072/5

Matrix: Solid

Analysis Batch: 105072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	50.0	45.9		ug/Kg		92	61 - 127
Styrene	50.0	49.9		ug/Kg		100	80 - 120
Tetrachloroethene	50.0	50.3		ug/Kg		101	74 - 122
Toluene	50.0	45.6		ug/Kg		91	74 - 128
trans-1,2-Dichloroethene	50.0	45.8		ug/Kg		92	78 - 126
trans-1,3-Dichloropropene	50.0	52.2		ug/Kg		104	73 - 123
Trichloroethene	50.0	46.9		ug/Kg		94	77 - 129
Trichlorofluoromethane	50.0	41.4		ug/Kg		83	65 - 146
Vinyl chloride	50.0	38.8		ug/Kg		78	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		64 - 126
Toluene-d8 (Surr)	101		71 - 125
4-Bromofluorobenzene (Surr)	103		72 - 126

Lab Sample ID: MB 480-105255/6

Matrix: Solid

Analysis Batch: 105255

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			02/28/13 12:20	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			02/28/13 12:20	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			02/28/13 12:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			02/28/13 12:20	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			02/28/13 12:20	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			02/28/13 12:20	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			02/28/13 12:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			02/28/13 12:20	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			02/28/13 12:20	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			02/28/13 12:20	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			02/28/13 12:20	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			02/28/13 12:20	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			02/28/13 12:20	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			02/28/13 12:20	1
2-Hexanone	ND		25	2.5	ug/Kg			02/28/13 12:20	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			02/28/13 12:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			02/28/13 12:20	1
Acetone	ND		25	4.2	ug/Kg			02/28/13 12:20	1
Benzene	ND		5.0	0.25	ug/Kg			02/28/13 12:20	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			02/28/13 12:20	1
Bromoform	ND		5.0	2.5	ug/Kg			02/28/13 12:20	1
Bromomethane	ND		5.0	0.45	ug/Kg			02/28/13 12:20	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			02/28/13 12:20	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			02/28/13 12:20	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			02/28/13 12:20	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			02/28/13 12:20	1
Chloroethane	ND		5.0	1.1	ug/Kg			02/28/13 12:20	1
Chloroform	ND		5.0	0.31	ug/Kg			02/28/13 12:20	1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: MB 480-105255/6

Matrix: Solid

Analysis Batch: 105255

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		5.0	0.30	ug/Kg			02/28/13 12:20	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			02/28/13 12:20	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			02/28/13 12:20	1
Cyclohexane	ND		5.0	0.70	ug/Kg			02/28/13 12:20	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			02/28/13 12:20	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			02/28/13 12:20	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg			02/28/13 12:20	1
Methyl acetate	ND		5.0	0.93	ug/Kg			02/28/13 12:20	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			02/28/13 12:20	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			02/28/13 12:20	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			02/28/13 12:20	1
Styrene	ND		5.0	0.25	ug/Kg			02/28/13 12:20	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			02/28/13 12:20	1
Toluene	ND		5.0	0.38	ug/Kg			02/28/13 12:20	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			02/28/13 12:20	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			02/28/13 12:20	1
Trichloroethene	ND		5.0	1.1	ug/Kg			02/28/13 12:20	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			02/28/13 12:20	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			02/28/13 12:20	1
Xylenes, Total	ND		10	0.84	ug/Kg			02/28/13 12:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		64 - 126		02/28/13 12:20	1
Toluene-d8 (Surr)	99		71 - 125		02/28/13 12:20	1
4-Bromofluorobenzene (Surr)	98		72 - 126		02/28/13 12:20	1

Lab Sample ID: LCS 480-105255/5

Matrix: Solid

Analysis Batch: 105255

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	46.4		ug/Kg		93	77 - 121
1,1,2,2-Tetrachloroethane	50.0	54.0		ug/Kg		108	80 - 120
1,1,2-Trichloroethane	50.0	50.7		ug/Kg		101	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	40.1		ug/Kg		80	60 - 140
1,1-Dichloroethane	50.0	46.6		ug/Kg		93	73 - 126
1,1-Dichloroethene	50.0	43.1		ug/Kg		86	59 - 125
1,2,4-Trichlorobenzene	50.0	53.5		ug/Kg		107	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	50.8		ug/Kg		102	63 - 124
1,2-Dibromoethane	50.0	52.6		ug/Kg		105	78 - 120
1,2-Dichlorobenzene	50.0	50.1		ug/Kg		100	75 - 120
1,2-Dichloroethane	50.0	50.4		ug/Kg		101	77 - 122
1,2-Dichloropropane	50.0	49.5		ug/Kg		99	75 - 124
1,3-Dichlorobenzene	50.0	49.8		ug/Kg		100	74 - 120
1,4-Dichlorobenzene	50.0	49.8		ug/Kg		100	73 - 120
2-Hexanone	250	273		ug/Kg		109	59 - 130
2-Butanone (MEK)	250	270		ug/Kg		108	70 - 134

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCS 480-105255/5

Matrix: Solid

Analysis Batch: 105255

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone (MIBK)	250	268		ug/Kg		107	65 - 133
Acetone	250	247		ug/Kg		99	61 - 137
Benzene	50.0	47.2		ug/Kg		94	79 - 127
Bromodichloromethane	50.0	54.5		ug/Kg		109	80 - 122
Bromoform	50.0	46.9		ug/Kg		94	68 - 126
Bromomethane	50.0	43.3		ug/Kg		87	37 - 149
Carbon disulfide	50.0	47.0		ug/Kg		94	64 - 131
Carbon tetrachloride	50.0	45.9		ug/Kg		92	75 - 135
Chlorobenzene	50.0	48.2		ug/Kg		96	76 - 124
Dibromochloromethane	50.0	48.9		ug/Kg		98	76 - 125
Chloroethane	50.0	44.9		ug/Kg		90	69 - 135
Chloroform	50.0	48.6		ug/Kg		97	80 - 118
Chloromethane	50.0	40.7		ug/Kg		81	63 - 127
cis-1,2-Dichloroethene	50.0	47.6		ug/Kg		95	81 - 117
cis-1,3-Dichloropropene	50.0	53.9		ug/Kg		108	82 - 120
Cyclohexane	50.0	41.5		ug/Kg		83	70 - 130
Dichlorodifluoromethane	50.0	30.8		ug/Kg		62	57 - 142
Ethylbenzene	50.0	47.5		ug/Kg		95	80 - 120
Isopropylbenzene	50.0	48.7		ug/Kg		97	72 - 120
Methyl acetate	50.0	50.3		ug/Kg		101	60 - 140
Methyl tert-butyl ether	50.0	52.0		ug/Kg		104	63 - 125
Methylcyclohexane	50.0	42.4		ug/Kg		85	60 - 140
Methylene Chloride	50.0	48.9		ug/Kg		98	61 - 127
Styrene	50.0	51.5		ug/Kg		103	80 - 120
Tetrachloroethene	50.0	47.2		ug/Kg		94	74 - 122
Toluene	50.0	46.2		ug/Kg		92	74 - 128
trans-1,2-Dichloroethene	50.0	46.7		ug/Kg		93	78 - 126
trans-1,3-Dichloropropene	50.0	53.7		ug/Kg		107	73 - 123
Trichloroethene	50.0	47.3		ug/Kg		95	77 - 129
Trichlorofluoromethane	50.0	41.6		ug/Kg		83	65 - 146
Vinyl chloride	50.0	39.8		ug/Kg		80	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		64 - 126
Toluene-d8 (Surr)	100		71 - 125
4-Bromofluorobenzene (Surr)	101		72 - 126

Lab Sample ID: 480-33480-8 MS

Matrix: Solid

Analysis Batch: 105255

Client Sample ID: BB-5

Prep Type: Total/NA

Prep Batch: 105319

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		106	39.1	F	ug/Kg	☼	37	77 - 121
1,1,2,2-Tetrachloroethane	ND		106	58.7	F	ug/Kg	☼	55	80 - 120
1,1,2-Trichloroethane	ND		106	57.6	F	ug/Kg	☼	54	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		106	30.0	F	ug/Kg	☼	28	60 - 140
1,1-Dichloroethane	ND		106	61.2	F	ug/Kg	☼	58	73 - 126

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: 480-33480-8 MS

Matrix: Solid

Analysis Batch: 105255

Client Sample ID: BB-5

Prep Type: Total/NA

Prep Batch: 105319

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	ND		106	48.5	F	ug/Kg	☼	46	59 - 125
1,2,4-Trichlorobenzene	ND		106	4.71	J F	ug/Kg	☼	4	64 - 120
1,2-Dibromo-3-Chloropropane	ND		106	23.8	F	ug/Kg	☼	22	63 - 124
1,2-Dibromoethane	ND		106	49.7	F	ug/Kg	☼	47	78 - 120
1,2-Dichlorobenzene	ND		106	20.3	F	ug/Kg	☼	19	75 - 120
1,2-Dichloroethane	ND		106	62.0	F	ug/Kg	☼	58	77 - 122
1,2-Dichloropropane	ND		106	51.7	F	ug/Kg	☼	49	75 - 124
1,3-Dichlorobenzene	ND		106	20.7	F	ug/Kg	☼	19	74 - 120
1,4-Dichlorobenzene	ND		106	21.8	F	ug/Kg	☼	21	73 - 120
2-Hexanone	ND		530	408		ug/Kg	☼	77	59 - 130
2-Butanone (MEK)	ND		530	380		ug/Kg	☼	72	70 - 134
4-Methyl-2-pentanone (MIBK)	ND		530	450		ug/Kg	☼	85	65 - 133
Acetone	41	J	530	369		ug/Kg	☼	62	61 - 137
Benzene	ND		106	47.6	F	ug/Kg	☼	45	79 - 127
Bromodichloromethane	ND		106	46.9	F	ug/Kg	☼	44	80 - 122
Bromoform	ND		106	27.3	F	ug/Kg	☼	26	68 - 126
Bromomethane	ND		106	85.4		ug/Kg	☼	80	37 - 149
Carbon disulfide	5.1	J	106	46.6	F	ug/Kg	☼	39	64 - 131
Carbon tetrachloride	ND		106	28.7	F	ug/Kg	☼	27	75 - 135
Chlorobenzene	ND		106	30.4	F	ug/Kg	☼	29	76 - 124
Dibromochloromethane	ND		106	40.6	F	ug/Kg	☼	38	76 - 125
Chloroethane	ND		106	75.3		ug/Kg	☼	71	69 - 135
Chloroform	ND		106	56.4	F	ug/Kg	☼	53	80 - 118
Chloromethane	ND		106	67.0		ug/Kg	☼	63	63 - 127
cis-1,2-Dichloroethene	ND		106	56.9	F	ug/Kg	☼	54	81 - 117
cis-1,3-Dichloropropene	ND		106	45.9	F	ug/Kg	☼	43	82 - 120
Cyclohexane	ND		106	18.8	F	ug/Kg	☼	18	70 - 130
Dichlorodifluoromethane	ND		106	36.8	F	ug/Kg	☼	35	57 - 142
Ethylbenzene	ND		106	25.6	F	ug/Kg	☼	24	80 - 120
Isopropylbenzene	ND		106	34.5	F	ug/Kg	☼	33	72 - 120
Methyl acetate	ND		106	144		ug/Kg	☼	136	60 - 140
Methyl tert-butyl ether	ND		106	87.9		ug/Kg	☼	83	63 - 125
Methylcyclohexane	ND		106	13.0	F	ug/Kg	☼	12	60 - 140
Methylene Chloride	ND		106	72.9		ug/Kg	☼	69	61 - 127
Styrene	ND		106	26.2	F	ug/Kg	☼	25	80 - 120
Tetrachloroethene	ND		106	23.7	F	ug/Kg	☼	22	74 - 122
Toluene	3.5	J	106	41.7	F	ug/Kg	☼	36	74 - 128
trans-1,2-Dichloroethene	ND		106	53.0	F	ug/Kg	☼	50	78 - 126
trans-1,3-Dichloropropene	ND		106	50.6	F	ug/Kg	☼	48	73 - 123
Trichloroethene	ND		106	33.3	F	ug/Kg	☼	31	77 - 129
Trichlorofluoromethane	ND		106	26.0	F	ug/Kg	☼	25	65 - 146
Vinyl chloride	ND		106	55.9	F	ug/Kg	☼	53	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		64 - 126
Toluene-d8 (Surr)	116		71 - 125
4-Bromofluorobenzene (Surr)	79		72 - 126

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: 480-33480-8 MSD

Matrix: Solid

Analysis Batch: 105255

Client Sample ID: BB-5

Prep Type: Total/NA

Prep Batch: 105319

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		99.4	33.9	F	ug/Kg	✱	34	77 - 121	14	30
1,1,1,2-Tetrachloroethane	ND		99.4	48.5	F	ug/Kg	✱	49	80 - 120	19	30
1,1,2-Trichloroethane	ND		99.4	50.1	F	ug/Kg	✱	50	78 - 122	14	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		99.4	26.8	F	ug/Kg	✱	27	60 - 140	11	30
1,1-Dichloroethane	ND		99.4	55.0	F	ug/Kg	✱	55	73 - 126	11	30
1,1-Dichloroethene	ND		99.4	41.8	F	ug/Kg	✱	42	59 - 125	15	30
1,2,4-Trichlorobenzene	ND		99.4	4.15	J F	ug/Kg	✱	4	64 - 120	13	30
1,2-Dibromo-3-Chloropropane	ND		99.4	20.4	F	ug/Kg	✱	21	63 - 124	15	30
1,2-Dibromoethane	ND		99.4	43.0	F	ug/Kg	✱	43	78 - 120	15	30
1,2-Dichlorobenzene	ND		99.4	16.4	F	ug/Kg	✱	17	75 - 120	21	30
1,2-Dichloroethane	ND		99.4	55.5	F	ug/Kg	✱	56	77 - 122	11	30
1,2-Dichloropropane	ND		99.4	46.1	F	ug/Kg	✱	46	75 - 124	11	30
1,3-Dichlorobenzene	ND		99.4	16.9	F	ug/Kg	✱	17	74 - 120	20	30
1,4-Dichlorobenzene	ND		99.4	17.9	F	ug/Kg	✱	18	73 - 120	19	30
2-Hexanone	ND		497	362		ug/Kg	✱	73	59 - 130	12	30
2-Butanone (MEK)	ND		497	346		ug/Kg	✱	70	70 - 134	9	30
4-Methyl-2-pentanone (MIBK)	ND		497	394		ug/Kg	✱	79	65 - 133	13	30
Acetone	41 J		497	336	F	ug/Kg	✱	59	61 - 137	9	30
Benzene	ND		99.4	40.4	F	ug/Kg	✱	41	79 - 127	16	30
Bromodichloromethane	ND		99.4	41.7	F	ug/Kg	✱	42	80 - 122	12	30
Bromoform	ND		99.4	23.8	F	ug/Kg	✱	24	68 - 126	14	30
Bromomethane	ND		99.4	77.2		ug/Kg	✱	78	37 - 149	10	30
Carbon disulfide	5.1 J		99.4	42.2	F	ug/Kg	✱	37	64 - 131	10	30
Carbon tetrachloride	ND		99.4	25.5	F	ug/Kg	✱	26	75 - 135	12	30
Chlorobenzene	ND		99.4	24.9	F	ug/Kg	✱	25	76 - 124	20	30
Dibromochloromethane	ND		99.4	34.5	F	ug/Kg	✱	35	76 - 125	16	30
Chloroethane	ND		99.4	68.5		ug/Kg	✱	69	69 - 135	9	30
Chloroform	ND		99.4	49.2	F	ug/Kg	✱	50	80 - 118	14	30
Chloromethane	ND		99.4	60.3	F	ug/Kg	✱	61	63 - 127	11	30
cis-1,2-Dichloroethene	ND		99.4	50.6	F	ug/Kg	✱	51	81 - 117	12	30
cis-1,3-Dichloropropene	ND		99.4	40.5	F	ug/Kg	✱	41	82 - 120	13	30
Cyclohexane	ND		99.4	16.8	F	ug/Kg	✱	17	70 - 130	11	30
Dichlorodifluoromethane	ND		99.4	32.1	F	ug/Kg	✱	32	57 - 142	13	30
Ethylbenzene	ND		99.4	20.7	F	ug/Kg	✱	21	80 - 120	21	30
Isopropylbenzene	ND		99.4	26.8	F	ug/Kg	✱	27	72 - 120	25	30
Methyl acetate	ND		99.4	145	F	ug/Kg	✱	146	60 - 140	0	30
Methyl tert-butyl ether	ND		99.4	78.3		ug/Kg	✱	79	63 - 125	12	30
Methylcyclohexane	ND		99.4	11.5	F	ug/Kg	✱	12	60 - 140	12	30
Methylene Chloride	ND		99.4	66.3		ug/Kg	✱	67	61 - 127	9	30
Styrene	ND		99.4	21.3	F	ug/Kg	✱	21	80 - 120	21	30
Tetrachloroethene	ND		99.4	18.8	F	ug/Kg	✱	19	74 - 122	23	30
Toluene	3.5 J		99.4	34.8	F	ug/Kg	✱	31	74 - 128	18	30
trans-1,2-Dichloroethene	ND		99.4	45.6	F	ug/Kg	✱	46	78 - 126	15	30
trans-1,3-Dichloropropene	ND		99.4	43.0	F	ug/Kg	✱	43	73 - 123	16	30
Trichloroethene	ND		99.4	28.3	F	ug/Kg	✱	28	77 - 129	16	30
Trichlorofluoromethane	ND		99.4	37.2	F	ug/Kg	✱	37	65 - 146	35	30
Vinyl chloride	ND		99.4	49.7	F	ug/Kg	✱	50	61 - 133	12	30

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: 480-33480-8 MSD

Matrix: Solid

Analysis Batch: 105255

Client Sample ID: BB-5

Prep Type: Total/NA

Prep Batch: 105319

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		64 - 126
Toluene-d8 (Surr)	112		71 - 125
4-Bromofluorobenzene (Surr)	80		72 - 126

Lab Sample ID: MB 480-106590/5

Matrix: Solid

Analysis Batch: 106590

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			03/08/13 20:28	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			03/08/13 20:28	1
1,1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			03/08/13 20:28	1
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			03/08/13 20:28	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			03/08/13 20:28	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			03/08/13 20:28	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			03/08/13 20:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			03/08/13 20:28	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			03/08/13 20:28	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			03/08/13 20:28	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			03/08/13 20:28	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			03/08/13 20:28	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			03/08/13 20:28	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			03/08/13 20:28	1
2-Hexanone	ND		25	2.5	ug/Kg			03/08/13 20:28	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			03/08/13 20:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			03/08/13 20:28	1
Acetone	ND		25	4.2	ug/Kg			03/08/13 20:28	1
Benzene	ND		5.0	0.25	ug/Kg			03/08/13 20:28	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			03/08/13 20:28	1
Bromoform	ND		5.0	2.5	ug/Kg			03/08/13 20:28	1
Bromomethane	ND		5.0	0.45	ug/Kg			03/08/13 20:28	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			03/08/13 20:28	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			03/08/13 20:28	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			03/08/13 20:28	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			03/08/13 20:28	1
Chloroethane	ND		5.0	1.1	ug/Kg			03/08/13 20:28	1
Chloroform	ND		5.0	0.31	ug/Kg			03/08/13 20:28	1
Chloromethane	ND		5.0	0.30	ug/Kg			03/08/13 20:28	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			03/08/13 20:28	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			03/08/13 20:28	1
Cyclohexane	ND		5.0	0.70	ug/Kg			03/08/13 20:28	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			03/08/13 20:28	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			03/08/13 20:28	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg			03/08/13 20:28	1
Methyl acetate	ND		5.0	0.93	ug/Kg			03/08/13 20:28	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			03/08/13 20:28	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			03/08/13 20:28	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			03/08/13 20:28	1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: MB 480-106590/5

Matrix: Solid

Analysis Batch: 106590

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0	0.25	ug/Kg			03/08/13 20:28	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			03/08/13 20:28	1
Toluene	1.02	J	5.0	0.38	ug/Kg			03/08/13 20:28	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			03/08/13 20:28	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			03/08/13 20:28	1
Trichloroethene	ND		5.0	1.1	ug/Kg			03/08/13 20:28	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			03/08/13 20:28	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			03/08/13 20:28	1
Xylenes, Total	ND		10	0.84	ug/Kg			03/08/13 20:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 126		03/08/13 20:28	1
Toluene-d8 (Surr)	99		71 - 125		03/08/13 20:28	1
4-Bromofluorobenzene (Surr)	101		72 - 126		03/08/13 20:28	1

Lab Sample ID: LCS 480-106590/4

Matrix: Solid

Analysis Batch: 106590

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	52.9		ug/Kg		106	77 - 121
1,1,2,2-Tetrachloroethane	50.0	48.5		ug/Kg		97	80 - 120
1,1,2-Trichloroethane	50.0	50.0		ug/Kg		100	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.0		ug/Kg		90	60 - 140
1,1-Dichloroethane	50.0	50.7		ug/Kg		101	73 - 126
1,1-Dichloroethene	50.0	50.5		ug/Kg		101	59 - 125
1,2,4-Trichlorobenzene	50.0	48.7		ug/Kg		97	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	46.5		ug/Kg		93	63 - 124
1,2-Dibromoethane	50.0	52.4		ug/Kg		105	78 - 120
1,2-Dichlorobenzene	50.0	47.1		ug/Kg		94	75 - 120
1,2-Dichloroethane	50.0	54.6		ug/Kg		109	77 - 122
1,2-Dichloropropane	50.0	52.5		ug/Kg		105	75 - 124
1,3-Dichlorobenzene	50.0	46.5		ug/Kg		93	74 - 120
1,4-Dichlorobenzene	50.0	46.5		ug/Kg		93	73 - 120
2-Hexanone	250	245		ug/Kg		98	59 - 130
2-Butanone (MEK)	250	256		ug/Kg		102	70 - 134
4-Methyl-2-pentanone (MIBK)	250	241		ug/Kg		96	65 - 133
Acetone	250	235		ug/Kg		94	61 - 137
Benzene	50.0	51.2		ug/Kg		102	79 - 127
Bromodichloromethane	50.0	58.9		ug/Kg		118	80 - 122
Bromoform	50.0	48.4		ug/Kg		97	68 - 126
Bromomethane	50.0	56.1		ug/Kg		112	37 - 149
Carbon disulfide	50.0	46.1		ug/Kg		92	64 - 131
Carbon tetrachloride	50.0	55.3		ug/Kg		111	75 - 135
Chlorobenzene	50.0	48.8		ug/Kg		98	76 - 124
Dibromochloromethane	50.0	49.8		ug/Kg		100	76 - 125
Chloroethane	50.0	54.5		ug/Kg		109	69 - 135

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCS 480-106590/4

Matrix: Solid

Analysis Batch: 106590

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	50.0	53.2		ug/Kg		106	80 - 118
Chloromethane	50.0	46.0		ug/Kg		92	63 - 127
cis-1,2-Dichloroethene	50.0	51.3		ug/Kg		103	81 - 117
cis-1,3-Dichloropropene	50.0	58.0		ug/Kg		116	82 - 120
Cyclohexane	50.0	46.0		ug/Kg		92	70 - 130
Dichlorodifluoromethane	50.0	46.5		ug/Kg		93	57 - 142
Ethylbenzene	50.0	48.3		ug/Kg		97	80 - 120
Isopropylbenzene	50.0	47.2		ug/Kg		94	72 - 120
Methyl acetate	50.0	49.6		ug/Kg		99	60 - 140
Methyl tert-butyl ether	50.0	51.4		ug/Kg		103	63 - 125
Methylcyclohexane	50.0	48.0		ug/Kg		96	60 - 140
Methylene Chloride	50.0	52.3		ug/Kg		105	61 - 127
Styrene	50.0	51.2		ug/Kg		102	80 - 120
Tetrachloroethene	50.0	48.8		ug/Kg		98	74 - 122
Toluene	50.0	47.7		ug/Kg		95	74 - 128
trans-1,2-Dichloroethene	50.0	50.9		ug/Kg		102	78 - 126
trans-1,3-Dichloropropene	50.0	53.8		ug/Kg		108	73 - 123
Trichloroethene	50.0	52.2		ug/Kg		104	77 - 129
Trichlorofluoromethane	50.0	53.1		ug/Kg		106	65 - 146
Vinyl chloride	50.0	46.3		ug/Kg		93	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		64 - 126
Toluene-d8 (Surr)	99		71 - 125
4-Bromofluorobenzene (Surr)	103		72 - 126

Lab Sample ID: MB 480-106691/6

Matrix: Water

Analysis Batch: 106691

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/10/13 15:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/10/13 15:18	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/10/13 15:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/10/13 15:18	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/10/13 15:18	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/10/13 15:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/10/13 15:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/10/13 15:18	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/10/13 15:18	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/10/13 15:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/10/13 15:18	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/10/13 15:18	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/10/13 15:18	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/10/13 15:18	1
2-Hexanone	ND		5.0	1.2	ug/L			03/10/13 15:18	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/10/13 15:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/10/13 15:18	1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: MB 480-106691/6

Matrix: Water

Analysis Batch: 106691

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			03/10/13 15:18	1
Benzene	ND		1.0	0.41	ug/L			03/10/13 15:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/10/13 15:18	1
Bromoform	ND		1.0	0.26	ug/L			03/10/13 15:18	1
Bromomethane	ND		1.0	0.69	ug/L			03/10/13 15:18	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/10/13 15:18	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/10/13 15:18	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/10/13 15:18	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/10/13 15:18	1
Chloroethane	ND		1.0	0.32	ug/L			03/10/13 15:18	1
Chloroform	ND		1.0	0.34	ug/L			03/10/13 15:18	1
Chloromethane	ND		1.0	0.35	ug/L			03/10/13 15:18	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/10/13 15:18	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/10/13 15:18	1
Cyclohexane	ND		1.0	0.18	ug/L			03/10/13 15:18	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/10/13 15:18	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/10/13 15:18	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/10/13 15:18	1
Methyl acetate	ND		1.0	0.50	ug/L			03/10/13 15:18	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/10/13 15:18	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/10/13 15:18	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/10/13 15:18	1
Styrene	ND		1.0	0.73	ug/L			03/10/13 15:18	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/10/13 15:18	1
Toluene	ND		1.0	0.51	ug/L			03/10/13 15:18	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/10/13 15:18	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/10/13 15:18	1
Trichloroethene	ND		1.0	0.46	ug/L			03/10/13 15:18	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/10/13 15:18	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/10/13 15:18	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/10/13 15:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137		03/10/13 15:18	1
Toluene-d8 (Surr)	113		71 - 126		03/10/13 15:18	1
4-Bromofluorobenzene (Surr)	106		73 - 120		03/10/13 15:18	1

Lab Sample ID: LCS 480-106691/5

Matrix: Water

Analysis Batch: 106691

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	22.5		ug/L		90	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	70 - 126
1,1,2-Trichloroethane	25.0	26.5		ug/L		106	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.2		ug/L		105	60 - 140
1,1-Dichloroethane	25.0	22.9		ug/L		91	71 - 129

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCS 480-106691/5

Matrix: Water

Analysis Batch: 106691

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	25.0	22.8		ug/L		91	58 - 121
1,2,4-Trichlorobenzene	25.0	25.9		ug/L		103	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	19.5		ug/L		78	56 - 134
1,2-Dibromoethane	25.0	26.5		ug/L		106	77 - 120
1,2-Dichlorobenzene	25.0	26.6		ug/L		107	80 - 124
1,2-Dichloroethane	25.0	26.0		ug/L		104	75 - 127
1,2-Dichloropropane	25.0	24.0		ug/L		96	76 - 120
1,3-Dichlorobenzene	25.0	25.1		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.7		ug/L		103	75 - 120
2-Hexanone	125	126		ug/L		101	65 - 127
2-Butanone (MEK)	125	128		ug/L		103	57 - 140
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	71 - 125
Acetone	125	136		ug/L		108	56 - 142
Benzene	25.0	25.2		ug/L		101	71 - 124
Bromodichloromethane	25.0	21.7		ug/L		87	80 - 122
Bromoform	25.0	18.4		ug/L		74	66 - 128
Bromomethane	25.0	18.0		ug/L		72	55 - 144
Carbon disulfide	25.0	21.8		ug/L		87	59 - 134
Carbon tetrachloride	25.0	19.8		ug/L		79	72 - 134
Chlorobenzene	25.0	26.8		ug/L		107	72 - 120
Dibromochloromethane	25.0	21.1		ug/L		84	75 - 125
Chloroethane	25.0	23.1		ug/L		92	69 - 136
Chloroform	25.0	24.7		ug/L		99	73 - 127
Chloromethane	25.0	24.7		ug/L		99	68 - 124
cis-1,2-Dichloroethene	25.0	25.7		ug/L		103	74 - 124
cis-1,3-Dichloropropene	25.0	22.3		ug/L		89	74 - 124
Cyclohexane	25.0	21.7		ug/L		87	65 - 126
Dichlorodifluoromethane	25.0	26.7		ug/L		107	59 - 135
Ethylbenzene	25.0	26.0		ug/L		104	77 - 123
Isopropylbenzene	25.0	24.5		ug/L		98	77 - 122
Methyl acetate	25.0	54.3	*	ug/L		217	60 - 140
Methyl tert-butyl ether	25.0	24.2		ug/L		97	64 - 127
Methylcyclohexane	25.0	22.0		ug/L		88	60 - 140
Methylene Chloride	25.0	24.2		ug/L		97	57 - 132
Styrene	25.0	26.5		ug/L		106	70 - 130
Tetrachloroethene	25.0	26.1		ug/L		104	74 - 122
Toluene	25.0	26.0		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	73 - 127
trans-1,3-Dichloropropene	25.0	21.7		ug/L		87	72 - 123
Trichloroethene	25.0	24.6		ug/L		98	74 - 123
Trichlorofluoromethane	25.0	24.1		ug/L		96	62 - 152
Vinyl chloride	25.0	22.1		ug/L		88	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
Toluene-d8 (Surr)	114		71 - 126
4-Bromofluorobenzene (Surr)	112		73 - 120

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: MB 480-105056/1-A

Matrix: Solid

Analysis Batch: 105281

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 105056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	36	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2,4-Dichlorophenol	ND		170	8.7	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2,4-Dimethylphenol	ND		170	45	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2,4-Dinitrophenol	ND		330	58	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2,6-Dinitrotoluene	ND		170	41	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2-Chloronaphthalene	ND		170	11	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2-Chlorophenol	ND		170	8.5	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2-Methylnaphthalene	ND		170	2.0	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2-Methylphenol	ND		170	5.1	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2-Nitroaniline	ND		330	54	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
2-Nitrophenol	ND		170	7.6	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
3-Nitroaniline	ND		330	38	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
4,6-Dinitro-2-methylphenol	ND		330	58	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
4-Bromophenyl phenyl ether	ND		170	53	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
4-Chloro-3-methylphenol	ND		170	6.9	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
4-Chloroaniline	ND		170	49	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
4-Chlorophenyl phenyl ether	ND		170	3.6	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
4-Methylphenol	ND		330	9.3	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
4-Nitroaniline	ND		330	19	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
4-Nitrophenol	ND		330	40	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Acenaphthene	ND		170	2.0	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Acenaphthylene	ND		170	1.4	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Acetophenone	ND		170	8.6	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Anthracene	ND		170	4.3	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Atrazine	ND		170	7.4	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Benzaldehyde	ND		170	18	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Benzo(b)fluoranthene	ND		170	3.2	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Benzo(k)fluoranthene	ND		170	1.8	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Biphenyl	ND		170	10	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
bis (2-chloroisopropyl) ether	ND		170	17	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Bis(2-chloroethoxy)methane	ND		170	9.1	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Bis(2-chloroethyl)ether	ND		170	14	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Bis(2-ethylhexyl) phthalate	ND		170	54	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Butyl benzyl phthalate	ND		170	45	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Caprolactam	ND		170	72	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Carbazole	ND		170	1.9	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Chrysene	ND		170	1.7	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Dibenzofuran	ND		170	1.7	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Diethyl phthalate	ND		170	5.0	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Dimethyl phthalate	ND		170	4.4	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Di-n-butyl phthalate	ND		170	58	ug/Kg		02/27/13 08:04	02/28/13 10:42	1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: MB 480-105056/1-A

Matrix: Solid

Analysis Batch: 105281

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 105056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		170	3.9	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Fluoranthene	ND		170	2.4	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Fluorene	ND		170	3.8	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Hexachlorobenzene	ND		170	8.3	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Hexachlorobutadiene	ND		170	8.5	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Hexachlorocyclopentadiene	ND		170	50	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Hexachloroethane	ND		170	13	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Isophorone	ND		170	8.3	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Naphthalene	ND		170	2.8	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Nitrobenzene	ND		170	7.4	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
N-Nitrosodiphenylamine	ND		170	9.1	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Pentachlorophenol	ND		330	57	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Phenanthrene	ND		170	3.5	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Phenol	ND		170	18	ug/Kg		02/27/13 08:04	02/28/13 10:42	1
Pyrene	ND		170	1.1	ug/Kg		02/27/13 08:04	02/28/13 10:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		39 - 146	02/27/13 08:04	02/28/13 10:42	1
2-Fluorobiphenyl	85		37 - 120	02/27/13 08:04	02/28/13 10:42	1
2-Fluorophenol	85		18 - 120	02/27/13 08:04	02/28/13 10:42	1
Nitrobenzene-d5	89		34 - 132	02/27/13 08:04	02/28/13 10:42	1
Phenol-d5	87		11 - 120	02/27/13 08:04	02/28/13 10:42	1
p-Terphenyl-d14	93		65 - 153	02/27/13 08:04	02/28/13 10:42	1

Lab Sample ID: LCS 480-105056/2-A

Matrix: Solid

Analysis Batch: 105281

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 105056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	3330	3250		ug/Kg		98	59 - 126
2,4,6-Trichlorophenol	3330	3270		ug/Kg		98	59 - 123
2,4-Dichlorophenol	3330	3000		ug/Kg		90	52 - 120
2,4-Dimethylphenol	3330	3100		ug/Kg		93	36 - 120
2,4-Dinitrophenol	3330	4310		ug/Kg		130	35 - 146
2,4-Dinitrotoluene	3330	3430		ug/Kg		103	55 - 125
2,6-Dinitrotoluene	3330	3490		ug/Kg		105	66 - 128
2-Chloronaphthalene	3330	2940		ug/Kg		88	57 - 120
2-Chlorophenol	3330	2840		ug/Kg		85	38 - 120
2-Methylnaphthalene	3330	2890		ug/Kg		87	47 - 120
2-Methylphenol	3330	2920		ug/Kg		88	48 - 120
2-Nitroaniline	3330	3270		ug/Kg		98	61 - 130
2-Nitrophenol	3330	3110		ug/Kg		93	50 - 120
3,3'-Dichlorobenzidine	3330	2210		ug/Kg		67	48 - 126
3-Nitroaniline	3260	2990		ug/Kg		92	61 - 127
4,6-Dinitro-2-methylphenol	3330	3820		ug/Kg		115	49 - 155
4-Bromophenyl phenyl ether	3330	3250		ug/Kg		98	58 - 131

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCS 480-105056/2-A

Matrix: Solid

Analysis Batch: 105281

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 105056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloro-3-methylphenol	3330	3150		ug/Kg		95	49 - 125
4-Chloroaniline	3190	2390		ug/Kg		75	49 - 120
4-Chlorophenyl phenyl ether	3330	3080		ug/Kg		93	63 - 124
4-Methylphenol	6660	5880	E	ug/Kg		88	50 - 119
4-Nitroaniline	3330	3210		ug/Kg		96	63 - 128
4-Nitrophenol	3330	3260		ug/Kg		98	43 - 137
Acenaphthene	3330	3020		ug/Kg		91	53 - 120
Acenaphthylene	3330	3100		ug/Kg		93	58 - 121
Acetophenone	3330	2930		ug/Kg		88	66 - 120
Anthracene	3330	3190		ug/Kg		96	62 - 129
Atrazine	3330	3540		ug/Kg		106	60 - 164
Benzaldehyde	3330	2740		ug/Kg		82	21 - 120
Benzo(a)anthracene	3330	3220		ug/Kg		97	65 - 133
Benzo(a)pyrene	3330	3430		ug/Kg		103	64 - 127
Benzo(b)fluoranthene	3330	3310		ug/Kg		100	64 - 135
Benzo(g,h,i)perylene	3330	3330		ug/Kg		100	50 - 152
Benzo(k)fluoranthene	3330	3160		ug/Kg		95	58 - 138
Biphenyl	3330	2940		ug/Kg		88	71 - 120
bis (2-chloroisopropyl) ether	3330	2860		ug/Kg		86	44 - 120
Bis(2-chloroethoxy)methane	3330	2860		ug/Kg		86	61 - 133
Bis(2-chloroethyl)ether	3330	2610		ug/Kg		78	45 - 120
Bis(2-ethylhexyl) phthalate	3330	3300		ug/Kg		99	61 - 133
Butyl benzyl phthalate	3330	3340		ug/Kg		100	61 - 129
Caprolactam	3330	3180		ug/Kg		96	54 - 133
Carbazole	3330	3240		ug/Kg		97	59 - 129
Chrysene	3330	3290		ug/Kg		99	64 - 131
Dibenz(a,h)anthracene	3330	3360		ug/Kg		101	54 - 148
Dibenzofuran	3330	2980		ug/Kg		90	56 - 120
Diethyl phthalate	3330	3090		ug/Kg		93	66 - 126
Dimethyl phthalate	3330	3130		ug/Kg		94	65 - 124
Di-n-butyl phthalate	3330	3310		ug/Kg		99	58 - 130
Di-n-octyl phthalate	3330	3450		ug/Kg		104	62 - 133
Fluoranthene	3330	3290		ug/Kg		99	62 - 131
Fluorene	3330	3100		ug/Kg		93	63 - 126
Hexachlorobenzene	3330	3040		ug/Kg		91	60 - 132
Hexachlorobutadiene	3330	2610		ug/Kg		78	45 - 120
Hexachlorocyclopentadiene	3330	3180		ug/Kg		95	31 - 120
Hexachloroethane	3330	2580		ug/Kg		78	41 - 120
Indeno(1,2,3-cd)pyrene	3330	3260		ug/Kg		98	56 - 149
Isophorone	3330	2880		ug/Kg		86	56 - 120
Naphthalene	3330	2790		ug/Kg		84	46 - 120
Nitrobenzene	3330	3040		ug/Kg		91	49 - 120
N-Nitrosodi-n-propylamine	3330	2860		ug/Kg		86	46 - 120
N-Nitrosodiphenylamine	3330	3470		ug/Kg		104	20 - 119
Pentachlorophenol	3330	3290		ug/Kg		99	33 - 136
Phenanthrene	3330	3120		ug/Kg		94	60 - 130
Phenol	3330	2880		ug/Kg		86	36 - 120
Pyrene	3330	3220		ug/Kg		97	51 - 133

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCS 480-105056/2-A

Matrix: Solid

Analysis Batch: 105281

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 105056

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	100		39 - 146
2-Fluorobiphenyl	85		37 - 120
2-Fluorophenol	79		18 - 120
Nitrobenzene-d5	88		34 - 132
Phenol-d5	81		11 - 120
p-Terphenyl-d14	95		65 - 153

Lab Sample ID: MB 480-106567/1-A

Matrix: Solid

Analysis Batch: 106764

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 106567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	36	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2,4-Dichlorophenol	ND		170	8.8	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2,4-Dimethylphenol	ND		170	45	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2,4-Dinitrophenol	ND		330	58	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2,6-Dinitrotoluene	ND		170	41	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2-Chloronaphthalene	ND		170	11	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2-Chlorophenol	ND		170	8.5	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2-Methylnaphthalene	ND		170	2.0	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2-Methylphenol	ND		170	5.1	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2-Nitroaniline	ND		330	54	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
2-Nitrophenol	ND		170	7.6	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
3-Nitroaniline	ND		330	38	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
4,6-Dinitro-2-methylphenol	ND		330	58	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
4-Bromophenyl phenyl ether	ND		170	53	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
4-Chloro-3-methylphenol	ND		170	6.9	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
4-Chloroaniline	ND		170	49	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
4-Chlorophenyl phenyl ether	ND		170	3.6	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
4-Methylphenol	ND		330	9.3	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
4-Nitroaniline	ND		330	19	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
4-Nitrophenol	ND		330	41	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Acenaphthene	ND		170	2.0	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Acenaphthylene	ND		170	1.4	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Acetophenone	ND		170	8.6	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Anthracene	ND		170	4.3	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Atrazine	ND		170	7.4	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Benzaldehyde	ND		170	18	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Benzo(b)fluoranthene	ND		170	3.2	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Benzo(k)fluoranthene	ND		170	1.8	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Biphenyl	ND		170	10	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
bis (2-chloroisopropyl) ether	ND		170	17	ug/Kg		03/08/13 14:48	03/11/13 11:37	1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: MB 480-106567/1-A

Matrix: Solid

Analysis Batch: 106764

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 106567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		170	9.1	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Bis(2-chloroethyl)ether	ND		170	14	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Bis(2-ethylhexyl) phthalate	ND		170	54	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Butyl benzyl phthalate	ND		170	45	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Caprolactam	ND		170	72	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Carbazole	ND		170	1.9	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Chrysene	ND		170	1.7	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Dibenzofuran	ND		170	1.7	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Diethyl phthalate	ND		170	5.0	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Dimethyl phthalate	ND		170	4.4	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Di-n-butyl phthalate	ND		170	58	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Di-n-octyl phthalate	ND		170	3.9	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Fluoranthene	ND		170	2.4	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Fluorene	ND		170	3.9	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Hexachlorobenzene	ND		170	8.3	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Hexachlorobutadiene	ND		170	8.6	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Hexachlorocyclopentadiene	ND		170	51	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Hexachloroethane	ND		170	13	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Isophorone	ND		170	8.4	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Naphthalene	ND		170	2.8	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Nitrobenzene	ND		170	7.4	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
N-Nitrosodiphenylamine	ND		170	9.1	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Pentachlorophenol	ND		330	57	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Phenanthrene	ND		170	3.5	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Phenol	ND		170	18	ug/Kg		03/08/13 14:48	03/11/13 11:37	1
Pyrene	ND		170	1.1	ug/Kg		03/08/13 14:48	03/11/13 11:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	93		39 - 146	03/08/13 14:48	03/11/13 11:37	1
2-Fluorobiphenyl	87		37 - 120	03/08/13 14:48	03/11/13 11:37	1
2-Fluorophenol	80		18 - 120	03/08/13 14:48	03/11/13 11:37	1
Nitrobenzene-d5	86		34 - 132	03/08/13 14:48	03/11/13 11:37	1
Phenol-d5	84		11 - 120	03/08/13 14:48	03/11/13 11:37	1
p-Terphenyl-d14	95		65 - 153	03/08/13 14:48	03/11/13 11:37	1

Lab Sample ID: LCS 480-106567/2-A

Matrix: Solid

Analysis Batch: 106764

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 106567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	3310	3020		ug/Kg		91	59 - 126
2,4,6-Trichlorophenol	3310	3010		ug/Kg		91	59 - 123
2,4-Dichlorophenol	3310	2920		ug/Kg		88	52 - 120
2,4-Dimethylphenol	3310	2940		ug/Kg		89	36 - 120
2,4-Dinitrophenol	3310	4480		ug/Kg		135	35 - 146

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCS 480-106567/2-A

Matrix: Solid

Analysis Batch: 106764

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 106567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	3310	3360		ug/Kg		102	55 - 125
2,6-Dinitrotoluene	3310	3350		ug/Kg		101	66 - 128
2-Chloronaphthalene	3310	2770		ug/Kg		84	57 - 120
2-Chlorophenol	3310	2630		ug/Kg		79	38 - 120
2-Methylnaphthalene	3310	2800		ug/Kg		85	47 - 120
2-Methylphenol	3310	2720		ug/Kg		82	48 - 120
2-Nitroaniline	3310	2910		ug/Kg		88	61 - 130
2-Nitrophenol	3310	3020		ug/Kg		91	50 - 120
3,3'-Dichlorobenzidine	3310	2000		ug/Kg		60	48 - 126
3-Nitroaniline	3240	2780		ug/Kg		86	61 - 127
4,6-Dinitro-2-methylphenol	3310	3810		ug/Kg		115	49 - 155
4-Bromophenyl phenyl ether	3310	3100		ug/Kg		94	58 - 131
4-Chloro-3-methylphenol	3310	3070		ug/Kg		93	49 - 125
4-Chloroaniline	3170	2300		ug/Kg		73	49 - 120
4-Chlorophenyl phenyl ether	3310	2960		ug/Kg		90	63 - 124
4-Methylphenol	6610	5430	E	ug/Kg		82	50 - 119
4-Nitroaniline	3310	3090		ug/Kg		93	63 - 128
4-Nitrophenol	3310	2920		ug/Kg		88	43 - 137
Acenaphthene	3310	2910		ug/Kg		88	53 - 120
Acenaphthylene	3310	3010		ug/Kg		91	58 - 121
Acetophenone	3310	2750		ug/Kg		83	66 - 120
Anthracene	3310	3060		ug/Kg		93	62 - 129
Atrazine	3310	3310		ug/Kg		100	60 - 164
Benzaldehyde	3310	2300		ug/Kg		70	21 - 120
Benzo(a)anthracene	3310	3050		ug/Kg		92	65 - 133
Benzo(a)pyrene	3310	3280		ug/Kg		99	64 - 127
Benzo(b)fluoranthene	3310	3070		ug/Kg		93	64 - 135
Benzo(g,h,i)perylene	3310	3110		ug/Kg		94	50 - 152
Benzo(k)fluoranthene	3310	3020		ug/Kg		91	58 - 138
Biphenyl	3310	2880		ug/Kg		87	71 - 120
bis (2-chloroisopropyl) ether	3310	2110		ug/Kg		64	44 - 120
Bis(2-chloroethoxy)methane	3310	2560		ug/Kg		77	61 - 133
Bis(2-chloroethyl)ether	3310	2400		ug/Kg		72	45 - 120
Bis(2-ethylhexyl) phthalate	3310	3090		ug/Kg		93	61 - 133
Butyl benzyl phthalate	3310	3080		ug/Kg		93	61 - 129
Caprolactam	3310	3300		ug/Kg		100	54 - 133
Carbazole	3310	3120		ug/Kg		94	59 - 129
Chrysene	3310	3050		ug/Kg		92	64 - 131
Dibenz(a,h)anthracene	3310	3230		ug/Kg		98	54 - 148
Dibenzofuran	3310	2890		ug/Kg		87	56 - 120
Diethyl phthalate	3310	2930		ug/Kg		89	66 - 126
Dimethyl phthalate	3310	2950		ug/Kg		89	65 - 124
Di-n-butyl phthalate	3310	3180		ug/Kg		96	58 - 130
Di-n-octyl phthalate	3310	3270		ug/Kg		99	62 - 133
Fluoranthene	3310	3150		ug/Kg		95	62 - 131
Fluorene	3310	3030		ug/Kg		92	63 - 126
Hexachlorobenzene	3310	3030		ug/Kg		92	60 - 132
Hexachlorobutadiene	3310	2510		ug/Kg		76	45 - 120

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCS 480-106567/2-A

Matrix: Solid

Analysis Batch: 106764

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 106567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	3310	2790		ug/Kg		84	31 - 120
Hexachloroethane	3310	2250		ug/Kg		68	41 - 120
Indeno(1,2,3-cd)pyrene	3310	3130		ug/Kg		95	56 - 149
Isophorone	3310	2640		ug/Kg		80	56 - 120
Naphthalene	3310	2620		ug/Kg		79	46 - 120
Nitrobenzene	3310	2690		ug/Kg		81	49 - 120
N-Nitrosodi-n-propylamine	3310	2490		ug/Kg		75	46 - 120
N-Nitrosodiphenylamine	3310	3300		ug/Kg		100	20 - 119
Pentachlorophenol	3310	3130		ug/Kg		95	33 - 136
Phenanthrene	3310	3030		ug/Kg		92	60 - 130
Phenol	3310	2620		ug/Kg		79	36 - 120
Pyrene	3310	3030		ug/Kg		92	51 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	102		39 - 146
2-Fluorobiphenyl	81		37 - 120
2-Fluorophenol	70		18 - 120
Nitrobenzene-d5	81		34 - 132
Phenol-d5	75		11 - 120
p-Terphenyl-d14	89		65 - 153

Lab Sample ID: LCSD 480-106567/3-A

Matrix: Solid

Analysis Batch: 106764

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 106567

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	3310	2980		ug/Kg		90	59 - 126	1	18
2,4,6-Trichlorophenol	3310	3020		ug/Kg		91	59 - 123	0	19
2,4-Dichlorophenol	3310	2900		ug/Kg		88	52 - 120	0	19
2,4-Dimethylphenol	3310	2930		ug/Kg		89	36 - 120	0	42
2,4-Dinitrophenol	3310	4560		ug/Kg		138	35 - 146	2	22
2,4-Dinitrotoluene	3310	3340		ug/Kg		101	55 - 125	1	20
2,6-Dinitrotoluene	3310	3360		ug/Kg		102	66 - 128	0	15
2-Chloronaphthalene	3310	2710		ug/Kg		82	57 - 120	2	21
2-Chlorophenol	3310	2600		ug/Kg		79	38 - 120	1	25
2-Methylnaphthalene	3310	2760		ug/Kg		83	47 - 120	1	21
2-Methylphenol	3310	2720		ug/Kg		82	48 - 120	0	27
2-Nitroaniline	3310	2870		ug/Kg		87	61 - 130	1	15
2-Nitrophenol	3310	2990		ug/Kg		90	50 - 120	1	18
3,3'-Dichlorobenzidine	3310	2060		ug/Kg		62	48 - 126	3	25
3-Nitroaniline	3240	2780		ug/Kg		86	61 - 127	0	19
4,6-Dinitro-2-methylphenol	3310	3890		ug/Kg		117	49 - 155	2	15
4-Bromophenyl phenyl ether	3310	3100		ug/Kg		94	58 - 131	0	15
4-Chloro-3-methylphenol	3310	3050		ug/Kg		92	49 - 125	0	27
4-Chloroaniline	3180	2280		ug/Kg		72	49 - 120	1	22
4-Chlorophenyl phenyl ether	3310	2920		ug/Kg		88	63 - 124	2	16
4-Methylphenol	6620	5470	E	ug/Kg		83	50 - 119	1	24
4-Nitroaniline	3310	3070		ug/Kg		93	63 - 128	1	24

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCSD 480-106567/3-A

Matrix: Solid

Analysis Batch: 106764

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 106567

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitrophenol	3310	2940		ug/Kg		89	43 - 137	1	25
Acenaphthene	3310	2850		ug/Kg		86	53 - 120	2	35
Acenaphthylene	3310	2990		ug/Kg		90	58 - 121	1	18
Acetophenone	3310	2720		ug/Kg		82	66 - 120	1	20
Anthracene	3310	3090		ug/Kg		93	62 - 129	1	15
Atrazine	3310	3290		ug/Kg		99	60 - 164	1	20
Benzaldehyde	3310	2340		ug/Kg		71	21 - 120	2	20
Benzo(a)anthracene	3310	3050		ug/Kg		92	65 - 133	0	15
Benzo(a)pyrene	3310	3270		ug/Kg		99	64 - 127	0	15
Benzo(b)fluoranthene	3310	3200		ug/Kg		97	64 - 135	4	15
Benzo(g,h,i)perylene	3310	3160		ug/Kg		95	50 - 152	2	15
Benzo(k)fluoranthene	3310	2970		ug/Kg		90	58 - 138	2	22
Biphenyl	3310	2850		ug/Kg		86	71 - 120	1	20
bis (2-chloroisopropyl) ether	3310	2080		ug/Kg		63	44 - 120	2	24
Bis(2-chloroethoxy)methane	3310	2520		ug/Kg		76	61 - 133	2	17
Bis(2-chloroethyl)ether	3310	2310		ug/Kg		70	45 - 120	4	21
Bis(2-ethylhexyl) phthalate	3310	3160		ug/Kg		95	61 - 133	2	15
Butyl benzyl phthalate	3310	3130		ug/Kg		94	61 - 129	1	16
Caprolactam	3310	3300		ug/Kg		100	54 - 133	0	20
Carbazole	3310	3160		ug/Kg		95	59 - 129	1	20
Chrysene	3310	3120		ug/Kg		94	64 - 131	2	15
Dibenz(a,h)anthracene	3310	3280		ug/Kg		99	54 - 148	2	15
Dibenzofuran	3310	2850		ug/Kg		86	56 - 120	2	15
Diethyl phthalate	3310	2910		ug/Kg		88	66 - 126	1	15
Dimethyl phthalate	3310	2910		ug/Kg		88	65 - 124	1	15
Di-n-butyl phthalate	3310	3200		ug/Kg		97	58 - 130	1	15
Di-n-octyl phthalate	3310	3280		ug/Kg		99	62 - 133	0	16
Fluoranthene	3310	3200		ug/Kg		97	62 - 131	2	15
Fluorene	3310	3000		ug/Kg		91	63 - 126	1	15
Hexachlorobenzene	3310	3080		ug/Kg		93	60 - 132	1	15
Hexachlorobutadiene	3310	2390		ug/Kg		72	45 - 120	5	44
Hexachlorocyclopentadiene	3310	2760		ug/Kg		83	31 - 120	1	49
Hexachloroethane	3310	2220		ug/Kg		67	41 - 120	2	46
Indeno(1,2,3-cd)pyrene	3310	3150		ug/Kg		95	56 - 149	1	15
Isophorone	3310	2590		ug/Kg		78	56 - 120	2	17
Naphthalene	3310	2580		ug/Kg		78	46 - 120	2	29
Nitrobenzene	3310	2640		ug/Kg		80	49 - 120	2	24
N-Nitrosodi-n-propylamine	3310	2450		ug/Kg		74	46 - 120	2	31
N-Nitrosodiphenylamine	3310	3310		ug/Kg		100	20 - 119	0	15
Pentachlorophenol	3310	3170		ug/Kg		96	33 - 136	1	35
Phenanthrene	3310	3040		ug/Kg		92	60 - 130	0	15
Phenol	3310	2620		ug/Kg		79	36 - 120	0	35
Pyrene	3310	3030		ug/Kg		92	51 - 133	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	105		39 - 146
2-Fluorobiphenyl	80		37 - 120
2-Fluorophenol	71		18 - 120

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCSD 480-106567/3-A

Matrix: Solid

Analysis Batch: 106764

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 106567

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Nitrobenzene-d5	81		34 - 132
Phenol-d5	77		11 - 120
p-Terphenyl-d14	92		65 - 153

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-105058/1-A

Matrix: Solid

Analysis Batch: 105157

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 105058

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		200	39	ug/Kg		02/27/13 08:07	02/27/13 14:52	1
PCB-1221	ND		200	39	ug/Kg		02/27/13 08:07	02/27/13 14:52	1
PCB-1232	ND		200	39	ug/Kg		02/27/13 08:07	02/27/13 14:52	1
PCB-1242	ND		200	39	ug/Kg		02/27/13 08:07	02/27/13 14:52	1
PCB-1248	ND		200	39	ug/Kg		02/27/13 08:07	02/27/13 14:52	1
PCB-1254	ND		200	95	ug/Kg		02/27/13 08:07	02/27/13 14:52	1
PCB-1260	ND		200	95	ug/Kg		02/27/13 08:07	02/27/13 14:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	100		47 - 176	02/27/13 08:07	02/27/13 14:52	1
Tetrachloro-m-xylene	124		46 - 175	02/27/13 08:07	02/27/13 14:52	1

Lab Sample ID: LCS 480-105058/2-A

Matrix: Solid

Analysis Batch: 105157

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 105058

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1920	2500		ug/Kg		130	51 - 185
PCB-1260	1920	2230		ug/Kg		116	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	111		47 - 176
Tetrachloro-m-xylene	136		46 - 175

Lab Sample ID: 480-33480-2 MS

Matrix: Solid

Analysis Batch: 105157

Client Sample ID: BB-2

Prep Type: Total/NA

Prep Batch: 105058

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		2460	1880	J	ug/Kg	☼	76	42 - 159
PCB-1260	ND		2460	1690	J	ug/Kg	☼	69	47 - 153

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	102		47 - 176
Tetrachloro-m-xylene	130		46 - 175

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-33480-2 MSD

Matrix: Solid

Analysis Batch: 105157

Client Sample ID: BB-2

Prep Type: Total/NA

Prep Batch: 105058

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		2570	2700		ug/Kg	✱	105	42 - 159	36	50
PCB-1260	ND		2570	2530	J	ug/Kg	✱	98	47 - 153	40	50
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
DCB Decachlorobiphenyl	121		47 - 176								
Tetrachloro-m-xylene	179	X	46 - 175								

Lab Sample ID: MB 480-106492/1-A

Matrix: Solid

Analysis Batch: 106680

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 106492

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	ND		220	44	ug/Kg		03/08/13 09:13	03/10/13 15:24	1
PCB-1221	ND		220	44	ug/Kg		03/08/13 09:13	03/10/13 15:24	1
PCB-1232	ND		220	44	ug/Kg		03/08/13 09:13	03/10/13 15:24	1
PCB-1242	ND		220	44	ug/Kg		03/08/13 09:13	03/10/13 15:24	1
PCB-1248	ND		220	44	ug/Kg		03/08/13 09:13	03/10/13 15:24	1
PCB-1254	ND		220	110	ug/Kg		03/08/13 09:13	03/10/13 15:24	1
PCB-1260	ND		220	110	ug/Kg		03/08/13 09:13	03/10/13 15:24	1
Surrogate	MB	MB	Limits						
	%Recovery	Qualifier							
DCB Decachlorobiphenyl	110		47 - 176						
Tetrachloro-m-xylene	122		46 - 175						

Lab Sample ID: LCS 480-106492/2-A

Matrix: Solid

Analysis Batch: 106680

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 106492

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
PCB-1016			1850	2330		ug/Kg		126	51 - 185		
PCB-1260			1850	2220		ug/Kg		120	61 - 184		

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-105141/1-A

Matrix: Solid

Analysis Batch: 105451

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 105141

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.9		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Antimony	ND		14.9		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Arsenic	ND		2.0		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Barium	ND		0.50		mg/Kg		02/27/13 14:20	02/28/13 14:58	1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: MB 480-105141/1-A

Matrix: Solid

Analysis Batch: 105451

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 105141

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.20		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Cadmium	ND		0.20		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Calcium	ND		49.6		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Chromium	ND		0.50		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Cobalt	ND		0.50		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Copper	ND		0.99		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Iron	13.31		9.9		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Lead	ND		0.99		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Magnesium	ND		19.8		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Manganese	ND		0.20		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Nickel	ND		5.0		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Potassium	ND		29.7		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Selenium	ND		4.0		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Silver	ND		0.50		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Sodium	ND		139		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Thallium	ND		5.9		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Vanadium	ND		0.50		mg/Kg		02/27/13 14:20	02/28/13 14:58	1
Zinc	ND		2.0		mg/Kg		02/27/13 14:20	02/28/13 14:58	1

Lab Sample ID: LCSSRM 480-105141/2-A

Matrix: Solid

Analysis Batch: 105451

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 105141

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	9050	7948		mg/Kg		87.8	42.6 - 156.7
Antimony	106	85.69		mg/Kg		80.9	23.1 - 255.7
Arsenic	182	188.8		mg/Kg		103.8	70.9 - 129.7
Barium	143	138.1		mg/Kg		96.7	72.7 - 128.0
Beryllium	98.2	102.3		mg/Kg		104.1	74.6 - 125.1
Cadmium	60.4	62.35		mg/Kg		103.3	73.2 - 129.3
Calcium	6040	5985		mg/Kg		99.2	73.7 - 126.2
Chromium	125	123.9		mg/Kg		99.2	69.8 - 129.6
Cobalt	163	175.6		mg/Kg		107.8	74.2 - 125.2
Copper	80.0	85.28		mg/Kg		106.6	73.7 - 129.8
Iron	12900	11350		mg/Kg		88.1	32.3 - 168.2
Lead	136	144.4		mg/Kg		106.3	73.1 - 127.2
Magnesium	2640	2529		mg/Kg		95.9	64.0 - 135.6
Manganese	279	280.6		mg/Kg		100.7	74.2 - 126.2

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

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

Lab Sample ID: LCSSRM 480-105141/2-A

Matrix: Solid

Analysis Batch: 105451

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 105141

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	128	138.8		mg/Kg		108.6	73.1 - 129.7
Potassium	2820	2692		mg/Kg		95.5	62.1 - 137.9
Selenium	85.8	90.84		mg/Kg		105.8	63.9 - 136.2
Silver	61.3	63.70		mg/Kg		104.0	66.9 - 133.1
Sodium	439	450.2		mg/Kg		102.6	48.3 - 151.7
Thallium	144	154.3		mg/Kg		107.2	68.3 - 131.9
Vanadium	104	104.6		mg/Kg		100.6	66.0 - 133.7
Zinc	204	213.8		mg/Kg		104.9	69.6 - 129.9

Lab Sample ID: MB 480-106652/2-A

Matrix: Solid

Analysis Batch: 106934

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 106652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0050		mg/L		03/09/13 12:10	03/11/13 12:44	1

Lab Sample ID: LCS 480-106652/3-A

Matrix: Solid

Analysis Batch: 106934

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 106652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.00	1.08		mg/L		108	80 - 120

Lab Sample ID: LB 480-106577/1-B LB

Matrix: Solid

Analysis Batch: 106934

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 106652

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0050		mg/L		03/09/13 12:10	03/11/13 12:41	1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-105093/1-A

Matrix: Solid

Analysis Batch: 105166

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 105093

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		02/27/13 09:30	02/27/13 14:27	1

TestAmerica Buffalo

QC Sample Results

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-105093/2-A

Matrix: Solid

Analysis Batch: 105166

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 105093

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	3.08		mg/Kg		81.6	50.9 - 149. 1

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

GC/MS VOA

Analysis Batch: 105072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-3	BB-2 (DUP)	Total/NA	Solid	8260B	105089
LCS 480-105072/5	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-105072/7	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 105089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-3	BB-2 (DUP)	Total/NA	Solid	5035	

Analysis Batch: 105255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-8	BB-5	Total/NA	Solid	8260B	105319
480-33480-8 MS	BB-5	Total/NA	Solid	8260B	105319
480-33480-8 MSD	BB-5	Total/NA	Solid	8260B	105319
480-33480-10	BB-7	Total/NA	Solid	8260B	105319
LCS 480-105255/5	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-105255/6	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 105319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-8	BB-5	Total/NA	Solid	5035	
480-33480-8 MS	BB-5	Total/NA	Solid	5035	
480-33480-8 MSD	BB-5	Total/NA	Solid	5035	
480-33480-10	BB-7	Total/NA	Solid	5035	

Analysis Batch: 106590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-2	BB-2	Total/NA	Solid	8260B	106605
480-33480-4	BB-3	Total/NA	Solid	8260B	106605
480-33480-5	BB-3 (DUP)	Total/NA	Solid	8260B	106605
480-33480-6	BB-4	Total/NA	Solid	8260B	106605
480-33480-7	BB-4 (DUP)	Total/NA	Solid	8260B	106605
LCS 480-106590/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-106590/5	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 106605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-2	BB-2	Total/NA	Solid	5035	
480-33480-4	BB-3	Total/NA	Solid	5035	
480-33480-5	BB-3 (DUP)	Total/NA	Solid	5035	
480-33480-6	BB-4	Total/NA	Solid	5035	
480-33480-7	BB-4 (DUP)	Total/NA	Solid	5035	

Analysis Batch: 106691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-11	TRIP BLANK	Total/NA	Water	8260B	
LCS 480-106691/5	Lab Control Sample	Total/NA	Water	8260B	
MB 480-106691/6	Method Blank	Total/NA	Water	8260B	

TestAmerica Buffalo

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

GC/MS Semi VOA

Prep Batch: 105056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-2	BB-2	Total/NA	Solid	3550B	
480-33480-3	BB-2 (DUP)	Total/NA	Solid	3550B	
480-33480-4	BB-3	Total/NA	Solid	3550B	
480-33480-7	BB-4 (DUP)	Total/NA	Solid	3550B	
480-33480-8	BB-5	Total/NA	Solid	3550B	
480-33480-10	BB-7	Total/NA	Solid	3550B	
LCS 480-105056/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-105056/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 105281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-2	BB-2	Total/NA	Solid	8270C	105056
480-33480-3	BB-2 (DUP)	Total/NA	Solid	8270C	105056
480-33480-4	BB-3	Total/NA	Solid	8270C	105056
480-33480-7	BB-4 (DUP)	Total/NA	Solid	8270C	105056
LCS 480-105056/2-A	Lab Control Sample	Total/NA	Solid	8270C	105056
MB 480-105056/1-A	Method Blank	Total/NA	Solid	8270C	105056

Analysis Batch: 105643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-8	BB-5	Total/NA	Solid	8270C	105056
480-33480-10	BB-7	Total/NA	Solid	8270C	105056

Prep Batch: 106567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-6	BB-4	Total/NA	Solid	3550B	
LCS 480-106567/2-A	Lab Control Sample	Total/NA	Solid	3550B	
LCSD 480-106567/3-A	Lab Control Sample Dup	Total/NA	Solid	3550B	
MB 480-106567/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 106764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-6	BB-4	Total/NA	Solid	8270C	106567
LCS 480-106567/2-A	Lab Control Sample	Total/NA	Solid	8270C	106567
LCSD 480-106567/3-A	Lab Control Sample Dup	Total/NA	Solid	8270C	106567
MB 480-106567/1-A	Method Blank	Total/NA	Solid	8270C	106567

GC Semi VOA

Prep Batch: 105058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-2	BB-2	Total/NA	Solid	3550B	
480-33480-2 MS	BB-2	Total/NA	Solid	3550B	
480-33480-2 MSD	BB-2	Total/NA	Solid	3550B	
480-33480-3	BB-2 (DUP)	Total/NA	Solid	3550B	
480-33480-4	BB-3	Total/NA	Solid	3550B	
480-33480-7	BB-4 (DUP)	Total/NA	Solid	3550B	
480-33480-8	BB-5	Total/NA	Solid	3550B	
480-33480-10	BB-7	Total/NA	Solid	3550B	
LCS 480-105058/2-A	Lab Control Sample	Total/NA	Solid	3550B	

TestAmerica Buffalo

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

GC Semi VOA (Continued)

Prep Batch: 105058 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-105058/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 105157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-2	BB-2	Total/NA	Solid	8082	105058
480-33480-2 MS	BB-2	Total/NA	Solid	8082	105058
480-33480-2 MSD	BB-2	Total/NA	Solid	8082	105058
480-33480-3	BB-2 (DUP)	Total/NA	Solid	8082	105058
480-33480-4	BB-3	Total/NA	Solid	8082	105058
480-33480-7	BB-4 (DUP)	Total/NA	Solid	8082	105058
480-33480-8	BB-5	Total/NA	Solid	8082	105058
480-33480-10	BB-7	Total/NA	Solid	8082	105058
LCS 480-105058/2-A	Lab Control Sample	Total/NA	Solid	8082	105058
MB 480-105058/1-A	Method Blank	Total/NA	Solid	8082	105058

Prep Batch: 106492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-6	BB-4	Total/NA	Solid	3550B	
LCS 480-106492/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-106492/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 106680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-6	BB-4	Total/NA	Solid	8082	106492
LCS 480-106492/2-A	Lab Control Sample	Total/NA	Solid	8082	106492
MB 480-106492/1-A	Method Blank	Total/NA	Solid	8082	106492

Metals

Prep Batch: 105093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-2	BB-2	Total/NA	Solid	7471A	
480-33480-3	BB-2 (DUP)	Total/NA	Solid	7471A	
480-33480-4	BB-3	Total/NA	Solid	7471A	
480-33480-6	BB-4	Total/NA	Solid	7471A	
480-33480-7	BB-4 (DUP)	Total/NA	Solid	7471A	
480-33480-8	BB-5	Total/NA	Solid	7471A	
480-33480-10	BB-7	Total/NA	Solid	7471A	
LCSSRM 480-105093/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-105093/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 105141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-2	BB-2	Total/NA	Solid	3050B	
480-33480-3	BB-2 (DUP)	Total/NA	Solid	3050B	
480-33480-4	BB-3	Total/NA	Solid	3050B	
480-33480-6	BB-4	Total/NA	Solid	3050B	
480-33480-7	BB-4 (DUP)	Total/NA	Solid	3050B	
480-33480-8	BB-5	Total/NA	Solid	3050B	
480-33480-10	BB-7	Total/NA	Solid	3050B	

TestAmerica Buffalo

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Metals (Continued)

Prep Batch: 105141 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 480-105141/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-105141/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 105166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-2	BB-2	Total/NA	Solid	7471A	105093
480-33480-3	BB-2 (DUP)	Total/NA	Solid	7471A	105093
480-33480-4	BB-3	Total/NA	Solid	7471A	105093
480-33480-6	BB-4	Total/NA	Solid	7471A	105093
480-33480-7	BB-4 (DUP)	Total/NA	Solid	7471A	105093
480-33480-8	BB-5	Total/NA	Solid	7471A	105093
480-33480-10	BB-7	Total/NA	Solid	7471A	105093
LCSSRM 480-105093/2-A	Lab Control Sample	Total/NA	Solid	7471A	105093
MB 480-105093/1-A	Method Blank	Total/NA	Solid	7471A	105093

Analysis Batch: 105451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-2	BB-2	Total/NA	Solid	6010B	105141
480-33480-3	BB-2 (DUP)	Total/NA	Solid	6010B	105141
480-33480-4	BB-3	Total/NA	Solid	6010B	105141
480-33480-6	BB-4	Total/NA	Solid	6010B	105141
480-33480-7	BB-4 (DUP)	Total/NA	Solid	6010B	105141
480-33480-8	BB-5	Total/NA	Solid	6010B	105141
480-33480-10	BB-7	Total/NA	Solid	6010B	105141
LCSSRM 480-105141/2-A	Lab Control Sample	Total/NA	Solid	6010B	105141
MB 480-105141/1-A	Method Blank	Total/NA	Solid	6010B	105141

Leach Batch: 106577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-6	BB-4	TCLP	Solid	1311	
480-33480-7	BB-4 (DUP)	TCLP	Solid	1311	
LB 480-106577/1-B LB	Method Blank	TCLP	Solid	1311	

Prep Batch: 106652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-6	BB-4	TCLP	Solid	3010A	106577
480-33480-7	BB-4 (DUP)	TCLP	Solid	3010A	106577
LB 480-106577/1-B LB	Method Blank	TCLP	Solid	3010A	106577
LCS 480-106652/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 480-106652/2-A	Method Blank	Total/NA	Solid	3010A	

Analysis Batch: 106934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-6	BB-4	TCLP	Solid	6010B	106652
480-33480-7	BB-4 (DUP)	TCLP	Solid	6010B	106652
LB 480-106577/1-B LB	Method Blank	TCLP	Solid	6010B	106652
LCS 480-106652/3-A	Lab Control Sample	Total/NA	Solid	6010B	106652
MB 480-106652/2-A	Method Blank	Total/NA	Solid	6010B	106652

TestAmerica Buffalo

QC Association Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

General Chemistry

Analysis Batch: 105007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-1	BB-1	Total/NA	Solid	Moisture	
480-33480-2	BB-2	Total/NA	Solid	Moisture	
480-33480-3	BB-2 (DUP)	Total/NA	Solid	Moisture	
480-33480-4	BB-3	Total/NA	Solid	Moisture	
480-33480-5	BB-3 (DUP)	Total/NA	Solid	Moisture	
480-33480-6	BB-4	Total/NA	Solid	Moisture	
480-33480-7	BB-4 (DUP)	Total/NA	Solid	Moisture	
480-33480-8	BB-5	Total/NA	Solid	Moisture	
480-33480-8 MS	BB-5	Total/NA	Solid	Moisture	
480-33480-8 MSD	BB-5	Total/NA	Solid	Moisture	
480-33480-9	BB-6	Total/NA	Solid	Moisture	
480-33480-9 MS	BB-6	Total/NA	Solid	Moisture	
480-33480-9 MSD	BB-6	Total/NA	Solid	Moisture	
480-33480-10	BB-7	Total/NA	Solid	Moisture	

Analysis Batch: 106137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-33480-9MS	BB-6	Total/NA	Solid	Moisture	
480-33480-9MSD	BB-6	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-1

Date Collected: 02/26/13 08:55

Date Received: 02/26/13 15:28

Lab Sample ID: 480-33480-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	105007	02/26/13 21:43	ZLR	TAL BUF

Client Sample ID: BB-2

Date Collected: 02/26/13 11:00

Date Received: 02/26/13 15:28

Lab Sample ID: 480-33480-2

Matrix: Solid

Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			106605	03/08/13 19:06	RL	TAL BUF
Total/NA	Analysis	8260B		1	106590	03/08/13 21:39	JMB	TAL BUF
Total/NA	Prep	3550B			105056	02/27/13 08:04	CM	TAL BUF
Total/NA	Analysis	8270C		20	105281	02/28/13 18:58	HTL	TAL BUF
Total/NA	Prep	3550B			105058	02/27/13 08:07	CM	TAL BUF
Total/NA	Analysis	8082		10	105157	02/27/13 19:10	JM	TAL BUF
Total/NA	Prep	7471A			105093	02/27/13 09:30	JRK	TAL BUF
Total/NA	Analysis	7471A		1	105166	02/27/13 14:37	JRK	TAL BUF
Total/NA	Prep	3050B			105141	02/27/13 14:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	105451	02/28/13 15:10	LH	TAL BUF
Total/NA	Analysis	Moisture		1	105007	02/26/13 21:43	ZLR	TAL BUF

Client Sample ID: BB-2 (DUP)

Date Collected: 02/26/13 11:00

Date Received: 02/26/13 15:28

Lab Sample ID: 480-33480-3

Matrix: Solid

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			105089	02/27/13 09:50	JMB	TAL BUF
Total/NA	Analysis	8260B		1	105072	02/27/13 13:44	JMB	TAL BUF
Total/NA	Prep	3550B			105056	02/27/13 08:04	CM	TAL BUF
Total/NA	Analysis	8270C		20	105281	02/28/13 19:23	HTL	TAL BUF
Total/NA	Prep	3550B			105058	02/27/13 08:07	CM	TAL BUF
Total/NA	Analysis	8082		10	105157	02/27/13 20:25	JM	TAL BUF
Total/NA	Prep	7471A			105093	02/27/13 09:30	JRK	TAL BUF
Total/NA	Analysis	7471A		1	105166	02/27/13 14:40	JRK	TAL BUF
Total/NA	Prep	3050B			105141	02/27/13 14:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	105451	02/28/13 15:12	LH	TAL BUF
Total/NA	Analysis	Moisture		1	105007	02/26/13 21:43	ZLR	TAL BUF

Client Sample ID: BB-3

Date Collected: 02/26/13 11:25

Date Received: 02/26/13 15:28

Lab Sample ID: 480-33480-4

Matrix: Solid

Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			106605	03/08/13 19:06	RL	TAL BUF
Total/NA	Analysis	8260B		1	106590	03/08/13 22:30	JMB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-3

Lab Sample ID: 480-33480-4

Date Collected: 02/26/13 11:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			105056	02/27/13 08:04	CM	TAL BUF
Total/NA	Analysis	8270C		5	105281	02/28/13 19:48	HTL	TAL BUF
Total/NA	Prep	3550B			105058	02/27/13 08:07	CM	TAL BUF
Total/NA	Analysis	8082		1	105157	02/27/13 21:14	JM	TAL BUF
Total/NA	Prep	7471A			105093	02/27/13 09:30	JRK	TAL BUF
Total/NA	Analysis	7471A		1	105166	02/27/13 14:42	JRK	TAL BUF
Total/NA	Prep	3050B			105141	02/27/13 14:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	105451	02/28/13 15:14	LH	TAL BUF
Total/NA	Analysis	Moisture		1	105007	02/26/13 21:43	ZLR	TAL BUF

Client Sample ID: BB-3 (DUP)

Lab Sample ID: 480-33480-5

Date Collected: 02/26/13 11:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 76.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			106605	03/08/13 19:06	RL	TAL BUF
Total/NA	Analysis	8260B		1	106590	03/08/13 22:56	JMB	TAL BUF
Total/NA	Analysis	Moisture		1	105007	02/26/13 21:43	ZLR	TAL BUF

Client Sample ID: BB-4

Lab Sample ID: 480-33480-6

Date Collected: 02/26/13 12:20

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			106605	03/08/13 19:06	RL	TAL BUF
Total/NA	Analysis	8260B		1	106590	03/08/13 23:21	JMB	TAL BUF
Total/NA	Prep	3550B			106567	03/08/13 14:48	KB	TAL BUF
Total/NA	Analysis	8270C		10	106764	03/11/13 12:52	AM	TAL BUF
Total/NA	Prep	3550B			106492	03/08/13 09:13	MRB	TAL BUF
Total/NA	Analysis	8082		10	106680	03/10/13 18:51	JM	TAL BUF
Total/NA	Prep	7471A			105093	02/27/13 09:30	JRK	TAL BUF
Total/NA	Analysis	7471A		1	105166	02/27/13 14:44	JRK	TAL BUF
Total/NA	Prep	3050B			105141	02/27/13 14:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	105451	02/28/13 15:17	LH	TAL BUF
TCLP	Leach	1311			106577	03/08/13 16:11	MRB	TAL BUF
TCLP	Prep	3010A			106652	03/09/13 12:10	SS	TAL BUF
TCLP	Analysis	6010B		1	106934	03/11/13 12:48	LH	TAL BUF
Total/NA	Analysis	Moisture		1	105007	02/26/13 21:43	ZLR	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-4 (DUP)

Lab Sample ID: 480-33480-7

Date Collected: 02/26/13 12:20

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			106605	03/08/13 19:06	RL	TAL BUF
Total/NA	Analysis	8260B		1	106590	03/08/13 23:46	JMB	TAL BUF
Total/NA	Prep	3550B			105056	02/27/13 08:04	CM	TAL BUF
Total/NA	Analysis	8270C		20	105281	02/28/13 20:13	HTL	TAL BUF
Total/NA	Prep	3550B			105058	02/27/13 08:07	CM	TAL BUF
Total/NA	Analysis	8082		10	105157	02/27/13 20:50	JM	TAL BUF
Total/NA	Prep	7471A			105093	02/27/13 09:30	JRK	TAL BUF
Total/NA	Analysis	7471A		1	105166	02/27/13 14:49	JRK	TAL BUF
Total/NA	Prep	3050B			105141	02/27/13 14:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	105451	02/28/13 15:19	LH	TAL BUF
TCLP	Leach	1311			106577	03/08/13 16:11	MRB	TAL BUF
TCLP	Prep	3010A			106652	03/09/13 12:10	SS	TAL BUF
TCLP	Analysis	6010B		1	106934	03/11/13 12:55	LH	TAL BUF
Total/NA	Analysis	Moisture		1	105007	02/26/13 21:43	ZLR	TAL BUF

Client Sample ID: BB-5

Lab Sample ID: 480-33480-8

Date Collected: 02/26/13 12:50

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			105319	02/28/13 11:02	JMB	TAL BUF
Total/NA	Analysis	8260B		1	105255	02/28/13 16:51	CDC	TAL BUF
Total/NA	Prep	3550B			105056	02/27/13 08:04	CM	TAL BUF
Total/NA	Analysis	8270C		20	105643	03/04/13 14:55	HTL	TAL BUF
Total/NA	Prep	3550B			105058	02/27/13 08:07	CM	TAL BUF
Total/NA	Analysis	8082		10	105157	02/27/13 21:39	JM	TAL BUF
Total/NA	Prep	7471A			105093	02/27/13 09:30	JRK	TAL BUF
Total/NA	Analysis	7471A		1	105166	02/27/13 14:51	JRK	TAL BUF
Total/NA	Prep	3050B			105141	02/27/13 14:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	105451	02/28/13 15:21	LH	TAL BUF
Total/NA	Analysis	Moisture		1	105007	02/26/13 21:43	ZLR	TAL BUF

Client Sample ID: BB-6

Lab Sample ID: 480-33480-9

Date Collected: 02/26/13 13:10

Matrix: Solid

Date Received: 02/26/13 15:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	105007	02/26/13 21:43	ZLR	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Client Sample ID: BB-7

Lab Sample ID: 480-33480-10

Date Collected: 02/26/13 13:25

Matrix: Solid

Date Received: 02/26/13 15:28

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			105319	02/28/13 11:02	JMB	TAL BUF
Total/NA	Analysis	8260B		1	105255	02/28/13 19:24	CDC	TAL BUF
Total/NA	Prep	3550B			105056	02/27/13 08:04	CM	TAL BUF
Total/NA	Analysis	8270C		20	105643	03/04/13 15:20	HTL	TAL BUF
Total/NA	Prep	3550B			105058	02/27/13 08:07	CM	TAL BUF
Total/NA	Analysis	8082		10	105157	02/27/13 22:04	JM	TAL BUF
Total/NA	Prep	7471A			105093	02/27/13 09:30	JRK	TAL BUF
Total/NA	Analysis	7471A		1	105166	02/27/13 14:55	JRK	TAL BUF
Total/NA	Prep	3050B			105141	02/27/13 14:20	SS	TAL BUF
Total/NA	Analysis	6010B		1	105451	02/28/13 15:26	LH	TAL BUF
Total/NA	Analysis	Moisture		1	105007	02/26/13 21:43	ZLR	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-33480-11

Date Collected: 02/26/13 00:00

Matrix: Water

Date Received: 02/26/13 15:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	106691	03/10/13 15:53	CDC	TAL BUF

Laboratory References:

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

Certification Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	06-30-13
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-01-13
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	03-31-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAP	10	NY200003	06-09-13
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Method Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: AMEC Environment & Infrastructure, Inc.
Project/Site: Niagara Falls site

TestAmerica Job ID: 480-33480-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-33480-1	BB-1	Solid	02/26/13 08:55	02/26/13 15:28
480-33480-2	BB-2	Solid	02/26/13 11:00	02/26/13 15:28
480-33480-3	BB-2 (DUP)	Solid	02/26/13 11:00	02/26/13 15:28
480-33480-4	BB-3	Solid	02/26/13 11:25	02/26/13 15:28
480-33480-5	BB-3 (DUP)	Solid	02/26/13 11:25	02/26/13 15:28
480-33480-6	BB-4	Solid	02/26/13 12:20	02/26/13 15:28
480-33480-7	BB-4 (DUP)	Solid	02/26/13 12:20	02/26/13 15:28
480-33480-8	BB-5	Solid	02/26/13 12:50	02/26/13 15:28
480-33480-9	BB-6	Solid	02/26/13 13:10	02/26/13 15:28
480-33480-10	BB-7	Solid	02/26/13 13:25	02/26/13 15:28
480-33480-11	TRIP BLANK	Water	02/26/13 00:00	02/26/13 15:28

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

TAL-4124 (1/007)

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

Client: AMEC E&I
Address: 800 N. Bell Ave. Suite 200
City: Carnegie State: PA Zip Code: 15106
Project Name and Location (State): Honeywell - Niagara Falls
Contract/Purchase Order/Quote No.: N201109085

Project Manager: Robert Crowley
Telephone Number (Area Code)/Fax Number: 716/261-1312
Date: 2/26/13
Chain of Custody Number: 233942
Page: 1 of 1

Site Contact: J. Luttinger
Lab Contact: B. Fisher
Lab Number: _____

Analysis (Attach list if more space is needed)
PCBs 8082
PAHs 8237
TC VOCs 8260
VOC MS/MSD
VOC MS/MSD

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix	Containers & Preservatives	Lab Contact	Analysis	Special Instructions/Conditions of Receipt
BB-1	2/26/13	0955	Soil	3	1	X	
BB-2	1100		Soil	3	1	X	
BB-2 (DUP)	1100		Soil	3	1	X	
BB-3	1125		Soil	3	1	X	
BB-3 (DUP)	1125		Soil	3	1	X	
BB-4	1220		Soil	3	1	X	
BB-4 (DUP)	1220		Soil	3	1	X	
BB-5	1250		Soil	3	1	X	
BB-6	1310		Soil	3	1	X	
BB-7	1325		Soil	3	1	X	
Trip Blank							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown
☐ Disposal By Lab ☐ Archive For _____ Months
 (A fee may be assessed if samples are retained longer than 1 month)

QC Requirements (Specify)
 1. Received By: [Signature] Date: 2/26/13 Time: 15:28
 2. Received By: [Signature] Date: _____ Time: _____
 3. Received By: [Signature] Date: _____ Time: _____

Comments: 261.312

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

Login Sample Receipt Checklist

Client: AMEC Environment & Infrastructure, Inc.

Job Number: 480-33480-1

Login Number: 33480

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robitaille, Zach L

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

Appendix D

Amec Data Validation and Summary Reports

**DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK**

1.0 INTRODUCTION

Data validation was completed on remedial investigation soil and water samples collected in 2012. Samples were analyzed by TestAmerica Laboratories in Amherst, New York (TAL-Buffalo) and reported in data sets 480-22688-1, 480-22767-1, 480-23055-1, 480-23380-1, 480-23600-1, 480-23756-1, and 480-26407-1. The following U.S. Environmental Protection Agency (USEPA) analytical methods (USEPA, 1996) were performed:

Soil:

- Volatile organic compounds (VOCs) by USEPA Method SW846 8260
- Semivolatile organic compounds (SVOCs) by USEPA Method SW846 8270
- Pesticides by USEPA Method SW846 8081
- Polychlorinated biphenyls (PCBs) by USEPA Method SW846 8082
- Metals by USEPA Method SW846 6010B
- Mercury by USEPA Method 7471
- Percent Solids by ASTM Method D2216

Water:

- Volatile organic compounds (VOCs) by USEPA Method SW846 8260
- Semivolatile organic compounds (SVOCs) by USEPA Method SW846 8270
- Pesticides by USEPA Method SW846 8081
- Polychlorinated biphenyls (PCBs) by USEPA Method SW846 8082
- Metals by USEPA Method SW846 6010B
- Mercury by USEPA Method 7470

A summary of the data deliverable groups, samples, and analytical parameters is presented on Table 1. Samples were collected based on objectives identified in the Supplemental Remedial Investigation Work Plan (AMEC, 2012). Data validation was completed in accordance with the Honeywell Remediation program Level II data validation procedures and the NYSDEC Data Usability Summary Report (DUSR) guidelines (NYSDEC, 2010). Data were reviewed using Honeywell generic precision and accuracy control limits presented in Table 2. Data quality reviews for the items listed above were completed using professional judgment and general procedures found in USEPA Region II guidelines (USEPA, 2006a; USEPA, 2006b; USEPA, 2006c; USEPA, 2008a; and USEPA, 2008b). A summary of validation data qualification actions is presented on Table 3. Final results are presented on Table 4.

During the Level II data validation the following data quality indicators were reviewed:

- Case Narrative
- Sample Collection and Holding Times
- Quality Control Blanks

- Laboratory Control Samples (LCS)
- Matrix Spike/Matrix Spike Duplicates (MS/MSD)
- Laboratory and Field Duplicates
- Reporting Limits
- Data Completeness
- Electronic Data Verification

The following additional checks were added to the Level II review based on data review procedures included in the NYSDEC DUSR guidance:

- Initial Calibrations
- Continuing Calibrations
- Internal Standards
- Interference Check Standard
- Serial Dilutions
- Percent Solids Evaluation
- Raw Data review and Calculations
- Calculation and quality control form transcription checks

Data qualifications were completed if necessary in accordance with the guidelines and professional judgment using the following qualifiers:

U = The target compound was not detected at concentrations greater than the associated quantitation limit

J = The reported concentration is considered an estimated value

Data validation was not completed on the remaining analytical samples. Results for all other methods remain as reported by the laboratory including laboratory data qualifiers.

2.0 DATA VALIDATION ACTIONS AND OBSERVATIONS

2.1 SOIL

2.1.1 VOC

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD
- * Field Duplicates
- * Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs

- * Electronic Data Verification
- * Raw Data review and Calculations
- * Target Compound Identification

* QC criteria were met for this parameter.

2.1.2 SVOCs

The majority of SVOC samples were analyzed at dilutions due to target compound concentrations or sample matrix condition. Reporting limit for compounds that were not detected are elevated.

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD
- * Field Duplicates
- * Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs
- * Electronic Data Verification
- * Raw Data review and Calculations
- * Target Compound Identification

* QC criteria were met for this parameter.

Blanks

Benzo(a)anthracene (428 µg/kg), benzo(a)pyrene (391 µg/kg), benzo(b)fluoranthene (517 µg/kg), benzo(g,h,i)perylene (497 µg/kg), benzo(k)fluoranthene (504 µg/kg), chrysene (411 µg/kg), fluoranthene (348 µg/kg), indeno(1,2,3-cd)pyrene (514 µg/kg), phenanthrene (212 µg/kg), Pyrene (345 µg/kg), 2-methylnaphthalene (19.0 µg/kg), acenaphthene (113 µg/kg), acenaphthylene (90.2 µg/kg), anthracene (206 µg/kg), carbazole (305 µg/kg), di-n-octyl phthalate (656 µg/kg), dibenz(a,h)anthracene (468 µg/kg) and dibenzofuran (130 µg/kg) were detected in method blank in batch 480-73105. An action limit was established at five times (di-n-octyl phthalate action limit was established at ten times) the reported blank concentration. A subset of sample results in associated samples were qualified as non-detect (U) at the reporting limit with reason code BL1. A summary of qualified sample results is presented in Table 3.

2.1.3 Pesticides

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody

- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD
- * Field Duplicates
- * Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs
- * Electronic Data Verification
- * Raw Data review and Calculations
- * Second Column Confirmation/Quantitation Review

* QC criteria were met for this parameter.

LCS/LCSD

The LCS percent recovery was greater than the QC limit of 140 percent for methoxychlor (143) in batch 480-72959, which may indicate high bias. Result for methoxychlor in sample B-25 (0-0.5) was qualified as estimated (J) with reason code LCSH. A summary of qualified sample results is presented in Table 3.

2.1.4 PCBs

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD
- * Field Duplicates
- * Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs
- * Electronic Data Verification
- * Raw Data review and Calculations
- * Second Column Confirmation/Quantitation Review

* QC criteria were met for this parameter.

2.1.5 Metals

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody

- * Collection and Preservation
- * Holding Times
- * QC Blanks
- LCS
- MS/MSD
- * Field and Lab Duplicates
- * Instrument Calibration
- * Electronic Data Verification
- * Interference Check Samples
- * Serial Dilutions

* - QC criteria were met for this parameter.

LCS/LCSD

The LCS percent recoveries were less than the QC limit of 80 percent for aluminum (76, 75 and 78), antimony (61, 79, and 76) and iron (71, 74 and 79) in batches 480-72847, 480-74854 and 480-73959, respectively, which may indicate low bias. These results in associated samples were qualified as estimated (UJ/J) with reason code LCSL. A summary of qualified sample results is presented in Table 3.

The LCS percent recoveries were less than the QC limit of 80 percent for antimony (79) and barium (33) in batches 480-73033 and 480-84938, respectively, which may indicate low bias. These results in associated samples were qualified as estimated (UJ/J) with reason code LCSL. A summary of qualified sample results is presented in Table 3.

MS/MSD

MS/MSD analyses were completed using sample B-26 (0-0.5). The MS percent recovery for antimony (74) was less than the QC limit of 70. Result of antimony in sample B-26 (0-0.5) was qualified as estimated (UJ) with reason code MSL. A summary of qualified sample result is presented in Table 3.

MS/MSD analyses were completed using sample B-36 (0-.5). The MS and / or MSD percent recoveries for antimony (112/156) and aluminum (150/174) were greater than the QC limit of 125. Result of antimony and aluminum in sample B-36 (0-.5) were qualified as estimated (J) with reason code MSL. A summary of qualified sample result is presented in Table 3.

2.1.6 Percent solid and Moisture

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- Field and Lab Duplicates

* - QC criteria were met for this parameter.

Laboratory Duplicates

Laboratory duplicates were analyzed in multiple data batches. Unless discussed below, results were within RPD project limits of 20.

In the lab duplicate analysis completed using sample TE3-W, the RPDs of Moisture exceeded the lab QC limit of 20. Result in sample TE3-W was qualified estimated (J) with reason code LDP. A summary of qualified sample results is presented in Table 3.

2.2 Water

2.2.1 VOC

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD
- * Field Duplicates
- * Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs
- * Electronic Data Verification
- * Raw Data review and Calculations
- * Target Compound Identification

* - QC criteria were met for this parameter.

MS/MSD

MS/MSD analyses were completed using sample TI-MW01_080912. The MSD percent recoveries for 1,1-dichloroethene (69) was less than the QC limit of 70. Results of 1,1-dichloroethene in sample TI-MW01_080912 were qualified as estimated (UJ) with reason code MSDL. A summary of qualified sample results is presented in Table 3.

2.2.2 SVOCs

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS

- * MS/MSD
- * Field Duplicates
- * Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs
- * Electronic Data Verification
- * Raw Data review and Calculations
- * Target Compound Identification

* QC criteria were met for this parameter.

2.2.3 Pesticides

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD
- * Field Duplicates
- * Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs
- * Electronic Data Verification
- * Raw Data review and Calculations
- * Second Column Confirmation/Quantitation Review

* - QC criteria were met for this parameter.

Surrogate

Surrogate decachlorobiphenyl had low recovery (17) in samples DUP_080912. Result for all target compounds in this sample were qualified estimated (UJ) with reason code SSL. A summary of qualified sample results is presented on Table 3.

2.2.4 PCBs

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD

- * Field Duplicates
- Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs
- * Electronic Data Verification
- * Raw Data review and Calculations
- * Second Column Confirmation/Quantitation Review

* - QC criteria were met for this parameter.

Surrogate

Surrogate decachlorobiphenyl had low recovery (26) in samples DUP_080912. Result for all target compounds in this sample were qualified estimated (UJ) with reason code SSL. A summary of qualified sample results is presented on Table 3.

2.2.5 Metals

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD
- Field and Lab Duplicates
- * Instrument Calibration
- * Electronic Data Verification
- * Interference Check Samples
- * Serial Dilutions

* - QC criteria were met for this parameter

Field Duplicate

For the field duplicate pair TI-MW02_080912 and DUP_080912 the absolute difference of dissolved zinc results exceeded the validation QC limit of less than the reporting limit (RL) [0.010] for values <5x the RL. The results for dissolved zinc in sample set TI-MW02_080912 and DUP_080912 were qualified estimated (J) with reason code FD.

References:

AMEC, 2012. Supplemental Remedial Investigation Work Plan; Tract I Site 3123 Highland Avenue Niagara Falls, Niagara County, New York Site No. 932157; May 2012.

New York State Department of Environmental Conservation (NYSDEC), 2010. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; DER-10; Division of Environmental Remediation; May 2010.

U.S. Environmental Protection Agency (USEPA), 1996. "Test Methods for Evaluating Solid Waste"; Laboratory Manual Physical/Chemical Methods; Office of Solid Waste and Emergency Response; Washington, DC; SW-846; November 1986; Revision 4 -December 1996.

U.S. Environmental Protection Agency (USEPA), 2006a. "Validation of Metals Data for the Contract Laboratory Program (CLP)"; USEPA Region II; HW-2; Revision 13; September 2006.

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Data Validator: Lakshmi Devi



Date: January 02, 2013

Senior Chemist: Chris Ricardi, NRCC-EAC

Date: January 22, 2013

TABLE 1
SAMPLE AND ANALYTICAL SUMMARY
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

SDG	Location	Sample ID	Purpose	Matrix	Parameter:		VOCs	SVOCs	Pesticides	PCBs	Total Metals	Dissolved Metals	TCLP Metal	Total Hg	Dissolved Hg	Hg	% Solids & Moisture
					Method:	Date											
480-26407-1	TE-04	TE4-E	REG	SOIL	SW8260	10/10/12		16	SW8081	SW8082	SW6010	SW6010	SW6010	SW7470	SW7470	SW7471	Lloyd Kahn
480-26407-1	TE-04	TE4-F	REG	SOIL		10/10/12		16									2
480-26407-1	TE-04	TE4-N	REG	SOIL		10/10/12		16									2
480-26407-1	TE-04	TE4-S	REG	SOIL		10/10/12		16									2
480-26407-1	TE-04	TE4-W	REG	SOIL		10/10/12		16									2
480-26407-1	TE-03	TE3-E	REG	SOIL		10/10/12		16									2
480-26407-1	TE-03	TE3-F	REG	SOIL		10/10/12		16									2
480-26407-1	TE-03	TE3-N	REG	SOIL		10/10/12		16									2
480-26407-1	TE-03	TE3-S	REG	SOIL		10/10/12		16									2
480-26407-1	TE-03	TE3-W	REG	SOIL		10/10/12		16									2
480-26407-1	TE-02	TE2-E	REG	SOIL		10/10/12					1						2
480-26407-1	TE-02	TE2-F	REG	SOIL		10/10/12					1						2
480-26407-1	TE-02	TE2-N	REG	SOIL		10/10/12					1						2
480-26407-1	TE-02	TE2-S	REG	SOIL		10/10/12					1						2
480-26407-1	TE-02	TE2-W	REG	SOIL		10/10/12					1						2
480-26407-1	TE-01	TE1-E	REG	SOIL		10/10/12		16									2
480-26407-1	TE-01	TE1-F	REG	SOIL		10/10/12		16									2
480-26407-1	TE-01	TE1-N	REG	SOIL		10/10/12		16									2
480-26407-1	TE-01	TE1-S	REG	SOIL		10/10/12		16									2
480-26407-1	TE-01	TE1-W	REG	SOIL		10/10/12		16									2
480-23380-1	T1-MW-03	T1-MW-03(0-5)	REG	SOIL		8/1/12					22						2
480-23380-1	T1-MW-03	T1-MW-03(1.5-2)	REG	SOIL		8/1/12					1						2
480-23600-1	T1-MW-02	T1-MW-02(0-0.5)	REG	SOIL		7/27/12							1				
480-23600-1	T1-MW-02	T1-MW-02(1-1.5)	REG	SOIL		7/27/12							1				
480-23380-1	T1-MW-02	T1-MW-02(5-6)	REG	SOIL		8/1/12	48	65	21	7						1	2
480-23055-1	T1-MW-02	T1-MW-02(0-5)	REG	SOIL		7/24/12		65	21	7	22					1	2
480-23055-1	T1-MW-02	T1-MW-02(1-1.5)	REG	SOIL		7/24/12					1						2
480-22767-1	T1-MW-01	T1-MW-01(5-1.0)	REG	SOIL		7/18/12		65	21	7	22					1	2
480-22767-1	T1-MW-01	T1-MW-01(4.5-5.0)	REG	SOIL		7/18/12	48										2
480-22767-1	T1-MW-01	T1-MW-01(8.5-9.0)	REG	SOIL		7/18/12	48										2
480-22767-1	B-39	B-39(0-0.5)	REG	SOIL		7/18/12					1						2
480-23600-1	B-39	B-39(0-0.5)	REG	SOIL		7/18/12							1				
480-22767-1	B-39	B-39(2.5-3.0)	REG	SOIL		7/18/12					1						2

TABLE 1
SAMPLE AND ANALYTICAL SUMMARY
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

SDG	Location	Sample ID	Purpose	Matrix	Parameter:		VOCs	SVOCs	Pesticides	PCBs	Total Metals	Dissolved Metals	TCLP Metal	Total Hg	Dissolved Hg	Hg	% Solids & Moisture
					Method:	Date	SW8260	SW8270	SW8081	SW8082	SW6010	SW6010	SW6010	SW7470	SW7470	SW7471	Lloyd Kahn
480-22767-1	B-38	B-38(0-0.5)	REG	SOIL		7/18/12					1						2
480-22767-1	B-38	B-38(3.5-4.0)	REG	SOIL		7/18/12					1						2
480-23055-1	B-36	B-36(0-0.5)	REG	SOIL		7/24/12		65	21	7	22					1	2
480-23600-1	B-36	B-36(0-0.5)	REG	SOIL		7/27/12							1				2
480-23055-1	B-36	B-36(1.5-2)	REG	SOIL		7/24/12					1						
480-23600-1	B-36	B-36(1.5-2)	REG	SOIL		7/27/12							1				
480-23055-1	B-35	B-35(0-0.5)	REG	SOIL		7/24/12		65	21	7	22					1	2
480-23600-1	B-35	B-35(0-0.5)	REG	SOIL		7/27/12							1				
480-23055-1	B-35	B-35(1.5-2)	REG	SOIL		7/24/12					1						2
480-22767-1	B-26	B-26(0-0.5)	REG	SOIL		7/18/12		65	21	7	22					1	2
480-23600-1	B-26	B-26(0-0.5)	REG	SOIL		7/18/12							1				
480-22767-1	B-26	B-26(4-4.5)	REG	SOIL		7/18/12					1						2
480-22688-1	B-25	B-25(0-0.5)	REG	SOIL		7/17/12		65	21	7	22					1	2
480-22688-1	B-25	B-25(4.5-5.0)	REG	SOIL		7/17/12					1						2
480-22688-1	B-24	B-24(0-0.5)	REG	SOIL		7/17/12		65	21	7	22					1	2
480-22688-1	B-24	B-24(6.5-7.0)	REG	SOIL		7/17/12					1						
480-22688-1	B-23	B-23(0-0.5)	REG	SOIL		7/17/12		65	21	7	22					1	2
480-23600-1	B-23	B-23(0-0.5)	REG	SOIL		7/17/12	48						1				
480-22688-1	B-23	B-23(2-4)	REG	SOIL		7/17/12											2
480-23600-1	B-23	B-23(5.5-6)	REG	SOIL		7/17/12							1				
480-22688-1	B-23	B-23(5.5-6.0)	REG	SOIL		7/17/12					1						2
480-22688-1	B-22	B-22(0-0.5)	REG	SOIL		7/17/12		65	21	7	22					1	2
480-23600-1	B-22	B-22(0-0.5)	REG	SOIL		7/17/12							1				
480-23600-1	B-22	B-22(6.5-7)	REG	SOIL		7/17/12							1				
480-22688-1	B-22	B-22(6.5-7.0)	REG	SOIL		7/17/12	48				1						2
480-22688-1	B-22	B-22(9.5-10.0)	REG	SOIL		7/17/12	48										2
480-23756-1	T1-MW-03	TI-MW03_080912	REG	WATER		8/9/12	48	65	21	7	22	22		1	1		
480-23756-1	T1-MW-02	DUP_080912	FD	WATER		8/9/12	48	65	21	7	22	22		1	1		2
480-23756-1	T1-MW-02	TI-MW02_080912	REG	WATER		8/9/12	48	65	21	7	22	22		1	1		2
480-23756-1	T1-MW-01	TI-MW01_080912	REG	WATER		8/9/12	48	65	21	7	22	22		1	1		2
480-23380-1	QC	TB_080112	TB	WATER		8/1/12	48										
480-22688-1	QC	TRIPBLANK_071712	TB	WATER		7/17/12	48										
480-22767-1	QC	TRIPBLANK_071812	TB	WATER		7/18/12	48										

TABLE 1
SAMPLE AND ANALYTICAL SUMMARY
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

SDG	Location	Sample ID	Purpose	Parameter:		VOCs	SVOCs	Pesticides	PCBs	Total Metals	Dissolved Metals	TCLP Metal	Total Hg	Dissolved Hg	Hg	% Solids & Moisture
				Method:	Date											
480-23756-1	QC	TRIPBLANK_080912	TB	Matrix	WATER	SW8260	SW8270	SW8081	SW8082	SW6010	SW6010	SW6010	SW7470	SW7470	SW7471	Lloyd Kahn
						48										

Note:

EB Equipment Blank
FB Field Blank
FD Field Duplicate
QC Quality control sample
REG Regular Sample
TB Trip Blank
SD Sediment

TABLE 2
ACCURACY AND PRECISION LIMITS
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

PARAMETER	QC TEST	ANALYTE	WATER (%R)	SOIL (%R)
Volatiles	Surrogate	All Surrogates	70 - 130	70 - 130
	LCS	All Target Compounds	70 - 130	70 - 130
	MS/MSD	All Target Compounds	70 - 130	70 - 130
Semivolatiles	Surrogate	Phenol-d5	15 -110	30 - 130
		2-Fluorophenol	15 -110	30 - 130
		2,4,6-tribromophenol	15 -110	30 - 130
		nitrobenzene-d5	30 - 130	30 - 130
		2-fluorobiphenyl	30 - 130	30 - 130
		terphenyl-d14	30 - 130	30 - 130
	LCS	Base-Neutral Compounds	40-140	40-140
		Acid Compounds	30-130	30-130
	MS/MSD	Base-Neutral Compounds	40-140	40-140
		Acid Compounds	30-130	30-130
Polychlorinated Biphenyls (PCBs)	Surrogate	Decachlorobiphenyl	30 - 150	30 - 150
		Tetrachloro-m-xylene	30 - 150	30 - 150
	LCS	All Target Compounds	40 - 140	40 - 140
		All Target Compounds	40 - 140	40 - 140
Pesticides	Surrogate	Decachlorobiphenyl	30 - 150	30 - 150
		Tetrachloro-m-xylene	30 - 150	30 - 150
	LCS	All Target Compounds	40 - 140	40 - 140
		All Target Compounds	30 - 150	30 - 150
Inorganics	LCS	All Target Compounds	80 - 120	80 - 120
	MS/MSD	All Target Compounds	75 -125	75 - 125

Notes:

LCS = Laboratory Control Sample

MS/MSD = Matrix spike/ Matrix Spike Duplicate

%R = Percent Recovery

QC = Quality Control

TABLE 2
ACCURACY AND PRECISION LIMITS
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

PARAMETER	QC TEST	Water	Soil
Volatiles	Field Duplicates	30	50
	MS/MSD	30	30
Semivolatiles	Field Duplicates	30	50
	MS/MSD	20	30
Polychlorinated Biphenyls (PCBs)	Field Duplicates	30	50
	MS/MSD	50	50
Pesticides	Field Duplicates	30	50
	MS/MSD	30	30
Inorganics	Lab Duplicates	25	25
	Field Duplicates	30	50
	MS/MSD	25	25

Notes:

LCS = Laboratory Control Sample

MS/MSD = Matrix spike/ Matrix Spike Duplicate

QC = Quality Control

RPD = Relative Percent Difference

TABLE 3
VALIDATION ACTIONS AND REASON CODES - SOIL DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
TE3-W	REG	480-26407-1	ASTM D2216	Percent Moisture	21.5		J	LDP	%
B-22 (0-0.5)	REG	480-22688-1	SW6010	Aluminum	5680		J	LCSL	mg/kg
B-23 (0-0.5)	REG	480-22688-1	SW6010	Aluminum	1850		J	LCSL	mg/kg
B-24 (0-0.5)	REG	480-22688-1	SW6010	Aluminum	8120		J	LCSL	mg/kg
B-25 (0-0.5)	REG	480-22688-1	SW6010	Aluminum	9600		J	LCSL	mg/kg
B-35 (0-0.5)	REG	480-23055-1	SW6010	Aluminum	5430		J	LCSL	mg/kg
T1-MW-02 (0-0.5)	REG	480-23055-1	SW6010	Aluminum	1520		J	LCSL	mg/kg
B-36 (0-0.5)	REG	480-23055-1	SW6010	Aluminum	4540		J	LCSL,MSH,MSDH	mg/kg
T1-MW-03 (0-0.5)	REG	480-23380-1	SW6010	Aluminum	6300		J	LCSL	mg/kg
B-22 (0-0.5)	REG	480-22688-1	SW6010	Antimony	177		J	LCSL	mg/kg
B-23 (0-0.5)	REG	480-22688-1	SW6010	Antimony	31.1		J	LCSL	mg/kg
B-24 (0-0.5)	REG	480-22688-1	SW6010	Antimony	15.1	U	UJ	LCSL	mg/kg
B-25 (0-0.5)	REG	480-22688-1	SW6010	Antimony	17.6	U	UJ	LCSL	mg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW6010	Antimony	15.9	U	UJ	LCSL	mg/kg
B-26 (0-0.5)	REG	480-22767-1	SW6010	Antimony	16.8	U	UJ	LCSL,MSL	mg/kg
B-35 (0-0.5)	REG	480-23055-1	SW6010	Antimony	86.6		J	LCSL	mg/kg
T1-MW-02 (0-0.5)	REG	480-23055-1	SW6010	Antimony	90.7		J	LCSL	mg/kg
B-36 (0-0.5)	REG	480-23055-1	SW6010	Antimony	153		J	LCSL,MSDH	mg/kg
T1-MW-03 (0-0.5)	REG	480-23380-1	SW6010	Antimony	166		J	LCSL	mg/kg
TE2-E	REG	480-26407-1	SW6010	Barium	87		J	LCSL	mg/kg
TE2-F	REG	480-26407-1	SW6010	Barium	143		J	LCSL	mg/kg
TE2-N	REG	480-26407-1	SW6010	Barium	186		J	LCSL	mg/kg
TE2-S	REG	480-26407-1	SW6010	Barium	87.7		J	LCSL	mg/kg
TE2-W	REG	480-26407-1	SW6010	Barium	80.1		J	LCSL	mg/kg
B-22 (0-0.5)	REG	480-22688-1	SW6010	Iron	15500		J	LCSL	mg/kg
B-23 (0-0.5)	REG	480-22688-1	SW6010	Iron	5190		J	LCSL	mg/kg
B-24 (0-0.5)	REG	480-22688-1	SW6010	Iron	18200		J	LCSL	mg/kg
B-25 (0-0.5)	REG	480-22688-1	SW6010	Iron	15700		J	LCSL	mg/kg

TABLE 3
VALIDATION ACTIONS AND REASON CODES - SOIL DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
B-35 (0-5)	REG	480-23055-1	SW6010	Iron	32600		J	LCSL	mg/kg
B-36 (0-5)	REG	480-23055-1	SW6010	Iron	76800		J	LCSL	mg/kg
T1-MW-02 (0-5)	REG	480-23055-1	SW6010	Iron	26200		J	LCSL	mg/kg
T1-MW-03 (0-5)	REG	480-23380-1	SW6010	Iron	30200		J	LCSL	mg/kg
B-25 (0-0.5)	REG	480-22688-1	SW8081	Methoxychlor	1600		J	LCSH	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	2-Methylnaphthalene	1800	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Acenaphthene	1800	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Acenaphthylene	1800	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Anthracene	1800	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Benzo(a)anthracene	1800	J,B	U	BL1	µg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW8270	Benzo(a)anthracene	1900	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Benzo(a)pyrene	1900	B	U	BL1	µg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW8270	Benzo(a)pyrene	1900	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Benzo(b)fluoranthene	3000	B	U	BL1	µg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW8270	Benzo(b)fluoranthene	1900	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Benzo(g,h,i)perylene	1800	J,B	U	BL1	µg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW8270	Benzo(g,h,i)perylene	1900	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Benzo(k)fluoranthene	1800	J,B	U	BL1	µg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW8270	Benzo(k)fluoranthene	1900	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Carbazole	1800	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Chrysene	2000	B	U	BL1	µg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW8270	Chrysene	1900	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Dibenz(a,h)anthracene	1800	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Dibenzofuran	1800	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Di-n-octyl phthalate	1800	J,B,*	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Fluoranthene	2900	B	U	BL1	µg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW8270	Fluoranthene	1900	J,B	U	BL1	µg/kg

TABLE 3
VALIDATION ACTIONS AND REASON CODES - SOIL DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
B-26 (0-0.5)	REG	480-22767-1	SW8270	Indeno(1,2,3-cd)pyrene	1800	J,B	U	BL1	µg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW8270	Indeno(1,2,3-cd)pyrene	1900	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Phenanthrene	1800	J,B	U	BL1	µg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW8270	Phenanthrene	1900	J,B	U	BL1	µg/kg
B-26 (0-0.5)	REG	480-22767-1	SW8270	Pyrene	2400	B	U	BL1	µg/kg
T1-MW-01 (.5-1.0)	REG	480-22767-1	SW8270	Pyrene	1900	J,B	U	BL1	µg/kg

Note:

J Estimated
U Undetected
BL1 Result qualified due to laboratory blank
FD Field Duplicate RPD acceptance limit exceeded.
HTP Preparation holding time exceeded
LDP Laboratory duplicate exceeds RPD criteria
LCSH LCS recovery criteria greater than the upper limit
LCSL LCS recovery criteria less than the lower limit
MSL Matrix spike recovery less than the lower limit
MSH Matrix spike recovery greater than the upper limit
MSDH Matrix spike duplicate recovery greater than the upper limit

TABLE 3
VALIDATION ACTIONS AND REASON CODES - WATER
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
DUP_080912	FD	480-23756-1	SW6010	Zinc, Dissolved	0.053		J	FD	mg/L
DUP_080912	FD	480-23756-1	SW8081	4,4'-DDD	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	4,4'-DDE	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	4,4'-DDT	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Aldrin	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	alpha-BHC	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	alpha-Chlordane	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	beta-BHC	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	delta-BHC	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Dieldrin	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Endosulfan I	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Endosulfan II	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Endosulfan sulfate	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Endrin	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Endrin aldehyde	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Endrin ketone	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	gamma-BHC (Lindane)	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	gamma-Chlordane	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Heptachlor	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Heptachlor epoxide	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Methoxychlor	0.047	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8081	Toxaphene	0.47	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8082	PCB-1016	0.47	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8082	PCB-1221	0.47	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8082	PCB-1232	0.47	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8082	PCB-1242	0.47	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8082	PCB-1248	0.47	U	UJ	SSL	µg/L
DUP_080912	FD	480-23756-1	SW8082	PCB-1254	0.47	U	UJ	SSL	µg/L

TABLE 3
VALIDATION ACTIONS AND REASON CODES - WATER
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
DUP_080912	FD	480-23756-1	SW8082	PCB-1260	0.47	U	UJ	SSL	µg/L
TI-MW01_080912	REG	480-23756-1	SW8260	1,1-Dichloroethene	1	U	UJ	MSDL	µg/L
TI-MW02_080912	REG	480-23756-1	SW6010	Zinc, Dissolved	0.033		J	FD	mg/L

Note:

J Estimated
U Undetected
FD Field Duplicate RPD acceptance limit exceeded.
MSDL Matrix spike duplicate recovery less than the lower limit
SSL Surrogate recovery less than the lower limit

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			B-22 (6.5-7.0) B-22 07/17/2012 480-22688-1	B-22 (9.5-10.0) B-22 07/17/2012 480-22688-1	B-23 (2-4) B-23 07/17/2012 480-22688-1
Units	Method	Parameter Name			
µg/kg	SW8260	1,1,1-Trichloroethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,1,2,2-Tetrachloroethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,1,2-Trichloro-1,2,2-trifluoroethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,1,2-Trichloroethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,1-Dichloroethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,1-Dichloroethene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,2,4-Trichlorobenzene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,2-Dibromo-3-Chloropropane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,2-Dibromoethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,2-Dichlorobenzene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,2-Dichloroethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,2-Dichloropropane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,3-Dichlorobenzene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	1,4-Dichlorobenzene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	2-Butanone (MEK)	4.3 J	4.4 J	20 U
µg/kg	SW8260	2-Hexanone	27 U	27 U	20 U
µg/kg	SW8260	4-Methyl-2-pentanone (MIBK)	27 U	27 U	20 U
µg/kg	SW8260	Acetone	23 J	34	20 U
µg/kg	SW8260	Benzene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Bromodichloromethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Bromoform	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Bromomethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Carbon disulfide	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Carbon tetrachloride	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Chlorobenzene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Chloroethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Chloroform	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Chloromethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	cis-1,2-Dichloroethene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	cis-1,3-Dichloropropene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Cyclohexane	5.3 U	34	4.0 U
µg/kg	SW8260	Dibromochloromethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Dichlorodifluoromethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Ethylbenzene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Isopropylbenzene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Methyl acetate	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Methyl tert-butyl ether	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Methylcyclohexane	0.82 J	64	4.0 U

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			B-22 (6.5-7.0) B-22 07/17/2012 480-22688-1	B-22 (9.5-10.0) B-22 07/17/2012 480-22688-1	B-23 (2-4) B-23 07/17/2012 480-22688-1
Units	Method	Parameter Name			
µg/kg	SW8260	Methylene Chloride	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Styrene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Tetrachloroethene	1.2 J	5.3 U	0.61 J
µg/kg	SW8260	Toluene	0.50 J	5.3 U	4.0 U
µg/kg	SW8260	trans-1,2-Dichloroethene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	trans-1,3-Dichloropropene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Trichloroethene	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Trichlorofluoromethane	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Vinyl chloride	5.3 U	5.3 U	4.0 U
µg/kg	SW8260	Xylenes, Total	11 U	11 U	8.1 U

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			T1-MW-01 (4.5-5.0) T1-MW-01 07/18/2012 480-22767-1	T1-MW-01 (8.5-9.0) T1-MW-01 07/18/2012 480-22767-1	T1-MW-02 (5-6) T1-MW-02 08/01/2012 480-23380-1
Units	Method	Parameter Name			
µg/kg	SW8260	1,1,1-Trichloroethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,1,2,2-Tetrachloroethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,1,2-Trichloro-1,2,2-trifluoroeth	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,1,2-Trichloroethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,1-Dichloroethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,1-Dichloroethene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,2,4-Trichlorobenzene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,2-Dibromo-3-Chloropropane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,2-Dibromoethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,2-Dichlorobenzene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,2-Dichloroethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,2-Dichloropropane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,3-Dichlorobenzene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	1,4-Dichlorobenzene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	2-Butanone (MEK)	33	4.5 J	31 U
µg/kg	SW8260	2-Hexanone	27 U	24 U	31 U
µg/kg	SW8260	4-Methyl-2-pentanone (MIBK)	27 U	24 U	31 U
µg/kg	SW8260	Acetone	100	22 J	31 U
µg/kg	SW8260	Benzene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Bromodichloromethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Bromoform	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Bromomethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Carbon disulfide	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Carbon tetrachloride	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Chlorobenzene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Chloroethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Chloroform	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Chloromethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	cis-1,2-Dichloroethene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	cis-1,3-Dichloropropene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Cyclohexane	13	61	6.2 U
µg/kg	SW8260	Dibromochloromethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Dichlorodifluoromethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Ethylbenzene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Isopropylbenzene	6.8	31	6.2 U
µg/kg	SW8260	Methyl acetate	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Methyl tert-butyl ether	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Methylcyclohexane	46	200	6.2 U

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			T1-MW-01 (4.5-5.0) T1-MW-01 07/18/2012 480-22767-1	T1-MW-01 (8.5-9.0) T1-MW-01 07/18/2012 480-22767-1	T1-MW-02 (5-6) T1-MW-02 08/01/2012 480-23380-1
Units	Method	Parameter Name			
µg/kg	SW8260	Methylene Chloride	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Styrene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Tetrachloroethene	5.4 U	1.1 J	6.2 U
µg/kg	SW8260	Toluene	0.48 J	4.8 U	6.2 U
µg/kg	SW8260	trans-1,2-Dichloroethene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	trans-1,3-Dichloropropene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Trichloroethene	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Trichlorofluoromethane	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Vinyl chloride	5.4 U	4.8 U	6.2 U
µg/kg	SW8260	Xylenes, Total	3.2 J	9.6 U	12 U

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			B-22 (0-0.5) B-22 07/17/2012 480-22688-1	B-23 (0-0.5) B-23 07/17/2012 480-22688-1	B-24 (0-0.5) B-24 07/17/2012 480-22688-1	B-25 (0-0.5) B-25 07/17/2012 480-22688-1	B-26 (0-0.5) B-26 07/18/2012 480-22767-1
Units	Method	Parameter Name					
µg/kg	SW8270	2,4,5-Trichlorophenol	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	2,4,6-Trichlorophenol	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	2,4-Dichlorophenol	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	2,4-Dimethylphenol	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	2,4-Dinitrophenol	3600 U	3600 U	3500 U	7500 U	3400 U
µg/kg	SW8270	2,4-Dinitrotoluene	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	2,6-Dinitrotoluene	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	2-Chloronaphthalene	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	2-Chlorophenol	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	2-Methylnaphthalene	1900 U	1800 U	77 J	3800 U	1800 U
µg/kg	SW8270	2-Methylphenol	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	2-Nitroaniline	3600 U	3600 U	3500 U	7500 U	3400 U
µg/kg	SW8270	2-Nitrophenol	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	3,3'-Dichlorobenzidine	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	3-Nitroaniline	3600 U	3600 U	3500 U	7500 U	3400 U
µg/kg	SW8270	4,6-Dinitro-2-methylphenol	3600 U	3600 U	3500 U	7500 U	3400 U
µg/kg	SW8270	4-Bromophenyl phenyl ether	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	4-Chloro-3-methylphenol	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	4-Chloroaniline	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	4-Chlorophenyl phenyl ether	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	4-Methylphenol	3600 U	3600 U	3500 U	7500 U	3400 U
µg/kg	SW8270	4-Nitroaniline	3600 U	3600 U	3500 U	7500 U	3400 U
µg/kg	SW8270	4-Nitrophenol	3600 U	3600 U	3500 U	7500 U	3400 U
µg/kg	SW8270	Acenaphthene	76 J	57 J	180 J	140 J	1800 U
µg/kg	SW8270	Acenaphthylene	1900 U	1800 U	1200 J	3800 U	1800 U
µg/kg	SW8270	Acetophenone	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Anthracene	250 J	190 J	2200	600 J	1800 U
µg/kg	SW8270	Atrazine	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Benzaldehyde	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Benzo(a)anthracene	1000 J	1000 J	9900	3200 J	1800 U
µg/kg	SW8270	Benzo(a)pyrene	1200 J	1100 J	8200	3100 J	1900 U
µg/kg	SW8270	Benzo(b)fluoranthene	2000	1300 J	12000	5100	3000 U
µg/kg	SW8270	Benzo(g,h,i)perylene	760 J	410 J	2300	1000 J	1800 U
µg/kg	SW8270	Benzo(k)fluoranthene	850 J	690 J	5400	1600 J	1800 U
µg/kg	SW8270	Biphenyl	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	bis (2-chloroisopropyl) ether	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Bis(2-chloroethoxy)methane	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Bis(2-chloroethyl)ether	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Bis(2-ethylhexyl) phthalate	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Butyl benzyl phthalate	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Caprolactam	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Carbazole	1900 U	1800 U	330 J	250 J	1800 U
µg/kg	SW8270	Chrysene	1400 J	980 J	9200	3400 J	2000 U
µg/kg	SW8270	Di-n-butyl phthalate	1900 U	1800 U	1800 U	3800 U	1800 U

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			B-22 (0-0.5) B-22 07/17/2012 480-22688-1	B-23 (0-0.5) B-23 07/17/2012 480-22688-1	B-24 (0-0.5) B-24 07/17/2012 480-22688-1	B-25 (0-0.5) B-25 07/17/2012 480-22688-1	B-26 (0-0.5) B-26 07/18/2012 480-22767-1
Units	Method	Parameter Name					
µg/kg	SW8270	Di-n-octyl phthalate	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Dibenz(a,h)anthracene	280 J	140 J	1100 J	420 J	1800 U
µg/kg	SW8270	Dibenzofuran	1900 U	1800 U	210 J	3800 U	1800 U
µg/kg	SW8270	Diethyl phthalate	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Dimethyl phthalate	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Fluoranthene	1900	1700 J	16000	5200	2900 U
µg/kg	SW8270	Fluorene	1900 U	1800 U	620 J	3800 U	1800 U
µg/kg	SW8270	Hexachlorobenzene	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Hexachlorobutadiene	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Hexachlorocyclopentadiene	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Hexachloroethane	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Indeno(1,2,3-cd)pyrene	710 J	420 J	2600	1000 J	1800 U
µg/kg	SW8270	Isophorone	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	N-Nitrosodi-n-propylamine	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	N-Nitrosodiphenylamine	190 J	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Naphthalene	160 J	200 J	1800 U	3800 U	200 J
µg/kg	SW8270	Nitrobenzene	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Pentachlorophenol	3600 U	3600 U	3500 U	7500 U	3400 U
µg/kg	SW8270	Phenanthrene	1300 J	900 J	7000	2400 J	1800 U
µg/kg	SW8270	Phenol	1900 U	1800 U	1800 U	3800 U	1800 U
µg/kg	SW8270	Pyrene	1500 J	1500 J	12000	4000	2400 U

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			T1-MW-01 (.5-1.0) T1-MW-01 07/18/2012 480-22767-1	B-35 (0-.5) B-35 07/24/2012 480-23055-1	B-36 (0-.5) B-36 07/24/2012 480-23055-1	TI-MW-02 (0-.5) T1-MW-02 07/24/2012 480-23055-1
Units	Method	Parameter Name				
µg/kg	SW8270	2,4,5-Trichlorophenol	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	2,4,6-Trichlorophenol	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	2,4-Dichlorophenol	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	2,4-Dimethylphenol	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	2,4-Dinitrophenol	3700 U	8200 U	8600 U	7600 U
µg/kg	SW8270	2,4-Dinitrotoluene	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	2,6-Dinitrotoluene	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	2-Chloronaphthalene	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	2-Chlorophenol	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	2-Methylnaphthalene	1900 U	1700 J	3000 J	3900 U
µg/kg	SW8270	2-Methylphenol	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	2-Nitroaniline	3700 U	8200 U	8600 U	7600 U
µg/kg	SW8270	2-Nitrophenol	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	3,3'-Dichlorobenzidine	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	3-Nitroaniline	3700 U	8200 U	8600 U	7600 U
µg/kg	SW8270	4,6-Dinitro-2-methylphenol	3700 U	8200 U	8600 U	7600 U
µg/kg	SW8270	4-Bromophenyl phenyl ether	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	4-Chloro-3-methylphenol	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	4-Chloroaniline	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	4-Chlorophenyl phenyl ether	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	4-Methylphenol	3700 U	8200 U	8600 U	7600 U
µg/kg	SW8270	4-Nitroaniline	3700 U	8200 U	8600 U	7600 U
µg/kg	SW8270	4-Nitrophenol	3700 U	8200 U	8600 U	7600 U
µg/kg	SW8270	Acenaphthene	1900 U	7800	7300	3900 U
µg/kg	SW8270	Acenaphthylene	1900 U	4200 U	3700 J	3900 U
µg/kg	SW8270	Acetophenone	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Anthracene	1900 U	13000	17000	3900 U
µg/kg	SW8270	Atrazine	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Benzaldehyde	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Benzo(a)anthracene	1900 U	42000	57000	1500 J
µg/kg	SW8270	Benzo(a)pyrene	1900 U	46000	59000	2000 J
µg/kg	SW8270	Benzo(b)fluoranthene	1900 U	61000	84000	2800 J
µg/kg	SW8270	Benzo(g,h,i)perylene	1900 U	3400 J	16000	820 J
µg/kg	SW8270	Benzo(k)fluoranthene	1900 U	22000	29000	1200 J
µg/kg	SW8270	Biphenyl	1900 U	400 J	560 J	3900 U
µg/kg	SW8270	bis (2-chloroisopropyl) ether	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Bis(2-chloroethoxy)methane	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Bis(2-chloroethyl)ether	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Bis(2-ethylhexyl) phthalate	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Butyl benzyl phthalate	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Caprolactam	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Carbazole	1900 U	8900	12000	3900 U
µg/kg	SW8270	Chrysene	1900 U	37000	56000	1800 J
µg/kg	SW8270	Di-n-butyl phthalate	1900 U	4200 U	4400 U	3900 U

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			T1-MW-01 (.5-1.0) T1-MW-01 07/18/2012 480-22767-1	B-35 (0-.5) B-35 07/24/2012 480-23055-1	B-36 (0-.5) B-36 07/24/2012 480-23055-1	TI-MW-02 (0-.5) T1-MW-02 07/24/2012 480-23055-1
Units	Method	Parameter Name				
µg/kg	SW8270	Di-n-octyl phthalate	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Dibenz(a,h)anthracene	1900 U	3300 J	2400 J	3900 U
µg/kg	SW8270	Dibenzofuran	1900 U	3600 J	4000 J	3900 U
µg/kg	SW8270	Diethyl phthalate	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Dimethyl phthalate	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Fluoranthene	1900 U	73000	100000	2300 J
µg/kg	SW8270	Fluorene	1900 U	5100	6700	3900 U
µg/kg	SW8270	Hexachlorobenzene	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Hexachlorobutadiene	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Hexachlorocyclopentadiene	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Hexachloroethane	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Indeno(1,2,3-cd)pyrene	1900 U	16000	20000	790 J
µg/kg	SW8270	Isophorone	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	N-Nitrosodi-n-propylamine	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	N-Nitrosodiphenylamine	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Naphthalene	1900 U	7300	9300	3900 U
µg/kg	SW8270	Nitrobenzene	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Pentachlorophenol	3700 U	8200 U	8600 U	7600 U
µg/kg	SW8270	Phenanthrene	1900 U	52000	74000	980 J
µg/kg	SW8270	Phenol	1900 U	4200 U	4400 U	3900 U
µg/kg	SW8270	Pyrene	1900 U	59000	81000	1900 J

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			T1-MW-03 (0-5) T1-MW-03 08/01/2012 480-23380-1	TE1-E TE-01 10/10/2012 480-26407-1	TE1-F TE-01 10/10/2012 480-26407-1	TE1-N TE-01 10/10/2012 480-26407-1	TE1-S TE-01 10/10/2012 480-26407-1
Units	Method	Parameter Name					
µg/kg	SW8270	2,4,5-Trichlorophenol	170 U				
µg/kg	SW8270	2,4,6-Trichlorophenol	170 U				
µg/kg	SW8270	2,4-Dichlorophenol	170 U				
µg/kg	SW8270	2,4-Dimethylphenol	170 U				
µg/kg	SW8270	2,4-Dinitrophenol	330 U				
µg/kg	SW8270	2,4-Dinitrotoluene	170 U				
µg/kg	SW8270	2,6-Dinitrotoluene	170 U				
µg/kg	SW8270	2-Chloronaphthalene	170 U				
µg/kg	SW8270	2-Chlorophenol	170 U				
µg/kg	SW8270	2-Methylnaphthalene	270				
µg/kg	SW8270	2-Methylphenol	170 U				
µg/kg	SW8270	2-Nitroaniline	330 U				
µg/kg	SW8270	2-Nitrophenol	170 U				
µg/kg	SW8270	3,3'-Dichlorobenzidine	170 U				
µg/kg	SW8270	3-Nitroaniline	330 U				
µg/kg	SW8270	4,6-Dinitro-2-methylphenol	330 U				
µg/kg	SW8270	4-Bromophenyl phenyl ether	170 U				
µg/kg	SW8270	4-Chloro-3-methylphenol	170 U				
µg/kg	SW8270	4-Chloroaniline	170 U				
µg/kg	SW8270	4-Chlorophenyl phenyl ether	170 U				
µg/kg	SW8270	4-Methylphenol	330 U				
µg/kg	SW8270	4-Nitroaniline	330 U				
µg/kg	SW8270	4-Nitrophenol	330 U				
µg/kg	SW8270	Acenaphthene	440	1200	2700	85	74
µg/kg	SW8270	Acenaphthylene	1200	330	300	66	24
µg/kg	SW8270	Acetophenone	170 U				
µg/kg	SW8270	Anthracene	1500	3500	6300	240	140
µg/kg	SW8270	Atrazine	170 U				
µg/kg	SW8270	Benzaldehyde	170 U				
µg/kg	SW8270	Benzo(a)anthracene	7800	7400	9400	660	540
µg/kg	SW8270	Benzo(a)pyrene	10000	5200	7700	530	480
µg/kg	SW8270	Benzo(b)fluoranthene	16000	6700	9000	680	630
µg/kg	SW8270	Benzo(g,h,i)perylene	2900	2600	4500	290	290
µg/kg	SW8270	Benzo(k)fluoranthene	5800	2300	5600	270	220
µg/kg	SW8270	Biphenyl	57 J				
µg/kg	SW8270	bis (2-chloroisopropyl) ether	170 U				
µg/kg	SW8270	Bis(2-chloroethoxy)methane	170 U				
µg/kg	SW8270	Bis(2-chloroethyl)ether	170 U				
µg/kg	SW8270	Bis(2-ethylhexyl) phthalate	230				
µg/kg	SW8270	Butyl benzyl phthalate	61 J				
µg/kg	SW8270	Caprolactam	170 U				
µg/kg	SW8270	Carbazole	870				
µg/kg	SW8270	Chrysene	9300	6800	9500	660	590
µg/kg	SW8270	Di-n-butyl phthalate	79 J				

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			T1-MW-03 (0-5) T1-MW-03 08/01/2012 480-23380-1	TE1-E TE-01 10/10/2012 480-26407-1	TE1-F TE-01 10/10/2012 480-26407-1	TE1-N TE-01 10/10/2012 480-26407-1	TE1-S TE-01 10/10/2012 480-26407-1
Units	Method	Parameter Name					
µg/kg	SW8270	Di-n-octyl phthalate	170 U				
µg/kg	SW8270	Dibenz(a,h)anthracene	1000	640	850	83	78
µg/kg	SW8270	Dibenzofuran	290				
µg/kg	SW8270	Diethyl phthalate	170 U				
µg/kg	SW8270	Dimethyl phthalate	170 U				
µg/kg	SW8270	Fluoranthene	12000	17000	26000	1400	1100
µg/kg	SW8270	Fluorene	340	1300	2800	110	56
µg/kg	SW8270	Hexachlorobenzene	170 U				
µg/kg	SW8270	Hexachlorobutadiene	170 U				
µg/kg	SW8270	Hexachlorocyclopentadiene	170 U				
µg/kg	SW8270	Hexachloroethane	170 U				
µg/kg	SW8270	Indeno(1,2,3-cd)pyrene	3100	2800	4400	260	260
µg/kg	SW8270	Isophorone	170 U				
µg/kg	SW8270	N-Nitrosodi-n-propylamine	170 U				
µg/kg	SW8270	N-Nitrosodiphenylamine	170 U				
µg/kg	SW8270	Naphthalene	470	260	800	27	34
µg/kg	SW8270	Nitrobenzene	170 U				
µg/kg	SW8270	Pentachlorophenol	330 U				
µg/kg	SW8270	Phenanthrene	4200	13000	21000	910	680
µg/kg	SW8270	Phenol	170 U				
µg/kg	SW8270	Pyrene	11000	13000	18000	1000	930

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			TE1-W TE-01 10/10/2012 480-26407-1	TE3-E TE-03 10/10/2012 480-26407-1	TE3-F TE-03 10/10/2012 480-26407-1	TE3-N TE-03 10/10/2012 480-26407-1	TE3-S TE-03 10/10/2012 480-26407-1
Units	Method	Parameter Name					
µg/kg	SW8270	2,4,5-Trichlorophenol					
µg/kg	SW8270	2,4,6-Trichlorophenol					
µg/kg	SW8270	2,4-Dichlorophenol					
µg/kg	SW8270	2,4-Dimethylphenol					
µg/kg	SW8270	2,4-Dinitrophenol					
µg/kg	SW8270	2,4-Dinitrotoluene					
µg/kg	SW8270	2,6-Dinitrotoluene					
µg/kg	SW8270	2-Chloronaphthalene					
µg/kg	SW8270	2-Chlorophenol					
µg/kg	SW8270	2-Methylnaphthalene					
µg/kg	SW8270	2-Methylphenol					
µg/kg	SW8270	2-Nitroaniline					
µg/kg	SW8270	2-Nitrophenol					
µg/kg	SW8270	3,3'-Dichlorobenzidine					
µg/kg	SW8270	3-Nitroaniline					
µg/kg	SW8270	4,6-Dinitro-2-methylphenol					
µg/kg	SW8270	4-Bromophenyl phenyl ether					
µg/kg	SW8270	4-Chloro-3-methylphenol					
µg/kg	SW8270	4-Chloroaniline					
µg/kg	SW8270	4-Chlorophenyl phenyl ether					
µg/kg	SW8270	4-Methylphenol					
µg/kg	SW8270	4-Nitroaniline					
µg/kg	SW8270	4-Nitrophenol					
µg/kg	SW8270	Acenaphthene	190	20	19	2900	67
µg/kg	SW8270	Acenaphthylene	70	24	43	100	43
µg/kg	SW8270	Acetophenone					
µg/kg	SW8270	Anthracene	520	53	51	4300	240
µg/kg	SW8270	Atrazine					
µg/kg	SW8270	Benzaldehyde					
µg/kg	SW8270	Benzo(a)anthracene	1200	180	220	7900	970
µg/kg	SW8270	Benzo(a)pyrene	920	170	210	5700	730
µg/kg	SW8270	Benzo(b)fluoranthene	1200	240	300	7200	950
µg/kg	SW8270	Benzo(g,h,i)perylene	470	110	140	2500	370
µg/kg	SW8270	Benzo(k)fluoranthene	550	75	120	2300	270
µg/kg	SW8270	Biphenyl					
µg/kg	SW8270	bis (2-chloroisopropyl) ether					
µg/kg	SW8270	Bis(2-chloroethoxy)methane					
µg/kg	SW8270	Bis(2-chloroethyl)ether					
µg/kg	SW8270	Bis(2-ethylhexyl) phthalate					
µg/kg	SW8270	Butyl benzyl phthalate					
µg/kg	SW8270	Caprolactam					
µg/kg	SW8270	Carbazole					
µg/kg	SW8270	Chrysene	1100	190	230	7900	840
µg/kg	SW8270	Di-n-butyl phthalate					

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			TE1-W TE-01 10/10/2012 480-26407-1	TE3-E TE-03 10/10/2012 480-26407-1	TE3-F TE-03 10/10/2012 480-26407-1	TE3-N TE-03 10/10/2012 480-26407-1	TE3-S TE-03 10/10/2012 480-26407-1
Units	Method	Parameter Name					
µg/kg	SW8270	Di-n-octyl phthalate					
µg/kg	SW8270	Dibenz(a,h)anthracene	130	7.2 U	44	720	110
µg/kg	SW8270	Dibenzofuran					
µg/kg	SW8270	Diethyl phthalate					
µg/kg	SW8270	Dimethyl phthalate					
µg/kg	SW8270	Fluoranthene	2600	350	340	18000	1800
µg/kg	SW8270	Fluorene	200	17	15	2600	63
µg/kg	SW8270	Hexachlorobenzene					
µg/kg	SW8270	Hexachlorobutadiene					
µg/kg	SW8270	Hexachlorocyclopentadiene					
µg/kg	SW8270	Hexachloroethane					
µg/kg	SW8270	Indeno(1,2,3-cd)pyrene	460	87	120	2700	390
µg/kg	SW8270	Isophorone					
µg/kg	SW8270	N-Nitrosodi-n-propylamine					
µg/kg	SW8270	N-Nitrosodiphenylamine					
µg/kg	SW8270	Naphthalene	51	7.1 J	29	1900	24
µg/kg	SW8270	Nitrobenzene					
µg/kg	SW8270	Pentachlorophenol					
µg/kg	SW8270	Phenanthrene	2000	190	170	18000	670
µg/kg	SW8270	Phenol					
µg/kg	SW8270	Pyrene	2000	270	300	14000	1400

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			TE3-W TE-03 10/10/2012 480-26407-1	TE4-E TE-04 10/10/2012 480-26407-1	TE4-F TE-04 10/10/2012 480-26407-1	TE4-N TE-04 10/10/2012 480-26407-1	TE4-S TE-04 10/10/2012 480-26407-1
Units	Method	Parameter Name					
µg/kg	SW8270	2,4,5-Trichlorophenol					
µg/kg	SW8270	2,4,6-Trichlorophenol					
µg/kg	SW8270	2,4-Dichlorophenol					
µg/kg	SW8270	2,4-Dimethylphenol					
µg/kg	SW8270	2,4-Dinitrophenol					
µg/kg	SW8270	2,4-Dinitrotoluene					
µg/kg	SW8270	2,6-Dinitrotoluene					
µg/kg	SW8270	2-Chloronaphthalene					
µg/kg	SW8270	2-Chlorophenol					
µg/kg	SW8270	2-Methylnaphthalene					
µg/kg	SW8270	2-Methylphenol					
µg/kg	SW8270	2-Nitroaniline					
µg/kg	SW8270	2-Nitrophenol					
µg/kg	SW8270	3,3'-Dichlorobenzidine					
µg/kg	SW8270	3-Nitroaniline					
µg/kg	SW8270	4,6-Dinitro-2-methylphenol					
µg/kg	SW8270	4-Bromophenyl phenyl ether					
µg/kg	SW8270	4-Chloro-3-methylphenol					
µg/kg	SW8270	4-Chloroaniline					
µg/kg	SW8270	4-Chlorophenyl phenyl ether					
µg/kg	SW8270	4-Methylphenol					
µg/kg	SW8270	4-Nitroaniline					
µg/kg	SW8270	4-Nitrophenol					
µg/kg	SW8270	Acenaphthene	330	93	24	17	81
µg/kg	SW8270	Acenaphthylene	56	43	67	24	94
µg/kg	SW8270	Acetophenone					
µg/kg	SW8270	Anthracene	1700	200	96	52	230
µg/kg	SW8270	Atrazine					
µg/kg	SW8270	Benzaldehyde					
µg/kg	SW8270	Benzo(a)anthracene	2600	720	370	210	770
µg/kg	SW8270	Benzo(a)pyrene	1800	650	300	180	650
µg/kg	SW8270	Benzo(b)fluoranthene	2200	830	520	270	1100
µg/kg	SW8270	Benzo(g,h,i)perylene	910	360	190	110	360
µg/kg	SW8270	Benzo(k)fluoranthene	980	450	110	84	210
µg/kg	SW8270	Biphenyl					
µg/kg	SW8270	bis (2-chloroisopropyl) ether					
µg/kg	SW8270	Bis(2-chloroethoxy)methane					
µg/kg	SW8270	Bis(2-chloroethyl)ether					
µg/kg	SW8270	Bis(2-ethylhexyl) phthalate					
µg/kg	SW8270	Butyl benzyl phthalate					
µg/kg	SW8270	Caprolactam					
µg/kg	SW8270	Carbazole					
µg/kg	SW8270	Chrysene	2300	740	370	210	770
µg/kg	SW8270	Di-n-butyl phthalate					

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			TE3-W TE-03 10/10/2012 480-26407-1	TE4-E TE-04 10/10/2012 480-26407-1	TE4-F TE-04 10/10/2012 480-26407-1	TE4-N TE-04 10/10/2012 480-26407-1	TE4-S TE-04 10/10/2012 480-26407-1
Units	Method	Parameter Name					
µg/kg	SW8270	Di-n-octyl phthalate					
µg/kg	SW8270	Dibenz(a,h)anthracene	320	88	64	23	100
µg/kg	SW8270	Dibenzofuran					
µg/kg	SW8270	Diethyl phthalate					
µg/kg	SW8270	Dimethyl phthalate					
µg/kg	SW8270	Fluoranthene	6300	1400	570	380	1400
µg/kg	SW8270	Fluorene	550	86	22	20	73
µg/kg	SW8270	Hexachlorobenzene					
µg/kg	SW8270	Hexachlorobutadiene					
µg/kg	SW8270	Hexachlorocyclopentadiene					
µg/kg	SW8270	Hexachloroethane					
µg/kg	SW8270	Indeno(1,2,3-cd)pyrene	940	320	180	100	360
µg/kg	SW8270	Isophorone					
µg/kg	SW8270	N-Nitrosodi-n-propylamine					
µg/kg	SW8270	N-Nitrosodiphenylamine					
µg/kg	SW8270	Naphthalene	86	74	59	7.0 J	89
µg/kg	SW8270	Nitrobenzene					
µg/kg	SW8270	Pentachlorophenol					
µg/kg	SW8270	Phenanthrene	5200	870	280	210	800
µg/kg	SW8270	Phenol					
µg/kg	SW8270	Pyrene	4600	1100	490	300	1100

Notes:

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J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			TE4-W TE-04 10/10/2012 480-26407-1
Units	Method	Parameter Name	
µg/kg	SW8270	2,4,5-Trichlorophenol	
µg/kg	SW8270	2,4,6-Trichlorophenol	
µg/kg	SW8270	2,4-Dichlorophenol	
µg/kg	SW8270	2,4-Dimethylphenol	
µg/kg	SW8270	2,4-Dinitrophenol	
µg/kg	SW8270	2,4-Dinitrotoluene	
µg/kg	SW8270	2,6-Dinitrotoluene	
µg/kg	SW8270	2-Chloronaphthalene	
µg/kg	SW8270	2-Chlorophenol	
µg/kg	SW8270	2-Methylnaphthalene	
µg/kg	SW8270	2-Methylphenol	
µg/kg	SW8270	2-Nitroaniline	
µg/kg	SW8270	2-Nitrophenol	
µg/kg	SW8270	3,3'-Dichlorobenzidine	
µg/kg	SW8270	3-Nitroaniline	
µg/kg	SW8270	4,6-Dinitro-2-methylphenol	
µg/kg	SW8270	4-Bromophenyl phenyl ether	
µg/kg	SW8270	4-Chloro-3-methylphenol	
µg/kg	SW8270	4-Chloroaniline	
µg/kg	SW8270	4-Chlorophenyl phenyl ether	
µg/kg	SW8270	4-Methylphenol	
µg/kg	SW8270	4-Nitroaniline	
µg/kg	SW8270	4-Nitrophenol	
µg/kg	SW8270	Acenaphthene	280
µg/kg	SW8270	Acenaphthylene	41
µg/kg	SW8270	Acetophenone	
µg/kg	SW8270	Anthracene	360
µg/kg	SW8270	Atrazine	
µg/kg	SW8270	Benzaldehyde	
µg/kg	SW8270	Benzo(a)anthracene	1000
µg/kg	SW8270	Benzo(a)pyrene	880
µg/kg	SW8270	Benzo(b)fluoranthene	1200
µg/kg	SW8270	Benzo(g,h,i)perylene	480
µg/kg	SW8270	Benzo(k)fluoranthene	410
µg/kg	SW8270	Biphenyl	
µg/kg	SW8270	bis (2-chloroisopropyl) ether	
µg/kg	SW8270	Bis(2-chloroethoxy)methane	
µg/kg	SW8270	Bis(2-chloroethyl)ether	
µg/kg	SW8270	Bis(2-ethylhexyl) phthalate	
µg/kg	SW8270	Butyl benzyl phthalate	
µg/kg	SW8270	Caprolactam	
µg/kg	SW8270	Carbazole	
µg/kg	SW8270	Chrysene	900
µg/kg	SW8270	Di-n-butyl phthalate	

TABLE 4
SAMPLE RESULTS-SOIL
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			TE4-W TE-04 10/10/2012 480-26407-1
Units	Method	Parameter Name	
µg/kg	SW8270	Di-n-octyl phthalate	
µg/kg	SW8270	Dibenz(a,h)anthracene	130
µg/kg	SW8270	Dibenzofuran	
µg/kg	SW8270	Diethyl phthalate	
µg/kg	SW8270	Dimethyl phthalate	
µg/kg	SW8270	Fluoranthene	1900
µg/kg	SW8270	Fluorene	190
µg/kg	SW8270	Hexachlorobenzene	
µg/kg	SW8270	Hexachlorobutadiene	
µg/kg	SW8270	Hexachlorocyclopentadiene	
µg/kg	SW8270	Hexachloroethane	
µg/kg	SW8270	Indeno(1,2,3-cd)pyrene	470
µg/kg	SW8270	Isophorone	
µg/kg	SW8270	N-Nitrosodi-n-propylamine	
µg/kg	SW8270	N-Nitrosodiphenylamine	
µg/kg	SW8270	Naphthalene	170
µg/kg	SW8270	Nitrobenzene	
µg/kg	SW8270	Pentachlorophenol	
µg/kg	SW8270	Phenanthrene	1400
µg/kg	SW8270	Phenol	
µg/kg	SW8270	Pyrene	1300

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Field Sample ID Location Sample Date Sample Delivery group Parameter Name	B-22 (0-0.5) B-22 07/17/2012 480-22688-1	B-23 (0-0.5) B-23 07/17/2012 480-22688-1	B-24 (0-0.5) B-24 07/17/2012 480-22688-1	B-25 (0-0.5) B-25 07/17/2012 480-22688-1	B-26 (0-0.5) B-26 07/18/2012 480-22767-1	T1-MW-01 (-5-1.0) T1-MW-01 07/18/2012 480-22767-1	B-35 (0-5) B-35 07/24/2012 480-23055-1
µg/kg	SW8081	4,4'-DDD	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	4,4'-DDE	91 U	90 U	87 U	43 J	87 U	94 U	30 J
µg/kg	SW8081	4,4'-DDT	54 J	33 J	27 J	180 J	29 J	94 U	34 J
µg/kg	SW8081	Aldrin	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	alpha-BHC	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	alpha-Chlordane	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	beta-BHC	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	delta-BHC	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	Dieldrin	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	Endosulfan I	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	Endosulfan II	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	Endosulfan sulfate	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	Endrin	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	Endrin aldehyde	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	Endrin ketone	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	gamma-BHC (Lindane)	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	gamma-Chlordane	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	Heptachlor	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	Heptachlor epoxide	91 U	90 U	87 U	190 U	87 U	94 U	100 U
µg/kg	SW8081	Methoxychlor	91 U	90 U	87 U	1600 J	87 U	94 U	100 U
µg/kg	SW8081	Toxaphene	910 U	900 U	870 U	1900 U	870 U	940 U	1000 U
µg/kg	SW8082	PCB-1016	240 U	240 U	240 U	240 U	230 U	280 U	0.28 U
µg/kg	SW8082	PCB-1221	240 U	240 U	240 U	240 U	230 U	280 U	0.28 U
µg/kg	SW8082	PCB-1232	240 U	240 U	240 U	240 U	230 U	280 U	0.28 U
µg/kg	SW8082	PCB-1242	240 U	240 U	240 U	240 U	230 U	280 U	0.28 U
µg/kg	SW8082	PCB-1248	240 U	240 U	240 U	240 U	230 U	280 U	0.28 U
µg/kg	SW8082	PCB-1254	240 U	240 U	240 U	260	240	280 U	0.28 U
µg/kg	SW8082	PCB-1260	240 U	240 U	240 U	240 U	320	280	0.28 U

Notes:

U = undetected

TABLE 4

Notes:

Table 4-CR final

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TABLE 4
SAMPLE RESULTS-SOIL
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Field Sample ID Location Sample Date Sample Delivery Group Parameter Name	B-22 (0-0.5) B-22 07/17/2012 480-22688-1	B-22 (6.5-7.0) B-22 07/17/2012 480-22688-1	B-22 (9.5-10.0) B-22 07/17/2012 480-22688-1	B-23 (0-0.5) B-23 07/17/2012 480-22688-1	B-23 (2-4) B-23 07/17/2012 480-22688-1	B-23 (5.5-6.0) B-23 07/17/2012 480-22688-1	B-24 (0-0.5) B-24 07/17/2012 480-22688-1	B-24 (6.5-7.0) B-24 07/17/2012 480-22688-1
%	ASTM D2216	Percent Moisture	10.2	15.2	18.6	7.9	12.2	21.0	6.4	26.7
%	ASTM D2216	Percent Solids	89.8	84.8	81.4	92.1	87.8	79.0	93.6	73.3
mg/kg	SW6010	Aluminum	5680 J			1850 J			8120 J	
mg/kg	SW6010	Antimony	177 J			31.1 J			15.1 UJ	
mg/kg	SW6010	Arsenic	44.0			2.6			8.0	
mg/kg	SW6010	Barium	221			78.6			141	
mg/kg	SW6010	Beryllium	0.55			0.23 U			0.60	
mg/kg	SW6010	Cadmium	0.89			0.46			0.58	
mg/kg	SW6010	Calcium	9950			39700			71900	
mg/kg	SW6010	Chromium	14.2			6.8			17.5	
mg/kg	SW6010	Cobalt	5.7			1.5			5.5	
mg/kg	SW6010	Copper	350			30.4			39.5	
mg/kg	SW6010	Iron	15500 J			5190 J			18200 J	
mg/kg	SW6010	Lead	1420	6710		9340		1450	653	37.5
mg/L	SW6010	Lead								
mg/kg	SW6010	Magnesium	5090			11300			5940	
mg/kg	SW6010	Manganese	394			157			411	
mg/kg	SW6010	Nickel	18.6			5.7			16.0	
mg/kg	SW6010	Potassium	1390			676			1400	
mg/kg	SW6010	Selenium	4.7 U			4.6 U			4.0 U	
mg/kg	SW6010	Silver	1.2			1.1			0.50 U	
mg/kg	SW6010	Sodium	165 U			160 U			222	
mg/kg	SW6010	Thallium	7.1 U			6.9 U			6.0 U	
mg/kg	SW6010	Vanadium	14.3			5.1			20.5	
mg/kg	SW6010	Zinc	218			73.4			230	
mg/kg	SW7471	Mercury	0.49			0.27			0.94	

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Field Sample ID Location Sample Date Sample Delivery Group Parameter Name	B-25 (0-0.5) B-25 07/17/2012 480-22688-1	B-25 (4.5-5.0) B-25 07/17/2012 480-22688-1	B-26 (0-0.5) B-26 07/18/2012 480-22767-1	B-26 (4-4.5) B-26 07/18/2012 480-22767-1	B-38 (0-0.5) B-38 07/18/2012 480-22767-1	B-38 (3.5-4.0) B-38 07/18/2012 480-22767-1	B-39 (0-0.5) B-39 07/18/2012 480-22767-1	B-39 (2.5-3.0) B-39 07/18/2012 480-22767-1
%	ASTM D2216	Percent Moisture	12.7	12.3	5.0	12.8	7.3	15.5	10.7	14.6
%	ASTM D2216	Percent Solids	87.3	87.7	95.0	87.2	92.7	84.5	89.3	85.4
mg/kg	SW6010	Aluminum	9600 J		9390					
mg/kg	SW6010	Antimony	17.6 UJ		16.8 UJ					
mg/kg	SW6010	Arsenic	7.4		103					
mg/kg	SW6010	Barium	419		216					
mg/kg	SW6010	Beryllium	0.65		1.2					
mg/kg	SW6010	Cadmium	2.3		1.2					
mg/kg	SW6010	Calcium	44300		24400					
mg/kg	SW6010	Chromium	195		30.6					
mg/kg	SW6010	Cobalt	5.5		6.5					
mg/kg	SW6010	Copper	209		101					
mg/kg	SW6010	Iron	15700 J		31400					
mg/kg	SW6010	Lead	962	672	1260	347	362	17.6	1060	20.2
mg/L	SW6010	Lead								
mg/kg	SW6010	Magnesium	14600		7070					
mg/kg	SW6010	Manganese	1460		390					
mg/kg	SW6010	Nickel	28.1		24.4					
mg/kg	SW6010	Potassium	1070		1160					
mg/kg	SW6010	Selenium	4.7 U		4.5 U					
mg/kg	SW6010	Silver	0.59 U		0.56 U					
mg/kg	SW6010	Sodium	387		389					
mg/kg	SW6010	Thallium	7.0 U		6.7 U					
mg/kg	SW6010	Vanadium	16.3		22.0					
mg/kg	SW6010	Zinc	483		221					
mg/kg	SW7471	Mercury	1.7		2.6					

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Field Sample ID Location Sample Date Sample Delivery Group Parameter Name	T1-MW-01 (.5-1.0) T1-MW-01 07/18/2012 480-22767-1	T1-MW-01 (4.5-5.0) T1-MW-01 07/18/2012 480-22767-1	T1-MW-01 (8.5-9.0) T1-MW-01 07/18/2012 480-22767-1	B-35 (0-5) B-35 07/24/2012 480-23055-1	B-35 (1.5-2) B-35 07/24/2012 480-23055-1	B-36 (0-.5) B-36 07/24/2012 480-23055-1	B-36 (1.5-2) B-36 07/24/2012 480-23055-1
%	ASTM D2216	Percent Moisture	12.5	23.1	18.6	21.4	19.2	23.5	17.6
%	ASTM D2216	Percent Solids	87.5	76.9	81.4	78.6	80.8	76.5	82.4
mg/kg	SW6010	Aluminum	17500			5430 J		4540 J	
mg/kg	SW6010	Antimony	15.9 UJ			86.6 J		153 J	
mg/kg	SW6010	Arsenic	6.1			19.7		45.1	
mg/kg	SW6010	Barium	281			227		233	
mg/kg	SW6010	Beryllium	1.1			0.59		0.47	
mg/kg	SW6010	Cadmium	0.46			4.3		1.9	
mg/kg	SW6010	Calcium	33500			11200		31600	
mg/kg	SW6010	Chromium	20.4			21.4		33.0	
mg/kg	SW6010	Cobalt	13.1			7.2		7.4	
mg/kg	SW6010	Copper	28.1			214		244	
mg/kg	SW6010	Iron	25200			32600 J		76800 J	
mg/kg	SW6010	Lead	180			4390	431	9550	6490
mg/L	SW6010	Lead							
mg/kg	SW6010	Magnesium	7900			2620		18100	
mg/kg	SW6010	Manganese	795			328		499	
mg/kg	SW6010	Nickel	25.1			19.1		35.7	
mg/kg	SW6010	Potassium	2470			800		635	
mg/kg	SW6010	Selenium	4.2 U			5.6 U		4.8 U	
mg/kg	SW6010	Silver	0.53 U			0.70 U		0.60 U	
mg/kg	SW6010	Sodium	247			196 U		169 U	
mg/kg	SW6010	Thallium	6.4 U			8.4 U		7.2 U	
mg/kg	SW6010	Vanadium	29.9			16.8		24.5	
mg/kg	SW6010	Zinc	211			752		485	
mg/kg	SW7471	Mercury	0.037			1.7		0.74	

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Field Sample ID Location Sample Date Sample Delivery Group Parameter Name	T1-MW-02 (0-.5) T1-MW-02 07/24/2012 480-23055-1	T1-MW-02 (1-1.5) T1-MW-02 07/24/2012 480-23055-1	T1-MW-02 (5-6) T1-MW-02 08/01/2012 480-23380-1	T1-MW-03 (0-.5) T1-MW-03 08/01/2012 480-23380-1	T1-MW-03 (1.5-2) T1-MW-03 08/01/2012 480-23380-1	B-22(0-0.5) B-22 07/17/2012 480-23600-1	B-22(6.5-7) B-22 07/17/2012 480-23600-1
%	ASTM D2216	Percent Moisture	15.4	14.4	21.3	3.5	11.0		
%	ASTM D2216	Percent Solids	84.6	85.6	78.7	96.5	89.0		
mg/kg	SW6010	Aluminum	1520 J			6300 J			
mg/kg	SW6010	Antimony	90.7 J			166 J			
mg/kg	SW6010	Arsenic	15.7			128			
mg/kg	SW6010	Barium	276			744			
mg/kg	SW6010	Beryllium	0.23 U			0.67			
mg/kg	SW6010	Cadmium	1.5			4.1			
mg/kg	SW6010	Calcium	16600			25800			
mg/kg	SW6010	Chromium	16.5			38.4			
mg/kg	SW6010	Cobalt	2.6			8.7			
mg/kg	SW6010	Copper	634			431			
mg/kg	SW6010	Iron	26200 J			30200 J			
mg/kg	SW6010	Lead	10100	4570		11600	1340	300	50.2
mg/L	SW6010	Lead							
mg/kg	SW6010	Magnesium	6930			7520			
mg/kg	SW6010	Manganese	148			1030			
mg/kg	SW6010	Nickel	12.6			32.6			
mg/kg	SW6010	Potassium	916			1020			
mg/kg	SW6010	Selenium	4.6 U			4.4 U			
mg/kg	SW6010	Silver	0.97			1.1			
mg/kg	SW6010	Sodium	161 U			172			
mg/kg	SW6010	Thallium	6.9 U			6.7 U			
mg/kg	SW6010	Vanadium	8.2			17.2			
mg/kg	SW6010	Zinc	190			855			
mg/kg	SW7471	Mercury	2.0			1.0			

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Field Sample ID Location Sample Date Sample Delivery Group Parameter Name	B-23(0-0.5) B-23 07/17/2012 480-23600-1	B-23(5.5-6) B-23 07/17/2012 480-23600-1	B-26(0-0.5) B-26 07/18/2012 480-23600-1	B-35(0-0.5) B-35 07/27/2012 480-23600-1	B-36(0-0.5) B-36 07/27/2012 480-23600-1	B-36(1.5-2) B-36 07/27/2012 480-23600-1	B-39(0-0.5) B-39 07/18/2012 480-23600-1	T1-MW-02(0-0.5) T1-MW-02 07/27/2012 480-23600-1
%	ASTM D2216	Percent Moisture								
%	ASTM D2216	Percent Solids								
mg/kg	SW6010	Aluminum								
mg/kg	SW6010	Antimony								
mg/kg	SW6010	Arsenic								
mg/kg	SW6010	Barium								
mg/kg	SW6010	Beryllium								
mg/kg	SW6010	Cadmium								
mg/kg	SW6010	Calcium								
mg/kg	SW6010	Chromium								
mg/kg	SW6010	Cobalt								
mg/kg	SW6010	Copper								
mg/kg	SW6010	Iron								
mg/kg	SW6010	Lead	69.1	13.1	0.48	8.5	20.4	0.23	0.073	62.4
mg/L	SW6010	Lead								
mg/kg	SW6010	Magnesium								
mg/kg	SW6010	Manganese								
mg/kg	SW6010	Nickel								
mg/kg	SW6010	Potassium								
mg/kg	SW6010	Selenium								
mg/kg	SW6010	Silver								
mg/kg	SW6010	Sodium								
mg/kg	SW6010	Thallium								
mg/kg	SW6010	Vanadium								
mg/kg	SW6010	Zinc								
mg/kg	SW7471	Mercury								

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID		T1-MW-02(1-1.5)		TE1-E	TE1-F	TE1-N	TE1-S	TE1-W	TE2-E	TE2-F
Location		T1-MW-02		TE-01	TE-01	TE-01	TE-01	TE-01	TE-02	TE-02
Sample Date		07/27/2012		10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012	10/10/2012
Sample Delivery Group		480-23600-1		480-26407-1	480-26407-1	480-26407-1	480-26407-1	480-26407-1	480-26407-1	480-26407-1
Units	Method	Parameter Name								
%	ASTM D2216	Percent Moisture		21.8	17.6	13.6	20.8	17.6	20.1	16.6
%	ASTM D2216	Percent Solids		78.2	82.4	86.4	79.2	82.4	79.9	83.4
mg/kg	SW6010	Aluminum								
mg/kg	SW6010	Antimony								
mg/kg	SW6010	Arsenic								
mg/kg	SW6010	Barium								
mg/kg	SW6010	Beryllium								
mg/kg	SW6010	Cadmium								
mg/kg	SW6010	Calcium								
mg/kg	SW6010	Chromium								
mg/kg	SW6010	Cobalt								
mg/kg	SW6010	Copper								
mg/kg	SW6010	Iron								
mg/kg	SW6010	Lead								
mg/L	SW6010	Lead								
mg/kg	SW6010	Magnesium								
mg/kg	SW6010	Manganese								
mg/kg	SW6010	Nickel								
mg/kg	SW6010	Potassium								
mg/kg	SW6010	Selenium								
mg/kg	SW6010	Silver								
mg/kg	SW6010	Sodium								
mg/kg	SW6010	Thallium								
mg/kg	SW6010	Vanadium								
mg/kg	SW6010	Zinc								
mg/kg	SW7471	Mercury								
				1.3						
				87.0 J						
				143 J						

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Field Sample ID Location Sample Date Sample Delivery Group	TE2-N TE-02 10/10/2012 480-26407-1	TE2-S TE-02 10/10/2012 480-26407-1	TE2-W TE-02 10/10/2012 480-26407-1	TE3-E TE-03 10/10/2012 480-26407-1	TE3-F TE-03 10/10/2012 480-26407-1	TE3-N TE-03 10/10/2012 480-26407-1	TE3-S TE-03 10/10/2012 480-26407-1	TE3-W TE-03 10/10/2012 480-26407-1
%	ASTM D2216	Percent Moisture	10.7	14.7	10.4	7.2	11.7	15.8	15.5	21.5 J
%	ASTM D2216	Percent Solids	89.3	85.3	89.6	92.8	88.3	84.2	84.5	78.5
mg/kg	SW6010	Aluminum								
mg/kg	SW6010	Antimony								
mg/kg	SW6010	Arsenic								
mg/kg	SW6010	Barium								
mg/kg	SW6010	Beryllium	186 J	87.7 J	80.1 J					
mg/kg	SW6010	Cadmium								
mg/kg	SW6010	Calcium								
mg/kg	SW6010	Chromium								
mg/kg	SW6010	Cobalt								
mg/kg	SW6010	Copper								
mg/kg	SW6010	Iron								
mg/kg	SW6010	Lead								
mg/L	SW6010	Lead								
mg/kg	SW6010	Magnesium								
mg/kg	SW6010	Manganese								
mg/kg	SW6010	Nickel								
mg/kg	SW6010	Potassium								
mg/kg	SW6010	Selenium								
mg/kg	SW6010	Silver								
mg/kg	SW6010	Sodium								
mg/kg	SW6010	Thallium								
mg/kg	SW6010	Vanadium								
mg/kg	SW6010	Zinc								
mg/kg	SW7471	Mercury								

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-SOIL
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Field Sample ID Location Sample Date Sample Delivery Group Parameter Name	TE4-E TE-04 10/10/2012 480-26407-1	TE4-F TE-04 10/10/2012 480-26407-1	TE4-N TE-04 10/10/2012 480-26407-1	TE4-S TE-04 10/10/2012 480-26407-1	TE4-W TE-04 10/10/2012 480-26407-1
%	ASTM D2216	Percent Moisture	11.0	8.4	9.7	14.7	14.5
%	ASTM D2216	Percent Solids	89.0	91.6	90.3	85.3	85.5
mg/kg	SW6010	Aluminum					
mg/kg	SW6010	Antimony					
mg/kg	SW6010	Arsenic					
mg/kg	SW6010	Barium					
mg/kg	SW6010	Beryllium					
mg/kg	SW6010	Cadmium					
mg/kg	SW6010	Calcium					
mg/kg	SW6010	Chromium					
mg/kg	SW6010	Cobalt					
mg/kg	SW6010	Copper					
mg/kg	SW6010	Iron					
mg/kg	SW6010	Lead					
mg/L	SW6010	Lead					
mg/kg	SW6010	Magnesium					
mg/kg	SW6010	Manganese					
mg/kg	SW6010	Nickel					
mg/kg	SW6010	Potassium					
mg/kg	SW6010	Selenium					
mg/kg	SW6010	Silver					
mg/kg	SW6010	Sodium					
mg/kg	SW6010	Thallium					
mg/kg	SW6010	Vanadium					
mg/kg	SW6010	Zinc					
mg/kg	SW7471	Mercury					

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS-WATER
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			DUP_080912 T1-MW-02 08/09/2012 480-23756-1	TI-MW01_080912 T1-MW-01 08/09/2012 480-23756-1	TI-MW02_080912 T1-MW-02 08/09/2012 480-23756-1	TI-MW03_080912 T1-MW-03 08/09/2012 480-23756-1
Units	Method	Parameter Name				
mg/L	SW6010	Aluminum	1.2	0.20	1.1	0.20 U
mg/L	SW6010	Aluminum, Dissolved	0.20 U	0.20 U	0.20 U	0.20 U
mg/L	SW6010	Antimony	0.020 U	0.020 U	0.020 U	0.021
mg/L	SW6010	Antimony, Dissolved	0.020 U	0.020 U	0.020 U	0.020
mg/L	SW6010	Arsenic	0.010 U	0.010 U	0.010 U	0.010 U
mg/L	SW6010	Arsenic, Dissolved	0.010 U	0.010 U	0.010 U	0.010 U
mg/L	SW6010	Barium	0.14	0.028	0.16	0.072
mg/L	SW6010	Barium, Dissolved	0.14	0.027	0.14	0.077
mg/L	SW6010	Beryllium	0.0020 U	0.0020 U	0.0020 U	0.0020 U
mg/L	SW6010	Beryllium, Dissolved	0.0020 U	0.0020 U	0.0020 U	0.0020 U
mg/L	SW6010	Cadmium	0.0010 U	0.0010 U	0.0010 U	0.0010 U
mg/L	SW6010	Cadmium, Dissolved	0.0010 U	0.0010 U	0.0010 U	0.0010 U
mg/L	SW6010	Calcium	254	147	249	114
mg/L	SW6010	Calcium, Dissolved	239	149	241	110
mg/L	SW6010	Chromium	0.0040 U	0.0040 U	0.0040 U	0.0040 U
mg/L	SW6010	Chromium, Dissolved	0.0040 U	0.0040 U	0.0040 U	0.0040 U
mg/L	SW6010	Cobalt	0.0040 U	0.0040 U	0.0040 U	0.0040 U
mg/L	SW6010	Cobalt, Dissolved	0.0040 U	0.0040 U	0.0040 U	0.0040 U
mg/L	SW6010	Copper	0.010 U	0.010 U	0.010 U	0.010 U
mg/L	SW6010	Copper, Dissolved	0.010 U	0.010 U	0.010 U	0.010 U
mg/L	SW6010	Iron	6.5	0.21	6.1	0.13
mg/L	SW6010	Iron, Dissolved	0.050 U	0.050 U	0.050 U	0.050 U
mg/L	SW6010	Lead	0.033	0.0050 U	0.033	0.027
mg/L	SW6010	Lead, Dissolved	0.0050 U	0.0050 U	0.0050 U	0.0050 U
mg/L	SW6010	Magnesium	126	123	144	87.6
mg/L	SW6010	Magnesium, Dissolved	139	126	142	82.1
mg/L	SW6010	Manganese	1.4	0.34	1.5	0.91
mg/L	SW6010	Manganese, Dissolved	1.4	0.34	1.5	0.84
mg/L	SW6010	Nickel	0.010 U	0.010 U	0.010 U	0.010 U
mg/L	SW6010	Nickel, Dissolved	0.010 U	0.010 U	0.010 U	0.010 U
mg/L	SW6010	Potassium	4.8	4.0	4.6	8.7
mg/L	SW6010	Potassium, Dissolved	4.3	4.2	4.3	8.1
mg/L	SW6010	Selenium	0.015 U	0.015 U	0.015 U	0.015 U
mg/L	SW6010	Selenium, Dissolved	0.015 U	0.015 U	0.015 U	0.015 U
mg/L	SW6010	Silver	0.0030 U	0.0030 U	0.0030 U	0.0030 U
mg/L	SW6010	Silver, Dissolved	0.0030 U	0.0030 U	0.0030 U	0.0030 U
mg/L	SW6010	Sodium	60.9	42.0	58.5	58.8
mg/L	SW6010	Sodium, Dissolved	60.7	42.7	60.2	57.6
mg/L	SW6010	Thallium	0.020 U	0.020 U	0.020 U	0.020 U
mg/L	SW6010	Thallium, Dissolved	0.020 U	0.020 U	0.020 U	0.020 U
mg/L	SW6010	Vanadium	0.0050	0.0050 U	0.0053	0.0050 U
mg/L	SW6010	Vanadium, Dissolved	0.0050 U	0.0050 U	0.0050 U	0.0050 U
mg/L	SW6010	Zinc	0.042	0.010 U	0.044	0.012
mg/L	SW6010	Zinc, Dissolved	0.053 J	0.011	0.033 J	0.030
mg/L	SW7470	Mercury	0.00020 U	0.00020 U	0.00020 U	0.00020 U
mg/L	SW7470	Mercury, Dissolved	0.00020 U	0.00020 U	0.00020 U	0.00020 U
µg/L	SW8081	4,4'-DDD	0.047 UJ	0.047 U	0.047 U	0.18
µg/L	SW8081	4,4'-DDE	0.047 UJ	0.047 U	0.047 U	0.042 J
µg/L	SW8081	4,4'-DDT	0.047 UJ	0.047 U	0.047 U	0.16
µg/L	SW8081	Aldrin	0.047 UJ	0.047 U	0.047 U	0.048 U
µg/L	SW8081	alpha-BHC	0.047 UJ	0.047 U	0.047 U	0.048 U
µg/L	SW8081	alpha-Chlordane	0.047 UJ	0.047 U	0.047 U	0.048 U
µg/L	SW8081	beta-BHC	0.047 UJ	0.047 U	0.047 U	0.20
µg/L	SW8081	delta-BHC	0.047 UJ	0.047 U	0.047 U	0.048 U
µg/L	SW8081	Dieldrin	0.047 UJ	0.047 U	0.047 U	0.048 U

TABLE 4
SAMPLE RESULTS-WATER
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			DUP_080912 T1-MW-02 08/09/2012 480-23756-1	TI-MW01_080912 T1-MW-01 08/09/2012 480-23756-1	TI-MW02_080912 T1-MW-02 08/09/2012 480-23756-1	TI-MW03_080912 T1-MW-03 08/09/2012 480-23756-1
Units	Method	Parameter Name				
µg/L	SW8081	Endosulfan I	0.047 UJ	0.047 U	0.047 U	0.048 U
µg/L	SW8081	Endosulfan II	0.047 UJ	0.017 J	0.047 U	0.064
µg/L	SW8081	Endosulfan sulfate	0.047 UJ	0.047 U	0.047 U	0.048 U
µg/L	SW8081	Endrin	0.047 UJ	0.018 J	0.047 U	0.048 U
µg/L	SW8081	Endrin aldehyde	0.047 UJ	0.047 U	0.047 U	0.048 U
µg/L	SW8081	Endrin ketone	0.047 UJ	0.047 U	0.047 U	0.048 U
µg/L	SW8081	gamma-BHC (Lindane)	0.047 UJ	0.047 U	0.047 U	0.048 U
µg/L	SW8081	gamma-Chlordane	0.047 UJ	0.16	0.047 U	0.048 U
µg/L	SW8081	Heptachlor	0.047 UJ	0.047 U	0.047 U	0.048 U
µg/L	SW8081	Heptachlor epoxide	0.047 UJ	0.047 U	0.047 U	0.020 J
µg/L	SW8081	Methoxychlor	0.047 UJ	0.018 J	0.047 U	0.048 U
µg/L	SW8081	Toxaphene	0.47 UJ	0.47 U	0.47 U	0.48 U
µg/L	SW8082	PCB-1016	0.47 UJ	0.47 U	0.47 U	0.48 U
µg/L	SW8082	PCB-1221	0.47 UJ	0.47 U	0.47 U	0.48 U
µg/L	SW8082	PCB-1232	0.47 UJ	0.47 U	0.47 U	0.48 U
µg/L	SW8082	PCB-1242	0.47 UJ	0.47 U	0.47 U	0.48 U
µg/L	SW8082	PCB-1248	0.47 UJ	0.47 U	0.47 U	0.48 U
µg/L	SW8082	PCB-1254	0.47 UJ	0.47 U	0.47 U	0.48 U
µg/L	SW8082	PCB-1260	0.47 UJ	0.47 U	0.47 U	0.48 U
µg/L	SW8260	1,1,1-Trichloroethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,1,2,2-Tetrachloroethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,1,2-Trichloro-1,2,2-trifluoroethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,1,2-Trichloroethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,1-Dichloroethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,1-Dichloroethene	4.0 U	1.0 UJ	4.0 U	5.0 U
µg/L	SW8260	1,2,4-Trichlorobenzene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,2-Dibromo-3-Chloropropane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,2-Dibromoethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,2-Dichlorobenzene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,2-Dichloroethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,2-Dichloropropane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,3-Dichlorobenzene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	1,4-Dichlorobenzene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	2-Butanone (MEK)	40 U	10 U	40 U	50 U
µg/L	SW8260	2-Hexanone	20 U	5.0 U	20 U	25 U
µg/L	SW8260	4-Methyl-2-pentanone (MIBK)	20 U	5.0 U	20 U	25 U
µg/L	SW8260	Acetone	40 U	3.4 J	40 U	50 U
µg/L	SW8260	Benzene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Bromodichloromethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Bromoform	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Bromomethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Carbon disulfide	4.0 U	0.51 J	4.0 U	5.0 U
µg/L	SW8260	Carbon tetrachloride	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Chlorobenzene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Chloroethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Chloroform	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Chloromethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	cis-1,2-Dichloroethene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	cis-1,3-Dichloropropene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Cyclohexane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Dibromochloromethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Dichlorodifluoromethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Ethylbenzene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Isopropylbenzene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Methyl acetate	4.0 U	1.0 U	4.0 U	5.0 U

TABLE 4
SAMPLE RESULTS-WATER
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			DUP_080912 T1-MW-02 08/09/2012 480-23756-1	TI-MW01_080912 T1-MW-01 08/09/2012 480-23756-1	TI-MW02_080912 T1-MW-02 08/09/2012 480-23756-1	TI-MW03_080912 T1-MW-03 08/09/2012 480-23756-1
Units	Method	Parameter Name				
µg/L	SW8260	Methyl tert-butyl ether	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Methylcyclohexane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Methylene Chloride	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Styrene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Tetrachloroethene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Toluene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	trans-1,2-Dichloroethene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	trans-1,3-Dichloropropene	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Trichloroethene	4.0 U	1.0 U	4.0 U	8.7
µg/L	SW8260	Trichlorofluoromethane	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Vinyl chloride	4.0 U	1.0 U	4.0 U	5.0 U
µg/L	SW8260	Xylenes, Total	8.0 U	2.0 U	8.0 U	10 U
µg/L	SW8270	2,4,5-Trichlorophenol	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	2,4,6-Trichlorophenol	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	2,4-Dichlorophenol	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	2,4-Dimethylphenol	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	2,4-Dinitrophenol	9.5 U	9.5 U	9.5 U	9.5 U
µg/L	SW8270	2,4-Dinitrotoluene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	2,6-Dinitrotoluene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	2-Chloronaphthalene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	2-Chlorophenol	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	2-Methylnaphthalene	2.0 J	4.8 U	1.9 J	4.8 U
µg/L	SW8270	2-Methylphenol	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	2-Nitroaniline	9.5 U	9.5 U	9.5 U	9.5 U
µg/L	SW8270	2-Nitrophenol	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	3,3'-Dichlorobenzidine	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	3-Nitroaniline	9.5 U	9.5 U	9.5 U	9.5 U
µg/L	SW8270	4,6-Dinitro-2-methylphenol	9.5 U	9.5 U	9.5 U	9.5 U
µg/L	SW8270	4-Bromophenyl phenyl ether	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	4-Chloro-3-methylphenol	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	4-Chloroaniline	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	4-Chlorophenyl phenyl ether	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	4-Methylphenol	9.5 U	9.5 U	9.5 U	9.5 U
µg/L	SW8270	4-Nitroaniline	9.5 U	9.5 U	9.5 U	9.5 U
µg/L	SW8270	4-Nitrophenol	9.5 U	9.5 U	9.5 U	9.5 U
µg/L	SW8270	Acenaphthene	0.47 J	4.8 U	0.42 J	4.8 U
µg/L	SW8270	Acenaphthylene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Acetophenone	4.7 U	4.8 U	1.8 J	4.8 U
µg/L	SW8270	Anthracene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Atrazine	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Benzaldehyde	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Benzo(a)anthracene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Benzo(a)pyrene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Benzo(b)fluoranthene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Benzo(g,h,i)perylene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Benzo(k)fluoranthene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Biphenyl	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	bis (2-chloroisopropyl) ether	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Bis(2-chloroethoxy)methane	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Bis(2-chloroethyl)ether	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Bis(2-ethylhexyl) phthalate	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Butyl benzyl phthalate	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Caprolactam	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Carbazole	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Chrysene	4.7 U	4.8 U	4.8 U	4.8 U

TABLE 4
SAMPLE RESULTS-WATER
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			DUP_080912 T1-MW-02 08/09/2012 480-23756-1	TI-MW01_080912 T1-MW-01 08/09/2012 480-23756-1	TI-MW02_080912 T1-MW-02 08/09/2012 480-23756-1	TI-MW03_080912 T1-MW-03 08/09/2012 480-23756-1
Units	Method	Parameter Name				
µg/L	SW8270	Di-n-butyl phthalate	4.7 U	4.8 U	4.8 U	0.40 J
µg/L	SW8270	Di-n-octyl phthalate	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Dibenz(a,h)anthracene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Dibenzofuran	9.5 U	9.5 U	9.5 U	9.5 U
µg/L	SW8270	Diethyl phthalate	0.41 J	4.8 U	0.31 J	4.8 U
µg/L	SW8270	Dimethyl phthalate	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Fluoranthene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Fluorene	0.55 J	4.8 U	0.55 J	4.8 U
µg/L	SW8270	Hexachlorobenzene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Hexachlorobutadiene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Hexachlorocyclopentadiene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Hexachloroethane	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Indeno(1,2,3-cd)pyrene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Isophorone	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	N-Nitrosodi-n-propylamine	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	N-Nitrosodiphenylamine	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Naphthalene	1.5 J	4.8 U	1.3 J	4.8 U
µg/L	SW8270	Nitrobenzene	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Pentachlorophenol	9.5 U	9.5 U	9.5 U	9.5 U
µg/L	SW8270	Phenanthrene	0.82 J	0.83 J	0.77 J	4.8 U
µg/L	SW8270	Phenol	4.7 U	4.8 U	4.8 U	4.8 U
µg/L	SW8270	Pyrene	4.7 U	4.8 U	4.8 U	4.8 U

Notes:

U = undetected

J = estimated value

TABLE 4
SAMPLE RESULTS
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group		TRIP BLANK_071712 QC 07/17/2012 480-22688-1	TRIP BLANK_071812 QC 07/18/2012 480-22767-1	TB_080112 QC 08/01/2012 480-23380-1	TRIP BLANK_080912 QC 08/09/2012 480-23756-1
Units	Method	Parameter Name			
µg/L	SW8260	1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloroethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloroethene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dibromo-3-Chloropropane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dibromoethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichloroethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichloropropane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	2-Butanone (MEK)	10 U	10 U	10 U
µg/L	SW8260	2-Hexanone	5.0 U	5.0 U	5.0 U
µg/L	SW8260	4-Methyl-2-pentanone (MIBK)	5.0 U	5.0 U	5.0 U
µg/L	SW8260	Acetone	10 U	10 U	10 U
µg/L	SW8260	Benzene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromodichloromethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromoform	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromomethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Carbon disulfide	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Carbon tetrachloride	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorobenzene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chloroethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chloroform	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chloromethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U

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Table 4-CR final

QC

TABLE 4
SAMPLE RESULTS
DATA VALIDATION SUMMARY REPORT
2012 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group		TRIP BLANK_071712 QC 07/17/2012 480-22688-1	TRIP BLANK_071812 QC 07/18/2012 480-22767-1	TB_080112 QC 08/01/2012 480-23380-1	TRIP BLANK_080912 QC 08/09/2012 480-23756-1
Units	Method	Parameter Name			
µg/L	SW8260	Cyclohexane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Dibromochloromethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Dichlorodifluoromethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethylbenzene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Isopropylbenzene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Methyl acetate	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Methyl tert-butyl ether	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Methylcyclohexane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Methylene Chloride	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Styrene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tetrachloroethene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Toluene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Trichloroethene	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Trichlorofluoromethane	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Vinyl chloride	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Xylenes, Total	2.0 U	2.0 U	2.0 U

Notes:

U = undetected

J = estimated value

**DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK**

1.0 INTRODUCTION

Data validation was completed on remedial investigation soil and water samples collected in February 2013. Samples were analyzed by TestAmerica Laboratories in Amherst, New York (TAL-Buffalo) and reported in data sets 480-33395-1, and 480-33480-1. The following U.S. Environmental Protection Agency (USEPA) analytical methods (USEPA, 1996) were performed:

- Volatile organic compounds (VOCs) by USEPA Method SW846 8260
- Semivolatile organic compounds (SVOCs) by USEPA Method SW846 8270
- Polychlorinated biphenyls (PCBs) by USEPA Method SW846 8082
- Metals by USEPA Method SW846 6010B
- Mercury by USEPA Method 7471
- Toxicity Characteristic Leaching Procedure (TCLP) lead by USEPA Method 1311/6010B
- Percent Solids by ASTM Method D2216

A summary of the data deliverable groups, samples, and analytical parameters is presented on Table 1. Samples were collected based on objectives identified in the Supplemental Remedial Investigation Work Plan (AMEC, 2012). Data validation was completed in accordance with the Honeywell Remediation program Level II data validation procedures and the NYSDEC Data Usability Summary Report (DUSR) guidelines (NYSDEC, 2010). Data were reviewed using Honeywell generic precision and accuracy control limits presented in Table 2. Data quality reviews for the items listed above were completed using professional judgment and general procedures found in USEPA Region II guidelines (USEPA, 2006a; USEPA, 2006b; USEPA, 2006c; USEPA, 2008a; and USEPA, 2008b). A summary of validation data qualification actions is presented on Table 3. Final results are presented on Table 4.

During the Level II data validation the following data quality indicators were reviewed:

- Laboratory Report Narrative
- Sample Collection and Holding Times
- Quality Control Blanks
- Laboratory Control Samples (LCS)
- Matrix Spike/Matrix Spike Duplicates (MS/MSD)
- Laboratory and Field Duplicates
- Surrogates
- Reporting Limits
- Data Completeness
- Electronic Data Verification

The following additional checks were added to the Level II review based on data review procedures included in the NYSDEC DUSR guidance:

- Initial Calibrations
- Continuing Calibrations
- Internal Standards
- Interference Check Standard
- Serial Dilutions
- Percent Solids Evaluation
- Raw Data review and Calculations
- Calculation and quality control form transcription checks

Data qualifications were completed if necessary in accordance with the guidelines and professional judgment using the following qualifiers:

U = The target compound was not detected at concentrations greater than the associated quantitation limit

J = The reported concentration is considered an estimated value

Data validation was not completed on the remaining analytical samples. Results for all other methods remain as reported by the laboratory including laboratory data qualifiers.

2.0 DATA VALIDATION ACTIONS AND OBSERVATIONS

2.1 VOC

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- QC Blanks
- LCS
- MS/MSD
- * Field Duplicates
- * Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs
- * Electronic Data Verification
- * Raw Data review and Calculations
- * Target Compound Identification

* QC criteria were met for this parameter.

Blanks

Toluene (1.02 ug/kg) was detected below the reporting limit in method blank in batch 480-106590. An action limit was established at five times the reported blank concentration. A subset of sample results in associated samples were qualified as non-detect (U) at the reporting limit with reason code BL1. A summary of qualified sample results is presented in Table 3.

LCS/LCSD

The LCS percent recovery was less than QC limit of 70 percent for dichlorodifluoromethane (62) in batch 480-105255, which may indicate low bias. Result for dichlorodifluoromethane in samples BB-5_022613 and BB-7_022613 was qualified as estimated (UJ) with reason code LCSL. A summary of qualified sample results is presented in Table 3.

MS/MSD

MS/MSD analyses were completed using sample BB-5_022613. The MS and / or MSD percent recoveries for most analytes were less than the QC limit of 70. Recoveries of 1,2,4-trichlorobenzene (4 percent) in both the MS and MSD were less than lower QC limit of 10. The associated in sample BB-5_022613 were qualified as estimated (UJ/J) and 1,2,4-trichlorobenzene result in sample BB-5_022613 was qualified as rejected (R) with reason code MSL/MSDL. The MS/MSD results indicate a low bias for VOCs in the soil matrix. A summary of qualified sample result is presented in Table 3.

2.2 SVOCs

The majority of SVOC samples were analyzed at dilutions due to target compound concentrations or sample matrix condition. Reporting limit for compounds that were not detected are elevated.

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD
- * Field Duplicates
- * Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs
- * Electronic Data Verification
- * Raw Data review and Calculations
- * Target Compound Identification

- * QC criteria were met for this parameter.

Instrument Calibration

The recoveries of 3,3'-dichlorobenzidine and 4-chloroaniline were below criteria in the initial calibration verification, indicating associated sample results are possibly biased low. These results in samples BB-5_022613 and BB-7_022613 were qualified as estimated (UJ) and with reason code ICVL.

2.3 PCBs

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD
- * Field Duplicates
- * Surrogate Recoveries
- * Internal Standard Response and Retention Times
- * Instrument Calibration
- * TICs
- * Electronic Data Verification
- * Raw Data review and Calculations
- * Second Column Confirmation/Quantitation Review

- * QC criteria were met for this parameter.

Second Column Confirmation/Quantitation

In a sample BB-4_022613 the second column confirmation RPDs for Aroclor-1260 was outside QC limit of 40. This result in sample BB-4_022613 was qualified as estimated (J) with reason code CFP.

2.4 Metals

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Holding Times
- * QC Blanks
- * LCS
- * MS/MSD
- * Field and Lab Duplicates
- * Instrument Calibration

- * Electronic Data Verification
- * Interference Check Samples
- * Serial Dilutions

* - QC criteria were met for this parameter.

Field Duplicate

For the field duplicate pair B-27 (0.5-1.0') and B-27 (0.5-1.0') DUP the relative percent differences (RPDs) for lead (total and TCLP) exceeded the QC limit of soil (50). The results for lead in sample set B-27 (0.5-1.0') and B-27 (0.5-1.0') DUP were qualified estimated (J) with reason code FD.

For the field duplicate pair BB-2_022613 and BB-2 (DUP)_022613 the RPDs of aluminum, arsenic, barium, calcium, copper, iron, magnesium, manganese, potassium and zinc exceeded the QC limit of 50 (arsenic was reported as not detected and detected at a concentration greater than the reporting limit). These results in sample set BB-2_022613 and BB-2 (DUP)_022613 were qualified estimated (J/UJ) with reason code FD.

For the field duplicate pair BB-4_022613 and BB-4 (DUP)_022613 the RPDs of barium and lead (total and TCLP) exceeded the QC limit of soil (50). The results for barium and lead in sample set BB-4_022613 and BB-4 (DUP)_022613 were qualified estimated (J) with reason code FD.

2.5 Percent solid and Moisture

Data were evaluated based on the following parameters:

- * Data Completeness and Chain of Custody
- * Collection and Preservation
- * Field and Lab Duplicates
- * Calculations and Reporting

* - QC criteria were met for this parameter.

Field Duplicate

For the field duplicate pair BB-2_022613 and BB-2 (DUP)_022613 the relative percent difference of percent moisture was exceeded the QC limit of 50. Percent moisture results in sample set BB-2_022613 and BB-2 (DUP)_022613 were qualified estimated (J) with reason code FD.

References:

AMEC, 2012. Supplemental Remedial Investigation Work Plan; Tract I Site 3123 Highland Avenue Niagara Falls, Niagara County, New York Site No. 932157; May 2012.

New York State Department of Environmental Conservation (NYSDEC), 2010. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; DER-10; Division of Environmental Remediation; May 2010.

U.S. Environmental Protection Agency (USEPA), 1996. "Test Methods for Evaluating Solid Waste"; Laboratory Manual Physical/Chemical Methods; Office of Solid Waste and Emergency Response; Washington, DC; SW-846; November 1986; Revision 4 -December 1996.

U.S. Environmental Protection Agency (USEPA), 2006a. "Validation of Metals Data for the Contract Laboratory Program (CLP)"; USEPA Region II; HW-2; Revision 13; September 2006.

U.S. Environmental Protection Agency (USEPA), 2006b. "Validating Pesticide Compounds Organochlorine Pesticides by Gas Chromatography SW-846 Method 8081B"; USEPA Region II; HW-44; Revision 1, October 2006.

U.S. Environmental Protection Agency (USEPA), 2006c. "Validating PCB Compounds PCBs By Gas Chromatography SW-846 Method 8082A"; USEPA Region II Hazardous Waste Support Branch; HW-45; Revision 1.0; October 2006.

U.S. Environmental Protection Agency (USEPA), 2008a. "Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B"; USEPA Region II; HW-24; Revision 2; October 2008.

U.S. Environmental Protection Agency (USEPA), 2008b. "Validating Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8270D"; USEPA Region II; HW-22; Revision 4; October 2008.

Data Validator: Lakshmi Devi



Date: April 24, 2013

Senior Chemist: Chris Ricardi, NRCC-EAC



Date: April 26, 2013

TABLE 1
SAMPLE AND ANALYTICAL SUMMARY
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

SDG	Location	Sample ID	Purpose	Matrix	Parameter:		VOCs	SVOCs	PCBS	Metals		Hg	% Solids & Moisture
					Method:	Date				Total	TCLP		
480-33480-1	BB-2	BB-2 022613	REG	SOIL	SW8260	2/26/13	48	65	7	SW6010	SW6010	SW7471	ASTM D2216
480-33480-1	BB-2	BB-2 (DUP) 022613	FD	SOIL		2/26/13	48	65	7			1	2
480-33480-1	BB-3	BB-3 022613	REG	SOIL		2/26/13	48	65	7			1	2
480-33480-1	BB-3	BB-3 (DUP) 022613	FD	SOIL		2/26/13	48						2
480-33480-1	BB-4	BB-4 022613	REG	SOIL		2/26/13	48	65	7		1	1	2
480-33480-1	BB-4	BB-4 (DUP) 022613	FD	SOIL		2/26/13	48	65	7		1	1	2
480-33480-1	BB-5	BB-5 022613	REG	SOIL		2/26/13	48	65	7			1	2
480-33480-1	BB-7	BB-7 022613	REG	SOIL		2/26/13	48	65	7			1	2
480-33480-1	QC	TRIP BLANK 022613	TB	SOIL		2/26/13	48						
480-33395-1	B-27	B-27(0.5-1.0')	REG	SOIL		2/21/13				1	1		2
480-33395-1	B-27	B-27(0.5-1.0')DUP	FD	SOIL		2/21/13				1	1		2
480-33395-1	B-28	B-28(0.5-1.0')	REG	SOIL		2/21/13				1			2
480-33395-1	B-28	B-28(7.0-7.5')	REG	SOIL		2/21/13				1			2
480-33395-1	B-29	B-29(0.5-1.0')	REG	SOIL		2/21/13				1			2
480-33395-1	B-29	B-29(0.5-1.0')DUP	FD	SOIL		2/21/13				1			2
480-33395-1	B-29	B-29(7.0-7.5')	REG	SOIL		2/21/13				1			2
480-33395-1	B-30	B-30(1.0-1.5')	REG	SOIL		2/21/13				1			2
480-33395-1	B-30	B-30(3.5-4.0')	REG	SOIL		2/21/13				1			2
480-33395-1	B-31	B-31 (0.5-1.0')	REG	SOIL		2/21/13				1			2
480-33395-1	B-32	B-32(0.5-1.0')	REG	SOIL		2/21/13				1			2
480-33395-1	B-32	B-32(6.5-7.0')	REG	SOIL		2/21/13				1			2
480-33395-1	B-32	B-32(6.5-7.0')DUP	FD	SOIL		2/21/13				1			2
480-33395-1	B-33	B-33(0.5-1.0')	REG	SOIL		2/21/13				1			2
480-33395-1	B-33	B-33(5.0-5.5')	REG	SOIL		2/21/13				1			2
480-33395-1	B-34	B-34(0.5-1.0')	REG	SOIL		2/21/13				1			2
480-33395-1	B-40	B-40(1.0-1.5')	REG	SOIL		2/21/13				1			2
480-33395-1	B-41	B-41(0.5-1.0')	REG	SOIL		2/21/13				1			2
480-33395-1	B-42	B-42(0.5-1.0')	REG	SOIL		2/21/13				1			2
480-33395-1	B-43	B-43(0.5-1.0')	REG	SOIL		2/21/13				1			2

Note:

FD Field Duplicate
 QC Quality control sample
 REG Regular Sample
 TB Trip Blank

TCLP = Toxicity Characteristic Leaching Procedure

TABLE 2
ACCURACY AND PRECISION LIMITS
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

PARAMETER	QC TEST	ANALYTE	WATER (%R)	SOIL (%R)
Volatiles	Surrogate	All Surrogates	70 - 130	70 - 130
	LCS	All Target Compounds	70 - 130	70 - 130
	MS/MSD	All Target Compounds	70 - 130	70 - 130
Semivolatiles	Surrogate	Phenol-d5	15 -110	30 - 130
		2-Fluorophenol	15 -110	30 - 130
		2,4,6-tribromophenol	15 -110	30 - 130
		nitrobenzene-d5	30 - 130	30 - 130
		2-fluorobiphenyl	30 - 130	30 - 130
		terphenyl-d14	30 - 130	30 - 130
	LCS	Base-Neutral Compounds	40-140	40-140
		Acid Compounds	30-130	30-130
	MS/MSD	Base-Neutral Compounds	40-140	40-140
		Acid Compounds	30-130	30-130
Polychlorinated Biphenyls (PCBs)	Surrogate	Decachlorobiphenyl	30 - 150	30 - 150
		Tetrachloro-m-xylene	30 - 150	30 - 150
	LCS	All Target Compounds	40 - 140	40 - 140
	MS/MSD	All Target Compounds	40 - 140	40 - 140
Inorganics	LCS	All Target Compounds	80 - 120	80 - 120
	MS/MSD	All Target Compounds	75 -125	75 - 125

Notes:

LCS = Laboratory Control Sample

MS/MSD = Matrix spike/ Matrix Spike Duplicate

%R = Percent Recovery

QC = Quality Control

TABLE 2
ACCURACY AND PRECISION LIMITS
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

PARAMETER	QC TEST	Water	Soil
Volatiles	Field Duplicates	30	50
	MS/MSD	30	30
Semivolatiles	Field Duplicates	30	50
	MS/MSD	20	30
Polychlorinated Biphenyls (PCBs)	Field Duplicates	30	50
	MS/MSD	50	50
Pesticides	Field Duplicates	30	50
	MS/MSD	30	30
Inorganics	Lab Duplicates	25	25
	Field Duplicates	30	50
	MS/MSD	25	25

Notes:

LCS = Laboratory Control Sample

MS/MSD = Matrix spike/ Matrix Spike Duplicate

QC = Quality Control

RPD = Relative Percent Difference

TABLE 3
VALIDATION ACTIONS AND REASON CODES - SOIL DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
BB-2 (DUP)_022613	FD	480-33480-1	ASTM D2216	Percent Moisture	5.7		J	FD	%
BB-2_022613	REG	480-33480-1	ASTM D2216	Percent Moisture	9.9		J	FD	%
BB-2 (DUP)_022613	FD	480-33480-1	SW6010	Aluminum	181		J	FD	mg/kg
BB-2_022613	REG	480-33480-1	SW6010	Aluminum	352		J	FD	mg/kg
BB-2 (DUP)_022613	FD	480-33480-1	SW6010	Arsenic	2.1	U	UU	FD	mg/kg
BB-2_022613	REG	480-33480-1	SW6010	Arsenic	6.9		J	FD	mg/kg
BB-2 (DUP)_022613	FD	480-33480-1	SW6010	Barium	9.8		J	FD	mg/kg
BB-2_022613	REG	480-33480-1	SW6010	Barium	24.1		J	FD	mg/kg
BB-4 (DUP)_022613	FD	480-33480-1	SW6010	Barium	27.3		J	FD	mg/kg
BB-4_022613	REG	480-33480-1	SW6010	Barium	49.6		J	FD	mg/kg
BB-2 (DUP)_022613	FD	480-33480-1	SW6010	Calcium	9170		J	FD	mg/kg
BB-2_022613	REG	480-33480-1	SW6010	Calcium	47600		J	FD	mg/kg
BB-2 (DUP)_022613	FD	480-33480-1	SW6010	Copper	8.2		J	FD	mg/kg
BB-2_022613	REG	480-33480-1	SW6010	Copper	32		J	FD	mg/kg
BB-2 (DUP)_022613	FD	480-33480-1	SW6010	Iron	8480	B7	J	FD	mg/kg
BB-2_022613	REG	480-33480-1	SW6010	Iron	28900	B7	J	FD	mg/kg
B-27 (0.5-1.0')	REG	480-33395-1	SW6010	Lead	3570		J	FD	mg/kg
B-27 (0.5-1.0') DUP	FD	480-33395-1	SW6010	Lead	12.1		J	FD	mg/kg
BB-4 (DUP)_022613	FD	480-33480-1	SW6010	Lead	1950		J	FD	mg/kg
BB-4_022613	REG	480-33480-1	SW6010	Lead	4090		J	FD	mg/kg
B-27 (0.5-1.0')	REG	480-33395-1	SW6010	Lead	1.3		J	FD	mg/L
B-27 (0.5-1.0') DUP	FD	480-33395-1	SW6010	Lead	0.11		J	FD	mg/L
BB-4 (DUP)_022613	FD	480-33480-1	SW6010	Lead	47	^	J	FD	mg/L
BB-4_022613	REG	480-33480-1	SW6010	Lead	116	^	J	FD	mg/L
BB-2 (DUP)_022613	FD	480-33480-1	SW6010	Magnesium	181		J	FD	mg/kg
BB-2_022613	REG	480-33480-1	SW6010	Magnesium	325		J	FD	mg/kg
BB-2 (DUP)_022613	FD	480-33480-1	SW6010	Manganese	11.1		J	FD	mg/kg

TABLE 3
VALIDATION ACTIONS AND REASON CODES - SOIL DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
BB-2_022613	REG	480-33480-1	SW6010	Manganese	27.8		J	FD	mg/kg
BB-2 (DUP)_022613	FD	480-33480-1	SW6010	Potassium	1180		J	FD	mg/kg
BB-2_022613	REG	480-33480-1	SW6010	Potassium	5220		J	FD	mg/kg
BB-2 (DUP)_022613	FD	480-33480-1	SW6010	Zinc	14		J	FD	mg/kg
BB-2_022613	REG	480-33480-1	SW6010	Zinc	38.1		J	FD	mg/kg
BB-4_022613	REG	480-33480-1	SW8082	PCB-1260	1300	J	J	CFP	mg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,1,1-Trichloroethane	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,1,2,2-Tetrachloroethane	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,1,2-Trichloro-1,2,2-trifluoroethane	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,1,2-Trichloroethane	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,1-Dichloroethane	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,1-Dichloroethene	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,2,4-Trichlorobenzene	9.2	U	R	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,2-Dibromo-3-Chloropropane	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,2-Dibromoethane	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,2-Dichlorobenzene	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,2-Dichloroethane	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,2-Dichloropropane	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,3-Dichlorobenzene	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	1,4-Dichlorobenzene	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Acetone	41	J	J	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Benzene	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Bromodichloromethane	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Bromoform	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Carbon disulfide	5.1	J	J	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Carbon tetrachloride	9.2	U	UU	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Chlorobenzene	9.2	U	UU	MSL,MSDL	µg/kg

TABLE 3
VALIDATION ACTIONS AND REASON CODES - SOIL DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
BB-5_022613	REG	480-33480-1	SW8260	Chloroethane	9.2	U	UJ	MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Chloroform	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Chloromethane	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	cis-1,2-Dichloroethene	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	cis-1,3-Dichloropropene	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Cyclohexane	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Dibromochloromethane	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Dichlorodifluoromethane	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Dichlorodifluoromethane	8.2	U	UJ	LCSL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Ethylbenzene	9.2	U	UJ	LCSL,MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Isopropylbenzene	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Methylcyclohexane	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Methylene Chloride	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Styrene	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Tetrachloroethene	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Toluene	14	J,B	U	BL1	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Toluene	10	J,B	U	BL1	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Toluene	8.5	J,B	U	BL1	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Toluene	3.5	J	J	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	trans-1,2-Dichloroethene	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	trans-1,3-Dichloropropene	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Trichloroethene	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Trichlorofluoromethane	9.2	U	UJ	MSL,MSDL	µg/kg
BB-5_022613	REG	480-33480-1	SW8260	Vinyl chloride	9.2	U	UJ	MSL,MSDL	µg/kg
BB-7_022613	REG	480-33480-1	SW8270	3,3'-Dichlorobenzidine	300000	U	UJ	ICVL	µg/kg
BB-5_022613	REG	480-33480-1	SW8270	3,3'-Dichlorobenzidine	300000	U	UJ	ICVL	µg/kg
BB-7_022613	REG	480-33480-1	SW8270	4-Chloroaniline	300000	U	UJ	ICVL	µg/kg

TABLE 3
VALIDATION ACTIONS AND REASON CODES - SOIL DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
BB-5_022613	REG	480-33480-1	SW8270	4-Chloroaniline	300000	U	UJ	ICVL	µg/kg

Note:

J Estimated
U Undetected
BL1 Result qualified due to laboratory blank
CFP Dual Column Confirmation Precision exceeds method goal
ICVL Initial calibration verification recovery less than the lower control limit
FD Field Duplicate RPD acceptance limit exceeded.
LCSL LCS recovery criteria less than the lower limit
MSL Matrix spike recovery less than the lower limit
MSDL Matrix spike duplicate recovery less than the lower limit

TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group		BB-2 (DUP)_022613 BB-2 02/26/2013 480-33480-1	BB-3 (DUP)_022613 BB-3 02/26/2013 480-33480-1	BB-3 (DUP)_022613 BB-3 02/26/2013 480-33480-1	BB-4 (DUP)_022613 BB-4 02/26/2013 480-33480-1	BB-4 022613 BB-4 02/26/2013 480-33480-1
Units	Method Parameter Name					
ug/kg	SW8082 PCB-1016	2400 U		230 U	2800 U	2700 U
ug/kg	SW8082 PCB-1221	2400 U		230 U	2800 U	2700 U
ug/kg	SW8082 PCB-1232	2400 U		230 U	2800 U	2700 U
ug/kg	SW8082 PCB-1242	2400 U		230 U	2800 U	2700 U
ug/kg	SW8082 PCB-1248	2400 U		230 U	2800 U	2700 U
ug/kg	SW8082 PCB-1254	2400 U		230 U	2800 U	1700 J
ug/kg	SW8082 PCB-1260	2400 U		230 U	2800 U	1300 J
ug/kg	SW8260 1,1,1-Trichloroethane	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,1,2,2-Tetrachloroethane	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,1,2-Trichloro-1,2,2-trifluoroeth	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,1,2-Trichloroethane	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,1-Dichloroethane	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,1-Dichloroethene	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,2,4-Trichlorobenzene	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,2-Dibromo-3-Chloropropane	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,2-Dibromoethane	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,2-Dichlorobenzene	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,2-Dichloroethane	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,2-Dichloropropane	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,3-Dichlorobenzene	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 1,4-Dichlorobenzene	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 2-Butanone (MEK)	66 U	51 U	43 U	29 U	31 U
ug/kg	SW8260 2-Hexanone	66 U	51 U	43 U	29 U	31 U
ug/kg	SW8260 4-Methyl-2-pentanone (MIBK)	66 U	51 U	43 U	29 U	31 U
ug/kg	SW8260 Acetone	21 J	8.6 J	43 U	5.2 J	5.4 J
ug/kg	SW8260 Benzene	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 Bromodichloromethane	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 Bromoform	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 Bromomethane	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 Carbon disulfide	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 Carbon tetrachloride	13 U	10 U	8.5 U	5.8 U	6.2 U
ug/kg	SW8260 Chlorobenzene	13 U	10 U	8.5 U	5.8 U	6.2 U

TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group		BB-2 (DUP)_022613 BB-2 02/26/2013 480-33480-1	BB-2 (DUP)_022613 BB-2 02/26/2013 480-33480-1	BB-3 (DUP)_022613 BB-3 02/26/2013 480-33480-1	BB-3 (DUP)_022613 BB-3 02/26/2013 480-33480-1	BB-4 (DUP)_022613 BB-4 02/26/2013 480-33480-1	BB-4 (DUP)_022613 BB-4 02/26/2013 480-33480-1
Units	Method	Parameter Name					
ug/kg	SW8260	Chloroethane	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Chloroform	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Chloromethane	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	cis-1,2-Dichloroethene	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	cis-1,3-Dichloropropene	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Cyclohexane	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Dibromochloromethane	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Dichlorodifluoromethane	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Ethylbenzene	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Isopropylbenzene	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Methyl acetate	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Methyl tert-butyl ether	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Methylcyclohexane	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Methylene Chloride	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Styrene	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Tetrachloroethene	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Toluene	2.6 J	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	trans-1,2-Dichloroethene	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	trans-1,3-Dichloropropene	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Trichloroethene	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Trichlorofluoromethane	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Vinyl chloride	13 U	14 U	10 U	8.5 U	5.8 U
ug/kg	SW8260	Xylenes, Total	26 U	28 U	20 U	1.8 J	12 U
ug/kg	SW8270	2,4,5-Trichlorophenol	370000 U	450000 U		1100 U	39000 U
ug/kg	SW8270	2,4,6-Trichlorophenol	370000 U	450000 U		1100 U	39000 U
ug/kg	SW8270	2,4-Dichlorophenol	370000 U	450000 U		1100 U	39000 U
ug/kg	SW8270	2,4-Dimethylphenol	370000 U	450000 U		1100 U	39000 U
ug/kg	SW8270	2,4-Dinitrophenol	720000 U	880000 U		2000 U	76000 U
ug/kg	SW8270	2,4-Dinitrotoluene	370000 U	450000 U		1100 U	39000 U
ug/kg	SW8270	2,6-Dinitrotoluene	370000 U	450000 U		1100 U	39000 U
ug/kg	SW8270	2-Chloronaphthalene	370000 U	450000 U		1100 U	39000 U
ug/kg	SW8270	2-Chlorophenol	370000 U	450000 U		1100 U	39000 U

TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group Parameter Name		BB-2 (DUP)_022613 BB-2 02/26/2013 480-33480-1	BB-3 (DUP)_022613 BB-3 02/26/2013 480-33480-1	BB-3 (DUP)_022613 BB-3 02/26/2013 480-33480-1	BB-4 (DUP)_022613 BB-4 02/26/2013 480-33480-1	BB-4 022613 BB-4 02/26/2013 480-33480-1
Units	Method					
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	720000 U	880000 U	2000 U	76000 U	26000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	720000 U	880000 U	2000 U	76000 U	26000 U
ug/kg	SW8270	720000 U	880000 U	2000 U	76000 U	26000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	720000 U	880000 U	2000 U	76000 U	26000 U
ug/kg	SW8270	720000 U	880000 U	2000 U	76000 U	26000 U
ug/kg	SW8270	720000 U	880000 U	2000 U	76000 U	26000 U
ug/kg	SW8270	370000 U	450000 U	110 J	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	260 J	39000 U	430 J
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	410 J	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	350 J	39000 U	600 J
ug/kg	SW8270	370000 U	450000 U	530 J	1400 J	790 J
ug/kg	SW8270	370000 U	450000 U	100 J	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	170 J	39000 U	440 J
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U
ug/kg	SW8270	370000 U	450000 U	1100 U	39000 U	14000 U

TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Parameter Name	Field Sample ID Location Sample Date Sample Delivery Group	BB-2 (DUP)_022613 BB-2 02/26/2013 480-33480-1	BB-3 (DUP)_022613 BB-3 02/26/2013 480-33480-1	BB-3_022613 BB-3 02/26/2013 480-33480-1	BB-4 (DUP)_022613 BB-4 02/26/2013 480-33480-1	BB-4_022613 BB-4 02/26/2013 480-33480-1
ug/kg	SW8270	Carbazole		370000 U		130 J	39000 U	14000 U
ug/kg	SW8270	Chrysene		370000 U		350 J	39000 U	14000 U
ug/kg	SW8270	Di-n-butyl phthalate		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Di-n-octyl phthalate		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Dibenz(a,h)anthracene		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Dibenzofuran		370000 U		86 J	39000 U	14000 U
ug/kg	SW8270	Diethyl phthalate		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Dimethyl phthalate		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Fluoranthene		7500 J		1000 J	2500 J	1500 J
ug/kg	SW8270	Fluorene		370000 U		120 J	39000 U	14000 U
ug/kg	SW8270	Hexachlorobenzene		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Hexachlorobutadiene		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Hexachlorocyclopentadiene		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Hexachloroethane		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Indeno(1,2,3-cd)pyrene		370000 U		92 J	39000 U	14000 U
ug/kg	SW8270	Isophorone		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	N-Nitrosodi-n-propylamine		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	N-Nitrosodiphenylamine		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Naphthalene		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Nitrobenzene		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Pentachlorophenol		720000 U		2000 U	76000 U	26000 U
ug/kg	SW8270	Phenanthrene		370000 U		990 J	2700 J	1700 J
ug/kg	SW8270	Phenol		370000 U		1100 U	39000 U	14000 U
ug/kg	SW8270	Pyrene		11000 J		710 J	1800 J	1200 J

Notes:

U = undetected

J = estimated value

TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units		Field Sample ID	BB-5_022613	BB-7_022613
		Location	BB-5	BB-7
		Sample Date	02/26/2013	02/26/2013
		Sample Delivery Group	480-33480-1	480-33480-1
Method	Parameter Name			
ug/kg	SW8082 PCB-1016		2400 U	2700 U
ug/kg	SW8082 PCB-1221		2400 U	2700 U
ug/kg	SW8082 PCB-1232		2400 U	2700 U
ug/kg	SW8082 PCB-1242		2400 U	2700 U
ug/kg	SW8082 PCB-1248		2400 U	2700 U
ug/kg	SW8082 PCB-1254		2400 U	1700 J
ug/kg	SW8082 PCB-1260		2400 U	2700 U
ug/kg	SW8260 1,1,1-Trichloroethane		9.2 UJ	8.2 U
ug/kg	SW8260 1,1,2,2-Tetrachloroethane		9.2 UJ	8.2 U
ug/kg	SW8260 1,1,2-Trichloro-1,2,2-trifluoroeth		9.2 UJ	8.2 U
ug/kg	SW8260 1,1,2-Trichloroethane		9.2 UJ	8.2 U
ug/kg	SW8260 1,1-Dichloroethane		9.2 UJ	8.2 U
ug/kg	SW8260 1,1-Dichloroethene		9.2 UJ	8.2 U
ug/kg	SW8260 1,2,4-Trichlorobenzene		9.2 R	8.2 U
ug/kg	SW8260 1,2-Dibromo-3-Chloropropane		9.2 UJ	8.2 U
ug/kg	SW8260 1,2-Dibromoethane		9.2 UJ	8.2 U
ug/kg	SW8260 1,2-Dichlorobenzene		9.2 UJ	8.2 U
ug/kg	SW8260 1,2-Dichloroethane		9.2 UJ	8.2 U
ug/kg	SW8260 1,2-Dichloropropane		9.2 UJ	8.2 U
ug/kg	SW8260 1,3-Dichlorobenzene		9.2 UJ	8.2 U
ug/kg	SW8260 1,4-Dichlorobenzene		9.2 UJ	8.2 U
ug/kg	SW8260 2-Butanone (MEK)		46 U	41 U
ug/kg	SW8260 2-Hexanone		46 U	41 U
ug/kg	SW8260 4-Methyl-2-pentanone (MIBK)		46 U	41 U
ug/kg	SW8260 Acetone		41 J	44
ug/kg	SW8260 Benzene		9.2 UJ	8.2 U
ug/kg	SW8260 Bromodichloromethane		9.2 UJ	8.2 U
ug/kg	SW8260 Bromoform		9.2 UJ	8.2 U
ug/kg	SW8260 Bromomethane		9.2 U	8.2 U
ug/kg	SW8260 Carbon disulfide		5.1 J	8.2 U
ug/kg	SW8260 Carbon tetrachloride		9.2 UJ	8.2 U
ug/kg	SW8260 Chlorobenzene		9.2 UJ	8.2 U

TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units		Field Sample ID	BB-5	BB-7
Method		Location	BB-5	BB-7
Parameter Name		Sample Date	02/26/2013	02/26/2013
Sample Delivery Group		480-33480-1	480-33480-1	480-33480-1
ug/kg	SW8260	Chloroethane	9.2 UJ	8.2 U
ug/kg	SW8260	Chloroform	9.2 UJ	8.2 U
ug/kg	SW8260	Chloromethane	9.2 UJ	8.2 U
ug/kg	SW8260	cis-1,2-Dichloroethene	9.2 UJ	8.2 U
ug/kg	SW8260	cis-1,3-Dichloropropene	9.2 UJ	8.2 U
ug/kg	SW8260	Cyclohexane	9.2 UJ	8.2 U
ug/kg	SW8260	Dibromochloromethane	9.2 UJ	8.2 U
ug/kg	SW8260	Dichlorodifluoromethane	9.2 UJ	8.2 UJ
ug/kg	SW8260	Ethylbenzene	9.2 UJ	8.2 U
ug/kg	SW8260	Isopropylbenzene	9.2 UJ	8.2 U
ug/kg	SW8260	Methyl acetate	9.2 U	8.2 U
ug/kg	SW8260	Methyl tert-butyl ether	9.2 U	8.2 U
ug/kg	SW8260	Methylcyclohexane	9.2 UJ	8.2 U
ug/kg	SW8260	Methylene Chloride	9.2 UJ	8.2 U
ug/kg	SW8260	Styrene	9.2 UJ	8.2 U
ug/kg	SW8260	Tetrachloroethene	9.2 UJ	8.2 U
ug/kg	SW8260	Toluene	3.5 J	1.2 J
ug/kg	SW8260	trans-1,2-Dichloroethene	9.2 UJ	8.2 U
ug/kg	SW8260	trans-1,3-Dichloropropene	9.2 UJ	8.2 U
ug/kg	SW8260	Trichloroethene	9.2 UJ	8.2 U
ug/kg	SW8260	Trichlorofluoromethane	9.2 UJ	8.2 U
ug/kg	SW8260	Vinyl chloride	9.2 UJ	8.2 U
ug/kg	SW8260	Xylenes, Total	18 U	16 U
ug/kg	SW8270	2,4,5-Trichlorophenol	300000 U	300000 U
ug/kg	SW8270	2,4,6-Trichlorophenol	300000 U	300000 U
ug/kg	SW8270	2,4-Dichlorophenol	300000 U	300000 U
ug/kg	SW8270	2,4-Dimethylphenol	300000 U	300000 U
ug/kg	SW8270	2,4-Dinitrophenol	590000 U	570000 U
ug/kg	SW8270	2,4-Dinitrotoluene	300000 U	300000 U
ug/kg	SW8270	2,6-Dinitrotoluene	300000 U	300000 U
ug/kg	SW8270	2-Chloronaphthalene	300000 U	300000 U
ug/kg	SW8270	2-Chlorophenol	300000 U	300000 U

TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units		Field Sample ID	BB-5_022613	BB-7_022613
Method		Location	BB-5	BB-7
Parameter Name		Sample Date	02/26/2013	02/26/2013
Sample Delivery Group		Sample Delivery Group	480-33480-1	480-33480-1
ug/kg	SW8270	2-Methylnaphthalene	300000 U	300000 U
ug/kg	SW8270	2-Methylphenol	300000 U	300000 U
ug/kg	SW8270	2-Nitroaniline	590000 U	570000 U
ug/kg	SW8270	2-Nitrophenol	300000 U	300000 U
ug/kg	SW8270	3,3'-Dichlorobenzidine	300000 UJ	300000 UJ
ug/kg	SW8270	3-Nitroaniline	590000 U	570000 U
ug/kg	SW8270	4,6-Dinitro-2-methylphenol	590000 U	570000 U
ug/kg	SW8270	4-Bromophenyl phenyl ether	300000 U	300000 U
ug/kg	SW8270	4-Chloro-3-methylphenol	300000 U	300000 U
ug/kg	SW8270	4-Chloroaniline	300000 UJ	300000 UJ
ug/kg	SW8270	4-Chlorophenyl phenyl ether	300000 U	300000 U
ug/kg	SW8270	4-Methylphenol	590000 U	570000 U
ug/kg	SW8270	4-Nitroaniline	590000 U	570000 U
ug/kg	SW8270	4-Nitrophenol	590000 U	570000 U
ug/kg	SW8270	Acenaphthene	300000 U	300000 U
ug/kg	SW8270	Acenaphthylene	300000 U	300000 U
ug/kg	SW8270	Acetophenone	300000 U	300000 U
ug/kg	SW8270	Anthracene	300000 U	8900 J
ug/kg	SW8270	Atrazine	300000 U	300000 U
ug/kg	SW8270	Benzaldehyde	300000 U	300000 U
ug/kg	SW8270	Benzo(a)anthracene	300000 U	300000 U
ug/kg	SW8270	Benzo(a)pyrene	300000 U	300000 U
ug/kg	SW8270	Benzo(b)fluoranthene	300000 U	300000 U
ug/kg	SW8270	Benzo(g,h,i)perylene	300000 U	300000 U
ug/kg	SW8270	Benzo(k)fluoranthene	300000 U	300000 U
ug/kg	SW8270	Biphenyl	300000 U	300000 U
ug/kg	SW8270	bis (2-chloroisopropyl) ether	300000 U	300000 U
ug/kg	SW8270	Bis(2-chloroethoxy)methane	300000 U	300000 U
ug/kg	SW8270	Bis(2-chloroethyl)ether	300000 U	300000 U
ug/kg	SW8270	Bis(2-ethylhexyl) phthalate	300000 U	300000 U
ug/kg	SW8270	Butyl benzyl phthalate	300000 U	300000 U
ug/kg	SW8270	Caprolactam	300000 U	300000 U

TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units Method Parameter Name		Field Sample ID Location Sample Date Sample Delivery Group	BB-5 BB-7 02/26/2013 480-33480-1	BB-7_022613 BB-7 02/26/2013 480-33480-1
ug/kg	SW8270	Carbazole	300000 U	300000 U
ug/kg	SW8270	Chrysene	300000 U	300000 U
ug/kg	SW8270	Di-n-butyl phthalate	300000 U	300000 U
ug/kg	SW8270	Di-n-octyl phthalate	300000 U	300000 U
ug/kg	SW8270	Dibenz(a,h)anthracene	300000 U	300000 U
ug/kg	SW8270	Dibenzofuran	300000 U	300000 U
ug/kg	SW8270	Diethyl phthalate	300000 U	300000 U
ug/kg	SW8270	Dimethyl phthalate	300000 U	300000 U
ug/kg	SW8270	Fluoranthene	9400 J	28000 J
ug/kg	SW8270	Fluorene	300000 U	300000 U
ug/kg	SW8270	Hexachlorobenzene	300000 U	300000 U
ug/kg	SW8270	Hexachlorobutadiene	300000 U	300000 U
ug/kg	SW8270	Hexachlorocyclopentadiene	300000 U	300000 U
ug/kg	SW8270	Hexachloroethane	300000 U	300000 U
ug/kg	SW8270	Indeno(1,2,3-cd)pyrene	300000 U	300000 U
ug/kg	SW8270	Isophorone	300000 U	300000 U
ug/kg	SW8270	N-Nitrosodi-n-propylamine	300000 U	300000 U
ug/kg	SW8270	N-Nitrosodiphenylamine	300000 U	300000 U
ug/kg	SW8270	Naphthalene	300000 U	300000 U
ug/kg	SW8270	Nitrobenzene	300000 U	300000 U
ug/kg	SW8270	Pentachlorophenol	590000 U	570000 U
ug/kg	SW8270	Phenanthrene	9600 J	26000 J
ug/kg	SW8270	Phenol	300000 U	300000 U
ug/kg	SW8270	Pyrene	12000 J	25000 J

Notes:

U = undetected

J = estimated value

TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group		B-27 (0.5-1.0') B-27 02/21/2013 480-33395-1	B-27 (0.5-1.0') DUP B-27 02/21/2013 480-33395-1	B-28 (0.5-1.0') B-28 02/21/2013 480-33395-1	B-28 (7.0-7.5') B-28 02/21/2013 480-33395-1	B-29 (0.5-1.0') B-29 02/21/2013 480-33395-1	B-29 (0.5-1.0') DUP B-29 02/21/2013 480-33395-1
Units	Method	Parameter Name					
%	ASTM D2216	Percent Moisture	21.5	21.2	27.6	22.2	12.2
%	ASTM D2216	Percent Solids	78.5	78.8	72.4	77.8	87.8
mg/kg	SW6010	Aluminum					
mg/kg	SW6010	Antimony					
mg/kg	SW6010	Arsenic					
mg/kg	SW6010	Barium					
mg/kg	SW6010	Beryllium					
mg/kg	SW6010	Cadmium					
mg/kg	SW6010	Calcium					
mg/kg	SW6010	Chromium					
mg/kg	SW6010	Cobalt					
mg/kg	SW6010	Copper					
mg/kg	SW6010	Iron					
mg/kg	SW6010	Lead	3570 J	12.1 J	48.7	8.6	27.6
mg/kg	SW6010	Magnesium					
mg/kg	SW6010	Manganese					
mg/kg	SW6010	Nickel					
mg/kg	SW6010	Potassium					
mg/kg	SW6010	Selenium					
mg/kg	SW6010	Silver					
mg/kg	SW6010	Sodium					
mg/kg	SW6010	Thallium					
mg/kg	SW6010	Vanadium					
mg/kg	SW6010	Zinc					
mg/kg	SW7471	Mercury					
mg/L	SW6010	Lead	1.3 J	0.11 J			

Notes:

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TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Field Sample ID Location Sample Date Sample Delivery Group Parameter Name	B-29 (7.0-7.5') B-29 02/21/2013 480-33395-1	B-30 (1.0-1.5') B-30 02/21/2013 480-33395-1	B-30 (3.5-4.0') B-30 02/21/2013 480-33395-1	B-31 (0.5-1.0') B-31 02/21/2013 480-33395-1	B-32 (0.5-1.0') B-32 02/21/2013 480-33395-1	B-32 (6.5-7.0') B-32 02/21/2013 480-33395-1
%	ASTM D2216	Percent Moisture	19.0	18.0	20.8	19.0	19.3	23.7
%	ASTM D2216	Percent Solids	81.0	82.0	79.2	81.0	80.7	76.3
mg/kg	SW6010	Aluminum						
mg/kg	SW6010	Antimony						
mg/kg	SW6010	Arsenic						
mg/kg	SW6010	Barium						
mg/kg	SW6010	Beryllium						
mg/kg	SW6010	Cadmium						
mg/kg	SW6010	Calcium						
mg/kg	SW6010	Chromium						
mg/kg	SW6010	Cobalt						
mg/kg	SW6010	Copper						
mg/kg	SW6010	Iron						
mg/kg	SW6010	Lead	9.7	47.0	15.6	9.0	165	12.8
mg/kg	SW6010	Magnesium						
mg/kg	SW6010	Manganese						
mg/kg	SW6010	Nickel						
mg/kg	SW6010	Potassium						
mg/kg	SW6010	Selenium						
mg/kg	SW6010	Silver						
mg/kg	SW6010	Sodium						
mg/kg	SW6010	Thallium						
mg/kg	SW6010	Vanadium						
mg/kg	SW6010	Zinc						
mg/kg	SW7471	Mercury						
mg/L	SW6010	Lead						

Notes:

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TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID			B-32 (6.5-7.0') DUP B-32 02/21/2013 480-33395-1	B-33 (0.5-1.0') B-33 02/21/2013 480-33395-1	B-33 (5.0-5.5') B-33 02/21/2013 480-33395-1	B-34 (0.5-1.0') B-34 02/21/2013 480-33395-1	B-40 (1.0-1.5') B-40 02/21/2013 480-33395-1	B-41 (0.5-1.0') B-41 02/21/2013 480-33395-1
Location								
Sample Date								
Sample Delivery Group								
Units	Method	Parameter Name						
%	ASTM D2216	Percent Moisture	20.6	15.5	21.7	19.9	23.9	20.7
%	ASTM D2216	Percent Solids	79.4	84.5	78.3	80.1	76.1	79.3
mg/kg	SW6010	Aluminum						
mg/kg	SW6010	Antimony						
mg/kg	SW6010	Arsenic						
mg/kg	SW6010	Barium						
mg/kg	SW6010	Beryllium						
mg/kg	SW6010	Cadmium						
mg/kg	SW6010	Calcium						
mg/kg	SW6010	Chromium						
mg/kg	SW6010	Cobalt						
mg/kg	SW6010	Copper						
mg/kg	SW6010	Iron						
mg/kg	SW6010	Lead	10.4	25000	204	26.3	22.0	154000
mg/kg	SW6010	Magnesium						
mg/kg	SW6010	Manganese						
mg/kg	SW6010	Nickel						
mg/kg	SW6010	Potassium						
mg/kg	SW6010	Selenium						
mg/kg	SW6010	Silver						
mg/kg	SW6010	Sodium						
mg/kg	SW6010	Thallium						
mg/kg	SW6010	Vanadium						
mg/kg	SW6010	Zinc						
mg/kg	SW7471	Mercury						
mg/L	SW6010	Lead						

Notes:

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TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Units	Method	Field Sample ID Location Sample Date Sample Delivery Group Parameter Name	B-42 (0.5-1.0') B-42 02/21/2013 480-33395-1	B-43 (0.5-1.0') B-43 02/21/2013 480-33395-1	BB-2 (DUP)_022613 BB-2 02/26/2013 480-33480-1	BB-2_022613 BB-2 02/26/2013 480-33480-1	BB-3 (DUP)_022613 BB-3 02/26/2013 480-33480-1	BB-3_0226 BB-3 02/26/201 480-33480
%	ASTM D2216	Percent Moisture	27.0	24.6	5.7 J	9.9 J	23.8	21.1
%	ASTM D2216	Percent Solids	73.0	75.4	94.3	90.1	76.2	78.9
mg/kg	SW6010	Aluminum			181 J	352 J		3750
mg/kg	SW6010	Antimony			15.7 U	16.6 U		18.8
mg/kg	SW6010	Arsenic			2.1 UJ	6.9 J		3.4
mg/kg	SW6010	Barium			9.8 J	24.1 J		292
mg/kg	SW6010	Beryllium			0.21 U	0.22 U		0.25
mg/kg	SW6010	Cadmium			0.21 U	0.22 U		0.35
mg/kg	SW6010	Calcium			9170 J	47600 J		57200
mg/kg	SW6010	Chromium			1.8	2.8		4.0
mg/kg	SW6010	Cobalt			0.52 U	0.55 U		2.2
mg/kg	SW6010	Copper			8.2 J	32.0 J		13.5
mg/kg	SW6010	Iron			8480 J	28900 J		6020
mg/kg	SW6010	Lead	30.4	43.7	83.3	130		66.4
mg/kg	SW6010	Magnesium			181 J	325 J		5310
mg/kg	SW6010	Manganese			11.1 J	27.8 J		347
mg/kg	SW6010	Nickel			5.2 U	5.5 U		6.3
mg/kg	SW6010	Potassium			1180 J	5220 J		840
mg/kg	SW6010	Selenium			4.2 U	4.4 U		5.0
mg/kg	SW6010	Silver			0.52 U	0.55 U		0.63
mg/kg	SW6010	Sodium			146 U	155 U		176
mg/kg	SW6010	Thallium			6.3 U	6.6 U		7.5
mg/kg	SW6010	Vanadium			15.4	20.3		6.3
mg/kg	SW6010	Zinc			14.0 J	38.1 J		158
mg/kg	SW7471	Mercury			0.060	0.022 U		0.025
mg/L	SW6010	Lead						

Notes:

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TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID 13		BB-4 (DUP)_022613		BB-4_022613		BB-5_022613		BB-7_022613	
Location		BB-4		BB-4		BB-5		BB-7	
Sample Date 3		02/26/2013		02/26/2013		02/26/2013		02/26/2013	
Sample Delivery Group -1		480-33480-1		480-33480-1		480-33480-1		480-33480-1	
Units	Method	Parameter Name							
%	ASTM D2216	Percent Moisture		14.1		13.0		17.6	
%	ASTM D2216	Percent Solids		85.9		87.0		84.7	
mg/kg	SW6010	Aluminum		926		758		428	
mg/kg	SW6010	Antimony		17.1 U		17.2 U		18.1 U	
mg/kg	SW6010	Arsenic		2.3 U		2.4		2.4 U	
mg/kg	SW6010	Barium		27.3 J		49.6 J		18.0	
mg/kg	SW6010	Beryllium		0.23 U		0.23 U		0.24 U	
mg/kg	SW6010	Cadmium		0.23 U		0.23 U		0.24 U	
mg/kg	SW6010	Calcium		7550		11600		3590	
mg/kg	SW6010	Chromium		2.3		2.6		5.2	
mg/kg	SW6010	Cobalt		0.57 U		0.57 U		0.60 U	
mg/kg	SW6010	Copper		24.3		30.3		28.3	
mg/kg	SW6010	Iron		4540		5700		7140	
mg/kg	SW6010	Lead		1950 J		4090 J		234	
mg/kg	SW6010	Magnesium		747		541		73.3	
mg/kg	SW6010	Manganese		33.6		32.3		13.9	
mg/kg	SW6010	Nickel		5.7 U		5.7 U		6.0 U	
mg/kg	SW6010	Potassium		967		1280		1020	
mg/kg	SW6010	Selenium		4.5 U		4.6 U		4.8 U	
mg/kg	SW6010	Silver		0.57 U		0.57 U		0.60 U	
mg/kg	SW6010	Sodium		159 U		161 U		169 U	
mg/kg	SW6010	Thallium		6.8 U		6.9 U		7.2 U	
mg/kg	SW6010	Vanadium		3.0		4.1		14.7	
mg/kg	SW6010	Zinc		12.2		14.3		22.5	
mg/kg	SW7471	Mercury		0.17		0.12		0.024 U	
mg/L	SW6010	Lead		47.0 J		116 J		0.023 U	

Notes:

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TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID			TRIP BLANK_022613
Location			QC
Sample Date			02/26/2013
Sample Delivery Group			480-33480-1
Units	Method	Parameter Name	
ug/L	SW8260	1,1,1-Trichloroethane	1.0 U
ug/L	SW8260	1,1,2,2-Tetrachloroethane	1.0 U
ug/L	SW8260	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U
ug/L	SW8260	1,1,2-Trichloroethane	1.0 U
ug/L	SW8260	1,1-Dichloroethane	1.0 U
ug/L	SW8260	1,1-Dichloroethene	1.0 U
ug/L	SW8260	1,2,4-Trichlorobenzene	1.0 U
ug/L	SW8260	1,2-Dibromo-3-Chloropropane	1.0 U
ug/L	SW8260	1,2-Dibromoethane	1.0 U
ug/L	SW8260	1,2-Dichlorobenzene	1.0 U
ug/L	SW8260	1,2-Dichloroethane	1.0 U
ug/L	SW8260	1,2-Dichloropropane	1.0 U
ug/L	SW8260	1,3-Dichlorobenzene	1.0 U
ug/L	SW8260	1,4-Dichlorobenzene	1.0 U
ug/L	SW8260	2-Butanone (MEK)	10 U
ug/L	SW8260	2-Hexanone	5.0 U
ug/L	SW8260	4-Methyl-2-pentanone (MIBK)	5.0 U
ug/L	SW8260	Acetone	10 U
ug/L	SW8260	Benzene	1.0 U
ug/L	SW8260	Bromodichloromethane	1.0 U
ug/L	SW8260	Bromoform	1.0 U
ug/L	SW8260	Bromomethane	1.0 U
ug/L	SW8260	Carbon disulfide	1.0 U
ug/L	SW8260	Carbon tetrachloride	1.0 U
ug/L	SW8260	Chlorobenzene	1.0 U
ug/L	SW8260	Chloroethane	1.0 U
ug/L	SW8260	Chloroform	1.0 U
ug/L	SW8260	Chloromethane	1.0 U
ug/L	SW8260	cis-1,2-Dichloroethene	1.0 U
ug/L	SW8260	cis-1,3-Dichloropropene	1.0 U
ug/L	SW8260	Cyclohexane	1.0 U
ug/L	SW8260	Dibromochloromethane	1.0 U
ug/L	SW8260	Dichlorodifluoromethane	1.0 U
ug/L	SW8260	Ethylbenzene	1.0 U
ug/L	SW8260	Isopropylbenzene	1.0 U
ug/L	SW8260	Methyl acetate	1.0 U
ug/L	SW8260	Methyl tert-butyl ether	1.0 U
ug/L	SW8260	Methylcyclohexane	1.0 U
ug/L	SW8260	Methylene Chloride	1.0 U
ug/L	SW8260	Styrene	1.0 U
ug/L	SW8260	Tetrachloroethene	1.0 U

TABLE 4
DATA VALIDATION SUMMARY REPORT
FEBRUARY 2013 REMEDIAL INVESTIGATION SAMPLING
BRIGHTFIELDS TRACT I SITE
NIAGARA, NEW YORK

Field Sample ID Location Sample Date Sample Delivery Group			TRIP BLANK_022613 QC 02/26/2013 480-33480-1
Units	Method	Parameter Name	
ug/L	SW8260	Toluene	1.0 U
ug/L	SW8260	trans-1,2-Dichloroethene	1.0 U
ug/L	SW8260	trans-1,3-Dichloropropene	1.0 U
ug/L	SW8260	Trichloroethene	1.0 U
ug/L	SW8260	Trichlorofluoromethane	1.0 U
ug/L	SW8260	Vinyl chloride	1.0 U
ug/L	SW8260	Xylenes, Total	2.0 U

Notes:

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J = estimated value