AECOM Environment

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Albany, NY

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August 2012

Final Engineering Report
Utility Manufacturing/Wonder King Site
(Site No. 130043H)

ENGINEERING CERTIFICATION

I, Scott Underhill, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities for Operable Unit 2, and I certify that the Remedial Design was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Design. Remedial activities for Operable Unit 1 were completed prior to my involvement in the project. NYSDEC has documented that no further remediation is required for Operable Unit 1 in NYSDEC (2003a). Remedial activities for Operable Unit 3 will continue under the New Cassel Industrial Area (NCIA) Site No. 130043 and are not covered by this Final Engineering Report.

I certify that the data submitted to the Department for Operable Unit 2 with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Design and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the remedy, for the Utility Manufacturing/Wonder King Site.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law.

Respectfully submitted,
AECOM Technical Services Northeast, Inc.

Scott Underhill, PE
Registered Professional Engineer
New York License No. 075332

August 15, 2012
Date

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List of Acronyms

%	Percent
AS	Air Sparging
ASTM	American Society for Testing and Materials
BGWD	Bowling Green Water District
BOCA	Building Officials Code Administrators
^{o}C	degrees Celsius
cfm	cubic feet per minute
COC	Chain of Custody
EC	Engineering Control
ERM	Environmental Resources Management
FER	Final Engineering Report
DCE	Dichloroethene
DER	Division of Environmental Remediation
DUSR	Data Usability Summary Report
ELAP	Environmental Laboratory Accreditation Program
EPA	United States Environmental Protection Agency
FS	Feasibility Study
ft	feet
GES	Groundwater and Environmental Services, Inc.
IC	Institutional Control
in. WC	inches water column
IRM	Interim Remedial Measure
m	meters
MCLs	Drinking Water Maximum Contaminant Levels

µg/L	micrograms per liter
µg/m^3	micrograms per cubic meter
MNA	Monitored Natural Attenuation
NCIA	New Cassel Industrial Area
NFPA	National Fire Protection Association
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PCE	Tetrachloroethene
PE	Professional Engineer
PID	Photoionization Detector
ppm	parts per million
PRP	Potentially Responsible Party
PSA	Preliminary Site Assessment
PVC	Polyvinyl Chloride
QC	Quality Control
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
SCGs	Standards, Criteria and Guidance
SCO	Soil Cleanup Objective
SSD	Sub-Slab Depressurization

SVE	Soil Vapor Extraction
TCA	Trichloroethane
TCE	Trichloroethene
VOC	Volatile Organic Compound

1.0 Introduction

This Final Engineering Report (FER) has been developed for the Utility Manufacturing/Wonder King Site (Utility Manufacturing or Site) located in the Town of North Hempstead, Nassau County, New York by AECOM Technical Services Northeast, Inc. (AECOM) for the New York State Department of Environmental Conservation (NYSDEC). The Utility Manufacturing Site (Site #130043H) is divided into three Operable Units (OUs). On-site contamination, designated as Operable Unit 1 (OU1) was addressed in the March 2003 Record of Decision (ROD) (NYSDEC, 2003a). Off-site contamination located north of Old Country Road, Operable Unit 2 (OU2), was addressed in the March 2008 ROD (NYSDEC, 2008). Operable Unit 3 (OU3) includes the groundwater contamination located south of the New Cassel Industrial Area (NCIA), and will be addressed by the selected remedy in the OU3 October 2003 ROD (NYSDEC, 2003b). A variety of disposal activities within the NCIA have resulted in the disposal of hazardous wastes, some of which were released or have migrated from the sites to surrounding areas including the area bordering the NCIA south of Old Country Road and Grand Boulevard. Utility Manufacturing is one of the hazardous waste sites within the NCIA identified in the OU3 ROD.

The Utility Manufacturing facility is located in the Town of North Hempstead, the County of Nassau, New York and is identified as Section 11, Block 328 and Lot 176 in New Cassel. The site is an approximately one-acre area bounded by Main Street to the north, between Bond Street to the west and Frost Street to the east, and approximately 500 feet (ft) north of Old Country Road (see Figure 1). The boundaries of the Site are fully described in Appendix A: Survey Map, Metes and Bounds. The study area is located within the NCIA, which is a 170-acre industrial and commercial area on the north side of Old Country Road, and extends south of Old Country Road (OU3).

An electronic copy of this FER with all supporting documentation is included as Appendix B.

2.0 Summary of Site Remedy

2.1 Remedial Action Goals

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the Site through the proper application of scientific and engineering principals.

The remediation goals for this Site are to eliminate or reduce to the extent practicable:

- Exposures of persons at or around the site to volatile organic compounds (VOCs) in soil, groundwater and indoor air;
- The release of contaminants from groundwater into indoor air through soil vapor; and,
- The release of contaminants from groundwater into the public water supply through the Bowling Green public water supply wells; and migration of the contaminant plume.

Further, the remediation goals for the site include attaining to the extent practicable:

- Ambient groundwater quality standards; and
- Indoor air guidance values.

2.2 Description of Selected Remedy

The Site was remediated in accordance with the NYSDEC-approved RODs dated March 2003 (OU1), March 2008 (OU2), and the Remedial Design (AECOM, 2010). OU3 has not been implemented to date.

The factors considered during the selection of the remedy are those listed in 6 NYCRR 375-1.8. The components of the selected remedy by OU are described below.

2.2.1 OU1 Selected Remedy

The March 2003 ROD provides the following description of the OU1 selected remedy:

1. Continued operation and maintenance of four existing soil vapor extraction (SVE) wells and two existing air sparging (AS) wells.

2. Continued operation and maintenance of the existing physical plant for the AS/SVE system. The equipment includes, but is not limited to, a blower, compressor, moisture separator, two activated carbon vessels, and associated values, gauges, and piping.

3. Quarterly monitoring of eight on-site monitoring wells (MW-2 through the MW-7 triplet) and one upgradient monitoring well (MW-1).

4. Institutional controls (ICs) in the form of existing use and development restrictions preventing the use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the Nassau County Department of Health.

5. The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the NYSDEC determines that the continued operation is technically impracticable or not feasible.

As documented in the OU2 ROD, the OU1 remedy is successful and remediation of OU1 is complete. An interim remedial measure (IRM) consisting of an AS/SVE system was installed to remediate on-Site soil and groundwater contamination. The AS/SVE system operated from December 2001 to December 2002. By December 2002, the system had reduced total VOC levels in groundwater to 13 µg/L and the contaminant levels had stopped decreasing. The AS/SVE system was chosen as the final remedy for on-Site contamination in the OU1 ROD. Utility Manufacturing obtained groundwater samples annually from 2003 to 2007 to detect any rebound in groundwater contaminant concentrations. As no rebound occurred during that period, on-Site remediation is complete.

2.2.2 OU2 Selected Remedy

The March 2008 ROD provides the following description of the OU2 selected remedy:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program.

2. Sub-slab depressurization (SSD) systems will be installed in three off-Site buildings that have vapor intrusion impacts.

3. Periodic vapor sub-slab vapor, indoor air and outdoor air samples will be obtained at three properties where the potential for vapor intrusion exists. Periodic sampling will continue until sampling results indicate that continued sampling is no longer required.

4. Groundwater contamination within the study area will be allowed to naturally attenuate.

5. Imposition of an IC in the form of an environmental easement on the site that will require: (a) compliance with the approved site management plan; and (b) the property owner to complete and submit to the Department a periodic certification of ICs and engineering controls (ECs).

6. Development of a site management plan which will include the following ICs and ECs: (a) monitoring of groundwater, sub-slab vapor, indoor air and outdoor air; and (b) provisions for the continued proper operation and maintenance of the components of the remedy.

7. The property owner will provide a periodic certification of ICs and ECs, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the ICs and ECs put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

8. The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

9. Since the remedy results in untreated hazardous waste remaining at the site, a long term monitoring program will be instituted. Up to nine monitoring wells will be sampled periodically for VOCs to track the progress of the natural attenuation. In addition, sub-slab vapor, indoor air and outdoor air samples will be obtained and analyzed for VOCs at three buildings with potential vapor intrusion impacts. This program will allow the effectiveness of the natural attenuation and soil vapor intrusion mitigation measures to be monitored and will be a component of the operation, maintenance, and monitoring for the site.

Vapor intrusion sampling at three structures (item 3) and groundwater monitoring sampling (item 9) was conducted in 2010 and documented in AECOM (2011). Of the three off-Site buildings identified for installation of SSD systems (item 2), the owners of two structures (6 and 9) declined to have the SSD systems installed. NYSDEC offered to conduct a round of air sampling in these structures instead. Indoor air sampling was conducted at Structure 6 in November 2011. The property manager for Structure 9 declined to have indoor air sampling conducted. A letter from the NYSDEC was sent to both facilities in June 2011 acknowledging their declination of both mitigation and/or monitoring in the future. Since finalizing the ROD, NYSDEC has determined that an environmental easement (item 5) is not needed for the site (NYSDEC, 2012).

2.2.3 OU3 Selected Remedy

The October 2003 ROD provides the following description of the OU3 selected remedy:

1. A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation, and maintenance and monitoring of the remedial program. Any uncertainties identified during the RI/FS process will be resolved;

2. Installation of one 225-ft vapor stripping well with ancillary systems, for the purpose of a pilot study to determine the radius of influence, and the number of additional stripping wells needed;

3. Based on the pilot test data, the effectiveness of the in-well vapor stripping system will be evaluated. If, for engineering or economic reasons, in-situ treatment should prove to be less practical, ex-situ extraction and treatment (treatment at the surface, possibly at a centralized location) will be substituted without impairing the overall effectiveness of the treatment system;

4. Based on the results of the pilot test, design and installation of three additional 225-ft vapor stripping wells, four 200-ft vapor stripping wells, and three 140-ft vapor stripping wells, plus their ancillary systems. Actual number and locations of these wells will be determined by the pilot test results;

5. Operation and maintenance of the treatment system until the remediation goals are achieved or the NYSDEC and New York State Department of Health (NYSDOH) determine that further operation of the treatment system is not necessary;

6. Continued monitoring of two existing Bowling Green Water District (BGWD) supply wells, located directly downgradient of the NCIA;

7. Installation of nine new monitoring wells at locations downgradient of Old Country Road;

8. Implementation of a long term groundwater monitoring program requiring quarterly sampling of nine new and thirteen existing groundwater monitoring wells for the first two years and periodically thereafter, and;

9. ICs in the form of existing use restrictions limiting the use of groundwater as potable or process water without necessary water quality treatment as determined by the Nassau County Department of Health from the affected areas.

The selected remedy for OU3 has not been implemented to date.

2.3 Standards, Criteria, and Guidance

To determine whether the groundwater, sub-slab vapor and/or indoor air contain contamination at levels of concern, data for this Site are compared to the following standards, criteria, and guidance (SCGs):

- Groundwater, drinking water, and surface water SCGs are based on NYSDEC "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.

Concentrations of VOCs in air are evaluated using the air guidelines provided in the NYSDOH guidance document titled "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," dated October 2006. Tetrachloroethene (PCE) and 1,1,1-trichloroethane (TCA) concentrations are compared to values in Matrix 2 in the guidance. Trichloroethene (TCE) levels are compared to values in Matrix 1 in the guidance. Concentrations of other VOCs in air are compared to typical background levels of VOCs in indoor and outdoor air using the background levels provided in NYSDOH (2006). The background levels are not SCGs and are used only as a general tool to assist in data evaluation.

2.4 Changes to the Remedy Since the ROD

Item 2 of Section 2.2.2: Installation of SSD systems is required in the ROD for three structures (2, 6, and 9). The owners of Structures 6 and 9 declined to have the SSD systems installed. NYSDEC offered to conduct a round of air sampling in these structures instead. Indoor air sampling was conducted at Structure 6 in November 2011. The property manager for Structure 9 declined to have indoor air sampling conducted. A letter from NYSDEC was sent to both facilities in June 2011 acknowledging their declination of both mitigation and/or monitoring in the future.

Items 3, 6, and 9 of Section 2.2.2: Following the first round of soil vapor intrusion sampling at Structures 1, 7, and 13, NYSDEC determined that no further monitoring was required. The site management plan only addresses continued groundwater monitoring. If future groundwater sampling determines that concentrations of volatile organic compounds increase around Structures 1, 7 and 13, additional soil vapor intrusion monitoring may be required at that time according to the recommendation of NYSDOH and NYSDEC.

Item 5 of Section 2.2.2: NYSDEC has determined that no environmental easement is required for OU2. This decision is documented in NYSDEC (2012).

3.0 Interim Remedial Measures, Operable Units and Remedial Contracts

3.1 Operable Unit 1

OU1 addresses on-Site groundwater and soil impacts from the Utility Manufacturing facility. An IRM consisting of an AS/SVE system was installed to the south of the Utility Manufacturing building to remediate on-Site soil and groundwater contamination. The AS/SVE system operated from December 2001 to December 2002. By December 2002, the system had reduced total VOC concentrations in groundwater from 1,019 µg/L to 13 µg/L, and the contaminant concentration stabilized. The AS/SVE system was chosen for the final remedy for on-Site contamination in the ROD dated March 2003 (NYSDEC, 2003). The remaining contamination was allowed to attenuate naturally. After the AS/SVE system ceased operation, Utility Manufacturing's consultant (CA RICH Consultants, Inc.) obtained groundwater samples annually until 2005 to detect any possible rebound in groundwater contaminant concentrations. As no rebound was detected, the NYSDEC deemed the on-Site remediation to be complete (NYSDEC, 2003a) and no ECs or ICs are required for OU1.

3.2 Operable Unit 2

OU2 addresses off-Site groundwater and indoor air impacts from the Utility Manufacturing facility north of Old Country Road.

In 1996, NYSDEC issued a Preliminary Site Assessment (PSA) report for several properties in the NCIA. Groundwater sampling results from the PSA showed PCE concentrations downgradient of Utility Manufacturing an order of magnitude greater than upgradient concentrations. The NYSDEC added the off-Site study area (OU2) to the Registry of Inactive Hazardous Waste Sites as a Class 2 site in May 1996, naming Utility Manufacturing as a Potentially Responsible Party (PRP). Utility Manufacturing filed petitions to delist the Site in 1996 and 1997; the NYSDEC denied both petitions.

In 2002, NYSDEC ordered Utility Manufacturing to perform off-Site (downgradient) groundwater sampling to Old Country Road. This off-Site area comprises OU2. Utility Manufacturing refused to perform this work in accordance with the NYSDEC's requirements. As a result, NYSDEC lead the off-site RI/FS. As part of the off-Site RI, 11 soil borings were advanced to the south of Utility Manufacturing. Groundwater samples were collected from each of the soil borings by Hydropunch sampling and new groundwater monitoring wells were installed in the south parking lot of the office building located at 1025 Old Country Road. Thirteen VOCs were detected in the Hydropunch and monitoring well groundwater samples; seven of which exceeded the applicable NYS Groundwater Quality criteria by one to two orders of magnitude. The vertical distribution of contaminants shows that VOCs were present in groundwater at higher concentrations in the deeper more transmissive strata of the Magothy aquifer. The RI (ERM, 2005) concluded that the distribution of the VOCs in groundwater

is consistent with southwesterly flow direction from Utility Manufacturing across OU2 towards the public supply wells.

Between September 2004 and March 2005, a total of 17 soil vapor/indoor air/outdoor air samples were also collected from various locations across OU2. Initially, one soil vapor sample was collected from each of the 11 soil borings. Based on the results of the initial soil vapor samples, a sub-slab soil vapor sample from the ground floor of the office building located at Structure 9, and two soil vapor samples from the parking lot of the shopping center at 1065 Old Country Road were also collected. Outdoor air samples were collected on the east side of the Structure 9 office building and an indoor air sample was collected from a small office area on the south end of the building at Structure 9. A total of 30 VOCs were detected in the soil vapor/indoor/outdoor air samples. PCE was the dominant VOC in soil vapor. The results indicated that volatilization of VOCs from groundwater represented a complete and significant exposure pathway that is confirmed by the presence of VOCs in groundwater, soil vapor, and indoor/outdoor air samples collected in the study area.

A total of eight structures in OU2 were investigated as part of the Supplemental RI in 2007 by AECOM. Originally, 13 structures were proposed for sampling. Since access was denied for five of the structures; only eight structures were sampled.

Based on the detected concentrations of TCE and PCE in the sub-slab vapor and indoor air samples and NYSDOH (2006), the following recommendations were made:

- No additional actions were required to address human exposures for two structures (Structures 3 and 11).
- Continued indoor air monitoring was recommended at three structures (Structures 1, 7, and 13).
- Based on TCE concentrations mitigation was recommended for three structures (Structures 2, 6, and 9).

The location of the structures is shown in Figure 2. In 2010, AECOM collected vapor intrusion samples from Structures 1, 7, and 13. No additional actions are required at these structures.

A SSD system was installed in Structure 2 by NYSDEC in January 2012. The owners of Structures 6 and 9 declined to have the SSD systems installed. NYSDEC offered to conduct a round of air sampling in these structures instead. Indoor air sampling was conducted at Structure 6 in November 2011. The property manager for Structure 9 declined to have indoor air sampling conducted. A letter from the NYSDEC was sent to both facilities in June 2011 acknowledging their declination of both mitigation and/or monitoring in the future.

This report summarizes the groundwater sampling and indoor air sampling conducted in 2010 and 2011 and documents the installation of a SSD system at Structure 2. More information on OU2 is provided in the Section 4.0.

The remedy for OU2 was performed as a single project, and no interim remedial measures or separate construction contracts were performed.

3.3 Operable Unit 3

OU3 addresses off-Site groundwater south of Old Country Road from Utility Manufacturing and other upgradient facilities.

In 1986, an investigation revealed that groundwater beneath and downgradient of the NCIA was impacted by four chlorinated VOCs, whose concentrations exceeded New York State (NYS) Class GA Groundwater Criteria: PCE, TCE, 1,2-dichloroethene (DCE), and 1,1,1- TCA. As a result of the investigation, the NYSDEC classified the entire NCIA as a Class 2 site in 1988. Regional groundwater was determined to flow to the southwest, and consequently, impacted groundwater leaving the NCIA flows directly towards the BGWD public supply wells (Well Nos. N8956 and N8957) located south of Old Country Road at the end of Iris Place. At the time of the 1986 investigation, the BGWD public supply wells were not impacted by the VOCs, but have since been impacted by VOC contamination. An air-stripper treatment system was constructed in 1996 at those supply wells, and the water supplied to the public system from the BGWD wells has since then been treated by the air stripping system to meet Federal and NYS Drinking Water Maximum Contaminant Levels (MCLs) and guidelines.

NYSDEC has determined that ongoing activities related to the OU3 remedy will be implemented through the remediation of groundwater contamination downgradient of all of the NCIA Sites.

4.0 Description of Remedial Actions Performed

This section provides a description of the remedial actions performed for OU2. Information on OU1 remedial actions is documented in CA Rich Consultants, Inc. (2001), NYSDEC (2003a) and CA Rich Consultants, Inc. (2005). Remedial activities for OU3 will be documented as part of the remedial activities for the NCIA Sites and are not covered under this report.

Remedial activities completed for OU2 were conducted in accordance with the NYSDEC-approved Remedial Design for the Utility Manufacturing Site OU2 (AECOM, 2010). All deviations from the Remedial Design are noted in Section 4.5.

All remedial work performed under this Remedial Action was in full compliance with government requirements, including Site and worker safety requirements mandated by the Federal Occupational Safety and Health Administration (OSHA).

4.1 Remedial Program Elements

4.1.1 Contractors and Consultants

Contractors who performed work and their associated tasks are as follows:

- AECOM conducted and documented vapor intrusion sampling at structures within OU2, conducted groundwater monitoring, conducted pre-design data gathering, prepared the Remedial Design, and oversaw the SSD system installation.
- Groundwater & Environmental Services, Inc. (GES) conducted pre-installation data gathering, procured a certified radon mitigation contractor and oversaw the SSD system installation.
- Diversified Geophysics Inc. provided utility markout services in the buildings prior to intrusive work as a subcontractor to GES.
- Alpine Environmental Services, Inc. installed the SSD system as a subcontractor to GES.
- Advanced Geological Services provided utility markout services as a subcontractor to AECOM.
- Alliance assisted with pre-design data gathering as a subcontractor to AECOM.

- US Radon Management provided review of data gathering procedures and GES' plans for implementing the Remedial Design as a subcontractor to AECOM.
- YEC, Inc. provided land surveying and field assistance during sampling as a subcontractor to AECOM.
- TestAmerica provided laboratory services for air analyses as a subcontractor to AECOM.
- EDS provided data validation services as a subcontractor to AECOM.
- The Engineer of Record is Scott Underhill of AECOM, NYS Professional Engineer #075332.

4.1.2 Soil Vapor Intrusion Sampling

Soil vapor intrusion sampling was conducted by AECOM in accordance with the ROD at the following structures:

- Structure 1: 1/27/2010
- Structure 7: 1/28/2010
- Structure 13: 1/27/2010

Soil vapor intrusion sampling was conducted at Structure 6 on 11/17/2011 after the property owners declined installation of a SSD system. Based on these results, NYSDEC and NYSDOH determined that no further sampling is required at these structures.

4.1.3 SSD System Installation

Pre-design sub-slab communication testing was conducted on the following dates by AECOM and Alliance:

- Structure 2: 12/2/2009
- Structure 6: 2/4/2010
- Structure 9: 11/30/2009 through 12/3/2009

Confirmatory sub-slab communication testing was conducted by GES with oversight by AECOM between December 2010 and January 2011.

US Radon conducted a site visit and reviewed GES' plans for the installation of the SSD system at Structure 2 on February 16, 2011.

GES submitted an application to the Town of North Hempstead building department to obtain the building permit for installation of the SSD System in Structure 2 in October 2010 and responded to comments in May 2011. NYSDEC issued a letter to the Town of North Hempstead Building Department commissioner on November 8, 2011 exempting the installation of the SSD system from requiring a local building permit. As stated in the letter, GES was in contact with the Town's Code Enforcement Official regarding the local building permits so the SSD systems can be installed according to code. The as-built drawings are provided in Appendix G. Permit information is provided in Appendix H.

The system was installed at Structure 2 from January 16, 2012 through January 20, 2012 by Alpine Environmental Services, Inc. with oversight by GES and AECOM.

4.1.3.1 SSD System Installation Details

The SSD system at Structure 2 was installed by Alpine Environmental Services, Inc, a NYSDOH Certified Radon Mitigation Contractor and Systematic Technologies a licensed electrician. The SSD system was installed in accordance with applicable EPA and American Society of Testing and Materials (ASTM) Guidance Documents, in accordance with good customary practice, and complies with applicable building codes.

The SSD system was installed in a manner that is consistent with other building components. All mitigation system components were installed to facilitate servicing, maintenance and repair or replacement of other equipment components in or outside the building. System materials and equipment were installed to provide the maximum headroom or side clearance possible. All systems, materials and equipment were installed level, plumb, parallel or perpendicular to other building systems and components except for the horizontal runs which were sloped so the condensate drains to the sub-slab. The contractor took precaution to avoid damaging existing utilities located in the building and in or below the floor slab.

The building consists of two separate slabs. The original building is on the northern side of the building. The slab is mostly covered by a warehouse which is separated into two sections by a chain link fence. On the north side is a loading area with a receiving office and on the south is an area with active heavy equipment. Bordering the warehouse to the south and separated by a wall are a small workroom, offices, restrooms, and storages areas. The offices are located next to the supply storage rooms. Across the supply window from the offices are a small common area and restrooms. This area has a lower ceiling than the warehouse. Above this area is a mezzanine that is accessible from the warehouse. The mezzanine is used for storage and to run utilities across the building. These areas are all a part of the original building and are situated on the same slab.

An addition was added to the southwest portion of the building. This area has a separate slab. This area consists mainly of offices and has no manufacturing. In addition to offices, this area contains a reception area, a conference room, a kitchen and bathrooms.

Prior to the installation of the SSD system, testing was performed to verify that the HS 5000 operates efficiently with the Site conditions and within manufacturer's specifications (i.e., not exceeding maximum operating pressure, etc.). Sub-slab to room pressure differential testing was measured with

a digital micro manometer to verify the acceptable pressure field extension for the HS 5000. The testing indicated that the fan for the warehouse would be able to handle four suction points. The testing also showed that one of the extraction points in the warehouse was not necessary. The defunct extraction point was part of a line with only two extraction points. By combining the remaining point with another line that had only three extraction points the number of required lines and fans was decreased to three instead of the four originally shown in the design report.

The mitigation system is comprised of three separate lines (L-1, L-2 and L-3) each with a system fan (RadonAway HS 5000) and distinct exhaust stack. System L-1 was the first line installed. It connects four extraction points (SVE-3, SVE-4, SVE-5 and SVE-6) in addition to a drainage point (DP-1). The extraction points are located in the warehouse receiving office and along the center of the warehouse. It is the northernmost system. The piping for L-1 runs along the ceiling of the warehouse and was installed using scissor lifts. The fan for L-1 is located along the western exterior wall of the building. The fan can be accessed with a ladder after passing through a gate to the west of the building.

The second line installed was system L-2. System L-2 connects three suction points (SVE-7, SVE-8 and SVE-9). SVE-7 and SVE-8 are located along the southern wall of the warehouse/equipment area and SVE-9 is located in the common area near the restrooms and supply window. The piping for L-2 is mostly located in the mezzanine area accessible from the warehouse. The fan for system L-2 is located along the southern exterior wall of the original building. This fan can be accessed through a trap door in the mezzanine area that leads to the roof of the original building, then by using a small ladder to descend to the roof over the addition. Since the roof of the original building is approximately 5 feet higher than the roof over the addition the fan can be serviced from the roof above the addition without a ladder.

The third system L-3 connects three suction points (SVE-10, SVE-11 and SVE-12) located in the addition. The vertical piping for these suction points extends through the drop ceilings. The piping is concealed by the drop ceilings until it enters the mezzanine area accessible from the warehouse. The fan for L-3 is located along the same exterior wall as the fan for L-2 and is accessible in the same manner described above.

The Radonaway HS 5000 fans have a 3-inch intake pipe. Schedule 40, 3-inch PVC pipe and fittings are used at all interior and exterior locations. The fans have 2-inch exhaust stacks. All exhaust pipes are installed to a termination point no less than 12 inches above the roofline and are fitted with a protective screen. The exhaust termination points are a minimum of 10 feet above grade and away from any intakes or openings into conditioned or other occupiable spaces.

All horizontal pipe runs between the fan and the suction holes or drainage points are sloped to ensure that water from rain or condensation flows downward into the ground beneath the slab so as not to create a possible water trap. Horizontal piping inside the office areas are concealed above drop ceilings. All horizontal pipe runs are supported with an appropriate device within 2 ft of each fitting and a maximum distance between supports of 6 ft as per BOCA National Plumbing Code and ASTM 2121. Penetrations through side walls match the shape of the pipe and the air between the pipe and wall are sealed. All vertical pipe runs are installed plumb. Vertical runs are secured either above or below the points of penetration through floors and ceilings or at least every 8 ft (2.5 m) on runs that do not penetrate floors or ceilings. System piping are secured with hangers, strapping, and clamps and are not attached to or supported by existing pipes, ducts, conduits, or any kind of equipment. System piping does not block windows and doors or access to installed equipment.

The contractor removed a minimum of 1 cubic foot of sub-slab material from below and around each suction hole. The removed material was drummed. Extraction points are supported and secured with a floor flange to prevent blockage of air flow into the bottom of the suction point. A polyurethane caulk seals the space between the outer diameter of the pipe and the concrete floor. An easily accessible ball valve is located between each suction point/drainage point and the main piping line. The valves equalize the flow at the suction points and minimize the air flow at the drainage point. The pressure was recorded at each suction point along with air flow and the position of the valve was noted once the flow was equalized. These initial conditions can be compared to future conditions to determine if there has been a significant decrease in the functionality of the system. The valves can also be used to shut off air flow to individual suction points, if necessary during maintenance. Labels are located on each extraction point and line in multiple places for easy identification. The vertical piping at extraction points SVE-9 and SVE-10 are boxed in and painted. The valves associated with these points are located in the mezzanine area for easy access. The initial conditions are listed below for each extraction and drainage point:

Extraction and Drainage Points	Original Pressure (in. WC)	Air Flow (cfm)	Valve Open (%)
SVE-3	5.0	14.4	100
SVE-4	5.0	13.2	100
SVE-5	6.0	12.9	100
SVE-6	5.0	14.6	100
SVE-7	16.0	20.5	100
SVE-8	16.0	33.8	100
SVE-9	14.0	24.2	100
SVE-10	3.3	14.1	50
SVE-11	6.0	12.1	100
SVE-12	6.0	14.2	100
DP-1	1	17	40

Each line has a real time mechanical pressure meter (Sensocon) and an audible and visual low pressure alarm. The pressure gauge and alarm for each line are located along the inside wall at the point where the piping exits the building towards the fan. The post installation static pressure reading of each line was recorded adjacent to the pressure monitor and is listed below:

Main Line Gauges	Original Static Pressure (in. WC)
L-1	6.0
L-2	16.0
L-3	8.0

All the electrical wiring was performed in accordance with the National Fire Protection Association's (NFPA) National Electrical Code, Standard #70, current edition, for all commercial and industrial work, state and local building codes, and manufacturer's specifications. The wiring is not located in or chased through the mitigation installation ducting or any other heating or cooling ductwork. All electrical work was performed by a licensed electrician and meets the substantive requirements of the Town of North Hempstead. The SSD system fans are powered by two dedicated circuits. A standard plug at each fan acts as a disconnect switch within 3 ft of the fans. The plug is in an outdoor rated electrical box with a switch cover. Additional disconnect switches are located inside the building next to the circuit breaker boxes. Outdoor rated flexible conduit runs between the switch boxes and fans.

Post-installation testing was performed at each sub-system to verify the sub-slab depressurization system was operating optimally. The post-installation testing verified that the system fan operates within manufacturer's specifications (i.e., not exceeding maximum operating pressure, etc.) and the sub-slab to room pressure differential testing verified that a negative pressure field is created under the slab across the building.

4.1.3.2 Site Restoration

All areas disturbed by the SSD system installation were restored to original condition.

4.1.4 Groundwater Monitoring

Groundwater monitoring was conducted in 2010 and 2011 at eight wells. The sampling in 2010 was conducted in May. The sampling in 2011 was conducted in August, but heavy rains caused the driveway near two of the wells to partially collapse. AECOM returned in October 2011 to sample the remaining two wells. Two of the wells were installed for the OU2 RI by ERM. The remaining six wells were installed by Environmental Assessment and Remediation, Inc. in 2010. One existing well installed by Nassau County (NC-12) could not be located.

4.1.4.1 Site Restoration

Six flush mount monitoring wells were installed in 2010. The area around the wells was left in original condition. In 2011, AECOM repaired a well at 1025 Old Country Road, Westbury, NY at the request of the property manager.

4.1.5 CAMP Results

Continuous monitoring for VOCs was conducted during drilling to install the six monitoring wells. Readings were collected using a photoionization detector (PID). VOCs were monitored at the downwind perimeter of the immediate work area. Upwind concentrations were measured at the start of each workday and periodically thereafter. Background was typically 0 ppm. No PID readings exceeded 5 parts per million (ppm). All work areas are paved. No visible dust migrated from the borehole or work area. Additionally, there was rain on three of the six days which suppressed any potential dust emissions.

Continuous monitoring for VOCs was conducted during the collection of groundwater samples from existing monitoring wells in 2010, 2011, and 2012. No elevated readings were reported during sampling. The headspace was tested when the wells were first opened, when the VOC build up would be greatest and the waste water was scanned during purging of the well. The PIDs were otherwise run continuously next to the well during purging and sampling to alert the sampler of any elevated VOCs. No elevated readings were observed.

During pre-design communication testing, the contractor (Alliance) used a wet vacuum next to the drill to immediately capture the dust. GES also used a wet vacuum during pre-installation testing. During SSD system installation, the contractor (Alpine Environmental Services, Inc.) used a wet core drill that prevented the saw from overheating and prevented dust from being created by wetting the area.

4.1.6 Reporting

AECOM prepared daily reports during oversight of the SSD system installation. GES provided weekly status updates. All daily reports are included in Appendix C.

The digital photo log is included in electronic format in Appendix D. Photography was generally prohibited by the owners in the facility, limiting the photo documentation of the installation in the interior of the facility.

Soil vapor intrusion sampling and groundwater sampling was documented in annual monitoring reports (AECOM, 2011 and AECOM, 2012a).

4.2 Soil Disposal

Soil was removed to install suction points. One 55-gallon drum of soil was drummed and disposed off-Site as non-hazardous waste by Lorco Petroleum Services (EPA ID Number N.J.R.000023036). The drum was transported to Clean Earth of North Jersey (N.J.D.991231105) on February 2, 2012. The waste manifest is provided in Appendix J.

4.3 Remedial Performance/Documentation

This section describes the methodology and results of end-point sampling to demonstrate that SCOs were achieved and to document what levels of contamination remain and will be managed under the Site Management Plan (AECOM, 2012b).

4.3.1 Soil Vapor Intrusion Sampling

4.3.1.1 Sampling Approach and Methodology

AECOM collected indoor air, outdoor ambient air and sub-slab soil vapor samples in accordance with the Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH; Final, October 2006). Prior to sampling, an inspection of general site conditions was performed. The inspection also included the preparation of a chemical product inventory, collection of ambient air organic vapor readings, and the completion of a property owner questionnaire.

Where possible, sub-slab vapor samples were located central to the building and away from the foundation walls and apparent penetrations such as water pipes and floor drains. AECOM used a PID to screen indoor air and inspected the floor for penetrations (e.g., concrete floor cracks, floor drains) prior to collecting the air samples.

The air samples were collected using 6-liter batch certified summa canisters equipped with 24-hour flow controller valves pre-calibrated at the laboratory.

Indoor air samples were collected by placing the summa canister in the breathing zone (4-6 ft above the floor).

Outdoor air sampling locations were away from outdoor operations known to generate VOCs. The outdoor air samples were collected near the entrance at Structure 6.

For the sub-slab samples, after the basement flooring/foundation slab had been inspected, the location of subsurface utilities determined, and the ambient air surrounding the proposed sampling location screened with a PID, an electric drill was used to advance a boring to a depth of no more than 2 inches beneath the basement flooring/foundation slab. Temporary probes were constructed with Teflon tubing. The annular space between the drilled hole and the ¼-inch ID sample tubing was filled with modeling clay and the sampling probe sealed to the floor with beeswax, a non-VOC-containing and non-shrinking product. After installation, one to three volumes (i.e., the volume of the sample probe and tube) were purged prior to collecting the samples by connecting the tube to a SKC Model 222-3 pump. After purging, the end of the tubing was connected directly to the summa canister's regulator intake valve. At the completion of the sampling of temporary points, each borehole was patched to restore the area to pre-sample condition.

All sub-slab, indoor air, and outdoor air samples were sent to TestAmerica in South Burlington, Vermont, a NYSDOH Environmental Laboratory Approval Program (ELAP #10391). Proper chain-of-custody (COC) procedures were maintained throughout the sampling event. The samples were analyzed for VOCs by USEPA Method TO-15 with a detection limit of 1.0 $\mu g/m^3$ (0.25 $\mu g/m^3$ for TCE). Site-specific quality control (QC) measures included the submission of a duplicate sample. In addition, the laboratory performed batch QC as required by the analytical method.

A table and figure summarizing all end-point sampling is included in Table 1 and Figure 3. Findings and recommendations based on the NYSDOH (2006) guidance and NYSDEC decision regarding required actions are provided in Table 2.

Data Usability Summary Reports (DUSRs) were prepared for all data generated in this remedial performance evaluation program. These DUSRs are included in Appendix F, and associated laboratory data is provided electronically in Appendix E.

4.3.1.2 Soil Vapor Intrusion Sampling 2010

Soil vapor intrusion sampling was conducted at Structures 1, 7, and 13 in 2010. A total of 13 air samples and one field duplicate were collected. The air samples include sub-slab soil vapor samples, indoor air samples, and outdoor air samples.

A comparison of the concentrations of TCE and PCE in the sub-slab vapor and indoor air samples with the Decision Matrices from NYSDOH (2006) is presented in Table 2. No further action is indicated for the three structures based on the PCE concentrations. No further action is indicated for Structures 1 and 13 based on the TCE concentrations. Take reasonable and practical actions to identify source(s) and reduce exposures is indicated for Structure 7 based on the TCE concentrations, although the TCE concentrations are just above this criteria. No further monitoring is recommended for Structure 7, because of the soil vapor concentration reductions in indoor and sub-slab air in 2010 compared to the initial vapor sampling conducted in 2007 (AECOM, 2007); current indoor air levels are relatively equal to those typically found in indoor air; and the building has a commercial use within an industrial area.

4.3.1.3 Soil Vapor Intrusion Sampling 2011

AECOM collected indoor air, outdoor ambient air and sub-slab soil vapor samples at Structure 6 in November 2011.

A comparison of the concentrations of TCE and PCE in the sub-slab vapor and indoor air samples with the Decision Matrices from NYSDOH (2006) is presented in Table 2. In 2007, identification of sources and reduction in exposure was indicated for PCE with the maximum sub-slab sample PCE concentration was 80.7 $\mu g/m^3$ and the maximum indoor air concentration of 3.58 $\mu g/m^3$. In 2011, monitoring is indicated for the Structure 6 based on one PCE concentration exceeding 100 $\mu g/m^3$ in a sub-slab sample (120 $\mu g/m^3$ [SS-2]). Indoor air PCE concentrations are less than 3 $\mu g/m^3$ (0.53 $\mu g/m^3$ [IAQ-1] and not detected at a reporting limit of 0.27 $\mu g/m^3$ [IAQ-2]).

In 2007, the TCE concentrations indicated mitigation was required with a sub-slab sample concentration of 22.7 $\mu g/m^3$ and an indoor air sample concentration of 5.47 $\mu g/m^3$. In 2011, TCE concentrations indicate no further action is required with concentrations of 3.9 $\mu g/m^3$ and 13 $\mu g/m^3$ in the indoor air samples and no detections in the sub-slab samples.

In 2007 and 2011, carbon tetrachloride concentrations indicate that identification of sources and reduction of exposure is indicated. However, carbon tetrachloride was not detected in any of the sub-slab samples. The source of the carbon tetrachloride in the indoor air may be from industrial activities in Structure 6 and not related to the Utility Manufacturing Site.

In 2007 and 2011, vapor intrusion sample concentrations for 1,1,1-trichloroethane indicate no further action is required.

4.3.2 Groundwater Sampling

AECOM collected a round of samples in 2010 and 2011. Well sampling forms showing compliance with EPA low flow sampling procedures (EPA SOP, 1998) were completed. Sampling forms are provided in the annual monitoring reports (AECOM, 2011 and 2012). A bladder pump was used. The pump intake was set at the midpoint of the screened interval. Dedicated Teflon-lined tubing was used for all groundwater sample collection. Several parameters were recorded during purging including flow rate, depth to water, temperature, pH, conductivity, dissolved oxygen, oxidation reduction potential, and turbidity. The measurements were recorded on a well sampling form. Measurements were collected approximately every five minutes. A flow through cell was used to measure most of the parameters. Purging was considered complete when the indicator parameters stabilized over three consecutive readings. If the groundwater did not stabilize, the samples were collected after two hours of purging.

During sample collection, the flow cell was disconnected and the sample tubing discharge was poured directly into the laboratory supplied sample containers and field vials. The sample water was field filtered with 45 micron filters for the filtered iron analyses. Water samples were collected in pre-preserved bottles provided by the laboratory, cooled to 4ºC after collection, and shipped to the subcontract laboratory for analysis of VOCs, dissolved iron, sulfates, nitrates, carbon dioxide, and methane at laboratories certified by the NYSDOH Environmental Laboratory Approval Program (TestAmerica, ELAP #10391 and Spectrum Analytical, Inc., ELAP #11522). Quality Assurance/Quality Control samples included environmental duplicates and trip blanks.

A table and figure summarizing all end-point sampling are included in Table 3 and Figure 4, respectively, and all exceedances of SCOs are highlighted.

DUSRs were prepared for all data generated in this remedial performance evaluation program. These DUSRs are included in Appendix F, and associated laboratory data are provided electronically in Appendix E.

Groundwater VOC concentrations in samples from one or more monitoring wells exceed the NYS Class GA criteria for 1,1-DCE, cis-1,2-DCE, PCE, and TCE. The maximum concentrations have declined for 1,1-DCE and TCE. The 1,1,1-TCA concentration exceeded the NYS Class GA standard in previous sampling rounds, but was not detected in the 2011 sampling. The maximum concentration for cis-1,2-DCE in 2011 is the same as in 2010. The maximum concentration for PCE in 2011 (20 µg/L) is slightly higher than in 2010 (18 µg/L). As shown in Figure 7, VOC concentrations generally appear to be declining. This is most apparent for samples with more elevated VOC concentrations.

4.4 Institutional Controls (IC)

IC in the form of an environmental easement as required by the RODs for OU1 and OU2 (NYSDEC, 2003 and NYSDEC, 2008) have been removed from the list of remedial elements by the NYSDEC (2012).

4.5 Deviations from the Remedial Design

Deviations from the Remedial Design are as follows:

- One system was not installed. Testing was conducted which showed that communication was achieved in the area of the building where this system was planned.
- Audible alarms were added to the SSD system to alert the building owner if a fan is not operating.

The proposed changes were discussed on January 18, 2012 with NYSDEC and approved as documented in the daily report (Appendix C).

As-built drawings and documentation are provided in Appendix G. Remediation Costs are provided in Appendix I. The Operation and Maintenance Manual for the SSD system installed in Structure 2 is provided in the Site Management Plan (AECOM, 2012b).

5.0 References

AECOM, 2010. Final Sub-Slab Depressurization System Design Report, Utility Manufacturing/Wonder King, OU 2, Town of North Hempstead, New York. September.

AECOM, 2011. Final Annual Long Term Monitoring Report, Utility Manufacturing/Wonder King, OU 2, Town of North Hempstead, New York. January.

AECOM, 2012a. Annual Long Term Monitoring Report, Utility Manufacturing/Wonder King, OU 2, Town of North Hempstead, New York. May.

AECOM, 2012b. Site Management Plan, Utility Manufacturing/Wonder King, OU 2, Town of North Hempstead, New York. May.

CA Rich Consultants, Inc., 2001. Interim Remedial Measures Work Plan, Utility Manufacturing Company, 700 Main Street, Westbury, New York. August.

CA Rich Consultants, Inc., 2005. Post Remediation Groundwater Monitoring Report, Operable Unit – 1 (OU-1), Utility Manufacturing Company, 700 Main Street, Westbury, New York. July.

NYSDEC, 2003a. Record of Decision Utility Manufacturing/Wonder King Site Operable Unit No. 1 Town of North Hempstead, Nassau County, New York. Site Number 130043H. March.

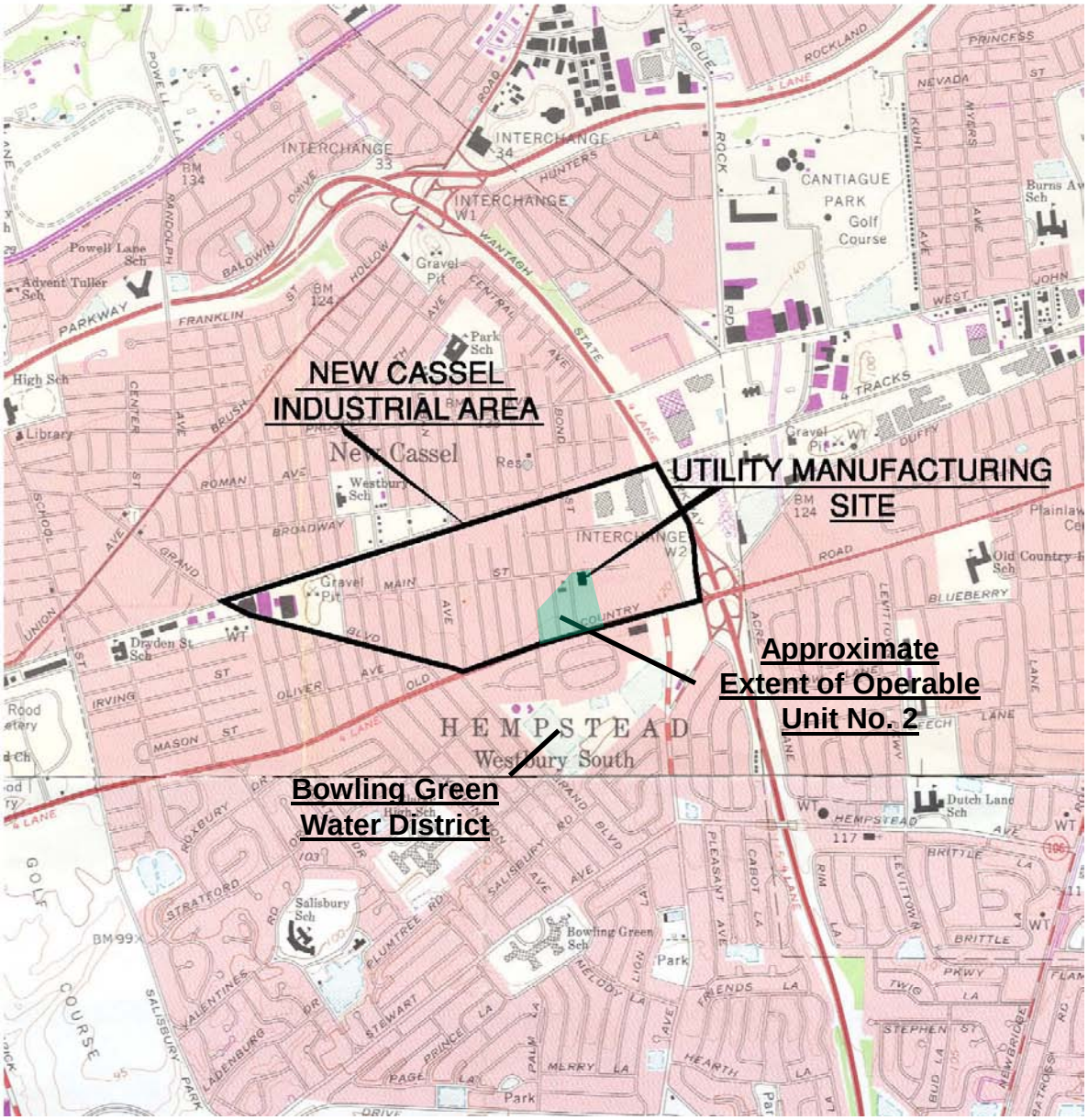
NYSDEC, 2003b. Record of Decision New Cassel Industrial Area Sites, Town of North Hempstead, Nassau County, New York, Off-site Groundwater South of the New Cassel Industrial Area Operable Unit No. 3. Site Numbers 1-30-043A, 1-30-043B, 1-30-043C, 1-30-043D, 1-30-043E, 1-30-043H, 1-30-043I, 1-30-043K, 1-30-043L, 1-30-043M, 1-30-043P, 1-30-043S, 1-30-043U, and 1-30-043V. October.

NYSDEC, 2008. Record of Decision Utility Manufacturing/Wonder King Site Operable Unit No. 2 Town of North Hempstead, Nassau County, New York. Site Number 130043H. March.

NYSDEC, 2010. NYSDEC Division of Environmental Remediation DER-10 Technical Guidance for Site Investigation and Remediation. May.

NYSDEC, 2012 Memo Modification to the Record of Decision, Utility Manufacturing/Wonder King Site Operable Unit No. 2 Town of North Hempstead, Nassau County, New York. Site Number 130043H. April.

NYSDOH, 2006. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October.



From ERM (2005):
USGS Hicksville & Freeport NY Quadrangle, 1979

100 Red Schoolhouse Road, Suite B-1
Chestnut Ridge , NY 10977-6715

ENVIRONMENTAL CONSULTING ENGINEERS

AECOM

PROJECT:

REMEDIAL DESIGN/
CONSTRUCTION OVERSIGHT

Utility Manufacturing/Wonder King
700 – 712 Main Street, Westbury, New York

SITE LOCATION MAP

Project No: 60134954

Figure No: 1

January 12, 2012

AECOM

Utility Manufacturing/Wonder King
700 – 712 Main Street
Westbury, New York

0 30 60 120
Feet

Legend

- SSD System Structure
- Indoor Air Sample Structures
- Site

Note: The remainder of Structure 2 is a warehouse.

Site Layout

Project No: 60134954

Figure No: 2

April 2, 2012

AECOM

Utility Manufacturing/Wonder King
700 – 712 Main Street
Westbury, New York

0 10 20 40
Feet

Legend

- Soil Vapor Intrusion Samples
- Indoor Air Sample Structures
- Site

SS - Sub-slab sample
FF - First floor indoor air sample
OA - Outdoor air sample
C. Tet. - Carbon Tetrachloride
1,1,1-TCA - 1,1,1-Trichloroethane
Units: µg/m3

Structures 1, 7, and 13 were sampled in January 2010.
Structure 6 was sampled in November 2011.

Soil Vapor Intrusion
Sampling TCE Levels

Project No: 60134954

Figure No: 3

April 2, 2012

MW1S	2010	2011
PCE	8.9	4.4 J
TCE	3.1 U	2.2 J
cis-1,2-DCE	18	20
1,1-DCE	1 U	5 U
1,1,1-TCA	1 U	5 U

MW1D	2010	2011
PCE	18	6.6
TCE	74	65
cis-1,2-DCE	4.4	5.7
1,1-DCE	30	4.3 J
1,1,1-TCA	15	3.7 J

MW13S	2010	2011	2011 (d)
PCE	1.2	3.5 J	3.3 J
TCE	1.7	16	14
cis-1,2-DCE	1 U	6.1	5.3
1,1-DCE	1 U	0.82 J	0.74 J
1,1,1-TCA	1 U	2.1 J	1.8 J

MW13D	2010	2011
PCE	9.4	5.5
TCE	200	88
cis-1,2-DCE	17	8.5
1,1-DCE	7	5.6
1,1,1-TCA	4.2	4.7 J

MW12S	2010	2010 (d)	2011
PCE	10	10	18
TCE	2.5	2.4	1.9 J
cis-1,2-DCE	15	15	2.2 J
1,1-DCE	1 U	1 U	5 U
1,1,1-TCA	1 U	1 U	5 U

MW12D	2010	2011
PCE	7.1	1.8 J
TCE	25	1.4 J
cis-1,2-DCE	1.8	5 U
1,1-DCE	17	1.5 J
1,1,1-TCA	8.8	0.91 J

MW11S	2010	2011
PCE	8.7	5.5 J
TCE	1 U	0.71 J
c-1,2-DCE	1 U	1 U
1,1-DCE	1 U	1 U
1,1,1-TCA	1 U	0.78 J

MW11D	2010	2011
PCE	8.1	17 J
TCE	3 U	5.3
cis-1,2-DCE	1.2	1.9
1,1-DCE	4	5.2
1,1,1-TCA	1.8	2.1

AECOM

Utility Manufacturing/Wonder King
700 – 712 Main Street
Westbury, New York

0 20 40 80
Feet

Monitoring Well

Indoor Air Sample Structures

Concentrations exceeding the NYS Class GA criteria are in red.

The NYS Class GA criterion for 1,2-dichloroethane is 0.6 µg/L.

Units: µg/L

The NYS Class GA criteria for all other parameters shown are 5 µg/L.

(d) Environmental duplicate sample

Groundwater Sampling Results

Project No: 60134954

Figure No: 4

January 12, 2012

Table 1

VOCs in Soil Vapor Intrusion Samples

	Structure:	B01		B01		B01		B01		B06		B06		B06		B06		B07	
	Type:	Indoor		Indoor		Sub-Slab		Sub-Slab		Indoor		Indoor		Sub-Slab		Sub-Slab		Indoor	
Units: µg/m³	NYSDOH	FF1		FF2		SS1		SS1 (dup)		IAQ-1		IAQ-2		SS-1		SS-2		FF1	
Analyte	Air Guideline	01/27/2010		01/27/2010		01/27/2010		01/27/2010		11/17/11		11/17/11		11/17/11		11/17/11		01/28/2010	
1,1,1-Trichloroethane	NA	0.22	U	0.22	U	0.87	U	**41**		**0.49**		**0.22**		**5.7**		**16**		0.22	U
1,1,2,2-Tetrachloroethane	NA	0.27	U	0.27	U	1.1	U	1.1	U	0.27	U	0.27	UJ	1.4	U	1.4	U	0.27	U
1,1,2-Trichloroethane	NA	0.22	U	0.22	U	0.87	U	0.87	U	0.22	U	0.22	U	1.1	U	1.1	U	0.22	U
1,1-Dichloroethane	NA	0.16	U	0.16	U	0.65	U	0.65	U	0.16	U	0.16	U	0.81	U	0.81	U	0.16	U
1,1-Dichloroethene	NA	0.16	U	0.16	U	0.63	U	0.63	U	0.16	U	0.16	U	0.79	U	0.79	U	0.16	U
1,2-Dibromoethane	NA	0.31	U	0.31	U	1.2	U	1.2	U	0.31	U	0.31	U	1.5	U	1.5	U	0.31	U
1,2-Dichloroethane	NA	0.32	U	0.32	U	0.65	U	0.65	U	0.32	U	0.32	U	0.81	U	0.81	U	0.32	U
1,2-Dichloroethene,Total	NA	0.16	U	0.16	U	0.63	U	0.63	U	NA		NA		NA		NA		0.16	U
1,2-Dichloropropane	NA	0.37	U	0.37	U	0.74	U	0.74	U	0.37	U	0.37	U	0.92	U	0.92	U	0.37	U
1,2-Dichlorotetrafluoroethane	NA	0.28	UJ	0.28	UJ	1.1	U	1.1	U	0.28	U	0.28	U	1.4	U	1.4	U	0.28	UJ
1,3,5-Trimethylbenzene	NA	**0.88**		**1.0**		**1.1**	J	**12**	J	0.39	U	0.39	U	0.98	U	0.98	U	0.39	U
1,3-Butadiene	NA	**0.40**		**0.31**		0.88	U	0.88	U	0.18	U	0.18	U	0.44	U	0.44	U	**0.24**	
2,2,4-Trimethylpentane	NA	**1.3**		**1.1**		**1.4**		0.75	U	0.19	U	0.19	U	**0.93**		0.93	U	**0.61**	
3-Chloropropene	NA	0.25	U	0.25	U	1.3	U	1.3	U	0.25	U	0.25	U	1.6	U	1.6	U	0.25	U
4-Ethyltoluene	NA	**0.74**		**0.88**		**0.88**	J	**9.3**	J	0.2	U	0.2	U	0.98	U	0.98	U	**0.38**	
Benzene	NA	**2.2**		**2.0**		**2.7**		**1.4**		**0.6**		**0.24**		**2**		**0.63**		**1.2**	
Bromodichloromethane	NA	0.27	U	0.27	U	1.1	U	1.1	U	0.27	U	0.27	U	1.3	U	1.3	U	0.27	U
Bromoethene	NA	0.35	U	0.35	U	0.70	U	0.70	U	0.35	U	0.35	U	0.87	U	0.87	U	0.35	U
Bromoform	NA	0.41	U	0.41	U	1.7	U	1.7	U	0.41	U	0.41	U	2.1	U	2.1	U	0.41	U
Bromomethane	NA	0.31	U	0.31	U	0.62	U	0.62	U	0.31	U	0.31	U	0.78	U	0.78	U	0.31	U
Carbon tetrachloride	NA	**0.56**		**0.50**		1.0	U	1.0	U	**0.47**		**0.33**		1.3	U	1.3	U	**0.55**	
Chloroethane	NA	0.21	U	0.21	U	1.1	U	1.1	U	0.21	U	0.21	U	1.3	U	1.3	U	0.21	U
Chloroform	NA	0.20	U	**0.37**		0.78	U	**0.98**		0.2	U	0.2	U	0.98	U	0.98	U	**0.47**	
cis-1,2-Dichloroethene	NA	0.16	U	0.16	U	0.63	U	0.63	U	0.16	U	0.16	U	**0.81**		0.79	U	0.16	U
cis-1,3-Dichloropropene	NA	0.18	U	0.18	U	0.73	U	0.73	U	0.18	U	0.18	U	0.91	U	0.91	U	0.18	U
Cyclohexane	NA	**0.89**		**0.96**		**0.72**		**1.6**		0.43	U	0.31	U	0.69	U	1.1	U	**0.59**	
Dibromochloromethane	NA	0.34	U	0.34	U	1.4	U	1.4	U	0.34	U	0.34	U	1.7	U	1.7	U	0.34	U
Dichlorodifluoromethane	NA	**3.0**		**2.6**		**2.9**		**3.1**		**2.5**		**2.2**		**2.8**		**2.5**		**3.1**	
Dichloroethylenes	NA	NA		NA		NA		NA		0.16	U	0.16	U	**2.4**		0.79	U	NA	
Ethylbenzene	NA	**2.9**		**3.4**		**3.3**		**3.3**		**1.6**		0.17	U	**2.1**		**2.5**		**0.61**	
Methyl tert-Butyl Ether	NA	0.14	U	0.14	U	1.4	U	1.4	U	0.14	U	0.14	U	0.72	U	0.72	U	0.14	U
Methylene chloride	60	2.8	U	2.8	U	1.4	U	1.4	U	1.4	U	1.4	U	1.7	U	1.7	U	2.8	U
n-Heptane	NA	**1.5**		**1.5**		**1.4**		**1.2**		0.68	U	0.16	U	**2**		**1.1**		**0.61**	
n-Hexane	NA	**2.3**		**2.0**		**1.7**		1.4	U	**0.5**		0.28	U	**2.7**		**0.92**		**1.1**	
Tetrachloroethene (PCE)	100	**0.81**		**0.95**		**1.5**	J	**31**	J	**0.53**		0.27	U	**52**		**120**		**0.68**	
Toluene	NA	**14**		**14**		**12**		**11**		2.1	U	0.17	U	**14**		8	U	**4.5**	

Table 1

VOCs in Soil Vapor Intrusion Samples

	Structure:	B01		B01		B01		B01		B06		B06		B06		B06		B07	
	Type:	Indoor		Indoor		Sub-Slab		Sub-Slab		Indoor		Indoor		Sub-Slab		Sub-Slab		Indoor	
Units: µg/m³	NYSDOH	FF1		FF2		SS1		SS1 (dup)		IAQ-1		IAQ-2		SS-1		SS-2		FF1	
Analyte	Air Guideline	01/27/2010		01/27/2010		01/27/2010		01/27/2010		11/17/11		11/17/11		11/17/11		11/17/11		01/28/2010	
trans-1,2-Dichloroethene	NA	0.16	U	0.16	U	0.63	U	0.63	U	0.16	U	0.16	U	**1.6**		0.79	U	0.16	U
trans-1,3-Dichloropropene	NA	0.18	U	0.18	U	0.73	U	0.73	U	0.18	U	0.18	U	0.91	U	0.91	U	0.18	U
Trichloroethene (TCE)	5	0.21	U	0.21	U	0.86	U	0.86	U	0.21	U	0.21	U	**13**		**3.9**		**0.33**	
Trichlorofluoromethane	NA	**1.6**		**1.5**		**1.5**		**1.7**		**1.4**		**1.2**		**1.8**		**1.5**		**1.6**	
Vinyl Chloride	NA	0.20	U	0.20	U	0.41	U	0.41	U	0.2	U	0.2	U	0.51	U	0.51	U	0.20	U
Xylene (m,p)	NA	**6.9**		**7.4**		**6.5**		**7.8**		**3.9**		0.17	U	**4.8**		**10**		**1.9**	
Xylene (o)	NA	**2.3**		**2.4**		**2.3**		**3.5**		**0.71**		0.17	U	**0.89**		**2.8**		**0.61**	
Xylenes, Total	NA	**9.6**		**9.6**		**8.7**		**11**		**4.7**		0.17	U	**5.6**		**13**		**2.5**	

U - Not detected
J - Estimated
NA - not available
Detections are bolded.

Table 1

VOCs in Soil Vapor Intrusion Samples

	B07		B07		B07		B13		B13		B13		B13		--		--		--	
	Indoor		Sub-Slab		Sub-Slab		Indoor		Indoor		Sub-Slab		Sub-Slab		Outdoor		Outdoor		Outdoor	
Units: µg/m³	FF2		SS1		SS2		FF1		FF2		SS1		SS2		OA		OA		AMBIENT	
Analyte	01/28/2010		01/28/2010		01/28/2010		01/27/2010		01/27/2010		01/27/2010		01/27/2010		01/27/2010		01/28/2010		11/17/11	
1,1,1-Trichloroethane	0.22	U	**6.5**		2.2	U	0.22	U	0.22	U	**21**		0.87	U	0.22	U	0.22	U	0.22	U
1,1,2,2-Tetrachloroethane	0.27	U	2.7	U	2.7	U	0.27	U	0.27	U	1.1	U	1.1	U	0.27	U	0.27	U	0.27	U
1,1,2-Trichloroethane	0.22	U	2.2	U	2.2	U	0.22	U	0.22	U	0.87	U	0.87	U	0.22	U	0.22	U	0.22	U
1,1-Dichloroethane	0.16	U	1.6	U	1.6	U	0.16	U	0.16	U	0.65	U	0.65	U	0.16	U	0.16	U	0.16	U
1,1-Dichloroethene	0.16	U	1.6	U	1.6	U	0.16	U	0.16	U	0.63	U	0.63	U	0.16	U	0.16	U	0.16	U
1,2-Dibromoethane	0.31	U	3.1	U	3.1	U	0.31	U	0.31	U	1.2	U	1.2	U	0.31	U	0.31	U	0.31	U
1,2-Dichloroethane	0.32	U	1.6	U	1.6	U	0.32	U	0.32	U	0.65	U	0.65	U	0.32	U	0.32	U	0.32	U
1,2-Dichloroethene,Total	0.16	U	1.6	U	1.6	U	0.16	U	0.16	U	0.63	U	0.63	U	0.16	U	0.16	U	NA	
1,2-Dichloropropane	0.37	U	1.8	U	1.8	U	0.37	U	0.37	U	0.74	U	0.74	U	0.37	U	0.37	U	0.37	U
1,2-Dichlorotetrafluoroethane	0.28	UJ	2.8	U	2.8	U	0.28	UJ	0.28	UJ	1.1	U	1.1	U	0.28	UJ	0.28	UJ	0.28	U
1,3,5-Trimethylbenzene	0.39	U	**5.4**		**5.4**		**0.79**		**1.0**		**1.6**		**10**		0.39	U	0.39	U	0.39	U
1,3-Butadiene	0.18	U	2.2	U	2.2	U	0.18	U	**0.24**		**1.4**		0.88	U	**0.18**		**0.27**		0.18	U
2,2,4-Trimethylpentane	**0.47**		1.9	U	1.9	U	**1.7**		**2.3**		0.75	U	**2.2**		**0.44**		**0.70**		**0.26**	
3-Chloropropene	0.25	U	3.1	U	3.1	U	0.25	U	0.25	U	1.3	U	1.3	U	0.25	U	0.25	U	0.25	U
4-Ethyltoluene	**0.29**		**4.4**		**4.3**		**0.74**		**1.2**		**1.8**		**7.9**		**0.29**		**0.29**		0.2	U
Benzene	**1.0**		1.3	U	1.3	U	**2.9**		**3.5**		**1.8**		**3.5**		**0.99**		**1.3**		**0.49**	
Bromodichloromethane	0.27	U	2.7	U	2.7	U	0.27	U	0.27	U	1.1	U	1.1	U	0.27	U	0.27	U	0.27	U
Bromoethene	0.35	U	1.7	U	1.7	U	0.35	U	0.35	U	0.70	U	0.70	U	0.35	U	0.35	U	0.35	U
Bromoform	0.41	U	4.1	U	4.1	U	0.41	U	0.41	U	1.7	U	1.7	U	0.41	U	0.41	U	0.41	U
Bromomethane	0.31	U	1.6	U	1.6	U	0.31	U	0.31	U	0.62	U	0.62	U	0.31	U	0.31	U	0.31	U
Carbon tetrachloride	**0.48**		2.5	U	2.5	U	**0.57**		**0.50**		**1.1**		1.0	U	**0.39**		**0.54**		**0.46**	
Chloroethane	0.21	U	2.6	U	2.6	U	0.21	U	0.21	U	1.1	U	1.1	U	0.21	U	0.21	U	0.21	U
Chloroform	**0.23**		2.0	U	2.0	U	0.20	U	0.20	U	**1.2**		0.78	U	**0.48**		0.20	U	0.2	U
cis-1,2-Dichloroethene	0.16	U	1.6	U	1.6	U	0.16	U	0.16	U	0.63	U	0.63	U	0.16	U	0.16	U	0.16	U
cis-1,3-Dichloropropene	0.18	U	1.8	U	1.8	U	0.18	U	0.18	U	0.73	U	0.73	U	0.18	U	0.18	U	0.18	U
Cyclohexane	**0.45**		1.4	U	1.4	U	**0.96**		**1.5**		**1.1**		**1.6**		**0.48**		**0.34**		0.47	U
Dibromochloromethane	0.34	U	3.4	U	3.4	U	0.34	U	0.34	U	1.4	U	1.4	U	0.34	U	0.34	U	0.34	U
Dichlorodifluoromethane	**3.0**		4.9	U	4.9	U	**3.3**		**2.9**		**2.4**		**3.1**		**3.0**		**3.0**		**2.2**	
Dichloroethylenes	NA		NA		NA		NA		NA		NA		NA		NA		NA		0.16	U
Ethylbenzene	**0.69**		1.7	U	1.7	U	**2.4**		**3.7**		**2.2**		**3.3**		**0.52**		**0.74**		**0.21**	
Methyl tert-Butyl Ether	0.14	U	3.6	U	3.6	U	0.14	U	0.14	U	1.4	U	1.4	U	0.14	U	0.14	U	0.14	U
Methylene chloride	2.8	U	3.5	U	3.5	U	2.8	U	2.8	U	**1.9**		1.4	U	2.8	U	2.8	U	1.4	U
n-Heptane	**0.78**		1.6	U	1.6	U	**2.1**		**3.0**		**1.2**		**2.9**		**0.53**		**0.57**		0.34	U
n-Hexane	**0.81**		3.5	U	3.5	U	**6.0**		**9.5**		**1.7**		**7.4**		**0.92**		**1.1**		**0.46**	
Tetrachloroethene (PCE)	**0.75**		**43**		**9.5**		**1.9**		**1.2**		**66**		**1.5**		**0.66**		**0.63**		**0.28**	
Toluene	**5.3**		**2.2**		**1.7**		**17**	J	**23**	J	**9.8**		**18**		**3.7**		**5.3**		2.2	U

Table 1

VOCs in Soil Vapor Intrusion Samples

	B07		B07		B07		B13		B13		B13		B13		--		--		--	
	Indoor		Sub-Slab		Sub-Slab		Indoor		Indoor		Sub-Slab		Sub-Slab		Outdoor		Outdoor		Outdoor	
Units: µg/m³	FF2		SS1		SS2		FF1		FF2		SS1		SS2		OA		OA		AMBIENT	
Analyte	01/28/2010		01/28/2010		01/28/2010		01/27/2010		01/27/2010		01/27/2010		01/27/2010		01/27/2010		01/28/2010		11/17/11	
trans-1,2-Dichloroethene	0.16	U	1.6	U	1.6	U	0.16	U	0.16	U	0.63	U	0.63	U	0.16	U	0.16	U	0.16	U
trans-1,3-Dichloropropene	0.18	U	1.8	U	1.8	U	0.18	U	0.18	U	0.73	U	0.73	U	0.18	U	0.18	U	0.18	U
Trichloroethene (TCE)	**0.28**		**3.4**		2.1	U	0.21	U	0.21	U	**17**		0.86	U	**0.24**		0.21	U	0.21	U
Trichlorofluoromethane	**1.6**		**2.8**		2.2	U	**1.7**		**1.5**		**5.6**		**1.5**		**1.5**		**1.5**		**1.1**	
Vinyl Chloride	0.20	U	1.0	U	1.0	U	0.20	U	0.20	U	0.41	U	0.41	U	0.20	U	0.20	U	0.2	U
Xylene (m,p)	**1.7**		3.5	U	3.5	U	**8.7**		**13**		**7.4**		**11**		**1.4**		**2.3**		0.63	U
Xylene (o)	**0.61**		1.7	U	1.7	U	**2.6**		**3.9**		**2.4**		**4.0**		**0.43**		**0.69**		**0.2**	
Xylenes, Total	**2.3**		1.7	U	1.7	U	**11**		**17**		**9.6**		**14**		**1.9**		**3.0**		0.84	U

Table 2
Comparison of Indoor Air Levels to the NYSDOH Decision Matricies

Units: µg/m³		Tetrachloroethene (PCE)							Trichloroethene (TCE)						
Structure	Year	Indoor Air	Q	Sub-Slab	Q	Outdoor Air	Q	Matrix 2	Indoor Air	Q	Sub-Slab	Q	Outdoor Air	Q	Matrix 1
1	2010	0.81		1.5	J	0.66		1. No further action	0.21	U	0.86	U	0.24		1. No further action
		0.95		31	J	0.66		1. No further action	0.21	U	0.86	U	0.24		1. No further action
6	2011	0.53		52		0.28		1. No further action	0.21	U	13		0.21	U	5. No further action
		0.27	U	120				5. Monitor	0.21	U	3.9				1. No further action
7	2010	0.75		9.3		0.63		1. No further action	0.28		2.1	U	0.21	U	2. Identify sources, reduce exposure
		0.68		43		0.63		1. No further action	0.33		3.4		0.21	U	2. Identify sources, reduce exposure
13	2010	1.9		66				1. No further action	0.21	U	17				1. No further action
		1.2		1.5				1. No further action	0.21	U	0.86	U			1. No further action
Units: ug/m3		Carbon Tetrachloride							1,1,1-Trichloroethane						
Structure		Indoor Air	Q	Sub-Slab	Q	Outdoor Air	Q	Matrix 1	Indoor Air	Q	Sub-Slab	Q	Outdoor Air	Q	Matrix 2
1	2010	0.56		1	U	0.39		2. Identify sources, reduce exposure	0.22	U	0.87	U	0.22	U	1. No further action
		0.50		1	U			2. Identify sources, reduce exposure	0.22	U	41				1. No further action
6	2011	0.47		1.3	U	0.46		2. Identify sources, reduce exposure	0.49		5.7		0.22	U	1. No further action
		0.33		1.3	U			2. Identify sources, reduce exposure	0.22		16				1. No further action
7	2010	0.55		2.5	U	0.54		2. Identify sources, reduce exposure	0.22	U	6.5		0.22	U	1. No further action
		0.48		2.5	U			2. Identify sources, reduce exposure	0.22	U	2.2	U			1. No further action
13	2010	0.57		1.1				2. Identify sources, reduce exposure	0.22	U	21				1. No further action
		0.5		1	U			2. Identify sources, reduce exposure	0.22	U	0.87	U			1. No further action

Notes:
1. Soil/Vapor Matrix as shown in NYSDOH (2006); recommended action and numbering taken from corresponding matrix.
U = Not detected, J=Estimated

Table 3
VOCs in Groundwater

Units: µg/L	NYS	MW11S				MW11D				MW12S		MW12S (dup)		MW-12S		MW12D			
ANALYTE	Class GA	5/12/2010		10/3/2011		5/12/2010		10/3/2011		5/11/2010		5/11/2010		8/9/2011		5/11/2010		8/9/2011	
1,1,1-Trichloroethane	5	1	U	**0.78**	J	**1.8**		**2.1**		1	U	1	U	5	U	**8.8**		**0.91**	J
1,1,2,2-Tetrachloroethane	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
1,1,2-Trichloroethane	1	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
1,1,2-Trichlorotrifluoroethane	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	**2.2**		5	U
1,1-Dichloroethane	5	1	U	1	U	**2.5**		**3**		1	U	1	U	5	U	**2.4**		5	U
1,1-Dichloroethene	5	1	U	1	U	**4**		**5.2**		1	U	1	U	5	U	**17**		**1.5**	J
1,2,4-Trichlorobenzene	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
1,2-Dibromo-3-chloropropane	0.04	1	U	1	UJ	1	U	1	UJ	1	UJ	1	U	5	UJ	1	U	5	UJ
1,2-Dibromoethane (EDB)	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
1,2-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
1,2-Dichloroethane	0.6	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
1,2-Dichloroethene, Total	5	2	U	1	U	**1.2**	J	**1.9**		**15**		**15**		**2.2**	J	**1.8**	J	5	U
1,2-Dichloropropane	1	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
1,3-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
1,4-Dichlorobenzene	3	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
2-Butanone (MEK)	5	5	U		R	5	UJ		R	5	U	5	U	5	UJ	5	U	5	UJ
2-Hexanone	5	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	5	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	5	5	U		R	**4.8**	J		R	5	U	5	U		R	5	U		R
Benzene	1	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Bromodichloromethane	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Bromoform	5	1	U	1	UJ	1	UJ	1	UJ	1	U	1	U	5	U	1	U	5	U
Bromomethane	5	1	UJ	1	U	1	U	1	U	1	U	1	UJ	5	U	1	UJ	5	U
Carbon disulfide	60	1	U	1	UJ	1	U	1	UJ	1	U	1	U	5	U	1	U	5	U
Carbon Tetrachloride	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Chlorobenzene	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Chlorodibromomethane	NA	1	U	1	U	1	U	1	U	1	UJ	1	U	5	U	1	U	5	U
Chloroethane	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Chloroform	7	1	U	1	UJ	1	U	1	UJ	1	U	1	U	5	U	1	U	5	U
Chloromethane	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
cis-1,2-Dichloroethene	5	1	U	1	U	**1.2**		**1.9**		**15**		**15**		**2.2**	J	**1.8**		5	U
cis-1,3-Dichloropropene	0.4	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Cyclohexane	NA	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Dichlorodifluoromethane	5	1	U	1	U	1	U	1	U	1	UJ	1	U	5	U	1	U	5	U
Ethylbenzene	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Isopropylbenzene	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Methyl Acetate	NA	1	U	1	U	1	UJ	1	U	1	U	1	U	5	UJ	1	U	5	UJ

Table 3
VOCs in Groundwater

Units: µg/L	NYS	MW11S				MW11D				MW12S		MW12S (dup)		MW-12S		MW12D			
ANALYTE	Class GA	5/12/2010		10/3/2011		5/12/2010		10/3/2011		5/11/2010		5/11/2010		8/9/2011		5/11/2010		8/9/2011	
Methyl tert-Butyl Ether	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Methylcyclohexane	NA	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Methylene Chloride	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Styrene	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Tetrachloroethene (PCE)	5	**8.7**		**5.5**	J	**8.1**		**17**	J	**10**		**10**		**18**		**7.1**		**1.8**	J
Toluene	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
trans-1,2-Dichloroethene	5	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
trans-1,3-Dichloropropene	0.4	1	U	1	U	1	U	1	U	1	UJ	1	U	5	U	1	U	5	U
Trichloroethene (TCE)	5	1	U	**0.71**	J	3	U	**5.3**		**2.5**		**2.4**		**1.9**	J	**25**		**1.4**	J
Trichlorofluoromethane	5	1	U	1	U	1	U	1	U	1	UJ	1	U	5	U	1	U	5	U
Vinyl chloride	2	1	U	1	U	1	U	1	U	1	U	1	U	5	U	1	U	5	U
Xylenes, total	5	2	U	2	U	2	U	2	U	2	U	2	U	5	U	2	U	5	U

U - Not detected
J - Estimated
R - Rejected
Detections are bolded.
Exceedances are highlighted.

Table 3
VOCs in Groundwater

Units: µg/L	NYS	MW13S				MW13S (dup)		MW13D				MW1S				MW1D			
ANALYTE	Class GA	5/11/2010		8/9/2011		8/9/2011		5/11/2010		8/9/2011		5/12/2010		8/10/2011		5/12/2010		8/10/2011	
1,1,1-Trichloroethane	5	1	U	**2.1**	J	**1.8**	J	**4.2**		**4.7**	J	1	U	5	U	**15**		**3.7**	J
1,1,2,2-Tetrachloroethane	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
1,1,2-Trichloroethane	1	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
1,1,2-Trichlorotrifluoroethane	5	1	U	5	U	5	U	**1.2**		5	U	1	U	5	U	**3.5**		5	U
1,1-Dichloroethane	5	1	U	**4.2**	J	**3.6**	J	**1.2**		**0.72**	J	1	U	5	U	**4.3**		**2.2**	J
1,1-Dichloroethene	5	1	U	**0.82**	J	**0.74**	J	**7**		**5.6**		1	U	5	U	**30**		**4.3**	J
1,2,4-Trichlorobenzene	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
1,2-Dibromo-3-chloropropane	0.04	1	UJ	5	UJ	5	UJ	1	UJ	5	UJ	1	U	5	UJ	1	U	5	UJ
1,2-Dibromoethane (EDB)	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
1,2-Dichlorobenzene	3	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
1,2-Dichloroethane	0.6	1	U	5	U	5	U	**0.58**	J	5	U	1	U	5	U	1	U	5	U
1,2-Dichloroethene, Total	5	**0.74**	J	**6.1**		**5.3**		**17**		**8.5**		**18**		**20**		**4.4**		**5.7**	
1,2-Dichloropropane	1	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
1,3-Dichlorobenzene	3	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
1,4-Dichlorobenzene	3	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
2-Butanone (MEK)	5	5	U	5	UJ	5	UJ	5	U	5	UJ	5	UJ	5	UJ	5	U	5	UJ
2-Hexanone	5	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	5	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U
Acetone	5	5	U		R		R	5	U		R	**5**	J		R	5	U		R
Benzene	1	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Bromodichloromethane	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Bromoform	5	1	U	5	U	5	U	1	U	5	U	1	UJ	5	U	1	U	5	U
Bromomethane	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	UJ	5	U
Carbon disulfide	60	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Carbon Tetrachloride	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Chlorobenzene	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Chlorodibromomethane	NA	1	UJ	5	U	5	U	1	UJ	5	U	1	U	5	U	1	U	5	U
Chloroethane	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Chloroform	7	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Chloromethane	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
cis-1,2-Dichloroethene	5	1	U	**6.1**		**5.3**		**17**		**8.5**		**18**		**20**		**4.4**		**5.7**	
cis-1,3-Dichloropropene	0.4	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Cyclohexane	NA	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Dichlorodifluoromethane	5	1	UJ	5	U	5	U	1	UJ	5	U	1	U	5	U	1	U	5	U
Ethylbenzene	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Isopropylbenzene	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Methyl Acetate	NA	1	U	5	UJ	5	UJ	1	U	5	UJ	1	UJ	5	UJ	1	U	5	UJ

Table 3
VOCs in Groundwater

Units: µg/L	NYS	MW13S				MW13S (dup)		MW13D				MW1S				MW1D			
ANALYTE	Class GA	5/11/2010		8/9/2011		8/9/2011		5/11/2010		8/9/2011		5/12/2010		8/10/2011		5/12/2010		8/10/2011	
Methyl tert-Butyl Ether	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Methylcyclohexane	NA	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Methylene Chloride	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Styrene	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Tetrachloroethene (PCE)	5	**1.2**		**3.5**	J	**3.3**	J	**9.4**		**5.5**		**8.9**		**4.4**	J	**18**		**6.6**	
Toluene	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
trans-1,2-Dichloroethene	5	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
trans-1,3-Dichloropropene	0.4	1	UJ	5	U	5	U	1	UJ	5	U	1	U	5	U	1	U	5	U
Trichloroethene (TCE)	5	**1.7**		**16**		**14**		**200**		**88**		3.1	U	**2.2**	J	**74**		**65**	
Trichlorofluoromethane	5	1	UJ	5	U	5	U	1	UJ	5	U	1	U	5	U	1	U	5	U
Vinyl chloride	2	1	U	5	U	5	U	1	U	5	U	1	U	5	U	1	U	5	U
Xylenes, total	5	2	U	5	U	5	U	2	U	5	U	2	U	5	U	2	U	5	U

Table 4

MNA Parameters in Groundwater

		MW11S		MW11D		MW12S	MW12S (dup)	MW12S	MW12D		MW13S	
ANALYTE	UNITS	5/12/2010	10/3/2011	5/12/2010	10/3/2011	5/11/2010	5/11/2010	8/9/2011	5/11/2010	8/9/2011	5/11/2010	8/9/2011
Methane	µg/L	1 U	1.9	0.63 J	1.7	1 U	1 U	0.61	1 U	0.63	1 U	0.63
Carbon Dioxide	µg/L	5200	1750	1000	7350	3500	3400	6400	3500	2300	17000	11000
Sulfate	mg/L	16.1 B	12	28.4 B	17	28.9	29	37	46.8	25	47.9	28
Nitrogen, Nitrate	mg/L-N	1.42	1.3 B	1.62	1.3 B	2.97	2.97	4 B	3.38 D08	2.4 B	3.81 D08	4.4 B
Iron - Dissolved	mg/L	0.05 U	0.2 U	0.05 U	0.2 U	0.05 U	0.05 U	0.2 U	0.05 U	0.2 U	0.05 U	0.2 U
Dissolved Oxygen	mg/L	10.5	33.6	10.6	35.6	11.3	11.3	37.2	9.9	47.4	12.2	16.9

Note: DO levels are more than twice the maximum saturation concentration
for several of the samples collected in 2011. The results may not reflect field conditions.

U Not detected

J Concentrations are estimated.

Dilution required due to high concentration of target analyte(s)

B Analyte was detected in the associated Method Blank

Table 4

MNA Parameters in Groundwater

		MW13D				MW1S				MW1D			
ANALYTE	UNITS	5/11/2010		8/9/2011		5/12/2010		8/10/2011		5/12/2010		8/10/2011	
Methane	µg/L	1	U	0.67		1	U	0.7		1	U	0.78	
Carbon Dioxide	µg/L	9000		13600		7700		10400		15000		3860	
Sulfate	mg/L	12.4		12		25.9	B	13		24.4	B	16	
Nitrogen, Nitrate	mg/L-N	6.39	D08	4.6	B	1.85		2.2	B	2.8		2.5	B
Iron - Dissolved	mg/L	0.05	U	1.17	U	0.05	U	0.2	U	0.029	J	0.2	U
Dissolved Oxygen	mg/L	9.3		16.0		6.6		25.2		4.2		38.0	

Appendix A Survey Map, Metes and Bounds

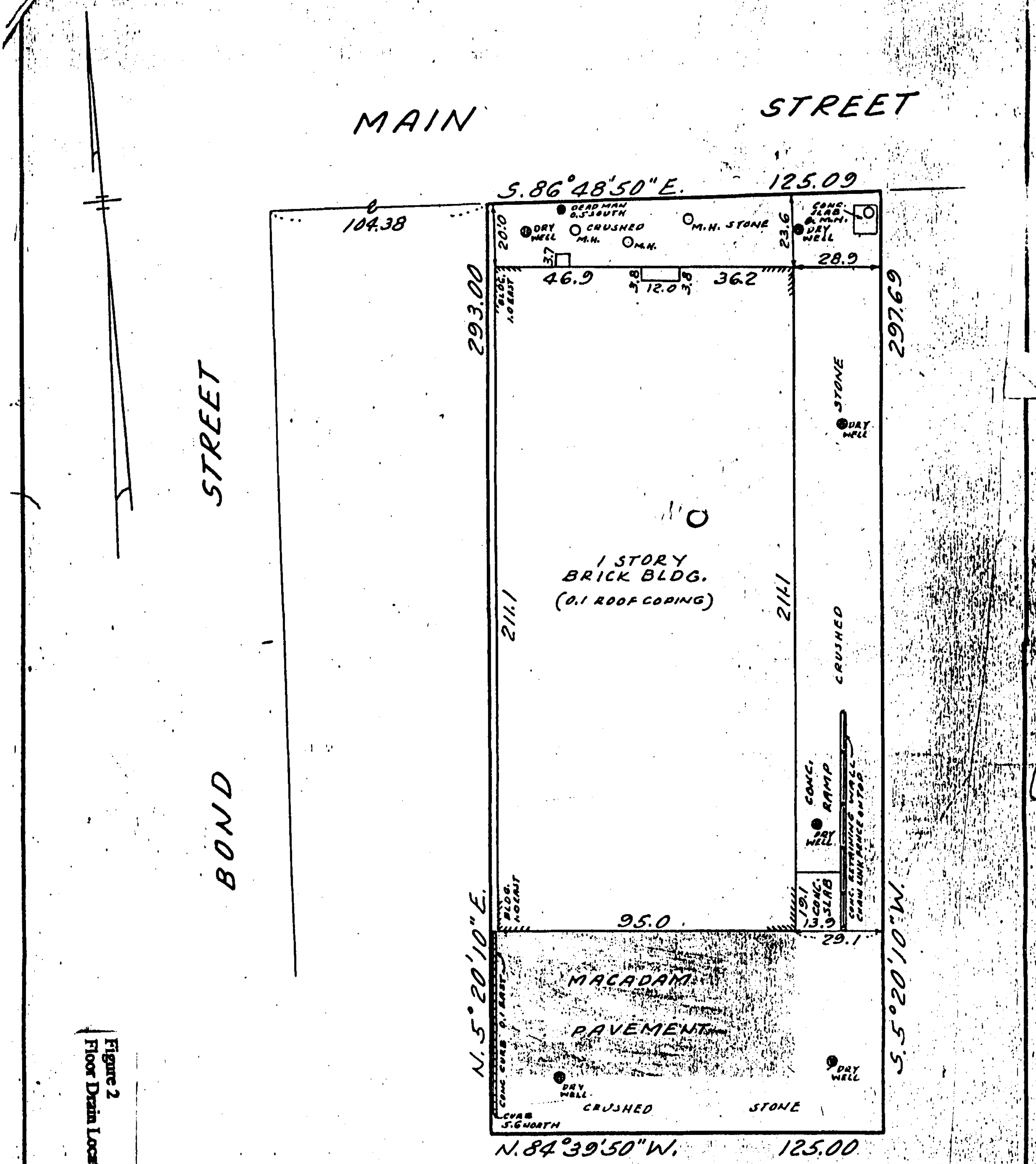


Figure 2
Floor Drain Location

J. J. Bohn & R. W. Phillips — Land Surveyors

72 E. Old Country Rd.
Mineola, N. Y. Pioneer 2-4007

Robert Phillips
L.S. 33703

The offsets (or dimensions) shown hereon from the structures to the property lines are for a specific purpose and use and therefore are not intended to guide the erection of Fences, Retaining Walls, Pools, Patios, Planting areas, addition to buildings and any other Construction.

MAP OF PROPERTY ON SOUTH SIDE OF MAIN STREET

SITUATED AT NEW CASSEL NASSAU COUNTY, N.Y. 9-13-67 67-528
GUARANTEED ONLY FOR JERRY SPIEGEL ASSOC. Ext. Comp. 1-4-68 68-03
UNDER TITLE NO. ______ OF THE TITLE GUARANTEE CO.
ROOSEVELT SAVINGS BANK

BLDR'S JOB NO. ______

Appendix B Digital Copy of the FER

Appendix C Daily Reports

A - E Weekly Quality
Control Summary Report

Date: January 16, 2012
Week ending: January 20, 2012

NYSDEC Project Manager: Jeffrey Dyber, PE

Project No.: 60134954
Site: Utility Manufacturing/Wonder King, Operable Unit 2
Site No.: 130043H
Work Assignment No. D004436-32

WEATHER	BRIGHT SUN ✓	CLEAR	OVERCAST	RAIN	SNOW
TEMPERATURE	TO 32	23 – 50 ✓	50 – 70	70 – 85	85 UP
WIND	STILL	MODERATE ✓	HIGH		
HUMIDITY	DRY	MODERATE ✓	HUMID		

PERSONNEL & SUBCONTRACTORS ON SITE:
AECOM – Celeste Foster
NYSDEC Contractor GES – Pawel Mecinski
SSDS Installation crew and GES subcontractor Alpine – Paul Schnitzer (Foreman), Dale, Karl and Joe
Certified Electricians and GES subcontractor Systematic Technologies – Luke Sorensen (Master Electrician/Owner), Arty (Master Electrician) and Rylan (helper)

EQUIPMENT ON SITE:
Two scissor lifts, corer (one owned by Alpine, one rented during the day), hammer drill, 3-inch PVC Schedule 40 (piping, pipe fittings and couplings), straps and clamps, PVC cement, Polyurethane, expansion foam, audible alarms, pressure gauges, GES brought Radon Away fans (GP-501, HS5000 x 4), and GAST fan

WORK PERFORMED (INCLUDING SAMPLING):

1. 0930 - On-site
2. Walk through the building and discuss the locations of all the suction points, piping, fan, electrical circuit breakers to hook into and locations requiring boxes.
3. 1030 - Electrician departed.
4. 1045 - Kick off safety meeting run by GES.
5. 1100 – Walk through building. Alpine stated that the central warehouse system (later designated System 1) will require a drainage point along the western wall where it exits the building.
6. AECOM requested (as agreed previously with NYSDEC, AECOM, GES and Alpine) that Alpine begin with System 1. AECOM requested that Alpine perform testing at these extraction points with the selected Radon Away fan (HS5000) to determine if the northwesternmost suction point (GES designated SVE-1) could be eliminated and the northeasternmost point (GES designated SVE-3) connected to System 1. Alpine agreed.
7. 1120 - Alpine split into two groups working in tandem. Crew 1 preparing suction points, Crew 2 laying piping. Alpine begins mobilizing equipment into the warehouse.
8. 1140 - Crew 1 began drilling with corer at the first location (GES designated SVE-6). This location is located next to the corner by entrance way into machine area. Crew 2 continued mobilizing in the scissor lifts and inspecting roof line.
9. 1230 - Crew 1 moved corer to next location (SVE-5). This point is located behind shelving column between shelves II and HH. Crew 2 prepared clamps and equipment for piping.
10. 1250 - Break for lunch (30 miutes)
11. 1330 - Clear cavity of SVE-6, continue drilling SVE-5.
12. 1430 - Begin clearing SVE-5 and drilling SVE-4. SVE-4 is placed behind shelf column between Z and Y shelves.
13. 1445 - Drill test points around SVE-5. Crew 2 laying piping for System 1.
14. 1505 - Pressure field testing with HS5000 at SVE-5 shows good suction all the way across warehouse to north wall. Indicates that SVE-1 may be dropped. Final decision to be determined by testing at SVE-4 also.
15. Equipment failure while drilling at SVE-4. Alpine rented a second corer. It was determined that due to an expansion joint in the slab the proper suction could not be created and the remainder of the suction point must be put in with the hammer drill.
16. Drilled drainage point.
17. AECOM, GES and Alpine discussed putting in audible alarms as is customary with the HS series fans in commercial buildings.
18. Alpine drilled through SVE-3.
19. Scissor lifts placed out of the way in an area at the end of the warehouse overnight where they could be charged.
20. 1810 - Depart

(Continuation Sheet)

Date: January 16, 2012
Week ending: January 20, 2012

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS): NA
HEALTH AND SAFETY ACTIVITIES: Kick off safety meeting, safe work procedures, proper PPE, scope of work, owner/operator requirements, site hazards
PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN: NA
SPECIAL NOTES: 1. Due to the noise in the warehouse/ machine area the noise from the corer is not noticeable. 2. There was some difficulty at first clearing the area of the palates stored in the warehouse by the owner/operator. 3. Care was taken to not obstruct the activities in the warehouse or machine area.
EXPECTATIONS FOR NEXT WEEK: Expected to finish most of the system this week and test next week.

BY Celeste Foster Environmental Engineer

A - E Weekly Quality
Control Summary Report

Date: January 17, 2012
Week ending: January 20, 2012

NYSDEC Project Manager: Jeffrey Dyber, PE

Project No.: 60134954
Site: Utility Manufacturing/Wonder King,
Operable Unit 2
Site No.: 130043H
Work Assignment No. D004436-32

WEATHER	BRIGHT SUN ✓	CLEAR	OVERCAST	RAIN	SNOW
TEMPERATURE	TO 32	23 – 50 ✓	50 – 70	70 – 85	85 UP
WIND	STILL	MODERATE ✓	HIGH		
HUMIDITY	DRY	MODERATE ✓	HUMID		

PERSONNEL & SUBCONTRACTORS ON SITE:
AECOM – Celeste Foster
NYSDEC Contractor GES – Pawel Mecinski
SSDS Installation crew and GES subcontractor Alpine – Paul Schnitzer (Foreman), Dale, Karl and Joe

EQUIPMENT ON SITE:
Two scissor lifts, corer (one owned by Alpine, one rented during the day), hammer drill, 3-inch PVC Schedule 40 (piping, pipe fittings and couplings), straps and clamps, PVC cement, Polyurethane, expansion foam, GES brought Radon Away fans (GP-501, HS5000 x 4), and GAST fan

WORK PERFORMED (INCLUDING SAMPLING):

1. 0845 - Safety meeting run by GES.
2. 0900 - Alpine Crew 1 continued to drill through SVE-4
3. All day - Crew 2 continued lay pipe for System 1.
4. 0930 - AECOM and GES discussed placement of suction points in warehouse as part of System 2. AECOM requested that the suction points be staggered with System 1. GES agreed. SVE-7 between machines 45 and 46, SVE-8 between machines 18 and 19.
5. 1100 - Finished drilling at SVE-4
6. 1100 to 1200 - Installed test points, tested pressure field with HS5000 at SVE-4, testing indicates that SVE-1 is not necessary.
7. 1230 - Finished drilling at SVE-7
8. 1300 - Finished drilling at SVE-8. AECOM requested that Alpine check the pressure field in the offices/hallway on the other side of the wall to make sure there is communication. AECOM was concerned that it might be a load bearing wall and have a footer. Alpine suggested checking for a footer when clearing the cavities for these points. Alpine also said they would place provisional T's along the piping run in case another point needed to be added south of the wall.
9. 1400 - Crew 2 mostly finished with piping of System 1, finished piping from drainage point to SVE-6, piping connection to SVE-3, set up to drill through wall over warehouse office door. Finished drilling through the wall at 1426. Continued laying piping for System 1.
10. After discussing location of SVE-9 with AECOM and GES, Crew 1 began drilling SVE-9 at 1400. Finished drilling 1410.
11. 1430 - Crew 1 began drilling SVE-12. While drilling point the tile next to it came loose, preventing corer from achieving proper suction. Alpine removed tile intact and they will finish drilling with the hammer drill tomorrow then glue the tile back on after they were finished.
12. Decided that System 2 will be placed along wall of original building where it connects to extension at northeastern corner of extension. This cuts back on piping length and resolved drainage issues.
13. 1500 – Alpine began drilling outside wall protrusions for Systems 2 and 3.
14. No disconnect switches will be placed by the fan since the 12V plugs will qualifier as the disconnect means in site of the fan during maintenance.
15. 1630 - Alpine set up to drill SVE-11 after 1630 to minimize disturbance to the office work.
16. 1700 - Alpine finished piping for System 1.
17. Began preparing for piping runs of System 2.
18. 1745 – Alpine drilled SVE-11 in office area. SVE-10 not drilled and SVE-12 not yet completed.
19. AECOM had discussions with GES Pawel and later GES Heather Cloud (1530, via conference call with Claire Hunt) to try to expedite the approval for the audible alarms.
20. 1800 Depart

(Continuation Sheet)

Date: January 17, 2012
Week ending: January 20, 2012

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS): NA
HEALTH AND SAFETY ACTIVITIES: Proper PPE, site hazards discussed
PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN: NA
SPECIAL NOTES: 1. Due to the noise in the warehouse/ machine area the noise from the corer is not noticeable. 2. Care was taken to work around warehouse, manufacturing and office activities.
EXPECTATIONS FOR NEXT WEEK: Expected to finish most of the system this week and test next week.

BY Celeste Foster Environmental Engineer

A - E Weekly Quality
Control Summary Report

Date: January 18, 2012
Week ending: January 20, 2012

NYSDEC Project Manager: Jeffrey Dyber, PE

Project No.: 60134954
Site: Utility Manufacturing/Wonder King, Operable Unit 2
Site No.: 130043H
Work Assignment No. D004436-32

WEATHER	BRIGHT SUN ✓	CLEAR	OVERCAST	RAIN	SNOW
TEMPERATURE	TO 32	23 – 50 ✓	50 – 70	70 – 85	85 UP
WIND	STILL	MODERATE	HIGH ✓		
HUMIDITY	DRY	MODERATE ✓	HUMID		

PERSONNEL & SUBCONTRACTORS ON SITE:
AECOM – Celeste Foster
NYSDEC Contractor GES – Pawel Mecinski
SSDS Installation crew and GES subcontractor Alpine – Paul Schnitzer (Foreman), Dale, Karl and Joe
Certified Electricians and GES subcontractor Systematic Technologies – Arty (Master Electrician) and Rylan (helper)

EQUIPMENT ON SITE:
Two scissor lifts, corer (one owned by Alpine, one rented during the day), hammer drill, 3-inch PVC Schedule 40 (piping, pipe fittings and couplings), straps and clamps, PVC cement, Polyurethane, expansion foam, audible alarms, pressure gauges, GES brought Radon Away fans (GP-501, HS5000 x 4), and GAST fan. Electrical equipment: 6 outlet boxes, wiring, switch box, circuit breakers

WORK PERFORMED (INCLUDING SAMPLING):

1. 0845 - Safety meeting run by GES.
2. 0900 - Alpine Crew 1 began by drilling SVE-10, then moved to mount fans and exhausts outside.
3. 0900 - Alpine Crew 2 began by laying pipe for System 2.
4. 0900 - Electrician began by mounting outlets for fans and audible alarms. The electrician plans to lay wiring for the connections to the electricity tomorrow.
5. 1030 - Weekly call with NYSDEC, AECOM, and GES to discuss the progress of the installation. Audible alarms will be installed, SVE-1 will be eliminated with no extra costs. GES will return the fourth HS5000 fan and get a discount.
6. 1130 Project status
    a. System 1 (central warehouse): all interior piping completed with 4 suction points and 1 drainage points, 1 protusion through outside wall, one protrusion through inside wall, points not yet sealed, all ball valves are installed, no exterior work yet to be done.
    b. System 2 (southern warehouse): exterior fan and exhaust mounted, protusion drilled through exterior wall, piping currently for connection to fan, all suction points are not connected but are cleared and ready for connection.
    c. System 3 (office): exterior protrusions drilled, fans and exhausts installed, two suction points drilled but cavities not yet cleared, point in conference room (SVE-12) halfway drilled, currently Alpine is hammer drilling it out, no piping yet done except for small point by SVE-10 through ceiling into mezzanine area.
7. Alpine stated that they did not find any footings while clearing the cavities for SVE-7 and SVE-8, therefore the system influence is expected to cross to other side of wall.
8. All the pressure gauges, audible alarms and ball valves for Systems 2 and 3 will be accessible from the mezzanine area.
9. Alpine noted the soil under the slab in the office area was similar though slightly tighter than the soil under the warehouse slab.
10. 1400 – After mounting the outlet boxes outside for Systems 1 and 3, the electrician was running wires for System 2 through the mezzanine area. Alpine Crew 1 installing System 1 fan and exhaust outside. Alpine Crew 2 continuing to lay piping for System 2 in mezzanine area.
11. 1450 – Electrician departed, all 6 outlet boxes (1 for each fan and 1 for each audible alarm) were mounted but still required connection to the electricity.
12. 1500 – Alpine crew 1 finished clearing cavities of System 3 points (SVE-10, SVE-11, and SVE-12). During clearing Alpine noted slightly tighter soils than in the warehouse. Continue to work on mounting pressure gauges and audible alarms.
13. 1500 – Alpine crew 2 finished connecting and sealing 2 points (SVE-7 and SVE-8) for System 2. Continuing to lay piping to connect third point (SVE-9)
14. 1700 – Alpine brought in material to box in points SVE-9 and SVE-10
15. 1730 – Alpine finished piping and sealing easternmost part of System 2.

(Continuation Sheet)

Date: January 18, 2012
Week ending: January 20, 2012

16. Status at end of the day:
    a. System 1
        i. Completed: All point cavities cleared, all interior piping completed already with 4 suction points and 1 drainage point. All points have ball valves to equalize the flow in the suction points and minimize the flow at the drainage point. All suction points and drainage points are sealed to the slab with polyurethane. Fan and exhaust piping mounted outside with audible alarm and pressure gauge inside, protrusion through outside wall sealed with expansion foam and polyurethane.
        ii. Required: Electrical outlets need connection to circuit.
    b. System 2
        i. Completed: All point cavities cleared, all interior piping completed with 3 suction points. All points have ball valves to equalize the flow in the suction points. All suction points are sealed to the slab with polyurethane. Fan and exhaust piping mounted outside with audible alarm and pressure gauge inside, protrusion through outside wall sealed with expansion foam and polyurethane
        ii. Required: Electrical outlet needs connection to circuit; SVE- 9 must be boxed in.
    c. System 3
        i. Completed: Fan and exhaust piping mounted outside with audible alarm and pressure gauge inside, protrusion through outside wall with sealing, all suction points cavities cleared.
        ii. Required: piping, electrical outlets need connection to circuit, SVE- 10 must be boxed in after installation.
17. 1800 Depart

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS): NA

HEALTH AND SAFETY ACTIVITIES:
Proper PPE, site hazards, electrical work precautions discussed

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:
During the installation of the piping for System 2 in the mezzanine area Alpine discovered a live broken wire that arced in front of them. The circuit was turned off and the building owner/operator maintenance and manager were notified immediately.

SPECIAL NOTES:
1. Care was taken to work around warehouse, manufacturing and office activities.

EXPECTATIONS FOR NEXT WEEK:
Expected to finish most of the system this week and test next week.

BY Celeste Foster Environmental Engineer

A - E Weekly Quality
Control Summary Report

Date: January 19, 2012
Week ending: January 20, 2012

NYSDEC Project Manager: Jeffrey Dyber, PE

Project No.: 60134954
Site: Utility Manufacturing/Wonder King, Operable Unit 2
Site No.: 130043H
Work Assignment No. D004436-32

WEATHER	BRIGHT SUN ✓	CLEAR	OVERCAST	RAIN	SNOW
TEMPERATURE	TO 32	23 – 50 ✓	50 – 70	70 – 85	85 UP
WIND	STILL	MODERATE	HIGH ✓		
HUMIDITY	DRY	MODERATE ✓	HUMID		

PERSONNEL & SUBCONTRACTORS ON SITE:
AECOM – Celeste Foster
NYSDEC Contractor GES – Pawel Mecinski
SSDS Installation crew and GES subcontractor Alpine – Paul Schnitzer (Foreman), Dale, Karl and Joe
Certified Electricians and GES subcontractor Systematic Technologies – Arty (Master Electrician) and Rylan (helper)

EQUIPMENT ON SITE:
Two scissor lifts, corer (one owned by Alpine, one rented during the day), hammer drill, 3-inch PVC Schedule 40 (piping, pipe fittings and couplings), straps and clamps, PVC cement, Polyurethane, expansion foam, audible alarms, pressure gauges, GES brought Radon Away fans (GP-501, HS5000 x 4), and GAST fan. Electrical equipment: 6 outlet boxes, wiring, switch box, circuit breakers, material to box in points

WORK PERFORMED (INCLUDING SAMPLING):

1. 0840 - Safety meeting run by GES.
2. 0900 - Alpine Crew 1 boxing in SVE-9, Alpine Crew 2 continuing to lay piping, electrician setting up connection to the circuit breaker, GES labeling lines with information (GES emergency contact information, Air direction, Final point and system names)
3. 1215 – Alpine finished boxing in SVE-9.
4. 1230 – Electrician working on connecting box with individual switches for each system.
5. 1400 – Alpine coring through wall to connect SVE-9.
6. 1415 – Glued tile back down at SVE-12 and sealed piping for the point.
7. 1430 – SVE-10 sealed and piping being run to mezzanine area.
8. 1445 – Electrician finished connections and switch installation. Only one circuit was available for all the lines and alarms. Departed.
9. GES finished labeling the suction points, electrical box and some of the lines. AECOM requested more labels on the lines as per design requirements.
10. 1500 – Alpine coring through wall for SVE-11.
11. 1500 - System 1 and System 2 installations completed. Systems turned on.
12. 1600 - GES installed vacuum testing points for System 1 and System 2 in warehouse, flows and pressures are good and within operating pressures of fan, collected initial test readings for Systems 1 and 2 (passed). Plan to collect final tests after systems have been running overnight.
13. 1600 to 17300 - AECOM walked through systems to document for as built drawings.
14. 1700 Alpine continuing to lay piping for System 3.
15. 1730 Alpine finished boxing in SVE-10
16. 1800 Depart

(Continuation Sheet)

Date: January 19, 2012
Week ending: January 20, 2012

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS): NA
HEALTH AND SAFETY ACTIVITIES: Proper PPE, site hazards, electrical work precautions discussed
PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:NA
SPECIAL NOTES: 1. Care was taken to work around warehouse, manufacturing and office activities.
EXPECTATIONS FOR NEXT WEEK: Expect to finish installation and testing this week.

BY Celeste Foster Environmental Engineer

A - E Weekly Quality
Control Summary Report

Date: January 20, 2012
Week ending: January 20, 2012

NYSDEC Project Manager: Jeffrey Dyber, PE

Project No.: 60134954
Site: Utility Manufacturing/Wonder King, Operable Unit 2
Site No.: 130043H
Work Assignment No. D004436-32

WEATHER	BRIGHT SUN ✓	CLEAR	OVERCAST	RAIN	SNOW
TEMPERATURE	TO 32	23 – 50 ✓	50 – 70	70 – 85	85 UP
WIND	STILL	MODERATE	HIGH ✓		
HUMIDITY	DRY	MODERATE ✓	HUMID		

PERSONNEL & SUBCONTRACTORS ON SITE:
AECOM – Celeste Foster
NYSDEC Contractor GES – Pawel Mecinski
SSDS Installation crew and GES subcontractor Alpine – Paul Schnitzer (Foreman), Dale, Karl and Joe

EQUIPMENT ON SITE:
Two scissor lifts, corer (one owned by Alpine, one rented during the day), hammer drill, 3-inch PVC Schedule 40 (piping, pipe fittings and couplings), straps and clamps, PVC cement, Polyurethane, expansion foam, audible alarms, pressure gauges, GES brought Radon Away fans (GP-501, HS5000 x 4), and GAST fan. Electrical equipment: 6 outlet boxes, wiring, switch box, circuit breakers, material to box in points, electronic manometer for final testing of test points.

WORK PERFORMED (INCLUDING SAMPLING):

1. 0845 - Safety meeting run by GES.
2. 0900 –Pressure field testing in warehouse. All points negative with magnitudes greater than 1 Pascal. System working properly and satisfactorily (passed) no modifications necessary. Readings recorded for as built drawings.
3. 1015 - Pressure field testing in office/storage portion under mezzanine. All points negative with magnitudes greater than 1 Pascal. System working properly and satisfactorily (passed) no modifications necessary. Readings recorded for as built drawings.
4. 1130 - Finished piping for System 3, let the cement dry, turned system on.
5. 1140 - AECOM and GES walked through System 3 and checked flows and static pressures. All readings within acceptable ranges. Final system values to be recorded after system is running for a while.
6. 1150 - Alpine removed scissor lifts from warehouse area.
7. 1200 – Break for lunch
8. 1215 - While inspecting System 3 suction points and piping, AECOM noted a noise coming from SVE-11 indicating air was getting in from the above the slab. AECOM called GES who directed Alpine to fix the leak.
9. 1230 - Alpine inspected and fixed the leak at SVE-11 by sealing the tile around the point.
10. 1315 - Pressure field testing in office area. All points negative with magnitudes greater than 1 Pascal. System working properly and satisfactorily (passed) no modifications necessary. Readings recorded for as built drawings.
11. 1330 - Final system readings at suction points and permanent pressure gauges completed by GES. Readings recorded for as built drawings.
12. AECOM requested that GES walk through with owner before Alpine departs.
13. Note – All points were sealed by Alpine with polyurethane.
14. 1400 – After Alpine removed all equipment, AECOM walked through all work areas to make sure they were clean and made sure everything that needed to be removed, Alpine departed.
15. 1410 - GES fixed points through door sills with wood putty.
16. 1415 - GES Brian Dunn picked up 4 empty drums. Two drums (one full, one with very little soil) remain
17. 1430 GES and AECOM walked through systems with owner/operator.
18. 1445 Depart

(Continuation Sheet)

Date: January 20, 2012
Week ending: January 20, 2012

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS): NA
HEALTH AND SAFETY ACTIVITIES: Proper PPE, site hazards discussed
PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:NA
SPECIAL NOTES: 1. Care was taken to work around warehouse, manufacturing and office activities.
EXPECTATIONS FOR NEXT WEEK:NA

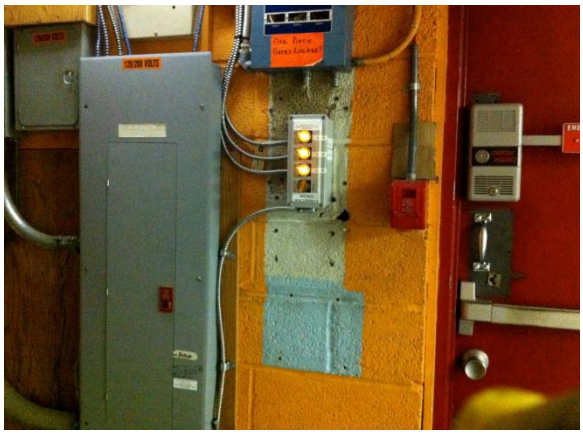
BY Celeste Foster Environmental Engineer

Appendix D Project Photo Log

Typical fan, electrical outlet and exhaust mounting (System 1 shown.)

Typical vertical piping, with protrusion through drop ceiling, and suction point seal (SVE-12 shown)

Typical boxing around point (SVE-10 shown)



Electrical switch box with individual switches for each system

Typical label at suction point (SVE-12 shown)

Typical pressure gauge, audible alarm (with outlet) and exterior wall protrusion (System 2 shown)

Appendix E Raw Analytical Laboratory Data (on CD)

Appendix F DUSRs for All Endpoint Samples

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
UTILITY MANUFACTURING/WONDERKING SITE

Client: AECOM Technical Services, Inc., Bloomfield, New Jersey
SDG: NY135783
Laboratory: Test America, South Burlington, Vermont
Site: Utility Manufacturing/Wonderking Site, New York
Date: August 9, 2010

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	B01-SS1-20100126	819327	Air
2	B51-SS1-20100126	819328	Air
3	B01-FF2-20100126	819329	Air
4	B01-FF1-20100126	819330	Air
5	B01-OA-20100126	819331	Air
6	B13-SS1-20100126	819332	Air
7	B13-FF1-20100126	819333	Air
8	B13-SS2-20100126	819334	Air
9	B13-FF2-20100126	819335	Air
10	B07-SS2-20100127	819336	Air
11	B07-FF2-20100127	819337	Air
12	B07-SS1-20100127	819338	Air
13	B07-FF1-20100127	819339	Air
14	B07-OA-20100127	819340	Air

A Data Usability Summary Review was performed on the analytical data for fourteen air samples collected January 27-28, 2010 by AECOM Technical Services, Inc. at the Utility Manufacturing Wonderking Site in New York. The samples were analyzed under "*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition January 1999, EPA/625/R-96/010B*", Compendium Method TO-15, "*Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)*".

The data have been evaluated according to the protocols and quality control (QC) requirements of the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Air Samples - Volatile Organic Analysis of Ambient Air in Canister and the reviewer's professional judgment.

Organics

The following items/criteria were reviewed for this report:

- Data Completeness
- Cover letter, Narrative, and Data Reporting Forms
- Canister Certification Blanks

- Canister Certification Pressures Differences
- Chains-of-Custody and Traffic Reports
- Holding Times
- Laboratory Control Samples
- Surrogate Spike Recoveries
- GC/MS Tuning
- Method Blank
- Initial Calibration
- Continuing Calibration
- Compound Quantitation
- Internal Standard (IS) Area Performance
- Field Duplicate Sample Precision

Overall Evaluation of Data and Potential Usability Issues

There were no rejections of data.

Overall the remaining data is acceptable for the intended purposes. Data were qualified for the following deficiencies.

- One compound was qualified as estimated in eight samples due to a high continuing calibration %D value.
- Three compounds were qualified as estimated in the field duplicate pair due to poor duplicate precision.
- One compound was qualified as estimated in two samples due to exceeding the linear range of the instrument.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Cover letter, Narrative, and Data Reporting Forms

- All criteria were met

Canister Certification Blanks

- The batch blank checks were non-detect or < RL.

Canister Certification Pressures Differences

- All criteria were met.

Chains-of-Custody and Traffic Reports

- All criteria were met

Holding Times

- All samples were analyzed within 30 days for air samples.

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries except the following.

LCS ID	Compound	%R	Qualifier	Affected Samples
EA020310LCS	1,2-Dichlorotetrafluoroethane	155%	None	All ND

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

GC/MS Tuning

- All criteria were met.

Method Blank

- The method blanks were free of contamination.

Field and Trip Blanks

- Field QC samples were not analyzed.

Initial Calibration

- The initial calibration exhibited acceptable %RSD and mean RRF values.

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B01-SS1-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 0.80

Sample Matrix: AIR

Lab Sample No.: 819327

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.59		0.40	2.9		2.0
1,2-Dichlorotetrafluoroethane	76-14-2	0.16	U	0.16	1.1	U	1.1
Vinyl Chloride	75-01-4	0.16	U	0.16	0.41	U	0.41
1,3-Butadiene	106-99-0	0.40	U	0.40	0.88	U	0.88
Bromomethane	74-83-9	0.16	U	0.16	0.62	U	0.62
Chloroethane	75-00-3	0.40	U	0.40	1.1	U	1.1
Bromoethene	593-60-2	0.16	U	0.16	0.70	U	0.70
Trichlorofluoromethane	75-69-4	0.27		0.16	1.5		0.90
1,1-Dichloroethene	75-35-4	0.16	U	0.16	0.63	U	0.63
3-Chloropropene	107-05-1	0.40	U	0.40	1.3	U	1.3
Methylene chloride	75-09-2	0.40	U	0.40	1.4	U	1.4
Methyl tert-Butyl Ether	1634-04-4	0.40	U	0.40	1.4	U	1.4
trans-1,2-Dichloroethene	156-60-5	0.16	U	0.16	0.63	U	0.63
n-Hexane	110-54-3	0.49		0.40	1.7		1.4
1,1-Dichloroethane	75-34-3	0.16	U	0.16	0.65	U	0.65
cis-1,2-Dichloroethene	156-59-2	0.16	U	0.16	0.63	U	0.63
1,2-Dichloroethene,Total	540-59-0	0.16	U	0.16	0.63	U	0.63
Chloroform	67-66-3	0.16	U	0.16	0.78	U	0.78
1,1,1-Trichloroethane	71-55-6	0.16	U	0.16	0.87	U	0.87
Cyclohexane	110-82-7	0.21		0.16	0.72		0.55
Carbon tetrachloride	56-23-5	0.16	U	0.16	1.0	U	1.0
2,2,4-Trimethylpentane	540-84-1	0.29		0.16	1.4		0.75
Benzene	71-43-2	0.85		0.16	2.7		0.51
1,2-Dichloroethane	107-06-2	0.16	U	0.16	0.65	U	0.65
n-Heptane	142-82-5	0.34		0.16	1.4		0.66
Trichloroethene	79-01-6	0.16	U	0.16	0.86	U	0.86
1,2-Dichloropropane	78-87-5	0.16	U	0.16	0.74	U	0.74
Bromodichloromethane	75-27-4	0.16	U	0.16	1.1	U	1.1
cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	0.73	U	0.73
Toluene	108-88-3	3.3		0.16	12		0.60
trans-1,3-Dichloropropene	10061-02-6	0.16	U	0.16	0.73	U	0.73
1,1,2-Trichloroethane	79-00-5	0.16	U	0.16	0.87	U	0.87
Tetrachloroethene	127-18-4	0.22 J		0.16	1.5 J		1.1

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MW 8/9/10

Continuing Calibration

- The following table presents compounds that exceeded 30 percent deviation (%D) and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
2/3/10	1,2-Dichlorotetrafluoroethane	52.0%	J/UJ	3, 4, 5, 7, 9, 11, 13, 14

Compound Quantitation

- EDS sample ID#s 7 and 9 exhibited high concentrations of toluene over the calibration range and were flagged (E) by the laboratory. The samples were not diluted and reanalyzed so the original toluene results were qualified estimated (J) by the reviewer.

Sensitivity/Reporting Limits

- NYSDOH (2006) has established matrices for the evaluation of indoor air data. For the data to be fully usable, reporting limits for the three Matrix 1 compounds (vinyl chloride, carbon tetrachloride, and trichloroethene) must be 0.25 ug/m^3 or lower in indoor air samples. The four Matrix 2 compounds (tetrachloroethene, cis-1,2-dichloroethene, 1,1,1-trichloroethane and 1,1-dichloroethene) must be 3 ug/m^3 or lower in indoor air samples. The laboratory met these reporting limits in this data package.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

- Field duplicate results are summarized below.

Compound	B01-SS1-20100126 ug/m^3	B51-SS1-20100126 ug/m^3	RPD	Qualifier
Dichlorodifluoromethane	2.9	3.1	7%	None
Trichlorofluoromethane	1.5	1.7	13%	None
n-Hexane	1.7	1.4 U	NC	None
Chloroform	0.78 U	0.98	NC	None
1,1,1-Trichloroethane	0.87 U	41	NC	None
Cyclohexane	0.72	1.6	76%	None
2,2,4-Trimethylpentane	1.4	0.75 U	NC	None
Benzene	2.7	1.4	63%	None

Compound	B01-SS1-20100126 ug/m³	B51-SS1-20100126 ug/m³	RPD	Qualifier
n-Heptane	1.4	1.2	15%	None
Toluene	12	11	9%	None
Tetrachloroethene	1.5	31	182%	J
Ethylbenzene	3.3	3.3	0%	None
Xylene (m,p)	6.5	7.8	18%	None
Xylene (o)	2.3	3.5	41%	None
Xylenes (Total)	8.7	11	23%	None
4-Ethyltoluene	0.88	9.3	165%	J
1,3,5-Trimethylbenzene	1.1	12	166%	J

Package Summary:

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: _____ Dated: _____

Nancy Weaver
Senior Chemist

Data Qualifiers

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B01-SS1-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 0.80

Sample Matrix: AIR

Lab Sample No.: 819327

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.16	U	0.16	1.4	U	1.4
1,2-Dibromoethane	106-93-4	0.16	U	0.16	1.2	U	1.2
Ethylbenzene	100-41-4	0.75		0.16	3.3		0.69
Xylene (m,p)	1330-20-7	1.5		0.32	6.5		1.4
Xylene (o)	95-47-6	0.52		0.16	2.3		0.69
Xylenes, Total	1330-20-7	2.0		0.16	8.7		0.69
Bromoform	75-25-2	0.16	U	0.16	1.7	U	1.7
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U	0.16	1.1	U	1.1
4-Ethyltoluene	622-96-8	0.18 J		0.16	0.88 J		0.79
1,3,5-Trimethylbenzene	108-67-8	0.23 J		0.16	1.1 J		0.79

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B51-SS1-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 0.80

Sample Matrix: AIR

Lab Sample No.: 819328

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.63		0.40	3.1		2.0
1,2-Dichlorotetrafluoroethane	76-14-2	0.16	U	0.16	1.1	U	1.1
Vinyl Chloride	75-01-4	0.16	U	0.16	0.41	U	0.41
1,3-Butadiene	106-99-0	0.40	U	0.40	0.88	U	0.88
Bromomethane	74-83-9	0.16	U	0.16	0.62	U	0.62
Chloroethane	75-00-3	0.40	U	0.40	1.1	U	1.1
Bromoethene	593-60-2	0.16	U	0.16	0.70	U	0.70
Trichlorofluoromethane	75-69-4	0.30		0.16	1.7		0.90
1,1-Dichloroethene	75-35-4	0.16	U	0.16	0.63	U	0.63
3-Chloropropene	107-05-1	0.40	U	0.40	1.3	U	1.3
Methylene chloride	75-09-2	0.40	U	0.40	1.4	U	1.4
Methyl tert-Butyl Ether	1634-04-4	0.40	U	0.40	1.4	U	1.4
trans-1,2-Dichloroethene	156-60-5	0.16	U	0.16	0.63	U	0.63
n-Hexane	110-54-3	0.40	U	0.40	1.4	U	1.4
1,1-Dichloroethane	75-34-3	0.16	U	0.16	0.65	U	0.65
cis-1,2-Dichloroethene	156-59-2	0.16	U	0.16	0.63	U	0.63
1,2-Dichloroethene,Total	540-59-0	0.16	U	0.16	0.63	U	0.63
Chloroform	67-66-3	0.20		0.16	0.98		0.78
1,1,1-Trichloroethane	71-55-6	7.6		0.16	41		0.87
Cyclohexane	110-82-7	0.47		0.16	1.6		0.55
Carbon tetrachloride	56-23-5	0.16	U	0.16	1.0	U	1.0
2,2,4-Trimethylpentane	540-84-1	0.16	U	0.16	0.75	U	0.75
Benzene	71-43-2	0.44		0.16	1.4		0.51
1,2-Dichloroethane	107-06-2	0.16	U	0.16	0.65	U	0.65
n-Heptane	142-82-5	0.30		0.16	1.2		0.66
Trichloroethene	79-01-6	0.16	U	0.16	0.86	U	0.86
1,2-Dichloropropane	78-87-5	0.16	U	0.16	0.74	U	0.74
Bromodichloromethane	75-27-4	0.16	U	0.16	1.1	U	1.1
cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	0.73	U	0.73
Toluene	108-88-3	3.0		0.16	11		0.60
trans-1,3-Dichloropropene	10061-02-6	0.16	U	0.16	0.73	U	0.73
1,1,2-Trichloroethane	79-00-5	0.16	U	0.16	0.87	U	0.87
Tetrachloroethene	127-18-4	4.5 J		0.16	31 J		1.1

NW 8/9/10

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B51-SS1-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 0.80

Sample Matrix: AIR

Lab Sample No.: 819328

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.16	U	0.16	1.4	U	1.4
1,2-Dibromoethane	106-93-4	0.16	U	0.16	1.2	U	1.2
Ethylbenzene	100-41-4	0.75		0.16	3.3		0.69
Xylene (m,p)	1330-20-7	1.8		0.32	7.8		1.4
Xylene (o)	95-47-6	0.80		0.16	3.5		0.69
Xylenes, Total	1330-20-7	2.6		0.16	11		0.69
Bromoform	75-25-2	0.16	U	0.16	1.7	U	1.7
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U	0.16	1.1	U	1.1
4-Ethyltoluene	622-96-8	1.9 J		0.16	9.3 J		0.79
1,3,5-Trimethylbenzene	108-67-8	2.5 J		0.16	12 J		0.79

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B01-FF2-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819329

Date Analyzed: 02/03/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.53		0.040	2.6		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040 UJ	U ✓	0.040	0.28 UJ	U ✓	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.14		0.080	0.31		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.26		0.040	1.5		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methylene Chloride	75-09-2	0.80	U	0.80	2.8	U	2.8
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	0.58		0.080	2.0		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.075		0.040	0.37		0.20
1,1,1-Trichloroethane	71-55-6	0.040	U	0.040	0.22	U	0.22
Cyclohexane	110-82-7	0.28		0.040	0.96		0.14
Carbon Tetrachloride	56-23-5	0.079		0.040	0.50		0.25
2,2,4-Trimethylpentane	540-84-1	0.23		0.040	1.1		0.19
Benzene	71-43-2	0.64		0.040	2.0		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.36		0.040	1.5		0.16
Trichloroethene	79-01-6	0.040	U	0.040	0.21	U	0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	3.8		0.040	14		0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.14		0.040	0.95		0.27

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B01-FF2-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819329

Date Analyzed: 02/03/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.78		0.040	3.4		0.17
Xylene (m,p)	1330-20-7	1.7		0.080	7.4		0.35
Xylene (o)	95-47-6	0.56		0.040	2.4		0.17
Xylene (total)	1330-20-7	2.2		0.040	9.6		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.18		0.040	0.88		0.20
1,3,5-Trimethylbenzene	108-67-8	0.21		0.080	1.0		0.39

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B01-FF1-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819330

Date Analyzed: 02/03/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.61		0.040	3.0		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040 UJ	✓	0.040	0.28 UJ	✓	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.18		0.080	0.40		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.29		0.040	1.6		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methylene Chloride	75-09-2	0.80	U	0.80	2.8	U	2.8
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	0.65		0.080	2.3		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.040	U	0.040	0.20	U	0.20
1,1,1-Trichloroethane	71-55-6	0.040	U	0.040	0.22	U	0.22
Cyclohexane	110-82-7	0.26		0.040	0.89		0.14
Carbon Tetrachloride	56-23-5	0.089		0.040	0.56		0.25
2,2,4-Trimethylpentane	540-84-1	0.27		0.040	1.3		0.19
Benzene	71-43-2	0.68		0.040	2.2		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.37		0.040	1.5		0.16
Trichloroethene	79-01-6	0.040	U	0.040	0.21	U	0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	3.6		0.040	14		0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.12		0.040	0.81		0.27

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Result Summary

CLIENT SAMPLE NO.

B01-FF1-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819330

Date Analyzed: 02/03/10

Date Received: 02/01/10

Target Compound	CAS Number	Results In ppbv	Q	RL In ppbv	Results In ug/m3	Q	RL In ug/m3
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.66		0.040	2.9		0.17
Xylene (m,p)	1330-20-7	1.6		0.080	6.9		0.35
Xylene (o)	95-47-6	0.54		0.040	2.3		0.17
Xylene (total)	1330-20-7	2.2		0.040	9.6		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.15		0.040	0.74		0.20
1,3,5-Trimethylbenzene	108-67-8	0.18		0.080	0.88		0.39

NW 8/9/10

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B01-OA-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819331

Date Analyzed: 02/03/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.60		0.040	3.0		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040 UJ	~~U~~	0.040	0.28 UJ	~~U~~	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.082		0.080	0.18		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.27		0.040	1.5		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methylene Chloride	75-09-2	0.80	U	0.80	2.8	U	2.8
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	0.26		0.080	0.92		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.098		0.040	0.48		0.20
1,1,1-Trichloroethane	71-55-6	0.040	U	0.040	0.22	U	0.22
Cyclohexane	110-82-7	0.14		0.040	0.48		0.14
Carbon Tetrachloride	56-23-5	0.062		0.040	0.39		0.25
2,2,4-Trimethylpentane	540-84-1	0.094		0.040	0.44		0.19
Benzene	71-43-2	0.31		0.040	0.99		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.13		0.040	0.53		0.16
Trichloroethene	79-01-6	0.044		0.040	0.24		0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	0.99		0.040	3.7		0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.098		0.040	0.66		0.27

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B01-OA-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819331

Date Analyzed: 02/03/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.12		0.040	0.52		0.17
Xylene (m,p)	1330-20-7	0.33		0.080	1.4		0.35
Xylene (o)	95-47-6	0.10		0.040	0.43		0.17
Xylene (total)	1330-20-7	0.43		0.040	1.9		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.059		0.040	0.29		0.20
1,3,5-Trimethylbenzene	108-67-8	0.080	U	0.080	0.39	U	0.39

NW
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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B13-SS1-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 0.80

Sample Matrix: AIR

Lab Sample No.: 819332

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.48		0.40	2.4		2.0
1,2-Dichlorotetrafluoroethane	76-14-2	0.16	U	0.16	1.1	U	1.1
Vinyl Chloride	75-01-4	0.16	U	0.16	0.41	U	0.41
1,3-Butadiene	106-99-0	0.62		0.40	1.4		0.88
Bromomethane	74-83-9	0.16	U	0.16	0.62	U	0.62
Chloroethane	75-00-3	0.40	U	0.40	1.1	U	1.1
Bromoethene	593-60-2	0.16	U	0.16	0.70	U	0.70
Trichlorofluoromethane	75-69-4	0.99		0.16	5.6		0.90
1,1-Dichloroethene	75-35-4	0.16	U	0.16	0.63	U	0.63
3-Chloropropene	107-05-1	0.40	U	0.40	1.3	U	1.3
Methylene chloride	75-09-2	0.54		0.40	1.9		1.4
Methyl tert-Butyl Ether	1634-04-4	0.40	U	0.40	1.4	U	1.4
trans-1,2-Dichloroethene	156-60-5	0.16	U	0.16	0.63	U	0.63
n-Hexane	110-54-3	0.47		0.40	1.7		1.4
1,1-Dichloroethane	75-34-3	0.16	U	0.16	0.65	U	0.65
cis-1,2-Dichloroethene	156-59-2	0.16	U	0.16	0.63	U	0.63
1,2-Dichloroethene,Total	540-59-0	0.16	U	0.16	0.63	U	0.63
Chloroform	67-66-3	0.24		0.16	1.2		0.78
1,1,1-Trichloroethane	71-55-6	3.9		0.16	21		0.87
Cyclohexane	110-82-7	0.32		0.16	1.1		0.55
Carbon tetrachloride	56-23-5	0.17		0.16	1.1		1.0
2,2,4-Trimethylpentane	540-84-1	0.16	U	0.16	0.75	U	0.75
Benzene	71-43-2	0.55		0.16	1.8		0.51
1,2-Dichloroethane	107-06-2	0.16	U	0.16	0.65	U	0.65
n-Heptane	142-82-5	0.30		0.16	1.2		0.66
Trichloroethene	79-01-6	3.2		0.16	17		0.86
1,2-Dichloropropane	78-87-5	0.16	U	0.16	0.74	U	0.74
Bromodichloromethane	75-27-4	0.16	U	0.16	1.1	U	1.1
cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	0.73	U	0.73
Toluene	108-88-3	2.6		0.16	9.8		0.60
trans-1,3-Dichloropropene	10061-02-6	0.16	U	0.16	0.73	U	0.73
1,1,2-Trichloroethane	79-00-5	0.16	U	0.16	0.87	U	0.87
Tetrachloroethene	127-18-4	9.7		0.16	66		1.1

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B13-SS1-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 0.80

Sample Matrix: AIR

Lab Sample No.: 819332

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.16	U	0.16	1.4	U	1.4
1,2-Dibromoethane	106-93-4	0.16	U	0.16	1.2	U	1.2
Ethylbenzene	100-41-4	0.50		0.16	2.2		0.69
Xylene (m,p)	1330-20-7	1.7		0.32	7.4		1.4
Xylene (o)	95-47-6	0.56		0.16	2.4		0.69
Xylenes, Total	1330-20-7	2.2		0.16	9.6		0.69
Bromoform	75-25-2	0.16	U	0.16	1.7	U	1.7
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U	0.16	1.1	U	1.1
4-Ethyltoluene	622-96-8	0.36		0.16	1.8		0.79
1,3,5-Trimethylbenzene	108-67-8	0.33		0.16	1.6		0.79

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Result Summary

CLIENT SAMPLE NO.

B13-FF1-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819333

Date Analyzed: 02/03/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.67		0.040	3.3		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040 UJ	✓	0.040	0.28 UJ	✓	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.080	U	0.080	0.18	U	0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.30		0.040	1.7		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methylene Chloride	75-09-2	0.80	U	0.80	2.8	U	2.8
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	1.7		0.080	6.0		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.040	U	0.040	0.20	U	0.20
1,1,1-Trichloroethane	71-55-6	0.040	U	0.040	0.22	U	0.22
Cyclohexane	110-82-7	0.28		0.040	0.96		0.14
Carbon Tetrachloride	56-23-5	0.091		0.040	0.57		0.25
2,2,4-Trimethylpentane	540-84-1	0.36		0.040	1.7		0.19
Benzene	71-43-2	0.92		0.040	2.9		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.51		0.040	2.1		0.16
Trichloroethene	79-01-6	0.040	U	0.040	0.21	U	0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	4.4 J	✓	0.040	17 J	✓	0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.28		0.040	1.9		0.27

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Result Summary

CLIENT SAMPLE NO.

B13-FF1-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819333

Date Analyzed: 02/03/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.56		0.040	2.4		0.17
Xylene (m,p)	1330-20-7	2.0		0.080	8.7		0.35
Xylene (o)	95-47-6	0.61		0.040	2.6		0.17
Xylene (total)	1330-20-7	2.6		0.040	11		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.15		0.040	0.74		0.20
1,3,5-Trimethylbenzene	108-67-8	0.16		0.080	0.79		0.39

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B13-SS2-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 0.80

Sample Matrix: AIR

Lab Sample No.: 819334

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.62		0.40	3.1		2.0
1,2-Dichlorotetrafluoroethane	76-14-2	0.16	U	0.16	1.1	U	1.1
Vinyl Chloride	75-01-4	0.16	U	0.16	0.41	U	0.41
1,3-Butadiene	106-99-0	0.40	U	0.40	0.88	U	0.88
Bromomethane	74-83-9	0.16	U	0.16	0.62	U	0.62
Chloroethane	75-00-3	0.40	U	0.40	1.1	U	1.1
Bromoethene	593-60-2	0.16	U	0.16	0.70	U	0.70
Trichlorofluoromethane	75-69-4	0.27		0.16	1.5		0.90
1,1-Dichloroethene	75-35-4	0.16	U	0.16	0.63	U	0.63
3-Chloropropene	107-05-1	0.40	U	0.40	1.3	U	1.3
Methylene chloride	75-09-2	0.40	U	0.40	1.4	U	1.4
Methyl tert-Butyl Ether	1634-04-4	0.40	U	0.40	1.4	U	1.4
trans-1,2-Dichloroethene	156-60-5	0.16	U	0.16	0.63	U	0.63
n-Hexane	110-54-3	2.1		0.40	7.4		1.4
1,1-Dichloroethane	75-34-3	0.16	U	0.16	0.65	U	0.65
cis-1,2-Dichloroethene	156-59-2	0.16	U	0.16	0.63	U	0.63
1,2-Dichloroethene,Total	540-59-0	0.16	U	0.16	0.63	U	0.63
Chloroform	67-66-3	0.16	U	0.16	0.78	U	0.78
1,1,1-Trichloroethane	71-55-6	0.16	U	0.16	0.87	U	0.87
Cyclohexane	110-82-7	0.46		0.16	1.6		0.55
Carbon tetrachloride	56-23-5	0.16	U	0.16	1.0	U	1.0
2,2,4-Trimethylpentane	540-84-1	0.47		0.16	2.2		0.75
Benzene	71-43-2	1.1		0.16	3.5		0.51
1,2-Dichloroethane	107-06-2	0.16	U	0.16	0.65	U	0.65
n-Heptane	142-82-5	0.70		0.16	2.9		0.66
Trichloroethene	79-01-6	0.16	U	0.16	0.86	U	0.86
1,2-Dichloropropane	78-87-5	0.16	U	0.16	0.74	U	0.74
Bromodichloromethane	75-27-4	0.16	U	0.16	1.1	U	1.1
cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	0.73	U	0.73
Toluene	108-88-3	4.9		0.16	18		0.60
trans-1,3-Dichloropropene	10061-02-6	0.16	U	0.16	0.73	U	0.73
1,1,2-Trichloroethane	79-00-5	0.16	U	0.16	0.87	U	0.87
Tetrachloroethene	127-18-4	0.22		0.16	1.5		1.1

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Result Summary

CLIENT SAMPLE NO.

B13-SS2-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 0.80

Sample Matrix: AIR

Lab Sample No.: 819334

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.16	U	0.16	1.4	U	1.4
1,2-Dibromoethane	106-93-4	0.16	U	0.16	1.2	U	1.2
Ethylbenzene	100-41-4	0.76		0.16	3.3		0.69
Xylene (m,p)	1330-20-7	2.5		0.32	11		1.4
Xylene (o)	95-47-6	0.91		0.16	4.0		0.69
Xylenes, Total	1330-20-7	3.3		0.16	14		0.69
Bromoform	75-25-2	0.16	U	0.16	1.7	U	1.7
1,1,2,2-Tetrachloroethane	79-34-5	0.16	U	0.16	1.1	U	1.1
4-Ethyltoluene	622-96-8	1.6		0.16	7.9		0.79
1,3,5-Trimethylbenzene	108-67-8	2.1		0.16	10		0.79

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B13-FF2-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819335

Date Analyzed: 02/03/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.58		0.040	2.9		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040 UJ	UJ	0.040	0.28 UJ	UJ	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.11		0.080	0.24		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.26		0.040	1.5		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methylene Chloride	75-09-2	0.80	U	0.80	2.8	U	2.8
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	2.7		0.080	9.5		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.040	U	0.040	0.20	U	0.20
1,1,1-Trichloroethane	71-55-6	0.040	U	0.040	0.22	U	0.22
Cyclohexane	110-82-7	0.44		0.040	1.5		0.14
Carbon Tetrachloride	56-23-5	0.079		0.040	0.50		0.25
2,2,4-Trimethylpentane	540-84-1	0.50		0.040	2.3		0.19
Benzene	71-43-2	1.1		0.040	3.5		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.72		0.040	3.0		0.16
Trichloroethene	79-01-6	0.040	U	0.040	0.21	U	0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	6.0 J	J	0.040	23 J	J	0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.18		0.040	1.2		0.27

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Result Summary

CLIENT SAMPLE NO.

B13-FF2-20100126

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819335

Date Analyzed: 02/03/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.85		0.040	3.7		0.17
Xylene (m,p)	1330-20-7	3.0		0.080	13		0.35
Xylene (o)	95-47-6	0.90		0.040	3.9		0.17
Xylene (total)	1330-20-7	4.0		0.040	17		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.24		0.040	1.2		0.20
1,3,5-Trimethylbenzene	108-67-8	0.21		0.080	1.0		0.39

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Result Summary

CLIENT SAMPLE NO.

B07-SS2-20100127

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 2.00

Sample Matrix: AIR

Lab Sample No.: 819336

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	1.0	U	1.0	4.9	U	4.9
1,2-Dichlorotetrafluoroethane	76-14-2	0.40	U	0.40	2.8	U	2.8
Vinyl Chloride	75-01-4	0.40	U	0.40	1.0	U	1.0
1,3-Butadiene	106-99-0	1.0	U	1.0	2.2	U	2.2
Bromomethane	74-83-9	0.40	U	0.40	1.6	U	1.6
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	0.40	U	0.40	1.7	U	1.7
Trichlorofluoromethane	75-69-4	0.40	U	0.40	2.2	U	2.2
1,1-Dichloroethene	75-35-4	0.40	U	0.40	1.6	U	1.6
3-Chloropropene	107-05-1	1.0	U	1.0	3.1	U	3.1
Methylene chloride	75-09-2	1.0	U	1.0	3.5	U	3.5
Methyl tert-Butyl Ether	1634-04-4	1.0	U	1.0	3.6	U	3.6
trans-1,2-Dichloroethene	156-60-5	0.40	U	0.40	1.6	U	1.6
n-Hexane	110-54-3	1.0	U	1.0	3.5	U	3.5
1,1-Dichloroethane	75-34-3	0.40	U	0.40	1.6	U	1.6
cis-1,2-Dichloroethene	156-59-2	0.40	U	0.40	1.6	U	1.6
1,2-Dichloroethene,Total	540-59-0	0.40	U	0.40	1.6	U	1.6
Chloroform	67-66-3	0.40	U	0.40	2.0	U	2.0
1,1,1-Trichloroethane	71-55-6	0.40	U	0.40	2.2	U	2.2
Cyclohexane	110-82-7	0.40	U	0.40	1.4	U	1.4
Carbon tetrachloride	56-23-5	0.40	U	0.40	2.5	U	2.5
2,2,4-Trimethylpentane	540-84-1	0.40	U	0.40	1.9	U	1.9
Benzene	71-43-2	0.40	U	0.40	1.3	U	1.3
1,2-Dichloroethane	107-06-2	0.40	U	0.40	1.6	U	1.6
n-Heptane	142-82-5	0.40	U	0.40	1.6	U	1.6
Trichloroethene	79-01-6	0.40	U	0.40	2.1	U	2.1
1,2-Dichloropropane	78-87-5	0.40	U	0.40	1.8	U	1.8
Bromodichloromethane	75-27-4	0.40	U	0.40	2.7	U	2.7
cis-1,3-Dichloropropene	10061-01-5	0.40	U	0.40	1.8	U	1.8
Toluene	108-88-3	0.44		0.40	1.7		1.5
trans-1,3-Dichloropropene	10061-02-6	0.40	U	0.40	1.8	U	1.8
1,1,2-Trichloroethane	79-00-5	0.40	U	0.40	2.2	U	2.2
Tetrachloroethene	127-18-4	1.4		0.40	9.5		2.7

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B07-SS2-20100127

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 2.00

Sample Matrix: AIR

Lab Sample No.: 819336

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.40	U	0.40	3.4	U	3.4
1,2-Dibromoethane	106-93-4	0.40	U	0.40	3.1	U	3.1
Ethylbenzene	100-41-4	0.40	U	0.40	1.7	U	1.7
Xylene (m,p)	1330-20-7	0.80	U	0.80	3.5	U	3.5
Xylene (o)	95-47-6	0.40	U	0.40	1.7	U	1.7
Xylenes, Total	1330-20-7	0.40	U	0.40	1.7	U	1.7
Bromoform	75-25-2	0.40	U	0.40	4.1	U	4.1
1,1,2,2-Tetrachloroethane	79-34-5	0.40	U	0.40	2.7	U	2.7
4-Ethyltoluene	622-96-8	0.88		0.40	4.3		2.0
1,3,5-Trimethylbenzene	108-67-8	1.1		0.40	5.4		2.0

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B07-FF2-20100127

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819337

Date Analyzed: 02/04/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.61		0.040	3.0		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040 UJ	✓	0.040	0.28 UJ	✓	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.080	U	0.080	0.18	U	0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.28		0.040	1.6		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methylene Chloride	75-09-2	0.80	U	0.80	2.8	U	2.8
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	0.23		0.080	0.81		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.047		0.040	0.23		0.20
1,1,1-Trichloroethane	71-55-6	0.040	U	0.040	0.22	U	0.22
Cyclohexane	110-82-7	0.13		0.040	0.45		0.14
Carbon Tetrachloride	56-23-5	0.077		0.040	0.48		0.25
2,2,4-Trimethylpentane	540-84-1	0.10		0.040	0.47		0.19
Benzene	71-43-2	0.32		0.040	1.0		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.19		0.040	0.78		0.16
Trichloroethene	79-01-6	0.053		0.040	0.28		0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	1.4		0.040	5.3		0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.11		0.040	0.75		0.27

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Result Summary

CLIENT SAMPLE NO.

B07-FF2-20100127

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819337

Date Analyzed: 02/04/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.16		0.040	0.69		0.17
Xylene (m,p)	1330-20-7	0.39		0.080	1.7		0.35
Xylene (o)	95-47-6	0.14		0.040	0.61		0.17
Xylene (total)	1330-20-7	0.53		0.040	2.3		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.060		0.040	0.29		0.20
1,3,5-Trimethylbenzene	108-67-8	0.080	U	0.080	0.39	U	0.39

NJ 8/9/10

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B07-SS1-20100127

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 2.00

Sample Matrix: AIR

Lab Sample No.: 819338

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	1.0	U	1.0	4.9	U	4.9
1,2-Dichlorotetrafluoroethane	76-14-2	0.40	U	0.40	2.8	U	2.8
Vinyl Chloride	75-01-4	0.40	U	0.40	1.0	U	1.0
1,3-Butadiene	106-99-0	1.0	U	1.0	2.2	U	2.2
Bromomethane	74-83-9	0.40	U	0.40	1.6	U	1.6
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	0.40	U	0.40	1.7	U	1.7
Trichlorofluoromethane	75-69-4	0.49		0.40	2.8		2.2
1,1-Dichloroethene	75-35-4	0.40	U	0.40	1.6	U	1.6
3-Chloropropene	107-05-1	1.0	U	1.0	3.1	U	3.1
Methylene chloride	75-09-2	1.0	U	1.0	3.5	U	3.5
Methyl tert-Butyl Ether	1634-04-4	1.0	U	1.0	3.6	U	3.6
trans-1,2-Dichloroethene	156-60-5	0.40	U	0.40	1.6	U	1.6
n-Hexane	110-54-3	1.0	U	1.0	3.5	U	3.5
1,1-Dichloroethane	75-34-3	0.40	U	0.40	1.6	U	1.6
cis-1,2-Dichloroethene	156-59-2	0.40	U	0.40	1.6	U	1.6
1,2-Dichloroethene,Total	540-59-0	0.40	U	0.40	1.6	U	1.6
Chloroform	67-66-3	0.40	U	0.40	2.0	U	2.0
1,1,1-Trichloroethane	71-55-6	1.2		0.40	6.5		2.2
Cyclohexane	110-82-7	0.40	U	0.40	1.4	U	1.4
Carbon tetrachloride	56-23-5	0.40	U	0.40	2.5	U	2.5
2,2,4-Trimethylpentane	540-84-1	0.40	U	0.40	1.9	U	1.9
Benzene	71-43-2	0.40	U	0.40	1.3	U	1.3
1,2-Dichloroethane	107-06-2	0.40	U	0.40	1.6	U	1.6
n-Heptane	142-82-5	0.40	U	0.40	1.6	U	1.6
Trichloroethene	79-01-6	0.63		0.40	3.4		2.1
1,2-Dichloropropane	78-87-5	0.40	U	0.40	1.8	U	1.8
Bromodichloromethane	75-27-4	0.40	U	0.40	2.7	U	2.7
cis-1,3-Dichloropropene	10061-01-5	0.40	U	0.40	1.8	U	1.8
Toluene	108-88-3	0.59		0.40	2.2		1.5
trans-1,3-Dichloropropene	10061-02-6	0.40	U	0.40	1.8	U	1.8
1,1,2-Trichloroethane	79-00-5	0.40	U	0.40	2.2	U	2.2
Tetrachloroethene	127-18-4	6.4		0.40	43		2.7

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B07-SS1-20100127

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 2.00

Sample Matrix: AIR

Lab Sample No.: 819338

Date Analyzed: 02/09/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.40	U	0.40	3.4	U	3.4
1,2-Dibromoethane	106-93-4	0.40	U	0.40	3.1	U	3.1
Ethylbenzene	100-41-4	0.40	U	0.40	1.7	U	1.7
Xylene (m,p)	1330-20-7	0.80	U	0.80	3.5	U	3.5
Xylene (o)	95-47-6	0.40	U	0.40	1.7	U	1.7
Xylenes, Total	1330-20-7	0.40	U	0.40	1.7	U	1.7
Bromoform	75-25-2	0.40	U	0.40	4.1	U	4.1
1,1,2,2-Tetrachloroethane	79-34-5	0.40	U	0.40	2.7	U	2.7
4-Ethyltoluene	622-96-8	0.89		0.40	4.4		2.0
1,3,5-Trimethylbenzene	108-67-8	1.1		0.40	5.4		2.0

8/9/10

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B07-FF1-20100127

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819339

Date Analyzed: 02/04/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.62		0.040	3.1		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040 UJ	U	0.040	0.28 UJ	U	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.11		0.080	0.24		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.28		0.040	1.6		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methylene Chloride	75-09-2	0.80	U	0.80	2.8	U	2.8
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	0.30		0.080	1.1		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.097		0.040	0.47		0.20
1,1,1-Trichloroethane	71-55-6	0.040	U	0.040	0.22	U	0.22
Cyclohexane	110-82-7	0.17		0.040	0.59		0.14
Carbon Tetrachloride	56-23-5	0.087		0.040	0.55		0.25
2,2,4-Trimethylpentane	540-84-1	0.13		0.040	0.61		0.19
Benzene	71-43-2	0.38		0.040	1.2		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.15		0.040	0.61		0.16
Trichloroethene	79-01-6	0.061		0.040	0.33		0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	1.2		0.040	4.5		0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.10		0.040	0.68		0.27

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B07-FF1-20100127

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819339

Date Analyzed: 02/04/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.14		0.040	0.61		0.17
Xylene (m,p)	1330-20-7	0.43		0.080	1.9		0.35
Xylene (o)	95-47-6	0.14		0.040	0.61		0.17
Xylene (total)	1330-20-7	0.58		0.040	2.5		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.078		0.040	0.38		0.20
1,3,5-Trimethylbenzene	108-67-8	0.080	U	0.080	0.39	U	0.39

MW 8/9/10

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B07-OA-20100127

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819340

Date Analyzed: 02/04/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.60		0.040	3.0		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040 UJ	✓	0.040	0.28 UJ	✓	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.12		0.080	0.27		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.26		0.040	1.5		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methylene Chloride	75-09-2	0.80	U	0.80	2.8	U	2.8
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	0.30		0.080	1.1		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.040	U	0.040	0.20	U	0.20
1,1,1-Trichloroethane	71-55-6	0.040	U	0.040	0.22	U	0.22
Cyclohexane	110-82-7	0.099		0.040	0.34		0.14
Carbon Tetrachloride	56-23-5	0.086		0.040	0.54		0.25
2,2,4-Trimethylpentane	540-84-1	0.15		0.040	0.70		0.19
Benzene	71-43-2	0.41		0.040	1.3		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.14		0.040	0.57		0.16
Trichloroethene	79-01-6	0.040	U	0.040	0.21	U	0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	1.4		0.040	5.3		0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.093		0.040	0.63		0.27

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

B07-OA-20100127

Lab Name: TAL Burlington

SDG Number: NY135783

Dilution Factor: 4.00

Sample Matrix: AIR

Lab Sample No.: 819340

Date Analyzed: 02/04/10

Date Received: 02/01/10

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.17		0.040	0.74		0.17
Xylene (m,p)	1330-20-7	0.53		0.080	2.3		0.35
Xylene (o)	95-47-6	0.16		0.040	0.69		0.17
Xylene (total)	1330-20-7	0.69		0.040	3.0		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.060		0.040	0.29		0.20
1,3,5-Trimethylbenzene	108-67-8	0.080	U	0.080	0.39	U	0.39

MW
8/9/10

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
UTILITY MANUFACTURING/WONDERKING SITE

Client: AECOM Technical Services, Inc., Bloomfield, New Jersey
SDG: RTE0678
Laboratory: Test America Laboratories, Buffalo, New York
Site: Utility Manufacturing/Wonderking Site, New York
Date: July 27, 2010

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	MW13S	RTE0678-01	Water
1MS	MW13SMS	RTE0678-01MS	Water
1MSD	MW13SMSD	RTE0678-01MSD	Water
2	MW13D	RTE0678-04	Water
2RE	MW13DRE	RTE0678-04RE	Water
3	MW12S	RTE0678-05	Water
4	MW62S	RTE0678-06	Water
5	MW12D	RTE0678-07	Water
6	TRIP BLANK	RTE0678-08	Water
7	MW11S	RTE0727-01	Water
8	MW11D	RTE0727-02	Water
9	MW1S	RTE0727-03	Water
10	MW1D	RTE0727-04	Water
11	TRIP BLANK 2	RTE0727-05	Water

A Data Usability Summary Review was performed on the analytical data for nine water samples and two aqueous trip blank samples collected May 11-13, 2010 by AECOM at the Utility Manufacturing/Wonderking site in New York State. The samples were analyzed under Environmental Protection Agency (USEPA) *"Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions"*.

Specific method references are as follows:

Analysis	*Method References*
VOCs	USEPA SW-846 Method 8260B

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-24, Revision 2, October 2006: Validating Volatile Organic Compounds by SW-846 Method 8260B;
- and the reviewer's professional judgment.

Organics

The following items/criteria were reviewed for this report:

- Data Completeness
- Holding times and sample preservation
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Duplicate (LCS/LCSD) recoveries
- Method blank and field blank contamination
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning
- Initial and continuing calibration summaries
- Compound Quantitation
- Internal standard area and retention time summary forms
- Field Duplicate sample precision

Overall Usability Issues:

There were no rejections of data.

Overall the data is acceptable for the intended purposes as qualified for the following deficiencies.

- Trichloroethene was qualified as nondetect in three samples due to trip blank contamination.
- Several compounds were qualified as estimated in all samples due to high continuing calibration RRF values.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organics Compounds (VOCs)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate recoveries.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable %R and RPD values.

Laboratory Control Samples

- The LCS samples exhibited acceptable recoveries.

Method Blank

- The method blanks were free of contamination.

Field Blank

- The following table lists field blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations of methylene chloride, 2-butanone, toluene or acetone (common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U). For all other compounds, an action level of five times (5x) the highest associated blank concentration is used.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
TRIP BLANK	None	ND	ND	-	-
TRIP BLANK 2	Trichloroethene	0.97	4.85	U	7, 8, 9

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The initial calibrations exhibited acceptable %RSD and mean RRF values.

Continuing Calibration

- The following table presents compounds that exceeded 20 percent deviation (%D) and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
05/19/10 (1105)	Bromomethane	35.8%	J/UJ	2RE, 4, 5
05/19/10 (2148)	Acetone	29.1%	J/UJ	8, 9
	Bromoform	35.2%		
	2-Butanone	32.8%		
	2-Hexanone	38.7%		
	4-Methyl-2-pentanone	32.1%		
	Methyl Acetate	27.1%		
05/20/10	Bromomethane	25.3%	J/UJ	7, 10, 11
05/18/10	1,2-Dibromo-3-chloropropane	29.3%	J/UJ	1, 2, 3, 6
	Chlorodibromomethane	25.2%		
	Dichlorodifluoromethane	30.0%		
	Trichlorofluoromethane	26.2%		
	trans-1,3-Dichloropropene	21.9%		

Compound Quantitation

- Sample MW13D exhibited a high concentration of trichloroethene over the linear range of the instrument and was flagged (E) by the laboratory. The sample was diluted 4X and reanalyzed and the dilution result for trichloroethene should be used for reporting.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision is acceptable.

VOC				
Compound	MW12S ug/L	MW-62S ug/L	RPD	Qualifier
1,2-Dichloroethene, Total	15	15	0%	None
cis-1,2-Dichloroethene	15	15	0%	None
Tetrachloroethene	10	10	0%	None
Trichloroethene	2.5	2.4	4%	None

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Very truly yours,
Environmental Data Services, Inc.

Nancy Weaver 7/28/10

Nancy Weaver Date
Senior Chemist

Data Qualifiers

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

MW13S

Laboratory: TestAmerica Buffalo | SDG: RTE0678

Client: AECOM - Bloomfield, NJ | Project: Utility Manufacturing

Matrix: Water | Laboratory ID: RTE0678-01 | File ID: T9681.D

Sampled: 05/11/10 11:18 | Prepared: 05/18/10 10:57 | Analyzed: 05/18/10 15:36

Solids: | Preparation: 5030B MS | Initial/Final: 5 mL / 5 mL

Batch: 10E1383 | Sequence: T002104 | Calibration: R10E004 | Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0 UJ	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	0.74	J
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0 UJ	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0 UJ	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

lw 7/27/10

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

MW13S

Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0678-01	File ID:	T9681.D
Sampled:	05/11/10 11:18	Prepared:	05/18/10 10:57	Analyzed:	05/18/10 15:36
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1383	Sequence:	T002104	Calibration:	R10E004
Instrument:	HP5975T				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.2	
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0 UJ	~~U~~
79-01-6	Trichloroethene	1	1.7	
75-69-4	Trichlorofluoromethane	1	1.0 UJ	~~U~~
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	26.6	106	66 - 137	
4-Bromofluorobenzene	25.0	22.4	90	73 - 120	
Toluene-d8	25.0	24.8	99	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	409918	9.86	662820	9.86	
1,4-Difluorobenzene	991230	5.68	1429838	5.68	
Chlorobenzene-d5	818988	7.95	1233359	7.95	

* Values outside of QC limits

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Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

MW13D

Laboratory:	TestAmerica Buffalo		SDG:	RTE0678	
Client:	AECOM - Bloomfield, NJ		Project:	Utility Manufacturing	
Matrix:	Water	Laboratory ID:	RTE0678-04	File ID:	T9684.D
Sampled:	05/11/10 12:07	Prepared:	05/18/10 10:57	Analyzed:	05/18/10 16:49
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1383	Sequence: T002104		Calibration:	R10E004 Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	4.2	
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.2	
75-34-3	1,1-Dichloroethane	1	1.2	
75-35-4	1,1-Dichloroethene	1	7.0	
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0 UJ	~~U~~
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	0.58	J
540-59-0	1,2-Dichloroethene, Total	1	17	
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0 UJ	~~U~~
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	17	
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0 UJ	~~U~~
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

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Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

MW13D

Laboratory:	TestAmerica Buffalo		SDG:	RTE0678	
Client:	AECOM - Bloomfield, NJ		Project:	Utility Manufacturing	
Matrix:	Water	Laboratory ID:	RTE0678-04	File ID:	T9684.D
Sampled:	05/11/10 12:07	Prepared:	05/18/10 10:57	Analyzed:	05/18/10 16:49
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1383	Sequence: T002104	Calibration:	R10E004	Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	9.4	
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0 UJ	~~U~~
79-01-6	Trichloroethene	4 ~~1~~	200 ~~190~~	~~E~~
75-69-4	Trichlorofluoromethane	1	1.0 UJ	~~U~~
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	26.5	106	66 - 137	
4-Bromofluorobenzene	25.0	21.8	87	73 - 120	
Toluene-d8	25.0	24.2	97	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	391472	9.86	662820	9.86	
1,4-Difluorobenzene	962471	5.68	1429838	5.68	
Chlorobenzene-d5	801036	7.95	1233359	7.95	

* Values outside of QC limits

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Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

MW13D

Use original results

Laboratory:	TestAmerica Buffalo		SDG:	RTE0678	
Client:	AECOM - Bloomfield, NJ		Project:	Utility Manufacturing	
Matrix:	Water	Laboratory ID:	RTE0678-04RE1	File ID:	C2998.D
Sampled:	05/11/10 12:07	Prepared:	05/19/10 10:08	Analyzed:	05/19/10 13:06
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1480	Sequence: T002131	Calibration:	R10E014	Instrument: HP5975C

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	4	5.8	D
79-34-5	1,1,2,2-Tetrachloroethane	4	4.0	UD
79-00-5	1,1,2-Trichloroethane	4	4.0	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	4	4.0	UD
75-34-3	1,1-Dichloroethane	4	4.0	UD
75-35-4	1,1-Dichloroethene	4	8.7	D
120-82-1	1,2,4-Trichlorobenzene	4	4.0	UD
96-12-8	1,2-Dibromo-3-chloropropane	4	4.0	UD
106-93-4	1,2-Dibromoethane (EDB)	4	4.0	UD
95-50-1	1,2-Dichlorobenzene	4	4.0	UD
107-06-2	1,2-Dichloroethane	4	4.0	UD
540-59-0	1,2-Dichloroethene, Total	4	18	D
78-87-5	1,2-Dichloropropane	4	4.0	UD
541-73-1	1,3-Dichlorobenzene	4	4.0	UD
106-46-7	1,4-Dichlorobenzene	4	4.0	UD
78-93-3	2-Butanone (MEK)	4	20	UD
591-78-6	2-Hexanone	4	20	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	4	20	UD
67-64-1	Acetone	4	20	UD
71-43-2	Benzene	4	4.0	UD
75-27-4	Bromodichloromethane	4	4.0	UD
75-25-2	Bromoform	4	4.0	UD
74-83-9	Bromomethane	4	4.0 UJ	UD
75-15-0	Carbon disulfide	4	4.0	UD
56-23-5	Carbon Tetrachloride	4	4.0	UD
108-90-7	Chlorobenzene	4	4.0	UD
124-48-1	Chlorodibromomethane	4	4.0	UD
75-00-3	Chloroethane	4	4.0	UD
67-66-3	Chloroform	4	4.0	UD
74-87-3	Chloromethane	4	4.0	UD
156-59-2	cis-1,2-Dichloroethene	4	18	D
10061-01-5	cis-1,3-Dichloropropene	4	4.0	UD
110-82-7	Cyclohexane	4	4.0	UD
75-71-8	Dichlorodifluoromethane	4	4.0	UD
100-41-4	Ethylbenzene	4	4.0	UD
98-82-8	Isopropylbenzene	4	4.0	UD
79-20-9	Methyl Acetate	4	4.0	UD
1634-04-4	Methyl tert-Butyl Ether	4	4.0	UD
108-87-2	Methylcyclohexane	4	4.0	UD

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Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

MW13D

Laboratory:	TestAmerica Buffalo		SDG:	RTE0678	
Client:	AECOM - Bloomfield, NJ		Project:	Utility Manufacturing	
Matrix:	Water	Laboratory ID:	RTE0678-04RE1	File ID:	C2998.D
Sampled:	05/11/10 12:07	Prepared:	05/19/10 10:08	Analyzed:	05/19/10 13:06
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1480	Sequence:	T002131	Calibration:	R10E014

Instrument: HP5975C

use original results

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	4	3.2	JD
100-42-5	Styrene	4	4.0	UD
127-18-4	Tetrachloroethene	4	9.8	D
108-88-3	Toluene	4	4.0	UD
156-60-5	trans-1,2-Dichloroethene	4	4.0	UD
10061-02-6	trans-1,3-Dichloropropene	4	4.0	UD
79-01-6	Trichloroethene	4	200	D
75-69-4	Trichlorofluoromethane	4	4.0	UD
75-01-4	Vinyl chloride	4	4.0	UD
1330-20-7	Xylenes, total	4	8.0	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	26.8	107	66 - 137	D
4-Bromofluorobenzene	25.0	22.1	88	73 - 120	D
Toluene-d8	25.0	23.7	95	71 - 126	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	420105	13.96	524712	13.96	
1,4-Difluorobenzene	840360	9.55	1004068	9.54	
Chlorobenzene-d5	749638	11.92	909996	11.92	

* Values outside of QC limits

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Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

MW12S

Laboratory:	TestAmerica Buffalo		SDG:	RTE0678	
Client:	AECOM - Bloomfield, NJ		Project:	Utility Manufacturing	
Matrix:	Water	Laboratory ID:	RTE0678-05	File ID:	T9685.D
Sampled:	05/11/10 14:55	Prepared:	05/18/10 10:57	Analyzed:	05/18/10 17:13
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1383	Sequence: T002104		Calibration:	R10E004
Instrument:	HP5975T				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0 UJ	~~U~~
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	15	
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0 UJ	~~U~~
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	15	
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0 UJ	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

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Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

MW12S

Laboratory: TestAmerica Buffalo SDG: RTE0678

Client: AECOM - Bloomfield, NJ Project: Utility Manufacturing

Matrix: Water Laboratory ID: RTE0678-05 File ID: T9685.D

Sampled: 05/11/10 14:55 Prepared: 05/18/10 10:57 Analyzed: 05/18/10 17:13

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 10E1383 Sequence: T002104 Calibration: R10E004 Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	10	
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0 UJ	~~U~~
79-01-6	Trichloroethene	1	2.5	
75-69-4	Trichlorofluoromethane	1	1.0 UJ	~~U~~
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	26.0	104	66 - 137	
4-Bromofluorobenzene	25.0	21.9	88	73 - 120	
Toluene-d8	25.0	24.5	98	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	378174	9.86	662820	9.86	
1,4-Difluorobenzene	937872	5.68	1429838	5.68	
Chlorobenzene-d5	783170	7.95	1233359	7.95	

* Values outside of QC limits

Form Rev: 11/23/09

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Printed: 05/24/2010

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

MW62S

Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0678-06	File ID:	C2999.D
Sampled:	05/11/10 15:10	Prepared:	05/19/10 10:08	Analyzed:	05/19/10 13:31
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1480	Sequence:	T002131	Calibration:	R10E014
Instrument:	HP5975C				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	15	
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0 UJ	~~U~~
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	15	
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

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Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

MW62S

Laboratory:	TestAmerica Buffalo		SDG:	RTE0678	
Client:	AECOM - Bloomfield, NJ		Project:	Utility Manufacturing	
Matrix:	Water	Laboratory ID:	RTE0678-06	File ID:	C2999.D
Sampled:	05/11/10 15:10	Prepared:	05/19/10 10:08	Analyzed:	05/19/10 13:31
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1480	Sequence: T002131	Calibration:	R10E014	Instrument: HP5975C

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	10	
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	2.4	
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	26.7	107	66 - 137	
4-Bromofluorobenzene	25.0	22.1	88	73 - 120	
Toluene-d8	25.0	23.1	92	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	391714	13.96	524712	13.96	
1,4-Difluorobenzene	781822	9.55	1004068	9.54	
Chlorobenzene-d5	692031	11.92	909996	11.92	

* Values outside of QC limits

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Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

MW12D

Laboratory: TestAmerica Buffalo | SDG: RTE0678

Client: AECOM - Bloomfield, NJ | Project: Utility Manufacturing

Matrix: Water | Laboratory ID: RTE0678-07 | File ID: C3000.D

Sampled: 05/11/10 15:40 | Prepared: 05/19/10 10:08 | Analyzed: 05/19/10 13:56

Solids: | Preparation: 5030B MS | Initial/Final: 5 mL / 5 mL

Batch: 10E1480 | Sequence: T002131 | Calibration: R10E014 | Instrument: HP5975C

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	8.8	
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	2.2	
75-34-3	1,1-Dichloroethane	1	2.4	
75-35-4	1,1-Dichloroethene	1	17	
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	1.8	J
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0 UJ	U ✓
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.8	
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

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8260B

MW12D

Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0678-07	File ID:	C3000.D
Sampled:	05/11/10 15:40	Prepared:	05/19/10 10:08	Analyzed:	05/19/10 13:56
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1480	Sequence:	T002131	Calibration:	R10E014
Instrument:	HP5975C				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	7.1	
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	25	
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	27.5	110	66 - 137	
4-Bromofluorobenzene	25.0	22.8	91	73 - 120	
Toluene-d8	25.0	23.8	95	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	381466	13.96	524712	13.96	
1,4-Difluorobenzene	753143	9.55	1004068	9.54	
Chlorobenzene-d5	680644	11.92	909996	11.92	

* Values outside of QC limits

MW 7/27/10

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ORGANIC ANALYSIS DATA SHEET

8260B

TRIP BLANK

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Laboratory: TestAmerica Buffalo SDG: RTE0678

Client: AECOM - Bloomfield, NJ Project: Utility Manufacturing

Matrix: Water Laboratory ID: RTE0678-08 File ID: T9688.D

Sampled: 05/11/10 00:00 Prepared: 05/18/10 10:57 Analyzed: 05/18/10 18:25

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 10E1383 Sequence: T002104 Calibration: R10E004 Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0 UJ	~~U~~
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	2.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0 UJ	~~U~~
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0 UJ	~~U~~
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

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8260B

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Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0678-08	File ID:	T9688.D
Sampled:	05/11/10 00:00	Prepared:	05/18/10 10:57	Analyzed:	05/18/10 18:25
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1383	Sequence:	T002104	Calibration:	R10E004
Instrument:	HP5975T				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0 UJ	~~U~~
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0 UJ	~~U~~
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	26.5	106	66 - 137	
4-Bromofluorobenzene	25.0	21.5	86	73 - 120	
Toluene-d8	25.0	24.4	98	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	379711	9.86	662820	9.86	
1,4-Difluorobenzene	905481	5.68	1429838	5.68	
Chlorobenzene-d5	760554	7.95	1233359	7.95	

* Values outside of QC limits

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06 MW11S

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Laboratory: TestAmerica Buffalo SDG: RTE0678

Client: AECOM - Bloomfield, NJ Project: Utility Manufacturing

Matrix: Water Laboratory ID: RTE0727-01 File ID: P6674.D

Sampled: 05/12/10 10:50 Prepared: 05/20/10 17:07 Analyzed: 05/20/10 22:13

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 10E1656 Sequence: T002177 Calibration: R10E100 Instrument: HP5973P

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	2.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0 UJ	~~U~~
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

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8260B

06 MW11S

Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0727-01	File ID:	P6674.D
Sampled:	05/12/10 10:50	Prepared:	05/20/10 17:07	Analyzed:	05/20/10 22:13
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1656	Sequence:	T002177	Calibration:	R10E100
Instrument:	HP5973P				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	8.7	
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0 ~~0.57~~ U	✓
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.3	93	66 - 137	
4-Bromofluorobenzene	25.0	23.0	92	73 - 120	
Toluene-d8	25.0	22.8	91	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	331643	17.6	409770	17.6	
1,4-Difluorobenzene	762308	10.28	856274	10.27	
Chlorobenzene-d5	651274	14.21	749951	14.21	

* Values outside of QC limits

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ORGANIC ANALYSIS DATA SHEET

8260B

06 MW11D

Laboratory:	TestAmerica Buffalo		SDG:	RTE0678	
Client:	AECOM - Bloomfield, NJ		Project:	Utility Manufacturing	
Matrix:	Water	Laboratory ID:	RTE0727-02	File ID:	P6653.D
Sampled:	05/12/10 11:10	Prepared:	05/19/10 20:55	Analyzed:	05/20/10 07:13
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1533	Sequence:	T002146	Calibration:	R10E066	Instrument:	HP5973P

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)		Q
71-55-6	1,1,1-Trichloroethane	1	1.8		
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0		U
79-00-5	1,1,2-Trichloroethane	1	1.0		U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0		U
75-34-3	1,1-Dichloroethane	1	2.5		
75-35-4	1,1-Dichloroethene	1	4.0		
120-82-1	1,2,4-Trichlorobenzene	1	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0		U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0		U
95-50-1	1,2-Dichlorobenzene	1	1.0		U
107-06-2	1,2-Dichloroethane	1	1.0		U
540-59-0	1,2-Dichloroethene, Total	1	1.2		J
78-87-5	1,2-Dichloropropane	1	1.0		U
541-73-1	1,3-Dichlorobenzene	1	1.0		U
106-46-7	1,4-Dichlorobenzene	1	1.0		U
78-93-3	2-Butanone (MEK)	1	5.0	UJ	U
591-78-6	2-Hexanone	1	5.0	UJ	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	UJ	U
67-64-1	Acetone	1	4.8	J	J
71-43-2	Benzene	1	1.0		U
75-27-4	Bromodichloromethane	1	1.0		U
75-25-2	Bromoform	1	1.0	UJ	U
74-83-9	Bromomethane	1	1.0		U
75-15-0	Carbon disulfide	1	1.0		U
56-23-5	Carbon Tetrachloride	1	1.0		U
108-90-7	Chlorobenzene	1	1.0		U
124-48-1	Chlorodibromomethane	1	1.0		U
75-00-3	Chloroethane	1	1.0		U
67-66-3	Chloroform	1	1.0		U
74-87-3	Chloromethane	1	1.0		U
156-59-2	cis-1,2-Dichloroethene	1	1.2		
10061-01-5	cis-1,3-Dichloropropene	1	1.0		U
110-82-7	Cyclohexane	1	1.0		U
75-71-8	Dichlorodifluoromethane	1	1.0		U
100-41-4	Ethylbenzene	1	1.0		U
98-82-8	Isopropylbenzene	1	1.0		U
79-20-9	Methyl Acetate	1	1.0	UJ	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0		U
108-87-2	Methylcyclohexane	1	1.0		U

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ORGANIC ANALYSIS DATA SHEET

8260B

06 MW11D

Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0727-02	File ID:	P6653.D
Sampled:	05/12/10 11:10	Prepared:	05/19/10 20:55	Analyzed:	05/20/10 07:13
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1533	Sequence:	T002146	Calibration:	R10E066	Instrument:	HP5973P

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	8.1	
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	3.0 U	
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	22.2	89	66 - 137	
4-Bromofluorobenzene	25.0	19.0	76	73 - 120	
Toluene-d8	25.0	21.7	87	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	231740	17.6	353972	17.6	
1,4-Difluorobenzene	545910	10.28	679450	10.28	
Chlorobenzene-d5	470544	14.21	630441	14.21	

* Values outside of QC limits

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ORGANIC ANALYSIS DATA SHEET

8260B

06 MW1S

Laboratory:	TestAmerica Buffalo		SDG:	RTE0678	
Client:	AECOM - Bloomfield, NJ		Project:	Utility Manufacturing	
Matrix:	Water	Laboratory ID:	RTE0727-03	File ID:	P6654.D
Sampled:	05/12/10 13:55	Prepared:	05/19/10 20:55	Analyzed:	05/20/10 07:42
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1533	Sequence: T002146	Calibration:	R10E066	Instrument: HP5973P

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	18	
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0 UJ	U
591-78-6	2-Hexanone	1	5.0 UJ	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0 UJ	U
67-64-1	Acetone	1	5.0 J	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0 UJ	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	18	
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0 UJ	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

Form Rev: 11/23/09

Printed: 05/24/2010

MW 7/27/10

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

06 MW1S

Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0727-03	File ID:	P6654.D
Sampled:	05/12/10 13:55	Prepared:	05/19/10 20:55	Analyzed:	05/20/10 07:42
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1533	Sequence:	T002146	Calibration:	R10E066 Instrument: HP5973P

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	8.9	
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	3.1 U	
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	22.3	89	66 - 137	
4-Bromofluorobenzene	25.0	18.5	74	73 - 120	
Toluene-d8	25.0	21.3	85	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	231560	17.6	353972	17.6	
1,4-Difluorobenzene	544451	10.28	679450	10.28	
Chlorobenzene-d5	470268	14.21	630441	14.21	

* Values outside of QC limits

MW 7/27/10

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

06 MW1D

Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0727-04	File ID:	P6675.D
Sampled:	05/12/10 14:25	Prepared:	05/20/10 17:07	Analyzed:	05/20/10 22:41
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1656	Sequence:	T002177	Calibration:	R10E100
Instrument:	HP5973P				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	15	
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	3.5	
75-34-3	1,1-Dichloroethane	1	4.3	
75-35-4	1,1-Dichloroethene	1	30	
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	4.4	
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0 UJ	~~U~~
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	4.4	
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

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Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

06 MW1D

Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0727-04	File ID:	P6675.D
Sampled:	05/12/10 14:25	Prepared:	05/20/10 17:07	Analyzed:	05/20/10 22:41
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1656	Sequence:	T002177	Calibration:	R10E100
Instrument:	HP5973P				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	18	
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	74	
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.2	93	66 - 137	
4-Bromofluorobenzene	25.0	23.2	93	73 - 120	
Toluene-d8	25.0	22.6	90	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	312728	17.6	409770	17.6	
1,4-Difluorobenzene	713489	10.27	856274	10.27	
Chlorobenzene-d5	619312	14.21	749951	14.21	

* Values outside of QC limits

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Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

TRIP BLANK 2

Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0727-05	File ID:	P6676.D
Sampled:	05/13/10 00:00	Prepared:	05/20/10 17:07	Analyzed:	05/20/10 23:54
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1656	Sequence:	T002177	Calibration:	R10E100 Instrument: HP5973P

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	2.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0 UJ	~~U~~
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

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Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

TRIP BLANK 2

Laboratory:	TestAmerica Buffalo			SDG:	RTE0678
Client:	AECOM - Bloomfield, NJ			Project:	Utility Manufacturing
Matrix:	Water	Laboratory ID:	RTE0727-05	File ID:	P6676.D
Sampled:	05/13/10 00:00	Prepared:	05/20/10 17:07	Analyzed:	05/20/10 23:54
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	10E1656	Sequence:	T002177	Calibration:	R10E100
Instrument:	HP5973P				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	0.97	J
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	22.9	92	66 - 137	
4-Bromofluorobenzene	25.0	23.2	93	73 - 120	
Toluene-d8	25.0	23.0	92	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	312373	17.6	409770	17.6	
1,4-Difluorobenzene	717353	10.28	856274	10.27	
Chlorobenzene-d5	614257	14.21	749951	14.21	

* Values outside of QC limits

MW 7/27/10

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
UTILITY MANUFACTURING, WESTBURY, NEW YORK

Client: AECOM Technical Services, Inc., Chestnut Ridge, New York
SDG: 200-8255
Laboratory: Test America, South Burlington, Vermont
Site: Utility Manufacturing, Westbury, New York
Date: December 14, 2011

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1*	TRIP BLANK	200-8255-1	Air
2	SS-1	200-8255-2	Air
3*	IAQ-1	200-8255-3	Air
4	SS-2	200-8255-4	Air
5*	IAQ-2	200-8255-5	Air
6*	AMBIENT	200-8255-6	Air

* - Analyzed for TO15- Low Level

A Data Usability Summary Review was performed on the analytical data for six air samples collected on November 17, 2011 by AECOM Technical Services, Inc. at the Utility Manufacturing Wonderking Site in New York. The samples were analyzed under "*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition January 1999, EPA/625/R-96/010B*", Compendium Method TO-15, "*Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)*".

The data have been evaluated according to the protocols and quality control (QC) requirements of the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Air Samples - Volatile Organic Analysis of Ambient Air in Canister and the reviewer's professional judgment.

Organics

The following items/criteria were reviewed for this report:

- Data Completeness
- Cover letter, Narrative, and Data Reporting Forms
- Canister Certification Blanks
- Canister Certification Pressures Differences
- Chains-of-Custody and Traffic Reports
- Holding Times
- Laboratory Control Samples
- Surrogate Spike Recoveries
- GC/MS Tuning

- Method Blank
- Initial Calibration
- Continuing Calibration
- Compound Quantitation
- Internal Standard (IS) Area Performance
- Field Duplicate Sample Precision

Overall Evaluation of Data and Potential Usability Issues

There were no rejections of data. Overall the data is acceptable for the intended purposes. Data were qualified for the following deficiencies.

- 1,1,2,2-Tetrachloroethane was qualified as estimated in two samples due to a low LCS percent recovery.
- Several compounds were qualified as non-detect in several samples due to trip blank contamination.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Cover letter, Narrative, and Data Reporting Forms

- All criteria were met

Canister Certification Blanks

- The batch blank checks were non-detect or < RL.

Canister Certification Pressures Differences

- All criteria were met.

Chains-of-Custody and Traffic Reports

- All criteria were met

Holding Times

- All samples were analyzed within 30 days for air samples.

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries except the following.

LCS ID	Compound	%R	Qualifier	Affected Samples
200-29996/3	1,1,2,2-Tetrachloroethane	64%	J/UJ	1, 5

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

GC/MS Tuning

- All criteria were met.

Method Blank

- The method blanks were free of contamination.

Field and Trip Blanks

- The following table lists field QC samples with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U).

Blank ID	Compound	Conc. ppb(v/v)	Action Level ppb(v/v)	Qualifier	Affected Samples
TRIP BLANK	Cyclohexane	0.14	0.70	U	3-6
	n-Heptane	0.045	0.225	U	3, 6
	Toluene	0.57	2.85	U	3-6
	m-Xylene & p-Xylene	0.076	0.38	U	6
	Xylenes, total	0.10	0.50	U	6

Initial Calibration

- The initial calibration exhibited acceptable %RSD and mean RRF values.

Continuing Calibration

- The continuing calibrations exhibited acceptable %D and RRF values.

Compound Quantitation

- All criteria were met.

Sensitivity/Reporting Limits

- NYSDOH (2006) has established matrices for the evaluation of indoor air data. For the data to be fully usable, reporting limits for the three Matrix 1 compounds (vinyl chloride, carbon tetrachloride, and trichloroethene) must be 0.25 ug/m^3 or lower in indoor air samples. The four Matrix 2 compounds (tetrachloroethene, cis-1,2-dichloroethene, 1,1,1-trichloroethane and 1,1-dichloroethene) must be 3 ug/m^3 or lower in indoor air samples. The laboratory met these reporting limits in this data package.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

- Field duplicate samples were not analyzed.

Package Summary:

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 12/15/11

Nancy Weaver
Senior Chemist

Data Qualifiers

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: TRIP BLANK

Lab Sample ID: 200-8255-1
Client Matrix: Air

Date Sampled: 11/17/2011 0000
Date Received: 11/23/2011 1115

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analysis Method:	TO15 LL	Analysis Batch:	200-29996	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeqd005.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	11/30/2011 1354			Final Weight/Volume:	500 mL
Prep Date:	11/30/2011 1354			Injection Volume:	500 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.040	U	0.040
1,2-Dichlorotetrafluoroethane	0.040	U	0.040
Vinyl chloride	0.080	U	0.080
1,3-Butadiene	0.080	U	0.080
Bromomethane	0.080	U	0.080
Chloroethane	0.080	U	0.080
Bromoethene(Vinyl Bromide)	0.080	U	0.080
Trichlorofluoromethane	0.040	U	0.040
1,1-Dichloroethene	0.040	U	0.040
3-Chloropropene	0.080	U	0.080
Methylene Chloride	0.40	U	0.40
Methyl tert-butyl ether	0.040	U	0.040
trans-1,2-Dichloroethene	0.040	U	0.040
n-Hexane	0.080	U	0.080
1,1-Dichloroethane	0.040	U	0.040
cis-1,2-Dichloroethene	0.040	U	0.040
Chloroform	0.040	U	0.040
1,1,1-Trichloroethane	0.040	U	0.040
Cyclohexane	0.14		0.040
Carbon tetrachloride	0.040	U	0.040
2,2,4-Trimethylpentane	0.040	U	0.040
Benzene	0.040	U	0.040
1,2-Dichloroethane	0.080	U	0.080
n-Heptane	0.045		0.040
Trichloroethene	0.040	U	0.040
1,2-Dichloropropane	0.080	U	0.080
Bromodichloromethane	0.040	U	0.040
cis-1,3-Dichloropropene	0.040	U	0.040
Toluene	0.57		0.040
trans-1,3-Dichloropropene	0.040	U	0.040
1,1,2-Trichloroethane	0.040	U	0.040
Tetrachloroethene	0.040	U	0.040
Dibromochloromethane	0.040	U	0.040
1,2-Dibromoethane	0.040	U	0.040
Ethylbenzene	0.040	U	0.040
o-Xylene	0.040	U	0.040
Bromoform	0.040	U	0.040
1,1,2,2-Tetrachloroethane	0.040	UJ U	0.040
4-Ethyltoluene	0.040	U	0.040
1,3,5-Trimethylbenzene	0.080	U	0.080
1,2-Dichloroethene, Total	0.040	U	0.040
m-Xylene & p-Xylene	0.076		0.040
Xylenes, Total	0.10		0.040

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	0.20	U	0.20

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 200-8255-1
Client Matrix: Air

Date Sampled: 11/17/2011 0000
Date Received: 11/23/2011 1115

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analysis Method:	TO15 LL	Analysis Batch:	200-29996	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeqd005.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	11/30/2011 1354			Final Weight/Volume:	500 mL
Prep Date:	11/30/2011 1354			Injection Volume:	500 mL

Analyte	Result (ug/m3)	Qualifier	RL
1,2-Dichlorotetrafluoroethane	0.28	U	0.28
Vinyl chloride	0.20	U	0.20
1,3-Butadiene	0.18	U	0.18
Bromomethane	0.31	U	0.31
Chloroethane	0.21	U	0.21
Bromoethene(Vinyl Bromide)	0.35	U	0.35
Trichlorofluoromethane	0.22	U	0.22
1,1-Dichloroethene	0.16	U	0.16
3-Chloropropene	0.25	U	0.25
Methylene Chloride	1.4	U	1.4
Methyl tert-butyl ether	0.14	U	0.14
trans-1,2-Dichloroethene	0.16	U	0.16
n-Hexane	0.28	U	0.28
1,1-Dichloroethane	0.16	U	0.16
cis-1,2-Dichloroethene	0.16	U	0.16
Chloroform	0.20	U	0.20
1,1,1-Trichloroethane	0.22	U	0.22
Cyclohexane	0.50		0.14
Carbon tetrachloride	0.25	U	0.25
2,2,4-Trimethylpentane	0.19	U	0.19
Benzene	0.13	U	0.13
1,2-Dichloroethane	0.32	U	0.32
n-Heptane	0.19		0.16
Trichloroethene	0.21	U	0.21
1,2-Dichloropropane	0.37	U	0.37
Bromodichloromethane	0.27	U	0.27
cis-1,3-Dichloropropene	0.18	U	0.18
Toluene	2.2		0.15
trans-1,3-Dichloropropene	0.18	U	0.18
1,1,2-Trichloroethane	0.22	U	0.22
Tetrachloroethene	0.27	U	0.27
Dibromochloromethane	0.34	U	0.34
1,2-Dibromoethane	0.31	U	0.31
Ethylbenzene	0.17	U	0.17
o-Xylene	0.17	U	0.17
Bromoform	0.41	U	0.41
1,1,2,2-Tetrachloroethane	0.27	UJ	0.27
4-Ethyltoluene	0.20	U	0.20
1,3,5-Trimethylbenzene	0.39	U	0.39
1,2-Dichloroethene, Total	0.16	U	0.16
m-Xylene & p-Xylene	0.33		0.17
Xylenes, Total	0.45		0.17

Analytical Data

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: SS-1

Lab Sample ID: 200-8255-2
Client Matrix: Air

Date Sampled: 11/17/2011 0857
Date Received: 11/23/2011 1115

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-29914	Instrument ID:	B.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	bkiq006.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	12/01/2011 1342			Final Weight/Volume:	200 mL
Prep Date:	12/01/2011 1342			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.57		0.50
1,2-Dichlorotetrafluoroethane	0.20	U	0.20
Vinyl chloride	0.20	U	0.20
1,3-Butadiene	0.20	U	0.20
Bromomethane	0.20	U	0.20
Chloroethane	0.50	U	0.50
Bromoethene(Vinyl Bromide)	0.20	U	0.20
Trichlorofluoromethane	0.32		0.20
1,1-Dichloroethene	0.20	U	0.20
3-Chloropropene	0.50	U	0.50
Methylene Chloride	0.50	U	0.50
Methyl tert-butyl ether	0.20	U	0.20
trans-1,2-Dichloroethene	0.40		0.20
n-Hexane	0.75		0.20
1,1-Dichloroethane	0.20	U	0.20
cis-1,2-Dichloroethene	0.20		0.20
1,2-Dichloroethene, Total	0.61		0.20
Chloroform	0.20	U	0.20
1,1,1-Trichloroethane	1.0		0.20
Cyclohexane	0.20	U	0.20
Carbon tetrachloride	0.20	U	0.20
2,2,4-Trimethylpentane	0.20		0.20
Benzene	0.62		0.20
1,2-Dichloroethane	0.20	U	0.20
n-Heptane	0.49		0.20
Trichloroethene	2.5		0.20
1,2-Dichloropropane	0.20	U	0.20
Bromodichloromethane	0.20	U	0.20
cis-1,3-Dichloropropene	0.20	U	0.20
Toluene	3.8		0.20
trans-1,3-Dichloropropene	0.20	U	0.20
1,1,2-Trichloroethane	0.20	U	0.20
Tetrachloroethene	7.7		0.20
Dibromochloromethane	0.20	U	0.20
1,2-Dibromoethane	0.20	U	0.20
Ethylbenzene	0.47		0.20
m,p-Xylene	1.1		0.50
Xylene, o-	0.21		0.20
Xylene (total)	1.3		0.20
Bromoform	0.20	U	0.20
1,1,2,2-Tetrachloroethane	0.20	U	0.20
4-Ethyltoluene	0.20	U	0.20
1,3,5-Trimethylbenzene	0.20	U	0.20

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	2.8		2.5

Analytical Data

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: SS-1

Lab Sample ID: 200-8255-2
Client Matrix: Air

Date Sampled: 11/17/2011 0857
Date Received: 11/23/2011 1115

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-29914	Instrument ID:	B.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	bkiq006.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	12/01/2011 1342			Final Weight/Volume:	200 mL
Prep Date:	12/01/2011 1342			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL
1,2-Dichlorotetrafluoroethane	1.4	U	1.4
Vinyl chloride	0.51	U	0.51
1,3-Butadiene	0.44	U	0.44
Bromomethane	0.78	U	0.78
Chloroethane	1.3	U	1.3
Bromoethene(Vinyl Bromide)	0.87	U	0.87
Trichlorofluoromethane	1.8		1.1
1,1-Dichloroethene	0.79	U	0.79
3-Chloropropene	1.6	U	1.6
Methylene Chloride	1.7	U	1.7
Methyl tert-butyl ether	0.72	U	0.72
trans-1,2-Dichloroethene	1.6		0.79
n-Hexane	2.7		0.70
1,1-Dichloroethane	0.81	U	0.81
cis-1,2-Dichloroethene	0.81		0.79
1,2-Dichloroethene, Total	2.4		0.79
Chloroform	0.98	U	0.98
1,1,1-Trichloroethane	5.7		1.1
Cyclohexane	0.69	U	0.69
Carbon tetrachloride	1.3	U	1.3
2,2,4-Trimethylpentane	0.93		0.93
Benzene	2.0		0.64
1,2-Dichloroethane	0.81	U	0.81
n-Heptane	2.0		0.82
Trichloroethene	13		1.1
1,2-Dichloropropane	0.92	U	0.92
Bromodichloromethane	1.3	U	1.3
cis-1,3-Dichloropropene	0.91	U	0.91
Toluene	14		0.75
trans-1,3-Dichloropropene	0.91	U	0.91
1,1,2-Trichloroethane	1.1	U	1.1
Tetrachloroethene	52		1.4
Dibromochloromethane	1.7	U	1.7
1,2-Dibromoethane	1.5	U	1.5
Ethylbenzene	2.1		0.87
m,p-Xylene	4.8		2.2
Xylene, o-	0.89		0.87
Xylene (total)	5.6		0.87
Bromoform	2.1	U	2.1
1,1,2,2-Tetrachloroethane	1.4	U	1.4
4-Ethyltoluene	0.98	U	0.98
1,3,5-Trimethylbenzene	0.98	U	0.98

Analytical Data

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: IAQ-1

Lab Sample ID: 200-8255-3
Client Matrix: Air

Date Sampled: 11/17/2011 0858
Date Received: 11/23/2011 1115

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analysis Method:	TO15 LL	Analysis Batch:	200-29652	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeqc014.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	11/28/2011 2045			Final Weight/Volume:	500 mL
Prep Date:	11/28/2011 2045			Injection Volume:	500 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.51		0.040
1,2-Dichlorotetrafluoroethane	0.040	U	0.040
Vinyl chloride	0.080	U	0.080
1,3-Butadiene	0.080	U	0.080
Bromomethane	0.080	U	0.080
Chloroethane	0.080	U	0.080
Bromoethene(Vinyl Bromide)	0.080	U	0.080
Trichlorofluoromethane	0.25		0.040
1,1-Dichloroethene	0.040	U	0.040
3-Chloropropene	0.080	U	0.080
Methylene Chloride	0.40	U	0.40
Methyl tert-butyl ether	0.040	U	0.040
trans-1,2-Dichloroethene	0.040	U	0.040
n-Hexane	0.14		0.080
1,1-Dichloroethane	0.040	U	0.040
cis-1,2-Dichloroethene	0.040	U	0.040
Chloroform	0.040	U	0.040
1,1,1-Trichloroethane	0.090		0.040
Cyclohexane	0.12 u		0.040
Carbon tetrachloride	0.075		0.040
2,2,4-Trimethylpentane	0.040	U	0.040
Benzene	0.19		0.040
1,2-Dichloroethane	0.080	U	0.080
n-Heptane	0.16 u		0.040
Trichloroethene	0.040	U	0.040
1,2-Dichloropropane	0.080	U	0.080
Bromodichloromethane	0.040	U	0.040
cis-1,3-Dichloropropene	0.040	U	0.040
Toluene	0.56 u		0.040
trans-1,3-Dichloropropene	0.040	U	0.040
1,1,2-Trichloroethane	0.040	U	0.040
Tetrachloroethene	0.078		0.040
Dibromochloromethane	0.040	U	0.040
1,2-Dibromoethane	0.040	U	0.040
Ethylbenzene	0.38		0.040
o-Xylene	0.16		0.040
Bromoform	0.040	U	0.040
1,1,2,2-Tetrachloroethane	0.040	U	0.040
4-Ethyltoluene	0.040	U	0.040
1,3,5-Trimethylbenzene	0.080	U	0.080
1,2-Dichloroethene, Total	0.040	U	0.040
m-Xylene & p-Xylene	0.91		0.040
Xylenes, Total	1.1		0.040

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	2.5		0.20

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: IAQ-1

Lab Sample ID: 200-8255-3
Client Matrix: Air

Date Sampled: 11/17/2011 0858
Date Received: 11/23/2011 1115

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analysis Method:	TO15 LL	Analysis Batch:	200-29652	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeqc014.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	11/28/2011 2045			Final Weight/Volume:	500 mL
Prep Date:	11/28/2011 2045			Injection Volume:	500 mL

Analyte	Result (ug/m3)	Qualifier	RL
1,2-Dichlorotetrafluoroethane	0.28	U	0.28
Vinyl chloride	0.20	U	0.20
1,3-Butadiene	0.18	U	0.18
Bromomethane	0.31	U	0.31
Chloroethane	0.21	U	0.21
Bromoethene(Vinyl Bromide)	0.35	U	0.35
Trichlorofluoromethane	1.4		0.22
1,1-Dichloroethene	0.16	U	0.16
3-Chloropropene	0.25	U	0.25
Methylene Chloride	1.4	U	1.4
Methyl tert-butyl ether	0.14	U	0.14
trans-1,2-Dichloroethene	0.16	U	0.16
n-Hexane	0.50		0.28
1,1-Dichloroethane	0.16	U	0.16
cis-1,2-Dichloroethene	0.16	U	0.16
Chloroform	0.20	U	0.20
1,1,1-Trichloroethane	0.49		0.22
Cyclohexane	0.43 u		0.14
Carbon tetrachloride	0.47		0.25
2,2,4-Trimethylpentane	0.19	U	0.19
Benzene	0.60		0.13
1,2-Dichloroethane	0.32	U	0.32
n-Heptane	0.68 u		0.16
Trichloroethene	0.21	U	0.21
1,2-Dichloropropane	0.37	U	0.37
Bromodichloromethane	0.27	U	0.27
cis-1,3-Dichloropropene	0.18	U	0.18
Toluene	2.1 u		0.15
trans-1,3-Dichloropropene	0.18	U	0.18
1,1,2-Trichloroethane	0.22	U	0.22
Tetrachloroethene	0.53		0.27
Dibromochloromethane	0.34	U	0.34
1,2-Dibromoethane	0.31	U	0.31
Ethylbenzene	1.6		0.17
o-Xylene	0.71		0.17
Bromoform	0.41	U	0.41
1,1,2,2-Tetrachloroethane	0.27	U	0.27
4-Ethyltoluene	0.20	U	0.20
1,3,5-Trimethylbenzene	0.39	U	0.39
1,2-Dichloroethene, Total	0.16	U	0.16
m-Xylene & p-Xylene	3.9		0.17
Xylenes, Total	4.7		0.17

Analytical Data

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: SS-2

Lab Sample ID: 200-8255-4
Client Matrix: Air

Date Sampled: 11/17/2011 0904
Date Received: 11/23/2011 1115

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-29914	Instrument ID:	B.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	bkiq007.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	12/01/2011 1435			Final Weight/Volume:	200 mL
Prep Date:	12/01/2011 1435			Injection Volume:	200 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.51		0.50
1,2-Dichlorotetrafluoroethane	0.20	U	0.20
Vinyl chloride	0.20	U	0.20
1,3-Butadiene	0.20	U	0.20
Bromomethane	0.20	U	0.20
Chloroethane	0.50	U	0.50
Bromoethene(Vinyl Bromide)	0.20	U	0.20
Trichlorofluoromethane	0.26		0.20
1,1-Dichloroethene	0.20	U	0.20
3-Chloropropene	0.50	U	0.50
Methylene Chloride	0.50	U	0.50
Methyl tert-butyl ether	0.20	U	0.20
trans-1,2-Dichloroethene	0.20	U	0.20
n-Hexane	0.26		0.20
1,1-Dichloroethane	0.20	U	0.20
cis-1,2-Dichloroethene	0.20	U	0.20
1,2-Dichloroethene, Total	0.20	U	0.20
Chloroform	0.20	U	0.20
1,1,1-Trichloroethane	2.9		0.20
Cyclohexane	0.31 U		0.20
Carbon tetrachloride	0.20	U	0.20
2,2,4-Trimethylpentane	0.20	U	0.20
Benzene	0.20		0.20
1,2-Dichloroethane	0.20	U	0.20
n-Heptane	0.27		0.20
Trichloroethene	0.72		0.20
1,2-Dichloropropane	0.20	U	0.20
Bromodichloromethane	0.20	U	0.20
cis-1,3-Dichloropropene	0.20	U	0.20
Toluene	2.1 U		0.20
trans-1,3-Dichloropropene	0.20	U	0.20
1,1,2-Trichloroethane	0.20	U	0.20
Tetrachloroethene	18		0.20
Dibromochloromethane	0.20	U	0.20
1,2-Dibromoethane	0.20	U	0.20
Ethylbenzene	0.58		0.20
m,p-Xylene	2.4		0.50
Xylene, o-	0.64		0.20
Xylene (total)	3.0		0.20
Bromoform	0.20	U	0.20
1,1,2,2-Tetrachloroethane	0.20	U	0.20
4-Ethyltoluene	0.20	U	0.20
1,3,5-Trimethylbenzene	0.20	U	0.20

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	2.5		2.5

Analytical Data

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: SS-2

Lab Sample ID: 200-8255-4
Client Matrix: Air

Date Sampled: 11/17/2011 0904
Date Received: 11/23/2011 1115

TO-15 Volatile Organic Compounds in Ambient Air

Analysis Method:	TO-15	Analysis Batch:	200-29914	Instrument ID:	B.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	bkiq007.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Analysis Date:	12/01/2011 1435			Final Weight/Volume:	200 mL
Prep Date:	12/01/2011 1435			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL
1,2-Dichlorotetrafluoroethane	1.4	U	1.4
Vinyl chloride	0.51	U	0.51
1,3-Butadiene	0.44	U	0.44
Bromomethane	0.78	U	0.78
Chloroethane	1.3	U	1.3
Bromoethene(Vinyl Bromide)	0.87	U	0.87
Trichlorofluoromethane	1.5		1.1
1,1-Dichloroethene	0.79	U	0.79
3-Chloropropene	1.6	U	1.6
Methylene Chloride	1.7	U	1.7
Methyl tert-butyl ether	0.72	U	0.72
trans-1,2-Dichloroethene	0.79	U	0.79
n-Hexane	0.92		0.70
1,1-Dichloroethane	0.81	U	0.81
cis-1,2-Dichloroethene	0.79	U	0.79
1,2-Dichloroethene, Total	0.79	U	0.79
Chloroform	0.98	U	0.98
1,1,1-Trichloroethane	16		1.1
Cyclohexane	1.1 u		0.69
Carbon tetrachloride	1.3	U	1.3
2,2,4-Trimethylpentane	0.93	U	0.93
Benzene	0.63		0.64
1,2-Dichloroethane	0.81	U	0.81
n-Heptane	1.1		0.82
Trichloroethene	3.9		1.1
1,2-Dichloropropane	0.92	U	0.92
Bromodichloromethane	1.3	U	1.3
cis-1,3-Dichloropropene	0.91	U	0.91
Toluene	8.0 u		0.75
trans-1,3-Dichloropropene	0.91	U	0.91
1,1,2-Trichloroethane	1.1	U	1.1
Tetrachloroethene	120		1.4
Dibromochloromethane	1.7	U	1.7
1,2-Dibromoethane	1.5	U	1.5
Ethylbenzene	2.5		0.87
m,p-Xylene	10		2.2
Xylene, o-	2.8		0.87
Xylene (total)	13		0.87
Bromoform	2.1	U	2.1
1,1,2,2-Tetrachloroethane	1.4	U	1.4
4-Ethyltoluene	0.98	U	0.98
1,3,5-Trimethylbenzene	0.98	U	0.98

Analytical Data

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: IAQ-2

Lab Sample ID: 200-8255-5
Client Matrix: Air

Date Sampled: 11/17/2011 0905
Date Received: 11/23/2011 1115

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analysis Method:	TO15 LL	Analysis Batch:	200-29996	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeqd006.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	11/30/2011 1449			Final Weight/Volume:	500 mL
Prep Date:	11/30/2011 1449			Injection Volume:	500 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.45		0.040
1,2-Dichlorotetrafluoroethane	0.040	U	0.040
Vinyl chloride	0.080	U	0.080
1,3-Butadiene	0.080	U	0.080
Bromomethane	0.080	U	0.080
Chloroethane	0.080	U	0.080
Bromoethene(Vinyl Bromide)	0.080	U	0.080
Trichlorofluoromethane	0.21		0.040
1,1-Dichloroethene	0.040	U	0.040
3-Chloropropene	0.080	U	0.080
Methylene Chloride	0.40	U	0.40
Methyl tert-butyl ether	0.040	U	0.040
trans-1,2-Dichloroethene	0.040	U	0.040
n-Hexane	0.080	U	0.080
1,1-Dichloroethane	0.040	U	0.040
cis-1,2-Dichloroethene	0.040	U	0.040
Chloroform	0.040	U	0.040
1,1,1-Trichloroethane	0.040		0.040
Cyclohexane	0.089 U		0.040
Carbon tetrachloride	0.052		0.040
2,2,4-Trimethylpentane	0.040	U	0.040
Benzene	0.074		0.040
1,2-Dichloroethane	0.080	U	0.080
n-Heptane	0.040	U	0.040
Trichloroethene	0.040	U	0.040
1,2-Dichloropropane	0.080	U	0.080
Bromodichloromethane	0.040	U	0.040
cis-1,3-Dichloropropene	0.040	U	0.040
Toluene	0.046 U		0.040
trans-1,3-Dichloropropene	0.040	U	0.040
1,1,2-Trichloroethane	0.040	U	0.040
Tetrachloroethene	0.040	U	0.040
Dibromochloromethane	0.040	U	0.040
1,2-Dibromoethane	0.040	U	0.040
Ethylbenzene	0.040	U	0.040
o-Xylene	0.040	U	0.040
Bromoform	0.040	U	0.040
1,1,2,2-Tetrachloroethane	0.040	UJ	0.040
4-Ethyltoluene	0.040	U	0.040
1,3,5-Trimethylbenzene	0.080	U	0.080
1,2-Dichloroethene, Total	0.040	U	0.040
m-Xylene & p-Xylene	0.040	U	0.040
Xylenes, Total	0.040	U	0.040

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	2.2		0.20

Analytical Data

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: IAQ-2

Lab Sample ID: 200-8255-5
Client Matrix: Air

Date Sampled: 11/17/2011 0905
Date Received: 11/23/2011 1115

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analysis Method:	TO15 LL	Analysis Batch:	200-29996	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeqd006.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	11/30/2011 1449			Final Weight/Volume:	500 mL
Prep Date:	11/30/2011 1449			Injection Volume:	500 mL

Analyte	Result (ug/m3)	Qualifier	RL
1,2-Dichlorotetrafluoroethane	0.28	U	0.28
Vinyl chloride	0.20	U	0.20
1,3-Butadiene	0.18	U	0.18
Bromomethane	0.31	U	0.31
Chloroethane	0.21	U	0.21
Bromoethene(Vinyl Bromide)	0.35	U	0.35
Trichlorofluoromethane	1.2		0.22
1,1-Dichloroethene	0.16	U	0.16
3-Chloropropene	0.25	U	0.25
Methylene Chloride	1.4	U	1.4
Methyl tert-butyl ether	0.14	U	0.14
trans-1,2-Dichloroethene	0.16	U	0.16
n-Hexane	0.28	U	0.28
1,1-Dichloroethane	0.16	U	0.16
cis-1,2-Dichloroethene	0.16	U	0.16
Chloroform	0.20	U	0.20
1,1,1-Trichloroethane	0.22		0.22
Cyclohexane	0.31	U	0.14
Carbon tetrachloride	0.33		0.25
2,2,4-Trimethylpentane	0.19	U	0.19
Benzene	0.24		0.13
1,2-Dichloroethane	0.32	U	0.32
n-Heptane	0.16	U	0.16
Trichloroethene	0.21	U	0.21
1,2-Dichloropropane	0.37	U	0.37
Bromodichloromethane	0.27	U	0.27
cis-1,3-Dichloropropene	0.18	U	0.18
Toluene	0.17	U	0.15
trans-1,3-Dichloropropene	0.18	U	0.18
1,1,2-Trichloroethane	0.22	U	0.22
Tetrachloroethene	0.27	U	0.27
Dibromochloromethane	0.34	U	0.34
1,2-Dibromoethane	0.31	U	0.31
Ethylbenzene	0.17	U	0.17
o-Xylene	0.17	U	0.17
Bromoform	0.41	U	0.41
1,1,2,2-Tetrachloroethane	0.27	UJ	0.27
4-Ethyltoluene	0.20	U	0.20
1,3,5-Trimethylbenzene	0.39	U	0.39
1,2-Dichloroethene, Total	0.16	U	0.16
m-Xylene & p-Xylene	0.17	U	0.17
Xylenes, Total	0.17	U	0.17

Analytical Data

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: **AMBIENT**

Lab Sample ID: 200-8255-6
Client Matrix: Air

Date Sampled: 11/17/2011 0910
Date Received: 11/23/2011 1115

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analysis Method:	TO15 LL	Analysis Batch:	200-29652	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeqc016.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	11/28/2011 2232			Final Weight/Volume:	500 mL
Prep Date:	11/28/2011 2232			Injection Volume:	500 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.44		0.040
1,2-Dichlorotetrafluoroethane	0.040	U	0.040
Vinyl chloride	0.080	U	0.080
1,3-Butadiene	0.080	U	0.080
Bromomethane	0.080	U	0.080
Chloroethane	0.080	U	0.080
Bromoethene(Vinyl Bromide)	0.080	U	0.080
Trichlorofluoromethane	0.20		0.040
1,1-Dichloroethene	0.040	U	0.040
3-Chloropropene	0.080	U	0.080
Methylene Chloride	0.40	U	0.40
Methyl tert-butyl ether	0.040	U	0.040
trans-1,2-Dichloroethene	0.040	U	0.040
n-Hexane	0.13		0.080
1,1-Dichloroethane	0.040	U	0.040
cis-1,2-Dichloroethene	0.040	U	0.040
Chloroform	0.040	U	0.040
1,1,1-Trichloroethane	0.040	U	0.040
Cyclohexane	0.14 u		0.040
Carbon tetrachloride	0.073		0.040
2,2,4-Trimethylpentane	0.056		0.040
Benzene	0.15		0.040
1,2-Dichloroethane	0.080	U	0.080
n-Heptane	0.083 u		0.040
Trichloroethene	0.040	U	0.040
1,2-Dichloropropane	0.080	U	0.080
Bromodichloromethane	0.040	U	0.040
cis-1,3-Dichloropropene	0.040	U	0.040
Toluene	0.57 u		0.040
trans-1,3-Dichloropropene	0.040	U	0.040
1,1,2-Trichloroethane	0.040	U	0.040
Tetrachloroethene	0.041		0.040
Dibromochloromethane	0.040	U	0.040
1,2-Dibromoethane	0.040	U	0.040
Ethylbenzene	0.048		0.040
o-Xylene	0.047		0.040
Bromoform	0.040	U	0.040
1,1,2,2-Tetrachloroethane	0.040	U	0.040
4-Ethyltoluene	0.040	U	0.040
1,3,5-Trimethylbenzene	0.080	U	0.080
1,2-Dichloroethene, Total	0.040	U	0.040
m-Xylene & p-Xylene	0.15 u		0.040
Xylenes, Total	0.19 u		0.040

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	2.2		0.20

Client: AECOM, Inc.

Job Number: 200-8255-1
Sdg Number: 200-8255

Client Sample ID: **AMBIENT**

Lab Sample ID: 200-8255-6
Client Matrix: Air

Date Sampled: 11/17/2011 0910
Date Received: 11/23/2011 1115

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analysis Method:	TO15 LL	Analysis Batch:	200-29652	Instrument ID:	E.i
Prep Method:	Summa Canister	Prep Batch:	N/A	Lab File ID:	eeqc016.d
Dilution:	4.0			Initial Weight/Volume:	125 mL
Analysis Date:	11/28/2011 2232			Final Weight/Volume:	500 mL
Prep Date:	11/28/2011 2232			Injection Volume:	500 mL

Analyte	Result (ug/m3)	Qualifier	RL
1,2-Dichlorotetrafluoroethane	0.28	U	0.28
Vinyl chloride	0.20	U	0.20
1,3-Butadiene	0.18	U	0.18
Bromomethane	0.31	U	0.31
Chloroethane	0.21	U	0.21
Bromoethene(Vinyl Bromide)	0.35	U	0.35
Trichlorofluoromethane	1.1		0.22
1,1-Dichloroethene	0.16	U	0.16
3-Chloropropene	0.25	U	0.25
Methylene Chloride	1.4	U	1.4
Methyl tert-butyl ether	0.14	U	0.14
trans-1,2-Dichloroethene	0.16	U	0.16
n-Hexane	0.46		0.28
1,1-Dichloroethane	0.16	U	0.16
cis-1,2-Dichloroethene	0.16	U	0.16
Chloroform	0.20	U	0.20
1,1,1-Trichloroethane	0.22	U	0.22
Cyclohexane	0.47 U		0.14
Carbon tetrachloride	0.46		0.25
2,2,4-Trimethylpentane	0.26		0.19
Benzene	0.49		0.13
1,2-Dichloroethane	0.32	U	0.32
n-Heptane	0.34 U		0.16
Trichloroethene	0.21	U	0.21
1,2-Dichloropropane	0.37	U	0.37
Bromodichloromethane	0.27	U	0.27
cis-1,3-Dichloropropene	0.18	U	0.18
Toluene	2.2 U		0.15
trans-1,3-Dichloropropene	0.18	U	0.18
1,1,2-Trichloroethane	0.22	U	0.22
Tetrachloroethene	0.28		0.27
Dibromochloromethane	0.34	U	0.34
1,2-Dibromoethane	0.31	U	0.31
Ethylbenzene	0.21		0.17
o-Xylene	0.20		0.17
Bromoform	0.41	U	0.41
1,1,2,2-Tetrachloroethane	0.27	U	0.27
4-Ethyltoluene	0.20	U	0.20
1,3,5-Trimethylbenzene	0.39	U	0.39
1,2-Dichloroethene, Total	0.16	U	0.16
m-Xylene & p-Xylene	0.63 U		0.17
Xylenes, Total	0.84 U		0.17

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
UTILITY MANUFACTURING, WESTBURY, NEW YORK

Client: AECOM Technical Services, Inc., Chestnut Ridge, New York
SDG: K1470
Laboratory: Spectrum Analytical, Inc., Warwick, Rhode Island
Site: Utility Manufacturing, Westbury, New York
Date: December 12, 2011

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	MW-13S	K1470-01	Water
1MS	MW-13SMS	K1470-01MS	Water
1MSD	MW-13SMSD	K1470-01MSD	Water
2	MW-63S	K1470-02	Water
3	MW-13D	K1470-03	Water
4	MW-12S	K1470-04	Water
5	MW-12D	K1470-05	Water
6	MW-1S	K1470-06	Water
7	MW-1D	K1470-07	Water
8	TRIP BLANK	K1470-08	Water

A Data Usability Summary Review was performed on the analytical data for seven water samples and one aqueous trip blank sample collected on August 9-10, 2011 by AECOM at the Utility Manufacturing site in Westbury, New York. The samples were analyzed under Environmental Protection Agency (USEPA) *"Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions"*.

Specific method references are as follows:

Analysis	*Method References*
VOCs	USEPA SW-846 Method 8260B

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-24, Revision 2, August 2008: Validating Volatile Organic Compounds by SW-846 Method 8260B;
- and the reviewer's professional judgment.

Organics

The following items/criteria were reviewed for this report:

- Data Completeness
- Holding times and sample preservation
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Duplicate (LCS/LCSD) recoveries
- Method blank and field blank contamination
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning
- Initial and continuing calibration summaries
- Compound Quantitation
- Internal standard area and retention time summary forms
- Field Duplicate sample precision

Overall Usability Issues:

There were several rejections of data. This data cannot be used in the decision-making process for this project.

- Acetone was rejected in all samples due to a low initial calibration RRF value.

Overall the remaining data is acceptable for the intended purposes as qualified for the following deficiencies.

- 2-Butanone, 1,2-dibromo-3-chloropropane, and methyl acetate were qualified as estimated in all samples due to high initial calibration %RSD values.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOCs)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate recoveries.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD sample exhibited acceptable %R and RPD values.

Laboratory Control Samples

- The LCS samples exhibited acceptable recoveries.

Method Blank

- The method blanks were free of contamination.

Field Blank

- The following table lists field QC samples with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations of acetone, 2-butanone and methylene chloride (common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U). For all other compounds, an action level of five times (5x) the highest associated blank concentration is used.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
TRIP BLANK	None - ND	-	-	-	-

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The following table presents compounds that exceeded 20 percent relative standard deviation (%RSD) and/or average RRF values <0.05 in the initial calibration (ICAL). A low RRF indicates poor indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %RSD may indicate a potential high or low bias. All results for

these compounds in affected samples are considered estimated and qualified (J/UJ).

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
08/15/11	Acetone	36.4%/0.040 RRF	J/R	All samples
	2-Butanone	22.0%	J/UJ	
	1,2-Dibromo-3-chloropropane	28.3%	J/UJ	
	Methyl acetate	22.4%	J/UJ	

Continuing Calibration

- The following table presents compounds that exceeded 20 percent deviation (%D) and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
08/16/11	Acetone	33.3%	None	See ICAL

Compound Quantitation

- All criteria were met.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision is acceptable.

VOC				
Compound	MW-13S ug/L	MW-63S ug/L	RPD	Qualifier
1,1-Dichloroethene	0.82	0.74	10%	None
1,1-Dichloroethane	4.2	3.6	15%	None
cis-1,2-Dichloroethene	6.1	5.3	14%	None
1,1,1-Trichloroethane	2.1	1.8	15%	None
Trichloroethene	16	14	13%	None
Tetrachloroethene	3.5	3.3	6%	None

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Very truly yours,
Environmental Data Services, Inc.

Nancy Weaver 12/13/11

Nancy Weaver Date
Senior Chemist

Data Qualifiers

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

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1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-01B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2328.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	0.82	J	
67-64-1	Acetone	5.0	~~U~~	R
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-butyl ether	5.0	U	
75-34-3	1,1-Dichloroethane	4.2	J	
78-93-3	2-Butanone	5.0	~~U~~	UJ
156-59-2	cis-1,2-Dichloroethene	6.1		
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	2.1	J	
56-23-5	Carbon tetrachloride	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	
71-43-2	Benzene	5.0	U	
79-01-6	Trichloroethene	16		
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	3.5	J	
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
1330-20-7	m,p-Xylene	5.0	U	

NW 12/12/11

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-01B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2328.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
95-47-6	o-Xylene	5.0	U	
1330-20-7	Xylene (Total)	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
79-20-9	Methyl acetate	5.0	~~U~~	UJ
108-87-2	Methylcyclohexane	5.0	U	

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1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-63S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-02B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2329.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	0.74	J	
67-64-1	Acetone	5.0	~~U~~	R
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-butyl ether	5.0	U	
75-34-3	1,1-Dichloroethane	3.6	J	
78-93-3	2-Butanone	5.0	~~U~~	UJ
156-59-2	cis-1,2-Dichloroethene	5.3		
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	1.8	J	
56-23-5	Carbon tetrachloride	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	
71-43-2	Benzene	5.0	U	
79-01-6	Trichloroethene	14		
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	3.3	J	
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
1330-20-7	m,p-Xylene	5.0	U	

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1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
MW-63S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-02B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2329.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
95-47-6	o-Xylene	5.0	U	
1330-20-7	Xylene (Total)	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
79-20-9	Methyl acetate	5.0	~~U~~	UJ
108-87-2	Methylcyclohexane	5.0	U	

NW 12/12/11

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1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-03B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2330.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	5.6		
67-64-1	Acetone	5.0	~~U~~	R
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-butyl ether	5.0	U	
75-34-3	1,1-Dichloroethane	0.72	J	
78-93-3	2-Butanone	5.0	~~U~~	UJ
156-59-2	cis-1,2-Dichloroethene	8.5		
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	4.7	J	
56-23-5	Carbon tetrachloride	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	
71-43-2	Benzene	5.0	U	
79-01-6	Trichloroethene	88		
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	5.5		
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
1330-20-7	m,p-Xylene	5.0	U	

MW 12/12/11

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO. 3

MW-13D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-03B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2330.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
95-47-6	o-Xylene	5.0	U	
1330-20-7	Xylene (Total)	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
79-20-9	Methyl acetate	5.0	~~U~~	UJ
108-87-2	Methylcyclohexane	5.0	U	

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1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-04B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2331.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	5.0	U	
67-64-1	Acetone	5.0	Ø	R
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-butyl ether	5.0	U	
75-34-3	1,1-Dichloroethane	5.0	U	
78-93-3	2-Butanone	5.0	Ø	UJ
156-59-2	cis-1,2-Dichloroethene	2.2	J	
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	5.0	U	
56-23-5	Carbon tetrachloride	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	
71-43-2	Benzene	5.0	U	
79-01-6	Trichloroethene	1.9	J	
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	18		
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
1330-20-7	m,p-Xylene	5.0	U	

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1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-04B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2331.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
95-47-6	o-Xylene	5.0	U	
1330-20-7	Xylene (Total)	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
79-20-9	Methyl acetate	5.0	~~U~~	UJ
108-87-2	Methylcyclohexane	5.0	U	

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1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-05B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2332.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	1.5	J	
67-64-1	Acetone	5.0	~~U~~	R
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-butyl ether	5.0	U	
75-34-3	1,1-Dichloroethane	5.0	U	
78-93-3	2-Butanone	5.0	~~U~~	UJ
156-59-2	cis-1,2-Dichloroethene	5.0	U	
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	0.91	J	
56-23-5	Carbon tetrachloride	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	
71-43-2	Benzene	5.0	U	
79-01-6	Trichloroethene	1.4	J	
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	1.8	J	
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
1330-20-7	m,p-Xylene	5.0	U	

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1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-05B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2332.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
95-47-6	o-Xylene	5.0	U	
1330-20-7	Xylene (Total)	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
79-20-9	Methyl acetate	5.0	~~U~~	UJ
108-87-2	Methylcyclohexane	5.0	U	

NW 12/12/11

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO. 6

MW-1S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-06B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2333.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	5.0	U	
67-64-1	Acetone	5.0	~~U~~	R
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-butyl ether	5.0	U	
75-34-3	1,1-Dichloroethane	5.0	U	
78-93-3	2-Butanone	5.0	~~U~~	UJ
156-59-2	cis-1,2-Dichloroethene	20		
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	5.0	U	
56-23-5	Carbon tetrachloride	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	
71-43-2	Benzene	5.0	U	
79-01-6	Trichloroethene	2.2	J	
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	4.4	J	
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
1330-20-7	m,p-Xylene	5.0	U	

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1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-06B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2333.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
95-47-6	o-Xylene	5.0	U	
1330-20-7	Xylene (Total)	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
79-20-9	Methyl acetate	5.0	~~U~~	UJ
108-87-2	Methylcyclohexane	5.0	U	

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1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-07B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2334.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	4.3	J	
67-64-1	Acetone	5.0	~~U~~	R
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-butyl ether	5.0	U	
75-34-3	1,1-Dichloroethane	2.2	J	
78-93-3	2-Butanone	5.0	~~U~~	UJ
156-59-2	cis-1,2-Dichloroethene	5.7		
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	3.7	J	
56-23-5	Carbon tetrachloride	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	
71-43-2	Benzene	5.0	U	
79-01-6	Trichloroethene	65		
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	6.6		
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
1330-20-7	m,p-Xylene	5.0	U	

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1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-07B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2334.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
95-47-6	o-Xylene	5.0	U	
1330-20-7	Xylene (Total)	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
79-20-9	Methyl acetate	5.0	~~U~~	UJ
108-87-2	Methylcyclohexane	5.0	U	

8

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2335.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	5.0	U	
67-64-1	Acetone	5.0	~~U~~	R
75-15-0	Carbon disulfide	5.0	U	
75-09-2	Methylene chloride	5.0	U	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-butyl ether	5.0	U	
75-34-3	1,1-Dichloroethane	5.0	U	
78-93-3	2-Butanone	5.0	~~U~~	UJ
156-59-2	cis-1,2-Dichloroethene	5.0	U	
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	5.0	U	
56-23-5	Carbon tetrachloride	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	
71-43-2	Benzene	5.0	U	
79-01-6	Trichloroethene	5.0	U	
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	5.0	U	
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
1330-20-7	m,p-Xylene	5.0	U	

MW 12/12/11

8

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1470 Mod. Ref No.: SDG No.: SK1470

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1470-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2M2335.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/12/2011

% Moisture: not dec. Date Analyzed: 08/16/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q	
95-47-6	o-Xylene	5.0	U	
1330-20-7	Xylene (Total)	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
79-20-9	Methyl acetate	5.0	~~U~~	UJ
108-87-2	Methylcyclohexane	5.0	U	

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
UTILITY MANUFACTURING, WESTBURY, NEW YORK

Client: AECOM Technical Services, Inc., Chestnut Ridge, New York
SDG: K1905
Laboratory: Spectrum Analytical, Inc., Warwick, Rhode Island
Site: Utility Manufacturing, Westbury, New York
Date: December 12, 2011

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	MW-11S	K1905-01	Water
2	MW-11D	K1905-02	Water
3	TRIP BLANK	K1905-03	Water

A Data Usability Summary Review was performed on the analytical data for two water samples and one aqueous trip blank sample collected on October 3, 2011 by AECOM at the Utility Manufacturing site in Westbury, New York. The samples were analyzed under Environmental Protection Agency (USEPA) *"Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions"*.

Specific method references are as follows:

Analysis	*Method References*
VOCs	USEPA SW-846 Method 8260B

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-24, Revision 2, August 2008: Validating Volatile Organic Compounds by SW-846 Method 8260B;
- and the reviewer's professional judgment.

Organics

The following items/criteria were reviewed for this report:

- Data Completeness
- Holding times and sample preservation
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Duplicate (LCS/LCSD) recoveries

- Method blank and field blank contamination
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning
- Initial and continuing calibration summaries
- Compound Quantitation
- Internal standard area and retention time summary forms
- Field Duplicate sample precision

Overall Usability Issues:

There were several rejections of data. This data cannot be used in the decision-making process for this project.

- Acetone and 2-butanone were rejected in all samples due to low initial calibration RRF values.

Overall the remaining data is acceptable for the intended purposes as qualified for the following deficiencies.

- Chloroform, bromoform, and 1,2-dibromo-3-chloropropane were qualified as estimated in all samples due to high initial calibration %RSD values.
- Carbon disulfide and tetrachloroethene were qualified as estimated in all samples due to high initial calibration %RSD values.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOCs)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate recoveries.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- A MS/MSD sample was not analyzed.

Laboratory Control Samples

- The LCS samples exhibited acceptable recoveries.

Method Blank

- The method blanks were free of contamination.

Field Blank

- The following table lists field QC samples with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations of acetone, 2-butanone and methylene chloride (common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U). For all other compounds, an action level of five times (5x) the highest associated blank concentration is used.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
TRIP BLANK	None - ND	-	-	-	-

GC/MS Tuning

- All criteria were met.

Initial Calibration

- The following table presents compounds that exceeded 20 percent relative standard deviation (%RSD) and/or average RRF values <0.05 in the initial calibration (ICAL). A low RRF indicates poor indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %RSD may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

ICAL Date	Compound	%RSD/RRF	Qualifier	Affected Samples
10/06/11	Acetone	0.028 RRF	J/R	All samples
	2-Butanone	0.025 RRF	J/R	
	Chloroform	23.9%	J/UJ	
	Bromoform	27.4%	J/UJ	
	1,2-Dibromo-3-chloropropane	35.7%	J/UJ	

Continuing Calibration

- The following table presents compounds that exceeded 20 percent deviation (%D) and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
10/06/11	Acetone	0.027 RRF	None	See ICAL
	2-Butanone	0.024 RRF	None	See ICAL
	Carbon disulfide	20.4%	J/UJ	All samples
	Chloroform	23.7%	None	See ICAL
	Tetrachloroethene	20.3%	J/UJ	All samples

Compound Quantitation

- All criteria were met.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

- Field duplicate samples were not analyzed.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Very truly yours,
Environmental Data Services, Inc.

Nancy Weaver 12/13/11

Nancy Weaver Date
Senior Chemist

Data Qualifiers

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-11S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1905 Mod. Ref No.: SDG No.: SK1905

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1905-01B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I3182.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/04/2011

% Moisture: not dec. Date Analyzed: 10/06/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
75-71-8	Dichlorodifluoromethane	1.0	U	
74-87-3	Chloromethane	1.0	U	
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-69-4	Trichlorofluoromethane	1.0	U	
75-35-4	1,1-Dichloroethene	1.0	U	
67-64-1	Acetone	5.0	~~U~~	R
75-15-0	Carbon disulfide	1.0	~~U~~	UJ
75-09-2	Methylene chloride	1.0	U	
156-60-5	trans-1,2-Dichloroethene	1.0	U	
1634-04-4	Methyl tert-butyl ether	1.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	~~U~~	R
156-59-2	cis-1,2-Dichloroethene	1.0	U	
67-66-3	Chloroform	1.0	~~U~~	UJ
71-55-6	1,1,1-Trichloroethane	0.78	J	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethene	0.71	J	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
127-18-4	Tetrachloroethene	5.5		J
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	1.0	U	
106-93-4	1,2-Dibromoethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	m,p-Xylene	1.0	U	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-11S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1905 Mod. Ref No.: SDG No.: SK1905

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1905-01B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I3182.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/04/2011

% Moisture: not dec. Date Analyzed: 10/06/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
95-47-6	o-Xylene	1.0	U	
1330-20-7	Xylene (Total)	2.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	~~U~~	UJ
98-82-8	Isopropylbenzene	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	
541-73-1	1,3-Dichlorobenzene	1.0	U	
106-46-7	1,4-Dichlorobenzene	1.0	U	
95-50-1	1,2-Dichlorobenzene	1.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	1.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	1.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	
110-82-7	Cyclohexane	1.0	U	
79-20-9	Methyl acetate	1.0	U	
108-87-2	Methylcyclohexane	1.0	U	

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MW-11D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1905 Mod. Ref No.: SDG No.: SK1905

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1905-02B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I3183.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/04/2011

% Moisture: not dec. Date Analyzed: 10/06/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
75-71-8	Dichlorodifluoromethane	1.0	U	
74-87-3	Chloromethane	1.0	U	
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-69-4	Trichlorofluoromethane	1.0	U	
75-35-4	1,1-Dichloroethene	5.2		
67-64-1	Acetone	5.0	~~U~~	R
75-15-0	Carbon disulfide	1.0	~~U~~	UJ
75-09-2	Methylene chloride	1.0	U	
156-60-5	trans-1,2-Dichloroethene	1.0	U	
1634-04-4	Methyl tert-butyl ether	1.0	U	
75-34-3	1,1-Dichloroethane	3.0		
78-93-3	2-Butanone	5.0	~~U~~	R
156-59-2	cis-1,2-Dichloroethene	1.9		
67-66-3	Chloroform	1.0	~~U~~	UJ
71-55-6	1,1,1-Trichloroethane	2.1		
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethene	5.3		
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
127-18-4	Tetrachloroethene	17		J
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	1.0	U	
106-93-4	1,2-Dibromoethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	m,p-Xylene	1.0	U	

2

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-11D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1905 Mod. Ref No.: SDG No.: SK1905

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1905-02B

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I3183.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/04/2011

% Moisture: not dec. Date Analyzed: 10/06/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
95-47-6	o-Xylene	1.0	U	
1330-20-7	Xylene (Total)	2.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	~~U~~	UJ
98-82-8	Isopropylbenzene	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	
541-73-1	1,3-Dichlorobenzene	1.0	U	
106-46-7	1,4-Dichlorobenzene	1.0	U	
95-50-1	1,2-Dichlorobenzene	1.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	1.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	1.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	
110-82-7	Cyclohexane	1.0	U	
79-20-9	Methyl acetate	1.0	U	
108-87-2	Methylcyclohexane	1.0	U	

3

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1905 Mod. Ref No.: SDG No.: SK1905

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1905-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I3173.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/04/2011

% Moisture: not dec. Date Analyzed: 10/06/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
75-71-8	Dichlorodifluoromethane	1.0	U	
74-87-3	Chloromethane	1.0	U	
75-01-4	Vinyl chloride	1.0	U	
74-83-9	Bromomethane	1.0	U	
75-00-3	Chloroethane	1.0	U	
75-69-4	Trichlorofluoromethane	1.0	U	
75-35-4	1,1-Dichloroethene	1.0	U	
67-64-1	Acetone	5.0	~~U~~	R
75-15-0	Carbon disulfide	1.0	~~U~~	UJ
75-09-2	Methylene chloride	1.0	U	
156-60-5	trans-1,2-Dichloroethene	1.0	U	
1634-04-4	Methyl tert-butyl ether	1.0	U	
75-34-3	1,1-Dichloroethane	1.0	U	
78-93-3	2-Butanone	5.0	~~U~~	R
156-59-2	cis-1,2-Dichloroethene	1.0	U	
67-66-3	Chloroform	1.0	~~U~~	UJ
71-55-6	1,1,1-Trichloroethane	1.0	U	
56-23-5	Carbon tetrachloride	1.0	U	
107-06-2	1,2-Dichloroethane	1.0	U	
71-43-2	Benzene	1.0	U	
79-01-6	Trichloroethene	1.0	U	
78-87-5	1,2-Dichloropropane	1.0	U	
75-27-4	Bromodichloromethane	1.0	U	
10061-01-5	cis-1,3-Dichloropropene	1.0	U	
108-10-1	4-Methyl-2-pentanone	5.0	U	
108-88-3	Toluene	1.0	U	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	
79-00-5	1,1,2-Trichloroethane	1.0	U	
127-18-4	Tetrachloroethene	1.0	~~U~~	UJ
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	1.0	U	
106-93-4	1,2-Dibromoethane	1.0	U	
108-90-7	Chlorobenzene	1.0	U	
100-41-4	Ethylbenzene	1.0	U	
1330-20-7	m,p-Xylene	1.0	U	

3

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: K1905 Mod. Ref No.: SDG No.: SK1905

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: K1905-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I3173.D

Level: (TRACE/LOW/MED) LOW Date Received: 10/04/2011

% Moisture: not dec. Date Analyzed: 10/06/2011

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
95-47-6	o-Xylene	1.0	U	
1330-20-7	Xylene (Total)	2.0	U	
100-42-5	Styrene	1.0	U	
75-25-2	Bromoform	1.0	~~U~~	UJ
98-82-8	Isopropylbenzene	1.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	
541-73-1	1,3-Dichlorobenzene	1.0	U	
106-46-7	1,4-Dichlorobenzene	1.0	U	
95-50-1	1,2-Dichlorobenzene	1.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	1.0	~~U~~	UJ
120-82-1	1,2,4-Trichlorobenzene	1.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	
110-82-7	Cyclohexane	1.0	U	
79-20-9	Methyl acetate	1.0	U	
108-87-2	Methylcyclohexane	1.0	U	

Appendix G As-Built Drawings and Documentation

GENERAL CONSTRUCTION NOTES:

1. The SSD system installation was done so as to coordinate with other building components. All mitigation system components were installed to facilitate servicing, maintenance and repair or replacement of other equipment components in or outside the building. System materials and equipment were installed to provide the maximum headroom or side clearance possible. All systems, materials and equipment were installed level, plumb, parallel or perpendicular to other building systems and components unless otherwise specified.

2. The contractor installing the SSD system took precaution to avoid any damage to existing utilities located anywhere in the building or those located in or below the slab floor.

3. The contractor covered the SSD system components at SVE-9 and SVE-10. The degree of finishing required was based on a consensus between the owners and NYSDEC.

4. The contractor who installed the SSD system sealed all penetrations through foundation walls and floors created to install the SSD system. Penetrations through side walls were carefully cut to match the shape of the pipe.

5. The entire system has UL or equivalent ratings for both individual components and the entire system as applicable.

6. The work performed conformed to ASTM 2121

7. Unless otherwise noted all areas disturbed by this work were restored to original condition.

8. Each system was installed with a Sensocon pressure gauge, and low pressure alarm inside the building along the wall that the piping exits out to the fan.The post installation static pressure reading of each subsystem
was recorded next to the pressure guage.

9. An easily accessible ball valve was place between each suction point/drainage point and the main piping line. The valves were manipulated to equalize the flow at the suction points and to minimize the air flow at the drainage point.

ORIGINAL PRESSURE CONDITIONS

Main Line Gauges	Original Static Pressure (in.w.c)
L-1	6.0
L-2	16.0
L-3	8.0

Extraction and Drainage Points	Original Pressure (in.w.c)	Air Flow (cfm)	Valve Open (%)
SVE-3	5.0	14.4	100
SVE-4	5.0	13.2	100
SVE-5	6.0	12.9	100
SVE-6	5.0	14.6	100
SVE-7	16.0	20.5	100
SVE-8	16.0	33.8	100
SVE-9	14.0	24.2	100
SVE-10	3.3	14.1	50
SVE-11	6.0	12.1	100
SVE-12	6.0	14.2	100
DP-1	1	17	40

STATE OF NEW YORK
SCOTT ANDREW UNDERHILL
075332
LICENSED PROFESSIONAL ENGINEER

Legend

- HS-5000 Fan
- Suction Point
- Drainage Point
- Boxed in Vertical Run
- Gauge/Alarm
- Valve and Test Hole
- Piping
- Machines

Prepared by: AECOM

Prepared for: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

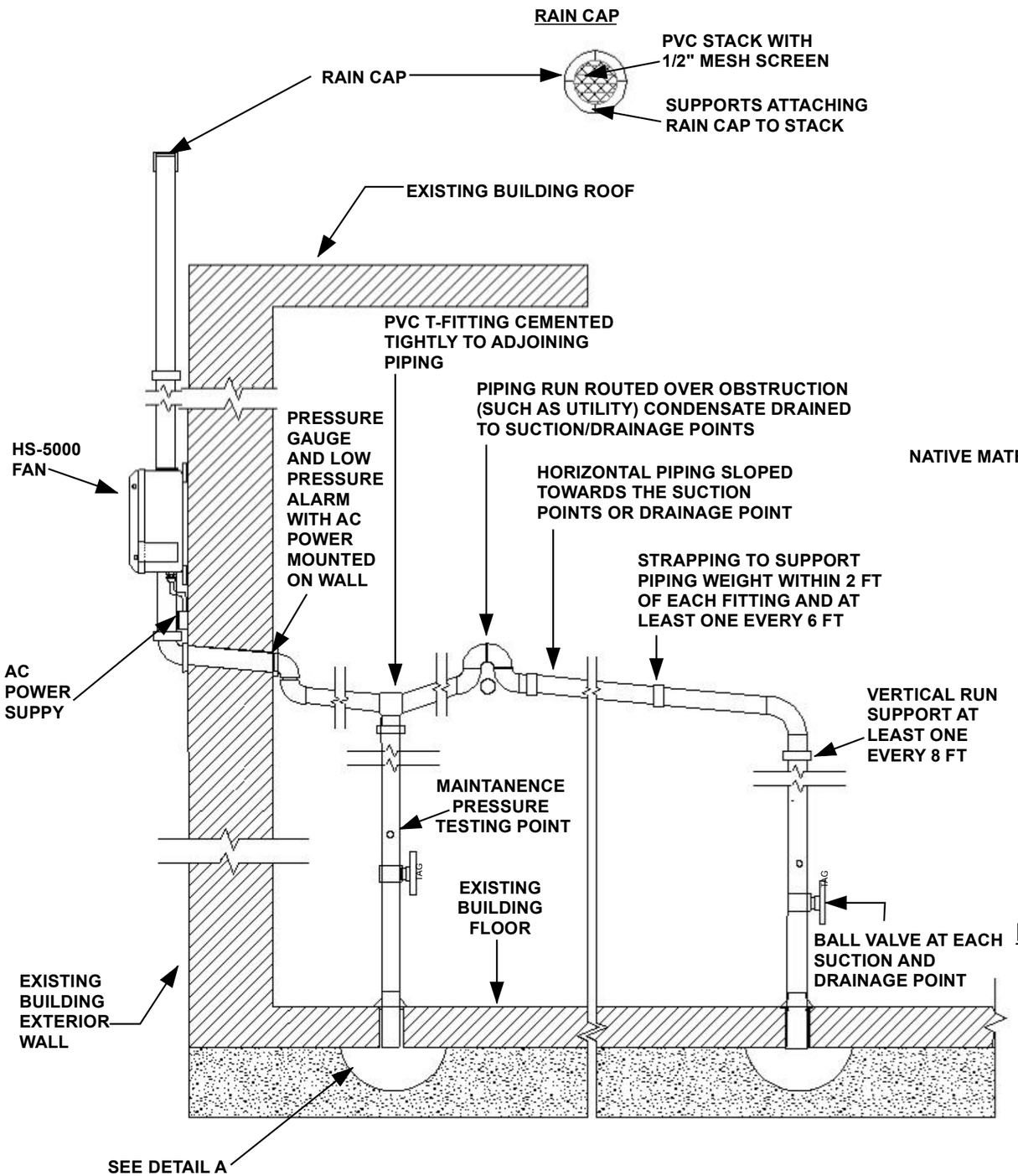
N

Utility Manufacturing/Wonder King
Operable Unit 2
Site No. 130043H

Date: AUGUST 2012

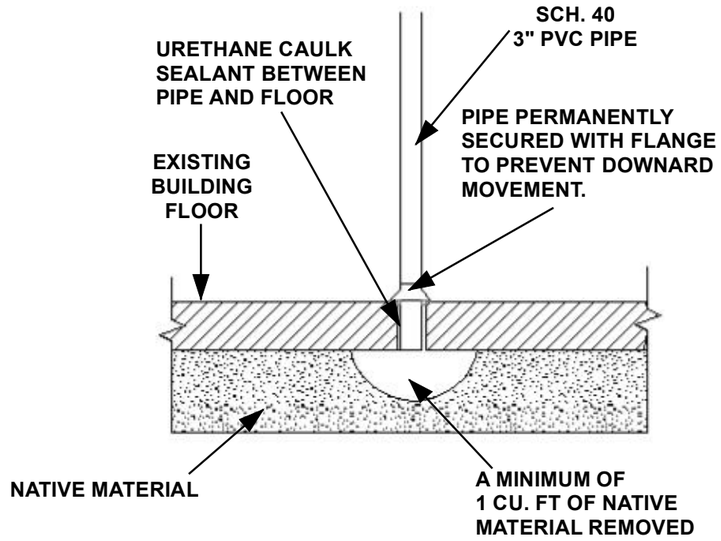
SUB-SLAB DEPRESSURIZATION
SYSTEM LAYOUT
717 MAIN STREET

Figure No. : D-1



TYPICAL INDIVIDUAL SYSTEM DETAIL

NOT TO SCALE



DETAIL A - SUCTION POINT

NOT TO SCALE

DETAIL B - STRAPPING AND SUPPORTS

NOT TO SCALE
(Reference: USEPA 1993)

SUCTION HOLE INSTALLATION NOTES:
1. The contractor removed a minimum of 1 cubic foot of sub-slab material from below and around each suction hole.

2. To prevent blockage of air flow into the bottom of suction point pipes and pipe movement to the bottom of the suction pits, the pipes at the suction points were supported and secured to the concrete floor slab with a floor flange.

3. A polyurethane caulk sealant was applied to securely seal the space between the outer diameter of the pipe and the concrete floor.

4. Shut-off valves and flow adjustment valves were installed on each extraction point and discharge point.

VENT PLACEMENT NOTES:
1. All exhaust pipes were installed to a termination point no less than 12" above the roof.

2. All system exhaust termination points were a minimum of 10 feet above grade and away from any intakes or openings into conditioned or other occupiable spaces.

4. All exhaust pipes were fitted with a protective screen.

PVC PIPE INSTALLATION NOTES:
1. All horizontal pipe runs between the fan and the suction holes were sloped to ensure that water from rain or condensation drains downward into the ground beneath the slab.

2. All vertical pipe runs were installed plumb. In no case was the piping installed so as to create a possible water trap in the piping.

3. All horizontal pipe runs have a support with an appropriate device within 2 ft of each fitting and a maximum distance between supports of 6 ft as per BOCA National Plumbing Code and ASTM 2121.

4. Vertical runs were secured either above or below the points of penetration through floors, ceilings, and roofs, or at least every 8 ft (2.5 m) on runs that do not penetrate floors, ceilings, or roofs.

5. System piping was fastened to the structure of the building with hangers, strapping, and clamps that secured it adequately.

6. System piping was not attached to or supported by existing pipes, ducts, conduits, or any kind of equipment. System piping does not block window and doors or access to installed equipment.

7. Horizontal piping inside the office areas were concealed above drop ceilings

8. The vertical piping at extraction points SVE-9 and SVE-10 were boxed in and painted. The valves associated with these points are located in the mezzanine area for easy access.

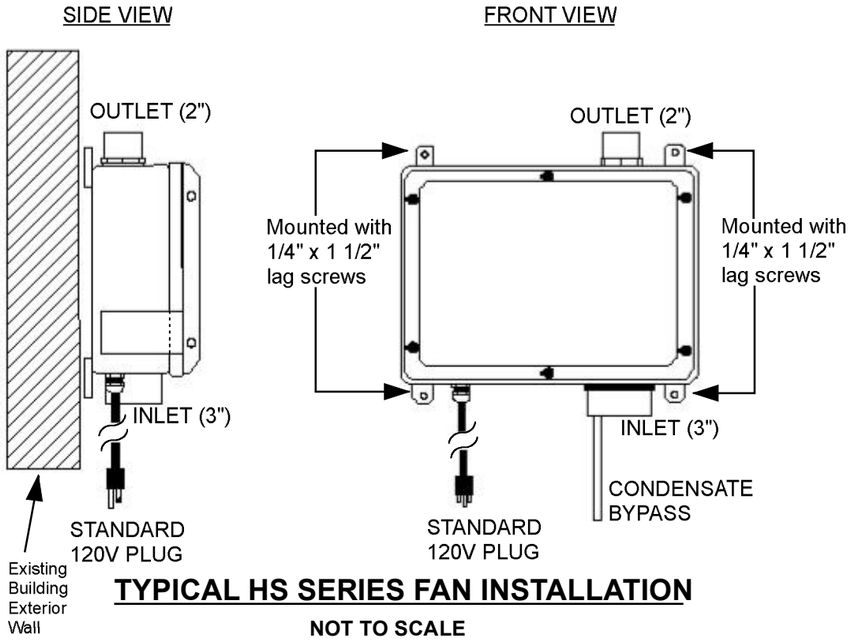
STATE OF NEW YORK
SCOTT ANDREW UNDERHILL
075332
LICENSED PROFESSIONAL ENGINEER

Prepared by: AECOM

Prepared for: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Utility Manufacturing/Wonder King
Operable Unit 2
Site No. 130043H

Date:	SSDS DETAILS	Figure No. :
AUGUST 2012	1025 OLD COUNTRY ROAD	D-2



TYPICAL HS SERIES FAN INSTALLATION

NOT TO SCALE

HS SERIES FAN INFORMATION

(Reference: RadonAway Instruction Manual)

Inlet: 3.0" PVC
Outlet: 2.0" PVC
Mounting: Brackets for vertical mount
Weight: Approximately 18 lbs.
Size: Approximately 15"W x 13"H x 8"D
Minimum recommended inlet ducting (greater diameter may always be used):
HS3000, HS5000 --- 2.0" PVC Pipe
HS2000 --- Main feeder line of 3.0" or greater PVC Pipe
Branch lines (if 3 or more) may be 2.0" PVC Pipe
Outlet ducting: 2.0" PVC
Storage temperature range: 32 - 100 degrees F.
Thermally protected
Locked rotor protection
Internal Condensate Bypass

Fan Wiring Notes:

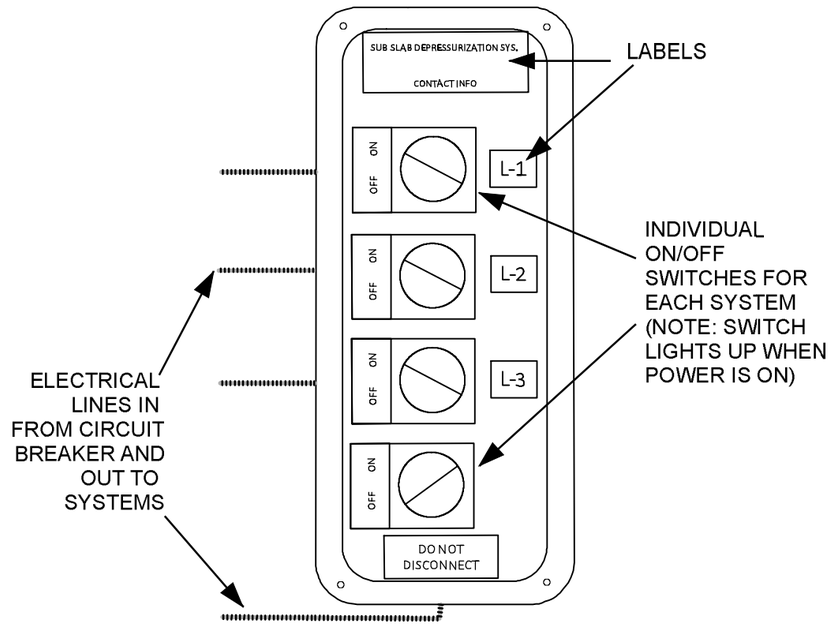
1. All wiring was performed in accordance with the National Fire Protection Association's (NFPA) "National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes and manufacturer's specifications.

2. Wiring was not located in or chased through the mitigation installation ducting or any other heating or cooling ductwork. All electrical work was performed by a licensed electrician and meet the substantive requirements of the Town of North Hempstead.

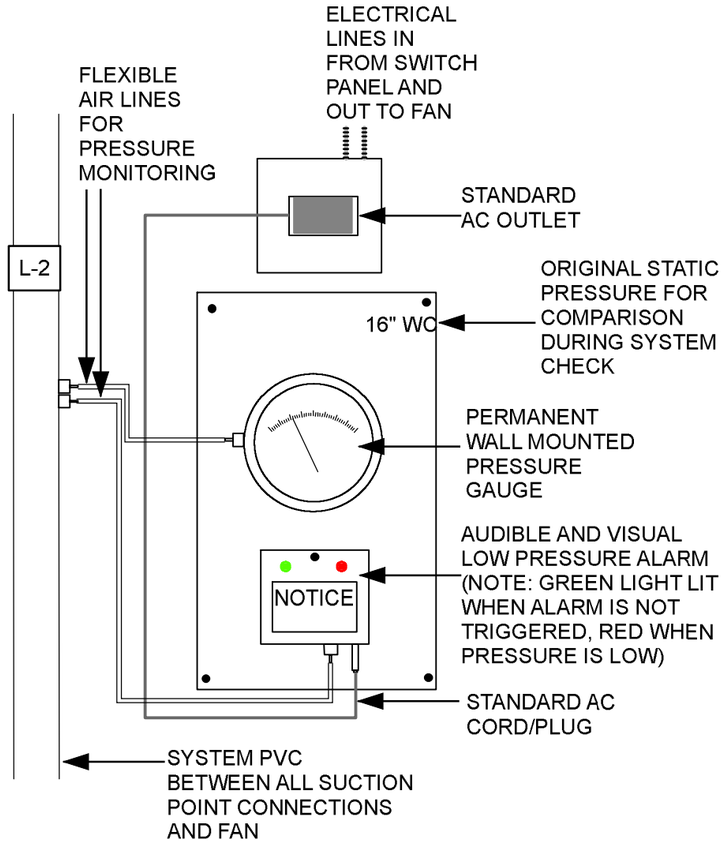
3. The sub-slab depressurization unit fans are powered by two dedicated circuits that are not used for any other building components.

4. The standard plug acts as a disconnect switch within 3 ft of each fan. The plug is in an outdoor rated electrical box with a switch cover. Additional disconnect switches are located inside the building next to the circuit breaker boxes.

5. The contractor used outdoor rated flexible conduit from each switch box to the fan.



SHUT OFF PANEL NEXT TO CIRCUIT BREAKER



WALL MOUNTED PRESSURE GAUGE AND AUDIBLE/VISIBLE ALARM

STATE OF NEW YORK
SCOTT ANDREW UNDERHILL
075332
LICENSED PROFESSIONAL ENGINEER

Prepared by: AECOM

Prepared for: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Utility Manufacturing/Wonder King
Operable Unit 2
Site No. 130043H

Date:	FAN INSTALLATION, SWITCH PANEL AND PRESSURE GAUGE	Figure No. :
AUGUST 2012	1025 OLD COUNTRY ROAD	D-3

T-3A
SVE-3
T-5D
T-3B
sub slab anomaly
T-4D
T-3C
T-5C
T-4C
T-5B
SVE-6
T-4B
T-5A
T-4A
SVE-5
SVE-4
DRAIN
T-6A
T-7A
T-7C
SVE-8
SVE-7
T-8A
T-8B
T-9D
T-9B
T-9C
SVE-9
T-9A
T-12A
T-7B
T-11A
T-12B
SVE-10
SVE-11
SVE-12
T-11B

LEGEND:

- SOIL VAPOR EXTRACTION POINT (4" Dia)
- SUB SLAB VACUUM TEST POINT (1/2" Dia)
- CONDENSATION DRAIN

0 5 10 20 30 40 Feet

1 inch = 20 feet

STATE OF NEW YORK
SCOTT ANDREW UNDERHILL
075332
LICENSED PROFESSIONAL ENGINEER

Prepared by: AECOM

Prepared for: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

N

Utility Manufacturing/Wonder King

SUB SLAB DEPRESSURIZATION SYSTEM
AS-BUILT TEST POINT LOCATIONS FOR
FINAL RADIUS OF INFLUENCE TESTING

Date: 01/24/2012

717 MAIN STREET, WESTBURY NY

Figure No. : 2

Table 1

SUB SLAB DEPRESSURIZATION SYSTEN PERFORMANCE DATA

Wonder King/Utility Manufacturing
717 Main Street
Westbury, New York

Blower ID	Blower Vacuum (in.w.c.)	Soil Vapor Extraction Point	Average Air Flow (cfm)	SVE Vacuum (in.w.c)	Percent Open (%)
L-1	6.0	SVE-3	14.4	5.0	100
		SVE-4	13.2	5.0	100
		SVE-5	12.9	6.0	100
		SVE-6	14.6	5.0	100
		Drain	17.0	1.0	40
L-2	16.0	SVE-7	20.5	16.0	100
		SVE-8	33.8	16.0	100
		SVE-9	24.2	14.0	100
L-3	8.0	SVE-10	14.1	3.3	50
		SVE-11	12.1	6.0	100
		SVE-12	14.2	6.0	100

Notes:
SVE = Soil Vapor Extraction
in. w.c. = Inches of water column
scfm = Standard cubic feet per minute

Table 2

VACUUM INFLUENCE TESTING RESULTS

Wonder King/Utility Manufacturing
717 Main Street
Westbury, New York

Test Point	Measured Vacuum Reading (in.w.c)	Vacuum Influence (Pa)	SVE Point	Distance To Test Point (feet)	SVE Vacuum (in.w.c)
T-3A	-0.032	-8.0	SVE-3	26.0	5.0
			SVE-6	44.0	5.0
T-3B	-0.090	-22.5	SVE-5	41.0	6.0
			SVE-6	52.0	5.0
T-3C	-0.012	-3.0	SVE-3	51.0	5.0
			SVE-6	30.0	5.0
T-4A	-0.184	-46.0	SVE-4	6.0	5.0
T-4B	-0.059	-14.8		12.0	5.0
T-4C	-0.008	-2.0		25.0	5.0
T-4D	-0.005	-1.3		35.0	5.0
T-5A	-0.094	-23.5	SVE-5	6.0	6.0
T-5B	-0.158	-39.5		12.0	6.0
T-5C	-0.036	-9.0		25.0	6.0
T-5D	-0.011	-2.8		36.0	6.0
T-6A	-0.164	-41.0	SVE-6	18.0	5.0
			SVE-8	22.0	16.0
T-7A	-0.174	-43.5	SVE-7	24.0	16.0
T-7B	-0.005	-1.3		17.0	16.0
T-7C	-0.050	-12.5	SVE-7	34.0	16.0
			SVE-4	17.0	5.0
T-8A	-0.179	-44.8	SVE-8	11.0	16.0
T-8B	-0.025	-6.3		30.0	16.0
T-9A	-0.102	-25.5	SVE-9	14.0	14.0
T-9B	-0.654	-164		6.0	14.0
T-9C	-0.239	-59.8		21.0	14.0
T-9D	-0.059	-14.8		13.0	14.0
T-7B	-0.023	-5.8	SVE-11	20.0	6.0
T-11A	-1.880	-470		7.0	6.0
T-11B	-0.008	-2.0		30.0	6.0
T-12A	-0.012	-3.0	SVE-12	26.0	6.0
T-12B	-1.080	-270		5.0	6.0

Notes:
Negative readings at test points indicate vacuum.
SVE = Soil Vapor Extraction
in. w.c. = Inches of water column
scfm = Standard cubic feet per minute

Appendix H Permit Information

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A, 11th Floor
625 Broadway, Albany, New York 12233-7015
Phone: (518) 402-9625 • **Fax:** (518) 402-9627
Website: www.dec.ny.gov

Joe Martens
Commissioner

November 8, 2011

Kevin Cronin, Commissioner
Town of North Hempstead Building Department
220 Plandome Road
Manhasset, New York 11030

Re: Utility Manufacturing/Wonder King State Superfund Remediation
NYSDEC Site ID # 130043H
Permit for Installation of Sub-Slab Depressurization Systems

Dear Commissioner Cronin:

The New York State Department of Environmental Conservation (DEC) is exempting its project to install a sub-slab depressurization system for the subject project from obtaining a local building permit issued by the Town.

The DEC has conducted a soil vapor intrusion evaluation associated with the Utility Manufacturing/Wonder King State Superfund Site (Site), which is located at 700 Main Street in the Town of North Hempstead (Town). Due to the nature of the contamination from the site, the DEC intends to install sub-slab depressurization systems, more commonly known as radon systems, in one structure in the Town to protect the building occupants from intrusion of chemical vapors through the foundation. Each system uses a fan and piping to draw vapors from beneath the building's slab and discharges them to the atmosphere. The installation of the systems will be performed by Alpine Environmental Services, Inc, a New York State Department of Health certified radon mitigation contractor. Electrical activities will be performed by Systematic Technologies, who is a licensed Town of North Hempstead electrician (license number: 1002E). The systems will be installed starting December 13, 2011 at the following property (section, block, and lot number): 11-328-148.

The DEC's contractor, Groundwater and Environmental Services, has been in contact with the Town's Code Enforcement Official, Mr. Michael LoPresti, regarding the local building permits so the sub-slab depressurization systems can be installed according to code. Based on DEC's review of the permit procedure, DEC is exempt from the Town's permit requirements. A review of the Department's regulatory authority in this instance indicates that the governing regulation appears at 6 NYCRR Part 375-1.12, which sets forth that certain conditions be fulfilled prior to the state preemption of local permitting requirements. In general, these conditions include:

1. That a DEC developed and implemented Title 13 remediation program be in progress;

2. That the activity associated with that program be on premises physically connected to the Site originally subject to the remedial activity;

3. That all substantive technical requirements applicable to the activity to be conducted as set forth in the applicable local permit are complied with, as determined by the Department; and,

4. The activity be a component of a remedial program selected by a process complying with the Department's citizen participation requirements.

The relevant facts demonstrate that the Department's selected remedial program requires installation of sub-slab depressurization systems to be performed on premises which are known to be physically connected to the Site via a confirmed soil vapor plume. In addition, DEC will comply with all substantive technical requirements of the Town Permit process, which will be completed by Groundwater and Environmental Services and any other applicable local, state and federal permit criteria. Finally, a review of the Department's records also indicates the applicable Citizen's Participation criteria have been satisfied throughout the remedial process. The property owners have been contacted and they have agreed to the installation of the systems.

Therefore, as the necessary regulatory requirements have been satisfied, the Department will not seek to have issued a Town building permit to install the sub-slab depressurization system for the subject project.

Sincerely,

Jeffrey Dyber, P.E.
Environmental Engineer 2
Remedial Section A

ec: G. Bobersky
A. Tamuno
W. Parish
C. Hunt, AECOM
H. Cloud, GES
M. LoPresti, North Hempstead Building Department

Triumph Structures - Long Island, LLC
A Triumph Group Company

To:	Heather Cloud	**From:**	Vincent Scuro
Fax:	631-582-4410	**Date:**	November 18, 2010
Company:	Groundwater & Environmental Srvcs	**Pages:**	3
Re:	Signed Property Access Agreement	**CC:**	

☐ **Urgent** x **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

Good afternoon Heather,

Please find attached the signed Property Access Agreement per your request.

If you have any questions, please do not hesitate to contact me at the below number.

Thank you and have a great holiday!

Regards,

Vincent Scuro
516-997-5757

717 MAIN STREET, WESTBURY, NY 11590
PHONE: 516-997-5757 FAX: 516-997-7112
www.triumphgroup.com

Groundwater
& Environmental Services, Inc.

89 Cabot Court, Suite A • Hauppauge, New York 11788 • (800)-360-9405 • Fax (631) 582-4410

November 17, 2010

Mr. Vinny Scuro
Triumph Structures – Long Island, LLC
717 Main Street
Westbury, NY 11590

Re: Property Access Agreement

Dear Mr. Scuro:

Groundwater & Environmental Services, Inc. ("GES") has been retained by New York State Department of Environmental Conservation ("NYSDEC") to perform sub-slab depressurization system (SSDS) install (the "Work") related to the property located at 717 Main Street, Westbury NY (the "Site"). As the owner of the property located at 717 Main Street, Westbury, NY, we request your cooperation by allowing GES to access the Property to perform any Work that is necessary in connection with the site including, without limitation, the installation of sub-slab suction points, installation of temporary test points, the placement of remedial equipment and materials, plumbing and electrical related work, and continued access to the above described monitoring points and equipment as necessary to conduct the Work.

In exchange for your agreement to access the Property to conduct the activities described above, GES will agree to the following:

1. GES will perform all work in accordance with all applicable laws;
2. GES will repair or replace any portion of the Property disturbed by the work to substantially the same condition as existed prior to the disturbance upon completion of the Work;
3. GES will maintain, at a minimum, the following insurance coverages while performing the work:
   (i) Worker's Compensation Insurance - as required by law;
   (ii) Employer's Liability Insurance - $1,000,000;
   (iii) Commercial General Liability - $1,000,000;
   (iv) Automobile - $1,000,000; and
   (v) Professional Liability and Pollution Insurance - $1,000,000;
4. GES will indemnify and hold Owner harmless from and against any personal injury or property damage claims that may arise related to the performance of the Work by GES on the Property.

Our authorized signature below indicates our acceptance of the above described terms and conditions of this agreement. Please confirm your acceptance of the same by providing your authorized signature in the space provided below.

Thank you for your cooperation and please contact the undersigned at (800) 360-9405 extension 4324 if you have any questions.

Regards,

Groundwater & Environmental Services, Inc

Heather Cloud

Heather Cloud
Site Operations Manager

Owner's Acceptance

Signature: Vinny Lupo

Name: VINNY LUPO

Title: Mgr.

Date Accepted: 11/17/10

Appendix I Remediation Costs

Cost for SSDS Installation

Structure 2	Qty	Unit Cost	Unit	Total	
Number of Systems	3				
Alpine Environmental Services, I	1	$ 37,000.00	LS	$ 33,950	
HS5000 Fans	3	$ 1,362.90	ea	$ 4,089	
GES Permitting\Administrative	1	$ 12,744.09	LS	$ 12,744	
GES Procurement & Oversight	1	$ 10,802.32	LS	$ 10,802	
GES PreInstallation Testing	1	$ 26,384.10	LS	$ 26,384	
Diversified Geophysics	1	$ 14,520.00	LS	$ 14,520	
Lorco Waste Disposal	1	$ 472.52	LS	$ 473	
Electrician	1	$ 8,543.36	LS	$ 8,543	
Total Cost					$ 111,505

Appendix J Waste Manifests

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

LORCO PETROLEUM SERVICES
450 SOUTH FRONT STREET, ELIZABETH, NJ 07202

EQ01B **NON-HAZARDOUS WASTE MANIFEST** 02/01 150	1. Generator's US EPA ID No.	Manifest Document No. 954040	2. Page 1 of 1	**NHZ** 954240

GENERATOR

3. Generator's Name and Mailing Address: Triumph Structures, 717 Main St., Westbury NY
4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone 11:30
LORCO PETROLEUM SERVICES	N.J.R.0.0.0.2.3.0.3.6	908-820-8800
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
CLEAN EARTH OF NORTH JERSEY 105 JACOBUS AVE. SOUTH KEARNY, NJ 07032 973-344-4004	N.J.D.9.9.1.2.9.1.1.0.5	973-344-4004

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. OIL CONTAMINATED SOLIDS NON DOT REGULATED MATERIAL.	001	D.M	500	P
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above: S,T

E. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information

24- HOUR EMERGENCY RESPONSE #908-820-8800

DECAL # 25717
MANIFEST USED FOR TRACKING PURPOSES ONLY

TRUCK # 135

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

Lorco Petroleum Services
450 South Front St.
Elizabeth, NJ 07202
(908) 820-8800
(800) 734-0910
FAX: (908) 820-8412

LORCO PETROLEUM SERVICES

www.lorcopetroleum.com

STANDARD COLLECTION ORDER FORM

878783

954040

GENERATOR/LOCATION

SALES ORDER #

NAME: Triumph Structures

INFORMATION/ATTENTION LINE: 717 Main St. ACCOUNT APPROVAL CODE: Westbury NY

DELIVERY ADDRESS: 717 main st

CITY: Westbury STATE: NY ZIP:

PHONE NUMBER: — PURCHASE ORDER NUMBER:

TIME IN: TIME OUT:

BILL TO (IF DIFFERENT FROM LOCATION)

NAME: GES

INFORMATION/ATTENTION LINE: ACCOUNT APPROVAL CODE: 11:30

DELIVERY ADDRESS: 89 A, CABOT CT

CITY: Hauppauge STATE: NY ZIP: 11788

PHONE NUMBER: PURCHASE ORDER NUMBER:

MANIFEST NUMBER 954240

SHIPPING INFORMATION

This is to certify that the below named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

NO	TYPE	QTY	UNIT	US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	SALES REPRESENTATIVE
					500

SERVICE SECTION

ITEM #	DESCRIPTION	WASTE CODE	QUANTITY	UNIT PRICE	PRICE	TAX	LINE TOTAL
40500	USED OIL REMOVAL						
40300	ANTIFREEZE REMOVAL						
40400	OILY WATER DISPOSAL						
41100	SLUDGE DISPOSAL						
41000	GASOLINE/WATER						
40900	DRUM DISPOSAL	1x55					
40611	NEW 55 GAL DRUMS / 17H						
40515	OIL WATER SEPARATOR SERVICE						
41513	TANK WASHER						
41507	TANK ENTRY						
41500	TRANSPORTATION						
41508	TRUCK AND OPERATOR						
41514	ADDITIONAL LABOR						

TOTAL 135

PARTS WASHER SERVICE INTERVAL 25717 DAYS.
USED OIL CUSTOMER SERVICED EVERY 30 DAYS UNLESS OTHERWISE INDICATED.
USED OIL SERVICE INTERVAL_____ DAYS.

GENERATOR WARRANTS AND REPRESENTS THAT THE MATERIALS PROVIDED LORCO HEREUNDER HAVE NOT BEEN MIXED, COMBINED, OR OTHERWISE BLENDED IN ANY QUANTITY WITH MATERIALS CONTAINING POLYCHLORINATED BIPHENYLS (PCB) OR ANY OTHER MATERIAL DEFINED AS HAZARDOUS WASTE UNDER APPLICABLE LAWS, INCLUDING BUT NOT LIMITED TO 40 CFR PART 261. GENERATOR AGREES TO INDEMNIFY AND HOLD LORCO HARMLESS FOR ANY DAMAGES, COSTS, ATTORNEY'S FEES, ETC. ARISING OUT OF OR IN ANY WAY RELATED TO A BREACH OF THE ABOVE WARRANTY BY THE GENERATOR.

Generator certifies that the waste is ☐ used oil ☐ used antifreeze ☐ oil filter ☐ parts washer solvent

☐ Other _____ Description

In accordance the N.J.A.C. 7:26-12.1 et seq, LORCO has the required permits to accept the above described waste.

X _____ Print Name Title

X _____ Signature Date

GENERATOR/CUSTOMER

CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR CERTIFICATION

I certify that this generator generates less than 100 kilograms of hazardous waste per month as defined at 40 C.F.R. 261, and does not accumulate more than 1,000 kilograms of such waste during the month

X _____ GENERATOR'S SIGNATURE

NON CONDITIONALLY EXEMPT LARGE QUANTITY GENERATOR CERTIFICATION

DEXSIL CDT TEST RESULTS

X _____ PPM

CUSTOMER

CHARGE MY ACCOUNT FOR THIS TRANSACTION UNLESS OTHERWISE INDICATED IN THE PAYMENT SECTION. INVOICES REFLECTING CHARGES TO CUSTOMER ARE SUBJECT TO AN INTEREST RATE OF THE LESSER OF 1½% PER MONTH (18% PER ANNUM) OR THE MAXIMUM RATE ALLOWED BY LAW ON ANY INVOICES THAT ARE NOT PAID WITHIN 30 DAYS. IN THE EVENT OF DEFAULT, LORCO SHALL BE ENTITLED TO RECOVER COSTS OF COLLECTION, INCLUDING REASONABLE ATTORNEY'S FEES. INITIAL _____

$

PAYMENT RECEIVED SECTION

CASH ☐	TOTAL RECEIVED
CHECK NUMBER	

In accordance with NJAC7:26-6.7b + 40CFR PART 279 LORCO has notified the US EPA of its location and used oil management activities.

X _____ Print Name

X _____ Signature Date

LORCO REPRESENTATIVE