

Former Scott Aviation Facility Lancaster, New York NYSDEC Site Code No. 9-15-149



Prepared by: AECOM Buffalo, NY 60155991 July 2016

Periodic Review Report (April 7, 2015 through April 7, 2016)

Former Scott Aviation Facility Lancaster, New York NYSDEC Site Code No. 9-15-149

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Contents

1.0	Introduction					
	1.1	Report Organization	1-1			
	1.2	Site Background	1-1			
		1.2.1 Site Geology/Hydrogeology	1-2			
		1.2.2 Site Remedial Investigation/Feasibility Study	1-2			
		1.2.3 Record of Decision				
		1.2.4 Previous Remediation Activities				
		1.2.5 Additional Investigation Activities				
		1.2.6 Remedial Alternatives Analysis				
		1.2.7 Injection Pilot Test				
	1.3	Remedial Action Objectives	1-4			
2.0	Curre	nt Remediation System Configuration and Operation and Maintenance				
		nary	2-1			
	2.1	Current Remediation System Description and Configuration	2-1			
	2.2	Combined DPE Remediation System Operation Summary	2-1			
	2.3	Routine DPE System Maintenance and Troubleshooting	2-1			
		2.3.1 Routine System Maintenance	2-1			
		2.3.2 System Troubleshooting	2-2			
		2.3.3 Waste Disposal	2-3			
3.0	Grour	ndwater Monitoring Summary	3-1			
	3.1	Description of Groundwater Monitoring Activities for the Reporting Period	3-1			
	3.2	April 2016 Groundwater Sampling, Elevations and Groundwater Flow Direction	3-1			
	3.3	April 2016 Groundwater Analytical Results	3-2			
	3.4	Comparison of April 2016 Groundwater Analytical Data with Historical Groundwater				
		Analytical Data	3-3			
	3.5	Groundwater Collection Trench and Dual Phase Extraction Wells Groundwater				
		Analytical Data	3-4			
	3.6	Dechlorinating Bacteria Analysis	3-5			
4.0	Grour	ndwater Remediation System Monitoring and VOC Mass Removal Summa	ry4-1			
	4.1	System Monitoring Results	4-1			
		4.1.1 Air Discharge Monitoring	4-1			
		4.1.2 Water Discharge Monitoring	4-1			
	4.2	Mass Removal Summary	4-2			

i

5.0	Conc	lusions and Recommendations	5-1
	5.1	Conclusions	5-1
	5.2	Recommendations	5-2
	5.3	Proposed Monitoring and Compliance Sampling Schedule	5-2
6.0	Evalu	ate Remedy Performance, Effectiveness, and Protectiveness	6-1
	6.1	Institutional Controls and Engineering Controls Certification	6-1
7.0	Refer	ences	7-1

ii

AECOM Environment iii

List of Appendices

Appendix A Former Scott Aviation Plant 2 O&M Checklist

Appendix B NYSDEC Hazardous Waste Compliance Inspection Form

Appendix C April 2016 Field Forms

Appendix D Current and Historical Summary of Groundwater Elevations

Appendix E Analytical Laboratory Data Packages (Provided on CD)

Appendix F Current and Historical Summary of VOC's in Groundwater

Appendix G IC/EC Certification Form Email from NYSDEC

AECOM Environment iv

List of Tables

<u>Table</u>	<u>Title</u>
1	Remedial Action Objectives
2	Monitoring Well, Nested Piezometer, Dual-Phase Extraction Well and Injection Wel Construction Specifications
3	Summary of the Groundwater Monitoring Program – July 2015 through April 2016
4	Quarterly Groundwater Monitoring Well Water Level Data – April 4, 2016
5	Summary of Groundwater Analytical Data – April 2016
6	Summary of Groundwater Collection Trench Analytical Data – April 2016
7	Summary of Dual Phase Extraction Groundwater Analytical Data – April 2016
8	Vapor Monitoring Results – April 2016
9	Volatile Organic Compound Removed – Aqueous Phase
10	Combined DPE Remediation System Operation and Maintenance Schedule
11	Groundwater Monitoring Schedule – July 2016 through April 2017
12	Monitoring and Compliance Sampling Summary

List of Figures

<u>Figure</u>	<u>Title</u>
1	Site Location Map
2	Site Features Map
3	Location of Injection Points
4	Typical Dual Phase Extraction Recovery Well Construction Diagram
5	Typical Nested Piezometer Construction Diagram
6	Process and Instrumentation Diagram
7	Groundwater Surface Contour Map – April 2016 Average Overburden Groundwater Elevations
8	Groundwater Surface Contour Map – April 2016 D Overburden Groundwater Elevations
9	Trichloroethene Isoconcentration Contour Map – April 2016
10	Toluene Isoconcentration Contour Map – April 2016
11	Vinyl Chloride Isoconcentration Contour Map – April 2016
12	1,1-Dichloroethane Isoconcentration Contour Map – April 2016
13	Chloroethane Isoconcentration Contour Map – April 2016
14	1,2-Dichloroethene Isoconcentration Contour Map – April 2016
15	Xylenes Isoconcentration Contour Map – April 2016
16	Total Volatile Organic Compounds Isoconcentration Contour Map – April 2016

AECOM Environment vi

List of Acronyms

AS air stripper

bgs below ground surface
BSA Buffalo Sewer Authority
cis-1,2 DCE cis-1,2-dichloroethene

CD compact disc

1,1-DCA1,1-dichloroethaneDPEdual phase extraction

EC/BPDES Erie County/Buffalo Pollution Discharge Elimination System

ft feet

gpm gallons per minute

GWCT groundwater collection trench GWTB groundwater treatment building

HES Heritage Environmental Services, LLC

lb/hr pounds per hour

LNAPL light non-aqueous phase liquid

LRP liquid ring pump

MVS mechanical volatilization system μg/m3 micrograms per cubic meter

μg/L micrograms per liter

NYCRR New York Codes, Rules and Regulations

NYSDEC New York State Department of Environmental Conservation

O&M operation and maintenance
PRR Periodic Review Report

RAER Remedial Action Engineering Report

RAO remedial action objective
RDWP Remedial Design Work Plan

RI/FS remedial investigation/feasibility study

ROD Record of Decision

SICR Site Investigation Completion Report

SVE soil vapor extraction 1,1,1-TCA 1,1,1-trichloroethane

TCE trichloroethene

AECOM Environment vii

TEH total extractable hydrocarbons

TSS total suspended solids

USEPA United States Environmental Protection Agency

UST underground storage tank

VC vinyl chloride

VOC volatile organic compound

Certification

I hereby certify, as a Professional Engineer licensed in the State of New York, that this "Periodic Review Report (April 7, 2015 through April 7, 2016)," prepared by AECOM Technical Services, Inc. for Scott Figgie LLC, was completed in conformance with accepted standards of practice for a project of this scope and nature, as well as the requirements of State of New York, Department of Environmental Conservation (NYSDEC), Order on Consent, Index No. B9-0377095-05, for the former Scott Aviation property (formerly Figgie International), NYSDEC Site Code No. 9-15-149.

Warning: It is a violation of the New York State Education Law for any person, unless acting under the direction of a licensed professional engineer, to alter an item in these plans or report in any way. If alterations are required, they shall be made in accordance with Article 145, Subsection 7209 of the New York State Education Law.



Date: July 22, 2016

1.0 Introduction

On behalf of Scott Figgie LLC (successor to Scott Technologies, Inc.), hereinafter "Scott", and pursuant to the requirements of New York State Department of Environmental Conservation (NYSDEC), Order on Consent, Index No. B9-0377095-05, AECOM Technical Services, Inc. (AECOM) prepared this Periodic Review Report (PRR) to summarize the operation and maintenance (O&M) and groundwater monitoring activities for the combined dual phase extraction (DPE) remediation system at the former Scott Aviation facility (the "Site"), NYSDEC Site Code No. 915149, located at 225 Erie Street, Village of Lancaster, County of Erie, State of New York (Figure 1). A selected remedy for soil and groundwater was described in the Record of Decision (ROD), Scott Aviation Site, Village of Lancaster, Erie County, Site Number 915149, which was signed into Declaration on November 7, 1994 (NYSDEC, November 1994). The reporting period discussed herein encompasses the period between April 7, 2015 and April 7, 2016.

1.1 Report Organization

The purpose of this PRR is to provide a summary of the current remediation system configuration, describe significant O&M and groundwater monitoring activities, discuss overall remediation system performance during the reporting period, and provide recommendations for future combined DPE remediation system operation.

This PRR was developed to adhere to NYSDEC site investigation and remediation requirements (NYSDEC DER-10, May 2010). More specifically, this report provides the following information:

- Report organization details, a brief summary of Site history, previous Site investigations, remediation activities, and remedial action objectives (RAOs) for the Site (Section 1.0);
- A description of the current combined DPE remediation system configuration and detailed summary of O&M activities performed during the reporting period (Section 2.0);
- A groundwater monitoring program summary including a description of groundwater monitoring activities completed during the reporting period, a detailed review of the April 2016 comprehensive groundwater monitoring event, and a comparison of historical comprehensive groundwater analytical results to the April 2016 comprehensive groundwater analytical results (Section 3.0);
- A summary of groundwater remediation system monitoring and remediation progress (Section 4.0);
- Conclusions, a description of upcoming Site-related activities, and a proposed monitoring and compliance sampling schedule (Section 5.0);
- Certification of the Institutional Controls and Engineering Controls (Section 6.0); and,
- References used in the preparation of this report (Section 7.0).

1.2 Site Background

The following subsections present a brief summary of Site history and previous investigation and remediation activities.

1.2.1 Site Geology/Hydrogeology

The native soils underlying the Site generally consist of interbedded silts and clays with discontinuous sporadic fine sand lenses (shallow overburden). A thin coarse-grained layer is located above the bedrock (deep overburden). Based on the deep overburden wells, the average thickness of the overburden is approximately 21 feet (ft) below ground surface (bgs); ranging from 20 ft in the south to 26 ft in the north.

Groundwater is first encountered at the Site in the shallow overburden and then again just above the bedrock. The natural flow of groundwater at the Site is to the northwest. Depth to groundwater across the Site in both the shallow and deep overburden is measured quarterly and is discussed in detail in Section 3.2 of this report.

1.2.2 Site Remedial Investigation/Feasibility Study

A 3,000-gallon underground storage tank (UST) was previously located at the Site, immediately adjacent to the southwest corner of Scott Aviation Plant 2 (**Figure 2**). The UST was used to store waste cutting oil and spent chlorinated solvents generated during manufacturing operations conducted in Plant 2. Activities at Plant 2 have historically included the machining of piece parts from metal feedstock and the fabrication of cores to fit into devices that provide emergency oxygen upon demand in commercial aircraft (Earth Tech, April 2004).

During April 1991, the former Site owner, Figgie International, removed the aforementioned UST. Based on contamination discovered during the removal of the UST, Figgie International entered into a remedial investigation/feasibility study (RI/FS) Order on Consent with the NYSDEC on July 9, 1992, and an RI was initiated by Versar, Inc. on behalf of Figgie International in the immediate area surrounding the former UST location. The final RI report, approved by the NYSDEC on December 13, 1993, indicated the presence of volatile organic compounds (VOCs) in excess of NYSDEC soil and groundwater guidance values to the west of Plant 2. A subsequent FS report was prepared by Figgie International and approved by the NYSDEC on August 29, 1994 (per O'Brien & Gere, July 1996).

1.2.3 Record of Decision

Based on the results of the RI/FS, the NYSDEC prepared a ROD, dated November 7, 1994, which required remedial actions to be initiated to address contaminated soils and groundwater at the Site. The ROD specified that soil remediation would be accomplished by excavating all soils with VOCs above Site-specific RAOs and subsequently treating the soil on-Site using an ex-situ soil vapor extraction (SVE) system. The established RAOs for the Site are presented in **Table 1** and are discussed further in Section 1.3 of this report. The ROD also specified that groundwater remediation would be performed by installing a groundwater collection trench (GWCT) west of Plant 2 to induce hydraulic capture of groundwater impacted with VOCs and by constructing an associated groundwater treatment system. A ROD Amendment approving the use of a mechanical volatilization system (MVS) to treat excavated soils in lieu of the proposed ex-situ SVE system was issued by the NYSDEC on April 19, 1995 (O'Brien & Gere, July 1996).

1.2.4 Previous Remediation Activities

This section summarizes previous soil and groundwater remedial activities performed at the Site.

1.2.4.1 Source Area Soil Excavation and Treatment

Following approval of the Remedial Design by the NYSDEC in September 1995, soil remediation actions were initiated. Soils to the west of Plant 2 in the vicinity of the former UST were excavated and treated on-Site using an MVS (see **Figure 2**). The MVS process consisted of a screening plant and hammermill shredder that mechanically pulverized and aerated the excavated soil that had previously been amended with pulverized quick lime. Volatilization of the VOCs from the soil occurred as a result of the sieving and pulverizing actions and also because of the heat generated by the reaction of lime with moisture in the soil. Approximately 5,600 cubic yards of soil were excavated from depths ranging between 2 ft and 21 ft bgs (bedrock contact) and treated using the MVS. Based on analytical results for the treated soil (each individual VOC <1 milligram per kilogram (mg/kg) and total VOCs <10 mg/kg), the NYSDEC approved backfilling the excavation with the originally excavated soil processed on-Site with the MVS on December 11, 1995. Backfilling of the excavation was completed on December 19, 1995.

1.2.4.2 Groundwater Collection Trench

In accordance with the ROD, a 200-foot long GWCT was constructed approximately 90 ft west of Plant 2 during February 1996 (see **Figure 2**). The purpose of the trench was to maintain hydraulic control of VOC-impacted groundwater. The bottom of the trench was excavated down to bedrock (approximately 25 ft bgs). The bottom five feet of the trench consists of rounded pea gravel and the top 20 feet of the trench was backfilled with remediated soils. A 6-inch diameter, slotted high density polyethylene pipe located at the bottom of the trench conveys water to a wet well located at the north end of the trench. The water is transferred from the wet well using a submersible pump through a 1-inch diameter schedule 80 polyvinyl chloride pipe to a treatment system located in the Groundwater Treatment Building (GWTB) immediately west of Plant 2.

The groundwater treatment system consists of a low-profile shallow tray air stripper (AS) unit. Treated water from the AS unit is discharged to the Buffalo Sewer Authority (BSA) under an Erie County/Buffalo Pollutant Discharge Elimination System (EC/BPDES) permit via a 2-inch diameter force main that discharges to a BSA sanitary sewer located south of the GWTB at Erie Street (O'Brien & Gere, July 1996). Start-up of the groundwater treatment system occurred on March 1, 1996. **Figure 2** shows the location of the GWCT and GWTB.

1.2.5 Additional Investigation Activities

Annual groundwater monitoring completed in April 1998 indicated an increasing trend in VOC concentrations in MW-4, located to the west of the GWCT at the western property boundary of the Site. Additionally, light non-aqueous phase liquid (LNAPL) was observed at MW-4 on the water level probe during a quarterly monitoring event conducted in November 1998. In April 1999, four new monitoring wells (designated MW-7, MW-8, MW-9, and MW-10) were installed to evaluate the extent and potential source of VOCs and LNAPL observed in MW-4. Based on repeated detections of VOCs and LNAPL in the groundwater to the west of the GWCT, a comprehensive site investigation was conducted in February 2003 to further assess the vertical and horizontal extent of VOCs and LNAPL.

During the 2003 investigation, LNAPL was observed in MW-8 only. A total of 21 direct push technology borings were advanced to the east and west of the GWCT to further assess the extent of impacted soils west of Plant 2. Results were summarized in the June 2003 Site Investigation Completion Report (SICR), and the data indicated the continued presence of chlorinated VOCs above the RAOs in the saturated soil and groundwater, primarily to the west of the GWCT (Earth Tech, June 2003).

1.2.6 Remedial Alternatives Analysis

Based upon the results of the 2003 investigation, a remedial alternatives analysis was completed and results were included in the SICR. DPE was recommended to be implemented to supplement the existing remediation system and to further remediate VOCs in soil and groundwater at the Site (Earth Tech, June 2003).

At the request of the NYSDEC, a Remedial Design Work Plan (RDWP) (Earth Tech, November 2003) was prepared that provided a detailed description of the proposed DPE system recommended in the SICR. A discussion of DPE system construction, startup, and O&M activities during approximately the first year of operation (May 14, 2004 through July 19, 2005) is provided in the first Remedial Action Engineering Report (RAER; May 14, 2004 through July 19, 2005; Earth Tech, November 2005).

1.2.7 Injection Pilot Test

Beginning on July 28, 2010 and concluding on October 29, 2010, O&M, Inc., on behalf of Scott and with NYSDEC approval, initiated a chemical oxidation pilot test. The test consisted of injection of sodium persulfate with chelated iron activation at 10 injection points located within the area of the >100 micrograms per liter (μ g/L) trichloroethene (TCE) plume as defined in 2010. A second series of injections was performed between June and October 2011; refer to attached **Figure 3** for injection locations. A review of groundwater data at the source wells following the pilot test indicated a spike in TCE concentrations; possibly due to mobilization of product from the vadose zone.

On November 6, 2014, AECOM submitted an Injection Pilot Test Work Plan to NYSDEC outlining a pilot test injection program to be performed with the injectate Anaerobic BioChem and zero valent iron (ABC+[®]). Following NYSDEC approval, the pilot test was performed in November 2014 in a 1,200 square foot area centered between source wells MW-4, MW-8R, and MW-16S; refer to attached **Figure 3** for injection locations. Following the November 2014 injection of ABC+[®], two rounds of groundwater samples were collected and analyzed for VOCs. The VOC groundwater data collected January 2015 and April 2015 showed decreasing concentrations of TCE in the area of the injections followed by a decline to below baseline concentrations and increases in cis-1,2-dichlorethene (cis-1,2-DCE), chloroethane, and vinyl chloride (VC).

On April 28, 2015, AECOM submitted an addendum to the Injection Pilot Test Work Plan to NYSDEC outlining a second phase of injections to be performed with the injectate ABC+[®]. Following NYSDEC approval, the injection program was performed between April and May 2015 in an approximate 3,600 square foot area centered between monitoring wells MW-4, MW-8R, MW-13S/D, and MW-16S/D, and dual phase extraction wells DPT-3, DPT-4, DPT-5, DPT-7, and DPT-8; refer to attached **Figure 3** for injection locations. A total of 21 injection points were completed with approximately 410 gallons of ABC+ injected at each location. Note that this area was expanded vertically and horizontally from the first phase of injections as well as overlapping (offset) the first phase of injections. Per the table in Section 3.4 below, TCE concentrations show a decreasing trend. In an effort to monitor the effectiveness of the previous injections, several monitoring wells have been added to the quarterly sampling program; refer to Section 5.3 below for additional details.

1.3 Remedial Action Objectives

Cleanup criteria for Site soil and groundwater are based on the RAOs established in the ROD (NYSDEC, November 1994). **Table 1** presents the Site-specific cleanup criteria for the contaminants of concern. The RAOs for the combined soil and groundwater remediation system include:

1. Maintain hydraulic control of shallow groundwater and eliminate potential off-Site migration of VOCs along the western property boundary.

- 2. Lower the groundwater table within the impacted source area to expose the aquifer matrix and subsequently extract soil vapors containing VOCs using enhanced vacuum extraction. By lowering the water table surface, the DPE system induces groundwater flow toward the system extraction wells, thereby allowing the applied vacuum to more effectively remove VOCs in the exposed aquifer matrix.
- 3. Reduce the mass of VOCs in the subsurface and remediate Site soil and groundwater to meet RAOs.
- 4. Obtain No Further Action status for the Site.

2.0 Current Remediation System Configuration and Operation and Maintenance Summary

This section provides a description of the current remediation system configuration and a summary of combined DPE remediation system O&M activities performed during the reporting period (April 7, 2015 through April 7, 2016).

2.1 Current Remediation System Description and Configuration

As described in Section 1.2.4.2 of this report, the initial groundwater remediation system installed at the Site consisted of a 200-foot long GWCT and an associated groundwater treatment system located to the west of Plant 2. The GWCT remediation system was combined to operate with a new DPE remediation system which was installed at the Site between February and May 2004. The combined remediation systems, known collectively as the combined DPE remediation system, began operation on May 14, 2004.

Figure 2 depicts the combined DPE remediation system including DPE system recovery wells, monitoring wells, and nested piezometers, DPE system piping locations, the DPE system trailer, and the pre-existing GWCT and GWTB. The DPE system consists of eight recovery wells. **Figure 4** presents a typical DPE recovery well construction diagram. Three additional monitoring wells (MW-8R, MW-11 and MW-12) and four pairs of nested piezometers (MW-13S/D through MW-16S/D) were also installed as part of DPE system construction activities and monitoring activities completed in 2004 and 2005. A typical nested piezometer construction diagram is shown in **Figure 5**. Monitoring well, nested piezometer, injection well and DPE system recovery well construction details are provided in **Table 2**. Section 2.0 of the first RAER provides a detailed summary of recovery well and monitoring well installation, subsequent DPE system installation, and DPE system equipment specifics (Earth Tech, November 2005). **Figure 6** presents the process and instrumentation diagram for the combined DPE remediation system.

2.2 Combined DPE Remediation System Operation Summary

The DPE system was taken off line following the second quarter 2014 sampling event to accommodate both repairs to the LRP and an injection pilot test (refer to Section 1.2.7). The GWCT, however, remained in operation. During the current reporting period from April 7, 2015 through April 7, 2016, the total volume of groundwater treated and discharged to the sanitary sewer via the AS unit was approximately 463,474 gallons, at an average flow rate of 0.88 gallons per minute (gpm). The treated groundwater was discharged to the BSA via the local sanitary sewer system.

2.3 Routine DPE System Maintenance and Troubleshooting

The following subsections describe routine remedial system maintenance and troubleshooting as well as associated waste disposal that occurred during the current reporting period.

2.3.1 Routine System Maintenance

During routine weekly Site visits, AECOM personnel recorded system operating parameters, and inspected and cleaned the various system components and piping as needed. Minor system repairs

were also made as necessary throughout the reporting period. The O&M data collected during the Site visits was recorded using the O&M checklist presented in **Appendix A**. Data collected on these checklists are used to track the performance of the system.

2.3.2 System Troubleshooting

Sporadic system shutdowns and delays that required troubleshooting and maintenance occurred during the current reporting period. These activities are summarized below. (Note: This information is on the basis of Scott Figgie LLC fiscal year, which begins in October.)

Third Quarter 2015 (following April 2015 sampling event through end of July 2015 sampling event) combined DPE remedial system O&M:

- AECOM continued routine GWCT remediation system O&M and optimization. The GWCT remediation system ran continuously throughout the quarter; the DPE system remained off to accommodate the November 2014 and April 2015 ABC+ injection programs and monitoring periods.
- During the week of May 25, 2015, AECOM and Matrix Environmental Technologies, Inc. (Matrix) completed restoration of the western swale and lawn area following the second phase of the ABC+ injections. In addition, Matrix repaired three monitoring wells (MW-6, MW-10, and MW-16S/D), decommissioned 10 injection wells, and repaired the header piping at DPE-8.
- On June 19, 2015, AECOM and Matrix disassembled and cleaned the air stripper.

Fourth Quarter 2015 (following July 2015 sampling event through end of October 2015 sampling event) combined DPE remedial system O&M:

- AECOM continued routine GWCT remediation system O&M and optimization. The GWCT remediation system ran intermittently throughout the quarter due to fouling of the pump with residual injectate from the April 2015 ABC+ injections; the DPE system remained off to accommodate the ABC+ injection program monitoring periods.
- On July 30, 2015, removal of hazardous waste materials (see Section 2.3.3).
- On July 30, 2015, AECOM noted that the GWCT pump was not working properly; Matrix was onsite August 5 and 14, 2015 to troubleshoot the GWCT pump in an effort to bring the pump back on line.
- During the week of August 31, 2015, Matrix, with AECOM oversight, performed the annual DPE well and conveyance line cleaning.

First Quarter 2016 (following October 2015 sampling event through end of January 2016 sampling event) combined DPE remedial system O&M;

 AECOM continued routine GWCT remediation O&M and optimization. The GWCT remediation system ran continuously throughout the quarter; the DPE system remained off to accommodate the ABC+ injection program monitoring periods.

 AECOM deployed two passive sample devices known as "Bio-traps" on December 7, 2015 at MW-4 and MW-16S. The "Bio-trap" data would be used to assess *Dehalococcoides* population to determine recommendations to complete dechlorination of cis-1,2dichloroethene (cis-1,2-DCE) and vinyl chloride (VC) to chloroethane and ethene.

Second Quarter 2016 (following January 2016 sampling event through end of April 2016 sampling event) combined DPE remedial system O&M:

- AECOM continued routine GWCT remediation O&M and optimization. The GWCT remediation system ran continuously throughout the quarter; the DPE system remained off to accommodate the ABC+ injection program monitoring periods.
- AECOM extracted the "Bio-traps" from MW-4 and MW-16S on January 4, 2016 and submitted for laboratory analysis. Data was used to assess *Dehalococcoides* population to determine recommendations to complete dechlorination of cis-1,2-DCE and VC to chloroethane and ethene.
- On January 12, 2016, AECOM coordinated the removal of hazardous waste materials (see Section 2.3.3).
- On February 23, 2016, AECOM collected survey data of the monitoring well and DPE well network, as several wells had been recently rehabilitated.
- AECOM and Matrix performed the quarterly O&M activity during the week of March 28, 2016.
 Activities included dismantling and cleaning the air stripper, cleaning system totalizers, and temporarily activating the DPE system.

2.3.3 Waste Disposal

On July 30, 2015, Heritage Environmental Services, LLC (HES) transported and disposed one 55-gallon drum (254 pounds) containing sediment and miscellaneous debris. This hazardous material (F002 waste code) was generated during O&M activities conducted at the Site between March 2015 and July 2015. AECOM personnel supervised the loading of the drum at the Site prior to transportation to an approved disposal facility.

On January 12, 2016, HES transported and disposed one 55-gallon drum (143 pounds) containing sediment and miscellaneous debris. This hazardous material (F002 waste code) was generated during O&M activities conducted at the Site between August 2015 and January 2016. AECOM personnel supervised the loading of the drum at the Site prior to transportation to an approved disposal facility.

On February 23, 2016, NYSDEC performed a hazardous waste compliance inspection; a letter dated February 24, 2016 from NYSDEC regarding the inspection documented that no violations were observed; refer to **Appendix B** for a copy of the cover letter and associated inspection form.

The next hazardous waste pickup (for waste generated between January 2016 and July 2016) is scheduled for July 2016.

3.0 Groundwater Monitoring Summary

The following sections provide a detailed description of groundwater monitoring activities completed during the current reporting period (April 7, 2015 through April 7, 2016), a review of the most recent comprehensive groundwater monitoring event analytical results, and a comparison of those results to historical comprehensive groundwater monitoring event analytical data.

3.1 Description of Groundwater Monitoring Activities for the Reporting Period

The groundwater monitoring program associated with the original GWCT system was combined with the monitoring program developed for the new DPE system in May 2004. Monitoring wells sampled during this reporting period varied in accordance with Table 10 of the NYSDEC-approved November 2005 RAER list of monitoring wells to be sampled during subsequent monitoring events. A total of four groundwater monitoring events were performed during the current reporting period (**Table 3**). These included three targeted quarterly monitoring events (July 2015, October 2015, and January 2016) and one comprehensive monitoring event (April 2016).

In July 2015, October 2015, and January 2016, quarterly sampling was performed which targeted six perimeter monitoring wells (MW-2, MW-3, MW-6, MW-10, MW-11 and MW-12 and four wells located within the TCE plume (MW-4, MW-8R, MW-13S and MW-16S). In addition, some DPE wells (DPE-3, DPE-4, DPE-5, DPE-7, and DPE-8) were sampled in July 2015 and October 2015, and the GWCT manhole was sampled in July 2015, October 2015, and January 2016.

In April 2016, a comprehensive groundwater monitoring event included all Site monitoring wells and nested piezometer pairs (17 total wells), as well as DPE wells DPE-1, DPE-2, DPT-3, DPE-4, DPE-5, DPE-7, DPE-8, and the GWCT manhole. Discussions of the results and the associated laboratory reports for the July 2015, October 2015, and January 2016 groundwater sampling events have previously been provided to the NYSDEC in quarterly monitoring summary reports (AECOM, August 2015; AECOM, November 2015; and AECOM, February 2016). A discussion of the groundwater analytical results for the comprehensive April 2016 sampling event is presented in Sections 3.2 and 3.3 of this report.

3.2 April 2016 Groundwater Sampling, Elevations and Groundwater Flow Direction

AECOM personnel collected groundwater samples for the latest comprehensive monitoring event between April 4 and 7, 2016, in accordance with the procedures outlined in the NYSDEC-approved RDWP. Monitoring wells sampled in April 2016 were MW-2, MW-3, MW-4, MW-6, MW-8R, MW-9, MW-10, MW-11, MW-12, MW-13S, MW-13D, MW-14S, MW-14D, MW-15S, MW-15D, MW-16S, and MW-16D (Figure 2). Field forms generated during the April 2016 sampling event are provided in Appendix C. Groundwater samples were analyzed for VOCs by TestAmerica, Inc. located in Amherst, New York, using United States Environmental Protection Agency (USEPA) analytical procedures manual SW-846, Method 8260C.

A complete round of groundwater levels was measured for all Site wells and piezometers. **Table 4** provides a summary of groundwater elevations measured on April 4, 2016. A historical summary of groundwater levels and corresponding elevations and hydrographs for each monitoring well and nested piezometer pair is provided in **Appendix D**. Monitoring wells MW-2, MW-3, MW-4, MW-6, MW-8R, MW-9, MW-10, MW-11, and MW-12 are screened across both the shallow and deep water-bearing units. The nested piezometer pairs (MW-13S/D, MW-14S/D, MW-15S/D, and MW-16S/D) are discretely screened, with one piezometer screened in the shallow water-bearing unit ('S' designation) and one piezometer screened in the deep water-bearing unit ('D' designation).

Two groundwater surface contour maps for April 2016 are provided. The average water levels calculated for the nested piezometer pairs in conjunction with monitoring well water level data were used to generate the groundwater surface contours presented in **Figure 7**. **Figure 8** illustrates the groundwater surface contours using only monitoring well and deep piezometer water level data.

Groundwater elevations measured in April 2016 ranged from 672.39 ft above mean sea level (AMSL) at MW-14D to 687.17 ft AMSL at MW-15S. Based on these water level measurements, the groundwater surface beneath the Site continues to exhibit an inward radial pattern (i.e., cone of depression), and groundwater flows inward towards the operating DPE recovery wells and the GWCT. **Figures 7** and **8** show depressions in the water table surface centered on MW-4, MW-8R, MW-9, MW-14S/D and MW-16D, which are located west of the GWCT. The historical groundwater flow direction at the Site before active groundwater remediation was initiated had been predominantly to the northwest. These figures indicate that the GWCT remediation system continues to induce groundwater flow reversal along the western property boundary. This groundwater flow reversal helps to provide sustained hydraulic capture of the on-Site groundwater.

3.3 April 2016 Groundwater Analytical Results

The April 2016 groundwater sampling event was the eleventh comprehensive sampling event conducted at the Site following the installation of the DPE system in May 2004. VOCs detected in groundwater during the April 2016 sampling event are presented in **Table 5**. The following table summarizes the VOCs detected, their respective concentration ranges, the number of detections, and the number of those detections that exceeded Site-specific groundwater RAOs or groundwater criteria presented in New York Codes, Rules and Regulations (NYCRR), Title 6, Part 702.15(a)(2) and 703.5.

Groundwater Quality Results April 2016

VOCs Detected in Groundwater	Concentration Range (µg/L)	Number of Detections	RAO/NYCRR Exceedances	
Vinyl chloride	2.6 - 280,000	10	8	
Chloroethane	0.58 - 390	9	8	
1,1-Dichloroethane	2.5 - 2,800	8	6	
cis-1,2-Dichloroethene	0.89 - 64,000	7	6	
Acetone	4 – 790	4	2	
2-Butanone	160 – 1,300	2	2	
Toluene	81 – 160	2	2	
1,2-Dichloroethane	0.43 – 1.1	2	1	
Trichloroethene	110	1	1	
Xylenes, total	21	1	1	
1,1-Dichloroethene	9	1	1	

VOCs Detected in Groundwater	Concentration Range (µg/L)	Number of Detections	RAO/NYCRR Exceedances
trans-1,2-Dichloroethene	2.4	1	0
Benzene	0.90	1	0

A total of 13 VOCs were detected in groundwater at monitoring wells and piezometers during the April 2016 sampling event. Eleven of the 13 VOCs detected exceeded either the Site-specific RAOs or the NYCRR criteria for groundwater at one or more wells. **Figures 9** through **16** illustrate April 2016 isoconcentration contours for TCE, toluene, VC, 1,1-dichloroethane (1,1-DCA), chloroethane, cis-1,2-DCE, xylenes (total), and total VOCs, respectively. These compounds are listed in the ROD as the Site-specific compounds for which RAOs were established.

The highest concentrations of VOCs were detected west of the GWCT and the former soil excavation area, in a suspected remnant source area located in the vicinity of MW-4, MW-8R, MW-13S, and MW-16S. VC and cis-1,2-DCE exhibited the highest overall concentrations in groundwater. As has been observed historically, the shallow piezometers, which are screened in silts and clays, generally showed higher concentrations of the most frequently detected VOCs when compared to their deeper piezometer counterparts, which are screened in sands and gravels located immediately above bedrock.

The presence and distribution of TCE daughter products (cis-1,2-DCE and VC) and 1,1,1-TCA daughter products (1,1-DCA and chloroethane) provide supportive evidence that the attenuation of TCE and 1,1,1-TCA and their daughter products via reductive dechlorination continues to occur in-situ at the Site. The occurrence of these daughter products is directly related to the historic distribution of TCE and 1,1,1-TCA in the subsurface. The only detection of TCE during the April 2016 sampling event was located within the excavation fill area to the east of the GWCT. The daughter products of TCE and 1,1,1-TCA were detected at their highest concentrations within the suspected source area in the vicinity of MW-4, MW-8R and MW-16S. A limited number of other VOCs were sporadically detected in groundwater at the Site, with the majority of these detections in perched groundwater located at MW-15S.

An electronic copy of the analytical laboratory data package for the April 2016 sampling event is provided in **Appendix E** on a compact disc (CD).

3.4 Comparison of April 2016 Groundwater Analytical Data with Historical Groundwater Analytical Data

As previously described, quarterly groundwater quality data obtained during the reporting period, with the exception of the April 2016 sampling event, has already been submitted to the NYSDEC in quarterly summary reports. Trend plots illustrating concentrations of TCE, cis-1,2-DCE, VC, chloroethane, 1,1-DCA, and 1,1,1-TCA over time are provided in **Appendix F**. Because concentrations of TCE were historically the highest compound detected at the Site, a discussion of historical and current TCE concentrations in perched groundwater at Site monitoring wells and piezometers is provided in the table below.

TCE concentrations decreased or remained constant in all but one well (MW-15S) since the last comprehensive groundwater sampling event conducted at the Site in April 2015. All monitoring wells except MW-15S contained no detections of TCE at or above the reporting detection limit. Based on these results, the injection pilot test appears to have successfully degraded TCE; note MW-15S is located in the excavation fill area and was not targeted during past injection pilot test programs.

Summary of Annual TCE Concentrations in Groundwater through April 2016

	TCE Concentrations (μg/L)											
Well ID	April 2005	July 2006	Oct 2007	Jan 2009	April 2010	April 2011	April 2012	April 2013	April 2014	April 2015	April 2016	TCE Trend
MW-2	<10	< 25	< 5	< 5	<25	<1	<1	<1	<1	<5	<1	Dcr
MW-3	<10	< 25	5 J	< 5	<5	<1	<1	<1	<1	<1	<1	Dcr
MW-4	NS	2,400	4,800	19,000	3,000	13,000	39,000	12,000	32,000	110	<100	Dcr
MW-6	< 10	< 5	0.63 J	< 5	<5	<1	<1	<1	<1	<1	<1	Dcr
MW-8R	15,000	16,000	2,200	8,400	2,500 J	8,900	99,000	64,000	100,000	<2,000	<1,000	Dcr
MW-9	< 10	1.3	2.6 J	< 5	<5	<1	<1	<1	<1	<1	<1	Dcr
MW-10	<10	< 5	< 5	< 5	<5	<1	<1	<1	<1	<1	<1	Dcr
MW-11	<10	< 20	0.71	0.77 J	0.95 J	1.2	0.51	<1	<1	<2	<1	Dcr
MW-12	< 10	< 25	< 5	NS	<5	<1	<1	<1	<1	<1	<5	Dcr
MW-13S	760	17,000	570	3,400	1,400	40,000	39,000	40,000	32,000	31,000	<100	Dcr
MW-13D	8	2 J	< 5	< 5	< 5	22	62	53	30	40	<10	Dcr
MW-14S	< 10	5.7 J	< 5	0.38 J	< 5	< 1	1.3	<1	<1	<1	<1	Dcr
MW-14D	10	0.96 J	< 5	< 5	9.4	0.97	0.64J	0.99	<1	<1	<1	Dcr
MW-15S	400	400	400	180	270	200	240	140	160	85	110	29% Inc
MW-15D	< 50	4.9 J	3.6 J	< 25	<5	<8	<10	<8	<20	<20	<10	Dcr
MW-16S	400,000	310,000	130,000	92,000	220,000	250,000	250,000	230,000	61,000	26,000	<4,000	Dcr
MW-16D	32	6.1	6 J	52	12	22	42	57	<25	<20	<10	Dcr

Notes:

TCE Trends – a comparison of the most recent monitoring results to those one year earlier.

J – Estimated concentration.

NS - Not sampled.

Dcr - Decrease.

Inc - Increase.

3.5 Groundwater Collection Trench and Dual Phase Extraction Wells Groundwater Analytical Data

A grab sample was collected from the GWCT during each of the four quarters included in the reporting period; these data are summarized in **Table 6**. Although the VOC concentrations are relatively low, the GWCT remediation system continues to induce groundwater flow reversal along the western property boundary. This groundwater flow reversal helps to provide sustained hydraulic capture of the on-Site groundwater.

As stated in Section 3.1, groundwater grab samples were collected from DPE wells and analyzed for VOCs. Analytical data presented in **Table 7** and in **Appendix E** show decreasing trends of chlorinated VOCs in groundwater following the November 2014 injection pilot test at DPE wells closest to the injections.

3.6 Dechlorinating Bacteria Analysis

On December 7, 2015, AECOM deployed two "Bio-traps", one each at MW-4 and MW-16S, to determine the concentration (i.e., cells/bead) of dechlorinating bacteria. On January 4, 2016, AECOM extracted the two "Bio-traps" and submitted them to Microbial Insights, Inc, in Knoxville, Tennessee for analysis; refer to **Appendix E** for laboratory report. Per the analysis, both wells had > 10⁴ cells/mL of *Dehalococcoides*, tceA Reductase, BAV1 VC Reductase, and VC Reductase bacteria, indicating that reductive dechlorination will yield a generally useful biodegradation rate (Lu et al., 2006). Refer to table below for dechlorinating bacteria data.

Sample ID	MW-16S	MW-4
Units	Cells/bead	Cells/bead
Dechlorinating Bacteria		
Dehalococcoides	2.28x10 ⁶	5.36x10 ⁵
tceA Reductase	1.02x10 ⁵	1.63x10⁴
BAV1 VC Reductase	6.80x10⁴	2.80x10 ⁴
VC Reductase	2.07x10 ⁴	4.81x10⁴

4.0 Groundwater Remediation System Monitoring and VOC Mass Removal Summary

This section describes system performance monitoring and summarizes the mass of VOCs removed by the combined DPE remediation system during the current reporting period from April 2015 through April 2016.

4.1 System Monitoring Results

4.1.1 Air Discharge Monitoring

Samples were obtained from the vapor effluent of the AS on a quarterly basis and analyzed by TestAmerica, Inc., located in South Burlington, Vermont, using USEPA Compendium Method TO-15. Based on the analytical results for the vapor samples collected, the exhaust mass-loading rate was calculated and presented to the NYSDEC in the Site quarterly groundwater monitoring reports. The combined total of the exhaust mass-loading rates for the vapor discharges was compared to the NYSDEC guidance value of 0.5 pounds per hour (lb/hr) of VOCs. Vapor effluent monitoring results for the first three monitoring events (July 2015, October 2015, and January 2016) during the reporting period have been previously submitted to NYSDEC, and no exceedance of the NYSDEC standard for VOC emissions occurred. Refer to Section 4.2 for a summary of air effluent data.

AECOM collected a vapor effluent sample from the AS unit for the final quarterly monitoring event of the reporting period on April 4, 2016. The AS vapor effluent analytical results for the reporting period are summarized in **Table 8**, and an electronic copy of the analytical laboratory data package is provided on the enclosed CD in **Appendix E**. During the April 2016 event, a total of eight VOCs were detected in the AS unit effluent. The total VOC discharge was 48 micrograms per cubic meter (µg/m³) in the AS unit effluent (the LRP was off line). Based on these effluent totals, the calculated VOC discharge-loading rate for the combined DPE remediation system was 0.00004 lb/hr, which is well below the NYSDEC discharge guidance value of 0.5 lb/hr.

4.1.2 Water Discharge Monitoring

Following the sale of the Site to AVOX Systems Inc., in September 2004, AECOM assumed responsibility for BSA EC/BPDES permit compliance sampling and reporting. The current BSA EC/BPDES permit (No. 15-10-E4054) for the combined DPE remediation system will expire on September 30, 2018.

The current permit requires quarterly sampling of treated groundwater discharge from the combined DPE groundwater remediation systems for a specific list of VOCs, total extractable hydrocarbons (TEH), total suspended solids (TSS), and pH. The quarterly discharge samples are analyzed by TestAmerica Inc., located in Amherst, New York. AECOM collected permit compliance samples from the AS unit treated effluent discharge sampling point in July 2015, October 2015, January 2016, and April 2016. Each quarter, AECOM tabulated the analytical data, converted the data to mass loading rates, compared the results to the permit requirements, and prepared a letter report for submittal to the BSA and NYSDEC. No exceedance of any permit discharge limit occurred during any of the four reporting periods.

On November 18, 2015, BSA performed an annual compliance inspection at the Site. In an electronic mail from BSA dated November 25, 2015, BSA stated that the inspection showed the facility was in compliance with all permit requirements.

4.2 Mass Removal Summary

The estimated VOC mass removed for both groundwater and soil vapor was calculated based on operational and analytical data collected during the reporting period (April 7, 2015 through April 7, 2016). The mass removal via groundwater extraction by the remediation system was calculated using total influent VOC concentrations, collected quarterly, and AS unit totalizer readings. The calculations are presented in **Table 9**. As shown in the table, approximately 0.163 pounds of VOCs were removed via groundwater extraction by the GWCT system per data collected from the July 2015 (Third Quarter 2015) through April 2016 (Second Quarter 2016) sampling events (note again that the DPE system was off line during the reporting period).

Combining the totals for the 11 reporting periods, the cumulative mass of VOCs removed by the system is estimated at 3,003 pounds since the startup of the system in its current configuration on May 14, 2004.

5.0 Conclusions and Recommendations

Based on results of the remediation system analytical and system operational data collected during the reporting period, conclusions, upcoming Site-related activities and a proposed system monitoring schedule are presented below.

5.1 Conclusions

- The DPE remediation system was offline during the entire reporting period from April 7, 2015 through April 7, 2016 to accommodate the November 2014 and April 2015 ABC+ injection programs and monitoring periods; the GWCT ran continuously with only minor downtime.
- During the current reporting period from April 7, 2015 through April 7, 2016, the total groundwater treated and discharged to the sanitary sewer via the AS unit was approximately 463,474 gallons, at a combined average flow rate of 0.85 gpm.
- Approximately 0.163 pounds of VOCs were removed by the remediation system (i.e., GWCT) during the reporting period from April 7, 2015 through April 7, 2016. An estimated cumulative total of 3,003 pounds of VOCs has been removed since system startup on May 14, 2004.
- The system discharges were in compliance with applicable requirements (i.e., BSA EC/BPDES permit effluent discharge limits for liquids, and the NYSDEC air emission standard for vapor of 0.5 lb/hr).
- 5. Groundwater elevations measured on April 7, 2016 ranged from 672.39 ft AMSL to 687.17 ft AMSL. The groundwater surface exhibits a cone of depression, with groundwater flowing inward towards the GWCT. This cone of depression is centered on MW-4, MW-8R, MW-9, MW-14S/D, and MW-16S/D which are located at the western property boundary. The GWCT continues to induce groundwater flow reversal along the western property boundary, which serves to mitigate further off-site migration of VOCs in the perched water-bearing unit.
- The groundwater analytical data and groundwater elevation data indicate that the GWCT
 continued to maintain hydraulic control of groundwater by capturing potential off-Site
 migration of VOCs along the western property boundary.
- TCE concentrations decreased or remained below the detection limit in all but one well (MW-15S) since the last comprehensive groundwater sampling event conducted at the Site in April 2015.
- VC, chloroethane, 1,1-DCA, and cis-1,2-DCE were the most frequently detected VOCs in groundwater. For the April 2016 comprehensive groundwater sampling event, the highest concentrations of VOCs were detected west of the GWCT and the former source area soil excavation.
- 9. The presence and distribution of TCE daughter products (cis-1,2-DCE, VC, chloroethane) and 1,1,1-TCA daughter products (1,1,-DCA and chloroethane) continued to provide supportive evidence that the attenuation of TCE and 1,1,1-TCA via reductive dechlorination is occurring at the Site.

5.2 Recommendations

Based on information gathered during the current reporting period, the following recommendations are proposed for the Site:

- Return the DPE system to operation. Once operating, target both shallow and deep waterbearing unit VOC contamination. This will be done by continuing to have all DPE wells remain on, except for DPE-6, which is located approximately 30 feet east of the GWCT in the former soil excavation area.
- 2. Continue to sample active DPE wells and the GWCT for VOCs.
- 3. Continue to monitor the *Dehalococcoides* population to assure that complete degradation of TCE to benign end products is not stalling at cis-1,2-DCE and VC.
- 4. Clean and/or replace the manifold for the DPE system that has become fouled with calcium hydroxide (lime) buildup, prior to the April 2017 groundwater sampling event.
- 5. Redevelop DPE-1 and DPE-5, if needed, with acid to remove excessive lime buildup.
- 6. Continue to perform O&M activities as listed in **Table 10**.
- 7. Perform three targeted quarterly groundwater sampling events and one comprehensive groundwater sampling event during the next reporting period.
- 8. Review and update the Site health and safety plan as needed.
- 9. Finalize a Site Management Plan.

5.3 Proposed Monitoring and Compliance Sampling Schedule

The proposed schedule for groundwater sampling at the Site during the next reporting period is presented in **Table 11**. As shown in **Table 11**, six perimeter wells (MW-2, MW-3, MW-6, MW-10, MW-11, and MW-12), six historic source area wells (MW-4, MW-8R, MW-13S, MW-13D, MW-16S, and MW-16D), seven dual-phase extraction wells (DPT-1, DPT-2, DPT-3, DPT-4, DPT-5, DPT-7, and DPT-8), and the GWCT will be sampled during the next three targeted quarterly events (July 2016, October 2016, and January 2017) for the next reporting period. The comprehensive groundwater monitoring event scheduled for April 2017 will include all 17 Site monitoring wells and nested piezometers as well as the seven dual-phase extraction wells (DPT-1, DPT-2, DPT-3, DPT-4, DPT-5, DPT-7, and DPT-8), and the GWCT.

Prior to each collection of groundwater samples, a complete round of water level measurements will be collected. Groundwater samples will be analyzed for VOCs using USEPA SW-846 Method 8260C. Quality assurance/quality control samples will include rinsate blanks, trip blanks, and blind duplicate samples. Laboratory batch quality control will be included with the completed data package.

Quarterly air samples from the AS unit and LRP (when on-line) vapor effluent sampling ports will be collected to ensure compliance with the NYSDEC exhaust mass-loading rate guidance of 0.5 lb/hr of VOCs. Quarterly vapor effluent air samples will be collected from the LRP when on-line to determine the mass of VOCs removed by the DPE system as a vapor. The samples will be analyzed for VOCs utilizing USEPA Method TO-15.

In addition, quarterly aqueous samples from the AS unit effluent discharge to the sanitary sewer will be collected as specified in the current BSA EC/BPDES discharge permit, and AS unit influent samples will be collected to determine the treatment efficiency of the AS unit. These samples will be

analyzed for VOCs, TEH, TSS, and pH as specified in the current permit. **Table 12** provides a summary of the proposed monitoring and compliance sampling activities during the next reporting period. In the event that any effluent permit monitoring requirements change, notification of these changes will be given to the NYSDEC in a future quarterly groundwater monitoring summary report.

The next PRR (twelfth comprehensive report since DPE system startup in May 2004) for the combined DPE remediation system will be prepared following the receipt of laboratory analytical results for the April 2017 comprehensive groundwater sampling event and will cover the period of April 2016 through April 2017.

6.0 Evaluate Remedy Performance, Effectiveness, and Protectiveness

6.1 Institutional Controls and Engineering Controls Certification

An Institutional Controls and Engineering Controls certification form was not distributed by NYSDEC for this reporting period. Per direction from NYSDEC via electronic mail on June 27, 2016, this PRR is to be submitted without Institutional Controls and Engineering Controls certification form; refer to **Appendix G**.

Institutional controls include:

- Monitoring Plan
- 2. O&M Plan

Engineering controls include:

- 1. Groundwater Treatment System
- 2. Vapor Mitigation
- 3. Cover System
- 4. Groundwater Containment

7.0 References

AECOM. February 2016. "First Quarter 2016 Groundwater Monitoring Report, January 2016 Sampling Event, Former Scott Aviation Facility, Lancaster, New York, NYSDEC Site Code No. 9-15-149".

AECOM. November 2015. "Fourth Quarter 2015 Groundwater Monitoring Report, December 2015 Sampling Event, Former Scott Aviation Facility, Lancaster, New York, NYSDEC Site Code No. 9-15-149".

AECOM. August 2015. "Third Quarter 2015 Groundwater Monitoring Report, July 2015 Sampling Event, Former Scott Aviation Facility, Lancaster, New York, NYSDEC Site Code No. 9-15-149".

AECOM. July 2015. "2015 Periodic Review Report, April 2014 Sampling Event, Former Scott Aviation Facility, Lancaster, New York, NYSDEC Site Code No. 9-15-149".

AECOM. February 2015. "First Quarter 2015 Groundwater Monitoring Report, January 2015 Sampling Event, Former Scott Aviation Facility, Lancaster, New York, NYSDEC Site Code No. 9-15-149".

AECOM. November 2014. "Fourth Quarter 2014 Groundwater Monitoring Report, October 2014 Sampling Event, Former Scott Aviation Facility, Lancaster, New York, NYSDEC Site Code No. 9-15-149".

AECOM. August 2014. "Third Quarter 2014 Groundwater Monitoring Report, July 2014 Sampling Event, Former Scott Aviation Facility, Lancaster, New York, NYSDEC Site Code No. 9-15-149".

AECOM. May 2014. "2014 Periodic Review Report, April 2014 Sampling Event, Former Scott Aviation Facility, Lancaster, New York, NYSDEC Site Code No. 9-15-149".

NYSDEC. May 2010. "New York State Department of Environmental Conservation, Division of Environmental Remediation, DER-10 Technical Guidance for Site Investigation and Remediation".

Lu, X., J.T. Wilson, and D.H. Kampbell. 2006. "Relationship Between *Dehalococcoides* DNA in Ground Water and Rates of Reductive Dechlorination at Field Scale". Water Research 40:3131-3140.

Earth Tech. November 2005. "Remedial Action Engineering Report (May 14, 2004 through July 19, 2005), Former Scott Aviation Site, Lancaster, New York".

Earth Tech. April 2004. "Phase I Environmental Site Assessment and Modified Compliance Assessment, Tyco/Scott Aviation Facility, Lancaster, New York."

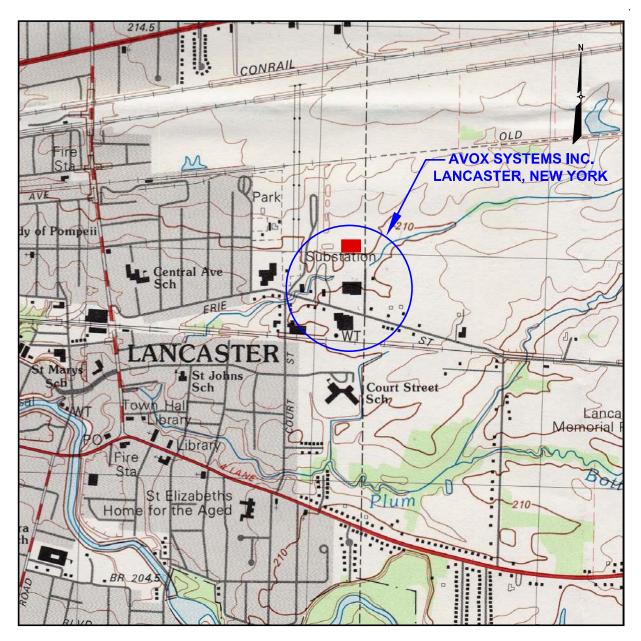
Earth Tech. November 2003. "Remedial Design Work Plan, Scott Aviation, Inc., Lancaster, New York".

Earth Tech. June 2003. "Site Investigation Completion Report, Scott Aviation, Inc., Lancaster, New York".

O'Brien & Gere Engineers, Inc. July 1996. "Soil and Ground Water Remediation Project, Scott Aviation, Lancaster, New York".

NYSDEC, Division of Hazardous Waste Remediation. November 1994. "Record of Decision, Scott Aviation Site, Village of Lancaster, Eric County, I.D. Number 9-15-149".

Figures



SOURCE:

1982 GEOLOGIC SURVEY 7.5 X 15 MINUTE TOPOGRAPHIC QUADRANGLE LANCASTER, NEW YORK

<u>LEGEND</u>

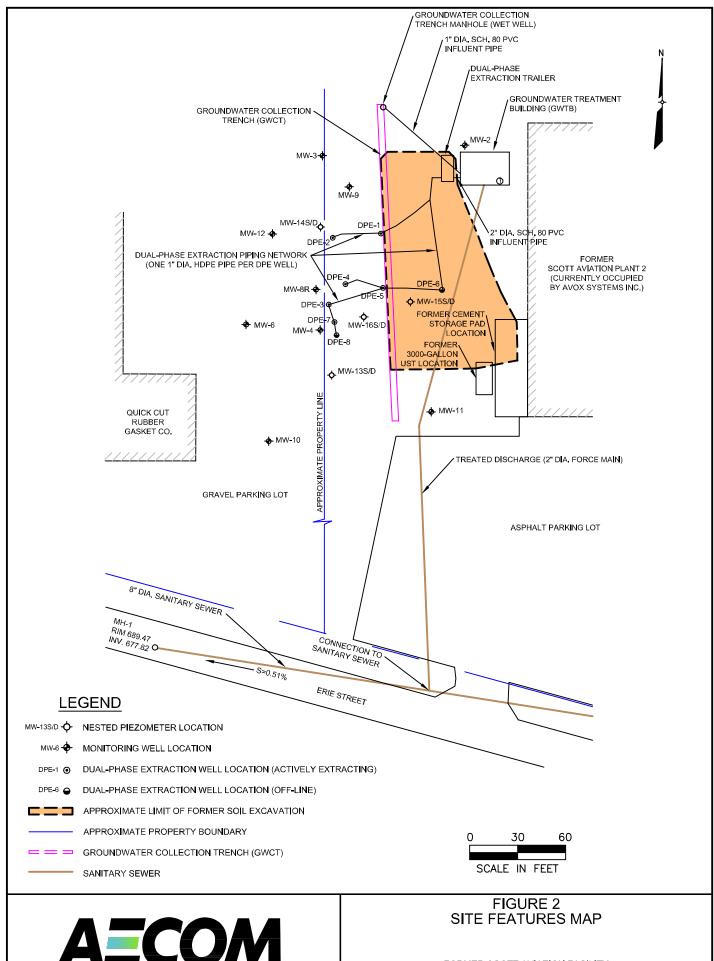
AVOX PLANT 3 ADDED AFTER PUBLICATION OF LANCASTER, NEW YORK TOPOGRAPHIC QUADRANGLE.





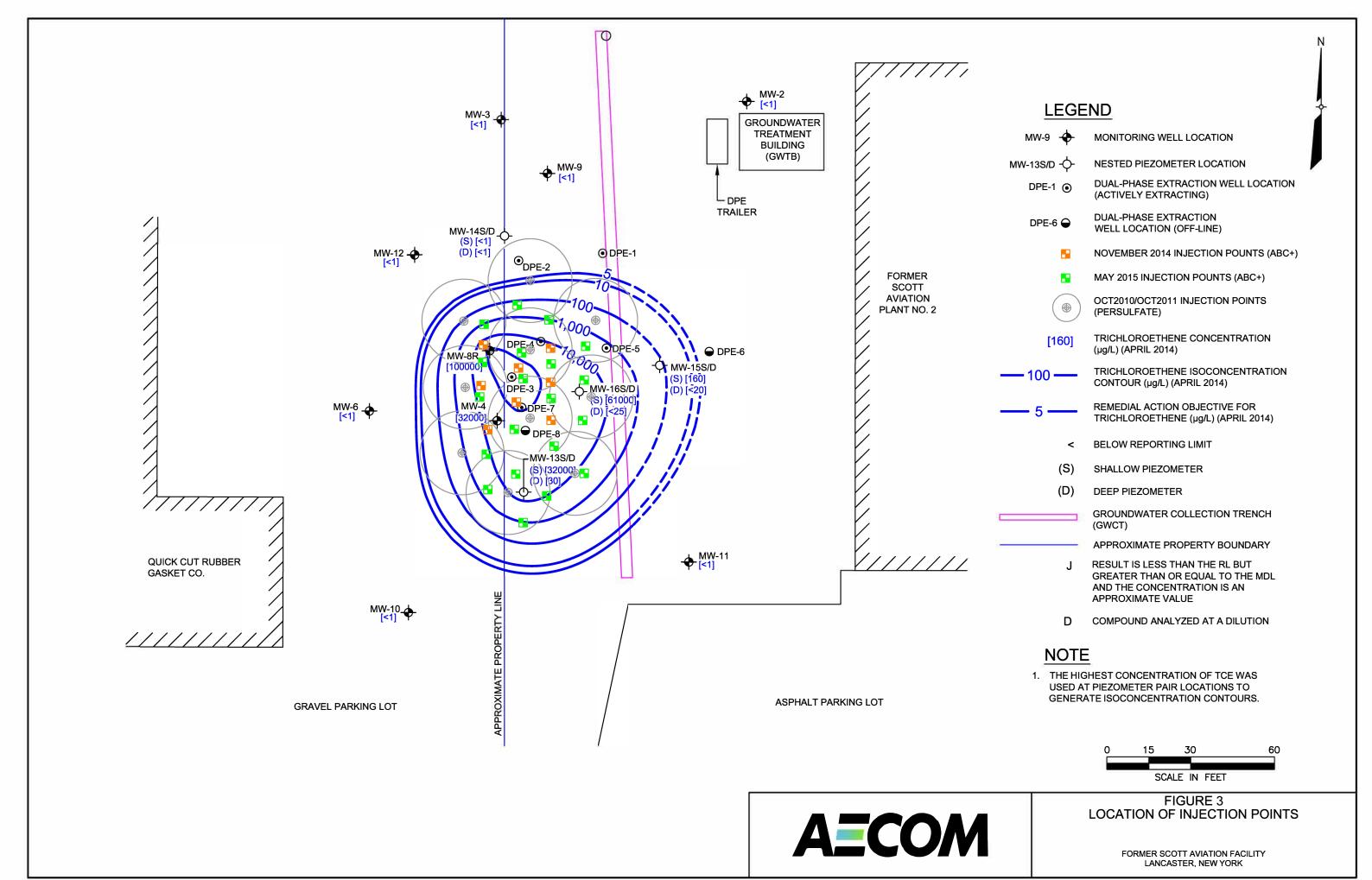
FIGURE 1 SITE LOCATION MAP

FORMER SCOTT AVIATION FACILITY AREA 1 LANCASTER, NEW YORK





FORMER SCOTT AVIATION FACILITY LANCASTER, NEW YORK



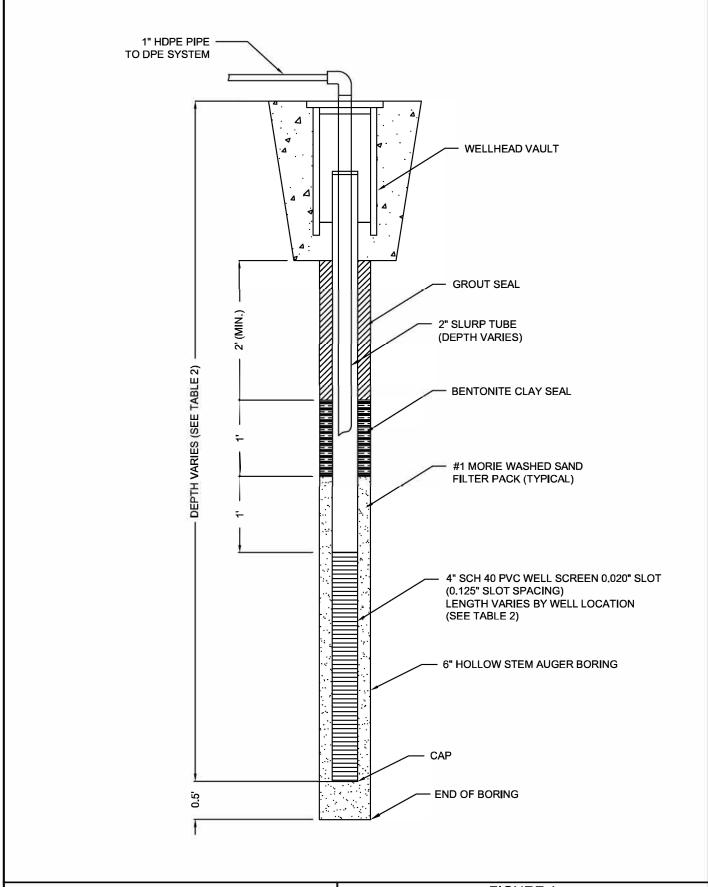




FIGURE 4 TYPICAL DUAL PHASE EXTRACTION RECOVERY WELL CONSTRUCTION DIAGRAM

FORMER SCOTT AVIATION FACILITY LANCASTER, NEW YORK

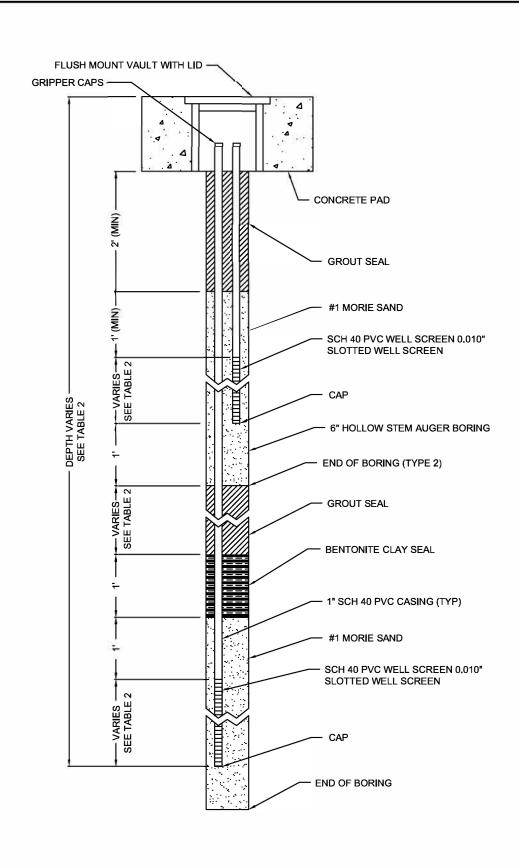
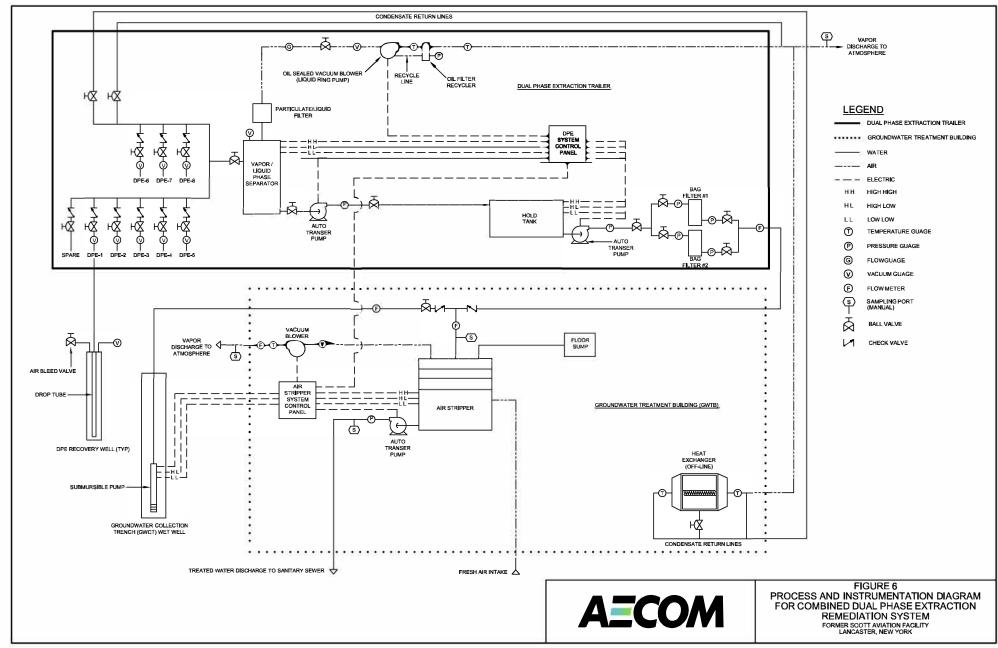
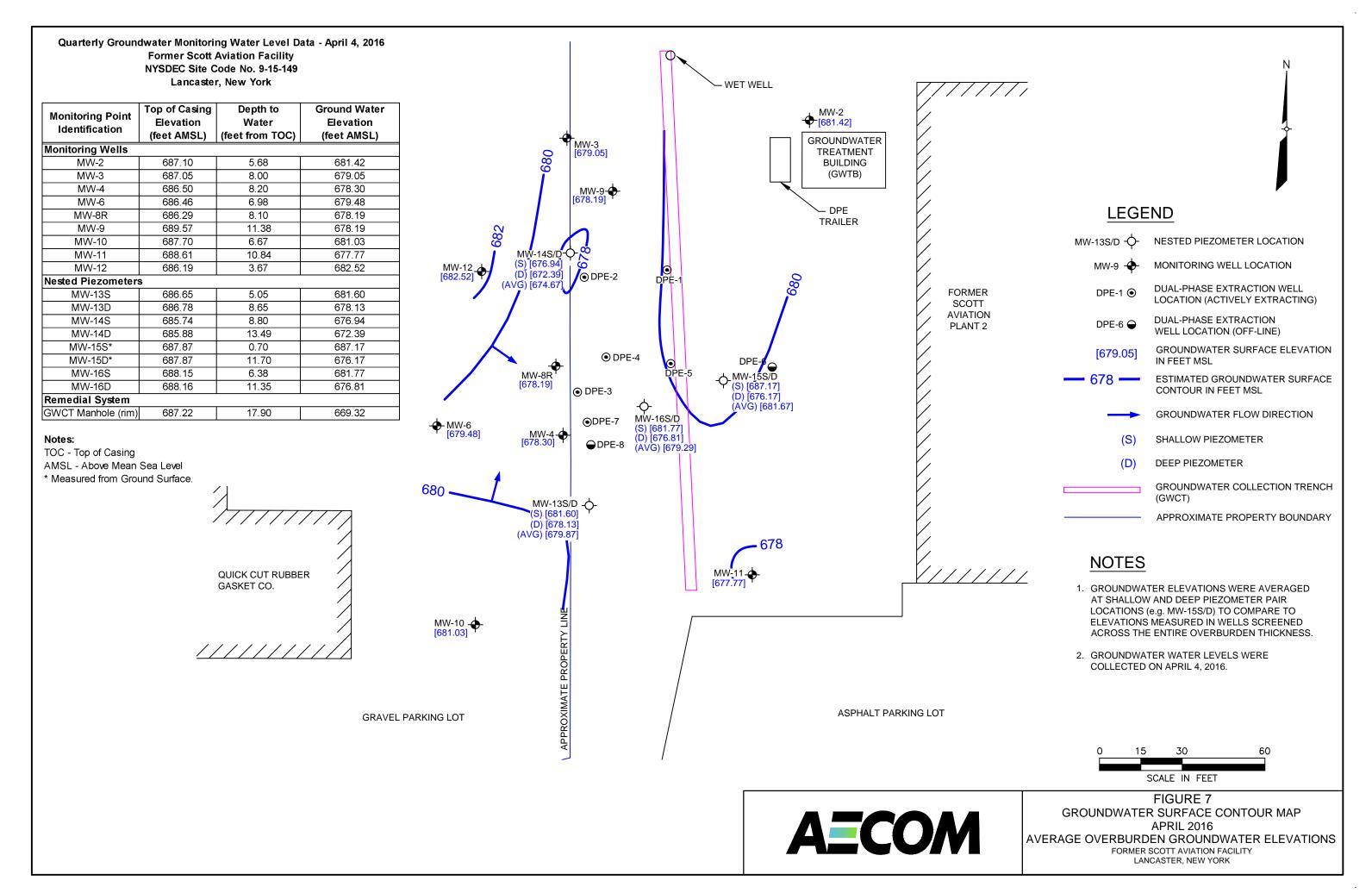




FIGURE 5 TYPICAL NESTED PIEZOMETER CONSTRUCTION DIAGRAM

FORMER SCOTT AVIATION FACILITY LANCASTER, NEW YORK





Quarterly Groundwater Monitoring Water Level Data - April 4, 2016 Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

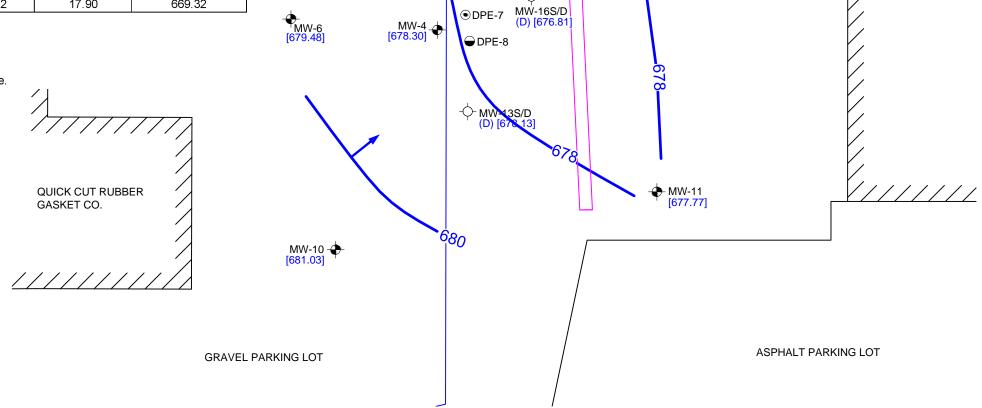
Monitoring Point	Top of Casing Elevation	Depth to Water	Ground Water Elevation
	(feet AMSL)	(feet from TOC)	(feet AMSL)
Monitoring Wells			
MW-2	687.10	5.68	681.42
MW-3	687.05	8.00	679.05
MW-4	686.50	8.20	678.30
MW-6	686.46	6.98	679.48
MW-8R	686.29	8.10	678.19
MW-9	689.57	11.38	678.19
MW-10	687.70	6.67	681.03
MW-11	688.61	10.84	677.77
MW-12	686.19	3.67	682.52
Nested Piezometers	3		
MW-13S	686.65	5.05	681.60
MW-13D	686.78	8.65	678.13
MW-14S	685.74	8.80	676.94
MW-14D	685.88	13.49	672.39
MW-15S*	687.87	0.70	687.17
MW-15D*	687.87	11.70	676.17
MW-16S	688.15	6.38	681.77
MW-16D	688.16	11.35	676.81
Remedial System			
GWCT Manhole (rim)	687.22	17.90	669.32

Notes:

TOC - Top of Casing

AMSL - Above Mean Sea Level

* Measured from Ground Surface.



MW-3 [679.05]

MW-8R 👍

[678.19]

MW-9 [678.19]

DPE-1

MW-15S/D-(D) [676.17]

MW-14S/D

● DPE-2

DPE-3

- WET WELL

MW-2

GROUNDWATER TREATMENT BUILDING (GWTB)

DPE

TRAILER

OPE-6

FORMER

SCOTT

AVIATION PLANT 2



MW-13S/D - NESTED PIEZOMETER LOCATION

MW-9 - MONITORING WELL LOCATION

DPE-1

DUAL-PHASE EXTRACTION WELL LOCATION (ACTIVELY EXTRACTING)

DPE-6

DUAL-PHASE EXTRACTION
WELL LOCATION (OFF-LINE)

[679.05] GROUNDWATER SURFACE ELEVATION IN FEET MSL

- 676 — ESTIMATED GROUNDWATER SURFACE CONTOUR IN FEET MSL

GROUND WATER FLOW DIRECTION

(D) DEEP PIEZOMETER

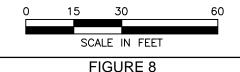
GROUNDWATER COLLECTION TRENCH

(- -)

APPROXIMATE PROPERTY BOUNDARY

NOTES

- GROUNDWATER ELEVATIONS FROM THE DEEP PIEZOMETER PAIR LOCATIONS (i.e. MW-13D, MW-14D, MW-15D, MW-16D) WERE USED TO CREATE THE GROUNDWATER SURFACE CONTOURS.
- 2. GROUNDWATER WATER LEVELS WERE COLLECTED ON APRIL 4, 2016.



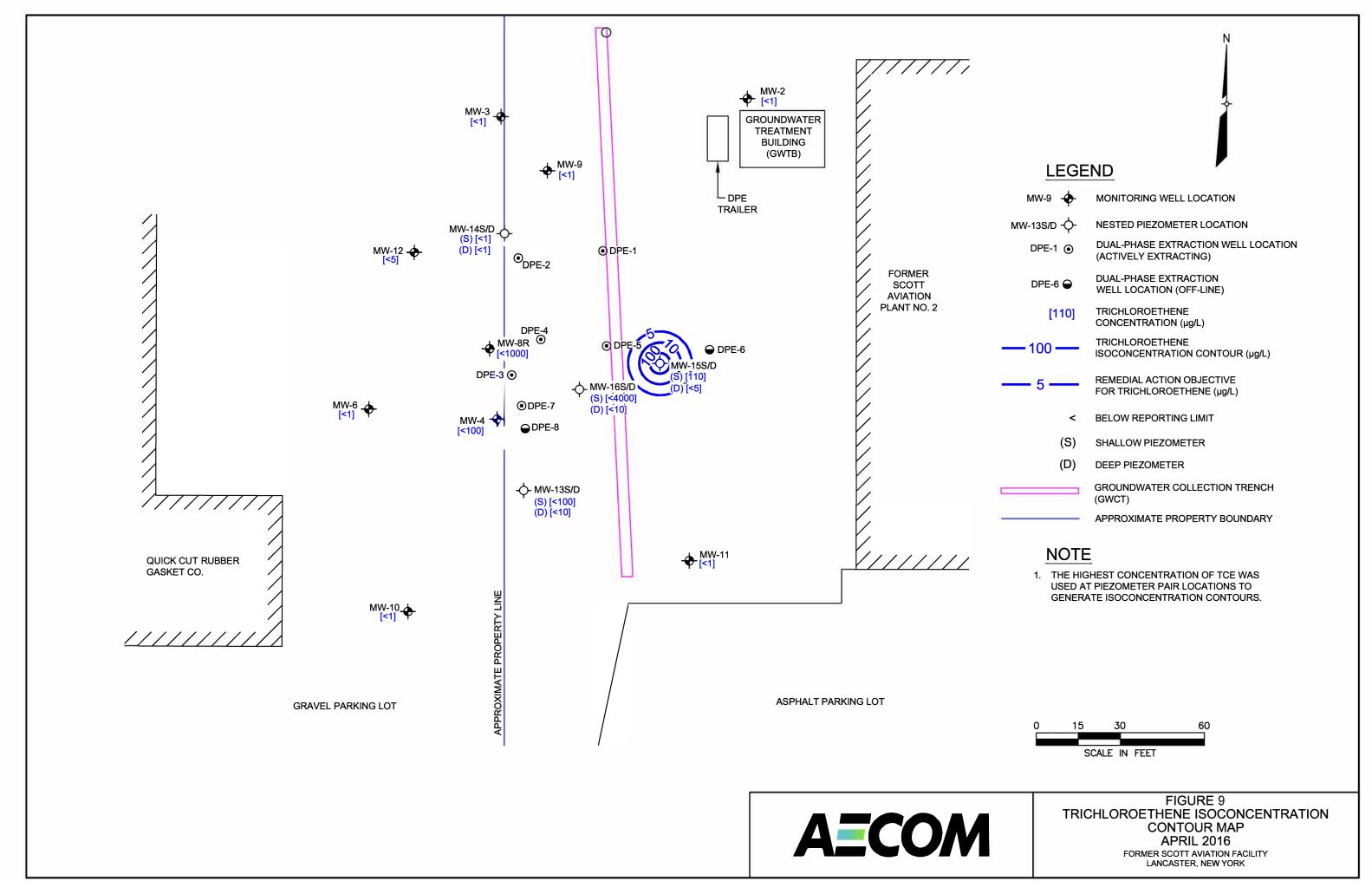


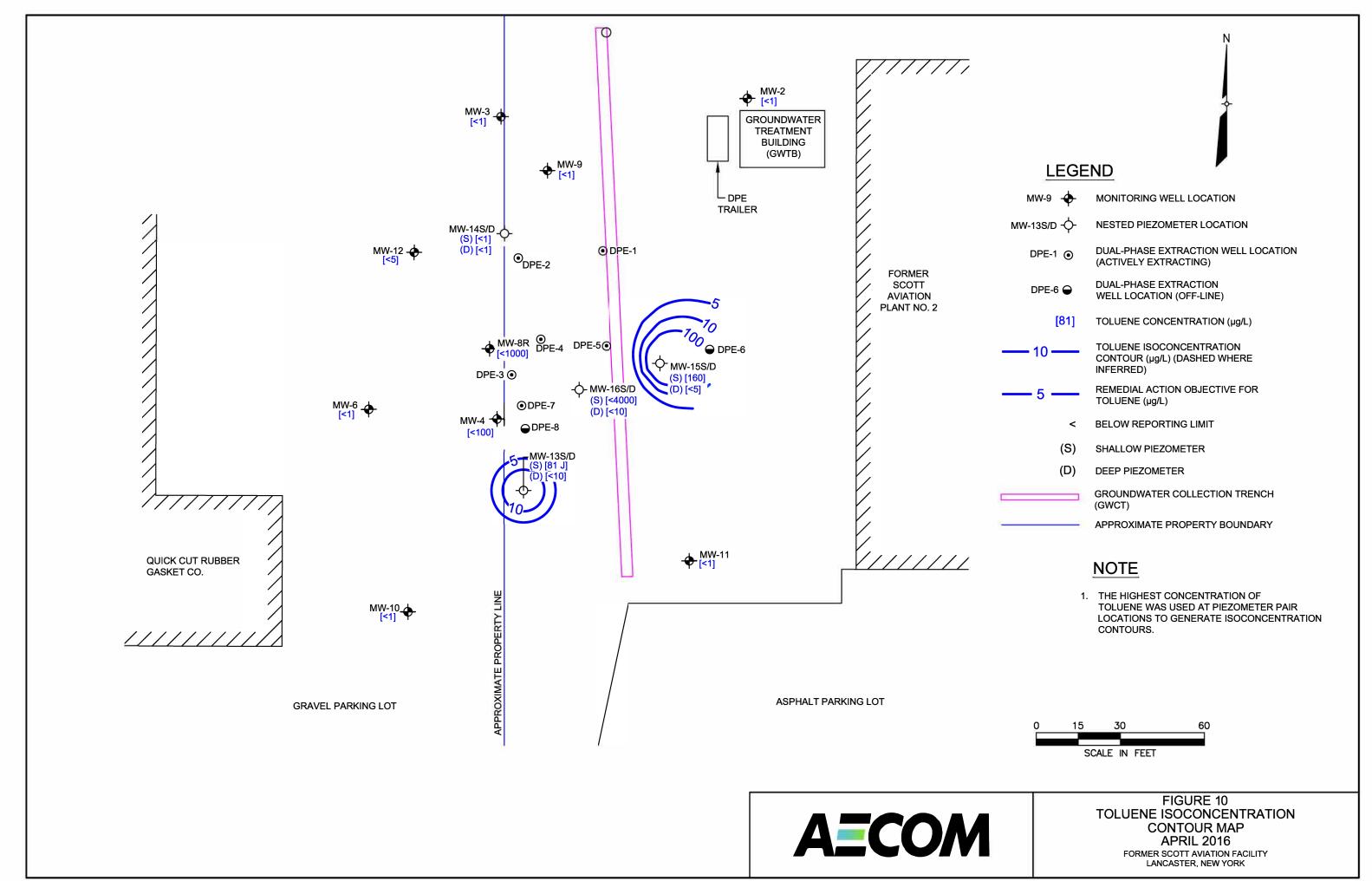
GROUNDWATER SURFACE CONTOUR MAP

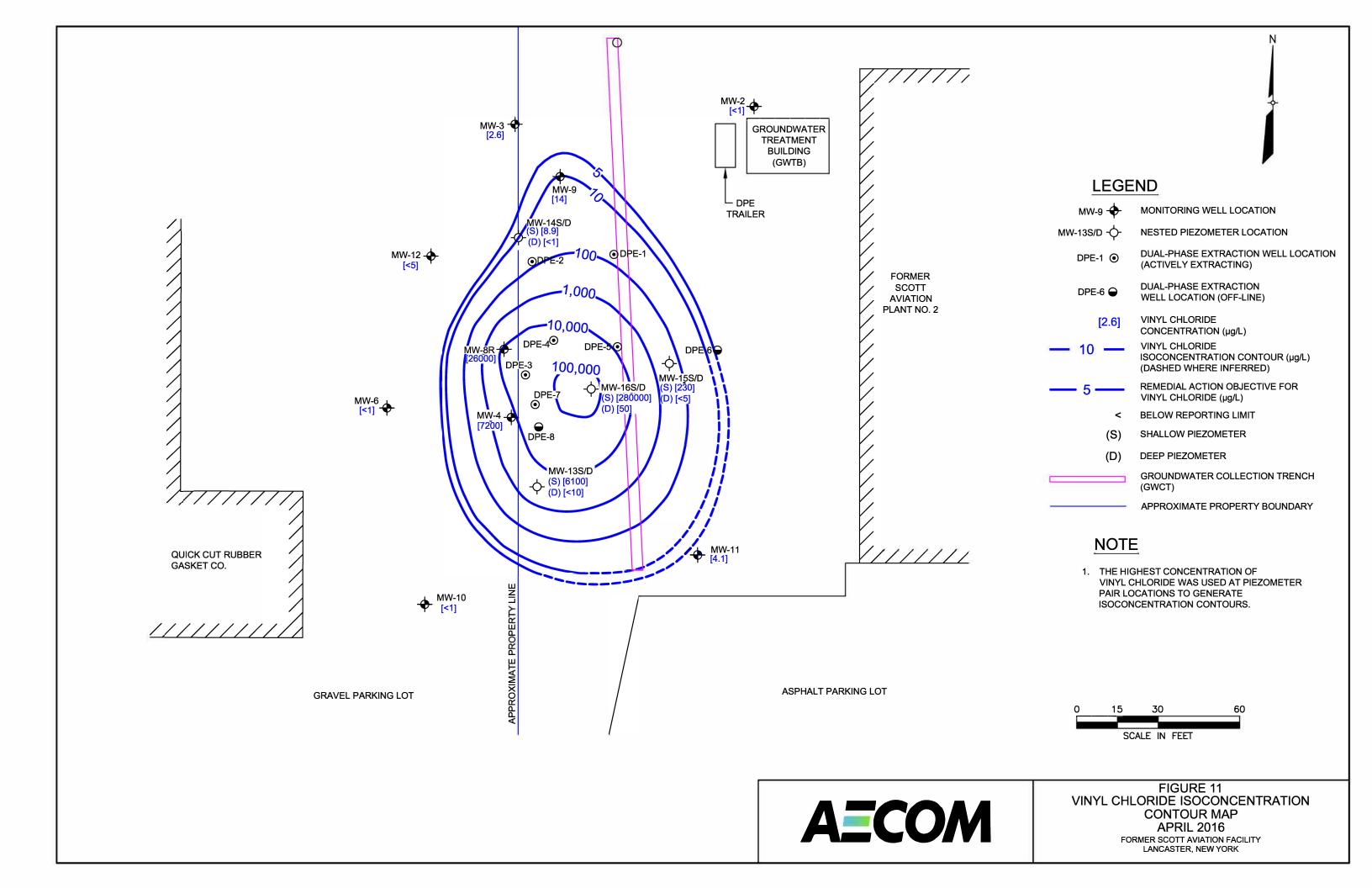
APRIL 2016

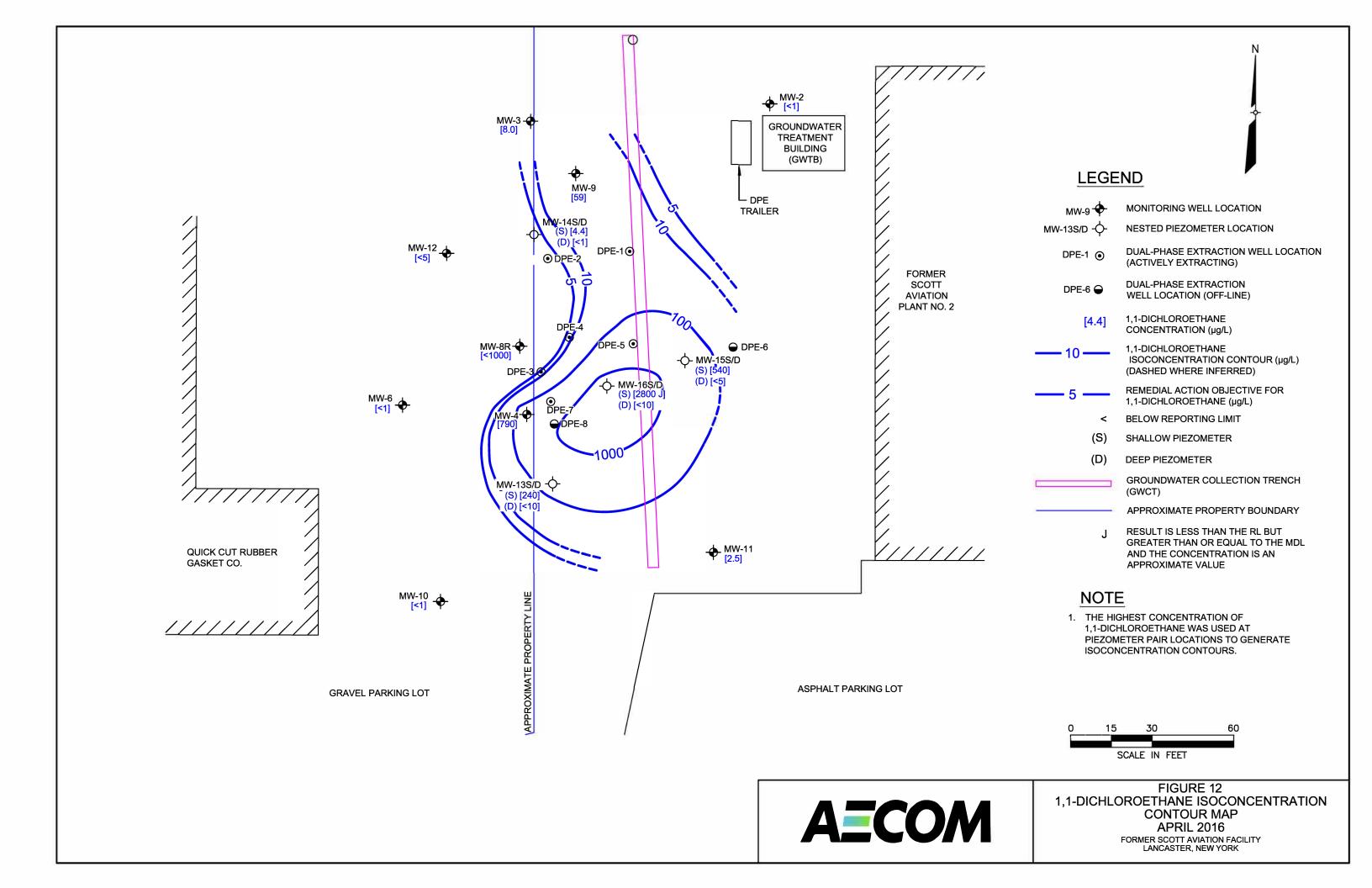
DEEP OVERBURDEN GROUNDWATER ELEVATIONS

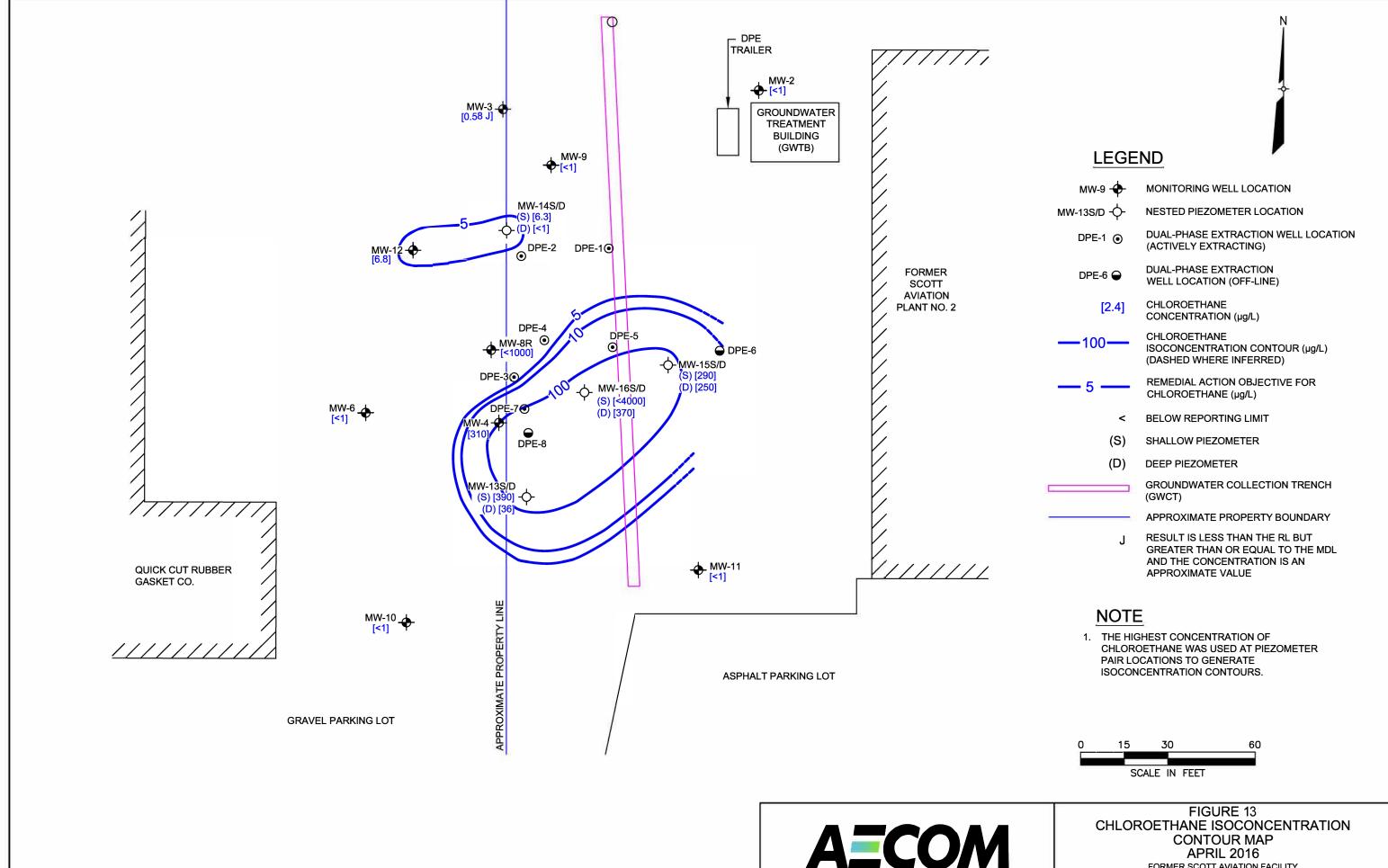
FORMER SCOTT AVIATION FACILITY LANCASTER, NEW YORK





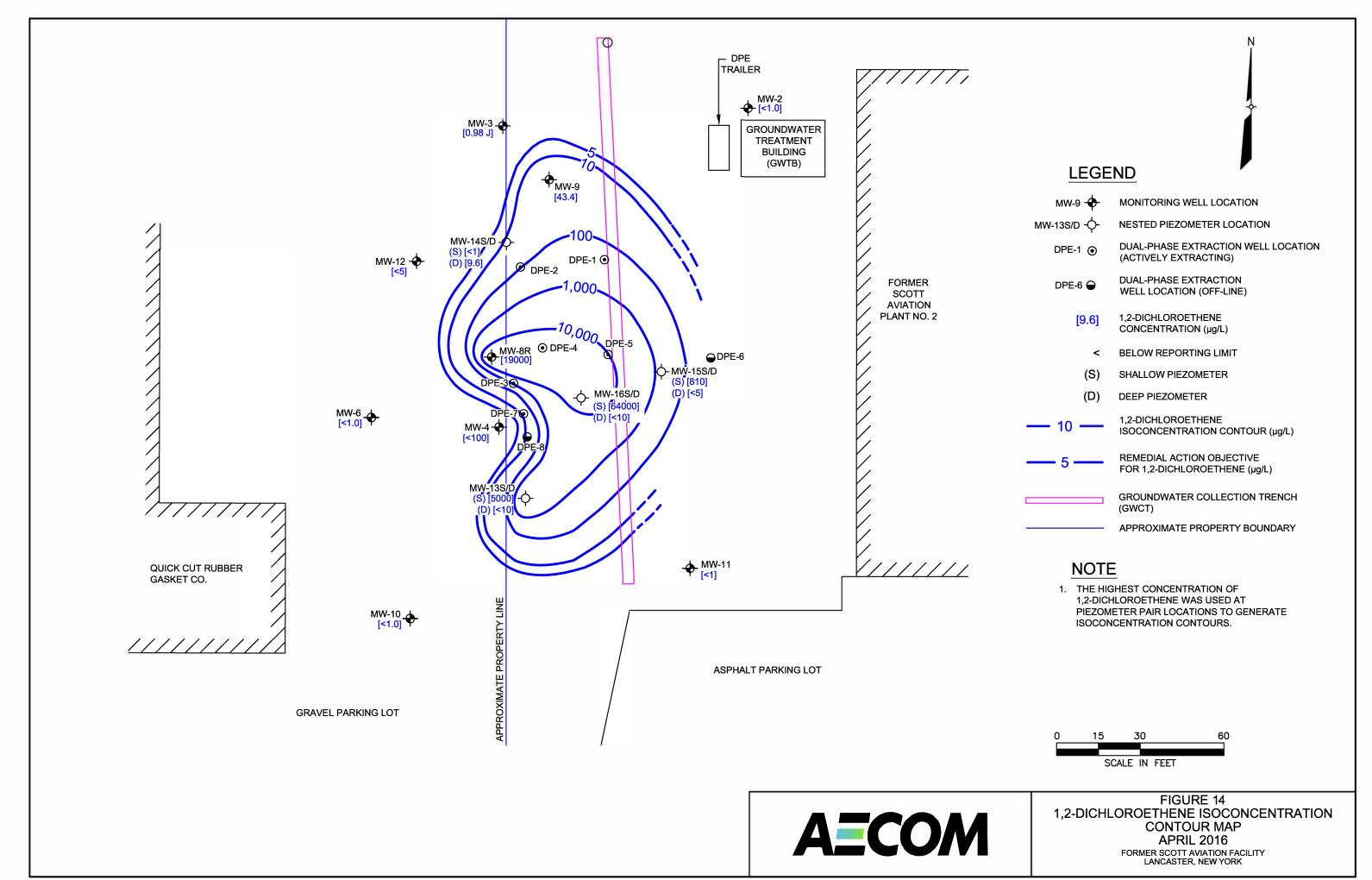


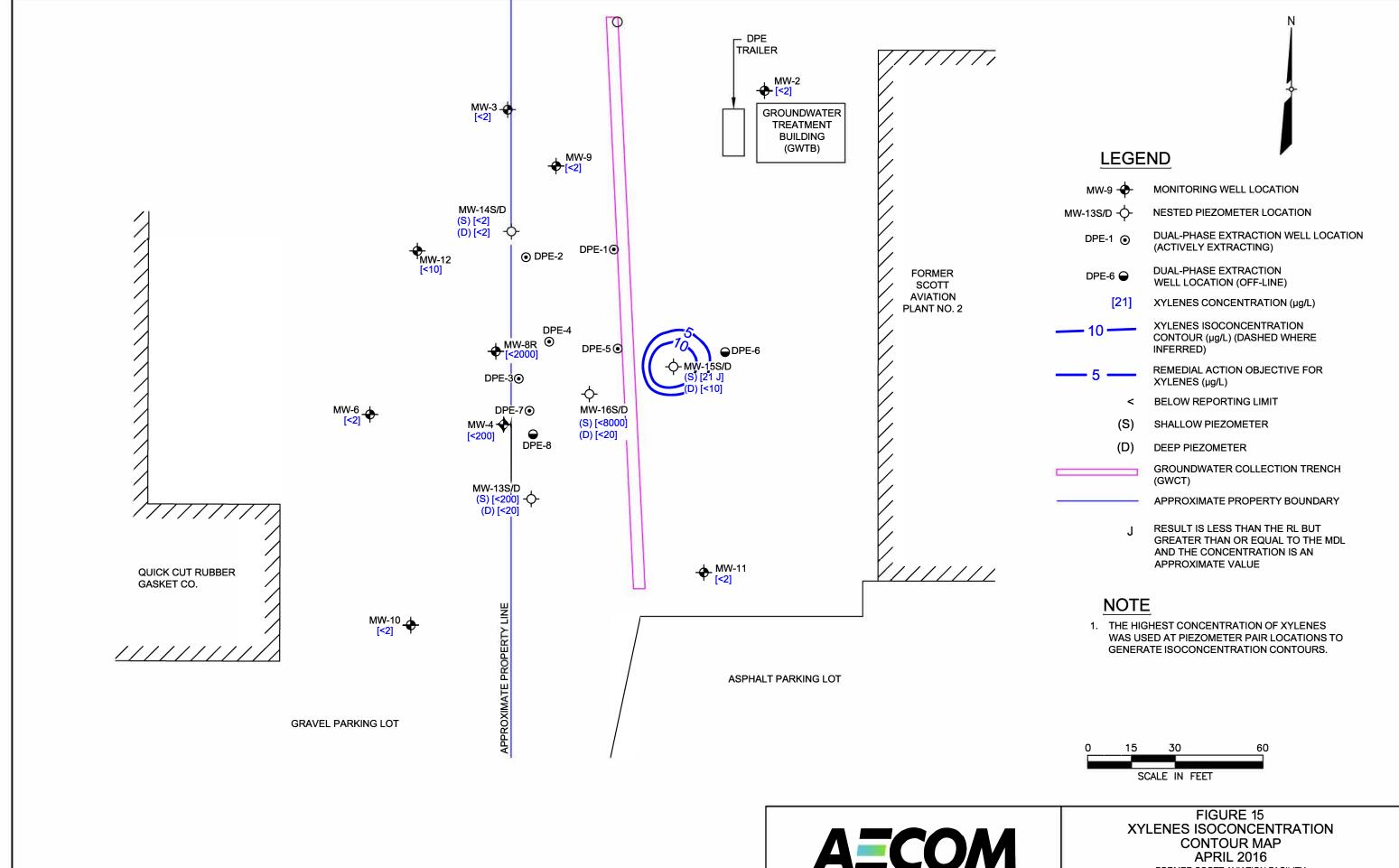






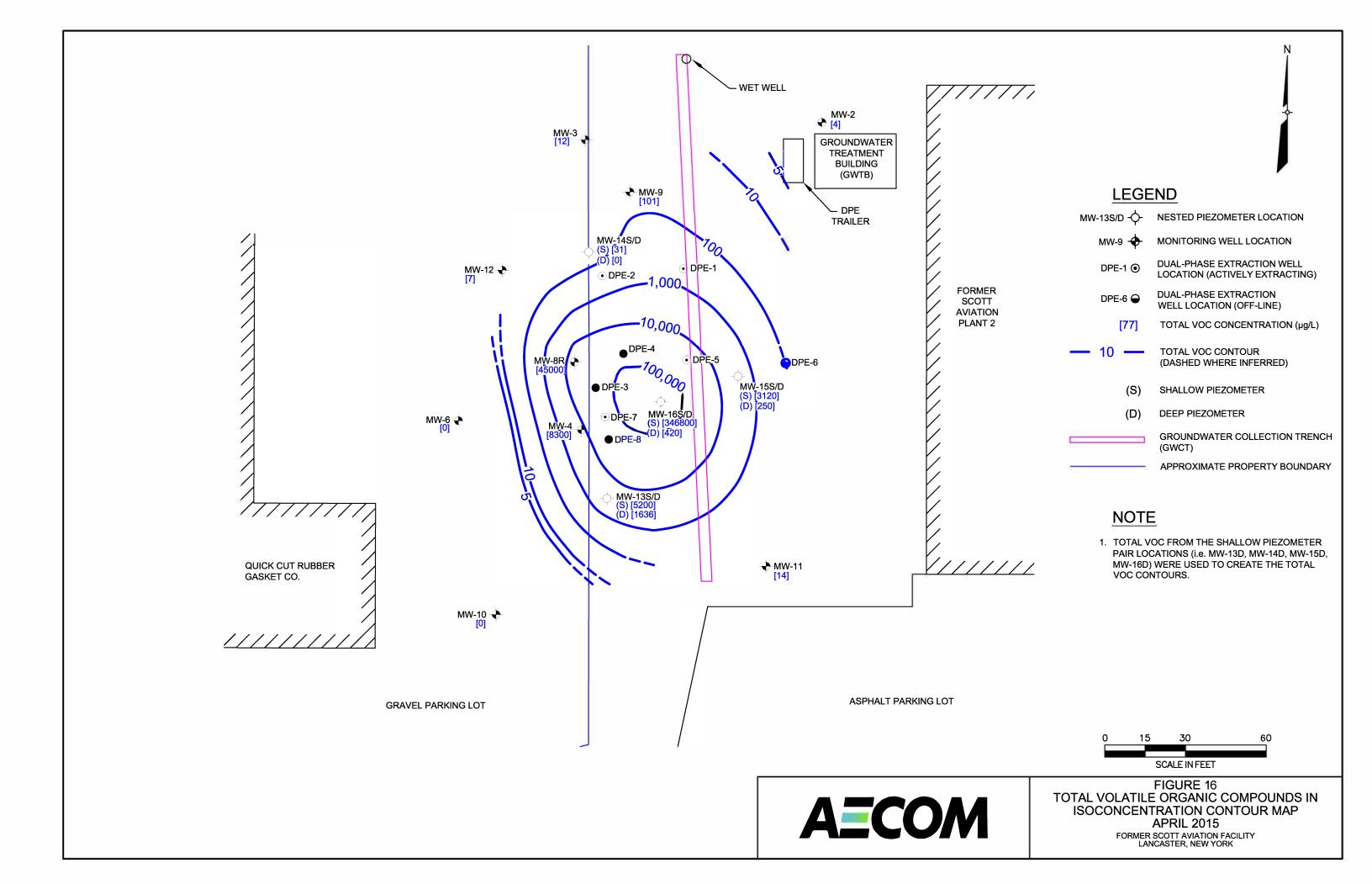
FORMER SCOTT AVIATION FACILITY LANCASTER, NEW YORK







FORMER SCOTT AVIATION FACILITY LANCASTER, NEW YORK



AECOM Environment

Tables

Table 1

Remedial Action Objectives Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

	Remedial A	Action Objectives*
Volatile Organic Compounds	Soil (mg/kg)	Groundwater (μg/L)
Chloroethane	1	5
1,1-Dichloroethane	1	5
1,2-Dichloroethene	1	5
1,1,1-Trichloroethane	1	5
Trichloroethene	1	5
Vinyl chloride	1	5
Ethylbenzene	1	5
Toluene	1	5
Xylenes	1	5
Total VOCs	10	NA

Notes:

mg/kg - milligrams per kilogram $\mu g/L$ - micrograms per liter NA - not applicable

* Based on values presented in site-specific ROD (November 1994).

Table 2

Monitoring Well, Nested Piezometer, and Dual Phase Extraction Well Construction Specifications

Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

			Bottom of		Well Screen	Filter Sand	Bentonite Seal
Well ID	Date Installed	Well Diameter	Boring	Screen Length	Interval	Pack Interval	Interval
11015	Date metanea	(inches)	(ft bgs)	(feet)	(ft bgs)	(ft bgs)	(ft bgs)
Monitoring Wells	l	l	(it bgs)		(it bgs)	(it bgs)	(it bgs)
MW-1	(1)	NA	NA	NA	NA	NA	NA
MW-2	05/24/91	2.0	15.0	10	5.0 - 15.0	4.0 - 15.0	1.0 - 4.0
MW-3	05/19/91	2.0	26.0	15	11.0 - 26.0	9.0 - 26.0	5.0 - 9.0
MW-4	05/23/91	2.0	26.0	10	16.0 - 26.0	14.0 - 26.0	11.0 - 14.0
MW-5	(1)	NA	NA	NA	NA	NA	NA
MW-6	03/17/04	2.0	26.0	10	16.0 - 26.0	14.0 - 16.0	11.5 - 14.0
MW-7	(2)	NA	NA	NA	NA	NA	NA
MW-8R	02/17/04	2.0	28.0	10	14.0 - 24.0	13.0 - 24.5	12.0 - 13.0
MW-9	04/11/99	2.0	25.4	20	5.4 - 25.4	4.0 - 25.4	2.0 - 4.0
MW-10	04/11/99	2.0	24.4	20	4.4 - 24.4	3.0 - 4.4	1.0 - 3.0
MW-11	03/01/04	2.0	29.0	20	8.5 - 28.5	7.5 - 29.0	6.5 - 7.5
MW-12	03/17/04	2.0	27.5	20	7.0 - 27.0	6.0 - 27.5	5.0 - 6.0
Nested Piezomete	ers						
MW-13S	03/03/04	1.0	24.0	8	8.5 - 16.5	7.5 - 17.0	6.5 - 7.5
MW-13D	03/03/04	1.0	24.0	4	19.5 - 23.5	19.0 - 24.0	17.0 - 19.0
MW-14S	03/04/05	1.0	24.0	8	8.5 - 16.5	7.5 - 16.75	6.5 - 7.5
MW-14D	03/04/05	1.0	24.0	5	18.5 - 23.5	18.25 - 24.0	16.75 - 18.25
MW-15S	03/02/05	1.0	28.0	6	12.0 - 18.0	11.0 - 12.0	10.0 - 11.0
MW-15D	03/02/05	1.0	28.0	4	21.0 - 25.0	20.5 - 28.0	18.5 - 20.5
MW-16S	03/03/05	1.0	24.0	6	12.0 - 18.0	11.0 -18.25	10.0 - 11.0
MW-16D	03/03/05	1.0	24.0	4	20.0 - 24.0	19.75 - 24.0	18.25 - 19.75
Dual Phase Extra	ction Recovery We	ells					
DPE-1	02/17/04	4.0	18.5	5	13.0 - 18.0	12.0 - 18.5	11.0 - 12.0
DPE-2	02/19/04	4.0	26.0	5	18.5 - 23.5	18.0 - 26.0	17.0 - 18.0
DPE-3	02/18/04	4.0	18.0	8	8.5 - 16.5	8.0 - 18.0	7.0 - 8.0
DPE-4	(3)	2.0	27.7	20	7.7 - 27.7	6.0 - 27.7	4.0 - 6.0
DPE-5	02/16/04	4.0	18.3	6	12.0 - 18.0	11.0 - 18.3	10.0 - 11.0
DPE-6	02/16/04	4.0	18.3	6	12.0 - 18.0	11.0 - 18.3	10.0 - 11.0
DPE-7	02/19/04	4.0	26.0	4	19.5 - 23.5	19.0 - 26.0	18.0 - 19.0
DPE-8	02/18/04	4.0	17.0	8	8.5 - 16.5	8.0 - 17.0	7.0 - 8.0

Notes:

ft bgs - feet below ground surface

MW-# - Monitoring Well

DPE-# - Dual Phase Extraction Recovery Well

- (1) MW-1 and MW-5 are not monitored for this project.
- (2) MW-7 was abandoned in November 2003 per Section 3.7 of the Remedial Design Work Plan.
- (3) Pre-existing monitoring well MW-8 (installed 04/11/99) was converted to DPE-4 in February 2004.

NA - Information is not available.

Table 3

Groundwater Monitoring Program - July 2015 through April 2016 Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Event Date	Number of Locations Sampled	S Locations Sampled								
Quarterly Groundwa	ter Monitoring									
July 2015	17	MW-2 MW-8R MW-13D DPE-4 GWCT	MW-3 MW-10 MW-16S DPE-5	MW-4 MW-11 MW-16D DPE-7	MW-6 MW-13S DPE-3 DPE-8					
October 2015	17	MW-2 MW-8R MW-13D DPE-4 GWCT	MW-3 MW-10 MW-16S DPE-5	MW-4 MW-11 MW-16D DPE-7	MW-6 MW-13S DPE-3 DPE-8					
January 2016	12	MW-2 MW-8R MW-13D	MW-3 MW-10 MW-16S	MW-4 MW-11 MW-16D	MW-6 MW-13S GWCT					
Comprehensive Ann	ual Groundwater Monito	oring								
April 2016	26	MW-2 MW-8R MW-12 MW-14D MW-16D DPE-3 DPE-8	MW-3 MW-9 MW-13S MW-15S GWCT DPE-4 GWCT	MW-4 MW-10 MW-13D MW-15D DPE-1 DPE-5	MW-6 MW-11 MW-14S MW-16S DPE-2 DPE-7					

Table 4

Quarterly Groundwater Monitoring Water Level Data - April 4, 2016 Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Monitoring Point Identification	Top of Casing Elevation (feet AMSL)	Depth to Water (feet from TOC)	Ground Water Elevation (feet AMSL)
Monitoring Wells			
MW-2	687.10	5.68	681.42
MW-3	687.05	8.00	679.05
MW-4	686.50	8.20	678.30
MW-6	686.46	6.98	679.48
MW-8R	686.29	8.10	678.19
MW-9	689.57	11.38	678.19
MW-10	687.70	6.67	681.03
MW-11	688.61	10.84	677.77
MW-12	686.19	3.67	682.52
Nested Piezometers			
MW-13S	686.65	5.05	681.60
MW-13D	686.78	8.65	678.13
MW-14S	685.74	8.80	676.94
MW-14D	685.88	13.49	672.39
MW-15S*	687.87	0.70	687.17
MW-15D*	687.87	11.70	676.17
MW-16S	688.15	6.38	681.77
MW-16D	688.16	11.35	676.81
Remedial System			
GWCT Manhole (rim)	687.22	17.90	669.32

Notes:

TOC - Top of Casing

AMSL - Above Mean Sea Level

* Measured from Ground Surface.

Table 5

Summary of April 2016 Analytical Data Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Sample ID	Groundwater		MW-	2		MW-3	3		MW-4			MW-6	3		MW-8R			MW-9			MW-1	0		MW-1	1		MW-1	2
Date Collected	RAO/ NYCRR		04/04/	16	(04/05/	16		04/06/1	6	(04/04/	16		04/06/16			04/05/1	6	C)4/04/1	16	(04/04/	16	()4/05/	16
Lab Sample ID	Objective	48	30-976	12-1	48	0-9798	39-1	4	80-9798	9-2	48	0-976	12-4	4	480-97989	-7	48	0-97612	2-12	48	0-9761	12-3	48	0-976	12-2	48	0-976 ⁻	12-5
Volatile Organic Compounds by Me	thod 8260 (µg/L	_)																										
1,1-Dichloroethane	5*	<	1.0	U		8.0			790		<	1.0	U	<	1,000	U		59		٧	1.0	U		2.5		<	5	U
1,1-Dichloroethene	5	<	1.0	U	<	1.0	U	<	100	U	<	1.0	U	<	1,000	U	<	1.0	U	<	1.0	U	<	1.0	U	<	5	U
1,2-Dichloroethane	0.6	<	1.0	U	<	1.0	U	<	100	U	<	1.0	U	<	1,000	U		1.1		<	1.0	U	<	1.0	U	<	5	U
2-Butanone (MEK)	50	<	10	U	<	10	U	<	1,000	U	<	10	U	<	10,000	U	<	10.0	U	<	10	U	<	10	U	<	50	U
Acetone	50		4		<	10	U	<	1,000	U	<	10	U	<	10,000	U	<	10.0	U	<	10	U		7.5		<	50	U
Benzene	1	<	1.0	U	<	1.0	U	<	100	U	<	1.0	U	<	1,000	U	<	1.0	U	<	1.0	U	<	1.0	U	<	5	U
Chloroethane	5*	<	1.0	U		0.58	J		310		<	1.0	U	<	1,000	U	<	1.0	U	<	1.0	U	<	1.0	U		6.8	
cis-1,2-Dichloroethene	5*	<	1.0	U		0.98	J	<	100	U	<	1.0	U		19,000			41.0		<	1.0	U	<	1.0	U	<	5	U
Toluene	5*	<	1.0	U	<	1.0	U	<	100	U	<	1.0	U	<	1,000	U	<	1.0	U	<	1.0	U	<	1.0	U	<	5	U
Trichloroethene	5*	<	1.0	U	<	1.0	U	<	100	U	<	1.0	U	<	1,000	U	<	1.0	U	<	1.0	U	<	1.0	U	<	5	U
trans-1,2-Dichloroethene	5	<	1.0	U	<	1.0	U	<	100	U	<	1.0	U	<	1,000	U		2.4		<	1.0	U	<	1.0	U	<	5	U
Vinyl chloride	5*	<	1.0	U		2.6			7,200		<	1.0	U		26,000			14		<	1.0	U		4.1		<	5	U
Xylenes, Total	5*	<	2.0	U	<	2.0	U	<	200	U	<	2.0	U	<	2,000	U	<	2.0	U	٧	2.0	U	<	2.0	U	<	10	U
Total Volatile Organic Compounds	NA		4			12			8,300			0			45,000			101			0			14			7	

Table 5

Summary of April 2016 Analytical Data Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Sample ID	Groundwater	1	MW-13E)		MW-13S		N	1W-14	D	1	лW-145	3	١	ЛW-15E)	Λ	/W-15S	3	N	ЛW-16D)		MW-16S	
Date Collected	RAO/ NYCRR	(04/06/16	3		04/05/16		0	4/05/1	6	(04/05/16	3	C	04/06/16	6	0	4/06/16	3	C	04/07/16	;		04/07/16	
Lab Sample ID	Objective	48	480-97989-6		48	30-97989	-5	480	-97612	2-10	48	0-97612	2-9	480	0-97989	9-9	480	0-97989	9-8	48	0-97989	-4	4	80-97989-	.3
Volatile Organic Compounds by Me	thod 8260 (µg/L	.)																							
1,1-Dichloroethane	5*	<	10	U		240		<	1.0	U		4.4		<	5	С		540		<	10	U		2,800	J
1,1-Dichloroethene	5	<	10	U	<	100	U	<	1.0	U	<	1.0	U	<	5	U		9	J	<	10	U	<	4,000	U
1,2-Dichloroethane	0.6	<	10	U	<	100	U	<	1.0	U		0.43	J	<	5	U	<	20	U	<	10	U	<	4,000	U
2-Butanone (MEK)	50		1,300		<	1,000	U	<	10	U	<	10	U	<	50	U		160	J	<	100	U	<	40,000	U
Acetone	50		300		<	1,000	U	<	10	U	<	10	U	<	50	U		790		<	100	U	<	40,000	U
Benzene	1	٧	10	U	'	100	U	<	1.0	U		0.90	J	<	5	U	<	20	C	<	10	U	<	4,000	U
Chloroethane	5*		36			390		<	1.0	U		6.3			250			290			370		<	4,000	U
cis-1,2-Dichloroethene	5*	<	10	U		5,000		<	1	U		9.6		<	5	U		810		<	10	U		64,000	
Toluene	5*	<	10	U		81	J	<	1.0	U	<	1.0	U	<	5	U		160		<	10	U	<	4,000	U
Trichloroethene	5*	<	10	U	<	100	U	<	1.0	U	<	1.0	U	<	5	U		110		<	10	U	<	4,000	U
trans-1,2-Dichloroethene	5	<	10	U	<	100	U	<	1.0	U	<	1.0	U	<	5	U	<	20	C	<	10	U	<	4,000	U
Vinyl chloride	5*	<	10	U		6,100		<	1.0	U		8.9		<	5	U		230			50			280,000	
Xylenes, Total	5*	<	20	U	<	200	U	<	2.0	U	<	2.0	Ū	'	10	U		21	J	<	20	Ū	<	8,000	U
Total Volatile Organic Compounds	NA		1,636			5,200			0			31			250			3,120			420			346,800	

Notes:

Bold font indicates the analyte was detected.

Bold font and bold outline indicates the screening criteria was exceeded.

Site-specific RAO Ethylbenzene and 1,1,1-Trichloroethane were not detected above the reporting limit.

- J Analyte detected at a level less than the reporting limit and greater than or equal to the method detection limit. Concentrations within this range are estimated.
- U Not detected at or above reporting limit.

NA - Not applicable

^{*} Site-specific RAO per ROD (November 1994)

Table 6

Summary of Groundwater Collection Trench Analytical Data Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Sample ID	Groundwater	GW	CT Man	hole	GW	CT Mar	hole	GW	CT Man	hole	GW	CT Man	ihole
Date Collected	RAO/ NYCRR		07/24/15	5		10/19/1	5		01/05/16	3	(04/04/16	6
Lab Sample ID	Objective	480	0-84562	-15	48	0-89674	-20	48	0-93630	-15	480	0-84562	:-15
Volatile Organic Compounds by Met	hod 8260 (µg/L)												
1,1-Dichloroethane	5*		1.3			0.7		<	1.0	U		0.4	J
2-Butanone (MEK)	50		2.4	J	<	10	U	<	10	U	<	10	U
Acetone	50		7.0	J	<	10	U	<	10	U	<	10	U
Benzene	1	<	1.0	U	<	1.0	U	<	1.0	U	<	1.0	U
Chloroethane	5*	<	1.0	U	<	1.0	U		62			44	
cis-1,2-Dichloroethene	5*		1.1		<	1.0	U	<	1.0	U	<	1.0	U
Methylene Chloride	5	<	1.0	U	<	1.0	U	<	1.0	U	<	1.0	U
Toluene	5*	<	1.0	U	<	1.0	U		0.99	J	<	1.0	U
Trichloroethene	5*	<	1.0	U	<	1.0	U	<	1.0	U	<	1.0	U
trans-1,2-Dichloroethene	5	<	1.0	U	<	1.0	U	<	1.0	U	<	1.0	U
Vinyl chloride	5*	<	1.0	U	<	1.0	U	<	1.0	U	<	1.0	U
Xylenes, Total	5*	'	2.0	U	'	2.0	U	<	2.0	U	'	2.0	U
Total Volatile Organic Compounds	NA		12.8			0.7			63.0			44.4	

Notes:

Bold font indicates the analyte was detected.

Bold font and bold outline indicates the screening criteria was exceeded.

- * Site-specific RAO per ROD (November 1994)
- J Analyte detected at a level less than the reporting limit and greater than or equal to the method detection limit; concentrations estimated.
- U Not detected at or above reporting limit.
- NA Not applicable

Table 7

Summary of Dual Phase Extraction Well Groundwater Analytical Data Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Sample ID	Groundwater	DPE-1		DPE-1		DPE-2	2	DPE-2	2	DPE-3	,	DPE-3	3	DPE-	3	DPE-	3
Date Collected	RAO/ NYCRR	04/17/1	4	04/06/1	6	04/17/1	4	04/06/1	16	04/17/1	4	07/24/1	5	10/21/	15	04/06/	16
Lab Sample ID	Objective	480-5830	3-1	480-97989	480-97989-10		3-6	480-9798	9-11	480-5830	3-2	480-8456	2-16	480-8967	4-15	480-9798	39-12
Volatile Organic Compounds by M	lethod 8260 (µg	L)										_					
1,1,1-Trichloroethane	5*	10	C	20	U	5	U	5	U	43		10	U	20	U	5	U
1,1-Dichloroethane	5*	69		130		4.4		5	U	42		24		20	U	5	U
1,1-Dichloroethene	5	10	U	20	U	5	U	5	U	26		3.1	J	20	U	5	U
1,2-Dichloroethane	0.6	10	U	20	U	5	U	5	U	10	U	10	U	20	U	5	U
2-Butanone (MEK)	50	140		200	U	50	U	50	U	50	U	610		220		50	U
Acetone	50	310		200	U	50	U	50	U	50	U	110		110	J	50	U
Benzene	1	10	U	20	U	5	U	5	U	10	U	10	U	20	U	5	U
Carbon Disulfide	60	10	U	20	U	5	U	5	U	10	U	10	U	20	U	5	U
Chloroethane	5*	15		20	U	5	U	5	U	10	U	23		20	U	5	U
Chloromethane	5	10	U	18	J	5	U	5	U	10	U	10	U	20	U	5	U
cis-1,2-Dichloroethene	5*	71		130		240		5	U	2,700		650		70		18	
Methylene Chloride	5	10	U	20	U	5	U	5	U	10	U	6.1	J	20	U	7.5	
Toluene	5*	18		29		5	U	5	U	8.0	J	8.4	J	20	U	5	U
trans-1,2-Dichloroethene	5	10	U	20	U	5	U	5	U	10	U	10	U	20	U	5	U
Trichloroethene	5*	23		18	J	5.9		5	U	6,500		10	U	20	U	5	U
Vinyl chloride	5*	15		31		54		5	U	120		240		20	U	12	

July 2016

Table 7

Summary of Dual Phase Extraction Well Groundwater Analytical Data Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Sample ID	Groundwater	DPE-4		DPE-4		DPE-4		DPE-4		DPE-5	5	DPE-5	5	DPE-5	5	DPE-	5
Date Collected	RAO/ NYCRR	04/17/1	4	07/24/15		10/21/15	5	04/06/16	;	04/17/1	4	07/24/1	5	10/21/1	5	04/06/	16
Lab Sample ID	Objective	480-5830	3-3	480-84562-	17	480-89674	-16	480-97989	-13	480-5830	3-4	480-84562	2-18	480-89674	4-17	480-9798	9-14
Volatile Organic Compounds by M	lethod 8260 (µg.	/L)															
1,1,1-Trichloroethane	5*	10	U	10	U	100	U	400	U	10	U	10	U	10	U	10	U
1,1-Dichloroethane	5*	8.1		130		450		400	U	160		30		59		17	
1,1-Dichloroethene	5	10	U	30		460		400	U	2.9	J	10	U	10	U	10	U
1,2-Dichloroethane	0.6	10	U	2.2	J	100	U	400	U	10	U	10	U	10	U	10	U
2-Butanone (MEK)	50	50	U	65	J	1,000	U	4,000	U	26	J	330		660		78	J
Acetone	50	50	U	46	J	1,000	U	4,000	U	120		240		340		120	
Benzene	1	10	U	10	U	100	U	400	U	10	U	10	U	10	U	10	U
Carbon Disulfide	60	10	U	3.4	J	100	U	400	U	10	U	10	U	10	U	10	U
Chloroethane	5*	10	U	49		110		400	U	46		51		81		87	
Chloromethane	5	10	U	10	U	230		400	U	10	U	10	U	10	U	10	U
cis-1,2-Dichloroethene	5*	510		30,000		130,000		25,000		320		410		610		120	
Methylene Chloride	5	10	U	8.1	J	100	U	260	J	10	U	4.5	J	10	U	10	U
Toluene	5*	10	U	28		140		400	U	30		11		9.2		10	U
trans-1,2-Dichloroethene	5	10	U	36		100	U	400	U	10	U	11		20		10	U
Trichloroethene	5*	630		93		120		400		160		10	U	10	U	10	U
Vinyl chloride	5*	31		4,700		37,000		12,000		71		180		170		71	

Table 7

Summary of Dual Phase Extraction Well Groundwater Analytical Data Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Sample ID	Groundwater	DPE-7		DPE-7		DPE-7		DPE-7	DPE-	8	DPE-8		DPE-8	3
Date Collected	RAO/ NYCRR	04/17/1	4	07/24/15	,	10/21/15	5	04/06/16	07/24/	15	10/21/15	,	04/06/1	6
Lab Sample ID	Objective	480-5830	3-5	480-84562	-19	480-89674	-18	480-97989-15	480-8456	2-20	480-89674-	·19	480-9798	9-16
Volatile Organic Compounds by M	lethod 8260 (µg	/L)												
1,1,1-Trichloroethane	5*	10	U	20	U	20	U	20 L	57		170		39	
1,1-Dichloroethane	5*	460		250		390		63	140		590		58	
1,1-Dichloroethene	5	47	J	12	J	20	U	20 L	50	U	20		5	U
1,2-Dichloroethane	0.6	10	U	20	U	20	U	20 L	50	U	20	U	5	U
2-Butanone (MEK)	50	50	U	150	J	940		530	540		260		50	U
Acetone	50	50	U	1,100		530		230	890		220		50	U
Benzene	1	10	U	20	U	20	U	20 L	50	U	20	U	5	U
Carbon Disulfide	60	10	U	20	U	20	U	20 L	50	U	11		5	U
Chloroethane	5*	11		27		260		260	50	U	54		44	
Chloromethane	5	10	U	20	U	20	U	20 L	IL		20	U	5	U
cis-1,2-Dichloroethene	5*	11,000		820		680		26	1,500		2,300		5	U
Methylene Chloride	5	10	С	11	۲	20	U	20 L	23	J	20	С	5	U
Toluene	5*	10	U	20	U	20	U	20 L	50	U	20	U	5	U
trans-1,2-Dichloroethene	5	10	U	20	U	20	U	20 L	50	U	55		8.1	
Trichloroethene	5*	1,300		20	U	12	J	20 L	230		92		5.4	
Vinyl chloride	5*	580		470		780		300	1,400		1,700		110	

Notes:

Bold font indicates the analyte was detected.

Bold font and bold outline indicates the screening criteria was exceeded.

^{*} Site-specific RAO per ROD (November 1994)

J - Analyte detected at a level less than the reporting limit and greater than or equal to the method detection limit; concentrations estimated.

U - Not detected at or above reporting limit.

Table 8

Vapor Monitoring Results - April 4, 2016 Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

	Sample ID: Sample Date:	LRP Effluent* Not Sampled	AS Effluent 4/4/2016
VOCs by Method TO-15 (μg/m³)			
Benzene		-	0.83
Chloroethane		-	36
Chloromethane		-	1.3
Trichlorofluoromethane		-	1.2
Methyl Ethyl Ketone		-	1.8
n-Heptane		-	1
n-Hexane		-	2.9
Toluene		-	2.6
Total Detected VOCs (μg/m³)		-	48
Vacuum (inches Hg)		-	4.50
Air Flow Rate (acfm)		-	210
VOC discharge loading (lb/hr)		-	0.00004
Total VOC discharge loading (lb/hr)		0.	00004

Notes:

The air stripper vacuum measured on April 4, 2016 was 4.5 inches H₂O and the flow rate was 210 scfm.

- 1. $\mu g/m^3 = micrograms per cubic meter$
- 2. acfm = actual cubic feet per minute
- 3. Hg = Mercury
- 4. scfm = standard cubic feet per minute
- 5. lb/hr = pounds per hour
- 6. LRP Effluent represents the untreated vapor discharge for the Liquid Ring Pump.
- 7. AS Effluent represents the untreated vapor discharge for the Air Stripper.

Qualifiers:

U - Not detected at or above reporting limit (reporting limit not included in the Total Detected VOCs).

^{*} The LRP was not running during sampling event on April 4, 2016.

Table 9

Volatile Organic Compound Removed - Aqueous Phase Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Sample ID Sample Date	Influent Third Quarter 2015	Influent Fourth Quarter 2015	Influent First Quarter 2016	Influent Second Quarter 2016	
VOCs (Method 8260) (μg/L)					
Chloroethane	39	38	43	42	
Methylene Chloride	1.0	ND	ND	ND	
Toluene	2.9	ND	0.73 J	ND	
Total VOCs (μg/L) Air Stripper Totalizer Readings (gallons)	42.9 5,652,490 (4/7/15) 5,783,130 (7/22/15)	38.0 5,783,130 (7/22/15) 5,843,922 (10/19/15)	43.7 5,843,922 (10/19/15) 5,949,858 (1/5/16)	42.0 5,949,858 (1/5/16) 6,115,964 (4/4/16)	
Gallons Processed	130,640	60,792	105,936	166,106	
VOCs Removed (pounds)	0.047	0.019	0.039	0.058	
Total VOCs Removed (pounds)	0.163				

Notes:

- 1. μg/L = micrograms per liter
- 2. Influent Represents the combined dual phase extraction and groundwater collection trench influent to the air stripper.
- 3. Dates are indicated next to the air stripper totalizer readings.
- 4. Totalizer readings from the air stripper effluent.
- 5. Dual phase extraction system ran intermittently during the reporting period.

Qualifiers:

- J Indicates compounds detected as estimated.
- ND Indicates compounds not detected above the quantitation limit.



Table 10

Combined DPE Remediation System Operation and Maintenance Schedule Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Frequency	Operation and Maintenance Activity
	Record System Operational Parameters
Weekly	Inspect All Piping, Mechanical, and Electrical Components
	Check/Fill LRP Seal Fluid
Monthly Change Bag Filters/Clean Housings and change KO Tank Filter as needed	
Quarterly	Clean System Components (KO Tank, Hold Tank, Air Stripper)
	Replace LRP Seal Fluid
Annually	Replace LRP Separator Element
Annually	Grease LRP Bearings
	Perform DPE Well and Conveyance Lines Scale Abatment Acitivity at Select Wells

Notes:

DPE: Dual Phase Extraction

KO: Knockout

LRP: Liquid Ring Pump

Table 11

Groundwater Monitoring Schedule - July 2016 through April 2017 Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

Event Date	Number of Locations Scheduled for Sampling	Lc	oations Schedule	ed for Sampling					
Quarterly Groun	Quarterly Groundwater Monitoring								
		MW-2	MW-3	MW-4	MW-6				
		MW-8R	MW-10	MW-11	MW-12				
July 2016	20	MW-13S	MW-13D	MW-16S	MW-16D				
		DPE-1	DPE-2	DPE-3	DPE-4				
		DPE-5	DPE-7	DPE-8	GWCT				
		MW-2	MW-3	MW-4	MW-6				
		MW-8R	MW-10	MW-11	MW-12				
October 2016	20	MW-13S	MW-13D	MW-16S	MW-16D				
		DPE-1	DPE-2	DPE-3	DPE-4				
		DPE-5	DPE-7	DPE-8	GWCT				
	20	MW-2	MW-3	MW-4	MW-6				
		MW-8R	MW-10	MW-11	MW-12				
January 2017		MW-13S	MW-13D	MW-16S	MW-16D				
		DPE-1	DPE-2	DPE-3	DPE-4				
		DPE-5	DPE-7	DPE-8	GWCT				
Comprehensive	Annual Groundwater Monito	oring							
		MW-2	MW-3	MW-4	MW-6				
		MW-8R	MW-9	MW-10	MW-11				
		MW-12	MW-13S	MW-13D	MW-14S				
April 2017	25	MW-14D	MW-15S	MW-15D	MW-16S				
		MW-16D	DPE-1	DPE-2	DPE-3				
ĺ		DPE-4	DPE-5	DPE-7	DPE-8				
		GWCT							

Notes:

MW-## - Monitoring Well
MW-##S - Shallow Piezometer

MW-##D - Deep Piezometer

DPE-## - Dual Phase Extraction Well
GWCT - Groundwater Collection Trench

Table 12

Monitoring and Compliance Sampling Summary Former Scott Aviation Facility NYSDEC Site Code No. 9-15-149 Lancaster, New York

		Analytical Parameter			eter	Comments	
Location/Type	Matrix			-			
		VOCs		TSS	pН		
		(aqueous)	TPH (aqueous)	(aqueous)	(aqueous)	VOCs (vapor)	
Quarterly BSA Sampling - 4		1					
GWTB Influent	aqueous	1	1	1	1	0	Four grabs over 8 hour process day
GWTB Effluent	aqueous	1	1	1	1	0	Four grabs over 8 hour process day
Trip Blank	aqueous	1	0	0	0	0	Quality Assurance/Quality Control
Per Event		3	2	2	2	0	
Sub-Total		12	8	8	8	0	
Remedial Action Compliand	ce Sampling						
Quarterly - 3 Events		1	Т	1	1	1	Malla ADALO ADALO ADALA ADALO ADALOD ADALAO ADALAO
Driver of Control of		00		0		0	Wells: MW-2, MW-3, MW-4, MW-6, MW-8R, MW-10, MW-11,
Primary Samples	aqueous	20	0	0	0	0	MW-12, MW-13S, MW-13D, MW-16S, MW-16D, DPE-1, DPE-2, DPE-3, DPE-4, DPE-5, DPE-7, DPE-8, GWCT
Duplicate	0.000000	1	0	0	0	0	Quality Assurance/Quality Control
	aqueous		0	0	_	0	· · · · · · · · · · · · · · · · · · ·
Trip Blank	aqueous	1 1	· ·		0	_	Quality Assurance/Quality Control
Rinsate Blank	aqueous	1	0	0	0	0	Quality Assurance/Quality Control
Air Stripper Effluent	air	0	0	0	0	1	Air Discharge Limit Compliance
LRP Effluent	air	0	0	0	0	1	Air Discharge Limit Compliance
Per Event		23	0	0	0	2	
Subtotal		69	0	0	0	6	
Annual Event - 1 Event							
							Wells: MW-2, MW-3, MW-4, MW-6, MW-8R, MW-9, MW-10,
Primary Samples	agueous	25	0	0	0	0	MW-11, MW-12, MW-13S, MW-13D, MW-14S, MW-14D, MW-15S, MW-15D
. Imialy Campies	aquoouo			ŭ		Ů	MW-16S, MW-16D, DPE-1, DPE-2, DPE-3, DPE-4,
T : 51 .							DPE-5, DPE-7, DPE-8, GWCT
Trip Blank	aqueous	1	0	0	0	0	Quality Assurance/Quality Control
Duplicate	aqueous	1	0	0	0	0	Quality Assurance/Quality Control
Rinsate Blank	aqueous	1	0	0	0	0	Quality Assurance/Quality Control
Air Stripper Effluent	air	0	0	0	0	1	Air Discharge Limit Compliance
LRP Effluent	air	0	0	0	0	1	Air Discharge Limit Compliance
Subtotal		28	0	0	0	2	
Total		109	8	8	8	8	

Methods:

Volatile organic compounds (VOCs) by USEPA SW-846 Method 8260C (aqueous) Total extractable hydrocarbons (TPH) by 40 CFR 136 Method 160.2 Total suspended solids (TSS) by 40 CFR 136 Method 1664 pH by 40 CFR 136 Method 150.1 VOCs by USEPA Method TO-15 (air)





AECOM Environment

Appendix A

Former Scott Aviation Plant 2 O&M Checklist

AECOM Technical Services, Inc. SCOTT AVIATION WEST OF PLANT 2 O&M CHECKLIST (updated 4/2016)

Date:		Weather:	
Time:		Field Technician Name:	
DPE Process Room			
DPE Wells (indicate vacuum reading if we	I is in operation)		
DPE-1	"Hg	DPE-5	"Hg
DPE-2	"Hg	DPE-6	Off Line Due to Lime
DPE-3	"Hg	DPE-7	"Hg
DPE-4	"Hg	DPE-8	"Hg
Comments:			
LRP Tank Exhaust Temperature -	°F_	Hold Tank Pump Pressure -	PSI
LRP Filter Pressure -	PSI	Bag Filter #1 Inlet Pressure -	PSI
LRP Oil Level -		Bag Filter #1 Outlet Pressure -	PSI
LRP Inlet Vacuum -	"Hg	Bag Filter #2 Inlet Pressure -	PSI
LRP Exhaust Temperature -	<u> </u>	Bag Filter #2 Outlet Pressure -	PSI
LRP Flow Rate -	x1000 FPM		
KO Tank Vacuum -	"Hg		
Comments:			
DPE Control Room			
LRP Hour Meter -	HRS		
KO Tank Hour Meter -	HRS		
Hold Tank Hour Meter -	HRS		
Comments:			
Groundwater Treatment Building			
GW Trench Totalizer	GAL	Air Stripper Vacuum -	"H ₂ O
Air Stripper Effluent Flowrate -	GPM	Air Stripper Flow -	"H ₂ O
Air Stripper Effluent Totalizer (T1) -	GAL	AS Discharge Pump Pressure -	PSI
Air Stripper Effluent Totalizer (T2) -	GAL	AS Flow Gauge -	SCFM
Air Stripper Effluent Temperature -	°F_		

AECOM Environment

Appendix B

NYSDEC Hazardous Waste Compliance Inspection Form

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9 270 Michigan Avenue, Buffalo, NY 14203-2915 P: (716) 851-7220 | F: (716) 851-7226 www.dec.ny.gov

February 24, 2016

Dino Zack Project Manager AECOM 257 West Genesee Street Suite 400 Buffalo, New York 14202

Re: Hazardous Waste Compliance Inspection

Inspection Date: 2/23/2016

AECOM

Handler Address: 225 Erie Street, Lancaster, New York 14086

EPA ID Number: NYR000130591

Dear Mr. Zack:

In order to determine compliance with the New York State Hazardous Waste Regulations (6 NYCRR Parts 370-374 and 376), the New York State Department of Environmental Conservation ('Department') conducted an inspection of your facility on the date indicated above. This letter hereby informs you that no violations were observed during the inspection.

We appreciate your cooperation during the inspection and your efforts to prevent releases of hazardous waste by keeping your facility in compliance with the regulatory requirements. This letter does not address issues pertaining to regulatory fees or hazardous waste special assessment fees. Nothing herein constitutes a waiver by the Department of any rights it has under state and/or federal law, including any rights regarding violations that may have been present at the facility but not observed, or a release from liability for any party pursuant to said laws.

A copy of the inspection form is enclosed for your file. If you have any questions, please contact me at Nelson.Schnabel@dec.ny.gov or (716) 851 7220.

Sincerely,

Nelson Schnabel

Environmental Engineer I



Enclosure

ec Kelly A. Lewandowski, NYSDEC, DER, Central office. eDocs:letter.rcra.NYR000130591.2016-02-24.AECOM.no_violation_observed.pdf



INSPECTION FORM

Region:	9
CESQG	Х
SQG	1
GENERATOR	
TSDF	
OTHER	Victoria ly
NONREGULATED	
UNANNOUNCED	Х
ANNOUNCED	

NEW YORK STATE INDUSTRIAL HAZARDOUS WASTE MANAGEMENT ACT (Chapter 639, Laws of 1978)

	(CI	napter 639, Laws of 1978)				
Prepared for: Send to:	ENVIRONME NYSDEC	STATE DEPARTMENT OF STATE DEPARTMENT OF STATE CONSERVATION STATE OF STATE O		Attach company business card here or attach letterhead as last page.		
		pliance Section				
	625 Broadwa					
	Albany, New	York 12233-7020				
EPA I.D. NUMBER:	NYR0001305	91				
COMPANY NAME	(Corporate):	AECOM	ytantes t paage			
	(Division):					
COMPANY MAILING A	DDRESS:	257 West Genesee Street	ล คนารกับเ อ นเป็นกระหว			
		Suite 400	obszanieko glefes u			
City & State		Buffalo, New York	Zip Code 14202			
COMPANY LOCATION	ADDRESS:	225 Erie Street	Sprend B. M. 212- Ph. 101			
(if different than mailing))	1960s. 1960s.	Law Kasawitti sa ja sa sa			
City & State		Lancaster, New York	Zip Code 14086			
COUNTY		ERie	great is an evening to			
COMPANY TELEPHON	IE NUMBER:	716-866-8222 Ext.	Fax #:	III X XX HIBROR		
NAME OF COMPANY O	CONTACT:	Dino Zack				
TITLE OF COMPANY C	CONTACT:	Project Manager				
EMAIL ADDRESS OF C	CONTACT:	dino.zack@AECOM.com				
INSPECTION DATE:	. 2/23/	2016 TIME OF INSPECTION	: 11:30 AM			
INSPECTOR'S NAME:	Nelson Schna	abel				
NAME:						
REPORT PREPARED E	BY: Telm	Schnabel DAT	E: 2/23/2016			
REPORT APPROVED E	BY: bidjan	Rastamo DAT	E: 2/23/2016			

TABLE OF CONTENTS

	,		Page No.
X	Part I	General Information and Classification of Facility	
		1. Identification of Hazardous Waste	I-1
		2. Exemptions	I-2
		3. Hazardous Waste Generation/Treatment/Storage/Disposal	1-4
		4. Status Identification	I-6
X	Part II	Comments, Conclusions and Recommendations (Not for release to company, protected information)	II-1
		Generator, TSDF and Transporter Requirements (Check and attach applicable Parts and Appendices)	
X	Part III	CESQG - Conditionally Exempt Small Quantity Generator	III-1
	Part IV	SQG - Small Quantity Generator	IV-1
	Part IV-A	Tank Storage Requirements for Small Quantity Generator	IV-A-1
	Part V	LQG - Large Quantity Generator	V-1
	Part VI	Interim Status Treatment, Storage and Disposal Facility	VI-1
	Part VII	Transporter Transfer Facility	VII-1
	Part VIII	Municipal Notification	VIII-1
	Part IX	Conditional Exemption for Low-Level Mixed Waste Storage and Disposal	IX-1
	Part X	Project XL for Public Utilities in New York State	X-1
		APPENDICES	
	Appendix A	Land Disposal Restrictions - SQG & Generator	
	Appendix B	Land Disposal Restrictions - TSDF	
	Appendix C	Permitted Facility Inspection	
	Appendix C2	Permitted Facility Inspection Checklist	
	Appendix D	Consent Order Follow-up Inspection	
	Appendix E	Requirements for Tanks	
	Appendix F	Elementary Neutralization Units/Wastewater Treatment Units	
	Appendix G	Requirements for Specific Hazardous Wastes	
	Appendix H	Closure/Post Closure Inspection	
	Appendix I	Incinerators and Energy Recovery Facilities Thermal Treatment	
	Appendix J Appendix K	Chemical, Physical and Biological Treatment	
	Appendix L-1	Universal Waste - Small Quantity Handlers	
	Appendix L-1 Appendix L-2	Universal Waste - Small Quantity Handlers Universal Waste - Large Quantity Handlers	
	Appendix X-I	Air Emissions Standards for Process Vents - 373-3.27	
	Appendix X-II	Air Emissions Standards for Flocess Vehics - 673-6.27 Air Emissions Standards for Equipment Leaks - 373-3.28	
	Appendix X-III	Tanks, Surface Impounds, and Containers - 373-3.29	
		<u>ATTACHMENTS</u>	

Attachment 1
Attachment 2

EPA I.D. No.		NYR000130591			
Date of Inspection:		2/23/2016			
			Part I		
		General Information	and Classification	of Facility	
I. <u>Iden</u>	tification of Ha	zardous Waste - 371		V	M -
A.	Facility generation-site.	ates and/or stores hazardo	us waste	Yes X	<u>No</u>
	a. Ye	e generator has determine s knowledge of the waste; s testing of the waste.	ed if his solid waste is h	nazardous waste t	pased on:
	(2) Yes Th	e material has the charact	eristics of:		
	(N	o) Ignitability (D001) - 371 o) Corrosivity (D002) - 37 o) Reactivity (D003) - 371 o) Toxicity (D004 - 043) -	1.3(c) .3(d)		
	` '	e material is listed in the reaste from non-specific sour	•		
	· · -	e waste is listed in the reg aste from specific sources		ıs	
	• • —	e material is listed in the rezardous waste (P-Waste).			
	dis sp	e material or product is lissearded commercial chemi ecies or manufacturing che 1.4(d)(6).	cal product, off-specific	cation	
	` '	ne material is listed in the rentaining PCBs (B-Waste).	-		
B.	If the facility is they:	s a treatment, storage or di	sposal facility, have		
	NA Submitte	d a Part A application.			
	NA Submitte	d a Part 373 permit applica	ation.		
	NA Been gra	inted a Part 373 permit* •	expiration date:		•
	*Comple condition	te Appendix C - indicate co ns.	ompliance status with p	permit	
C.		acility signed a consent or		s	

**Complete Appendix D and indicate compliance with conditions of the order.

I-1

Facility Name

AECOM:

12/03

II. Exemptions

A. Generator Exemptions

- (1) NA Not a regulated handler
- (2) NA Samples collected for testing 372.1(e)(5).
- (3) NA Residues of hazardous waste in empty containers 372.1(e)(6).
- (4) NA A hazardous waste which is generated in a product or raw material storage tank, transport vehicle or vessel, pipeline, or in a manufacturing process unit or an associated non-waste treatment manufacturing unit is not subject to regulation until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated, manufacturing, or for storage or transportation. 372.1(e)(7)(i).

B. TSD Exemptions

- (1) NA Storage of hazardous waste that is generated on-site in containers or tanks for a period not exceeding 90 days. 373-1.1(d)(1)(iii).
- (2) NA Storage of liquid hazardous waste in containers (>185 gallons) or tanks generated on-site over the designated sole source aquifers for a period not exceeding 90 days. 373-1.1(d)(1)(iv).
- (3) Yes The on-site storage and treatment of hazardous waste by generators that generate less than 100 kilograms of hazardous waste in any calendar month and store less than 1,000 kilograms. 373-1.1(d)(1)(v).
- (4) NA The storage and recycling of the recyclable materials identified in subparagraphs 371.1(g)(1)(iii) and (iv) of this title 373-1.1(d)(1)(vi).
- (5) NA The storage of the following recyclable materials is exempt from permitting provided that Subpart 374-1 is complied with. (NOTE: Subpart 374-1 will require that the facility also complies with selected sections of this Part.) 373-1.1(d)(1)(vii):
 - (a) NA recyclable materials used in a manner constituting disposal (see section 374-1.3);
 - (b) NA hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under section 373-2.15 or 373-3.15 of this Title (see section 374-1.8);
 - (c) NA recyclable materials from which precious metals are reclaimed (see section 374-1.6);
 - (d) **NA** spent lead-acid batteries that are being reclaimed (see section 374-1.7).

1-2 12/03

- (6) NA The recycling of hazardous wastes is exempt from permitting provided 373-2.2(c) (identification number), 373-2.5(b) or 373-3.5(b) (manifest requirement), and clause 373-1.1(d)(1)(viii)(d) are complied with. (Storage prior to recycling is not exempt under this subparagraph.) In addition, 373-1.1(d)(1)(viii):

 (a) NA This exemption is available to:
 (b) NA Commercial facilities that reclaim precious metals, as defined in 374-1.6 of this Title:
 - (2) NA Mobile or transportable commercial facilities which operate on the generator's site, if a containment area, meeting the requirements of 373-2.9(f), is provided for the reclaiming facility and any associated, temporary container holding or storage area.
 - (b) NA This exemption is <u>not</u> available to any units, other than boilers and industrial furnaces, that burn hazardous wastes for energy recovery.
 - (c) NA Exempted processes that recycle the hazardous wastes listed in 2B(5)(a-d) must comply with Part 374 of this Title in lieu of the requirements specified in this subparagraph. (Note: Part 374 will require that the facility also complies with selected sections of this Part.)
 - (d) NA Owners or operators of facilities subject to RCRA permitting requirements with hazardous waste management units that recycle hazardous waste are subject to the requirements of sections 373-2.27, 373-2.28, 373-3.27 and 373-3.28 of this Part.
- The on-site treatment of hazardous waste, by the generator, in the same tanks or containers used for accumulation and storage is exempt provided the generator complies with Part 373-1.1(d)(1)(iii) and (iv) and Part 372.2(c)(4). Any treatment or placement of hazardous waste in a manner that constitutes land disposal, as defined in subdivision 370.2(b), does not qualify for this exemption 373-1.1(d)(1)(ix).
- (8) NA Totally enclosed treatment facility 373-1.1(d)(1)(xi).
- (9) NA Elementary neutralization units or wastewater treatment units, as defined in Part 370 of this Title 373-1.1(d)(1)(xii).
- (10) **NA** Accumulation areas 373-1.1(d)(1)(xiv).
- (11) NA A transporter storing manifested shipments of hazardous waste in containers at a transfer facility for a period of ten calendar days or less Complete Part VII 373-1.1(d)(1)(xv).

I-3 12/03

III. Hazardous Waste Generation/Treatment/Storage/Disposal

Α.	Describe only the activities that result in the generation of
	hazardous waste. Include manufacturing processes that
	generate hazardous waste. [Do not include hazardous waste treatment processes.]
	Pump and treat remediation for removal of TCE. Contaminated filter
	media -F002

B. Describe any on-site hazardous waste treatment processes that result in the generation of hazardous waste (exempt and/or non-exempt). Include process diagrams if available.

Dual phase collection system, air stripping.

- C. Identify the hazardous wastes that are on-site, the quantity of each, the storage method, the type and size of containers or tanks used and their location in the storage area. (Be as specific as possible.)
 - (1) Accumulation Areas [NOTE: Waste in accumulation areas must be included as part of the total quantity of waste on-site]:
 NA
 - (2) Container Storage Areas for CESQG, SQG or Generator: No waste in storage. Recent shipment 1/2016.
 - (3) Tank Storage Areas for CESQG,SQG or Generator: NA

I-4 12/03

		(4)	Interim Status/Permitted Container Storage Areas: NA
		(5)	Interim Status/Permitted Tank Storage Areas: NA
		(6)	Treatment, storage or disposal units such as surface impoundments, landfills, waste piles or incinerators: NA
IV.	Stat	us Id	entification:
	A.	Ger	nerator Status
		(1)	Yes Conditionally Exempt Small Quantity Generator (CESQG) - generates less than 100 kg/mo of non-acute hazardous waste or 1 kg/mo of acute hazardous waste. Complete Part III - 372.1(f)(6), 371.1(f)(7).
		(2)	No Small Quantity Generator (SQG) - generates more than 100 kg/mo but less than 1,000 kg/mo of non-acute hazardous, and accumulates no more than 6,000 kg of non-acute hazardous waste on-site. Complete Part IV - 372.2(a)(8)(iii).
		(3)	No Generator - generates more than 1,000 kg/mo of non-acute hazardous waste or generates more than 1 kg of acute hazardous waste in a calendar month. Complete Part V - 372.2(a)(8)(ii).
	B.	Tre	atment, Storage or Disposal Facility (TSDF)
		(1)	NA Hazardous waste is stored greater than 90 days.*,**
		(2)	NA Hazardous waste is received from off-site and not beneficially used, reused or legitimately recycled or stored.*
		(3)	NA Hazardous waste is treated on-site in non-exempt units.*
		(4)	NA Hazardous waste is disposed of on-site.*

(If checked Complete Part VI and/or appropriate Appendices)
(Do not complete for generators only that have exceeded the 90 day storage limit.)

I-5

C.	Transport Yes	ter Status <u>No</u> X	Transporter operates a 10-day transfer facility.	
	If Yes, Co	mplete Part VII	Permit No.	
D.	Universal	Waste Handler		
	(1) No	-	Handler - company accumulates no more than funiversal waste at any time - Complete Appendix L-1.	
	(2)		Handler - Company accumulates 5,000 kg or more ste at any time - Complete Appendix L-2.	
	(3)	_Universal Waste	e Managed On-Site (list type and quantity).	
E.	RCRA Air	Emission Rule	(Subpart AA/BB/CC)	
	Is facility s	subject to RCRA	Air Emission Rules (Subpart AA/BB/CC)?	
		_If Yes, Complet	te Appendix-X.	
	<u>x</u>	If No, Please ex CESQ	xplain:	
٠				
F. Viol	The facility		(c)(7) Olivinia (c)(7) Olivinia (c)(7) Olivinia (c)(7) Olivinia (c)(7) Olivinia (c)(7)	K NA
		Yes, List what r	notice is for:	
				·
	NA	If No, Please ex	xplain:	

I-6 12/03

Facility Name	AECOM:
EPA I.D. No.	NYR000130591
Date of Inspection:	2/23/2016

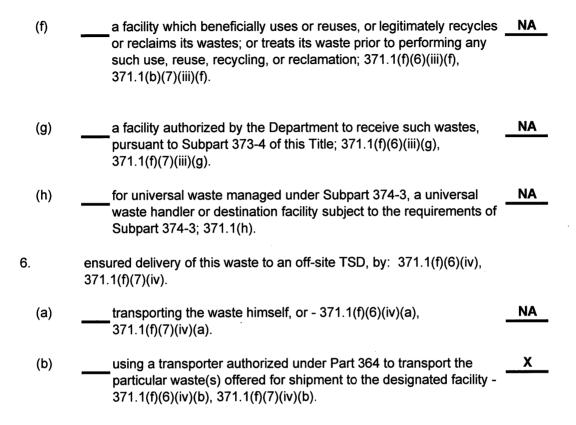
Part III

CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR (CESQG)

CESQG - The generator who generates no more than 100 kg of non-acute hazardous waste or 1 kg of acute hazardous waste in a calendar month has complied with the following: 371.1(f)(6) *, 371.1(f)(7)**

g. 07 1. 1(1)	<u>07 ; 07 1.1(1)(17)</u>	
1	has determined his solid waste is hazardous as required by paragraph 372.2(a)(2) of this Title - 371.1(f)(6)(i), 371.1(f)(7)(i).	<u> </u>
2	accumulated no more than 1,000 kg of non-acute hazardous waste on-site. [NOTE: If more than 1,000 kg hazardous waste on-site. [NOTE: If more than 1,000 kg is accumulated, then the requirements for a SQG apply. Part IV must be completed.] - 371.1(f)(7)(ii).	<u> </u>
3	accumulated no more than a total of 1 kg of acute hazardous waste on	Х
	accumulated no more than a total of 1 kg of acute hazardous waste onsite. [NOTE: If more than 1 kg is accumulated, then the requirements for a generator apply. Part V must be completed.] - 371.1(f)(6)(ii).	
4.		X
	accumulated no more than a total of 100 kilograms of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in section 371.4(b), (c) and (d)(5) of this Title. [NOTE: If more than 100 kg is accumulated, then the requirements for a generator apply. Part V must be completed.] - 371.1(f)(6)(ii).	
5.	treated or disposed of his hazardous waste in an on-site facility, or ensured delivery to an off-site TSD, either of which, if located in the U.S., is: 371.1(f)(6)(iii), 371.1(f)(7)(iii).	
(a)	permitted under Part 373; 371.1(f)(6)(iii)(<u>a</u>), 371.1(f)(7)(iii)(<u>a</u>).	X
(b)	in interim status under Part 373; 371.1(f)(6)(iii)(<u>b</u>), 371.1(f)(7)(iii)(<u>b</u>).	NA
(c)		NA
	authorized to manage hazardous waste by a state with a hazardous waste management program approved under RCRA, if located outside New York; 371.1(f)(6)(iii)(c), 371.1(f)(7)(iii)(c).	
(d)	authorized to receive hazardous waste under RCRA; 371.1(f)(6)(iii)(d), 371.1(f)(7)(iii)(d).	NA
(e)	permitted under Part 360 to manage municipal or industrial solid waste and authorized to receive such wastes, or permitted,	NA

licensed, or registered by a state other than New York to manage municipal solid waste in a solid waste landfill or registered by a state to manage industrial solid waste if managed in an industrial waste disposal unit; 371.1(f)(6)(iii)(e), 371.1(f)(7)(iii)(e).



^{*} NOTE: The requirements for handling acute hazardous waste are found in 371.1(f)(6).

^{**} NOTE: The requirements for handling non-acute hazardous waste are found in 371.1(f)(7).

AECOM Environment

Appendix C April 2016 Field Forms

Date (mo/day/yr)		4/4/2	2016		Casing Diameter 2				inches	
Field Personnel			/ET		Casing Material		PVC			
Site Name	Fori	mer Scott Aviation S	Site - Lancaster, NY		Measuring Point Eleva	ation		690.35		1/100 ft
Job#		60	314190		Height of Riser (above	land surface)				1/100 ft
Well ID #		MW-	2	_	Land Surface Elevation					1/100 ft
	Upgrad	ient	Downgradient		Screened Interval (bel	ow land surface)		7-17	7	1/100 ft
Weather Conditions		;	Snow							
Air Temperature		25		°F	Container	Analysis (Method) #	# Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below	Total Depth (TWD) Below Top of Casing = 16.4 1/1				VOA 40 mL glass	TCL VOC	(8260B)	3	HCL, 4°C	
Depth to Groundwater (DGW) Below Top of Casing = 5.68 1/100 ft										
Length of Water Column	1 (LWC) = -	TWD - DGW =		1/100 ft						
1 Casing Volume (OCV)	= LWC x	0.163 =		gal						
3 Casing Volumes =				gal						
Method of Well Evacuati	Method of Well Evacuation Peristaltic Pump									
Method of Sample Collect	Method of Sample Collection Peristaltic Pump/Poly Tubing									
Total Volume of Water R	Removed _			liter						
					FIELD ANALYSES					
Flow Rate (ml/min)	Γ	200	150	100	100	100	100			
Time (Military)		12:15	12:20	12:25	12:30	12:35	12:40			
Depth to Groundwater		-	-							
Below Top of Casing (ft)	_	8.15	9.65	9.88	10.05	10.31	10.58			
Drawdown (ft)	-	-2.47	-1.50	-0.23	-0.17	-0.26	-0.27			
pH (S.U.)	Ļ	6.77	6.77	6.79	6.82	6.85	6.88			
Sp. Cond. (mS/cm)	L	1.592	1.527	1.510	1.507	1.500	1.498			
Turbidity (NTUs)	L	9.32	7.18	7.01	11.6	7.3	6.27			
Dissolved Oxygen (mg/L	-)	13.5	3.31	7.41	5.27	4.76	4.27			
Water Temperature (°C))	8.49	6.62	6.65	6.91	6.85	6.57			
ORP (mV)		-59.8	-63.2	-64.2	-54.4	-62.6	-64.4			
Physical appearance at start Color clear with iron					<u>b</u> acteria Phy	sical appearance at	sampling Color	clear v	with iron bacteria	
Odor no				or no	_		Odor		no	
		Sheen/Free Prod	duct	no	She	en/Free Product	no)		
COMMENTS/OBSERVA	ATIONS	Start purging well at	12:10hrs. Sample tin	ne at 12:405hrs. No	ote water level during pur	ging measure from o	outer casing.			
	_									

Date (mo/day/yr)	4/5/	2016		Casing Diameter 2					inches
Field Personnel		Z/ET		Casing Material		PVC			
Site Name	Former Scott Aviation	Site - Lancaster, NY		Measuring Point Eleva	ation	(87.05		1/100 ft
Job#	60	314190		Height of Riser (above	e land surface)		1.15		1/100 ft
Well ID #	MW-	3		Land Surface Elevation	·		5.9		1/100 ft
	Jpgradient	Downgradient	_	Screened Interval (be	low land surface)		7.5 - 27.	.5	1/100 ft
Weather Conditions		clear							
Air Temperature			°F	Container	Analysis (Method) #	Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below To	op of Casing =	28	1/100 ft	VOA 40 mL glass	TCL VOCs	(8260C)	3	HCL, 4°C	
Depth to Groundwater (DGW	/) Below Top of Casing =								
Length of Water Column (LV	VC) = TWD - DGW =		1/100 ft						
1 Casing Volume (OCV) = L	WC x 0.163 =	liter							
3 Casing Volumes =		liter							
Method of Well Evacuation	F	Peristaltic Pump							
Method of Sample Collection	Peristal	tic Pump/Poly Tubing							
Total Volume of Water Remo	oved		liter						
				FIELD ANALYSES					
Flow Rate (ml/min)	250	250	250	250	250	250			
Time (Military)	13:10	13:15	13:20	13:25	13:30	13:35			
Depth to Groundwater									
Below Top of Casing (ft)	8.90	10.20	11.70	12.15	12.6	12.79			
Drawdown (ft)	-0.85	-1.30	-1.50	-0.45	-0.45	-0.19			
pH (S.U.)	7.42	7.2	7.19	7.19	7.19	7.19			
Sp. Cond. (mS/cm)	0.978	1.003	0.998	1.001	0.999	0.998	_		
Turbidity (NTUs)	2.14	1.77	1.28	0.94	0.75	0.65	-		
Dissolved Oxygen (mg/L)	10.35	1.17	0.57	0.62	0.63	0.65			
Water Temperature (°C)	9.27	9.43	9.51	9.33	9.24	9.31			
ORP (mV)	54.1	48.3	43.8	43.5	43.6	43.4			
	<u>b</u> acteria Phy	ysical appearance at	sampling Color	clear wi	ith iron bacteria				
		Odo	r no	_		Odor		no	
	Sheen/Free Pro	duct	no	She	een/Free Product	no			
COMMENTS/OBSERVATIO	NS Start purging well at	13:05hrs. Sample time	e at 13:40hrs.						

Date (mo/day/yr)	4/6/	2016		Casing Diameter			2		inches
Field Personnel		Z/ET		Casing Material			VC		<u>.</u>
	Former Scott Aviation	Site - Lancaster, NY		Measuring Point Elev	ation		686.5		1/100 ft
Job#	60	314190		Height of Riser (above	ve land surface)		-0.39	9	1/100 ft
Well ID #	MW-	4	_	Land Surface Elevati	·		686.89		1/100 ft
Up <u>(</u>	gradient	Downgradient	_	Screened Interval (be	elow land surface)		15.5 - 2	25.5	1/100 ft
Weather Conditions	· · · · · · · · · · · · · · · · · · ·	- vercast							
Air Temperature			°F	Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below Top		26	1/100 ft	VOA 40 mL glass	TCL VOCs	(8260B)	3	HCL, 4°C	
Depth to Groundwater (DGW)	Below Top of Casing =	1/100 ft							
Length of Water Column (LWC	s) = TWD - DGW =	1/100 ft							
1 Casing Volume (OCV) = LW0	C x <u>0.163</u> =		gal						
3 Casing Volumes =			gal						
Method of Well Evacuation		Peristaltic Pump							
Method of Sample Collection	Peristal	tic Pump/Poly Tubing							
Total Volume of Water Remove	ed		liter						
				FIELD ANALYSES					
Flow Rate (ml/min)	350	350	200	150	150				1
Time (Military)	8:55	9:00	9:05	9:10	9:15				
Depth to Groundwater	0.33	3.00	9.00	3.10	9.10				
Below Top of Casing (ft)	10.64	13.06	14.08	15.43	15.83				
Drawdown (ft)	-1.71	-2.42	-1.02	-1.35	-0.40				
pH (S.U.)	7.49	7.17	7.18	7.19	7.19				
Sp. Cond. (mS/cm)	2.365	2.352	2.346	2.338	2.327				
Turbidity (NTUs)	8.61	7.75	7.85	8.07	8.44				
Dissolved Oxygen (mg/L)	0.32	0.27	0.22	0.3	0.33				
Water Temperature (°C)	9.92	9.86	9.56	9.29	9.26				
ORP (mV)	-116.1	-124	-114.5	-115.4	-130.6				
	Physical appearance at start Color clear with black					sampling C	olor <u>clear v</u>	with black particles	
Odor moderate				<u></u>		0	dor <u>m</u>	oderate	
	Sheen/Free Prod	duct	no	Sh	neen/Free Product		no		
COMMENTS/OBSERVATIONS	Start purging well at	08:50hrs. Sample time	e at 09:15hrs.						

Page __1__ of __1__

Date (mo/day/yr)		4/4/	2016		Casing Diameter			2		inches
Field Personnel		DZ	Z/ET		Casing Material			PVC		
			Site - Lancaster, NY		Measuring Point E	levation		686.46		1/100 ft
Job#		60	314190		Height of Riser (at	oove land surface)		-0.36	i	1/100 ft
Well ID #		MW-	6		Land Surface Elev	ation		686.82		1/100 ft
	Upgradient		Downgradient		Screened Interval	(below land surface)		14.5 - 2	4.5	1/100 ft
Weather Conditions			snow							
				°F	Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below	v Top of Casin	g =	25	1/100 ft	VOA 40 mL glas	s TCL VOCs	(8260C)	3	HCL, 4°C	
Depth to Groundwater (D	Depth to Groundwater (DGW) Below Top of Casing = 6.98									
Length of Water Column (LWC) = TWD - DGW = 1/100 =										
1 Casing Volume (OCV) = LWC x 0.163 = 0.0 lite										
3 Casing Volumes =lite										
Method of Well Evacuation			Peristaltic Pump							
Method of Sample Collec	tion	Peristal	Itic Pump/Poly Tubing							
Total Volume of Water Re	emoved			liter						
					FIELD ANALYSES					
Flow Rate (ml/min)		150	150	150	150	150				
Time (Military)		14:25	14:30	14:35	14:40	14:45				
Depth to Groundwater		14.20	14.50	14.55	14.40	14.45				
Below Top of Casing (ft)		9.12	9.45	9.62	9.84	9.94				
Drawdown (ft)		-2.14	-0.33	-0.17	-0.22	-0.10				
pH (S.U.)		7.58	7.57	7.58	7.58	7.58				
Sp. Cond. (mS/cm)		0.978	0.976	0.971	0.967	0.965				
Turbidity (NTUs)		7.11	6.84	4.01	2.99	1.03				
Dissolved Oxygen (mg/L)		0.52	0.89	0.69	0.49	0.32				
Water Temperature (°C)		9.48	9.17	9.16	9.15	9.13				
ORP (mV)		49.6	41.3	37.1	34.8	31.9				
	Physical appearance at start clear with a li				tle iron bacteria	Physical appearance at	sampling	Color c	clear	
	no			<u>-</u> -			Odor	no		
	;	Sheen/Free Pro	ductr	10	_	Sheen/Free Product		no		
COMMENTS/OBSERVAT	TIONS Start	t purging well at	14:20hrs. Sample time	at 14:50hrs.						

Date (mo/day/yr)	4/6,	/2016		Casing Diameter		4			inches
Field Personnel		Z/ET		Casing Material		PV			<u>.</u>
Site Name	Former Scott Aviation	Site - Lancaster, NY		Measuring Point Eleva	tion		686.29		1/100 ft
Job #)314190		Height of Riser (above	land surface)		-0.29)	1/100 ft
Well ID #	MW-8	3R	_	Land Surface Elevation	·		686.58		1/100 ft
	Upgradient	Downgradient	_	Screened Interval (beld	ow land surface)		14 - 2	4	1/100 ft
Weather Conditions	· · · · · · · · · · · · · · · · · · ·	vercast							
Air Temperature		l	°F	Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
	Top of Casing =	27.5	1/100 ft	VOA 40 mL glass	TCL VOC	s (8260B)	3	HCL, 4°C	
Depth to Groundwater (DG	W) Below Top of Casing =	VOA 40 mL glass	TCL VOC	s (8260B)	3	HCL, 4°C	Dup		
Length of Water Column (L	.WC) = TWD - DGW =								
1 Casing Volume (OCV) =	LWC x 0.163 =	gal							
3 Casing Volumes =		gal							
Method of Well Evacuation	F	Peristaltic Pump							
Method of Sample Collection	on Perista	Itic Pump/Poly Tubing	1						
Total Volume of Water Ren	moved		liter						
				FIELD ANALYSES					
Flow Rate (ml/min)	200	200	200	150	150	150			
Time (Military)	9:40	9:45	9:50	9:55	10:00	10:05			
Depth to Groundwater									
Below Top of Casing (ft)	9.39	10.35	12.16	12.95	13.84	14.77			
Drawdown (ft)	-1.63	-0.96	-1.81	-0.79	-0.89	-0.93			
pH (S.U.)	7.71	7.75	7.85	7.89	7.91	7.92			
Sp. Cond. (S/cm)	2.642	2.652	2.659	2.664	2.654	2.65			
Turbidity (NTUs)	17.8	14.5	14.7	13.3	13.6	14.1			
Dissolved Oxygen (g/L)	2.95	1.48	0.7	0.57	0.34	0.39			
Water Temperature (°C)	9.09	9.03	9.17	8.96	8.9	8.89			
ORP (mV)	-230.2	-206.2	-149.9	-159.8	-151.9	-161.3			
	Physical appear	ance at start Col	lor <u>clear</u>	Phys	sical appearance at	sampling Cold	or <u>clear</u>		
		Ode	or yes	_		Odo	r	yes	
	Sheen/Free Pro	duct	no	_ She	en/Free Product	r	10		
COMMENTS/OBSERVATI	ONS Start purging well at	09:37hrs. Sample tim	ne at 10:05hrs.						

Date (mo/day/yr)	4/5/	2016	Casing Diameter 2				inches		
Field Personnel		/ET		Casing Material			PVC		
Site Name Fo	rmer Scott Aviation	Site - Lancaster, NY		Measuring Point Elevation	n		689.57		1/100 ft
Job#	60	314190		Height of Riser (above la	nd surface)		1.57		1/100 ft
Well ID #	MW-	9		Land Surface Elevation 688.0				1/100 ft	
Upgra	dient	Downgradient		Screened Interval (below land surface) 3.5 - 23.5			3.5	1/100 ft	
Weather Conditions	0	vercast							
Air Temperature	28			Container	Analysis (I	Method)	# Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below Top of	Casing =	23.5	1/100 ft	VOA 40 mL glass	TCL VOCs	(8260B)	3	HCL, 4°C	
Depth to Groundwater (DGW) Below Top of Casing = 11.6									
Length of Water Column (LWC) =	Length of Water Column (LWC) = TWD - DGW = 1/100								
1 Casing Volume (OCV) = LWC x	gal								
3 Casing Volumes =	gal								
Method of Well Evacuation		eristaltic Pump							
Method of Sample Collection	Peristal	tic Pump/Poly Tubing							
Total Volume of Water Removed			liter						
		1		FIELD ANALYSES			<u> </u>		
Flow Rate (ml/min)	150	150	150	150					
Time (Military)	11:25	11:30	11:35	11:40					
Depth to Groundwater Below Top of Casing (ft)	13.25	13.75	14.40	14.45					
Drawdown (ft)	-1.65	-0.50	-0.65	-0.05					
pH (S.U.)	7.2	7.15	7.17	7.21					
Sp. Cond. (mS/cm)	1.17	1.128	1.127	1.098					
Turbidity (NTUs)	2.1	1.1	1.2	1					
Dissolved Oxygen (mg/L)	5.46	4.76	3.07	8.44					
Water Temperature (°C)	7.95	7.98	8.11	6.91					
ORP (mV)	32.0	40.4	47.4	68.7					
	Physical appearance at start Color clear			Physical appearance at sampling Color clear					
Odor no			_		C	odor	no		
Sheen/Free Product no				Sheen	/Free Product		no		
COMMENTS/OBSERVATIONS	Start purging well at	11:20hrs. Sample time	at 10:455hrs.						

Date (mo/day/yr)	(mo/day/yr) 4/4/2016						2			inches
Field Personnel		DZ/	ET		Casing Material		PVC	;		
			ite - Lancaster, N	1	Measuring Point Eleva	tion		687.7		1/100 ft
Job #		603	14190		Height of Riser (above	land surface)		-0.08		1/100 ft
Well ID #		MW-10)		Land Surface Elevation	n	6	87.78		1/100 ft
	Upgradient		Downgradient		Screened Interval (belo	ow land surface)		3.5 - 23	.5	1/100 ft
Weather Conditions		S	inow							
Air Temperature		25		°F	Container	Analysis ((Method)	# Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below	Top of Casing	=	24	1/100 ft	VOA 40 mL glass	TCL VOC	s (8260C)	3	HCL, 4°C	
Depth to Groundwater (DO	GW) Below Top	of Casing =	6.67	1/100 ft						
Length of Water Column ((LWC) = TWD	- DGW =		1/100 ft						
1 Casing Volume (OCV) = LWC x 0.163 = liter										
3 Casing Volumes =lite										
Method of Well Evacuation Peristaltic Pump										
Method of Sample Collect	tion	Peristalti	c Pump/Poly Tubin	g						
Total Volume of Water Re	emoved			liter						
				,	FIELD ANALYSES					
Flow Rate (ml/min)		200	200	200	200	200	200		I	
Time (Military)		13:45	13:50	13:55	14:00	14:05	14:10			
Depth to Groundwater		10.40	10.00	10.00	14.00	14.00	14.10			
Below Top of Casing (ft)		7.80	8.52	9.15	9.4	9.68	9.75			
Drawdown (ft)		-1.13	-0.72	-0.63	-0.25	-0.28	-0.07			
pH (S.U.)		7.11	7.07	7.01	6.99	6.98	6.97			
Sp. Cond. (mS/cm)		1.611	1.599	1.595	1.589	1.581	1.572			
Turbidity (NTUs)		39.9	39.4	22.0	22.3	21.5	20.1			
Dissolved Oxygen (mg/L)		2.47	1.51	0.78	0.7	0.62	0.51			
Water Temperature (°C)		8.14	8.27	8.34	8.35	8.34	8.35			
ORP (mV)		30.7	35.2	46	47.5	49.1	51.8			
Physical appearance at start Color clear					Phy	sical appearance at	sampling Colo	r <u>c</u>	lear	
Odor no				_		Odo	·	no		
	S	heen/Free Prod	uct	no	_ She	en/Free Product	n	0		
COMMENTS/OBSERVAT	TIONS Start	ourging well at 1	3:40hrs. Sample ti	me at 14:15hrs.						

Date (mo/day/yr)		4/4/	2016		Casing Diameter		2			inches
Field Personnel			/ET		Casing Material		PVC			
Site Name			Site - Lancaster, NY		Measuring Point Eleva	tion	1	688.61		1/100 ft
Job #		60	314190		Height of Riser (above	land surface)		-0.26		1/100 ft
Well ID #		MW-1	1		Land Surface Elevation	n	68	8.87		1/100 ft
	Upgradien	t	Downgradient		Screened Interval (belo	low land surface) 8.5 - 28.5			1/100 ft	
Weather Conditions			Snow							
Air Temperature		25			Container	Analysis (Method) #	Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below	w Top of Casi	Fop of Casing = 28.5 1/			VOA 40 mL glass	TCL VOCs	s (8260C)	3	HCL, 4°C	
Depth to Groundwater (De	undwater (DGW) Below Top of Casing = 10.84			1/100 ft						
Length of Water Column	(LWC) = TW	/D - DGW =		1/100 ft						
1 Casing Volume (OCV) =	= LWC x	0.163 =		liter						
3 Casing Volumes =				liter						
Method of Well Evacuation			eristaltic Pump							
Method of Sample Collect	ction	Peristal	tic Pump/Poly Tubing							
Total Volume of Water Re	emoved			liter						
					FIELD ANALYSES					
Flow Rate (ml/min)		150	150	150	150	150	150			
Time (Military)		13:05	13:10	13:15	13:20	13:25	13:30			
Depth to Groundwater		.0.00	.66		10120					
Below Top of Casing (ft)	_	11.20	11.41	11.53	11.65	11.85	11.96			
Drawdown (ft)		-0.36	-0.21	-0.12	-0.12	-0.20	-0.11			
pH (S.U.)		6.9	6.89	6.89	6.88	6.88	6.89			
Sp. Cond. (mS/cm)		3.359	-	-	4.239	4.295	4.299			
Turbidity (NTUs)		6.80	6.2	6.11	5	3.1	2.81			
Dissolved Oxygen (mg/L))	9.73	6.73	4.11	1.27	1.06	1			
Water Temperature (°C)		8.51	8.91	9.67	9.96	10.23	9.89			
ORP (mV)		9.4	-	-	257.2	339.4	367.2			
		Physical appeara	ance at start Cole	or clear	Phys	sical appearance at	sampling Color		clear	
			Odd	or <u>no</u>	_		Odor		no	
Sheen/Free Productno				_ She	en/Free Product	no				
COMMENTS/OBSERVAT	TIONS Sta	art purging well at	13:00hrs. Sample tim	e at 13:35hrs.						

Date (mo/day/yr)	4,	5/2016		Casing Diameter		4			inches
		DZ/ET		Casing Material					
Site Name	Former Scott Aviatio	n Site - Lancaster, NY		Measuring Point Eleva	ation		686.19		1/100 ft
Job #		60314190		Height of Riser (above	land surface)		-0.36		1/100 ft
Well ID #	MV	<i>I-</i> 12		Land Surface Elevatio			6.55		1/100 ft
	Upgradient	Downgradient		Screened Interval (bel	ow land surface)		7 - 27		1/100 ft
	-								
Air Temperature		12	°F	Container	Analysis ((Method) #	Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Belo	w Top of Casing =	27.5	1/100 ft	VOA 40 mL glass	TCL VOC	s (8260B)	3	HCL, 4°C	
Depth to Groundwater (E	OGW) Below Top of Casing =	4.80	1/100 ft						
Length of Water Column	(LWC) = TWD - DGW =		1/100 ft						
1 Casing Volume (OCV)	= LWC x 0.163	=	gal						
3 Casing Volumes =			gal						
	on	Peristaltic Pump							
Method of Sample Collection	ction Perist	altic Pump/Teflon Tubing							
Total Volume of Water R	Removed		liter						
				FIELD ANALYSES					
VOLUME PURGED (ml)	200	200	200	200	200	200			
TIME (Military)	9:50	9:55	10:00	10:05	10:10	10:15			
Depth to Groundwater	9.50	9.00	10.00	10.03	10.10	10.13			
Below Top of Casing (ft)	5.55	5.67	6.55	7.15	7.43	7.71			
Drawdown (ft)	-0.75	-0.12	-0.88	-0.60	-0.28	-0.28			
pH (S.U.)	6.81	6.81	6.83	6.85	6.85	6.85			
Sp. Cond. (mS/cm)	1.355	1.353	1.356	1.354	1.359	1.348			
Turbidity (NTUs)	25.2	21.7	15.7	12.7	10.1	11.1			
Dissolved Oxygen (mg/L	.) 9.29	8.13	4.14	3.08	3.05	2.94			
Water Temperature (°C)	9.16	9.23	8.94	8.92	8.76	8.96			
ORP (mV)	-68.2	-68.6	-64.5	-60.2	-58.3	-57.7			
	Physical appe	arance at start Cole	or <u>clear with blac</u>	ck flecks Phy	sical appearance at	sampling Color	clear wit	h black flecks	
		Odd	or <u>no</u>	<u>—</u>		Odor	r	10	
	Sheen/Free P	roduct	no	She	een/Free Product	no			
COMMENTS/OBSERVA	ATIONS Start purging well	at 09:45hrs. Sample tim	e at 10:15hrs.						

Date (mo/day/yr)		4/5/2016		Casing Diameter			1		inches
Field Personnel		E. Laity		Casing Material			PVC		
Site Name		on Site - Lancaster, N	Υ	Measuring Point Eleva	ation		685.74		1/100 ft
Job#		60314190		Height of Riser (above	e land surface)		-0.50	l	1/100 ft
Well ID #	MV	V-13S		Land Surface Elevatio	n	686.24			1/100 ft
	Upgradient	Downgradient		Screened Interval (bel	ow land surface)		8.5-16.	.5	1/100 ft
Weather Conditions		Overcast							
Air Temperature		40	° F	Container	Analysis (l	Method)	# Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below		16.5	1/100 ft	VOA 40 mL glass	TCL VOCs	(8260B)	3	HCL, 4°C	
Depth to Groundwater (DC	GW) Below Top of Casing	4.95	1/100 ft						
Length of Water Column (LWC) = TWD - DGW =		1/100 ft						
1 Casing Volume (OCV) =	LWC x 0.163	=	gal						
3 Casing Volumes =			gal						
Method of Well Evacuation		Peristaltic Pump							
Method of Sample Collect	ion Peri	staltic Pump/Poly Tubin	g						
Total Volume of Water Re	moved	2	liter						
				FIELD ANALYSES					
Flow Rate (ml/min)	200	200	200	200	200				
Time (Military)	13:45	13:50	13:55	14:00	14:05				
Depth to Groundwater	10.10			100					
Below Top of Casing (ft)	6.12	8.15	9.13	9.72	9.99				
Drawdown (ft)	-1.17	-2.03	-0.98	-0.59	-0.27				
pH (S.U.)	7.30	7.42	7.55	7.59	7.68				
Sp. Cond. (mS/cm)	1.466	1.478	1.528	1.532	1.529				
Turbidity (NTUs)	250	149	120	71	50				
Dissolved Oxygen (mg/L)	9.95	2.25	0.28	0.55	0.62				
Water Temperature (°C)	8.47	8.60	8.75	8.76	8.87				
ORP (mV)	-142.5	-176.8	-201.3	-210.8	-213.7				
	Physical appe	earance at start C	solor sl tint with little	<u>i</u> ron bacteria Phy	sical appearance at	sampling (Color	clear	
		C	odor no	_		(Odor	no	
	Sheen/Free F	Product	no	_ She	en/Free Product		no		
COMMENTS/OBSERVAT	IONS Start purging well	at 13:40hrs. Sample tir	me at 14:05hrs.						

Date (mo/day/yr)	4/6/	/2016		Casing Diameter		1			inches
Field Personnel		Z/ET		Casing Material		PVC	;		
Site Name Fo	rmer Scott Aviation	Site - Lancaster, NY		Measuring Point Elevat	ion		685.88		1/100 ft
Job#	60	314190		Height of Riser (above	land surface)		-0.36	1	1/100 ft
Well ID #	MW-1	3D		Land Surface Elevation	1	6	86.24		1/100 ft
Upgrad	dient	Downgradient		Screened Interval (belo	w land surface)	surface) 19.5-23.5			1/100 ft
Weather Conditions		cloudy							
Air Temperature	34		°F	Container	Analysis (I	Method)	# Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below Top of 0	Casing =	23.5	1/100 ft	VOA 40 mL glass	TCL VOCs	(8260B)	3	HCL, 4°C	
Depth to Groundwater (DGW) Bel	ow Top of Casing =	8.25	1/100 ft						
Length of Water Column (LWC) =	TWD - DGW =		1/100 ft						
1 Casing Volume (OCV) = LWC x	0.163 =		gal						
3 Casing Volumes =			gal						
Method of Well Evacuation	F	Peristaltic Pump							
Method of Sample Collection	Peristal	ltic Pump/Poly Tubing							
Total Volume of Water Removed			liter						
				TIELD ANALYSES					
Flow Rate (ml/min)	200	100	100	100					
Time (Military)	7:45	7:50	7:55	8:00					
Depth to Groundwater	7.45	7.50	7.55	0.00					
Below Top of Casing (ft)	10.56	11.12	13.90	14.70					
Drawdown (ft)	-2.31	-0.56	-2.78	-0.80					
pH (S.U.)	7.6	7.71	7.62	7.61					
Sp. Cond. (mS/cm)	2.634	2.643	2.569	2.61					
Turbidity (NTUs)	1.64	1.22	0.87	0.55					
Dissolved Oxygen (mg/L)	4.63	4.22	2.75	2.07					
Water Temperature (°C)	10.49	10.4	9.61	9.73					
ORP (mV)	65.4	116.4	423.3	-					
	Physical appeara	ance at start Colo	r clear	Phys	sical appearance at	sampling Colo	r <u> </u>	clear	
		Odo	r no	_		Odo	·	no	
	Sheen/Free Prod	duct	no	Shee	en/Free Product	n	0		
COMMENTS/OBSERVATIONS	Start purging well at 0	08:05hrs. Sample time	at 07:40hrs.						

Date (mo/day/yr)	4/5/	2016		Casing Diameter					inches
Field Personnel		Z/ET		Casing Material		P\	′C		<u>.</u>
Site Name	Former Scott Aviation	Site - Lancaster, NY		Measuring Point Eleva	ition		685.65		1/100 ft
Job #	60	314190		Height of Riser (above	land surface)				1/100 ft
Well ID #	MW-1	4S		Land Surface Elevation			686.93		1/100 ft
Up <u>(</u>	gradient	Downgradient	_	Screened Interval (bel	ow land surface)	rface) 8.5-16.5			1/100 ft
Weather Conditions		clear							
Air Temperature	24		°F	Container	Analysis (l	Method)	# Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below Top	of Casing =	16.5	1/100 ft	VOA 40 mL glass	TCL VOCs	(8260B)	3	HCL, 4°C	
Depth to Groundwater (DGW)	Below Top of Casing =	8.8	1/100 ft						
Length of Water Column (LWC	c) = TWD - DGW =		1/100 ft						
1 Casing Volume (OCV) = LW	C x 0.163 =		gal						
3 Casing Volumes =			gal						
Method of Well Evacuation	F	Peristaltic Pump							
Method of Sample Collection	Peristal	Itic Pump/Poly Tubing							
Total Volume of Water Remove	ed		liter						
				FIELD ANALYSES					
Flow Rate (ml/min)	150	150	150	150	150				
Time (Military)	10:20	10:25	10:30	10:35	10:40				
Depth to Groundwater	10.20	10.20	10.00	10.00	10.10				
Below Top of Casing (ft)	7.02	7.3	7.75	8.14	8.34				
Drawdown (ft)	1.78	-0.28	-0.45	-0.39	-0.2				
pH (S.U.)	7.28	7.1	7.17	7.22	7.21				
Sp. Cond. (S/cm)	1.062	1.088	1.095	1.088	1.099				
Turbidity (NTUs)	38.2	39.7	15.1	12.4	10.2				
Dissolved Oxygen (g/L)	15.58	5.09	7.03	7.2	4.62				
Water Temperature (°C)	6.89	6.64	6.4	7.08	7.6				
ORP (mV)	-24.9	8	2.7	-1.6	-1.8				
	Physical appeara	ance at start Cold	or clear with iron	<u>bacteria</u> Phy	sical appearance at	sampling Co	or o	clear	
		Odo	or no	_		Od	or	no	
	Sheen/Free Prod	duct	no	She	en/Free Product		no		
COMMENTS/OBSERVATIONS	Start purging well at	10:15hrs. Sample time	at 10:45hrs.						

Date (mo/day/yr)	4/5	5/2016		Casing Diameter		1			inches
Field Personnel	D	Z/ET		Casing Material			′C		
Site Name	Former Scott Aviation	Site - Lancaster, NY		Measuring Point Eleva	tion		685.84		1/100 ft
Job#	6	0197162		Height of Riser (above	land surface)				1/100 ft
Well ID #	MW-	14D		Land Surface Elevation					1/100 ft
Up	gradient	Downgradient	_	Screened Interval (belo	ow land surface)	surface) 18.5-23.5			1/100 ft
Weather Conditions		 clear							
Air Temperature		5	°F	Container	Analysis (I	Method)	# Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below Top	of Casing =	23.5	1/100 ft	VOA 40 mL glass	TCL VOCs	(8260B)	3	HCL, 4°C	
Depth to Groundwater (DGW)	Below Top of Casing =	13.49	1/100 ft						
Length of Water Column (LWC	c) = TWD - DGW =		1/100 ft						
1 Casing Volume (OCV) = LW		=							
3 Casing Volumes =			gal						
Method of Well Evacuation		Peristaltic Pump							
Method of Sample Collection	Perist	altic Pump/Poly Tubing							
Total Volume of Water Remov	ed	3	liter						
				FIELD ANALYSES					
Flow Rate (ml/min)	150	150	150	150	150				
Time (Military)	10:50	10:55	11:00	11:05	11:10				
Depth to Groundwater	10.00	10.00	11.00	11.00	11.10				
Below Top of Casing (ft)	13.49	13.81	14.43	14.81	15.20				
Drawdown (ft)	0.00	-0.32	-0.62	-0.38	-0.39				
pH (S.U.)	7.12	7.14	7.14	7.14	7.14				
Sp. Cond. (mS/cm)	1.209	1.212	1.201	1.998	1.193				
Turbidity (NTUs)	8.9	3.1	2.8	1.7	1.5				
Dissolved Oxygen (mg/L)	1.17	0.89	0.82	0.71	0.63				
Water Temperature (°C)	9.53	9.70	9.98	10.01	10.15				
ORP (mV)	-56.0	-73.4	-74.9	-76.1	-77.3				
	Physical appea	rance at start Co	lor clear	Phy	sical appearance at s	sampling Co	or o	clear	
		Od	or no	_		Od	or	no	
	Sheen/Free Pro	oduct	no	_ She	en/Free Product		no		
COMMENTS/OBSERVATIONS	Start purging well at	10:45hrs. Sample time	e at 11:10hrs.						

Date (mo/day/yr)	4/6	/2016		Casing Diameter			1			inches
Field Personnel		Z/ET		Casing Material			PVC			
Site Name Fo	rmer Scott Aviation	Site - Lancaster, NY		Measuring Point Eleva	tion		687	7.52		1/100 ft
Job#	6	0314190		Height of Riser (above	land surface)			-0.33		1/100 ft
Well ID #	MW-	158		Land Surface Elevation		687.85				1/100 ft
Upgrad	dient	Downgradient		Screened Interval (bel	ow land surface)			12-18		1/100 ft
Weather Conditions		Coludy								
Air Temperature	36	6	° F	Container	Analysis (I	Method)	# Bot	ttles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below Top of 0	Casing =	18	1/100 ft	VOA 40 mL glass	TCL VOCs	(8260B)	3	3	4°C	
Depth to Groundwater (DGW) Bel	ow Top of Casing =	0.30	1/100 ft							
Length of Water Column (LWC) =	TWD - DGW =		1/100 ft							
1 Casing Volume (OCV) = LWC x	0.163 =	·	gal							
3 Casing Volumes =			gal							
Method of Well Evacuation										
Method of Sample Collection	Perista	altic Pump/Poly Tubing								
Total Volume of Water Removed		8	liter							
			_							
				FIELD ANALYSES		1	1			
Flow Rate (ml/min)	-		-	-	-					
Time (Military) Depth to Groundwater	15:00	15:15	15:29	15:40	15:50					
Below Top of Casing (ft)	-	-	-	-	-					
Drawdown (ft)	-	-	-	-	•					
pH (S.U.)	9.18	6.76	7.02	6.68	6.68					
Sp. Cond. (mS/cm)	1.457	3.031	1.295	5.127	1.99					
Turbidity (NTUs)	30.6	15.1	21.6	38.6	>500					
Dissolved Oxygen (mg/L)	2.02	7.14	5.64	5.16	4.39					
Water Temperature (°C)	9.47	10.56	9.31	10.04	8.67					
ORP (mV)	-200.1	-114.2	-92.0	-117.8	125.3					
	Physical appear	ance at start Col	or <u>clear with blac</u>	ck flecks Phy	sical appearance at s	sampling C	Color	clear witl	n black flecks	
		Odd	or yes	<u> </u>		C	Odor _		yes	
	Sheen/Free Pro	duct	no	She	en/Free Product		no			
COMMENTS/OBSERVATIONS	Start purging well at	14:55hrs. Well flushme	ountflooded.							

Date (mo/day/yr)	4/6/2	2016		Casing Diameter		1			inches
Field Personnel		ET.		Casing Material		PVC			<u> </u>
Site Name Form		Site - Lancaster, NY		Measuring Point Eleva	tion	(687.62		1/100 ft
Job #	603	314190		Height of Riser (above	land surface)		-0.27		1/100 ft
Well ID #	MW-15	iD .		Land Surface Elevation	n	687.89			
Upgradie	Upgradient Downgradient			Screened Interval (bel	ow land surface)		21-25		1/100 ft
Weather Conditions		oudy 35							
Air Temperature	50		°F	Container	Analysis (I	Method) #	Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below Top of Ca	sing =	25	1/100 ft	VOA 40 mL glass	TCL VOCs	(8260B)	3	4°C	
Depth to Groundwater (DGW) Below	/ Top of Casing =	11.19	1/100 ft						
Length of Water Column (LWC) = TV	WD - DGW =		1/100 ft						
1 Casing Volume (OCV) = LWC x	0.163 =		gal						
3 Casing Volumes =			gal						
Method of Well Evacuation	Pe	eristaltic Pump							
Method of Sample Collection	Peristalt	ic Pump/Poly Tubing							
Total Volume of Water Removed			liter						
			-	FIELD ANALYSES					
Flow Rate (ml/min)	200	200	200	200	200	200			
Time (Military)	14:05	14:10	14:15	14:20	14:25	14:30			
Depth to Groundwater	11.00	71.10	1 1.10	11.20	11.20	11.00			
Below Top of Casing (ft)	11.42	11.45	11.45	11.45	11.45	11.45			
Drawdown (ft)	-0.23	-0.03	0.00	0.00	0.00	0.00			
pH (S.U.)	8.69	8.56	8.11	7.95	7.92	7.88			
Sp. Cond. (mS/cm)	1.076	1.107	1.167	1.223	1.243	1.254			
Turbidity (NTUs)	7.83	5.85	6.23	8.41	7.64	6.17			
Dissolved Oxygen (mg/L)	6.72	4.97	2.79	2.26	2.02	1.95			
Water Temperature (°C)	11.41	11.33	11.32	11.35	11.34	11.39			
ORP (mV)	-175.5	-179.3	-148.2	-156.4	-149.3	-146.0			
	Physical appeara	nce at start Cold	or <u>clear</u>	Phy	sical appearance at s	sampling Color	clea	ar	
		Odo	r no	_		Odor	n	0	
	Sheen/Free Prode	uct	no	She	en/Free Product	no			
COMMENTS/OBSERVATIONS S	tart purging well at 1	4:00hrs. Sample time	at 14:30hrs.						
_									

Page __1__ of __1__

Date (mo/day/yr)	4/7/	2016		Casing Diameter			1		inches
Field Personnel		z/et		Casing Material			/C		
Site Name	Former Scott Aviation	Site - Lancaster, NY		Measuring Point Eleva	tion		688.15		1/100 ft
Job #	60	314190		Height of Riser (above	land surface)		2.46	3	1/100 ft
Well ID #	MW-1	6S		Land Surface Elevatio	n	685.69			1/100 ft
Upg	radient	Downgradient	_	Screened Interval (bel	ow land surface)		12 - 1	8	1/100 ft
Weather Conditions		vercast							
Air Temperature	40		°F	Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below Top of	of Casing =	15.4	1/100 ft	VOA 40 mL glass	TCL VOCs	(8260C)	3	HCL, 4°C	
Depth to Groundwater (DGW) E	selow Top of Casing =	6.30	1/100 ft						
Length of Water Column (LWC)	= TWD - DGW =		1/100 ft						
1 Casing Volume (OCV) = LWC	x 0.163 =		liter						
3 Casing Volumes =			liter						
Method of Well Evacuation	F	Peristaltic Pump							
Method of Sample Collection	Perista	tic Pump/Poly Tubing							
Total Volume of Water Remove	d	2	liter						
			F	FIELD ANALYSES					
Flow Rate (ml/min)	150	150	150	150					
Time (Military)	10:10	10:15	10:20	10:25					
Depth to Groundwater									
Below Top of Casing (ft)	8.46	10.05	11.74	12.05					
Drawdown (ft)	-2.16	-1.59	-1.69	-0.31					
pH (S.U.)	7.08	6.84	6.89	6.88					
Sp. Cond. (mS/cm)	3.087	3.055	3.013	3.024		+			
Turbidity (NTUs)	83.4	64.5	47.7	41.3					
Dissolved Oxygen (mg/L)	1.06	0.99	0.72	0.63		+			
Water Temperature (°C)	7.89	7.83	7.55	7.41					
ORP (mV)	-115.3	-125.1	-131.4	-136.3					
	Physical appeara			_ Phy	sical appearance at			loudy grey	
		Od		_		Od		yes	
			yes	_	en/Free Product		yes		
COMMENTS/OBSERVATIONS	Start purging well at	10:07hrs. Sample time	e at 10:25hrs. Well	drawing dry, grab sample) .				

Date (mo/day/yr)		4/7/2016		Casing Diameter		1			inches
Field Personnel		E. Laity		Casing Material		PVC			
Site Name		ation Site - Lancaster, I	NY	Measuring Point Eleva	tion		688.16		1/100 ft
Job#		60314190		Height of Riser (above	land surface)		2.47		1/100 ft
Well ID #	ı	MW-16D		Land Surface Elevation	n	685.69			1/100 ft
	Upgradient	Downgradient		Screened Interval (belo	ow land surface)		20-24		1/100 ft
Weather Conditions		Overcast							
Air Temperature		40	° F	Container	Analysis ((Method) #	Bottles	Preservative	Dup - MS/MSD
Total Depth (TWD) Below		24	1/100 ft	VOA 40 mL glass	TCL VOC	s (8260B)	3	HCL, 4°C	
Depth to Groundwater (Do	GW) Below Top of Casin	g = 10.6	1/100 ft						
Length of Water Column	(LWC) = TWD - DGW =		1/100 ft						
1 Casing Volume (OCV) =	= LWC x 0.163	_ =	gal						
3 Casing Volumes =			gal						
Method of Well Evacuatio									
Method of Sample Collect	tion P	eristaltic Pump/Poly Tub	ing						
Total Volume of Water Re	emoved	3	liter						
				FIELD ANALYSES					
Flow Rate (ml/min)	200	150	150	150	150	150			
Time (Military)	9:35	9:40	9:45	9:50	9:55	10:00			
Depth to Groundwater	0.00	00	01.0	0.00	0.00	10.00			
Below Top of Casing (ft)	13.05	16.72	20.8	21.4	21.79	22.14			
Drawdown (ft)	-2.45	-3.67	-4.08	-0.60	-0.39	-0.35			
pH (S.U.)	7.79	7.41	7.32	7.26	7.29	7.36			
Sp. Cond. (mS/cm)	2.189	2.175	2.171	2.164	2.141	2.13			
Turbidity (NTUs)	37.6	41.3	35.4	33.6	22.3	19.6			
Dissolved Oxygen (g/L)	13.42	2.86	2.94	2.43	2.87	2.94			
Water Temperature (°C)	110.44	10.13	9.79	9.65	9.68	9.74			
ORP (mV)	-150.4	-124.3	-117.2	-106.1	-116.3	-128.8			
	Physical ap	pearance at start	Color clear	Phy	sical appearance at	sampling Color	cle	ear	
			Odor yes	_		Odor		yes	
	Sheen/Free	Product	no	She	en/Free Product	no	1		
COMMENTS/OBSERVAT	Start purging w	ell at 09:30hrs. Sample	time at 10:00hrs.						

AECOM Environment

Appendix D

Current and Historical Summary of Groundwater Elevations

MONITORING WELL MW-2 SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site

Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	7.29	683.06
4/8/2004	NM	NA NA
10/12/2004	NM	NA 2014 12
1/6/2005	5.92	684.43
4/14/2005	6.50	683.85
7/20/2005	7.77	682.58
10/4/2005	6.08	684.27
1/5/2006	9.56	680.79
4/11/2006	6.65	683.70
7/10/2006	7.79	682.56
10/18/2006	6.11	684.24
1/9/2007	6.27	684.08
2/28/2007	5.20	685.15
4/16/2007	5.99	684.36
7/2/2007	7.22	683.13
10/15/2007	8.15	682.20
1/8/2008	5.73	684.62
4/2/2008	5.95	684.40
7/1/2008	4.90	685.45
9/30/2008	7.40	682.95
1/19/2009	6.75	683.60
4/14/2009	6.15	684.20
7/21/2009	6.25	684.10
10/14/2009	5.85	684.50
1/18/2010	7.00	683.35
4/8/2010	5.45	684.90
7/12/2010	6.10	684.25
10/11/2010	7.00	683.35
1/11/2011	6.80	683.55
4/4/2011	5.70	684.65
7/25/2011	4.75	685.60
10/3/2011	4.13	686.22
1/12/2012	6.40	683.95
4/2/2012	6.00	684.35
7/5/2012	6.47	683.88
10/11/2012	7.17	683.18
1/21/2013	6.72	683.63
4/1/2013	6.10	684.25
7/1/2013	6.84	683.51
10/9/2013	6.70	683.65
1/21/2014	6.00	684.35
4/7/2014	4.95	685.40
7/16/2014	6.72	683.63
10/14/2014	6.79	683.56
1/20/2015	7.12	683.23
4/6/2015	5.74	684.61
7/22/2015	6.19	684.16
10/19/2015	5.79	684.56
1/5/2016	6.41	683.94
4/4/2016	5.68	681.42

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

TOC - top of PVC casing

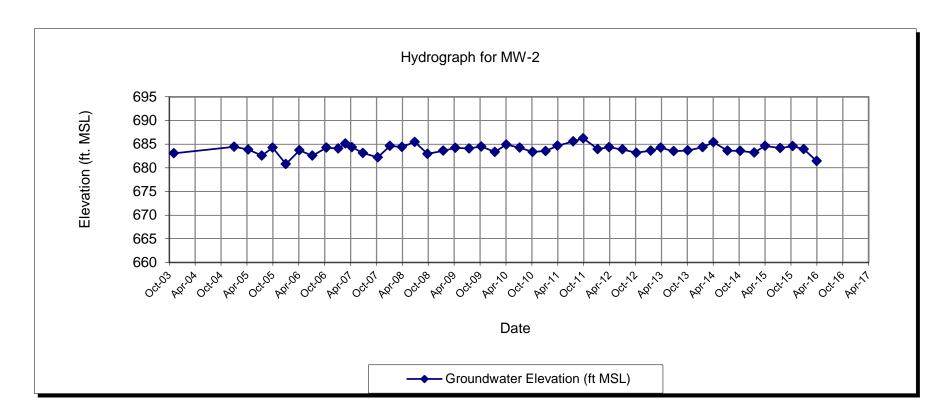
TOC Elevation - 690.35

DPE and GWCT down on 2/28/07 DPE down on 1/8/08 and 10/9/13

TOC Elevation as of 6/13/08 - 687.1

MONITORING WELL MW-2 SUMMARY OF GROUNDWATER ELEVATIONS

Former Scott Aviation Site Lancaster, New York



MONITORING WELL MW-3 SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	12.76	674.96
4/8/2004	NM	NA
10/12/2004	NM	NA
1/6/2005	11.65	676.07
4/14/2005	12.64	675.08
7/20/2005	12.73	674.99
10/4/2005	7.38	680.34
1/5/2006	11.31	676.41
4/11/2006	11.84	675.88
7/10/2006	12.31	675.41
10/18/2006	10.82	676.9
1/9/2007	10.99	676.73
2/28/2007	3.99	683.73
4/16/2007	11.87	675.85
7/2/2007	13.35	674.37
10/17/2007	13.1	674.62
1/8/2008	7.61	680.11
4/2/2008	11.71	676.01
7/1/2008	10.75	676.27
9/30/2008	11.95	675.07
1/19/2009	10.94	676.08
4/14/2009	10.94	676.08
7/21/2009	11.51	675.51
10/14/2009	10.75	676.27
1/18/2010	12.38	674.64
4/8/2010	11.02	676.00
7/12/2010	9.18	677.84
10/11/2010	10.9	676.12
1/12/2011	11.3	675.72
4/4/2011	10.7	676.32
7/25/2011	4.38	682.64
10/3/2011	3.14	683.88
1/12/2012	10.65	676.37
4/2/2012	9.81	677.21
7/5/2012	8.56	678.46
10/11/2012	9.77	677.25
1/21/2013	11.15	675.87
4/1/2013	8.56	678.46
7/1/2013	11.85	675.17
10/9/2013	10.43	676.59
1/21/2014	10.45	676.57
4/7/2014	11.77	675.25
7/16/2014	10.29	676.73
10/14/2014	9.65	677.37
1/20/2015	10.15	676.87
4/6/2015	8.94	678.08
7/22/2015	7.98	679.04
10/19/2015	5.15	681.87
1/5/2016	9.01	678.01
4/4/2016	8.00	679.05

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

TOC - top of PVC casing

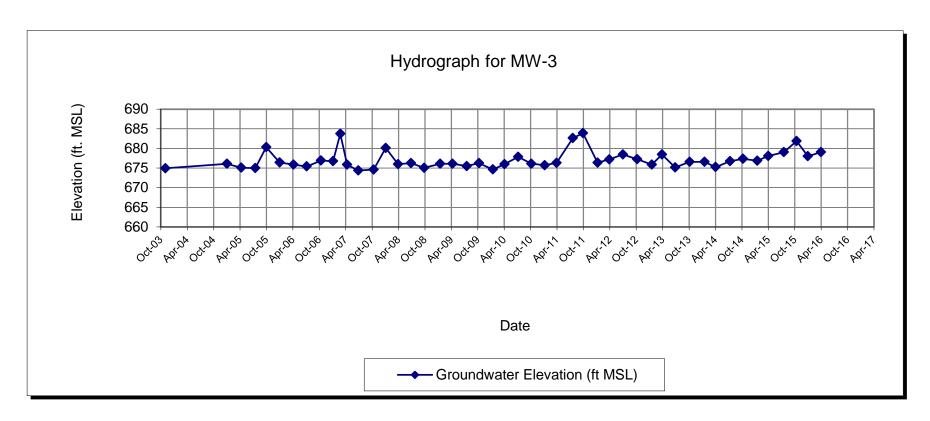
TOC Elevation - 687.72

DPE and GWCT down on 2/28/07 DPE down on 1/8/08 and 10/9/13

TOC Elevation as of 6/13/08 - 687.02

MONITORING WELL MW-3 SUMMARY OF GROUNDWATER ELEVATIONS

Former Scott Aviation Site Lancaster, New York



MONITORING WELL MW-4 SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	8.54	678.10
4/8/2004	NM	NA 075 04
10/12/2004	11.40	675.24
1/6/2005	9.20	677.44
4/14/2005	NM	NA NA
7/20/2005	NM	NA OTA 40
10/4/2005	15.24	671.40
1/5/2006	15.71	670.93
4/11/2006	18.56	668.08
7/10/2006	15.02	671.62
10/18/2006	15.21	671.43
1/9/2007	14.00	672.64
2/28/2007	2.54	684.10
4/16/2007	12.45	674.19
7/2/2007	14.89	671.75
10/17/2007	12.91	673.73
1/8/2008	5.59	681.05
4/2/2008	9.31	677.33
7/1/2008	13.91	672.51
9/30/2008	13.55	672.87
1/19/2009	10.78	675.64
4/14/2009	8.90	677.52
7/21/2009	12.35	674.07
10/14/2009	10.40	676.02
1/18/2010	8.90	677.52
4/8/2010	10.90	675.52
7/12/2010	14.00	672.42
10/11/2010	16.69	669.73
1/12/2011	16.35	670.07
4/4/2011	17.67	668.75
7/25/2011	2.32	684.10
10/3/2011	2.98	683.44
1/12/2012	13.26	673.16
4/2/2012	13.10	673.32
7/6/2012	9.66	676.76
10/11/2012	18.60	667.82
1/21/2013	17.04	669.38
4/1/2013	18.65	667.77
7/1/2013	19.10	667.32
10/9/2013	10.10	676.32
1/21/2014	NM*	NA 667 F7
4/7/2014	18.85	667.57
7/16/2014	10.74	675.68
10/14/2014	8.52	677.90
1/20/2015	10.95	675.47
4/6/2015	9.05	677.37
7/22/2015	7.55	678.87
10/19/2015	4.59	681.83
1/5/2016	9.92	676.50 678.30
4/4/2016	8.20	678.30

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

TOC - top of PVC casing

TOC Elevation - 686.64

DPE and GWCT down on 2/28/07

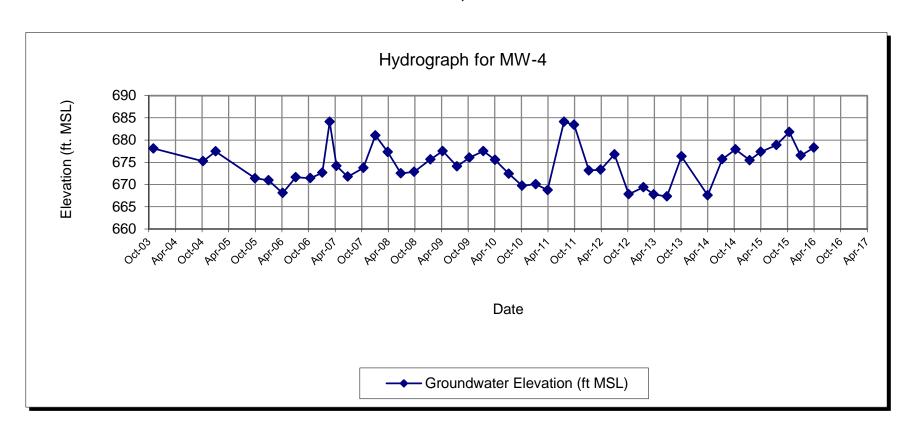
DPE down on 1/8/08 and 10/9/13

TOC Elevation as of 6/13/08 - 686.42

NM* - Well could not be accessed due to snow cover

MONITORING WELL MW-4 SUMMARY OF GROUNDWATER ELEVATIONS

Former Scott Aviation Site Lancaster, New York



MONITORING WELL MW-6 SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	11.06	675.62
4/8/2004	NM	NA
10/12/2004	9.95	676.73
1/6/2005	13.00	673.68
4/14/2005	11.57	675.11
7/20/2005	12.88	673.80
10/4/2005	8.55	678.13
1/5/2006	12.11	674.57
4/11/2006	11.91	674.77
7/10/2006	12.5	674.18
10/18/2006	11.02	675.66
1/9/2007	11.1	675.58
2/28/2007	4.35	682.33
4/16/2007	11.81	674.87
7/2/2007	12.85	673.83
10/17/2007	13.09	673.59
1/8/2008	7.02	679.66
4/2/2008	11.00	675.68
7/1/2008	10.98	675.55
9/30/2008	11.39	675.14
1/19/2009	9.68	676.85
4/14/2009	10.02	676.51
7/21/2009	11.50	675.03
10/14/2009	10.35	676.18
1/18/2010	11.20	675.33
4/8/2010	10.05	676.48
7/12/2010	9.25	677.28
10/11/2010	9.91	676.62
1/12/2011	10.56	675.97
4/4/2011	10.27	676.26
7/25/2011	4.17	682.36
10/3/2011	3.45	683.08
1/12/2012	9.86	676.67
4/2/2012	9.39	677.14
7/5/2012	7.64	678.89
10/11/2012	10.80	675.73
1/21/2013	10.12	676.41
4/1/2013	8.41	678.12
7/1/2013	11.18	675.35
10/9/2013	9.32	677.21
1/21/2014	9.95	676.58
4/7/2014	10.75	675.78
7/16/2014	9.61	676.92
10/14/2014	8.60	677.93
1/20/2015	9.20	677.33
4/6/2015	8.08	678.45
7/22/2015	7.28	679.25
10/19/2015	4.82	681.71
1/5/2016	8.41	678.12
4/4/2016	6.98	679.48

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

TOC - top of PVC casing

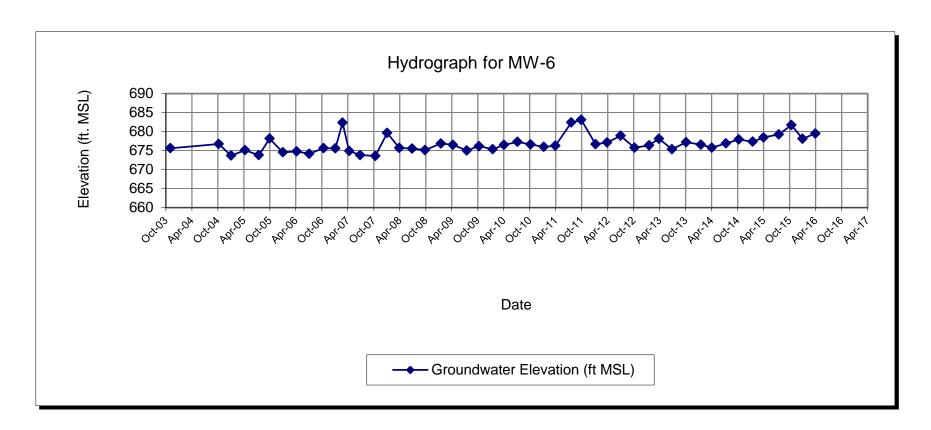
TOC Elevation - 686.68

DPE and GWCT down on 2/28/07 DPE down on 1/8/08 and 10/9/13

TOC Elevation as of 6/13/08 - 686.53

MONITORING WELL MW-6 SUMMARY OF GROUNDWATER ELEVATIONS

Former Scott Aviation Site Lancaster, New York



MONITORING WELL MW-8R SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	NM	NA
10/12/2004	12.75	672.92
1/6/2005	7.45	678.22
4/14/2005	14.45	671.22
7/20/2005	NM	NA
10/4/2005	NM	NA
1/6/2006	15.51	670.16
4/11/2006	15.65	670.02
7/10/2006	14.9	670.77
10/18/2006	15.72	669.95
1/9/2007	15.76	669.91
2/28/2007	10.78	674.89
4/16/2007	15.60	670.07
7/2/2007	16.29	669.38
10/15/2007	18.50	667.17
1/8/2008	4.99	680.68
4/2/2008	13.19	672.48
7/1/2008	12.15	674.06
9/30/2008	15.83	670.38
1/19/2009	11.55	674.66
4/14/2009	11.20	675.01
7/21/2009	13.57	672.64
10/14/2009	12.76	673.45
1/18/2010	11.26	674.95
4/8/2010	14.95	671.26
7/12/2010	13.74	672.47
10/11/2010	12.34	673.87
1/12/2011	13.10	673.11
4/4/2011	14.88	671.33
7/25/2011	3.25	682.96
10/3/2011	4.50	681.71
1/12/2012	12.96	673.25
4/2/2012	11.70	674.51
7/5/2012	10.34	675.87
10/11/2012	13.38	672.83
1/21/2013	14.90	671.31
4/1/2013	10.82	675.39
7/1/2013	12.70	673.51
10/9/2013	9.25	676.96
1/21/2014	NM*	NA
4/7/2014	14.55	671.66
7/16/2014	8.97	677.24
10/14/2014	5.85	680.36
1/20/2015	9.80	676.41
4/6/2015	7.55	678.66
7/22/2015	8.22	677.99
10/19/2015	4.90	681.31
1/5/2016	4.90 8.95	677.26
4/4/2016	8.10	678.19

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

TOC - top of PVC casing

TOC Elevation - 685.67

DPE and GWCT down on 2/28/07

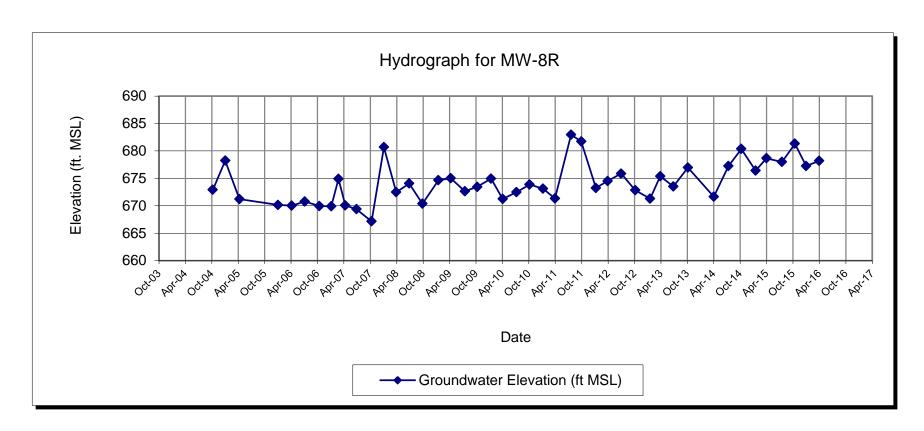
DPE down on 1/8/08 and 10/9/13

TOC Elevation as of 6/13/08 - 686.21

NM* - Well could not be accessed due to snow cover

MONITORING WELL MW-8R SUMMARY OF GROUNDWATER ELEVATIONS

Former Scott Aviation Site Lancaster, New York



MONITORING WELL MW-9 SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Floyetian (ft MSL)
11/7/2003	13.03	Groundwater Elevation (ft MSL) 672.4
4/8/2004	NM	072.4 NA
10/12/2004	13.68	671.75
1/6/2005	12.89	671.73 672.54
4/14/2005	12.74	672.69
7/20/2005	13.88	671.55
10/4/2005	7.22	671.33 678.21
1/5/2006	12.79	672.64
4/11/2006	13.50	671.93
7/10/2006	13.24	672.19
10/18/2006	11.00	674.43
1/9/2007	12.24	673.19
2/28/2007	1.66	683.77
4/16/2007	13.15	672.28
7/2/2007	13.00	672.28 672.43
10/17/2007	13.00	672.43 671.48
1/8/2008	6.70	671.48 678.73
4/2/2008	10.61	674.82
7/1/2008		674.39
	14.25 15.67	674.39 672.97
9/30/2008 1/19/2009	15.67	672.97 674.16
4/14/2009	15.48	673.16
7/21/2009	15.46	673.44
10/10/2009 1/18/2010	15.06 17.00	673.58 671.64
4/8/2010	17.00	671.64 673.24
7/12/2010	12.42	675.24 676.22
10/11/2010 1/12/2011	14.21 15.29	674.43 673.35
4/4/2011	14.55	673.33 674.09
7/25/2011	5.75	682.89
10/3/2011 1/12/2012	4.58 14.75	684.06 673.89
4/2/2012 7/5/2012	14.52 11.48	674.12 677.16
10/11/2012	12.66	677.16 675.98
1/21/2013	12.66	675.98 674.20
4/1/2013	14.44	674.20 676.77
7/1/2013	16.54	676.77 672.10
10/9/2013 1/21/2014	13.68 15.38	674.96 673.26
	16.30	
4/7/2014 7/16/2014	13.71	672.34 674.93
10/14/2014 1/20/2015	13.09 13.92	675.55 674.72
		_
4/6/2015	12.41	676.23
7/22/2015	10.72	677.92
10/19/2015	7.06	681.58
1/5/2016	12.09	676.55
4/4/2016	11.38	678.19

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

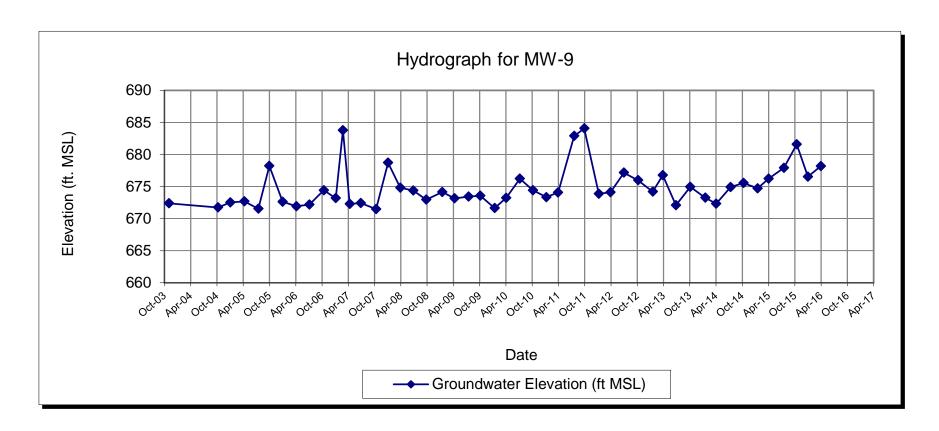
TOC - top of PVC casing

TOC Elevation - 685.43

DPE and GWCT down on 2/28/07
DPE down on 1/8/08 and 10/9/13

TOC Elevation as of 6/13/08 - 688.64

MONITORING WELL MW-9 SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-10 SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	10.75	676.97
4/8/2004	NM	NA
10/12/2004	NM	NA
1/6/2005	10.28	677.44
4/14/2005	11.50	676.22
7/20/2005	12.43	675.29
10/4/2005	9.58	678.14
1/5/2006	11.28	676.44
4/11/2006	10.91	676.81
7/10/2006	10.90	676.82
10/18/2006	10.13	677.59
1/9/2007	10.21	677.51
2/28/2007	4.30	683.42
4/16/2007	10.93	676.79
7/2/2007	12.21	675.51
10/17/2007	13.15	674.57
1/8/2008	7.03	680.69
4/2/2008	9.91	677.81
7/1/2008	10.04	677.37
9/30/2008	11.05	676.36
1/19/2009	9.74	677.67
4/14/2009	9.14	678.27
7/21/2009	10.56	676.85
10/14/2009	9.37	678.04
1/18/2010	10.59	676.82
4/8/2010	9.35	678.06
7/12/2010	9.12	678.29
10/11/2010	10.20	677.21
1/12/2011	10.00	677.41
4/4/2011	9.61	677.80
7/25/2011	4.45	682.96
10/3/2011	4.25	683.16
1/12/2012	9.82	677.59
4/2/2012	8.51	678.90
7/5/2012	7.55	679.86
10/11/2012	10.65	676.76
1/21/2013	9.59	677.82
4/1/2013	8.30	679.11
7/1/2013	9.77	677.64
10/9/2013	8.65	678.76
1/21/2014	8.73	678.68
4/7/2014	9.25	678.16
7/16/2014	8.65	678.76
10/14/2014	8.02	679.39
1/20/2015	8.50	678.91
4/6/2015	7.40	680.01
7/22/2015	6.84	680.57
10/19/2015	5.40	682.01
1/5/2016	7.89	679.52
4/4/2016	6.67	681.03

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

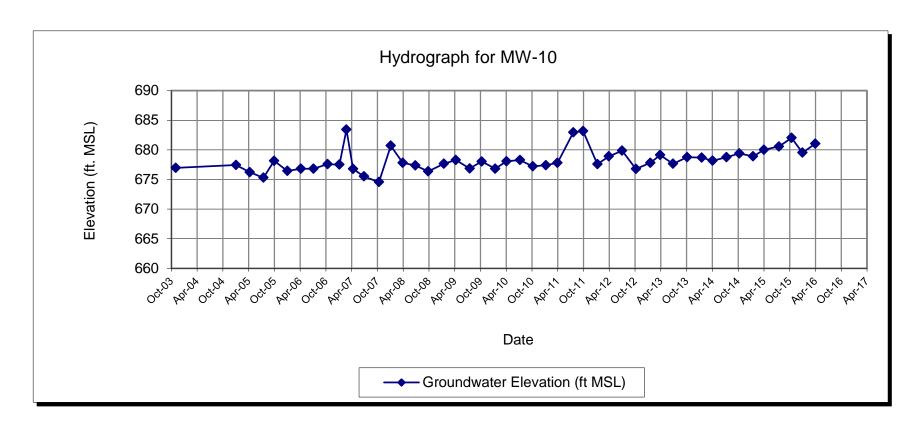
TOC - top of PVC casing

TOC Elevation - 687.72

DPE and GWCT down on 2/28/07 DPE down on 1/8/08 and 10/9/13

TOC Elevation as of 6/13/08 - 687.41

MONITORING WELL MW-10 SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-11 SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site Lancaster, New York

D .	D 41 4 W 4 1 TOO (6)	0 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Date A/0/2004	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	NM	NA
10/12/2004	NM	NA ozo oo
1/6/2005	15.59	673.02
4/14/2005	11.59	677.02
7/20/2005	17.34	671.27
10/4/2005	10.45	678.16
1/5/2006	16.58	672.03
4/11/2006	13.52	675.09
7/10/2006	13.75	674.86
10/18/2006	14.35	674.26
1/9/2007	15.26	673.35
2/28/2007	6.34	682.27
4/16/2007	11.55	677.06
7/2/2007	17.30	671.31
10/16/2007	17.69	670.92
1/8/2008	11.73	676.88
4/2/2008	14.78	673.83
7/1/2008	13.91	674.74
9/30/2008	15.25	673.40
1/19/2009	13.45	675.20
4/14/2009	13.50	675.15
7/21/2009	14.51	674.14
10/14/2009	13.85	674.80
1/18/2010	16.38	672.27
4/8/2010	13.90	674.75
7/12/2010	12.60	676.05
10/11/2010	14.80	673.85
1/12/2011	NA	073.03
4/4/2011	14.52	674.13
7/25/2011	4.48	684.17
	4.46	
10/3/2011		684.60
1/12/2012	8.96	679.69
4/2/2012	12.87	675.78
7/5/2012	10.53	678.12
10/11/2012	14.40	674.25
1/21/2013	14.75	673.90
4/1/2013	11.66	676.99
7/1/2013	14.99	673.66
10/9/2013	12.25	676.40
1/21/2014	13.75	674.90
4/7/2014	14.56	674.09
7/16/2014	12.64	676.01
10/14/2014	12.26	676.39
1/20/2015	12.31	676.34
4/6/2015	11.95	676.70
7/22/2015	8.49	680.16
10/19/2015	8.75	679.90
1/5/2016	12.53	676.12
4/4/2016	10.84	677.77

NOTES:

ft MSL - feet mean sea level

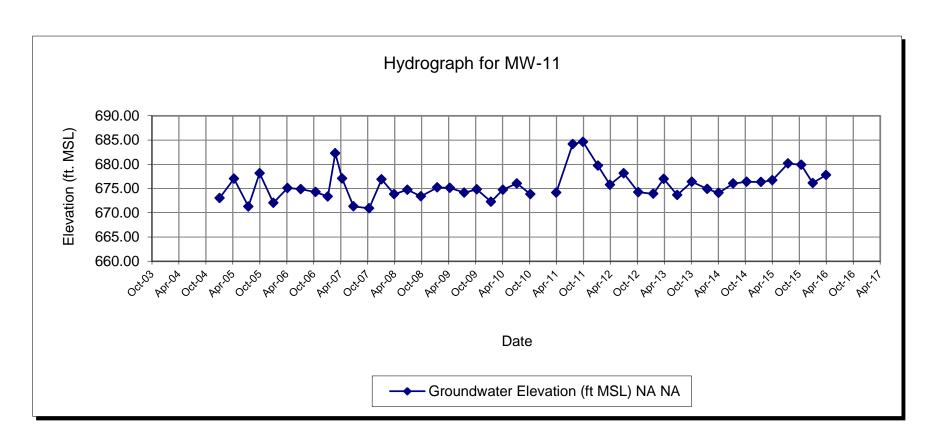
NA - Not Available NM - Not Measured

TOC - top of PVC casing

TOC Elevation - 688.61

DPE and GWCT down on 2/28/07 DPE down on 1/8/08 and 10/9/13 TOC Elevation as of 6/13/08 - 688.65

MONITORING WELL MW-11 SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-12 SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site

Lancaster, New York

Date 4/8/2004	Depth to Water from TOC (ft) NM	Groundwater Elevation (ft MSL)
10/12/2004	10.64	675.15
1/6/2005	6.18	679.61
4/14/2005		
	6.80	678.99
7/20/2005	11.95	673.84
10/4/2005	7.36	678.43
1/5/2006	6.80	678.99
4/11/2006	6.76	679.03
7/10/2006	11.35 NM*	674.44 NA
10/18/2006		
1/9/2007	6.35	679.44
2/28/2007	NM*	NA 670.44
4/16/2007	7.38	678.41
7/2/2007	11.42	674.37
10/15/2007	12.00	673.79
1/8/2008	4.31	681.48
4/2/2008	5.86	679.93
7/1/2008	7.10	679.04
9/30/2008	10.92	675.22
1/19/2009	NM*	NA 070
4/14/2009	7.14	679
7/21/2009	9.66	676.48
10/14/2009	8.83	677.31
1/18/2010	7.40	678.74
4/8/2010	7.10	679.04
7/12/2010	8.48	677.66
10/11/2010	8.64	677.51
1/12/2011	6.32	679.83
4/4/2011 7/25/2011	5.69 3.5	680.46 682.65
10/3/2011	2.67	683.48
1/12/2012	5.41	680.74
4/2/2012	5.41	680.85
	7.20	
7/5/2012 10/11/2012	7.20 6.75	678.95 679.40
1/21/2013	6.75 5.51	680.64
4/1/2013	5.07	681.08
7/1/2013 7/1/2013	5.07 7.88	678.27
10/9/2013	7.88 5.20	680.95
1/21/2014	3.20 NM*	NA
4/7/2014	5.76	680.39
7/16/2014	6.60	679.55
10/14/2014	5.15	681.00
1/20/2015	0.13 NM*	NA
4/6/2015	4.10	682.05
7/22/2015	4.10	681.33
10/19/2015	3.80	682.35
1/5/2016	3.94	682.21
4/4/2016	3.67	682.52

NOTES:

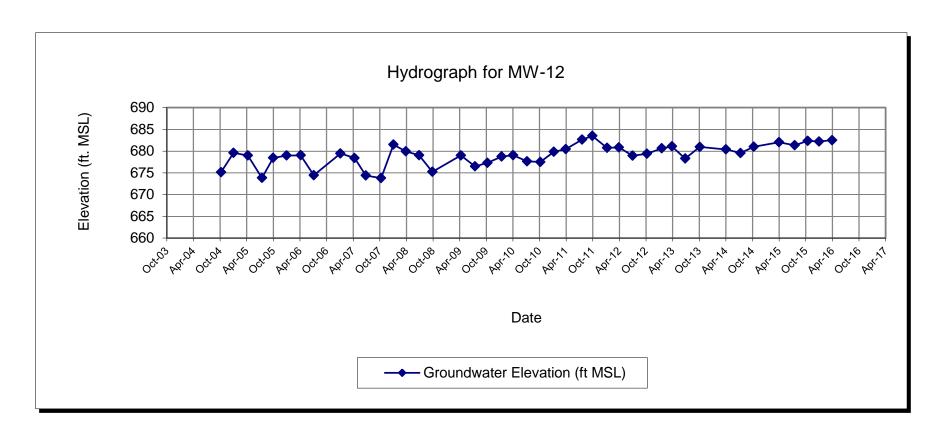
ft MSL - feet mean sea level

NA - Not Available NM - Not Measured TOC - top of PVC casing TOC Elevation - 685.79

NM* - Well could not be accessed due to snow cover

DPE and GWCT down on 2/28/07 DPE down on 1/8/08 and 10/9/13 TOC Elevation as of 6/13/08 - 686.15

MONITORING WELL MW-12 SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-13S SUMMARY OF GROUNDWATER ELEVATIONS

Former Scott Aviation Site Lancaster, New York

Da	ate	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
	2004	7.01	679.56
	2/2004	13.47	673.10
	2005	7.24	679.33
	2005	13.91	672.66
	2005	12.81	673.76
	2005	13.35	673.22
	2006	13.79	672.78
	2006	12.45	674.12
7/10/	2006	13.02	673.55
10/18	/2006	10.99	675.58
1/9/2	2007	11.35	675.22
2/28/	2007	3.49	683.08
4/16/	2007	12.01	674.56
7/2/2	2007	13.20	673.37
10/18	/2007	12.77	673.80
1/8/2	2008	5.08	681.49
4/2/2	2008	5.45	681.12
7/1/2	2008	9.70	676.90
9/30/	2008	11.80	674.80
1/19/	2009	8.70	677.90
4/14/	2009	8.64	677.96
7/21/	2009	10.91	675.69
10/14	/2009	9.18	677.42
1/18/	2010	9.80	676.80
4/8/2	2010	8.30	678.30
7/12/	2010	9.96	676.64
10/11	/2010	10.29	676.31
1/12/	2011	7.53	679.07
	2011	8.00	678.60
	2011	2.55	684.05
	2011	1.81	684.79
	2012	8.11	678.49
1	2012	8.06	678.54
	2012	8.71	677.89
	/2012	9.57	677.03
	2013	13.85	672.75
	2013	6.44	680.16
1	2013	6.44	680.16
	2013	4.10	682.50
	2014	4.95	681.65
	2014	6.02	680.58
	′2014 ′2014	5.42	681.18
	/2014	4.41	682.19
	2015	6.10	680.50
	2015	4.69	681.91
	² 2015	7.97	678.63
	/2015	3.95	682.65
	2016 2016	5.90 5.05	680.70 681.60

NOTES:

ft MSL - feet mean sea level

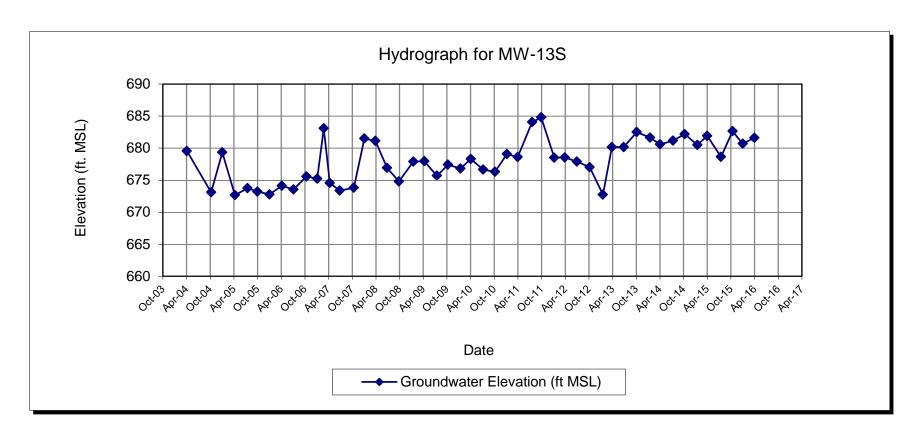
NA - Not Available NM - Not Measured

TOC - top of PVC casing

TOC Elevation - 686.57

DPE and GWCT down on 2/28/07 DPE down on 1/8/08 and 10/9/13 TOC Elevation as of 6/13/08 - 686.60

MONITORING WELL MW-13S SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-13D SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	13.28	673.43
10/12/2004	14.87	671.84
1/6/2005	14.55	672.16
4/14/2005	15.32	671.39
7/20/2005	15.65	671.06
10/4/2005	9.44	677.27
1/5/2006	15.83	670.88
4/11/2006	15.41	671.30
7/10/2006	13.79	672.92
10/18/2006	13.17	673.54
1/9/2007	14.41	672.30
2/28/2007	3.28	683.43
4/16/2007	14.66	672.05
7/2/2007	15.68	671.03
10/18/2007	15.80	670.91
1/8/2008	8.69	678.02
4/2/2008	12.86	673.85
7/1/2008	12.55	674.18
9/30/2008	13.89	672.84
1/19/2009	12.10	674.63
4/14/2009	11.78	674.95
7/21/2009	12.86	673.87
10/14/2009	11.59	675.14
1/18/2010	13.88	672.85
4/8/2010	12.00	674.73
7/12/2010	11.90	674.83
10/11/2010	13.34	673.39
1/12/2011	13.2	673.53
4/4/2011	13.13	673.60
7/25/2011	3.33	683.40
10/3/2011	2.55	684.18
1/12/2012	12.34	674.39
4/2/2012	11.76	674.97
7/5/2012	9.25	677.48
10/11/2012	13.00	673.73
1/21/2013	13.85	672.88
4/1/2013	11.01	675.72
7/1/2013	14.26	672.47
10/9/2013	10.36	676.37
1/21/2014	11.45	675.28
4/7/2014	13.65	673.08
7/16/2014	10.74	675.99
10/14/2014	9.41	677.32
1/20/2015	11.02	675.71
4/6/2015	9.35	677.38
7/22/2015	7.44	679.29
10/19/2015	4.55	682.18
1/5/2016	10.31	676.42
4/4/2016	8.65	678.13

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

TOC - top of PVC casing

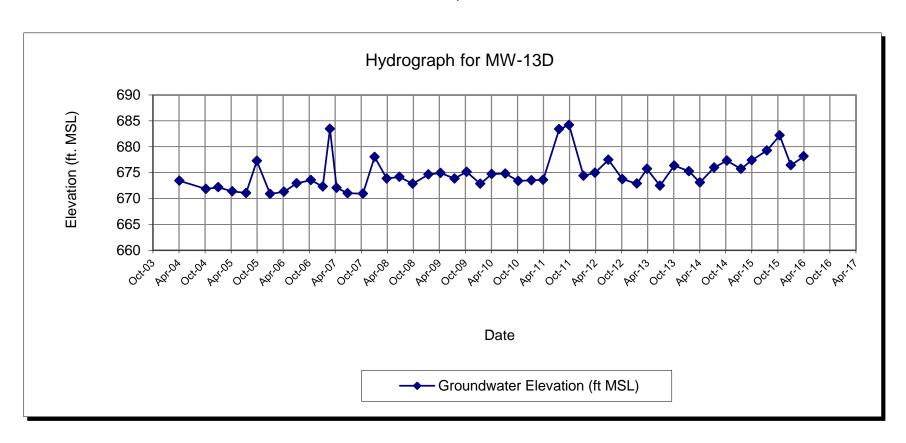
TOC Elevation - 686.71

DPE and GWCT down on 2/28/07

DPE down on 1/8/08 and 10/9/13

TOC Elevation as of 6/13/08 - 686.73

MONITORING WELL MW-13D SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-14S SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site

Lancaster, New York

D. (D 41 ()W () T00 (()	0 I (El (' ('10))
Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	5.14	680.17
10/12/2004	8.57	676.74
1/6/2005	6.27	679.04
4/14/2005	5.16	680.15
7/20/2005	8.32	676.99
10/4/2005	6.14	679.17
1/5/2006	8.41	676.90
4/11/2006	7.75	677.56
7/10/2006	8.18	677.13
10/18/2006	9.00	676.31
1/9/2007	6.61	678.70
2/28/2007	1.50	683.81
4/16/2007	3.45	681.86
7/2/2007	8.36	676.95
10/15/2007	9.45	675.86
1/8/2008	4.65	680.66
4/2/2008	4.47	680.84
7/1/2008	6.37	679.33
9/30/2008	8.90	676.80
1/19/2009	6.15	679.55
4/14/2009	7.70	678.00
7/21/2009	7.25	678.45
10/14/2009	7.05	678.65
1/18/2010	NM	
4/8/2010	6.50	678.81
7/12/2010	6.54	678.77
10/11/2010	5.90	679.80
1/12/2011	6.83	678.87
4/4/2011	6.34	679.36
7/25/2011	2.59	683.11
10/3/2011	1.98	683.72
1/12/2012	5.10	680.60
4/2/2012	4.55	681.15
7/5/2012	7.15	678.55
10/11/2012	6.67	679.03
1/21/2013	5.15	680.55
4/1/2013	5.05	680.65
7/1/2013	6.81	678.89
10/9/2013	5.60	680.10
1/21/2014	5.68	680.02
4/7/2014	6.03	679.67
7/16/2014	5.49	680.21
10/14/2014	5.61	680.09
1/20/2015	5.55	680.15
4/6/2015	4.58	681.12
7/22/2015	3.59	682.11
10/19/2015	3.70	682.00
1/5/2016	3.92	681.78
4/4/2016	8.80	676.94

NOTES:

ft MSL - feet mean sea level

NA - Not Available

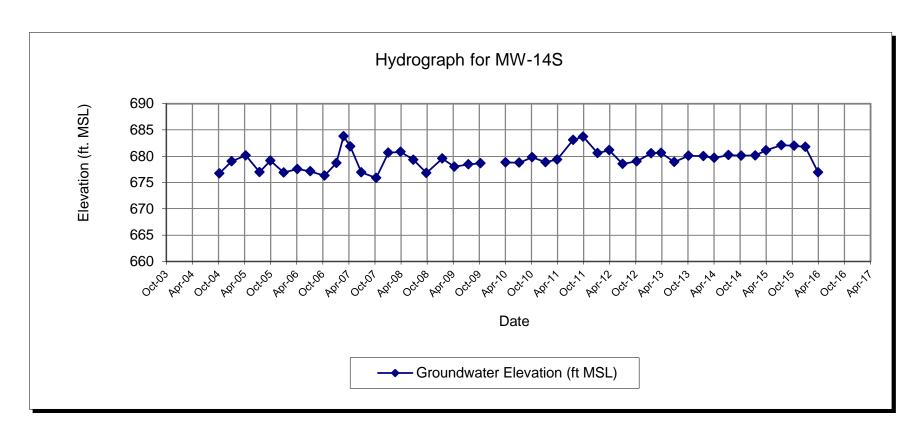
NM - Not Measured TOC - top of PVC casing

TOC Elevation - 685.31

DPE and GWCT down on 2/28/07 DPE down on 1/8/08 and 10/9/13

TOC Elevation as of 6/13/08 - 685.70

MONITORING WELL MW-14S SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-14D SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site

Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	13.21	672.22
10/12/2004	14.55	670.88
1/6/2005	15.97	669.46
4/14/2005	13.25	672.18
7/20/2005	18.20	667.23
10/4/2005	13.26	672.17
1/5/2006	19.08	666.35
4/11/2006	19.79	665.64
7/10/2006	17.16	668.27
10/18/2006	19.44	665.99
1/9/2007	14.71	670.72
2/28/2007	2.67	682.76
4/16/2007	19.74	665.69
7/2/2007	19.68	665.75
10/15/2007	19.76	665.67
1/8/2008	7.92	677.51
4/2/2008	14.41	671.02
7/1/2008	14.45	671.37
9/30/2008	15.39	670.43
1/19/2009	13.55	672.27
4/14/2009	20.10	665.72
7/21/2009	15.15	670.67
10/14/2009	20.27	665.55
1/18/2010	20.40	665.42
4/8/2010	15.40	670.42
7/12/2010	17.15	668.67
10/11/2010	14.40 17.92	671.42 667.90
1/12/2011 4/4/2011	16.23	
7/25/2011	3.10	669.59 682.72
10/3/2011	2.72	683.10
1/12/2012	15.30	670.52
4/2/2012	16.50	669.32
7/5/2012	12.81	673.01
10/11/2012	14.55	671.27
1/21/2013	13.45	672.37
4/1/2013	10.78	675.04
7/1/2013	19.85	665.97
10/9/2013	10.02	675.80
1/21/2014	18.20	667.62
4/7/2014	17.95	667.87
7/16/2014	12.99	672.83
10/14/2014	10.70	675.12
1/20/2015	13.49	672.33
4/6/2015	11.30	674.52
7/22/2015	8.62	677.20
10/19/2015	4.10	681.72
1/5/2016	11.70	674.12
4/4/2016	17.98	667.90
4/4/2010	11.30	06.100

NOTES:

ft MSL - feet mean sea level

NA - Not Available NM - Not Measured

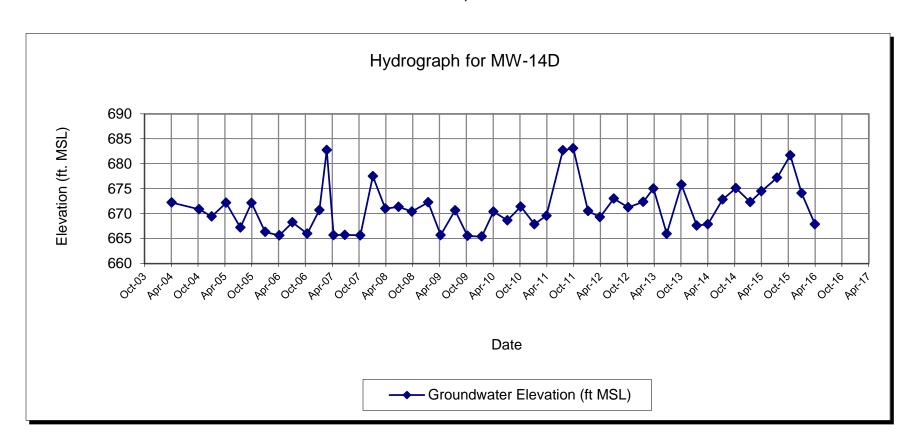
TOC - top of PVC casing

TOC Elevation - 685.43

DPE down on 1/8/08 and 10/0/13

DPE down on 1/8/08 and 10/9/13 TOC Elevation as of 6/13/08 - 685.82'

MONITORING WELL MW-14D SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-15S SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site

Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	1.20	685.44
10/12/2004	5.26	681.38
1/6/2005	0.35	686.29
4/14/2005	2.31	684.33
7/20/2005	4.78	681.86
10/4/2005	2.22	684.42
1/5/2006	0.70	685.94
4/11/2006	2.00	684.64
7/10/2006	4.75	681.89
1/9/2007	0.05	686.59
2/28/2007	0.00	686.64
4/16/2007	0.50	686.14
7/2/2007	4.67	681.97
10/16/2007	4.80	681.84
1/8/2008	0.70	685.94
4/2/2008	0.00	686.64
7/1/2008	0.50	687.02
9/30/2008	3.14	684.38
1/19/2009	1.50	686.02
4/14/2009	1.60	685.92
7/21/2009	1.11	686.41
10/14/2009	1.11	686.41
1/18/2010	0.80	686.72
4/8/2010	2.00	685.52
7/12/2010	2.80	684.72
10/11/2010	3.14	684.38
1/12/2011	1.40	686.12
4/4/2011	0.50	687.02
7/25/2011	2.51	685.01
10/3/2011	0.20	687.32
1/12/2012	0.50	687.02
4/2/2012	1.40	686.12
7/5/2012	3.90	683.62
10/1/2012	3.18	684.34
1/21/2013	0.00	687.52
4/1/2013	0.50	687.02
7/1/2013	1.73	685.79
10/9/2013	2.10	685.42
1/21/2014	1.75	685.77
4/7/2014	0.90	686.62
7/16/2014	1.91	685.61
10/14/2014	2.00	685.52
1/20/2015	1.60	685.92
4/6/2015	0.51	687.01
7/22/2015	1.41	686.11
10/19/2015	2.20	685.32
1/5/2016	2.20 1.15	686.37
	_	
4/4/2016	0.70	687.17

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

TOC - top of PVC casing

TOC Elevation - 686.64

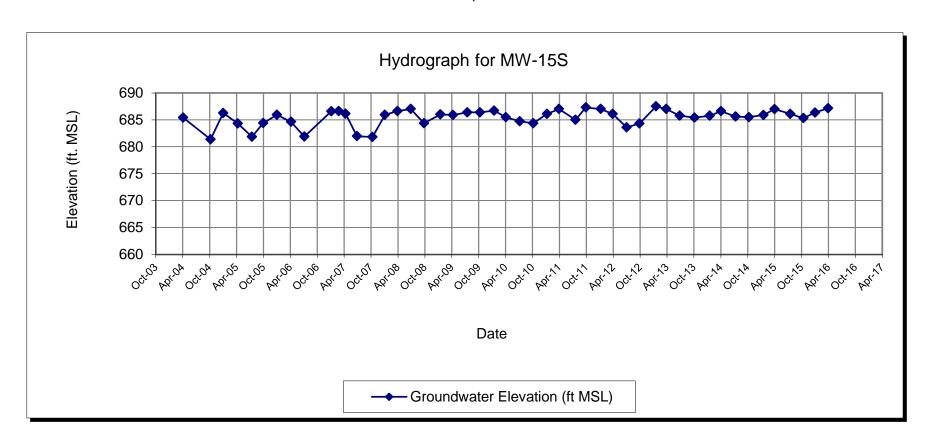
DPE and GWCT down on 2/28/07

DPE down on 1/8/08 and 10/9/13

Measured from ground surface from 4/4/16 (687.87')

TOC Elevation as of 6/13/08 - 687.52'

MONITORING WELL MW-15S SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-15D SUMMARY OF GROUNDWATER ELEVATIONS Former Scott Aviation Site

Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	15.70	671.61
10/12/2004	17.42	669.89
1/6/2005	15.74	671.57
4/14/2005	16.99	670.32
7/20/2005	17.31	670.00
10/4/2005	8.94	678.37
1/5/2006	16.16	671.15
4/11/2006	16.90	670.41
7/10/2006	15.78	671.53
10/18/2006	15.50	671.81
1/9/2007	15.80	671.51
2/28/2007	4.10	683.21
4/16/2007	16.61	670.70
7/2/2007	17.20	670.11
10/16/2007	16.70	670.61
1/8/2008	8.99	678.32
4/2/2008	15.01	672.30
7/1/2008	14.64	672.98
9/30/2008	16.24	671.38
1/19/2009	15.00	672.62
4/14/2009	14.21	673.41
7/21/2009	14.61	673.01
10/14/2009	14.81	672.81
1/18/2010	16.89	670.73
4/8/2010	15.00	672.62
7/12/2010	13.00	674.62
10/11/2010	13.00	674.62
1/12/2011	15.65	671.97
4/4/2011	15.51	672.11
7/25/2011	3.73	683.89
10/3/2011	3.05	684.57
1/12/2012	15.50	672.12
4/2/2012	14.30	673.32
7/5/2012	9.81	677.81
10/11/2012	13.70	673.92
1/21/2013	15.90	671.72
4/1/2013	11.08	676.54
7/1/2013	16.04	671.58
10/9/2013	13.95	673.67
1/21/2014	15.05	672.57
4/7/2014	15.84	671.78
7/16/2014	13.51	674.11
10/14/2014	12.49	675.13
1/20/2015	15.04	673.13 672.58
III		
4/6/2015	13.15	674.47 677.70
7/22/2015	9.92	677.70
10/19/2015	6.50	681.12 673.07
1/5/2016	13.65	673.97
4/4/2016	21.70	666.17

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

TOC - top of PVC casing

TOC Elevation - 687.31

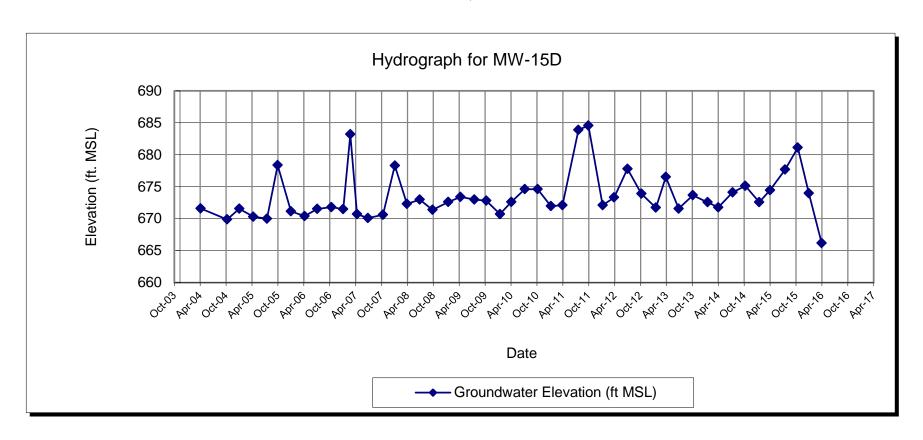
DPE and GWCT down on 2/28/07

DPE down on 1/8/08 and 10/9/13

TOC Elevation as of 6/13/08 - 687.62'

Measured from ground surface from 4/4/16 (687.87')

MONITORING WELL MW-15D SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-16S SUMMARY OF GROUNDWATER ELEVATIONS

Former Scott Aviation Site Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	5.09	680.75
10/12/2004	12.09	673.75
1/6/2005	4.75	681.09
4/14/2005	10.15	675.69
7/20/2005	14.56	671.28
10/4/2005	11.50	674.34
1/5/2006	11.41	674.43
4/11/2006	12.90	672.94
7/10/2006	11.54	674.30
10/18/2006	12.50	673.34
1/9/2007	13.82	672.02
2/28/2007	2.90	682.94
4/16/2007	13.07	672.77
7/2/2007	12.50	673.34
10/18/2007	15.23	670.61
1/8/2008	5.60	680.24
4/2/2008	12.40	673.44
7/1/2008	15.70	674.67
9/30/2008	19.34	671.03
1/19/2009	17.80	672.57
4/14/2009	18.22	672.15
7/21/2009	19.95	670.42
10/14/2009	17.77	672.60
1/18/2010	16.45	673.92
4/8/2010	18.60	671.77
7/12/2010	18.45	671.92
10/11/2010	13.51	676.86
4/7/2011	8.55	677.29
7/25/2011	1.45	684.39
10/3/2011	0.60	685.24
1/12/2012	3.80	682.04
4/2/2012	5.85	679.99
7/5/2012	9.12	676.72
10/11/2012	6.36	679.48
1/21/2013	7.85	677.99
4/1/2013	10.15	675.69
7/1/2013	9.18	676.66
10/9/2013	3.80	682.04
1/21/2014	9.55	676.29
4/7/2014	9.60	676.24
7/16/2014	9.05	676.79
10/14/2014	3.10	682.74
1/20/2015	6.90	678.94
4/6/2015	5.50	680.34
7/22/2015	10.14	678.05
10/19/2015	5.00	683.19
1/5/2016	7.05	681.14
4/4/2016	6.38	681.77

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

TOC - top of PVC casing

TOC Elevation - 685.84

DPE and GWCT down on 2/28/07

DPE down on 1/8/08 and 10/9/13

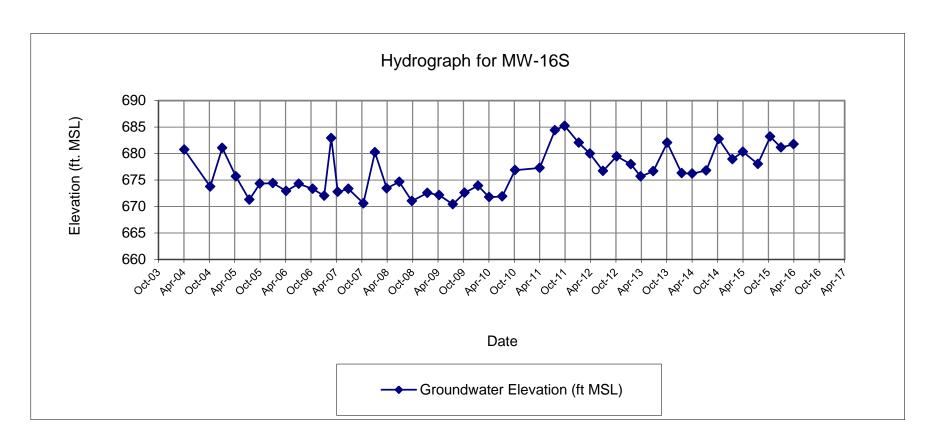
TOC Elevation as of 6/13/08 - 690.37'

TOC Elevation as of 4/7/2011 - 685.84'

TOC Elevation as of 6/2015 - 688.19'

TOC Elevation as of 2/23/2016 - 688.15'

MONITORING WELL MW-16S SUMMARY OF GROUNDWATER ELEVATIONS



MONITORING WELL MW-16D SUMMARY OF GROUNDWATER ELEVATIONS

Former Scott Aviation Site Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	13.62	672.39
10/12/2004	15.51	670.50
1/6/2005	13.70	672.31
4/14/2005	16.09	669.92
7/20/2005	16.65	669.36
10/4/2005	9.89	676.12
1/5/2006	17.21	668.80
4/11/2006	17.1	
		668.91
7/10/2006	10.61	675.4
10/18/2006	15.41	670.6
1/9/2007	15.6	670.41
2/28/2007	2.74	683.27
4/16/2007	16.35	669.66
7/2/2007	16.85	669.16
10/18/2007	17.17	668.84
1/8/2008	8.32	677.69
4/2/2008	13.44	672.57
7/1/2008	17.72	672.83
9/30/2008	19.29	671.26
1/19/2009	17.95	672.60
4/14/2009	17.21	673.34
7/21/2009	18.28	672.27
10/14/2009	17.60	672.95
1/18/2010	19.51	671.04
4/8/2010	17.19	673.36
7/12/2010	17.15	673.40
10/11/2010	18.63	671.92
4/7/2011	13.67	672.34
7/25/2011	2.46	683.55
10/3/2011	1.70	684.31
1/12/2012	13.55	672.46
4/2/2012	12.61	673.40
7/5/2012	8.90	677.11
10/11/2012	13.38	672.63
1/21/2013	15.44	670.57
4/1/2013	12.31	673.70
7/1/2013	16.25	669.76
10/9/2013	11.40	674.61
1/21/2014	13.35	672.66
4/7/2014	15.54	670.47
7/16/2014	11.73	674.28
10/14/2014	10.04	675.97
1/20/2015	12.31	673.70
4/6/2015	10.30	675.71
7/22/2015	9.80	678.59
10/19/2015	6.40	681.99
1/5/2016	13.00	675.39
4/4/2016	11.35	676.81

NOTES:

ft MSL - feet mean sea level

NA - Not Available

NM - Not Measured

TOC - top of PVC casing

TOC Elevation - 686.01

DPE and GWCT down on 2/28/07

DPE down on 1/8/08 and 10/9/13

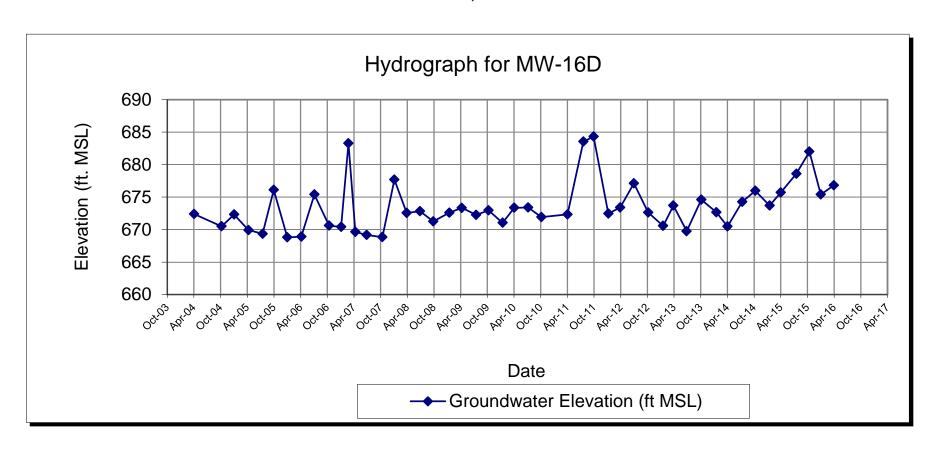
TOC Elevation as of 6/13/08 - 690.55'

TOC Elevation as of 4/7/2011 - 686.01'

TOC Elevation as of 6/2015 - 688.39'

TOC Elevation as of 2/23/16 - 688.16'

MONITORING WELL MW-16D SUMMARY OF GROUNDWATER ELEVATIONS



AECOM Environment

Appendix E Analytical Laboratory Data Packages (Provided on CD)

AECOM Environment

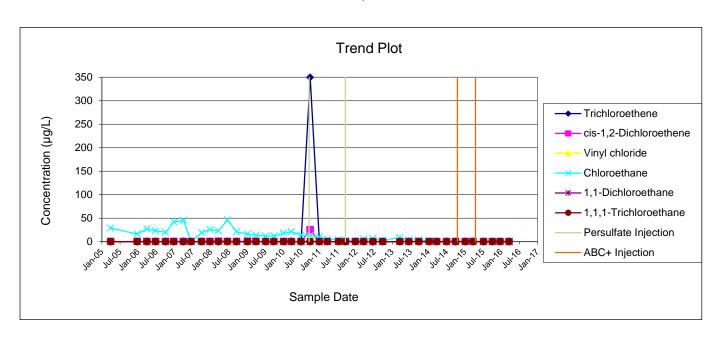
Appendix F

Current and Historical Summary of VOC's in Groundwater

MONITORING WELL MW-2 SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

	Analytical Results (μg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
Sample Date						
4/14/2005	< 10	< 10	< 10	29	< 10	<10
1/5/2006	< 25	< 25	< 25	16	< 25	< 25
4/14/2006	< 25	< 25	< 25	27	< 25	< 25
7/10/2006	< 25	< 25	< 25	23	< 25	< 25
10/19/2006	< 5	< 5	< 5	20	< 5	< 5
1/9/2007	< 5	< 5	< 5	42	< 5	< 5
4/16/2007	< 20	< 20	< 20	45	< 20	< 20
7/2/2007	< 5	< 5	< 5	< 5	< 5	< 5
10/15/2007	< 5	< 5	< 5	19	< 5	< 5
1/8/2008	< 5	< 5	< 5	26	< 5	< 5
4/2/2008	< 5	0.48	< 5	23	1	< 5
7/1/2008	< 5	< 5	< 5	46	0.65	< 5
10/1/2008	< 5	< 5	< 5	21	<5	< 5
1/20/2009	< 5	0	< 5	16	<5	< 5
4/15/2009	< 5	0	< 5	14	<5	< 5
7/22/2009	< 5	< 5	< 5	12	<5	< 5
10/12/2009	< 5	< 5	< 5	12	<5	< 5
1/18/2010	< 25	< 25	< 25	18	< 25	< 25
4/7/2010	< 25	< 25	< 25	21	< 25	< 25
7/12/2010	< 25	< 25	< 25	14	< 25	< 25
10/11/2010	350	25	< 25	13	< 25	< 25
1/12/2011	<1	<1	<1	10	<1	<1
4/4/2011	<1	<1	<1	5.4	<1	<1
7/25/2011	<1	<1	<1	4.5	<1	<1
10/3/2011	<1	<1	<1	2.1	<1	<1
1/11/2012	<1	<1	<1	2	<1	<1
4/2/2012	<1	<1	<1	5.8	<1	<1
7/5/2012	<1	<1	<1	6.3	<1	<1
10/11/2012	<1	<1	<1	2.4	<1	<1
4/1/2013	<1	<1	<1	8.8	<1	<1
7/1/2013	<1	<1	<1	3.6	<1	<1
10/9/2013	<1	<1	<1	3.9	<1	<1
1/21/2014	<1	<1	<1	1.9	0.67	<1
4/7/2014	<1	<1	<1	0.68	<1	<1
7/16/2014	<1	<1	<1	0.94	<1	<1
10/14/2014	<1	<1	<1	1.1	<1	<1
1/20/2015	<5	<5	<5	<5	<5	<5
4/7/2015	<5	<5	<5	<5 <5	<5 <5	<5
7/22/2015	<1	<1	<1	1	<1	<1
10/19/2015	<1	<1	<1	1	<1	<1
1/5/2016	<1	<1	<1	1	<1	<1
4/4/2016	<1	<1	<1	1	<1	<1
7/7/2010	\ 1	\ 1	_ \1	ı		\ 1

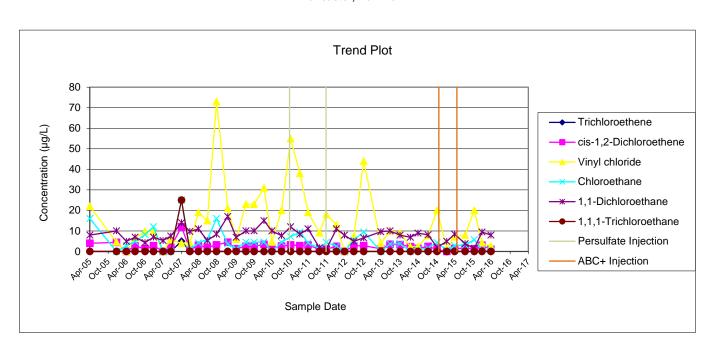
MONITORING WELL MW-2 SUMMARY OF VOCs IN GROUNDWATER



MONITORING WELL MW-3 SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

	Analytical Results (μg/L)					
Sample	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
Date	rict	<u>is</u> -1	'n))	<u>_</u>	<u></u>
4/14/2005	<u>⊢</u> <10	4	22	16	8	<10
1/5/2006	< 25	4.4	4.6	< 25	10	< 25
4/14/2006	< 25	< 25	< 25	2.8	4.9	< 25
7/10/2006	< 25	2.6	6.5	4.8	7	< 25
10/18/2006	< 5	1.3	9.8	8.2	4.3	< 5
1/10/2007	< 5	2.8	9.8	12	7	< 5
4/16/2007	< 20	< 20	< 20	< 20	5.3	< 20
7/2/2007	< 20 < 5	2	5.7	< 5	7.5	< 5
10/17/2007	5	12	4	25	14	25
1/9/2008	< 5	0.9	4.2	1.2	9.7	<5
4/3/2008	<5	3	19	4.1	11	<5
7/1/2008	<5	2	15	6	5.3	<5
10/1/2008	<5	3.2	73	16	8.4	<5
1/21/2009	<5	4.5	21	3.6	17	<5
4/15/2009	<5	1.3	6	1.4	6.9	<5
7/22/2009	<5	2.5	23	4.5	10	<5
10/12/2009	<5	2.5	23	4.5	10	<5
1/18/2010	<5	3.4	31	4.6	15	<5
4/7/2010	<5	1.7	4.6	<5	10	<5 <5
7/13/2010	<5	2.6	20	4.5	7.7	<5 <5
10/11/2010	<5	3.2	55	7.2	12	<5
1/12/2011	<1	2.8	38	9.4	8.4	<1
4/4/2011	<1	3.1	19	4.2	11	<1
7/26/2011	<1	0.98	9.1	1.5	1.8	<1
10/3/2011	<1	1.1	18	4.4	1.2	<1
1/13/2012	<1	2.5	13	2.5	11	<1
4/2/2012	<1	<1	<1	<1	7.9	<1
7/5/2012	<1	2.7	7.2	5.6	4.9	<1
10/11/2012	<1	2.8	44	9.5	6.6	<1
4/1/2013	<1	1.3	4	<1	9.6	<1
7/1/2013	<1	3.5	10	3.6	10	<1
10/10/2013	<1	3.3	9.1	3.8	7.9	<1
1/21/2014	<1	2.3	2.3	<1	6.9	<1
4/7/2014	<1	1.5	2.5	0.82	8.9	<1
7/17/2014	<1	2.4	7.8	1.7	8.1	<1
10/14/2014	<1	0.93	20	4.3	2	<1
1/20/2015	<1	<1	1.5	0.64	4.9	<1
4/7/2015	<1	1.4	7.1	2.8	8.4	<1
7/22/2015	<1	1.6	7.9	3.1	3.8	<1
10/21/2015	<1	1.3	20	5.7	1.5	<1
1/6/2016	<1	3	4.2	0.83	9.5	<1
4/5/2016	<1	0.98	2.6	0.58	8	<1

MONITORING WELL MW-3 SUMMARY OF VOCs IN GROUNDWATER

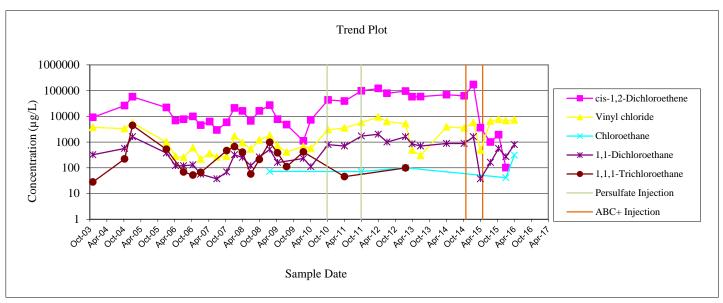


MONITORING WELL MW-4 SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

	Analytical Results (μg/L)					
		cis-1,2-Dichloroethene	-		,	1,1,1-Trichloroethane
	Ø)	oetk			1,1-Dichloroethane	etha
	Trichloroethene	lorc	<u>e</u>	<u>a</u>	eth	Š
	eth	ich	Vinyl chloride	Chloroethane	oro	양
	oro	2-D	chlc	oetł	ch	i i
Sample	chlc	-7,	yl o	lorc	Ρ̈́	<u></u>
Date	Tri	Cis	Vin	Ch	1,	1,
11/7/2003	270	9,100	3,700	< 10	320	28
10/13/2004	8,100	26,000	3,300	< 1000	560	220
1/7/2005	20,000	57,000	5,500	< 2000	1,600	4,400
1/6/2006	6,500	22,000	1,000	< 2000	370	520
4/14/2006	3,200	6,800	280	<500	120	<500
7/10/2006	2,400	7,600	250	<500	120	68
10/18/2006	2,600	9,800	600	<5	130	52
1/10/2007	2,800	4,500	220	<400	56	66
4/17/2007	4,900	6,200	360	<500	<500	<500
7/3/2007	1,100	2,900	260	<200	37	<200
10/17/2007	4,800	5,800	280	<500	68	460
1/9/2008	9,200	21,000	1,700	<500	320	660
4/3/2008	5,800	16,000	940	<1200	250	400
7/2/2008	500	6,600	530	<500	120	57
10/2/2008	6,300	16,000	1,200	<500	260	210
1/22/2009 4/15/2009	1,800	27,000	1,800 710	72 <200	520	970 380
7/22/2009	4,100 2,300	7,600 4,700	410	<250	160 <250	110
1/19/2010	7,400	1,100	670	<1000	230	410
4/8/2010	3,000	7,200	560	<500	110	<500
10/11/2010	7,800	43,000	3,000	<4,000	790	<4,000
4/6/2011	13,000	39,000	3,500	<40	700	45
10/4/2011	17,000	97,000	5,700	71	1700	<1
4/3/2012	39,000	120,000	9,400	<200	2000	<200
7/6/2012	15,000	78,000	6,200	<1000	990	<1000
1/21/2013	40,000	95,000	5,100	100	1600	98
4/2/2013	12,000	57,000	480	<40	850	<40
7/1/2013	14,000	58,000	300	<100	700	<100
4/7/2014	32,000	69,000	3,900	<1000	880	<1000
10/14/2014	32,000	62,000	3,500	<1000	880	<1000
1/21/2015	1,800	170,000	5,700	<1000	1,600	<1000
4/7/2015	110	3,600	480	<80	37	<80
7/23/2015	<100	990	6,500	<100	160	<100
10/20/2015	<100	1,900	7,600	<100	560	<100
1/6/2016	<100	100	6,800	41	270	<100
4/6/2016	<100	<100	7,200	310	790	<100

MONITORING WELL MW-4 SUMMARY OF VOCs IN GROUNDWATER

Former Scott Aviation Site Lancaster, New York

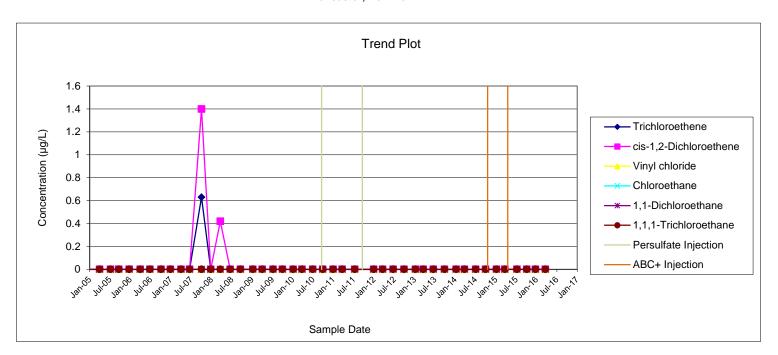


Note: LNAPL was present in MW-4 during the October 2004 and January 2005 groundwater sampling events.

MONITORING WELL MW-6 SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

	Analytical Results (μg/L)					
		cis-1,2-Dichloroethene				<u>e</u>
		the			Je	1,1,1-Trichloroethane
	ЭС	roe			haı	Deth
	Jer	olu	de	ne	oet	orc
	oeth)icl	lori	tha	lor	당
	lorc	2-[당	.oe	ic	Ë
	Trichloroethene	·-1,	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1
Sample Date						
11/7/2003	< 10	< 10	< 10	< 10	< 10	< 6
10/12/2004	< 10	< 10	< 10	< 10	< 10	< 10
1/6/2005	< 10	< 10	< 10	< 10	< 10	< 10
4/14/2005	< 10	< 10	< 10	< 10	< 10	< 10
7/21/2005	< 5	< 5	< 5	< 5	< 5	< 5
10/4/2005	< 5	< 5	< 5	< 5	< 5	< 5
1/5/2006	< 5	< 5	< 5	< 5	< 5	< 5
4/14/2006	< 5	< 5	< 5	< 5	< 5	< 5
7/10/2006	< 5	< 5	< 5	< 5	< 5	< 5
10/18/2006	< 5	< 5	< 5	< 5	< 5	< 5
1/10/2007	< 5	< 5	< 5	< 5	< 5	< 5
4/16/2007 7/2/2007	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	< 5	< 5
10/17/2007	0.63	1.4	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5
1/8/2008	<5	<5		< 5 < 5	< 5 < 5	< 5 < 5
4/3/2008	<5 <5	0.42	<5 <5	< 5 <5	< 5 <5	< 5 <5
7/1/2008	<5 <5	<5	<5 <5	<5 <5	<5 <5	<5 <5
10/1/2008	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5
1/20/2009	<5	<5 <5	<5 <5	<5 <5	<5 <5	<5
4/15/2009	<5 <5	<5 <5	<5 <5	<5 <5	<5	<5
7/21/2009	<5	<5	<5	<5	<5	<5
10/13/2009	<5	<5	<5	<5	<5	<5
1/18/2010	<5	<5	<5	<5	<5	<5
4/7/2010	<5	<5	<5	<5	<5	<5
7/13/2010	<5	<5	<5	<5	<5	<5
10/11/2010	<5	<5	<5	<5	<5	<5
1/12/2011	<1	<1	<1	<1	<1	<1
4/4/2011	<1	<1	<1	<1	<1	<1
7/26/2011	<1	<1	<1	<1	<1	<1
1/12/2012	<1	<1	<1	<1	<1	<1
4/2/2012	<1	<1	<1	<1	<1	<1
7/5/2012	<1	<1	<1	<1	<1	<1
10/11/2012	<1	<1	<1	<1	<1	<1
1/21/2013	<1	<1	<1	<1	<1	<1
4/1/2013	<1	<1	<1	<1	<1	<1
7/1/2013	<1	<1	<1	<1	<1	<1
10/10/2013	<1	<1	<1	<1	<1	<1
1/22/2014	<1	<1	<1	<1	<1	<1
4/7/2014	<1	<1	<1	<1	<1	<1
7/17/2014	<1	<1	<1	<1	<1	<1
10/14/2014	<1	<1	<1	<1	<1	<1
1/20/2015	<1	<1	<1	<1	<1	<1
4/6/2015	<1	<1	<1	<1	<1	<1
7/23/2015	<1	<1	<1	<1	<1	<1
10/19/2015	<1	<1	<1	<1	<1	<1
1/6/2016	<1	<1	<1	<1	<1	<1
4/4/2016	<1	<1	<1	<1	<1	<1

MONITORING WELL MW-6 SUMMARY OF VOCs IN GROUNDWATER

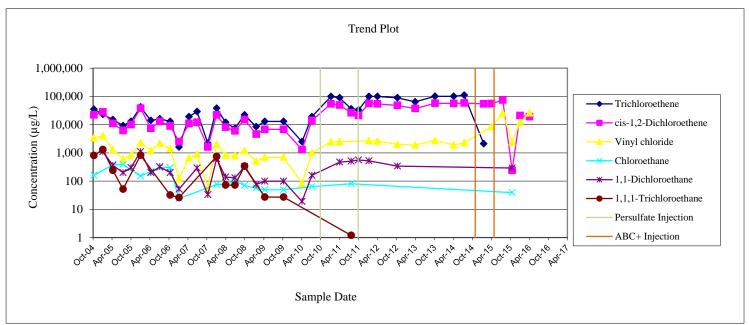


MONITORING WELL MW-8R SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

	Analytical Results (μg/L)					
	Frichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
	lor	,2-I	당	JOE)ict	Ė
Sample	ich	5-1	nyl	ıol	1-	7,
Date				_		
10/13/2004	35,000	22,000	3,400	160	< 5,000	810
1/7/2005	23,000	28,000	4,000	< 2,000	1,100	1,300
4/14/2005	15,000	11,000	1,300	380	360	240
7/21/2005	9,200	6,200	600	390	200	52
10/5/2005	13,000	10,000	830	< 1,000	300	<1,000
1/6/2006	42,000	38,000	2,300	150	1100	820
4/14/2006	14,000	7,400	1,200	220	200	< 1,000
7/10/2006	16,000	13,000	2,200	300	320	< 1,000
10/18/2006	13,000	8,900	1,400	300	200	32
1/10/2007	1,600	2,500	120	24	52	26
4/17/2007	19,000	11,000	670	< 1,000	< 1,000	< 1,000
7/3/2007	29,000	12,000	890	< 1,000	290	< 1,000
10/15/2007	2,200	1,600	60	< 200	33	< 200
1/8/2008	38,000	22,000	2,000	76	620	740
4/3/2008	12,000	8,100	820	77	140	72
7/2/2008	7,400	6,000	790	100	130	72
10/2/2008	22,000	15,000	1,200	70	320	340
1/22/2009	8,400	4,600	510	56	76	<100
4/15/2009	13,000	6,800	700	49	99	27
10/13/2009	13,000	6,800	700	49	99	27
4/8/2010	2,500	1,300	84	<100	19	<100
7/12/2010 1/12/2011	19,000	14,000	1,000	64	160	<100
4/6/2011	99,000	54,000	2,500	<2000	<2000 470	<2000
7/26/2011	89,000 36,000	49,000 26,000	2,500 <800	<800 80	510	<800 1.2
10/4/2011	33,000	21,000	<400	<400	560	<400
1/13/2012	99,000	56,000	2,700	<800	520	<800
4/3/2012	99,000	54,000	2,600	<2000	<2000	<2000
10/12/2012	89,000	48,000	2,000	<800	340	<800
4/2/2013	64,000	37,000	1,900	<1000	<1000	<1000
10/10/2013	100,000	57,000	2,700	<1000	<1000	<1000
4/7/2014	100,000	56,000	1,900	<1000	<1000	<1000
7/17/2014	110,000	58,000	2,300	<1000	<1000	<1000
1/21/2015	2,100	54,000	<2000	<2000	<2000	<2000
4/6/2015	<2000	55,000	8,500	<2000	<2000	<2000
7/23/2015	<200	74,000	26,000	<200	<200	<200
10/21/2015	<25	240	2,400	39	290	<25
1/6/2016	<1,000	21,000	12,000	<1,000	<1,000	<1,000
4/6/2016	<1,000	19,000	26,000	<1,000	<1,000	<1,000

MONITORING WELL MW-8R SUMMARY OF VOCS IN GROUNDWATER

Former Scott Aviation Site Lancaster, New York



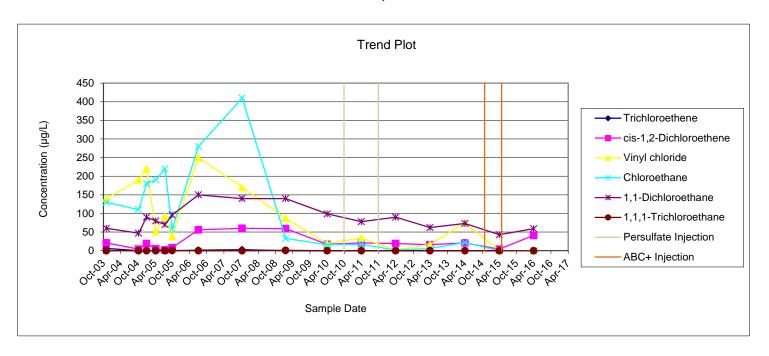
Note: LNAPL was present in MW-4 during the October 2004 and January 2005 groundwater sampling events.

MONITORING WELL MW-9 SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

		An	alytical Re	esults (µg	/L)	
Sample Date	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
11/7/2003	6	21	140	130	60	< 10
10/13/2004	< 10	4	190	110	47	< 10
1/6/2005	< 10	19	220	180	90	< 10
4/14/2005	< 10	5	51	190	80	< 10
7/21/2005	< 5	2	92	220	70	< 5
10/5/2005	< 5	8	38	58	96	0.68
7/10/2006	1.3	56	250	280	150	< 5
10/17/2007	2.6	60	170	410	140	< 25
1/21/2009	<5	59	87	33	140	0.81
4/7/2010	<5	17	19	16	99	< 5
4/4/2011	<1	21	34	17	78	<1
4/2/2012	<1	19	1.8	1.5	90	<1
4/1/2013	<1	16	17	5.9	62	<1
4/7/2014	<1	21	75	22	73	<1
4/7/2015	<1	4.1	<1	<1	43	<1
4/5/2016	<1	41	<1	<1	59	<1

MONITORING WELL MW-9 SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site

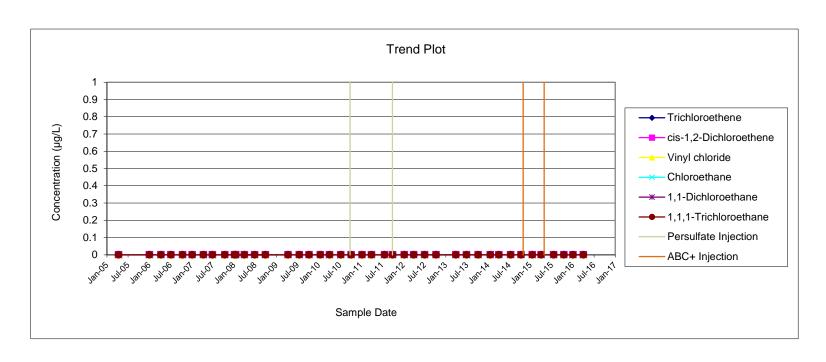
Lancaster, New York



MONITORING WELL MW-10 SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

		An	alytical R	esults (µg	/L)	
	Trichloroethene	cis-1,2-Dichloroethene	^ Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
Sample Date			<u> </u>			,
4/14/2005	< 10	< 10		< 10	< 10	<10
1/5/2006	< 5	< 5	< 5	< 5	< 5	< 5
4/14/2006	< 5	< 5	< 5	< 5	< 5	< 5
7/10/2006	< 5	< 5	< 5	< 5	< 5	< 5
10/18/2006	< 5	< 5	< 5	< 5	< 5	< 5
1/9/2007	< 5	< 5	< 5	< 5	< 5	< 5
4/16/2007	< 5	< 5	< 5	< 5	< 5	< 5
7/2/2007	< 5	< 5	< 5	< 5	< 5	< 5
10/17/2007	< 5 < 5	< 5 < 5	< 5	< 5	< 5 < 5	< 5
1/9/2008			< 5	< 5		< 5
4/3/2008	< 5	< 5	< 5	< 5	< 5	< 5
7/1/2008	< 5	< 5	< 5	< 5	< 5	< 5
10/1/2008	< 5	< 5	< 5	< 5	< 5	< 5
1/20/2008	< 5	< 5	< 5	< 5	< 5	< 5
4/15/2009	< 5	< 5	< 5	< 5	< 5	< 5
7/21/2009	< 5	< 5	< 5	< 5	< 5	< 5
10/13/2009	< 5	< 5	< 5	< 5	< 5	< 5
1/18/2010	< 5	< 5	< 5	< 5	< 5	< 5
4/7/2010	< 5	< 5	< 5	< 5	< 5	< 5
7/13/2010	< 5	< 5	< 5	< 5	< 5	< 5
10/11/2010	< 5	< 5	< 5	< 5	< 5	< 5
1/12/2011	<1	<1	<1	<1	<1	<1
4/4/2011	<1	<1	<1	<1	<1	<1
7/26/2011	<1	<1	<1	<1	<1	<1
10/3/2011	<1	<1	<1	<1	<1	<1
1/12/2012	<1	<1	<1	<1	<1	<1
4/2/2012	<1	<1	<1	<1	<1	<1
7/5/2012	<1	<1	<1	<1	<1	<1
10/11/2012	<1	<1	<1	<1	<1	<1
4/1/2013	<1	<1	<1	<1	<1	<1
7/1/2013	<1	<1	<1	<1	<1	<1
10/10/2013	<1	<1	<1	<1	<1	<1
1/22/2014	<1	<1	<1	<1	<1	<1
4/7/2014 7/17/2014	<1	<1	<1	<1 <1	<1 <1	<1 <1
10/14/2014	<1 <1	<1 <1	<1 <1	<1	<1	<1
1/20/2015	<1	<1	<1	<1	<1 <1	<1
			<1	<1		
4/6/2015	<1	<1			<1	<1
7/23/2015	<1	<1	<1	<1	<1	<1
10/19/2015	<1	<1	<1	<1	<1	<1
1/6/2016	<1	<1	<1	<1	<1	<1
4/4/2016	<1	<1	<1	<1	<1	<1

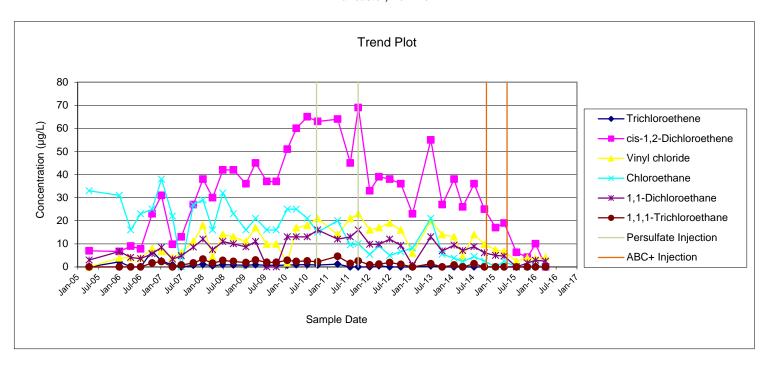
MONITORING WELL MW-10 SUMMARY OF VOCs IN GROUNDWATER



MONITORING WELL MW-11 SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

	Analytical Results (µg/L)							
Sample	Trichloroethene	✓ cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	ω 1,1-Dichloroethane	1,1,1-Trichloroethane		
Date	Γric	-Si	/in/	훉	<u> </u>	<u>1</u> ,		
4/14/2005	< 10	7	< 10	33	3	< 10		
1/5/2006	2.2	6.7	3.9	31	6.7	<20		
4/14/2006	< 20	9	4	16	4.1	< 20		
7/10/2006	< 20	7.8	3.9	23	3.6	< 20		
10/19/2006	6.8	23	7.9	25	5.7	1.7		
1/9/2007	2.6	31	6.7	38	8.5	2.3		
4/16/2007	0.89	9.8	4.1	22	3.4	<5		
7/2/2007	< 5	13	6.1	< 5	4.8	0.84		
10/16/2007	0.71	27	11	27	8.6	1.7		
1/8/2008	1.1	38	18	29	12	3.4		
4/2/2008	0.49	30	4.3	16	7.4	1.6		
7/1/2008	1	42	14	32	11	2.8		
10/2/2008	0.81	42	13	23	10	2.4		
1/20/2009	0.77	36	11	16	8.7	1.9		
4/14/2009	0.95	45	17	21	11	3		
7/22/2009	0.69	37	9.9	16	<5	2		
10/13/2009	0.69	37	9.9	16	<5	2		
1/18/2010	0.77	51	1.7	25	13	2.9		
4/7/2010	0.95	60	17	25	13	2.4		
7/12/2010	1	65	18	21	13	2.6		
10/11/2010	0.8	63	21	15	16	2.2		
4/5/2011	1.2	64	14	20	12	4.6		
7/25/2011	<1	45	21	9.5	13	1.5		
10/3/2011	<1	69	23	10	16	2.6		
1/12/2012	<1	33	16	5.4	9.8	0.88		
4/2/2012	0.51	39	17	9.1	9.8	1.2		
7/5/2012	<1	38	19	5	12	1.9		
10/11/2012	<1	36	16	6.6	9.3	1.1		
1/21/2013	<1	23	6	8.2	0.64	<1		
7/1/2013	0.46	55	20	21	13	1.4		
10/9/2013	<1	27	14	5.5	6.9	<1		
1/21/2014	<1	38	13	3.8	9.4	0.85		
4/7/2014	<1	26	4.3	2.3	7.1	<1		
7/16/2014	<1	36	14	4.5	8.8	1.4		
10/14/2014	<1	25	9.8	2.5	6.1	<1		
1/20/2015	<5	17	7.4	<5	5.0	<5		
4/6/2015	<2	19	6.7	2.4	4.7	<2		
7/22/2015	<1	6.3	2.5	<1	<1	<1		
10/26/2015	<1	4.2	3.9	<1	1.7	<1		
1/6/2016	<1	10	3.6	0.89	2.9	<1		
4/4/2016	<1	<1	4.1	<1	2.5	<1		

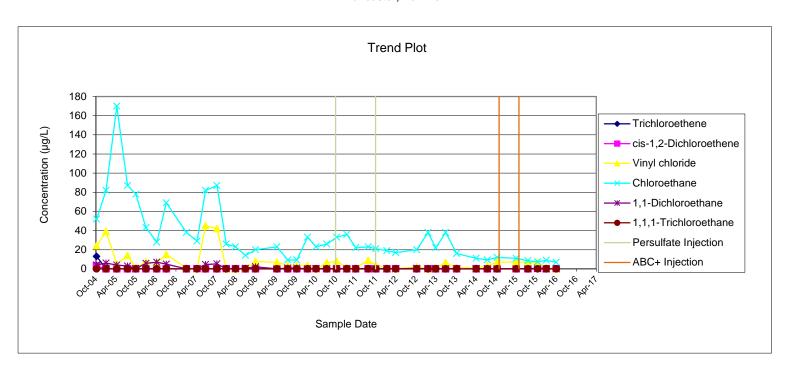
MONITORING WELL MW-11 SUMMARY OF VOCs IN GROUNDWATER



MONITORING WELL MW-12 SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

	Analytical Results (μg/L)							
	Trichloroethene	ω cis-1,2-Dichloroethene	5 Vinyl chloride	Chloroethane	ন 1,1-Dichloroethane	1,1,1-Trichloroethane		
	ichl	3-1,	الإر	ılor	1-D			
Sample Date		Cis	Ξ		1,	<u>,,</u>		
10/12/2004	13			52		< 10		
1/6/2005	< 10	< 10	39	82	6	< 10		
4/14/2005	< 10	< 10	5	170	4	< 10		
7/21/2005	< 5	< 5	14	87	3	<		
10/5/2005	< 5	< 5	1.2	78	0.43	< 5		
1/5/2006	< 25	< 25	7.2	43	5.8	< 25		
4/14/2006	< 25	< 25	6.3	28	6.9	< 25		
7/10/2006	< 25	< 25	15	69	5	< 25		
1/9/2007	< 5	< 5	0.83	38	< 5	< 5		
4/16/2007	< 20	< 20	< 20	29	< 20	< 20		
7/2/2007	< 5	< 5	45	82	4.6	< 5		
10/15/2007	< 5	< 5	42	87	5.2	< 5		
1/8/2008	< 5	< 5	< 5	26	< 5	< 5		
4/2/2008	< 5	< 5	< 5	23	< 5	< 5		
7/1/2008	< 5	< 5	0.64	14	0.55	< 5		
10/1/2008	< 5	< 5	7.8	20	2.1	< 5		
4/14/2009	<5	<5	6.8	23	<5	<5		
7/22/2009	<5	<5	3.6	9.2	0.79	<5		
10/12/2009	<5	<5	3.6	9.2	0.79	<5		
1/18/2010	<5	<5	3.6	33	<5	<5		
4/7/2010	<5	<5	< 5	23	<5	<5		
7/13/2010	<5	<5	6.4	26	<5	<5		
10/11/2010	<5	<5	8.1	33	<5	<5		
1/12/2011	<1	<1	1.3	36	<1	<1		
4/4/2011	<1	<1	1.1	22	<1	<1		
7/26/2011	<1	<1	8.9	23	<1	<1		
10/4/2011	<1	<1	3.9	21	<1	<1		
1/12/2012	<1	<1	1.4	19	<1	<1		
4/2/2012	<1	<1	<1	17	<1	<1		
10/11/2012	<1	<1	2.1	20	0.49	<1		
1/21/2013	<1	<1	<1	38	<1	<1		
4/1/2013	<1	<1	1.1	22	<1	<1		
7/1/2013	<1	<1	6.6	38	<1	<1		
10/10/2013	<1	<1	0.95	16	<1	<1		
4/7/2014	<1	<1	1.2	11	<1	<1		
7/17/2014	<1	<1	3.3	9.4	<1	<1		
10/14/2014	<1	<1	7.1	12	<1	<1		
4/6/2015	<1	<1	7.2	11	<1	<1		
7/23/2015	<1	<1	6.6	8.5	<1	<1		
10/19/2015	<1	0.88	6.7	7.4	<1	<1		
1/6/2016	<1	<1	1.5	9	<1	<1		
4/5/2016	<5	<5	< 5	6.8	<5	<5		

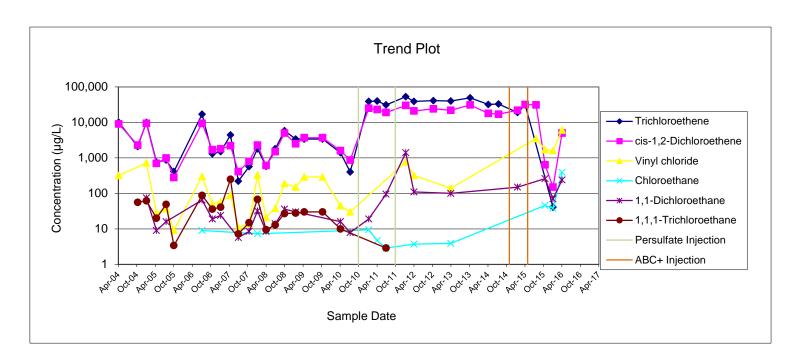
MONITORING WELL MW-12 SUMMARY OF VOCs IN GROUNDWATER



PIEZOMETER MW-13S SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

		An	alytical R	esults (µg	/L)	
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
Sample Date	Tric	cis-	Vin	Chl	1,1	1,1
4/8/2004	10,000	9,000	320	< 100	< 100	< 100
10/12/2004	2,100	2,300	< 200	< 200	< 200	56
1/6/2005	10,000	9,400	720	< 200	75	62
4/15/2005	760	700	28	< 50	9	20
7/20/2005	870	990	37	< 40	16	49
10/4/2005	410	280	9.1	< 40	< 40	3.4
7/10/2006	17,000	9,400	300	9	65	88
10/19/2006	1,300	1,700	50	<100	19	36
1/10/2007	1,500	1,800	58	<100	24	41
4/17/2007	4,400	2,200	90	< 250	< 250	250
7/3/2007	220	410	11	< 25	5.7	7.2
10/18/2007	570	800	14	< 25	8.5	15
1/9/2008	1800	2300	330	7.3	32	68
4/3/2008	580	610	21	<50	8.5	9.5
7/2/2008	1,800	1,500	38	<120	14	13
10/2/2008	5,800	5,000	190	<120	36	27
1/20/2009	3,400	2,500	150	<10	30	28
4/15/2009	3,400	3,700	290	<40	<40	30
10/13/2009	3,400	3,700	290	<40	<40	30
4/7/2010	1,400	1,600	45	<50	16	10
7/13/2010	400	870	30	<50	7.9	<50
1/12/2011	39,000	25,000	<500	9.4	19	<1
4/6/2011	40,000	23,000	<800	4.7	<800	<800
7/2/2011	31,000	19,000	<800	2.9	95	2.9
1/13/2012	53,000	30,000	770	<800	1400	<800
4/3/2012	39,000	21,000	320	3.7	110	<1
10/12/2012	41,000	24,000	<800	<800	<800	<800
4/2/2013	40,000	22,000	140	3.9	100	<1
10/10/2013	49,000	31,000	<1	<1	<1	<1
4/7/2014	32,000	18,000	<500	<500	<500	<500
7/17/2014	33,000	17,000	<500	<500	<500	<500
1/21/2015	19,000	22,000	<500	<500	150	<500
4/7/2015	31,000	32,000	<500	<500	<500	<500
7/23/2015	<500	31,000	3,500	<500	<500	<500
10/20/2015	<10	640	1,700	46	260	<10
1/6/2016	41	150	1,600	38	70	<25
4/5/2016	<100	5,000	6,100	390	240	<100

MONITORING WELL MW-13S SUMMARY OF VOCs IN GROUNDWATER

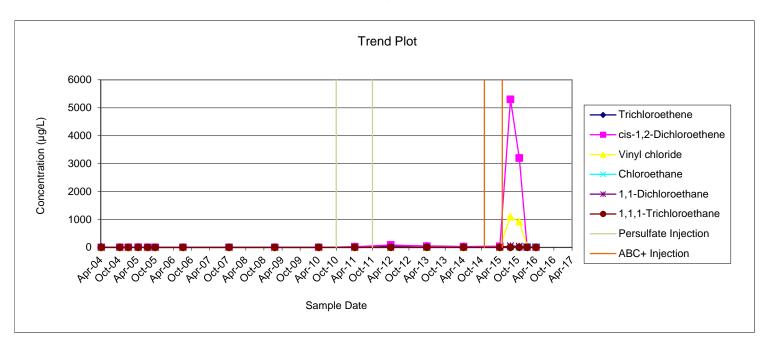


PIEZOMETER MW-13D SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

		An	alytical R	esults (µg	/L)	
Sample Date	Trichloroethene	∾ cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	17		< 10	< 10	< 10	< 10
10/12/2004	7	2	< 10	< 10	< 10	< 10
1/6/2005	< 10	< 10	< 10	< 10	< 10	< 10
4/15/2005	8	4	< 10	< 10	< 10	< 10
7/20/2005	1	2	< 5	< 5	< 5	< 5
10/4/2005	1.4	1.5	< 5	< 5	< 5	<5
7/10/2006	2	1.6	2.6	< 5	< 5	< 5
10/18/2007	<5	0.55	1.1	< 5	< 5	< 5
1/20/2009	< 5	< 5	< 5	< 5	< 5	<5
4/7/2010	<5	<5	<5	<5	< 5	<5
4/6/2011	22	23	<1	<1	<1	<1
4/3/2012	62	89	2.3	<1	<1	<1
4/1/2013	53	44	2.9	<1	<1	<1
4/7/2014	30	28	1.9	<1	<1	<1
4/7/2015	40	37	<1	<1	<1	<1
7/23/2015	2	5,300	1,100	11	56	<1
10/20/2015	<100	3,200	920	<100	42	<100
1/6/2016	<10	15	47	38	12	<10
4/6/2016	<10	<10	<10	36	<10	<10

PIEZOMETER MW-13D SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site

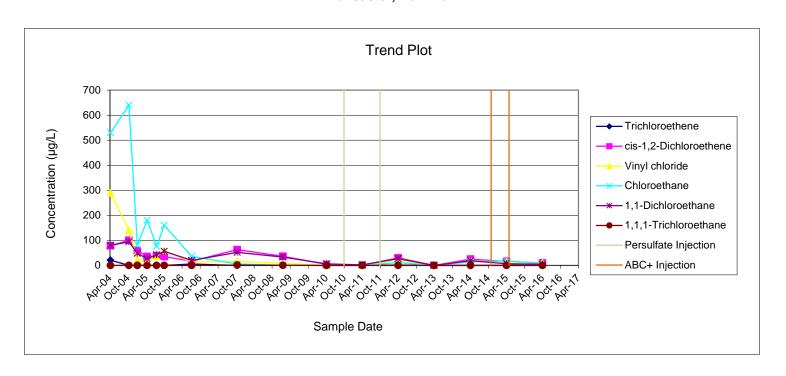
Lancaster, New York



PIEZOMETER MW-14S SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

		An	alytical R	esults (µg	/L)	
Sample Date	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	21	78	290	530	80	< 20
10/12/2004	< 10	100	140	640	94	< 10
1/6/2005	< 10	59	22	82	48	< 10
4/15/2005	< 10	35	15	180	27	< 10
7/20/2005	< 5	39	36	76	42	< 5
10/5/2005	< 5	35	59	160	56	<5
7/10/2006	5.7	17	13	36	20	< 25
10/15/2007	< 5	63	16	5.7	52	1.3
1/21/2009	0.38	36	7.9	0.87	33	0.63
4/8/2010	< 5	4	< 5	0.62	5.9	<5
4/5/2011	< 1	1.1	<1	<1	1.9	<1
4/2/2012	1.3	30	21	11	27	<1
4/1/2013	<1	<1	<1	<1	<1	<1
4/7/2014	<1	25	19	14	19	<1
4/7/2015	<1	16	14	18	6.8	<1
4/5/2016	<1	9.6	8.9	6.3	4.4	<1

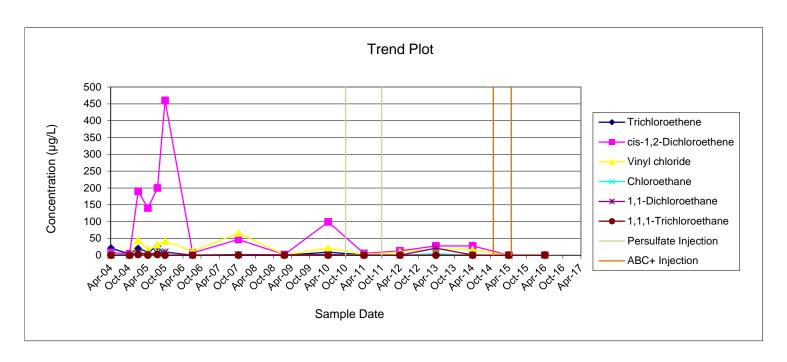
PIEZOMETER MW-14S SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York



PIEZOMETER MW-14D SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

		An	alytical R	esults (µg	/L)	
Sample Date	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	21	8	< 10	4	< 10	< 10
10/12/2004	4	4	< 10	< 10	< 10	< 10
1/6/2005	20	190	45	3	8	2
4/15/2005	10	140	18	6	4	< 10
7/20/2005	26	200	31	4	7	2
10/5/2005	< 10	460	42	7.2	9.9	<10
7/10/2006	0.96	7.2	12	0.82	< 5	< 5
10/15/2007	< 5	47	66	1.8	2.2	< 5
1/21/2009	< 5	2	1.4	0.91	1.3	<5
4/8/2010	9.4	99	21	1.5	2	<5
4/5/2011	0.97	5.6	2.6	1.5	<1	<1
4/2/2012	0.64	13	9.9	<1	0.44	<1
4/1/2013	0.99	28	19	4.6	21	<1
4/7/2014	<1	28	17	<1	0.82	<1
4/7/2015	<1	<1	<1	<1	<1	<1
4/5/2016	<1	<1	<1	<1	<1	<1

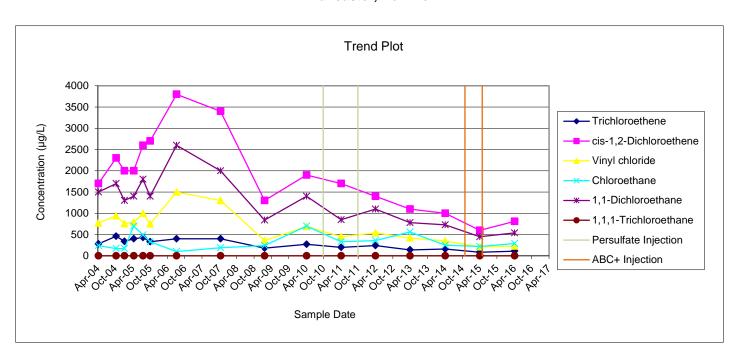
PIEZOMETER MW-14D SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York



PIEZOMETER MW-15S SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

		An	alytical R	esults (µg	/L)	
Sample Date	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	280	1,700	770	240	1,500	< 250
10/12/2004	460	2,300	940	170	1,700	< 250
1/7/2005	340	2,000	760	170	1,300	< 250
4/15/2005	400	2,000	790	700	1,400	< 200
7/21/2005	430	2,600	1,000	490	1,800	< 120
10/5/2005	330	2,700	750	330	1,400	<100
7/10/2006	400	3,800	1,500	100	2,600	< 25
10/16/2007	400	3400	1300	190	2000	< 200
1/21/2009	180	1300	360	240	840	<5
4/8/2010	270	1900	690	700	1400	<10
4/7/2011	200	1700	450	330	850	<1
4/3/2012	240	1400	540	360	1100	<1
4/1/2013	140	1100	420	560	780	<20
4/7/2014	160	1000	350	250	730	<20
4/6/2015	85	600	210	220	450	<20
4/6/2016	110	810	230	290	540	<20

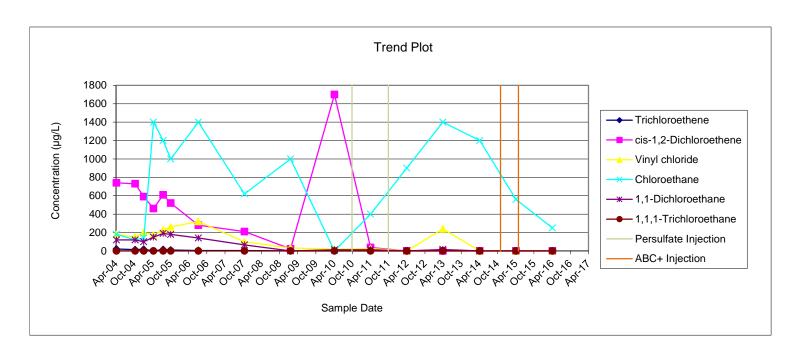
PIEZOMETER MW-15S SUMMARY OF VOCs IN GROUNDWATER



PIEZOMETER MW-15D SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

		An	alytical R	esults (µg	/L)	
Sample Date	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	21	740	180	180	120	< 10
10/12/2004	14	730	150	120	120	< 50
1/7/2005	18	590	200	140	100	< 50
4/15/2005	< 50	460	170	1,400	150	< 50
7/21/2005	15	610	230	1,200	190	< 25
10/5/2005	10	520	260	1,000	180	<50
7/10/2006	4.9	280	320	1,400	140	< 5
10/16/2007	3.6	210	99	620	66	< 5
1/21/2009	<25	22	32	1000	<25	<25
4/8/2010	<5	1700	19	<5	12	<5
4/5/2011	<8	38	26	400	13	<8
4/3/2012	<10	<10	<10	900	<10	<10
4/1/2013	<8	<8	240	1400	16	<8
4/7/2014	<20	<20	<20	1200	<20	<20
4/6/2015	<20	<20	<20	560	<20	<20
4/6/2016	<5	<5	<5	250	<5	<5

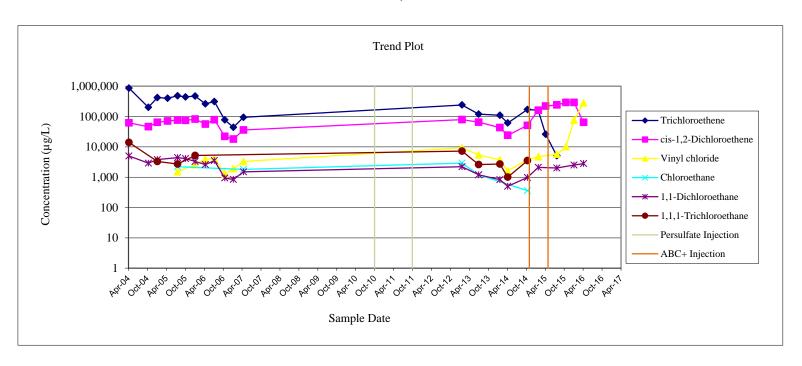
PIEZOMETER MW-15D SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York



PIEZOMETER MW-16S SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

		Analytical Results (μg/L)						
			aiyticai R	esuits (µg	/L)			
Sample Date	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane		
4/8/2004	860,000	62,000	< 20,000	< 20,000	5,000	14,000		
10/12/2004	200,000	46,000	< 10,000	< 10,000	2,900	< 10,000		
1/7/2005	420,000	64,000	< 10,000	< 10,000	3,800	3,300		
4/15/2005	400,000	71,000	< 25,000	< 25,000	< 25,000	< 25,000		
7/21/2005	480,000	76,000	1,500	2,200	4,400	2,700		
10/5/2005	440,000	74,000	< 25,000	< 25,000	4,100	< 25,000		
1/6/2006	470,000	82,000	2,600	< 20,000	3,300	5,200		
4/14/2006	260,000	56,000	3,900	< 20,000	2,600	< 20,000		
7/10/2006	310,000	78,000	4,000	< 20,000	3,500	< 20,000		
10/19/2006	77,000	22,000	1,300	< 5,000	940	< 5,000		
1/10/2007	44,000	18,000	1,900	< 2,500	840	< 2,500		
4/17/2007	94,000	36,000	3,300	1,800	1,500	< 5,000		
1/21/2013	240,000	79,000	9,300	2,900	2,200	7,200		
7/1/2013	120,000	65,000	5,400	1,200	1,200	2,600		
1/22/2014	110,000	43,000	3,700	<2,000	830	2,700		
4/7/2014	61,000	24,000	1,600	<1000	500	1,000		
10/14/2014	170,000	51,000	3,800	360	980	3,500		
1/26/2015	160,000	160,000	4,700	<4,000	2,100	<4,000		
4/7/2015	26,000	220,000	<4,000	<4,000	<4,000	<4,000		
7/24/2015	5,100	240,000	5,700	<4,000	2,000	<4,000		
10/20/2015	<4,000	290,000	10,000	<4,000	<4,000	<4,000		
1/6/2016	<4,000	290,000	76,000	<4,000	2,500	<4,000		
4/7/2016	<4,000	64,000	280,000	<4,000	2,800	<4,000		

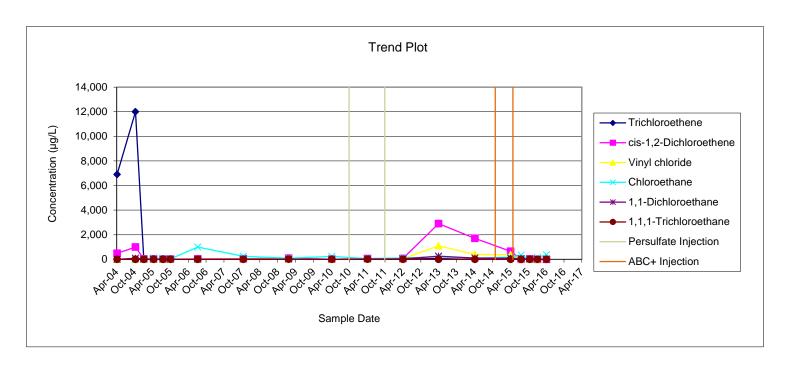
MONITORING WELL MW-16S SUMMARY OF VOCs IN GROUNDWATER



PIEZOMETER MW-16D SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York

		An	alytical R	esults (µg	/L)	
Sample Date	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	6,900	490	< 500	< 500	< 500	< 500
10/12/2004	12,000	1,000	< 500	< 500	91	< 500
1/6/2005	9	27	39	22	15	< 10
4/15/2005	32	36	17	100	10	< 10
7/21/2005	25	12	4	84	2	< 10
10/5/2005	1.3	16	10	41	5	<5
7/10/2006	6.1	27	21	1,000	9.7	< 5
10/18/2007	6	48	39	250	16	< 20
1/22/2009	52	92	39	90	21	1.9
4/8/2010	12	6.9	3.6	240	8.7	< 10
4/7/2011	22	59	33	59	27	1.2
4/3/2012	42	66	46	110	35	<1
4/1/2013	57	2900	1100	190	260	<1
4/7/2014	<25	1700	390	110	99	<25
4/7/2015	<25	650	380	170	94	<25
7/23/2015	<25	<25	41	340	56	<25
10/20/2015	<10	24	9.2	<10	15	<10
1/6/2016	<5	<5	9.2	140	2.9	<5
4/7/2016	<10	<10	50	370	<10	<10

PIEZOMETER MW-16D SUMMARY OF VOCs IN GROUNDWATER Former Scott Aviation Site Lancaster, New York



AECOM Environment

Appendix G

IC/EC Certification Form Email from NYSDEC

Zack, Dino

From: May, Glenn (DEC) < glenn.may@dec.ny.gov>

Sent: Monday, June 27, 2016 7:51 AM

To: Zack, Dino

Subject: RE: Scott 45-Day Notice Letter

Dino,

The Department is NOT tracking a Periodic Review project so there will be no 45-notice letter. Please go ahead and wrap up the report without the form. Thanks.

Glenn

From: Zack, Dino [mailto:Dino.Zack@aecom.com]

Sent: Thursday, June 23, 2016 10:24 AM

To: May, Glenn (DEC) < glenn.may@dec.ny.gov >

Subject: RE: Scott 45-Day Notice Letter

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hi Glenn-

As a follow up to the phone message I left you a couple minutes ago, I have completed the draft PRR for the west of Plant 2 site...I'm waiting on the IC/EC cert form before I can wrap things up and send the report out for internal and Tyco review, and PE stamp. Below is the email you sent me last year regarding the "auto-generated" IC/EC cert form. Do you think an IC/EC cert form will be sent to me this year or should I button up the report without the form?

Thanks, Dino

Dino Zack, P.G.
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From: May, Glenn (DEC) [mailto:glenn.may@dec.ny.gov]

Sent: Wednesday, July 22, 2015 3:59 PM

To: Zack, Dino

Subject: Scott 45-Day Notice Letter

Dino,

You recently sent me an email regarding the 45-day notice letter containing the IC/EC form. It turns out that when I added an actual date to last year's PRR project, this year's project never autogenerated. Since the PRR didn't autogenerate, the site isn't being tracked for the 45-day notice letter. With that said, please go ahead and submit the PRR without the IC/EC form. I would mention in the cover letter (or introductory section) that you didn't receive the IC/EC forms from the NYSDEC.

Glenn