



Environment

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May 2021

Periodic Review Report (April 17, 2020 through April 9, 2021)

Former Scott Aviation Facility (Area 1)
Lancaster, New York
NYSDEC Site Code No. C915233



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1,1-DCA	1,1-dichloroethane
1,1-DCE	1,1-dichloroethene
1,2-DCA	1,2-dichloroethane
1,1,1-TCA	1,1,1-trichloroethane
1,1,2-TCA	1,1,2-trichloroethane
AAR	Alternatives Analysis Report
ABC®	Anaerobic Biochem
ABC+®	Anaerobic Biochem with Zero Valence Iron
AECOM	AECOM Technical Services, Inc.
AMSL	above mean sea level
AVOX	AVOX Systems Inc
BCP	Brownfield Cleanup Program
bgs	below ground surface
CCR	Construction Completion Report
cis-1,2 DCE	cis-1,2-dichloroethene
cm/sec	centimeters per second
COC	contaminants of concern
COPC	constituents of potential concern
CVOC	chlorinated volatile organic compound
DHC	<i>Dehalococcoides</i> (bacteria)
DPT	Direct Push Technology
ERD	Enhanced Reductive Dechlorination
ESA	Environmental Site Assessment
ft	feet
HPT	hydraulic profiling tool
IC/EC	Institutional Controls/Engineering Controls
IRM	interim remedial measure
K	hydraulic conductivity
Matrix	Matrix Environmental Technologies, Inc.
mg/L	milligrams per liter
MIP	membrane interface probe
MNA	monitored natural attenuation

NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	operation and maintenance
PCB	polychlorinated biphenyl
PCE	Tetrachloroethene (Perchloroethene)
PGA	Preliminary Groundwater Assessment
PID	photoionization detector
PRR	Periodic Review Report
QA/QC	quality assurance / quality control
RAO	remedial action objective
RAWP	Remedial Action Work Plan
RI	remedial investigation
SCO	soil cleanup objective
SMP	Site Management Plan
SRI	Supplemental Remedial Investigation
SVI	soil vapor intrusion
sq	square
SVOC	semi volatile organic compound
TCE	trichloroethene
TOC	total organic carbon
TOGS	Technical and Operational Guidance Series
TVOC	total volatile organic compounds
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VC	vinyl chloride
VOC	volatile organic compound
wt. %	weight percent
XSD	halogen specific detector
ZVI	zero valence iron

Executive Summary

On September 1, 2004, the former Scott Aviation Facility (three plant facility) was sold by Scott Technologies, Inc. to the current facility owner/operator, AVOX Systems Inc. (AVOX). On September 11, 2008, Scott Technologies, Inc. submitted an application for the area located adjacent to the southwest corner of the Plant 1 property (the "Site", also known as Area 1) to enter the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP), per Title 6 New York Codes, Rules, and Regulations Part 375-3.4 (Applications), effective December 14, 2006. Scott Technologies, Inc. applied for entry into NYSDEC BCP as a participant to investigate and remediate, as appropriate, potential areas of environmental concern associated with the Site. On July 8, 2009, NYSDEC approved the application and Scott Technologies was accepted into the BCP program as a participant (NYSDEC Site Code No. C915233). Scott Technologies, a successor to Figgie International, is now known as Scott Figgie LLC. In December 2015, AVOX was added to the Brownfield Cleanup Agreement as a Volunteer.

Soil, groundwater, surface water, and soil vapor impacts at the Site were outlined in reports submitted to the NYSDEC that describe the results of a series of investigations which took place over several years. Impacts identified during these investigations were addressed via interim remedial measures (IRMs) prior to the issuance in December 2015 of a final Decision Document and Certificate of Completion for the Site.

Based on the implementation of the IRMs and a groundwater injection program conducted in March 2019, findings from the investigation of the Site indicate that the Site no longer poses a threat to human health or the environment; therefore, No Further Action is the selected remedy by NYSDEC. The No Further Action remedy currently includes semi-annual groundwater monitoring, and inspections of the boiler room repairs to the floor cracks and joints and sealing of the annulus around each floor drain to mitigate the potential for subsurface VOC vapors to enter the building.

Periodic groundwater monitoring has shown a notable decrease in the concentrations of contaminants of concern (COC) and no off-site migration of COCs in groundwater. Additionally, microbial analysis of shallow and deep overburden groundwater has indicated that the necessary microbes, such as *Dehalococcoides* (DHC), and degradation enzymes are present in subsurface groundwater.

A continuation of semi-annual groundwater monitoring for volatile organic compounds and monitored natural attenuation parameters at select Site wells, semi-annual inspections of the boiler room floor, and annual reporting per the NYSDEC-approved Site Management Plan is recommended for the next reporting period. No change is recommended to the existing Site Management Plan.

1.0 Introduction

On behalf of Scott Figgie LLC (successor to Scott Technologies, Inc.), and pursuant to the requirements of New York State Department of Environmental Conservation (NYSDEC), Decision Document (NYSDEC, December 2015) and Site Management Plan (SMP) (AECOM, December 2015), AECOM Technical Services, Inc. (AECOM) has prepared this Periodic Review Report (PRR) to summarize the groundwater monitoring activities for the former Scott Aviation facility (the “Site”, also known as Area 1), NYSDEC Site Code No. C915233, located within two parcels at 215 and 221 Erie Street, Village of Lancaster, County of Erie, State of New York (**Figure 1**). The reporting period discussed herein encompasses the period from April 17, 2020 through April 9, 2021. During the reporting period, the Site has been owned and operated by AVOX Systems, Inc. (AVOX).

1.1 Report Organization

The purpose of this PRR is to provide a summary of the controls implemented for the Site as required by Section 7.2 of the SMP and to provide recommendations for future controls at the Site.

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:

- An Executive Summary including a brief summary of the Site, nature and extent of contamination, remedial history, the effectiveness of the remedial program, and recommendations for changes to the SMP;
- A brief summary of the Site and PRR organizational details (Section 1.0);
- A Site overview, describing the Site location, significant features, surrounding areas, and the extent of environmental impacts prior to Site remediation. A description of the chronology of the main features of the remedial program for the Site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection (Section 2.0);
- A groundwater monitoring program summary including a description of the requirements of the monitoring, a summary of the groundwater monitoring activities completed during the PRR reporting period, a comparison of the most recent (April 2021) groundwater results to the Remedial Action Objectives (RAOs) of the Site, and conclusions regarding the monitoring completed and the resulting evaluations regarding remedial performance, effectiveness, and protectiveness (Section 3.0);
- A description of the Site inspections, associated operations and maintenance (O&M) tasks completed and recommendations for improvements (Section 4.0);
- A summary of overall conclusions and recommendations regarding compliance with the SMP, performance and effectiveness of the remedy, a description of upcoming Site-related activities, and a proposed monitoring and compliance sampling and reporting schedule (Section 5.0);
- A review of the Institutional Controls/Engineering Controls (IC/EC) for the Site (Section 6.0); and,

- References used in the preparation of this report (Section 7.0).

2.0 Site Overview

The following subsections present a description of the Site location, significant features, surrounding areas, and the extent of contamination prior to the Site remediation. A description of the chronology of the main features of the remedial program for the Site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection are also presented.

2.1 Site Location

The Site is located in Lancaster, Erie County, New York and is identified as Section 104 Block 5 and Lots 8 and 9 on the Erie County Tax Map; refer to **Figure 1** – Site Location Map. The Site is approximately 1.25 acres in area and is bounded by non-impacted AVOX land and then Erie Street to the north, railroad tracks to the south, AVOX Plant 1 (currently vacant) to the east, and residential zoned property (with a house) to the west; refer to **Figure 2** – Site Layout Map).

2.2 Physical Setting

2.2.1 Land Use

The Site consists of the following: outbuildings that support Plant 1 (which is not part of the Site), asphalt driveways and parking areas, and lawn and brush-covered areas. Site occupants include only occasional maintenance and shipping/receiving personal, as manufacturing activities have been moved to the two plants located on the north side of Erie Street.

The land adjoining the Site and in the neighborhood surrounding the Site includes both commercial and residential properties. The property immediately south of the Site includes railroad tracks; the properties immediately north of the Site include additional AVOX land and commercial properties; the properties immediately east of the Site include AVOX Plant 1 and its parking lot, and then residential properties (including vacant land); and the properties to the west of the Site include residential parcels.

2.2.2 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 of weathered shale is located above the bedrock (deep overburden). Overburden thickness ranges from 20 feet (ft) in the southern portion of the Site to 26 ft in the northern portion of the Site.

The average depth to bedrock is approximately 21 ft. Bedrock was observed to consist of black shale of the Marcellus Formation (Hamilton Group).

A transect for a geologic cross section with monitoring well and piezometer locations is shown on **Figure 3**, and the geologic cross-section is shown on **Figure 4**.

Groundwater monitoring wells were installed at three intervals: shallow overburden, deep overburden, and bedrock; the one bedrock well was decommissioned in October 2017. Overburden groundwater is first encountered at the Site in the shallow overburden, and then again just above the bedrock. An observation of the groundwater within the deep overburden, which is present on top of bedrock, indicates a semi-confined state.

Results of the in-situ hydraulic conductivity (K) tests performed in the monitoring wells at the Site during the BCP Remedial Investigation (RI) showed that K values range from 1.49E-03 centimeters per second (cm/sec) to 3.13E-05 cm/sec in the shallow overburden and range from 4.72E-03 cm/sec to 8.96E-05 cm/sec in the deep overburden. Hydraulic conductivity testing was not performed in the bedrock monitoring well.

The natural flow of groundwater at the Site in both the shallow and deep overburden is to the northwest. The flow direction is most pronounced in the deep overburden, as the flow of shallow overburden groundwater within the Site is significantly influenced by seasonal standing water to the southwest, a storm sewer network cutting through the Site, large asphalt areas to the north and east, and Plant 1 to the east. Depth to groundwater across the Site in both the shallow and deep overburden was measured in April 2021 and is discussed in detail in Section 3.0 of this report.

2.2.3 Site Investigation and Remedial History

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 7.0.

The general historical operations that existed in the Plant 1 building adjacent to the Site were primarily manufacturing, development, testing, and distribution for aircraft and military supplied-air systems. The oldest portion of Plant 1 dates to the early 1950s. That original building was expanded several times, with most of it in place by 1975 except for a small warehouse addition in 1996. Plant 1 historical activities included the chemical cleaning and repainting of oxygen cylinders, the chemical cleaning (with inorganic acid solutions) and chromium plating (in a non-electrolytic "soak bath") of metallic components of oxygen supply systems, and the fabrication of oxygen-regulating assemblies. Plant 1 also supported a Class 10,000 clean room and a Class 100,000 clean room. The office area contained management, administrative, engineering, training, and other support activities, and a cafeteria.

Since 2010, Plant 1 has no longer been used for production (i.e., painting and plating activities have terminated). The BCP boundary for the Site is located immediately west/southwest of Plant 1. In general, the pre-remediated areas as described below consisted of low-level metals in the top of the shallow overburden soil immediately south of Plant 1, volatile organic chemicals (VOCs) in shallow overburden soil at the fence gate southwest of Plant 2, and VOCs in shallow and deep overburden groundwater west/southwest of Plant 1. Note: the BCP boundary, or VOC-impacted groundwater plume, does not extend off the AVOX property.

2.2.3.1 Phase I

In 2004, a Phase I Environmental Site Assessment (ESA) was performed at the Site by Earth Tech, Inc. (now AECOM) on behalf of then owner, Scott Technologies, Inc. The entire facility was sold to the current owner, AVOX, in September 2004. Historical aerial photographs included in the Phase I ESA Report indicated an area of potentially disturbed soil on the west side of Plant 1, south of the

existing visitor parking area, and just outside the Plant 1 western perimeter fence line on the adjacent vacant parcel (Earth Tech, April 2004). The Phase I ESA also identified two former underground storage tanks (USTs) that had contained gasoline starting in the early 1970s that were removed from the southeastern portion of the Plant 1 Area in November of 1987; however, no records were found to indicate that any post-excavation sampling was done to demonstrate that the soil and groundwater in their vicinity had not been impacted.

Another former UST that had contained gasoline from an unknown date until the early 1970s was reportedly cleaned and closed in place at that time by filling it with sand. It is believed to be located beneath the current hazardous materials storage shed. No records were found to indicate exactly where that tank is located, when closure occurred, or that any post-closure sampling was done to demonstrate that soil and ground water in the vicinity had not been impacted. From the early 1950s to about 1973, used sand from a steel-casting foundry operation, located in the western portion of Plant 1, was disposed behind (south of) Plant 1.

2.2.3.2 Phase II

A Phase II Environmental Site Investigation was completed in 2004 for the entire Scott Aviation facility, to address environmental concerns described in the Phase I ESA Report, including the area of potentially disturbed soil on the west side of Plant I. During the Phase II ESI, seven test pits were excavated. Residual paint sludge of unknown origin was observed in two of the test pits. The paint sludge area was approximately 150 square (sq) ft in size and located just west and south of the vehicle gate located in the western perimeter fence, immediately north of the water tower. Elevated levels of VOCs and semi-volatile organic compounds (SVOCs) present in the soil immediately below the waste indicated that some leaching of the waste had occurred (Earth Tech, June 2004).

2.2.3.3 Interim Remedial Measure - Soil Excavation

On June 28, 2005, Earth Tech, in accordance with a NYSDEC-approved Interim Remedial Measures (IRM) / Supplemental Site Investigation Work Plan, performed an initial excavation of the buried paint sludge material located to the west of Plant 1. A total of 60 cubic yards of soil was excavated to the west of Plant 1, down to the level at which groundwater was encountered - about 6 ft below ground surface (bgs). Further excavation was not completed during the IRM, as the scope of work only addressed vadose zone soil.

2.2.3.4 Preliminary Groundwater Assessment

The above investigations identified the general areas of concern at the Site. As a result of the elevated VOC and SVOC soil concentrations detected in the excavation bottom at Area 1 during the 2005 IRM, a Preliminary Groundwater Assessment (PGA) was performed in 2006 and 2007. The purpose of the PGA was to assess the nature and extent of VOCs in groundwater in the vicinity of Area 1. A series of groundwater wells was installed, and samples were collected and analyzed as a part of the PGA (Earth Tech, January 2008). Eighteen temporary piezometers were installed during the PGA to monitor shallow overburden groundwater. Groundwater samples collected from these piezometers contained VOCs, with 18 of these compounds detected at concentrations that exceeded the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 (NYSDEC, June 1998, January 1999 errata sheet, April 2000 addendum, June 2004 addendum) protection for source of drinking water (groundwater) standards (i.e., water class GA); herein referred to as TOGS 1.1.1 groundwater standards. Samples of deep overburden groundwater also contained VOCs but to a lesser degree than the shallow overburden groundwater.

2.2.3.5 Remedial Investigation

The BCP RI began in December 2010 with the completion of soil borings, the installation of monitoring wells, and the collection of soil, groundwater and vapor samples for chemical analysis. This initial work was completed during the summer of 2010 following the approval of the Remedial Investigation / Alternatives Analysis Work Plan (AECOM, February 2010) and addendum to the Remedial Investigation / Alternatives Analysis Work Plan (AECOM, May 2010). A Supplemental RI (SRI) (Supplemental Remedial Investigation Report, AECOM, April 2012), describing work completed in June 2011, included the installation of additional monitoring wells, groundwater sampling, and an evaluation of a storm sewer system that was located throughout the BCP Site. The RI and SRI were performed to gather the data necessary to complete the characterization of chemical presence in on-site groundwater, soil, and soil vapor, in order to identify and evaluate necessary and appropriate remedial alternatives as presented in the Remedial Investigation Report (AECOM, September 2011). The proposed remedial alternatives were presented in an Alternatives Analysis Report (AAR) (AECOM, September 2015). That AAR was completed in accordance with the NYSDEC DER Draft BCP Guide (NYSDEC, May 2004), 6 New York Codes, Rules and Regulations (NYCRR) Part 375 Environmental Remediation Programs (NYSDEC, December 14, 2006), and NYSDEC DER-10 (NYSDEC, May 3, 2010).

These studies investigated Area 1 for contamination in surface soil, subsurface soil, groundwater, and impacts to on-site storm sewers. Constituents of potential concern (COPCs) were identified for soil by comparison of maximum detected concentrations for VOCs to 6 NYCRR Part 375 Unrestricted Use soil cleanup objectives (SCOs), and for SVOCs, metals, pesticides, and polychlorinated biphenyls (PCBs) by comparison to 6 NYCRR Part 375 Commercial Use SCOs. COPCs were identified for groundwater by comparison of maximum detected concentrations for VOCs, SVOCs, metals, pesticides, and PCBs to TOGS 1.1.1 groundwater standards. The results of this comparison to applicable standards are detailed below:

- Surface Soil - VOC concentrations for surface soil (i.e., 0 to 2 inches bgs) were below the NYSDEC Subpart 375-6 SCOs for Unrestricted Use at the borings sampled. SVOC, metal, PCB, and pesticide concentrations were below the SCOs for Commercial Use, with the exceptions of benzo(a)pyrene (potentially resulting from asphalt paving and/or the adjacent active rail line) and the metals cadmium and nickel.
- Subsurface Soil - VOC concentrations from subsurface soil samples collected from borings during the RI and SRI were below the SCO for Unrestricted Use, with the exception of acetone and methylene chloride (common laboratory contaminants) at two borings: DPT8-2A and DPT8-2B, both located south of Plant 1. VOC concentrations from one confirmation sample collected from the bottom of the historic IRM (B-1A) had seven compounds exceeding Unrestricted Use SCOs (all seven compounds were below Commercial Use SCOs). SVOC, pesticide and PCB concentrations from subsurface soil samples were all below Unrestricted Use SCOs. Regarding metals, only mercury, copper, and cadmium exceeded SCOs for Commercial Use. These exceedances occurred at two borings: DPT8-1A and DPT8-2A.
- Groundwater - Analytical data for groundwater samples collected from the shallow and deep overburden wells during the RI and SRI identified the presence of VOCs exceeding TOGS 1.1.1 groundwater standards. Refer to **Figure 5** and **Figure 6** for the RI/SRI total VOC (TVOC) contaminant concentration contours for shallow and deep overburden concentration contours, respectively. There were no exceedances of TOGS 1.1.1

groundwater standards in the bedrock groundwater. The most frequently detected VOCs were trichloroethene (TCE) and its decomposition product cis-1,2-dichloroethene (cis-1,2-DCE). Refer to **Figure 7** and **Figure 8** for the RI/SRI TCE contaminant concentration contours for shallow and deep overburden concentration contours respectively. The greatest VOC concentrations were detected in the area of the previously-excavated source area during the 2005 IRM. At perimeter wells, VOCs were either not detected or were detected at concentrations below or slightly above TOGS 1.1.1 groundwater standards for TCE. See **Appendix A** for a summary of groundwater VOC data collected during the RI, SRI, and subsequent quarterly monitoring, and **Appendix B** for trend plots illustrating concentrations of contaminants of concern (COCs) over time which include 1,1,1-trichloroethane (1,1,1-TCA), 1,1,2-trichloroethane (1,1,2-TCA), 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), 1,2-dichloroethane (1,2-DCA), tetrachloroethene (PCE), TCE, cis-1,2-DCE, and vinyl chloride (VC). Per a NYSDEC comment letter dated August 23, 2019, cis-1,2-DCE was added as a Site COC. SVOCs in groundwater were below TOGS 1.1.1 groundwater standards. Three naturally occurring metals (iron, magnesium, and sodium) were detected in groundwater above TOGS 1.1.1 groundwater standards. No PCBs were detected, and only one pesticide was tentatively detected in one groundwater sample at a concentration greater than TOGS 1.1.1 groundwater standards. Refer to the AAR (AECOM, April 2015) for groundwater VOC, SVOC, metal, and PCB/pesticide data.

- Storm Sewer Catch Basins - A storm sewer with several catch basins is present in Area 1; refer to **Figure 3** for the location of the storm sewer system. VOCs were detected within storm sewer catch basins located on the Site and from water within the storm sewer pipe bedding. Groundwater is present above the storm sewer piping; refer to **Appendix A** for a summary of storm sewer VOC data and for temporary piezometer water sample data that was collected from within the storm sewer pipe bedding gravel near catch basin CB-1 at temporary piezometer TP-5 and approximately 130 feet to the north at TP-6. Refer to **Appendix B** for a trend plot of VOCs over time in catch basin CB-1.
- Soil Vapor - Based on the evaluation of the data against the decision matrices, a vapor intrusion condition is not present at the Site, and indoor air quality has not been adversely impacted by the presence of the adjacent groundwater plume. However, per a June 1, 2012 letter from the NYSDEC to Scott Figgie LLC, the New York State Department of Health (NYSDOH) considered this Site to be a significant threat due to elevated concentrations of VOCs in sub-slab soil vapor, and the potential for this vapor to impact indoor air. Refer to the AAR (AECOM, September 2015) for air sampling data, for vapor data compared to 2006 NYSDOH guidance values, and for the United States Environmental Protection Agency (USEPA) 2001 Building Assessment and Survey Evaluation database indoor air values, respectively.

2.2.3.6 Soil Vapor Intrusion Evaluation

Based on NYSDEC comments on the draft AAR (AECOM, April 2013), AECOM completed a targeted soil vapor intrusion (SVI) investigation for the Site in July 2013. The purpose of that SVI investigation was to assess whether soil vapor on the Site in the vicinity of a nearby residence at 205 Erie Street contained chlorinated VOCs (CVOCs), and if so, were they detected at concentrations sufficiently elevated to represent a potential indoor air quality issue for the nearby buildings (AECOM, August 2013). A second investigation and report were completed in September 2013 to follow up on one TCE detection in soil vapor above the method detection limit. Both

groundwater and soil samples were collected hydraulically downgradient of Area 1, between the facility and the 205 Erie Street residence, and focused on seven CVOCs that, per NYSDOH guidance values, should be considered as part of an SVI analysis for the residence: 1,1,1-TCA; cis-1,2-DCE; VC; 1,1-DCE; carbon tetrachloride, PCE, and TCE.

No CVOC listed above was reported in any of the soil or groundwater samples. Acetone was reported in one soil sample at 12 micrograms per kilogram ($\mu\text{g}/\text{kg}$). Acetone was also reported in five of the six groundwater samples and in the trip blank. The only other VOC reported was 2-butanone (methyl ethyl ketone) at 4.1 micrograms per liter ($\mu\text{g}/\text{L}$). AECOM reviewed historical soil, groundwater, soil vapor, and stormwater data from the northern portion of the Area 1 Site to assess the potential relationship between the low level TCE concentration reported in SV-1 in July 2013 and the Area 1 contamination. The collective data did not identify a clear relationship between the two that would warrant further SVI sampling at the residential property. Multiple media were evaluated. The property boundary between AVOX (which includes the Site) and 205 Erie Street does not appear to be impacted by the BCP Site (AECOM, October 2013).

2.2.3.7 Interim Remedial Measures - 2014

During a conference call between NYSDEC, Scott Figgie LLC, AECOM, and AVOX representatives on February 28, 2014, the NYSDEC recommended moving forward with the BCP cleanup in advance of an approved Final AAR by completing four IRMs to address soil and selected groundwater impacts at the Site. They included:

- Excavation and off-site disposal of shallow soils impacted by metals (cadmium, copper and nickel);
- Excavation and off-site disposal of subsurface soils impacted by VOCs in some locations;
- Grout sealing on-site storm sewer joints to prevent groundwater infiltration, and installation of impermeable plugs across the pipe bedding to prevent migration of groundwater; and
- Mitigation of SVI concerns at the AVOX boiler room (the only structure within Area 1 that is occasionally occupied).

Those four IRMs were described in an IRM Remedial Action Work Plan (RAWP) dated June 4, 2014 (AECOM). On August 14, 2014, NYSDEC provided approval to begin the described work per the 2014 IRM RAWP.

Soil Excavation and Storm Sewer Interim Remedial Measures

The 2014 IRM activities were initiated on September 8, 2014. The soil excavation and storm sewer IRMs were completed during October 2014. Metals-impacted soil was excavated to 1 ft bgs in the vicinity of MW-41B, with all confirmatory samples passing metal Commercial Use SCOs for the target parameters. Confirmation soil samples were collected from the excavation sidewalls and bottoms. Soil was excavated to 2 ft bgs in the vicinity of DPT8-1 and DPT8-2. Following the initial excavation, an additional 2 ft wide by 2 ft deep excavation occurred on the south side wall of DPT8-1 and on the north side wall of DPT8-2, until sample results were below Commercial Use SCOs. Following receipt of passing sample confirmation data, and with concurrence from the NYSDEC, the excavated areas were backfilled with imported soil that met NYSDEC Unrestricted Use SCOs and restored to pre-excavation conditions. Each excavation remained open until receipt

of soil analytical results determined that confirmation soil samples were below respective SCOs, and the NYSDEC issued approval to discontinue excavation.

VOC concentrations from soil confirmation bottom samples collected in 2005 following an IRM soil excavation were found to be in exceedance of the Unrestricted Use SCO. These samples were collected at or below typical shallow overburden groundwater depths. The concentrations of 1,1-DCE, cis-1,2-DCE, ethylbenzene, toluene, 1,1,1-TCA, TCE, and total xylenes exceeded NYSDEC Subpart 375-6 Unrestricted Use SCOs. An initial horizontal excavation limit was established following the same footprint of the previously excavated area (approximately 14 ft by 18 ft, by 6 ft deep). The 2014 IRM scope was to remove the top 0 to 6 ft of previous clean fill and excavate material from 6 to 8 ft bgs. Elevated Photoionization Detector (PID) headspace readings on side wall and bottom samples were observed following excavation of the 6 to 8 ft bgs interval and reported to NYSDEC. Due to the depth of observed elevated PID readings and below-average shallow groundwater elevations, an additional 2 ft of soil was removed from the side walls (where physical constraints allowed) and from the bottom of the excavation. Characterization samples from the side walls and bottom of the excavation were collected and resulted in VOC detections exceeding Unrestricted Use SCOs. Refer to the 2014 IRM Construction Completion Report (CCR) for characterization sample results and for the location of the VOC IRM. With approval from the NYSDEC, no further excavation of soil took place; impacts were left in place to be addressed as part of the groundwater IRM, since all impacted material was below the water table. Prior to backfilling, and with approval from the NYSDEC, 270 pounds of Kloxur® CR engineered calcium peroxide was placed on the bottom of the excavation area and mixed with the small amount of groundwater that had accumulated in the excavation. Fill from the 2005 IRM and imported fill in compliance with NYSDEC DER-10 was used to backfill the excavation areas created for this IRM.

Following the completion of the IRMs in October 2014, AECOM submitted a draft IRM CCR on February 15, 2015 describing those 2014 IRMs. The 2014 IRM CCR was written in compliance with DER-10 Section 5.8, Construction Completion Report and Final Engineering Report, and summarized these IRM activities. The Final 2014 IRM CCR was approved by NYSDEC on March 27, 2015 (AECOM, March 2015).

Sub-slab Soil Vapor Interim Remedial Measure

On November 4, 2014, AECOM and NYSDEC inspected the concrete floor of the boiler room, and AECOM sealed visible floor cracks with concrete caulking. In addition, the annulus between a drain line effluent and the associated floor penetration and foundation perforations were sealed with expanding foam. Two other foundation perforations (drains) were observed and temporarily plugged with modelling clay just prior to a sampling event. The floor drains appeared to discharge to the bedding gravel beneath the concrete floor slab. On December 24, 2014 one sub-slab vapor sample, one indoor vapor sample, one ambient (outdoor) air sample, and an associated quality assurance / quality control (QA/QC) sample were collected from the boiler room building at AVOX Plant 1, to determine if CVOCs were currently at indoor concentrations sufficiently elevated to trigger a need for mitigation activities. The December 2014 indoor air sample did not detect any CVOCs listed in the NYSDOH Guidance document. The 2014 sub-slab vapor sample detected 1,1,1-TCA, cis-1,2-DCE, 1,1-DCE, PCE, and TCE. According to the NYSDOH decision matrices, PCE and TCE concentrations triggered an action of 'monitor' only, while the 1,1,1-TCA, cis-1,2-DCE, and 1,1-DCE concentrations were below an action level. Low concentrations of 1,1,1-TCA, cis-1,2-DCE, and TCE were detected in the ambient (outdoor) air sample. The sealing of floor cracks and foundation perforations decreased the concentrations in the indoor air samples and lowered the action level from 'mitigation' to 'monitoring' (AECOM, January 2015).

Groundwater Interim Remedial Measure

In 2014, an IRM pre-design investigation utilizing a combined membrane interface probe (MIP) and hydraulic profiling tool (HPT) was performed in Area 1; refer to **Figure 9** for MIP locations. That pre-design investigation was performed in accordance with the approved MIP/HPT and Baseline Sampling Work Plan (AECOM, October 2014).

On November 24-25, 2014, 11 borings were completed throughout the groundwater plume in Area 1 to a depth of 20 ft bgs, with the objective of verifying the distribution of VOC COPCs within that area. The MIP/HPT was used to capture data at continuous depths at each boring.

The 3D Imaging Summary, MIP/HPT Boring Summary, and MIP Data Cross Section figures summarized the field activities and results of the MIP/HPT analysis. Halogen specific detector (XSD) data were used as the prime indicator of CVOC impacts, as they are highly sensitive to CVOCs compared to the other data collection methods. Within the investigated zones, target treatment depths were identified using K data provided by the HPT analysis. The MIP/HPT results were generally consistent with the RI groundwater data collected from June 2010 through June 2011. The data indicated that there were lower VOC concentrations present in the northern portion of the Site and that, where present, they were limited to the upper 14 ft of the overburden. In the southern portion of the Site, VOC concentrations were greater and also present in significant concentrations throughout the entire depth of the soil borings, with the 5-15 ft bgs region exhibiting the highest XSD response. In addition to MIP-8 located in the center of the groundwater plume, the easternmost and westernmost boring locations, MIP-1 and MIP-11, showed the highest VOC concentrations.

Remedial activities for the groundwater IRM were described in the Final Remedial Action Work Plan - 2015 Interim Remedial Measures - Groundwater Treatment (2015 IRM RAWP) (AECOM, March 25, 2015). On April 10, 2015 the NYSDEC provided approval to begin the described work per the 2015 IRM RAWP; the groundwater injections commenced in April 2015 and were completed in May 2015. In accordance with the AAR and the 2015 IRM RAWP, the remedial approach to address VOCs in Site groundwater was in-situ enhanced reductive dechlorination (ERD) via direct-push injections of Anaerobic Biochem (ABC[®]) with zero valent iron (ZVI), i.e., ABC+[®]. Per the 2015 IRM RAWP, the treatment area was divided into two target depths zones: a 12,600 sq ft shallow injection zone and a 20,025 sq ft deep injection zone. In general, the shallow zone was defined as groundwater from 5 to 15 ft bgs, and the deep zone as groundwater from 15 to 25 ft bgs.

A total of 41 of the 47 planned injection point locations were successfully completed in the “shallow only” zone. Six of the 47 planned injection locations were not completed to avoid interference with utilities or as a result of observed breakthrough along the south and west sections of the injection grid. Approximately 23,370 pounds of ABC+[®] were injected to treat the shallow (only) zone at approximately 570 pounds of ABC+[®] per point. Mixed at approximately a 15 weight percent (wt. %) solution, this resulted in approximately 16,000 gallons of solution. Each injection point received approximately 390 gallons, divided up among intervals that had the highest permeability.

A total of 79 of the 89 planned injection points were successfully completed in the combined “shallow and deep” zone. Ten of the 89 planned injection locations were not completed to avoid interference with utilities or as a result of observed breakthrough along the south and west sections of the injection grid. Approximately 59,800 pounds of ABC+[®] was required to treat the shallow and deep zone at 757 pounds of ABC+[®] per point. Mixed at approximately a 15 wt. % solution, this resulted in approximately 40,300 gallons of solution. Each injection point received approximately 510 gallons, divided up among intervals that had the highest permeability.

Additional injection points were completed adjacent to the storm sewer system to reduce VOCs in the vicinity of the sewer pipe and to apply treatment into the storm sewer pipe bedding. Injection points were performed approximately five to six feet offset (upgradient) from the storm sewer line to establish a biobarrier that groundwater must flow through before entering the storm sewer bedding. Injection locations within the footprint of the TVOC plume that were adjacent to the storm sewer also addressed the storm sewer bedding. Injections associated with the storm sewer bedding were completed between 4 and 6 ft bgs. To protect the existing subsurface utility, injections immediately adjacent to the storm sewer consisted of only ABC® (without ZVI). One location received the planned 390 gallons of injectate; two other locations received only 50 gallons each to limit the volume of injectate breaking through to the ground surface.

The final 2015 IRM CCR describes work completed to remediate VOCs in Site groundwater (AECOM, August 12, 2015). Refer to **Figure 9** for the IRM injection zone details.

2.2.3.8 Supplemental Groundwater Injection

On May 15, 2019, NYSEC approved the 2019 Supplemental Injection Work Plan (AECOM, May 10, 2020). Between May 20, 2019 and May 22, 2019, AECOM and subcontractor Matrix Environmental Technologies, Inc. (Matrix) and their teaming partner Redox completed the supplemental groundwater injection event using ABC-Ole® and ZVI.

ABC-Ole® is an emulsified fatty acid product designed to address anaerobic bioremediation sites. It is a modified blend of ABC® which contains a high fatty acid content ranging from 50-85% ABC®. The addition of ZVI to the ABC-Ole® immediately provides a large drop in oxidative reduction potential in the surrounding groundwater which is conducive to biotic reductive dechlorination. The ZVI also promotes an abiotic reductive dechlorination process where the degradation of the targeted groundwater VOCs occurs via the β -elimination pathway. This pathway does not create the degradation intermediates cis-1,2-DCE and vinyl chloride which are produced via the biotic reductive dechlorination pathway, and it also does not rely on the presence of *Dehalococcoides* (DHC) to achieve complete VOC destruction.

The combined ABC-Ole® and ZVI mixture was specifically designed to remediate impacted groundwater in an approximate 6,750 square foot area within the approximate 1,000 µg/L TVOC shallow overburden zone contour (which also overlies the 1,000 µg/L TVOC deep overburden zone contour). The area of injection encompasses the area around the most TVOC-impacted monitoring wells located on the Site: A1-GP02, A1-GP06, A1-GP10, MW-42S, MW-38D, and MW-40D.

Figure 10 depicts the supplemental injection area.

The injectate ABC-Ole®, mixed with ZVI, was injected at 30 locations using a DPT drill rig. Each injection point received approximately 240 gallons of injectate. The injectate was distributed at depth intervals 11, 14, 17, and 20 feet bgs, targeting the shallow and deep water bearing units, and was performed from a bottom to top sequence.

Approximately 7,500 pounds of ABC Ole® and 7,500 pounds of ZVI were injected to treat the approximately 10 foot thick zone at approximately 500 pounds of ABC-Ole® and ZVI per point. Mixed at approximately a 20 wt. % solution, this resulted in approximately 7,200 gallons of solution. Each injection point received approximately 240 gallons, divided up among intervals that had the highest permeability.

2.2.3.9 Storm Sewer Pipe Replacement

Per the NYSDEC approved Storm Sewer Replacement Work Plan dated June 12, 2020, approximately 200 linear feet of storm sewer piping was replaced by Matrix in June of 2020 between CB-4 and CB-E, CB-E and CB-3, and CB-3 and CB-2 (refer to **Figure 3** for the location of catch basins). This work was performed based on the ongoing detections of VOCs in quarterly Site grab samples collected since the 2014 IRM was completed. This section of storm sewer piping was replaced with a new 12-inch diameter SDR35 solid PVC pipe with watertight joints. It was presumed that over time, shallow groundwater entered the storm sewer pipes through pipe joints that may not have been sealed or through previously sealed pipe joints and at catch basins that were no longer watertight.

The impermeable “plugs” along the sections of pipe that were removed during replacement of the storm sewer pipe were re-installed with a grout slurry prior to backfilling activities, to continue to potentially prevent VOC-impacted groundwater from migrating off-Site through the pipe bedding material. In addition, a non-shrinking concrete/grout was used at four catch basins (CB-2, CB-3, CB-E, and CB-4) to seal the connections where the stormwater pipes enter and exit the catch basins.

During excavation activities, soils were scanned with a PID. Soils excavated between CB-E and CB-3 were observed to have elevated PID readings and were segregated and sampled for VOC and metals analysis. Per the analytical data and associated historic soil characterization data from the Site, the impacted soil was characterized as non-hazardous. Approximately 18.76 tons of soil was sent to Waste Management’s landfill in Chaffee, NY for disposal.

During backfilling of the pipe section between CB-E and CB-3 (where the impacted soil was observed), coarse zero valent iron (ZVI; 80 percent between 150 and 600 microns) was scratch mixed using an excavator with the backfill material placed from the bottom of the excavation to approximately 2 feet below ground surface (i.e., within the saturated groundwater zone). Due to the concentration of VOCs in groundwater in this area and the size of the excavation required to replace the storm water pipe in this section (approximately 4 feet wide by 5 feet deep by 85 feet long), approximately 1,100 pounds or approximately 1.1 percent by weight of ZVI was used. The depth of soil to be treated by ZVI was approximately 3 feet since the top 2 feet of soil was above the water table, and vadose zone soil is not effectively treated by ZVI.

The removed sections of storm sewer pipe were decontaminated (i.e., soil was brushed and/or washed from pipe), cut to size, and placed in a roll-off box for disposal as municipal waste.

Following backfilling activities, the disturbed areas were restored in kind (i.e., crushed stone, asphalt, and grass seed depending on the pre-excavation conditions).

2.3 Remedial Action Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the Site to pre-disposal conditions to the extent feasible. At a minimum, the remedy must eliminate or mitigate all significant threats to the public health and the environment presented by the CVOCs and metals identified at the Site through the proper application of scientific and engineering principles.

The RAOs for the Site as listed in the Decision Document (NYSDEC, December 2015) are as follows:

2.3.1 Groundwater

- RAOs for Public Health Protection
 - Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
 - Prevent contact with, or inhalation of, VOCs from impacted groundwater.
- RAOs for Environmental Protection
 - Restore the ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
 - Prevent the discharge of COCs to surface water.
 - Remove the source of ground or surface water constituents of concern.

2.3.2 Soil

- RAOs for Public Health Protection
 - Prevent ingestion/direct contact with impacted soil.
 - Prevent inhalation of or exposure from contaminants volatilizing from soil.
- RAOs for Environmental Protection
 - Prevent migration of constituents that would result in groundwater or surface water contamination.

2.3.3 Soil Vapor

- RAOs for Public Health Protection
 - Mitigate impacts to public health resulting from existing, or the potential for, SVI into buildings at a site.

2.4 Contaminants of Concern

Eight COCs in groundwater have been determined through sampling associated with the RI and SRI. Per the Decision Document (NYSDEC, December 2015), Section 6.1.2 (NYSDEC, December 2015), a “contaminant of concern” is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all constituents identified on the Site are COCs. The groundwater COCs identified at the Site and their associated RAOs (Guidance or Standard Values) from TOGS 1.1.1 groundwater standards are listed below:

- 1,1,1-TCA – 5 µg/L
- 1,1,2-TCA – 5 µg/L
- 1,1-DCA – 5 µg/L
- 1,1-DCE – 5 µg/L
- 1,2-DCA – 0.6 µg/L
- *cis-1,2-DCE - 5 µg/L

- PCE – 5 µg/L
- TCE – 5 µg/L
- VC – 2 µg/L

*Per NYSDEC comment letter dated August 23, 2019, cis-1,2-DCE was added as a Site COC.

3.0 Groundwater Monitoring Program Summary

The following sections provide a summary of the groundwater monitoring program completed during the reporting period (April 17, 2020 through April 9, 2021); a comparison of the groundwater data collected from the October 2020 and April 2021 monitoring events to the COCs and historical groundwater analytical data; and conclusions regarding the monitoring completed and the resulting evaluations regarding remedial performance, effectiveness, and protectiveness.

3.1 Groundwater Monitoring Activities

In accordance with the SMP and NYSDEC February 28, 2020 approval to change the groundwater monitoring frequency from quarterly to semi-annually, the groundwater monitoring program during the reporting period consisted of two comprehensive semi-annual monitoring events (October 2020 and April 2021). These sampling events, following the IRMs and the supplemental groundwater injections described in Section 2.2.3.7 and Section 2.2.3.8 respectively, were conducted to determine the effectiveness of the groundwater remedy.

Semi-annual sampling was performed at 20 wells, two temporary piezometers screened in the storm sewer pipe bedding, and five on-site storm water catch basins. Refer to **Figure 3** for the location of the sampling points.

Groundwater samples from the monitoring wells were analyzed for VOCs and total organic carbon (TOC). Seven monitoring wells (four shallow overburden and three deep overburden) were also sampled for monitored natural attenuation (MNA) parameters. The two temporary piezometers screened in the storm sewer pipe bedding, and one on-site storm water catch basin, were analyzed for VOCs only. Groundwater analyses for VOCs, TOC, and MNA were performed by Eurofins TestAmerica, Inc. located in Amherst, New York. Two monitoring wells (one shallow overburden [MW-42S] and one deep overburden [MW-38]) were sampled in April 2021 as part of an annual event for concentrations of dechlorinating bacteria (DHC) and specific degradation enzymes. Analysis was performed by Microbial Insights, Inc. located in Knoxville, Tennessee. The groundwater monitoring program is summarized in **Table 1**.

Monitoring of groundwater conditions at this Site includes both groundwater level measurements and groundwater sampling and analysis. All monitoring and laboratory data, including QA/QC samples, have been uploaded to the NYSDEC EQulS database. In addition, groundwater purge data, water levels, and VOC, TOC, MNA, and microbial data from these two semi-annual events, as well as groundwater data collected prior to the IRMs, are summarized in **Appendix A**.

Groundwater samples were divided into three different groups based on historical analytical concentrations from individual wells: plume wells, downgradient wells, and upgradient wells (refer to **Table 2** for monitoring well, piezometer, and catch basin specifications). To the extent practical, wells were sampled from lowest to highest historical VOC concentrations. QA/QC samples including field duplicates, rinse blanks, and trip blanks were collected at the recommended rates stated in the SMP.

In accordance with the SMP, standard low-flow sampling procedures were followed. Each well was purged using a peristaltic pump with dedicated/disposable polyethylene tubing. During purging, field parameters (pH, dissolved oxygen, oxidation-reduction potential, specific conductance, turbidity, and

temperature) were measured and recorded. Refer to **Appendix A** for the final field parameter readings that were recorded prior to sample collection from each well and to **Appendix C** for purge logs from the October 2020 and April 2021 monitoring events. Purging continued until field parameters had stabilized and between three and five well volumes had been purged. After purging was complete, groundwater samples were collected from the wells, with VOC samples being collected first.

Grab samples were collected from the catch basin and temporary piezometers screened in the storm sewer pipe bedding. In some instances, field parameters were collected during sampling of these features; data are included in **Appendix A**.

A discussion of the groundwater analytical results for the two semi-annual sampling events as well as a detailed discussion of the most recent monitoring event (April 2021) are presented below.

3.2 April 2021 Groundwater Elevation and Flow Direction

In addition to groundwater elevation data recorded semi-annually from the 20 wells sampled, a comprehensive round of groundwater levels was measured from all Site wells and piezometers during the April 2021 sampling event. **Table 3** provides a summary of groundwater elevations measured on April 1, 2021.

Two groundwater surface contour maps for April 2021 are provided. Shallow overburden groundwater surface contours are presented in **Figure 11**, and deep overburden groundwater surface contours are presented in **Figure 12**; note that the groundwater elevation from MW-30 was not included in the groundwater surface contour figures as this well is screened through both the shallow and deep groundwater overburden units. Groundwater elevations measured on April 1, 2021 from the shallow overburden ranged from 687.69 ft above mean sea level (AMSL) at A1-GP15-S to 689.82 ft AMSL at MW-36S. Groundwater elevations measured on April 1, 2021 from the deep overburden ranged from 681.84 ft AMSL at MW-35D to 686.46 ft AMSL at MW-38D. Based on these water level measurements, the groundwater beneath the Site indicates a northwesterly flow direction. This flow direction is most pronounced in the deep overburden, as the shallow overburden groundwater flow within Area 1 is significantly influenced by Site features such as the on-site stormwater system as described in Section 2.2.2.

3.3 October 2020 and April 2021 Groundwater Analytical Data

The October 2020 and April 2021 groundwater sampling event were the sixteenth and seventeenth comprehensive sampling event conducted at the Site since completion of the groundwater injection IRM in May 2015. VOCs detected in groundwater during the October 2020 and April 2021 sampling events are presented in **Table 4** and **Table 5**, respectively. The analytical results are compared to the Site RAOs or groundwater criteria presented in TOGS 1.1.1 groundwater standards. 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 TOGS 1.1.1 groundwater standards from the most recent sampling event (April 2021).

**Groundwater Contaminants of Concern Summary of Results
April 2021**

VOCs Detected in Groundwater	Concentration Range (µg/L)	Number of Detections	RAO/TOGS 1.1.1 Exceedances
Chloroethane	1.6 – 12,000	5	4
1,1-Dichloroethane*	0.52 – 3,700	6	4
Methylene Chloride	1.6 – 100	4	2
Acetone	6.1 – 12	4	0
1,1,2-Trichloro-1,2,2-trifluoroethane	36 – 490	3	3
Vinyl chloride*	190 – 4,500	2	2
1,1,1-Trichloroethane*	210 – 2,200	2	3
2-Butanone (MEK)	2.9 – 5.4	2	0
cis-1,2-Dichloroethene*	2.2 - 340	2	1
Toluene	620	1	1
1,1-Dichloroethene*	200	1	1
Ethylbenzene	57	1	1
Xylenes, Total	56	1	1
2-Hexanone	4.3	1	0
Trichloroethene*	2.4	1	0

Note: VOCs in the table above followed by an asterisk (*) are Site COCs.

Fifteen VOCs were detected in groundwater from the monitoring wells (not including the five on-site stormwater catch basins and two temporary piezometers screened in the storm sewer pipe bedding) during the April 2021 sampling event. Eleven of the 15 VOCs detected exceeded either the Site-specific RAOs or the TOGS 1.1.1 groundwater standards at one or more wells. Six of the nine COCs were detected; all of which reflected a marked decrease in concentration of the parent VOCs (1,1,1-TCA, PCE, and TCE) following the IRMs. **Figures 13 through 19** illustrate April 2021 contours for individual COCs which were detected in shallow and/or deep overburden groundwater. **Figures 20 and 21** illustrate April 2021 contours for TVOCs in shallow and deep overburden groundwater respectively.

The highest concentrations of VOCs in shallow overburden groundwater were detected at A1-GP-10 and MW-42S. The highest concentrations of VOCs in deep overburden groundwater were detected at MW-40D. Chloroethane, 1,1-DCA, VC, and cis-1,2-DCE exhibited the highest overall concentrations in groundwater, all of which are degradation products of 1,1,1-TCA, PCE, and/or TCE.

Historical trend plots for the wells sampled in October 2020 and April 2021 for concentrations of 1,1,1-TCA, 1,1,2-TCA, 1,1-DCA, 1,1-DCE, 1,2-DCA, cis-1,2-DCE, PCE, TCE, and VC are provided in **Appendix B**. As stated above, the VOC concentrations in groundwater continue to show a degradation trend both as a result of naturally occurring reductive dechlorination processes and as a result of the 2015 injection IRM and 2019 supplemental groundwater injection program. Because TCE has been considered the primary source of groundwater impacts at the Site, a summary of historical and current TCE concentrations in groundwater for 19 monitoring wells is included in **Table 6**.

Based on the October 2020 and April 2021 groundwater data, there was one detection of TCE (A1-GP14-S). The concentration at A1-GP14-S (2.4 µg/L) was below the site-specific RAO for

groundwater and TOGS 1.1.1 groundwater standards. Overall, decreases in TCE concentrations observed since the 2015 injection IRM continue to show reductions of VOC concentrations in overburden groundwater. This is most clearly demonstrated on the TCE trend plots for monitoring wells MW-42S and MW-39D, and piezometers A1-GP02-S, A1-GP06-S and A1-GP10-S (refer to **Appendix B**).

3.4 October 2020 and April 2021 Storm Sewer Catch Basin and Storm Sewer Pipe Bedding Analytical Data

VOC data collected from on-site catch basins CB-1, CB-2, CB-3, and CB-4 exhibited a decrease in TVOCs since the June 2020 storm sewer pipe replacement activity as well as the IRMs and 2019 supplemental groundwater injection program. CB-E exhibited an increase in TVOCs (primarily xylenes), but it remains an order of magnitude below the concentrations measured during the RI. Refer to **Table 7** for a summary of the VOC data collected between April 2020 and April 2021.

Two temporary piezometers screened in the storm sewer pipe bedding (TP-5 and TP-6) were sampled for VOCs. TP-5 is located adjacent to CB-1 and TP-6 is located approximately 110 feet north (down-gradient) of CB-1. No COCs were detected above the site-specific RAOs in TP-5 or TP-6. Refer to **Table 7** for a summary analytical data collected between April 2020 and April 2021, **Appendix A** for a summary of historical data for the two temporary piezometers and the on-site catch basin (CB-1), and **Appendix B** for COC trend plots.

3.5 Comparison of April 2021 COCs in Groundwater with Pre-IRM Groundwater Analytical Data

Trend plots illustrating concentrations of COCs (1,1,1-TCA, 1,1,2-TCA, 1,1-DCA, 1,1-DCE, 1,2-DCA, PCE, TCE, and VC) in monitoring wells over time are provided in **Appendix B**. Because concentrations of TCE were historically the highest of the COCs detected at the Site, a discussion of historical and current TCE concentrations in groundwater at Site monitoring wells and piezometers is provided below.

In April 2021, TCE was detected in one monitoring well (A1-GP14-S) at 2.4 µg/L. TCE was detected at on-site catch basins CB-1 (9.9 µg/L), CB-2 (20 µg/L) and CB-E (0.99 µg/L), and at temporary piezometer TP-5 (0.87 µg/L). Based on the substantial decreases in concentrations of TCE at locations with historical detections of TCE, the 2015 IRM injection of ABC+® and 2019 supplemental groundwater injection of ABC-Ole® with ZVI appears to be promoting the continual degradation TCE. This decrease is most clearly demonstrated on the trend plots in **Appendix B** for monitoring wells A1-GP02-S (20,000 µg/L to below the detection limit), MW-42S (13,000 µg/L to below the detection limit), and MW-38D (11,000 µg/L to below the detection limit).

3.6 Groundwater MNA Data Summary

The use of the ERD amendments ABC+® and ABC-Ole® with ZVI was designed to provide needed nutrients, such as a soluble lactic acid carbon source, a phosphate buffer to control pH for optimum microbial growth, and ZVI which accelerates abiotic dechlorination of chlorinated ethenes and ethanes. The microbial analysis from “Bio-traps” placed on-site indicated that the necessary concentrations of microbes, such as DHC, which produces vinyl chloride reductase, remain present in the subsurface. Stimulation of the bacteria by the presence of chlorinated solvents, combined with the extra nutrients supplied by injection, have dramatically reduced the concentrations of original parent CVOCs TCE and 1,1,1-TCA over time. The initial concentrations of known TCA degradation products

(1,1-DCA and chloroethane), as well as of PCE/TCE degradation products (1,2-DCE isomers and VC), suggest that advanced decomposition of the chlorinated solvents has already enhanced microbial populations which would use CVOs as substrates. Induction of reducing conditions can accelerate the reductive dechlorination of parent solvents and increase the relative accumulation of degradation intermediates such as VC before complete mineralization. As the predominant aerobic conditions of groundwater at the Site return after treatment, the population of VC oxidizing bacteria should increase and complete dechlorination to ethene along with co-metabolic oxidation followed by complete mineralization. In the event that continued monitoring indicates this process has plateaued, then additional amendments or subsurface microbial characterization could be performed to attempt to further enhance degradation.

3.7 Dechlorinating Bacteria Analysis

Following the injection of ABC+® in April/May 2015, AECOM deployed “Bio-traps” in select shallow and deep overburden groundwater wells annually to monitor the concentration (i.e., cells/bead) of dechlorinating bacteria. The “Bio-traps” were submitted to Microbial Insights, Inc., in Knoxville, Tennessee for analysis. Per the April 2021 analysis, the detected shallow overburden groundwater concentrations of DHC, tceA Reductase, and VC Reductase from MW-42S continue to remain elevated in comparison to pre-injection concentrations.

Deep overburden groundwater at MW-38D shows DHC and degradative enzymes concentrations that are indicative of pre-injection concentrations. This indicates that reductive dechlorination may be complete at that location (Lu et al., 2006); note there were no detections above the reporting limit for any VOCs at MW-38D and only one deep overburden groundwater monitoring well (MW-40D) had detections exceeding either the Site-specific RAOs or TOGS 1.1.1 groundwater standards (1,1-DCA at 8.6 µg/L and chloroethane at 400 µg/L). Refer to the tables below and **Appendix A** for microflora data.

Shallow Overburden Dechlorinating Bacteria Data

Sample ID	MW-42S	MW-43S	MW-42S	MW-42S	MW-42S	MW-42S	MW-42S
Sample Date	7/27/15	7/12/16	4/12/17	4/12/18	5/6/19	4/9/20	4/6/21
Dechlorinating Bacteria (Cells/bead)							
DHC	<2.50x10 ¹	1.77x10 ²	3.98x10 ⁴	4.04x10 ⁴	1.84x10 ⁵	7.73x10 ¹	4.22x10 ⁴
tceA Reductase	<2.50x10 ¹	1.58x10 ¹	1.28x10 ⁴	4.92x10 ⁴	6.19x10 ³	<2.50x10 ¹	1.95x10 ³
BAV1 VC Reductase	<2.50x10 ¹	<2.50x10 ¹	<2.50x10 ¹	3.3x10 ¹	6.55x10 ¹	<2.50x10 ¹	<2.50x10 ¹
VC Reductase	<2.50x10 ¹	<2.50x10 ¹	1.04x10 ³	3.56x10 ³	4.59x10 ⁴	7.00x10 ⁰	4.77x10 ³

Deep Overburden Dechlorinating Bacteria Data

Sample ID	MW-38D	MW-38D	MW-38D	MW-38D	MW-38D	MW-38D	MW-38D
Sample Date	7/27/15	7/12/16	4/12/17	4/12/18	5/6/19	4/9/20	4/6/21
Dechlorinating Bacteria (Cells/bead)							
DHC	8.41x10 ²	4.00x10 ⁴	2.52x10 ⁴	1.81x10 ²	6.47x10 ²	1.09x10 ⁴	2.18x10 ²
tceA Reductase	<2.50x10 ¹	1.78x10 ²	7.24x10 ²	6.36x10 ¹	2.36x10 ¹	1.60x10 ²	3.63x10 ¹
BAV1 VC Reductase	1.20x10 ²	2.22x10 ⁴	2.20x10 ²	1.25x10 ¹	6.70x10 ⁰	<2.50x10 ¹	<2.50x10 ¹
VC Reductase	1.47x10 ¹	6.96x10 ²	9.12x10 ²	5.16x10 ¹	1.12x10 ²	1.08x10 ³	<2.50x10 ¹

3.8 Dechlorinating Chemical Analysis

In addition to the DHC and degradative enzyme results, the presence and distribution of TCE degradation products (cis-1,2-DCE and VC) and 1,1,1-TCA degradation products (1,1-DCA and chloroethane) provide supportive evidence that the attenuation of TCE and 1,1,1-TCA and their degradation products, via reductive dechlorination, continues to occur in-situ at the Site. The occurrence and concentrations of these degradation products are directly related to the historic distribution of TCE and 1,1,1-TCA in the subsurface. A limited number of other VOCs were sporadically detected in groundwater at the Site during the April 2021 sampling event, with most of these detections in groundwater located at wells A1-GP02-S, A1-GP06-S, A1-GP10-S, MW-42S, and MW-40D; refer to **Table 5**.

3.9 Total Organic Carbon

Samples were collected for TOC analysis to monitor the concentration of available carbon sources for the optimum microbial growth. Although TOC concentrations have decreased over time in the areas outside the 2019 supplemental groundwater injection area (refer to **Figure 10**), locations within the 2019 supplemental groundwater injection area continue to exhibit elevated TOC concentrations as compared to background. Refer to **Appendix A** for a summary of TOC concentrations for October 2020 and April 2021. Refer to **Figure 22** and **Figure 23** for shallow and deep overburden groundwater TOC plume figures respectively.

4.0 Site Inspection

This section describes the semi-annual Site inspections, O&M tasks completed, and recommendations for improvements.

4.1 Boiler Room

Inspections of the boiler room floor were performed concurrently during the October 2020 and April 2021 semi-annual groundwater sampling events. All previous repairs that were completed in November 2014 and November 2017 remain intact, and no additional cracks or perforations were observed. Note, as stated in the SMP, if the boiler room becomes occupied or its usage changes, additional treatment and/or control measures will need to be evaluated.

4.2 Monitoring Wells

As per the SMP, Site monitoring wells were inspected during each of the semi-annual groundwater sampling events; no issues were observed regarding the condition of the wells.

5.0 Conclusions and Recommendations

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

5.1 Conclusions

1. Groundwater elevations measured on April 1, 2021 from the shallow overburden ranged from 687.69 ft AMSL at A1-GP15-S to 689.82 ft AMSL at MW-36S. Groundwater elevations measured on April 1, 2021 from the deep overburden ranged from 681.84 ft AMSL at MW-35D to 686.46 ft AMSL at MW-38D. Based on these water level measurements, the groundwater beneath the Site exhibits a northwesterly flow direction. This flow direction is most pronounced in the deep overburden, as the shallow overburden groundwater is significantly influenced by Site features (e.g., the stormwater sewer system and adjacent paved areas).
2. The groundwater analytical data indicate that the IRMs and 2019 supplemental groundwater injection were, and continue to be, successful in the attenuation of CVOCs.
3. The groundwater microbial analyses indicate that the necessary microbes, such as DHC, and degradative enzymes are present in the shallow overburden at sufficient concentrations to promote reductive dechlorination, whereas the deep overburden groundwater shows a decrease of DHC and degradative enzymes down to pre-injection concentrations (and a notable decrease in CVOCs).
4. VOC data collected from the on-site catch basins in April 2021 exhibited detections of some COCs but continued to show a general decreasing trend in concentration of COCs following the IRMs.
5. Concentrations of VOCs in samples collected in April 2021 from the temporary piezometers screened in the storm sewer bedding exhibited detections above the screening criteria of some COCs at TP-5 (located adjacent to CB-1) but below the Site-specific RAOs or TOGS 1.1.1 groundwater standards. There were no detections of VOCs above the reporting limit at TP-6 (down-gradient of TP-5).
6. Semi-annual monitoring data collected during the reporting period demonstrate that TOC concentrations in the areas targeted for injections remain above pre-injection levels, maintaining conditions that promote microbial growth.
7. The boiler room floor crack caulking and drain pipe annulus seals (i.e., sub-slab mitigation controls) were inspected semi-annually and did not need repair. No additional floor cracks or perforations in the floor were noted during the reporting period.

5.2 Recommendations

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

1. Continue semi-annual inspections of the boiler room sub-slab mitigation controls.

2. Continue semi-annual inspections of the monitoring well network.
3. Perform semi-annual comprehensive groundwater sampling events (October 2021 and April 2022); refer to **Table 1** for a list of locations to be sampled and associated analyses.
4. Review and update the Site health and safety plan as necessary.

5.3 Proposed Monitoring and Compliance Sampling Schedule

The proposed schedule for groundwater sampling at the Site during the next reporting period includes semi-annual sampling of 20 wells, five on-site catch basins, and two temporary piezometers screened in the storm sewer pipe bedding; refer to **Table 1** for a list of locations to be sampled and associated analyses.

It is anticipated that the next PRR will be prepared following receipt of laboratory analytical results for the April 2022 comprehensive groundwater sampling event, and it will include the results from groundwater sampling events scheduled for October 2021 and April 2022.

6.0 Evaluate Remedy Performance, Effectiveness, and Protectiveness

6.1 Institutional Controls and Engineering Controls Certification

As a component of the PRR requirement, included in **Appendix D** is the completed IC/EC certification form.

Institutional controls include:

1. Groundwater Use Restrictions
2. Land Use Restrictions
3. Site Management Plan
4. Soils Monitoring Plan
5. Groundwater Monitoring Plan
6. IC/EC Plan

Engineering controls include:

1. None listed.

7.0 References

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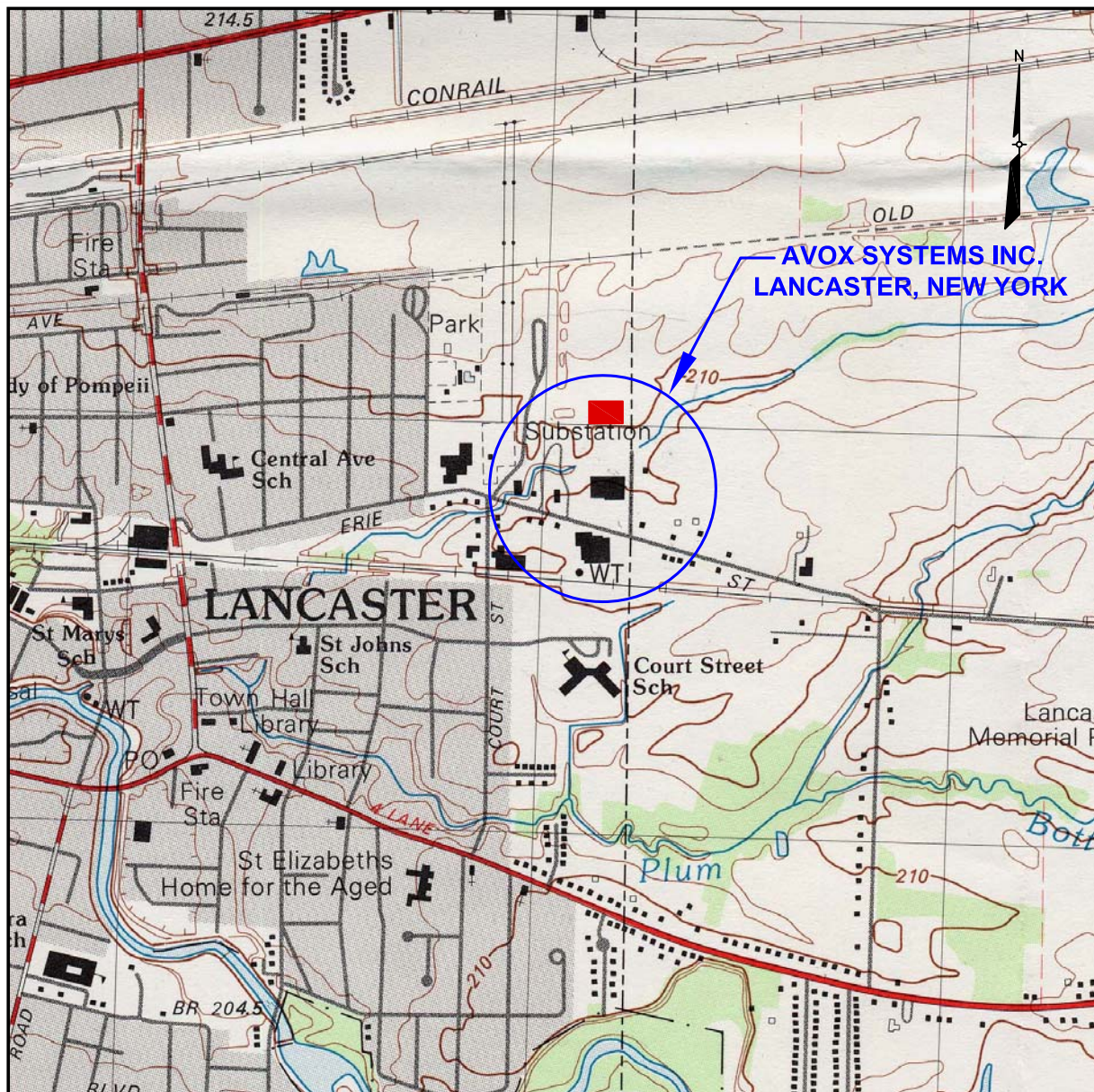
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Figures



SOURCE:
1982 U.S. GEOLOGIC SURVEY 7.5 X 15 MINUTE TOPOGRAPHIC QUADRANGLE
LANCASTER, NEW YORK

LEGEND

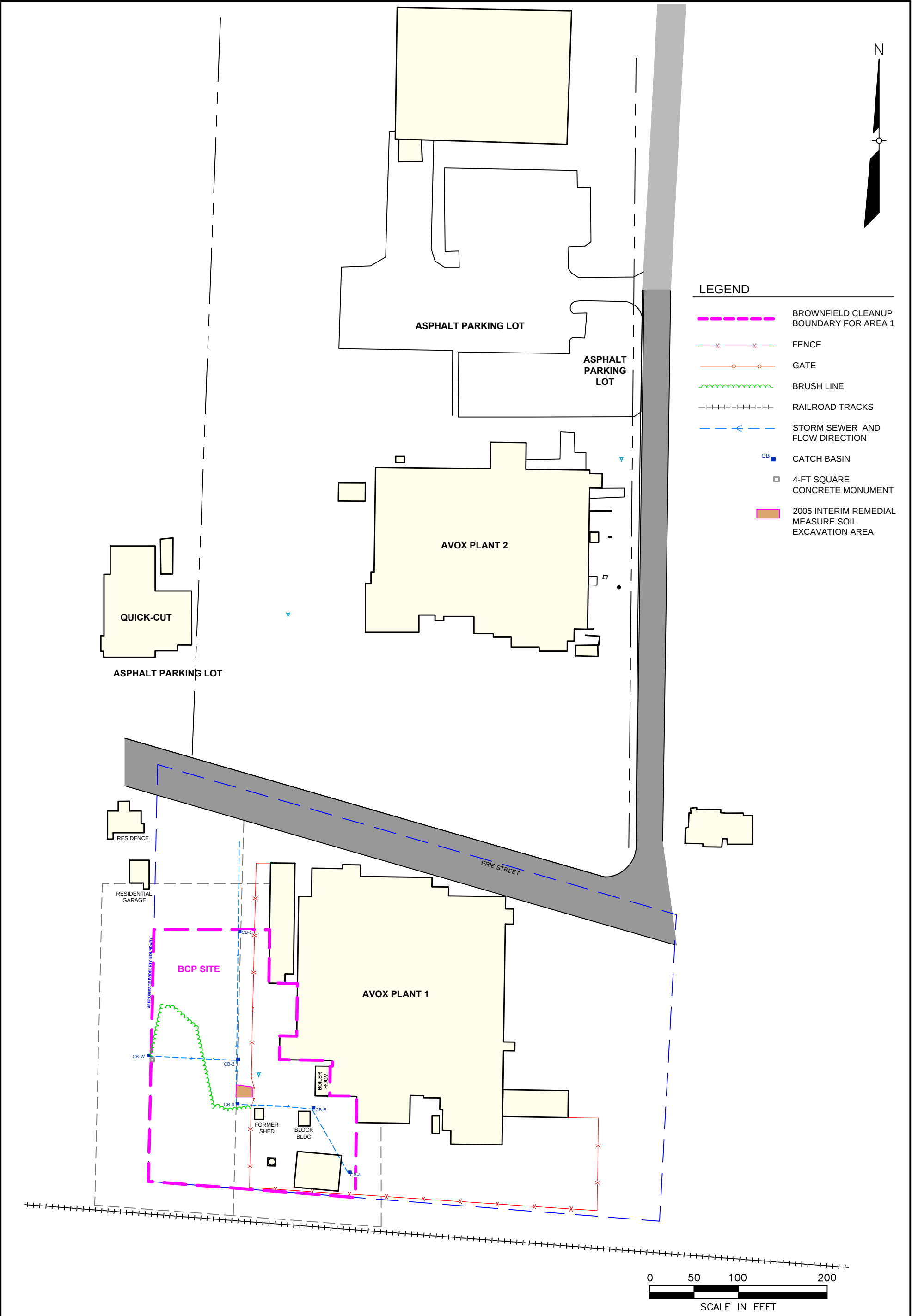
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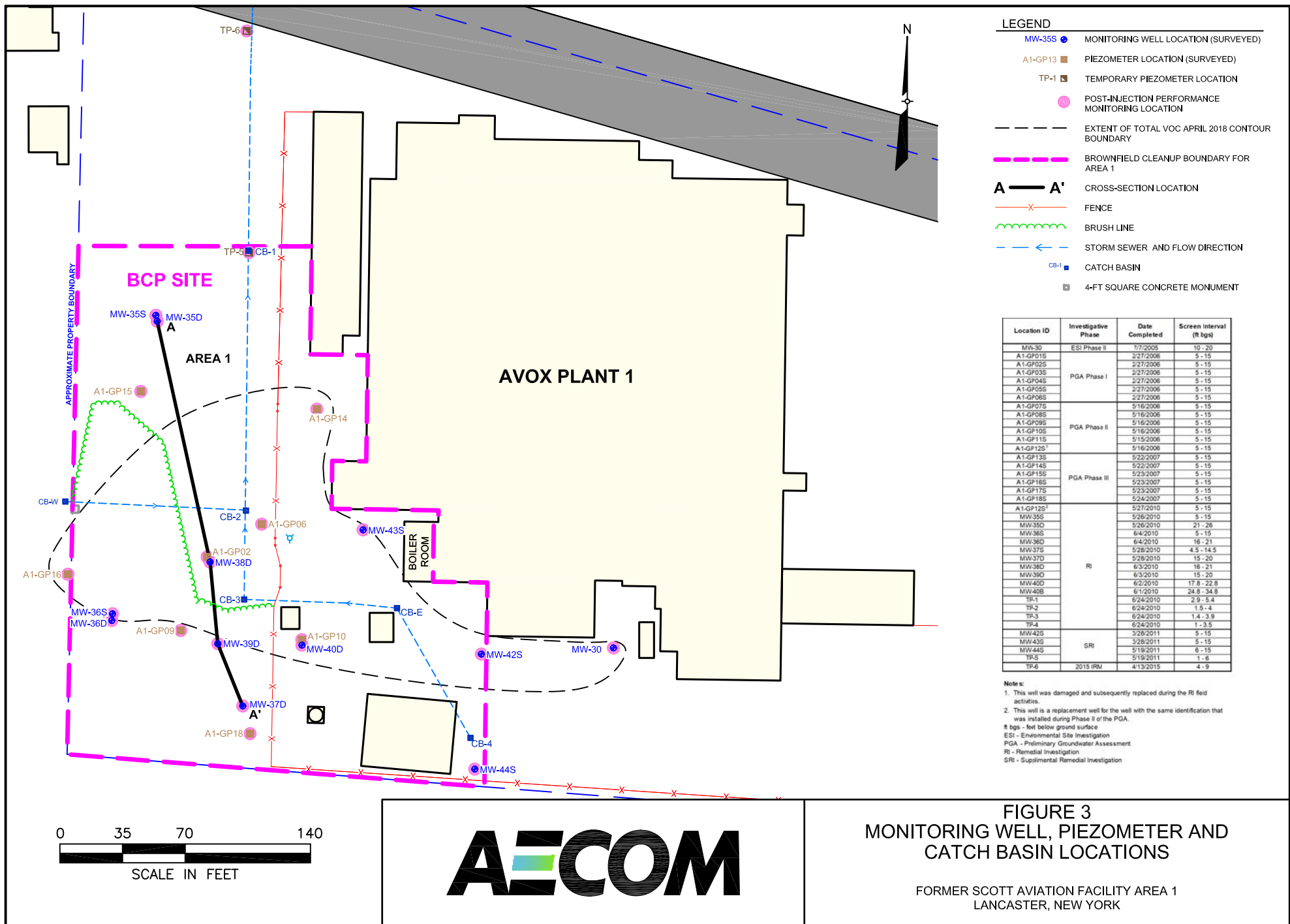
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**FIGURE 1
SITE LOCATION MAP**

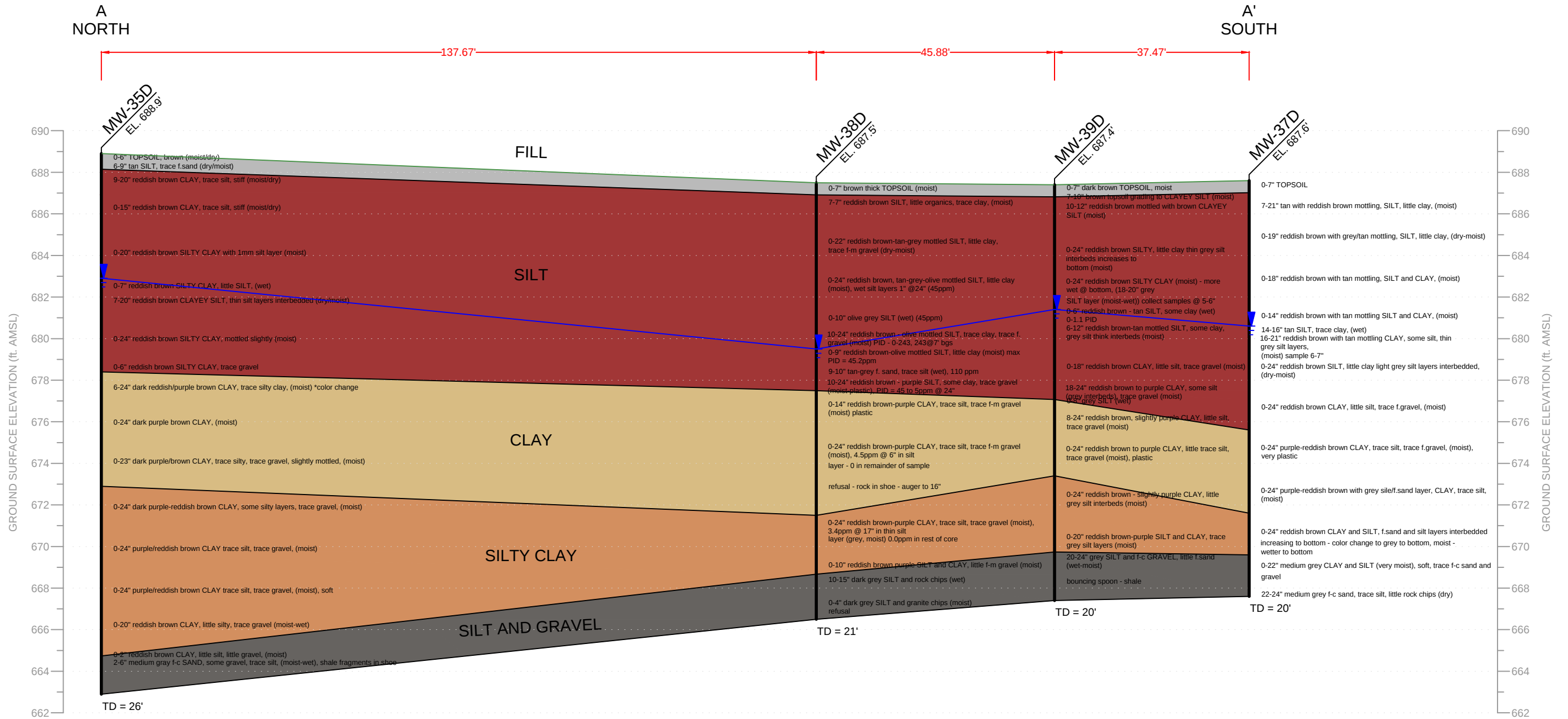
FORMER SCOTT AVIATION FACILITY AREA 1
LANCASTER, NEW YORK





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LEGEND:

- | | |
|---|---|
|  FILL | TD = TOTAL DEPTH |
|  SILT |  GROUNDWATER ELEVATION (ft AMSL) |
|  CLAY | |
|  SILTY CLAY | |
|  SILT AND GRAVEL | |

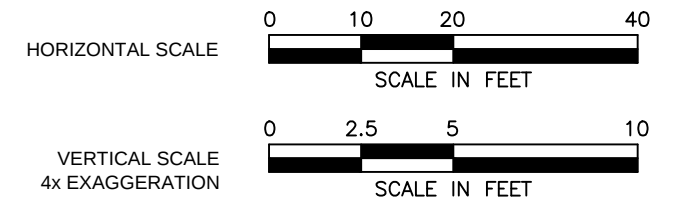
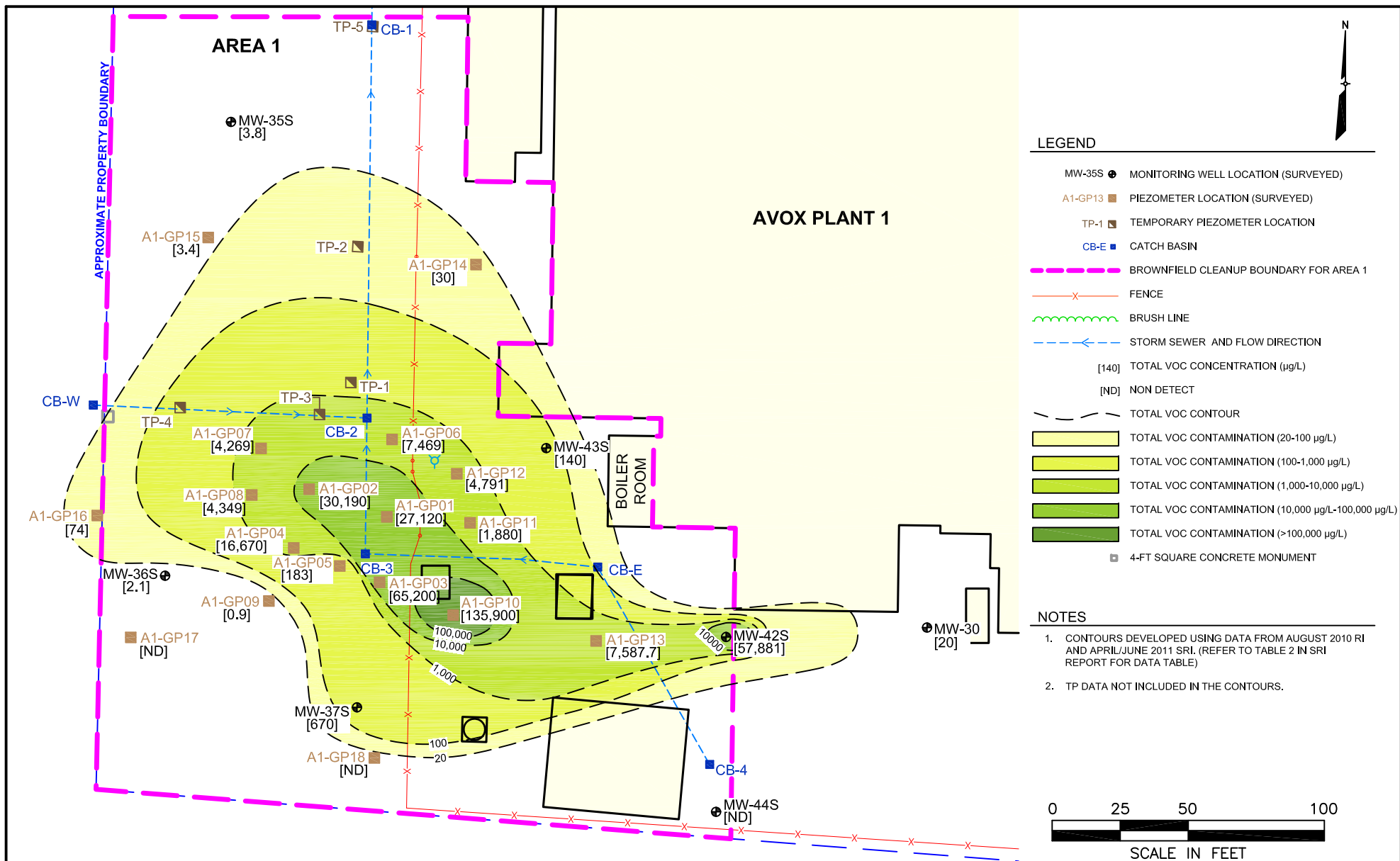


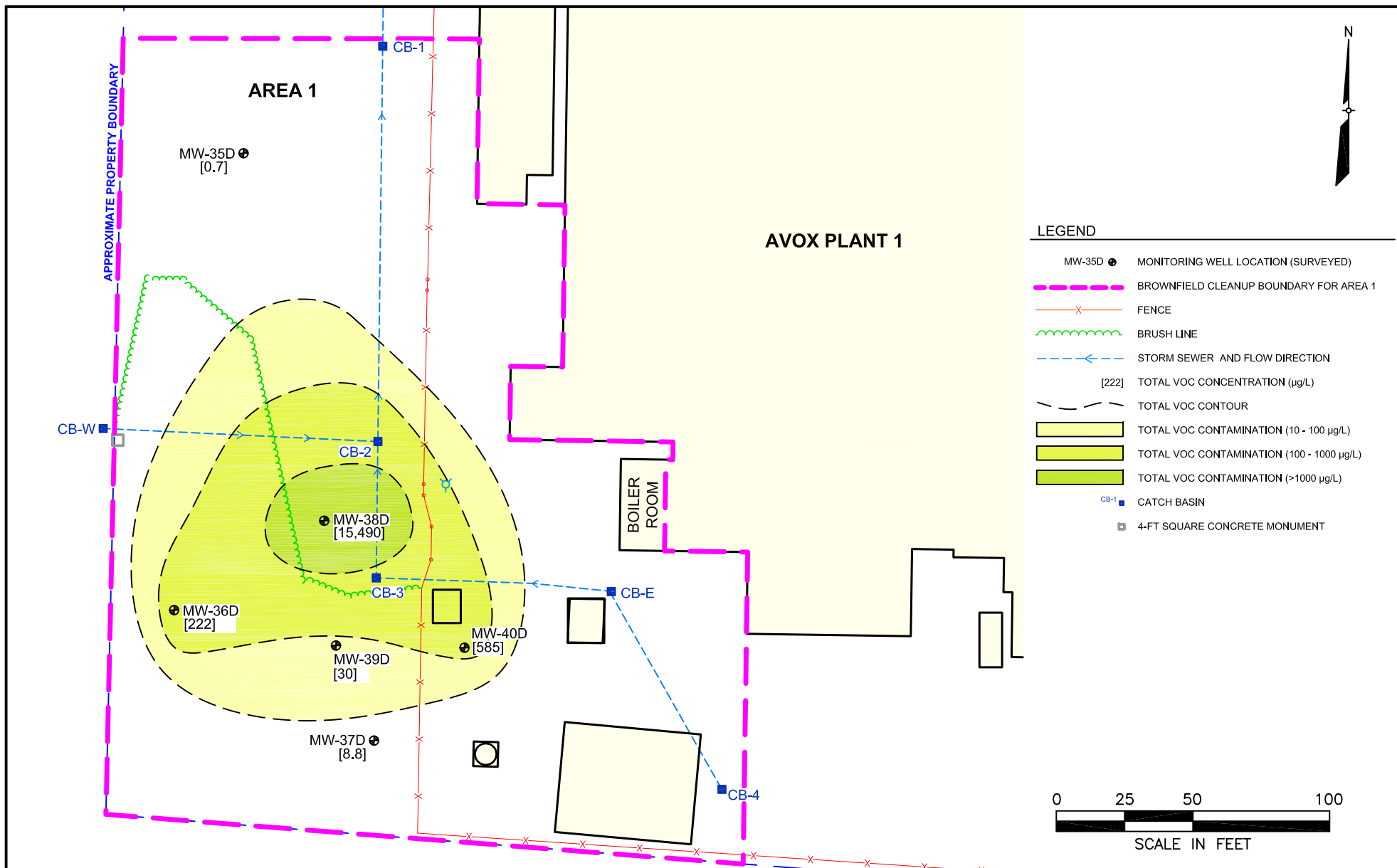
FIGURE 4
GEOLOGIC CROSS-SECTION

FORMER SCOTT AVIATION FACILITY AREA 1
LANCASTER, NEW YORK



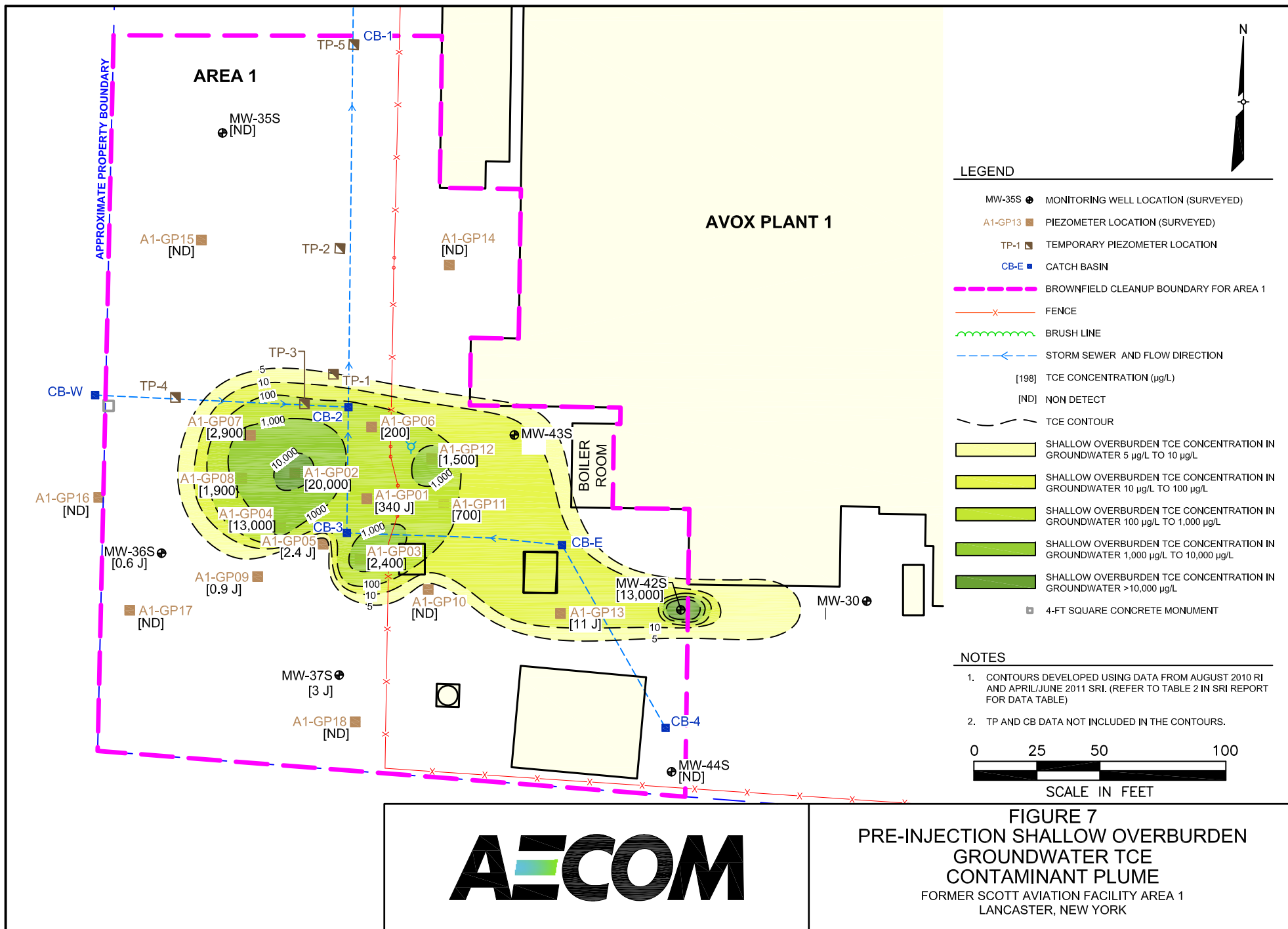
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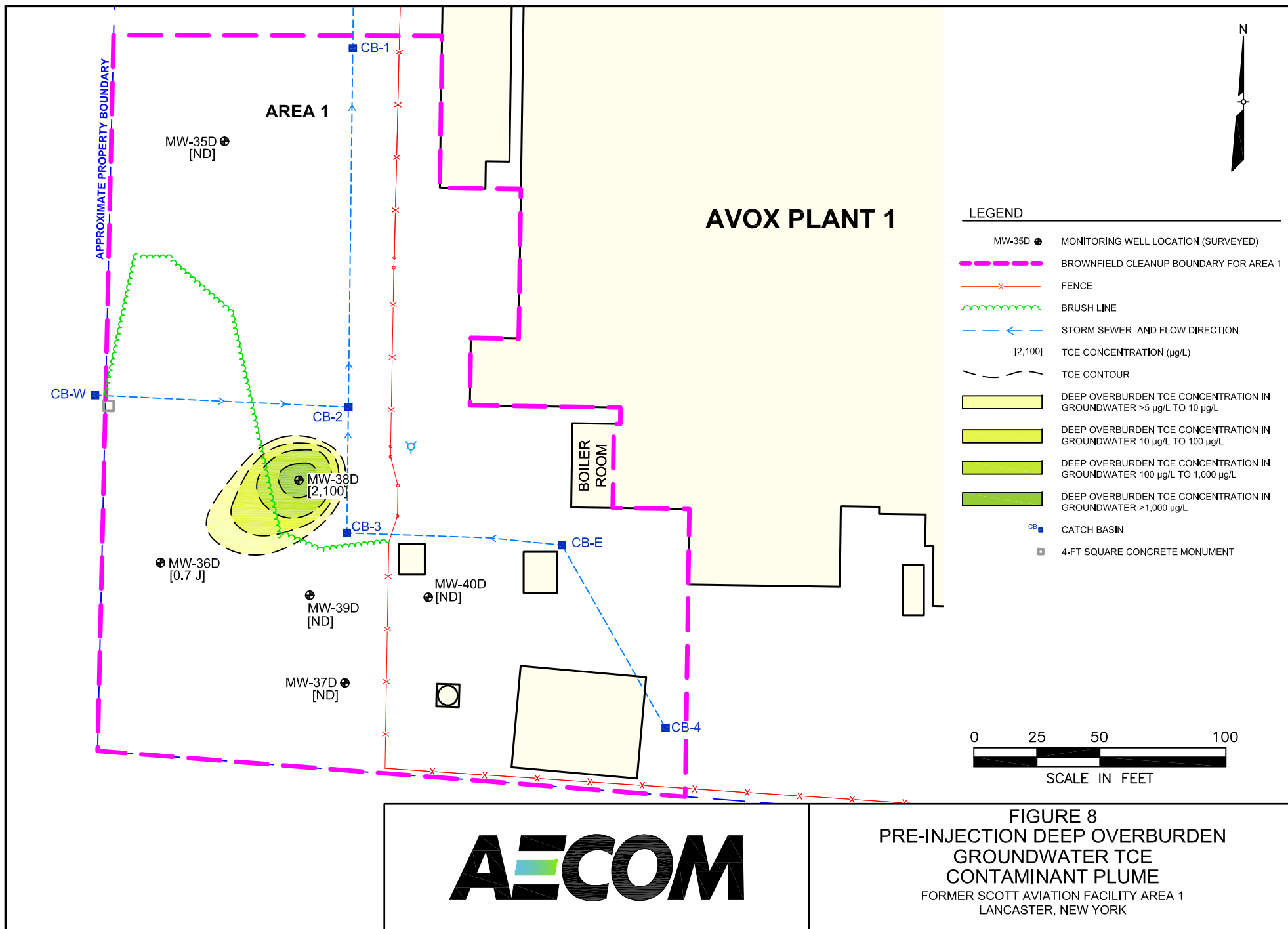
FIGURE 5
PRE-INJECTION SHALLOW OVERBURDEN
GROUNDWATER TOTAL VOC
CONTAMINANT PLUME
 FORMER SCOTT AVIATION FACILITY AREA 1
 LANCASTER, NEW YORK



AECOM

FIGURE 6
PRE-INJECTION DEEP OVERBURDEN
GROUNDWATER TOTAL VOC
CONTAMINANT PLUME
 FORMER SCOTT AVIATION FACILITY AREA 1
 LANCASTER, NEW YORK





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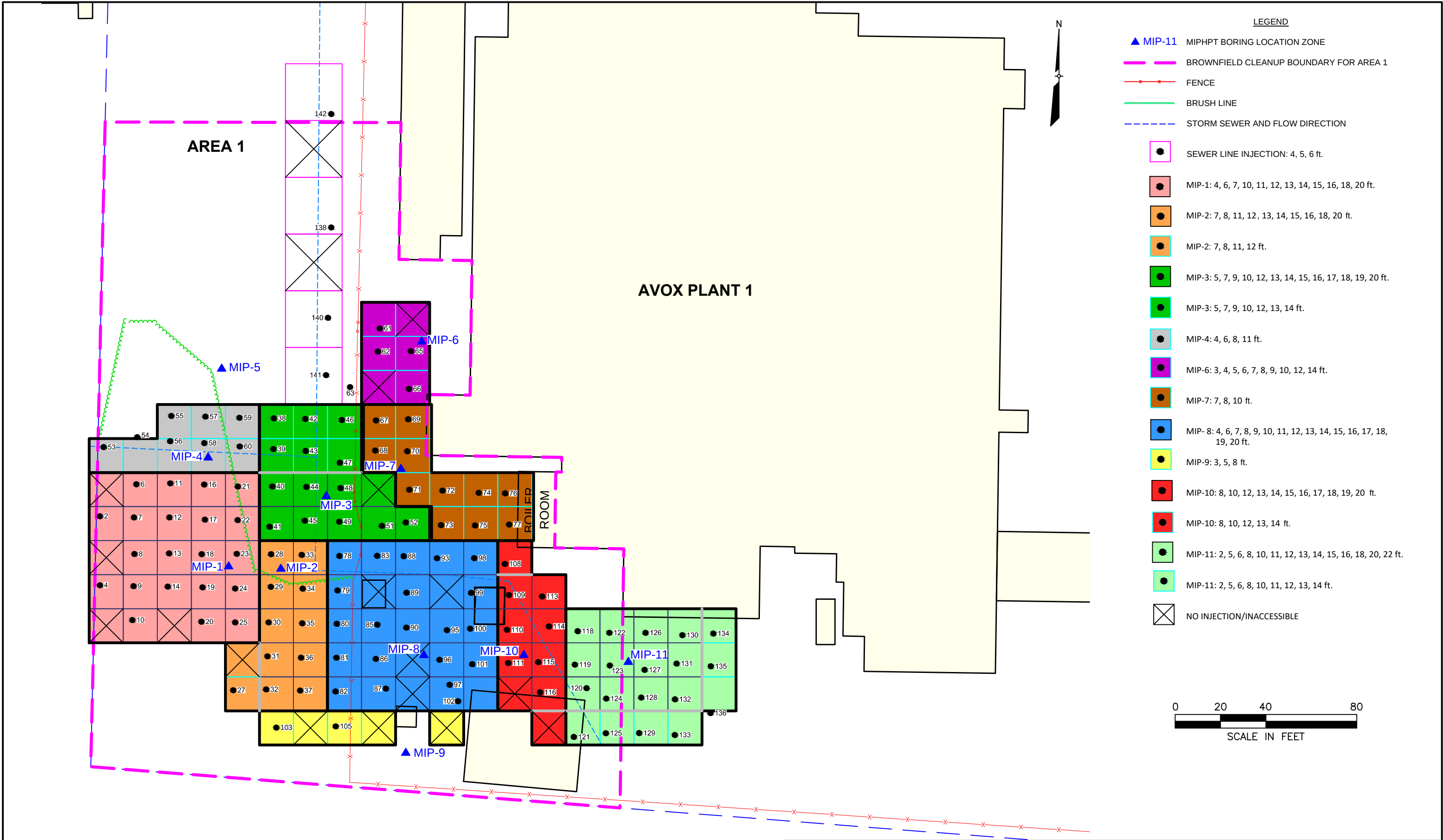
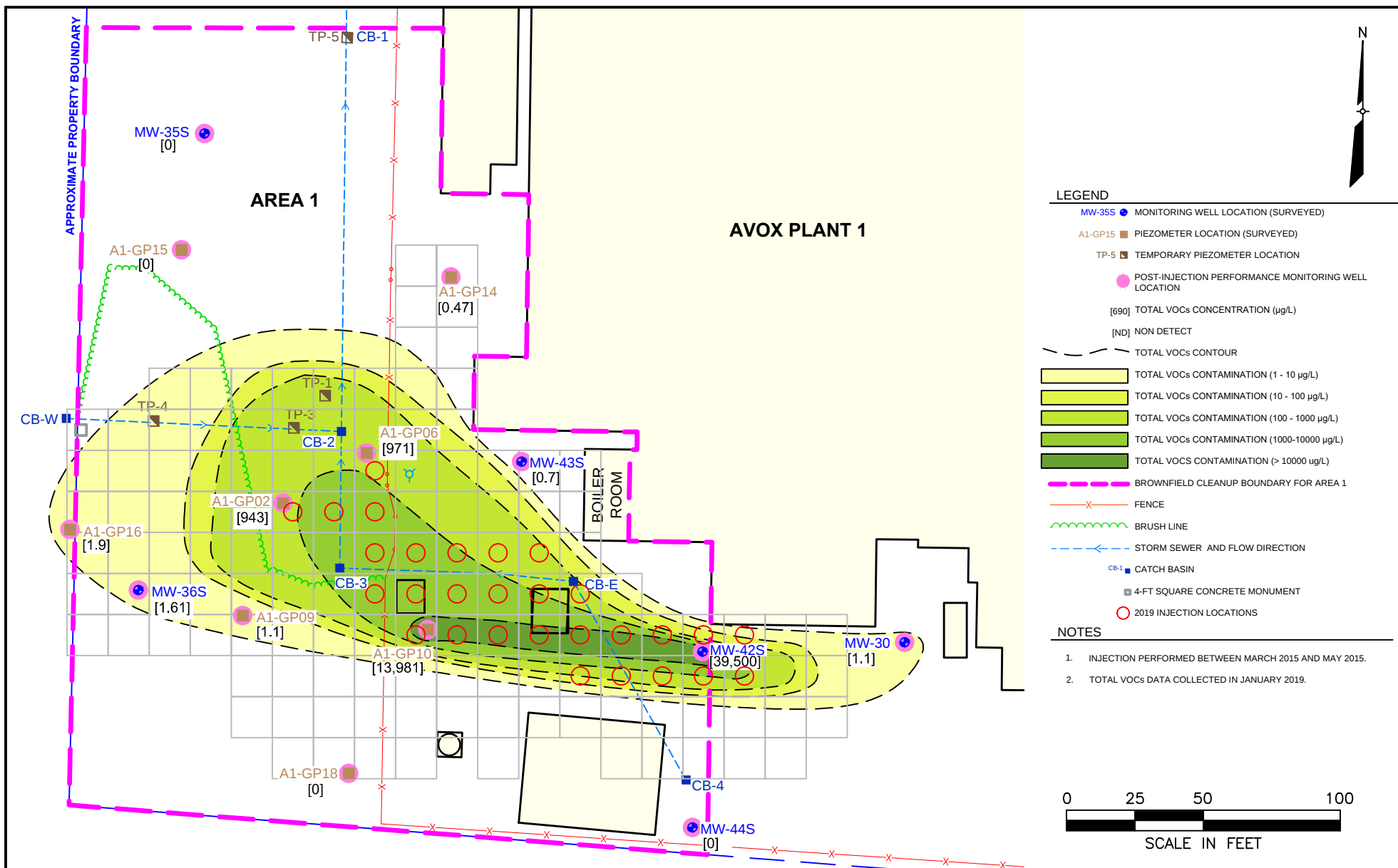


FIGURE 9
2015 IRM INJECTION ZONE DETAILS

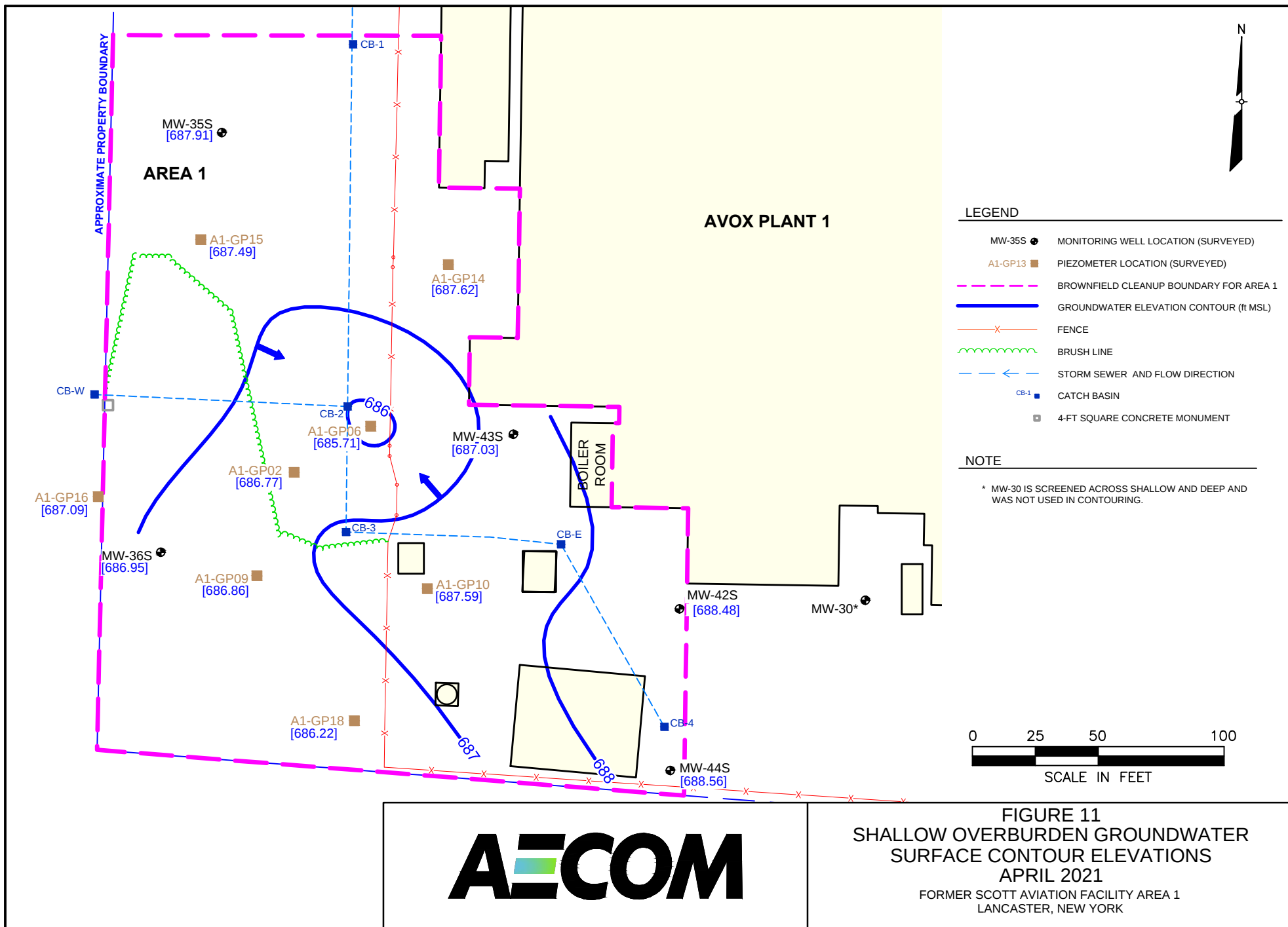
FORMER SCOTT AVIATION FACILITY AREA 1 LANCASTER,
NEW YORK

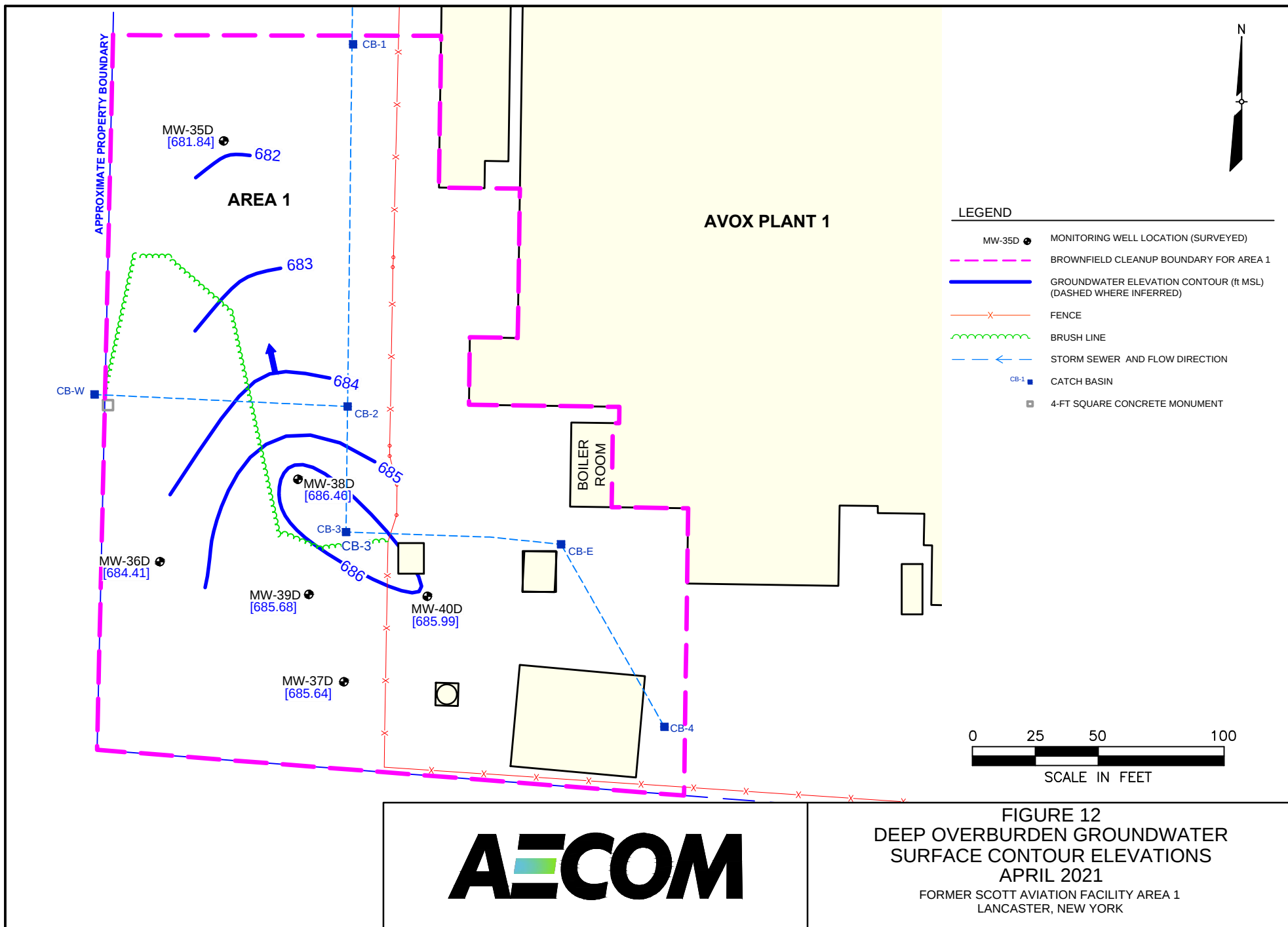


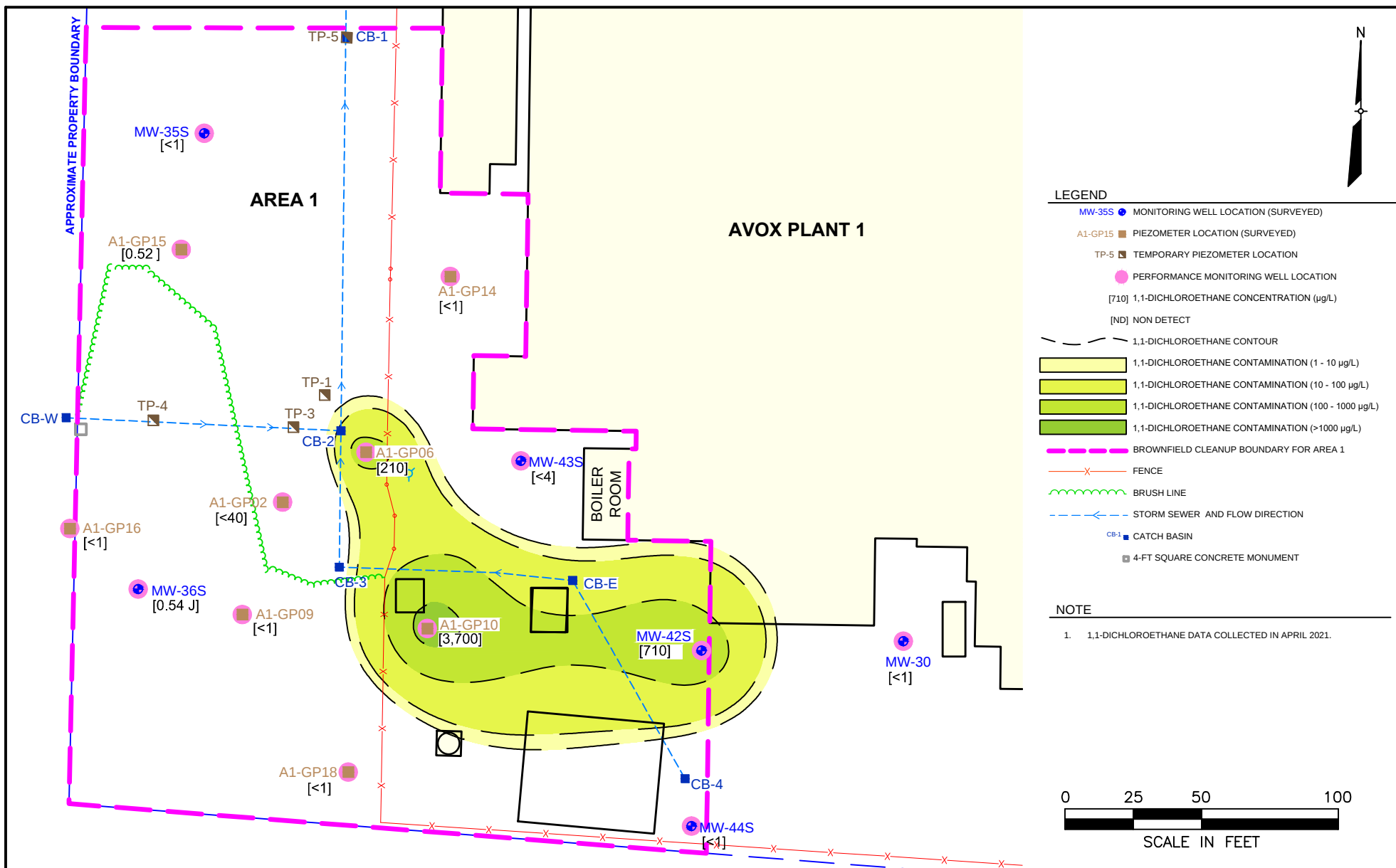
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FIGURE 10
2019 SUPPLEMENTAL GROUNDWATER
INJECTION AREA

FORMER SCOTT AVIATION FACILITY AREA 1 LANCASTER, NEW YORK

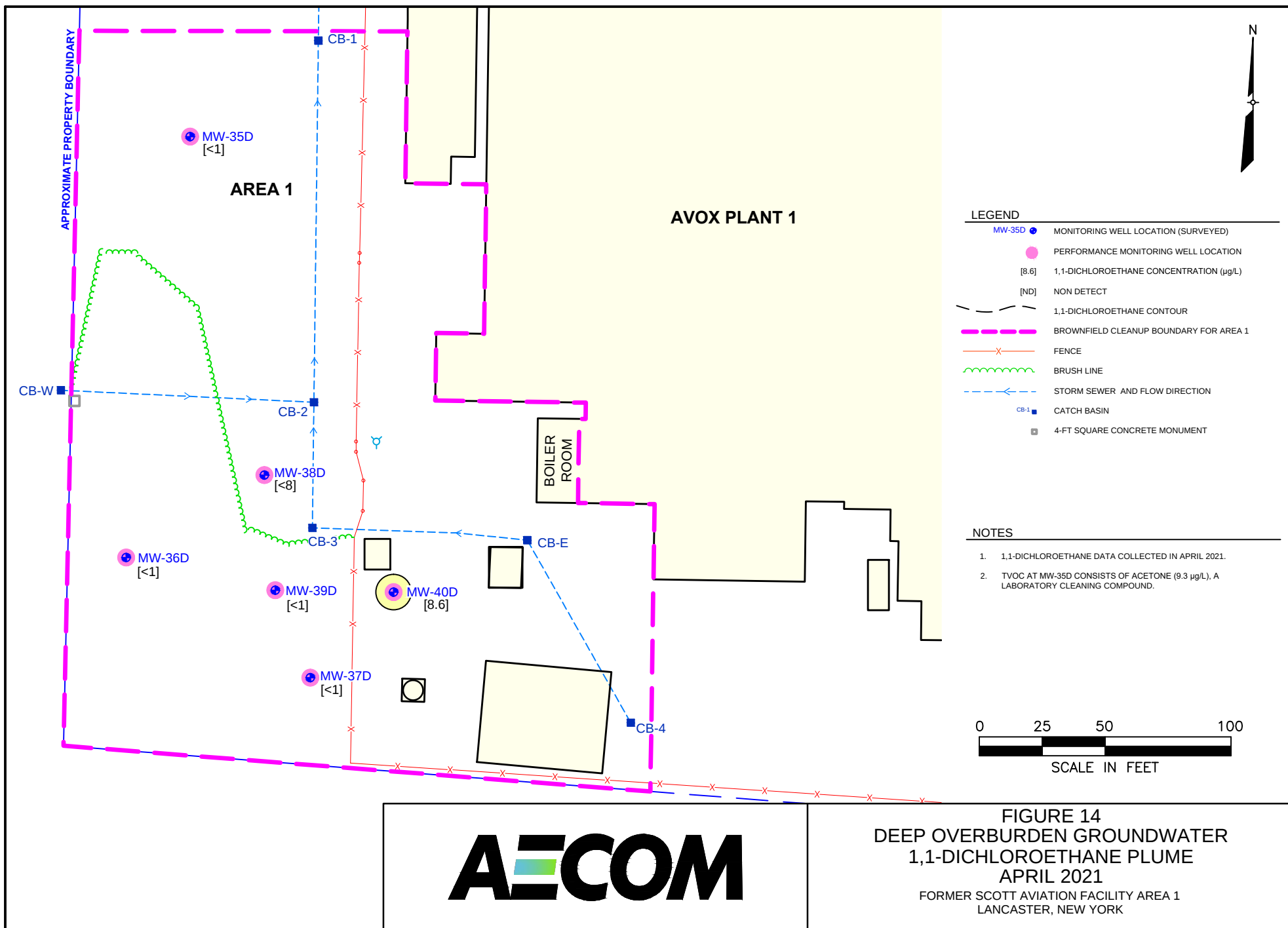


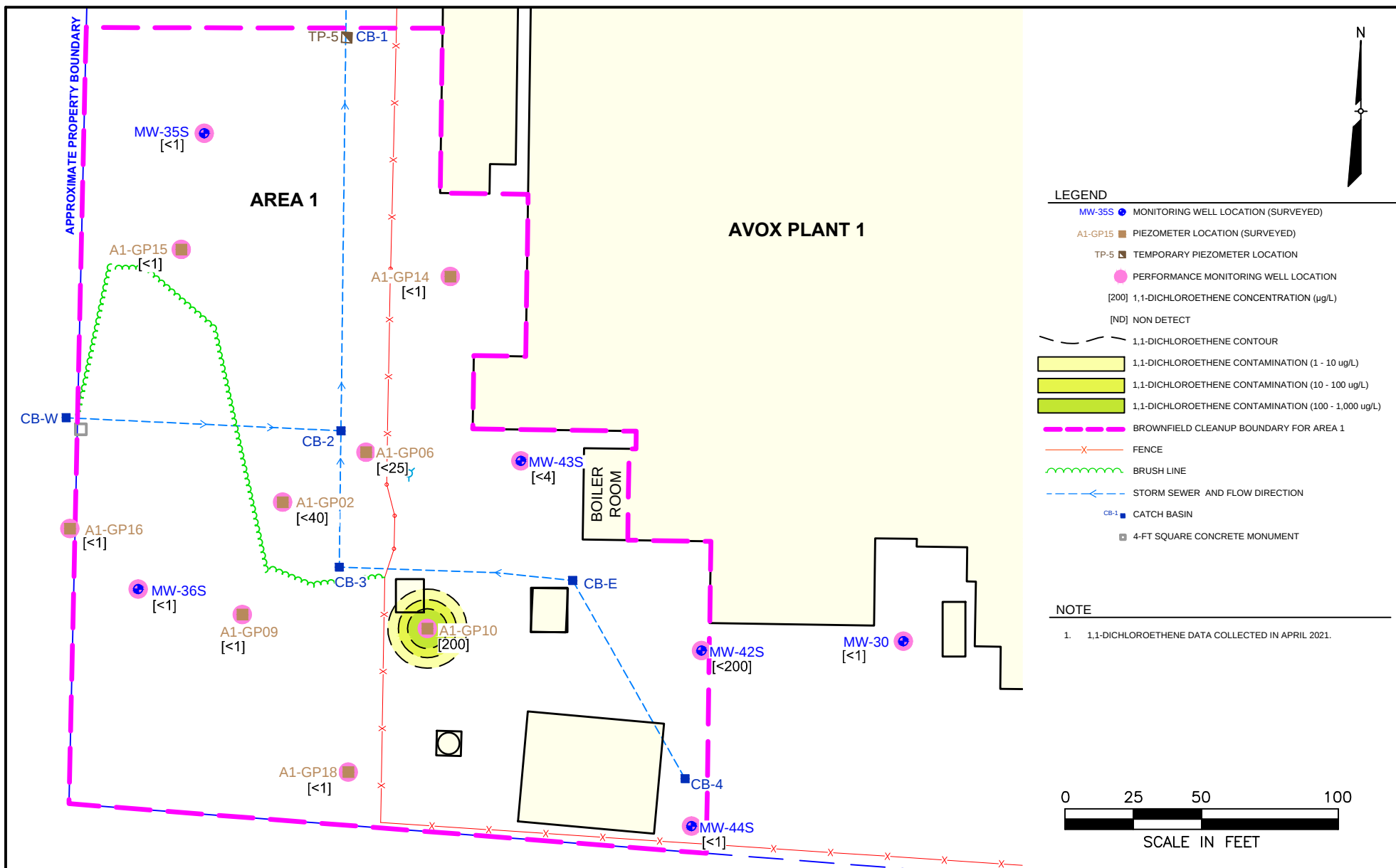




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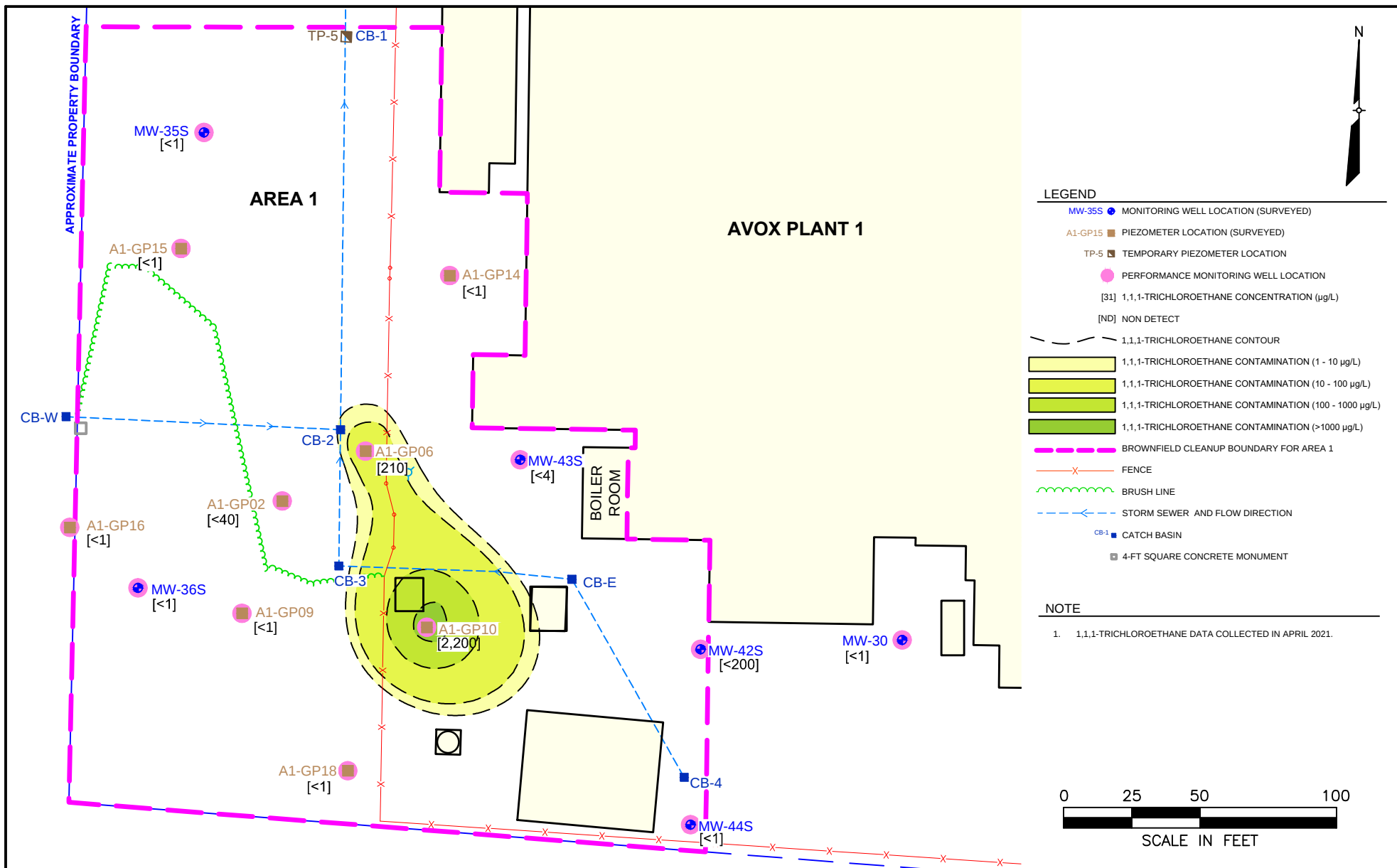
FIGURE 13
SHALLOW OVERBURDEN GROUNDWATER
1,1-DICHLOROETHANE PLUME
APRIL 2021
 FORMER SCOTT AVIATION FACILITY AREA 1
 LANCASTER, NEW YORK





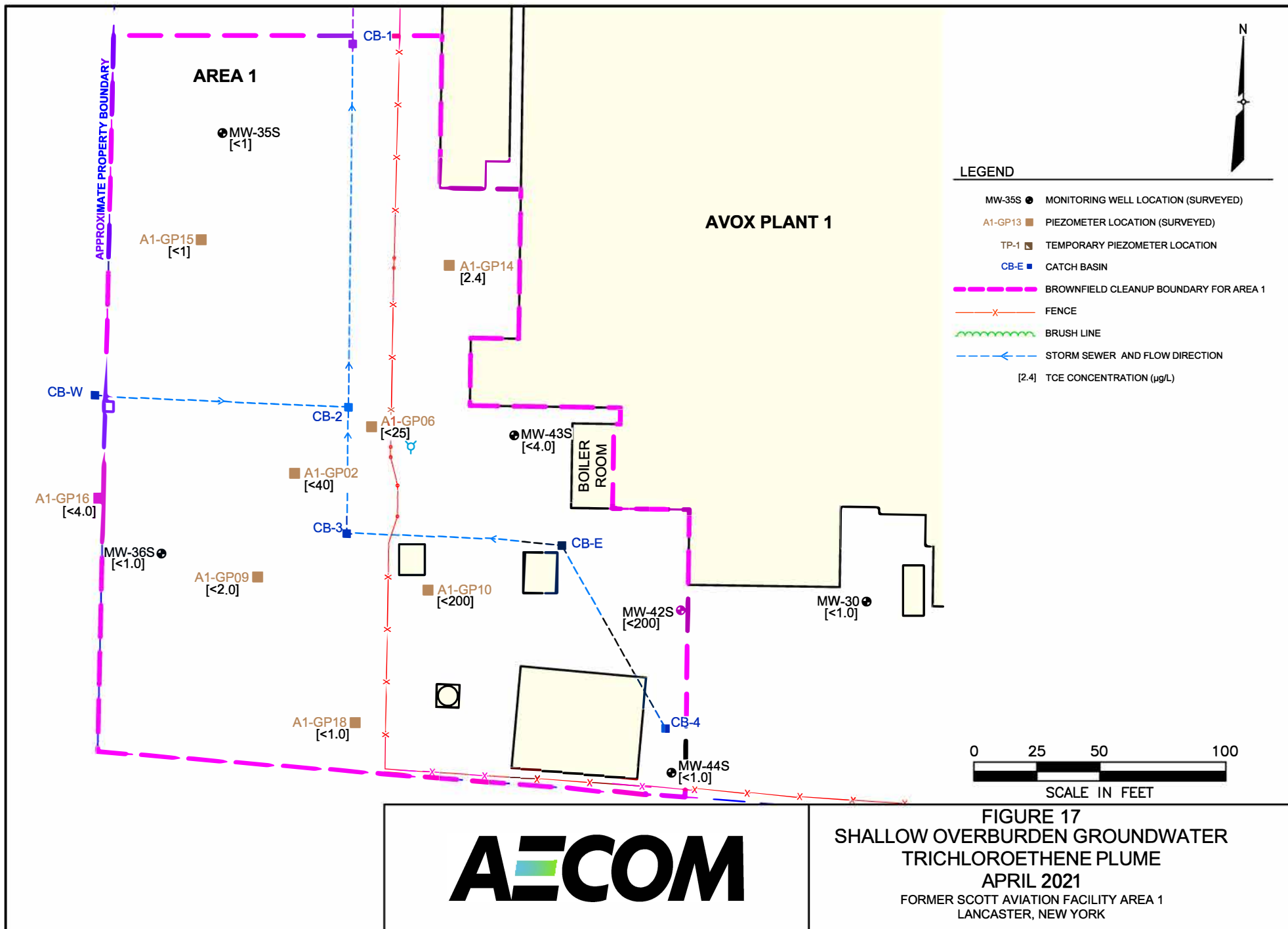
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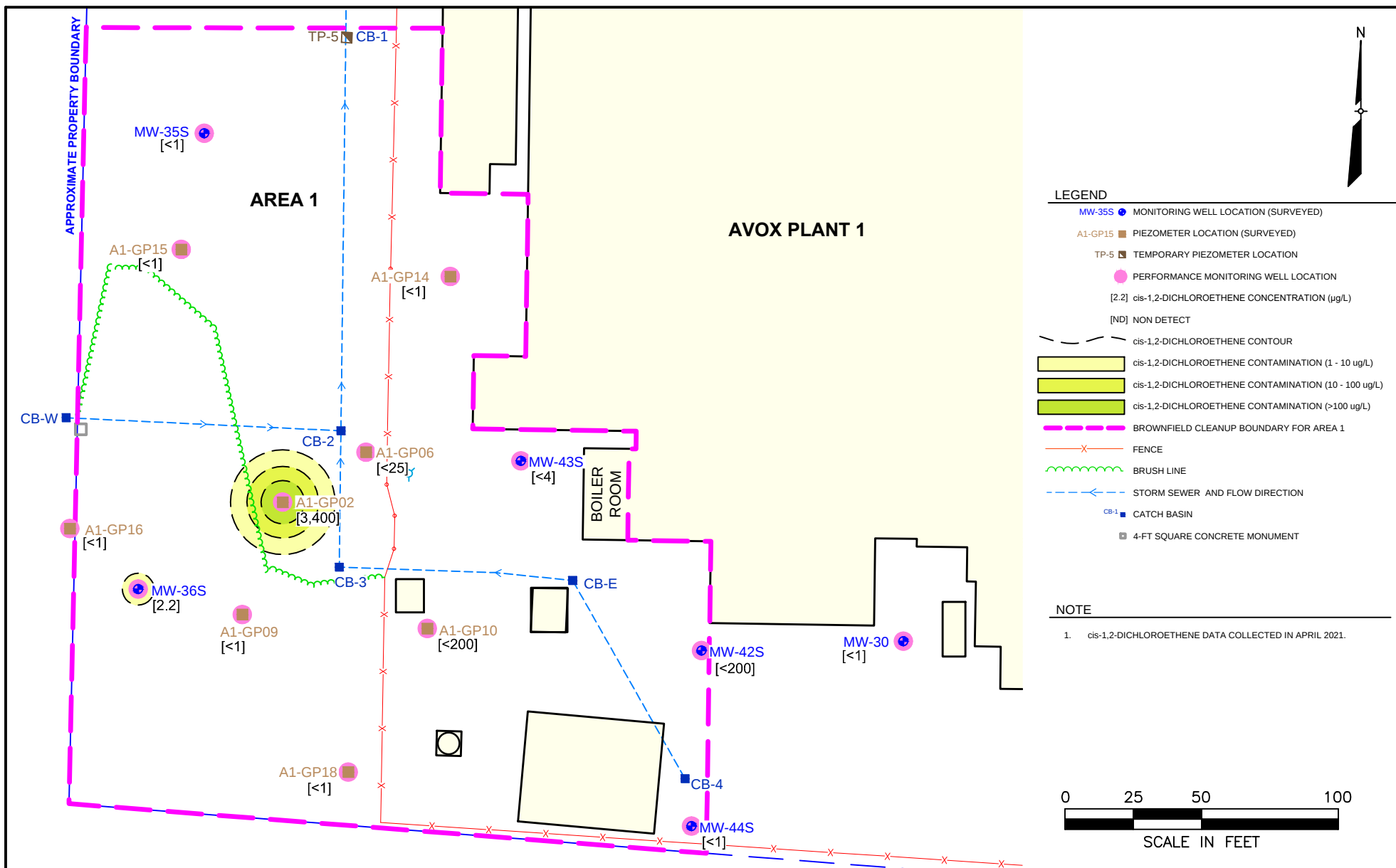
FIGURE 15
SHALLOW OVERBURDEN GROUNDWATER
1,1-DICHLOROETHENE PLUME
APRIL 2021
 FORMER SCOTT AVIATION FACILITY AREA 1
 LANCASTER, NEW YORK



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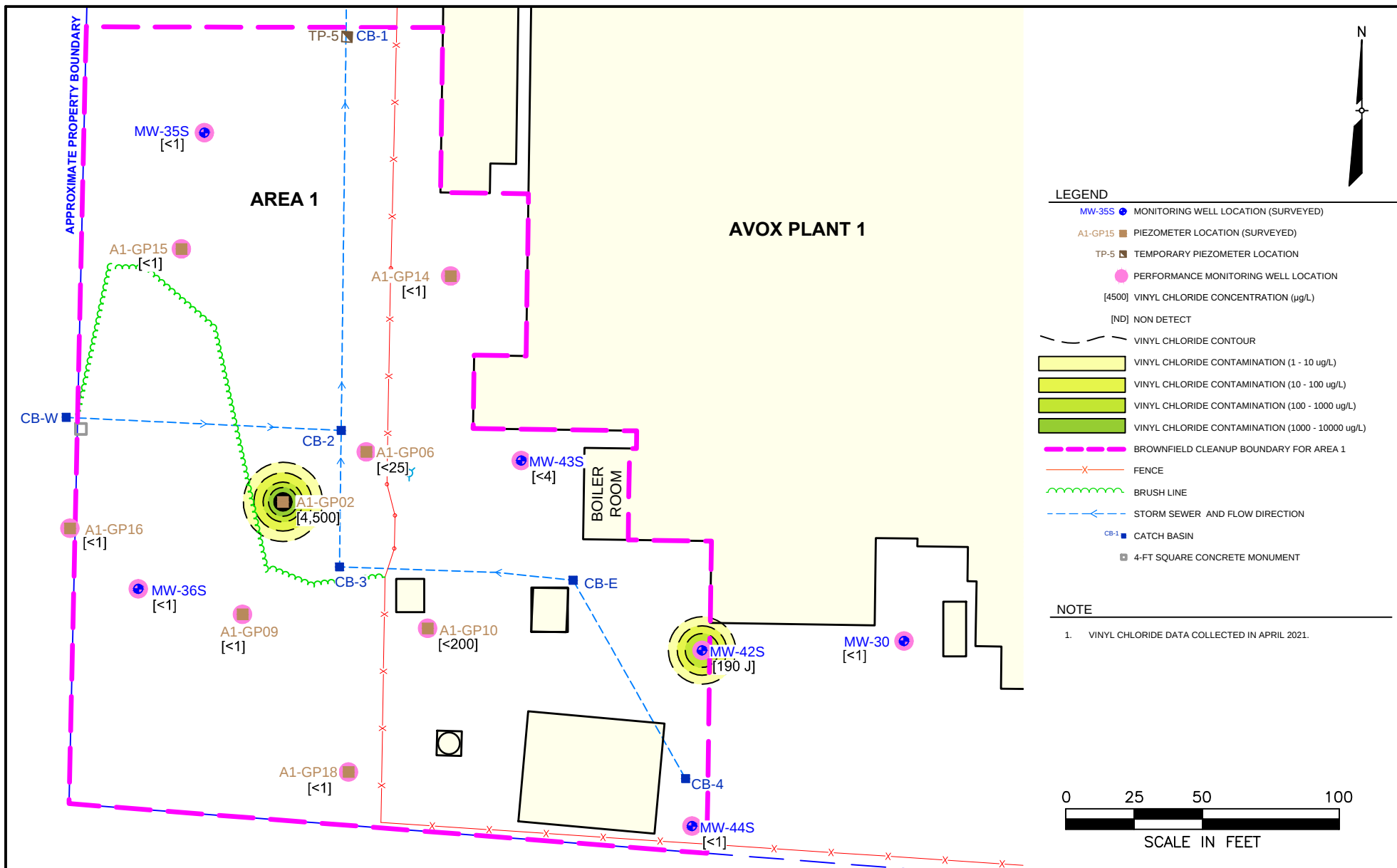
FIGURE 16
SHALLOW OVERBURDEN GROUNDWATER
1,1,1-TRICHLOROETHANE PLUME
APRIL 2021
 FORMER SCOTT AVIATION FACILITY AREA 1
 LANCASTER, NEW YORK





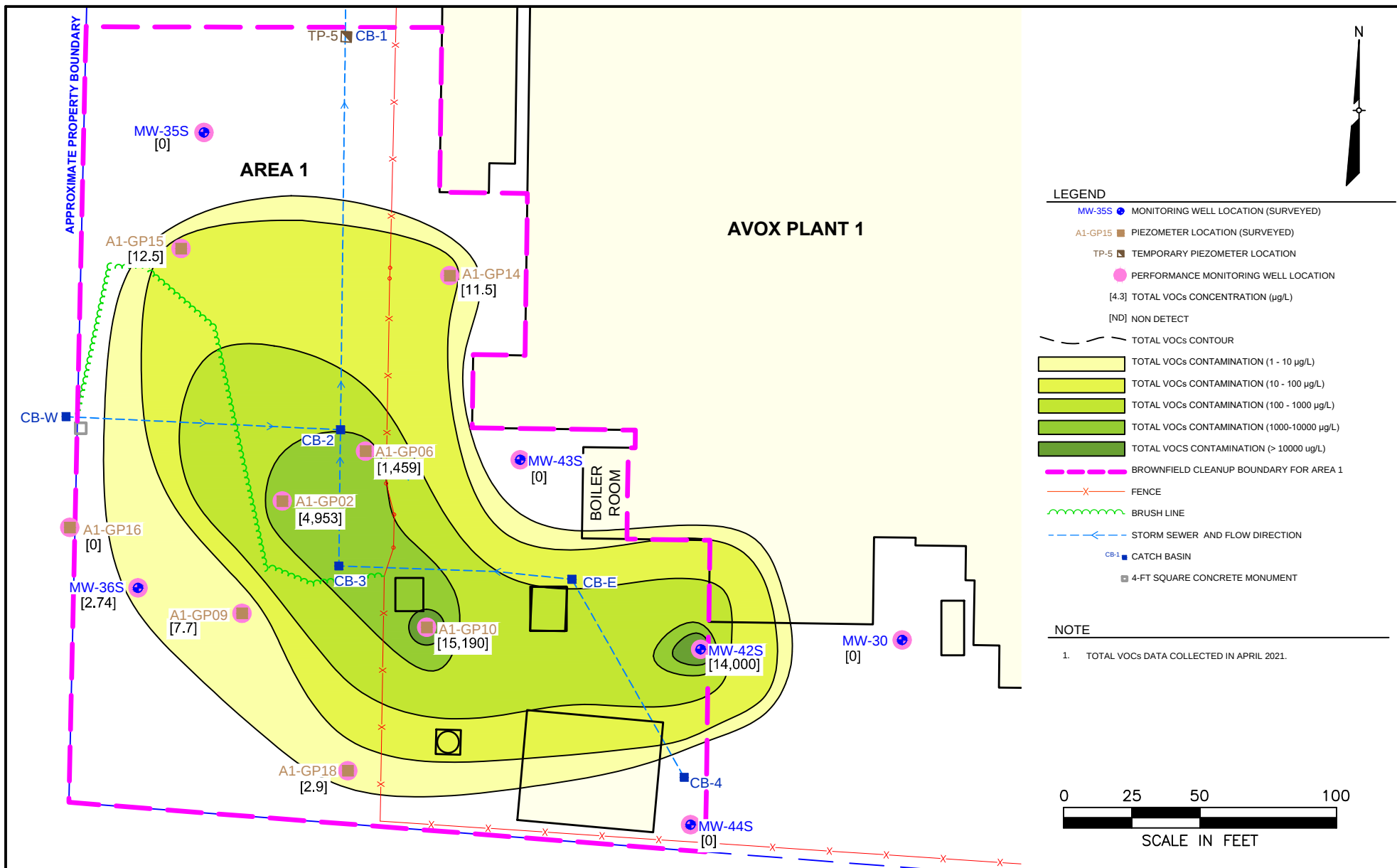
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FIGURE 18
SHALLOW OVERBURDEN GROUNDWATER
cis-1,2-DICHLOROETHENE PLUME
APRIL 2021
 FORMER SCOTT AVIATION FACILITY AREA 1
 LANCASTER, NEW YORK



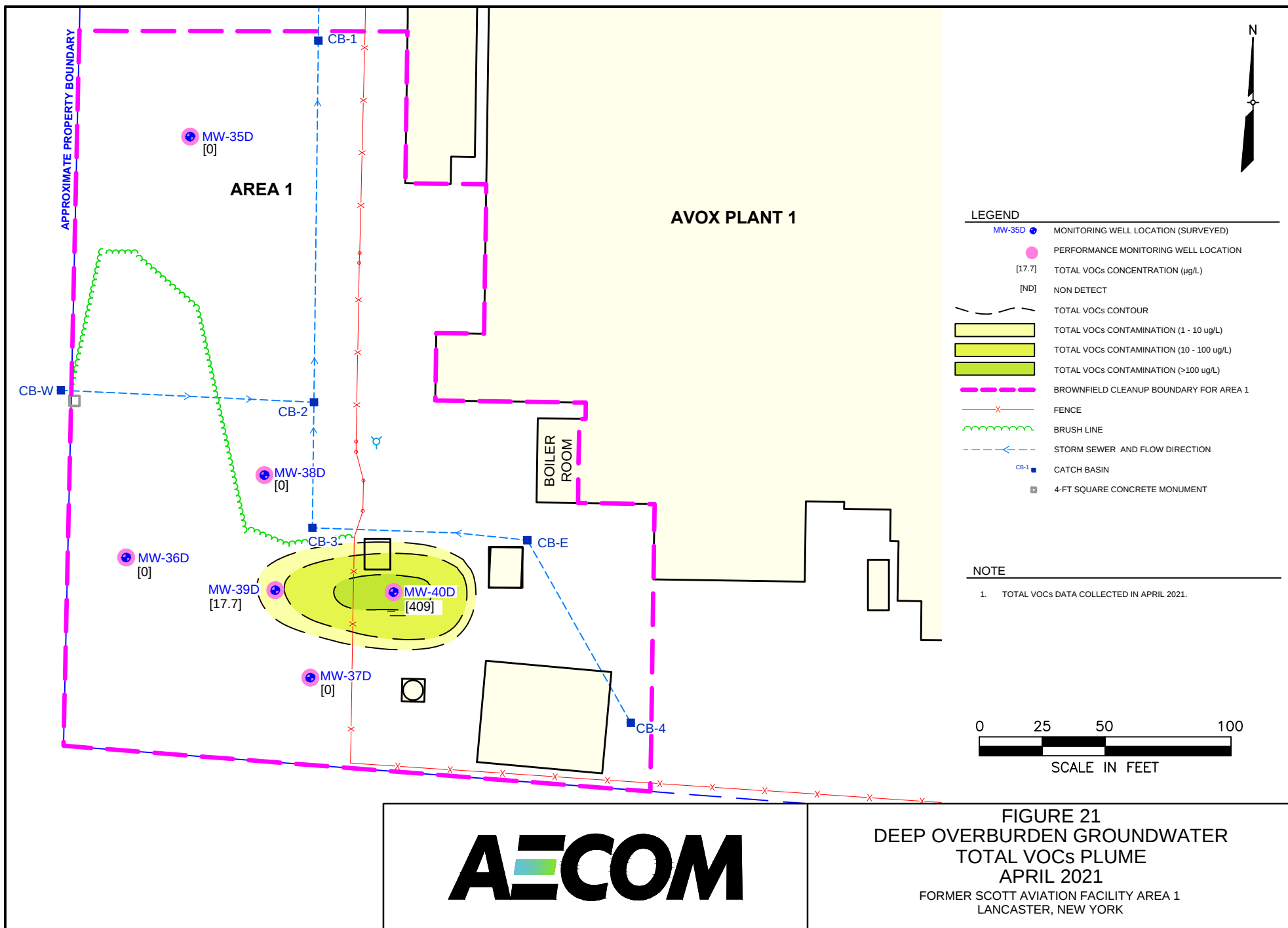
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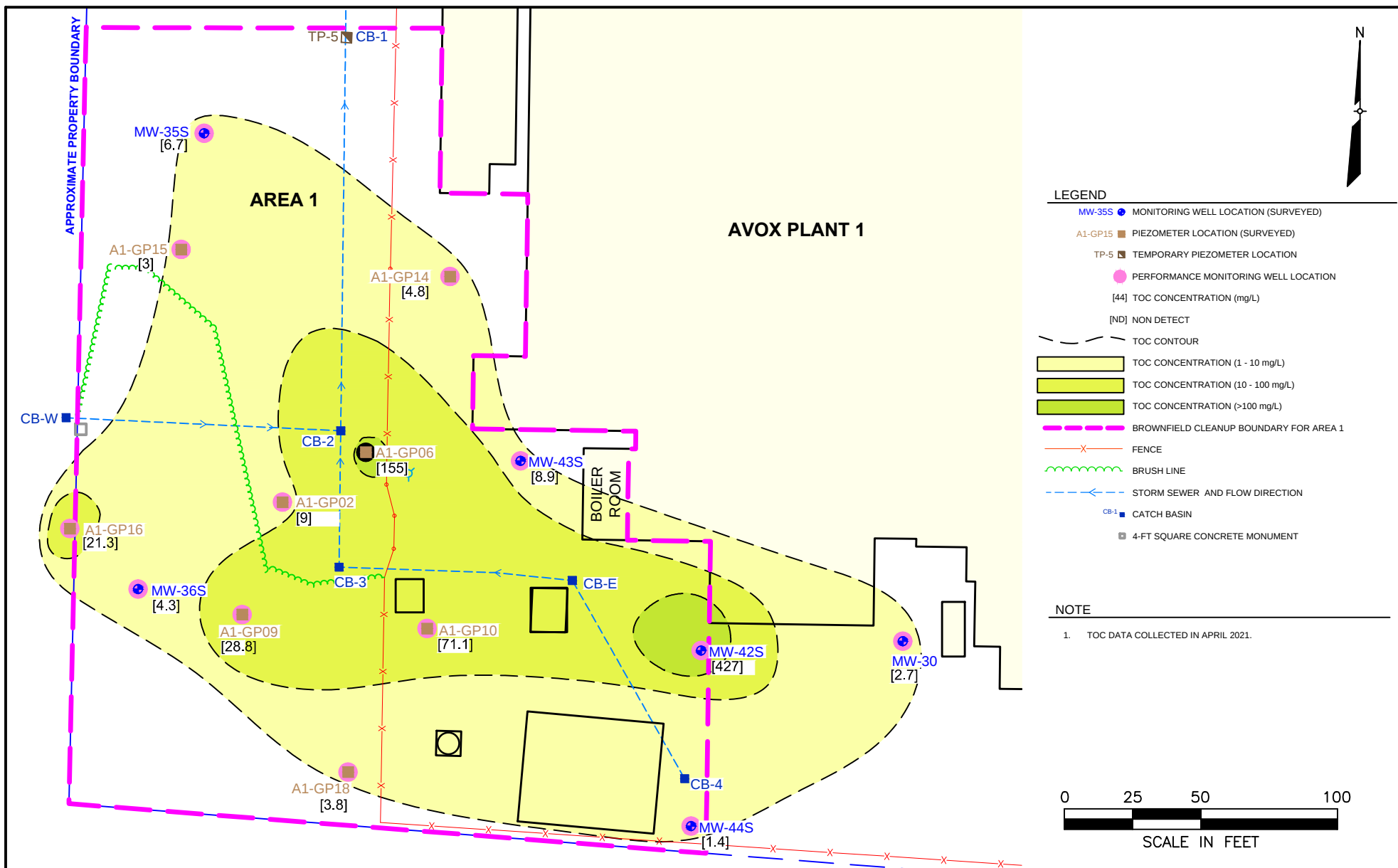
FIGURE 19
SHALLOW OVERBURDEN GROUNDWATER
VINYL CHLORIDE PLUME
APRIL 2021
 FORMER SCOTT AVIATION FACILITY AREA 1
 LANCASTER, NEW YORK



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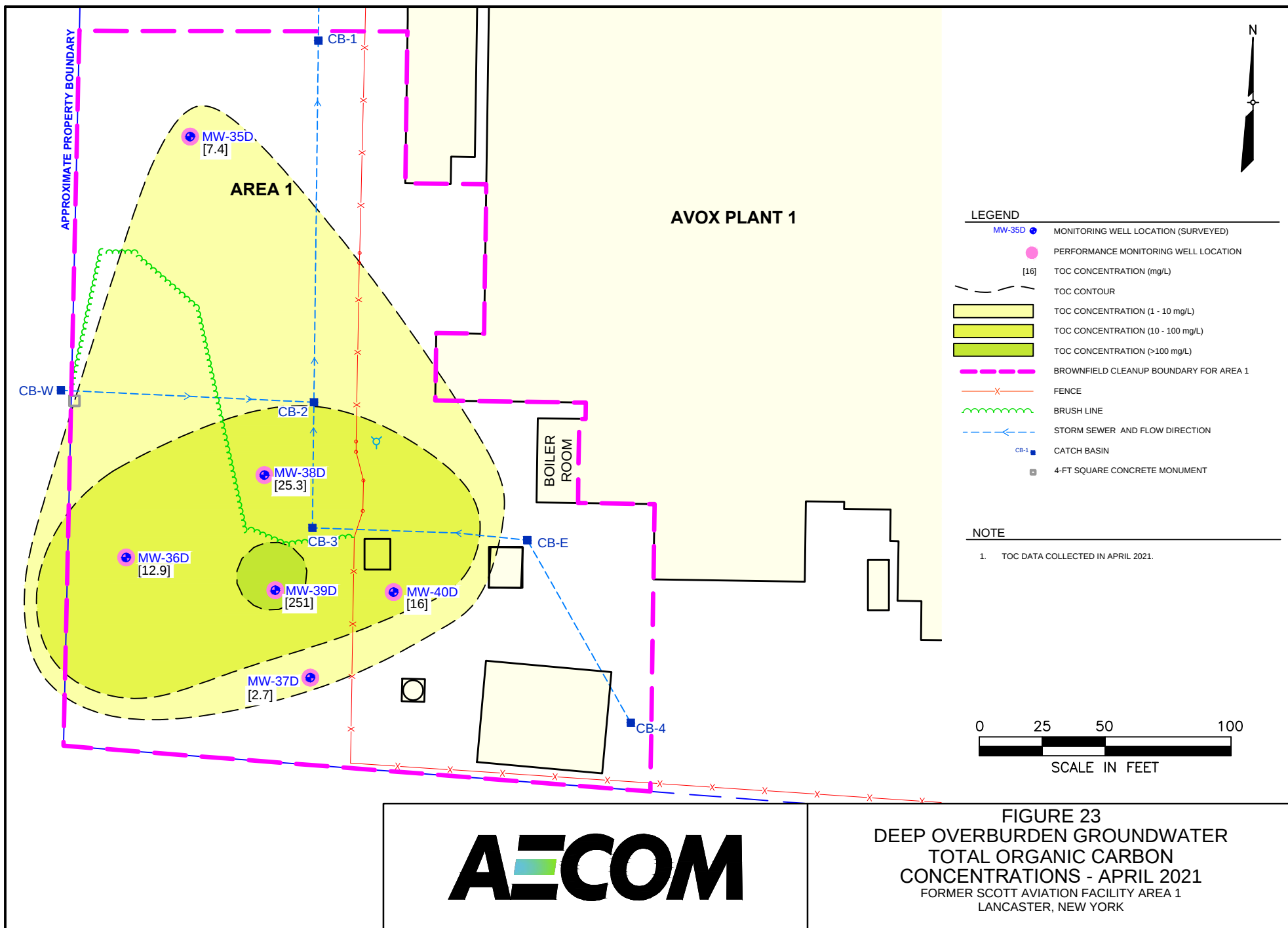
FIGURE 20
SHALLOW OVERBURDEN GROUNDWATER
TOTAL VOCs PLUME
APRIL 2021
 FORMER SCOTT AVIATION FACILITY AREA 1
 LANCASTER, NEW YORK





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FIGURE 22
SHALLOW OVERBURDEN GROUNDWATER
TOTAL ORGANIC CARBON
CONCENTRATIONS - APRIL 2021
 FORMER SCOTT AVIATION FACILITY AREA 1
 LANCASTER, NEW YORK



Tables

Table 1
Groundwater Monitoring Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Location	Field Parameters	VOCs (SW846 8260C)	TOC (SW846 9060A)	Iron Ferrous and Ferric (SM 3500 FE D)	Iron Ferric (SM 3500)	Nitrogen Nitrate (MCAWW 353.2)	Nitrate (EPA 353.2)	Manganese (SW846 6010C)	Sulfate (MCAWW 300.0)	Sulfide Total (SM 4500 S2 F)	Alkalinity (MCAWW 310.2)	Iron (EPA 200.7 Rev 4.4)	Carbon Dioxide (RSK-175)	Nitrogen Ammonia (MCAWW 350.1)	Methane Ethane, Ethene (RSK-175)
Monitoring Well and Temporary Piezometer Groundwater Sampling															
MW-30	✓	✓	✓												
MW-35S	✓	✓	✓												
MW-35D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MW-36S	✓	✓	✓												
MW-36D	✓	✓	✓												
MW-37D	✓	✓	✓												
MW-38D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MW-39D	✓	✓	✓												
MW-40D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MW-42S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MW-43S	✓	✓	✓												
MW-44S	✓	✓	✓												
A1-GP02-S	✓	✓	✓												
A1-GP06-S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A1-GP09-S	✓	✓	✓												
A1-GP10-S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A1-GP14-S	✓	✓	✓												
A1-GP15-S	✓	✓	✓												
A1-GP16-S	✓	✓	✓												
A1-GP18-S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Storm Sewer and Pipe Bedding Water Sampling															
CB-1	✓	✓													
CB-2	✓	✓													
CB-3	✓	✓													
CB-4	✓	✓													
CB-E	✓	✓													
TP-5	✓	✓													
TP-6	✓	✓													

Notes:
QA/QC samples to be collected per QAPP.
Field Parameters include pH, temperature, turbidity, oxidation-reduction potential (ORP), dissolved oxygen (DO), and specific conductivity.
VOC - Volatile Organic Compound
TOC - Total Organic Carbon

Table 2
Monitoring Well and Piezometer Specifications
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Well ID	Well Location	Coordinates (longitude/latitude)	Well Diameter (inches)	Elevation (feet above mean sea level)				Feet from Casing
				Casing	Surface	Screen Top	Screen Bottom	Mid-Screen
A1-GP02-S	Plume	42.9047° N, 78.6593° W	0.75	689.82	687.3	682.3	672.3	12.5
A1-GP06-S	Plume	42.9047° N, 78.6592° W	0.75	687.71	687.8	682.8	672.8	9.9
A1-GP09-S	Downgradient	42.9045° N, 78.6594° W	0.75	689.36	686.8	681.8	671.8	12.6
A1-GP10-S	Plume	42.9045° N, 78.6591° W	0.75	689.10	689.2	684.2	674.2	9.9
A1-GP14-S	Downgradient	42.9049° N, 78.6591° W	0.75	689.43	689.7	684.7	674.7	9.7
A1-GP15-S	Downgradient	42.9049° N, 78.6595° W	0.75	687.69	688.0	683.0	673.0	9.7
A1-GP16-S	Downgradient	42.9046° N, 78.6596° W	0.75	689.86	686.6	681.6	671.6	13.3
A1-GP18-S	Upgradient	42.9044° N, 78.6592° W	0.75	690.37	687.5	682.5	672.5	12.9
MW-30	Upgradient	42.9045° N, 78.6585° W	2.0	689.69	689.8	679.8	669.8	14.9
MW-35D	Downgradient	42.9050° N, 78.6594° W	2.0	688.40	688.9	667.9	662.9	23.0
MW-35S	Downgradient	42.9050° N, 78.6594° W	2.0	688.56	689.1	684.1	674.1	9.5
MW-36D	Plume	42.9046° N, 78.6595° W	2.0	689.66	687.1	671.1	666.1	21.1
MW-36S	Upgradient	42.9046° N, 78.6595° W	2.0	689.82	687.1	683.1	672.1	12.2
MW-37D	Upgradient	42.9044° N, 78.6593° W	2.0	690.05	687.6	672.6	667.6	19.9
MW-38D	Plume	42.9047° N, 78.6593° W	2.0	689.66	687.5	671.5	666.5	20.7
MW-39D	Plume	42.9045° N, 78.6593° W	2.0	689.72	687.4	672.4	667.4	19.8
MW-40D	Plume	42.9045° N, 78.6591° W	2.0	689.19	689.5	671.7	666.7	20.0
MW-42S	Plume	42.9045° N, 78.6588° W	2.0	689.08	689.7	684.7	674.7	9.4
MW-43S	Plume	42.9047° N, 78.6590° W	2.0	689.14	689.6	684.6	674.6	9.5
MW-44S	Upgradient	42.9043° N, 78.6588° W	2.0	688.98	689.4	684.4	674.4	9.6
TP-5	Stormsewer Bedding	42.9051° N, 78.6592° W	0.75	690.53	689.53	685.53	682.53	5.50
TP-6	Stormsewer Bedding	42.9051° N, 78.6592° W	0.75	690.25	690.45	686.45	681.45	4.30

Table 3
Groundwater Elevation Data
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Monitoring Point Identification	Top of Casing Elevation	April 1, 2021	
		Depth to Groundwater (feet from TOC)	Groundwater Elevation (feet AMSL)
Monitoring Wells			
MW-30 ¹	689.69	3.14	686.55
MW-35S	688.56	0.65	687.91
MW-35D	688.40	6.56	681.84
MW-36S	689.82	2.87	686.95
MW-36D	689.66	5.25	684.41
MW-37D	690.05	4.41	685.64
MW-38D	689.66	3.20	686.46
MW-39D	689.72	4.04	685.68
MW-40D	689.19	3.20	685.99
MW-42S	689.08	0.60	688.48
MW-43S	689.13	2.10	687.03
MW-44S	688.96	0.40	688.56
Piezometers			
A1-GP02-S	689.82	3.05	686.77
A1-GP06-S	687.71	2.00	685.71
A1-GP09-S	689.36	2.50	686.86
A1-GP10-S	689.10	1.51	687.59
A1-GP14-S	689.43	1.81	687.62
A1-GP15-S	687.69	0.20	687.49
A1-GP16-S	689.86	2.77	687.09
A1-GP18-S	690.37	4.15	686.22
Storm Sewer			
TP-5	690.53	7.74	682.79
TP-6	690.25	7.45	682.80
CB-1	689.53	6.24	683.29
CB-2	687.40	3.62	683.78
CB-3	687.55	3.70	683.85
CB-4	689.00	3.25	685.75
CB-E	689.35	4.91	684.44

Notes:

1 - Well is screened across both shallow and deep overburden units.

TOC - Top of Casing

AMSL - Above Mean Sea Level

S - well is screened in shallow overburden

D - well is screened in deep overburden

Table 4

Summary of Monitoring Well Analytical Data - October 2020
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID	Groundwater	A1-GP02-S	A1-GP06-S	A1-GP09-S	A1-GP10-S	A1-GP14-S	A1-GP15-S	A1-GP16-S
Date Collected	RAO/TOGS 1.1.1	10/12/20	10/08/20	10/09/20	10/08/20	10/08/20	10/08/20	10/08/20
Lab Sample ID	Objective	480-176370-4	480-176254-2	480-176353-2	480-176254-3	480-176254-7	480-176254-5	480-176254-6
Volatile Organic Compounds by Method 8260 (µg/L)								
1,1-Dichloroethane*	5	< 20 U	80	< 2.0 U	15,000	< 2.0 U	< 1.0 U	< 4.0 U
1,1-Dichloroethene*	5	< 20 U	< 25 U	< 2.0 U	270	< 2.0 U	< 1.0 U	< 4.0 U
1,1,1-Trichloroethane*	5	< 20 U	< 25 U	< 2.0 U	1,300	< 2.0 U	< 1.0 U	< 4.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	< 20 U	< 25 U	< 2.0 U	110 J	< 2.0 U	< 1.0 U	< 4.0 U
1,2-Dichloroethane*	0.6	< 20 U	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
2-Butanone (MIBK)	50	< 100 U	< 250 U	< 20 U	< 2,000 U	< 10 U	< 10 U	< 40 U
Acetone	50	< 200 U	< 250 U	19 J	< 2,000 U	6.4 J	< 10 U	< 40 U
Benzene	5	< 20 U	< 25 U	< 2.0 U	< 200 U	1.9 J	< 1.0 U	< 4.0 U
Chloroethane	5	< 20 U	660	< 2.0 U	22,000	0.74 J	< 1.0 U	< 4.0 U
cis-1,2-Dichloroethene*	5	390	< 25 U	< 2.0 U	170 J	< 2.0 U	< 1.0 U	15
Ethylbenzene	5	37	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
Methylene Chloride	5	19 J	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
Methylcyclohexane	5	< 20 U	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
Toluene	5	< 20 U	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
Vinyl chloride*	2	2,300	< 25 U	< 2.0 U	< 200 U	1.8 J	< 1.0 U	< 4.0 U
Xylenes, Total	5	33 J	< 50 U	< 4 U	< 400 U	< 4.0 U	< 2.0 U	< 8.0 U
Total Volatile Organic Compounds	NL	2,779	740	19	38,850	10.8	0	15

Table 4

Summary of Monitoring Well Analytical Data - October 2020
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID	Groundwater	A1-GP18-S	MW-30	MW-35S	Duplicate	MW-36S	MW-42S	MW-43S
Date Collected	RAO/TOGS 1.1.1	10/08/20	10/07/20	10/06/20	10/06/20	10/09/20	10/12/20	10/07/20
Lab Sample ID	Objective	480-176254-4	480-176142-4	480-176049-10	480-176049-8	480-176353-3	480-176370-3	480-176142-2
Volatile Organic Compounds by Method 8260 (µg/L)								
1,1-Dichloroethane*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.53 J	1,900	< 4.0 U
1,1-Dichloroethene*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	99 J	< 4.0 U
1,1,1-Trichloroethane*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	160 J	< 4.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	240	< 4.0 U
1,2-Dichloroethane*	0.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	76 J	< 4.0 U
2-Butanone (MIBK)	50	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2,000 U	< 40 U
Acetone	50	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2,000 U	< 40 U
Benzene	5	< 1.0 U	3.6 J	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U
Chloroethane	5	< 1.0 U	0.91 J	< 1.0 U	< 1.0 U	< 1.0 U	17,000	4.3
cis-1,2-Dichloroethene*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.6	490	< 4.0 U
Ethylbenzene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U
Methylene Chloride	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	130 J	< 4.0 U
Methylcyclohexane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U
Toluene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	880	< 4.0 U
Vinyl chloride*	2	< 1.0 U	1.0	< 1.0 U	< 1.0 U	< 1.0 U	2,500	< 4.0 U
Xylenes, Total	5	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 400 U	< 8.0 U
Total Volatile Organic Compounds	NL	0	5.5	0	0	2.1	23,475	4.3

Table 4

Summary of Monitoring Well Analytical Data - October 2020
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID	Groundwater	MW-44S	MW-35D	MW-36D	MW-37D	MW-38D	MW-39D	MW-40D
Date Collected	RAO/TOGS 1.1.1	10/07/20	10/06/20	10/09/20	10/07/20	10/12/20	10/09/20	10/12/20
Lab Sample ID	Objective	480-176142-3	480-176049-11	480-176353-4	480-176142-1	480-176370-1	480-176353-1	480-176370-2
Volatile Organic Compounds by Method 8260 (µg/L)								
1,1-Dichloroethane*	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
1,1-Dichloroethene*	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
1,1,1-Trichloroethane*	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
1,2-Dichloroethane*	0.6	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
2-Butanone (MIBK)	50	< 10 U	< 10 U	< 40 U	< 10 U	250	30	53 J
Acetone	50	< 10 U	< 10 U	< 40 U	< 10 U	35 J	28	< 80 U
Benzene	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	2.2	270
cis-1,2-Dichloroethene*	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
Ethylbenzene	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
Methylene Chloride	5	< 1.0 U	< 1.0 U	3.6 J	< 1.0 U	4.2	< 1.0 U	5.0 J
Methylcyclohexane	5	< 1.0 U	0.31	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
Toluene	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
Vinyl chloride*	2	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U
Xylenes, Total	5	< 2.0 U	< 2.0 U	< 8.0 U	< 2.0 U	< 8.0 U	< 2.0 U	< 16 U
Total Volatile Organic Compounds	NL	0	0.31	3.6	0	289	60	328

Notes:

Bold font indicates the analyte was detected.

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

* Site-specific Contaminants of Concern per Decision Document (December 2015). Per NYSDEC comment letter dated August 29, 2019, cis-1,2-DCE was added as a Site-specific Contaminants of Concern.

Duplicate collected at MW-35S.

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.

NL - Not listed

Table 5

Summary of Monitoring Well Analytical Data - April 2021
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID	Groundwater	A1-GP02-S	A1-GP06-S	A1-GP09-S	A1-GP10-S	A1-GP14-S	A1-GP15-S	A1-GP16-S
Date Collected	RAO/TOGS 1.1.1	04/01/21	04/01/21	04/01/21	04/01/21	04/01/21	04/01/21	04/01/21
Lab Sample ID	Objective	480-182787-8	480-182787-2	480-182787-10	480-182787-3	480-182787-11	480-182787-9	480-182787-12
Volatile Organic Compounds by Method 8260 (µg/L)								
1,1-Dichloroethane*	5	< 40 U	200	< 2.0 U	3,700	< 2.0 U	0.52	< 4.0 U
1,1-Dichloroethene*	5	< 40 U	< 25 U	< 2.0 U	200	< 2.0 U	< 1.0 U	< 4.0 U
1,1,1-Trichloroethane*	5	< 40 U	210	< 2.0 U	2,200	< 2.0 U	< 1.0 U	< 4.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	< 40 U	36	< 2.0 U	490	< 2.0 U	< 1.0 U	< 4.0 U
1,2-Dichloroethane*	0.6	< 40 U	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
2-Butanone (MIBK)	50	< 400 U	< 130 U	< 20 U	< 1,000 U	< 10 U	< 10 U	< 40 U
2-Hexanone	50	< 200 U	< 130 U	< 10 U	< 1,000 U	< 10 U	< 5.0 U	< 20 U
Acetone	50	< 400 U	< 250 U	6.1 J	< 2,000 U	6.4 J	12	< 40 U
Carbon Disulfide	60	< 40 U	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
Chloroethane	5	< 40 U	1,000	< 2.0 U	8,600	< 2.0 U	< 1.0 U	< 4.0 U
Chloromethane	5	< 40 U	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
cis-1,2-Dichloroethene*	5	340	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
Ethylbenzene	5	57	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
Methylene Chloride	5	< 40 U	13 J	1.6 J	< 200 U	2.7	< 1.0 U	< 4.0 U
Toluene	5	< 40 U	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
Trichloroethene*	5	< 40 U	< 25 U	< 2.0 U	< 200 U	2.4	< 1.0 U	< 4.0 U
Vinyl chloride*	2	4,500	< 25 U	< 2.0 U	< 200 U	< 2.0 U	< 1.0 U	< 4.0 U
Xylenes, Total	5	56 J	< 50 U	< 4.0 U	< 400 U	< 4.0 U	< 2.0 U	< 8.0 U
Total Volatile Organic Compounds	NL	4,953	1,459	7.7	15,190	11.5	12.5	0

Table 5

Summary of Monitoring Well Analytical Data - April 2021
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID	Groundwater	A1-GP18-S	MW-30	MW-35S	Duplicate	MW-36S	MW-42S	MW-43S
Date Collected	RAO/TOGS 1.1.1	04/01/21	04/05/21	04/05/21	04/05/21	04/06/21	04/01/21	04/01/21
Lab Sample ID	Objective	480-182787-4	480-182636-4	480-182636-5	480-182636-1	480-182888-2	480-182787-5	480-182787-6
Volatile Organic Compounds by Method 8260 (µg/L)								
1,1-Dichloroethane*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.54 J	710	< 4.0 U
1,1-Dichloroethene*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U
1,1,1-Trichloroethane*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	380	< 4.0 U
1,2-Dichloroethane*	0.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U
2-Butanone (MIBK)	50	2.9 J	< 10 U	< 10 U	< 10 U	< 10 U	< 2,000 U	< 40 U
2-Hexanone	50	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1,000 U	< 20 U
Acetone	50	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2,000 U	< 40 U
Carbon Disulfide	60	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	12,000	< 4.0 U
Chloromethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U
cis-1,2-Dichloroethene*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	2.2	< 200 U	< 4.0 U
Ethylbenzene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U
Methylene Chloride	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	100 J	< 4.0 U
Toluene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	620	< 4.0 U
Trichloroethene*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U
Vinyl chloride*	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	190 J	< 4.0 U
Xylenes, Total	5	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 400 U	< 8.0 U
Total Volatile Organic Compounds	NL	2.9	0	0	0	2.7	14,000	0

Table 5

Summary of Monitoring Well Analytical Data - April 2021
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID	Groundwater	MW-44S	MW-35D	MW-36D	MW-37D	MW-38D	MW-39D	MW-40D
Date Collected	RAO/TOGS 1.1.1	04/01/21	04/05/21	04/06/21	04/05/21	04/05/21	04/05/21	04/01/21
Lab Sample ID	Objective	480-182787-7	480-182836-2	480-182888-1	480-182636-6	480-182636-3	480-182636-7	480-182787-1
Volatile Organic Compounds by Method 8260 (µg/L)								
1,1-Dichloroethane*	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	8.6
1,1-Dichloroethene*	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
1,1,1-Trichloroethane*	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
1,2-Dichloroethane*	0.6	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
2-Butanone (MIBK)	50	< 10 U	< 10 U	< 40 U	< 10 U	< 80 U	5.4 J	< 80 U
2-Hexanone	50	< 5.0 U	< 5.0 U	< 20 U	< 5.0 U	< 40 U	4.3 J	< 40 U
Acetone	50	< 10 U	< 10 U	< 40 U	< 10 U	< 80 U	6.4	< 80 U
Carbon Disulfide	60	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	1.6	400
Chloromethane	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
cis-1,2-Dichloroethene*	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
Ethylbenzene	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
Methylene Chloride	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
Toluene	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
Trichloroethene*	5	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
Vinyl chloride*	2	< 1.0 U	< 1.0 U	< 4.0 U	< 1.0 U	< 8.0 U	< 1.0 U	< 8.0 U
Xylenes, Total	5	< 2.0 U	< 2.0 U	< 8.0 U	< 2.0 U	< 16 U	< 2.0 U	< 16 U
Total Volatile Organic Compounds	NL	0	0	0	0	0	18	409

Notes:

Bold font indicates the analyte was detected.

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

* Site-specific Contaminants of Concern per Decision Document (December 2015). Per NYSDEC comment letter dated August 29, 2019, cis-1,2-DCE was added as a Site-specific Contaminants of Concern.

Duplicate collected at MW-35S.

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.

NL - Not listed

Table 6

Summary of Trichloroethene Concentrations

Former Scott Aviation Facility Area 1 (BCP Site #C915233)

Lancaster, New York

Well ID	June 2010	August 2010	April 2011	June 1, 2011	June 16, 2011	October 2011	March 2015	June 2015	July 2015	January 2016	April 2016	July 2016	October 2016	January 2017	April 2017	July 2017	October 2017	January 2018	April 2018	July 2018	October 2018	January 2019	April 2019	July 2019	October 2019	January 2020	April 2020	October 2020	April 2021	TCE Reduction - Previous Sampling	TCE Reduction - Baseline Sampling
MW-30	1.4 J	1.6 J	-	-	-	-	-	-	1.1	-	ND	2.4	0.56 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-35S	ND	ND	-	-	-	-	ND	-	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-35D	ND	ND	-	-	-	-	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-36S	7.2	0.58 J	-	-	-	-	ND	-	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-36D	2.1	0.74 J	-	-	-	-	ND	-	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-37D	ND	ND	-	-	-	-	ND	-	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-39D	11,000	2,100	-	-	-	-	1.9	18 J	6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-40D	2.8 J	ND	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-42S	-	-	13,000	-	-	-	12,000	2,700	280	-	ND	100 J	ND	ND	ND	ND	54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-43S	-	-	15	-	-	-	ND	-	0.60 J	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-44S	-	-	-	ND	-	-	-	-	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A1-GP02-S	11,000	20,000	-	-	-	-	5,400	-	8,000	330 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A1-GP06-S	46 J	200	-	-	-	-	0.81 J	-	18	ND	5.4 J	ND	ND	ND	ND	ND	ND	ND	7.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A1-GP09-S	ND	0.88 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A1-GP10-S	92	ND	-	-	-	-	6.6	ND	36	ND	ND	ND	ND	ND	ND	ND	0.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A1-GP14-S	ND	ND	-	-	-	-	-	-	-	-	-	-	ND	-	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	increase	increase
A1-GP15-S	ND	ND	-	-	-	-	-	-	4.0	-	ND	ND	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A1-GP16-S	ND	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
A1-GP18-S	ND	ND	-	-	-	-	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

TCE concentrations listed in µg/L.

TCE concentrations with bold outline represent baseline established prior to May 2015 injection IRM (i.e., highest concentration of TCE prior to injection IRM).

Bold TCE concentrations indicate the screening criteria of 5 µg/L was exceeded.

The injection of ABC+[®] occurred in May 2015 and is represented by a bold vertical line.

The suplimental injection of ABC-Ole[®] and ZVI occurred in May 2019 and is represented by a bold vertical dashed line.

ND - Not detected at or above reporting limit.

- - Not sampled.

NA - Not available.

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.

* No baseline established as piezometer was installed following the May 2015 injection IRM.

Table 7

Summary of Catch Basin and Temporary Piezometers Analytical Data - April 2020 through April 2021
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID Date Collected Lab Sample ID	Groundwater RAO/NYCRR Objective	CB-1 04/09/20 480-16849-1	CB-1 07/23/20 480-172828-1	CB-1 10/05/20 480-176049-1	CB-1 04/01/21 480-182787-13	CB-2 04/09/20 480-16849-2	CB-2 07/23/20 480-172828-2	CB-2 10/05/20 480-176049-2	CB-2 04/01/20 480-182787-14
Volatile Organic Compounds by Method 8260 (µg/L)									
1,1,1-Trichloroethane*	5	40	ND	ND	2.5	35	ND	ND	3.2
1,1,2-Trichloro-1,2,2-trifluoroethane	5	37	4.4	7.1	27	19	ND	1.6	7.7
1,1-Dichloroethane*	5	15	0.94 J	1.3	5.4	13	1 J	6.7	9.1
1,1-Dichloroethene*	5	4.2	ND	ND	0.64 J	3.9	ND	ND	0.70 J
Acetone	50	ND	ND	3.3 J	ND	ND	ND	6.0 J	ND
Chloroethane	5	17	ND	1.6	2.5	6.3	2.3	18	6.2
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene*	5	94	4.2	1.2	24	90	ND	13	48
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	5	ND	ND	ND	ND	ND	ND	ND	0.30 J
Methylene chloride	5	ND	0.89 J	ND	ND	ND	1.6 J	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	3.4	ND	ND	0.59 J	3.8	ND	ND	2.0
trans-1,2-Dichloroethene	5	2.5	ND	ND	1.0	ND	ND	1.2	2.4
Trichloroethene*	5	5.3	2.1	0.50 J	9.9	7.6	ND	3.8	20
Vinyl chloride*	2	12	ND	ND	3.1	12	ND	4.4	8.3
Xylenes, Total	5	5.6	ND	ND	2.0	6.6	9.3	ND	6.0
TVOC	NL	230	12.5	15.0	78.6	197	14	55	114

Table 7

Summary of Catch Basin and Temporary Piezometers Analytical Data - April 2020 through April 2021
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID Date Collected Lab Sample ID	Groundwater RAO/NYCRR Objective	CB-3 04/09/20 480-16849-3	CB-3 07/23/20 480-172828-3	CB-3 10/05/20 480-176049-3	CB-3 04/01/21 480-182787-15	CB-E 04/09/20 480-16849-4	CB-E 07/23/20 480-172828-5	CB-E 10/05/20 480-176049-5	CB-E 04/01/21 480-182787-16
Volatile Organic Compounds by Method 8260 (µg/L)									
1,1,1-Trichloroethane*	5	2,700	ND	ND	ND	11	ND	ND	1.4
1,1,2-Trichloro-1,2,2-trifluoroethane	5	710	ND	0.60 J	1.8	15	0.49 J	ND	3.7
1,1-Dichloroethane*	5	750	1.8	2.6	7.4	11	3.3	2.5	17
1,1-Dichloroethene*	5	240	ND	ND	0.58 J	4.1	ND	ND	1.5
Acetone	50	ND	9.0 J	6.1 J	ND	ND	5.6 J	4.3 J	ND
Chloroethane	5	250	3.6	7.8	9.4	7.0	6.2	9.8	23
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene*	5	3,500	ND	ND	5.0	33	0.99 J	ND	12
Ethylbenzene	5	55	1.3	ND	3.3	2.6	2.6	2.1	2.1
Methylcyclohexane	5	ND	ND	ND	1.7	0.54	0.45 J	0.27 J	3.9
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	0.58 J
Toluene	5	260	1.7	ND	11	5.8	3.4	1.4	37
trans-1,2-Dichloroethene	5	56	ND	ND	ND	ND	ND	ND	1.1
Trichloroethene*	5	28	ND	ND	ND	ND	ND	ND	0.99 J
Vinyl chloride*	2	600	ND	ND	2.7	6	ND	ND	8.3
Xylenes, Total	5	270	17	3.8	35	36	41	30	120
TVOC	NL	9,419	34	21	78	132	64	50	233

Table 7

Summary of Catch Basin and Temporary Piezometers Analytical Data - April 2020 through April 2021
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID Date Collected Lab Sample ID	Groundwater RAO/NYCRR Objective	CB-4 04/09/20 480-16849-5	CB-4 07/23/20 480-172828-4	CB-4 10/05/20 480-176049-4	CB-4 04/01/21 480-182787-17	TP-5 04/09/20 480-16849-6	TP-5 07/23/20 480-172828-6	TP-5 10/05/20 480-176049-6	TP-5 04/01/21 480-182787-18
Volatile Organic Compounds by Method 8260 (µg/L)									
1,1,1-Trichloroethane*	5	59	ND	ND	ND	25	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5	59	ND	1.9	ND	25	2.7	3.2	2.6
1,1-Dichloroethane*	5	53	ND	2.6	ND	10	1.4	1.0	ND
1,1-Dichloroethene*	5	28	ND	ND	ND	2.9	ND	ND	ND
Acetone	50	ND	3.7 J	ND	3.7 J	ND	ND	ND	ND
Chloroethane	5	29	0.40 J	2.7	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	4.4	0.61 J	ND	ND
cis-1,2-Dichloroethene*	5	200	ND	ND	ND	58	3.4	1.7	1.9
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	5	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	1.4	ND	ND	ND
Trichloroethene*	5	ND	ND	ND	ND	2.6	0.81 J	0.88 J	0.87 J
Vinyl chloride*	2	27	ND	ND	ND	4.9	ND	ND	ND
Xylenes, Total	5	ND	ND	0.79 J	ND	ND	ND	ND	ND
TVOC	NL	455	4.1	8.0	3.7	134	8.9	6.8	5.4

Table 7

Summary of Catch Basin and Temporary Piezometers Analytical Data - April 2020 through April 2021
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID Date Collected Lab Sample ID	Groundwater RAO/NYCRR Objective	TP-6 04/09/20 480-16849-7	TP-6 07/23/20 480-172828-7	TP-6 10/05/20 480-176049-7	TP-6 04/01/21 480-182787-19
Volatile Organic Compounds by Method 8260 (µg/L)					
1,1,1-Trichloroethane*	5	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	ND	ND	ND
1,1-Dichloroethane*	5	ND	ND	ND	ND
1,1-Dichloroethene*	5	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND
cis-1,2-Dichloroethene*	5	1.3	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND
Methylcyclohexane	5	ND	ND	ND	ND
Methylene chloride	5	0.50	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND
Trichloroethene*	5	ND	ND	ND	ND
Vinyl chloride*	2	ND	ND	ND	ND
Xylenes, Total	5	ND	ND	ND	ND
TVOC	NL	1.8	0	0	0

Notes:

Storm sewer piping replaced in June 2020.

Bold font indicates the analyte was detected.

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

* Site-specific Contaminants of Concern.

ND - Not detected at or above reporting limit.

NL - Not listed.

Appendix A

Former Scott Aviation Area 1 Pre-Injection and Post-Injection Groundwater Quality Data

Well ID	Event / Description		Date	Elapsed Time (Days)	Well		Field Parameters								VOCs														Dissolved Gasses			Wet Chemistry														Q Potential (DNA)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
					Total Depth (feet)	Water Level Measurement (ft. ATOC)	Top of Casing Elevation (ft. AMSL)	Head Elevation (ft. AMSL)	pH (SU)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Specific Conductance (mS/cm)	Turbidity (NTUs)	Temperature (°C)	Carbon, Total Organic (mg/L)																																	Dechlorinating Bacteria	Functional Genes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
																	(ug/L)														(ug/L)			(mg/L)														Dehalococcoides spp (1)	TCE R-Dase (1)	BAV1 VC R-Dase (1)	VC R-Dase																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
A1-GP06-S	Monitoring event	BL1	6/21/2010	-1779	15	3.4	687.7	687.7	6.88	3.45	83.7	0.752	64.1	17	NS	1,1,1-Trichloroethane	620	1,700	660	16 J	ND	3,200	890	270	63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Not Sampled For These Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Monitoring event	BL2	8/4/2010	-1735	15	3.24	687.7	687.7	7.1	4.32	13.2	0.793	4.1	64.1	NS	1,1,2-Trichloroethane	1,900	1,900	660	16 J	ND	3,200	890	270	63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes	
ND	The compound was analyzed for but not detected at, or above, the reporting limit.
NS	Indicates parameter was not measured or analyzed.
J	Result is less than the RL but greater that or equal to the MDL and the concentration is an approximate value. F1 MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
b	Result detected in the unseeded control blank.
HF	Field parameter with a holding time of 15 minutes.
mg/L	Milligrams per liter, equivalent to parts per million.
ug/L	Micrograms per liter, equivalent to parts per billion.
ppb	Parts per billion
mL	Milliliter
SU	Standard Unit
mV	Millivolts
mS	Milli Siemens
°C	Degrees Celsius
ft.	Feet
ATOC	Above top of casing.
AMSL	Above mean sea level.
NTU	Nephelometric Turbidity Unit.
P1	Performance monitoring event.
BL	Baseline event

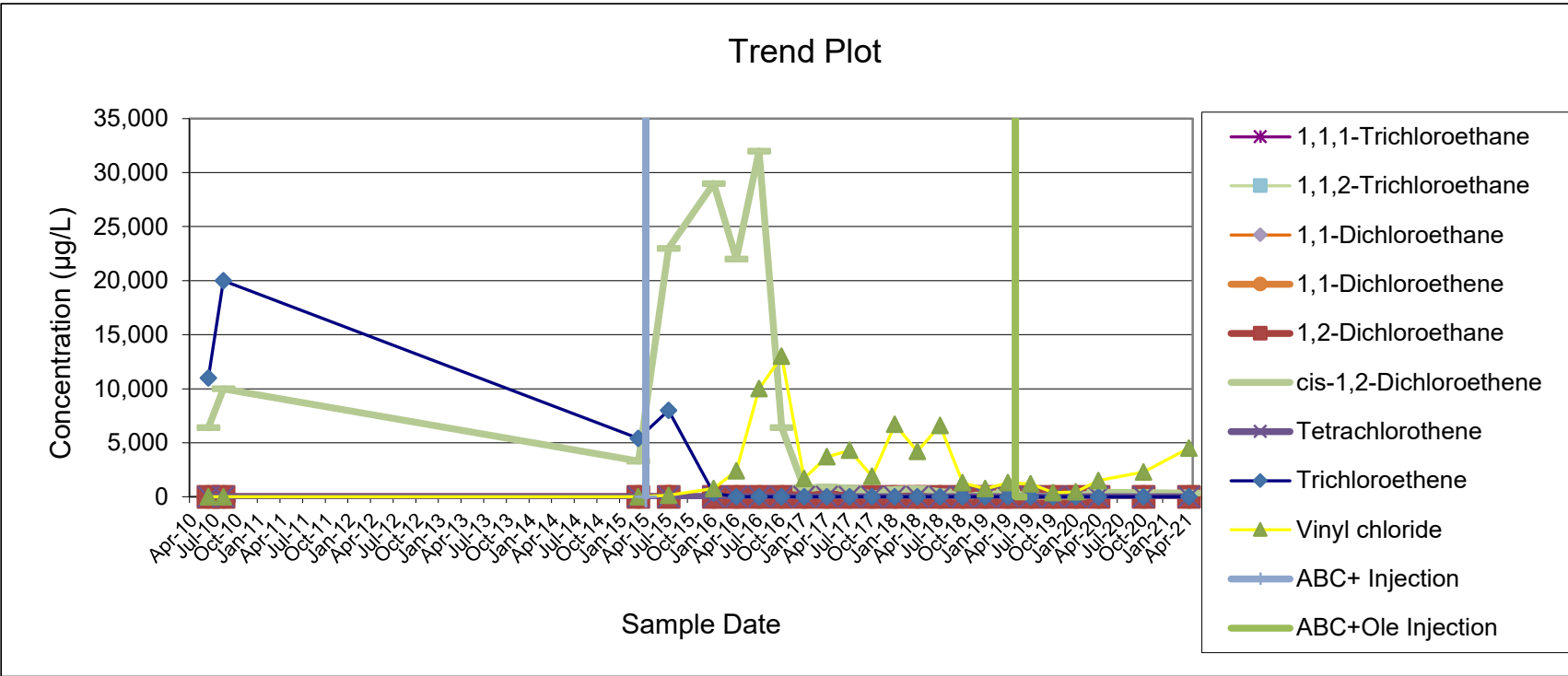
Appendix B

Former Scott Aviation Area 1
Summary of VOC's in Groundwater

MONITORING WELL A1-GP02S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)								
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride
6/22/2010	ND	ND	ND	ND	ND	6,400	ND	11,000	ND
8/4/2010	ND	ND	ND	ND	ND	10,000	ND	20,000	ND
3/10/2015	ND	ND	ND	ND	ND	3,300	ND	5,400	ND
7/28/2015	ND	ND	ND	34	ND	23,000	ND	8,000	140
1/7/2016	ND	ND	ND	ND	ND	29,000	ND	330	770
4/8/2016	ND	ND	ND	ND	ND	22,000	ND	ND	2,400
7/11/2016	ND	ND	ND	ND	ND	32,000	ND	ND	10,000
10/10/2016	ND	ND	ND	ND	ND	6,400	ND	ND	13,000
1/23/2017	ND	ND	ND	ND	ND	810	ND	ND	1,700
4/11/2017	ND	ND	ND	ND	ND	900	ND	ND	3,700
7/6/2017	ND	ND	ND	ND	ND	790	ND	ND	4,300
10/17/2017	ND	ND	ND	ND	ND	230	ND	ND	1,900
1/5/2018	ND	ND	ND	ND	ND	680	ND	ND	6,700
4/12/2018	ND	ND	ND	ND	ND	730	ND	ND	4,200
7/9/2018	ND	ND	ND	ND	ND	460	ND	ND	6,600
10/18/2018	ND	ND	ND	ND	ND	74	ND	ND	1,300
1/2/2019	ND	ND	ND	ND	ND	150	ND	ND	750
4/18/2019	ND	ND	ND	ND	ND	450	ND	ND	1,300
7/25/2019	ND	ND	ND	ND	ND	46	ND	ND	1,200
10/14/2019	ND	ND	ND	ND	ND	44	ND	ND	390
1/7/2020	ND	ND	ND	ND	ND	64	ND	ND	450
4/13/2020	ND	ND	ND	ND	ND	420	ND	ND	1,500
10/12/2020	ND	ND	ND	ND	ND	390	ND	ND	2,300
4/1/2021	ND	ND	ND	ND	ND	340	ND	ND	4,500

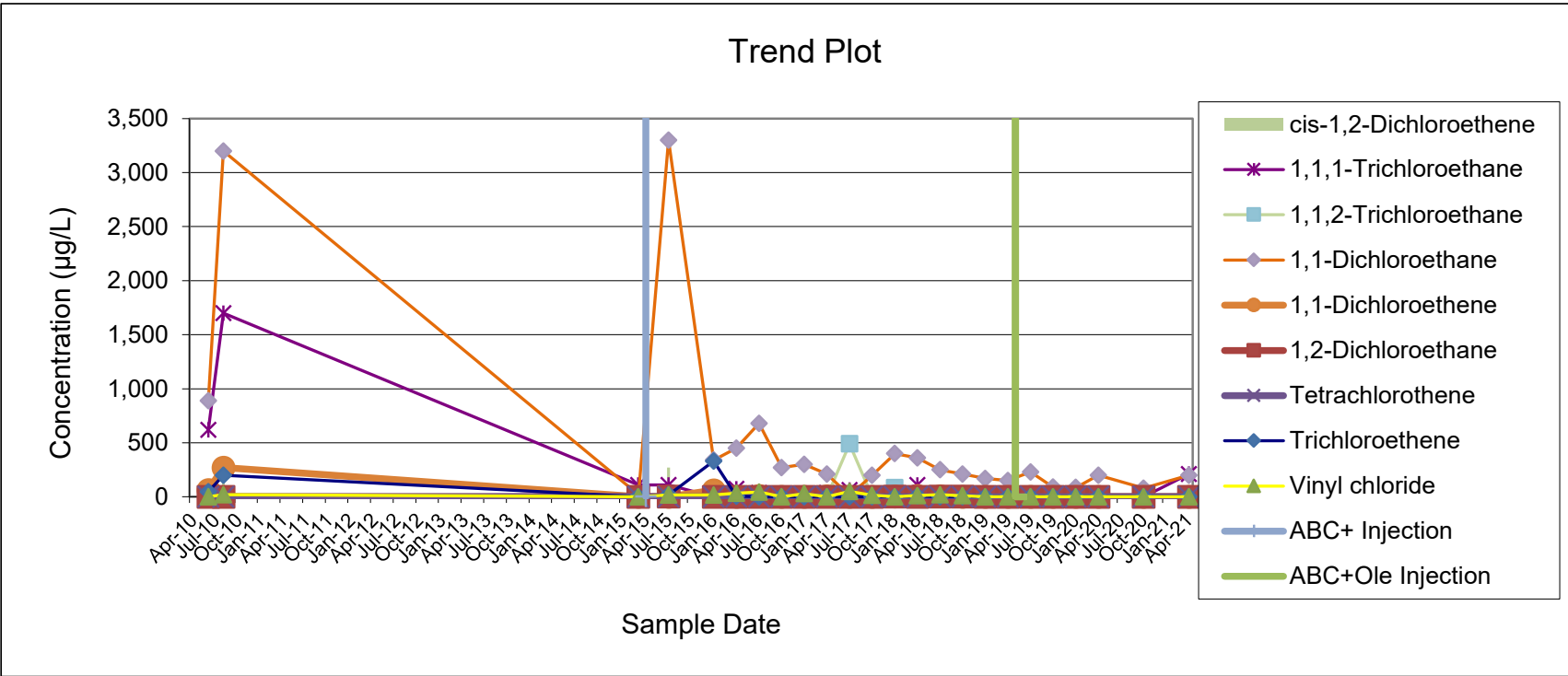
MONITORING WELL A1-GP02S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL A1-GP06S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)								
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride
6/21/2010	620	ND	890	63	ND	32	ND	46	ND
8/4/2010	1,700	16	3,200	270	ND	130	ND	200	20
3/11/2015	110	ND	21	ND	ND	ND	ND	0.81	ND
7/27/2015	110	4.1	3,300	0.89	3.1	270	ND	18	16
1/7/2016	ND	ND	340	60	ND	25	ND	330	16
4/8/2016	73	ND	450	ND	ND	ND	ND	5.4	33
7/12/2016	35	ND	680	7.8	ND	ND	ND	ND	44
10/10/2016	ND	ND	270	ND	ND	ND	ND	ND	ND
1/24/2017	24	ND	300	ND	ND	ND	ND	ND	29
4/11/2017	34	ND	210	6.2	ND	ND	ND	ND	ND
7/6/2017	63	490	13	ND	ND	16	ND	ND	50
10/18/2017	ND	ND	200	ND	ND	ND	ND	ND	14
1/5/2018	44	84	400	3.7	2.1	ND	ND	ND	ND
4/10/2018	110	ND	360	6.8	ND	8	ND	7.2	11
7/9/2018	18	ND	250	4.1	2.6	ND	ND	ND	20
10/19/2018	15	ND	210	ND	3.3	ND	ND	ND	9.9
1/4/2019	21	ND	170	ND	ND	ND	ND	ND	ND
4/10/2019	23	ND	150	ND	ND	ND	ND	ND	ND
7/22/2019	22	ND	230	ND	ND	ND	ND	ND	ND
10/14/2019	ND	ND	89	ND	ND	ND	ND	ND	ND
1/7/2020	ND	ND	86	ND	ND	ND	ND	ND	ND
4/13/2020	ND	ND	200	ND	ND	ND	ND	ND	ND
10/8/2020	ND	ND	80	ND	ND	ND	ND	ND	ND
4/1/2021	210	ND	200	ND	ND	ND	ND	ND	ND

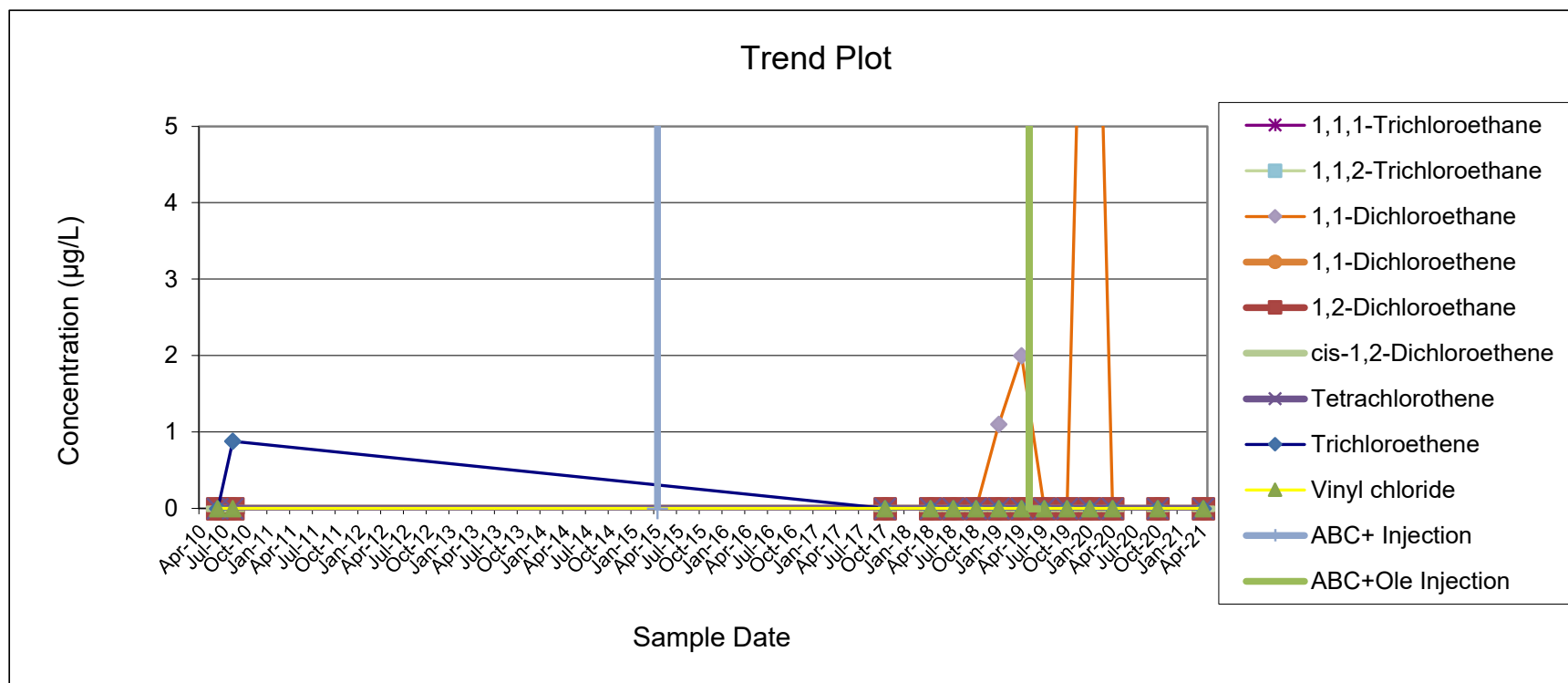
MONITORING WELL A1-GP06S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL A1-GP09S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

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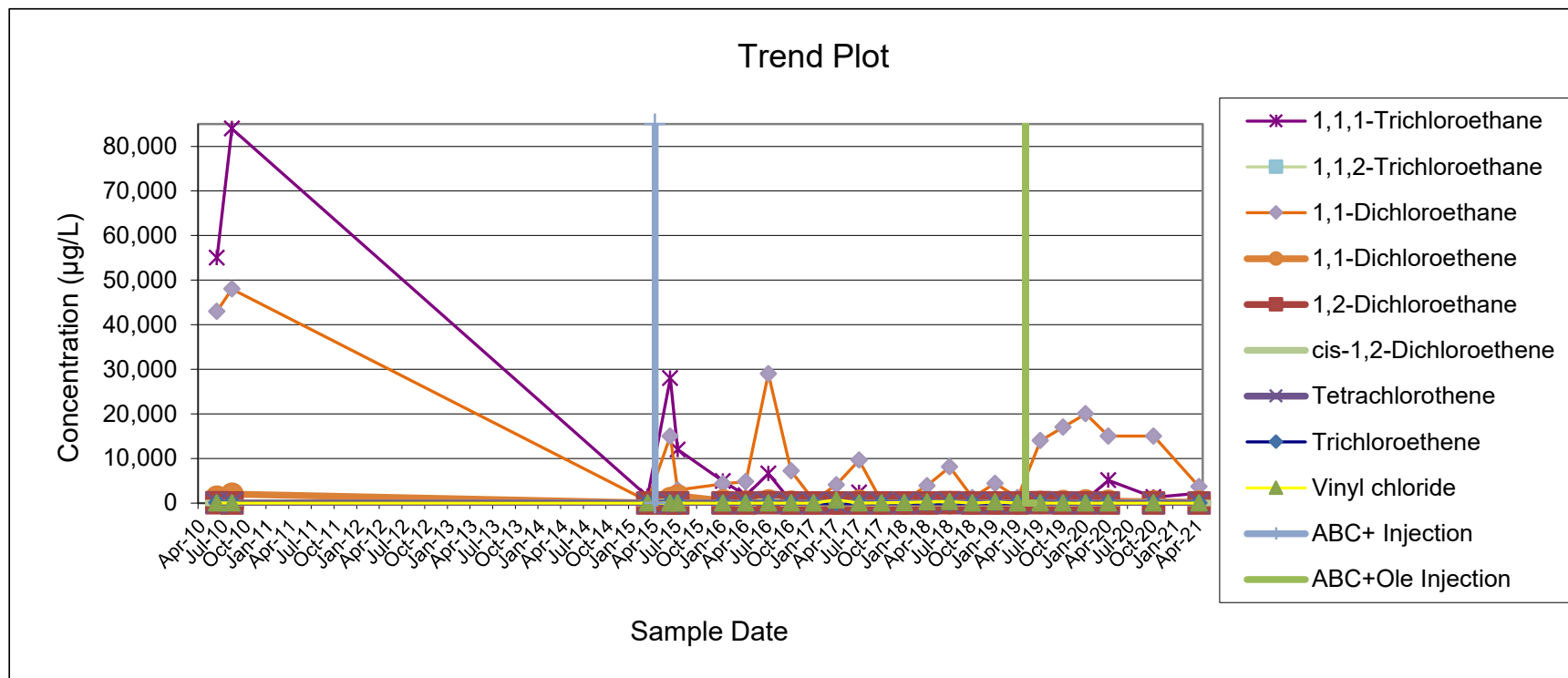
MONITORING WELL A1-GP09S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL A1-GP10S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)								
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride
6/21/2010	55,000	84	43,000	1,300	77	ND	1.2	92	41
8/3/2010	84,000	ND	48,000	2,000	ND	ND	ND	ND	ND
3/11/2015	1,500	1.2	440	65	1.6	7.4	ND	6.6	ND
6/12/2015	28,000	ND	15,000	1,000	40	190	ND	ND	ND
7/27/2015	12,000	ND	2,900	1,600	9.6	45	ND	36	ND
1/7/2016	4,900	ND	4,300	470	ND	51	ND	ND	ND
4/8/2016	1,700	ND	4,800	220	ND	ND	ND	ND	ND
7/11/2016	6,600	ND	29,000	500	72	270	ND	ND	ND
10/7/2016	360	ND	7,200	190	47	ND	ND	ND	ND
1/23/2017	ND	ND	580	ND	ND	ND	ND	ND	ND
4/10/2017	240	ND	4,100	45	ND	ND	ND	ND	690
7/6/2017	2,400	ND	9,600	380	ND	ND	ND	ND	ND
10/17/2017	23	ND	240	4	1.4	0.5	ND	0.47	45
1/4/2018	44	ND	600	ND	11	ND	ND	ND	85
4/10/2018	140	ND	3,900	19	18	ND	ND	ND	260
7/9/2018	530	ND	8,100	51	77	ND	ND	ND	320
10/19/2018	640	ND	1,200	ND	ND	ND	ND	ND	ND
1/4/2019	200	ND	4,400	91	ND	ND	ND	ND	260
4/15/2019	ND	ND	1,200	ND	ND	ND	ND	ND	ND
7/22/2019	690	ND	14,000	130	78	ND	ND	ND	ND
10/14/2019	780	ND	17,000	310	ND	ND	ND	ND	ND
1/7/2020	730	ND	20,000	480	ND	ND	ND	ND	ND
4/13/2020	5,100	ND	15,000	400	44	ND	ND	ND	ND
10/8/2020	1,300	ND	15,000	270	ND	170	ND	ND	ND
4/1/2021	2,200	ND	3,700	200	ND	ND	ND	ND	ND

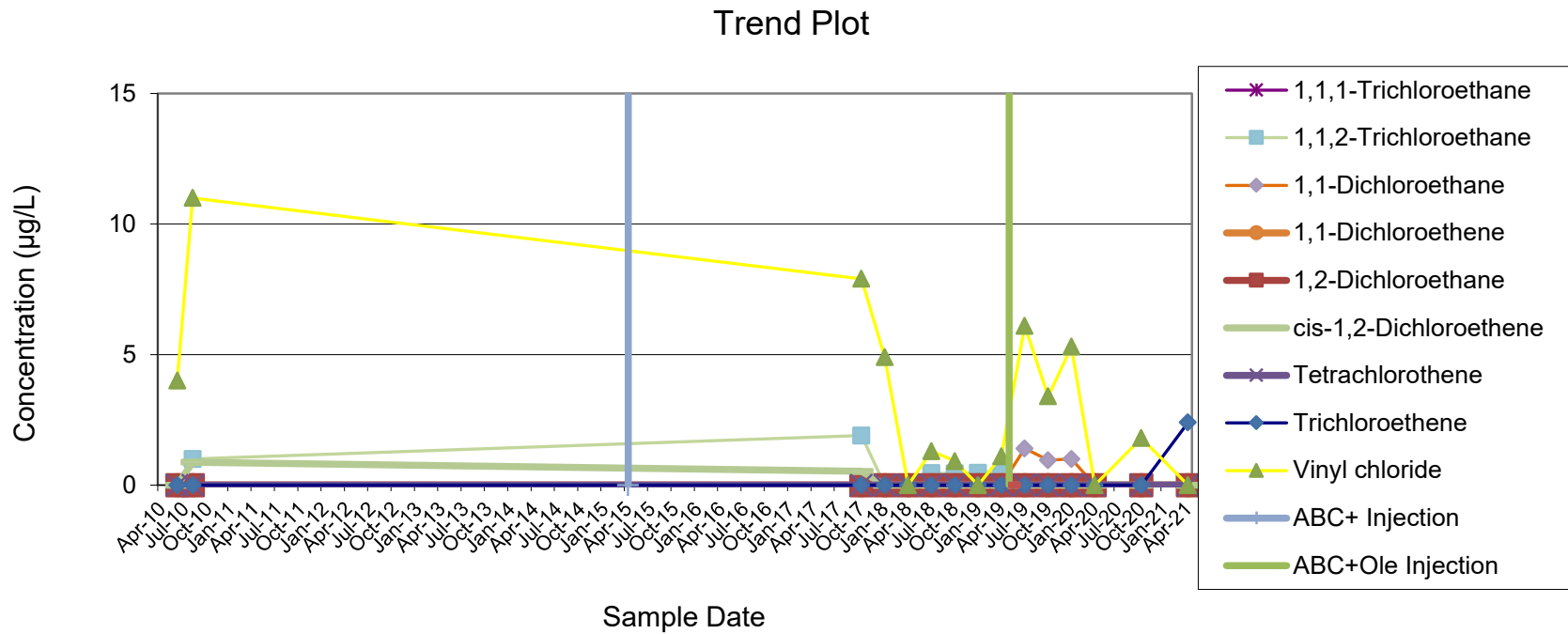
MONITORING WELL A1-GP10S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL A1-GP14S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

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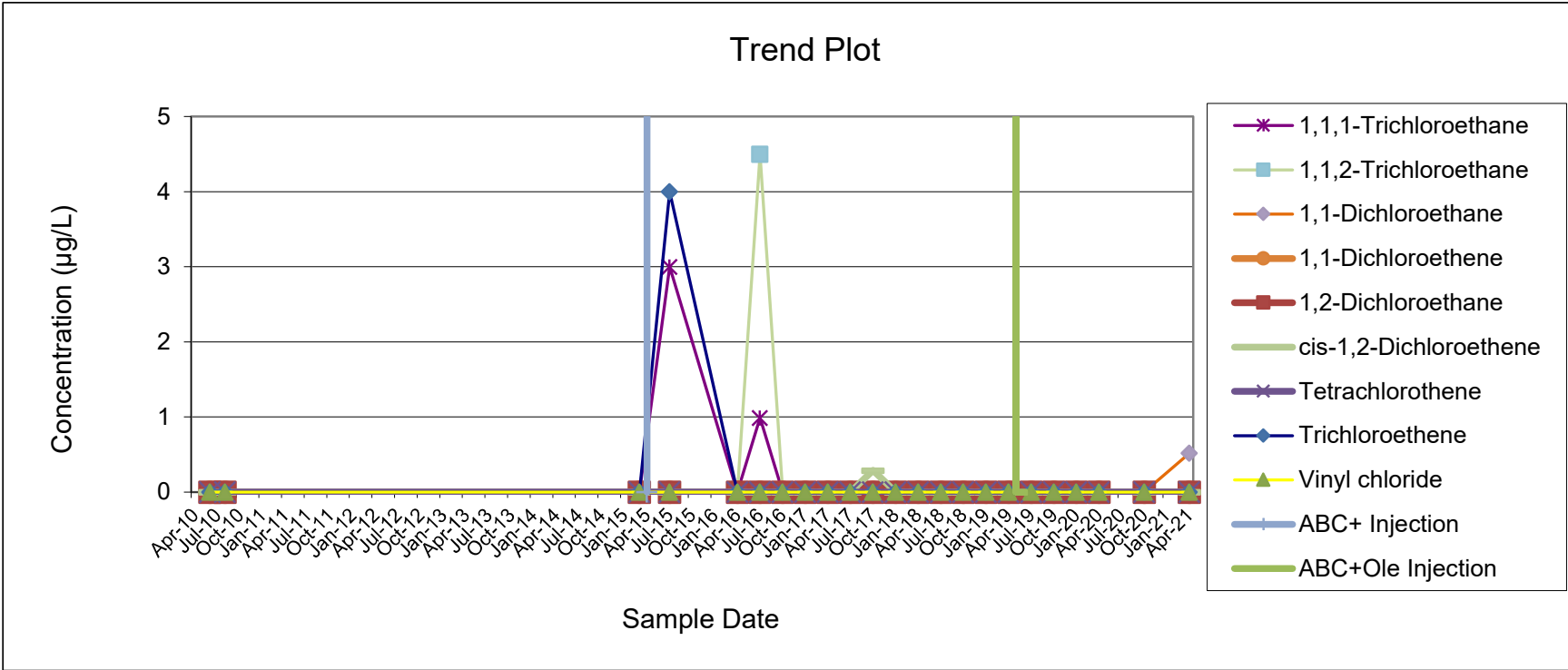
MONITORING WELL A1-GP14S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL A1-GP15S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)								
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride
6/17/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/2/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND
3/11/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/29/2015	3.0	ND	ND	ND	ND	ND	ND	4.0	ND
4/8/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/11/2016	0.99	4.5	ND	ND	ND	ND	ND	ND	ND
10/7/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/23/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/12/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/6/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/17/2017	ND	ND	ND	ND	ND	0.29	ND	ND	ND
1/2/2018	NS	NS	NS	NS	NS	NS	NS	NS	NS
4/10/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/9/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/22/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/2/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/10/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/25/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/14/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/7/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/13/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/8/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/1/2021	ND	ND	0.52	ND	ND	ND	ND	ND	ND

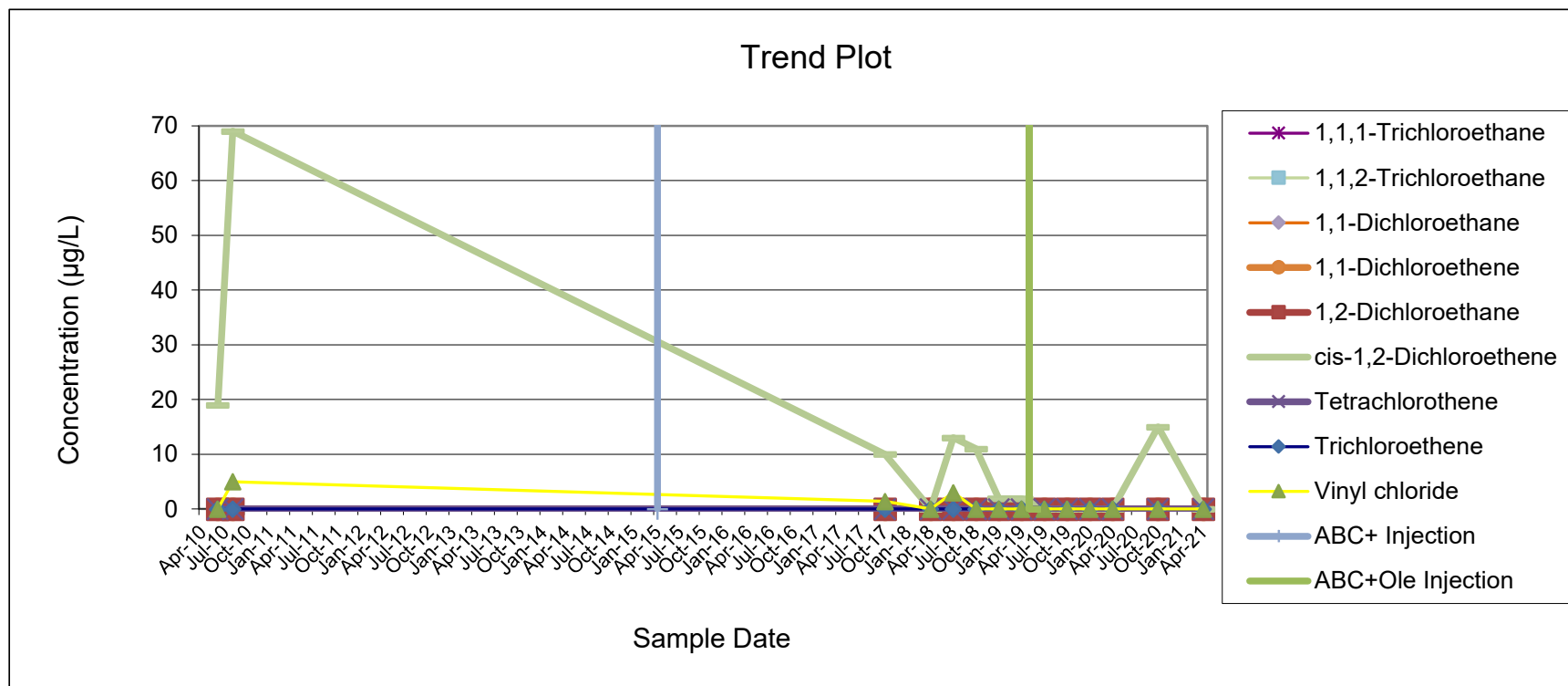
MONITORING WELL A1-GP15S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL A1-GP16S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

[illegible]

MONITORING WELL A1-GP16S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL A1-GP18S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)								
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	Tetrachloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl chloride
6/18/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/2/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND
3/11/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/27/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/7/2016	ND	ND	ND	ND	ND	ND	3.0	ND	ND
4/8/2016	ND	ND	ND	ND	ND	ND	2.4	ND	ND
7/8/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/7/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/23/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/10/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/6/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/16/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/5/2018	NA	NA	NA	NA	NA	NA	ND	NA	NA
4/9/2018	ND	ND	ND	ND	ND	ND	8.2	ND	ND
7/9/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/19/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/4/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/9/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/22/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/14/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/7/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/13/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/8/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/1/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND

NA - Not available

Trend Plot

Concentration ($\mu\text{g/L}$)

Sample Date

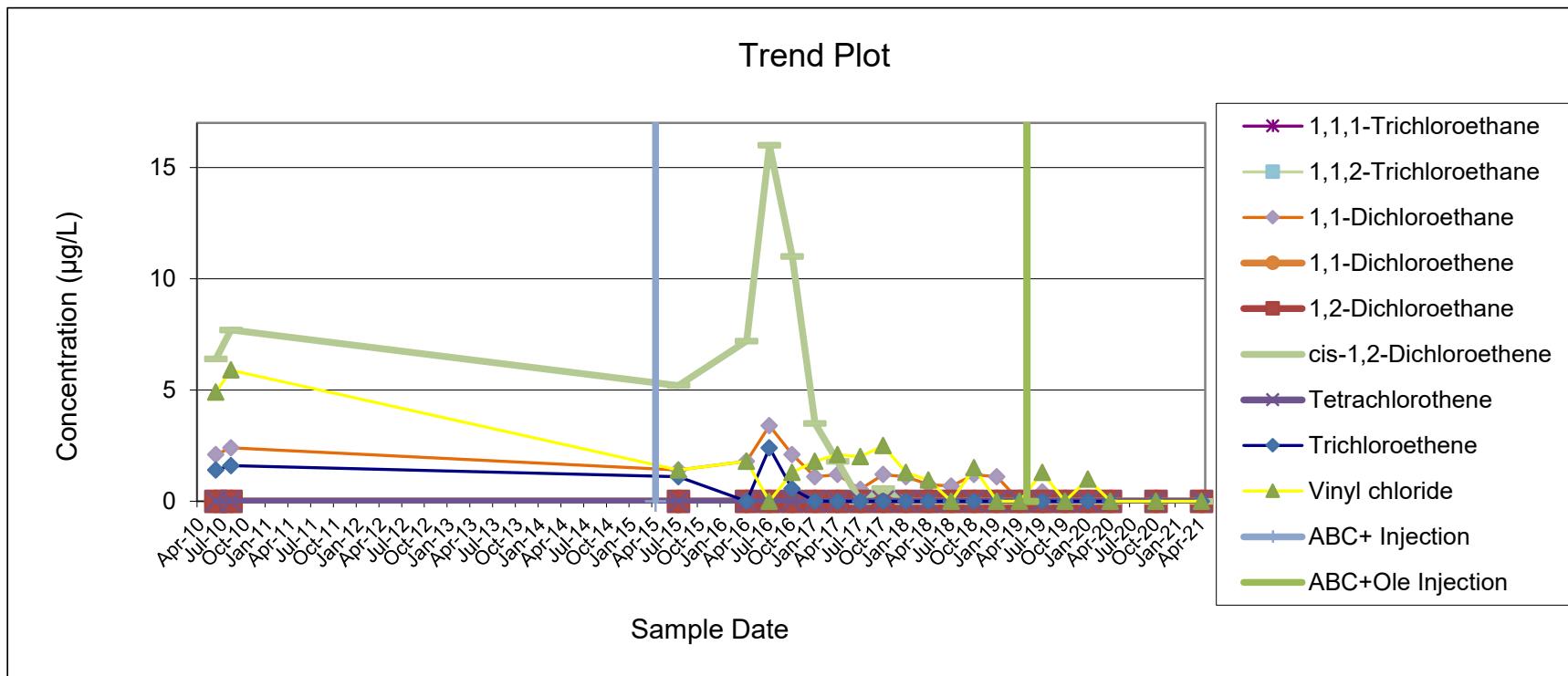
Legend:

- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- 1,1-Dichloroethane
- 1,1-Dichloroethene
- 1,2-Dichloroethane
- cis-1,2-Dichloroethene
- Tetrachloroethene
- Trichloroethene
- Vinyl chloride
- ABC+ Injection
- ABC+Ole Injection

MONITORING WELL MW-30
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

[illegible]

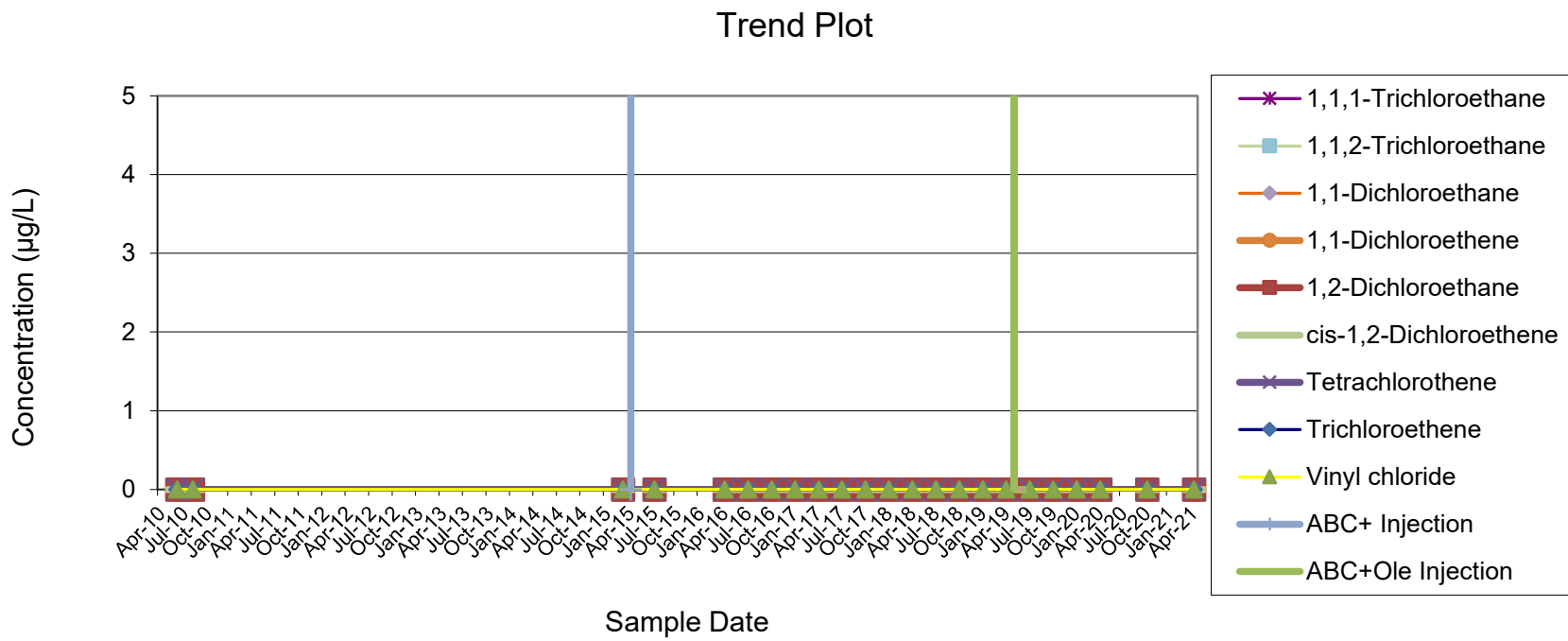
MONITORING WELL MW-30
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL MW-35S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

[illegible]

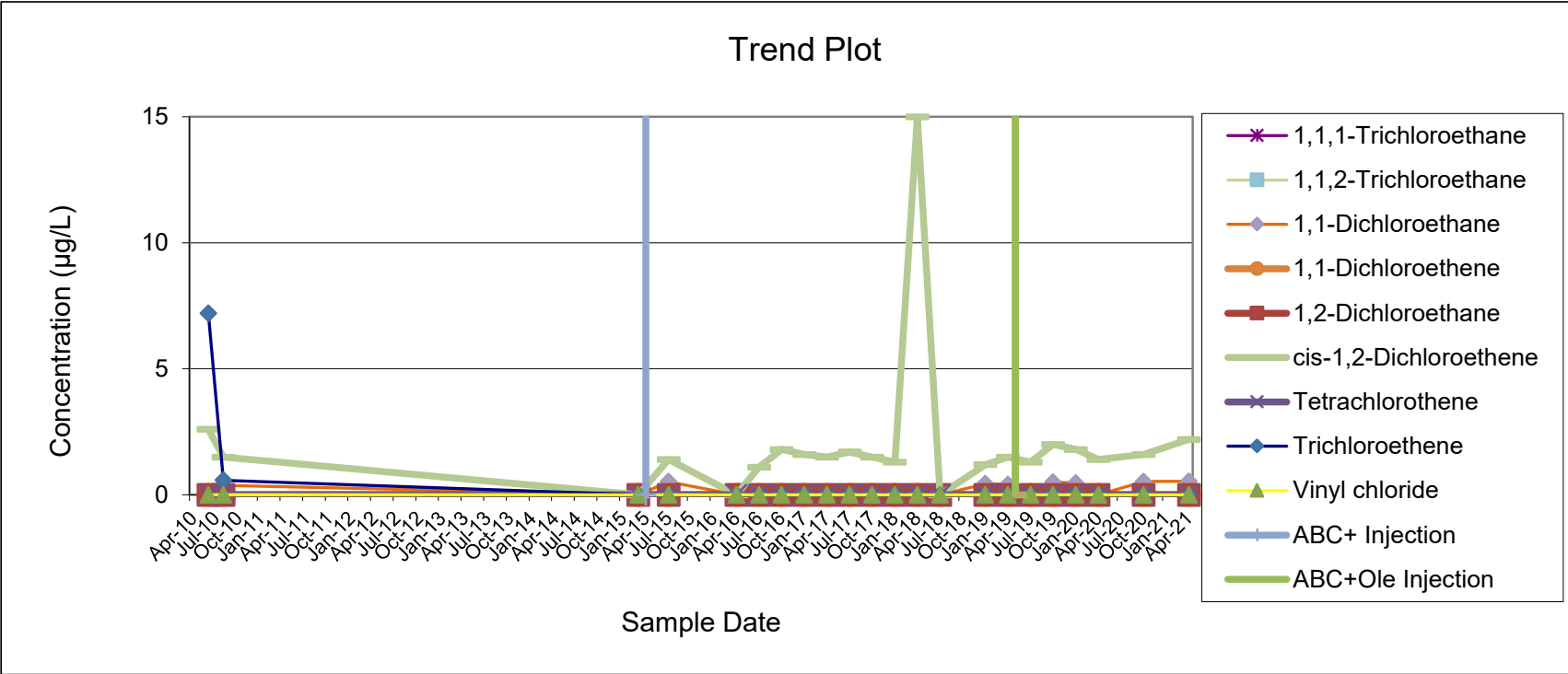
MONITORING WELL MW-35S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL MW-36S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)								
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride
6/17/2010	ND	ND	ND	ND	ND	2.6	ND	7.2	ND
8/3/2010	ND	ND	0.38	ND	ND	1.5	ND	0.58	ND
3/10/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/29/2015	ND	ND	0.52	ND	ND	1.4	ND	ND	ND
4/8/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/11/2016	ND	ND	ND	ND	ND	1.1	ND	ND	ND
10/12/2016	ND	ND	ND	ND	ND	1.8	ND	ND	ND
1/24/2017	ND	ND	ND	ND	ND	1.6	ND	ND	ND
4/12/2017	ND	ND	ND	ND	ND	1.5	ND	ND	ND
7/6/2017	ND	ND	ND	ND	ND	1.7	ND	ND	ND
10/17/2017	ND	ND	ND	ND	ND	1.5	ND	ND	ND
1/4/2018	ND	ND	ND	ND	ND	1.3	ND	ND	ND
4/9/2018	ND	ND	ND	ND	ND	15	ND	ND	ND
7/10/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/7/2019	ND	ND	0.44	ND	ND	1.2	ND	ND	ND
4/16/2019	ND	ND	0.41	ND	ND	1.5	ND	ND	ND
7/25/2019	ND	ND	ND	ND	ND	1.3	ND	ND	ND
10/18/2019	ND	ND	0.50	ND	ND	2.0	ND	ND	ND
1/8/2020	ND	ND	0.47	ND	ND	1.8	ND	ND	ND
4/16/2020	ND	ND	0.40J	ND	ND	1.4	ND	ND	ND
10/9/2020	ND	ND	0.53	ND	ND	1.6	ND	ND	ND
4/6/2021	ND	ND	0.54	ND	ND	2.2	ND	ND	ND

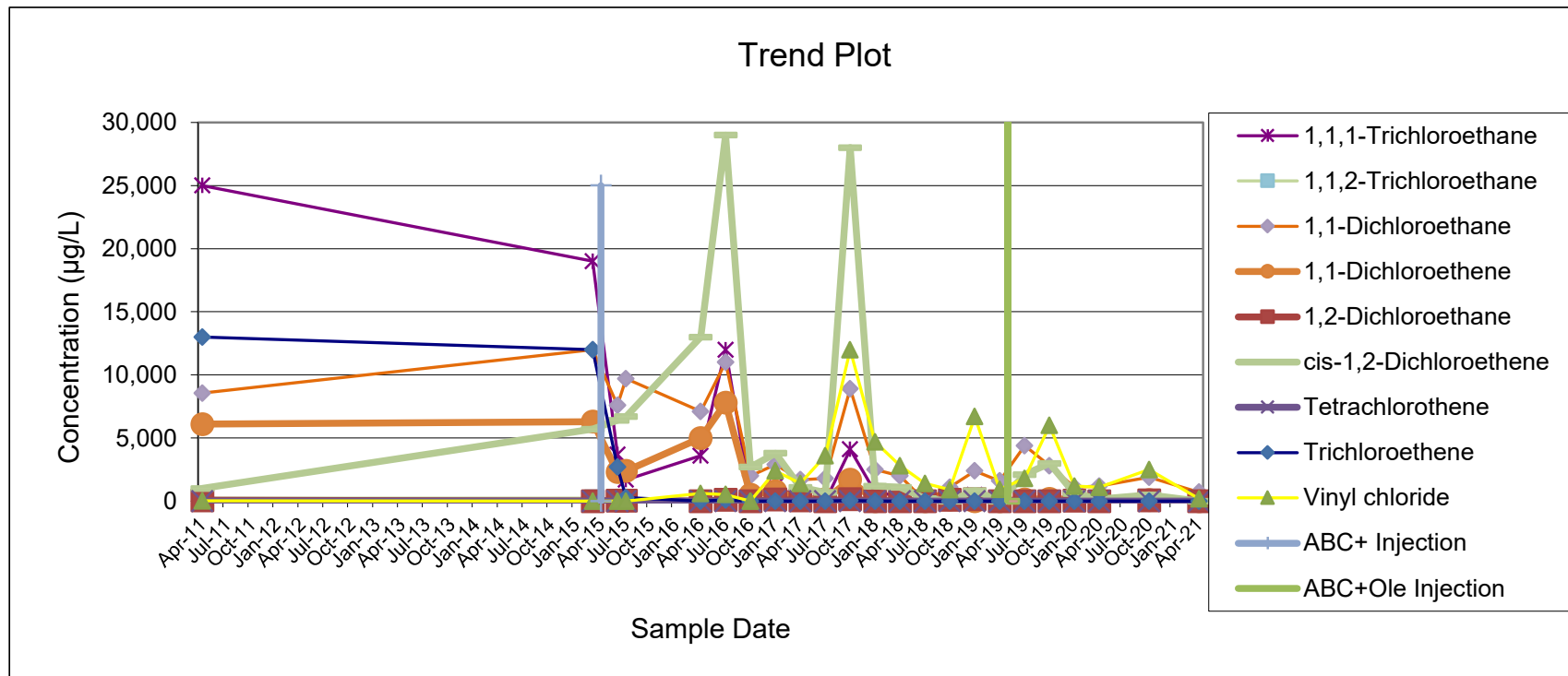
MONITORING WELL MW-36S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL MW-42S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)								
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride
4/7/2011	25,000	240	8,550	6,100	76	1,000	6	13,000	27
3/12/2015	19,000	240	12,000	6,300	ND	5,700	ND	12,000	ND
6/12/2015	3,700	100	7,600	2,300	44	6,400	ND	2,700	ND
7/27/2015	1,700	71	9,700	2,400	44	6,700	ND	280	ND
4/8/2016	3,600	ND	7,100	5,000	ND	13,000	ND	ND	610
7/14/2016	12,000	120	11,000	7,800	110	29,000	ND	100	530
10/13/2016	440	ND	2,000	520	ND	2,700	ND	ND	ND
1/25/2017	1,200	ND	2,900	790	130	3,800	ND	ND	2,400
4/12/2017	230	ND	1,700	220	74	1,100	ND	ND	1,400
7/10/2017	ND	ND	1,800	150	ND	690	ND	ND	3,600
10/19/2017	4,100	48	8,900	1,700	170	28,000	ND	54	12,000
1/2/2018	740	ND	2,500	ND	ND	1,200	ND	ND	4,700
4/11/2018	390	ND	2,000	120	ND	1,100	ND	ND	2,800
7/12/2018	ND	ND	ND	ND	ND	210	ND	ND	1,400
10/23/2018	ND	ND	1,100	130	110	ND	ND	ND	910
1/8/2019	490	ND	2,400	ND	160	850	ND	ND	6,700
4/18/2019	ND	ND	1,600	ND	ND	ND	ND	ND	940
7/26/2019	ND	ND	4,400	140	ND	2,100	ND	ND	1,800
10/18/2019	ND	ND	2,800	190	ND	3,000	ND	ND	6,000
1/10/2020	160	390	1,100	150	43	610	ND	ND	1,200
4/16/2020	200	ND	1,200	130	58J	160	ND	ND	1,100
10/12/2020	160	ND	1,900	99	76	490	ND	ND	2,500
4/1/2021	ND	ND	710	ND	ND	ND	ND	ND	190

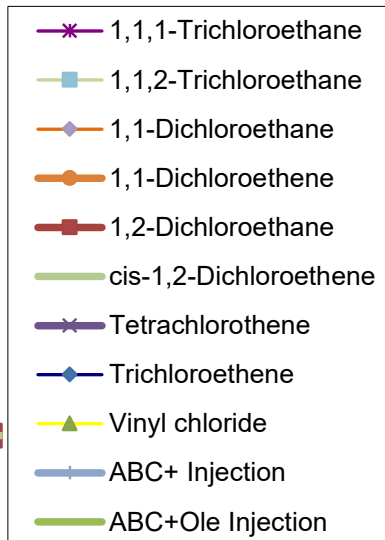
MONITORING WELL MW-42S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL MW-43S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

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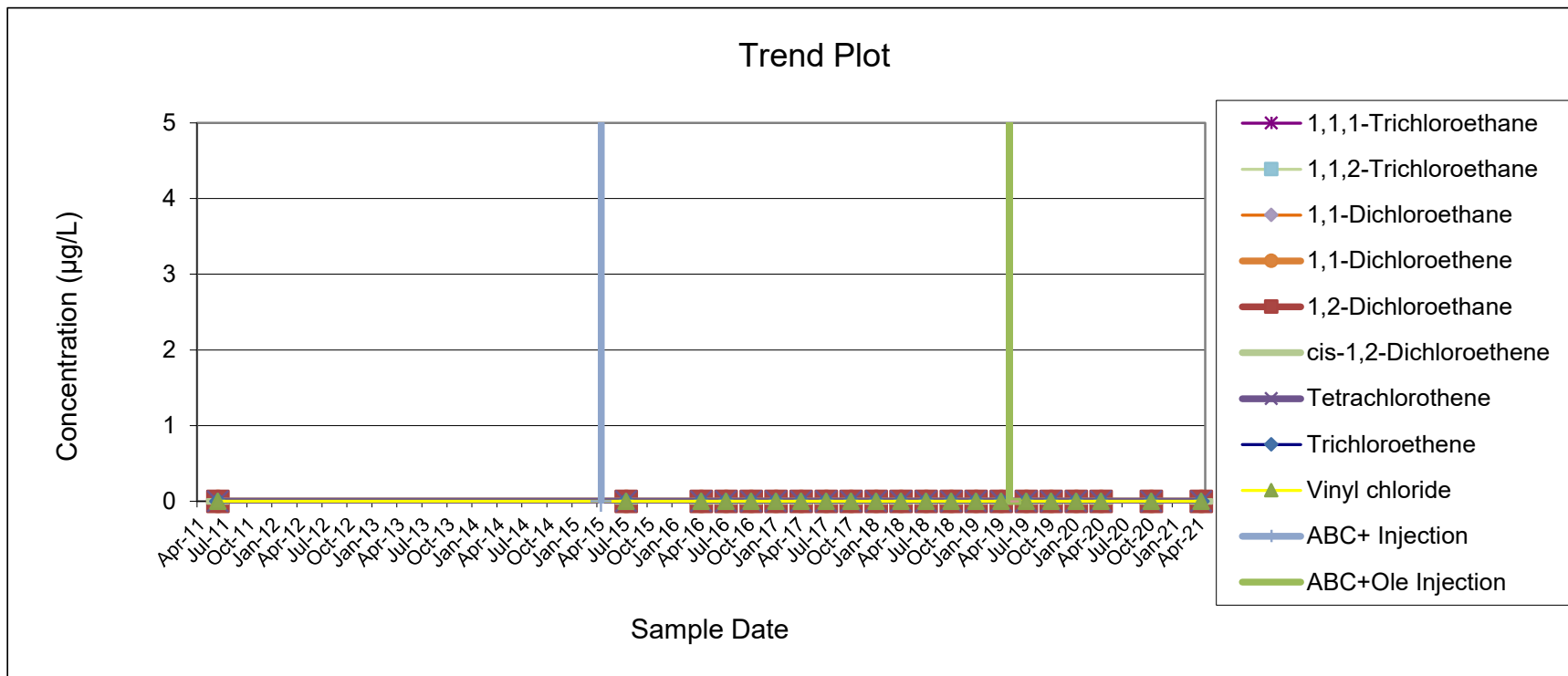
Lancaster, New York



MONITORING WELL MW-44S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

[illegible]

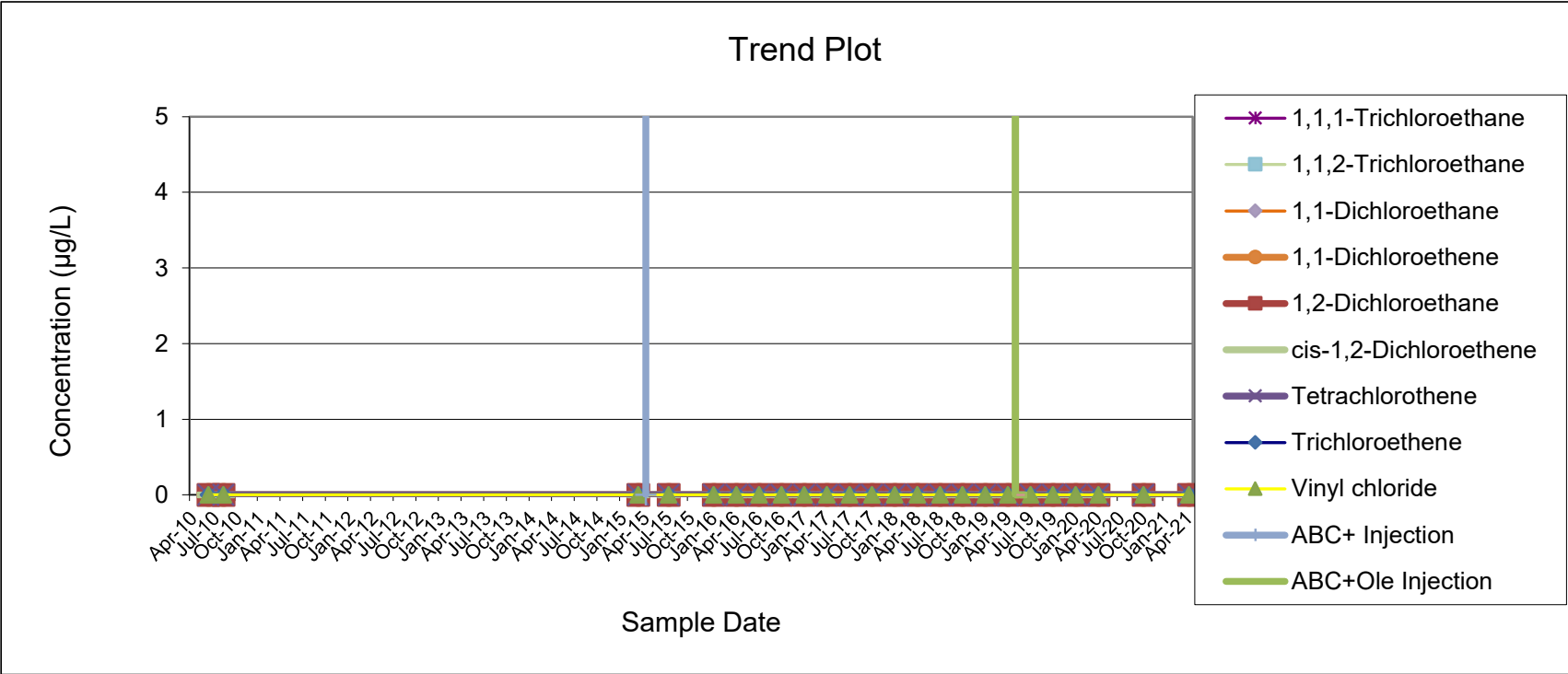
MONITORING WELL MW-44S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL MW-35D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

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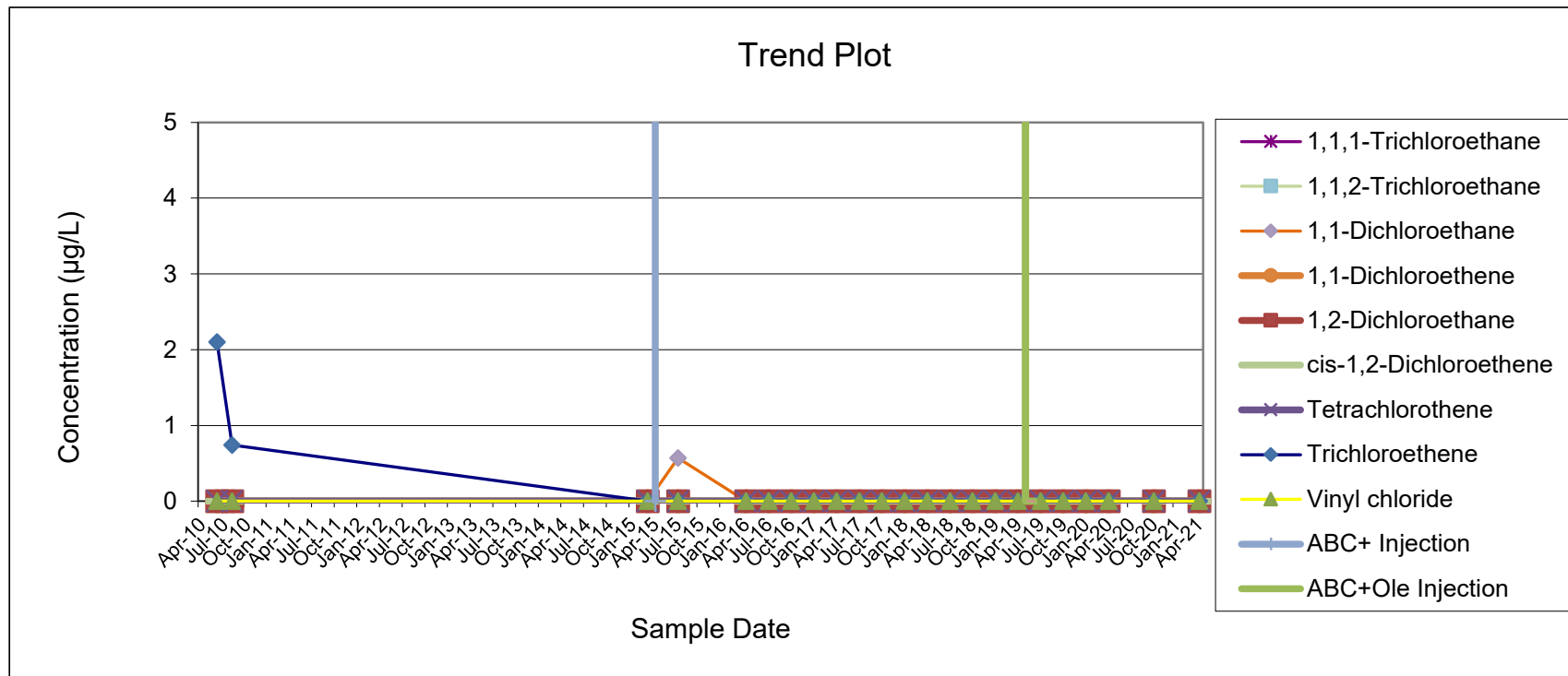
MONITORING WELL MW-35D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL MW-36D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

[illegible]

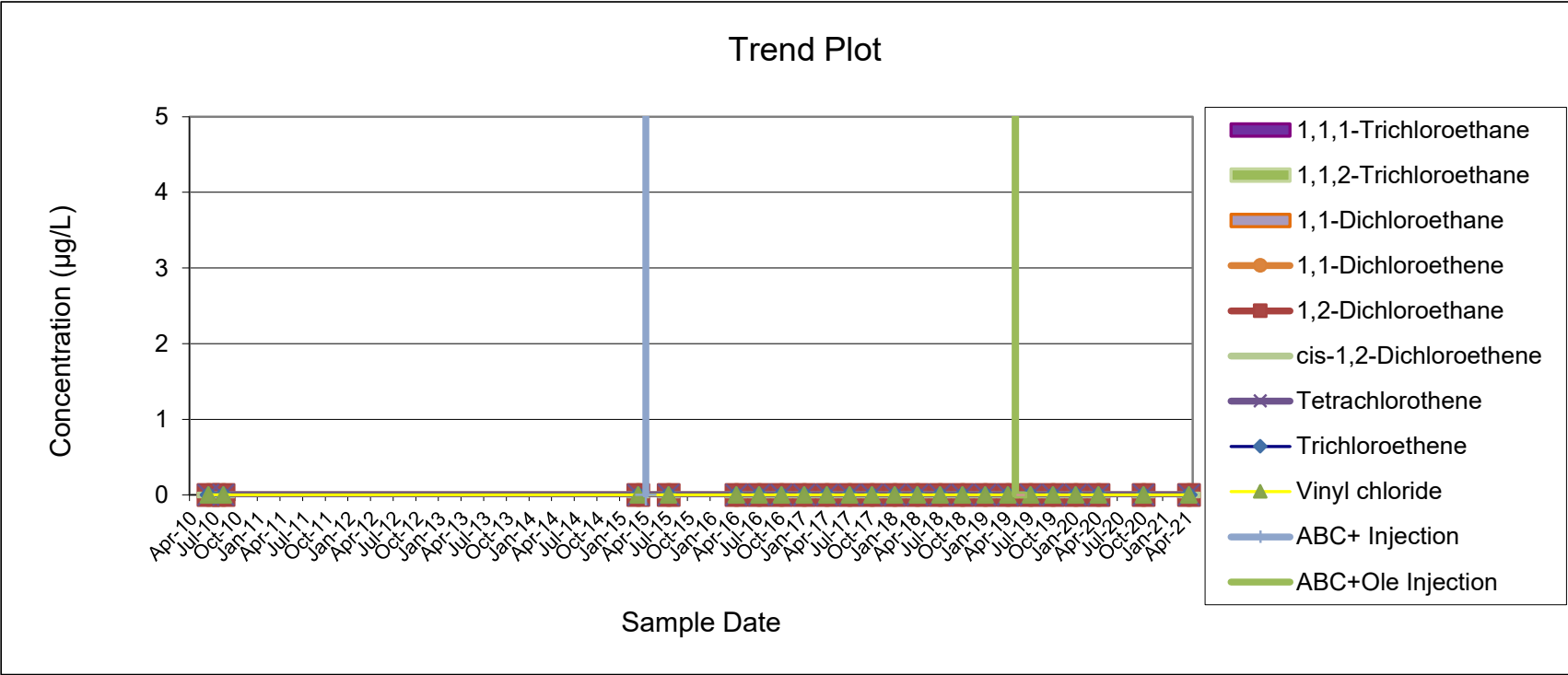
MONITORING WELL MW-36D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL MW-37D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

[illegible]

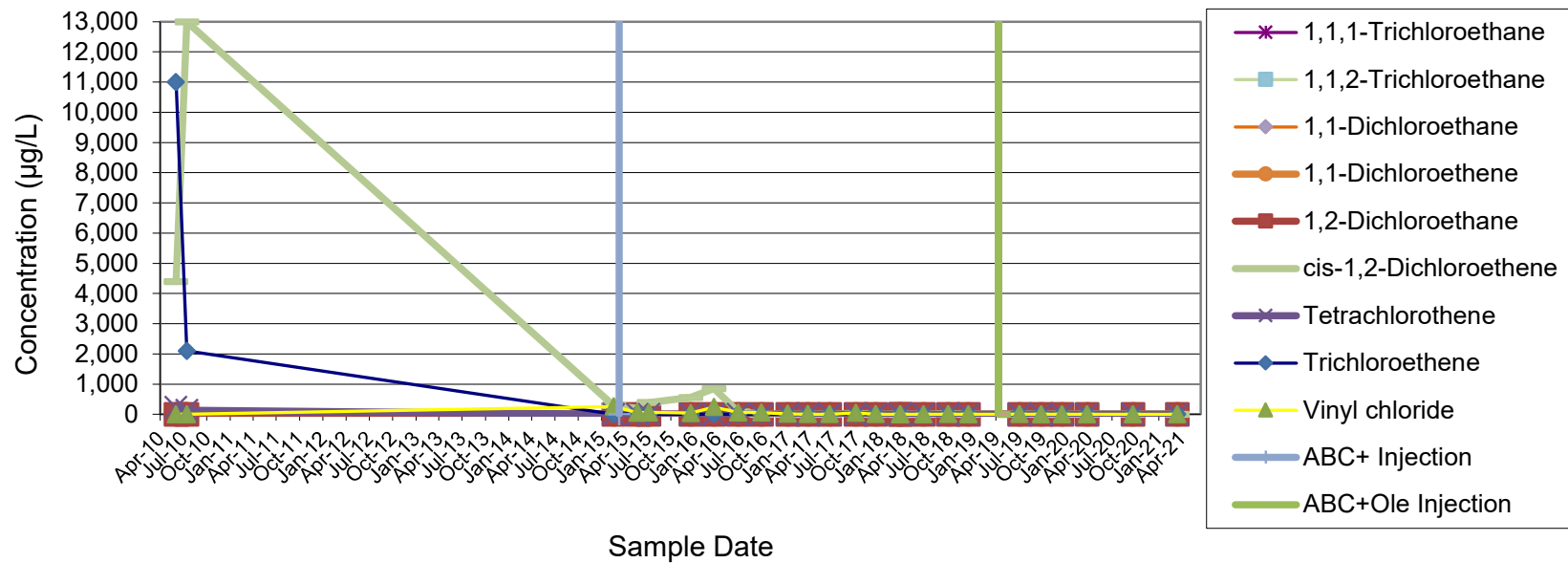
MONITORING WELL MW-37D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL MW-38D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

[illegible]

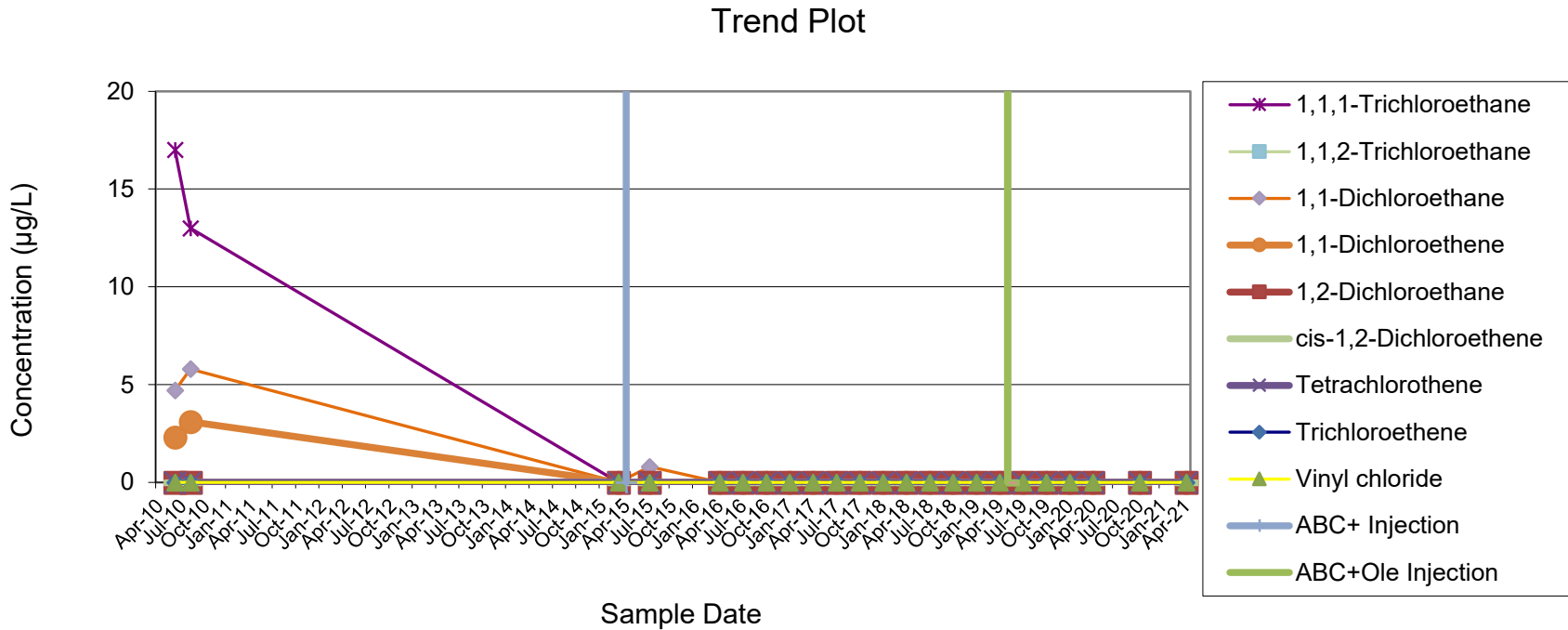
Lancaster, New York



MONITORING WELL MW-39D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

[illegible]

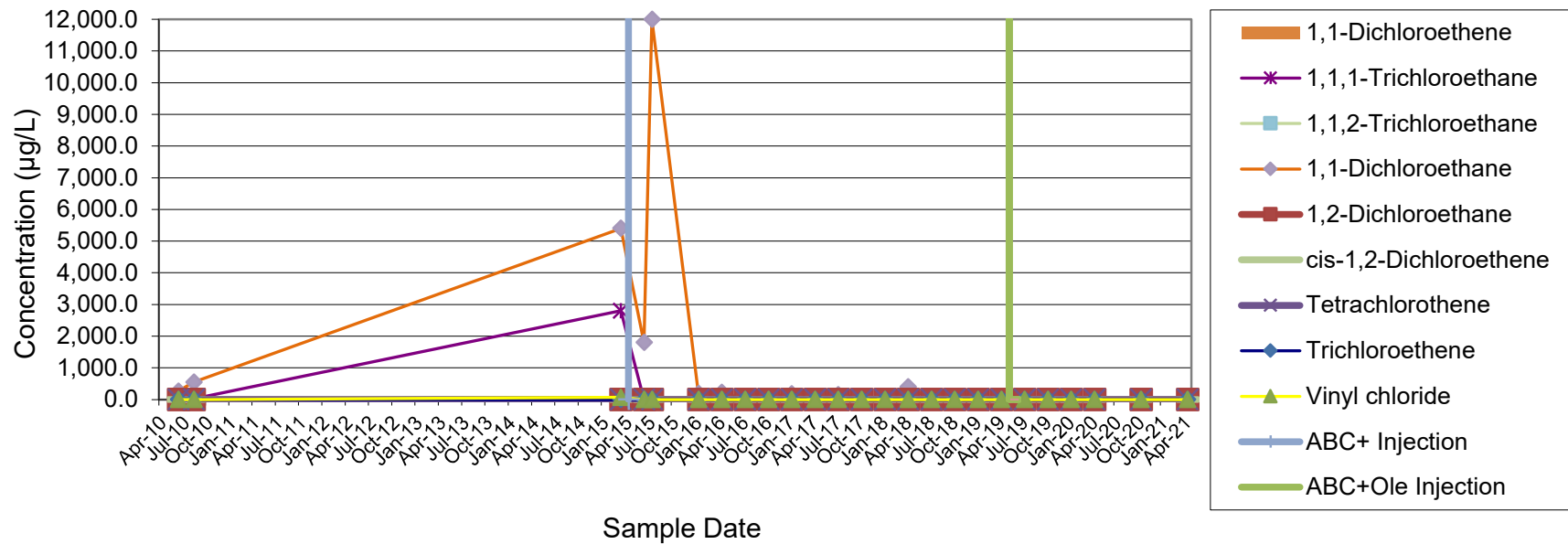
MONITORING WELL MW-39D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



MONITORING WELL MW-40D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)								
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride
6/21/2010	23	ND	260	1.8	ND	1.2	ND	2.8	ND
8/3/2010	25	ND	550	6	ND	ND	ND	ND	ND
3/11/2015	2,800	ND	5,400	200	ND	ND	ND	ND	67
6/12/2015	ND	ND	1,800	ND	ND	ND	ND	ND	ND
7/27/2015	ND	ND	12,000	64	ND	ND	ND	ND	ND
1/7/2016	ND	ND	190	ND	ND	ND	ND	ND	ND
4/8/2016	ND	ND	220	ND	ND	ND	ND	ND	ND
7/11/2016	ND	ND	12	ND	ND	ND	ND	ND	ND
10/11/2016	ND	ND	71	ND	5.2	ND	ND	ND	ND
1/25/2017	ND	ND	180	ND	4.8	ND	ND	ND	ND
4/10/2017	43	ND	ND	ND	ND	ND	ND	ND	ND
7/10/2017	ND	ND	150	ND	ND	ND	ND	ND	ND
10/16/2017	ND	ND	51	ND	1.3	ND	ND	ND	0.9
1/4/2018	ND	ND	32	ND	ND	ND	ND	ND	ND
4/10/2018	20	ND	400	ND	ND	ND	ND	ND	ND
7/10/2018	ND	ND	4.6	ND	ND	ND	ND	ND	ND
10/18/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/7/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/16/2019	20	ND	78	ND	ND	ND	ND	ND	ND
7/29/2019	ND	ND	15	ND	ND	ND	ND	ND	ND
10/18/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/8/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/16/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/12/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/1/2021	ND	ND	8.6	ND	ND	ND	ND	ND	ND

Lancaster, New York



Appendix C

Purge Logs

Appendix C1 Purge Logs

October 2020



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/9/2020
Field Personnel C.Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # GP-2S
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 45 ° F
Total Depth (TWD) Below Top of Casing 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 3.6 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 11.4 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 1.8582 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collectio Peristaltic Pump/Poly Tubing
Total Volume of Water Remove 3.79 liter

Casing Diameter 1 inches
Casing Material PVC
Measuring Point Elevation 689.82 1/100 ft
Height of Riser (above land surface) 2.52 1/100 ft
Land Surface Elevation 687.3 1/100 ft
Screened Interval (below land surfac 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	125	100	100				
Time (Military)	9:10	9:15	9:20		12:48	12:53	
Depth to Groundwater Below Top of Casing (ft)	8.61		dry				
Drawdown (ft)							
pH (S.U.)	6.5	6.64	6.64		6.53	6.47	
Sp. Cond. (mS/cm)	0.950	0.887	0.898		0.870	0.864	
Turbidity (NTUs)	26.4	25.2	60		52	58.4	
Dissolved Oxygen (mg/L)	2.39	1.78	1.79		1.52	1.33	
Water Temperature (°C)	14.3	14.6	14.6		16.3	16	
ORP (mV)	21	-60.7	-83.7		-47.5	-67.7	

Physical appearance at start Color CloudyOdor NoneSheen/Free Product NonePhysical appearance at sampling Color CloudyOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Sampled on 10/12/20 @ 1240Dry on 10/9/10 @ 0923, recharged, dry @ 1445 Dry on 10/12/20 @ 0845, recharged, sampled



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/9/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # GP-9S
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 59 ° F
Total Depth (TWD) Below Top of Casing 17.3 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 11.19 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 6.11 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0 = 0.2 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Remove 0.757 liter

Casing Diameter 1 inches
Casing Material PVC
Measuring Point Elevation 1/100 ft
Height of Riser (above land surface) 1/100 ft
Land Surface Elevation 1/100 ft
Screened Interval (below land surfac 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

7/10/17 post sample

Flow Rate (ml/min)
Time (Military)
Depth to Groundwater
Below Top of Casing (ft)
Drawdown (ft)
pH (S.U.)
Sp. Cond. (mS/cm)
Turbidity (NTUs)
Dissolved Oxygen (mg/L)
Water Temperature (°C)
ORP (mV)

200	150		200	150			
12:15	12:20		14:54	14:59			
8.23	11.5 (dry)		10.55	12.30 (dry)			
6.64	6.54		6.79	6.52			
1.439	1.454		1.357	1.374			
730au	1150au		95				
11.97	3.22		11.77	3.55			
6.68	6.47		6.98	6.71			
118	91.6		108	97.1			

Physical appearance at start Color Odor Sheen/Free Product Physical appearance at sampling Color Odor Sheen/Free Product NoneCOMMENTS/OBSERVATIONS Sampled on 4/13/20 @ 1030 Water level @ sample - 3.39'



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr)10/7/2020

Field PersonnelC. Bourne

Site NameFormer Scott Aviation Site - Lancaster, NY

AECOM Job #60536398

Well ID #GP-14S

Upgradient

Downgradient

Weather ConditionsOvercast, Rain

Air Temperature56 ° F

Total Depth (TWD) Below Top of Casing151/100 ft

Depth to Groundwater (DGW) Below Top of Casing :2.681/100 ft

Length of Water Column (LWC) = TWD - DGW :12.321/100 ft

1 Casing Volume (OCV) = LWC x 0.0408 = 0.502656 gal

3 Casing Volumes = gal

Method of Well EvacuationPeristaltic Pump

Method of Sample CollectorPeristaltic Pump/Poly Tubing

Total Volume of Water Removed1.9 liter

Casing Diameter1 inches

Casing MaterialPVC

Measuring Point Elevation687.691/100 ft

Height of Riser (above land surface)-1.741/100 ft

Land Surface Elevation689.41/100 ft

Screened Interval (below land surface)5-151/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	150	125	125	125	100	100		
Time (Military)	9:52	9:57	10:02	10:07	10:12	10:17		
Depth to Groundwater Below Top of Casing (ft)	4.80	5.48	6.75	9.70	11.02	-		
Drawdown (ft)	2.12	2.80	4.07	7.02	8.34	-		
pH (S.U.)	7.1	7.22	7.27	7.21	7.16	7.14		
Sp. Cond. (mS/cm)	0.76	0.615	0.534	0.583	0.678	0.681		
Turbidity (NTUs)	58.4	24	13.8	34.8	41.2	34.1		
Dissolved Oxygen (mg/L)	1.21	0.8	0.96	1.24	1.79	1.81		
Water Temperature (°C)	16.7	17.3	17.6	17.3	16.9	16.8		
ORP (mV)	-119.4	-127	-125.4	-122.9	-110.8	-106.4		

Physical appearance at start

ColorClear

OdorNone

Physical appearance at sampling

ColorClear

OdorNone

Sheen/Free ProductNone

Sheen/Free ProductNone

COMMENTS/OBSERVATIONS

Start purge @ 0951

Dry @ 1017

Start purge @ 1148 on 10/8/20, WL 3.3'

Sampled @ 1205



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/6/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # GP-16S
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 65 ° F
Total Depth (TWD) Below Top of Casing 17.52 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 5 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 12.52 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.510816 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 4.0 liter

Casing Diameter 1 inches
Casing Material PVC
Measuring Point Elevation 687.69 1/100 ft
Height of Riser (above land surface) -0.31 1/100 ft
Land Surface Elevation 688.0 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)
Time (Military)
Depth to Groundwater
Below Top of Casing (ft)
Drawdown (ft)
pH (S.U.)
Sp. Cond. (mS/cm)
Turbidity (NTUs)
Dissolved Oxygen (mg/L)
Water Temperature (°C)
ORP (mV)

225	175	125	125	100	100	100	100
14:49	14:54	14:59	15:04	9:07	9:12	11:03	11:08
7.75	-	-	-	6.20	7.85	6	6.7
2.75	-	-	-	1.2	2.85	1	1.7
7.66	7.39	7.35	-	6.45	6.67	6.97	6.95
1.099	1.003	1.046	1.137	0.967	-	0.85	0.826
50.4	116	87	-	62	-	45	76.9
1	0.51	0.51	-	0.98	-	0.94	0.66
13.80	14.10	14.00	14.70	12.9	13	13.9	13.5
-54.9	-40.4	-54.8	-38.5	126.0	60.4	15.7	-9.6

Physical appearance at start Color Cloudy
Odor None

Physical appearance at sampling Color Minor cloudiness
Odor None

Sheen/Free Product None

Sheen/Free Product None

COMMENTS/OBSERVATIONS Start Purge @ 1448, Dry @ 1502 Start purge @904 on 10/7/20, Dry @ 0920, rain made data recording difficult
Start Purge @1058 on 10/8/20, small air bubbles every 5 inches in tubing starting @ 1111, sampled @ 1128



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr)	10/6/2020		Casing Diameter	1		inches
Field Personnel	C. Bourne		Casing Material	PVC		
Site Name	Former Scott Aviation Site - Lancaster, NY		Measuring Point Elevation	687.69		1/100 ft
AECOM Job #	60536398		Height of Riser (above land surface)	-0.31		1/100 ft
Well ID #	GP-16S		Land Surface Elevation	688.0		1/100 ft
	Upgradient	Downgradient	Screened Interval (below land surface)	5-15		1/100 ft
Weather Conditions	Sunny					
Air Temperature	65 ° F					
Total Depth (TWD) Below Top of Casing	17.52	1/100 ft				
Depth to Groundwater (DGW) Below Top of Casing :	5	1/100 ft				
Length of Water Column (LWC) = TWD - DGW =	12.52	1/100 ft				
1 Casing Volume (OCV) = LWC x	0.0408	=	0.510816	gal		
3 Casing Volumes =			gal			
Method of Well Evacuation	Peristaltic Pump					
Method of Sample Collector	Peristaltic Pump/Poly Tubing					
Total Volume of Water Removed	4.0		liter			

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES							
Flow Rate (ml/min)	225	175	125	125			
Time (Military)	11:13	11:18	11:23	11:28			
Depth to Groundwater Below Top of Casing (ft)	8.65	10.69	11.25	11.33			
Drawdown (ft)	3.65	5.69	6.25	6.33			
pH (S.U.)	6.94	6.95	6.97	7			
Sp. Cond. (mS/cm)	0.777	0.782	0.804	0.806			
Turbidity (NTUs)	49.4	47.2	44.4	44.2			
Dissolved Oxygen (mg/L)	0.94	0.94	0.9	0.88			
Water Temperature (°C)	13.50	13.40	13.30	13.10			
ORP (mV)	-9.6	-57.9	-62.4	-66.7			

Physical appearance at start	Color		Physical appearance at sampling	Color	
	Odor			Odor	
Sheen/Free Product			Sheen/Free Product	None	

COMMENTS/OBSERVATIONS



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr)	10/08/20	Casing Diameter	0.75	inches
Field Personnel	C. Bourne	Casing Material	PVC	
Site Name	Former Scott Aviation Site - Lancaster, NY	Measuring Point Elevation	690.37	1/100 ft
AECOM Job #	60536398	Height of Riser (above land surface)	2.87	1/100 ft
Well ID #	GP-18S	Land Surface Elevation	687.5	1/100 ft
	Upgradient Downgradient	Screened Interval (below land surface)	5-15	1/100 ft
Weather Conditions	Mostly Cloudy			
Air Temperature	46 ° F			
Total Depth (TWD) Below Top of Casing	18	1/100 ft		
Depth to Groundwater (DGW) Below Top of Casing :	7.62	1/100 ft		
Length of Water Column (LWC) = TWD - DGW :	10.38	1/100 ft		
1 Casing Volume (OCV) = LWC x	0.0408 =	0.423504 gal		
3 Casing Volumes =		gal		
Method of Well Evacuation	Peristaltic Pump			
Method of Sample Collector	Peristaltic Pump/Poly Tubing			
Total Volume of Water Removed	4.77	liter		

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	
Various	MNA Analyses	15	Varies	

FIELD ANALYSES							
Flow Rate (ml/min)	-	-					
Time (Military)	10:15	10:20					
Depth to Groundwater Below Top of Casing (ft)	-	-					
Drawdown (ft)	-	-					
pH (S.U.)	6.42	6.64					
Sp. Cond. (mS/cm)	0.632	0.638					
Turbidity (NTUs)	600au	551au					
Dissolved Oxygen (mg/L)	2.12	1.35					
Water Temperature (°C)	12.7	12.6					
ORP (mV)	-40.9	-94.6					
Physical appearance at start	Color		Physical appearance at sampling	Color	Cloudy		
	Odor			Odor	None		
Sheen/Free Product			Sheen/Free Product		None		

COMMENTS/OBSERVATIONS Purged dry on 10/5/20, 10/6/20, 10/7/20
Sampled on 10/8/20 @1000



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/7/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-30
 Upgradient Downgradient
Weather Conditions Cloudy
Air Temperature 59 ° F
Total Depth (TWD) Below Top of Casing 20 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 4.77 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 15.23 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.48249 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 9.46 liter

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 1/100 ft
Height of Riser (above land surface) 0.00 1/100 ft
Land Surface Elevation 1/100 ft
Screened Interval (below land surface) 10-20 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	325	325	250	250	250	250	250	
Time (Military)	13:30	13:35	13:40	13:45	13:50	13:55	14:00	
Depth to Groundwater Below Top of Casing (ft)	5.08	7.05	8.6	9.6	10	10.24	10.55	
Drawdown (ft)	0.31	2.28	3.83	4.83	5.23	5.47	5.78	
pH (S.U.)	7.41	7.43	7.49	7.47	7.44	7.42	7.41	
Sp. Cond. (mS/cm)	0.579	0.57	0.555	0.552	0.551	0.551	0.551	
Turbidity (NTUs)	4.63	4.51	4.32	3.95	3.87	3.81	4	
Dissolved Oxygen (mg/L)	1.57	0.58	0.41	0.34	0.28	0.28	0.29	
Water Temperature (°C)	16.7	17.00	17.40	17.50	17.60	17.60	17.60	
ORP (mV)	-118.3	-126.4	-128.6	-130.8	-132.3	-132.7	-130	

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start Purge: 1329 Sample Time - 1400



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/6/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-35S
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 60 ° F
Total Depth (TWD) Below Top of Casing 14.01 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 9.58 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 4.43 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 0.72209 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 9.46 liter

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 688.56 1/100 ft
Height of Riser (above land surface) -0.54 1/100 ft
Land Surface Elevation 689.1 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	Dup
VOA 40 mL glass	TOC	2	HCL, 4°C	--

FIELD ANALYSES

Flow Rate (ml/min)
Time (Military)
Depth to Groundwater
Below Top of Casing (ft)
Drawdown (ft)
pH (S.U.)
Sp. Cond. (mS/cm)
Turbidity (NTUs)
Dissolved Oxygen (mg/L)
Water Temperature (°C)
ORP (mV)

125	150	150	150	150	150	150	150
10:15	10:20	10:25	10:30	10:35	10:40	10:45	10:50
10.02	10.59	10.89	11.30	11.95	12.37	12.60	13
0.44	0.79	1.30	1.72	2.37	2.77	3.02	3.42
8.15	7.43	7.36	7.29	7.27	7.26	7.25	7.24
0.925	0.926	0.954	0.954	0.929	0.898	0.887	0.883
5.42	5.01	4.75	4.61	4.51	4.2	3.86	3.71
2.35	2.16	1.36	1.18	0.99	0.84	0.74	0.62
13.8	14	14.3	14.2	14.2	14.1	14	13.9
104.8	88.5	79.2	75.3	71.4	66.3	64.7	62.8

Physical appearance at start Color Clear
Odor None

Physical appearance at sampling Color Clear
Odor None

Sheen/Free Product None

Sheen/Free Product None

COMMENTS/OBSERVATIONS Start Purge @ 1014 Sample Time @ 1100, DUP-100620-1 taken



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr)10/6/2020
Field PersonnelC. Bourne
Site NameFormer Scott Aviation Site - Lancaster, NY
AECOM Job #60536398
Well ID #MW-35S

Upgradient
Downgradient

Weather ConditionsSunny
Air Temperature60 ° F
Total Depth (TWD) Below Top of Casing14.011/100 ft
Depth to Groundwater (DGW) Below Top of Casing :9.581/100 ft
Length of Water Column (LWC) = TWD - DGW =4.431/100 ft
1 Casing Volume (OCV) = LWC x 0.163 =0.72209 gal
3 Casing Volumes = gal
Method of Well EvacuationPeristaltic Pump
Method of Sample CollectorPeristaltic Pump/Poly Tubing
Total Volume of Water Removed9.46 liter

Casing Diameter2 inches
Casing MaterialPVC
Measuring Point Elevation688.561/100 ft
Height of Riser (above land surface)-0.541/100 ft
Land Surface Elevation689.11/100 ft
Screened Interval (below land surface)5-151/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	Dup
VOA 40 mL glass	TOC	2	HCL, 4°C	--

Flow Rate (ml/min)

Time (Military)

Depth to Groundwater Below Top of Casing (ft)

Drawdown (ft)

pH (S.U.)

Sp. Cond. (mS/cm)

Turbidity (NTUs)

Dissolved Oxygen (mg/L)

Water Temperature (°C)

ORP (mV)

125	125						
10:55	11:00						
13.41	13.75						
3.83	4.17						
7.25	7.27						
0.89	0.885						
3.6	3.55						
0.64	0.6						
13.9	13.9						
60.3	59.4						

Physical appearance at start
Color
Odor

Physical appearance at sampling
Color
Odor

Sheen/Free Product

Sheen/Free Product
None

COMMENTS/OBSERVATIONS



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/6/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-35D
 Upgradient Downgradient
Weather Conditions Partly Cloudy
Air Temperature 59 ° F
Total Depth (TWD) Below Top of Casing 25.22 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 8.4 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 16.82 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.74166 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 18.9 liter

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 698.66 1/100 ft
Height of Riser (above land surface) 2.83 1/100 ft
Land Surface Elevation 687.1 1/100 ft
Screened Interval (below land surface) 21-26 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	
Various	MNA Analyses	15	Varies	

FIELD ANALYSES

Flow Rate (ml/min)	300	300	300	300	300	300	300
Time (Military)	11:25	11:30	11:35	11:40	11:45	11:50	12:00
Depth to Groundwater Below Top of Casing (ft)	9.82	10.71	13.05	14	15.45	16.8	17.7
Drawdown (ft)	1.42	2.31	4.65	5.6	7.05	8.40	9.3
pH (S.U.)	7.66	7.63	7.74	7.75	7.77	7.87	7.84
Sp. Cond. (mS/cm)	0.522	0.523	0.521	0.518	0.518	0.517	0.517
Turbidity (NTUs)	104.3	104.6	74.5	53.7	57.9	90.5	205
Dissolved Oxygen (mg/L)	0.66	0.38	0.46	0.31	0.34	0.33	0.33
Water Temperature (°C)	12.7	12.6	12.90	12.9	12.8	12.9	12.9
ORP (mV)	-98.7	-127.4	-133	-136.4	-130.1	-98.3	-93.1

Physical appearance at start Color Cloudy
Odor None

Physical appearance at sampling Color Brown
Odor None

Sheen/Free Product None

Sheen/Free Product None

COMMENTS/OBSERVATIONS Start Purge @ 1122 Sample Time @ 1225

Water remained cloudy throughout sampling, turbidity remained steady, sampled when other parameters were steady



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr)	10/6/2020		Casing Diameter	2		inches
Field Personnel	C. Bourne		Casing Material	PVC		
Site Name	Former Scott Aviation Site - Lancaster, NY		Measuring Point Elevation	698.66		1/100 ft
AECOM Job #	60536398		Height of Riser (above land surface)	2.83		1/100 ft
Well ID #	MW-35D		Land Surface Elevation	687.1		1/100 ft
	Upgradient	Downgradient	Screened Interval (below land surface)	21-26		1/100 ft
Weather Conditions	Partly Cloudy					
Air Temperature	59 ° F					
Total Depth (TWD) Below Top of Casing	29 1/100 ft					
Depth to Groundwater (DGW) Below Top of Casing :	1/100 ft					
Length of Water Column (LWC) = TWD - DGW =	29 1/100 ft					
1 Casing Volume (OCV) = LWC x	0.163	=	4.727	gal		
3 Casing Volumes =			gal			
Method of Well Evacuation	Peristaltic Pump					
Method of Sample Collector	Peristaltic Pump/Poly Tubing					
Total Volume of Water Removed			liter			

FIELD ANALYSES							
Flow Rate (ml/min)	300	300	200	200	200		
Time (Military)	12:05	12:10	12:15	12:20	12:25		
Depth to Groundwater Below Top of Casing (ft)	19.07	19.55	19.65	19.71	19.85		
Drawdown (ft)	10.67	11.15	11.25	11.31	11.45		
pH (S.U.)	8	8.26	8.28	8.3	8.21		
Sp. Cond. (mS/cm)	0.513	0.512	0.509	0.508	0.506		
Turbidity (NTUs)	210.0	310.0	300.0	350.0	324.0		
Dissolved Oxygen (mg/L)	0.31	0.32	0.34	0.34	0.3		
Water Temperature (°C)	13.2	13.2	13.3	13.2	13		
ORP (mV)	-80.6	-148.1	-154.2	-151.3	-146.1		

Physical appearance at start	Color		Physical appearance at sampling	Color	
	Odor			Odor	
Sheen/Free Product			Sheen/Free Product	None	



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr)	10/9/2020		Casing Diameter	2		inches	
Field Personnel	C. Bourne		Casing Material	PVC			
Site Name	Former Scott Aviation Site - Lancaster, NY		Measuring Point Elevation	689.82		1/100 ft	
AECOM Job #	60536398		Height of Riser (above land surface)	2.72		1/100 ft	
Well ID #	MW-36S		Land Surface Elevation	687.1		1/100 ft	
	Upgradient	Downgradient	Screened Interval (below land surface)	5-15		1/100 ft	
Weather Conditions	Sunny						
Air Temperature	59 ° F						
Total Depth (TWD) Below Top of Casing	17.7 1/100 ft						
Depth to Groundwater (DGW) Below Top of Casing :	5.42 1/100 ft						
Length of Water Column (LWC) = TWD - DGW =	12.28 1/100 ft						
1 Casing Volume (OCV) = LWC x 0.163 =	2.00164 gal						
3 Casing Volumes =	6.00492 gal						
Method of Well Evacuation	Peristaltic Pump						
Method of Sample Collector	Peristaltic Pump/Poly Tubing						
Total Volume of Water Removed	7.5 liter						

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES							
Flow Rate (ml/min)	175	175	200	200	200	200	
Time (Military)	12:04	12:09	12:14	12:19	12:24	12:29	12:34
Depth to Groundwater Below Top of Casing (ft)	6.09	7.09	8.08	8.32	8.33	8.34	8.61
Drawdown (ft)	0.67	1.67	2.66	2.90	2.91	2.92	3.19
pH (S.U.)	6.78	6.77	6.8	6.85	6.86	6.89	6.9
Sp. Cond. (mS/cm)	1.009	0.993	0.99	0.989	0.987	0.99	0.999
Turbidity (NTUs)	4.24	4.11	3.26	3.04	2.99	8.98	9.74
Dissolved Oxygen (mg/L)	3.52	0.35	0.65	0.66	0.55	0.52	0.55
Water Temperature (°C)	14.2	13	13.2	13.5	13.60	13.7	14
ORP (mV)	-0.1	-76.8	-81.5	-85.6	-89.1	-92.1	-98.4

Physical appearance at start	Color	Clear	Physical appearance at sampling	Color	Clear
	Odor	None		Odor	None
Sheen/Free Product	None		Sheen/Free Product	None	

COMMENTS/OBSERVATIONS	Start Purge @ 1203	Sampled @ 1234
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GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/9/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-36D
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 61
Total Depth (TWD) Below Top of Casing 23.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 7.9 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 15.6 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.5428 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 11.4 liter

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.66 1/100 ft
Height of Riser (above land surface) 2.56 1/100 ft
Land Surface Elevation 687.1 1/100 ft
Screened Interval (below land surface) 16-21 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	500	400	400	225	200	200	200	200
Time (Military)	13:30	13:35	13:40	13:45	13:50	13:55	14:00	14:05
Depth to Groundwater Below Top of Casing (ft)	9.10	11.71	14.41	15.70	17.10	18.03	18.71	19.31
Drawdown (ft)	1.20	3.81	6.51	7.80	9.2	10.13	10.81	11.41
pH (S.U.)	6.62	7.13	7.36	7.42	7.41	7.42	7.44	7.46
Sp. Cond. (mS/cm)	1.111	1.075	1.080	1.078	1.083	1.089	1.093	1.090
Turbidity (NTUs)	11.7	15.3	17.2	16.8	20.5	19.9	20.0	18.6
Dissolved Oxygen (mg/L)	4.54	1.21	0.73	0.61	0.57	0.53	0.54	0.50
Water Temperature (°C)	11.8	12.4	12.60	13	13.3	13.3	13.3	13.3
ORP (mV)	-107.7	-139.8	-136.4	-130	-121.3	-117.1	-116.6	-111.4

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color Odor Sheen/Free Product None

COMMENTS/OBSERVATIONS Start Purge @ 1329
Sample Time @ 1405



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/6/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-38D
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 64 ° F
Total Depth (TWD) Below Top of Casing 20.9 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 6.31 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 14.59 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.37817 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 15 liter

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.66 1/100 ft
Height of Riser (above land surface) 2.72 1/100 ft
Land Surface Elevation 687.5 1/100 ft
Screened Interval (below land surface) 16-21 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	
Various	MNA Analyses	15	Varies	

FIELD ANALYSES

Flow Rate (ml/min)	325	325	325	325	325	225	150	150
Time (Military)	13:52	13:57	14:02	14:07	14:12	14:17	9:31	9:36
Depth to Groundwater Below Top of Casing (ft)	7.01	10.28	12.48	15.10	16.45	17.20	9.87	10.69
Drawdown (ft)	0.70	3.97	6.17	8.79	10.14	10.89	0.54	1.36
pH (S.U.)	7.36	7.35	7.39	7.41	7.44	7.50	7.03	7.13
Sp. Cond. (mS/cm)	1.675	1.675	1.677	1.68	1.676	1.688	1.18	1.18
Turbidity (NTUs)	32.4	37.9	31.7	30.4	29.6	28.0	38.0	22.3
Dissolved Oxygen (mg/L)	1.47	1.1	1.06	0.98	0.85	1.47	1.56	0.88
Water Temperature (°C)	15	15	14.80	15.00	14.2	15.1	13.6	13.6
ORP (mV)	21.7	-27.9	-55.4	-87.7	-91.9	-103.4	-86.0	-98.3

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color Odor Sheen/Free Product COMMENTS/OBSERVATIONS Start Purge @ 1349, Dry at 1425, Purged dry on 10/7/20, 10/9/20Sampled on 10/12/20 @ 0900



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/9/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-39D
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 54 ° F
Total Depth (TWD) Below Top of Casing 22.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 6.7 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 15.8 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.5754 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 9.5 liter

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.72 1/100 ft
Height of Riser (above land surface) 2.57 1/100 ft
Land Surface Elevation 687.4 1/100 ft
Screened Interval (below land surface) 15-20 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	400	300	250	200	200	200	200	200
Time (Military)	10:30	10:35	10:40	10:45	10:55	11:00	11:05	11:10
Depth to Groundwater Below Top of Casing (ft)	8.10	9.7	11.55	13.20	14.30	14.95	15.57	15.95
Drawdown (ft)	1.4	3.00	4.85	6.50	7.6	8.25	8.87	9.25
pH (S.U.)	6.65	6.42	6.28	6.19	6.2	6.23	6.3	6.32
Sp. Cond. (mS/cm)	0.649	0.644	0.646	0.65	0.695	0.728	0.751	0.752
Turbidity (NTUs)	39	46	87	86.6	85.4	66.1	54.2	48.3
Dissolved Oxygen (mg/L)	1.91	0.9	0.82	0.75	0.76	0.51	0.49	0.54
Water Temperature (°C)	13.2	13.1	13	12.8	12.8	12.4	12.3	12.3
ORP (mV)	-11	-25.7	-32.3	-39.9	-56.1	-74.1	-79.4	-83.2

Physical appearance at start Color CloudyOdor NoneSheen/Free Product NonePhysical appearance at sampling Color Odor Sheen/Free Product

COMMENTS/OBSERVATIONS Start Purge @ 1029,
Sampled @ 1110



GROUNDWATER SAMPLING LOG

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Date (mo/day/yr) 10/12/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-40D
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 55 ° F
Total Depth (TWD) Below Top of Casing 22.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 5.52 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 16.98 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.77 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collectio Peristaltic Pump/Poly Tubing
Total Volume of Water Remove 7.6 liter

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.19 1/100 ft
Height of Riser (above land surface) -0.3 1/100 ft
Land Surface Elevation 689.5 1/100 ft
Screened Interval (below land surfac 17.8-22.8 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	
Various	MNA Analyses	15	Varies	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	200	200	200	175	175	175
Time (Military)	9:40	9:45	9:50	9:55	10:00	10:05	10:10	10:15	10:20
Depth to Groundwater Below Top of Casing (ft)	6.28	7.58	9.40	11.11	12.75	13.68	14.51	14.95	15.30
Drawdown (ft)	0.76	2.06	3.88	5.59	7.23	8.16	8.99	9.43	9.78
pH (S.U.)	6.7	6.68	6.83	6.77	6.91	6.96	7	7.02	7.05
Sp. Cond. (mS/cm)	0.96	0.94	0.926	0.938	0.933	0.927	0.925	.926	.926
Turbidity (NTUs)	143.00	54.1	61.2	58.9	72.4	68.3	64.5	63.4	55.6
Dissolved Oxygen (mg/L)	1.59	0.7	0.42	0.38	0.31	0.31	0.3	0.3	.31
Water Temperature (°C)	14.1	13.9	14.1	14.1	14.3	14.3	14.4	14.4	14.4
ORP (mV)	-109.4	-129.6	-167.1	-163.7	-183.9	-196.3	-197.6	(-)197.9	-197.9

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color CloudyOdor NoneSheen/Free Product None

COMMENTS/OBSERVATIONS Start purge @ 0939 Sample Time @ 1020



GROUNDWATER SAMPLING LOG

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Date (mo/day/yr) 10/12/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-42S
 Upgradient Downgradient
Weather Conditions Partly Cloudy
Air Temperature 57 ° F
Total Depth (TWD) Below Top of Casing 14.3 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 1.55 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 12.75 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.07825 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 7.6 liter

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.08 1/100 ft
Height of Riser (above land surface) -0.58 1/100 ft
Land Surface Elevation 689.66 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	350	275	275	275	275	275	275	275
Time (Military)	11:11	11:16	11:21	11:26	11:31	11:36	11:41	11:51
Depth to Groundwater Below Top of Casing (ft)	1.90	3.49	4.89	5.50	6.12	6.71	7.10	7.59 7.9
Drawdown (ft)	0.35	1.94	3.34	3.95	4.57	5.16	6.55	6.04 6.35
pH (S.U.)	6.56	6.56	6.52	6.48	6.48	6.5	6.5	6.53 6.55
Sp. Cond. (mS/cm)	2.491	2.256	1.855	1.63	1.389	1.322	1.29	1.271 1.302
Turbidity (NTUs)	15	6.55	6.29	6.17	6.01	3.9	3.81	2.69 2.54
Dissolved Oxygen (mg/L)	0.74	0.32	0.49	0.38	0.37	0.38	0.37	.34 .33
Water Temperature (°C)	17.1	17.6	17.9	18.1	18.1	18.2	18.2	18.3 18.3
ORP (mV)	-119.6	-138	-121.3	-114.7	-109.7	-106.1	-107.1	-222.1

Physical appearance at start Color ClearOdor NoneSheen/Free Product SheenPhysical appearance at sampling Color Odor Sheen/Free Product NoneCOMMENTS/OBSERVATIONS Start Purge @ 1109 Sample Time @ 1151



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/7/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-43S
 Upgradient Downgradient
Weather Conditions Overcast, Rain
Air Temperature 57 ° F
Total Depth (TWD) Below Top of Casing 14.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 2.45 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 12.05 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 1.96415 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 9.5 liter

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.14 1/100 ft
Height of Riser (above land surface) -0.46 1/100 ft
Land Surface Elevation 689.6 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	250	200	200	200	200	200	200
Time (Military)	10:45	10:50	10:55	11:00	11:05	11:10	11:15
Depth to Groundwater Below Top of Casing (ft)	2.9	4.39	5	5.09	5.5	5.85	6.21
Drawdown (ft)	0.45	1.94	2.55	2.64	3.05	3.40	3.76
pH (S.U.)	7.00	6.93	6.88	6.87	6.86	6.86	6.85
Sp. Cond. (mS/cm)	1.225	1.208	1.189	1.181	1.192	1.179	1.181
Turbidity (NTUs)	5.72	5.69	7.16	6.91	6.54	6.42	5.11
Dissolved Oxygen (mg/L)	0.43	0.58	0.6	0.71	0.81	0.73	0.66
Water Temperature (°C)	17.4	17.7	17.9	18	18.1	18.1	18.2
ORP (mV)	-108.9	-116.3	-121.9	-126.1	-127	-126.4	-126.1

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purge @ 1043 Sample Time @ 1120



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 10/7/2020
Field Personnel C. Bourne
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-44S
 Upgradient Downgradient
Weather Conditions Overcast
Air Temperature 57 ° F
Total Depth (TWD) Below Top of Casing 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 2 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 13 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.119 gal
3 Casing Volumes = gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 9.5 liter

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 1/100 ft
Height of Riser (above land surface) 0.00 1/100 ft
Land Surface Elevation 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	300	300	300	300	300	250	250	250
Time (Military)	11:43	11:48	11:53	11:58	12:03	12:08	12:13	12:18
Depth to Groundwater Below Top of Casing (ft)	2.33	4.22	5.69	6.19	6.67	7.00	7.33	7.70
Drawdown (ft)	0.33	2.22	3.69	4.19	4.67	5.00	5.33	5.70
pH (S.U.)	7.33	7.16	7.17	7.19	7.21	7.23	7.21	7.19
Sp. Cond. (mS/cm)	0.854	0.848	0.845	0.837	0.831	0.832	0.835	0.839
Turbidity (NTUs)	14.50	5.91	5.44	6.87	6.55	6.41	3.19	3.11
Dissolved Oxygen (mg/L)	0.68	0.36	0.48	1.52	3.42	3.37	3.11	3.01
Water Temperature (°C)	13.8	14	14.3	14.60	14.70	14.70	14.70	14.70
ORP (mV)	-103.6	-105.8	-107.7	-93.4	-62.4	-54.4	-49.4	-44.8

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Started Purge @ 1141 Sample time @ 1218

Appendix C2

Purge Logs - April 2021



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/1/2021
Field Personnel Tony Ye
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # GP-2S
 Upgradient Downgradient

Casing Diameter 1 inches
Casing Material PVC
Measuring Point Elevation 689.82 1/100 ft
Height of Riser (above land surface) 2.52 1/100 ft
Land Surface Elevation 687.3 1/100 ft
Screened Interval (below land surfac 5-15 1/100 ft

Weather Conditions Cloudy
Air Temperature 32 ° F
Total Depth (TWD) Below Top of Casing 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 8.15 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 6.85 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.28 gal
3 Casing Volumes = 0.84 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collectio Peristaltic Pump/Poly Tubing
Total Volume of Water Remove 0.5 gal

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100			
Time (Military)	12:35	12:45	12:50	12:55			
Depth to Groundwater Below Top of Casing (ft)	8.20	*	*	*			
Drawdown (ft)	0.05	-	-	-			
pH (S.U.)	6.99	6.87	6.88	6.85			
Sp. Cond. (mS/cm)	0.621	0.607	0.620	0.617			
Turbidity (NTUs)	28.40	44.40	48.00	54.60			
Dissolved Oxygen (mg/L)	4.02	3.10	3.35	3.66			
Water Temperature (°C)	6.12	6.60	6.42	6.05			
ORP (mV)	-56.40	-65.80	-70.80	-70.40			

Physical appearance at start Color CloudyOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1233. Start sampling at 1255.*Water levels were not taken due to probe getting stuck against tubing. Turbidity did not stabilize, samples were collected when other parameters were stable.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/2/2021
Field Personnel Tony Ye
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # GP-6S
 Upgradient Downgradient

Casing Diameter 1 inches
Casing Material PVC
Measuring Point Elevation 687.71 1/100 ft
Height of Riser (above land surface) -0.09 1/100 ft
Land Surface Elevation 687.8 1/100 ft
Screened Interval (below land surfac 5-15 1/100 ft

Weather Conditions Cloudy / Light Snow

Air Temperature 29

Total Depth (TWD) Below Top of Casing 15.0 1/100 ft

Depth to Groundwater (DGW) Below Top of Casing = 2.00 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 13.0 1/100 ft

1 Casing Volume (OCV) = LWC x 0.0408 = 0.53 gal

3 Casing Volumes = 1.59 gal

Method of Well Evacuation Peristaltic Pump

Method of Sample Collection Peristaltic Pump/Poly Tubing

Total Volume of Water Removed 0.25 gal

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	
Various	MNA Analyses	15	Varies	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100				
Time (Military)	12:10	12:15	12:20				
Depth to Groundwater Below Top of Casing (ft)	11.70	14.10	14.50				
Drawdown (ft)	9.70	12.10	12.50				
pH (S.U.)	6.79	6.79	6.81				
Sp. Cond. (mS/cm)	0.828	0.824	0.830				
Turbidity (NTUs)	16.70	14.60	14.10				
Dissolved Oxygen (mg/L)	3.62	3.56	3.48				
Water Temperature (°C)	7.74	7.50	7.55				
ORP (mV)	-54.20	-55.00	-53.00				

Physical appearance at start Color Clear

Odor None

Sheen/Free Product None

Physical appearance at sampling Color Clear

Odor None

Sheen/Free Product None

COMMENTS/OBSERVATIONS Start purging at 1208. Start sampling at 0630 on 04/02/2021.

Well went dry after 1220.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/1/2021
Field Personnel Tony Ye
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # GP-10S
 Upgradient Downgradient
Weather Conditions Cloudy
Air Temperature 32
Total Depth (TWD) Below Top of Casing : 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 9.85 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 5.15 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.21 gal
3 Casing Volumes = 0.63 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collector Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 0.75 gal

Casing Diameter 1 inches
Casing Material PVC
Measuring Point Elevation 689.10 1/100 ft
Height of Riser (above land surface) -0.10 1/100 ft
Land Surface Elevation 689.2 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	
Various	MNA Analyses	15	Varies	

FIELD ANALYSES

7/10/17 post sample

Flow Rate (ml/min)
Time (Military)
Depth to Groundwater
Below Top of Casing (ft)
Drawdown (ft)
pH (S.U.)
Sp. Cond. (mS/cm)
Turbidity (NTUs)
Dissolved Oxygen (mg/L)
Water Temperature (°C)
ORP (mV)

100	100	100	100	100			
11:25	11:30	11:35	11:42	17:00			
10.50	11.15	12.20	13.90	Dry			
0.65	1.30	2.35	4.05	-			
6.56	6.57	6.55	6.60	6.65			
1.208	1.009	0.961	0.986	0.846			
12.60	12.20	-	17.60	16.00			
3.80	4.34	6.33	6.27	8.70			
9.45	9.28	3.63	8.82	7.73			
-11.90	-22.80	-30.40	-31.30	-36.9			

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1120. Start sampling at 0830 on 04/02/2021.Well went dry at 1145, returned to purge one more flow cell volume at 1700.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/1/2021
Field Personnel Tony Ye
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # GP-14S
 Upgradient Downgradient
Weather Conditions Cloudy
Air Temperature 32
Total Depth (TWD) Below Top of Casing 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 6.55 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 8.45 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.34 gal
3 Casing Volumes = 1.03 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 1 inches
Casing Material PVC
Measuring Point Elevation 687.69 1/100 ft
Height of Riser (above land surface) -1.74 1/100 ft
Land Surface Elevation 689.4 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	150	150	150	150	150		
Time (Military)	10:30	10:50	10:55	10:58	11:01	11:04	
Depth to Groundwater Below Top of Casing (ft)	7.85	8.45	9.20	10.00	10.45	11.00	
Drawdown (ft)	1.30	1.90	2.65	3.45	3.90	4.45	
pH (S.U.)	7.41	7.31	7.30	7.25	7.19	7.16	
Sp. Cond. (mS/cm)	0.373	0.374	0.632	0.349	0.329	0.336	
Turbidity (NTUs)	15.00	12.60	11.20	15.40	35.20	30.90	
Dissolved Oxygen (mg/L)	11.95	10.00	9.65	9.29	8.96	9.03	
Water Temperature (°C)	9.67	9.27	9.24	8.89	9.16	9.08	
ORP (mV)	-63.40	-71.00	-70.00	-60.40	-53.8	-52.1	

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1027. Start sampling at 1200.Turbidity did not stabilize, began sampling when other water quality parameters remained steady.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/1/2021
Field Personnel Tony Ye
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # GP-15S
 Upgradient Downgradient
Weather Conditions Cloudy
Air Temperature 32
Total Depth (TWD) Below Top of Casing 14.82 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 1.15 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 13.67 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.56 gal
3 Casing Volumes = 1.67 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 1 inches
Casing Material PVC
Measuring Point Elevation 687.69 1/100 ft
Height of Riser (above land surface) -0.31 1/100 ft
Land Surface Elevation 688.0 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	200	200	200			
Time (Military)	15:00	15:05	15:10	16:20	16:25			
Depth to Groundwater Below Top of Casing (ft)	2.90	5.40	7.60	-	-			
Drawdown (ft)	1.75	4.25	6.45	-	-			
pH (S.U.)	7.57	7.43	7.44	9.30	9.9			
Sp. Cond. (mS/cm)	0.320	0.321	0.328	0.378	0.380			
Turbidity (NTUs)	-	29.10	19.40	17.00	-			
Dissolved Oxygen (mg/L)	5.67	7.13	5.40	11.23	9.64			
Water Temperature (°C)	4.49	4.33	4.94	7.56	7.41			
ORP (mV)	41.20	42.90	40.40	62.50	60.7			

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1457. Start sampling at 1630.



GROUNDWATER SAMPLING LOG

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Date (mo/day/yr) 4/1/2021
Field Personnel Tony Ye
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # GP-16S
 Upgradient Downgradient
Weather Conditions Cloudy
Air Temperature 32
Total Depth (TWD) Below Top of Casing 17.52 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 7.71 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 9.81 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.40 gal
3 Casing Volumes = 1.20 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 1 inches
Casing Material PVC
Measuring Point Elevation 687.69 1/100 ft
Height of Riser (above land surface) -0.31 1/100 ft
Land Surface Elevation 688.0 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)
Time (Military)
Depth to Groundwater
Below Top of Casing (ft)
Drawdown (ft)
pH (S.U.)
Sp. Cond. (mS/cm)
Turbidity (NTUs)
Dissolved Oxygen (mg/L)
Water Temperature (°C)
ORP (mV)

200	100	100	100				
15:40	15:45	15:55	16:00				
*	*	*	*				
-	-	-	-				
7.53	7.50	7.48	7.50				
0.475	0.475	0.475	0.476				
-	11.84	7.34	5.21				
3.88	3.14	2.78	2.80				
5.89	5.73	5.49	5.42				
49.20	42.90	38.50	36.50				

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1537. Start sampling at 1600.*Water levels were not taken due to difficulty accessing the well from equipment location.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 04/01/21
Field Personnel Tony Ye
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # GP-18S
 Upgradient Downgradient
Weather Conditions Cloudy
Air Temperature 32
Total Depth (TWD) Below Top of Casing 18 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 7.71 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 10.29 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.42 gal
3 Casing Volumes = 1.26 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 0.75 inches
Casing Material PVC
Measuring Point Elevation 690.37 1/100 ft
Height of Riser (above land surface) 2.87 1/100 ft
Land Surface Elevation 687.5 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	
Various	MNA Analyses	15	Varies	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100				
Time (Military)	14:00	14:05	14:10				
Depth to Groundwater Below Top of Casing (ft)	8.50	10.08	11.10				
Drawdown (ft)	0.79	2.37	3.39				
pH (S.U.)	6.98	6.98	6.97				
Sp. Cond. (mS/cm)	0.545	0.515	0.501				
Turbidity (NTUs)	101.00	98.00	90.00				
Dissolved Oxygen (mg/L)	3.23	3.12	2.74				
Water Temperature (°C)	6.81	6.32	5.99				
ORP (mV)	-47.30	-52.00	-54.60				

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1358. Start sampling at 0730 on 04/02/2021.



GROUNDWATER SAMPLING LOG

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Date (mo/day/yr) 4/5/2021
Field Personnel Tony Ye / Ann Marie Kropovitch
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-30
 Upgradient Downgradient
Weather Conditions Cloudy
Air Temperature 50
Total Depth (TWD) Below Top of Casing 20 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 3.87 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 16.13 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.66 gal
3 Casing Volumes = 1.97 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 1/100 ft
Height of Riser (above land surface) 0.00 1/100 ft
Land Surface Elevation 1/100 ft
Screened Interval (below land surface) 10-20 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	200	200		
Time (Military)	15:19	15:24	15:34	15:39	15:44		
Depth to Groundwater Below Top of Casing (ft)	3.85	5.50	7.50	9.10	8.82		
Drawdown (ft)	-0.02	1.63	3.63	5.23	4.95		
pH (S.U.)	7.66	7.45	7.27	7.30	7.32		
Sp. Cond. (mS/cm)	0.145	0.139	0.133	0.132	0.136		
Turbidity (NTUs)	5.75	3.19	4.15	6.58	7.17		
Dissolved Oxygen (mg/L)	3.21	2.07	1.35	1.26	1.18		
Water Temperature (°C)	12.63	12.38	12.19	12.14	12.24		
ORP (mV)	11.00	-17.10	-29.60	-33.60	-36.3		

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1517. Start sampling at 1546.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/5/2021
Field Personnel Tony Ye / Ann Marie Kropovitch
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-35S
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 52 ° F
Total Depth (TWD) Below Top of Casing 14.01 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 1.1 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 12.91 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.53 gal
3 Casing Volumes = 1.58 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 688.56 1/100 ft
Height of Riser (above land surface) -0.54 1/100 ft
Land Surface Elevation 689.1 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	Dup
VOA 40 mL glass	TOC	2	HCL, 4°C	--

FIELD ANALYSES

Flow Rate (ml/min)	400	300	200	200	200	150	150	
Time (Military)	9:33	9:40	9:45	9:50	9:55	10:04	10:11	
Depth to Groundwater Below Top of Casing (ft)	1.10	2.40	4.70	4.93	5.15	5.70	6.05	
Drawdown (ft)	0.00	1.30	3.60	3.83	4.05	4.60	4.95	
pH (S.U.)	7.42	6.93	7.30	7.15	7.26	7.28	7.27	
Sp. Cond. (mS/cm)	0.367	0.369	0.365	0.337	0.293	0.271	0.279	
Turbidity (NTUs)	9.42	10.11	12.18	13.90	13.4	13.1	10.77	
Dissolved Oxygen (mg/L)	13.23	11.70	11.16	10.81	10.6	10.72	10.45	
Water Temperature (°C)	8.89	9.00	9.16	9.18	9.12	8.64	8.73	
ORP (mV)	42.70	52.20	51.90	55.70	51.4	52.6	52.3	

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 0931. Start sampling at 1016.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/5/2021
Field Personnel Tony Ye / Ann Marie Kropovitch
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-35D
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 52
Total Depth (TWD) Below Top of Casing 25.22 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 6.4 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 18.82 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.77 gal
3 Casing Volumes = 2.30 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 698.66 1/100 ft
Height of Riser (above land surface) 2.83 1/100 ft
Land Surface Elevation 687.1 1/100 ft
Screened Interval (below land surface) 21-26 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	
Various	MNA Analyses	15	Varies	

FIELD ANALYSES

Flow Rate (ml/min)	150	150	200	200			
Time (Military)	10:44	10:50	10:55	11:00			
Depth to Groundwater Below Top of Casing (ft)	7.70	8.50	9.20	10.00			
Drawdown (ft)	1.30	2.10	2.80	3.60			
pH (S.U.)	7.65	7.76	8.21	8.55			
Sp. Cond. (mS/cm)	0.286	0.284	0.283	0.282			
Turbidity (NTUs)	9.70	13.77	12.00	12.40			
Dissolved Oxygen (mg/L)	7.81	6.97	6.82	6.71			
Water Temperature (°C)	11.42	11.42	11.28	11.15			
ORP (mV)	74.30	78.80	76.10	75.20			

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1042. Start sampling at 1115.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/6/2021
Field Personnel Tony Ye / Ann Marie Kropovitch
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-36S
 Upgradient Downgradient
Weather Conditions Clear
Air Temperature 43
Total Depth (TWD) Below Top of Casing 17.7 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 2.28 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 15.42 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.63 gal
3 Casing Volumes = 1.89 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 2 gal

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.82 1/100 ft
Height of Riser (above land surface) 2.72 1/100 ft
Land Surface Elevation 687.1 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	200	200			
Time (Military)	8:53	9:01	9:06	9:12	9:20			
Depth to Groundwater Below Top of Casing (ft)	4.20	5.35	6.25	7.25	8.30			
Drawdown (ft)	1.92	3.07	3.97	4.97	6.02			
pH (S.U.)	7.17	7.08	7.10	7.11	7.11			
Sp. Cond. (mS/cm)	0.610	0.610	0.612	0.614	0.619			
Turbidity (NTUs)	3.13	2.68	3.96	3.38	3.25			
Dissolved Oxygen (mg/L)	18.62	6.27	4.52	3.55	2.90			
Water Temperature (°C)	7.51	7.26	7.18	7.25	7.24			
ORP (mV)	1.00	-57.80	-70.60	-75.40	-78.20			

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 0851. Start sampling at 0923.



GROUNDWATER SAMPLING LOG

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Date (mo/day/yr) 4/6/2021
Field Personnel Tony Ye / Ann Marie Kropovitch
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-36D
 Upgradient Downgradient
Weather Conditions Clear
Air Temperature 43
Total Depth (TWD) Below Top of Casing 23.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 4.81 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 18.69 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.76 gal
3 Casing Volumes = 2.29 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.66 1/100 ft
Height of Riser (above land surface) 2.56 1/100 ft
Land Surface Elevation 687.1 1/100 ft
Screened Interval (below land surface) 16-21 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	200	200	200		
Time (Military)	9:41	9:46	9:51	9:58	10:04	10:11		
Depth to Groundwater Below Top of Casing (ft)	6.80	8.02	8.96	10.31	11.23	12.39		
Drawdown (ft)	1.99	3.21	4.15	5.50	6.42	7.58		
pH (S.U.)	7.55	7.59	7.60	7.58	7.56	7.50		
Sp. Cond. (mS/cm)	0.748	0.753	0.761	0.772	0.781	0.789		
Turbidity (NTUs)	13.20	15.32	16.14	15.90	12.59	13.00		
Dissolved Oxygen (mg/L)	2.89	2.32	2.01	1.78	1.67	1.60		
Water Temperature (°C)	8.31	8.35	8.53	8.71	8.89	9.06		
ORP (mV)	-37.60	-62.70	-71.80	-80.80	-80.7	-76.3		

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 0940. Start sampling at 1050.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/5/2021
Field Personnel Tony Ye / Ann Marie Kropovitch
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-37D
 Upgradient Downgradient
Weather Conditions Clear / Sunny
Air Temperature 53
Total Depth (TWD) Below Top of Casing 22.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing : 4.12 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 18.38 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.75 gal
3 Casing Volumes = 2.25 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 690.05 1/100 ft
Height of Riser (above land surface) 2.45 1/100 ft
Land Surface Elevation 687.6 1/100 ft
Screened Interval (below land surface) 15-20 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)
Time (Military)
Depth to Groundwater
Below Top of Casing (ft)
Drawdown (ft)
pH (S.U.)
Sp. Cond. (mS/cm)
Turbidity (NTUs)
Dissolved Oxygen (mg/L)
Water Temperature (°C)
ORP (mV)

200	150	125	125	125	125		
14:20	14:25	14:30	14:36	14:44	14:50		
5.35	6.10	6.40	6.50	6.85	6.90		
1.23	1.98	2.28	2.38	2.73	2.78		
7.81	7.88	7.97	7.86	7.24	7.32		
0.553	0.546	0.548	0.568	0.585	0.582		
11.30	4.11	2.41	7.71	2.81	3.75		
5.57	3.58	3.08	2.64	2.41	2.19		
9.97	9.74	9.85	9.93	9.84	9.93		
10.20	2.50	3.09	-22.00	-36.9	-53.5		

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1412. Start sampling at 1454.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/5/2021
Field Personnel Tony Ye / Ann Marie Kropovitch
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-38D
 Upgradient Downgradient

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.66 1/100 ft
Height of Riser (above land surface) 2.72 1/100 ft
Land Surface Elevation 687.5 1/100 ft
Screened Interval (below land surfac 16-21 1/100 ft

Weather Conditions Sunny
Air Temperature 64 ° F
Total Depth (TWD) Below Top of Casing 20.9 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 3.65 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 17.25 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.70 gal
3 Casing Volumes = 2.11 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	
Various	MNA Analyses	15	Varies	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	200	200	200		
Time (Military)	11:56	12:01	12:08	12:13	12:18	12:23		
Depth to Groundwater Below Top of Casing (ft)	4.82	6.30	7.47	8.60	9.70	10.85		
Drawdown (ft)	1.17	2.65	3.82	4.95	6.05	7.20		
pH (S.U.)	7.51	7.33	7.41	7.47	7.49	7.43		
Sp. Cond. (mS/cm)	0.682	0.686	0.692	0.691	0.692	0.695		
Turbidity (NTUs)	7.22	7.15	10.82	7.72	6.97	9.04		
Dissolved Oxygen (mg/L)	4.21	2.87	2.38	2.45	2.31	2.08		
Water Temperature (°C)	10.46	10.24	10.57	10.15	10.16	10.41		
ORP (mV)	-83.20	-92.30	-93.50	-90.20	-84.9	-87.4		

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1153. Start sampling at 1230.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/5/2021
Field Personnel Tony Ye / Ann Marie Kropovitch
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-39D
 Upgradient Downgradient
Weather Conditions Sunny
Air Temperature 53
Total Depth (TWD) Below Top of Casing 22.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 3.8 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 18.8 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.77 gal
3 Casing Volumes = 2.30 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.72 1/100 ft
Height of Riser (above land surface) 2.57 1/100 ft
Land Surface Elevation 687.4 1/100 ft
Screened Interval (below land surface) 15-20 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	200	150	150	150	150	150		
Time (Military)	13:22	13:27	13:33	13:40	13:46	13:53		
Depth to Groundwater Below Top of Casing (ft)	5.43	6.44	7.54	8.63	8.52	10.36		
Drawdown (ft)	1.68	2.69	3.79	4.88	4.77	6.61		
pH (S.U.)	6.72	6.75	6.96	7.08	7.04	6.95		
Sp. Cond. (mS/cm)	0.516	0.508	0.512	0.518	0.525	0.539		
Turbidity (NTUs)	44.30	39.70	40.90	41.70	31.5	33.2		
Dissolved Oxygen (mg/L)	4.55	3.19	2.78	2.24	2	1.8		
Water Temperature (°C)	10.53	10.13	10.07	10.16	10.29	10.33		
ORP (mV)	-16.80	-27.10	-34.50	-37.00	-40.8	-45.3		

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1400. Start sampling at 1403.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/2/2021
Field Personnel Tony Ye
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-40D
 Upgradient Downgradient
Weather Conditions Cloudy / Light Snow
Air Temperature 32
Total Depth (TWD) Below Top of Casing 22.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 2.9 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 19.6 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 2.77 gal
3 Casing Volumes = 8.31 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.19 1/100 ft
Height of Riser (above land surface) -0.3 1/100 ft
Land Surface Elevation 689.5 1/100 ft
Screened Interval (below land surface) 17.8-22.8 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	
Various	MNA Analyses	15	Varies	

FIELD ANALYSES

Flow Rate (ml/min)	150	100	100	100			
Time (Military)	11:25	11:30	11:35	11:40			
Depth to Groundwater Below Top of Casing (ft)	4.90	5.70	6.70	7.20			
Drawdown (ft)	2.00	2.80	3.80	4.30			
pH (S.U.)	7.60	7.34	7.43	7.65			
Sp. Cond. (mS/cm)	0.585	0.580	0.579	0.581			
Turbidity (NTUs)	13.80	14.30	11.60	13.60			
Dissolved Oxygen (mg/L)	3.34	2.64	2.34	2.19			
Water Temperature (°C)	9.84	9.36	9.28	9.20			
ORP (mV)	-156.90	-185.00	-189.00	-186.40			

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1122. Start sampling at 1140.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/2/2021
Field Personnel Tony Ye
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-42S
 Upgradient Downgradient
Weather Conditions Cloudy / Light Snow
Air Temperature 29
Total Depth (TWD) Below Top of Casing 14.3 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 0.5 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 13.8 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.56 gal
3 Casing Volumes = 1.69 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.08 1/100 ft
Height of Riser (above land surface) -0.58 1/100 ft
Land Surface Elevation 689.66 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100		
Time (Military)	10:14	10:17	10:20	10:23	10:26		
Depth to Groundwater Below Top of Casing (ft)	1.40	2.10	2.60	3.20	3.60		
Drawdown (ft)	0.90	1.60	2.10	2.70	3.10		
pH (S.U.)	12.88	12.82	12.72	12.57	12.53		
Sp. Cond. (mS/cm)	1.157	1.187	1.199	1.213	1.221		
Turbidity (NTUs)	4.63	3.11	2.80	2.73	2.56		
Dissolved Oxygen (mg/L)	3.70	3.06	2.73	2.52	2.33		
Water Temperature (°C)	8.40	7.81	7.91	7.88	8.05		
ORP (mV)	-91.20	-99.90	-102.70	-102.30	-103.1		

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 1011. Start sampling at 1030.



GROUNDWATER SAMPLING LOG

Page 1 of 1

Date (mo/day/yr) 4/2/2021
Field Personnel Tony Ye
Site Name Former Scott Aviation Site - Lancaster, NY
AECOM Job # 60536398
Well ID # MW-43S
 Upgradient Downgradient
Weather Conditions Cloudy / Light Snow
Air Temperature 29
Total Depth (TWD) Below Top of Casing 14.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 2 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 12.5 1/100 ft
1 Casing Volume (OCV) = LWC x 0.0408 = 0.51 gal
3 Casing Volumes = 1.53 gal
Method of Well Evacuation Peristaltic Pump
Method of Sample Collection Peristaltic Pump/Poly Tubing
Total Volume of Water Removed 1.5 gal

Casing Diameter 2 inches
Casing Material PVC
Measuring Point Elevation 689.14 1/100 ft
Height of Riser (above land surface) -0.46 1/100 ft
Land Surface Elevation 689.6 1/100 ft
Screened Interval (below land surface) 5-15 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	3	HCL, 4°C	
VOA 40 mL glass	TOC	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100			
Time (Military)	9:33	9:47	9:50	9:53			
Depth to Groundwater Below Top of Casing (ft)	2.70	3.30	3.60	4.20			
Drawdown (ft)	0.70	1.30	1.60	2.20			
pH (S.U.)	12.90	13.05	13.35	13.46			
Sp. Cond. (mS/cm)	0.639	0.672	0.662	0.695			
Turbidity (NTUs)	9.90	7.68	5.86	5.63			
Dissolved Oxygen (mg/L)	4.52	4.99	3.98	3.32			
Water Temperature (°C)	8.65	5.42	6.35	7.64			
ORP (mV)	-47.80	-85.00	-84.80	-82.80			

Physical appearance at start Color ClearOdor NoneSheen/Free Product NonePhysical appearance at sampling Color ClearOdor NoneSheen/Free Product NoneCOMMENTS/OBSERVATIONS Start purging at 0930. Start sampling at 0955.

Appendix D

Institutional Controls and Engineering Controls Certification Form



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site No.	C915233	Site Details	Box 1
Site Name Former Scott Aviation Facility (Area 1)			
Site Address: 215 and 221 Erie Street		Zip Code: 14086	
City/Town: Lancaster			
County: Erie			
Site Acreage: 1.250			
Reporting Period: April 01, 2020 to April 01, 2021			
Reporting Period: April 17, 2020 to April 09, 2021			
			YES NO
1. Is the information above correct?			☐ X
If NO, include handwritten above or on a separate sheet.			
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?			☐ X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?			☐ X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?			☐ X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.			
5. Is the site currently undergoing development?			☐ X

			Box 2
			YES NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial			X ☐
7. Are all ICs in place and functioning as designed?			X ☐

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Box 2A

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

☐ YES ☒ NO

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid?
(The Qualitative Exposure Assessment must be certified every five years)

☒ YES ☐ NO

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C915233**Box 3****Description of Institutional Controls**ParcelOwnerInstitutional Control**104.16-5-8**

AVOX Systems, Inc.

Ground Water Use Restriction
Landuse Restriction
Site Management Plan
Soil Management Plan
Monitoring Plan
IC/EC Plan

An Environmental Easement was filed with the Erie County Clerk's Office on November 19, 2015. The Controlled Property may be used for commercial and industrial use as long as the following long-term institutional controls are employed: (1) restrict the use of site groundwater as a source of potable or process water without necessary water quality treatment as determined by the NYSDOH or Erie County Department of Health; (2) all future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the Site Management Plan; and (3) monitoring to assess the performance and effectiveness of the remedy must be conducted as defined in the Site management Plan.

104.16-5-9

AVOX Systems, Inc.

Soil Management Plan
Monitoring Plan
IC/EC Plan
Ground Water Use Restriction
Landuse Restriction
Site Management Plan

An Environmental Easement was filed with the Erie County Clerk's Office on November 19, 2015. The Controlled Property may be used for commercial and industrial use as long as the following long-term institutional controls are employed: (1) restrict the use of site groundwater as a source of potable or process water without necessary water quality treatment as determined by the NYSDOH or Erie County Department of Health; (2) all future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the Site Management Plan; and (3) monitoring to assess the performance and effectiveness of the remedy must be conducted as defined in the Site management Plan.

Box 4**Description of Engineering Controls**

None Required

Not Applicable/No EC's

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

X ☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

X ☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

**IC CERTIFICATIONS
SITE NO. C915233**

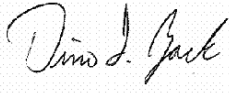
Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Dino Zack, PG, STS at AECOM, 257 West Genesee St., Suite 400, Buffalo, NY 14202,
print name print business address
am certifying on behalf of Scott Figgie LLC (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.



Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

05/26/21

Date