



Environment

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Periodic Review Report

(April 12, 2017 through April 12, 2018)

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>
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
METI	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
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
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 BCP 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, findings of 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 includes quarterly groundwater monitoring and quarterly 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 subslab vapors to enter the building.

Quarterly post-IRM groundwater monitoring shows 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 indicates that the necessary microflora, such as *Dehalococcoides* (DHC) bacterial species, producing the enzymes tceA reductase and vinyl chloride reductase, are present in the subsurface.

A continuation of quarterly groundwater monitoring for volatile organic compounds, quarterly inspections of the boiler room floor, and annual reporting per the NYSDEC-approved Site Management Plan is recommended for the next reporting period.

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 (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 between April 12, 2017 through April 12, 2018. The Site is currently owned and operated by AVOX Systems, Inc. (AVOX).

1.1 Report Organization

The purposes of this PRR are to provide a summary of the controls implemented for the Site as required by Section 7.2 of the Site Management Plan (SMP) (AECOM, December 2015) 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;
- 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 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 (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 2018) 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 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 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 is 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 properties adjoining the Site and in the neighborhood surrounding the Site include both commercial and residential properties. The properties immediately south of the Site include railroad tracks; the properties immediately north of the Site include 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 properties.

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 are installed at three intervals: shallow overburden, deep overburden, and bedrock. 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 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 shallow overburden groundwater is 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 2018 and is discussed in detail in Section 5.0 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 coating (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.

As of 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 the 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 which 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 the 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 1. 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 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. 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). 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 Remedial Investigation (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. A Supplemental RI (SRI), 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. 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 NYSDEC TOGS 1.1.1 protection for source of drinking water (groundwater) standards (i.e., water class GA). 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 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) exhibited 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 NYSDEC TOGS 1.1.1 protection for source of drinking water (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 NYSDEC TOGS 1.1.1 protection for source of drinking water (groundwater) standards in the bedrock groundwater. The most frequently detected VOCs were trichloroethene (TCE) and 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 NYSDEC TOGS 1.1.1 protection for source of drinking water (groundwater) standards for TCE. See **Appendix A** for a summary of groundwater VOC data collected during the RI, SRI, and quarterly monitoring, and **Appendix B** for trend plots illustrating concentrations of contaminants of concerns (COCs) 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, and vinyl chloride (VC) over time. SVOCs in groundwater were below NYSDEC TOGS 1.1.1 protection for source of drinking water (groundwater) standards. Three naturally occurring metals (iron, magnesium, and sodium) were detected in groundwater above NYSDEC TOGS 1.1.1 protection for source of drinking water (groundwater) standards. No PCBs were detected, and only one pesticide was tentatively detected in one groundwater sample at a concentration greater than NYSDEC TOGS 1.1.1 protection for source of drinking water (groundwater) standards. Refer to the Alternatives Analysis Report (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 the AAR (AECOM, April 2015) for storm sewer VOC data and for temporary piezometer water sample data that was collected from within the storm sewer pipe bedding gravel.
- 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, 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 at concentrations sufficiently elevated to represent a potential indoor air quality issue for the nearby buildings (AECOM, August 2013). A second investigation and report was 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 (12 micrograms per kilogram). Acetone was also reported in five of the six groundwater samples and in the trip blank. The only other VOC reported was 2-butanone 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 does not identify a clear relationship between the two that would

warrant further SVI sampling at the residential property. Multiple media have been evaluated. The property boundary between AVOX (which includes the Site) and 205 Erie Street appears to not be impacted by the BCP Site (AECOM, October 2013).

2.2.3.7 Interim Remedial Measures - 2014

During a conference call between NYSDEC, Scott, AECOM, and AVOX 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. 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 Klozur® 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 November 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 summarizes 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 foundation perforations was 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 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 chlorinated VOCs 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 trigger an action of 'monitor' only, while the 1,1,1-TCA, cis-1,2-DCE, and 1,1-DCE concentrations are 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 have 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 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 MIP is a percussion tolerant VOC sensor that can continuously log VOCs that diffuse through a semi-permeable membrane. Using a carrier gas, the VOCs are brought to the surface through tubing which is connected to a laboratory grade halogen specific detector (XSD), PID, and flame ionization

detector to provide immediate analysis. Concurrently, the HPT allows the user to create continuous real-time profiles of soil hydraulic properties in both fine-grained and coarse-grained material. The HPT uses a sensitive downhole transducer to measure the pressure response of the soil to injection of water. Injection pressure is a measure of the hydraulic properties of the soil; a relatively high pressure response indicates a higher proportion of clays and fine-grained materials, whereas a relatively low pressure response indicates a larger grain size and a higher K value.

The 3D Imaging Summary, MIP/HPT Boring Summary, and MIP Data Cross Section figures summarize the field activities and results of the MIP/HPT analysis. XSD data were used as the prime indicator of CVOC impacts, as they are highly sensitive to chlorinated VOCs 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 groundwater data collected from June 2010 through June 2011. The data indicated that there are lower VOC concentrations present in the northern portion of the Site and that, where present, they are 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. 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+[®]. The final 2015 IRM CCR describes work completed to remediate VOCs in Site groundwater (AECOM, August 12, 2015). Refer to **Figure 9** for the injection zone details.

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 CVOCs 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, volatile organic compounds from impacted groundwater.

- RAOs for Environmental Protection
 - Restore 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 NYSDEC TOGS 1.1.1 protection for source of drinking water (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
- PCE – 5 µg/L
- TCE – 5 µg/L
- VC – 2 µg/L

3.0 Groundwater Monitoring Program Summary

The following sections provide a summary of the groundwater monitoring program completed during the reporting period (April 12, 2017 through April 12, 2018); a comparison of the groundwater data collected from the most recent monitoring event (April 2018) 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, the groundwater monitoring program during the reporting period consisted of four comprehensive quarterly monitoring events (July 2017, October 2017, January 2018, and April 2018). These sampling events, following the IRMs described in Section 2.2.3.7, were to determine the effectiveness of the groundwater remedy.

Quarterly sampling was performed at 17 wells, two temporary piezometers screened in the storm sewer pipe bedding, and one on-Site storm water catch basin. On August 4, 2017, NYSDEC requested the addition of three wells to the groundwater monitoring program; these wells were added to the program during the October 2017, January 2018, and April 2018 comprehensive quarterly groundwater sampling events. Refer to **Figure 3** for the location of sampling points.

Groundwater samples from the monitoring wells were analyzed for VOCs and total organic carbon (TOC). Six monitoring wells (three shallow overburden and three deep overburden) were also sampled for monitored natural attenuation (MNA) parameters. Two monitoring wells (one shallow overburden and one deep overburden) were sampled annually for concentrations of dechlorinating bacteria (DHC). The two temporary piezometers screened in the storm sewer pipe bedding, and one on-Site storm water catch basin, were analyzed for VOCs only. 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 quality assurance / quality control (QA/QC) samples, have been uploaded to the NYSDEC EQuIS database. In addition, groundwater purge data, water levels, VOC, TOC, MNA, and microbial data from these four quarterly 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 included field duplicates, rinse blanks, and trip blanks, and 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 final readings prior to sample collection from each well. 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 four quarterly sampling events as well as a detailed discussion of the most recent quarterly event (April 2018) is presented below.

3.1.1 Quarterly Groundwater Sampling

AECOM collected comprehensive rounds of groundwater samples in July 2017, October 2017, January 2018, and April 2018 in accordance with the procedures outlined in the SMP. Twenty monitoring wells were sampled using low flow methods, including 13 shallow overburden wells, six deep overburden wells, and one well screened through both shallow and deep overburden units. In addition, grab samples were collected from one on-Site stormwater catch basin and two temporary piezometers screened in the storm sewer pipe bedding. VOC samples were collected from all locations; TOC samples were collected from each shallow and deep overburden monitoring well; and MNA samples were collected from three shallow and three deep overburden wells. Groundwater analysis for VOC, TOC, and MNA was performed by TestAmerica, Inc. located in Amherst, New York. Microbial analysis was performed by Microbial Insights, Inc. located in Knoxville, Tennessee.

3.2 April 2018 Groundwater Elevation and Flow Direction

In addition to groundwater elevation data recorded from the 20 wells sampled each quarter, a comprehensive round of groundwater levels was measured from all Site wells and piezometers during the April 2018 sampling event. **Table 3** provides a summary of groundwater elevations measured on April 9, 2018.

Two groundwater surface contour maps for April 2018 are provided; shallow overburden groundwater surface contours are presented in **Figure 10**, and deep overburden groundwater surface contours are presented in **Figure 11**; note that the groundwater elevation from MW-30 was not included in the groundwater surface contour figures as the well is screened through both shallow and deep groundwater overburden units. Groundwater elevations measured in April 2018 from the shallow overburden ranged from 688.61 ft above mean sea level (AMSL) at A1-GP14-S to 685.39 ft AMSL at A1-GP15-S. Groundwater elevations measured April 2018 from the deep overburden ranged from 681.86 ft AMSL at MW-35D to 686.51 ft AMSL at MW-40D. Based on these water level measurements, the groundwater beneath the Site indicates a northwest flow direction. This flow direction is most pronounced in the deep overburden, as the shallow overburden groundwater is influenced by Site features as described in Section 2.2.2.

3.3 April 2018 Groundwater Analytical Data

The April 2018 groundwater sampling event was the tenth comprehensive sampling event conducted at the Site since completion of the groundwater injection IRM in March 2015. VOCs detected in groundwater during the April 2018 sampling event are presented in **Table 4** and are compared to the Site RAOs or groundwater criteria presented in TOGS 1.1.1. The following table summarizes the VOCs detected, their respective concentration ranges, the number of detections, and the number of those detections that exceeded Site-specific groundwater RAOs or groundwater criteria presented in NYCRR.

Groundwater Contaminants of Concern Summary of Results
April 2018

VOCs Detected in Groundwater	Concentration Range ($\mu\text{g/L}$)	Number of Detections	RAO/NYCRR Exceedances
Chloroethane	14 – 9,400	6	6
Vinyl chloride*	0.95 – 4,200	5	4
1,1-Dichloroethane*	0.75 – 3,900	5	4
1,1,1-Trichloroethane*	20 - 390	4	4
cis-1,2-Dichloroethene	1.2 – 1,100	4	3
1,1,2-Trichloro-1,2,2-trifluoroethane	55 -740	3	3
1,1-Dichloroethene*	6.8 - 120	3	3
Xylenes, total	3.0 - 44	3	2
Toluene	2.2 - 670	2	1
Ethylbenzene	3.1 – 49	2	1
Methylene Chloride	3.1 – 9.4	2	1
1,2-Dichloroethane*	14	1	1
Trichloroethene*	7.2	1	1
2-Hexanone	2.7	1	0

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

A total of 14 VOCs were detected in groundwater from the monitoring wells (not including one on-Site stormwater catch basin and two temporary piezometers screened in the storm sewer pipe bedding) during the April 2018 sampling event. Thirteen of the 14 VOCs detected exceeded either the Site-specific RAOs or the NYCRR criteria for groundwater at one or more wells. Only five of the eight 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 12 through 19** illustrate April 2018 contours for individual COCs which were detected in shallow and/or deep overburden groundwater. **Figures 20 and 21** illustrate April 2018 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.

3.4 April 2018 Storm Sewer Catch Basin and Storm Sewer Pipe Bedding Analytical Data

VOC data collected from the on-Site catch basin CB-1 exhibited 10 compounds, with all parent VOCs (1,1,1-TCA, PCE, and TCE) showing a decrease in concentration following the IRMs. Five of the eight COCs were detected.

VOC data collected from the two temporary piezometers screened in the storm sewer pipe bedding (TP-05 and TP-06) were below the detection limits for RAO's, with the exception of one detection of 1,1,1-TCA and TCE at TP-05. These detections (4.0 $\mu\text{g/L}$ and 1.2 $\mu\text{g/L}$, respectively) were below the RAO of 5 $\mu\text{g/L}$, and below historical concentrations of this compound at that location.

Attached **Figure 3** shows the locations of the catch basin and temporary piezometers. Analytical data are summarized in **Appendix A**.

3.5 Comparison of April 2018 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) 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 2018, TCE was detected at one well (A1-GP06-S) at 7.2 ug/l, down from 330 ug/L in January 2016. TCE was detected at the on-Site catch basin (CB-1) at 11 µg/L and at temporary piezometer TP-5 at 1.2 µg/L. Based on the substantial decrease in concentration of TCE at locations with historical detections of TCE, the injection of ABC+® appears to continually degrade TCE. This is most clearly demonstrated on the trend plots in **Appendix B** for monitoring wells A1-GP02-S (5,000 ug/L to almost zero), MW-42S (12,000 ug/L to almost zero), and MW-38D (11,000 ug/L to almost zero).

3.6 Groundwater MNA Data Summary

The use of the ERD amendment ABC+ 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 zero valent iron which accelerates abiotic dechlorination of chlorinated ethenes and ethanes. The microbial analysis from “Bio-traps” placed on-Site indicated that the necessary concentrations microflora, such as DHC species producing the enzymes tceA reductase and 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 CVOCs 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 more aerobic conditions return after treatment, then VC oxidizing bacteria should increase and complete the dechlorination to ethene and 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 (refer to Section 5.2 - Recommendations).

3.7 Dechlorinating Bacteria Analysis

Following the injection of ABC+, AECOM deployed “Bio-traps” in both the shallow and deep overburden groundwater wells 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 2018 analysis, the shallow overburden groundwater shows a general increase of DHC, tceA Reductase, BAV1 VC Reductase, and VC Reductase bacteria, with concentration levels indicating that reductive dechlorination will yield a generally useful biodegradation rate (Lu et al., 2006). Deep overburden groundwater shows a general decrease of DHC, tceA Reductase, BAV1 VC Reductase, and VC Reductase bacteria, with concentration levels of vinyl chloride reductase genes indicating that reductive dechlorination may still occur while DHC populations indicate that other Site-specific data

should be evaluated to determine whether subsurface conditions may be limiting reductive dechlorination (Lu et al., 2006). 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
Sample Date	7/27/15	7/12/16	4/12/17	4/12/18
Dechlorinating Bacteria (Cells/bead)				
DHC	<2.50x10 ¹	1.77x10 ²	3.98x10 ⁴	4.04x10 ⁴
tceA Reductase	<2.50x10 ¹	1.58x10 ¹	1.28x10 ⁴	4.92x10 ⁴
BAV1 VC Reductase	<2.50x10 ¹	<2.50x10 ¹	<2.50x10 ¹	3.3x10 ¹
VC Reductase	<2.50x10 ¹	<2.50x10 ¹	1.04x10 ³	3.56x10 ³

Deep Overburden Dechlorinating Bacteria Data

Sample ID	MW-38D	MW-38D	MW-38D	MW-38D
Sample Date	7/27/15	7/12/16	4/12/17	4/12/18
Dechlorinating Bacteria (Cells/bead)				
DHC	8.41x10 ²	4.00x10 ⁴	2.52x10 ⁴	1.81x10 ²
tceA Reductase	<2.50x10 ¹	1.78x10 ²	7.24x10 ²	6.36x10 ¹
BAV1 VC Reductase	1.20x10 ²	2.22x10 ⁴	2.20x10 ²	1.25x10 ¹
VC Reductase	1.47x10 ¹	6.96x10 ²	9.12x10 ²	5.16x10 ¹

3.8 Dechlorinating Chemical Analysis

In addition to the dechlorinating bacteria 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, with the majority 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 4**.

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 are decreasing over time in the areas targeted for injection (refer to **Figure 9**), locations with the highest concentrations of COCs (A1-GP02-S, A1-GP06-S, A1-GP10-S, MW-42S, and MW-40D) still have TOC concentrations above pre-injection levels. Refer to **Appendix A** for a summary of TOC concentrations and **Figure 22** and **Figure 23** for April 2018 TOC concentration contours in the shallow and deep overburden groundwater, respectively.

4.0 Site Inspection

This section describes quarterly Site inspections, O&M tasks completed, and recommendations for improvements.

4.1 Boiler Room

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 foundation perforations was sealed with expanding foam. Two other foundation perforations (drains) were observed and temporarily plugged with modelling clay just prior to a sampling event, as the floor drains appeared to discharge to the bedding gravel beneath the concrete floor slab. The sealing of floor cracks and foundation perforations has decreased the concentrations in the indoor air samples and lowered the regulatory action level from 'mitigation' to 'monitoring' (AECOM, January 2015).

The improvements established in the boiler room (which is normally not occupied) as a result of the corrective actions completed to address soil vapor intrusion concerns consist of caulking in the boiler room floor and the seal around the annulus of a drain pipe in the boiler room. These improvements were inspected quarterly during groundwater sampling events. During the week of November 20, 2017, AECOM and subcontractor Matrix Environmental Technologies, Inc. (METI) performed preventive maintenance in the boiler room that consisted of removing and replacing all floor crack caulking and drain pipe annulus seals, and resealing all visible floor cracks and foundation perforations. Note, as stated in the SMP, if the boiler room becomes occupied or its usage changes, additional treatment and/or control measures will be evaluated.

4.2 Monitoring Wells

In Section 5.2 of the 2017 PRR, AECOM proposed to decommission 17 of the 36 monitoring wells and piezometers; i.e., wells that are not sampled quarterly as part of the SMP. On August 4, 2017 NYSDEC approved the decommissioning of 14 wells and piezometers; NYSDEC required that A1-GP09-S, A1-GP14-S and A1-GP16-S remain and be added to the quarterly groundwater sampling program.

During the week of October 23, 2017, AECOM and subcontractor METI decommissioned 14 wells in accordance with NYSDEC's November 3, 2009 Groundwater Monitoring Well Decommissioning Policy; refer to **Appendix C** for well decommissioning records. In addition, five wells were refurbished (i.e., repair of flush mount road boxes and concrete pads).

5.0 Conclusions and Recommendations

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

5.1 Conclusions

1. Groundwater elevations measured in April 2018 from the shallow overburden ranged from 685.39 ft AMSL at A1-GP15-S to 688.61 ft AMSL at A1-GP14-S. Groundwater elevations measured April 2018 from the deep overburden ranged from 681.86 ft AMSL at MW-35D to 686.51 ft AMSL at MW-40D. Based on these water level measurements, the groundwater beneath the Site exhibits a northwest flow direction. This flow direction is most pronounced in the deep overburden, as the shallow overburden groundwater is influenced by Site features (e.g., storm sewer and utility systems).
2. The groundwater analytical data indicate that the IRMs were, and continue to be, successful in the attenuation of CVOCs.
3. The groundwater microbial analyses indicate that the necessary microflora, such as DHC, tceA reductase, BAV1 VC Reductase, and VC Reductase bacteria, are present in the shallow overburden at sufficient concentrations, whereas the deep overburden groundwater shows a general decrease of microflora.
4. VOC data collected from on-Site catch basin CB-1 in April 2018 exhibited a general decreasing trend in concentration of COCs following the IRMs, with the exception of VC which increased slightly.
5. Concentrations of VOCs in samples collected in April 2018 from the temporary piezometers screened in the storm sewer bedding were below the RAOs for COCs.
6. Periodic monitoring data demonstrate that TOC concentrations in the areas targeted for injections remain above pre-injection levels, maintaining conditions for microbial growth.
7. The boiler room floor crack caulking and drain pipe annulus seals (i.e., sub-slab mitigation controls) were replaced during the reporting period as a preventative measure.
8. With approval from NYSDEC, 14 wells were decommissioned and five wells were refurbished (i.e., repair of flush mount road boxes and concrete pads).

5.2 Recommendations

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

1. Continue quarterly inspections of the boiler room sub-slab mitigation controls.
2. Continue quarterly inspections of the monitoring well network.
3. Perform four quarterly groundwater sampling events during the next reporting period.

4. Evaluate if additional targeted injections (at approximately 12 locations) would be beneficial, targeting localized areas adjacent to monitoring wells A1-GP02-S, A1-GP06-S, A1-GP10-S, MW-42S, and MW-40D.
5. Review and update the Site health and safety plan as needed.

5.3 Proposed Monitoring and Compliance Sampling Schedule

The proposed schedule for groundwater sampling at the Site during the next reporting period includes quarterly sampling of 20 wells, the on-Site catch basin, 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 2019 comprehensive groundwater sampling event, and will include the results from groundwater sampling events scheduled for July 2018, October 2018, January 2019, and April 2019.

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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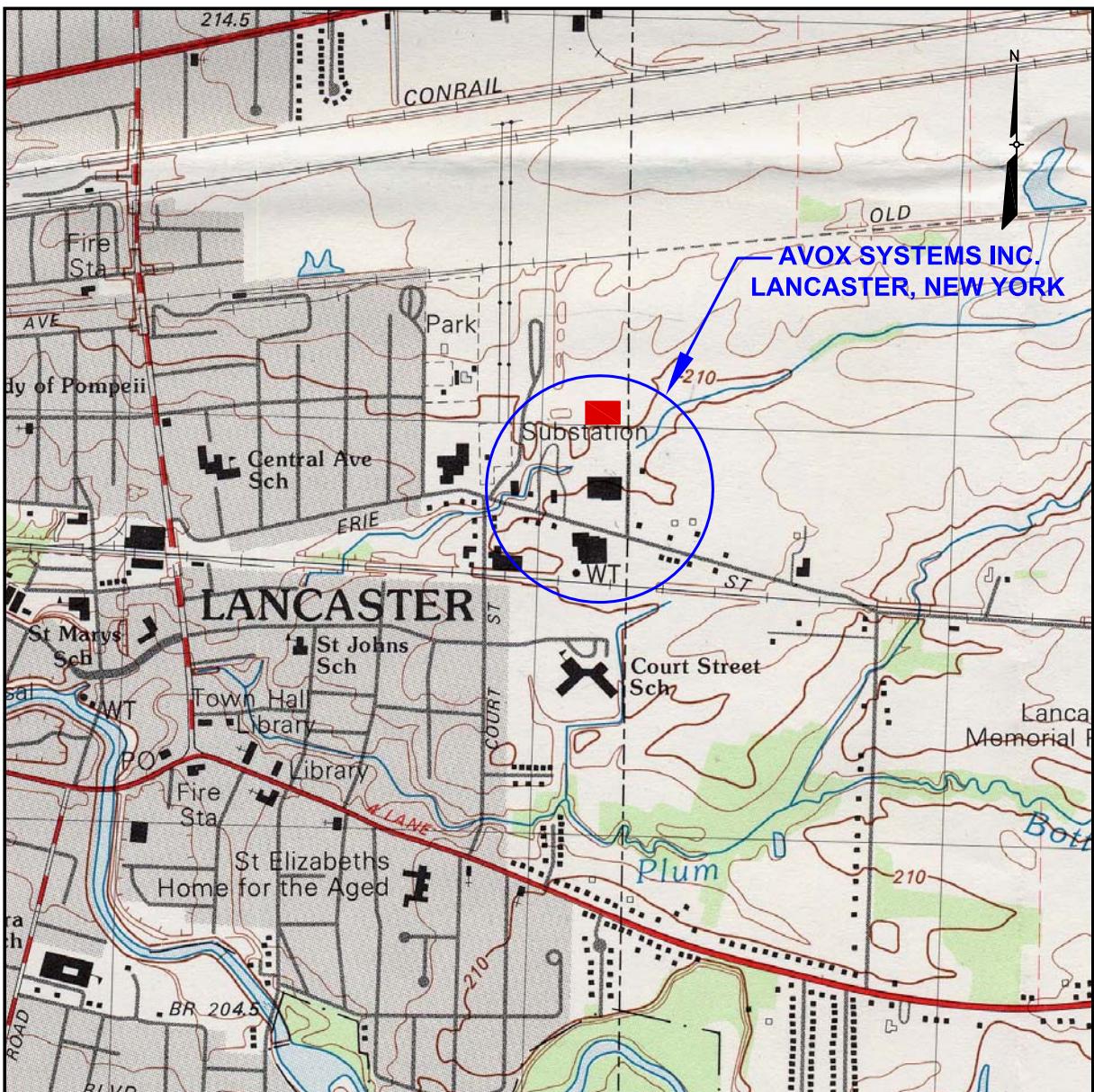
NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (June 2004 addendum).

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Figures



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

LEGEND

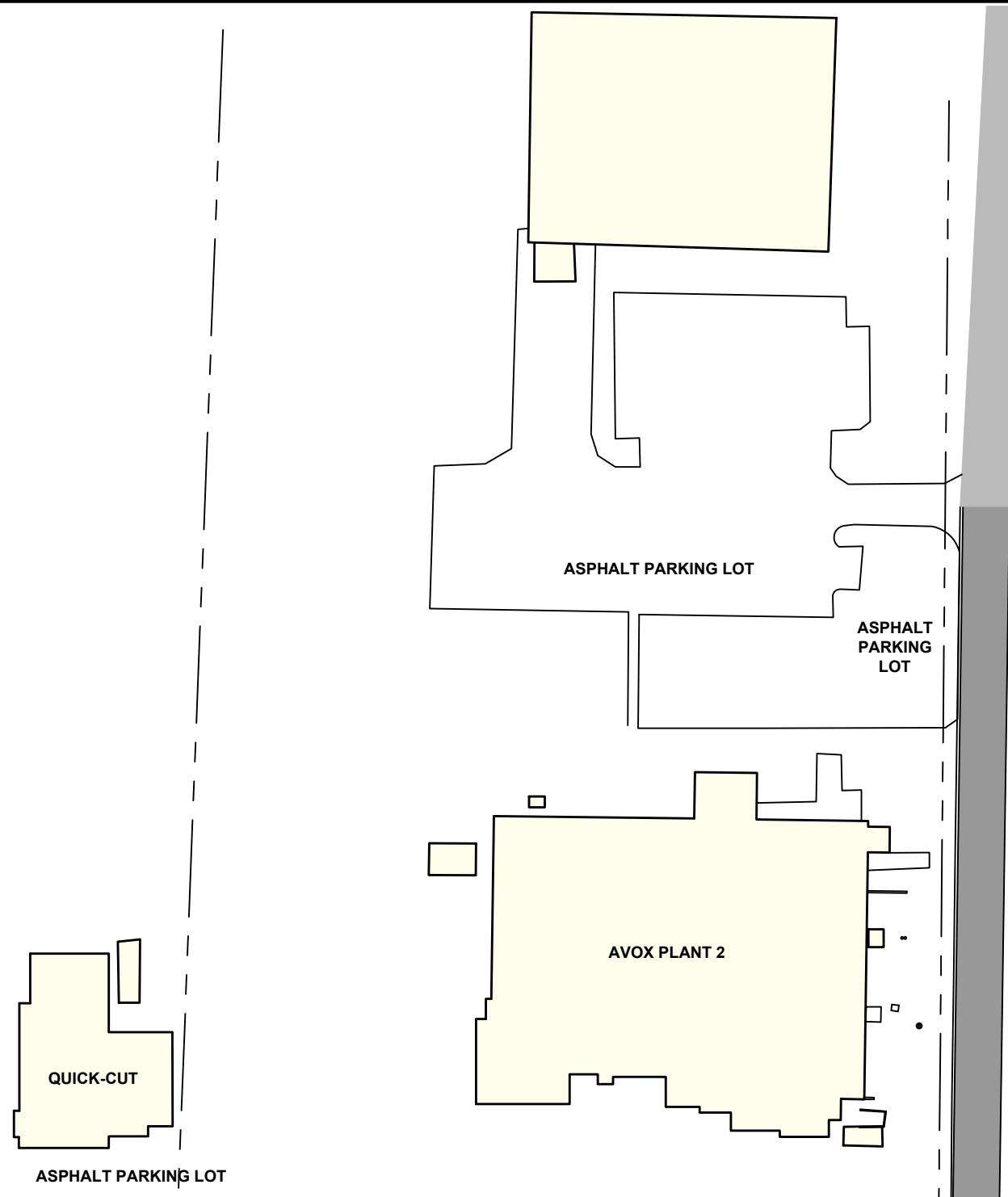
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TOPOGRAPHIC QUADRANGLE.

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SCALE IN FEET

FIGURE 1
SITE LOCATION MAP

AECOM

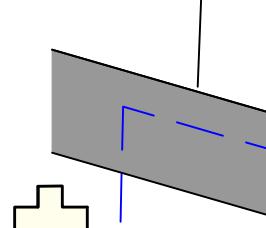
FORMER SCOTT AVIATION FACILITY
LANCASTER, NEW YORK



ASPHALT PARKING LOT

LEGEND

	BROWNFIELD CLEANUP BOUNDARY FOR AREA 1
	FENCE
	GATE
	BRUSH LINE
	RAILROAD TRACKS
	STORM SEWER AND FLOW DIRECTION
	CATCH BASIN
	4-FT SQUARE CONCRETE MONUMENT
	2005 INTERIM REMEDIAL MEASURE SOIL EXCAVATION AREA



RESIDENCE

RESIDENTIAL GARAGE

BCP SITE

APPROXIMATE PROPERTY
BOUNDARY

CB-W

CB-1

CB-2

CB-3

CB-4

CB-E

FORMER
SHED

BLOCK
BLDG

BOILER
ROOM

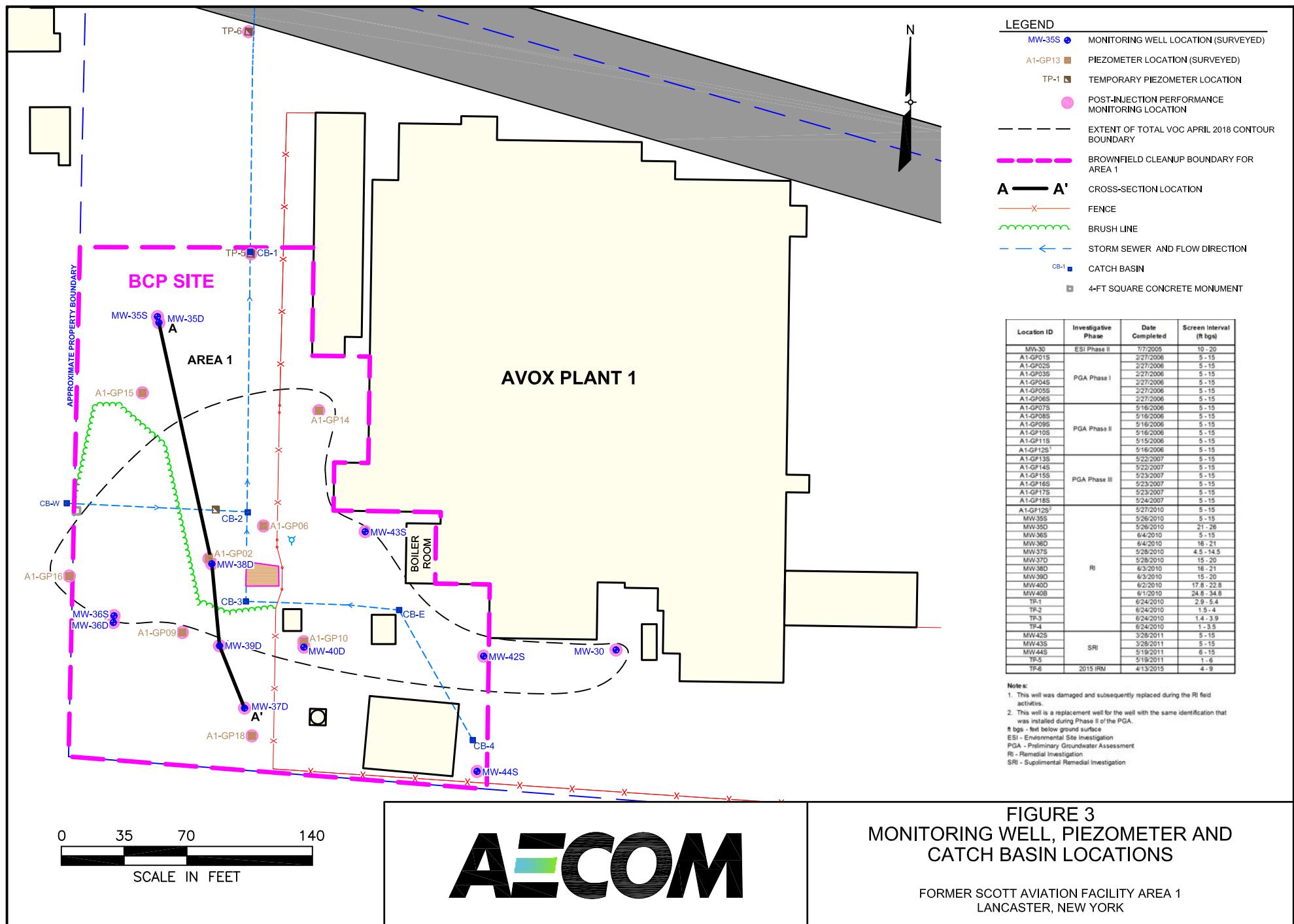
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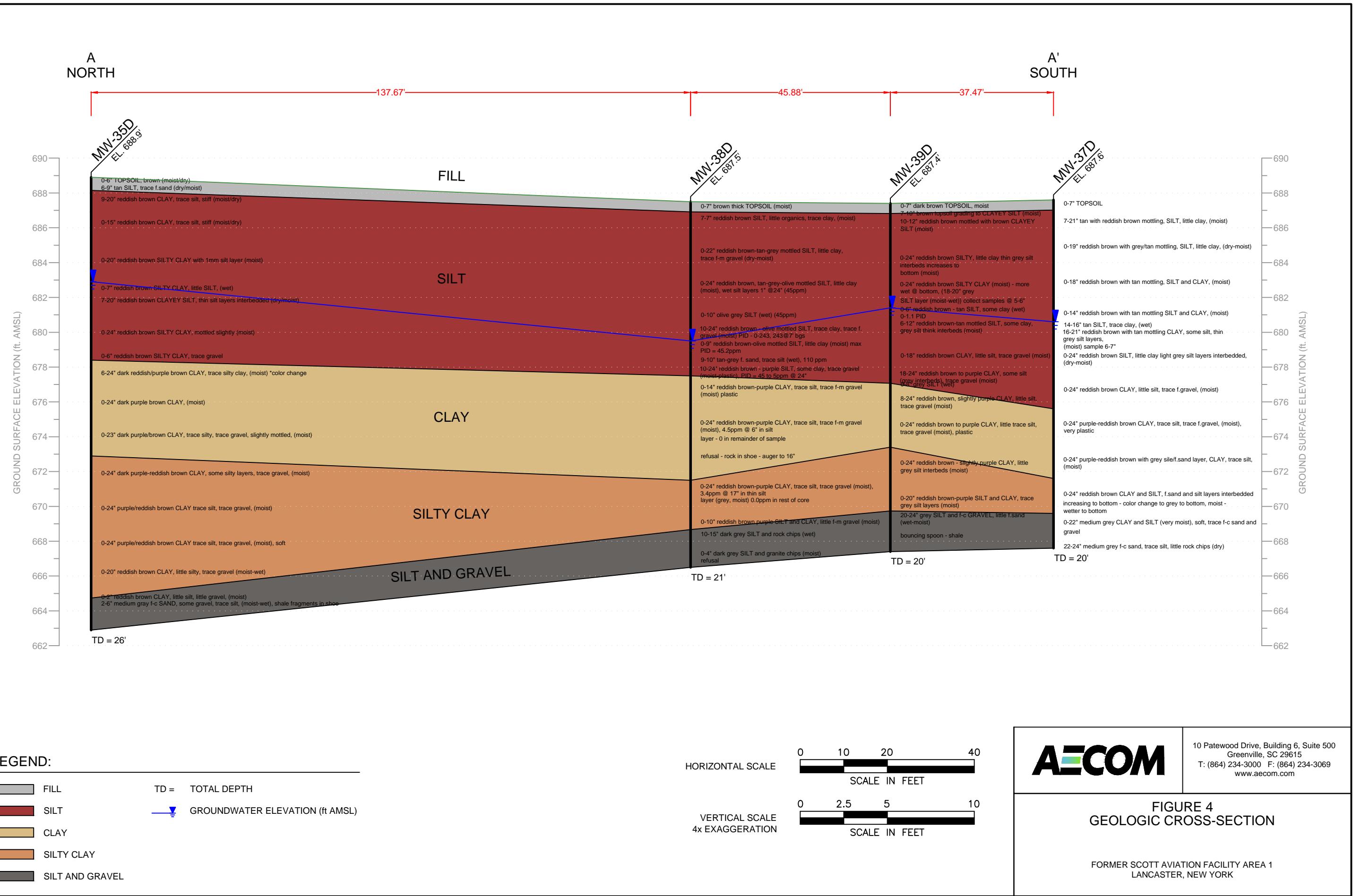
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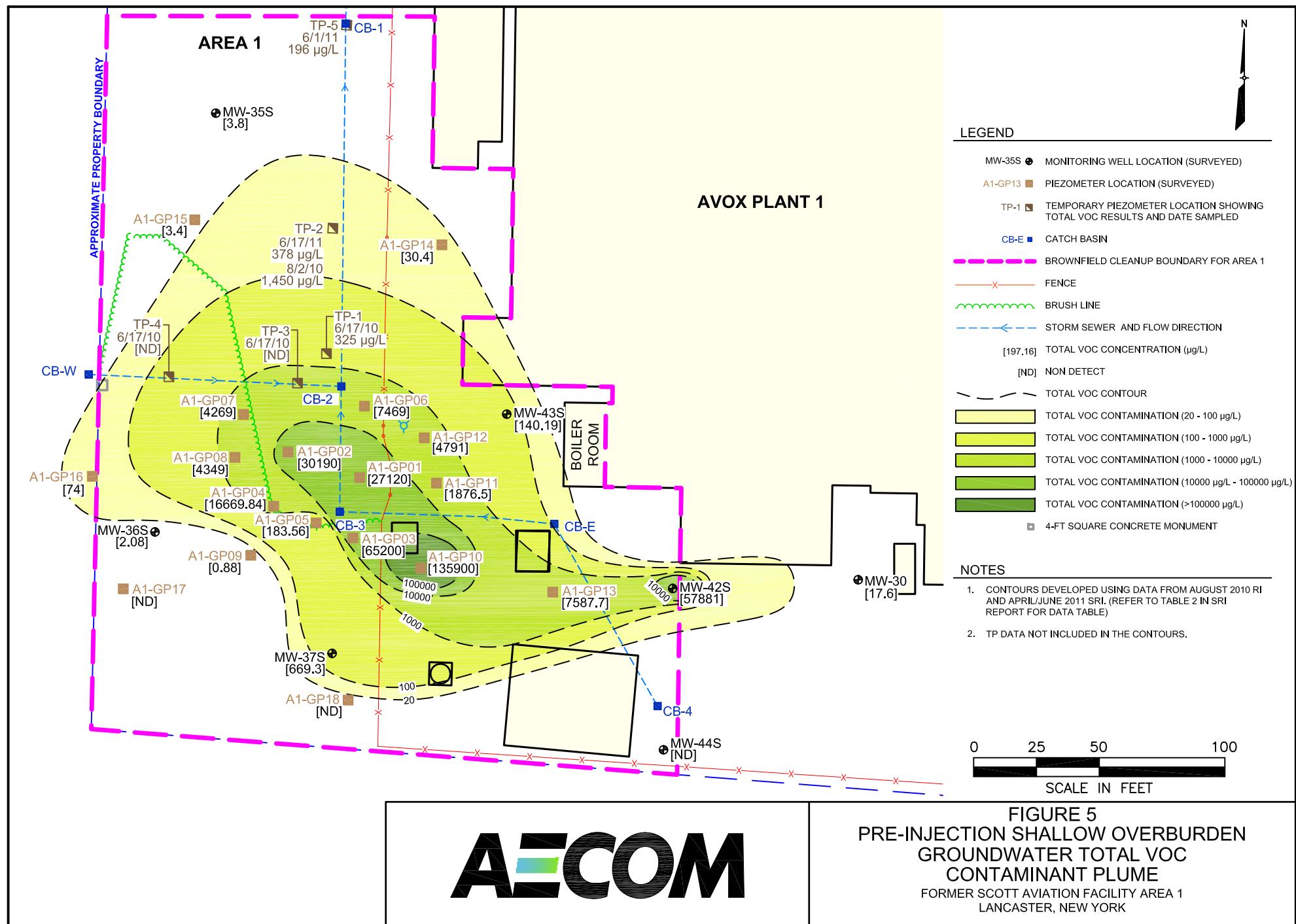
FIGURE 2
SITE LAYOUT MAP

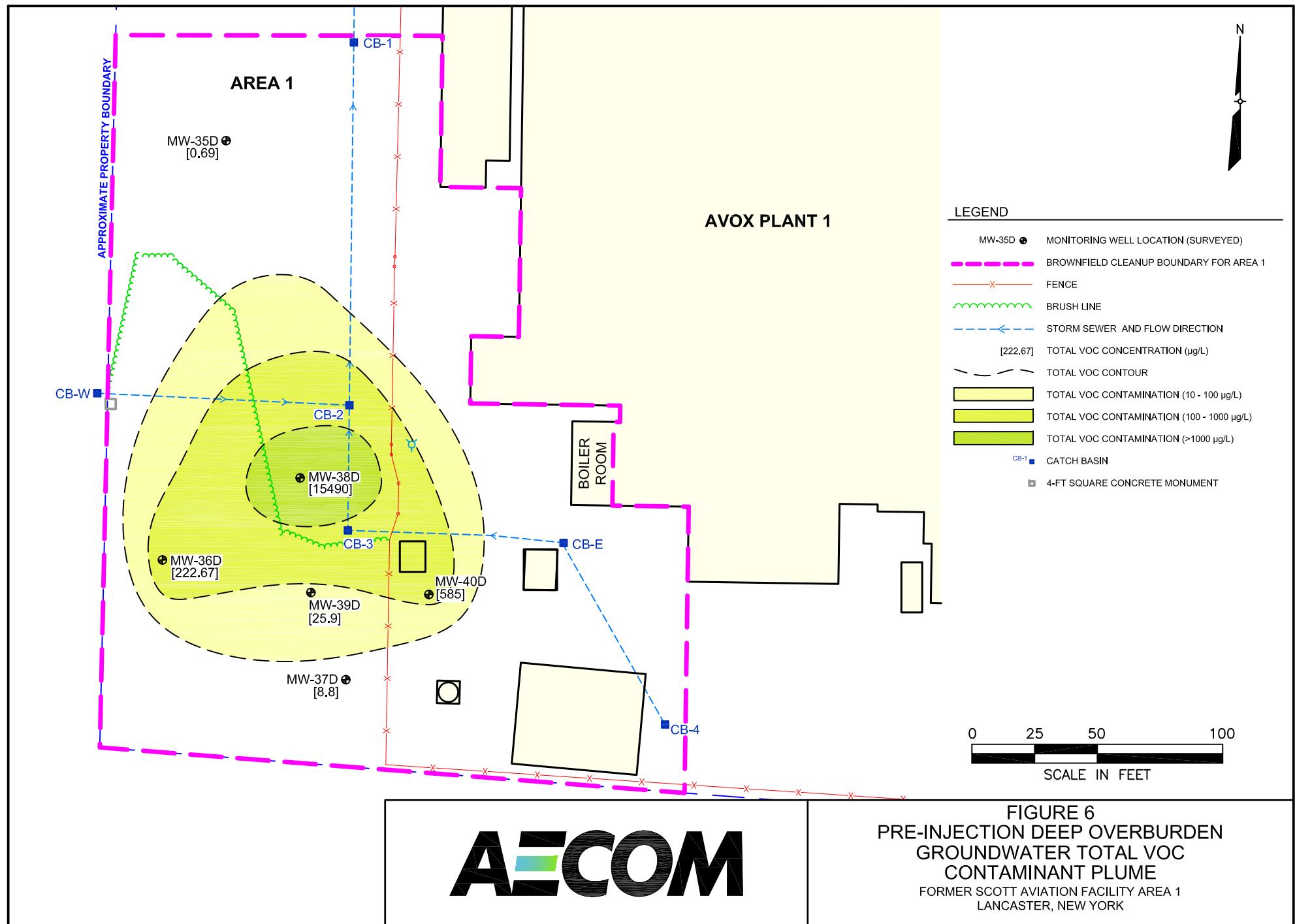
FORMER SCOTT AVIATION FACILITY AREA 1
LANCASTER, NEW YORK

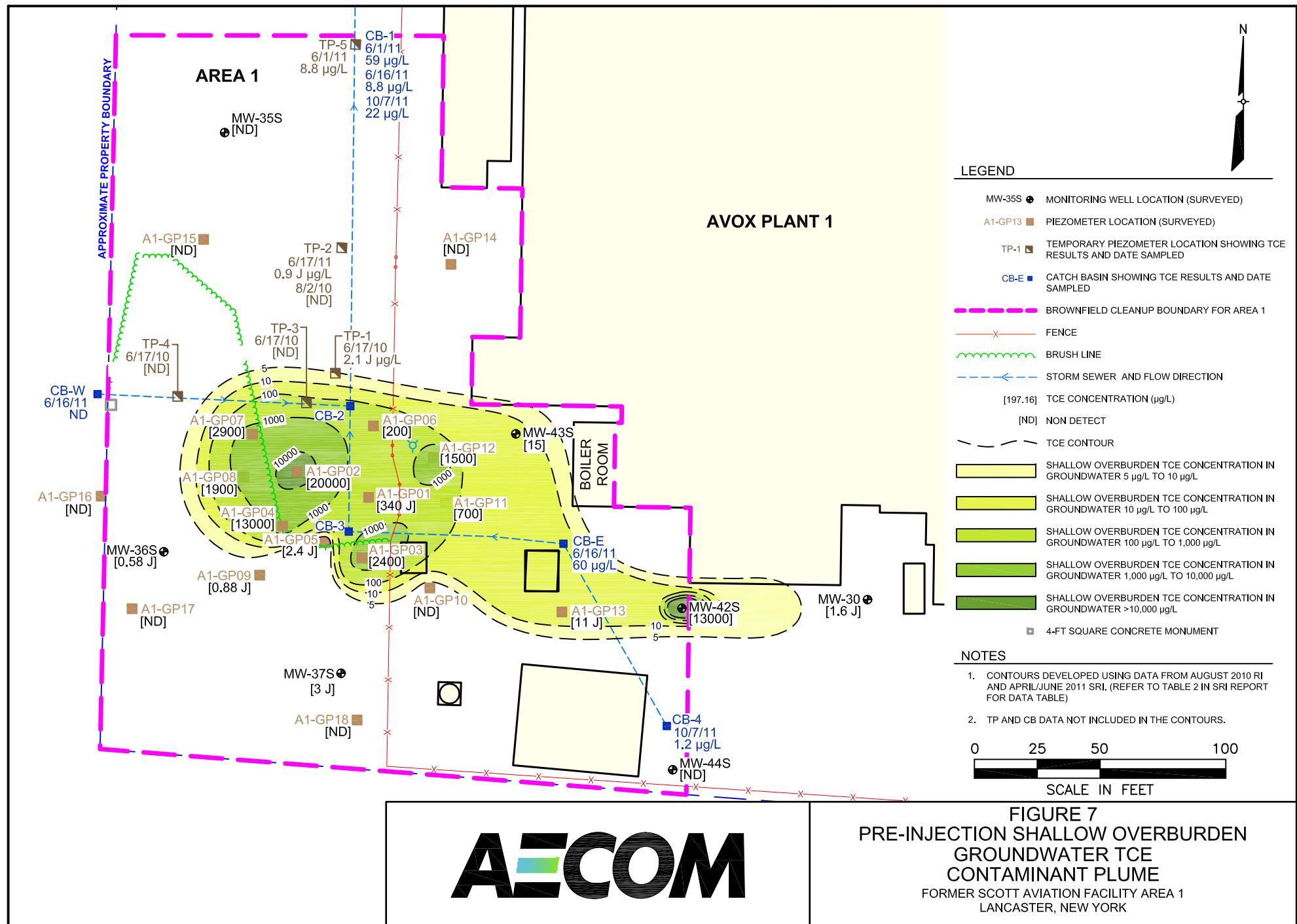
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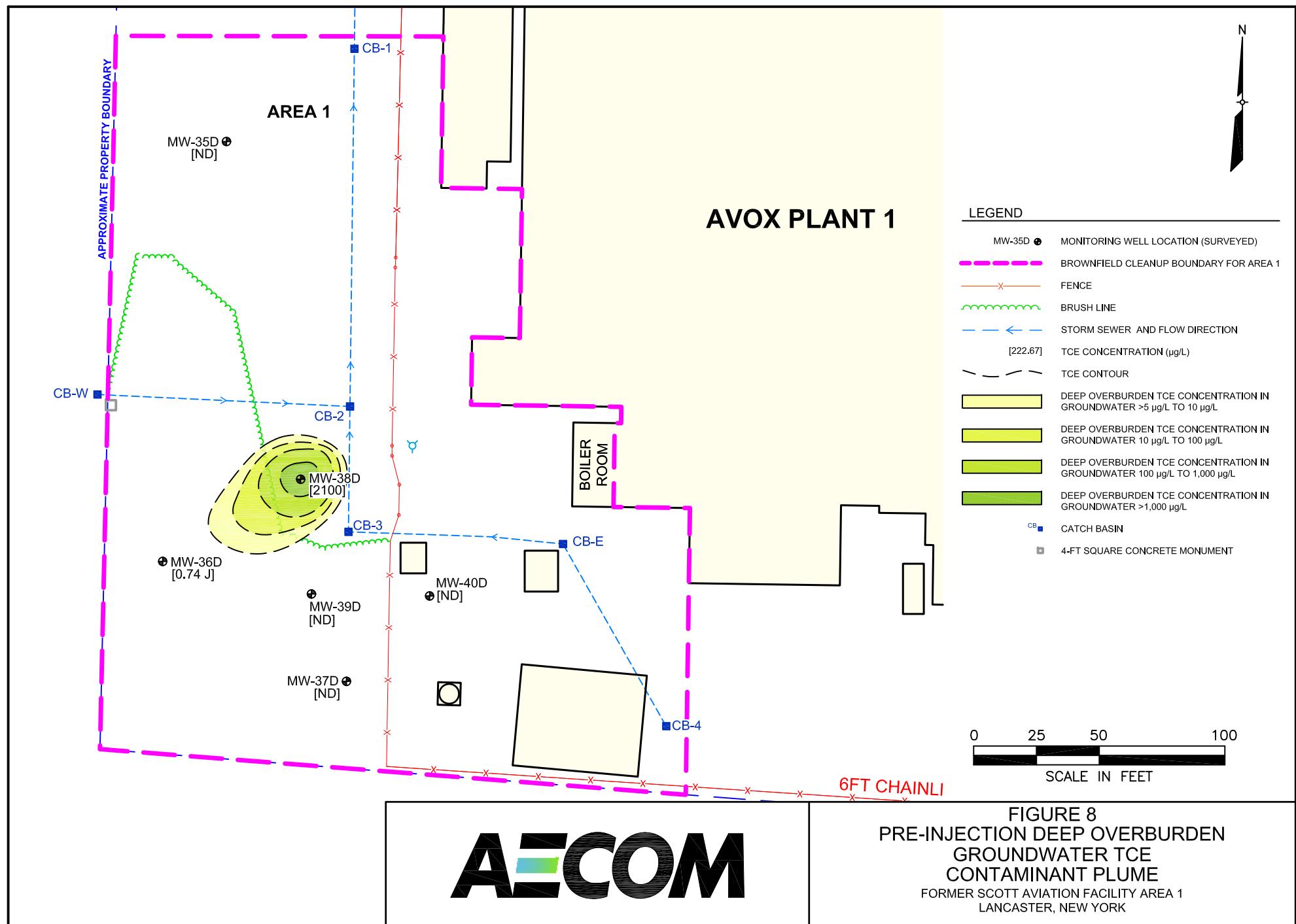


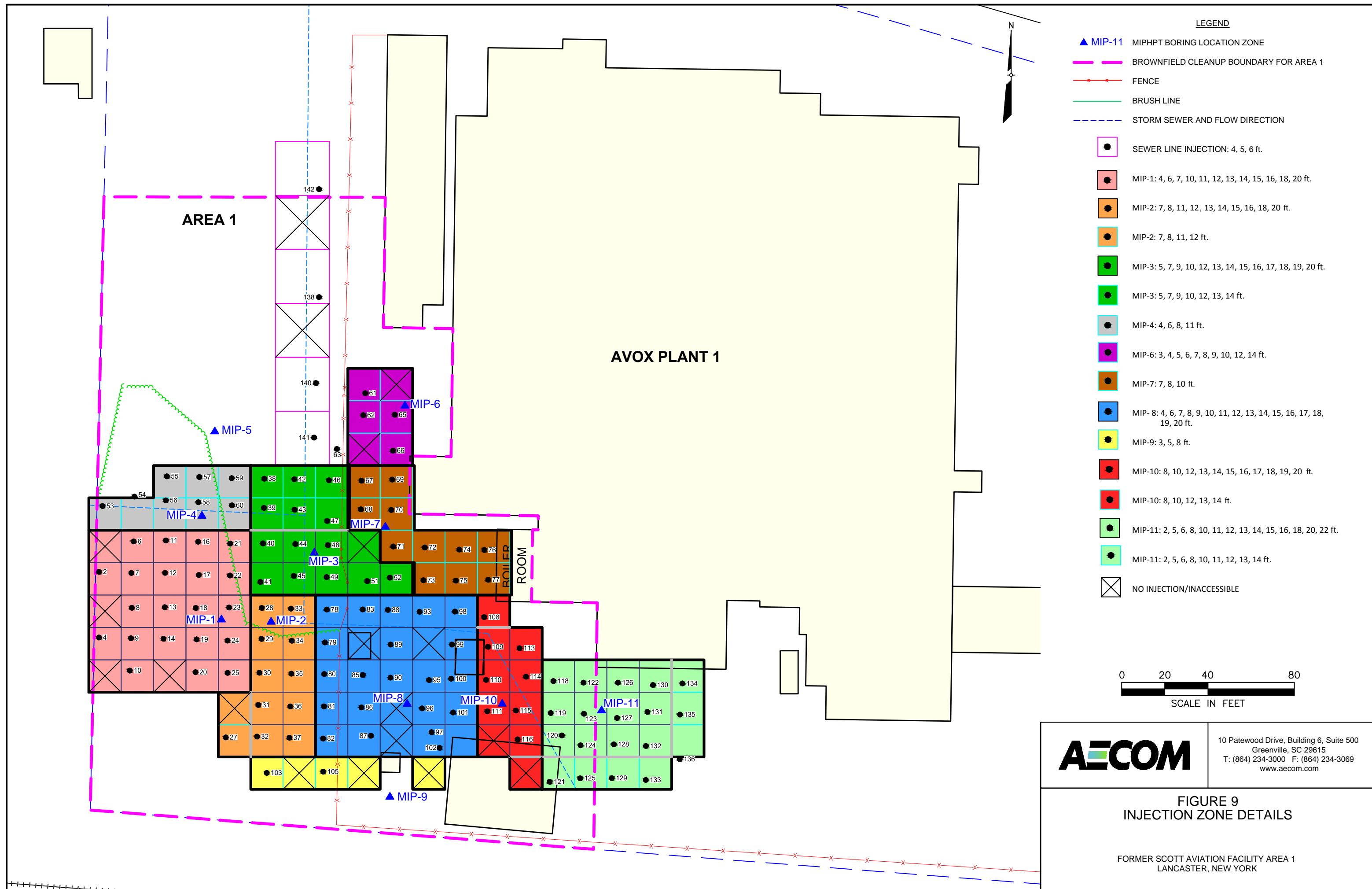


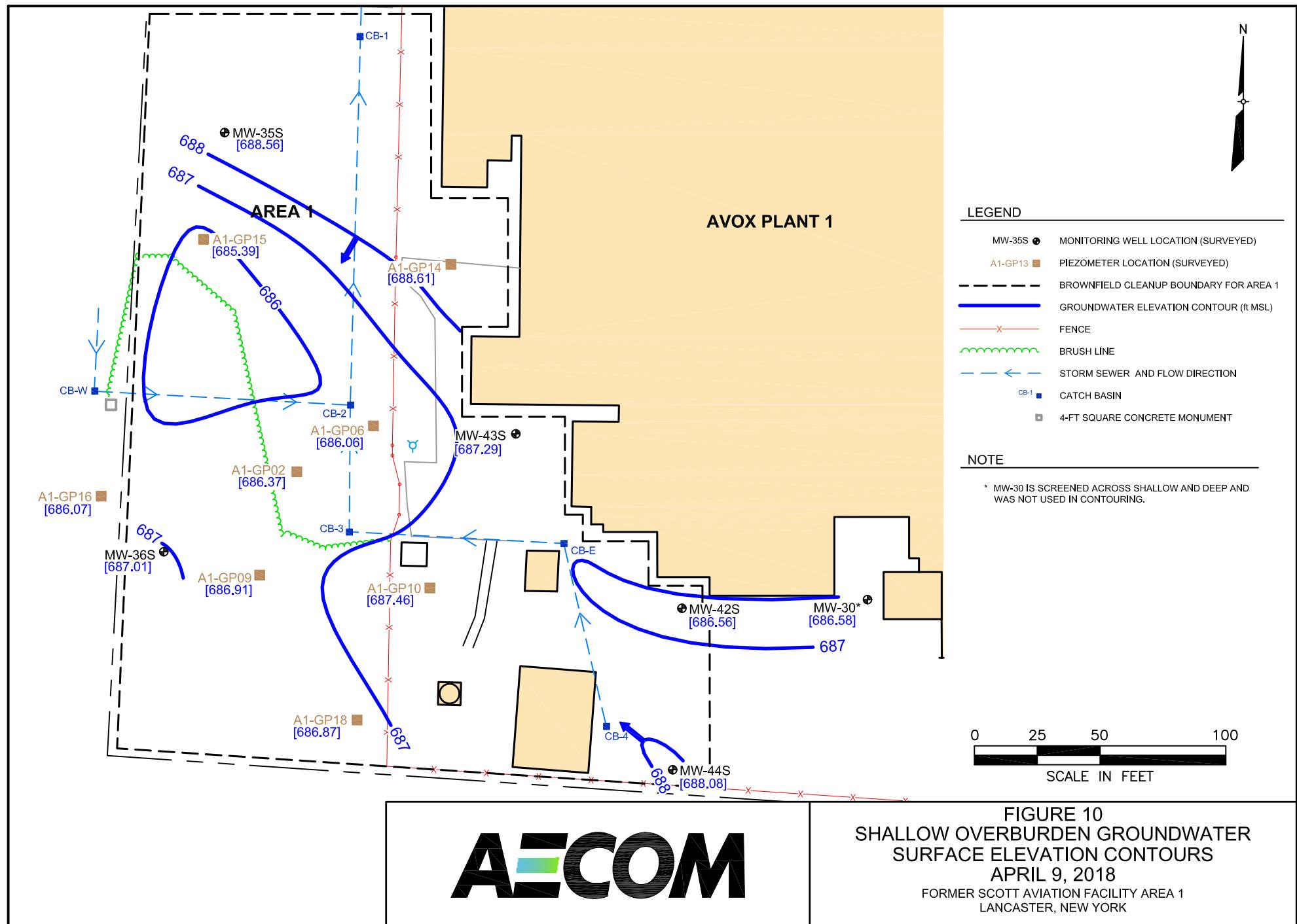


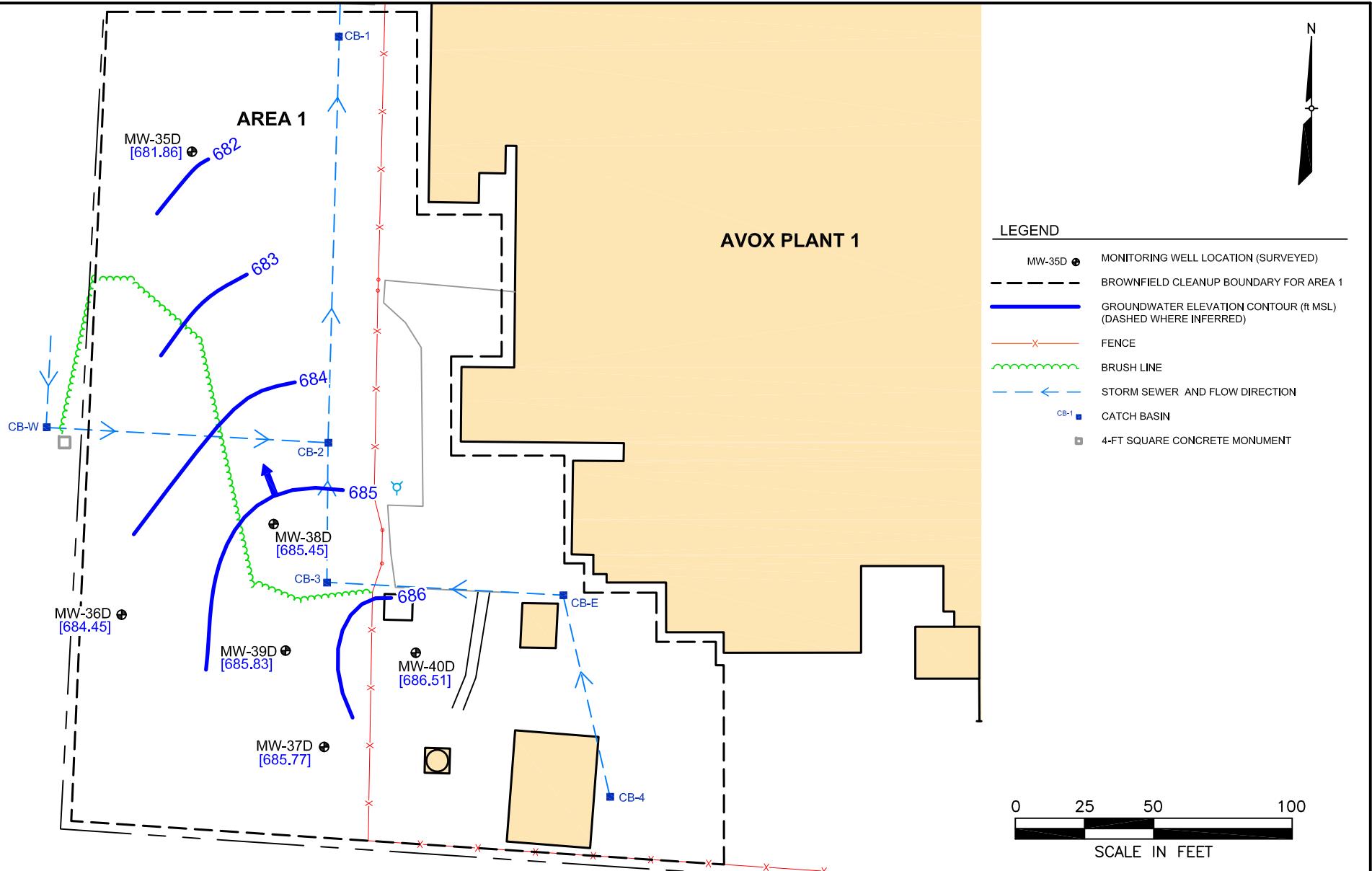






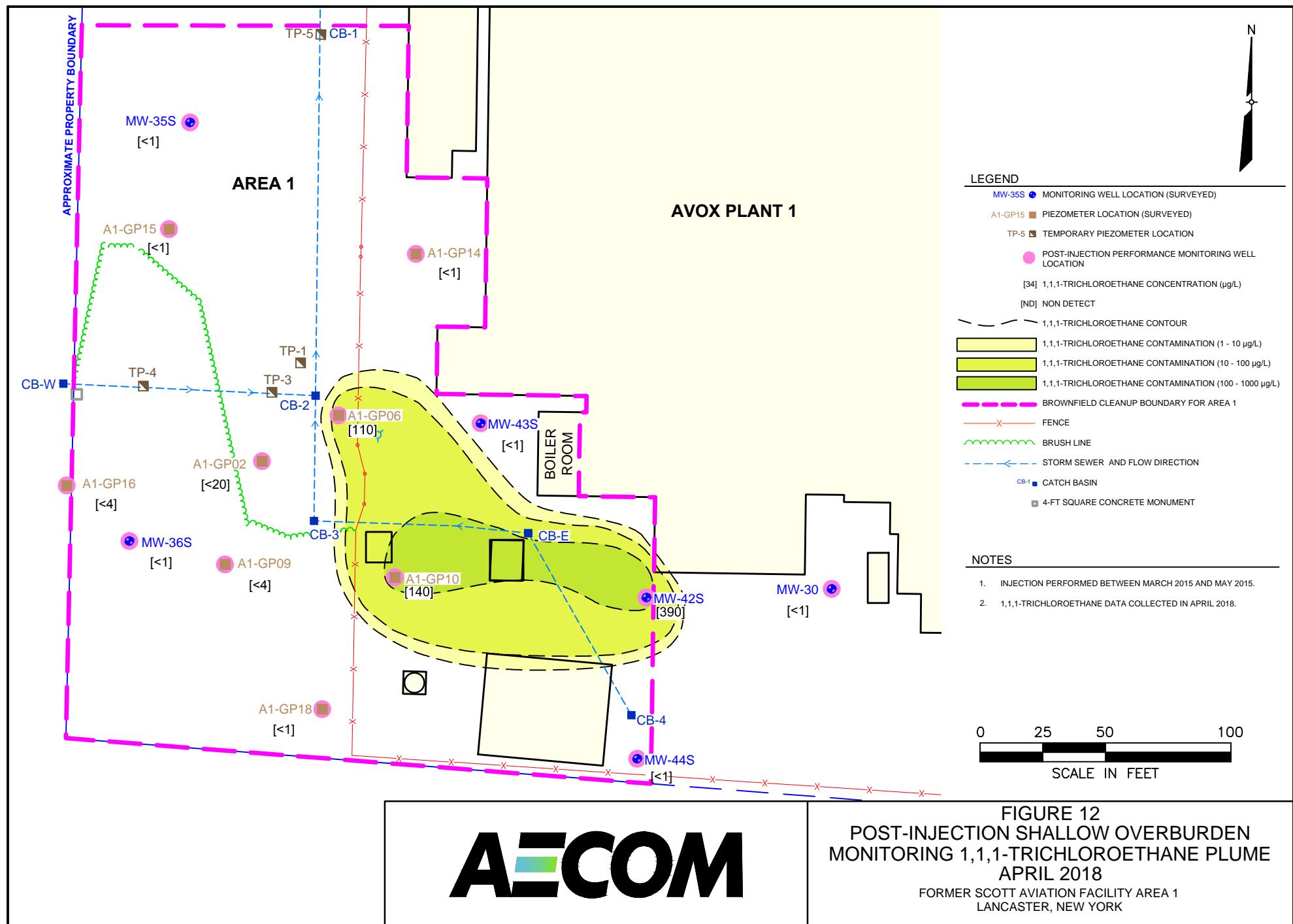


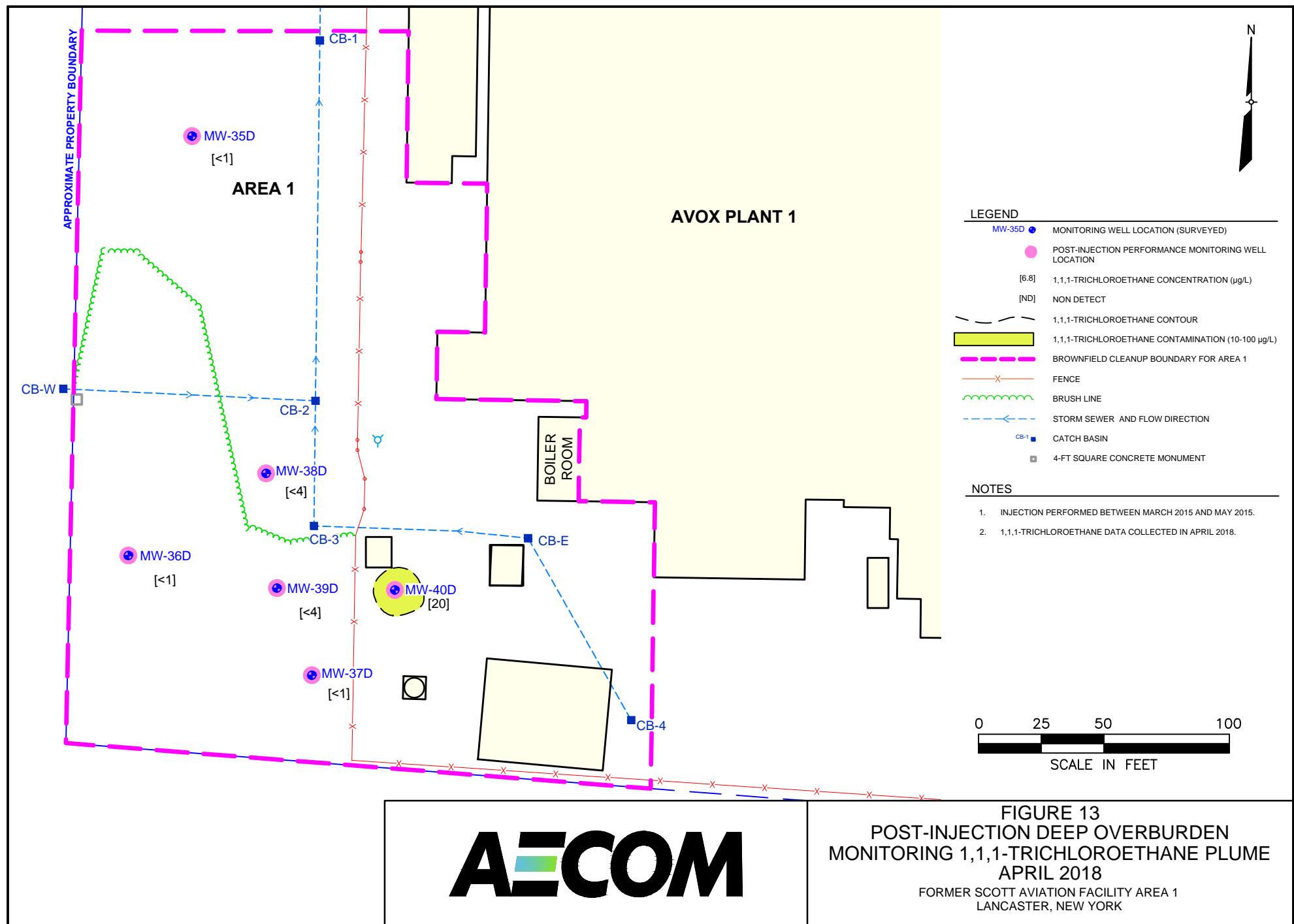


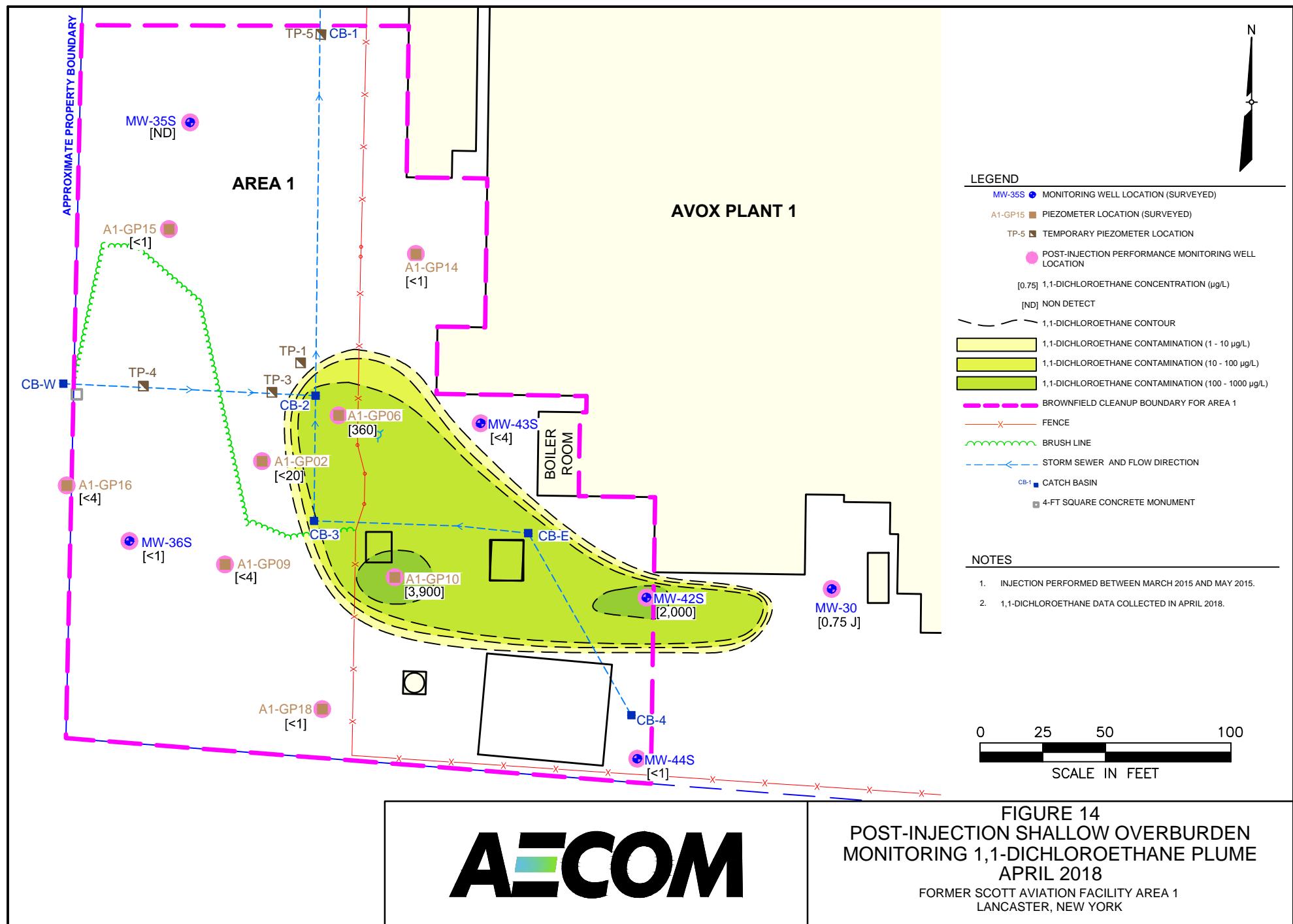


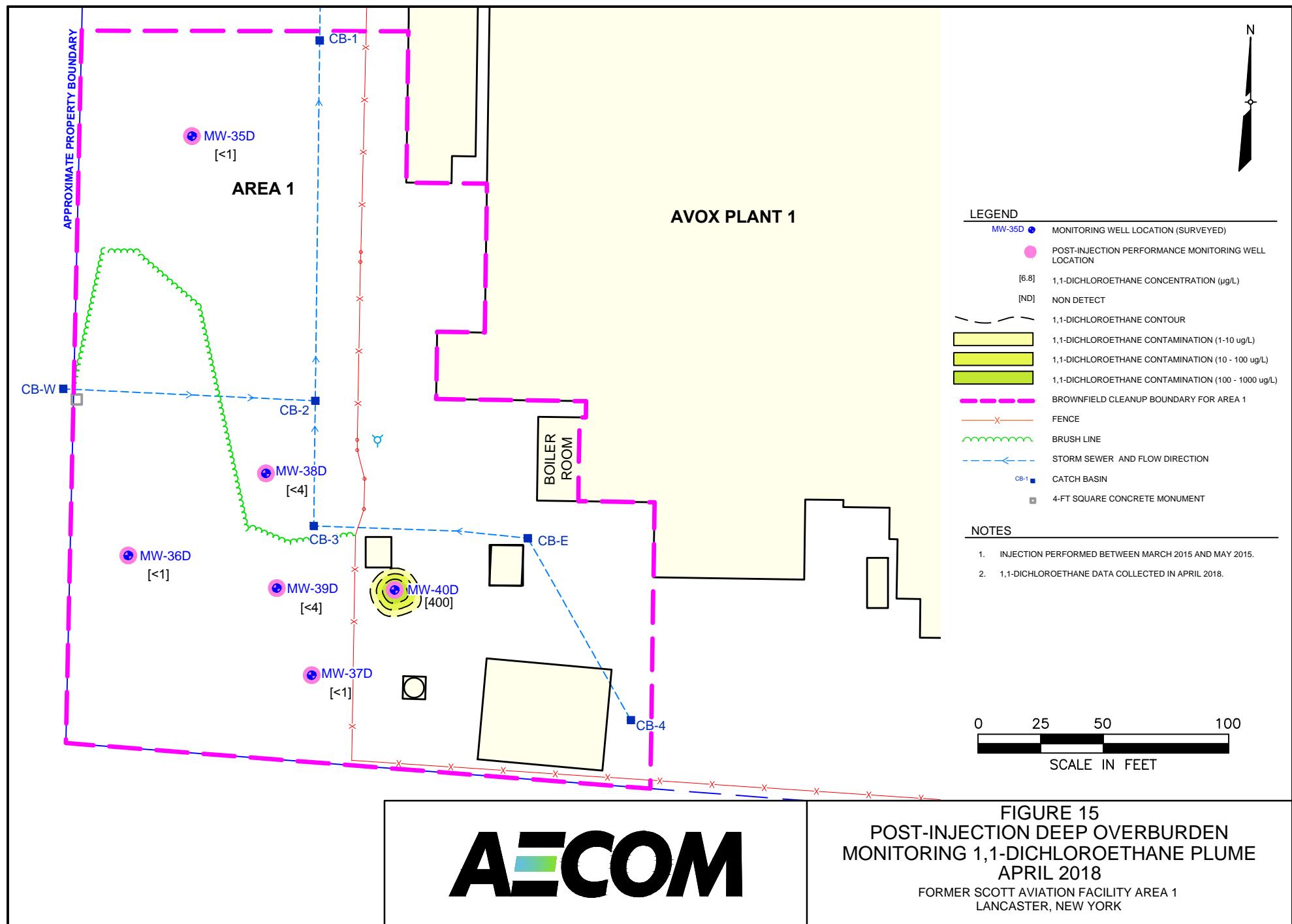
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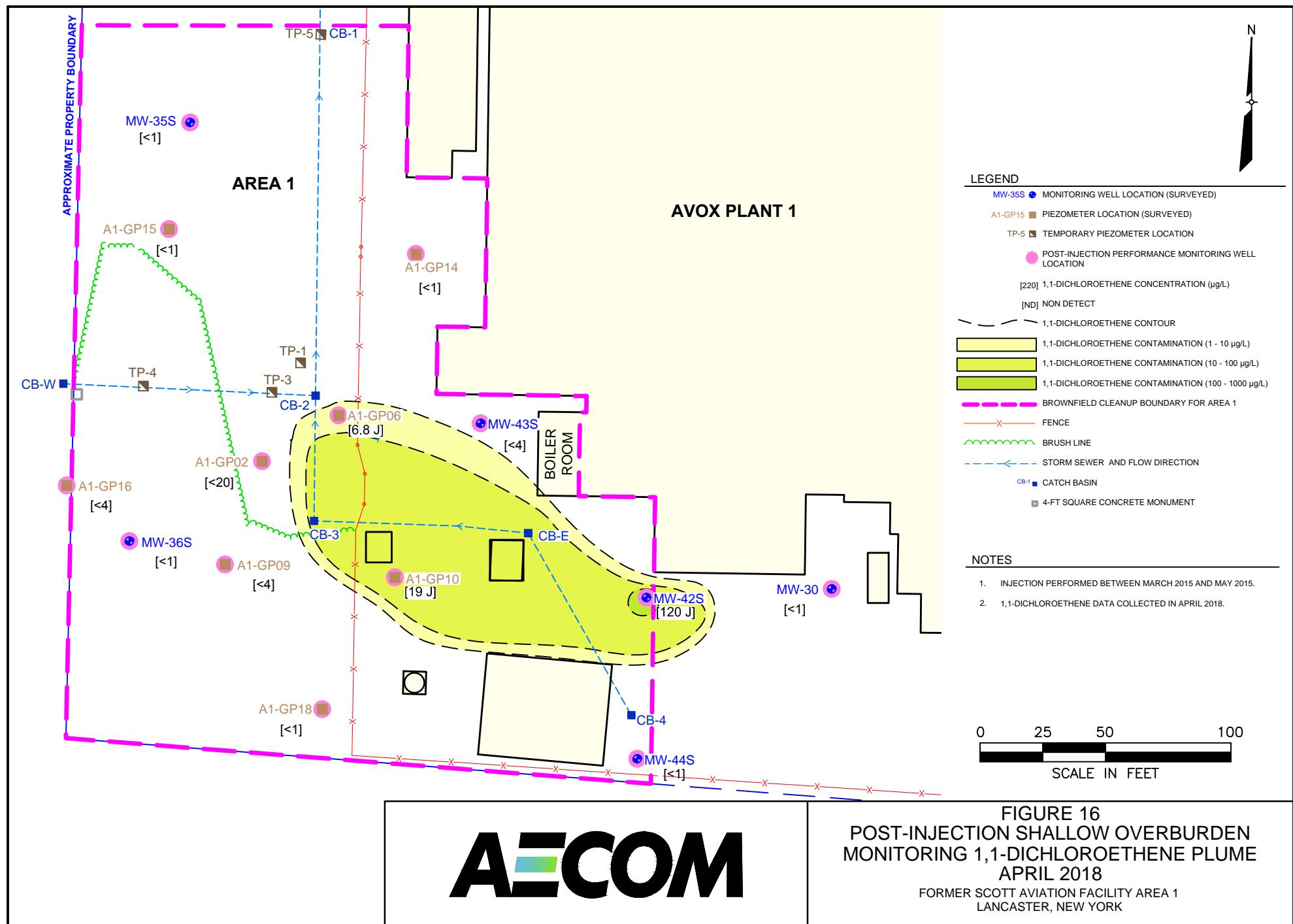
FIGURE 11
DEEP OVERTBURDEN GROUNDWATER
SURFACE ELEVATION CONTOURS
APRIL 9, 2018
FORMER SCOTT AVIATION FACILITY AREA 1
LANCASTER, NEW YORK

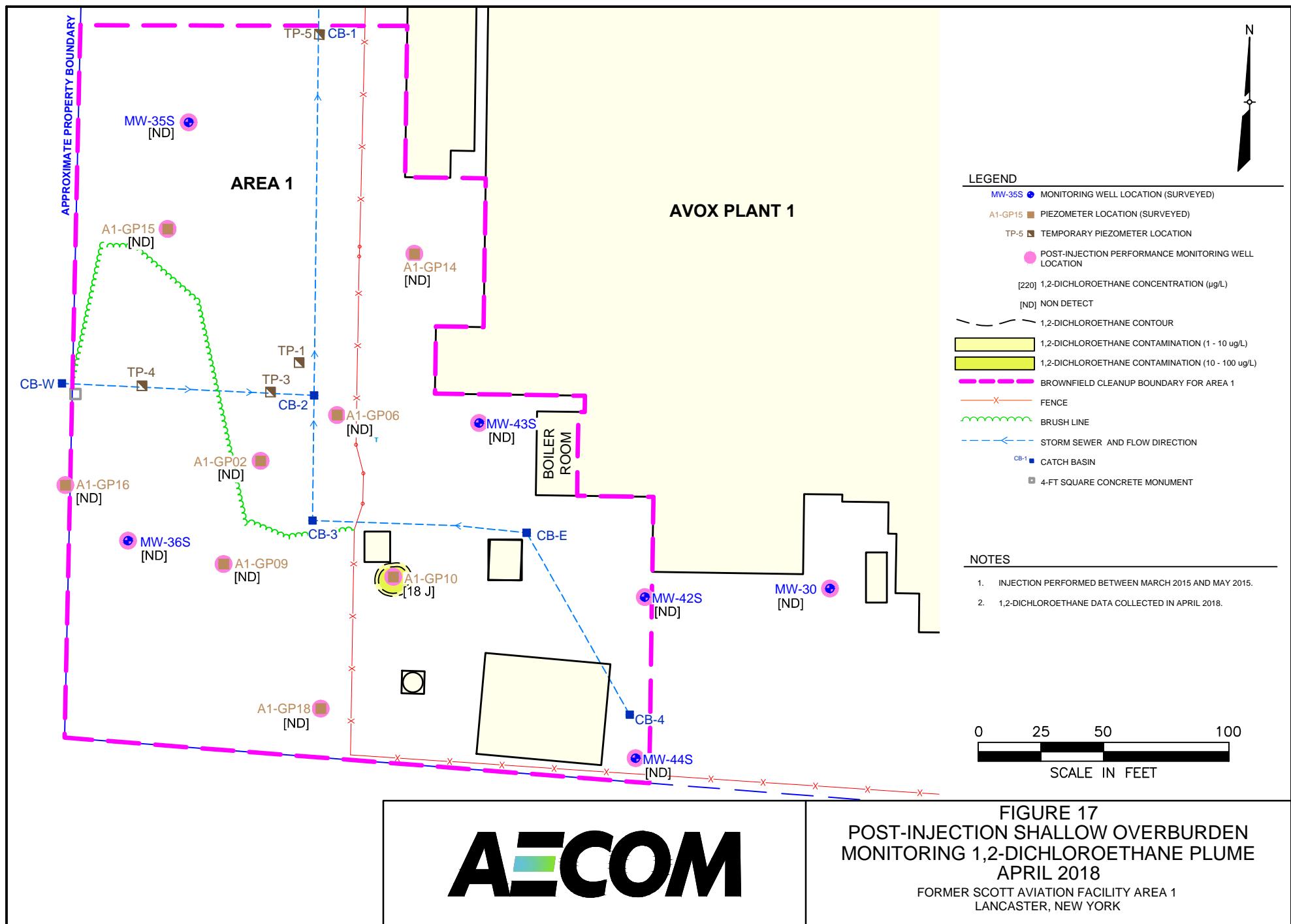


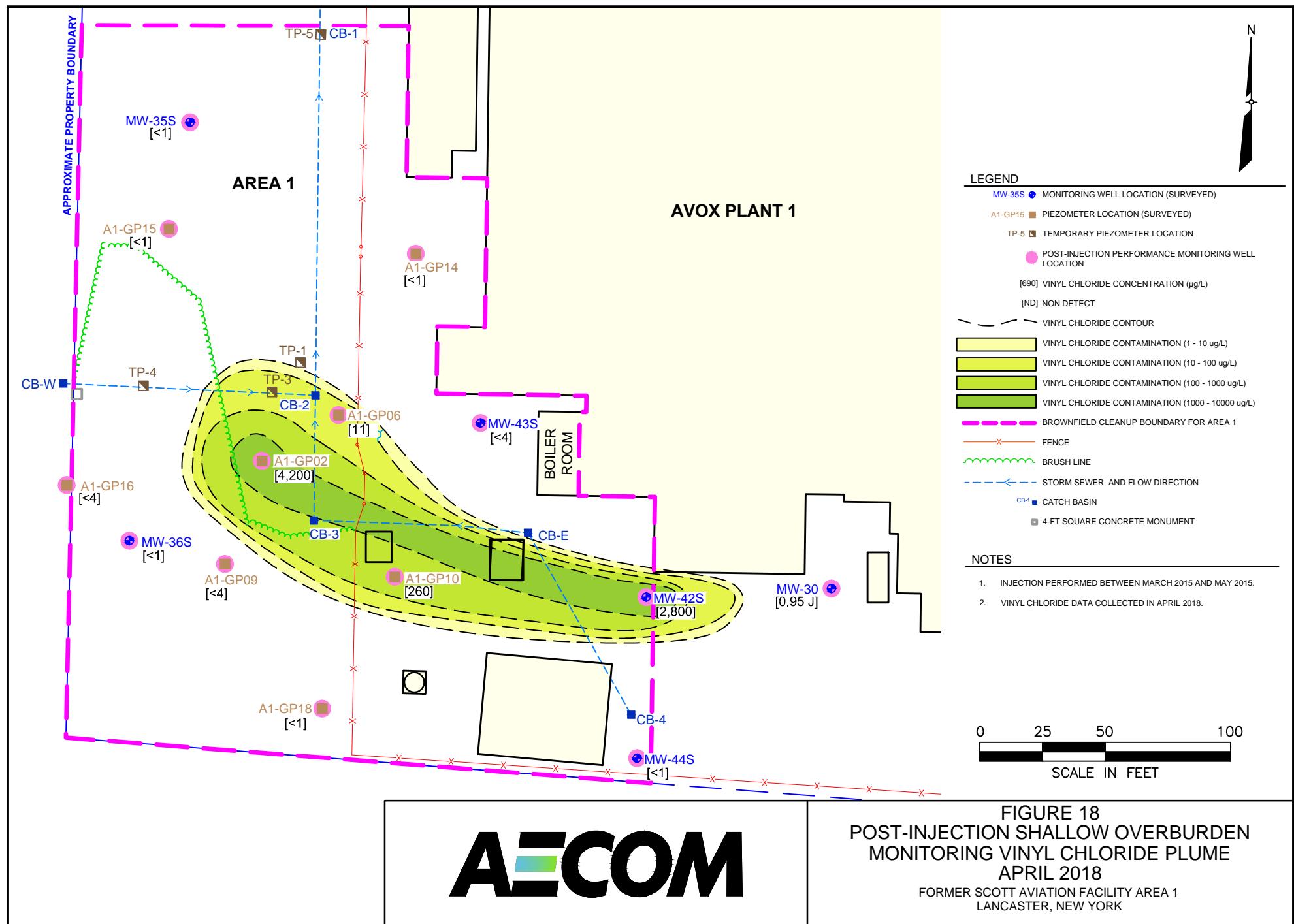


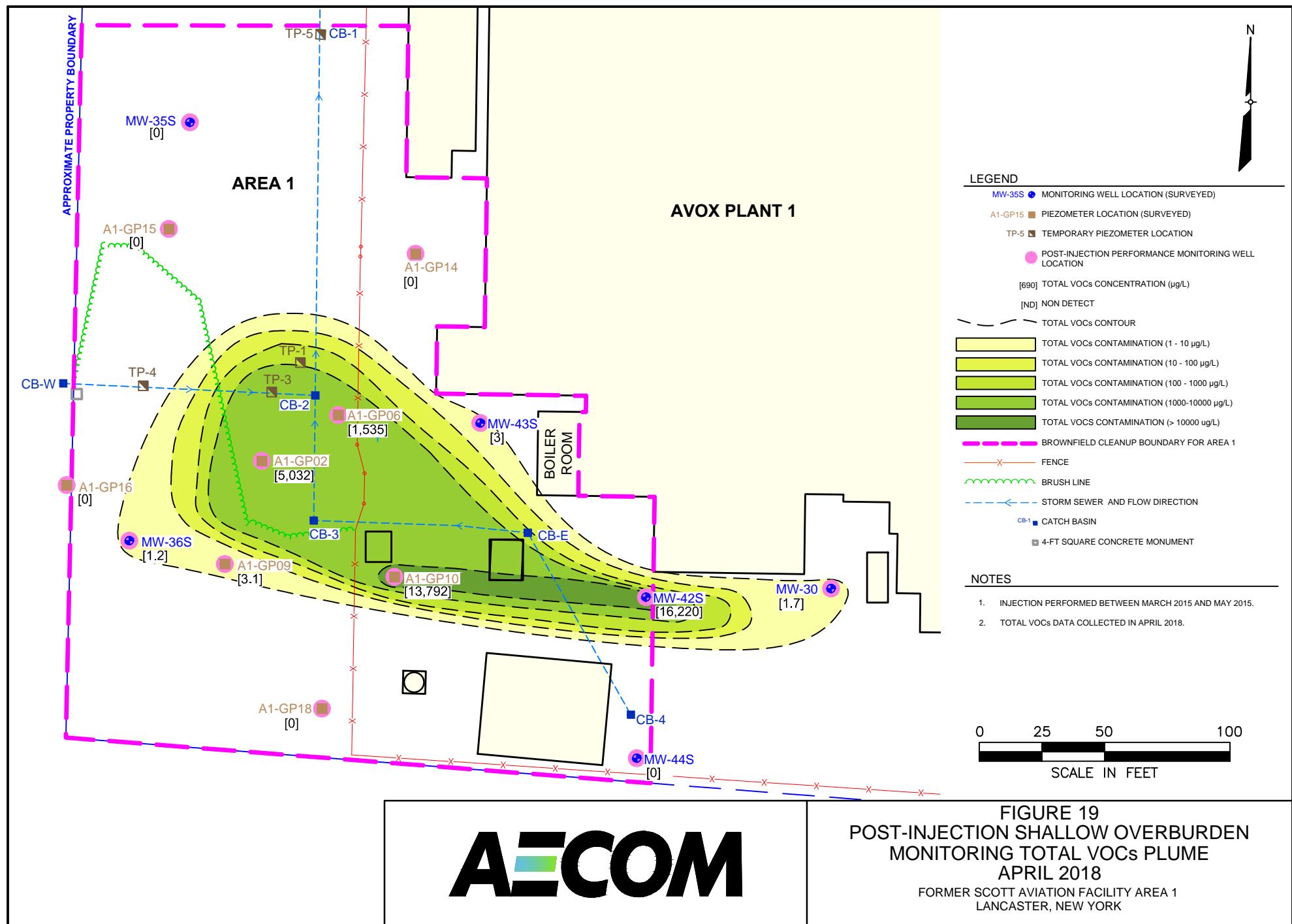


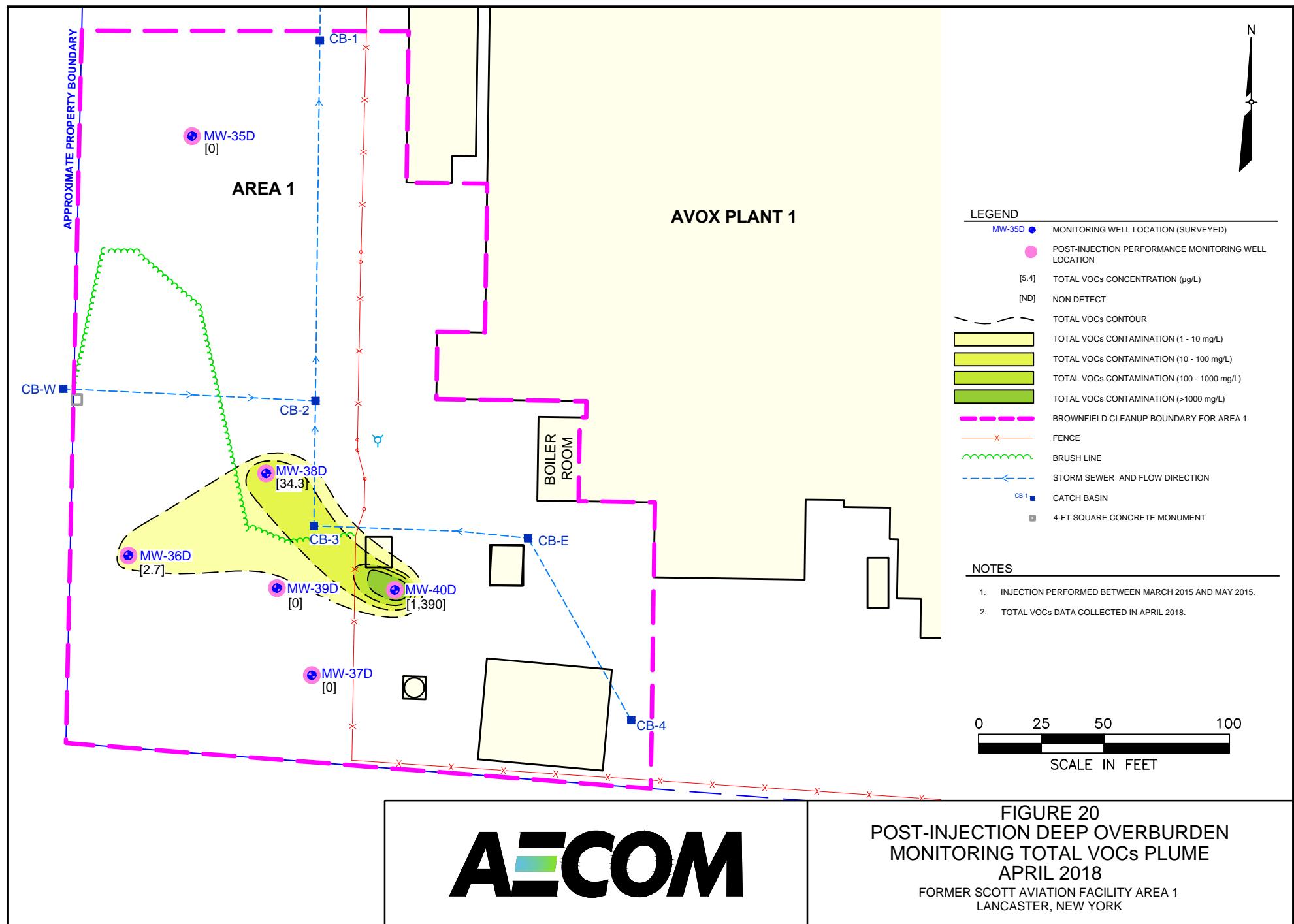


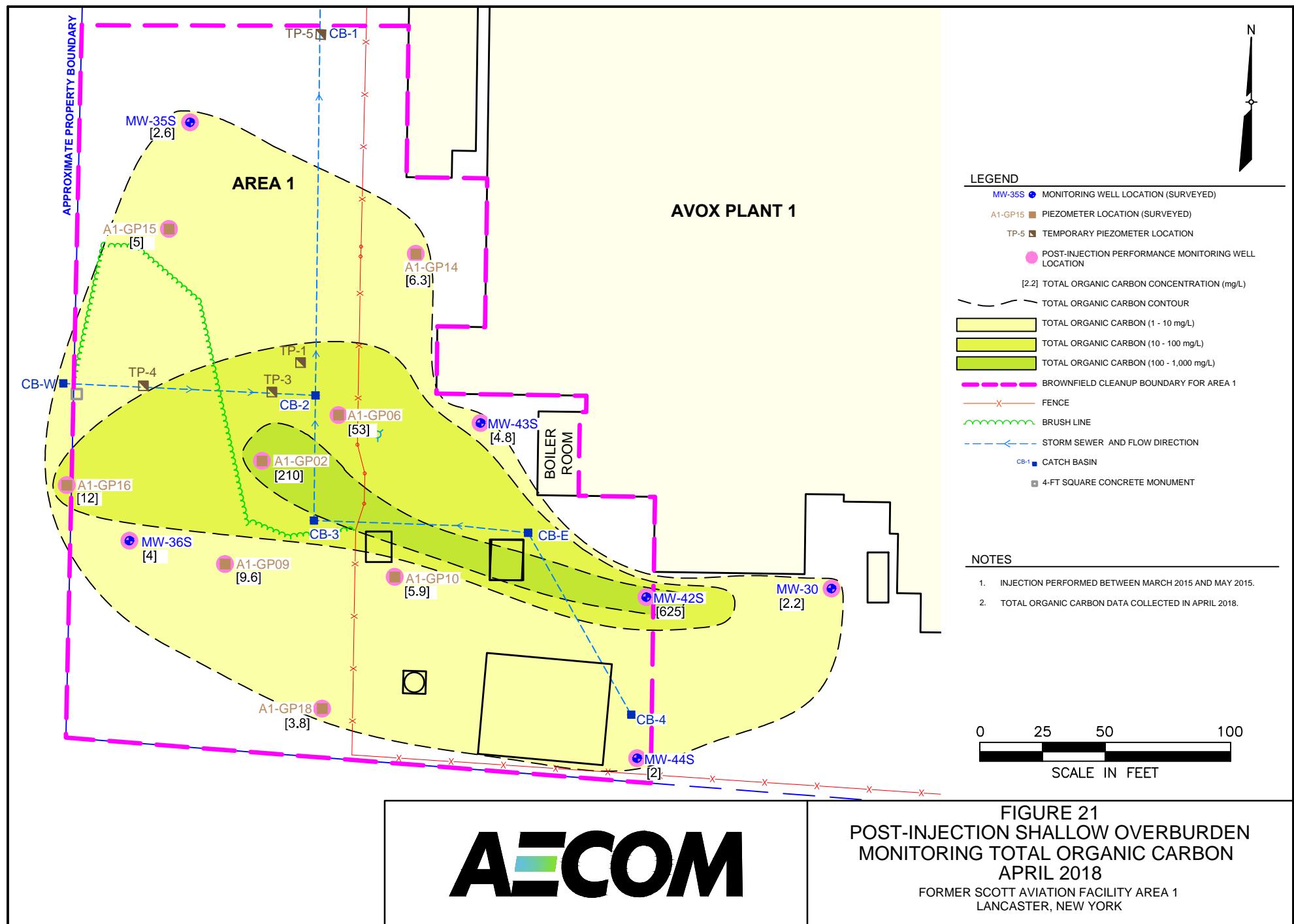


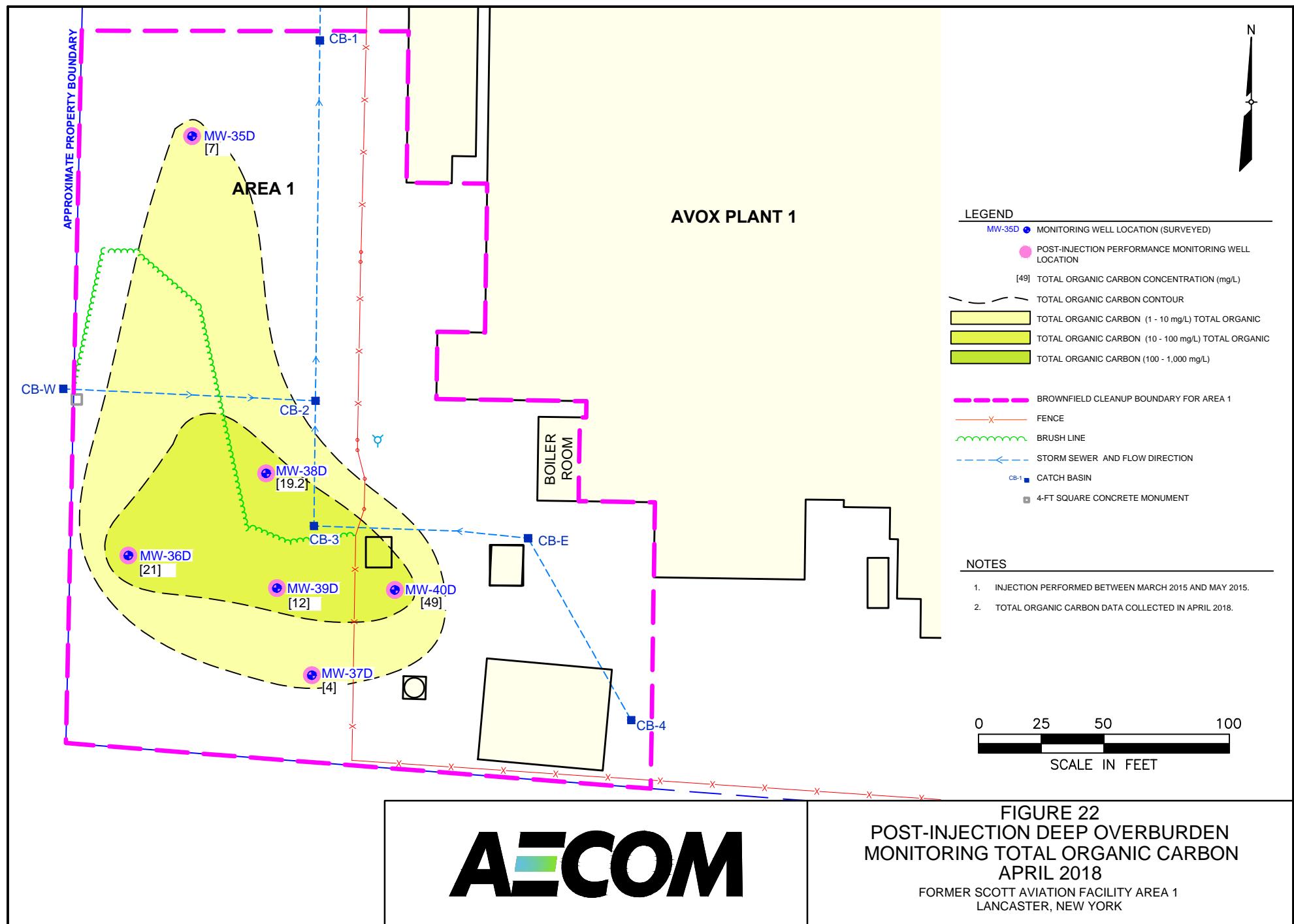












Tables

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

Location	Field Parameters	VOCs (8260B)	TOC (9060)	Iron Ferrous and Ferric (SM 3500 FE D)	Iron Ferric (SM 3500)	Nitrogen Nitrate (MCAWW 353.2)	Nitrogen Nitrate-Nitrite (MCAWW 353.2)	Nitrate (EPA 353.2)	Sulfate Turbidimetric (9038)	Manganese (6010C)	Sulfate (300.0)	Sulfide Total (SM 4500 S2 D)	Alkalinity (MCAWW 310.2)	Iron (200.7 Rev 4.4)	Carbon Dioxide (RSK-175)	COD (MCAWW 410.4)	BOD (SM 5210B)	Phosphorus (SM 4500 P E)	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 Water Sampling																				
CB-1		✓																		
TP-5		✓																		
TP-6		✓																		

Notes:

QA/QC samples will also 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

COD - Chemical Oxygen Demand

BOD - Biochemical Oxygen Demand

Table 2
Monitoring Well, Piezometer, and Catch Basin 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)			
				Casing	Surface	Screen Top	Screen Bottom
A1-GP02-S	Plume	42.9047° N, 78.6593° W	0.75	689.82	687.3	682.3	672.3
A1-GP03-S*	Plume	42.9046° N, 78.6592° W	0.75	690.70	688.8	683.8	673.8
A1-GP04-S*	Plume	42.9046° N, 78.6594° W	0.75	690.46	687.7	682.7	672.7
A1-GP05-S*	Plume	42.9046° N, 78.6593° W	0.75	690.38	687.6	682.6	672.6
A1-GP06-S	Plume	42.9047° N, 78.6592° W	0.75	687.71	687.8	682.8	672.8
A1-GP07-S*	Plume	42.9047° N, 78.6593° W	0.75	690.47	687.5	682.5	672.5
A1-GP08-S*	Plume	42.9047° N, 78.6594° W	0.75	689.68	686.5	681.5	671.5
A1-GP09-S	Downgradient	42.9045° N, 78.6594° W	0.75	689.36	686.8	681.8	671.8
A1-GP10-S	Plume	42.9045° N, 78.6591° W	0.75	689.10	689.2	684.2	674.2
A1-GP12-S*	Plume	42.9047° N, 78.6591° W	0.75	689.5	689.4	684.4	674.4
A1-GP13-S*	Plume	42.9045° N, 78.6589° W	0.75	689.69	689.8	684.8	674.8
A1-GP14-S	Downgradient	42.9049° N, 78.6591° W	0.75	689.43	689.7	684.7	674.7
A1-GP15-S	Downgradient	42.9049° N, 78.6595° W	0.75	687.69	688.0	683.0	673.0
A1-GP16-S	Downgradient	42.9046° N, 78.6596° W	0.75	689.86	686.6	681.6	671.6
A1-GP17-S*	Downgradient	42.9045° N, 78.6596° W	0.75	690.11	687.0	682.0	672.0
A1-GP18-S	Upgradient	42.9044° N, 78.6592° W	0.75	690.37	687.5	682.5	672.5
MW-30	Upgradient	42.9045° N, 78.6585° W	2	689.69	689.8	679.8	669.8
MW-35D	Downgradient	42.9050° N, 78.6594° W	2	688.40	688.9	667.9	662.9
MW-35S	Downgradient	42.9050° N, 78.6594° W	2	688.56	689.1	684.1	674.1
MW-36D	Plume	42.9046° N, 78.6595° W	2	689.66	687.1	671.1	666.1
MW-36S	Upgradient	42.9046° N, 78.6595° W	2	689.82	687.1	683.1	672.1
MW-37D	Upgradient	42.9044° N, 78.6593° W	2	690.05	687.6	672.6	667.6
MW-37S*	Plume	42.9044° N, 78.6593° W	2	690.10	687.4	682.9	672.9
MW-38D	Plume	42.9047° N, 78.6593° W	2	689.66	687.5	671.5	666.5
MW-39D	Plume	42.9045° N, 78.6593° W	2	689.72	687.4	672.4	667.4
MW-40D	Plume	42.9045° N, 78.6591° W	2	689.19	689.5	671.7	666.7
MW-41B*	Bedrock	42.9046° N, 78.6592° W	2	689.78	687.8	663.0	653.0
MW-42S	Plume	42.9045° N, 78.6588° W	2	689.08	689.7	684.7	674.7
MW-43S	Plume	42.9047° N, 78.6590° W	2	689.14	689.6	684.6	674.6
MW-44S	Upgradient	42.9043° N, 78.6588° W	2	688.98	689.4	684.4	674.4
CB-1	Catch Basin	42.9044° N, 78.6600° W	na	na	689.5	na	683.2 ⁽¹⁾
TP-5	Stormsewer	42.9051° N, 78.6592° W	0.75	690.53	689.5	685.5	682.5
TP-6	Stormsewer	42.9051° N, 78.6592° W	0.75	690.25	690.5	686.5	681.5

(1) Bottom elevation of catch basin.

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 9, 2018	
		Depth to Groundwater (feet from TOC)	Groundwater Elevation (feet AMSL)
Monitoring Wells			
MW-30 ¹	689.69	3.11	686.58
MW-35S	688.56	0.00	688.56
MW-35D	688.40	6.54	681.86
MW-36S	689.82	2.81	687.01
MW-36D	689.66	5.21	684.45
MW-37D	690.05	4.28	685.77
MW-38D	689.66	4.21	685.45
MW-39D	689.72	3.89	685.83
MW-40D	689.19	2.68	686.51
MW-42S	689.08	2.52	686.56
MW-43S	689.13	1.84	687.29
MW-44S	688.96	0.88	688.08
Piezometers			
A1-GP02-S	689.82	3.45	686.37
A1-GP06-S	687.71	1.65	686.06
A1-GP09-S	689.36	2.45	686.91
A1-GP10-S	689.10	1.64	687.46
A1-GP14-S	689.43	0.82	688.61
A1-GP15-S	687.69	2.30	685.39
A1-GP16-S	689.86	3.79	686.07
A1-GP18-S	690.37	3.50	686.87
Storm Sewer			
TP-5	690.53	7.76	682.77
TP-6	690.25	7.48	682.77
CB-1	690.70	6.28	684.42

Notes:

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

TOC - Top of Casing

AMSL - Above Mean Sea Level

NA - Not Available

S - well is screened in shallow overburden

D - well is screened in deep overburden

Table 4

Summary of Monitoring Well Analytical Data - April 2018
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID	Groundwater	CB-1	TP-5	TP-6	A1-GP02-S	A1-GP06-S	A1-GP09-S	A1-GP10-S	A1-GP14-S
Date Collected	RAO/NYCRR	04/09/18	04/09/18	04/09/18	04/12/18	04/10/18	04/12/18	04/10/18	04/10/18
Lab Sample ID	Objective	480-133949-1	480-133949-2	480-133949-3	480-133949-5	480-133949-14	480-133949-5	480-133949-15	480-133949-12
Volatile Organic Compounds by Method 8260 (µg/L)									
1,1-Dichloroethane*	5	47	< 1.0	U	< 1.0	U	< 20	U	360
1,1-Dichloroethene*	5	13	< 1.0	U	< 1.0	U	< 20	U	6.8 J
1,1,1-Trichloroethane*	5	180	4.0		< 1.0	U	< 20	U	110
1,1,2-Trichloro-1,2,2-trifluoroethane	5	130	7.6		< 1.0	U	< 20	U	92
1,2-Dichloroethane*	0.6	< 4.0	U	< 1.0	U	< 1.0	U	< 10	U
2-Hexanone	50	< 20	U	< 5.0	U	< 5.0	U	< 50	U
Chloroethane	5	11	< 1.0	U	< 1.0	U	< 20	U	940
cis-1,2-Dichloroethene	5	260	8.5		< 1.0	U	< 1.0	U	730
Ethylbenzene	5	< 4.0	U	< 1.0	U	< 1.0	U	< 10	U
Methylene Chloride	5	< 4.0	U	< 1.0	U	< 1.0	U	< 9.4	J
Toluene	5	11	< 1.0	U	< 1.0	U	< 20	U	49
trans-1,2-Dichloroethene	5	4.0	< 1.0	U	< 1.0	U	< 20	U	9.4 J
Trichloroethene*	5	11	1.2		< 1.0	U	< 20	U	7.2 J
Vinyl chloride*	2	17	< 1.0	U	< 1.0	U	< 20	U	4,200
Xylenes, Total	5	5.5 J	< 2.0	U	< 2.0	U	< 20	U	11
Total Volatile Organic Compounds	NL	689.5	21	0	5,032.4	1,528.0	3.1	13,792	0

Table 4

Summary of Monitoring Well Analytical Data - April 2018
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID Date Collected Lab Sample ID	Groundwater RAO/NYCRR Objective	A1-GP15-S 04/09/18 480-133949-11	A1-GP16-S 04/09/18 480-133949-13	A1-GP18-S 04/10/18 480-133949-16	MW-30 04/11/18 480-133949-17	MW-35S 04/09/18 480-133949-18	MW-36S 04/09/18 480-133949-19	MW-42S 04/11/18 480-134235-3	MW-43S 04/11/18 480-133949-21	MW-44S 04/11/18 480-133949-10	
Volatile Organic Compounds by Method 8260 (µg/L)											
1,1-Dichloroethane*	5	< 1.0 U	< 1.0 U	< 1.0 U	0.75 J	< 1.0 U	< 1.0 U	2,000	< 4.0 U	< 1.0 U	
1,1-Dichloroethene*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	120 J	< 4.0 U	< 1.0 U	
1,1,1-Trichloroethane*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	390	< 4.0 U	< 1.0 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	< 1.0 U	740	< 4.0 U	< 1.0 U	
1,2-Dichloroethane*	0.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U	< 1.0 U	
2-Hexanone	50	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1,000 U	< 20 U	< 5.0 U	
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	8,400	< 4.0 U	< 1.0 U	
cis-1,2-Dichloroethene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1,100	< 4.0 U	< 1.0 U	
Ethylbenzene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U	< 1.0 U	
Methylene Chloride	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U	< 1.0 U	
Toluene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	670	< 4.0 U	< 1.0 U	
trans-1,2-Dichloroethene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U	< 1.0 U	
Trichloroethene*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 200 U	< 4.0 U	< 1.0 U	
Vinyl chloride*	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.95 J	< 1.0 U	< 1.0 U	2,800	< 4.0 U	< 1.0 U
Xylenes, Total	5	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 400 U	3.0 J	< 2.0 U
Total Volatile Organic Compounds	NL	0	0	0	1.7	0	1.2	16,220	3.0	0	

Table 4

Summary of Monitoring Well Analytical Data - April 2018
Former Scott Aviation Facility
NYSDEC Site Code No. C915233
Lancaster, New York

Sample ID	Groundwater	MW-35D	MW-36D	MW-37D	MW-38D	MW-39D	MW-40D
Date Collected	RAO/NYCRR	04/10/18	04/10/18	04/11/18	04/10/18	04/12/18	04/10/18
Lab Sample ID	Objective	480-133949-7	480-133949-20	480-134235-1	480-133949-8	480-134235-2	480-133949-9
Volatile Organic Compounds by Method 8260 ($\mu\text{g/L}$)							
1,1-Dichloroethane*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	400
1,1-Dichloroethene*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 10 U
1,1,1-Trichloroethane*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	20
1,1,2-Trichloro-1,2,2-trifluoroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 10 U
1,2-Dichloroethane*	0.6	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 10 U
2-Hexanone	50	< 5.0 U	2.7 J	< 5.0 U	< 20 U	< 20 U	< 50 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	14	< 4.0 U	970
cis-1,2-Dichloroethene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 10 U
Ethylbenzene	5	< 1.0 U	< 1.0 U	< 1.0 U	3.1 J	< 4.0 U	< 10 U
Methylene Chloride	5	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 10 U
Toluene	5	< 1.0 U	< 1.0 U	< 1.0 U	2.2 J	< 4.0 U	< 10 U
trans-1,2-Dichloroethene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 10 U
Trichloroethene*	5	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 10 U
Vinyl chloride*	2	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 10 U
Xylenes, Total	5	< 2.0 U	< 2.0 U	< 2.0 U	15	< 8.0 U	< 20 U
Total Volatile Organic Compounds	NL	0	2.7	0	34.3	0	1,390

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).

Site-specific Contaminants of Concern, 1,1,2-trichloroethane and tetrachloroethane were not detected above the reporting limit.

J - Analyte detected at a level less than the reporting limit and greater than or equal to the method detection limit. Concentrations within this range are estimated.

U - Not detected at or above reporting limit.

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)	Geological & Chemical Data													
				Hydrogeology			Water Quality			Organic Compounds			Inorganic Compounds			Microbiology	
				pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Specific Conductance (mS/cm)	Turbidity (NTUs)	Temperature (°C)	Carbon, Total Organic (mg/L)	Nitrate (mg/L)	Manganese	BOD (mg/L)	Total Alkalinity (cells/mL)			
CB-1	Monitoring event	BL1	6/1/2011	-1434													
	Monitoring event	BL2	6/16/2011	-1419													
	Monitoring event	BL3	10/7/2011	-1306													
	Monitoring event	P1	6/12/2015	38													
	Monitoring event	P2	1/6/2016	246													
	Monitoring event	P3	4/8/2016	339													
	Monitoring event	P4	7/11/2016	433													
	Monitoring event	P5	10/13/2016	527													
	Monitoring event	P6	1/20/2017	626													
	Monitoring event	P7	4/7/2017	703													
	Monitoring event	P8	7/10/2017	797													
	Monitoring event	P9	10/18/2017	897													
	Monitoring event	P10	1/2/2018	973													
	Monitoring event	P11	4/9/2018	1070													
Not Sampled For These Parameters																	

Well ID	Event / Description	Date	Elapsed Time (Days)	Parameter Data												
				Water Level Measurement (ft. ATOC)	Top of Casing Elevation (ft. AMSL)	Head Elevation (ft. AMSL)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Specific Conductance (mS/cm)	Turbidity (NTUs)	Temperature (°C)	Carbon, Total Organic (mg/L)	Nitrate (mg/L)	Manganese	
TP-05	Monitoring event	BL1	6/1/2011	-1434	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	(feet)	Total Depth (feet)		
	Monitoring event	P1	7/28/2015	84	7.76	NA	7.64	7.8	7.63	NA	7.56	7.79	7.64	NA	7.75	NA
	Monitoring event	P2	1/6/2016	246	690.5	690.5	690.5	690.5	690.5	690.5	690.5	690.5	690.5	690.5	690.5	690.5
	Monitoring event	P3	4/8/2016	339	NA	NA	682.9	683	682.9	NA	683	682.7	682.9	NA	682.8	NA
	Monitoring event	P4	7/11/2016	433	7.42	7.71	7.14	7.3	7.48	NA (Grab Sample)	7.07	NA (Grab Sample)	7.07	(SU)	pH	
	Monitoring event	P5	10/13/2016	527	14.1	3.92	4.06	NA	5.94	NA (Grab Sample)	3.62	NA (Grab Sample)	3.62	(mg/L)	Dissolved Oxygen (mg/L)	1,1,1-Trichloroethane
	Monitoring event	P6	1/20/2017	626	71.3	220.5	26.5	26.6	116	NA (Grab Sample)	-66.7	NA (Grab Sample)	-66.7	(mV)	Oxidation Reduction Potential (mV)	1,1,2-Trichloro-1,2,2-trifluoroethane
	Monitoring event	P7	4/7/2017	703	0.689	0.74	0.67	1.197	0.549	NA (Grab Sample)	1.153	NA (Grab Sample)	1.153	(mS/cm)	Specific Conductance (mS/cm)	1,1-Dichloroethane
	Monitoring event	P8	7/10/2017	797	7.37	122	40.3	70.1	11.4	NA (Grab Sample)	9.43	NA (Grab Sample)	9.43	(NTUs)	Turbidity (NTUs)	1,1-Dichloroethene
	Monitoring event	P9	10/18/2017	897	ND	NS	NS	NS	NS	NA (Grab Sample)	19.51	NA (Grab Sample)	19.51	(°C)	Temperature (°C)	1,2-Dichloroethane
	Monitoring event	P10	1/2/2018	973	ND	NS	NS	NS	NS	NA (Grab Sample)	ND	NA (Grab Sample)	ND	(mg/L)	Carbon, Total Organic (mg/L)	2-Hexanone
	Monitoring event	P11	4/9/2018	1070	4.0	ND	8.6	ND	ND	NA (Grab Sample)	ND	NA (Grab Sample)	ND	2.5	83	2-Butanone (MEK)
Not Sampled For These Parameters Dehalococcoides spp (1) (cells / mL) TCE R-Dase (1) BAV1 VC R-Dase (1) VC R-Dase																

Not Sampled For These Parameters

Well ID	Event / Description	Date	Elapsed Time (Days)													
				(ft.)	Total Depth (ft. ATOC)	Water Level Measurement (ft. ATOC)	Top of Casing Elevation (ft. AMSL)	Head Elevation (ft. AMSL)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Specific Conductance (mS/cm)	Turbidity (NTUs)	Temperature (°C)	Carbon, Total Organic (mg/L)	
TP-06	Monitoring event	P1	6/12/2015	38	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
	Monitoring event	P2	7/28/2015	84	7.48	NA	7.45	8.5	7.33	NA	7.43	7.52	7.4	NA	7.75	NS
	Monitoring event	P3	1/6/2016	246	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3
	Monitoring event	P4	4/8/2016	339	NA	NA	682.9	682.9	NA	682.8	682.7	682.9	NA	682.5	NS	NS
	Monitoring event	P5	7/11/2016	433	7.09	7.71	7.27	9.51	7.34	NA (Grab Sample)	NA (Grab Sample)	NA (Grab Sample)	NA (Grab Sample)	7.13	NA (Grab Sample)	NA (Grab Sample)
	Monitoring event	P6	10/13/2016	527	14.63	5.21	1.10	NA	4.61	1.54	1.54	54.5	3.082	2.82	19.35	1.54
	Monitoring event	P7	1/20/2017	626	61.13	207.2	19.6	18.4	175.9	ND	ND	ND	ND	ND	ND	ND
	Monitoring event	P8	4/7/2017	703	2.478	2.44	3.16	1.525	2.302	ND	ND	ND	ND	ND	ND	ND
	Monitoring event	P9	7/10/2017	797	NA	27	52.1	150	24.2	ND	ND	ND	ND	ND	ND	ND
	Monitoring event	P10	10/18/2017	897	6.34	17.7	18.8	NA	16.71	ND	ND	ND	ND	ND	ND	ND
	Monitoring event	P11	1/2/2018	973	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Monitoring event	P12	4/19/2018	1080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Not Sampled For These Parameters

Not Sampled For These Parameters

Well ID	Event / Description	Date	Elapsed Time (Days)													
				(ft)	Total Depth (ft. ATOC)	Water Level Measurement (ft. ATOC)	(ft. AMSL)	Top of Casing Elevation (ft. AMSL)	Head Elevation (ft. AMSL)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Specific Conductance (mS/cm)	Turbidity (NTUs)	Temperature (°C)	Carbon, Total Organic (mg/L)
A1-GP15-S	Monitoring event	BL1	6/17/2010	-1783												
	Monitoring event	BL3	8/2/2010	-1737												
	Monitoring event	BL4	3/11/2015	-55												
	Monitoring event	P1	7/29/2015	85												
	Monitoring event	P2	4/8/2016	339												
	Monitoring event	P3	7/11/2016	433												
	Monitoring event	P4	10/7/2016	521												
	Monitoring event	P5	1/23/2017	629												
	Monitoring event	P6	4/12/2017	708												
	Monitoring event	P7	7/6/2017	793												
A1-GP15-S	Monitoring event	P8	10/17/2017	896												
	Monitoring event	P9	1/2/2018	973												
	Monitoring event	P10	4/10/2018	1071												
	Not Sampled For These Parameters															
	Not Sampled (well could not be located under snow)															
	Not Sampled For These Parameters															

Well ID	Event / Description		Date	Elapsed Time (Days)																	
					(ft.)		(ft. ATOC)		(ft. AMSL)		(ft. AMSL)		(mV)		(mS/cm)		(mg/L)		(cells / mL)		
A1-GP18-S	Monitoring event	BL1	6/18/2010	-1782	18	18	18	18	18	18	18	18	15	18	(feet)	Total Depth					
	Monitoring event	BL2	8/2/2010	-1737	3.5	NA	6.9	5.95	3.72	NA	9.1	7.1	3.2	4.65	5.35	4.5	5.25	4.12	(ft. ATOC)	Water Level Measurement	
	Monitoring event	BL3	11/5/2014	-181	690.37	690.4	690.4	690.37	690.4	690.37	690.4	690.4	690.4	690.4	690.4	690.4	690.4	690.4	(ft. AMSL)	Top of Casing Elevation	
	Monitoring event	BL4	3/11/2015	-55	686.87	NA	683.5	684.4	686.7	NA	681.3	683.27	687.2	685.7	685	685.1	685.9	686.3	(ft. AMSL)	Head Elevation	
	Monitoring event	P1	7/27/2015	83	7.16	NA	7.09	7.21	7.04	7.14	7.05	NA	6.94	7.01	6.08	7.38	7.3	7.12	6.95	(SU)	pH
	Monitoring event	P2	1/7/2016	247	19.7	1.2	3.02	0.51	NA	0.45	6.46	1.47	1.41	NA	0.89	1.93	3.11	3.36	6.28	(mg/L)	Dissolved Oxygen
	Monitoring event	P3	4/8/2016	339	-80.4	-149.9	-299	-148	-70.1	-117.3	46.1	-5.2	-94.3	-48.2	-40.5	50	-69.7	-66.8	36.3	(mV)	Oxidation Reduction Potential
	Monitoring event	P4	7/8/2016	430	0.481	0.58	0.9	0.79	763	0.758	1.414	1.059	1.186	1.726	3.265	0.699	0.587	0.677	0.737	(mS/cm)	Specific Conductance
	Monitoring event	P5	10/7/2016	521	NA	72.6	1474	3308	333	50	69	>1000	893	NA	22.9	11	NS	5.1	30	(NTUs)	Turbidity
	Monitoring event	P6	1/23/2017	629	8.12	9.26	13.4	15.1	6.5	10.38	16.75	14.21	7.65	8.24	14.3	8.35	12.36	16.29	13.31	(°C)	Temperature
	Monitoring event	P7	4/10/2017	706	3.8	72.4	3.5	4.8	4.9	5.1	8.9	20.5	89.1	178	829	B	1	NS	NS	(mg/L)	Carbon, Total Organic
	Monitoring event	P8	7/6/2017	793	59,000	52,000	#####	68,000	53,000	80,000	69,000	6,700	6,100	17,000	8,200						Dehalococcoides spp (1)
	Monitoring event	P9	10/16/2017	895	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(cells / mL)	TCE R-Dase (1)
	Monitoring event	P10	1/5/2018	976	3,600	14,000	3,900	350	1,900	1,000	2,400	910	1,100	1,800	520	260					BAV1 VC R-Dase (1)
	Monitoring event	P11	4/9/2018	1070	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	VC R-Dase	

Not Sampled For These Parameters

Well ID	Event / Description	Date	Elapsed Time (Days)													
				(ft.)	Total Depth (ft.)	Water Level Measurement (ft. ATOC)	Top of Casing Elevation (ft. AMSL)	Head Elevation (ft. AMSL)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Specific Conductance (mS/cm)	Turbidity (NTUs)	Temperature (°C)	Carbon, Total Organic (mg/L)	
MW-30	Monitoring event	BL1	6/18/2010	-1782												
	Monitoring event	BL2	8/3/2010	-1736												
	Monitoring event	P1	7/29/2015	85												
	Monitoring event	P2	4/8/2016	339												
	Monitoring event	P3	7/14/2016	436												
	Monitoring event	P4	10/11/2016	525												
	Monitoring event	P5	1/25/2017	631												
	Monitoring event	P6	4/12/2017	708												
	Monitoring event	P7	7/7/2017	794												
	Monitoring event	P8	10/19/2017	898												
	Monitoring event	P9	1/2/2018	973												
	Monitoring event	P10	4/11/2018	1072												
Not Sampled For These Parameters																
(cells / mL) TCE R-Dase (1) BAV1 VC R-Dase (1) VC R-Dase																

Not Sampled For These Parameters

Not Sampled For These Parameters

Well ID	Event / Description		Date	Elapsed Time (Days)														
MW-42S	Monitoring event	BL1	4/7/2011	-1489														
	Monitoring event	BL2	3/12/2015	-54														
	Monitoring event	P1	6/12/2015	38														
	Monitoring event	P2	7/27/2015	83														
	Monitoring event	P3	4/8/2016	339														
	Monitoring event	P4	7/14/2016	436														
	Monitoring event	P5	10/13/2016	527														
	Monitoring event	P6	1/25/2017	631														
	Monitoring event	P7	4/12/2017	708														
	Monitoring event	P8	7/10/2017	797														
	Monitoring event	P9	10/19/2017	898														
	Monitoring event	P10	1/2/2018	973														
	Monitoring event	P11	4/11/2018	1072														
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Well ID	Event / Description		Date	Elapsed Time (Days)													
					(ft.)	Total Depth	(ft. ATOC)	Water Level Measurement	(ft. AMSL)	Top of Casing Elevation	(ft. AMSL)	Head Elevation	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Specific Conductance (mS/cm)	Turbidity (NTUs)
MW-44S	Monitoring event	BL	6/1/2011	-1434													
	Monitoring event	P1	7/29/2015		85												
	Monitoring event	P2	4/8/2016		339												
	Monitoring event	P3	7/14/2016		436												
	Monitoring event	P4	10/11/2016		525												
	Monitoring event	P5	1/25/2017		631												
	Monitoring event	P6	4/7/2017		703												
	Monitoring event	P7	7/10/2017		797												
	Monitoring event	P8	10/16/2017		895												
	Monitoring event	P9	1/2/2018		973												
	Monitoring event	P10	4/11/2018		1072												
Not Sampled For These Parameters																	
Dehalococcoides spp (1)																	
(cells / mL)																	
TCE R-Dase (1)																	
BAV1 VC R-Dase (1)																	
VC R-Dase																	

Well ID	Event / Description		Date	Elapsed Time (Days)		Water Level Measurement												
						(ft. ATOC)	Total Depth (feet)	(ft. AMSL)	Water Level Measurement	(ft. AMSL)	Top of Casing Elevation	(ft. AMSL)	Head Elevation	(ft. AMSL)	pH	(mS/cm)	Specific Conductance	
MW-35D	Monitoring event	BL1	6/17/2010	-1783														
	Monitoring event	BL2	8/2/2010	-1737														
	Monitoring event	BL3	11/5/2014	-181														
	Monitoring event	BL4	3/12/2015	-54														
	Monitoring event	P1	7/28/2015	84														
	Monitoring event	P2	1/8/2016	248														
	Monitoring event	P3	4/8/2016	339														
	Monitoring event	P4	7/12/2016	434														
	Monitoring event	P5	10/11/2016	525														
	Monitoring event	P6	1/24/2017	630														
	Monitoring event	P7	4/10/2017	706														
	Monitoring event	P8	7/7/2017	794														
	Monitoring event	P9	10/17/2017	896														
	Monitoring event	P10	1/3/2018	974														
	Monitoring event	P11	4/10/2018	1071														
				26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
				6.54	7.29	8.9	8.25	7.44	8.07	8.65	7.42	6.96	7.6	6.8	6.65	8	7.83	8.14
				698.7	698.7	698.66	698.7	698.66	698.66	698.7	698.66	698.7	698.7	698.7	698.7	698.7	698.7	698.7
				692.1	691.4	689.8	689.41	691.2	690.59	690.01	691.24	691.7	691.1	691.86	692	690.7	690.5	690.5
				7.46	9.9	7.87	7.81	7.61	7.76	7.58	7.76	7.73	7.71	7.23	7.47	7.06	8.32	
				0.78	1.46	0.23	0.16	0.35	0.78	0.13	0.38	0.84	0.9	1.08	0.87	0.68	2.27	
				-108.8	-145	-321	-77.2	-153.8	-115	-98.6	-28.5	-91.9	-104.4	-64	-56.6	58.7	61.4	
				0.311	0.319	0.491	0.438	0.39	0.294	0.455	0.466	0.407	0.494	0.454	0.511	0.399	0.499	0.492
				NA	NA	11.8	20.8	15	84	26	83.7	7.11	9.95	4.18	10.01	NS	7.23	24.8
				9.77	9.88	13.4	14.9	13.4	10.28	14.3	15.93	9.53	10.21	13.97	8.41	12.98	18.46	11.57
				7.3	2.6	2.2	1.6	2.9	3.6 B	1.9	1.5	1.9	2.0 B	3.3 B	4.7	NS	NS	
				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
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				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

Not Sampled For These Parameters

Well ID	Event / Description	Date	Elapsed Time (Days)														
				(ft)	Total Depth (ft)	(ft. ATOC)	Water Level Measurement	(ft. AMSL)	Top of Casing Elevation	(ft. AMSL)	Head Elevation	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Specific Conductance (mS/cm)	Turbidity (NTU)	Temperature (°C)
MW-37D	Monitoring event	BL1	6/18/2010	-1782													
	Monitoring event	BL2	8/3/2010	-1736													
	Monitoring event	BL3	3/10/2015	-56													
	Monitoring event	P1	7/29/2015	85													
	Monitoring event	P2	4/8/2016	339													
	Monitoring event	P3	7/12/2016	434													
	Monitoring event	P4	10/12/2016	526													
	Monitoring event	P5	1/24/2017	630													
	Monitoring event	P6	4/11/2017	707													
	Monitoring event	P7	7/10/2017	797													
	Monitoring event	P8	10/18/2017	897													
	Monitoring event	P9	1/5/2018	976													
	Monitoring event	P10	4/11/2018	1072													
Not Sampled For These Parameters																	
Dehalococcoides spp (1)																	
(cells / mL)																	
TCE R-Dase (1)																	
BAV1 VC R-Dase (1)																	
VC R-Dase																	

Well ID	Event / Description		Date	Elapsed Time (Days)																											
					Water Level Measurement (ft. ATOC)			Top of Casing Elevation (ft. AMSL)			Head Elevation (ft. AMSL)			pH			Dissolved Oxygen (mg/L)			Oxidation Reduction Potential (mV)			Specific Conductance (mS/cm)			Turbidity (NTUs)			Temperature (°C)		
MW-38D	Monitoring event	BL	6/22/2010	-1778	24	24	24	24	24	24	24	21	21	(feet)	Total Depth (feet)																
	Monitoring event	BL2	8/4/2010	-1735	5.7	4.4	5.22	7.35	6.3	4.69	5.2	5.65	5.32	5.51	6.25	15.21	(ft. ATOC)	Water Level Measurement													
	Monitoring event	BL3	11/5/2014	-181	689.66	689.66	689.66	689.66	689.66	689.66	689.66	689.66	689.7	689.7	689.7	689.7	(ft. AMSL)	Top of Casing Elevation													
	Monitoring event	BL4	3/10/2015	-56	683.96	685.26	684.44	682.31	683.36	684.97	684.46	684.01	684.3	684.2	683.4	674.5	(ft. AMSL)	Head Elevation													
	Monitoring event	P1	6/12/2015	38	7.61	7.32	7.33	7.33	6.89	6.31	5.39	5.67	7.78	7.7	6.92	7.05	(SU)	pH													
	Monitoring event	P2	7/27/2015	247	0.07	0.01	1.08	1.6	0.07	0.65	0.51	0.36	0.62	0.21	0.79	1.1	(mg/L)	Dissolved Oxygen													
	Monitoring event	P3	1/7/2016	339	-115.7	-163.5	-138.8	-149.4	-159	-75	22.2	57.6	-2.3	-114.6	-46.9	20.5	(mV)	Oxidation Reduction Potential													
	Monitoring event	P4	4/8/2016	434	2.59	2.526	2.997	3.317	5.553	4.248	6.189	5.771	0.778	0.658	0.718	0.716	(mS/cm)	Specific Conductance													
	Monitoring event	P5	7/12/2016	526	19.5	17.9	38	51.9	51.6	21.6	27.7	739	25.7	NS	1.43	2.1	(NTUs)	Turbidity													
	Monitoring event	P6	10/12/2016	629	18.4	8.4	10.38	14.3	18.55	8.83	9.7	17.39	7.89	12.85	18.1	14.23	(°C)	Temperature													
	Monitoring event	P7	1/23/2017	708	370	459 B	650	1,310 B	2,270	2,540	4,650	7,240	2.5	NS	NS	NS	(mg/L)	Carbon, Total Organic													
	Monitoring event	P8	4/12/2017	794	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	1,1,1-Trichloroethane													
	Monitoring event	P9	7/7/2017		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	1,1,2-Trichloro-1,2,2-trifluoroethane													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	1,1,2-Trichloroethane													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	1,1-Dichloroethane													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	1,1-Dichloroethane													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	1,2-Dichloroethane													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	2-Hexanone													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	2-Butanone (MEK)													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	4-Methyl-2-pentanone													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Acetone													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Carbon Disulfide													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Chloroethane													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Chloroform													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Chloromethane													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	cis-1,2-Dichloroethene													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Dichlorodifluoromethane													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Ethylbenzene													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Methylcyclohexane													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Methylene chloride													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Methyl Acetate													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Tetrachloroethene													
					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(mg/L)	Toluene													
					ND	ND	ND	ND	ND																						

Well ID	Event / Description		Date	Elapsed Time (Days)													(mg/L)			(cells / mL)				
					(ft)			(ft. ATOC)			(ft. AMSL)			(ft. AMSL)			(mg/L)			(cells / mL)				
					Total Depth	Water Level Measurement	Top of Casing Elevation	Head Elevation	pH	Dissolved Oxygen	Oxidation Reduction Potential	Specific Conductance	Turbidity	Temperature	Carbon, Total Organic	BOD	Total Alkalinity	Ferrous Iron	Iron	TCE R-Dase (1)	BAV1 VC R-Dase (1)	VC R-Dase		
MW-39D	Monitoring event	BL1	6/18/2010	-1782	22.5	22.5	22.5	22.5	22.5	22.5	20	20	(ft)	(ft)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(cells / mL)	(cells / mL)		
	Monitoring event	BL2	8/3/2010	-1736	3.89	6.27	5.55	3.84	4.65	7.8	6.7	4.08	5.2	4.7	5	4	(ft. ATOC)	Water Level Measurement						
	Monitoring event	BL3	3/10/2015	-56	689.7	689.7	689.7	689.7	689.7	689.7	689.7	689.7	689.7	689.7	689.7	689.7	(ft. AMSL)	Top of Casing Elevation						
	Monitoring event	P1	7/29/2015	85	685.8	683.5	684.2	685.9	685.1	681.9	683	685.6	684.5	685	684.7	685.7	(ft. AMSL)	Head Elevation						
	Monitoring event	P2	4/8/2016	339	7.15	9.33	7.05	6.78	6.85	6.77	6.77	5.76	7.81	7.1	7.1	(SU)	pH							
	Monitoring event	P3	7/12/2016	434	0.77	1.08	0.13	0.13	0.03	0.29	0.41	0.45	0.43	0.4	0.77	1.57	4.93	(mg/L)	Dissolved Oxygen					
	Monitoring event	P4	10/13/2016	527	-85.2	-53.8	-314	-90.9	-120	-117	-91.2	-119	-144	-63	-47.4	-138	-49.6	(mV)	Oxidation Reduction Potential					
	Monitoring event	P5	1/24/2017	630	0.834	1.37	1.25	1.35	1.613	1.807	2.287	3.505	5.088	0.655	0.724	0.724	(mS/cm)	Specific Conductance						
	Monitoring event	P6	4/11/2017	707	NA	22.2	24.2	25	27.1	35.7	44.4	120	767	1.75	18	12.09	(NTU)	Turbidity						
	Monitoring event	P7	7/6/2017	793	8.75	8.84	12.6	13.2	11	9.12	12.21	14.8	7.17	17.12	8.85	15.89	11.89	(°C)	Temperature					
	Monitoring event	P8	10/18/2017	897	11.7	10	11	NS	30.7	57.4	127	436	2250	3340	B	0.55	J	NS	NS	(mg/L)	Carbon, Total Organic			
	Monitoring event	P9	1/9/2018	980	10.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	17	1,1,1-Trichloroethane					
	Monitoring event	P10	4/12/2018	1073	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,1,2-Trichloro-1,2,2-trifluoroethane			

Not Sampled For These Parameters

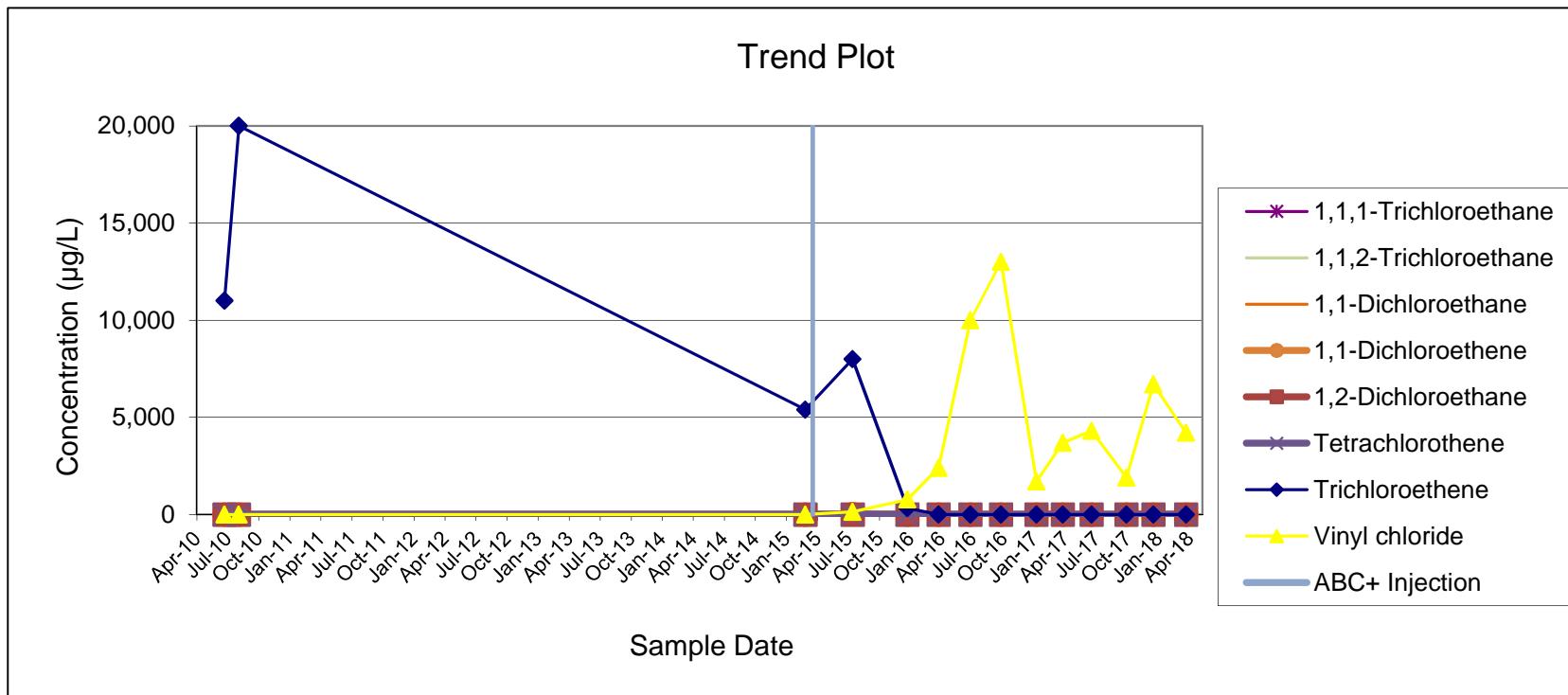
Well ID	Event / Description	Date	Elapsed Time (Days)										
				(ft.)		(ft.)		(ft.)		(mg/L)		(mV)	
MW-40D	Monitoring event	BL1	6/21/2010	-1779	22.5	22.5	22.5	22.5	22.5	NA	22.8	22.8	(feet) Total Depth
	Monitoring event	BL2	8/3/2010	-1736	2.68	3.39	4.55	4.1	2.88	NA	3.95	4.3	(ft. ATOC) Water Level Measurement
	Monitoring event	BL3	11/6/2014	-180	689.19	689.2	689.19	689.19	689.19	689.19	689.2	689.2	(ft. AMSL) Top of Casing Elevation
	Monitoring event	BL4	3/11/2015	-55	0.36	NA	0.41	0.35	0.17	0.37	0.75	0.95	(ft. AMSL) Head Elevation
	Monitoring event	P1	6/12/2015	38	7.96	NA	7.09	7.85	7.05	7.08	9.01	7.2	pH
	Monitoring event	P2	7/27/2015	83	0.36	NA	0.41	0.35	0.17	0.37	0.75	1.01	Dissolved Oxygen
	Monitoring event	P3	1/7/2016	247	-105.1	NA	-329.9	-145	-136.3	-118.3	-15.1	-14	Oxidation Reduction Potential
	Monitoring event	P4	4/8/2016	339	48.5	168 B	131	NS	172	146	0.669	0.624	Specific Conductance
	Monitoring event	P5	7/11/2016	433	20	ND	ND	43	ND	ND	25	23	1,1,1-Trichloroethane
	Monitoring event	P6	10/11/2016	525	ND	ND	ND	ND	ND	ND	ND	ND	1,1,2-Trichloro-1,2,2-trifluoroethane
	Monitoring event	P7	1/25/2017	631	ND	ND	ND	ND	ND	ND	ND	ND	cis-1,2-Dichloroethene
MW-40D	Monitoring event	P8	4/10/2017	706	ND	ND	ND	ND	ND	ND	ND	ND	Dichlorodifluoromethane
	Monitoring event	P9	7/10/2017	797	ND	ND	ND	ND	ND	ND	ND	ND	Ethylbenzene
	Monitoring event	P10	10/16/2017	895	ND	ND	ND	ND	ND	ND	ND	ND	Methylcyclohexane
	Monitoring event	P11	1/4/2018	975	ND	ND	ND	ND	ND	ND	ND	ND	4-Methyl-2-pentanone
	Monitoring event	P12	4/10/2018	1071	22.5	22.5	22.5	22.5	22.5	NA	22.8	22.8	Acetone
	Monitoring event	BL1	6/21/2010	-1779	2.68	3.39	4.55	4.1	2.88	NA	3.95	4.3	Benzene
	Monitoring event	BL2	8/3/2010	-1736	689.19	689.2	689.19	689.19	689.19	689.19	689.2	689.2	Carbon Disulfide
	Monitoring event	BL3	11/6/2014	-180	686.51	685.8	685.1	686.31	685.55	683.42	684.24	686.298	685.94
	Monitoring event	BL4	3/11/2015	-55	7.96	NA	7.09	7.85	7.05	7.08	9.01	7.2	Chloroethane
	Monitoring event	P1	6/12/2015	38	0.36	NA	0.41	0.35	0.17	0.37	0.75	1.01	Chloroform
	Monitoring event	P2	7/27/2015	83	-105.1	NA	-329.9	-145	-136.3	-118.3	-15.1	-14	Chloromethane
MW-40D	Monitoring event	P3	1/7/2016	247	48.5	168 B	131	NS	172	146	0.669	0.624	cis-1,2-Dichloroethene
	Monitoring event	P4	4/8/2016	339	20	ND	ND	43	ND	ND	25	23	Dichlorodifluoromethane
	Monitoring event	P5	7/11/2016	433	ND	ND	ND	ND	ND	ND	ND	ND	Ethylbenzene
	Monitoring event	P6	10/11/2016	525	ND	ND	ND	ND	ND	ND	ND	ND	Methylcyclohexane
	Monitoring event	P7	1/25/2017	631	ND	ND	ND	ND	ND	ND	ND	ND	4-Methyl-2-pentanone
	Monitoring event	P8	4/10/2017	706	ND	ND	ND	ND	ND	ND	ND	ND	Acetone
	Monitoring event	P9	7/10/2017	797	ND	ND	ND	ND	ND	ND	ND	ND	Benzene
	Monitoring event	P10	10/16/2017	895	ND	ND	ND	ND	ND	ND	ND	ND	Carbon Disulfide
	Monitoring event	P11	1/4/2018	975	ND	ND	ND	ND	ND	ND	ND	ND	Chloroethane
	Monitoring event	P12	4/10/2018	1071	22.5	22.5	22.5	22.5	22.5	NA	22.8	22.8	Chloroform
	Monitoring event	BL1	6/21/2010	-1779	2.68	3.39	4.55	4.1	2.88	NA	3.95	4.3	Chloromethane
MW-40D	Monitoring event	BL2	8/3/2010	-1736	689.19	689.2	689.19	689.19	689.19	689.19	689.2	689.2	cis-1,2-Dichloroethene
	Monitoring event	BL3	11/6/2014	-180	686.51	685.8	685.1	686.31	685.55	683.42	684.24	686.298	Dichlorodifluoromethane
	Monitoring event	BL4	3/11/2015	-55	7.96	NA	7.09	7.85	7.05	7.08	9.01	7.2	Ethylbenzene
	Monitoring event	P1	6/12/2015	38	0.36	NA	0.41	0.35	0.17	0.37	0.75	1.01	Methylcyclohexane
	Monitoring event	P2	7/27/2015	83	-105.1	NA	-329.9	-145	-136.3	-118.3	-15.1	-14	4-Methyl-2-pentanone
	Monitoring event	P3	1/7/2016	247	48.5	168 B	131	NS	172	146	0.669	0.624	Acetone
	Monitoring event	P4	4/8/2016	339	20	ND	ND	43	ND	ND	25	23	Benzene
	Monitoring event	P5	7/11/2016	433	ND	ND	ND	ND	ND	ND	ND	ND	Carbon Disulfide
	Monitoring event	P6	10/11/2016	525	ND	ND	ND	ND	ND	ND	ND	ND	Chloroethane
	Monitoring event	P7	1/25/2017	631	ND	ND	ND	ND	ND	ND	ND	ND	Chloroform
	Monitoring event	P8	4/10/2017	706	ND	ND	ND	ND	ND	ND	ND	ND	Chloromethane
	Monitoring event	P9	7/10/2017	797	ND	ND	ND	ND	ND	ND	ND	ND	cis-1,2-Dichloroethene
MW-40D	Monitoring event	P10	10/16/2017	895	ND	ND	ND	ND	ND	ND	ND	ND	Dichlorodifluoromethane
	Monitoring event	P11	1/4/2018	975	ND	ND	ND	ND	ND	ND	ND	ND	Ethylbenzene
	Monitoring event	P12	4/10/2018	1071	22.5	22.5	22.5	22.5	22.5	NA	22.8	22.8	Methylcyclohexane
	Monitoring event	BL1	6/21/2010	-1779	2.68	3.39	4.55	4.1	2.88	NA	3.95	4.3	4-Methyl-2-pentanone
	Monitoring event	BL2	8/3/2010	-1736	689.19	689.2	689.19	689.19	689.19	689.19	689.2	689.2	Acetone
	Monitoring event	BL3	11/6/2014	-180	686.51	685.8	685.1	686.31	685.55	683.42	684.24	686.298	Benzene
	Monitoring event	BL4	3/11/2015	-55	7.96	NA	7.09	7.85	7.05	7.08	9.01	7.2	Carbon Disulfide
	Monitoring event	P1	6/12/2015	38	0.36	NA	0.41	0.35	0.17	0.37	0.75	1.01	Chloroethane
	Monitoring event	P2	7/27/2015	83	-105.1	NA	-329.9	-145	-136.3	-118.3	-15.1	-14	Chloroform
	Monitoring event	P3	1/7/2016	247	48.5	168 B	131	NS	172	146	0.669	0.624	Cis-1,2-dichloroethene
	Monitoring event	P4	4/8/2016	339	20	ND	ND	43	ND	ND	25	23	Dichlorodifluoromethane
	Monitoring event	P5	7/11/2016	433	ND	ND	ND	ND	ND	ND	ND	ND	Ethylbenzene
	Monitoring event	P6	10/11/2016	525	ND	ND	ND	ND	ND	ND	ND	ND	Carbon Disulfide
	Monitoring event	P7	1/25/2017	631	ND	ND	ND	ND	ND	ND	ND	ND	Chloroethane
	Monitoring event	P8	4/10/2017	706	ND	ND	ND	ND	ND	ND	ND	ND	Chloroform
	Monitoring event	P9	7/10/2017	797	ND	ND	ND	ND	ND	ND	ND	ND	Cis-1,2-dichloroethene
MW-40D	Monitoring event	P10	10/16/2017	895	ND	ND	ND	ND	ND	ND	ND	ND	Dichlorodifluoromethane
	Monitoring event	P11	1/4/2018	975	ND	ND	ND	ND	ND	ND	ND	ND	Ethylbenzene
	Monitoring event	P12	4/10/2018	1071	22.5	22.5	22.5	22.5	22.5	NA	22.8	22.8	Carbon Disulfide
	Monitoring event												

Appendix B

Former Scott Aviation Area 1 Summary of VOCs in Groundwater

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

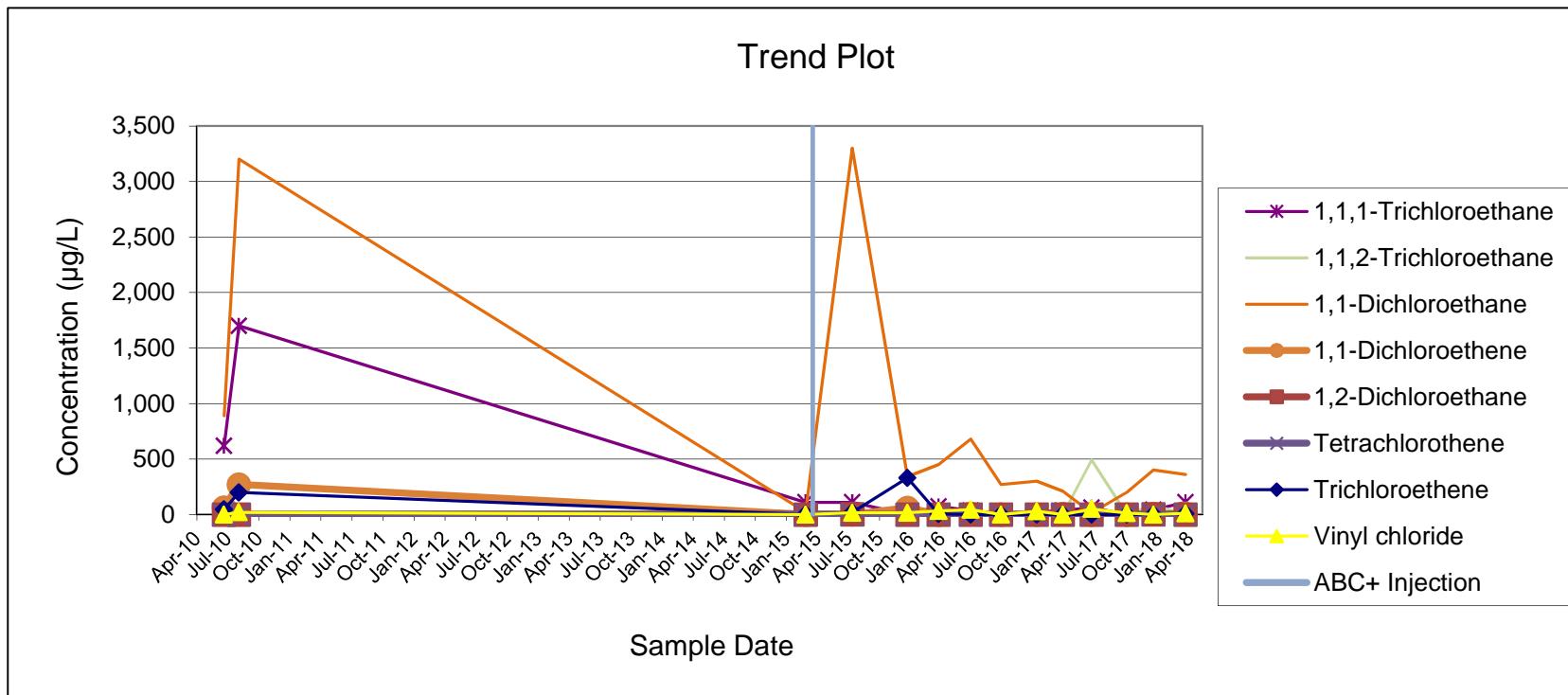
MONITORING WELL A1-GP02S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



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	Tetrachloroethene	Trichloroethene	Vinyl chloride
6/21/2010	620	ND	890	63	ND	ND	46	ND
8/4/2010	1,700	16	3,200	270	ND	ND	200	20
3/11/2015	110	ND	21	ND	ND	ND	0.81	ND
7/27/2015	110	4.1	3,300	0.89	3.1	ND	18	16
1/7/2016	ND	ND	340	60	ND	ND	330	16
4/8/2016	73	ND	450	ND	ND	ND	5.4	33
7/12/2016	35	ND	680	7.8	ND	ND	ND	44
10/10/2016	ND	ND	270	ND	ND	ND	ND	ND
1/24/2017	24	ND	300	ND	ND	ND	ND	29
4/11/2017	34	ND	210	6.2	ND	ND	ND	ND
7/6/2017	63	490	13	ND	ND	ND	ND	50
10/18/2017	ND	ND	200	ND	ND	ND	ND	14
1/5/2018	44	84	400	3.7	2.1	ND	ND	ND
4/10/2018	110	ND	360	6.8	ND	ND	7.2	11

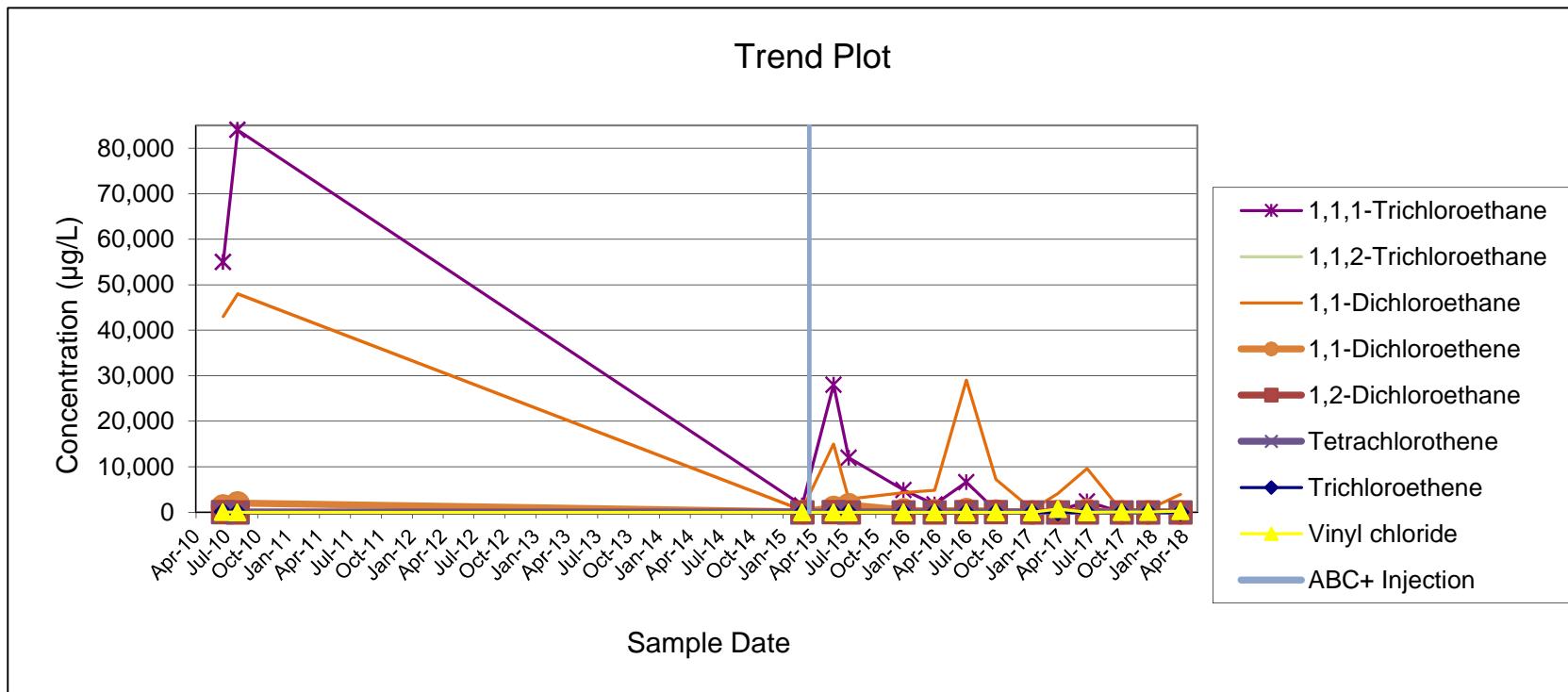
MONITORING WELL A1-GP06S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



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

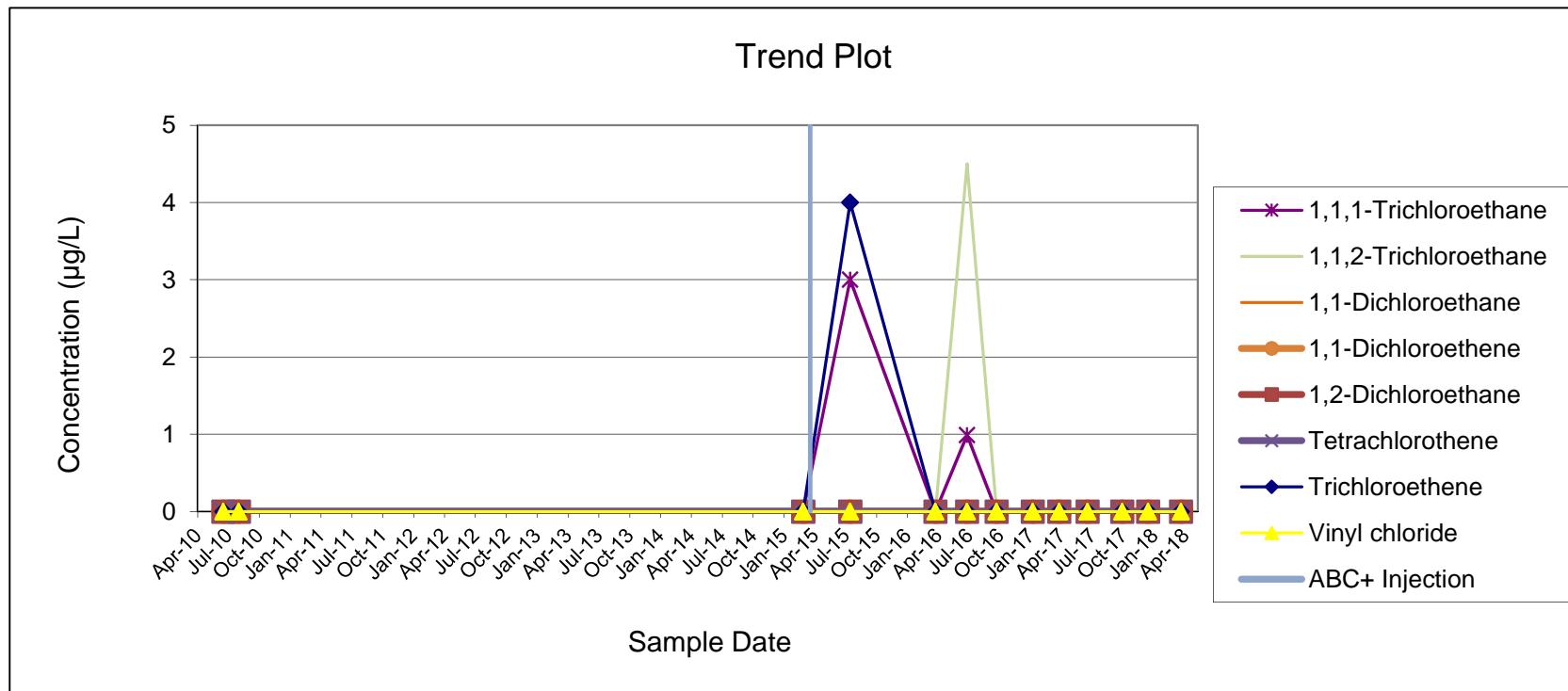
Sample Date	Analytical Results (µg/L)							
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	Tetrachloroethene	Trichloroethene	Vinyl chloride
6/21/2010	55,000	84	43,000	1,300	77	1.2	92	41
8/3/2010	84,000	ND	48,000	2,000	ND	ND	ND	ND
3/11/2015	1,500	1.2	440	65	1.6	ND	6.6	ND
6/12/2015	28,000	ND	15,000	1,000	40	ND	ND	ND
7/27/2015	12,000	ND	2,900	1,600	9.6	ND	36	ND
1/7/2016	4,900	ND	4,300	470	ND	ND	ND	ND
4/8/2016	1,700	ND	4,800	220	ND	ND	ND	ND
7/11/2016	6,600	ND	29,000	500	72	ND	ND	ND
10/7/2016	360	ND	7,200	190	47	ND	ND	ND
1/23/2017	ND	ND	580	ND	ND	ND	ND	ND
4/10/2017	240	ND	4,100	45	ND	ND	ND	690
7/6/2017	2,400	ND	9,600	380	ND	ND	ND	ND
10/17/2017	23	ND	240	4	1.4	ND	0.47	45
1/4/2018	44	ND	600	ND	11	ND	ND	85
4/10/2018	140	ND	3,900	19	18	ND	ND	260

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



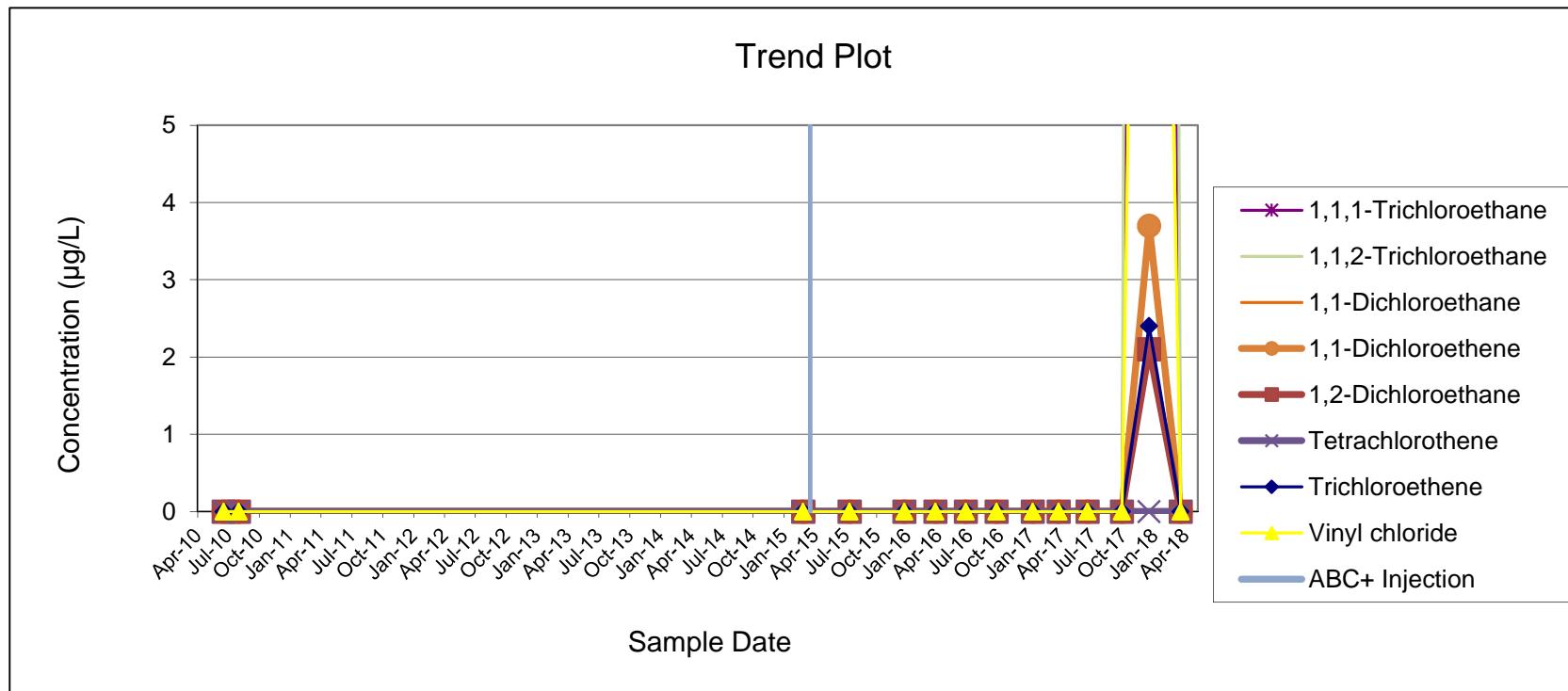
**MONITORING WELL A1-GP15S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York**

MONITORING WELL A1-GP15S
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**

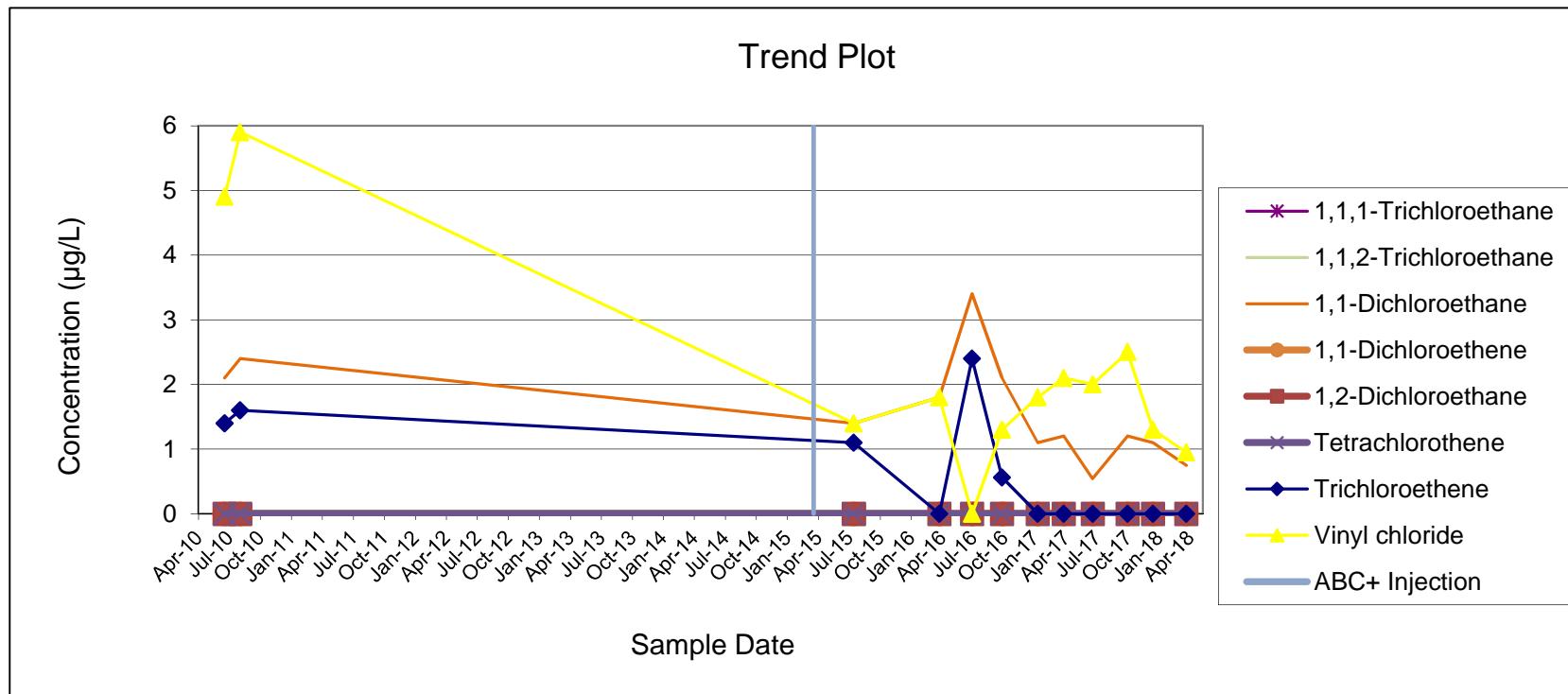
MONITORING WELL A1-GP18S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



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

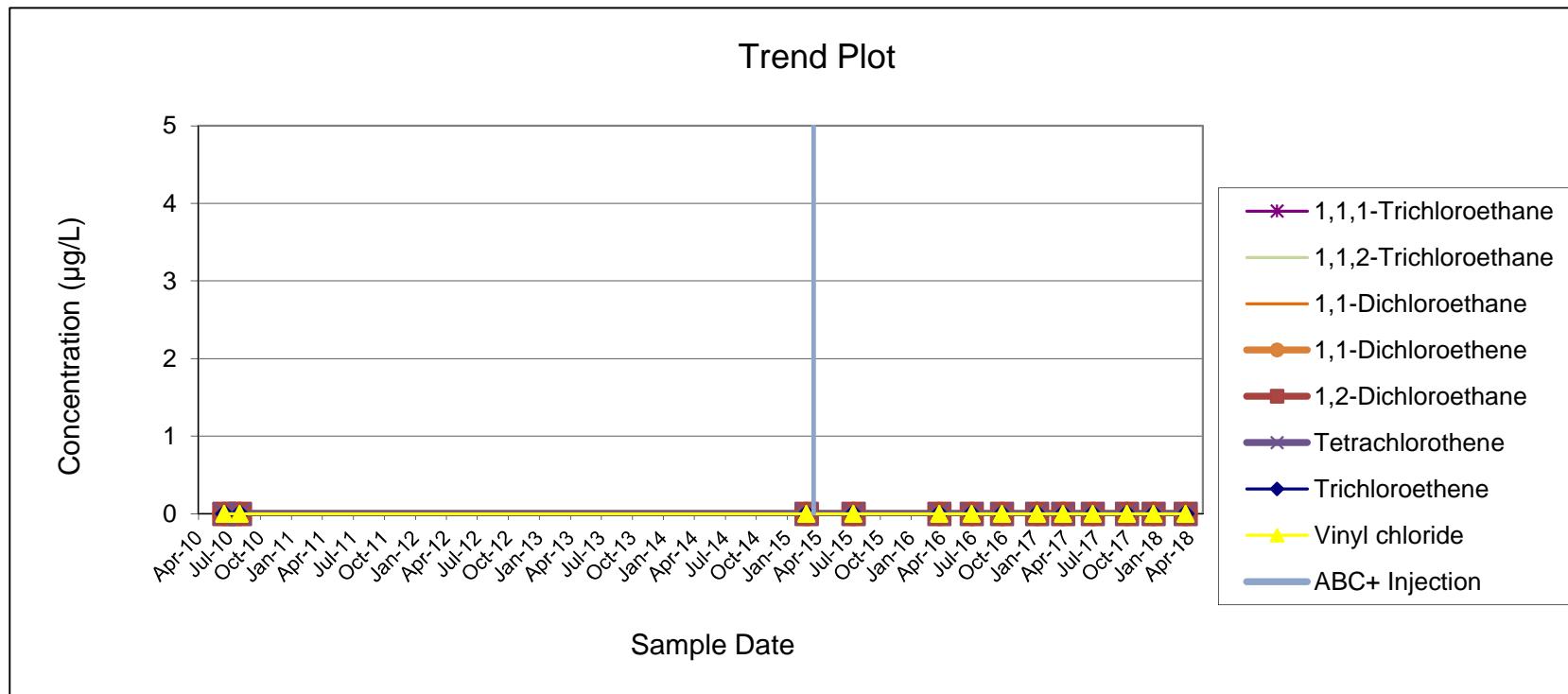
Sample Date	Analytical Results (µg/L)							
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	Tetrachloroethene	Trichloroethene	Vinyl chloride
6/18/2010	ND	ND	2.1	ND	ND	ND	1.4	4.9
8/3/2010	ND	ND	2.4	ND	ND	ND	1.6	5.9
7/29/2015	ND	ND	1.4	ND	ND	ND	1.1	1.4
4/8/2016	ND	ND	1.8	ND	ND	ND	ND	1.8
7/14/2016	ND	ND	3.4	ND	ND	ND	2.4	ND
10/11/2016	ND	ND	2.1	ND	ND	ND	0.56	1.3
1/25/2017	ND	ND	1.1	ND	ND	ND	ND	1.8
4/12/2017	ND	ND	1.2	ND	ND	ND	ND	2.1
7/7/2017	ND	ND	0.54	ND	ND	ND	ND	2.0
10/19/2017	ND	ND	1.2	ND	ND	ND	ND	2.5
1/2/2018	ND	ND	1.1	ND	ND	ND	ND	1.3
4/11/2018	ND	ND	0.75	ND	ND	ND	ND	0.95

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



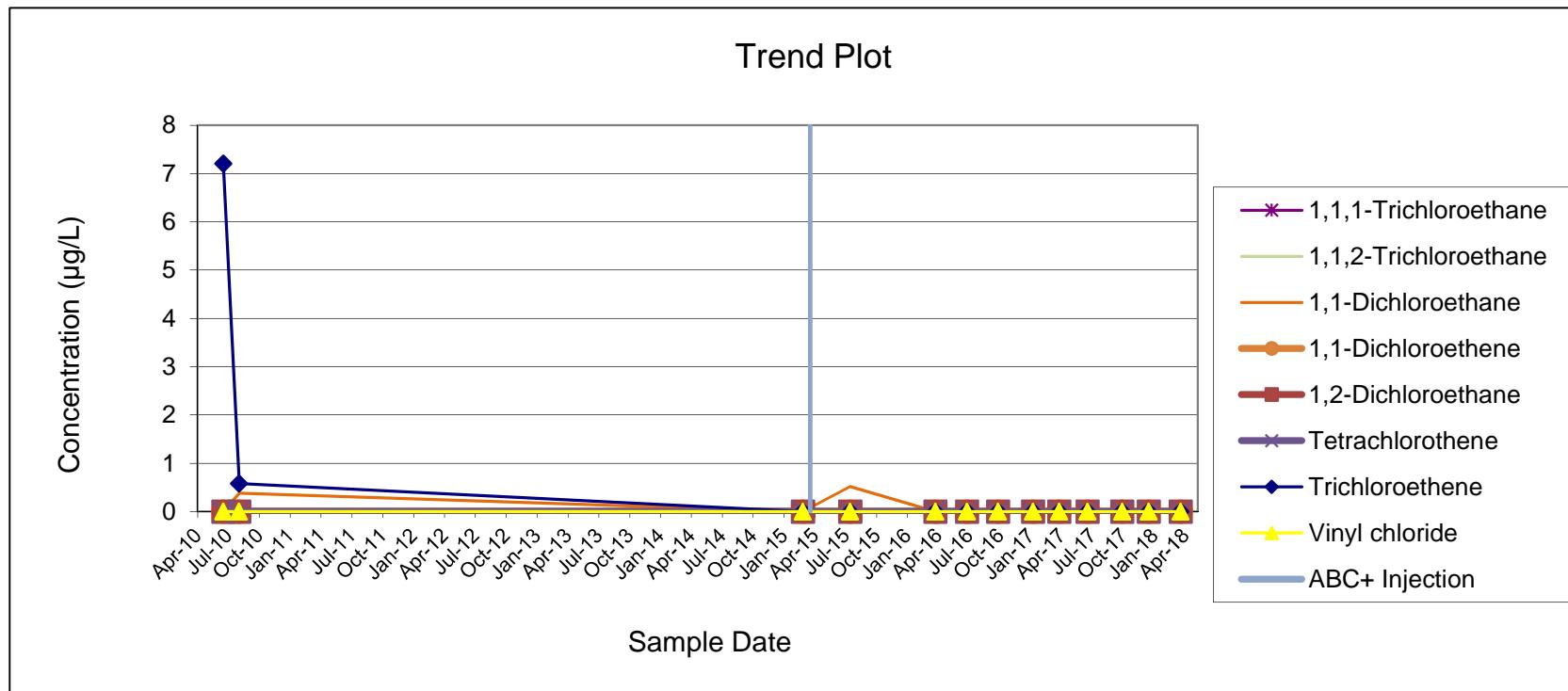
**MONITORING WELL MW-35S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York**

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**

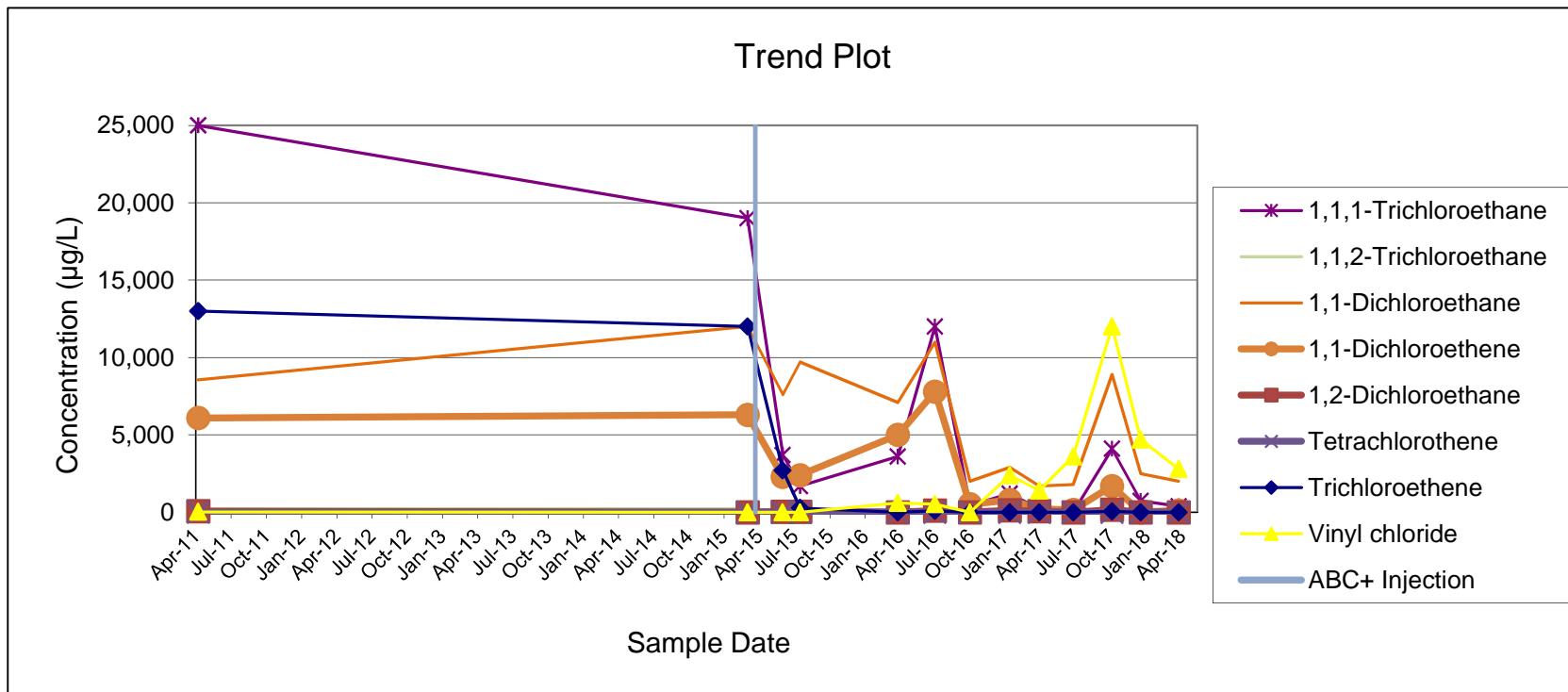
MONITORING WELL MW-36S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



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

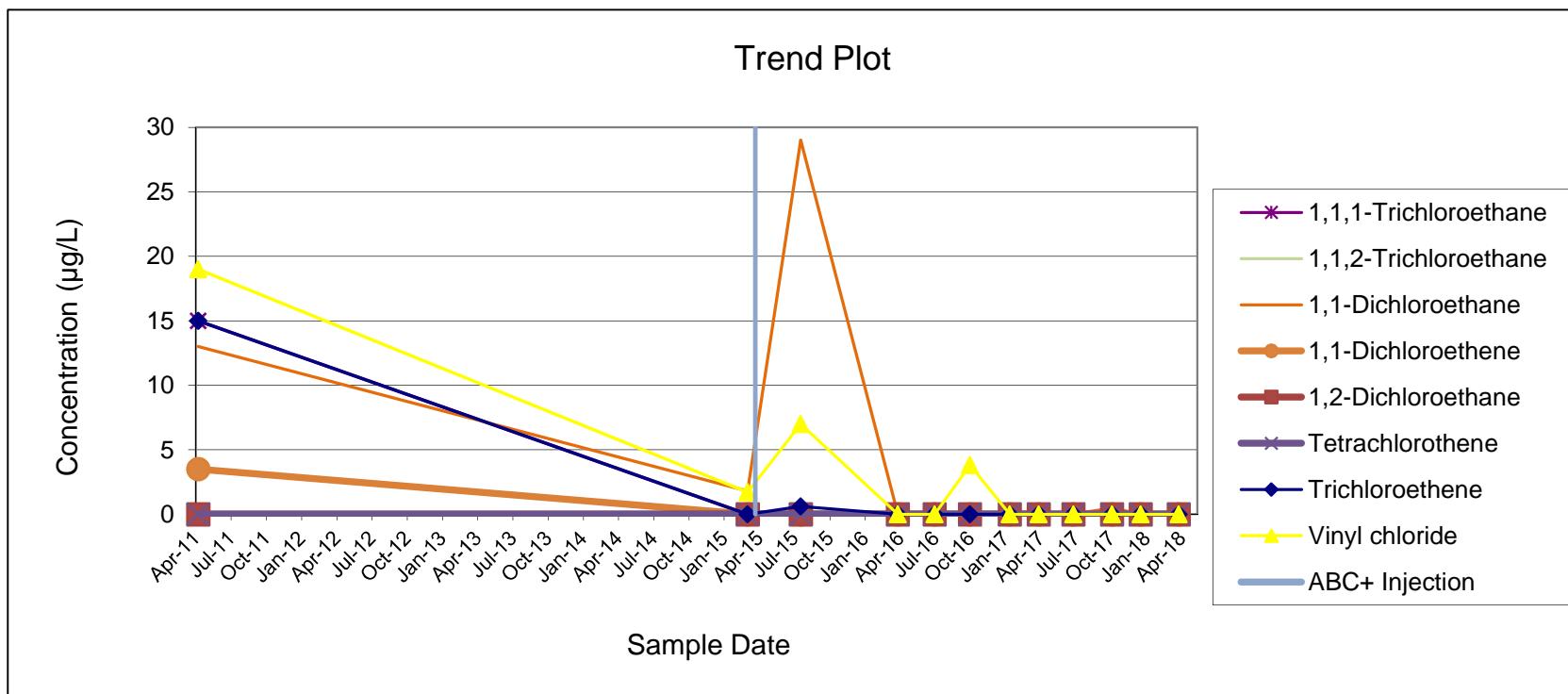
Sample Date	Analytical Results (µg/L)							
	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	Tetrachloroethene	Trichloroethene	Vinyl chloride
4/7/2011	25,000	240	8,550	6,100	76	6	13,000	27
3/12/2015	19,000	240	12,000	6,300	ND	ND	12,000	ND
6/12/2015	3,700	100	7,600	2,300	44	ND	2,700	ND
7/27/2015	1,700	71	9,700	2,400	44	ND	280	ND
4/8/2016	3,600	ND	7,100	5,000	ND	ND	ND	610
7/14/2016	12,000	120	11,000	7,800	110	ND	100	530
10/13/2016	440	ND	2,000	520	ND	ND	ND	ND
1/25/2017	1,200	ND	2,900	790	130	ND	ND	2,400
4/12/2017	230	ND	1,700	220	74	ND	ND	1,400
7/10/2017	ND	ND	1,800	150	ND	ND	ND	3,600
10/19/2017	4,100	48	8,900	1,700	170	ND	54	12,000
1/2/2018	740	ND	2,500	ND	ND	ND	ND	4,700
4/11/2018	390	ND	2,000	120	ND	ND	ND	2,800

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



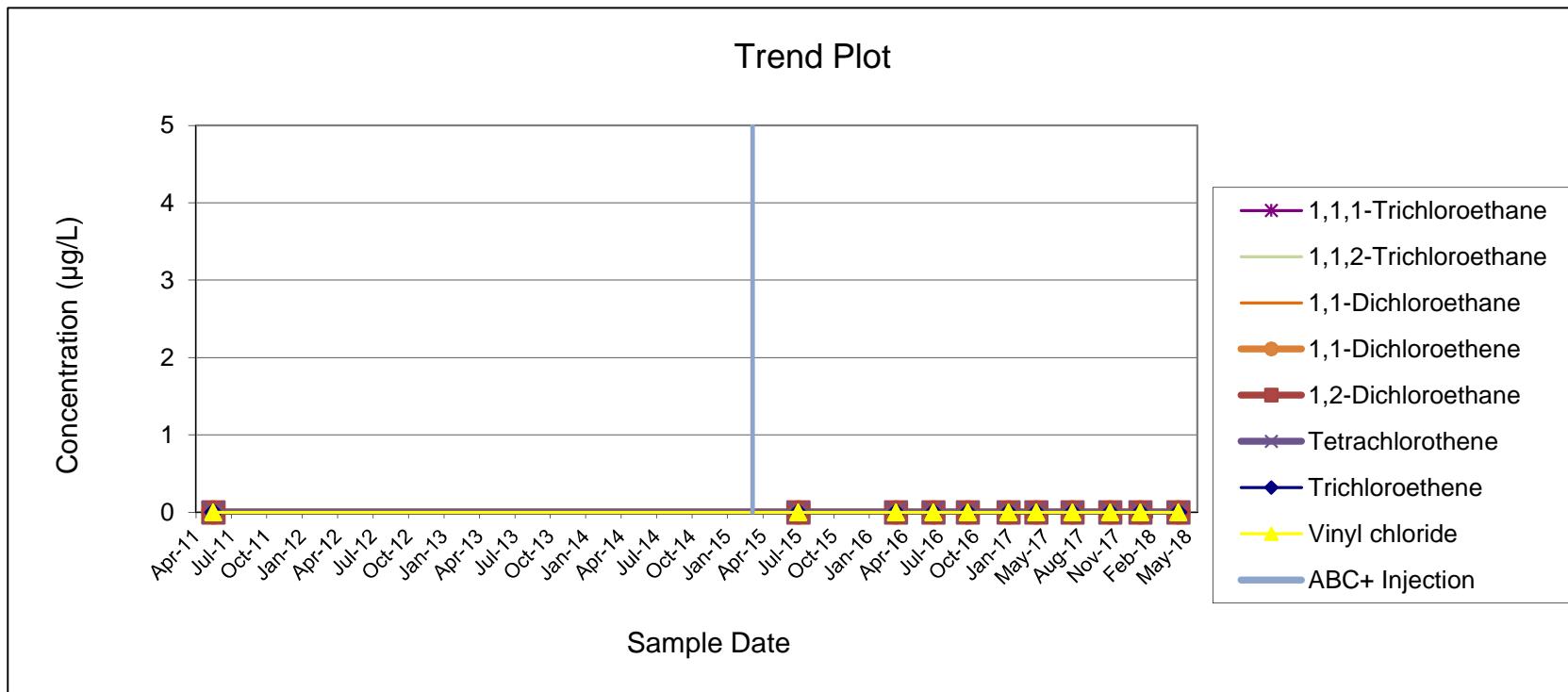
**MONITORING WELL MW-43S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York**

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



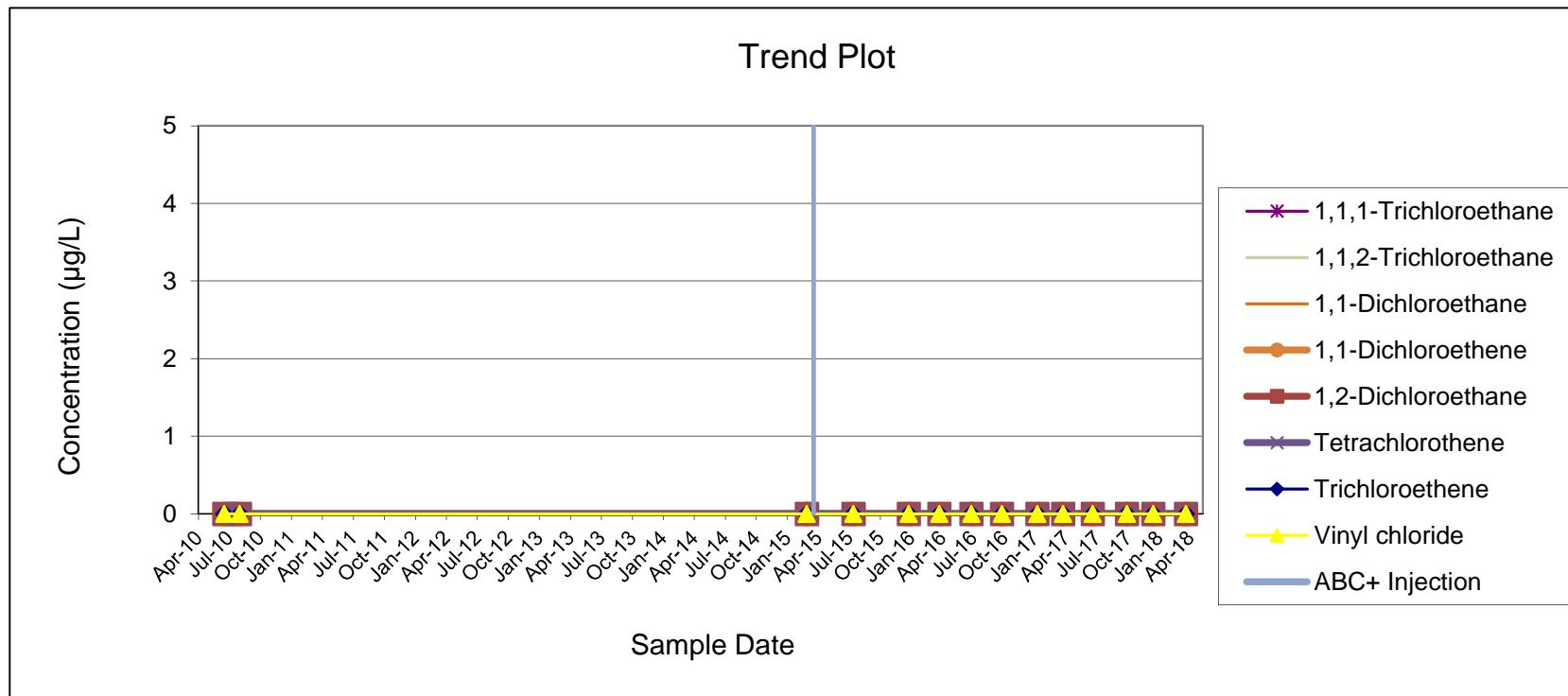
**MONITORING WELL MW-44S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York**

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



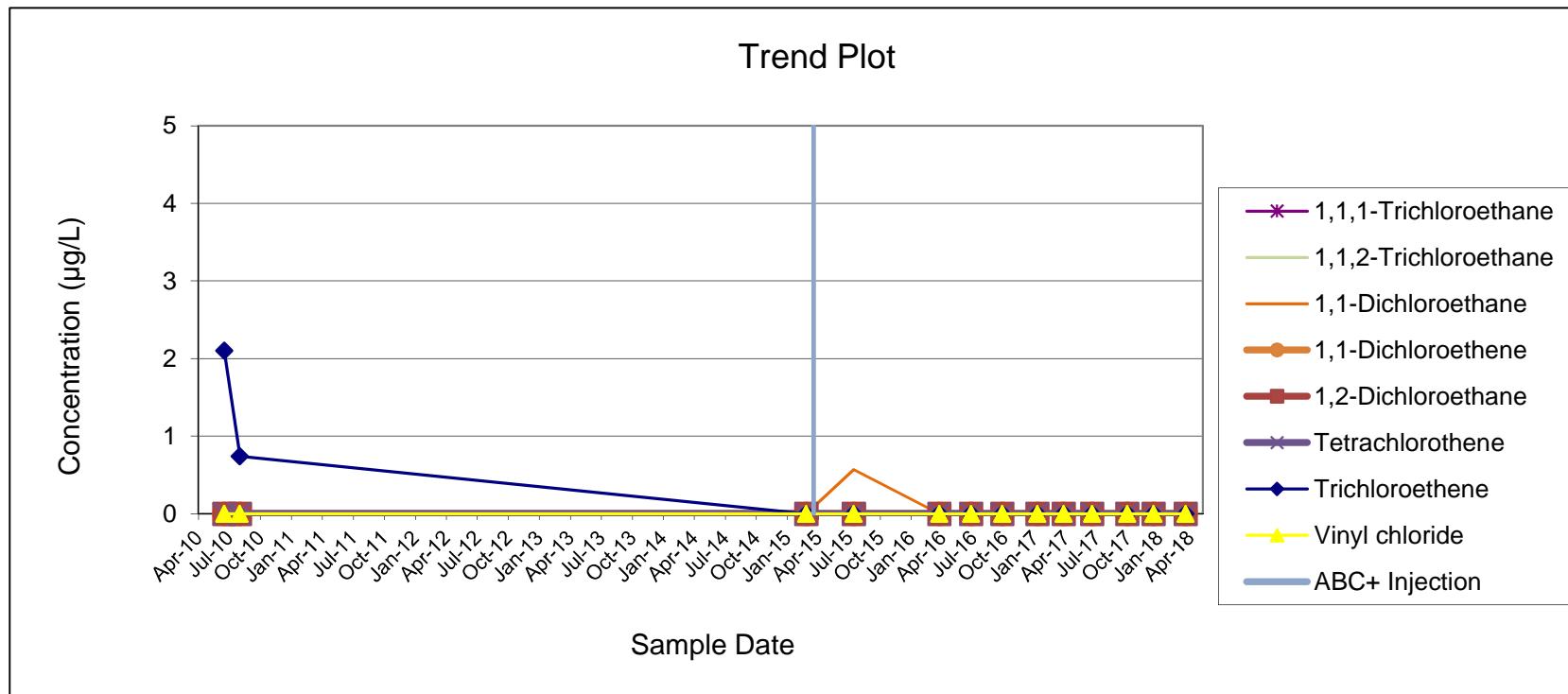
**MONITORING WELL MW-35D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York**

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



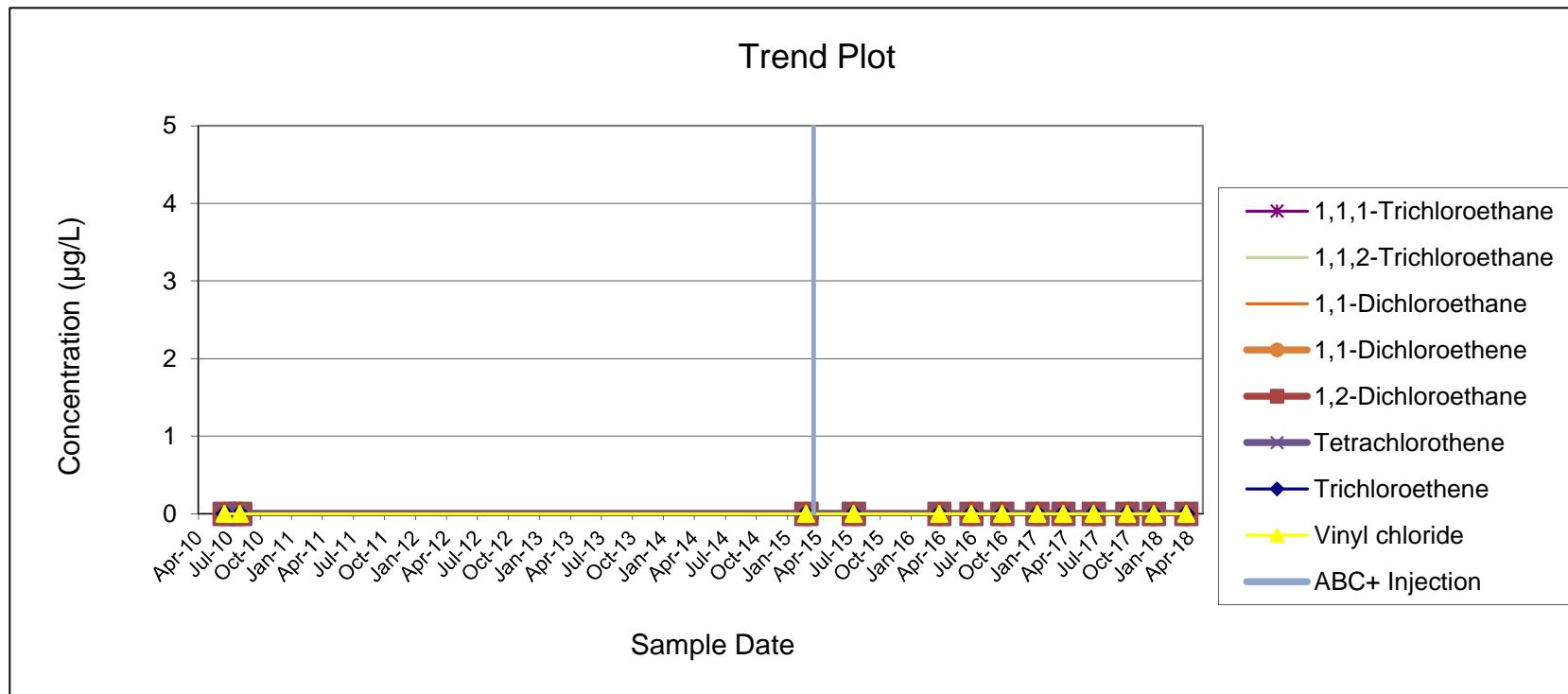
**MONITORING WELL MW-36D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York**

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



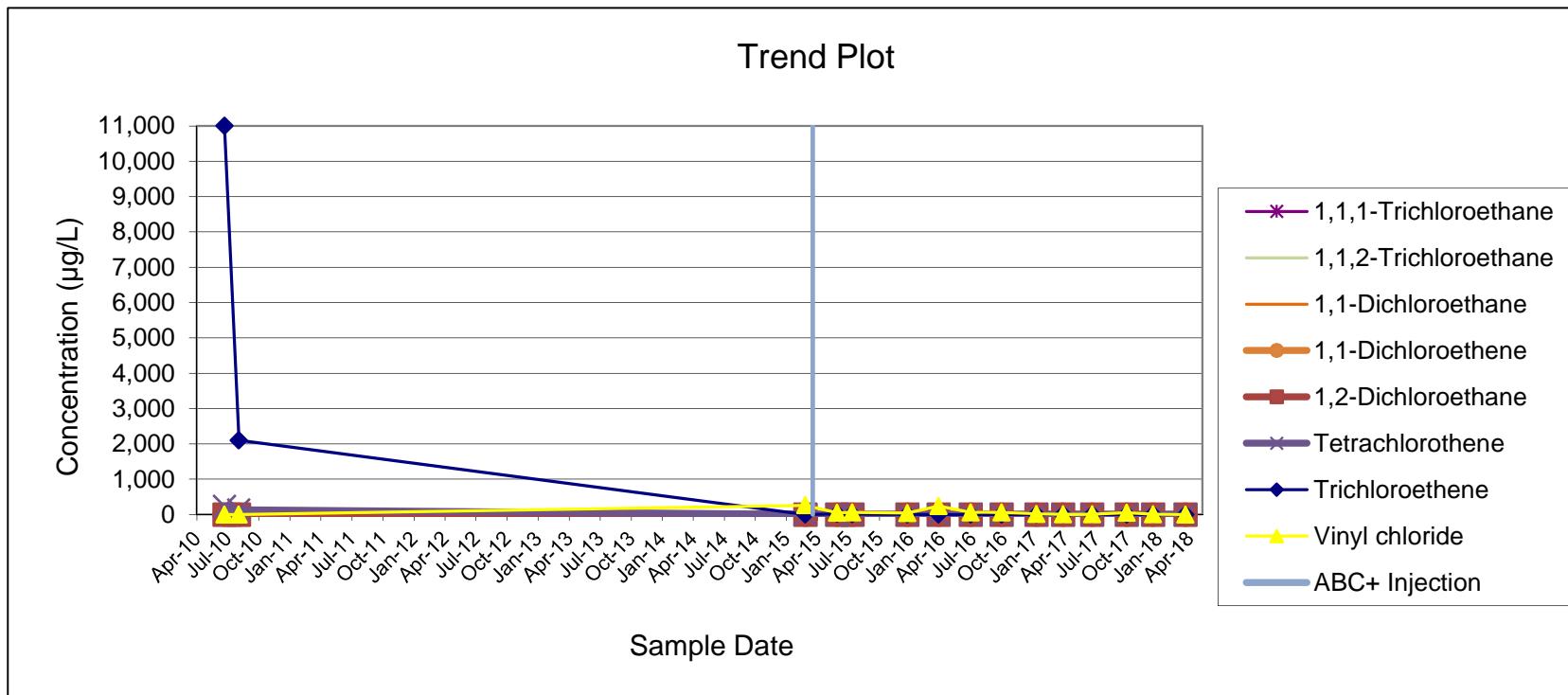
**MONITORING WELL MW-37D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York**

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



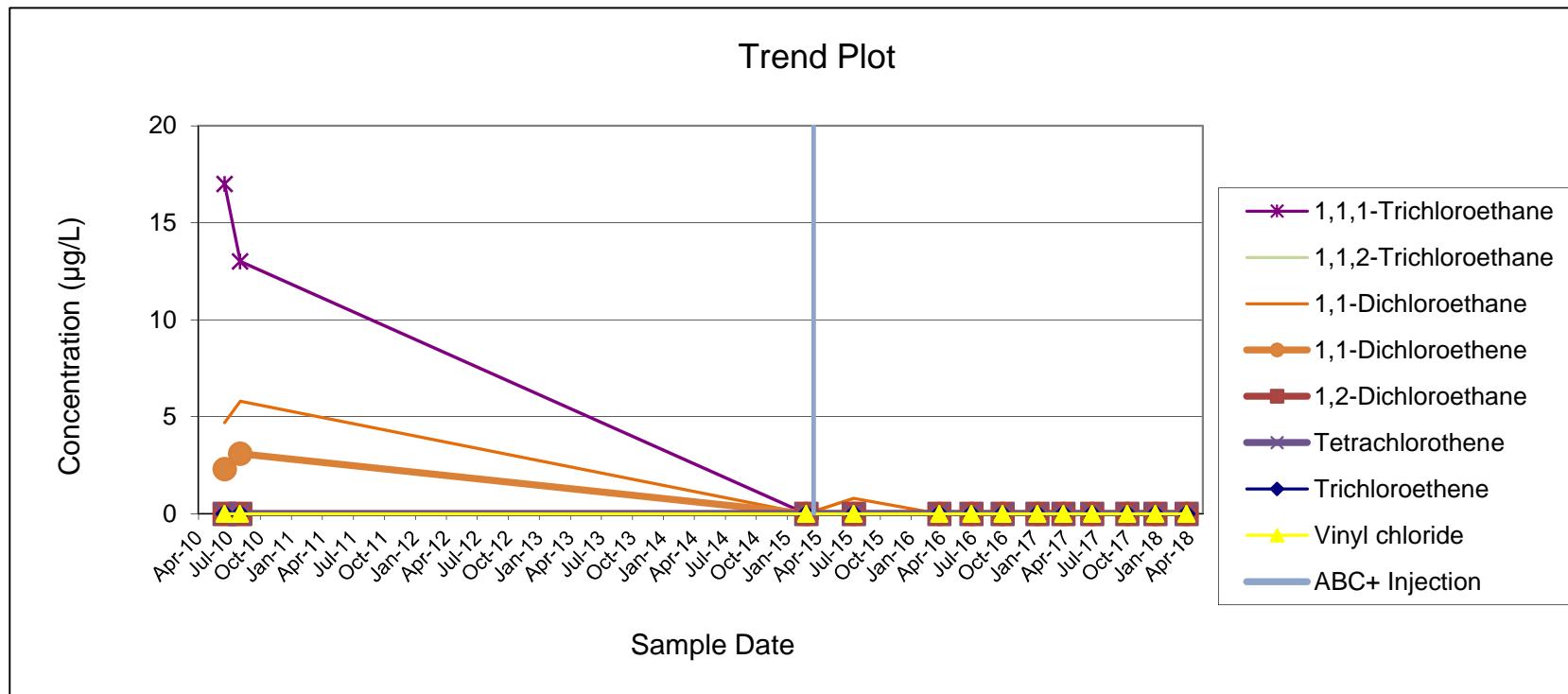
**MONITORING WELL MW-38D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York**

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



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

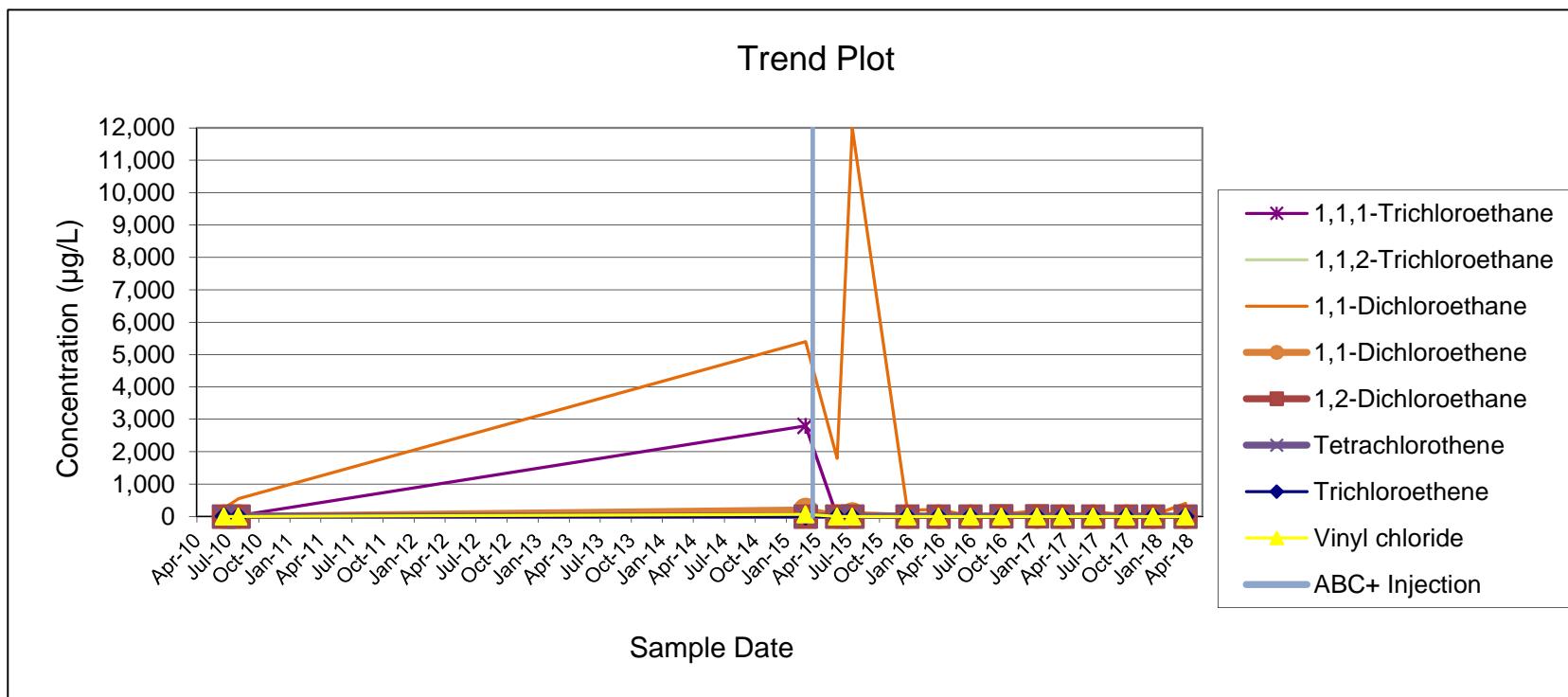
MONITORING WELL MW-39D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York



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	Tetrachloroethene	Trichloroethylene	Vinyl chloride
6/21/2010	23	ND	260	1.8	ND	ND	2.8	ND
8/3/2010	25	ND	550	6	ND	ND	ND	ND
3/11/2015	2,800	ND	5,400	200	ND	ND	ND	67
6/12/2015	ND	ND	1,800	ND	ND	ND	ND	ND
7/27/2015	ND	ND	12,000	64	ND	ND	ND	ND
1/7/2016	ND	ND	190	ND	ND	ND	ND	ND
4/8/2016	ND	ND	220	ND	ND	ND	ND	ND
7/11/2016	ND	ND	12	ND	ND	ND	ND	ND
10/11/2016	ND	ND	71	ND	5.2	ND	ND	ND
1/25/2017	ND	ND	180	ND	4.8	ND	ND	ND
4/10/2017	43	ND	ND	ND	ND	ND	ND	ND
7/10/2017	ND	ND	150	ND	ND	ND	ND	ND
10/16/2017	ND	ND	51	ND	1.3	ND	ND	0.9
1/4/2018	ND	ND	32	ND	ND	ND	ND	ND
4/10/2018	20	ND	400	ND	ND	ND	ND	ND

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



Appendix C

Well Decommissioning Logs

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D.: A1-GP03
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connolly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	[]
Drilling Method(s)	[]
Borehole Dia. (in.)	[]
Temporary Casing Installed? (y/n)	[]
Depth temporary casing installed	[]
Casing type/dia. (in.)	[]
Method of installing	[]
CASING PULLING	
Method employed	[]
Casing retrieved (feet)	15.0
Casing type/dia. (in)	0.75
CASING PERFORATING	
Equipment used	[]
Number of perforations/foot	[]
Size of perforations	[]
Interval perforated	[]
GROUTING	
Interval grouted (FBLS)	0.0-15.0'
# of batches prepared	[]
For each batch record:	[]
Quantity of water used (gal.)	[]
Quantity of cement used (lbs.)	[]
Cement type	[]
Quantity of bentonite used (lbs.)	[]
Quantity of calcium chloride used (lbs.)	[]
Volume of grout prepared (gal.)	[]
Volume of grout used (gal.)	1.0
COMMENTS:	

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D.: A1-GP04
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connolly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	<input type="text"/>
Drilling Method(s)	<input type="text"/>
Borehole Dia. (in.)	<input type="text"/>
Temporary Casing Installed? (y/n)	<input type="text"/>
Depth temporary casing installed	<input type="text"/>
Casing type/dia. (in.)	<input type="text"/>
Method of installing	<input type="text"/>
CASING PULLING	
Method employed	<input type="text"/>
Casing retrieved (feet)	<input type="text"/> 15.0
Casing type/dia. (in)	<input type="text"/> 0.75
CASING PERFORATING	
Equipment used	<input type="text"/>
Number of perforations/foot	<input type="text"/>
Size of perforations	<input type="text"/>
Interval perforated	<input type="text"/>
GROUTING	
Interval grouted (FBLS)	<input type="text"/> 0.0-15.0'
# of batches prepared	<input type="text"/>
For each batch record:	
Quantity of water used (gal.)	<input type="text"/>
Quantity of cement used (lbs.)	<input type="text"/>
Cement type	<input type="text"/>
Quantity of bentonite used (lbs.)	<input type="text"/>
Quantity of calcium chloride used (lbs.)	<input type="text"/>
Volume of grout prepared (gal.)	<input type="text"/>
Volume of grout used (gal.)	<input type="text"/> 1.0
COMMENTS:	

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D.: A1-GP05
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connolly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	<input type="text"/>
Drilling Method(s)	<input type="text"/>
Borehole Dia. (in.)	<input type="text"/>
Temporary Casing Installed? (y/n)	<input type="text"/>
Depth temporary casing installed	<input type="text"/>
Casing type/dia. (in.)	<input type="text"/>
Method of installing	<input type="text"/>
CASING PULLING	
Method employed	<input type="text"/>
Casing retrieved (feet)	<input type="text"/> 15.0
Casing type/dia. (in)	<input type="text"/> 0.75
CASING PERFORATING	
Equipment used	<input type="text"/>
Number of perforations/foot	<input type="text"/>
Size of perforations	<input type="text"/>
Interval perforated	<input type="text"/>
GROUTING	
Interval grouted (FBLS)	<input type="text"/> 0.0-15.0'
# of batches prepared	<input type="text"/>
For each batch record:	
Quantity of water used (gal.)	<input type="text"/>
Quantity of cement used (lbs.)	<input type="text"/>
Cement type	<input type="text"/>
Quantity of bentonite used (lbs.)	<input type="text"/>
Quantity of calcium chloride used (lbs.)	<input type="text"/>
Volume of grout prepared (gal.)	<input type="text"/>
Volume of grout used (gal.)	<input type="text"/> 2.0
COMMENTS:	

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D.: A1-GP07
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connolly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	<input type="text"/>
Drilling Method(s)	<input type="text"/>
Borehole Dia. (in.)	<input type="text"/>
Temporary Casing Installed? (y/n)	<input type="text"/>
Depth temporary casing installed	<input type="text"/>
Casing type/dia. (in.)	<input type="text"/>
Method of installing	<input type="text"/>
CASING PULLING	
Method employed	<input type="text"/>
Casing retrieved (feet)	<input type="text"/> 15.0
Casing type/dia. (in)	<input type="text"/> 0.75
CASING PERFORATING	
Equipment used	<input type="text"/>
Number of perforations/foot	<input type="text"/>
Size of perforations	<input type="text"/>
Interval perforated	<input type="text"/>
GROUTING	
Interval grouted (FBLS)	<input type="text"/> 0.0-15.0'
# of batches prepared	<input type="text"/>
For each batch record:	
Quantity of water used (gal.)	<input type="text"/>
Quantity of cement used (lbs.)	<input type="text"/>
Cement type	<input type="text"/>
Quantity of bentonite used (lbs.)	<input type="text"/>
Quantity of calcium chloride used (lbs.)	<input type="text"/>
Volume of grout prepared (gal.)	<input type="text"/>
Volume of grout used (gal.)	<input type="text"/> 1.0
COMMENTS:	

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D.: A1-GP08
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connolly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	<input type="text"/>
Drilling Method(s)	<input type="text"/>
Borehole Dia. (in.)	<input type="text"/>
Temporary Casing Installed? (y/n)	<input type="text"/>
Depth temporary casing installed	<input type="text"/>
Casing type/dia. (in.)	<input type="text"/>
Method of installing	<input type="text"/>
CASING PULLING	
Method employed	<input type="text"/>
Casing retrieved (feet)	<input type="text"/> 15.0
Casing type/dia. (in)	<input type="text"/> 0.75
CASING PERFORATING	
Equipment used	<input type="text"/>
Number of perforations/foot	<input type="text"/>
Size of perforations	<input type="text"/>
Interval perforated	<input type="text"/>
GROUTING	
Interval grouted (FBLS)	<input type="text"/> 0.0-15.0'
# of batches prepared	<input type="text"/>
For each batch record:	
Quantity of water used (gal.)	<input type="text"/>
Quantity of cement used (lbs.)	<input type="text"/>
Cement type	<input type="text"/>
Quantity of bentonite used (lbs.)	<input type="text"/>
Quantity of calcium chloride used (lbs.)	<input type="text"/>
Volume of grout prepared (gal.)	<input type="text"/>
Volume of grout used (gal.)	<input type="text"/> 1.0
COMMENTS:	

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D.: A1-GP12
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connelly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	[]
Drilling Method(s)	[]
Borehole Dia. (in.)	[]
Temporary Casing Installed? (y/n)	[]
Depth temporary casing installed	[]
Casing type/dia. (in.)	[]
Method of installing	[]
CASING PULLING	
Method employed	[]
Casing retrieved (feet)	15.0
Casing type/dia. (in)	0.75
CASING PERFORATING	
Equipment used	[]
Number of perforations/foot	[]
Size of perforations	[]
Interval perforated	[]
GROUTING	
Interval grouted (FBLS)	0.0-15.0'
# of batches prepared	[]
For each batch record:	
Quantity of water used (gal.)	[]
Quantity of cement used (lbs.)	90.0
Cement type	[]
Quantity of bentonite used (lbs.)	5.0
Quantity of calcium chloride used (lbs.)	[]
Volume of grout prepared (gal.)	[]
Volume of grout used (gal.)	[]
COMMENTS:	

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D.: A1-GP13
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connolly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	[]
Drilling Method(s)	[]
Borehole Dia. (in.)	[]
Temporary Casing Installed? (y/n)	[]
Depth temporary casing installed	[]
Casing type/dia. (in.)	[]
Method of installing	[]
CASING PULLING	
Method employed	[]
Casing retrieved (feet)	15.0'
Casing type/dia. (in)	0.75
CASING PERFORATING	
Equipment used	[]
Number of perforations/foot	[]
Size of perforations	[]
Interval perforated	[]
GROUTING	
Interval grouted (FBLS)	0.0-15.0'
# of batches prepared	[]
For each batch record:	
Quantity of water used (gal.)	[]
Quantity of cement used (lbs.)	[]
Cement type	[]
Quantity of bentonite used (lbs.)	[]
Quantity of calcium chloride used (lbs.)	[]
Volume of grout prepared (gal.)	[]
Volume of grout used (gal.)	2.0
COMMENTS:	

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D.: MW-37S
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connolly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	<input type="text"/>
Drilling Method(s)	<input type="text"/>
Borehole Dia. (in.)	<input type="text"/>
Temporary Casing Installed? (y/n)	<input type="text"/>
Depth temporary casing installed	<input type="text"/>
Casing type/dia. (in.)	<input type="text"/>
Method of installing	<input type="text"/>
CASING PULLING	
Method employed	<input type="text"/>
Casing retrieved (feet)	<input type="text"/> 18.0'
Casing type/dia. (in)	<input type="text"/>
CASING PERFORATING	
Equipment used	<input type="text"/>
Number of perforations/foot	<input type="text"/>
Size of perforations	<input type="text"/>
Interval perforated	<input type="text"/>
GROUTING	
Interval grouted (FBLS)	<input type="text"/> 0.0-15.0'
# of batches prepared	<input type="text"/>
For each batch record:	
Quantity of water used (gal.)	<input type="text"/>
Quantity of cement used (lbs.)	<input type="text"/> 90.0
Cement type	<input type="text"/>
Quantity of bentonite used (lbs.)	<input type="text"/> 5.0
Quantity of calcium chloride used (lbs.)	<input type="text"/>
Volume of grout prepared (gal.)	<input type="text"/>
Volume of grout used (gal.)	<input type="text"/>
COMMENTS:	

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D.: MW-41B
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connelly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	<input type="text"/>
Drilling Method(s)	<input type="text"/>
Borehole Dia. (in.)	<input type="text"/>
Temporary Casing Installed? (y/n)	<input type="text"/>
Depth temporary casing installed	<input type="text"/>
Casing type/dia. (in.)	<input type="text"/>
Method of installing	<input type="text"/>
CASING PULLING	
Method employed	<input type="text"/>
Casing retrieved (feet)	<input type="text"/> 0.0'
Casing type/dia. (in.)	<input type="text"/>
CASING PERFORATING	
Equipment used	<input type="text"/>
Number of perforations/foot	<input type="text"/>
Size of perforations	<input type="text"/>
Interval perforated	<input type="text"/>
GROUTING	
Interval grouted (FBLS)	<input type="text"/> 0.0-34.0'
# of batches prepared	<input type="text"/>
For each batch record:	
Quantity of water used (gal.)	<input type="text"/>
Quantity of cement used (lbs.)	<input type="text"/> 180.0
Cement type	<input type="text"/>
Quantity of bentonite used (lbs.)	<input type="text"/> 10.0
Quantity of calcium chloride used (lbs.)	<input type="text"/>
Volume of grout prepared (gal.)	<input type="text"/>
Volume of grout used (gal.)	<input type="text"/>
COMMENTS:	

WELL SCHEMATIC*

Depth (feet)

Surface

2.0' Stick Up

5.0'

10.0'

15.0'

20.0'

24.0'

Screen starts

30.0'

Screen Stops

34.0'

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D. TP 1:
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connolly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	[]
Drilling Method(s)	[]
Borehole Dia. (in.)	[]
Temporary Casing Installed? (y/n)	[]
Depth temporary casing installed	[]
Casing type/dia. (in.)	[]
Method of installing	[]
CASING PULLING	
Method employed	[]
Casing retrieved (feet)	5.75
Casing type/dia. (in.)	[]
CASING PERFORATING	
Equipment used	[]
Number of perforations/foot	[]
Size of perforations	[]
Interval perforated	[]
GROUTING	
Interval grouted (FBLS)	[]
# of batches prepared	0.0-5.4'
For each batch record:	[]
Quantity of water used (gal.)	[]
Quantity of cement used (lbs.)	[]
Cement type	[]
Quantity of bentonite used (lbs.)	[]
Quantity of calcium chloride used (lbs.)	[]
Volume of grout prepared (gal.)	[]
Volume of grout used (gal.)	0.5
COMMENTS:	

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D. TP 2:
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connolly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	[]
Drilling Method(s)	[]
Borehole Dia. (in.)	[]
Temporary Casing Installed? (y/n)	[]
Depth temporary casing installed	[]
Casing type/dia. (in.)	[]
Method of installing	[]
CASING PULLING	
Method employed	[]
Casing retrieved (feet)	5.52
Casing type/dia. (in)	0.75
CASING PERFORATING	
Equipment used	[]
Number of perforations/foot	[]
Size of perforations	[]
Interval perforated	[]
GROUTING	
Interval grouted (FBLS)	[]
# of batches prepared	[]
For each batch record:	0.0-4.0'
Quantity of water used (gal.)	[]
Quantity of cement used (lbs.)	[]
Cement type	[]
Quantity of bentonite used (lbs.)	[]
Quantity of calcium chloride used (lbs.)	[]
Volume of grout prepared (gal.)	[]
Volume of grout used (gal.)	0.5
COMMENTS:	

WELL DECOMMISSIONING RECORD

Site Name: Former Scott Aviation Site (60538931-1)	Well I.D. TP 3:
Site Location: 225 Erie St. Lancaster NY	Driller: Rob Gin; Pat Bliek; Steve Marchetti
Drilling Co.: Matrix	Inspector: Sean P. Connolly
	Date: 10/23/17

DECOMMISSIONING DATA (Fill in all that apply)	WELL SCHEMATIC*
OVERDRILLING	
Interval Drilled	<input type="text"/>
Drilling Method(s)	<input type="text"/>
Borehole Dia. (in.)	<input type="text"/>
Temporary Casing Installed? (y/n)	<input type="text"/>
Depth temporary casing installed	<input type="text"/>
Casing type/dia. (in.)	<input type="text"/>
Method of installing	<input type="text"/>
CASING PULLING	
Method employed	<input type="text"/>
Casing retrieved (feet)	<input type="text"/> 4.3
Casing type/dia. (in)	<input type="text"/> 0.25
CASING PERFORATING	
Equipment used	<input type="text"/>
Number of perforations/foot	<input type="text"/>
Size of perforations	<input type="text"/>
Interval perforated	<input type="text"/>
GROUTING	
Interval grouted (FBLS)	<input type="text"/> 0.0-3.9
# of batches prepared	<input type="text"/>
For each batch record:	
Quantity of water used (gal.)	<input type="text"/>
Quantity of cement used (lbs.)	<input type="text"/>
Cement type	<input type="text"/>
Quantity of bentonite used (lbs.)	<input type="text"/>
Quantity of calcium chloride used (lbs.)	<input type="text"/>
Volume of grout prepared (gal.)	<input type="text"/>
Volume of grout used (gal.)	<input type="text"/> 0.5
COMMENTS:	

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 Details	Box 1
Site No. C915233	
Site Name Former Scott Aviation Facility (Area 1)	
Site Address: 215 and 221 Erie Street City/Town: Lancaster County: Erie Site Acreage: 4.3125 Acres	Zip Code: 14086
Reporting Period: July 01, 2017 to July 01, 2018 April 12, 2017 to April 12, 2018	
YES NO	
1. Is the information above correct? If NO, include handwritten above or on a separate sheet.	<input type="checkbox"/> X
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/> X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/> 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?	<input type="checkbox"/> 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?	<input type="checkbox"/> X
Box 2	
YES NO	
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	X <input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	X <input type="checkbox"/>
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

- | | |
|--|---|
| <p>8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?</p> <p>If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.</p> <p>9. Are the assumptions in the Qualitative Exposure Assessment still valid?
(The Qualitative Exposure Assessment must be certified every five years)</p> <p>If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.</p> | <input type="checkbox"/> YES NO
<input checked="" type="checkbox"/> X |
|--|---|

SITE NO. C915233

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
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
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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.

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 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

YES NO

X

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or 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, P.G. at AECOM, 257 West Genesee St., 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

June 30, 2018

Date