AECOM Environment

Prepared for:
Scott Technologies, Inc.
aka Scott Figgie LLC
Princeton, NJ

Prepared by:
AECOM
Buffalo, NY
60155991
August 2015

CONSTRUCTION COMPLETION REPORT

2015 Interim Remedial Measure – Groundwater Treatment

NYSDEC Site Code No. C915233

Former Scott Aviation Facility
Lancaster, NY

AECOM Environment

Prepared for:
Scott Technologies, Inc.
aka Scott Figgie LLC
Princeton, NJ

Prepared by:
AECOM
Buffalo, NY
60155991
August 2015

CONSTRUCTION COMPLETION REPORT

2015 Interim Remedial Measure – Groundwater Treatment

NYSDEC Site Code No. C915233

Former Scott Aviation Facility
Lancaster, NY

Dino Zack, P.G.

_____
Prepared By [Name]

Scott Underhill, P.E.

_____
Reviewed By [Name]

Contents

Appendices

List of Tables

List of Figures

List of Acronyms

AAR	Alternatives Analysis Report
ABC®	Anaerobic Biochem
ABC+®	Anaerobic Biochem with ZVI
BCP	Brownfield Cleanup Program
bgs	Below Ground Surface
CAMP	Community Air Monitoring Program
CCR	Construction Completion Report
Cis-1,2-DCE	cis-1,2-dichloroethene
DER	Division of Environmental Remediation
Dhb	Dehalobacter
Dhc	Dehalococcoides
DO	Dissolved Oxygen
ERD	Enhanced Reductive Dechlorination
ft	Feet
HASP	Health and Safety Plan
HPT	Hydraulic Profiling Tool
IRM	Interim Remedial Measure
MIP	Membrane Interface Probe
µg/l	Micrograms per Liter
NFA	No Further Action
NYCRR	New York State Official Compilation of Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ND	Non-detect
ORP	Oxidation – Reduction Potential
PID	Photoionization Detector
PSI	Pounds per square inch
QAPP	Quality Assurance Project Plan
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
RI/AA	Remedial Investigation / Alternatives Analysis
RIR	Remedial Investigation Report
RAO	Remedial Action Objective
Sq. ft	Square Foot
SRI	Supplemental Remedial Investigation
SRIR	Supplemental Remedial Investigation Report
SVI	Soil Vapor Intrusion
TCE	Trichloroethene
TOGS	Technical and Operational Guidance Series
TOC	Total Organic Carbon
TVOC	Total Volatile Organic Compounds
VOC	Volatile Organic Compound
Wt. %	Weight Percent
ZVI	Zero Valent Iron

CONSTRUCTION COMPLETION

Engineering Certification

I, Scott Underhill, certify I am currently a NYS registered professional engineer and that this Construction Completion Report - 2015 Interim Remedial Measure for Groundwater Treatment for the Former Scott Aviation Facility Site, NYSDEC Site Code No. C915233, was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER10) and that all activities were performed in full accordance with DER-approved work plan and any DER-approved modifications.

Respectfully submitted,
AECOM Technical Services, Inc.

August 12, 2015
Scott Underhill Date
Registered Professional Engineer
New York License No. 075332

1.0 BACKGROUND AND SITE DESCRIPTION

On behalf of Scott Technologies, Inc. (aka Scott Figgie LLC), hereinafter "Scott", AECOM Technical Services, Inc. (AECOM) has prepared this Construction Completion Report for 2015 Interim Remedial Measure - Groundwater Treatment (CCR 2015 IRM) at NYSDEC Site Code No. C915233, under the guidance of New York State Department of Environmental Conservation's (NYSDEC) Brownfield Cleanup Program (BCP) for the former Scott Aviation Facility Area 1 site (Site) located at 225 Erie Street, Village of Lancaster, Erie County, New York. Refer to **Figure 1** for the Site location. The Site layout (**Figure 2**) depicts the three AVOX plants, as well as the Site boundary located on the west and southwest sides of Plant 1.

On September 1, 2004, the former Scott Aviation Facility was sold by Scott Technologies, Inc. (a subsidiary of Tyco International) to the current facility owner/operator, AVOX Systems Inc. (AVOX). On September 11, 2008, Scott submitted an application for the Site to enter the NYSDEC BCP, per Title 6 New York State Official Compilation of Codes, Rules, and Regulations (NYCRR) Part 375-3.4 (Applications), effective December 14, 2006. Scott applied for entry into NYSDEC BCP as a participant to investigate and remediate, as appropriate, potential areas of environmental concern associated with the Site.

A Remedial Investigation Report (RIR) (AECOM, September 1, 2011) presenting the findings of the remedial investigation (RI) was submitted to the NYSDEC and the New York State Department of Health (NYSDOH), and approved on September 15, 2011. A revised Supplemental Remedial Investigation Report (SRIR) (AECOM, April 30, 2012) presenting the findings of additional RI work performed in May, June, and October 2011 was submitted to NYSDEC and NYSDOH on April 30, 2012, and approved on June 1, 2012. A Draft Alternatives Analysis Report (AAR) (AECOM, April 2013) was developed based upon findings of the RI and the Supplemental Remedial Investigation (SRI). The Draft AAR has been completed in accordance with NYSDEC Division of Environmental Remediation (DER) Draft Brownfield Cleanup Program Guide (BCP Guide) (NYSDEC, May 2004), 6 New York State Official Compilation of Codes, Rules, and Regulations (NYCRR) Part 375 Environmental Remediation Programs (NYSDEC, December 14, 2006), and NYSDEC DER Technical Guidance for Site Investigation and Remediation (DER-10) (NYSDEC, May 3, 2010). Per NYSDEC and NYSDOH comments on the draft AAR, AECOM completed a soil vapor intrusion (SVI) investigation in July 2013 and submitted a letter report to the NYSDEC (AECOM, August 2013). A second investigation and report was completed in September 2013 to follow up on one trichloroethene (TCE) detection in soil vapor above the method detection limit (AECOM, October 2013). On June 3, 2015, AECOM submitted a work plan to address a third SVI investigation; this work was completed June 26, 2015; findings for this SVI investigation will be reported in the Final AAR.

During a conference call between NYSDEC, Tyco, AECOM, and AVOX on February 28, 2014, the NYSDEC recommended moving forward with the BCP cleanup in advance of an approved AAR by completing separate IRMs to address soil, sub-slab soil vapor, and groundwater at the Site. These IRMs included:

- Excavation and off-site disposal of soils impacted by metals in selected areas;
- Excavation and off-site disposal of subsurface soils impacted by volatile organic compounds (VOCs) in selected areas;
- Mitigation of sub-slab vapor intrusion issues at the AVOX boiler room;
- Grout sealing the joints in the on-site storm sewer to prevent groundwater infiltration;
- Installation of low-permeability barriers within the on-site storm sewer pipe bedding to prevent migration of groundwater through the bedding; and,
- Groundwater treatment of the total VOC (TVOC) plume through injections.

Remedial activities for the impacted soil, sub-slab vapor, and storm sewer sealing IRMs were described in the Final Remedial Action Work Plan - 2014 Interim Remedial Measures (2014 IRM RAWP) (AECOM, June 4, 2014). On August 14, 2014, NYSDEC provided approval to begin the described work per the 2014 IRM RAWP. Those 2014 IRM activities were initiated on September 8, 2014. Following the completion of the IRMs in November 2014, AECOM submitted the Final Construction Completion Report – 2014 Interim Remedial Measures (2014 IRM CCR) describing the 2014 IRMs (AECOM, March 27, 2015). The 2014 IRM CCR was written in compliance with DER-10 Section 5.8, *Construction Completion Report and Final Engineering Report*, and summarizes those IRM activities. The 2014 IRM CCR was approved by NYSDEC on March 27, 2015.

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 NYSDEC provided approval to begin the described work per the 2015 IRM RAWP. In accordance with the draft 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+®. This Construction Completion Report – 2015 Interim Remedial Measures – Groundwater Treatment (2015 IRM CCR) describes work completed to remediate VOCs in Site groundwater.

2.0 SUMMARY OF SITE REMEDY

Several Site investigations and prior IRMs performed in 2005 and 2014 have been conducted at the Site (refer to Section 2.0 of the 2015 IRM RAWP for referenced project documents). The objectives of the groundwater IRM described in this CCR were to address the presence of VOCs identified at the Site in the RIR and SRI via in-situ remediation by ZVI enhanced ERD, the recommended alternative proposed for groundwater remediation in the draft AAR.

Analytical data for groundwater samples collected from the shallow and deep overburden wells and stormwater system identified the presence of VOCs exceeding NYSDEC Technical and Operational Guidance Series 1.1.1 Standards for the Protection of Drinking Water (TOGS 1.1.1) (NYSDEC, June 1998). Refer to **Figure 3** for the location of monitoring wells, piezometers and the portion of the stormwater system within the BCP area. There were no exceedances of TOGS 1.1.1, protection of drinking water standards in the bedrock groundwater. The most frequently detected VOCs in shallow groundwater were TCE and cis-1,2-dichloroethene (cis-1,2-DCE). The highest VOC concentrations were detected in the vicinity of the previously-excavated source area during the 2005 IRM and 2014 IRM; refer to **Table 1** for historical groundwater sampling VOC results and **Table 2** for historical stormwater system sampling VOC results. At perimeter wells, VOCs were either not detected or were detected at concentrations below or slightly above the TOGS 1.1.1 standard for TCE. The delineation of TCE is complete to the north, south, east and west (to northeast corner of building) of the historic source area.

2.1 Remedial Action Objectives - Groundwater

Remedial action objectives (RAO) for Site groundwater are based on TOGS 1.1.1. The maximum detected concentrations of VOCs in Site groundwater that exceeded NYSDEC Groundwater Guidance or Standards are summarized in the table below (data collected during the RI and SRI).

Constituent of Concern	***TOGS 1.1.1 Groundwater Guidance (g) or Standard (s) Value (µg/L)***	***Maximum Detected Conc. (µg/L)***	**Sample Location**	**Date of Maximum Detection**
Benzene	1 s	34 J	A1-GP13-S	8/3/10
Toluene	5 s	1,500	A1-GP01-S	6/22/10
Ethylbenzene	5 s	270	MW-38D	6/22/10
Xylenes (total)	5 s	2,000	A1-GP13-S	8/3/10
1,1,1-Trichloroethane	5 s	84,000	A1-GP10-S	8/3/10
1,1,2-Trichloro-1,2,2-trifluoroethane	5 s	4,400	A1-GP01-S	6/22/10
1,1,2-Trichloroethane	1 s	240 J	MW-42S	4/7/11

Constituent of Concern	*TOGS 1.1.1 Groundwater Guidance (g) or Standard (s) Value (µg/L)*	*Maximum Detected Conc. (µg/L)*	Sample Location	Date of Maximum Detection
1,1-Dichloroethane	5 s	48,000	A1-GP10-S	8/3/10
1,1-Dichloroethene	5 s	6,100	MW-42S	4/7/11
1,2-Dichloroethane	0.6 s	77	A1-GP10-S	6/21/10
2-Butanone	50 g	510 J	MW-42S	4/7/11
Acetone	50 g	400	MW-42S	4/7/11
Chloroethane	5 s	180	A1-GP13-S	8/3/10
cis-1,2-Dichloroethene	5 s	22,000	A1-GP01-S	6/22/10
Dichlorodifluoromethane	5 s	33 J	A1-GP06-S	8/4/10
Methylene Chloride	5 s	17	A1-GP10-S	6/21/10
Tetrachloroethene	5 s	230 J	MW-38D	6/22/10
trans-1,2-Dichloroethene	5 s	190 J	A1-GP02-S	8/4/10
Trichloroethene	5 s	20,000	A1-GP02-S	8/4/10
Vinyl Chloride	2 s	2,200	A1-GP13-S	8/3/10

µg/L – microgram per liter J – estimated concentration

The RAOs for the groundwater remediation injection include:

- Achieve satisfactory distribution of the reductive amendment (ABC+®) solution into the subsurface;
- Establish and maintain anaerobic (reducing) conditions in the subsurface through the targeted treatment area;
- Control potential off-site migration of VOCs within and along the storm sewer pipe line;
- Reduce VOC concentrations in groundwater to meet RAOs; and,
- Obtain No Further Action (NFA) status for the Site.

To achieve the RAOs above, the selected ERD amendment for the Site is ABC+®. The ABC+® provides short-term and long-term nutrients to support anaerobic bacteria growth, which also assists in creating a reducing environment. ABC® contains soluble lactic acid and a phosphate buffer that maintains the pH in a range that is best suited for microbial growth, and provides an important micronutrient for bioremediation. To further enhance the in-situ treatment, ZVI was added to the ABC® mixture; the combination of ABC® with ZVI is called ABC+® (ABC® lactate formulation with ZVI). A detailed description of the ZVI ERD process is located in Section 3 of the 2015 IRM RAWP.

3.0 DESCRIPTION OF REMEDIAL ACTIONS COMPLETED

The 2015 IRM for groundwater for the Site was completed under the oversight of AECOM, in accordance with DER-10 and supporting documentation as discussed in Section 3.0 of the 2015 IRM RAWP report. In November 2014, baseline groundwater samples were collected. Between March 2015 and May 2015, the groundwater remedy proposed in the 2015 IRM RAWP was completed within the footprint of the shallow and deep TVOC groundwater plume.

3.1 Baseline Groundwater Sampling and Analysis

3.1.1 November 2014 Sampling

Baseline groundwater sampling and analysis was conducted at the Site in November 2014 per the Membrane Interface Probe / Hydraulic Profiling Tool (MIP/HPT) and Baseline Sampling Work Plan (AECOM, October 2014) to assess whether on-Site conditions were acceptable for anaerobic degradation.

Groundwater samples were collected from six existing upgradient, source area, and downgradient monitoring wells, in the shallow and deep overburden units, per the table below (note: TVOC data is from August 2010):

Monitoring Well Location	Shallow Overburden Well	Deep Overburden Well
Upgradient	A1-GP18 [ND TVOC]	MW-40 [555 µg/L TVOC]
Source Area	A1-GP10 [135,900 µg/L TVOC]	MW-38D [15,490 µg/L TVOC]
Downgradient	A1-GP06 [7,469 µg/L TVOC]	MW-35D [0.69 µg/L TVOC]

ND – Non-detect

Groundwater samples were collected using low-flow methods and analyzed for monitored natural attenuation (MNA) parameters including sulfate, iron (ferrous), phosphorus, biological demand, carbon demand, nitrogen (nitrate, nitrite, ammonia), alkalinity, methane, carbon dioxide, and manganese; the MNA analytical results are summarized in **Table 3**. Field parameters were monitored during sample collection for dissolved oxygen (DO), oxygen reduction potential (ORP), conductivity, and pH.

The baseline data indicated pH within a neutral range of 6.9 to 8.3, and therefore pretreatment to adjust the pH was not necessary at the Site. For optimal anaerobic degradation to occur, more energetically favorable electron acceptors such as oxygen, nitrate, manganese, ferric iron or sulfate must first be consumed. As shown in the MNA data, these electron acceptors were present in both deep and shallow monitoring wells at the Site, with the exception of nitrate in all wells and oxygen in the deep overburden wells. Phosphorus was present in low concentrations in three of the wells that were sampled, but was not detected in the remaining three wells sampled.

3.1.2 March 2015 Pre-Injection Groundwater Sampling

Pre-Injection groundwater sampling took place on March 10 through 12, 2015. A total of 15 wells were sampled via low-flow methods as part of this sampling event. Samples were analyzed for VOCs and total organic carbon (TOC); refer to **Table 4** for the pre-injection and post-injection groundwater monitoring schedule. Nine wells were selected from the shallow zone (MW-35S, MW-36S, MW-42S, MW-43S, A1-GP02, A1-GP06 , A1-GP-10, A1-GP15, and A1-GP18) and six wells were selected from the deep zone (MW-35D, MW-36D, MW-37D, MW-38D, MW-39D, and MW-40D). Refer to **Table 5** for a summary of the pre-injection analytical results, **Appendix A** for sample logs, and **Appendix B** for the laboratory data report. These same wells will be sampled for the post-injection events.

3.1.3 Laboratory Bacteria Testing

During November 2014, Bio-Trap® samplers were deployed in MW-42S (shallow well) and MW-38D (deep well) to characterize the pre-existing microbial community per the MIP/HPT and Baseline Sampling Work Plan (AECOM, October 2014). Results from the samples indicated that reductive dechlorinating bacteria were present at suitable concentrations in the deep overburden in the groundwater near MW-38D. Dehalococcoides (Dhc) bacteria were measured on the order of 10^4 cells/milliliter in MW-38D. Dhc were not detected in the sample from shallow overburden well MW-42S. This result was anticipated, because elevated DO concentrations and ORP levels in the shallow overburden inhibit the growth of anaerobic Dhc bacteria. However, the injection of ABC+® was expected to lower the DO and ORP levels in the shallow zone, resulting in a transition to the reducing conditions which promote Dhc and Dehalobacter (Dhb) growth.

Quantification of dehalogenase functional genes is used to more definitely confirm that Dhc cells are living and active, and the potential for complete degradation to ethene. The tceA gene encodes the enzyme TCE reductase, which is responsible for the reduction of TCE to cis-1,2-DCE. Likewise, the bvcA and vcrA genes encode the vinyl chloride reductase enzyme, which is responsible for the degradation of cis-1,2-DCE and vinyl chloride to ethene. All three genes were found in significant concentrations in the Bio-Trap sample from MW-38D. Results are summarized in **Table 6**. Based on the data, significant concentrations of Dhc bacteria are already present in groundwater at the Site where reducing conditions are already present, and the enzymes responsible for complete degradation are being expressed. As a result, bioaugmentation in the form of Dhc and/or Dhb injections was not proposed for the initial injection. Bioaugmentation will be considered at a later time if the degradation activity of pre-existing reductive dechlorinating bacteria is not sufficiently stimulated in the in-situ treatments zones by the injection of ABC+®.

3.2 Injection Methods

Per the 2015 IRM RAWP, the treatment area was divided into two target depths zones: a 12,600 square foot (sq. ft) shallow injection zone and a 20,025 sq. ft deep injection zone. In general, the shallow zone is defined as groundwater from 5 to 15 feet below ground surface (bgs), and the deep zone is defined as groundwater from 15 to 25 feet bgs. Forty-seven “shallow only” injection locations and 89 “shallow and deep” injection locations were proposed in the 2015 IRM RAWP. In addition, six injection locations were proposed to target the storm sewer bedding outside the footprint of the shallow and deep TVOC groundwater plume. Refer to **Figure 4** for locations of completed of injection points. Injection of ABC+® was performed through 1.5-inch injection rods penetrated into the subsurface with a direct-push Geoprobe® rig. Two Geoprobe® rigs were used concurrently for the program: a track-mounted Geoprobe® 54UD was run by contractor Matrix Environmental Technologies Inc. (METI) out of Orchard Park, New York and the second rig was a truck mounted Geoprobe® 5410 operated by METI’s subcontractor Redox Tech, LLC (Redox) from Attleboro,

Massachusetts. In general, injection points in the asphalt areas behind Plant 1 were completed by Redox, and injection points in the grassy areas west of the Plant 1 fencing were completed by METI's track-mounted rig. Direct-push injections were selected for the remedy because no new injection well construction would be required (eliminating the need for well installation and abandonment) and for greater flexibility in moving injection locations. In addition, because injection of a ZVI solution was part of the remedy, direct-push injections were necessary as the ZVI would clog well screens.

All ABC® (without ZVI) and ABC+® (with ZVI) were mixed by subcontractor Redox personnel. To create the ABC+®, ABC® was measured out to the proper ratio for the intended location and mixed in a 500 gallon poly tank with municipal water from the AVOX Plant 1 facility, creating the desired total number of gallons for injection. The water/ABC® mixture for a particular interval was then transferred to the hopper of a chem-grout mixer where the ZVI was then added immediately prior to injection. "Shallow only" injection points received 191 pounds of ZVI per injection point. "Shallow and deep" injection points received 324 pounds of ZVI per injection point. The total amount of ZVI was divided by the number of intervals to be injected and the amount for each interval was weighed out in a bucket via a digital scale. The portioned amounts of ZVI for each interval were added to the chem-grout hoppers as a single batch along with a small amount of guar gum powder to help keep the ZVI in suspension during the injection process. The portioned amount for that particular interval was then injected. The chem-grout mixer had two hoppers, allowing for injection from one hopper while re-filling the second for mix preparation of the next interval.

Injections were completed using the "bottom-up" method as described in the 2015 IRM RAWP (AECOM, March 2015); the bottom-up method was proposed based upon field conditions indicating silt and clay soils present at the site. The "top down" method was tested during the first day of injections; however, this method resulted in surface breakthrough from the shallow intervals. To perform the "bottom up" injections, injection tooling with a removable tip was pushed to the deepest injection interval. The rods were raised up a few inches to remove the tip and allow for injection product to flow. Pressures were monitored during injection, and were typically consistent throughout the site remaining between 25 and 50 pounds per square inch (psi). Average target injection speed for each location was approximately five gallons per minute. Following completion of an injection point, rods were left in place until back pressures equalized, typically one half to one full day following injection. Upon removal of the rods the injection holes were backfilled with CETCO® granular bentonite and finished with an asphalt hole-patch if located in a paved area.

At each injection location, several discrete injection intervals were performed; refer to **Table 7** for injection depth intervals. Determination of the number and spacing of intervals depended on the vertical remediation target thickness and soil hydraulic conductivity within the contaminated zone. During drilling and injecting, field observations necessitated that some intervals (especially shallow injection intervals) were eliminated at some locations. The volume for skipped intervals was divided among the remaining intervals, injected into the deepest interval, or eliminated altogether, depending on field conditions; refer to **Table 8** for a list of borings not completed with associated rationales. Injection logs are included in **Appendix C**.

In general, injection points were spaced 15 feet apart. This spacing was selected based on observed subsurface stratigraphy from soil boring logs and from an injection pilot study on an adjacent AVOX property. At times, injection points had to be off-set due to utilities, buildings, subsurface refusal, and other field conditions. If a point had to be moved, it was moved toward the center of the plume, to the extent practical.

Injection intervals and locations of “shallow only” and “deep and shallow” injection points were based upon data obtained during a MIP/HPT pre-design investigation performed in November 2014; refer to the 2015 IRM RAWP for MIP/HPT data.

3.2.1 Shallow (Only) Zone Injection

A total of 41 of the 47 planned injection point locations were successfully completed in the “shallow only” zone. Six of the 47 planned injection locations were not completed to avoid interference with utilities or as a result of observed breakthrough along the south and west sections of the injection grid; refer to **Figure 4** for locations of completed injection points. Refer to **Table 7** for completed injection points, injection intervals, and injection volumes. Approximately 23,370 pounds of ABC+® were injected to treat the shallow (only) zone at approximately 570 pounds of ABC+® per point (67 percent by weight [wt. %] ABC® and 33 wt. % ZVI). Mixed at approximately a 15 wt. % solution, this resulted in approximately 16,000 gallons of solution. Each injection point received approximately 390 gallons, divided up among intervals that had the highest permeability as listed below. The injection design targeted these vertical intervals. The injection intervals listed in the table below were based on the 2014 MIP/HPT pre-design investigation.

Target Injection Zones for Shallow (Only) Overburden	**Depths of Injections**
MIP-2 Zone	7, 8, 11, and 12 feet below ground surface (ft bgs)
MIP-3 Zone	5, 7, 9, 10, 12, 13, and 14 ft bgs
MIP-4 Zone	4, 6, 8, and 11 ft bgs
MIP-6 Zone	3, 4, 5, 6, 7, 8, 9, 10, 12, and 14 ft bgs
MIP-7 Zone	7, 8, and 10 ft bgs
MIP-9 Zone	3, 5, and 8 ft bgs
MIP-10 Zone	8, 10, 12, and 14 ft bgs
MIP-11 Zone	2, 5, 6, 8, 10, 11, 12, 13, and 14 ft bgs

3.2.2 Shallow and Deep Zone Injection

Injections targeting the combined shallow and deep zone at the Site were completed between April 13, 2015 and May 5, 2015. A total of 79 of the 89 planned injection points were successfully completed in the combined “shallow and deep” zone. Ten of the 89 planned injection locations were not completed to avoid interference with utilities or as a result of observed breakthrough along the south and west sections of the injection grid; refer to **Figure 4** for locations of completed injection points. Refer to **Table 7** for completed injection points, injection intervals, and injection volumes. Approximately 59,800 pounds of ABC+® was required to treat the shallow and deep zone at 757 pounds of ABC+® per point (57 wt. % ABC® and 43 wt. % ZVI).

Mixed at approximately a 15 wt. % solution, this resulted in approximately 40,300 gallons of solution. Each injection point received approximately 510 gallons, divided up among intervals that had the highest permeability as listed below. The injection intervals listed below were based on the 2014 MIP/HPT pre-design investigation.

Target Injection Zones for Shallow + Deep Overburden	Depths of Injections
MIP-1 Zone	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18 and 20 ft bgs
MIP-2 Zone	7, 8, 11, 12, 13, 14, 15, 16, 18, and 20 ft bgs
MIP-3 Zone	5, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19 and 20 ft bgs
MIP-8 Zone	4, 6 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20 ft bgs
MIP-10 Zone	8, 10, 12, 13,14, 15, 16, 17, 18, 19, and 20 ft bgs
MIP-11 Zone	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20 and 22 ft bgs

Note that the MIP-2, MIP-3, MIP-10, and MIP-11 injection zones contain both “shallow” and “shallow and deep” injection points. This is because the MIP/HPT injection zone is determined by the geology, while the specific injection depths are determined by both the geology and the extent of vertical contamination.

3.2.3 Storm Sewer Bedding Injection

Per the 2015 IRM RAWP, additional injection points were completed adjacent to the storm sewer system to reduce VOCs in the vicinity of the sewer pipe and to apply treatment into the storm sewer pipe bedding. The storm sewer targeted injections occurred on April 13, 2015 and April 14, 2015. Injection points were performed approximately five to six feet offset (upgradient) from the storm sewer line to establish a biobarrier that groundwater must flow through before entering the storm sewer bedding. Injection locations within the footprint of the TVOC plume that were adjacent to the storm sewer also addressed the storm sewer bedding. Injections associated with the storm sewer bedding were completed between 4 and 6 ft bgs. To protect the existing subsurface utility, injections immediately adjacent to the storm sewer consisted of only ABC® (without ZVI). One location received the planned 390 gallons of injectate; two other locations received only 50 gallons each to limit the volume of injectate breaking through to the ground surface. Refer to **Figure 4** for locations of injection points, and to **Table 7** for a summary of injection depths, volumes, and injectate mixture.

Monitoring of piezometers within the stormwater system pipe bedding, and visual inspections of catch-basins and the manhole located to the south side of Erie Street, were performed to assess the migration of ABC® substrate injectate in those areas during field activities. Diluted injectate was observed in catch basin CB-1 and contained on Site; refer to **Figure 3** for the location catch basin CB-1.

METI installed a temporary plug in the storm sewer pipe at the downgradient side of catch basin CB-1 and placed a submersible pump within the sump at the catch basin. With NYSDEC concurrence, when injectate was observed in catch basin CB-1, the stormwater with visible injectate was pumped from the storm sewer catch basin sump to a 500 gallon poly tank, mixed with ABC+® and re-injected.

3.3 Utility Survey

On January 19, 2015, Cardno TBE (Syracuse, NY) completed a geophysical survey utilizing ground penetrating radar and EM-31 to locate utilities at the Site; refer to the 2015 IRM RAWP for the geophysical report.

Drill rig operators METI and Redox called Dig Safe (811) for utility mark-out for underground utilities on the Site prior to intrusive activities. Injection points were also cleared by the property owner (AVOX). Prior to injection activities, an AECOM New York state-licensed land surveyor re-located the utility markings from the geophysical survey prior to and throughout the injection activity.

3.4 Survey

An AECOM New York state-licensed land surveyor marked-out all injection points prior to drilling for injection, and re-surveyed the actual injection locations following injection point completion. See **Figure 4** for actual injection locations.

3.5 Post-Injection Groundwater Performance Monitoring

Post-injection groundwater sampling was performed in late July 2015. Groundwater sampling used low-flow techniques in accordance with the approved Remedial Investigation/Alternatives Analysis (RI/AA) Work Plan (February 2010) and the letter Addendum to the RI/AA Work Plan (May 13, 2010). Post-injection performance monitoring will evaluate TOC concentrations, contaminant concentrations and transformations, distribution of the ABC+® in the subsurface, monitor groundwater geochemistry, and document the initial extent of VOC degradation. Groundwater quality parameters were measured in the field, with particular attention to pH, specific conductance, ORP, and DO, which will be used to evaluate the generation and distribution of reducing conditions. Discrete samples were collected and analyzed for MNA parameters including sulfate, iron (ferrous), phosphorus, biological demand, carbon demand, nitrogen (nitrate, nitrite, ammonia), alkalinity, methane, carbon dioxide, and manganese. Two Bio-Trap® samplers were also deployed to measure changes in Dhc compared to baseline values.

Table 4 presents the wells and monitoring parameters for the remedial performance monitoring (i.e., pre-injection and post-injection performance monitoring). Refer to **Figure 5** and **Figure 6** for locations of the groundwater monitoring wells included in the performance monitoring program with respect to the pre-injection shallow overburden and deep overburden groundwater TVOC plumes respectively. Groundwater data from the July 2015 post-injection sampling event will be presented in the final AAR. Future post-injection sampling will be described in the Site Management Plan.

3.6 Temporary Piezometer Installation

On April 13, 2015, prior to the start of injection in the storm sewer bedding, an additional temporary piezometer, TP-6, was installed in the northeastern corner of the Plant 1 visitor parking lot area; refer to **Figure 3** for the location of temporary piezometer TP-6. TP-6 was installed in the bedding gravel adjacent to the storm sewer as a 1-inch diameter polyvinyl chloride piezometer with a 5 ft screen from 4 to 9 ft bgs. Refer to **Appendix D** for the TP-6 boring log. As stated in Section 3.2.3, the purpose of this additional piezometer was for observation of the water in the bedding gravel during the ABC® storm sewer injection portion of the IRM and for future sampling to measure the performance of the injection program. This piezometer provided an observation point in the bedding gravel between CB-1 and the storm sewer manhole on the south side of Erie Street.

4.0 GOVERNING DOCUMENTS

4.1 Site Specific Health & Safety Plan

The Health and Safety Plan (HASP) presented in the RI/AA Work Plan and associated amendment to the HASP (i.e., Task Hazard Analysis) as included in the 2015 IRM RAWP were followed for all remedial activities completed at the Site. In additional, all workers and visitors were required to complete the AVOX health and safety training.

4.2 Site-specific Quality Assurance Project Plan

The Quality Assurance Project Plan (QAPP) included in the RI/AA Work Plan was followed for this work. The QAPP described the specific policies, objectives, organization, functional activities and quality assurance/quality control activities designed to achieve the project data quality objectives.

4.3 Waste Management Plan

IRM-derived waste consisted of empty totes, empty bags, pallets, personal protective equipment, and miscellaneous trash. The empty totes are re-usable and were removed from the Site on May 5, 2015 by the subcontractor for re-use. IRM-derived waste was disposed of as municipal trash, as none of the waste came in contact with contaminated materials in the subsurface. Purge water from pre-investigation groundwater sampling was managed per the approved RI/AA work plan. Stormwater was pumped from the storm sewer catch basin sump at CB-1 when injectate was observed in the sewer piping; this water was mixed with ABC+® and re-injected.

4.4 Community Air Monitoring Plan

The community air monitoring plan (CAMP) was developed in accordance with the NYSDOH Generic CAMP and is summarized in Section 4 of the 2015 IRM RAWP. The CAMP included daily VOC sampling of upwind, downwind, and adjacent to a neighboring residential property to fulfill perimeter community air monitoring requirements. Refer to Section 5.5 of this report for a discussion of CAMP data.

5.0 REMEDIAL PROGRAM ELEMENTS

5.1 Contractors and Consultants

METI implemented IRM drilling, injection, and site restoration work. METI's subcontractor, Redox, performed IRM drilling, injection, and injectate mixing work. TestAmerica Laboratories, Inc. (Amherst, NY) performed laboratory analysis of the groundwater samples. Dino Zack, P.G. (AECOM) managed the project and Scott Underhill, P.E. (AECOM) was the Engineer of Record for this project. Remedial coordination and oversight was performed by AECOM out of the Buffalo, New York office.

5.2 Site Preparation

Prior to intrusive work, DigSafeNY was notified. On April 13, 2015 METI, Redox, and AECOM mobilized to the site to prepare equipment and begin injection work. Field equipment was mobilized to the Site on April 13, 2015 and April 14, 2015. METI mobilized a field trailer and track-mounted Geoprobe® 54UD. Redox mobilized a truck-mounted Geoprobe® 5410, two chem-grout mixers, and took delivery of the first half of injection chemicals (ABC® in 3,100 pound totes, ZVI in 1,000 kilogram supersacks), a pallet of granular bentonite in 50 pound bags, and guar gum powder (used to keep the ZVI in suspension for injection) in 50 pound bags. On April 16, 2015 METI performed brush clearing in the wooded and brush covered portions of the investigative area.

5.3 General Site Controls

The Site is located on private property owned by AVOX. The injection was performed on the south side of AVOX Plant 1, and to the west of AVOX Plant 1 in a vacant lot (owned by AVOX); both lots are zoned for commercial use. A perimeter fence with locking gates enclosed Plant 1; there is no perimeter fence around the vacant lot. At the end of each day and over weekends, equipment and materials were stored behind Plant 1 and/or locked in storage boxes located on the visitor's parking lot. Immediately following arrival on Site, all personnel signed in and received an AVOX visitor's badge. At the end of each work day, personnel signed out and returned their badge. Exclusion zones around each of the Geoprobes® were established during injection activities.

5.4 Nuisance Controls

Truck routing was arranged to minimize local impacts and to limit travel through residential areas. VOC and odor controls were arranged onsite; no CAMP exceedances or odor complaints were observed throughout the IRM activities. Following the injection activity, topsoil was spread across the unpaved portion of the Site and seeded, to minimize potential odors from injectate that broke through to the ground surface.

5.5 Community Air Monitoring Program Results

Air monitoring VOC data were collected using a Photoionization Detector (PID) by AECOM throughout the IRM activities conducted at the Site. The CAMP data summary report is provided in **Appendix E**. No readings above background were noted.

5.6 Reporting

Weekly field activity reports were completed and submitted to the project team and stakeholders via electronic mail following the end of each work week. Weekly field summary reports included a detailed description of work performed during the week as well as tracking figures and data summary tables; weekly field summary reports are included in **Appendix F**. Photographs were collected during the program; the photograph log is included in **Appendix G**.

5.7 Restoration

Following injections in the IRM areas, the disturbed areas were restored to pre-excavation conditions.

Boreholes were backfilled with CETCO® granular bentonite. Boreholes located in paved areas were backfilled with bentonite and then finished at the surface with asphalt hole-patch. Ruts and disturbed areas in grassy areas were backfilled with topsoil, graded, seeded and mulched. Refer to the 2014 IRM CCR for sample data for top soil used for restoration activities.

An area of old asphalt to the south of Plant 1 was broken up during site activities. This area received a new crushed stone pad per the direction of AVOX.

6.0 DEVIATIONS

6.1 Breakthrough

When surface breakthrough at the shallowest intervals occurred at multiple locations, the shallowest intervals for some locations were removed from the injection plan and the volume for those intervals was divided among the remaining intervals. To reduce the amount of potential breakthrough, the two Geoprobe® rigs were injecting in separate areas of the site, and in areas with consistent breakthrough, operators avoided drilling and injecting at two locations adjacent to each consecutively. Refer to **Table 8** for a list of deviations from the 2015 IRM RAWP.

Breakthrough to the ground surface was noted during the injections at a variety of injection depths, and often following the same preferential pathways. Breakthrough sometimes came to the surface after the injection was complete as the formation was pressurized. Injection breakthrough was observed as close as immediately adjacent to the boring, and as far away as 50 feet from the injection site. Injection was paused if moderate or severe breakthrough was observed. Drillers would then move to another location and let the area around the affected boring equilibrate, coming back later in the day or the next day to inject the remaining intervals. In some cases of persistent severe breakthrough, injection was halted at the location and the remaining intervals were not injected.

In the grassy area west of Plant 1, some injectate from the shallow injection intervals closest to the storm drain migrated into the drainage pipe or to catch basin CB-W from surface breakthrough. When injection product was observed flowing through the storm sewer, water was pumped from CB-1 (which was blocked off) into a 500 gallon poly tank; refer to **Figure 3** for the location of catch basins CB-W and CB-1. To mitigate this kind of breakthrough, intervals less than five feet from the storm sewer were eliminated. Throughout the remedy, AECOM personnel performed checks of the Plant 1 buildings, pits, trenches, sumps, etc., when drilling near foundations. No indication of injection product was observed inside any of the buildings. If breakthrough was observed near a catch basin, that catch basin was covered with plastic to block entry of the injectate into the catch basin. If the catch basin could not be covered because it would be otherwise compromised (e.g., CB-W), the storm sewer was pumped at CB-1 to intercept storm water mixed with injection fluid to prevent the fluids from migrating to the storm sewer at Erie Street.

7.0 REFERENCES

AECOM. March 2015. "Final Remedial Action Work Plan - 2015 Interim Remedial Measure – Groundwater Treatment, Former Scott Aviation Facility Area 1, Lancaster New York".

AECOM. March 2015. "Final Construction Completion Report – 2014 Interim Remedial Measures, Former Scott Aviation Facility Area 1, Lancaster New York".

AECOM. October 2014. "Membrane Interface Probe / Hydraulic Profiling Tool (MIP/HPT) and Baseline Sampling Work, Former Scott Aviation Facility Area 1, Lancaster New York".

AECOM. June 2014. "Draft Interim Remedial Measures Action Work Plan, Former Scott Aviation Facility Area 1, Lancaster New York".

AECOM. October 2013. "Soil Vapor Intrusion Evaluation – Supplemental Soil and Groundwater Data Report", Former Scott Aviation Facility Area 1, Lancaster New York".

AECOM. August 2013. "Soil Vapor Intrusion Evaluation", Former Scott Aviation Facility Area 1, Lancaster New York".

AECOM. April 2013. "Draft Alternatives Analysis Report, Former Scott Aviation Facility Area 1, Lancaster New York".

AECOM. April 2012. "Supplemental Remedial Investigation, Former Scott Aviation Facility Area 1, Lancaster New York".

AECOM. September 2011. "Remedial Investigation Report, Former Scott Aviation Facility Area 1, Lancaster New York".

AECOM. May 2010. "Addendum to Remedial Investigation/Alternatives Analysis Work Plan, Former Scott Aviation Facility Area 1, Lancaster New York".

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

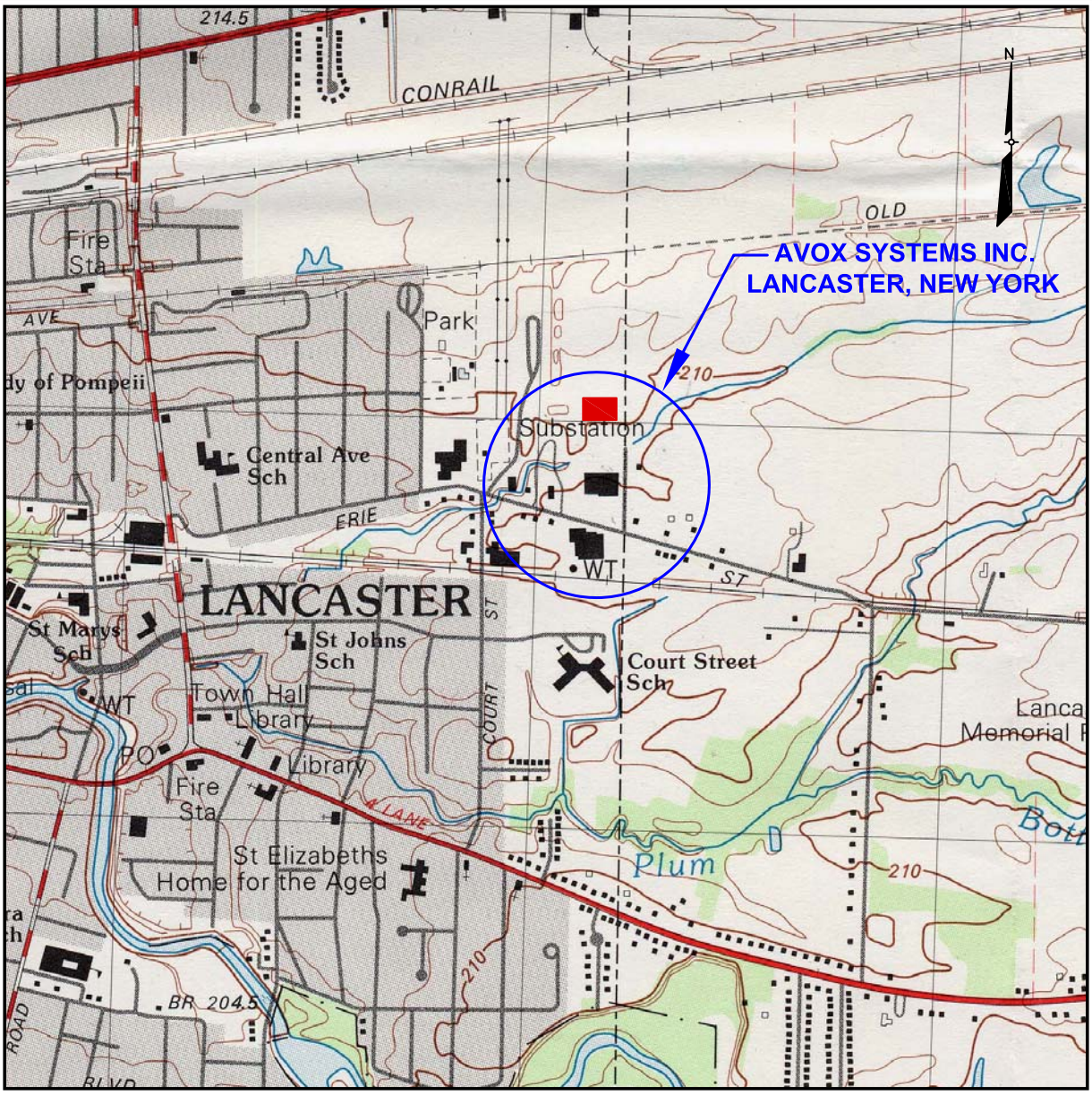
AECOM. February 2010. "Remedial Investigation/Alternatives Analysis Work Plan, Former Scott Aviation Facility Area 1, Lancaster New York".

NYSDEC. 2006. Rules and Regulations, 6 NYCRR Subpart 375-6, Remedial Program Soil Cleanup Objectives, dated December 14, 2006.

NYSDEC. May 2004. “Draft Brownfield Cleanup Program Guide”.

NYSDEC. June 1998. “NYSDEC TOGS 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitation”, updated 1999, 2000, and 2004.

Figures



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

LEGEND

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

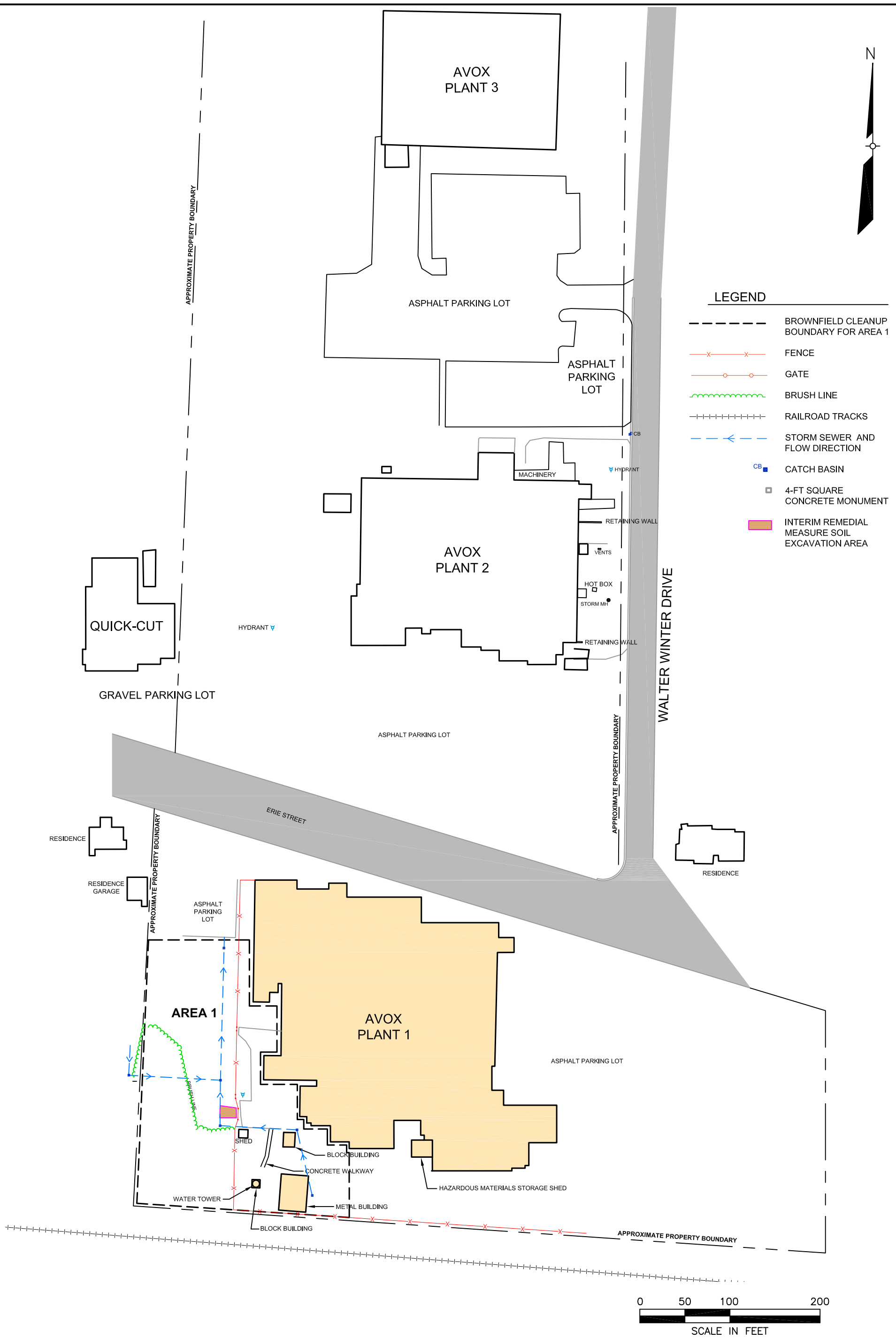
0 1000 2000
SCALE IN FEET

AECOM

FIGURE 1
SITE LOCATION MAP

FORMER SCOTT AVIATION FACILITY AREA 1
LANCASTER, NEW YORK

L:\work\60147012\CADD\60147012_063 Site Loc Map.dwg, 2/5/2015 11:06:33 AM, Splawnm

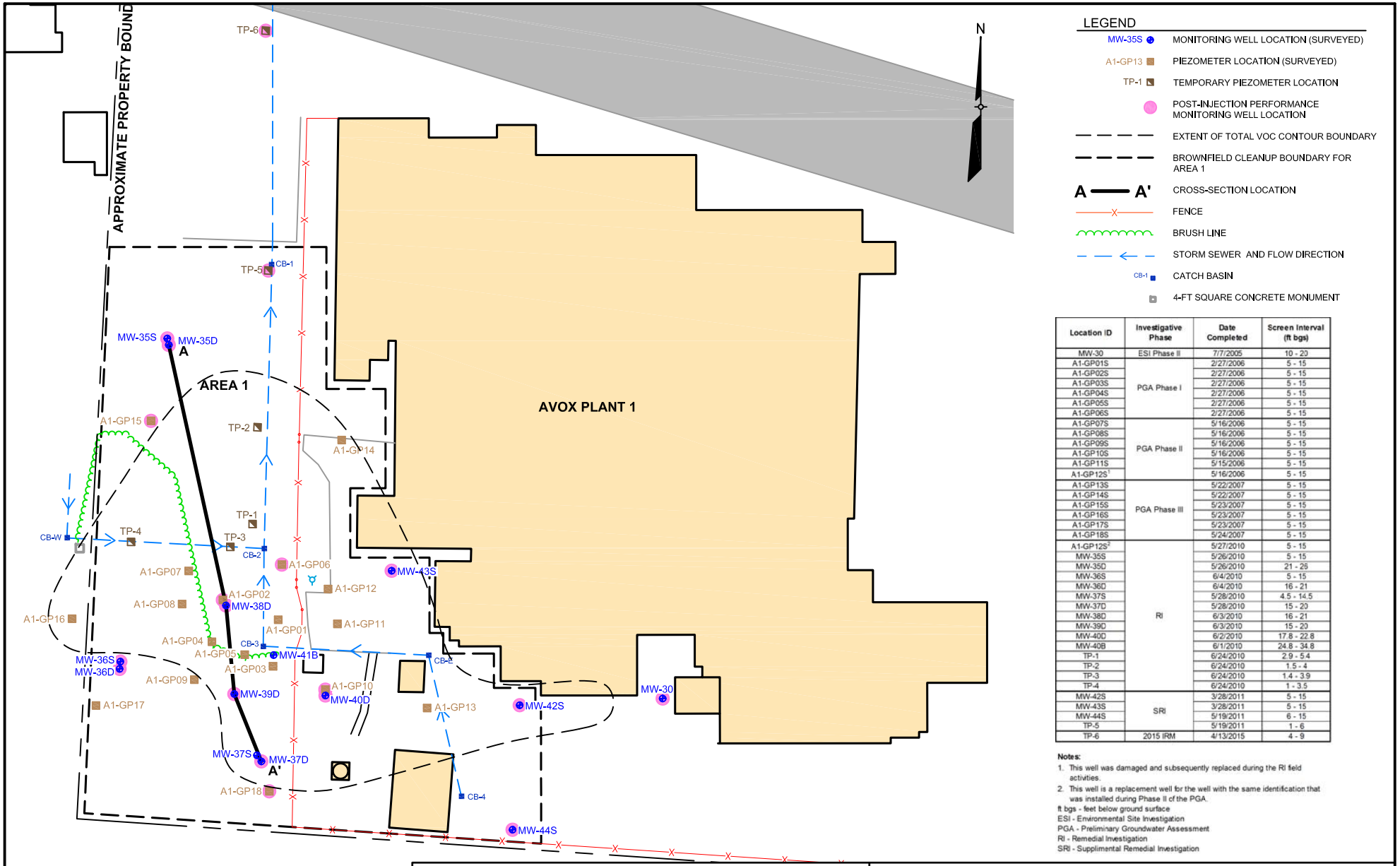


AECOM

FIGURE 2
FACILITY LAYOUT MAP

FORMER SCOTT AVIATION FACILITY AREA 1
LANCASTER, NEW YORK

L:\work\60147012\CADD\60147012_064 Facility Layout Map.dwg, 2/25/2015 10:02:22 AM, Splawnm



LEGEND

- MW-35S — MONITORING WELL LOCATION (SURVEYED)
- A1-GP13 — PIEZOMETER LOCATION (SURVEYED)
- TP-1 — TEMPORARY PIEZOMETER LOCATION
- POST-INJECTION PERFORMANCE MONITORING WELL LOCATION
- EXTENT OF TOTAL VOC CONTOUR BOUNDARY
- BROWNFIELD CLEANUP BOUNDARY FOR AREA 1
- A — A' CROSS-SECTION LOCATION
- FENCE
- BRUSH LINE
- STORM SEWER AND FLOW DIRECTION
- CB-1 CATCH BASIN
- 4-FT SQUARE CONCRETE MONUMENT

Location ID	Investigative Phase	Date Completed	Screen Interval (ft bgs)
MW-30	ESI Phase II	7/7/2005	10 - 20
A1-GP01S	PGA Phase I	2/27/2006	5 - 15
A1-GP02S		2/27/2006	5 - 15
A1-GP03S		2/27/2006	5 - 15
A1-GP04S		2/27/2006	5 - 15
A1-GP05S		2/27/2006	5 - 15
A1-GP06S		2/27/2006	5 - 15
A1-GP07S	PGA Phase II	5/16/2006	5 - 15
A1-GP08S		5/16/2006	5 - 15
A1-GP09S		5/16/2006	5 - 15
A1-GP10S		5/16/2006	5 - 15
A1-GP11S		5/15/2006	5 - 15
A1-GP12S[1]		5/16/2006	5 - 15
A1-GP13S	PGA Phase III	5/22/2007	5 - 15
A1-GP14S		5/22/2007	5 - 15
A1-GP15S		5/23/2007	5 - 15
A1-GP16S		5/23/2007	5 - 15
A1-GP17S		5/23/2007	5 - 15
A1-GP18S		5/24/2007	5 - 15
A1-GP12S[2]	RI	5/27/2010	5 - 15
MW-35S		5/26/2010	5 - 15
MW-35D		5/26/2010	21 - 26
MW-36S		6/4/2010	5 - 15
MW-36D		6/4/2010	16 - 21
MW-37S		5/28/2010	4.5 - 14.5
MW-37D		5/28/2010	15 - 20
MW-38D		6/3/2010	16 - 21
MW-39D		6/3/2010	15 - 20
MW-40D		6/2/2010	17.8 - 22.8
MW-40B		6/1/2010	24.8 - 34.8
TP-1		6/24/2010	2.9 - 5.4
TP-2		6/24/2010	1.5 - 4
TP-3		6/24/2010	1.4 - 3.9
TP-4		6/24/2010	1 - 3.5
MW-42S	SRI	3/28/2011	5 - 15
MW-43S		3/28/2011	5 - 15
MW-44S		5/19/2011	6 - 15
TP-5		5/19/2011	1 - 6
TP-6	2015 IRM	4/13/2015	4 - 9

Notes:

1. This well was damaged and subsequently replaced during the RI field activities.
2. This well is a replacement well for the well with the same identification that was installed during Phase II of the PGA.

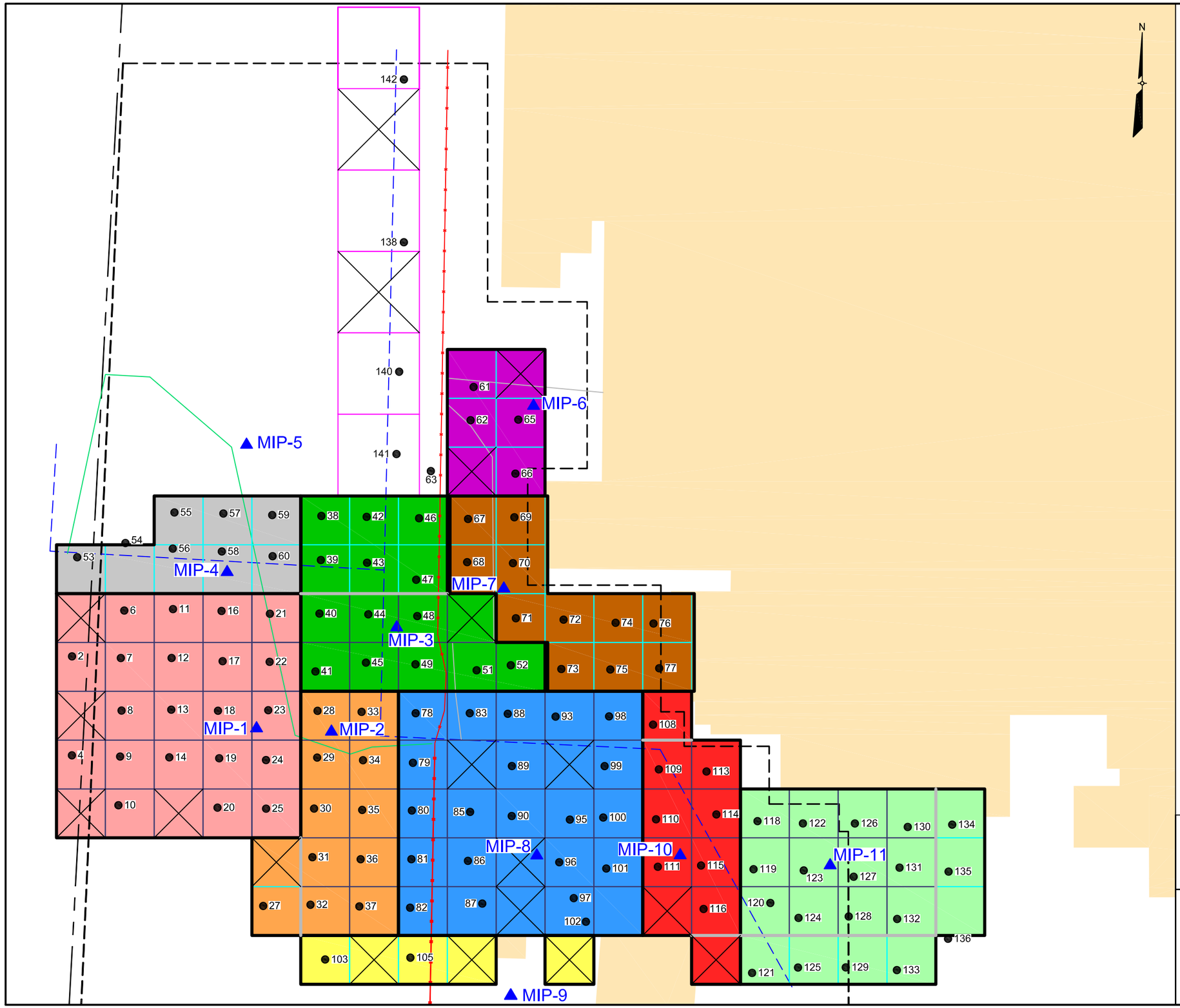
ft bgs - feet below ground surface
ESI - Environmental Site Investigation
PGA - Preliminary Groundwater Assessment
RI - Remedial Investigation
SRI - Supplimental Remedial Investigation

AECOM

FIGURE 3
MONITORING WELL AND PIEZOMETER LOCATIONS

FORMER SCOTT AVIATION FACILITY AREA 1
LANCASTER, NEW YORK

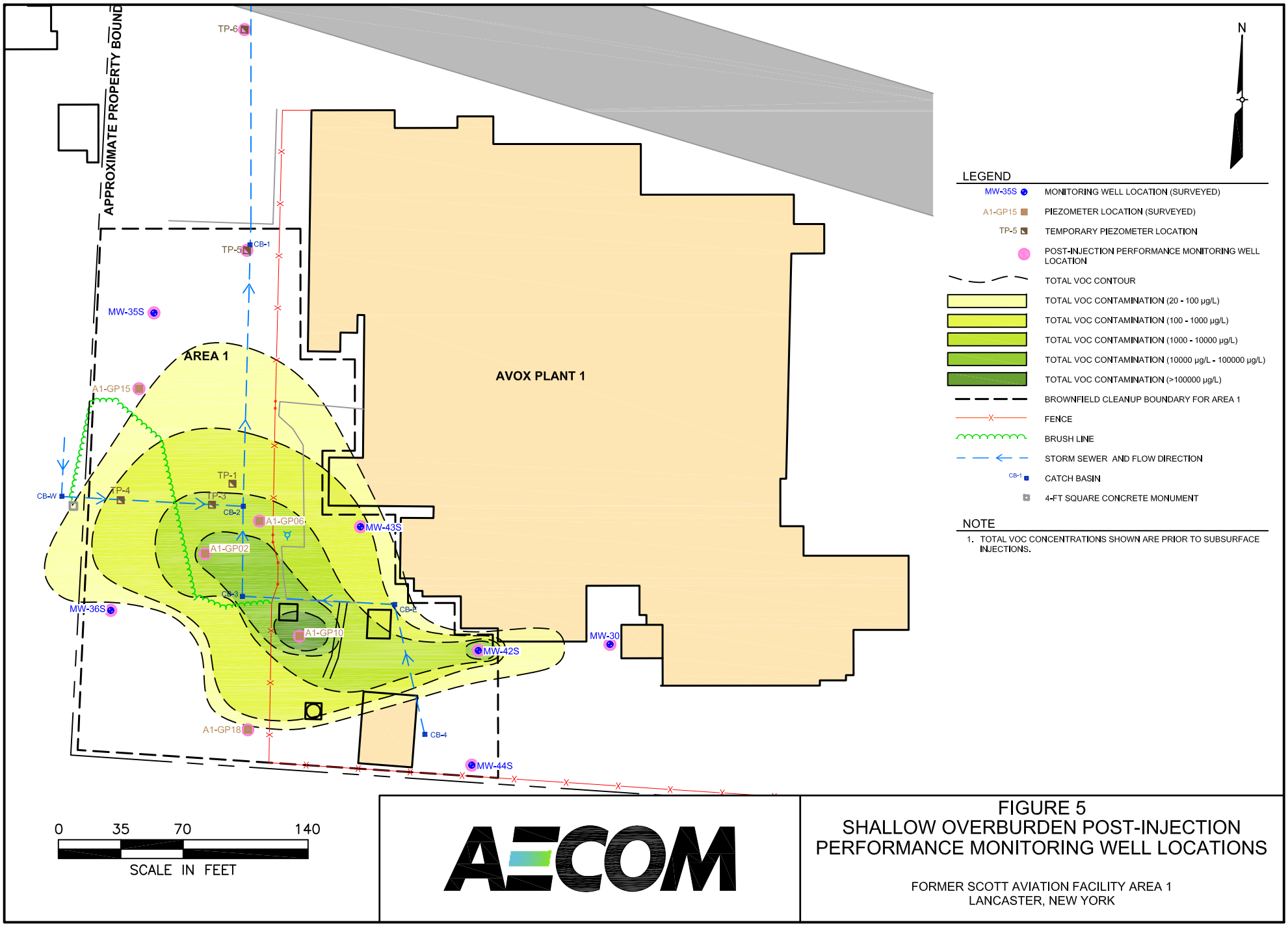
L:\work\60147012\CADD\60147012_093 MW and Piezometer Locations_Rev1.dwg, 8/11/2015 2:27:18 PM, Splawnm



AECOM
10 Patewood Drive, Building 6, Suite 500
Greenville, SC 29615
T: (864) 234-3000 F: (864) 234-3069
www.aecom.com

FIGURE 4
INJECTION ZONE DETAILS

FORMER SCOTT AVIATION FACILITY AREA 1
LANCASTER, NEW YORK

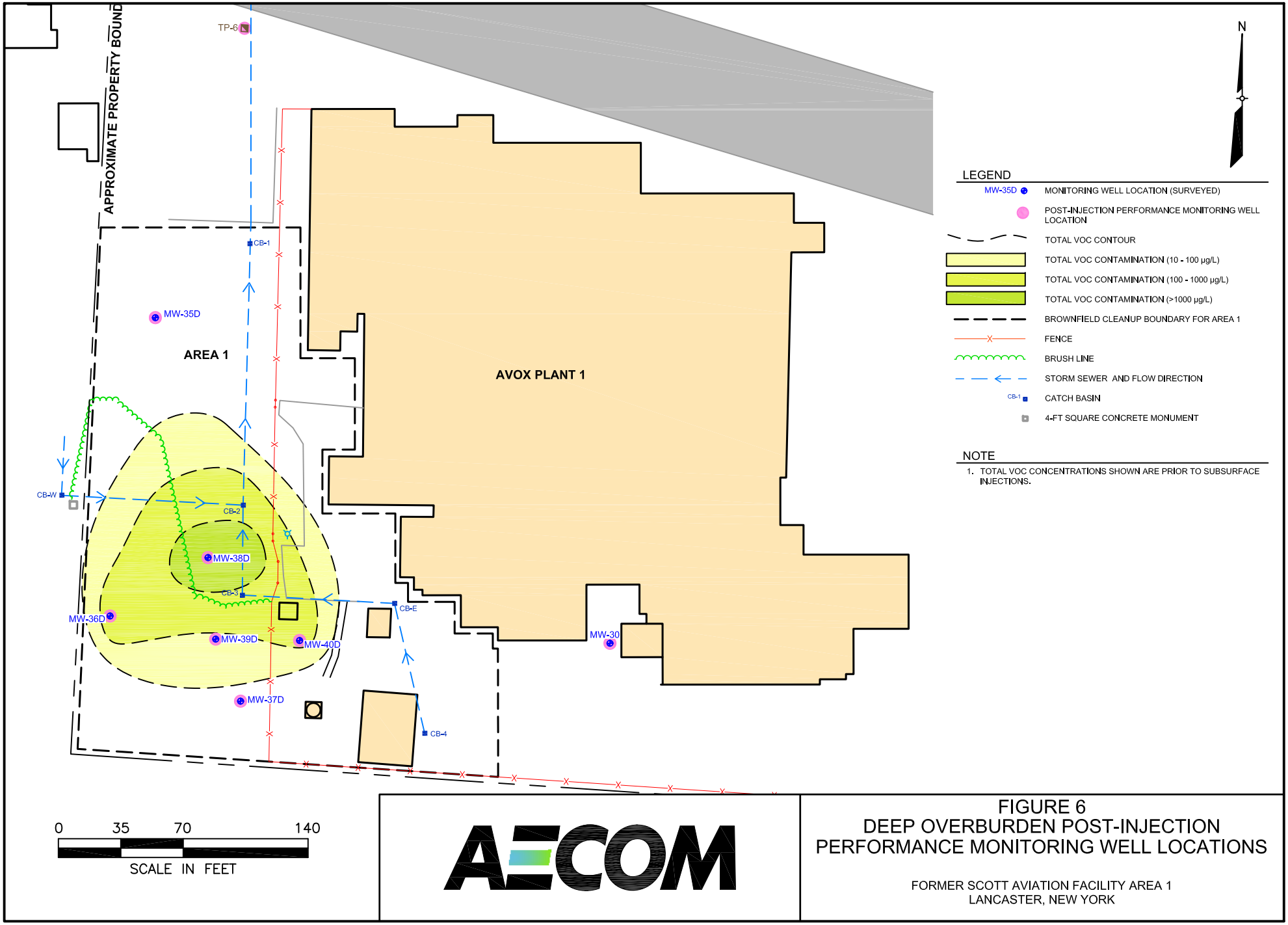


AECOM

FIGURE 5
SHALLOW OVERBURDEN POST-INJECTION PERFORMANCE MONITORING WELL LOCATIONS

FORMER SCOTT AVIATION FACILITY AREA 1
LANCASTER, NEW YORK

L:\work\60147012\CADD\60147012_122 Shallow Overburden Post-Inj Performance MW Locs.dwg, 8/12/2015 9:55:29 AM, Splawnm



AECOM

FIGURE 6
DEEP OVERBURDEN POST-INJECTION PERFORMANCE MONITORING WELL LOCATIONS

FORMER SCOTT AVIATION FACILITY AREA 1
LANCASTER, NEW YORK

L:\work\60147012\CADD\60147012_123 Deep Overburden Post-Inj Performance MW Locs.dwg, 8/12/2015 9:55:53 AM, Splawnm

Tables

Table 1

Historical Groundwater VOC Data
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Sample Designation	CAS	NYSDEC Groundwater Guidance	RI August 2010 Shallow Overburden														
Laboratory Identification	Number	or Standard Value[1]	MW-30	MW-35S	MW-36S	Duplicate MW-36S	MW-37S	A1-GP01-S	A1-GP02-S	A1-GP03-S	A1-GP04-S	A1-GP05-S	A1-GP06-S	A1-GP07-S	A1-GP08-S	A1-GP09-S	A1-GP10-S
			RTH0401-01	RTH0401-07	RTH0401-02	RTH0401-06	RTH0401-10	RTH0401-14	RTH0401-15	RTH0401-16	RTH0401-17	RTH0401-18	RTH0401-19	RTH0401-20	RTH0402-01	RTH0402-02	RTH0402-03
Date Sampled			8/3/2010	8/2/2010	8/3/2010	8/2/2010	8/3/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/3/2010	8/3/2010
BTEX Compounds (ug/L)																	
Benzene	71-43-2	1 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	**1.4 J**	5 U	100 U	250 U	120 U	5 U	6,200 U
Toluene	100-41-4	5 s	5 U	5 U	5 U	5 U	20 U	**340 J**	1,000 U	2,000 U	**1.6 J**	5 U	100 U	250 U	120 U	5 U	6,200 U
Ethylbenzene	108-88-3	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	**0.75 J**	5 U	100 U	250 U	120 U	5 U	6,200 U
Xylenes (total)	1330-20-7	5 s	15 U	15 U	15 U	15 U	60 U	3,800 U	3,000 U	6,000 U	15 U	15 U	300 U	750 U	380 U	15 U	19,000 U
Total BTEX Compounds (ug/L)	NA	NL	--- U	--- U	--- U	--- U	--- U	340	--- U	--- U	3.75	--- U	--- U	--- U	--- U	--- U	--- U
Other VOCs (ug/L)																	
1,1,1-Trichloroethane	71-55-6	5 s	5 U	5 U	5 U	5 U	**200**	**7,500**	1,000 U	**39,000**	**14**	**98**	**1,700**	250 U	120 U	5 U	**84,000**
1,1,2,2-Tetrachloroethane	79-34-5	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5 s	5 U	5 U	5 U	5 U	**6.3 J**	**1,000 J**	1,000 U	2,000 U	**1.7 J**	5 U	**1,900**	250 U	120 U	5 U	**1,900 J**
1,1,2-Trichloroethane	79-00-5	1 s	5 U	5 U	5 U	5 U	20 U	**180 J**	1,000 U	2,000 U	**0.59 J**	5 U	**16 J**	250 U	120 U	5 U	6,200 U
1,1-Dichloroethane	75-34-3	5 s	**2.4 J**	5 U	5 UJ	5 UJ	**440**	**2,000**	1,000 U	**6,200**	**13**	**38**	**3,200**	250 U	120 U	5 U	**48,000**
1,1-Dichloroethene	75-35-4	5 s	5 U	5 U	5 U	5 U	**20**	**760 J**	1,000 U	**5,600**	**20**	**21**	**270**	250 U	120 U	5 U	**2,000 J**
1,2,4-Trichlorobenzene	120-82-1	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
1,2-Dibromo-3-chloropropane	96-12-8	0.04 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
1,2-Dibromoethane	106-93-4	0.0006 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
1,2-Dichlorobenzene	95-50-1	3 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
1,2-Dichloroethane	107-06-2	0.6 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
1,2-Dichloropropane	78-87-5	1 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
1,3-Dichlorobenzene	541-73-1	3 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
1,4-Dichlorobenzene	106-46-7	3 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
2-Butanone	78-93-3	50 g	25 U	25 U	25 U	25 U	100 U	6,200 U	5,000 U	10,000 U	25 U	25 U	500 U	1,200 U	620 U	25 U	31,000 U
2-Hexanone	591-78-6	50 g	25 U	25 U	25 U	25 U	100 U	6,200 U	5,000 U	10,000 U	25 U	25 U	500 U	1,200 U	620 U	25 U	31,000 U
4-Methyl-2-pentanone	108-10-1	NL	25 U	25 U	25 U	25 U	100 U	6,200 U	5,000 U	10,000 U	25 U	25 U	500 U	1,200 U	620 U	25 U	31,000 U
Acetone	67-64-1	50 g	25 U	**3.8 J**	25 U	25 U	100 U	6,200 U	5,000 U	10,000 U	25 U	25 U	500 U	1,200 U	620 U	25 U	31,000 U
Bromodichloromethane	75-27-4	50 g	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Bromoform	75-25-2	50 g	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Bromomethane	74-83-9	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Carbon disulfide	75-15-0	60 g	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Carbon tetrachloride	56-23-5	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Chlorobenzene	108-90-7	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Chloroethane	75-00-3	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Chloroform	67-66-3	7 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Chloromethane	74-87-3	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
cis-1,2-Dichloroethene	156-59-2	5 s	**7.7**	5 U	**1.5 J**	**1.4 J**	20 U	**15,000**	**10,000**	**12,000**	**3,100**	**22**	**130**	**1,300**	**2,400**	5 U	6,200 U
cis-1,3-Dichloropropene	10061-01-5	0.4 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Cyclohexane	110-82-7	NL	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Dibromochloromethane	124-48-1	50 g	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Dichlorodifluoromethane	75-71-8	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	**33 J**	250 U	120 U	5 U	6,200 U
Isopropylbenzene	98-82-8	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Methyl acetate	79-20-9	NL	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Methyl tert-butyl ether	1634-04-4	10 g	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Methylcyclohexane	108-87-2	NL	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Methylene chloride	75-09-2	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Styrene	100-42-5	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Tetrachloroethene	127-18-4	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	**1.8 J**	5 U	100 U	250 U	120 U	5 U	6,200 U
trans-1,2-Dichloroethene	156-60-5	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	**190 J**	2,000 U	**35**	**0.96 J**	100 U	250 U	120 U	5 U	6,200 U
trans-1,3-Dichloropropene	10061-02-6	0.4 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Trichloroethene	79-01-6	5 s	**1.6 J**	5 U	**0.58 J**	**0.58 J**	**3 J**	**340 J**	**20,000**	**2,400**	**13,000**	**2.4 J**	**200**	**2,900**	**1,900**	**0.88 J**	6,200 U
Trichlorofluoromethane	75-69-4	5 s	5 U	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	5 U	5 U	100 U	250 U	120 U	5 U	6,200 U
Vinyl chloride	75-01-4	2 s	**5.9**	5 U	5 U	5 U	20 U	1,200 U	1,000 U	2,000 U	**480 J**	**1.2 J**	**20 J**	**69 J**	**49 J**	0.9 U	6,200 U
Total VOCs (ug/L)2	NA	NL	17.6	3.8	2.08	1.98	669	27,120	30,190	65,200	16,669.84	183.56	7,469	4,269	4,349	0.88	135,900

Notes:
1. Guidance or Standard Values - NYSDEC, Division of Water, TOGS (1.1.1) [NYSDEC, 1998, with addenda through 2004].
2. Total VOCs includes BTEX compounds.
NA = Not analyzed, not applicable
NL = Not listed
U = The material was analyzed for but not detected at, or above, the reporting limit. The associated numerical value is the sample quantitation limit.
J = The associated numerical value is an estimated quantity.
Bold value - compound detected at concentration greater than the reporting limit
Shaded value - Compound detected in a concentration greater than the groundwater standard value.
s = Standard Value
g = Guidance Value

Table 1

Historical Groundwater VOC Data
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Sample Designation / Laboratory Identification / Date Sampled	CAS Number	NYSDEC Groundwater Guidance or Standard Value[1]	RI August 2010 Shallow Overburden A1-GP11-S RTH0402-04 8/3/2010	A1-GP12-S RTH0402-05 8/3/2010	A1-GP13-S RTH0402-06 8/3/2010	A1-GP14-S RTH0402-07 8/3/2010	A1-GP15-S RTH0402-08 8/2/2010	A1-GP16-S RTH0402-09 8/2/2010	A1-GP17-S RTH0402-10 8/3/2010	A1-GP18-S RTH0402-11 8/2/2010	SRI April 2011 Shallow Overburden MW-42S 480-3472-2 4/7/2011	MW-43S 480-3472-3 4/7/2011	Duplicate MW-43S 480-3472-1FD 4/7/2011	SRI June 2011 Shallow Overburden MW-44S 480-5581-1 6/1/2011	Duplicate MW-44S 480-5581-5 6/1/2011
BTEX Compounds (ug/L)															
Benzene	71-43-2	1 s	50 U	100 U	**34 J**	**5.5**	5 U	25 U	5 U	5 U	**1.9**	1 UJ	**0.44**	1 U	1 U
Toluene	100-41-4	5 s	50 U	100 U	**63**	5 U	5 U	25 U	5 U	5 U	**1100**	**1.5**	**1.5**	1 U	1 U
Ethylbenzene	108-88-3	5 s	50 U	100 U	**120**	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	1330-20-7	5 s	150 U	300 U	**2,000**	15 U	15 U	75 U	15 U	15 U	1 U	**1.7 J**	**1.5 J**	2 U	2 U
Total BTEX Compounds (ug/L)	NA	NL	--- U	--- U	2,217	5.5	--- U	--- U	--- U	--- U	1,102	3.2	3.4	--- U	--- U
Other VOCs (ug/L)															
1,1,1-Trichloroethane	71-55-6	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	**25000**	**15**	**17**	1 U	1 U
1,1,2,2-Tetrachloroethane	79-34-5	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5 s	**14 J**	100 U	**17 J**	5 U	5 U	25 U	5 U	5 U	**1700**	**7.4**	**6**	1 U	1 U
1,1,2-Trichloroethane	79-00-5	1 s	50 U	100 U	**13 J**	5 U	5 U	25 U	5 U	5 U	**240 J**	1 U	1 U	1 U	1 U
1,1-Dichloroethane	75-34-3	5 s	**68**	**14 J**	**620**	**1 J**	5 U	25 U	5 U	5 U	**8550**	**13**	**14**	1 U	1 U
1,1-Dichloroethene	75-35-4	5 s	**6.5 J**	**17 J**	**46 J**	5 U	5 U	25 U	5 U	5 U	**6100**	**3.5 J**	**2 J**	1 U	1 U
1,2,4-Trichlorobenzene	120-82-1	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	96-12-8	0.04 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	106-93-4	0.0006 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	95-50-1	3 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	107-06-2	0.6 s	50 U	100 U	**14 J**	5 U	5 U	25 U	5 U	5 U	**76**	1 U	1 U	1 U	1 U
1,2-Dichloropropane	78-87-5	1 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	541-73-1	3 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	106-46-7	3 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	78-93-3	50 g	250 U	500 U	250 U	25 U	25 U	120 U	25 U	25 U	**510 J**	**3.3 J**	**3**	10 U	10 U
2-Hexanone	591-78-6	50 g	250 U	500 U	250 U	25 U	25 U	120 U	25 U	25 U	**11**	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	108-10-1	NL	250 U	500 U	250 U	25 U	25 U	120 U	25 U	25 U	**3.5 J**	5 U	5 U	5 U	5 U
Acetone	67-64-1	50 g	250 U	500 U	250 U	**5.2 J**	**3.4 J**	120 U	25 U	25 U	**400**	**13**	**15**	10 U	10 U
Bromodichloromethane	75-27-4	50 g	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Bromoform	75-25-2	50 g	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	74-83-9	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	75-15-0	60 g	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	**9**	**1.1**	**0.99 J**	1 U	1 U
Carbon tetrachloride	56-23-5	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	108-90-7	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	75-00-3	5 s	50 U	100 U	**180**	**0.62 J**	5 U	25 U	5 U	5 U	**100 J**	**12**	**11**	1 U	1 U
Chloroform	67-66-3	7 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	**4.8**	1 U	1 U	1 UJ	0.46 J
Chloromethane	74-87-3	5 s	50 U	100 U	50 U	5 J	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	156-59-2	5 s	**1,000**	**2,900**	**2,200**	**0.88 J**	5 U	**69**	5 U	5 U	**1000**	**34**	**33**	1 U	1 U
cis-1,3-Dichloropropene	10061-01-5	0.4 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	110-82-7	NL	50 U	100 U	**5.7 J**	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	124-48-1	50 g	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	75-71-8	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 UJ	**12 J**	1 U	1 U
Isopropylbenzene	98-82-8	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Methyl acetate	79-20-9	NL	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl ether	1634-04-4	10 g	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	108-87-2	NL	50 U	100 U	**36 J**	5 U	5 U	25 U	5 U	5 U	1 U	**0.69 J**	**0.61**	1 U	1 U
Methylene chloride	75-09-2	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	**11**	1 U	1 U	1 U	1 U
Styrene	100-42-5	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	127-18-4	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	**5.6**	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	156-60-5	5 s	**28 J**	**120**	**28 J**	**6.2**	5 U	25 U	5 U	5 U	**31**	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	10061-02-6	0.4 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	79-01-6	5 s	**700**	**1,500**	**11 J**	5 U	5 U	25 U	5 U	5 U	**13000**	**15**	**16**	1 U	1 U
Trichlorofluoromethane	75-69-4	5 s	50 U	100 U	50 U	5 U	5 U	25 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	75-01-4	2 s	**60**	**240**	**2,200**	**11**	5 U	**5 J**	5 U	5 U	**27**	**19**	**22**	1 U	1 U
Total VOCs (ug/L)2	NA	NL	1,877	4,791	7,588	30.4	3.4	74	--- U	--- U	57,881	140.19	156.04	--- U	0.46

Notes:
1. Guidance or Standard Values - NYSDEC, Division of Water, TOGS (1.1.1)
[NYSDEC, 1998, with addenda through 2004].
2. Total VOCs includes BTEX compounds.
NA = Not analyzed, not applicable
NL = Not listed
U = The material was analyzed for but not detected at, or above, the reporting limit.
The associated numerical value is the sample quantitation limit.
J = The associated numerical value is an estimated quantity.
Bold value - compound detected at concentration greater than the reporting limit
Shaded value - Compound detected in a concentration greater than the groundwater standard value.
s = Standard Value
g = Guidance Value

Table 2
Historical Catch Basin and Temporary Piezometer Aqueous VOC Data
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Sample Designation	CAS	NYSDEC	June 2010				August 2010	June 2011					October 2011		
Laboratory Identification	Number	Groundwater Guidance	TP-1	TP-2	TP-3	TP-4	TP-2	TP-5-06/01/2011	CB-1-06/01/2011	CB-1-06/16/2011	CB-E-06/16/2011	CB-W-06/16/2011	CB-1-10/07/2011	CB-4-10/07/2011	OF-1-10/07/2011
Date Sampled		or Standard Value[1]	RTF1140-12	RTF1140-13	RTF1140-10	RTF1140-11	RTH0402-12	480-5581-1	480-5581-1	480-6205-1	480-6205-3	480-6205-2	480-10892-1	480-10892-2	480-10892-3
			6/17/2010	6/17/2010	6/17/2010	6/17/2010	8/2/2010	6/1/2011	6/1/2011	6/16/2011	6/16/2011	6/16/2011	10/7/2011	10/7/2011	10/7/2011
BTEX Compounds (ug/L)															
Benzene	71-43-2	1 s	5 U	5 U	25 U	25 U	25 U	0.41 U	0.41 U	0.41 U	**0.7 J**	2.1 U	1 U	1 U	1 U
Toluene	100-41-4	5 s	5 U	5 U	25 U	25 U	25 U	0.51 U	**1.9**	0.51 U	0.51 U	**61**	1 U	1 U	1 U
Ethylbenzene	108-88-3	5 s	5 U	5 U	25 U	25 U	25 U	0.74 U	0.74 U	0.74 U	0.74 U	3.7 U	1 U	1 U	1 U
Xylenes (total)	1330-20-7	5 s	15 U	15 U	25 U	25 U	75 U	0.66 U	**1 J**	0.66 U	0.66 U	3.3 U	1 U	1 U	1 U
Total BTEX Compounds (ug/L)	NA	NL	--- U	--- U	--- U	--- U	--- U	--- U	**2.9**	--- U	**0.7**	**61**	--- U	--- U	--- U
Other VOCs (ug/L)															
1,1,1-Trichloroethane	71-55-6	5 s	**63**	**74**	25 U	25 U	**230**	**83**	**420**	**120**	**230**	4.1 U	**170**	**1.4**	**1.2**
1,1,2,2-Tetrachloroethane	79-34-5	5 s	5 U	5 U	25 U	25 U	25 U	0.21 U	0.21 U	0.21 U	0.21 U	1.1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5 s	**240**	**290**	25 U	25 U	**1200**	**60 J**	**400 J**	**220**	**140**	1.6 U	**260**	1 U	**1.5**
1,1,2-Trichloroethane	79-00-5	1 s	5 U	5 U	25 U	25 U	25 U	0.23 U	**1.6**	**0.87 J**	**10**	1.2 U	**1.4**	1 U	1 U
1,1-Dichloroethane	75-34-3	5 s	**1.4 J**	**0.64 J**	25 U	25 U	25 U	**12**	**53**	**18**	**110**	1.9 U	**26**	1 U	1 U
1,1-Dichloroethene	75-35-4	5 s	**4.8 J**	**5.7**	25 U	25 U	**20 J**	**7.2**	**41**	**14**	**93**	1.5 U	**28**	1 U	1 U
1,2,4-Trichlorobenzene	120-82-1	5 s	5 U	5 U	25 U	25 U	25 U	0.41 U	0.41 U	0.41 U	0.41 U	2.1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	96-12-8	0.04 s	5 U	5 U	25 U	25 U	25 U	0.39 U	0.39 U	0.39 U	0.39 U	2 U	1 U	1 U	1 U
1,2-Dibromoethane	106-93-4	0.0006 s	5 U	5 U	25 U	25 U	25 U	0.73 U	0.73 U	0.73 U	0.73 U	3.7 U	1 U	1 U	1 U
1,2-Dichlorobenzene	95-50-1	3 s	5 U	5 U	25 U	25 U	25 U	0.79 U	0.79 U	0.79 U	0.79 U	4 U	1 U	1 U	1 U
1,2-Dichloroethane	107-06-2	0.6 s	5 U	5 U	25 U	25 U	25 U	0.21 U	0.21 U	0.21 U	**2**	1.1 U	1 U	1 U	1 U
1,2-Dichloropropane	78-87-5	1 s	5 U	5 U	25 U	25 U	25 U	0.72 U	0.72 U	0.72 U	0.72 U	3.6 U	1 U	1 U	1 U
1,3-Dichlorobenzene	541-73-1	3 s	5 U	5 U	25 U	25 U	25 U	0.78 U	0.78 U	0.78 U	0.78 U	3.9 U	1 U	1 U	1 U
1,4-Dichlorobenzene	106-46-7	3 s	5 U	5 U	25 U	25 U	25 U	0.84 U	0.84 U	0.84 U	0.84 U	4.2 U	1 U	1 U	1 U
2-Butanone	78-93-3	50 g	25 U	25 U	120 U	120 U	120 U	1.3 U	1.3 U	1.3 U	1.3 U	6.6 U	10 U	10 U	10 U
2-Hexanone	591-78-6	50 g	25 U	25 U	120 U	120 U	120 U	1.2 U	1.2 U	1.2 U	1.2 U	6.2 U	5 U	5 U	5 U
4-Methyl-2-pentanone	108-10-1	NL	25 U	25 U	120 U	120 U	120 U	2.1 U	2.1 U	2.1 U	2.1 U	11 U	5 U	5 U	5 U
Acetone	67-64-1	50 g	**9 J**	**6.4 J**	120 U	120 U	120 U	3 U	**61**	**390 J**	3 U	**15 J**	1 U	1 U	1 U
Bromodichloromethane	75-27-4	50 g	5 U	5 U	25 U	25 U	25 U	0.39 U	0.39 U	0.39 U	0.39 U	2 U	1 U	1 U	**5.9**
Bromoform	75-25-2	50 g	5 U	5 U	25 U	25 U	25 U	0.26 U	0.26 U	0.26 U	0.26 U	1.3 U	1 U	1 U	1 U
Bromomethane	74-83-9	5 s	5 U	5 U	25 U	25 U	25 U	0.69 U	0.69 U	0.69 U	0.69 U	3.5 U	1 U	1 U	1 U
Carbon disulfide	75-15-0	60 g	**0.8 J**	5 U	25 U	25 U	25 U	0.19 U	0.19 U	0.19 U	0.19 U	0.95 U	1 U	1 U	1 U
Carbon tetrachloride	56-23-5	5 s	5 U	5 U	25 U	25 U	25 U	0.27 U	0.27 U	0.27 U	0.27 U	1.4 U	1 U	1 U	1 U
Chlorobenzene	108-90-7	5 s	5 U	5 U	25 U	25 U	25 U	0.75 U	0.75 U	0.75 U	0.75 U	3.8 U	1 U	1 U	1 U
Chloroethane	75-00-3	5 s	5 U	5 U	25 U	25 U	25 U	0.32 U	**2.8**	**0.6 J**	**10**	1.6 U	1 U	1 U	1 U
Chloroform	67-66-3	7 s	5 U	5 U	25 U	25 U	25 U	0.34 U	0.34 U	0.34 U	0.34 U	1.7 U	1 U	1 U	**13**
Chloromethane	74-87-3	5 s	5 U	5 U	25 U	25 U	25 U	0.35 U	0.35 U	0.35 U	0.35 U	1.8 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	156-59-2	5 s	**3.8 J**	**0.83 J**	25 U	25 U	25 U	**23**	**140**	**51**	**1200**	4.1 U	**52**	1 U	1 U
cis-1,3-Dichloropropene	10061-01-5	0.4 s	5 U	5 U	25 U	25 U	25 U	0.36 U	0.36 U	0.36 U	0.36 U	1.8 U	1 U	1 U	1 U
Cyclohexane	110-82-7	NL	5 U	5 U	25 U	25 U	25 U	0.18 U	0.18 U	0.18 U	0.18 U	0.9 U	1 U	1 U	1 U
Dibromochloromethane	124-48-1	50 g	5 U	5 U	25 U	25 U	25 U	0.32 U	0.32 U	0.32 U	0.32 U	1.6 U	1 U	1 U	**2.6**
Dichlorodifluoromethane	75-71-8	5 s	5 U	5 U	25 U	25 U	25 U	0.68 U	0.68 U	0.68 U	0.68 U	3.4 U	1 U	1 U	1 U
Isopropylbenzene	98-82-8	5 s	5 U	5 U	25 U	25 U	25 U	0.79 U	0.79 U	0.79 U	0.79 U	4 U	1 U	1 U	1 U
Methyl acetate	79-20-9	NL	5 U	5 U	25 U	25 U	25 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	1 U	1 U	1 U
Methyl tert-butyl ether	1634-04-4	10 g	5 U	5 U	25 U	25 U	25 U	0.16 U	0.16 U	0.16 U	0.16 U	0.8 U	1 U	1 U	1 U
Methylcyclohexane	108-87-2	NL	5 U	5 U	25 U	25 U	25 U	0.16 U	0.16 U	0.16 U	0.16 U	0.8 U	1 U	1 U	1 U
Methylene chloride	75-09-2	5 s	5 U	5 U	25 U	25 U	25 U	0.44 U	0.44 U	0.44 U	**1.2**	2.2 U	1 U	1 U	1 U
Styrene	100-42-5	5 s	5 U	5 U	25 U	25 U	25 U	0.73 U	0.73 U	0.73 U	0.73 U	3.7 U	1 U	1 U	1 U
Tetrachloroethene	127-18-4	5 s	5 U	5 U	25 U	25 U	25 U	0.36 U	**0.5 J**	0.36 U	**8.8**	1.8 U	**0.73 J**	1 U	1 U
trans-1,2-Dichloroethene	156-60-5	5 s	5 U	5 U	25 U	25 U	25 U	0.9 U	**1.8**	**1.5**	**4.6**	4.5 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	10061-02-6	0.4 s	5 U	5 U	25 U	25 U	25 U	0.37 U	0.37 U	0.37 U	0.37 U	1.9 U	1 U	1 U	1 U
Trichloroethene	79-01-6	5 s	**2.1 J**	**0.9 J**	25 U	25 U	25 U	**8.8**	**59**	**18**	**60**	2.3 U	**22**	**1.2**	1 U
Trichlorofluoromethane	75-69-4	5 s	5 U	5 U	25 U	25 U	25 U	0.88 U	0.88 U	0.88 U	0.88 U	4.4 U	1 U	1 U	1 U
Vinyl chloride	75-01-4	2 s	5 U	5 U	25 U	25 U	25 U	**1.6**	**8.4**	**1.4**	**22**	4.5 U	1 U	1 U	1 U
Total VOCs (ug/L)[2]	NA	NL	**325**	**378**	--- U	--- U	**1450**	**196**	**1,192**	**835**	**1892**	**76**	**560**	**2.6**	**24**

Notes:
1. Guidance or Standard Values - NYSDEC, Division of Water, TOGS (1.1.1) [NYSDEC, 1998, with addenda through 2004].
2. Total VOCs includes BTEX compounds.

NA = Not analyzed, not applicable
NL = Not listed
U = The material was analyzed for but not detected at, or above, the reporting limit. The associated numerical value is the sample quantitation limit.
J = The associated numerical value is an estimated quantity.
Bold value - compound detected at concentration greater than the reporting limit
Shaded value - Compound detected in a concentration greater than the groundwater standard value.
s = Standard Value
g = Guidance Value

Table 3
Baseline Monitored Natural Attenuation Data Summary
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Well ID	Electron Acceptors					Biodegradation Intermediates and End Products			Nutrients	
	Dissolved Oxygen (mg/L)	Nitrate (mg/L)	Manganese (mg/L)	Ferric Iron (mg/L)	Sulfate (mg/L)	Carbon Dioxide (mg/L)	Methane (mg/L)	Nitrite (mg/L)	Phosphorus (mg/L)	Ammonia (mg/L)
MW35D	0.87	ND	0.050	2.3	9.1	3200	3900	ND	0.0091	0.37
MW38D	0.21	ND	0.025	0.98	4.8	5500	1200	ND	0.27	0.14
MW40D	0.46	ND	0.0020	0.24	ND	1400	1400	ND	ND	0.61
A1-GP6S	1.00	ND	0.047	0.27	22.0	9500	44	ND	ND	0.23
A1-GP10S	2.15	ND	0.042	0.63	8.3	9800	91	ND	ND	0.033
A1-GP18S	3.11	ND	2.3	121	27.8	8200	260	ND	0.65	0.18

Well ID	Oxygen Demand		Bioindicators		Field Parameters			
	COD (mg/L)	BOD (mg/L)	Total Alkalinity (mg/L)	Ferrous Iron (mg/L)	ORP (mV)	Temperature (°C)	pH	Conductivity (mS/cm)
MW-35D	18.7	5.2	260	0.12	-56.6	12.98	7.47	0.399
MW-38D	229	68.2	489	ND	-114.6	12.85	7.7	0.658
MW-40D	12.9	2.7	291	ND	-14	12.18	8.31	0.624
A1-GP6S	19.6	ND	376	ND	-57.4	12.74	7.19	0.759
A1-GP10S	27.4	3.0	388	0.17	-68.2	12.65	6.9	1.007
A1- GP18S	ND	ND	359	ND	-69.7	12.36	7.3	0.587

COD - Carbon Demand
BOD - Biological Demand
ORP - Oxygen Reduction Potential
mg/L- milligrams per liter
mV - millivolts
°C - degrees Celsius
mS/cm - milli-Siemens per centimeter
ND = non detected

Table 4
Pre-Injection and Post-Injection Monitoring Wells and Analysis Summary
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Well	Location	Pre-Injection	Post -Injection
		Baseline	3 months
OBJECTIVE	Area 1 BCP Site	• Determine baseline VOC concentrations peformance of in-situ remedy • Assess baseline geochemistry	• Evaluate changes in geochemistry • Evaluate reduction in VOC concentrations and generation of VOC byproducts
Area 1 Temporary Piezometers - Storm Sewer Bedding			
TP-05	Adjancet to CB-1	-	VOCs
TP-06	north side of vistors parking lot (just south of Erie Street strom sewer manhole)	-	VOCs
Area 1 Monitoring Wells - Shallow Overburden			
A1-GP02	plume hotspot	VOCs, TOC	VOCs, TOC
A1-GP06*	north of hotspot in plume	VOCs, TOC	MNA, VOCs, TOC
A1-GP10*	plume hotspot	VOCs, TOC	MNA, VOCs, TOC
A1-GP15	down gradient of TVOC plume; northern BCP boundary	VOCs, TOC	VOCs, TOC
AI-GP18*	up gradient of TVOC plume	VOCs, TOC	MNA, VOCs, TOC
MW-30	up gradient (east) of TVOC plume	-	VOCs, TOC
MW-35S	down gradient of TVOC plume; northern BCP boundary	VOCs, TOC	VOCs, TOC
MW-36S	western edge of TVOC plume	VOCs, TOC	VOCs, TOC
MW-42S	eastern plume hotspot	VOCs, TOC	VOCs, TOC, Bio-trap (DHC)
MW-43S	eastern edge of TVOC plume	VOCs, TOC	VOCs, TOC
MW-44S	up gradient (south) of TVOC plume	-	VOCs, TOC
Area 1 Monitoring Wells - Deep Overburden			
MW-35D*	down gradient of TVOC plume; northern BCP boundary	VOCs, TOC	MNA, VOCs, TOC
MW-36D	western edge of TVOC plume	VOCs, TOC	VOCs, TOC
MW-37D	southern edge of TVOC plume	VOCs, TOC	VOCs, TOC
MW-38D*	TVOC plume hotspot	VOCs, TOC	MNA, VOCs, TOC; Bio-trap (DHC)
MW-39D	TVOC plume hotspot	VOCs, TOC	VOCs, TOC
MW-40D*	TVOC plume hotspot	VOCs, TOC	MNA, VOCs, TOC
#wells		15	19

Notes:
1. Field observations will be made in each sampled well for pH, temperature, ORP, dissolved oxygen, conductivity, turbidity.
2. Additional analyses and/or wells may be added to the sampling program as necessary to further evaluate performance.
3. Select analysis may be removed if deemed unnecessary due to previous results observations.
4. Pre- and post-injection samples will include 1 duplicate and 1 VOC trip.
* Baseline geochemical samples collected in November 2014.
TOC = Total Organic Carbon (Assess distribution of substrate)
VOCs = Volatile Organic Compounds

Table 5
Pre-Injection VOC and TOC Data
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Sample Designation / Laboratory Identification / Date Sampled	CAS Number	NYSDEC Groundwater Guidance or Standard Value (Note 1)	MW-35S 480-76544-1 3/11/2015	MW-36S 480-76544-2 3/10/2015	A1-GP02-S 480-76544-5 3/10/2015	A1-GP06-S 480-76544-9 3/11/2015	A1-GP10-S 480-76544-8 3/11/2015	A1-GP15-S 480-76544-6 3/11/2015	A1-GP18-S 480-76544-3 3/11/2015	MW-35D 480-76544-10 3/12/2015	MW-36D 480-76544-11 3/10/2015	MW-37D 480-76544-12 3/10/2015	MW-38D 480-76544-13 3/10/2015	MW-39D 480-76544-14 3/10/2015	MW-40D 480-76544-15 3/11/2015	MW-42S 480-76544-7 3/12/2015	MW-43S 480-76544-4 3/12/2015	Duplicate (MW-35S) 480-76544-16 3/11/2015
BTEX Compounds (ug/L)																		
Benzene	71-43-2	1 s	0.41 U	0.41 U	41 U	0.41 U	2.1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	1.6 U	0.41 U	16 U	82 U	0.41 U	0.41 U
Toluene	100-41-4	5 s	0.51 U	0.51 U	51 U	0.51 U	2.6 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	2 U	0.51 U	20 U	1200	0.51 U	0.51 U
Ethylbenzene	108-88-3	5 s	0.74 U	0.74 U	74 U	0.74 U	3.7 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	3 U	0.74 U	30 U	150 U	0.74 U	0.74 U
Xylenes (total)	1330-20-7	5 s	0.66 U	0.66 U	66 U	0.66 U	3.3 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	2.6 U	0.66 U	26 U	130 U	0.73 **J**	0.66 U
Total BTEX Compounds (ug/L)	NA	NL	--- U	--- U	--- U	--- U	--- U	--- U	--- U	--- U	--- U	--- U	--- U	--- U	--- U	1200	0.73	--- U
Other VOCs (ug/L)																		
1,1,1-Trichloroethane	71-55-6	5 s	0.82 U	0.82 U	82 U	1 U	1500	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	3.3 U	0.82 U	2800	**19000**	0.82 U	0.82 U
1,1,2,2-Tetrachloroethane	79-34-5	5 s	0.21 U	0.21 U	21 U	0.21 U	1.1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.84 U	0.21 U	8.4 U	42 U	0.21 U	0.21 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5 s	**7.4**	0.31 U	31 U	85	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	1.2 U	0.31 U	110	14000	0.31 U	0.31 U
1,1,2-Trichloroethane	79-00-5	1 s	0.23 U	0.23 U	23 U	0.23 U	1.2 **J**	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.92 U	0.23 U	9.2 U	240	0.23 U	0.23 U
1,1-Dichloroethane	75-34-3	5 s	0.38 U	0.38 U	38 U	**21**	440	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	1.5 U	0.38 U	5400	12000	1.8	0.38 U
1,1-Dichloroethene	75-35-4	5 s	0.29 U	0.29 U	29 U	**0.89** J	65	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	1.2 U	0.29 U	200	6300	0.29 U	0.29 U
1,2,4-Trichlorobenzene	120-82-1	5 s	0.41 U	0.41 U	41 U	0.41 U	2.1 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	1.6 U	0.41 U	16 U	82 U	0.41 U	0.41 U
1,2-Dibromo-3-chloropropane	96-12-8	0.04 s	0.39 U	0.39 U	39 U	0.39 U	2 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	1.6 U	0.39 U	16 U	78 U	0.39 U	0.39 U
1,2-Dibromoethane	106-93-4	0.0006 s	0.73 U	0.73 U	73 U	0.73 U	3.7 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	2.9 U	0.73 U	29 U	150 U	0.73 U	0.73 U
1,2-Dichlorobenzene	95-50-1	3 s	0.79 U	0.79 U	79 U	0.79 U	4 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	3.2 U	0.79 U	32 U	160 U	0.79 U	0.79 U
1,2-Dichloroethane	107-06-2	0.6 s	0.21 U	0.21 U	21 U	0.21 U	1.6 **J**	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.84 U	0.21 U	8.4 U	42 U	0.21 U	0.21 U
1,2-Dichloropropane	78-87-5	1 s	0.72 U	0.72 U	72 U	0.72 U	3.6 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U	2.9 U	0.72 U	29 U	140 U	0.72 U	0.72 U
1,3-Dichlorobenzene	541-73-1	3 s	0.78 U	0.78 U	78 U	0.78 U	3.9 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	3.1 U	0.78 U	31 U	160 U	0.78 U	0.78 U
1,4-Dichlorobenzene	106-46-7	3 s	0.84 U	0.84 U	84 U	0.84 U	4.2 U	0.84 U	0.84 U	0.84 U	0.84 U	0.84 U	3.4 U	0.84 U	34 U	170 U	0.84 U	0.84 U
2-Butanone	78-93-3	50 g	1.3 U	1.3 U	130 U	1.3 U	6.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	5.3 U	1.3 U	53 U	260 U	1.3 U	1.3 U
2-Hexanone	591-78-6	50 g	1.2 U	1.2 U	120 U	1.2 U	6.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5 U	1.2 U	50 U	250 U	1.2 U	1.2 U
4-Methyl-2-pentanone	108-10-1	NL	2.1 U	2.1 U	210 U	2.1 U	11 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	8.4 U	2.1 U	84 U	420 U	2.1 U	2.1 U
Acetone	67-64-1	50 g	3 U	3 U	300 U	3 U	15 U	3 U	3 U	3 U	3 U	3 U	12 U	3 U	120 U	600 U	3 U	3 U
Bromodichloromethane	75-27-4	50 g	0.39 U	0.39 U	39 U	0.39 U	2 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	1.6 U	0.39 U	16 U	78 U	0.39 U	0.39 U
Bromoform	75-25-2	50 g	0.26 U	0.26 U	26 U	0.26 U	1.3 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	1 U	0.26 U	10 U	52 U	0.26 U	0.26 U
Bromomethane	74-83-9	5 s	0.69 U	0.69 U	69 U	0.69 U	3.5 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	2.8 U	0.69 U	28 U	140 U	0.69 U	0.69 U
Carbon disulfide	75-15-0	60 g	0.19 U	0.19 U	19 U	0.19 U	0.95 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.76 U	0.19 U	7.6 U	38 U	0.19 U	0.19 U
Carbon tetrachloride	56-23-5	5 s	0.27 U	0.27 U	27 U	0.27 U	1.4 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	1.1 U	0.27 U	11 U	54 U	0.27 U	0.27 U
Chlorobenzene	108-90-7	5 s	0.75 U	0.75 U	75 U	0.75 U	3.8 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	3 U	0.75 U	30 U	150 U	0.75 U	0.75 U
Chloroethane	75-00-3	5 s	0.32 U	0.32 U	32 U	0.32 U	3	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.3 U	0.32 U	1100	160 **J**	0.32 U	0.32 U
Chloroform	67-66-3	7 s	0.34 U	0.34 U	34 U	0.34 U	1.7 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.4 U	0.34 U	14 U	68 U	0.34 U	0.34 U
Chloromethane	74-87-3	5 s	0.35 U	0.35 U	35 U	0.35 U	1.8 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	1.4 U	0.35 U	14 U	70 U	0.35 U	0.35 U
cis-1,2-Dichloroethene	156-59-2	5 s	0.81 U	0.81 U	**3300**	0.81 U	7.4	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	290	0.81 U	32 U	5700	3.7	0.81 U
cis-1,3-Dichloropropene	10061-01-5	0.4 s	0.36 U	0.36 U	36 U	0.36 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.4 U	0.36 U	14 U	72 U	0.36 U	0.36 U
Cyclohexane	110-82-7	NL	0.18 U	0.18 U	18 U	0.18 U	0.9 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.72 U	0.18 U	7.2 U	36 U	0.18 U	0.18 U
Dibromochloromethane	124-48-1	50 g	0.32 U	0.32 U	32 U	0.32 U	1.6 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.3 U	0.32 U	13 U	64 U	0.32 U	0.32 U
Dichlorodifluoromethane	75-71-8	5 s	0.68 U	0.68 U	68 U	0.68 U	3.4 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	2.7 U	0.68 U	27 U	140 U	0.68 U	0.68 U
Isopropylbenzene	98-82-8	5 s	0.79 U	0.79 U	79 U	0.79 U	4 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	3.2 U	0.79 U	32 U	160 U	0.79 U	0.79 U
Methyl acetate	79-20-9	NL	0.5 U	0.5 U	50 U	0.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	20 U	100 U	0.5 U	0.5 U
Methyl tert-butyl ether	1634-04-4	10 g	0.16 U	0.16 U	16 U	0.16 U	0.8 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.64 U	0.16 U	6.4 U	32 U	0.16 U	0.16 U
Methylcyclohexane	108-87-2	NL	0.16 U	0.16 U	16 U	0.16 U	0.8 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.64 U	0.16 U	6.4 U	32 U	0.82 **J**	0.16 U
Methylene chloride	75-09-2	5 s	0.44 U	0.44 U	44 U	**1.4** B	4.2 **J**	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	1.8 U	0.44 U	18 U	88 U	0.44 U	0.44 U
Styrene	100-42-5	5 s	0.73 U	0.73 U	73 U	0.73 U	3.7 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	2.9 U	0.73 U	29 U	150 U	0.73 U	0.73 U
Tetrachloroethene	127-18-4	5 s	0.36 U	0.36 U	36 U	0.36 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.4 U	0.36 U	14 U	72 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	156-60-5	5 s	0.9 U	0.9 U	90 U	0.9 U	4.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	3.6 U	0.9 U	36 U	180 U	0.9 U	0.9 U
trans-1,3-Dichloropropene	10061-02-6	0.4 s	0.37 U	0.37 U	37 U	0.37 U	1.9 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	1.5 U	0.37 U	15 U	74 U	0.37 U	0.37 U
Trichloroethene	79-01-6	5 s	0.46 U	0.46 U	**5400**	**0.81** J	6.6	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	1.9	0.46 U	18 U	12000	0.46 U	0.46 U
Trichlorofluoromethane	75-69-4	5 s	0.88 U	0.88 U	88 U	0.88 U	4.4 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	3.5 U	0.88 U	35 U	180 U	0.88 U	0.88 U
Vinyl chloride	75-01-4	2 s	0.9 U	0.9 U	90 U	0.9 U	4.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	260	0.9 U	67	180 U	1.7	0.9 U
Total VOCs (ug/L) (Note 2)	NA	NL	--- U	--- U	8,700	32	2,114	--- U	--- U	--- U	--- U	--- U	552	--- U	9,677	70,600	9	--- U
Total Organic Carbon (mg/L)	NA	NL	2.4	2.0	3.3	5.5	2.7	2.2	1.0	4.7	1.2	0.65 J	2.5	0.55 J	1.8	15.7	2.1	2.3

Notes:
NA = Not analyzed, not applicable
NL = Not listed
U = The material was analyzed for but not detected at, or above, the reporting limit. The associated numerical value is the sample quantitation limit.
J = The associated numerical value is an estimated quantity.
Bold value - compound detected at concentration greater than the reporting limit
Shaded value - Compound detected in a concentration greater than the groundwater standard value.
s = Standard Value
g = Guidance Value
Note 1 - Guidance or Standard Values - NYSDEC, Division of Water, TOGS (1.1.1) [NYSDEC, 1998, with addenda through 2004].
Note 2 - Total VOCs includes BTEX compounds.

Table 6
Baseline Biological Data Summary
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Bacteria/Enzyme	MW42S (cells/bead)	MW38D (cells/bead)
Dehalococcoides (DHC)	<2.5E+01	5.43E+04
tceA Reductase (TCE)	<2.5E+01	8.80E+00
BAV1 Vinyl Chloride Reductase (BVC)	<2.5E+01	5.10E+03
Vinyl Chloride Reductase (VCR)	<2.5E+01	6.56E+01

Table 7
Summary of Injection Depths, Volumes, and Injectate Mixture
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Injection Location	MIP Zone	Injection Depth (ft bgs)	Injectate	Injectate Volume (gallons)	Injectate Volume per Discrete Depth (gallons)	wt%ZVI / wt% ABC	Injection Depth Designation	Date Completed	Comments
1	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Eliminated	Eliminated	Per DEC Approval
2	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/20/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
3	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Eliminated	Eliminated	Per DEC Approval
4	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/27/2015	
5	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Eliminated	Eliminated	Per DEC Approval
6	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/22/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
7	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/16/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
8	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/17/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
9	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/28/2015	
10	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/28/2015	
11	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/22/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
12	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/23/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
13	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/23/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
14	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/27/2015	
15	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Eliminated	Eliminated	Per DEC Approval
16	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/15/2015	
17	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/21/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
18	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/24/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
19	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	5/1/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
20	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/28/2015	
21	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/15/2015	
22	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/27/2015	
23	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	5/5/2015	Started on 5/4/2015. Injected thru 13'bsg interval. Completed on 5/5/2015.
24	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/20/2015	Did not inject into shallow (4ft) interval. Volume divided among the remaining intervals.
25	MIP-1	4, 6, 7, 10, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	42.5	43% / 57%	Shallow + Deep	4/29/2015	
26	MIP-2	7, 8, 11, 12	ABC+	390	97.5	33% / 67%	Eliminated	Eliminated	Per DEC Approval
27	MIP-2	7, 8, 11, 12	ABC+	390	97.5	33% / 67%	Shallow	4/28/2015	
28	MIP-2	7, 8, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	51	43% / 57%	Shallow + Deep	4/15/2015	
29	MIP-2	7, 8, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	51	43% / 57%	Shallow + Deep	4/16/2015	
30	MIP-2	7, 8, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	51	43% / 57%	Shallow + Deep	4/30/2015	
31	MIP-2	7, 8, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	51	43% / 57%	Shallow + Deep	4/29/2015	
32	MIP-2	7, 8, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	51	43% / 57%	Shallow + Deep	4/29/2015	
33	MIP-2	7, 8, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	51	43% / 57%	Shallow + Deep	4/24/2015	
34	MIP-2	7, 8, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	51	43% / 57%	Shallow + Deep	5/5/2015	
35	MIP-2	7, 8, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	51	43% / 57%	Shallow + Deep	5/4/2015	
36	MIP-2	7, 8, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	51	43% / 57%	Shallow + Deep	4/30/2015	
37	MIP-2	7, 8, 11, 12, 13, 14, 15, 16, 18, 20	ABC+	510	51	43% / 57%	Shallow + Deep	4/29/2015	
38	MIP-3	5, 7, 9, 10, 12, 13, 14	ABC+	390	55.7	33% / 67%	Shallow	4/14/2015	
39	MIP-3	5, 7, 9, 10, 12, 13, 14	ABC+	390	55.7	33% / 67%	Shallow	4/14/2015	

Table 7
Summary of Injection Depths, Volumes, and Injectate Mixture
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Injection Location	MIP Zone	Injection Depth (ft bgs)	Injectate	Injectate Volume (gallons)	Injectate Volume per Discrete Depth (gallons)	wt%ZVI / wt% ABC	Injection Depth Designation	Date Completed	Comments
40	MIP-3	5, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	39.2	43% / 57%	Shallow + Deep	4/15/2015	
41	MIP-3	5, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	39.2	43% / 57%	Shallow + Deep	4/16/2015	
42	MIP-3	5, 7, 9, 10, 12, 13, 14	ABC+	390	55.7	33% / 67%	Shallow	4/17/2015	Did not inject into 5ft interval (shallow and near storm sewer drain line. Volume divided among other intervals.
43	MIP-3	5, 7, 9, 10, 12, 13, 14	ABC+	390	55.7	33% / 67%	Shallow	4/15/2015	break through to CB-2; 5ft interval not injected total injected 334 gallons.
44	MIP-3	5, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	39.2	43% / 57%	Shallow + Deep	4/25/2015	Did not inject at 5ft interval due to adjacent storm sewer drain.
45	MIP-3	5, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	39.2	43% / 57%	Shallow + Deep	5/4/2015	
46	MIP-3	5, 7, 9, 10, 12, 13, 14	ABC+	390	55.7	33% / 67%	Shallow	4/14/2015	
47	MIP-3	5, 7, 9, 10, 12, 13, 14	ABC+	390	55.7	33% / 67%	Shallow	4/14/2015	
48	MIP-3	5, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	39.2	43% / 57%	Shallow + Deep	4/21/2015	Volume for 1st interval divided among the remaining intervals.
49	MIP-3	5, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	39.2	43% / 57%	Shallow + Deep	4/27/2015	
50	MIP-3	5, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	39.2	43% / 57%	Eliminated	Eliminated	Utility Conflict
51	MIP-3	5, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	39.2	43% / 57%	Shallow + Deep	4/22/2015	
52	MIP-3	5, 7, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	39.2	43% / 57%	Shallow + Deep	4/21/2015	
53	MIP-4	4, 6, 8, 11	ABC+	390	97.5	33% / 67%	Shallow	4/15/2015	Breakthrough to CB-2 coming into the bedding pipe between CB-W and CB-2
54	MIP-4	4, 6, 8, 11	ABC+	390	97.5	33% / 67%	Shallow	4/16/2015	Volume for 1st 2 intervals injected into the last two intervals
55	MIP-4	4, 6, 8, 11	ABC+	390	97.5	33% / 67%	Shallow	4/20/2015	Volume for 1st 2 intervals injected into the last two intervals
56	MIP-4	4, 6, 8, 11	ABC+	390	97.5	33% / 67%	Shallow	4/21/2015	Volume for 1st 2 intervals injected into the last two intervals
57	MIP-4	4, 6, 8, 11	ABC+	390	97.5	33% / 67%	Shallow	4/17/2015	No injection on 4' interval, 390 gallons distributed between the remaining 3 intervals. breakout and storm sewer bedding infiltration at 6'. Remaining Shallow wells in this group will be injected only at 8 and 11 ft.
58	MIP-4	4, 6, 8, 11	ABC+	390	97.5	33% / 67%	Shallow	4/17/2015	Injected 195 gal into 11ft on 4/16/15. Injected remaining 195 gal. into 8ft on 4/17/15.
59	MIP-4	4, 6, 8, 11	ABC+	390	97.5	33% / 67%	Shallow	4/21/2015	Volume for 1st 2 intervals injected into the last two intervals
60	MIP-4	4, 6, 8, 11	ABC+	390	97.5	33% / 67%	Shallow	4/20/2015	Volume for 1st 2 intervals injected into the last two intervals
61	MIP-6	3, 4, 5, 6, 7, 8, 9, 10, 12, 14	ABC+	390	39	33% / 67%	Shallow	4/28/2015	No injection at shallow 3' interval. Integrated volume into the rest of the intervals.
62	MIP-6	3, 4, 5, 6, 7, 8, 9, 10, 12, 14	ABC+	390	39	33% / 67%	Shallow	4/27/2015	No injection at shallow 3' interval. Integrated volume into the rest of the intervals.
63	MIP-6	3, 4, 5, 6, 7, 8, 9, 10, 12, 14	ABC+	390	39	33% / 67%	Shallow	4/21/2015	Moved to outside the fence because of power pole and utilities. Did not inject shallowest 2 intervals on this side due to storm sewer. Volume was divided among the other intervals.
64	MIP-6	3, 4, 5, 6, 7, 8, 9, 10, 12, 14	ABC+	390	39	33% / 67%	Eliminated	Eliminated	Per DEC Approval
65	MIP-6	3, 4, 5, 6, 7, 8, 9, 10, 12, 14	ABC+	390	39	33% / 67%	Shallow	4/23/2015	No injection at shallow 3' interval. Integrated volume into the rest of the intervals.
66	MIP-6	3, 4, 5, 6, 7, 8, 9, 10, 12, 14	ABC+	390	39	33% / 67%	Shallow	4/23/2015	Completed intervals 14-7 on 4-22-15. Stopped because of breakthrough coming up completed #63. Finished injection on 4/23/15. No 3' injection. Added volume to other intervals.
67	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/24/2015	
68	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/27/2015	
69	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/29/2015	
70	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/21/2015	130 gal. injected into interval 10. The other two intervals completed. 4/21/15.
71	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/23/2015	
72	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/20/2015	
73	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/16/2015	
74	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/16/2015	
75	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/27/2015	
76	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/22/2015	
77	MIP-7	7, 8, 10	ABC+	390	130	33% / 67%	Shallow	4/21/2015	
78	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	5/5/2015	Did not inject 4ft interval. Split volume among other intervals.

Table 7
Summary of Injection Depths, Volumes, and Injectate Mixture
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Injection Location	MIP Zone	Injection Depth (ft bgs)	Injectate	Injectate Volume (gallons)	Injectate Volume per Discrete Depth (gallons)	wt%ZVI / wt% ABC	Injection Depth Designation	Date Completed	Comments
79	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/28/2015	Did not inject 4ft interval. Split volume among other intervals.
80	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	5/1/2015	Did not inject 4ft interval. Split volume among other intervals.
81	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/30/2015	Did not inject 4ft interval. Split volume among other intervals.
82	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/30/2015	Did not inject 4ft interval. Split volume among other intervals.
83	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/15/2015	
84	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Eliminated	Eliminated	Shed on point/conflict.
85	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/23/2015	
86	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/28/2015	
87	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/28/2015	
88	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/17/2015	
89	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/15/2015	
90	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/17/2015	Injectate coming up adjacent #89. Drove plug rod to stem flow during remainder of injection.
91	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Eliminated	Eliminated	Utility Conflict
92	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Eliminated	Eliminated	Utility Conflict
93	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/24/2015	Breakthrough nearby at injection poing #89. Injected half volume then moved and came back later.
94	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Eliminated	Eliminated	Utility Conflict
95	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/24/2015	Injected half then returned later to finish.
96	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/15/2015	
97	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/20/2015	
98	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/22/2015	
99	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/23/2015	Had to pause halfway through injection because of surface breakthrough and return later in the day to finish the boring.
100	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/27/2015	
101	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/16/2015	
102	MIP-8	4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	31.9	43% / 57%	Shallow + Deep	4/23/2015	A little breakthrough coming up at corner of Flammables storage shed.
103	MIP-9	3, 5, 8	ABC+	390	130	33% / 67%	Shallow	4/29/2015	Did not inject 3ft interval, split volume between other two intervals
104	MIP-9	3, 5, 8	ABC+	390	130	33% / 67%	Eliminated	Eliminated	Per DEC Approval
105	MIP-9	3, 5, 8	ABC+	390	130	33% / 67%	Shallow	4/30/2015	Did not inject 3ft interval, split volume between other two intervals
106	MIP-9	3, 5, 8	ABC+	390	130	33% / 67%	Eliminated	Eliminated	Per DEC Approval
107	MIP-9	3, 5, 8	ABC+	390	130	33% / 67%	Eliminated	Eliminated	Per DEC Approval
108	MIP-10	8, 10, 12, 13, 14	ABC+	390	78	33% / 67%	Shallow	4/28/2015	
109	MIP-10	8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	46.4	43% / 57%	Shallow + Deep	4/27/2015	
110	MIP-10	8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	46.4	43% / 57%	Shallow + Deep	4/21/2015	Breakthrough nearby starting at 20ft. Plugged breakthrough area to slow it down.
111	MIP-10	8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	46.4	43% / 57%	Shallow + Deep	4/15/2015	
112	MIP-10	8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	46.4	43% / 57%	Eliminated	Eliminated	Utility Conflict
113	MIP-10	8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	46.4	43% / 57%	Shallow + Deep	4/20/2015	
114	MIP-10	8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	46.4	43% / 57%	Shallow + Deep	4/28/2015	
115	MIP-10	8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	46.4	43% / 57%	Shallow + Deep	4/14/2015	
116	MIP-10	8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20	ABC+	510	46.4	43% / 57%	Shallow + Deep	4/27/2015	
117	MIP-10	8, 10, 12, 13, 14	ABC+	390	78	33% / 67%	Eliminated	Eliminated	Per DEC Approval
118	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/21/2015	Volume for intervals 2ft injected into 22ft
119	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/16/2015	Volume for intervals 2ft injected into 22ft
120	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/24/2015	Volume for intervals 2ft injected into 22ft
121	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14	ABC+	390	43.3	33% / 67%	Shallow	4/14/2015	Volume for intervals 2ft injected int 14ft
122	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/17/2015	Volume for intervals 2ft injected into 22ft
123	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/14/2015	Volume for intervals 2ft and 5ft injected into 6ft
124	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/16/2015	Volume for intervals 2ft injected into 22ft
125	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14	ABC+	390	43.3	33% / 67%	Shallow	4/13/2015	

Table 7
Summary of Injection Depths, Volumes, and Injectate Mixture
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Injection Location	MIP Zone	Injection Depth (ft bgs)	Injectate	Injectate Volume (gallons)	Injectate Volume per Discrete Depth (gallons)	wt%ZVI / wt% ABC	Injection Depth Designation	Date Completed	Comments
126	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/15/2015	Volume for intervals 2ft injected into 22ft
127	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/22/2015	Volume for intervals 2ft injected into 22ft
128	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/28/2015	
129	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14	ABC+	390	43.3	33% / 67%	Shallow	4/21/2015	Volume for intervals 2ft injected into 14ft
130	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/20/2015	
131	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/14/2015	Volume for intervals 2ft injected into 22ft
132	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22	ABC+	510	36.4	43% / 57%	Shallow + Deep	4/14/2015	Volume for intervals 2ft injected into 22ft
133	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14	ABC+	390	43.3	33% / 67%	Shallow	4/17/2015	Volume for intervals 2ft injected into 14ft
134	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14	ABC+	390	43.3	33% / 67%	Shallow	4/16/2015	Volume for intervals 2ft injected into 14ft
135	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14	ABC+	390	43.3	33% / 67%	Shallow	4/14/2015	
136	MIP-11	2, 5, 6, 8, 10, 11, 12, 13, 14	ABC+	390	43.3	33% / 67%	Shallow	4/13/2015	
137	Storm Sewer Bedding	4, 5, 6	ABC	390	130	0% / 100%	Eliminated	Eliminated	Eliminated due to adjacent borings product entering storm sewer pipe
138	Storm Sewer Bedding	4, 5, 6	ABC	50	130	0% / 100%	Storm Sewer Bedding	4/14/2015	Injected 50 gallons at 6'
139	Storm Sewer Bedding	4, 5, 6	ABC	390	130	0% / 100%	Eliminated	Eliminated	Eliminated due to adjacent borings product entering storm sewer pipe
140	Storm Sewer Bedding	4, 5, 6	ABC	390	130	0% / 100%	Storm Sewer Bedding	4/13/2015	Breakthrough observed in CB-1
141	Storm Sewer Bedding	4, 5, 6	ABC	390	130	0% / 100%	Eliminated	Eliminated	4/13/15 FAILED injection - rods pushed out of ground. Did not return due to Injection fluid in storm sewer pipe from nearby injection point IP-140.
142	Storm Sewer Bedding	6	ABC	50	30	0% / 100%	Storm Sewer Bedding	4/14/2015	

RED - interval not injected - volume eliminated or distributed to another interval/intervals.
GREEN - Received extra injectate from an eliminated interval.

Table 8
Deviation From the RAWP
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

No.	Date Change Initiated	MIP Area(s)	Injection Point Location(s) Affected	Description of Deviation	Original Design	Reference Section/Table/Figure from RAWP
Injection Point Additions and Eliminations						
1	4/14/2015	Storm Sewer Bedding	142	Injection point IP-142 added to the injection map north of TP-5 at the southern end of the AVOX visitor parking lot. IP-142 received 50 gallons of ABC® at 6' bsg into the bedding gravel ~ 5ft east of the centerline for the storm sewer.	Originally 141 mapped and surveyed injection points.	Figure 2d: Injection Zone Details
2	4/14/2015	Storm Sewer Bedding	137,139,141	3 injection points eliminated based upon observed breakthrough into the storm sewer at CB-1 during injections on 4/13/2015 and 4/14/2015.	Inject at locations 137, 139, 141	Table 6: Injection Depth Intervals
3	4/22/2015	MIP-1 MIP-2 MIP-9	1,3,5,15,26,104	6 injection points eliminated per DEC approval. Breakthrough in grid from adjacent injection point/redefined TVOC plume.	Inject at locations 1,3,5,15	Table 6: Injection Depth Intervals
4	4/22/2015	MIP-3 MIP-8 MIP-9 MIP-10	50,64,84,91,92,94,106, 107,112,117	10 Injection points eliminated based upon utility access, obstruction, or other access issues.	Inject at locations 50,64,84,91,92,94,106,107,112,117	Table 6: Injection Depth Intervals
Injection Interval, Volume & Location Deviations						
5	4/14/2015	MIP-11	123	Based upon Field conditions, the volume for the 2ft and 5ft intervals was injected at 6ft bsg.	Inject at 2ft and 5ft bsg	Table 6: Injection Depth Intervals
6	4/14/2015	MIP-11	118,119,120,121,122,124,126,127,128,129,130,131, 132 133, 134	Based upon field conditions, the 2ft interval was eliminated due to high levels of breakthrough. The 2ft volume was injected into the deepest interval for the injection point.	Inject at 2ft bsg	Table 6: Injection Depth Intervals
7	4/14/2015	Storm Sewer Bedding	138	Injection only 50 gallons of ABC® at 6' bsg into the bedding gravel. Stopped after 50 gal when observed migration to CB-1.	Inject 390 gallons at 4,5 & 6 ft bsg	Table 6: Injection Depth Intervals
8	4/15/2015	MIP-3	43	Breakthrough to CB-2; 5ft interval not injected total injected 334 gallons.	Inject at 5ft bsg; Target Volume 390 gallons	Table 6: Injection Depth Intervals
9	4/16/2015	MIP-1 MIP-8	4,6,7,8,9,10,11,12,13,14, 17,18,19,20,22,23,24,25, 78,79,80,81,82	Shallowest 4' interval eliminated in these areas for the portion of the site located in the swampy and grassy areas west of the Plant 1 fence line. Volume for the eliminated interval(s) was divided up among the other intervals.	Inject at 4ft bsg	Table 6: Injection Depth Intervals
10	4/16/2015	MIP-4	54,55,58,60	Shallowest intervals (6,8ft) eliminated for the locations closest to the storm sewer pipe based upon field conditions observed in other nearby injection points. Volume divided up among the remaining intervals.	Inject at 6 and 8ft bsg	Table 6: Injection Depth Intervals
11	4/16/2015	MIP-7	74	Injected 20 gal at original location. Injection Tip failed to deploy properly. Moved over ~5ft and redrilled point. Injected remaining volume.	Inject at surveyed location	Figure 2d: Injection Zone Details

Table 8
Deviation From the RAWP
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

12	4/17/2015	MIP-4	57	Shallowest interval (4ft) eliminated based upon field conditions observed in nearby injection points. Volume divided up among the remaining intervals.	Inject at 4ft bsg	Table 6: Injection Depth Intervals
13	4/17/2015	MIP-3	42,44,48,49	Shallowest interval (5ft) eliminated for the locations west of the Plant 1 fence line directly adjacent to the storm sewer pipe based upon field conditions observed at IP-43. Volume divided up among the remaining intervals.	Inject at 5ft bsg	Table 6: Injection Depth Intervals
14	4/20/2015	MIP-4	55,59	Shallowest intervals (6,8ft) eliminated for these locations based upon field conditions observed at IP-57. Volume divided up among the remaining intervals.	Inject at 6 and 8ft bsg	Table 6: Injection Depth Intervals
15	4/20/2015	MIP-8	97	IP-97 moved from original surveyed location due to water tower footer obstruction. Injection point was moved east of the original surveyed location toward IP-102.	Inject at surveyed location	Figure 2d: Injection Zone Details
16	4/21/2015	MIP-6	63	IP-63 moved from original surveyed location due to overhead electrical pole obstruction. Location was moved from the east side of the fence line to the west side and the shallowest 2 intervals (3,4ft) were eliminated due to storm sewer concerns on the west side of the fence.	Inject at surveyed location; Inject at 3 and 4 ft bsg	Table 6: Injection Depth Intervals; Figure 2d: Injection Zone Details
17	4/22/2015	MIP-6	61,62,65,66	Shallowest interval (3ft) eliminated based upon field conditions observed at the 2ft area of MIP-11. Volume divided up among the remaining intervals.	Inject at 3ft bsg	Table 6: Injection Depth Intervals
18	4/28/2015	MIP-8	87	IP-87 moved from original surveyed location due to water tower footer obstruction. Injection point was moved east of the original surveyed location ~ halfway toward eliminated IP-92.	Inject at surveyed location	Figure 2d: Injection Zone Details
19	4/29/2015	MIP-9	103,105	Shallowest interval (3ft) eliminated based upon field conditions observed in other nearby injection points. Volume divided up among the remaining intervals.	Inject at 3ft bsg	Table 6: Injection Depth Intervals
Other Deviations						
20	4/13/2015	ALL	ALL	Injection method of Bottom-Up was used after field testing indicated breakthrough issues with the preferred Top-Down method.	Preferred Injection method - Top-Down	Section 4.1: Injection Methods
21	4/14/2015	MIP-4 MIP-6 MIP-8 MIP-10	54,58,66,93,95,98,99,115	Injection was paused if moderate or severe breakthrough was observed. Field personnell would move to another location in a different area to the area around the affected boring equilibrate, coming back later in the day or the next day to inject the remaining intervals.	In the event of observed breakout during and injection, install a new injection point half-distance between the original injection point in the direction of the plume center	Section 4.5: Additional Injections

Appendix A

Laboratory Analytical Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-76544-1
Client Project/Site: Pre-Injection & Post Injection Sampling

For:
AECOM, Inc.
100 Corporate Parkway
Suite 341
Amherst, New York 14226

Attn: Mr. Dino Zack

Authorized for release by:
3/26/2015 6:10:45 PM

Brian Fischer, Manager of Project Management
(716)504-9835
brian.fischer@testamericainc.com

Table of Contents

Definitions/Glossary

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-76544-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-76544-1

Comments
No additional comments.

Receipt
The samples were received on 3/12/2015 1:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 230675 recovered above the upper control limit for 2-Hexanone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data has been reported. The following samples are impacted: A1-GP02 (480-76544-5), A1-GP18 (480-76544-3), MW-35S (480-76544-1), MW-36S (480-76544-2), MW-43S (480-76544-4).

Method(s) 8260C: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: A1-GP02 (480-76544-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-76544-7 MS), (480-76544-7 MSD), MW-38D (480-76544-13), MW-40D (480-76544-15), MW-42S (480-76544-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW-40D (480-76544-15). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) associated with batch 231897.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 231897recovered outside acceptance criteria, low biased, for several analytes. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analytes, the data have been reported.

Method(s) 8260C: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: A1-GP10 (480-76544-8). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The method blank for batch 231897contained Methylene chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 231897 was outside the method criteria for the following analyte(s): 1,1,2-Trichloro-1,2,2-trifluoroethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated. A1-GP06 (480-76544-9), A1-GP10 (480-76544-8).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 232120 recovered outside acceptance criteria, low biased, for Carbon Disulfide and Cyclohexane. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analytes, the data have been reported.

Method(s) 8260C: The method blank for batch 232120 contained Methylene Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) associated with batch 232120.

Method(s) 8260C: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: A1-GP10

Job ID: 480-76544-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

(480-76544-8). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Sample was analyzed from multiple vials with varying results. Labels appear to be correct. Sample with the highest detections has been reported. A1-GP10 (480-76544-8)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-35S
Date Collected: 03/11/15 12:30
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 07:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 07:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 07:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 07:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/17/15 07:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 07:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 07:25	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 07:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 07:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 07:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 07:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 07:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 07:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 07:25	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 07:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 07:25	1
Acetone	ND		10	3.0	ug/L			03/17/15 07:25	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 07:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 07:25	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 07:25	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 07:25	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 07:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 07:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 07:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 07:25	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 07:25	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 07:25	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 07:25	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/17/15 07:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 07:25	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 07:25	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 07:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 07:25	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 07:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 07:25	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 07:25	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 07:25	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/17/15 07:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 07:25	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 07:25	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 07:25	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 07:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 07:25	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 07:25	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 07:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 07:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/17/15 07:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/17/15 07:25	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-35S
Date Collected: 03/11/15 12:30
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*71 - 126*		*03/17/15 07:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*03/17/15 07:25*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*03/17/15 07:25*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*		*03/17/15 07:25*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	2.4		1.0	0.43	mg/L			03/14/15 00:45	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-36S
Date Collected: 03/10/15 10:25
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 07:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 07:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 07:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 07:48	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/17/15 07:48	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 07:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 07:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 07:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 07:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 07:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 07:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 07:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 07:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 07:48	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 07:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 07:48	1
Acetone	ND		10	3.0	ug/L			03/17/15 07:48	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 07:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 07:48	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 07:48	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 07:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 07:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 07:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 07:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 07:48	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 07:48	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 07:48	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 07:48	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/17/15 07:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 07:48	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 07:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 07:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 07:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 07:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 07:48	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 07:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 07:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/17/15 07:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 07:48	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 07:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 07:48	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 07:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 07:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 07:48	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 07:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 07:48	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/17/15 07:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/17/15 07:48	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-36S
Date Collected: 03/10/15 10:25
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*71 - 126*		*03/17/15 07:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*03/17/15 07:48*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*03/17/15 07:48*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*		*03/17/15 07:48*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	2.0		1.0	0.43	mg/L			03/14/15 01:14	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: A1-GP18
Date Collected: 03/11/15 09:15
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 08:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 08:12	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 08:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 08:12	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/17/15 08:12	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 08:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 08:12	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 08:12	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 08:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 08:12	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 08:12	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 08:12	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 08:12	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 08:12	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 08:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 08:12	1
Acetone	ND		10	3.0	ug/L			03/17/15 08:12	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 08:12	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 08:12	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 08:12	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 08:12	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 08:12	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 08:12	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 08:12	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 08:12	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 08:12	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 08:12	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 08:12	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/17/15 08:12	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 08:12	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 08:12	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 08:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 08:12	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 08:12	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 08:12	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 08:12	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 08:12	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/17/15 08:12	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 08:12	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 08:12	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 08:12	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 08:12	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 08:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 08:12	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 08:12	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 08:12	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/17/15 08:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/17/15 08:12	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: A1-GP18
Date Collected: 03/11/15 09:15
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*71 - 126*		*03/17/15 08:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*03/17/15 08:12*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*03/17/15 08:12*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*		*03/17/15 08:12*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**1.0**		1.0	0.43	mg/L			03/14/15 01:42	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-43S
Date Collected: 03/12/15 12:00
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 08:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 08:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 08:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 08:36	1
1,1-Dichloroethane	**1.8**		1.0	0.38	ug/L			03/17/15 08:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 08:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 08:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 08:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 08:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 08:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 08:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 08:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 08:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 08:36	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 08:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 08:36	1
Acetone	ND		10	3.0	ug/L			03/17/15 08:36	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 08:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 08:36	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 08:36	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 08:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 08:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 08:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 08:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 08:36	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 08:36	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 08:36	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 08:36	1
cis-1,2-Dichloroethene	**3.7**		1.0	0.81	ug/L			03/17/15 08:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 08:36	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 08:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 08:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 08:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 08:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 08:36	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 08:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 08:36	1
Methylcyclohexane	**0.82**	**J**	1.0	0.16	ug/L			03/17/15 08:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 08:36	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 08:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 08:36	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 08:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 08:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 08:36	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 08:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 08:36	1
Vinyl chloride	**1.7**		1.0	0.90	ug/L			03/17/15 08:36	1
Xylenes, Total	**0.76**	**J**	2.0	0.66	ug/L			03/17/15 08:36	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-43S
Date Collected: 03/12/15 12:00
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-4
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*71 - 126*		*03/17/15 08:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*03/17/15 08:36*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*03/17/15 08:36*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*		*03/17/15 08:36*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	2.1		1.0	0.43	mg/L			03/14/15 02:11	1

Client Sample ID: A1-GP02
Date Collected: 03/10/15 15:25
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			03/17/15 08:59	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			03/17/15 08:59	100
1,1,2-Trichloroethane	ND		100	23	ug/L			03/17/15 08:59	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			03/17/15 08:59	100
1,1-Dichloroethane	ND		100	38	ug/L			03/17/15 08:59	100
1,1-Dichloroethene	ND		100	29	ug/L			03/17/15 08:59	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			03/17/15 08:59	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			03/17/15 08:59	100
1,2-Dichlorobenzene	ND		100	79	ug/L			03/17/15 08:59	100
1,2-Dichloroethane	ND		100	21	ug/L			03/17/15 08:59	100
1,2-Dichloropropane	ND		100	72	ug/L			03/17/15 08:59	100
1,3-Dichlorobenzene	ND		100	78	ug/L			03/17/15 08:59	100
1,4-Dichlorobenzene	ND		100	84	ug/L			03/17/15 08:59	100
2-Butanone (MEK)	ND		1000	130	ug/L			03/17/15 08:59	100
2-Hexanone	ND		500	120	ug/L			03/17/15 08:59	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			03/17/15 08:59	100
Acetone	ND		1000	300	ug/L			03/17/15 08:59	100
Benzene	ND		100	41	ug/L			03/17/15 08:59	100
Bromodichloromethane	ND		100	39	ug/L			03/17/15 08:59	100
Bromoform	ND		100	26	ug/L			03/17/15 08:59	100
Bromomethane	ND		100	69	ug/L			03/17/15 08:59	100
Carbon disulfide	ND		100	19	ug/L			03/17/15 08:59	100
Carbon tetrachloride	ND		100	27	ug/L			03/17/15 08:59	100
Chlorobenzene	ND		100	75	ug/L			03/17/15 08:59	100
Dibromochloromethane	ND		100	32	ug/L			03/17/15 08:59	100
Chloroethane	ND		100	32	ug/L			03/17/15 08:59	100
Chloroform	ND		100	34	ug/L			03/17/15 08:59	100
Chloromethane	ND		100	35	ug/L			03/17/15 08:59	100
cis-1,2-Dichloroethene	**3300**		100	81	ug/L			03/17/15 08:59	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			03/17/15 08:59	100
Cyclohexane	ND		100	18	ug/L			03/17/15 08:59	100
Dichlorodifluoromethane	ND		100	68	ug/L			03/17/15 08:59	100
Ethylbenzene	ND		100	74	ug/L			03/17/15 08:59	100
1,2-Dibromoethane	ND		100	73	ug/L			03/17/15 08:59	100
Isopropylbenzene	ND		100	79	ug/L			03/17/15 08:59	100
Methyl acetate	ND		250	50	ug/L			03/17/15 08:59	100
Methyl tert-butyl ether	ND		100	16	ug/L			03/17/15 08:59	100
Methylcyclohexane	ND		100	16	ug/L			03/17/15 08:59	100
Methylene Chloride	ND		100	44	ug/L			03/17/15 08:59	100
Styrene	ND		100	73	ug/L			03/17/15 08:59	100
Tetrachloroethene	ND		100	36	ug/L			03/17/15 08:59	100
Toluene	ND		100	51	ug/L			03/17/15 08:59	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			03/17/15 08:59	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			03/17/15 08:59	100
Trichloroethene	**5400**		100	46	ug/L			03/17/15 08:59	100
Trichlorofluoromethane	ND		100	88	ug/L			03/17/15 08:59	100
Vinyl chloride	ND		100	90	ug/L			03/17/15 08:59	100
Xylenes, Total	ND		200	66	ug/L			03/17/15 08:59	100

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: A1-GP02
Date Collected: 03/10/15 15:25
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-5
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*71 - 126*		*03/17/15 08:59*	*100*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*03/17/15 08:59*	*100*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*03/17/15 08:59*	*100*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*03/17/15 08:59*	*100*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	3.3		1.0	0.43	mg/L			03/14/15 02:39	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: A1-GP15
Date Collected: 03/11/15 11:05
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 13:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 13:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 13:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 13:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/17/15 13:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 13:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 13:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 13:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 13:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 13:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 13:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 13:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 13:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 13:29	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 13:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 13:29	1
Acetone	ND		10	3.0	ug/L			03/17/15 13:29	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 13:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 13:29	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 13:29	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 13:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 13:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 13:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 13:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 13:29	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 13:29	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 13:29	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 13:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/17/15 13:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 13:29	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 13:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 13:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 13:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 13:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 13:29	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 13:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 13:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/17/15 13:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 13:29	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 13:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 13:29	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 13:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 13:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 13:29	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 13:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 13:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/17/15 13:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/17/15 13:29	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: A1-GP15
Date Collected: 03/11/15 11:05
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-6
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*71 - 126*		*03/17/15 13:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*03/17/15 13:29*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*03/17/15 13:29*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*		*03/17/15 13:29*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	2.2		1.0	0.43	mg/L			03/14/15 05:01	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-42S
Date Collected: 03/12/15 11:15
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**19000**		200	160	ug/L			03/17/15 13:53	200
1,1,2,2-Tetrachloroethane	ND		200	42	ug/L			03/17/15 13:53	200
1,1,2-Trichloroethane	**240**		200	46	ug/L			03/17/15 13:53	200
1,1,2-Trichloro-1,2,2-trifluoroethane	**14000**		200	62	ug/L			03/17/15 13:53	200
1,1-Dichloroethane	**12000**		200	76	ug/L			03/17/15 13:53	200
1,1-Dichloroethene	**6300**		200	58	ug/L			03/17/15 13:53	200
1,2,4-Trichlorobenzene	ND		200	82	ug/L			03/17/15 13:53	200
1,2-Dibromo-3-Chloropropane	ND		200	78	ug/L			03/17/15 13:53	200
1,2-Dichlorobenzene	ND		200	160	ug/L			03/17/15 13:53	200
1,2-Dichloroethane	ND		200	42	ug/L			03/17/15 13:53	200
1,2-Dichloropropane	ND		200	140	ug/L			03/17/15 13:53	200
1,3-Dichlorobenzene	ND		200	160	ug/L			03/17/15 13:53	200
1,4-Dichlorobenzene	ND		200	170	ug/L			03/17/15 13:53	200
2-Butanone (MEK)	ND		2000	260	ug/L			03/17/15 13:53	200
2-Hexanone	ND		1000	250	ug/L			03/17/15 13:53	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			03/17/15 13:53	200
Acetone	ND		2000	600	ug/L			03/17/15 13:53	200
Benzene	ND		200	82	ug/L			03/17/15 13:53	200
Bromodichloromethane	ND		200	78	ug/L			03/17/15 13:53	200
Bromoform	ND		200	52	ug/L			03/17/15 13:53	200
Bromomethane	ND		200	140	ug/L			03/17/15 13:53	200
Carbon disulfide	ND		200	38	ug/L			03/17/15 13:53	200
Carbon tetrachloride	ND		200	54	ug/L			03/17/15 13:53	200
Chlorobenzene	ND		200	150	ug/L			03/17/15 13:53	200
Dibromochloromethane	ND		200	64	ug/L			03/17/15 13:53	200
Chloroethane	**160**	**J**	200	64	ug/L			03/17/15 13:53	200
Chloroform	ND		200	68	ug/L			03/17/15 13:53	200
Chloromethane	ND		200	70	ug/L			03/17/15 13:53	200
cis-1,2-Dichloroethene	**5700**		200	160	ug/L			03/17/15 13:53	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			03/17/15 13:53	200
Cyclohexane	ND		200	36	ug/L			03/17/15 13:53	200
Dichlorodifluoromethane	ND		200	140	ug/L			03/17/15 13:53	200
Ethylbenzene	ND		200	150	ug/L			03/17/15 13:53	200
1,2-Dibromoethane	ND		200	150	ug/L			03/17/15 13:53	200
Isopropylbenzene	ND		200	160	ug/L			03/17/15 13:53	200
Methyl acetate	ND		500	100	ug/L			03/17/15 13:53	200
Methyl tert-butyl ether	ND		200	32	ug/L			03/17/15 13:53	200
Methylcyclohexane	ND		200	32	ug/L			03/17/15 13:53	200
Methylene Chloride	ND		200	88	ug/L			03/17/15 13:53	200
Styrene	ND		200	150	ug/L			03/17/15 13:53	200
Tetrachloroethene	ND		200	72	ug/L			03/17/15 13:53	200
Toluene	**1200**		200	100	ug/L			03/17/15 13:53	200
trans-1,2-Dichloroethene	ND		200	180	ug/L			03/17/15 13:53	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			03/17/15 13:53	200
Trichloroethene	**12000**		200	92	ug/L			03/17/15 13:53	200
Trichlorofluoromethane	ND		200	180	ug/L			03/17/15 13:53	200
Vinyl chloride	ND		200	180	ug/L			03/17/15 13:53	200
Xylenes, Total	ND		400	130	ug/L			03/17/15 13:53	200

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-42S
Date Collected: 03/12/15 11:15
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-7
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*71 - 126*		*03/17/15 13:53*	*200*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*03/17/15 13:53*	*200*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*03/17/15 13:53*	*200*
Dibromofluoromethane (Surr)	*107*		*60 - 140*		*03/17/15 13:53*	*200*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	15.7		1.0	0.43	mg/L			03/14/15 05:59	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: A1-GP10
Date Collected: 03/11/15 14:45
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1900**	**E**	5.0	4.1	ug/L			03/24/15 17:22	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			03/24/15 17:22	5
1,1,2-Trichloroethane	**1.2**	**J**	5.0	1.2	ug/L			03/24/15 17:22	5
1,1,2-Trichloro-1,2,2-trifluoroethane	**85**	**^**	5.0	1.6	ug/L			03/24/15 17:22	5
1,1-Dichloroethane	**440**		5.0	1.9	ug/L			03/24/15 17:22	5
1,1-Dichloroethene	**65**		5.0	1.5	ug/L			03/24/15 17:22	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			03/24/15 17:22	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			03/24/15 17:22	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			03/24/15 17:22	5
1,2-Dichloroethane	**1.6**	**J**	5.0	1.1	ug/L			03/24/15 17:22	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			03/24/15 17:22	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			03/24/15 17:22	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			03/24/15 17:22	5
2-Butanone (MEK)	ND	*	50	6.6	ug/L			03/24/15 17:22	5
2-Hexanone	ND		25	6.2	ug/L			03/24/15 17:22	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			03/24/15 17:22	5
Acetone	ND		50	15	ug/L			03/24/15 17:22	5
Benzene	ND		5.0	2.1	ug/L			03/24/15 17:22	5
Bromodichloromethane	ND		5.0	2.0	ug/L			03/24/15 17:22	5
Bromoform	ND		5.0	1.3	ug/L			03/24/15 17:22	5
Bromomethane	ND		5.0	3.5	ug/L			03/24/15 17:22	5
Carbon disulfide	ND		5.0	0.95	ug/L			03/24/15 17:22	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			03/24/15 17:22	5
Chlorobenzene	ND		5.0	3.8	ug/L			03/24/15 17:22	5
Dibromochloromethane	ND		5.0	1.6	ug/L			03/24/15 17:22	5
Chloroethane	**3.0**	**J**	5.0	1.6	ug/L			03/24/15 17:22	5
Chloroform	ND		5.0	1.7	ug/L			03/24/15 17:22	5
Chloromethane	ND		5.0	1.8	ug/L			03/24/15 17:22	5
cis-1,2-Dichloroethene	**7.4**		5.0	4.1	ug/L			03/24/15 17:22	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			03/24/15 17:22	5
Cyclohexane	ND		5.0	0.90	ug/L			03/24/15 17:22	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			03/24/15 17:22	5
Ethylbenzene	ND		5.0	3.7	ug/L			03/24/15 17:22	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			03/24/15 17:22	5
Isopropylbenzene	ND		5.0	4.0	ug/L			03/24/15 17:22	5
Methyl acetate	ND		13	2.5	ug/L			03/24/15 17:22	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			03/24/15 17:22	5
Methylcyclohexane	ND		5.0	0.80	ug/L			03/24/15 17:22	5
Methylene Chloride	**4.2**	**J B**	5.0	2.2	ug/L			03/24/15 17:22	5
Styrene	ND		5.0	3.7	ug/L			03/24/15 17:22	5
Tetrachloroethene	ND		5.0	1.8	ug/L			03/24/15 17:22	5
Toluene	ND		5.0	2.6	ug/L			03/24/15 17:22	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			03/24/15 17:22	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			03/24/15 17:22	5
Trichloroethene	**6.6**		5.0	2.3	ug/L			03/24/15 17:22	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			03/24/15 17:22	5
Vinyl chloride	ND		5.0	4.5	ug/L			03/24/15 17:22	5
Xylenes, Total	ND		10	3.3	ug/L			03/24/15 17:22	5

Client Sample ID: A1-GP10
Date Collected: 03/11/15 14:45
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-8
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*71 - 126*		*03/24/15 17:22*	*5*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 137*		*03/24/15 17:22*	*5*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*03/24/15 17:22*	*5*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*03/24/15 17:22*	*5*

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1500**		25	21	ug/L			03/25/15 14:48	25
1,1,2,2-Tetrachloroethane	ND		25	5.3	ug/L			03/25/15 14:48	25
1,1,2-Trichloroethane	ND		25	5.8	ug/L			03/25/15 14:48	25
1,1,2-Trichloro-1,2,2-trifluoroetha ne	**31**		25	7.8	ug/L			03/25/15 14:48	25
1,1-Dichloroethane	**410**		25	9.5	ug/L			03/25/15 14:48	25
1,1-Dichloroethene	**48**		25	7.3	ug/L			03/25/15 14:48	25
1,2,4-Trichlorobenzene	ND		25	10	ug/L			03/25/15 14:48	25
1,2-Dibromo-3-Chloropropane	ND		25	9.8	ug/L			03/25/15 14:48	25
1,2-Dichlorobenzene	ND		25	20	ug/L			03/25/15 14:48	25
1,2-Dichloroethane	ND		25	5.3	ug/L			03/25/15 14:48	25
1,2-Dichloropropane	ND		25	18	ug/L			03/25/15 14:48	25
1,3-Dichlorobenzene	ND		25	20	ug/L			03/25/15 14:48	25
1,4-Dichlorobenzene	ND		25	21	ug/L			03/25/15 14:48	25
2-Butanone (MEK)	ND	*	250	33	ug/L			03/25/15 14:48	25
2-Hexanone	ND		130	31	ug/L			03/25/15 14:48	25
4-Methyl-2-pentanone (MIBK)	ND		130	53	ug/L			03/25/15 14:48	25
Acetone	ND		250	75	ug/L			03/25/15 14:48	25
Benzene	ND		25	10	ug/L			03/25/15 14:48	25
Bromodichloromethane	ND		25	9.8	ug/L			03/25/15 14:48	25
Bromoform	ND		25	6.5	ug/L			03/25/15 14:48	25
Bromomethane	ND		25	17	ug/L			03/25/15 14:48	25
Carbon disulfide	ND		25	4.8	ug/L			03/25/15 14:48	25
Carbon tetrachloride	ND		25	6.8	ug/L			03/25/15 14:48	25
Chlorobenzene	ND		25	19	ug/L			03/25/15 14:48	25
Dibromochloromethane	ND		25	8.0	ug/L			03/25/15 14:48	25
Chloroethane	ND		25	8.0	ug/L			03/25/15 14:48	25
Chloroform	ND		25	8.5	ug/L			03/25/15 14:48	25
Chloromethane	ND		25	8.8	ug/L			03/25/15 14:48	25
cis-1,2-Dichloroethene	ND		25	20	ug/L			03/25/15 14:48	25
cis-1,3-Dichloropropene	ND		25	9.0	ug/L			03/25/15 14:48	25
Cyclohexane	ND		25	4.5	ug/L			03/25/15 14:48	25
Dichlorodifluoromethane	ND		25	17	ug/L			03/25/15 14:48	25
Ethylbenzene	ND		25	19	ug/L			03/25/15 14:48	25
1,2-Dibromoethane	ND		25	18	ug/L			03/25/15 14:48	25
Isopropylbenzene	ND		25	20	ug/L			03/25/15 14:48	25
Methyl acetate	ND		63	13	ug/L			03/25/15 14:48	25
Methyl tert-butyl ether	ND		25	4.0	ug/L			03/25/15 14:48	25
Methylcyclohexane	ND		25	4.0	ug/L			03/25/15 14:48	25
Methylene Chloride	**32**	**B**	25	11	ug/L			03/25/15 14:48	25
Styrene	ND		25	18	ug/L			03/25/15 14:48	25
Tetrachloroethene	ND		25	9.0	ug/L			03/25/15 14:48	25
Toluene	ND		25	13	ug/L			03/25/15 14:48	25

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: A1-GP10
Date Collected: 03/11/15 14:45
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		25	23	ug/L			03/25/15 14:48	25
trans-1,3-Dichloropropene	ND		25	9.3	ug/L			03/25/15 14:48	25
Trichloroethene	ND		25	12	ug/L			03/25/15 14:48	25
Trichlorofluoromethane	ND		25	22	ug/L			03/25/15 14:48	25
Vinyl chloride	ND		25	23	ug/L			03/25/15 14:48	25
Xylenes, Total	ND		50	17	ug/L			03/25/15 14:48	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*71 - 126*		*03/25/15 14:48*	*25*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*03/25/15 14:48*	*25*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*03/25/15 14:48*	*25*
Dibromofluoromethane (Surr)	*102*		*60 - 140*		*03/25/15 14:48*	*25*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**2.7**		1.0	0.43	mg/L			03/14/15 06:56	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: A1-GP06
Date Collected: 03/11/15 10:20
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**11**		1.0	0.82	ug/L			03/24/15 17:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/24/15 17:46	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/24/15 17:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**7.4**	**^**	1.0	0.31	ug/L			03/24/15 17:46	1
1,1-Dichloroethane	**21**		1.0	0.38	ug/L			03/24/15 17:46	1
1,1-Dichloroethene	**0.89**	**J**	1.0	0.29	ug/L			03/24/15 17:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/24/15 17:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/24/15 17:46	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/24/15 17:46	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/24/15 17:46	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/24/15 17:46	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/24/15 17:46	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/24/15 17:46	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			03/24/15 17:46	1
2-Hexanone	ND		5.0	1.2	ug/L			03/24/15 17:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/24/15 17:46	1
Acetone	ND		10	3.0	ug/L			03/24/15 17:46	1
Benzene	ND		1.0	0.41	ug/L			03/24/15 17:46	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/24/15 17:46	1
Bromoform	ND		1.0	0.26	ug/L			03/24/15 17:46	1
Bromomethane	ND		1.0	0.69	ug/L			03/24/15 17:46	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/24/15 17:46	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/24/15 17:46	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/24/15 17:46	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/24/15 17:46	1
Chloroethane	ND		1.0	0.32	ug/L			03/24/15 17:46	1
Chloroform	ND		1.0	0.34	ug/L			03/24/15 17:46	1
Chloromethane	ND		1.0	0.35	ug/L			03/24/15 17:46	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/24/15 17:46	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/24/15 17:46	1
Cyclohexane	ND		1.0	0.18	ug/L			03/24/15 17:46	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/24/15 17:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/24/15 17:46	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/24/15 17:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/24/15 17:46	1
Methyl acetate	ND		2.5	0.50	ug/L			03/24/15 17:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/24/15 17:46	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/24/15 17:46	1
Methylene Chloride	**1.4**	**B**	1.0	0.44	ug/L			03/24/15 17:46	1
Styrene	ND		1.0	0.73	ug/L			03/24/15 17:46	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/24/15 17:46	1
Toluene	ND		1.0	0.51	ug/L			03/24/15 17:46	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/24/15 17:46	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/24/15 17:46	1
Trichloroethene	**0.81**	**J**	1.0	0.46	ug/L			03/24/15 17:46	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/24/15 17:46	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/24/15 17:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/24/15 17:46	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: A1-GP06
Date Collected: 03/11/15 10:20
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-9
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*71 - 126*		*03/24/15 17:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*03/24/15 17:46*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*03/24/15 17:46*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*		*03/24/15 17:46*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	5.5		1.0	0.43	mg/L			03/14/15 07:25	1

Client Sample ID: MW-35D
Date Collected: 03/12/15 10:05
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 15:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 15:05	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 15:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 15:05	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/17/15 15:05	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 15:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 15:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 15:05	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 15:05	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 15:05	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 15:05	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 15:05	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 15:05	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 15:05	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 15:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 15:05	1
Acetone	ND		10	3.0	ug/L			03/17/15 15:05	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 15:05	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 15:05	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 15:05	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 15:05	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 15:05	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 15:05	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 15:05	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 15:05	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 15:05	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 15:05	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 15:05	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/17/15 15:05	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 15:05	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 15:05	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 15:05	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 15:05	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 15:05	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 15:05	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 15:05	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 15:05	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/17/15 15:05	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 15:05	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 15:05	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 15:05	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 15:05	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 15:05	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 15:05	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 15:05	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 15:05	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/17/15 15:05	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/17/15 15:05	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-35D
Date Collected: 03/12/15 10:05
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-10
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*71 - 126*		*03/17/15 15:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*03/17/15 15:05*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*03/17/15 15:05*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*03/17/15 15:05*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**4.7**		1.0	0.43	mg/L			03/14/15 07:53	1

Client Sample ID: MW-36D
Date Collected: 03/10/15 11:15
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 15:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 15:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 15:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 15:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/17/15 15:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 15:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 15:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 15:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 15:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 15:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 15:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 15:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 15:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 15:29	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 15:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 15:29	1
Acetone	ND		10	3.0	ug/L			03/17/15 15:29	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 15:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 15:29	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 15:29	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 15:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 15:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 15:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 15:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 15:29	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 15:29	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 15:29	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 15:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/17/15 15:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 15:29	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 15:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 15:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 15:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 15:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 15:29	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 15:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 15:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/17/15 15:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 15:29	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 15:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 15:29	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 15:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 15:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 15:29	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 15:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 15:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/17/15 15:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/17/15 15:29	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-36D
Date Collected: 03/10/15 11:15
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-11
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*71 - 126*		*03/17/15 15:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*03/17/15 15:29*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*03/17/15 15:29*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*		*03/17/15 15:29*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.2		1.0	0.43	mg/L			03/14/15 08:22	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-37D
Date Collected: 03/10/15 13:30
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 15:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 15:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 15:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 15:53	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/17/15 15:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 15:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 15:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 15:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 15:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 15:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 15:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 15:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 15:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 15:53	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 15:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 15:53	1
Acetone	ND		10	3.0	ug/L			03/17/15 15:53	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 15:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 15:53	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 15:53	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 15:53	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 15:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 15:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 15:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 15:53	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 15:53	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 15:53	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 15:53	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/17/15 15:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 15:53	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 15:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 15:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 15:53	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 15:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 15:53	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 15:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 15:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/17/15 15:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 15:53	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 15:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 15:53	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 15:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 15:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 15:53	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 15:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 15:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/17/15 15:53	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/17/15 15:53	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-37D
Date Collected: 03/10/15 13:30
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-12
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*71 - 126*		*03/17/15 15:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*03/17/15 15:53*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*03/17/15 15:53*	*1*
Dibromofluoromethane (Surr)	*107*		*60 - 140*		*03/17/15 15:53*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.65	J	1.0	0.43	mg/L			03/14/15 09:47	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-38D
Date Collected: 03/10/15 16:10
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-13
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			03/17/15 16:16	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			03/17/15 16:16	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			03/17/15 16:16	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			03/17/15 16:16	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			03/17/15 16:16	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			03/17/15 16:16	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			03/17/15 16:16	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			03/17/15 16:16	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			03/17/15 16:16	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			03/17/15 16:16	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			03/17/15 16:16	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			03/17/15 16:16	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			03/17/15 16:16	4
2-Butanone (MEK)	ND		40	5.3	ug/L			03/17/15 16:16	4
2-Hexanone	ND		20	5.0	ug/L			03/17/15 16:16	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			03/17/15 16:16	4
Acetone	ND		40	12	ug/L			03/17/15 16:16	4
Benzene	ND		4.0	1.6	ug/L			03/17/15 16:16	4
Bromodichloromethane	ND		4.0	1.6	ug/L			03/17/15 16:16	4
Bromoform	ND		4.0	1.0	ug/L			03/17/15 16:16	4
Bromomethane	ND		4.0	2.8	ug/L			03/17/15 16:16	4
Carbon disulfide	ND		4.0	0.76	ug/L			03/17/15 16:16	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			03/17/15 16:16	4
Chlorobenzene	ND		4.0	3.0	ug/L			03/17/15 16:16	4
Dibromochloromethane	ND		4.0	1.3	ug/L			03/17/15 16:16	4
Chloroethane	ND		4.0	1.3	ug/L			03/17/15 16:16	4
Chloroform	ND		4.0	1.4	ug/L			03/17/15 16:16	4
Chloromethane	ND		4.0	1.4	ug/L			03/17/15 16:16	4
cis-1,2-Dichloroethene	**290**		4.0	3.2	ug/L			03/17/15 16:16	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			03/17/15 16:16	4
Cyclohexane	ND		4.0	0.72	ug/L			03/17/15 16:16	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			03/17/15 16:16	4
Ethylbenzene	ND		4.0	3.0	ug/L			03/17/15 16:16	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			03/17/15 16:16	4
Isopropylbenzene	ND		4.0	3.2	ug/L			03/17/15 16:16	4
Methyl acetate	ND		10	2.0	ug/L			03/17/15 16:16	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			03/17/15 16:16	4
Methylcyclohexane	ND		4.0	0.64	ug/L			03/17/15 16:16	4
Methylene Chloride	ND		4.0	1.8	ug/L			03/17/15 16:16	4
Styrene	ND		4.0	2.9	ug/L			03/17/15 16:16	4
Tetrachloroethene	ND		4.0	1.4	ug/L			03/17/15 16:16	4
Toluene	ND		4.0	2.0	ug/L			03/17/15 16:16	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			03/17/15 16:16	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			03/17/15 16:16	4
Trichloroethene	**1.9**	**J**	4.0	1.8	ug/L			03/17/15 16:16	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			03/17/15 16:16	4
Vinyl chloride	**260**		4.0	3.6	ug/L			03/17/15 16:16	4
Xylenes, Total	ND		8.0	2.6	ug/L			03/17/15 16:16	4

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-38D
Date Collected: 03/10/15 16:10
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-13
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*71 - 126*		*03/17/15 16:16*	*4*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*03/17/15 16:16*	*4*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*03/17/15 16:16*	*4*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*03/17/15 16:16*	*4*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	2.5		1.0	0.43	mg/L			03/14/15 10:43	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-39D
Date Collected: 03/10/15 13:50
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-14
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 16:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 16:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 16:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 16:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/17/15 16:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 16:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 16:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 16:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 16:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 16:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 16:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 16:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 16:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 16:40	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 16:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 16:40	1
Acetone	ND		10	3.0	ug/L			03/17/15 16:40	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 16:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 16:40	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 16:40	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 16:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 16:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 16:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 16:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 16:40	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 16:40	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 16:40	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 16:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/17/15 16:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 16:40	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 16:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 16:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 16:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 16:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 16:40	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 16:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 16:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/17/15 16:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 16:40	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 16:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 16:40	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 16:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 16:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 16:40	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 16:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 16:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/17/15 16:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/17/15 16:40	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-39D
Date Collected: 03/10/15 13:50
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-14
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*71 - 126*		*03/17/15 16:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*03/17/15 16:40*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*03/17/15 16:40*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*03/17/15 16:40*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.55	J	1.0	0.43	mg/L			03/14/15 11:39	1

Client Sample ID: MW-40D
Date Collected: 03/11/15 14:30
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**2800**		40	33	ug/L			03/17/15 17:03	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			03/17/15 17:03	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			03/17/15 17:03	40
1,1,2-Trichloro-1,2,2-trifluoroethane	**110**		40	12	ug/L			03/17/15 17:03	40
1,1-Dichloroethane	**7100**	**E**	40	15	ug/L			03/17/15 17:03	40
1,1-Dichloroethene	**200**		40	12	ug/L			03/17/15 17:03	40
1,2,4-Trichlorobenzene	ND		40	16	ug/L			03/17/15 17:03	40
1,2-Dibromo-3-Chloropropane	ND		40	16	ug/L			03/17/15 17:03	40
1,2-Dichlorobenzene	ND		40	32	ug/L			03/17/15 17:03	40
1,2-Dichloroethane	ND		40	8.4	ug/L			03/17/15 17:03	40
1,2-Dichloropropane	ND		40	29	ug/L			03/17/15 17:03	40
1,3-Dichlorobenzene	ND		40	31	ug/L			03/17/15 17:03	40
1,4-Dichlorobenzene	ND		40	34	ug/L			03/17/15 17:03	40
2-Butanone (MEK)	ND		400	53	ug/L			03/17/15 17:03	40
2-Hexanone	ND		200	50	ug/L			03/17/15 17:03	40
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			03/17/15 17:03	40
Acetone	ND		400	120	ug/L			03/17/15 17:03	40
Benzene	ND		40	16	ug/L			03/17/15 17:03	40
Bromodichloromethane	ND		40	16	ug/L			03/17/15 17:03	40
Bromoform	ND		40	10	ug/L			03/17/15 17:03	40
Bromomethane	ND		40	28	ug/L			03/17/15 17:03	40
Carbon disulfide	ND		40	7.6	ug/L			03/17/15 17:03	40
Carbon tetrachloride	ND		40	11	ug/L			03/17/15 17:03	40
Chlorobenzene	ND		40	30	ug/L			03/17/15 17:03	40
Dibromochloromethane	ND		40	13	ug/L			03/17/15 17:03	40
Chloroethane	**1100**		40	13	ug/L			03/17/15 17:03	40
Chloroform	ND		40	14	ug/L			03/17/15 17:03	40
Chloromethane	ND		40	14	ug/L			03/17/15 17:03	40
cis-1,2-Dichloroethene	ND		40	32	ug/L			03/17/15 17:03	40
cis-1,3-Dichloropropene	ND		40	14	ug/L			03/17/15 17:03	40
Cyclohexane	ND		40	7.2	ug/L			03/17/15 17:03	40
Dichlorodifluoromethane	ND		40	27	ug/L			03/17/15 17:03	40
Ethylbenzene	ND		40	30	ug/L			03/17/15 17:03	40
1,2-Dibromoethane	ND		40	29	ug/L			03/17/15 17:03	40
Isopropylbenzene	ND		40	32	ug/L			03/17/15 17:03	40
Methyl acetate	ND		100	20	ug/L			03/17/15 17:03	40
Methyl tert-butyl ether	ND		40	6.4	ug/L			03/17/15 17:03	40
Methylcyclohexane	ND		40	6.4	ug/L			03/17/15 17:03	40
Methylene Chloride	ND		40	18	ug/L			03/17/15 17:03	40
Styrene	ND		40	29	ug/L			03/17/15 17:03	40
Tetrachloroethene	ND		40	14	ug/L			03/17/15 17:03	40
Toluene	ND		40	20	ug/L			03/17/15 17:03	40
trans-1,2-Dichloroethene	ND		40	36	ug/L			03/17/15 17:03	40
trans-1,3-Dichloropropene	ND		40	15	ug/L			03/17/15 17:03	40
Trichloroethene	ND		40	18	ug/L			03/17/15 17:03	40
Trichlorofluoromethane	ND		40	35	ug/L			03/17/15 17:03	40
Vinyl chloride	**67**		40	36	ug/L			03/17/15 17:03	40
Xylenes, Total	ND		80	26	ug/L			03/17/15 17:03	40

Client Sample ID: MW-40D
Date Collected: 03/11/15 14:30
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-15
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*71 - 126*		*03/17/15 17:03*	*40*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*		*03/17/15 17:03*	*40*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*03/17/15 17:03*	*40*
Dibromofluoromethane (Surr)	*110*		*60 - 140*		*03/17/15 17:03*	*40*

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**2000**		100	82	ug/L			03/18/15 03:08	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			03/18/15 03:08	100
1,1,2-Trichloroethane	ND		100	23	ug/L			03/18/15 03:08	100
1,1,2-Trichloro-1,2,2-trifluoroethane	**86**	**J**	100	31	ug/L			03/18/15 03:08	100
1,1-Dichloroethane	**5400**		100	38	ug/L			03/18/15 03:08	100
1,1-Dichloroethene	**150**		100	29	ug/L			03/18/15 03:08	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			03/18/15 03:08	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			03/18/15 03:08	100
1,2-Dichlorobenzene	ND		100	79	ug/L			03/18/15 03:08	100
1,2-Dichloroethane	ND		100	21	ug/L			03/18/15 03:08	100
1,2-Dichloropropane	ND		100	72	ug/L			03/18/15 03:08	100
1,3-Dichlorobenzene	ND		100	78	ug/L			03/18/15 03:08	100
1,4-Dichlorobenzene	ND		100	84	ug/L			03/18/15 03:08	100
2-Butanone (MEK)	ND		1000	130	ug/L			03/18/15 03:08	100
2-Hexanone	ND		500	120	ug/L			03/18/15 03:08	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			03/18/15 03:08	100
Acetone	ND		1000	300	ug/L			03/18/15 03:08	100
Benzene	ND		100	41	ug/L			03/18/15 03:08	100
Bromodichloromethane	ND		100	39	ug/L			03/18/15 03:08	100
Bromoform	ND		100	26	ug/L			03/18/15 03:08	100
Bromomethane	ND		100	69	ug/L			03/18/15 03:08	100
Carbon disulfide	ND		100	19	ug/L			03/18/15 03:08	100
Carbon tetrachloride	ND		100	27	ug/L			03/18/15 03:08	100
Chlorobenzene	ND		100	75	ug/L			03/18/15 03:08	100
Dibromochloromethane	ND		100	32	ug/L			03/18/15 03:08	100
Chloroethane	**790**		100	32	ug/L			03/18/15 03:08	100
Chloroform	ND		100	34	ug/L			03/18/15 03:08	100
Chloromethane	ND		100	35	ug/L			03/18/15 03:08	100
cis-1,2-Dichloroethene	ND		100	81	ug/L			03/18/15 03:08	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			03/18/15 03:08	100
Cyclohexane	ND		100	18	ug/L			03/18/15 03:08	100
Dichlorodifluoromethane	ND		100	68	ug/L			03/18/15 03:08	100
Ethylbenzene	ND		100	74	ug/L			03/18/15 03:08	100
1,2-Dibromoethane	ND		100	73	ug/L			03/18/15 03:08	100
Isopropylbenzene	ND		100	79	ug/L			03/18/15 03:08	100
Methyl acetate	ND		250	50	ug/L			03/18/15 03:08	100
Methyl tert-butyl ether	ND		100	16	ug/L			03/18/15 03:08	100
Methylcyclohexane	ND		100	16	ug/L			03/18/15 03:08	100
Methylene Chloride	ND		100	44	ug/L			03/18/15 03:08	100
Styrene	ND		100	73	ug/L			03/18/15 03:08	100
Tetrachloroethene	ND		100	36	ug/L			03/18/15 03:08	100
Toluene	ND		100	51	ug/L			03/18/15 03:08	100

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-40D
Date Collected: 03/11/15 14:30
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		100	90	ug/L			03/18/15 03:08	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			03/18/15 03:08	100
Trichloroethene	ND		100	46	ug/L			03/18/15 03:08	100
Trichlorofluoromethane	ND		100	88	ug/L			03/18/15 03:08	100
Vinyl chloride	ND		100	90	ug/L			03/18/15 03:08	100
Xylenes, Total	ND		200	66	ug/L			03/18/15 03:08	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*71 - 126*		*03/18/15 03:08*	*100*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*03/18/15 03:08*	*100*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*03/18/15 03:08*	*100*
Dibromofluoromethane (Surr)	*110*		*60 - 140*		*03/18/15 03:08*	*100*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**1.8**		1.0	0.43	mg/L			03/14/15 12:08	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: DUPLICATE
Date Collected: 03/11/15 08:00
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-16
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 17:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 17:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 17:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 17:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/17/15 17:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 17:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 17:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 17:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 17:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 17:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 17:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 17:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 17:27	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 17:27	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 17:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 17:27	1
Acetone	ND		10	3.0	ug/L			03/17/15 17:27	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 17:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 17:27	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 17:27	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 17:27	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 17:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 17:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 17:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 17:27	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 17:27	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 17:27	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 17:27	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/17/15 17:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 17:27	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 17:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 17:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 17:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 17:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 17:27	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 17:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 17:27	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/17/15 17:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 17:27	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 17:27	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 17:27	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 17:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 17:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 17:27	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 17:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 17:27	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/17/15 17:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/17/15 17:27	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: DUPLICATE
Date Collected: 03/11/15 08:00
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-16
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*71 - 126*		*03/17/15 17:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*03/17/15 17:27*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*03/17/15 17:27*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*		*03/17/15 17:27*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	2.3		1.0	0.43	mg/L			03/14/15 12:36	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: TRIP BLANK
Date Collected: 03/12/15 00:00
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-17
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/17/15 17:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/17/15 17:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/17/15 17:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/17/15 17:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/17/15 17:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/17/15 17:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/17/15 17:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/17/15 17:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/17/15 17:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/17/15 17:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/17/15 17:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/17/15 17:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/17/15 17:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/17/15 17:51	1
2-Hexanone	ND		5.0	1.2	ug/L			03/17/15 17:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/17/15 17:51	1
Acetone	ND		10	3.0	ug/L			03/17/15 17:51	1
Benzene	ND		1.0	0.41	ug/L			03/17/15 17:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/17/15 17:51	1
Bromoform	ND		1.0	0.26	ug/L			03/17/15 17:51	1
Bromomethane	ND		1.0	0.69	ug/L			03/17/15 17:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/17/15 17:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/17/15 17:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/17/15 17:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/17/15 17:51	1
Chloroethane	ND		1.0	0.32	ug/L			03/17/15 17:51	1
Chloroform	ND		1.0	0.34	ug/L			03/17/15 17:51	1
Chloromethane	ND		1.0	0.35	ug/L			03/17/15 17:51	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/17/15 17:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/17/15 17:51	1
Cyclohexane	ND		1.0	0.18	ug/L			03/17/15 17:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/17/15 17:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/17/15 17:51	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/17/15 17:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/17/15 17:51	1
Methyl acetate	ND		2.5	0.50	ug/L			03/17/15 17:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/17/15 17:51	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/17/15 17:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/17/15 17:51	1
Styrene	ND		1.0	0.73	ug/L			03/17/15 17:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/17/15 17:51	1
Toluene	ND		1.0	0.51	ug/L			03/17/15 17:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/17/15 17:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/17/15 17:51	1
Trichloroethene	ND		1.0	0.46	ug/L			03/17/15 17:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/17/15 17:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/17/15 17:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/17/15 17:51	1

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: TRIP BLANK
Date Collected: 03/12/15 00:00
Date Received: 03/12/15 13:40

Lab Sample ID: 480-76544-17
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		71 - 126		03/17/15 17:51	1
1,2-Dichloroethane-d4 (Surr)	108		66 - 137		03/17/15 17:51	1
4-Bromofluorobenzene (Surr)	88		73 - 120		03/17/15 17:51	1
Dibromofluoromethane (Surr)	108		60 - 140		03/17/15 17:51	1

Lab Chronicle

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: MW-35S
Lab Sample ID: 480-76544-1
Date Collected: 03/11/15 12:30
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230675	03/17/15 07:25	LJF	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 00:45	CAS	TAL BUF

Client Sample ID: MW-36S
Lab Sample ID: 480-76544-2
Date Collected: 03/10/15 10:25
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230675	03/17/15 07:48	LJF	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 01:14	CAS	TAL BUF

Client Sample ID: A1-GP18
Lab Sample ID: 480-76544-3
Date Collected: 03/11/15 09:15
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230675	03/17/15 08:12	LJF	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 01:42	CAS	TAL BUF

Client Sample ID: MW-43S
Lab Sample ID: 480-76544-4
Date Collected: 03/12/15 12:00
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230675	03/17/15 08:36	LJF	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 02:11	CAS	TAL BUF

Client Sample ID: A1-GP02
Lab Sample ID: 480-76544-5
Date Collected: 03/10/15 15:25
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	230675	03/17/15 08:59	LJF	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 02:39	CAS	TAL BUF

Client Sample ID: A1-GP15
Lab Sample ID: 480-76544-6
Date Collected: 03/11/15 11:05
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230730	03/17/15 13:29	NMD1	TAL BUF

Lab Chronicle

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: A1-GP15

Lab Sample ID: 480-76544-6

Date Collected: 03/11/15 11:05
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	230545	03/14/15 05:01	CAS	TAL BUF

Client Sample ID: MW-42S

Lab Sample ID: 480-76544-7

Date Collected: 03/12/15 11:15
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	230730	03/17/15 13:53	NMD1	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 05:59	CAS	TAL BUF

Client Sample ID: A1-GP10

Lab Sample ID: 480-76544-8

Date Collected: 03/11/15 14:45
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	231897	03/24/15 17:22	SWO	TAL BUF
Total/NA	Analysis	8260C	DL	25	232120	03/25/15 14:48	LCH	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 06:56	CAS	TAL BUF

Client Sample ID: A1-GP06

Lab Sample ID: 480-76544-9

Date Collected: 03/11/15 10:20
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	231897	03/24/15 17:46	SWO	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 07:25	CAS	TAL BUF

Client Sample ID: MW-35D

Lab Sample ID: 480-76544-10

Date Collected: 03/12/15 10:05
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230730	03/17/15 15:05	NMD1	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 07:53	CAS	TAL BUF

Client Sample ID: MW-36D

Lab Sample ID: 480-76544-11

Date Collected: 03/10/15 11:15
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230730	03/17/15 15:29	NMD1	TAL BUF

Client Sample ID: MW-36D

Lab Sample ID: 480-76544-11

Date Collected: 03/10/15 11:15

Matrix: Water

Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	230545	03/14/15 08:22	CAS	TAL BUF

Client Sample ID: MW-37D

Lab Sample ID: 480-76544-12

Date Collected: 03/10/15 13:30

Matrix: Water

Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230730	03/17/15 15:53	NMD1	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 09:47	CAS	TAL BUF

Client Sample ID: MW-38D

Lab Sample ID: 480-76544-13

Date Collected: 03/10/15 16:10

Matrix: Water

Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	230730	03/17/15 16:16	NMD1	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 10:43	CAS	TAL BUF

Client Sample ID: MW-39D

Lab Sample ID: 480-76544-14

Date Collected: 03/10/15 13:50

Matrix: Water

Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230730	03/17/15 16:40	NMD1	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 11:39	CAS	TAL BUF

Client Sample ID: MW-40D

Lab Sample ID: 480-76544-15

Date Collected: 03/11/15 14:30

Matrix: Water

Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		40	230730	03/17/15 17:03	NMD1	TAL BUF
Total/NA	Analysis	8260C	DL	100	230861	03/18/15 03:08	LJF	TAL BUF
Total/NA	Analysis	9060A		1	230545	03/14/15 12:08	CAS	TAL BUF

Client Sample ID: DUPLICATE

Lab Sample ID: 480-76544-16

Date Collected: 03/11/15 08:00

Matrix: Water

Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230730	03/17/15 17:27	NMD1	TAL BUF

Lab Chronicle

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Client Sample ID: DUPLICATE

Lab Sample ID: 480-76544-16

Date Collected: 03/11/15 08:00
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	230545	03/14/15 12:36	CAS	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-76544-17

Date Collected: 03/12/15 00:00
Matrix: Water
Date Received: 03/12/15 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	230730	03/17/15 17:51	NMD1	TAL BUF

Laboratory References:

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

Certification Summary

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-15 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: AECOM, Inc.
Project/Site: Pre-Injection & Post Injection Sampling

TestAmerica Job ID: 480-76544-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-76544-1	MW-35S	Water	03/11/15 12:30	03/12/15 13:40
480-76544-2	MW-36S	Water	03/10/15 10:25	03/12/15 13:40
480-76544-3	A1-GP18	Water	03/11/15 09:15	03/12/15 13:40
480-76544-4	MW-43S	Water	03/12/15 12:00	03/12/15 13:40
480-76544-5	A1-GP02	Water	03/10/15 15:25	03/12/15 13:40
480-76544-6	A1-GP15	Water	03/11/15 11:05	03/12/15 13:40
480-76544-7	MW-42S	Water	03/12/15 11:15	03/12/15 13:40
480-76544-8	A1-GP10	Water	03/11/15 14:45	03/12/15 13:40
480-76544-9	A1-GP06	Water	03/11/15 10:20	03/12/15 13:40
480-76544-10	MW-35D	Water	03/12/15 10:05	03/12/15 13:40
480-76544-11	MW-36D	Water	03/10/15 11:15	03/12/15 13:40
480-76544-12	MW-37D	Water	03/10/15 13:30	03/12/15 13:40
480-76544-13	MW-38D	Water	03/10/15 16:10	03/12/15 13:40
480-76544-14	MW-39D	Water	03/10/15 13:50	03/12/15 13:40
480-76544-15	MW-40D	Water	03/11/15 14:30	03/12/15 13:40
480-76544-16	DUPLICATE	Water	03/11/15 08:00	03/12/15 13:40
480-76544-17	TRIP BLANK	Water	03/12/15 00:00	03/12/15 13:40

Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 480-76544-1

Login Number: 76544
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo

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

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Emily Laity	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-64439-16305.1
Client Contact: Mr. Dino Zack	Phone: 716 - 836 - 4506	E-Mail: brian.fischer@testamericainc.com		Page: Page 1 of 2
Company: AECOM, Inc.		Analysis Requested		Job #:
Address: 100 Corporate Parkway Suite 341	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
City: Amherst	TAT Requested (days): Standard			
State, Zip: NY, 14226				Other:
Phone:	PO #: Purchase Order not required			
Email: dino.zack@aecom.com	WO #:			
Project Name: Pre-Injection & Post Injection Sampling	Project #: 48011352			
Site: Scott Aviation BCP	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL list OLM04.2	9060A - Local Method	Total Number of Containers	Special Instructions/Note:
			Preservation Code:				A	A		
MW-35S	3/11/15	12:30	G	Water	N	N	3	2		
MW-36S	3/10/15	10:25	G	Water	N	N	3	2		
A1-GP18	3/11/15	9:15	G	Water	N	N	3	2		
MW-43S	3/12/15	12:00	G	Water	N	N	3	2		
A1-GP02	3/10/15	15:25	G	Water	N	N	3	2		
A1-GP15	3/11/15	11:05	G	Water	N	N	3	2		
MW-42S	3/12/15	11:15	G	Water	N	N	3	2		
A1-GP10	3/11/15	14:45	G	Water	N	N	3	2		
A1-GP06	3/11/15	10:20	G	Water	N	N	3	2		
MW-35D	3/12/15	10:05	G	Water	N	N	3	2		
MW-36D	3/10/15	11:15	G	Water	N	N	3	2		

480-76544 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	3/12/15 13:46	AECOM	Cameron Wallace	3-12-15 13:46	TAB
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: IR1 2.3

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Emily Laity	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-64439-16305.2
Client Contact: Mr. Dino Zack	Phone: 716-836-4506	E-Mail: brian.fischer@testamericainc.com		Page: Page 2 of 2
Company: AECOM, Inc.		**Analysis Requested**		Job #:
Address: 100 Corporate Parkway Suite 341	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
City: Amherst	TAT Requested (days): Standard			
State, Zip: NY, 14226	PO #: Purchase Order not required			
Phone:	WO #:			Other:
Email: dino.zack@aecom.com	Project #: 48011352			
Project Name: Pre-Injection & Post Injection Sampling	SSOW#:			
Site: Scott Aviation BCP				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL list OLM04.2	9060A - Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A		
MW-37D	3/10/15	13:30	G	Water	N	N	3	2		
MW-38D	3/10/15	16:10	G	Water	N	N	3	2		
MW-39D	3/10/15	13:50	G	Water	N	N	3	2		
MW-40D	3/11/15	14:30	G	Water	N	N	3	2		
DUPLICATE	3/11/15	8:00	G	Water	N	N	3	2		
EXTRA				Water						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	3/12/15 13:40	AECOM	[signature]	3-12-15 13:40	TAB
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: F1 2.3

Appendix B

Groundwater Sample Logs

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/10/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: GP-2S
Upgradient ____ Downgradient ____
Weather Conditions: Cloudy
Air Temperature: 45 ° F
Total Depth (TWD) Below Top of Casing = 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 3.95 1/100 ft
Length of Water Column (LWC) = TWD - DGW = ____ 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = ____ gal
3 Casing Volumes = ____ gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 8 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	150	150	150	150	100	100	100	
Time (Military)	15:00	15:05	15:10	15:15	15:20	15:25	15:30	
Depth to Groundwater Below Top of Casing (ft)	7.95	7.9	8	8	7.76	7.75	7.75	
Drawdown (ft)	-4.00	-0.05	0.10	0.00	-0.24	-0.01	0.00	
pH (S.U.)	7.62	7.41	7.26	7.22	7.22	7.24	7.24	
Sp. Cond. (mS/cm)	0.848	0.663	0.857	0.850	0.846	0.850	0.850	
Turbidity (NTUs)	81.6	1220	157	138	211	103	52.7	
Dissolved Oxygen (g/L)	4.78	1.73	4.77	6.59	6.24	7.01	6.95	
Water Temperature (°C)	6.67	6.29	6.3	6.58	6.95	6.9	6.86	
ORP (mV)	-4.5	-1	4.4	3.2	1	-1.4	-0.9	

Physical appearance at start — Color: tan/turbid; Odor: no
Physical appearance at sampling — Color: slightly turbid; Odor: no
Sheen/Free Product: no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 14:55. Emptied flow trhu cell at 15:05; well turbidity got worse, then improved right before sample Sample at 15:30, but time listed on bottles was 15:25.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/11/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: GP-6S
Upgradient ____ Downgradient ____
Weather Conditions: Cloudy
Air Temperature: 40 ° F
Total Depth (TWD) Below Top of Casing = 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 2.00 1/100 ft
Length of Water Column (LWC) = TWD - DGW = ____ 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = ____ gal
3 Casing Volumes = ____ gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 4.00 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	150	150	125	125	100	100	100	
Time (Military)	9:45	9:50	9:55	10:00	10:05	10:10	10:15	
Depth to Groundwater Below Top of Casing (ft)	3.7	3.91	3.95	4.8	5	5.2	5.65	
Drawdown (ft)	-1.7	-0.21	-0.04	-0.85	-0.2	-0.2	-0.45	
pH (S.U.)	5.31	5.25	5.35	5.49	5.58	5.66	5.8	
Sp. Cond. (mS/cm)	0.725	0.702	0.657	0.631	0.625	0.622	0.616	
Turbidity (NTUs)	7.18	8.89	5.35	4.69	7.09	9.41	8.54	
Dissolved Oxygen (mg/L)	3	7.36	8.7	9.3	9.79	9.63	9.8	
Water Temperature (°C)	6.22	6.42	5.38	5.03	4.92	4.81	4.86	
ORP (mV)	275.2	278.6	276.6	271.6	269	264.2	257.3	

Physical appearance at start — Color: clear; Odor: no
Sheen/Free Product: no

Physical appearance at sampling — Color: clear; Odor: no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 09:40. May be getting water from some surface infiltration DO high, PH a little low, water temp getting colder. Collect samples at 10:20. Concrete pad is raised a little from freeze/thaw. Casing is not loose though. Sample time at 10:20.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/11/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: GP-10S
Upgradient ____ Downgradient ____
Weather Conditions: Cloudy
Air Temperature: 40 ° F
Total Depth (TWD) Below Top of Casing = 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 1.8 1/100 ft
Length of Water Column (LWC) = TWD - DGW = ____ 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = ____ gal
3 Casing Volumes = ____ gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 2 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100			
Time (Military)	13:25	13:30	13:35	13:40	13:45			
Depth to Groundwater Below Top of Casing (ft)	5.2	7.5	10.2	11.5	12.8			
Drawdown (ft)	-3.4	-2.3	-2.7	-1.3	-1.3			
pH (S.U.)	6.91	6.87	6.87	6.88	6.87			
Sp. Cond. (mS/cm)	1.465	1.373	1.218	1.185	1.096			
Turbidity (NTUs)	11.7	43.5	44	41	32			
Dissolved Oxygen (mg/L)	3.26	1.89	1.49	1.37	1.84			
Water Temperature (°C)	6.93	6.85	6.64	7.29	7.56			
ORP (mV)	28.5	-16.5	-39.5	-47.2	-49.8			

Physical appearance at start — Color: clear w/ pale iron bac. — Odor: no — Sheen/Free Product: no

Physical appearance at sampling — Color: cloudy — Odor: no — Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start puring at 13:15.20. Well dry at 13:50. Allow to recharge. Samples collected at 14:45. Turbidity was 20.3 from sampled recharged water. Well recharged to 1.8'bsg at 14:40. Sample time at 14:45.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/11/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: GP-15S
___ Upgradient ___ Downgradient
Weather Conditions: Cloudy
Air Temperature: 40 ° F
Total Depth (TWD) Below Top of Casing = 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 1.2 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = gal
3 Casing Volumes = gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 4.0 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100				
Time (Military)	10:45	10:50	10:55	11:00				
Depth to Groundwater Below Top of Casing (ft)	4.00	6.15	8.40	10.50				
Drawdown (ft)	-2.80	-2.15	-2.25	-2.10				
pH (S.U.)	6.79	6.81	6.82	6.85				
Sp. Cond. (mS/cm)	0.796	0.8	0.802	0.801				
Turbidity (NTUs)	55	69	69.8	59.8				
Dissolved Oxygen (mg/L)	3.46	1.51	1.6	1.4				
Water Temperature (°C)	6.09	6.13	6.06	6.37				
ORP (mV)	123.6	75.5	54.6	42				

Physical appearance at start — Color: tan cloudy; Odor: no
Sheen/Free Product: no

Physical appearance at sampling — Color: cloudy; Odor: no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 10:40. Well drawing down consistantly. Collect samples at 11:05. Post sample turbidity = 19.6 NTU.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 03/10/15
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: GP-18S
Upgradient ____ Downgradient ____
Weather Conditions: Cloudy
Air Temperature: 40 ° F
Total Depth (TWD) Below Top of Casing = 18 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 5.25 1/100 ft
Length of Water Column (LWC) = TWD - DGW = ____ 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = ____ gal
3 Casing Volumes = ____ gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 3 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100	100	100	100
Time (Military)	11:45	11:50	11:55	12:00	12:05	12:10	12:15	12:20
Depth to Groundwater Below Top of Casing (ft)	3.9	9.55	11.7	12	13.3	14.1	16.65	DRY @ 18' btoc
Drawdown (ft)	1.35	-5.65	-2.15	-0.3	-1.3	-0.8	-2.55	
pH (S.U.)	7.72	7.56	7.18	7.27	7.35	7.37	7.38	
Sp. Cond. (mS/cm)	0.700	0.706	0.719	0.717	0.701	0.698	0.699	
Turbidity (NTUs)	5.42	22	27.9	24.1	18.1	19.5	11	
Dissolved Oxygen (mg/L)	2.73	2.66	2.76	2.41	2	2.84	1.93	
Water Temperature (°C)	5.65	5.57	6.53	6.86	7.73	8.07	8.35	
ORP (mV)	44.1	49.1	65.1	55.4	16.4	51	50	

Physical appearance at start: Color Cloudy; Odor no
Sheen/Free Product: no

Physical appearance at sampling: Color Clear; Odor no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 11:45. Well dry at 12:20. Allowed to recharge overnight. Collect samples at 9:15 on 3/11/15.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/11/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-35S
Upgradient ____ Downgradient ____
Weather Conditions: Cloudy
Air Temperature: 40 ° F
Total Depth (TWD) Below Top of Casing = 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 3.6 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = gal
3 Casing Volumes = gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 4 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100			
Time (Military)	12:05	12:10	12:15	12:20	12:25			
Depth to Groundwater Below Top of Casing (ft)	4.25	4.75	4.9	5.1	5.25			
Drawdown (ft)	-0.65	-0.5	-0.15	-0.2	-0.15			
pH (S.U.)	7.31	7.18	7.12	7.09	7.07			
Sp. Cond. (mS/cm)	0.874	0.875	0.876	0.875	0.873			
Turbidity (NTUs)	30.9	10.59	8.47	5.4	5.65			
Dissolved Oxygen (mg/L)	4.75	4.15	3.99	3.92	3.9			
Water Temperature (°C)	7.1	7.12	7.04	7.01	7.03			
ORP (mV)	70.4	34.4	78.9	81.2	82.4			

Physical appearance at start: Color slightly cloudy; Odor no; Sheen/Free Product no

Physical appearance at sampling: Color clear; Odor no; Sheen/Free Product no

COMMENTS/OBSERVATIONS: Start purging at 12:30. Samples collected at 12:30. Duplicate collected. Time listed on Duplicate as 8:00.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/12/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-35D
Upgradient ____ Downgradient ____
Weather Conditions: Sunny
Air Temperature: 30 ° F
Total Depth (TWD) Below Top of Casing = 29 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 6.65 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = gal
3 Casing Volumes = gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 3 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	150	150	100	100	100	100	100	100
Time (Military)	9:20	9:25	9:30	9:35	9:40	9:45	9:50	9:55
Depth to Groundwater Below Top of Casing (ft)	7.45	8.05	8.6	8.95	9.3	9.65	9.95	10.25
Drawdown (ft)	-0.8	-0.6	-0.55	-0.35	-0.35	-0.35	-0.3	-0.3
pH (S.U.)	6.66	6.79	6.93	7.03	7.09	7.14	7.19	7.19
Sp. Cond. (mS/cm)	0.482	0.498	0.509	0.509	0.51	0.51	0.512	0.511
Turbidity (NTUs)	31.9	24.3	15.8	16.4	12.3	14.9	11.4	10.69
Dissolved Oxygen (mg/L)	4.48	1.29	1.21	1.15	1.19	1.15	1.14	1.19
Water Temperature (°C)	8.3	8.5	8.1	8.01	8.07	8.22	8.33	8.39
ORP (mV)	169	142	100.5	53	28.5	-2	-24.5	-51.1

Physical appearance at start — Color: clear; Odor: no
Sheen/Free Product: no

Physical appearance at sampling — Color: clear; Odor: no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 9:15. Samples collected at 10:05. ORP still dropping slightly at sample.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/12/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-35D
Upgradient ____ Downgradient ____
Weather Conditions: Sunny
Air Temperature: 30 ° F
Total Depth (TWD) Below Top of Casing = 29 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 6.65 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = gal
3 Casing Volumes = gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 3 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	100							
Time (Military)	10:00							
Depth to Groundwater Below Top of Casing (ft)	10.55							
Drawdown (ft)	-0.3							
pH (S.U.)	7.23							
Sp. Cond. (mS/cm)	0.511							
Turbidity (NTUs)	10.01							
Dissolved Oxygen (mg/L)	1.08							
Water Temperature (°C)	8.41							
ORP (mV)	-64							

Physical appearance at start: Color clear; Odor no; Sheen/Free Product no

Physical appearance at sampling: Color clear; Odor no; Sheen/Free Product no

COMMENTS/OBSERVATIONS: Start purging at 9:15. Samples collected at 10:05. ORP still dropping slightly at sample.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/10/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-36S
Upgradient ____ Downgradient ____
Weather Conditions: Partly Cloudy
Air Temperature: 35 ° F
Total Depth (TWD) Below Top of Casing = 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 3.21 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = gal
3 Casing Volumes = gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 8 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	150	110	110	110	110	110	150	150
Time (Military)	9:40	9:45	9:50	9:55	10:00	10:05	10:10	10:15
Depth to Groundwater Below Top of Casing (ft)	3.84	4.45	5.06	5.65	6.15	6.55	7.22	7.45
Drawdown (ft)	-0.63	-0.61	-0.61	-0.59	-0.5	-0.4	-0.67	-0.23
pH (S.U.)	6.19	6.2	6.35	6.59	6.73	6.95	6.92	6.95
Sp. Cond. (mS/cm)	1.063	1.058	1.064	1.06	1.063	1.067	1.063	1.069
Turbidity (NTUs)	1.33	0.65	1.66	1.73	1.42	1.44	1.36	1.59
Dissolved Oxygen (g/L)	3.74	2.8	2.82	2.84	2.75	2.77	2.71	2.84
Water Temperature (°C)	5.07	5.8	6.03	5.94	6.12	6.17	6.19	6.13
ORP (mV)	256.9	262.4	247.2	237.3	229.5	219.4	221.8	220.2

Physical appearance at start: Color clear; Odor no
Sheen/Free Product: no

Physical appearance at sampling: Color clear; Odor no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 9:35. Samples collected at 10:25.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/10/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-36S
Upgradient ____ Downgradient ____
Weather Conditions: Partly Cloudy
Air Temperature: 35 ° F
Total Depth (TWD) Below Top of Casing = 15 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 3.21 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = gal
3 Casing Volumes = gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 8 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	150							
Time (Military)	10:20							
Depth to Groundwater Below Top of Casing (ft)	7.7							
Drawdown (ft)	-0.25							
pH (S.U.)	6.95							
Sp. Cond. (mS/cm)	1.064							
Turbidity (NTUs)	2.43							
Dissolved Oxygen (g/L)	2.87							
Water Temperature (°C)	6.03							
ORP (mV)	214.7							

Physical appearance at start: Color clear; Odor no; Sheen/Free Product no

Physical appearance at sampling: Color clear; Odor no; Sheen/Free Product no

COMMENTS/OBSERVATIONS: Start purging at 9:35. Samples collected at 10:25.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/10/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-36D
Upgradient / Downgradient
Weather Conditions: Partly Cloudy
Air Temperature: 35
Total Depth (TWD) Below Top of Casing = 23.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 5.9 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = gal
3 Casing Volumes = gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 6 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	150	150	150	150	100	100	100	100
Time (Military)	10:35	10:40	10:45	10:50	10:55	11:00	11:05	11:10
Depth to Groundwater Below Top of Casing (ft)	6.7	7.15	8.2	8.95	9.5	10	10.55	11.2
Drawdown (ft)	-0.8	-0.45	-1.05	-0.75	-0.55	-0.5	-0.55	-0.65
pH (S.U.)	7.44	7.61	7.71	7.74	7.76	7.77	7.78	7.8
Sp. Cond. (mS/cm)	0.671	0.648	0.652	0.651	0.650	0.647	0.646	0.647
Turbidity (NTUs)	4.46	16.1	11.21	9.52	17.3	17.7	29.1	15.2
Dissolved Oxygen (mg/L)	2.80	2.60	2.40	2.58	3.00	2.91	2.74	2.84
Water Temperature (°C)	7.77	8.04	8.31	8.1	8.21	8.06	8.24	8.59
ORP (mV)	188.4	170.6	141.3	122.3	94	80	67.7	46.3

Physical appearance at start — Color: Clear w/ grey floaters; Odor: no; Sheen/Free Product: no

Physical appearance at sampling — Color: Clear w/ a little iron bac.; Odor: no; Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 10:35. Sample at 11:15. ORP still dropping slightly at sample.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/10/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-37D
Upgradient ____ Downgradient ____
Weather Conditions: Cloudy
Air Temperature: 43
Total Depth (TWD) Below Top of Casing = 22.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 4.98 1/100 ft
Length of Water Column (LWC) = TWD - DGW = ____ 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = ____ gal
3 Casing Volumes = ____ gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 3 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	150	150	150	200	200	200	200	200
Time (Military)	12:40	12:45	12:50	12:55	13:00	13:05	13:10	13:15
Depth to Groundwater Below Top of Casing (ft)	5.2	5.24	5.25	5.35	5.39	5.39	5.4	5.41
Drawdown (ft)	-0.22	-0.04	-0.01	-0.1	-0.04	0	-0.01	-0.01
pH (S.U.)	10.84	11.12	10.27	9.70	9.46	9.09	8.48	8.25
Sp. Cond. (mS/cm)	0.301	0.299	0.353	0.381	0.42	0.511	0.606	0.631
Turbidity (NTUs)	14.3	11.8	4.31	6.08	4.66	2.51	1.97	1.39
Dissolved Oxygen (mg/L)	2.74	2.51	1.79	1.07	0.93	0.70	1.00	0.66
Water Temperature (°C)	8.16	8.24	8.45	8.76	8.88	9.01	9.1	9.13
ORP (mV)	6.3	6.2	23.3	21.6	21.3	15.6	-38	-72.9

Physical appearance at start — Color: clear; Odor: Yes
Sheen/Free Product: no

Physical appearance at sampling — Color: clear; Odor: Yes
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 12:35. Samples collected at 13:30.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/10/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-37D
Upgradient ____ Downgradient ____
Weather Conditions: Cloudy
Air Temperature: 43
Total Depth (TWD) Below Top of Casing = 22.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 4.98 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = gal
3 Casing Volumes = gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 3 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	200	200						
Time (Military)	13:20	13:25						
Depth to Groundwater Below Top of Casing (ft)	5.45	5.45						
Drawdown (ft)	-0.04	0						
pH (S.U.)	8.10	8.00						
Sp. Cond. (mS/cm)	0.648	0.662						
Turbidity (NTUs)	0.191	0.073						
Dissolved Oxygen (mg/L)	0.60	0.59						
Water Temperature (°C)	9.17	9.2						
ORP (mV)	-84.9	-80.3						

Physical appearance at start: Color clear; Odor Yes
Sheen/Free Product: no

Physical appearance at sampling: Color clear; Odor Yes
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 12:35. Samples collected at 13:30.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/10/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-38D
Upgradient ____ Downgradient ____
Weather Conditions: Cloudy
Air Temperature: 45 ° F
Total Depth (TWD) Below Top of Casing = 24 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 5.32 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = gal
3 Casing Volumes = gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 6 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	160	160	160	100	100			
Time (Military)	15:45	15:50	15:55	16:00	16:05			
Depth to Groundwater Below Top of Casing (ft)	5.8	6.6	7.75	8.85	9.45			
Drawdown (ft)	-0.48	-0.8	-1.15	-1.1	-0.6			
pH (S.U.)	7.84	7.83	7.81	7.79	7.78			
Sp. Cond. (mS/cm)	0.779	0.778	0.779	0.778	0.778			
Turbidity (NTUs)	23.3	22	19.8	23.1	25.7			
Dissolved Oxygen (g/L)	4.12	0.93	0.79	0.66	0.62			
Water Temperature (°C)	8.18	8.1	8.01	7.86	7.89			
ORP (mV)	11	6.5	5.4	1	-2.3			

Physical appearance at start: Color: clear w/ little iron bac. & black flecks; Odor: no
Sheen/Free Product: no

Physical appearance at sampling: Color: clear w/ little iron bac. & black flecks; Odor: no
Sheen/Free Product:

COMMENTS/OBSERVATIONS: Start purging 15:43. Collect samples at 16:10.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/10/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-39D
Upgradient ____ Downgradient ____
Weather Conditions: Cloudy
Air Temperature: 45 ° F
Total Depth (TWD) Below Top of Casing = 22.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 4.7 1/100 ft
Length of Water Column (LWC) = TWD - DGW = ____ 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = ____ gal
3 Casing Volumes = ____ gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 10 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	225	225	225	225	225	225		
Time (Military)	13:50	13:55	14:00	14:05	14:10	14:15		
Depth to Groundwater Below Top of Casing (ft)	4.72	4.84	4.85	4.85	4.85	4.85		
Drawdown (ft)	0	-0.12	-0.01	0	0	0		
pH (S.U.)	8.19	8.03	7.97	7.91	7.85	7.81		
Sp. Cond. (mS/cm)	0.645	0.643	0.644	0.646	0.649	0.655		
Turbidity (NTUs)	1.65	1.37	1.73	3.64	2.15	1.75		
Dissolved Oxygen (mg/L)	3.77	1.48	1.17	0.97	0.98	0.77		
Water Temperature (°C)	8.17	8.53	8.69	8.76	8.76	8.85		
ORP (mV)	-19.3	-13	-17.1	-23.8	-38.3	-47.4		

Physical appearance at start — Color: sl clear; Odor: no
Sheen/Free Product: no

Physical appearance at sampling — Color: clear w/ a little floating iron bac.; Odor: slight
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 13:50. Samples collected at 14:20.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/11/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-40D
Upgradient ____ Downgradient ____
Weather Conditions: Cloudy
Air Temperature: 40 ° F
Total Depth (TWD) Below Top of Casing = 22.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 3.95 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = gal
3 Casing Volumes = gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 3 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	125	125	125	125				
Time (Military)	14:13	14:18	14:23	14:28				
Depth to Groundwater Below Top of Casing (ft)	4.6	5.7	6.4	7.35				
Drawdown (ft)	-0.65	-1.1	-0.7	-0.95				
pH (S.U.)	8.34	8.8	8.9	9.01				
Sp. Cond. (mS/cm)	0.682	0.675	0.672	0.669				
Turbidity (NTUs)	9.89	5.76	3.9	2.09				
Dissolved Oxygen (g/L)	8.14	1.05	0.83	0.75				
Water Temperature (°C)	8.52	8.64	8.68	8.81				
ORP (mV)	-6.4	-11.6	-13.6	-15.1				

Physical appearance at start — Color: clear; Odor: no
Sheen/Free Product: no

Physical appearance at sampling — Color: clear; Odor: no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 14:10. Samples collected at 14:30. Well drawing down.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/12/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-42
Upgradient ____ Downgradient ____
Weather Conditions: Sunny
Air Temperature: 40 ° F
Total Depth (TWD) Below Top of Casing = 14.3 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 1.8 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 12.5 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = ____ gal
3 Casing Volumes = ____ gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 4 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	150	150	150	150				
Time (Military)	10:55	11:00	11:05	11:10				
Depth to Groundwater Below Top of Casing (ft)	2.4	3.4	4.25	4.7				
Drawdown (ft)	-0.6	-1	-0.85	-0.45				
pH (S.U.)	7.1	7.04	7.03	6.94				
Sp. Cond. (mS/cm)	1.803	1.836	1.854	1.855				
Turbidity (NTUs)	3.09	3.36	4.41	8.04				
Dissolved Oxygen (g/L)	2.06	0.97	0.92	0.91				
Water Temperature (°C)	7.93	7.98	7.31	7.55				
ORP (mV)	-97.2	-98.9	-101.1	-101.3				

Physical appearance at start — Color: clear; Odor: Yes
Sheen/Free Product: no

Physical appearance at sampling — Color: clear; Odor: Yes
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 10:50. Samples collected at 11:15. Turbidity increasing slightly.

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 3/12/2015
Field Personnel: Emily Laity
Site Name: **Former Scott Aviation Site - Lancaster, NY**
AECOM Job #: **60155991**
Well ID #: MW-43
Upgradient ____ Downgradient ____
Weather Conditions: Sunny
Air Temperature: 40 ° F
Total Depth (TWD) Below Top of Casing = 14.5 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 2.68 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 11.82 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = ____ gal
3 Casing Volumes = ____ gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: 4 liter

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

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

FIELD ANALYSES

Flow Rate (ml/min)	150	150	150	100				
Time (Military)	11:40	11:45	11:50	11:55				
Depth to Groundwater Below Top of Casing (ft)	3.3	3.95	4.95	4.95				
Drawdown (ft)	-0.62	-0.65	-1.00	0.00				
pH (S.U.)	7.74	7.61	7.51	7.45				
Sp. Cond. (mS/cm)	0.641	0.626	0.62	0.615				
Turbidity (NTUs)	14.1	6.19	5.29	2.58				
Dissolved Oxygen (g/L)	2.4	1.22	1.01	1				
Water Temperature (°C)	9.9	9.91	9.65	9.48				
ORP (mV)	-155	-145.2	-138.5	-140.2				

Physical appearance at start — Color: clear; Odor: Yes
Sheen/Free Product: no

Physical appearance at sampling — Color: clear; Odor: Yes
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 11:38. Samples collected at 12:00.

Appendix C

Injection Logs

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/13/2014	Matrix	IP-140	6-4	390	0%/100%	30	11:52	12:42	7.80	0:50	Bottom Up	390	
4/13/2015	Matrix	IP-136	2	20	33%/67%	40	14:56	15:02	3.33	0:06	Top Down	362	
	Matrix	IP-136	5	DL	33%/67%	40	-	-	-	-	Top Down		
	Matrix	IP-136	2,5,6,8,10,11,12,13,14	342	33%/67%	40	15:26	16:12	7.43	0:46	Bottom Up		
4/13/2015	Matrix	IP-125	2,5,6,8,10,11,12,13,14	390	33%/67%	40	16:23	17:13	7.80	0:50	Bottom Up	390	

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/14/2014	Matrix	IP-135	6,8,10,11,12,13,14	310	33%/67%	40	7:42	8:30	6.46	0:48	Bottom Up	390	
	Matrix	IP-135	5	80	33%/67%	40	8:30	8:43	6.15	0:13	Bottom Up		
	Matrix	IP-135	2	0	-	-	-	-	-	-	-		
4/14/2015	Redox Tech	IP-123	12,13,14,15,16,18,20,22	290	43%/57%	40	8:52	9:52	4.83	1:00	Top Down	509	
	Redox Tech	IP-123	11	73	43%/57%	40	10:01	10:15	5.21	0:14	Top Down		
	Redox Tech	IP-123	8,10	73	43%/57%	40	10:17	10:32	4.87	0:15	Bottom Up		
	Redox Tech	IP-123	2,5,6	73	43%/57%	40	10:38	10:44	12.17	0:06	Bottom Up		
4/14/2015	Redox Tech	IP-121	2,5,6,8,10,11,12,13,14	390	33%/67%		10:47	11:35	8.13	0:48	Bottom Up	390	
	Redox Tech	IP-115	18,19,20	140	43%/57%		11:42	11:56	10.00	0:14	Bottom Up	509	
	Redox Tech	IP-115	16 (17*)	46	43%/57%		12:35	12:45	4.60	0:10	Bottom Up		
	Redox Tech	IP-115	14(16*)	46	43%/57%		12:55	13:03	5.75	0:08	Bottom Up		
	Redox Tech	IP-115	14(15*)	46	43%/57%		13:40	13:47	6.57	0:07	Bottom Up		
	Redox Tech	IP-115	14 (14*)	46	43%/57%		14:31	14:37	7.67	0:06	Bottom Up		
	Redox Tech	IP-115	13	46	43%/57%		15:40	15:47	6.57	0:07	Bottom Up		
	Redox Tech	IP-115	8,10,12	139	43%/57%		16:55	17:17	6.32	0:22	Bottom Up		
4/14/2015	Redox Tech	IP-131	18,20,22	145	43%/57%		14:06	14:30	6.04	0:24	Bottom Up	509	
	Redox Tech	IP-131	2,5,6,8,10,11,12,13,14,15,16,	364	43%/57%		14:38	15:37	6.17	0:59	Bottom Up		
4/14/2015	Redox Tech	IP-132	2,5,6,8,10,11,12,13,14,15,16,18,20,22	510	43%/57%		15:52	16:51	8.64	0:59	Bottom Up	510	
4/14/2015	Matrix	IP-142	6	50	0%/100%		11:05	11:10	10.00	0:05	Bottom Up		
4/14/2015	Matrix	IP-138	6	30	0%/100%		11:16	11:19	10.00	0:03	Bottom Up		
	Matrix	IP-138	6	20	0%/100%		11:20	11:23	6.67	0:03	Bottom Up		
4/14/2015	Matrix	IP-46	14	55.7	33%/67%		13:00	13:05	11.14	0:05	Bottom Up		
	Matrix	IP-46	13	55.7	33%/67%		13:35	13:41	9.28	0:06	Bottom Up	390	
	Matrix	IP-46	12	55.7	33%/67%		13:41	13:45	13.93	0:04	Bottom Up		
	Matrix	IP-46	10	55.7	33%/67%		13:45	13:49	13.93	0:04	Bottom Up		
	Matrix	IP-46	9	55.7	33%/67%		13:50	13:53	18.57	0:03	Bottom Up		
	Matrix	IP-46	7	55.7	33%/67%		13:53	13:57	13.93	0:04	Bottom Up		
	Matrix	IP-46	5	55.7	33%/67%		13:57	14:01	13.93	0:04	Bottom Up		
4/14/2015	Matrix	IP-39	14	55.7	33%/67%		14:20	14:24	13.93	0:04	Bottom Up	390	
	Matrix	IP-39	13	55.7	33%/67%		14:24	14:28	13.93	0:04	Bottom Up		
	Matrix	IP-39	12	55.7	33%/67%		14:28	14:31	18.57	0:03	Bottom Up		
	Matrix	IP-39	10	55.7	33%/67%		14:32	14:35	18.57	0:03	Bottom Up		
	Matrix	IP-39	9	55.7	33%/67%		14:37	14:40	18.57	0:03	Bottom Up		
	Matrix	IP-39	7	55.7	33%/67%		14:40	14:44	13.93	0:04	Bottom Up		
	Matrix	IP-39	5	55.7	33%/67%		14:44	14:48	13.93	0:04	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/14/2015	Matrix	IP-47	14	55.7	33%/67%		15:15	15:19	13.93	0:04	Bottom Up		
	Matrix	IP-47	13	55.7	33%/67%		15:19	15:24	11.14	0:05	Bottom Up	390	
	Matrix	IP-47	12	55.7	33%/67%		15:24	15:29	11.14	0:05	Bottom Up		
	Matrix	IP-47	10	55.7	33%/67%		15:29	15:35	9.28	0:06	Bottom Up		
	Matrix	IP-47	9	55.7	33%/67%		15:35	15:37	27.85	0:02	Bottom Up		
	Matrix	IP-47	7	55.7	33%/67%		15:37	15:40	18.57	0:03	Bottom Up		
	Matrix	IP-47	5	55.7	33%/67%		15:40	15:45	11.14	0:05	Bottom Up		
4/14/2015	Matrix	IP-38	14	55.7	33%/67%		16:05	16:10	11.14	0:05	Bottom Up	390	
	Matrix	IP-38	13	55.7	33%/67%		16:10	16:15	11.14	0:05	Bottom Up		
	Matrix	IP-38	12	55.7	33%/67%		16:15	16:19	13.93	0:04	Bottom Up		
	Matrix	IP-38	10	55.7	33%/67%		16:19	16:23	13.93	0:04	Bottom Up		
	Matrix	IP-38	9	55.7	33%/67%		16:23	16:30	7.96	0:07	Bottom Up		
	Matrix	IP-38	7	55.7	33%/67%		16:30	16:35	11.14	0:05	Bottom Up		
	Matrix	IP-38	5	55.7	33%/67%		16:35	16:40	11.14	0:05	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/15/2014	Redox Tech	IP-126	2,5,6,8,10,11,12,13,14,15,16,18,20,22	510	43%/57%	50	8:04	9:30	5.93	1:26	Bottom Up	510	
4/15/2015	Redox Tech	IP-111	8,10,12,13,14,15,16,17.18,19,20	510	43%/57%	50	9:40	11:19	5.15	1:39	Bottom Up	510	
4/15/2014	Redox Tech	IP-96	4,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	510	43%/57%	50	11:22	12:44	6.22	1:22	Bottom Up	510	
4/15/2015	Redox Tech	IP-89	4,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	510	43%/57%	50	13:00	14:45	4.86	1:45	Bottom Up	510	
4/15/2014	Redox Tech	IP-83	4,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	510	43%/57%	50	15:39	17:13	5.43	1:34	Bottom Up	510	
4/15/2015	Matrix	IP-43	5,7,9,10,12,13,14	390	33%/67%	40	7:52	8:19	12.37	0:27	Bottom Up	334	finish at 7', did not inject at 5'
4/15/2014	Matrix	IP-53	4,6,8,11	390	33%/67%	40	9:58	10:24	15.00	0:26	Bottom Up	390	
4/15/2015	Matrix	IP-21	4,6,7,10,11,12,13,14,15,16,18,20	510	43%/57%	40	11:14	11:50	14.17	0:36	Bottom Up	510	
4/15/2014	Matrix	IP-28	7,8,11,12,13,14,15,16,18,20	510	43%/57%	40	12:13	13:00	10.85	0:47	Bottom Up	510	
4/15/2015	Matrix	IP-16	4,6,7,10,11,12,13,14,15,16,18,20	510	43%/57%	40	14:15	15:20	7.85	1:05	Bottom Up	510	
4/15/2014	Matrix	IP-40	5,7,9,10,12,13,14,15,16,17,18,19,20	510	43%/57%	40	15:59	16:47	10.63	0:48	Bottom Up	510	

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/16/2014	Redox Tech	IP-124	2,16,18,20,22	182	43%/57%		7:31	7:55	7.58	0:24	Bottom Up	509.6	
	Redox Tech	IP-124	15	36.4	43%/57%		7:55	8:11	2.28	0:16	Bottom Up		
	Redox Tech	IP-124	12,13,14	109.2	43%/57%		8:11	8:25	7.80	0:14	Bottom Up		
	Redox Tech	IP-124	11	36.4	43%/57%		8:25	8:53	1.30	0:28	Bottom Up		
	Redox Tech	IP-124	10	36.4	43%/57%		8:53	8:59	6.07	0:06	Bottom Up		
	Redox Tech	IP-124	8	36.4	43%/57%		8:59	9:08	4.04	0:09	Bottom Up		
	Redox Tech	IP-124	6	36.4	43%/57%		9:08	9:16	4.55	0:08	Bottom Up		
	Redox Tech	IP-124	5	36.4	43%/57%		9:16	9:24	4.55	0:08	Bottom Up		
4/16/2015	Redox Tech	IP-101	4,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	510	43%/57%		9:26	11:40	3.81	2:14	Bottom Up	510	
4/16/2014	Redox Tech	IP-134	2,5,6,8,10,11,12,13,14	390	33%/67%		11:45	12:30	8.67	0:45	Bottom Up	390	
4/16/2015	Redox Tech	IP-73	10	130	33%/67%		13:20	13:45	5.20	0:25	Bottom Up	390	
	Redox Tech	IP-73	8	130	33%/67%		13:45	14:00	8.67	0:15	Bottom Up		
	Redox Tech	IP-73	7	130	33%/67%		14:00	14:21	6.19	0:21	Bottom Up		
4/16/2014	Redox Tech	IP-119	2,5,6,8,10,11,12,13,14,15,16,18,20,22	510	43%/57%		14:27	16:00	5.48	1:33	Bottom Up	510	
4/16/2015	Redox Tech	IP-74	7,8,10	390	33%/67%		16:05	17:01	6.96	0:56	Bottom Up	390	2 locations. 1st one got ~ 20gal - tip did not deploy properly, moved over, injected the rest of volume. Little oil observed on rods at 1st location.
4/16/2014	Matrix	IP-54	4,11	195	33%/67%		8:03	8:23	9.75	0:20	Bottom Up	390	
	Matrix	IP-54	6,8	195	33%/67%		15:52	16:15	8.48	0:23	Bottom Up		
4/16/2015	Matrix	IP-29	20	51	43%/57%		9:25	9:28	17.00	0:03	Bottom Up	510	
	Matrix	IP-29	18	51	43%/57%		9:28	9:33	10.20	0:05	Bottom Up		
	Matrix	IP-29	16	51	43%/57%		9:33	9:38	10.20	0:05	Bottom Up		
	Matrix	IP-29	15	51	43%/57%		9:38	9:43	10.20	0:05	Bottom Up		
	Matrix	IP-29	14	51	43%/57%		9:43	9:49	8.50	0:06	Bottom Up		
	Matrix	IP-29	13	51	43%/57%		9:49	9:52	17.00	0:03	Bottom Up		
	Matrix	IP-29	12	51	43%/57%		9:52	9:58	8.50	0:06	Bottom Up		
	Matrix	IP-29	11	51	43%/57%		9:58	10:02	12.75	0:04	Bottom Up		
	Matrix	IP-29	8	51	43%/57%		10:02	10:11	5.67	0:09	Bottom Up		
	Matrix	IP-29	7	51	43%/57%		10:11	10:22	4.64	0:11	Bottom Up		
4/16/2014	Matrix	IP-7	20	46.4	43%/57%		10:55	11:05	4.64	0:10	Bottom Up	510.4	
	Matrix	IP-7	18	46.4	43%/57%		11:05	11:17	3.87	0:12	Bottom Up		
	Matrix	IP-7	16	46.4	43%/57%		11:17	11:28	4.22	0:11	Bottom Up		
	Matrix	IP-7	15	46.4	43%/57%		11:28	11:36	5.80	0:08	Bottom Up		
	Matrix	IP-7	14	46.4	43%/57%		11:36	11:45	5.16	0:09	Bottom Up		
	Matrix	IP-7	13	46.4	43%/57%		11:45	11:54	5.16	0:09	Bottom Up		
	Matrix	IP-7	12	46.4	43%/57%		11:54	12:04	4.64	0:10	Bottom Up		
	Matrix	IP-7	11	46.4	43%/57%		12:04	12:13	5.16	0:09	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
	Matrix	IP-7	10	46.4	43%/57%		12:13	12:22	5.16	0:09	Bottom Up		
	Matrix	IP-7	7	46.4	43%/57%		12:22	12:27	9.28	0:05	Bottom Up		
	Matrix	IP-7	4,6	46.4	43%/57%		12:27	12:36	5.16	0:09	Bottom Up		
4/16/2015	Matrix	IP-41	20	39.2	43%/57%		14:12	14:17	7.84	0:05	Bottom Up	509.6	
	Matrix	IP-41	19	39.2	43%/57%		14:17	14:26	4.36	0:09	Bottom Up		
	Matrix	IP-41	18	39.2	43%/57%		14:26	14:36	3.92	0:10	Bottom Up		
	Matrix	IP-41	17	39.2	43%/57%		14:36	14:42	6.53	0:06	Bottom Up		
	Matrix	IP-41	16	39.2	43%/57%		14:42	14:51	4.36	0:09	Bottom Up		
	Matrix	IP-41	15	39.2	43%/57%		14:51	14:58	5.60	0:07	Bottom Up		
	Matrix	IP-41	14	39.2	43%/57%		14:58	15:08	3.92	0:10	Bottom Up		
	Matrix	IP-41	13	39.2	43%/57%		15:08	15:13	7.84	0:05	Bottom Up		
	Matrix	IP-41	12	39.2	43%/57%		15:13	15:19	6.53	0:06	Bottom Up		
	Matrix	IP-41	10	39.2	43%/57%		15:19	15:24	7.84	0:05	Bottom Up		
	Matrix	IP-41	9	39.2	43%/57%		15:24	15:31	5.60	0:07	Bottom Up		
	Matrix	IP-41	7	39.2	43%/57%		15:31	15:36	7.84	0:05	Bottom Up		
	Matrix	IP-41	5	39.2	43%/57%		15:36	15:40	9.80	0:04	Bottom Up		
4/16/2014	Matrix	IP-58 (part.)	4,11	195	33%/67%		8:33	8:53	9.75	0:20	Bottom Up	510	

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/17/2014	Redox Tech	IP-88	19,20	64	43%/57%	50	8:52	9:03	5.82	0:11	Bottom Up	512	
	Redox Tech	IP-88	18	32	43%/57%	50	9:03	9:11	4.00	0:08	Bottom Up		
	Redox Tech	IP-88	17	32	43%/57%	50	9:11	9:20	3.56	0:09	Bottom Up		
	Redox Tech	IP-88	16	32	43%/57%	50	9:20	9:29	3.56	0:09	Bottom Up		
	Redox Tech	IP-88	15	32	43%/57%	50	9:29	9:35	5.33	0:06	Bottom Up		
	Redox Tech	IP-88	14	32	43%/57%	50	9:35	9:41	5.33	0:06	Bottom Up		
	Redox Tech	IP-88	13	32	43%/57%	50	9:41	9:47	5.33	0:06	Bottom Up		
	Redox Tech	IP-88	12	32	43%/57%	50	9:47	9:51	8.00	0:04	Bottom Up		
	Redox Tech	IP-88	11	32	43%/57%	50	9:51	10:03	2.67	0:12	Bottom Up		
	Redox Tech	IP-88	10	32	43%/57%	50	10:03	10:09	5.33	0:06	Bottom Up		
	Redox Tech	IP-88	9	32	43%/57%	50	10:09	10:18	3.56	0:09	Bottom Up		
	Redox Tech	IP-88	8	32	43%/57%	50	10:18	10:24	5.33	0:06	Bottom Up		
	Redox Tech	IP-88	7	32	43%/57%	50	10:24	10:30	5.33	0:06	Bottom Up		
	Redox Tech	IP-88	6	32	43%/57%	50	10:30	10:35	6.40	0:05	Bottom Up		
	Redox Tech	IP-88	4	32	43%/57%	50	10:35	10:41	5.33	0:06	Bottom Up		
4/17/2015	Redox Tech	IP-122	2,22	73	43%/57%	50	10:43	10:58	4.87	0:15	Bottom Up	511	
	Redox Tech	IP-122	20	36.5	43%/57%	50	10:58	11:05	5.21	0:07	Bottom Up		
	Redox Tech	IP-122	18	36.5	43%/57%	50	11:05	11:13	4.56	0:08	Bottom Up		
	Redox Tech	IP-122	16	36.5	43%/57%	50	11:13	11:18	7.30	0:05	Bottom Up		
	Redox Tech	IP-122	15	36.5	43%/57%	50	11:18	11:22	9.13	0:04	Bottom Up		
	Redox Tech	IP-122	14	36.5	43%/57%	50	11:22	11:29	5.21	0:07	Bottom Up		
	Redox Tech	IP-122	13	36.5	43%/57%	50	11:29	11:36	5.21	0:07	Bottom Up		
	Redox Tech	IP-122	12	36.5	43%/57%	50	11:36	11:42	6.08	0:06	Bottom Up		
	Redox Tech	IP-122	11	36.5	43%/57%	50	11:42	11:48	6.08	0:06	Bottom Up		
	Matrix	IP-122	10	36.5	43%/57%	50	11:48	11:52	9.13	0:04	Bottom Up		
	Redox Tech	IP-122	8	36.5	43%/57%	50	11:52	11:58	6.08	0:06	Bottom Up		
	Redox Tech	IP-122	6	36.5	43%/57%	50	11:58	12:05	5.21	0:07	Bottom Up		
	Redox Tech	IP-122	5	36.5	43%/57%	50	12:05	12:11	6.08	0:06	Bottom Up		
4/17/2015	Redox Tech	IP-133	2,14	86.6	33%/67%	50	12:20	12:34	6.19	0:14	Bottom Up	389.7	
	Redox Tech	IP-133	13	43.3	33%/67%	50	12:24	12:42	2.41	0:18	Bottom Up		
	Redox Tech	IP-133	12	43.3	33%/67%	50	12:42	12:52	4.33	0:10	Bottom Up		
	Redox Tech	IP-133	11	43.3	33%/67%	50	12:52	13:00	5.41	0:08	Bottom Up		
	Redox Tech	IP-133	10	43.3	33%/67%	50	13:00	13:09	4.81	0:09	Bottom Up		
	Redox Tech	IP-133	8	43.3	33%/67%	50	13:09	13:18	4.81	0:09	Bottom Up		
	Redox Tech	IP-133	6	43.3	33%/67%	50	13:18	13:26	5.41	0:08	Bottom Up		
	Redox Tech	IP-133	5	43.3	33%/67%	50	13:26	13:33	6.19	0:07	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/17/2015	Redox Tech	IP-90	20	32	43%/57%	50	13:38	13:50	2.67	0:12	Bottom Up	512	
	Redox Tech	IP-90	19	32	43%/57%	50	13:50	14:00	3.20	0:10	Bottom Up		
	Redox Tech	IP-90	18	32	43%/57%	50	14:00	14:12	2.67	0:12	Bottom Up		
	Redox Tech	IP-90	17	32	43%/57%	50	14:12	14:20	4.00	0:08	Bottom Up		
	Redox Tech	IP-90	16	32	43%/57%	50	14:20	14:27	4.57	0:07	Bottom Up		
	Redox Tech	IP-90	15	32	43%/57%	50	14:27	14:32	6.40	0:05	Bottom Up		
	Redox Tech	IP-90	14	32	43%/57%	50	14:32	14:38	5.33	0:06	Bottom Up		
	Redox Tech	IP-90	13	32	43%/57%	50	14:38	14:48	3.20	0:10	Bottom Up		
	Redox Tech	IP-90	12	32	43%/57%	50	14:48	14:54	5.33	0:06	Bottom Up		
	Redox Tech	IP-90	11	32	43%/57%	50	14:54	15:00	5.33	0:06	Bottom Up		
	Redox Tech	IP-90	10	32	43%/57%	50	15:00	15:04	8.00	0:04	Bottom Up		
	Redox Tech	IP-90	9	32	43%/57%	50	15:04	15:09	6.40	0:05	Bottom Up		
	Redox Tech	IP-90	8	32	43%/57%	50	15:09	15:13	8.00	0:04	Bottom Up		
	Redox Tech	IP-90	7	32	43%/57%	50	15:13	15:17	8.00	0:04	Bottom Up		
	Redox Tech	IP-90	6	32	43%/57%	50	15:17	15:21	8.00	0:04	Bottom Up		
	Redox Tech	IP-90	4	32	43%/57%	50	15:21	15:25	8.00	0:04	Bottom Up		end time estimated.
4/17/2015	Matrix	IP-58 (part.)	6,8	195	33%/67%	40	7:57	8:20	8.48	0:23	Bottom Up	195	
4/17/2015	Matrix	IP-8	20	46.4	43%/57%	40	8:45	8:55	4.64	0:10	Bottom Up	510.4	
	Matrix	IP-8	18	46.4	43%/57%	40	8:55	9:00	9.28	0:05	Bottom Up		
	Matrix	IP-8	16	46.4	43%/57%	40	9:00	9:10	4.64	0:10	Bottom Up		
	Matrix	IP-8	15	46.4	43%/57%	40	9:10	9:17	6.63	0:07	Bottom Up		
	Matrix	IP-8	14	46.4	43%/57%	40	9:17	9:27	4.64	0:10	Bottom Up		
	Matrix	IP-8	13	46.4	43%/57%	40	9:27	9:37	4.64	0:10	Bottom Up		
	Matrix	IP-8	12	46.4	43%/57%	40	9:37	9:45	5.80	0:08	Bottom Up		
	Matrix	IP-8	11	46.4	43%/57%	40	9:45	9:51	7.73	0:06	Bottom Up		
	Matrix	IP-8	10	46.4	43%/57%	40	9:51	9:58	6.63	0:07	Bottom Up		
	Matrix	IP-8	7	46.4	43%/57%	40	9:58	10:05	6.63	0:07	Bottom Up		
	Matrix	IP-8	4,6	46.4	43%/57%	40	10:05	10:12	6.63	0:07	Bottom Up		
4/17/2015	Matrix	IP-42	14	65	33%/67%	40	11:00	11:22	2.95	0:22	Bottom Up	390	
	Matrix	IP-42	13	65	33%/67%	40	11:22	11:37	4.33	0:15	Bottom Up		
	Matrix	IP-42	12	65	33%/67%	40	11:37	11:53	4.06	0:16	Bottom Up		
	Matrix	IP-42	10	65	33%/67%	40	11:53	12:06	5.00	0:13	Bottom Up		
	Matrix	IP-42	9	65	33%/67%	40	12:06	12:24	3.61	0:18	Bottom Up		
	Matrix	IP-42	5,7	65	33%/67%	40	12:24	12:33	7.22	0:09	Bottom Up		
4/17/2015	Matrix	IP-57	11	130	33%/67%	40	13:11	13:25	9.29	0:14	Bottom Up	390	
	Matrix	IP-57	8	130	33%/67%	40	13:25	13:39	9.29	0:14	Bottom Up		
	Matrix	IP-57	4,6	130	33%/67%	40	13:39	14:06	4.81	0:27	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/20/2014	Redox Tech	IP-113	20	46.4	43%/57%	40	8:32	8:38	7.73	0:06	Bottom Up	510.4	
	Redox Tech	IP-113	18,19	92.8	43%/57%	40	8:38	8:52	6.63	0:14	Bottom Up		
	Redox Tech	IP-113	16, 17	92.8	43%/57%	40	8:52	9:15	4.03	0:23	Bottom Up		
	Redox Tech	IP-113	15	46.4	43%/57%	40	9:15	9:25	4.64	0:10	Bottom Up		
	Redox Tech	IP-113	12,13,14	139.2	43%/57%	40	9:25	9:50	5.57	0:25	Bottom Up		
	Redox Tech	IP-113	8,10	92.8	43%/57%	40	9:50	10:08	5.16	0:18	Bottom Up		
4/20/2015	Redox Tech	IP-72	8,10	260	33%/67%	40	10:17	11:18	4.26	1:01	Bottom Up	390	
	Redox Tech	IP-72	7	130	33%/67%	40	11:18	11:34	8.13	0:16	Bottom Up		
4/20/2014	Redox Tech	IP-97	18,19,20	95.7	43%/57%	40	12:10	12:34	3.99	0:24	Bottom Up	510.4	
	Redox Tech	IP-97	17	31.9	43%/57%	40	12:34	12:48	2.28	0:14	Bottom Up		
	Redox Tech	IP-97	15,16	63.8	43%/57%	40	12:48	13:06	3.54	0:18	Bottom Up		
	Redox Tech	IP-97	10,11,12,13,14	159.5	43%/57%	40	13:06	13:34	5.70	0:28	Bottom Up		
	Redox Tech	IP-97	4,6,7,8,9	159.5	43%/57%	40	13:34	13:52	8.86	0:18	Bottom Up		
4/20/2015	Redox Tech	IP-130	2,18,20,22	145.6	43%/57%	40	13:57	14:14	8.56	0:17	Bottom Up	509.6	
	Redox Tech	IP-130	16	36.4	43%/57%	40	14:14	14:24	3.64	0:10	Bottom Up		
	Redox Tech	IP-130	15	36.4	43%/57%	40	14:24	14:40	2.28	0:16	Bottom Up		
	Redox Tech	IP-130	14	36.4	43%/57%	40	14:40	14:49	4.04	0:09	Bottom Up		
	Redox Tech	IP-130	13	36.4	43%/57%	40	14:49	14:57	4.55	0:08	Bottom Up		
	Redox Tech	IP-130	12	36.4	43%/57%	40	14:57	15:03	6.07	0:06	Bottom Up		
	Redox Tech	IP-130	11	36.4	43%/57%	40	15:03	15:11	4.55	0:08	Bottom Up		
	Redox Tech	IP-130	10	36.4	43%/57%	40	15:11	15:17	6.07	0:06	Bottom Up		
	Redox Tech	IP-130	8	36.4	43%/57%	40	15:17	15:23	6.07	0:06	Bottom Up		
	Redox Tech	IP-130	6	36.4	43%/57%	40	15:23	15:29	6.07	0:06	Bottom Up		
	Redox Tech	IP-130	5	36.4	43%/57%	40	15:29	15:40	3.31	0:11	Bottom Up		
4/20/2015	Matrix	IP-70 (part.)	10	130	33%/67%	40	16:33	17:02	4.48	0:29	Bottom Up	130	one of 3 intervals completed. Others will be done tomorrow 4/21/15.
4/20/2015	Matrix	IP-55	4,11	195	33%/67%	40	8:50	9:05	13.00	0:15	Bottom Up	390	
	Matrix	IP-55	6,8	195	33%/67%	40	9:05	9:30	7.80	0:25	Bottom Up		
4/20/2015	Matrix	IP-2	20	46.4	43%/57%	40	9:57	10:07	4.64	0:10	Bottom Up	510.4	
	Matrix	IP-2	18	46.4	43%/57%	40	10:07	10:16	5.16	0:09	Bottom Up		
	Matrix	IP-2	16	46.4	43%/57%	40	10:16	10:27	4.22	0:11	Bottom Up		
	Matrix	IP-2	15	46.4	43%/57%	40	10:27	10:36	5.16	0:09	Bottom Up		
	Matrix	IP-2	14	46.4	43%/57%	40	10:36	10:48	3.87	0:12	Bottom Up		
	Matrix	IP-2	13	46.4	43%/57%	40	10:48	11:00	3.87	0:12	Bottom Up		
	Matrix	IP-2	12	46.4	43%/57%	40	11:00	11:10	4.64	0:10	Bottom Up		
	Matrix	IP-2	11	46.4	43%/57%	40	11:10	11:19	5.16	0:09	Bottom Up		
	Matrix	IP-2	10	46.4	43%/57%	40	11:19	11:28	5.16	0:09	Bottom Up		
	Matrix	IP-2	7	46.4	43%/57%	40	11:28	11:42	3.31	0:14	Bottom Up		
	Matrix	IP-2	4,6	46.4	43%/57%	40	11:42	11:50	5.80	0:08	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/20/2015	Matrix	IP-60	4,11	195	33%/67%	30	12:53	13:20	7.22	0:27	Bottom Up	900.4	
	Matrix	IP-60	6,8	195	33%/67%	30	13:20	14:05	4.33	0:45	Bottom Up		
4/20/2015	Matrix	IP-24	20	46.4	43%/57%	30	14:44	14:54	4.64	0:10	Bottom Up	510.4	
	Matrix	IP-24	18	46.4	43%/57%	30	14:54	15:04	4.64	0:10	Bottom Up		
	Matrix	IP-24	16	46.4	43%/57%	30	15:04	15:11	6.63	0:07	Bottom Up		
	Matrix	IP-24	15	46.4	43%/57%	30	15:11	15:21	4.64	0:10	Bottom Up		
	Matrix	IP-24	14	46.4	43%/57%	30	15:21	15:28	6.63	0:07	Bottom Up		
	Matrix	IP-24	13	46.4	43%/57%	30	15:28	15:35	6.63	0:07	Bottom Up		
	Matrix	IP-24	11,12	92.8	43%/57%	30	15:35	15:45	9.28	0:10	Bottom Up		in the middle of 11 during lightnight shutdown. Avg of 9.28 and 3.87 is ~6.6gpm
	Matrix	IP-24	10	46.4	43%/57%	30	16:38	16:50	3.87	0:12	Bottom Up		
	Matrix	IP-24	7	46.4	43%/57%	30	16:50	16:55	9.28	0:05	Bottom Up		
	Matrix	IP-24	4,6	46.4	43%/57%	30	16:55	17:01	7.73	0:06	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/21/2015	Redox Tech	IP-70 (part.)	7,8	260	33%/67%	40	7:25	8:25	4.33	1:00	Bottom Up	260	2 of 3 intervals completed. Other was done yesterday 4/20/15.
	Redox Tech	IP-110	20	46.4	43%/57%	40	8:28	8:42	3.31	0:14	Bottom Up	510.4	
	Redox Tech	IP-110	19	46.4	43%/57%	40	8:42	8:54	3.87	0:12	Bottom Up		
	Redox Tech	IP-110	18	46.4	43%/57%	40	8:54	9:10	2.90	0:16	Bottom Up		
	Redox Tech	IP-110	17	46.4	43%/57%	40	9:10	9:27	2.73	0:17	Bottom Up		
	Redox Tech	IP-110	16	46.4	43%/57%	40	9:27	9:42	3.09	0:15	Bottom Up		
	Redox Tech	IP-110	15	46.4	43%/57%	40	9:42	9:48	7.73	0:06	Bottom Up		
	Redox Tech	IP-110	14	46.4	43%/57%	40	9:48	9:54	7.73	0:06	Bottom Up		
	Redox Tech	IP-110	13	46.4	43%/57%	40	9:54	10:00	7.73	0:06	Bottom Up		
	Redox Tech	IP-110	12	46.4	43%/57%	40	10:00	10:14	3.31	0:14	Bottom Up		
	Redox Tech	IP-110	10	46.4	43%/57%	40	10:14	10:21	6.63	0:07	Bottom Up		
	Redox Tech	IP-110	8	46.4	43%/57%	40	10:21	10:27	7.73	0:06	Bottom Up		
4/21/2015	Redox Tech	IP-52	20	39.2	43%/57%	40	10:32	10:45	3.02	0:13	Bottom Up	509.6	
	Redox Tech	IP-52	19	39.2	43%/57%	40	10:45	10:55	3.92	0:10	Bottom Up		
	Redox Tech	IP-52	18	39.2	43%/57%	40	10:55	11:05	3.92	0:10	Bottom Up		
	Redox Tech	IP-52	17	39.2	43%/57%	40	11:05	11:14	4.36	0:09	Bottom Up		
	Redox Tech	IP-52	16	39.2	43%/57%	40	11:14	11:24	3.92	0:10	Bottom Up		
	Redox Tech	IP-52	15	39.2	43%/57%	40	11:24	11:30	6.53	0:06	Bottom Up		
	Redox Tech	IP-52	14	39.2	43%/57%	40	11:30	11:37	5.60	0:07	Bottom Up		
	Redox Tech	IP-52	13	39.2	43%/57%	40	11:37	11:45	4.90	0:08	Bottom Up		
	Redox Tech	IP-52	12	39.2	43%/57%	40	11:45	11:50	7.84	0:05	Bottom Up		
	Redox Tech	IP-52	10	39.2	43%/57%	40	11:50	11:56	6.53	0:06	Bottom Up		
	Redox Tech	IP-52	9	39.2	43%/57%	40	11:56	12:03	5.60	0:07	Bottom Up		
	Redox Tech	IP-52	7	39.2	43%/57%	40	12:03	12:09	6.53	0:06	Bottom Up		
	Redox Tech	IP-52	5	39.2	43%/57%	40	12:09	12:15	6.53	0:06	Bottom Up		
4/21/2015	Redox Tech	IP-118	2,22	72.8	43%/57%	40	12:20	12:34	5.20	0:14	Bottom Up	509.6	
	Redox Tech	IP-118	20	36.4	43%/57%	40	12:34	12:40	6.07	0:06	Bottom Up		
	Redox Tech	IP-118	18	36.4	43%/57%	40	12:40	12:53	2.80	0:13	Bottom Up		
	Redox Tech	IP-118	16	36.4	43%/57%	40	12:53	13:03	3.64	0:10	Bottom Up		
	Redox Tech	IP-118	15	36.4	43%/57%	40	13:03	13:14	3.31	0:11	Bottom Up		
	Redox Tech	IP-118	14	36.4	43%/57%	40	13:14	13:21	5.20	0:07	Bottom Up		
	Redox Tech	IP-118	13	36.4	43%/57%	40	13:21	13:27	6.07	0:06	Bottom Up		
	Redox Tech	IP-118	12	36.4	43%/57%	40	13:27	13:33	6.07	0:06	Bottom Up		
	Redox Tech	IP-118	11	36.4	43%/57%	40	13:33	13:44	3.31	0:11	Bottom Up		
	Redox Tech	IP-118	10	36.4	43%/57%	40	13:44	13:53	4.04	0:09	Bottom Up		
	Redox Tech	IP-118	8	36.4	43%/57%	40	13:53	14:02	4.04	0:09	Bottom Up		
	Redox Tech	IP-118	6	36.4	43%/57%	40	14:02	14:09	5.20	0:07	Bottom Up		
	Redox Tech	IP-118	5	36.4	43%/57%	40	14:09	14:15	6.07	0:06	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/21/2015	Redox Tech	IP-129	2,14	86.6	33%/67%	50	14:23	14:35	7.22	0:12	Bottom Up	389.7	
	Redox Tech	IP-129	13	43.3	33%/67%	50	14:35	14:40	8.66	0:05	Bottom Up		
	Redox Tech	IP-129	12	43.3	33%/67%	50	14:40	14:55	2.89	0:15	Bottom Up		
	Redox Tech	IP-129	11	43.3	33%/67%	50	14:55	15:15	2.17	0:20	Bottom Up		
	Redox Tech	IP-129	6,8,10	129.9	33%/67%	50	15:15	15:36	6.19	0:21	Bottom Up		
	Redox Tech	IP-129	5	43.3	33%/67%	50	15:36	15:43	6.19	0:07	Bottom Up		
4/21/2015	Redox Tech	IP-77	10	130	33%/67%	40	15:51	16:20	4.48	0:29	Bottom Up	390	
	Redox Tech	IP-77	8	130	33%/67%	40	16:20	16:41	6.19	0:21	Bottom Up		
	Redox Tech	IP-77	7	130	33%/67%	40	16:41	17:13	4.06	0:32	Bottom Up		
4/21/2015	Matrix	IP-56	4,11	195	33%/67%	30	7:45	8:11	7.50	0:26	Bottom Up	390	
	Matrix	IP-56	6,8	195	33%/67%	30	8:11	8:37	7.50	0:26	Bottom Up		
4/21/2015	Matrix	IP-59	4,6,8,11	390	33%/67%	30	9:00	10:23	4.70	1:23	Bottom Up	390	
4/21/2015	Matrix	IP-63	14	48.75	33%/67%	30	10:40	11:08	1.74	0:28	Bottom Up	390	
	Matrix	IP-63	12	48.75	33%/67%	30	11:08	11:18	4.88	0:10	Bottom Up		
	Matrix	IP-63	10	48.75	33%/67%	30	11:18	11:30	4.06	0:12	Bottom Up		
	Matrix	IP-63	9	48.75	33%/67%	30	11:30	11:35	9.75	0:05	Bottom Up		
	Matrix	IP-63	8	48.75	33%/67%	30	11:35	11:41	8.13	0:06	Bottom Up		
	Matrix	IP-63	7	48.75	33%/67%	30	11:41	11:48	6.96	0:07	Bottom Up		
	Matrix	IP-63	6	48.75	33%/67%	30	11:48	11:58	4.88	0:10	Bottom Up		
	Matrix	IP-63	3,4,5	48.75	33%/67%	30	11:58	12:05	6.96	0:07	Bottom Up		
4/21/2015	Matrix	IP-48	20	42.5	43%/57%	30	13:10	13:20	4.25	0:10	Bottom Up	510	
	Matrix	IP-48	19	42.5	43%/57%	30	13:20	13:28	5.31	0:08	Bottom Up		
	Matrix	IP-48	18	42.5	43%/57%	30	13:28	13:34	7.08	0:06	Bottom Up		
	Matrix	IP-48	17	42.5	43%/57%	30	13:34	13:40	7.08	0:06	Bottom Up		
	Matrix	IP-48	16	42.5	43%/57%	30	13:40	13:51	3.86	0:11	Bottom Up		
	Matrix	IP-48	15	42.5	43%/57%	30	13:51	13:59	5.31	0:08	Bottom Up		
	Matrix	IP-48	14	42.5	43%/57%	30	13:59	14:10	3.86	0:11	Bottom Up		
	Matrix	IP-48	13	42.5	43%/57%	30	14:10	14:17	6.07	0:07	Bottom Up		
	Matrix	IP-48	12	42.5	43%/57%	30	14:17	14:25	5.31	0:08	Bottom Up		
	Matrix	IP-48	10	42.5	43%/57%	30	14:25	14:35	4.25	0:10	Bottom Up		
	Matrix	IP-48	9	42.5	43%/57%	30	14:35	14:43	5.31	0:08	Bottom Up		
	Matrix	IP-48	5,7	42.5	43%/57%	30	14:43	14:50	6.07	0:07	Bottom Up		
4/21/2015	Matrix	IP-17	20	46.3	43%/57%	30	15:20	15:27	6.61	0:07	Bottom Up	509.3	
	Matrix	IP-17	18	46.3	43%/57%	30	15:27	15:38	4.21	0:11	Bottom Up		
	Matrix	IP-17	16	46.3	43%/57%	30	15:38	15:48	4.63	0:10	Bottom Up		
	Matrix	IP-17	15	46.3	43%/57%	30	15:48	15:56	5.79	0:08	Bottom Up		
	Matrix	IP-17	14	46.3	43%/57%	30	15:56	16:03	6.61	0:07	Bottom Up		
	Matrix	IP-17	13	46.3	43%/57%	30	16:03	16:12	5.14	0:09	Bottom Up		
	Matrix	IP-17	12	46.3	43%/57%	30	16:12	16:20	5.79	0:08	Bottom Up		
	Matrix	IP-17	11	46.3	43%/57%	30	16:20	16:31	4.21	0:11	Bottom Up		
	Matrix	IP-17	10	46.3	43%/57%	30	16:31	16:40	5.14	0:09	Bottom Up		
	Matrix	IP-17	7	46.3	43%/57%	30	16:40	16:50	4.63	0:10	Bottom Up		
	Matrix	IP-17	4,6	46.3	43%/57%	30	16:50	17:00	4.63	0:10	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/22/2015	Redox Tech	IP-127	2,22	72.8	43%/57%	40	9:25	9:43	4.04	0:18	Bottom Up	509.6	
	Redox Tech	IP-127	20	36.4	43%/57%	40	9:43	9:53	3.64	0:10	Bottom Up		
	Redox Tech	IP-127	18	36.4	43%/57%	40	9:53	10:03	3.64	0:10	Bottom Up		
	Redox Tech	IP-127	16	36.4	43%/57%	40	10:03	10:14	3.31	0:11	Bottom Up		
	Redox Tech	IP-127	15	36.4	43%/57%	40	10:14	10:31	2.14	0:17	Bottom Up		
	Redox Tech	IP-127	14	36.4	43%/57%	40	10:31	10:38	5.20	0:07	Bottom Up		
	Redox Tech	IP-127	13	36.4	43%/57%	40	10:38	10:46	4.55	0:08	Bottom Up		
	Redox Tech	IP-127	12	36.4	43%/57%	40	10:46	10:53	5.20	0:07	Bottom Up		
	Redox Tech	IP-127	11	36.4	43%/57%	40	10:53	11:00	5.20	0:07	Bottom Up		
	Redox Tech	IP-127	10	36.4	43%/57%	40	11:00	11:09	4.04	0:09	Bottom Up		
	Redox Tech	IP-127	8	36.4	43%/57%	40	11:09	11:13	9.10	0:04	Bottom Up		
	Redox Tech	IP-127	6	36.4	43%/57%	40	11:13	11:18	7.28	0:05	Bottom Up		
	Redox Tech	IP-127	5	36.4	43%/57%	40	11:18	11:22	9.10	0:04	Bottom Up		
4/22/2015	Redox Tech	IP-98	20	31.9	43%/57%	40	7:42	8:03	1.52	0:21	Bottom Up	510.4	
	Redox Tech	IP-98	15,16,17,18,19	159.5	43%/57%	40	8:03	8:22	8.39	0:19	Bottom Up		
	Redox Tech	IP-98	14	31.9	43%/57%	40	8:22	8:30	3.99	0:08	Bottom Up		
	Redox Tech	IP-98	13	31.9	43%/57%	40	8:30	8:37	4.56	0:07	Bottom Up		
	Redox Tech	IP-98	12	31.9	43%/57%	40	8:37	8:41	7.98	0:04	Bottom Up		
	Redox Tech	IP-98	10,11	63.8	43%/57%	40	8:41	8:50	7.09	0:09	Bottom Up		
	Redox Tech	IP-98	9	31.9	43%/57%	40	9:00	9:12	2.66	0:12	Bottom Up		
	Redox Tech	IP-98	4,6,7,8	127.6	43%/57%	40	11:25	11:52	4.73	0:27	Bottom Up		
4/22/2015	Redox Tech	IP-76	10	130	33%/67%	40	12:03	12:25	5.91	0:22	Bottom Up		
	Redox Tech	IP-76	8	130	33%/67%	40	12:25	12:52	4.81	0:27	Bottom Up		
	Redox Tech	IP-76	7	130	33%/67%	40	12:52	13:20	4.64	0:28	Bottom Up		
4/22/2015	Matrix	IP-51	19,20	78.4	43%/57%	40	13:31	13:56	3.14	0:25	Bottom Up	509.6	
	Redox Tech	IP-51	18	39.2	43%/57%	40	13:56	14:02	6.53	0:06	Bottom Up		
	Redox Tech	IP-51	17	39.2	43%/57%	40	14:02	14:11	4.36	0:09	Bottom Up		
	Redox Tech	IP-51	16	39.2	43%/57%	40	14:11	14:17	6.53	0:06	Bottom Up		
	Redox Tech	IP-51	15	39.2	43%/57%	40	14:17	14:22	7.84	0:05	Bottom Up		
	Redox Tech	IP-51	14	39.2	43%/57%	40	14:22	14:28	6.53	0:06	Bottom Up		
	Redox Tech	IP-51	13	39.2	43%/57%	40	14:28	14:40	3.27	0:12	Bottom Up		
	Redox Tech	IP-51	12	39.2	43%/57%	40	14:40	14:46	6.53	0:06	Bottom Up		
	Redox Tech	IP-51	10	39.2	43%/57%	40	14:46	14:52	6.53	0:06	Bottom Up		
	Redox Tech	IP-51	9	39.2	43%/57%	40	14:52	14:58	6.53	0:06	Bottom Up		
	Redox Tech	IP-51	7	39.2	43%/57%	40	14:58	15:03	7.84	0:05	Bottom Up		
	Redox Tech	IP-51	5	39.2	43%/57%	40	15:03	15:07	9.80	0:04	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/22/2015	Redox Tech	IP-66 (part.)	14	43.3	33%/67%	40	15:08	15:15	6.19	0:07	Bottom Up	259.8	each interval got a little extra volume, will not inject 3ft interval.
	Redox Tech	IP-66 (part.)	12	43.3	33%/67%	40	15:15	15:24	4.81	0:09	Bottom Up		
	Redox Tech	IP-66 (part.)	10	43.3	33%/67%	40	15:24	15:32	5.41	0:08	Bottom Up		
	Redox Tech	IP-66 (part.)	9	43.3	33%/67%	40	15:32	15:45	3.33	0:13	Bottom Up		
	Redox Tech	IP-66 (part.)	8	43.3	33%/67%	40	15:45	15:55	4.33	0:10	Bottom Up		
	Redox Tech	IP-66 (part.)	7	43.3	33%/67%	40	15:55	16:00	8.66	0:05	Bottom Up		
4/22/2015	Matrix	IP-11	20	46.3	43%/57%	30	7:46	7:56	4.63	0:10	Bottom Up	509.3	
	Matrix	IP-11	18	46.3	43%/57%	30	7:56	8:07	4.21	0:11	Bottom Up		
	Matrix	IP-11	16	46.3	43%/57%	30	8:07	8:15	5.79	0:08	Bottom Up		
	Matrix	IP-11	15	46.3	43%/57%	30	8:15	8:23	5.79	0:08	Bottom Up		
	Matrix	IP-11	14	46.3	43%/57%	30	8:23	8:30	6.61	0:07	Bottom Up		
	Matrix	IP-11	13	46.3	43%/57%	30	8:30	8:36	7.72	0:06	Bottom Up		
	Matrix	IP-11	12	46.3	43%/57%	30	8:36	8:44	5.79	0:08	Bottom Up		
	Matrix	IP-11	11	46.3	43%/57%	30	8:44	8:50	7.72	0:06	Bottom Up		
	Matrix	IP-11	10	46.3	43%/57%	30	8:50	9:00	4.63	0:10	Bottom Up		
	Matrix	IP-11	7	46.3	43%/57%	30	9:00	9:06	7.72	0:06	Bottom Up		
	Matrix	IP-11	4,6	46.3	43%/57%	30	9:06	9:09	15.43	0:03	Bottom Up		
4/22/2015	Matrix	IP-6	20	46.3	43%/57%	30	9:52	10:02	4.63	0:10	Bottom Up	509.3	
	Matrix	IP-6	18	46.3	43%/57%	30	10:02	10:09	6.61	0:07	Bottom Up		
	Matrix	IP-6	16	46.3	43%/57%	30	10:09	10:17	5.79	0:08	Bottom Up		
	Matrix	IP-6	15	46.3	43%/57%	30	10:17	10:27	4.63	0:10	Bottom Up		
	Matrix	IP-6	14	46.3	43%/57%	30	10:27	10:33	7.72	0:06	Bottom Up		
	Matrix	IP-6	13	46.3	43%/57%	30	10:33	10:40	6.61	0:07	Bottom Up		
	Matrix	IP-6	12	46.3	43%/57%	30	10:40	10:46	7.72	0:06	Bottom Up		
	Matrix	IP-6	11	46.3	43%/57%	30	10:46	10:56	4.63	0:10	Bottom Up		
	Matrix	IP-6	10	46.3	43%/57%	30	10:56	11:05	5.14	0:09	Bottom Up		
	Matrix	IP-6	7	46.3	43%/57%	30	11:05	11:11	7.72	0:06	Bottom Up		
	Matrix	IP-6	4,6	46.3	43%/57%	30	11:11	11:20	5.14	0:09	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/23/2015	Redox Tech	IP-66 (part.)	6	43.3	33%/67%	40	7:18	7:40	1.97	0:22	Bottom Up	129.9	Last interval very short 1st 2 of the day ran a little long for the projected volume. Or they injected extra into the lower intervals.
	Redox Tech	IP-66 (part.)	5	43.3	33%/67%	40	7:40	7:58	2.41	0:18	Bottom Up		
	Redox Tech	IP-66 (part.)	3,4	43.3	33%/67%	40	7:58	8:00	21.65	0:02	Bottom Up		
4/23/2015	Redox Tech	IP-99	20	31.9	43%/57%	40	8:00	8:10	3.19	0:10	Bottom Up	510.4	
	Redox Tech	IP-99	19	31.9	43%/57%	40	8:10	8:17	4.56	0:07	Bottom Up		
	Redox Tech	IP-99	18	31.9	43%/57%	40	8:17	8:24	4.56	0:07	Bottom Up		
	Redox Tech	IP-99	17	31.9	43%/57%	40	8:24	8:30	5.32	0:06	Bottom Up		
	Redox Tech	IP-99	16	31.9	43%/57%	40	8:30	8:40	3.19	0:10	Bottom Up		
	Redox Tech	IP-99	15	31.9	43%/57%	40	8:40	8:50	3.19	0:10	Bottom Up		
	Redox Tech	IP-99	14	31.9	43%/57%	40	8:50	8:57	4.56	0:07	Bottom Up		
	Redox Tech	IP-99	13	31.9	43%/57%	40	8:57	9:05	0.37	0:08	Bottom Up		
	Redox Tech	IP-99	12	31.9	43%/57%	40	9:05	9:11	5.32	0:06	Bottom Up		
	Redox Tech	IP-99	11	31.9	43%/57%	40	9:11	9:19	3.99	0:08	Bottom Up		
	Redox Tech	IP-99	10	31.9	43%/57%	40	9:19	9:24	6.38	0:05	Bottom Up		
	Redox Tech	IP-99	9	31.9	43%/57%	40	9:24	9:30	5.32	0:06	Bottom Up		
	Redox Tech	IP-99	8	31.9	43%/57%	40	12:40	12:48	3.99	0:08	Bottom Up		
	Redox Tech	IP-99	7	31.9	43%/57%	40	12:48	12:57	3.54	0:09	Bottom Up		
	Redox Tech	IP-99	6	31.9	43%/57%	40	12:57	13:04	4.56	0:07	Bottom Up		
	Redox Tech	IP-99	4	31.9	43%/57%	40	13:04	13:11	4.56	0:07	Bottom Up		
4/23/2015	Redox Tech	IP-71	10	130	33%/67%	40	11:22	11:48	5.00	0:26	Bottom Up		
	Redox Tech	IP-71	8	130	33%/67%	40	11:48	12:05	7.65	0:17	Bottom Up		
	Redox Tech	IP-71	7	130	33%/67%	40	12:05	12:38	3.94	0:33	Bottom Up		
4/23/2015	Redox Tech	IP-85	18,19,20	95.7	43%/57%	40	9:38	9:58	4.79	0:20	Bottom Up	510.4	
	Redox Tech	IP-85	17	31.9	43%/57%	40	9:58	10:07	3.54	0:09	Bottom Up		
	Matrix	IP-85	16	31.9	43%/57%	40	10:07	10:14	4.56	0:07	Bottom Up		
	Redox Tech	IP-85	15	31.9	43%/57%	40	10:14	10:23	3.54	0:09	Bottom Up		
	Redox Tech	IP-85	14	31.9	43%/57%	40	10:23	10:31	3.99	0:08	Bottom Up		
	Redox Tech	IP-85	13	31.9	43%/57%	40	10:31	10:37	5.32	0:06	Bottom Up		
	Redox Tech	IP-85	12	31.9	43%/57%	40	10:37	10:43	5.32	0:06	Bottom Up		
	Redox Tech	IP-85	11	31.9	43%/57%	40	10:43	10:49	5.32	0:06	Bottom Up		
	Redox Tech	IP-85	10	31.9	43%/57%	40	10:49	10:53	7.98	0:04	Bottom Up		
	Redox Tech	IP-85	9	31.9	43%/57%	40	10:53	11:00	4.56	0:07	Bottom Up		
	Redox Tech	IP-85	8	31.9	43%/57%	40	11:00	11:05	6.38	0:05	Bottom Up		
	Redox Tech	IP-85	7	31.9	43%/57%	40	11:05	11:10	6.38	0:05	Bottom Up		
	Redox Tech	IP-85	6	31.9	43%/57%	40	11:10	11:15	6.38	0:05	Bottom Up		
	Redox Tech	IP-85	4	31.9	43%/57%	40	11:15	11:18	10.63	0:03	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/23/2015	Redox Tech	IP-102	18,19,20	95.7	43%/57%	40	13:11	13:27	5.98	0:16	Bottom Up	510.4	
	Redox Tech	IP-102	17	31.9	43%/57%	40	13:27	13:35	3.99	0:08	Bottom Up		
	Redox Tech	IP-102	16	31.9	43%/57%	40	13:35	13:44	3.54	0:09	Bottom Up		
	Redox Tech	IP-102	15	31.9	43%/57%	40	13:44	13:52	3.99	0:08	Bottom Up		
	Redox Tech	IP-102	14	31.9	43%/57%	40	13:52	13:59	4.56	0:07	Bottom Up		
	Redox Tech	IP-102	13	31.9	43%/57%	40	13:59	14:05	5.32	0:06	Bottom Up		
	Redox Tech	IP-102	12	31.9	43%/57%	40	14:05	14:11	5.32	0:06	Bottom Up		
	Redox Tech	IP-102	11	31.9	43%/57%	40	14:11	14:17	5.32	0:06	Bottom Up		
	Redox Tech	IP-102	10	31.9	43%/57%	40	14:17	14:25	3.99	0:08	Bottom Up		
	Redox Tech	IP-102	9	31.9	43%/57%	40	14:25	14:31	5.32	0:06	Bottom Up		
	Redox Tech	IP-102	8	31.9	43%/57%	40	14:31	14:37	5.32	0:06	Bottom Up		
	Redox Tech	IP-102	7	31.9	43%/57%	40	14:37	14:44	4.56	0:07	Bottom Up		
	Redox Tech	IP-102	6	31.9	43%/57%	40	14:44	14:50	5.32	0:06	Bottom Up		
	Redox Tech	IP-102	4	31.9	43%/57%	40	14:50	14:55	6.38	0:05	Bottom Up		
4/23/2015	Redox Tech	IP-65	14	43.3	33%/67%	40	15:13	15:27	3.09	0:14	Bottom Up	389.7	
	Redox Tech	IP-65	12	43.3	33%/67%	40	15:27	15:37	4.33	0:10	Bottom Up		
	Redox Tech	IP-65	10	43.3	33%/67%	40	15:37	15:43	7.22	0:06	Bottom Up		
	Redox Tech	IP-65	9	43.3	33%/67%	40	15:43	15:52	4.81	0:09	Bottom Up		
	Redox Tech	IP-65	8	43.3	33%/67%	40	15:52	16:02	4.33	0:10	Bottom Up		
	Redox Tech	IP-65	7	43.3	33%/67%	40	16:02	16:08	7.22	0:06	Bottom Up		
	Redox Tech	IP-65	6	43.3	33%/67%	40	16:08	16:15	6.19	0:07	Bottom Up		
	Redox Tech	IP-65	5	43.3	33%/67%	40	16:15	16:23	5.41	0:08	Bottom Up		
	Redox Tech	IP-65	3,4	43.3	33%/67%	40	16:23	16:32	4.81	0:09	Bottom Up		
4/23/2015	Matrix	IP-12	20	46.3	43%/57%	30	12:32	12:44	3.86	0:12	Bottom Up	509.3	
	Matrix	IP-12	18	46.3	43%/57%	30	12:44	12:50	7.72	0:06	Bottom Up		
	Matrix	IP-12	16	46.3	43%/57%	30	12:50	12:57	6.61	0:07	Bottom Up		
	Matrix	IP-12	15	46.3	43%/57%	30	12:57	13:04	6.61	0:07	Bottom Up		
	Matrix	IP-12	14	46.3	43%/57%	30	13:04	13:10	7.72	0:06	Bottom Up		
	Matrix	IP-12	13	46.3	43%/57%	30	13:10	13:17	6.61	0:07	Bottom Up		
	Matrix	IP-12	12	46.3	43%/57%	30	13:17	13:24	6.61	0:07	Bottom Up		
	Matrix	IP-12	11	46.3	43%/57%	30	13:24	13:30	7.72	0:06	Bottom Up		
	Matrix	IP-12	10	46.3	43%/57%	30	13:30	13:36	7.72	0:06	Bottom Up		
	Matrix	IP-12	7	46.3	43%/57%	30	13:36	13:44	5.79	0:08	Bottom Up		
	Matrix	IP-12	4,6	46.3	43%/57%	30	13:44	13:50	7.72	0:06	Bottom Up		
4/23/2015	Matrix	IP-13	20	46.3	43%/57%	30	14:00	14:08	5.79	0:08	Bottom Up	509.3	
	Matrix	IP-13	18	46.3	43%/57%	30	14:08	14:16	5.79	0:08	Bottom Up		
	Matrix	IP-13	16	46.3	43%/57%	30	14:16	14:25	5.14	0:09	Bottom Up		
	Matrix	IP-13	15	46.3	43%/57%	30	14:25	14:33	5.79	0:08	Bottom Up		
	Matrix	IP-13	14	46.3	43%/57%	30	14:33	14:39	7.72	0:06	Bottom Up		
	Matrix	IP-13	13	46.3	43%/57%	30	14:39	14:45	7.72	0:06	Bottom Up		
	Matrix	IP-13	12	46.3	43%/57%	30	14:45	14:51	7.72	0:06	Bottom Up		
	Matrix	IP-13	11	46.3	43%/57%	30	14:51	14:57	7.72	0:06	Bottom Up		
	Matrix	IP-13	10	46.3	43%/57%	30	14:57	15:03	7.72	0:06	Bottom Up		
	Matrix	IP-13	7	46.3	43%/57%	30	15:03	15:11	5.79	0:08	Bottom Up		
	Matrix	IP-13	4,6	46.3	43%/57%	30	15:11	15:20	5.14	0:09	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/24/2015	Redox Tech	IP-93	20	31.9	43%/57%	40	7:34	7:48	2.28	0:14	Bottom Up	510.4	
	Redox Tech	IP-93	19	31.9	43%/57%	40	7:48	7:57	3.54	0:09	Bottom Up		
	Redox Tech	IP-93	18	31.9	43%/57%	40	7:57	8:04	4.56	0:07	Bottom Up		
	Redox Tech	IP-93	17	31.9	43%/57%	40	8:04	8:09	6.38	0:05	Bottom Up		
	Redox Tech	IP-93	16	31.9	43%/57%	40	8:09	8:14	6.38	0:05	Bottom Up		
	Redox Tech	IP-93	15	31.9	43%/57%	40	8:14	8:20	5.32	0:06	Bottom Up		
	Redox Tech	IP-93	14	31.9	43%/57%	40	8:20	8:28	3.99	0:08	Bottom Up		
	Redox Tech	IP-93	13	31.9	43%/57%	40	8:28	8:35	4.56	0:07	Bottom Up		
	Redox Tech	IP-93	12	31.9	43%/57%	40	12:30	12:37	4.56	0:07	Bottom Up		
	Redox Tech	IP-93	11	31.9	43%/57%	40	12:37	12:44	4.56	0:07	Bottom Up		
	Redox Tech	IP-93	10	31.9	43%/57%	40	12:44	12:52	3.99	0:08	Bottom Up		
	Redox Tech	IP-93	9	31.9	43%/57%	40	12:52	12:56	7.98	0:04	Bottom Up		
	Redox Tech	IP-93	8	31.9	43%/57%	40	12:56	13:00	7.98	0:04	Bottom Up		
	Redox Tech	IP-93	7	31.9	43%/57%	40	13:00	13:06	5.32	0:06	Bottom Up		
	Redox Tech	IP-93	6	31.9	43%/57%	40	13:06	13:11	6.38	0:05	Bottom Up		
	Redox Tech	IP-93	4	31.9	43%/57%	40	13:11	13:15	7.98	0:04	Bottom Up		
4/24/2015	Redox Tech	IP-95	20	31.9	43%/57%	40	8:39	8:43	7.98	0:04	Bottom Up	510.4	
	Redox Tech	IP-95	19	31.9	43%/57%	40	8:43	8:51	3.99	0:08	Bottom Up		
	Redox Tech	IP-95	18	31.9	43%/57%	40	8:51	8:59	3.99	0:08	Bottom Up		
	Redox Tech	IP-95	17	31.9	43%/57%	40	8:59	9:06	4.56	0:07	Bottom Up		
	Redox Tech	IP-95	16	31.9	43%/57%	40	9:06	9:13	4.56	0:07	Bottom Up		
	Redox Tech	IP-95	15	31.9	43%/57%	40	9:13	9:21	3.99	0:08	Bottom Up		
	Redox Tech	IP-95	14	31.9	43%/57%	40	9:21	9:26	6.38	0:05	Bottom Up		
	Redox Tech	IP-95	13	31.9	43%/57%	40	9:26	9:32	5.32	0:06	Bottom Up		
	Matrix	IP-95	9,10,11,12	127.6	43%/57%	40	13:16	13:35	6.72	0:19	Bottom Up		
	Redox Tech	IP-95	4,6,7,8	127.6	43%/57%	40	13:35	14:02	4.73	0:27	Bottom Up		
4/24/2015	Redox Tech	IP-67	10	130	33%/67%	40	9:39	10:02	5.65	0:23	Bottom Up		
	Redox Tech	IP-67	8	130	33%/67%	40	10:02	10:25	5.65	0:23	Bottom Up		
	Redox Tech	IP-67	7	130	33%/67%	40	10:25	10:53	4.64	0:28	Bottom Up		
4/24/2015	Redox Tech	IP-120	2,22	72.8	43%/57%	40	10:54	11:05	6.62	0:11	Bottom Up	509.6	
	Redox Tech	IP-120	20	36.4	43%/57%	40	11:05	11:14	4.04	0:09	Bottom Up		
	Redox Tech	IP-120	18	36.4	43%/57%	40	11:14	11:22	4.55	0:08	Bottom Up		
	Redox Tech	IP-120	16	36.4	43%/57%	40	11:22	11:28	6.07	0:06	Bottom Up		
	Redox Tech	IP-120	15	36.4	43%/57%	40	11:28	11:36	4.55	0:08	Bottom Up		
	Redox Tech	IP-120	11,12,13,14	145.6	43%/57%	40	11:36	11:57	6.93	0:21	Bottom Up		
	Redox Tech	IP-120	8,10	72.8	43%/57%	40	11:57	12:11	5.20	0:14	Bottom Up		
	Redox Tech	IP-120	6	36.4	43%/57%	40	12:11	12:18	5.20	0:07	Bottom Up		
	Redox Tech	IP-120	5	36.4	43%/57%	40	12:18	12:27	4.04	0:09	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/24/2015	Matrix	IP-18	20	46.3	43%/57%	30	7:22	7:30	5.79	0:08	Bottom Up	509.3	
	Matrix	IP-18	18	46.3	43%/57%	30	7:30	7:42	3.86	0:12	Bottom Up		
	Matrix	IP-18	16	46.3	43%/57%	30	7:42	7:50	5.79	0:08	Bottom Up		
	Matrix	IP-18	15	46.3	43%/57%	30	7:50	7:57	6.61	0:07	Bottom Up		
	Matrix	IP-18	14	46.3	43%/57%	30	7:57	8:05	5.79	0:08	Bottom Up		
	Matrix	IP-18	13	46.3	43%/57%	30	8:05	8:14	5.14	0:09	Bottom Up		
	Matrix	IP-18	12	46.3	43%/57%	30	8:14	8:19	9.26	0:05	Bottom Up		
	Matrix	IP-18	11	46.3	43%/57%	30	8:19	8:27	5.79	0:08	Bottom Up		
	Matrix	IP-18	10	46.3	43%/57%	30	8:27	8:36	5.14	0:09	Bottom Up		
	Matrix	IP-18	7	46.3	43%/57%	30	8:36	8:44	5.79	0:08	Bottom Up		
	Matrix	IP-18	4,6	46.3	43%/57%	30	8:44	8:52	5.79	0:08	Bottom Up		
4/24/2015	Matrix	IP-44	20	42.5	43%/57%	30	9:18	9:24	7.08	0:06	Bottom Up		
	Matrix	IP-44	19	42.5	43%/57%	30	9:24	9:30	7.08	0:06	Bottom Up		
	Matrix	IP-44	18	42.5	43%/57%	30	9:30	9:38	5.31	0:08	Bottom Up		
	Matrix	IP-44	17	42.5	43%/57%	30	9:38	9:47	4.72	0:09	Bottom Up		
	Matrix	IP-44	16	42.5	43%/57%	30	9:47	9:55	5.31	0:08	Bottom Up		
	Matrix	IP-44	15	42.5	43%/57%	30	9:55	10:04	4.72	0:09	Bottom Up		
	Matrix	IP-44	14	42.5	43%/57%	30	10:04	10:11	6.07	0:07	Bottom Up		
	Matrix	IP-44	13	42.5	43%/57%	30	10:11	10:18	6.07	0:07	Bottom Up		
	Matrix	IP-44	12	42.5	43%/57%	30	10:18	10:24	7.08	0:06	Bottom Up		
	Matrix	IP-44	10	42.5	43%/57%	30	10:24	10:34	4.25	0:10	Bottom Up		
	Matrix	IP-44	9	42.5	43%/57%	30	10:34	10:40	7.08	0:06	Bottom Up		
	Matrix	IP-44	5,7	42.5	43%/57%	30	10:40	10:48	5.31	0:08	Bottom Up		
4/24/2015	Matrix	IP-33	20	51	43%/57%	30	11:00	11:10	5.10	0:10	Bottom Up	510	
	Matrix	IP-33	18	51	43%/57%	30	11:10	11:20	5.10	0:10	Bottom Up		
	Matrix	IP-33	16	51	43%/57%	30	11:20	11:30	5.10	0:10	Bottom Up		
	Matrix	IP-33	15	51	43%/57%	30	11:30	11:40	5.10	0:10	Bottom Up		
	Matrix	IP-33	14	51	43%/57%	30	11:40	11:48	6.38	0:08	Bottom Up		
	Matrix	IP-33	13	51	43%/57%	30	11:48	11:53	10.20	0:05	Bottom Up		
	Matrix	IP-33	12	51	43%/57%	30	11:53	12:01	6.38	0:08	Bottom Up		
	Matrix	IP-33	11	51	43%/57%	30	12:01	12:24	2.22	0:23	Bottom Up		
	Matrix	IP-33	8	51	43%/57%	30	12:24	12:35	4.64	0:11	Bottom Up		
	Matrix	IP-33	7	51	43%/57%	30	12:35	12:49	3.64	0:14	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/27/2015	Redox Tech	IP-100	4,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	510	43%/57%	40	8:35	10:11	5.31	1:36	Bottom Up	510	
4/27/2015	Redox Tech	IP-109	8,10,12,13,14,15,16,17,18,19,20	510	43%/57%	40	10:13	11:54	5.05	1:41	Bottom Up	510	
4/27/2015	Redox Tech	IP-116	8,10,12,13,14,15,16,17,18,19,20	510	43%/57%	40	12:00	13:30	5.67	1:30	Bottom Up	510	
4/27/2015	Redox Tech	IP-62	3,4,5,6,7,8,9,10,12,14	510	43%/57%	40	13:36	14:47	7.18	1:11	Bottom Up	510	
4/27/2015	Redox Tech	IP-68	7,8,10	390	33%/67%	40	14:50	16:05	5.20	1:15	Bottom Up	390	
4/27/2015	Redox Tech	IP-75	7,8,10	390	33%/67%	40	16:05	17:15	5.57	1:10	Bottom Up	390	
4/27/2015	Matrix	IP-22	20	46.4	43%/57%	25	8:49	8:59	4.64	0:10	Bottom Up	510.4	
	Matrix	IP-22	18	46.4	43%/57%	25	8:59	9:08	5.16	0:09	Bottom Up		
	Matrix	IP-22	16	46.4	43%/57%	25	9:08	9:15	6.63	0:07	Bottom Up		
	Matrix	IP-22	15	46.4	43%/57%	25	9:15	9:24	5.16	0:09	Bottom Up		
	Matrix	IP-22	14	46.4	43%/57%	25	9:24	9:32	5.80	0:08	Bottom Up		
	Matrix	IP-22	13	46.4	43%/57%	25	9:32	9:40	5.80	0:08	Bottom Up		
	Matrix	IP-22	12	46.4	43%/57%	25	9:40	9:50	4.64	0:10	Bottom Up		
	Matrix	IP-22	11	46.4	43%/57%	25	9:50	9:58	5.80	0:08	Bottom Up		
	Matrix	IP-22	10	46.4	43%/57%	25	9:58	10:02	11.60	0:04	Bottom Up		
	Matrix	IP-22	7	46.4	43%/57%	25	10:02	10:17	3.09	0:15	Bottom Up		
	Matrix	IP-22	4,6	46.4	43%/57%	25	10:17	10:30	3.57	0:13	Bottom Up		
4/27/2015	Matrix	IP-14	20	46.4	43%/57%	25	11:05	11:12	6.63	0:07	Bottom Up	510.4	
	Matrix	IP-14	18	46.4	43%/57%	25	11:12	11:20	5.80	0:08	Bottom Up		
	Matrix	IP-14	16	46.4	43%/57%	25	11:20	11:29	5.16	0:09	Bottom Up		
	Matrix	IP-14	15	46.4	43%/57%	25	11:29	11:39	4.64	0:10	Bottom Up		
	Matrix	IP-14	14	46.4	43%/57%	25	11:39	11:50	4.22	0:11	Bottom Up		
	Matrix	IP-14	13	46.4	43%/57%	25	11:50	11:59	5.16	0:09	Bottom Up		
	Matrix	IP-14	12	46.4	43%/57%	25	11:59	12:07	5.80	0:08	Bottom Up		
	Matrix	IP-14	11	46.4	43%/57%	25	12:07	12:27	2.32	0:20	Bottom Up		
	Matrix	IP-14	10	46.4	43%/57%	25	12:27	12:53	1.78	0:26	Bottom Up		
	Matrix	IP-14	7	46.4	43%/57%	25	12:53	13:04	4.22	0:11	Bottom Up		
	Matrix	IP-14	4,6	46.4	43%/57%	25	13:04	13:04	-	0:00	Bottom Up		missed an interval at about 12:17.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/27/2015	Matrix	IP-4	20	46.4	43%/57%	50-75	13:18	13:28	4.64	0:10	Bottom Up	510.4	
	Matrix	IP-4	18	46.4	43%/57%	50-75	13:28	13:39	4.22	0:11	Bottom Up		
	Matrix	IP-4	16	46.4	43%/57%	50-75	13:39	13:47	5.80	0:08	Bottom Up		
	Matrix	IP-4	15	46.4	43%/57%	50-75	13:47	13:55	5.80	0:08	Bottom Up		
	Matrix	IP-4	14	46.4	43%/57%	50-75	13:55	14:02	6.63	0:07	Bottom Up		
	Matrix	IP-4	13	46.4	43%/57%	50-75	14:02	14:10	5.80	0:08	Bottom Up		
	Matrix	IP-4	12	46.4	43%/57%	50-75	14:10	14:18	5.80	0:08	Bottom Up		
	Matrix	IP-4	11	46.4	43%/57%	50-75	14:18	14:25	6.63	0:07	Bottom Up		
	Matrix	IP-4	10	46.4	43%/57%	50-75	14:25	14:35	4.64	0:10	Bottom Up		
	Matrix	IP-4	7	46.4	43%/57%	50-75	14:35	14:40	9.28	0:05	Bottom Up		
	Matrix	IP-4	4,6	46.4	43%/57%	50-75	14:40	14:50	4.64	0:10	Bottom Up		
4/27/2015	Matrix	IP-49	20	42.5	43%/57%	25	15:04	15:09	8.50	0:05	Bottom Up	510	
	Matrix	IP-49	19	42.5	43%/57%	25	15:09	15:17	5.31	0:08	Bottom Up		
	Matrix	IP-49	18	42.5	43%/57%	25	15:17	15:27	4.25	0:10	Bottom Up		
	Matrix	IP-49	17	42.5	43%/57%	25	15:27	15:31	10.63	0:04	Bottom Up		
	Matrix	IP-49	16	42.5	43%/57%	25	15:31	15:39	5.31	0:08	Bottom Up		
	Matrix	IP-49	15	42.5	43%/57%	25	15:39	15:47	5.31	0:08	Bottom Up		
	Matrix	IP-49	14	42.5	43%/57%	25	15:47	15:55	5.31	0:08	Bottom Up		
	Matrix	IP-49	13	42.5	43%/57%	25	15:55	16:05	4.25	0:10	Bottom Up		
	Matrix	IP-49	12	42.5	43%/57%	25	16:05	16:12	6.07	0:07	Bottom Up		
	Matrix	IP-49	10	42.5	43%/57%	25	16:12	16:19	6.07	0:07	Bottom Up		
	Matrix	IP-49	9	42.5	43%/57%	25	16:19	16:25	7.08	0:06	Bottom Up		
	Matrix	IP-49	5,7	42.5	43%/57%	25	16:25	16:33	5.31	0:08	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/28/2015	Redox Tech	IP-86	4,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	510	43%/57%	40	7:43	9:32	4.68	1:49	Bottom Up	510	
4/28/2015	Redox Tech	IP-114	8,10,12,13,14,15,16,17,18,19,20	510	43%/57%	40	9:35	11:09	5.43	1:34	Bottom Up	510	
4/28/2015	Redox Tech	IP-87	4,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	510	43%/57%	40	11:14	12:45	5.60	1:31	Bottom Up	510	
4/28/2015	Redox Tech	IP-128	2,5,6,8,10,11,12,13,14,15,16,18,20,22	510	43%/57%	40	12:55	14:28	5.48	1:33	Bottom Up	510	
4/28/2015	Redox Tech	IP-61	4,5,6,7,8,9,10,12,14	390	33%/67%	40	14:34	15:45	5.49	1:11	Bottom Up	390	
4/28/2015	Redox Tech	IP-108	8,10,12,13,14	390	33%/67%	40	15:52	17:02	5.57	1:10	Bottom Up	390	
4/28/2015	Matrix	IP-79	20	34	43%/57%	25	7:30	7:35	6.80	0:05	Bottom Up	510	
	Matrix	IP-79	19	34	43%/57%	25	7:35	7:42	4.86	0:07	Bottom Up		
	Matrix	IP-79	18	34	43%/57%	25	7:42	7:49	4.86	0:07	Bottom Up		
	Matrix	IP-79	17	34	43%/57%	25	7:49	7:56	4.86	0:07	Bottom Up		
	Matrix	IP-79	16	34	43%/57%	25	7:56	8:02	5.67	0:06	Bottom Up		
	Matrix	IP-79	15	34	43%/57%	25	8:02	8:09	4.86	0:07	Bottom Up		
	Matrix	IP-79	14	34	43%/57%	25	8:09	8:13	8.50	0:04	Bottom Up		
	Matrix	IP-79	13	34	43%/57%	25	8:13	8:20	4.86	0:07	Bottom Up		
	Matrix	IP-79	12	34	43%/57%	25	8:20	8:25	6.80	0:05	Bottom Up		
	Matrix	IP-79	11	34	43%/57%	25	8:25	8:30	6.80	0:05	Bottom Up		
	Matrix	IP-79	10	34	43%/57%	25	8:30	8:36	5.67	0:06	Bottom Up		
	Matrix	IP-79	9	34	43%/57%	25	8:36	8:43	4.86	0:07	Bottom Up		
	Matrix	IP-79	8	34	43%/57%	25	8:43	8:47	8.50	0:04	Bottom Up		
	Matrix	IP-79	7	34	43%/57%	25	8:47	8:53	5.67	0:06	Bottom Up		
	Matrix	IP-79	4,6	34	43%/57%	25	8:53	9:05	2.83	0:12	Bottom Up		
4/28/2015	Matrix	IP-9	20	46.4	43%/57%	25	9:23	9:30	6.63	0:07	Bottom Up	510.4	
	Matrix	IP-9	18	46.4	43%/57%	25	9:30	9:45	3.09	0:15	Bottom Up		
	Matrix	IP-9	16	46.4	43%/57%	25	9:45	9:50	9.28	0:05	Bottom Up		
	Matrix	IP-9	15	46.4	43%/57%	25	9:50	10:00	4.64	0:10	Bottom Up		
	Matrix	IP-9	14	46.4	43%/57%	25	10:00	10:08	5.80	0:08	Bottom Up		
	Matrix	IP-9	13	46.4	43%/57%	25	10:08	10:15	6.63	0:07	Bottom Up		
	Matrix	IP-9	12	46.4	43%/57%	25	10:15	10:21	7.73	0:06	Bottom Up		
	Matrix	IP-9	11	46.4	43%/57%	25	10:21	10:28	6.63	0:07	Bottom Up		
	Matrix	IP-9	10	46.4	43%/57%	25	10:28	10:40	3.87	0:12	Bottom Up		
	Matrix	IP-9	7	46.4	43%/57%	25	10:40	10:45	9.28	0:05	Bottom Up		
	Matrix	IP-9	4,6	46.4	43%/57%	25	10:45	10:52	6.63	0:07	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/28/2015	Matrix	IP-20	20	46.4	43%/57%	25	11:23	11:30	6.63	0:07	Bottom Up	510.4	
	Matrix	IP-20	18	46.4	43%/57%	25	11:30	11:36	7.73	0:06	Bottom Up		
	Matrix	IP-20	16	46.4	43%/57%	25	11:36	11:45	5.16	0:09	Bottom Up		
	Matrix	IP-20	15	46.4	43%/57%	25	11:45	11:52	6.63	0:07	Bottom Up		
	Matrix	IP-20	14	46.4	43%/57%	25	11:52	12:03	4.22	0:11	Bottom Up		
	Matrix	IP-20	13	46.4	43%/57%	25	12:03	12:12	5.16	0:09	Bottom Up		
	Matrix	IP-20	12	46.4	43%/57%	25	12:12	12:20	5.80	0:08	Bottom Up		
	Matrix	IP-20	11	46.4	43%/57%	25	12:20	12:28	5.80	0:08	Bottom Up		
	Matrix	IP-20	10	46.4	43%/57%	25	12:28	12:36	5.80	0:08	Bottom Up		
	Matrix	IP-20	7	46.4	43%/57%	25	12:36	12:45	5.16	0:09	Bottom Up		
	Matrix	IP-20	4,6	46.4	43%/57%	25	12:45	12:53	5.80	0:08	Bottom Up		
4/28/2015	Matrix	IP-10	20	46.4	43%/57%	25	13:55	14:03	5.80	0:08	Bottom Up	510.4	
	Matrix	IP-10	18	46.4	43%/57%	25	14:03	14:13	4.64	0:10	Bottom Up		
	Matrix	IP-10	16	46.4	43%/57%	25	14:13	14:20	6.63	0:07	Bottom Up		
	Matrix	IP-10	15	46.4	43%/57%	25	14:20	14:30	4.64	0:10	Bottom Up		
	Matrix	IP-10	14	46.4	43%/57%	25	14:30	14:39	5.16	0:09	Bottom Up		
	Matrix	IP-10	13	46.4	43%/57%	25	14:39	14:47	5.80	0:08	Bottom Up		
	Matrix	IP-10	12	46.4	43%/57%	25	14:47	14:55	5.80	0:08	Bottom Up		
	Matrix	IP-10	11	46.4	43%/57%	25	14:55	15:05	4.64	0:10	Bottom Up		
	Matrix	IP-10	10	46.4	43%/57%	25	15:05	15:15	4.64	0:10	Bottom Up		
	Matrix	IP-10	7	46.4	43%/57%	25	15:15	15:23	5.80	0:08	Bottom Up		
	Matrix	IP-10	4,6	46.4	43%/57%	25	15:23	15:33	4.64	0:10	Bottom Up		
4/28/2015	Matrix	IP-27	12	97.5	33%/67%	50	15:43	16:02	5.13	0:19	Bottom Up	390	
	Matrix	IP-27	11	97.5	33%/67%	50	16:02	16:24	4.43	0:22	Bottom Up		
	Matrix	IP-27	7,8	195	33%/67%	50	16:24	17:00	5.42	0:36	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/29/2015	Redox Tech	IP-69	7,8,10	390	33%/67%	40	7:59	9:31	4.24	1:32	Bottom Up	390	
4/29/2015	Matrix	IP-25	20	46.4	43%/57%		7:25	7:34	5.16	0:09	Bottom Up	510.4	
	Matrix	IP-25	18	46.4	43%/57%		7:34	7:44	4.64	0:10	Bottom Up		
	Matrix	IP-25	16	46.4	43%/57%		7:44	7:52	5.80	0:08	Bottom Up		
	Matrix	IP-25	15	46.4	43%/57%		7:52	8:06	3.31	0:14	Bottom Up		
	Matrix	IP-25	14	46.4	43%/57%		8:06	8:18	3.87	0:12	Bottom Up		
	Matrix	IP-25	13	46.4	43%/57%		8:18	8:26	5.80	0:08	Bottom Up		
	Matrix	IP-25	12	46.4	43%/57%		8:26	8:32	7.73	0:06	Bottom Up		
	Matrix	IP-25	11	46.4	43%/57%		8:32	8:38	7.73	0:06	Bottom Up		
	Matrix	IP-25	10	46.4	43%/57%		8:38	8:46	5.80	0:08	Bottom Up		
	Matrix	IP-25	7	46.4	43%/57%		8:46	8:52	7.73	0:06	Bottom Up		
	Matrix	IP-25	4,6	46.4	43%/57%		8:52	9:03	4.22	0:11	Bottom Up		
4/29/2015	Matrix	IP-103	8	195	33%/67%		9:20	9:53	5.91	0:33	Bottom Up	390	
	Matrix	IP-103	3,5	195	33%/67%		9:53	10:30	5.27	0:37	Bottom Up		
4/29/2015	Matrix	IP-32	20	51	43%/57%		10:43	10:53	5.10	0:10	Bottom Up	510	
	Matrix	IP-32	18	51	43%/57%		10:53	11:06	3.92	0:13	Bottom Up		
	Matrix	IP-32	16	51	43%/57%		11:06	11:14	6.38	0:08	Bottom Up		
	Matrix	IP-32	15	51	43%/57%		11:14	11:21	7.29	0:07	Bottom Up		
	Matrix	IP-32	14	51	43%/57%		11:21	11:35	3.64	0:14	Bottom Up		
	Matrix	IP-32	13	51	43%/57%		11:35	11:42	7.29	0:07	Bottom Up		
	Matrix	IP-32	12	51	43%/57%		11:42	11:50	6.38	0:08	Bottom Up		
	Matrix	IP-32	11	51	43%/57%		11:50	12:00	5.10	0:10	Bottom Up		
	Matrix	IP-32	8	51	43%/57%		12:00	12:11	4.64	0:11	Bottom Up		
	Matrix	IP-32	7	51	43%/57%		12:11	12:20	5.67	0:09	Bottom Up		
4/29/2015	Matrix	IP-31	20	51	43%/57%		13:05	13:15	5.10	0:10	Bottom Up	510	
	Matrix	IP-31	18	51	43%/57%		13:15	13:23	6.38	0:08	Bottom Up		
	Matrix	IP-31	16	51	43%/57%		13:23	13:32	5.67	0:09	Bottom Up		
	Matrix	IP-31	15	51	43%/57%		13:32	13:41	5.67	0:09	Bottom Up		
	Matrix	IP-31	14	51	43%/57%		13:41	13:50	5.67	0:09	Bottom Up		
	Matrix	IP-31	13	51	43%/57%		13:50	14:00	5.10	0:10	Bottom Up		
	Matrix	IP-31	12	51	43%/57%		14:00	14:08	6.38	0:08	Bottom Up		
	Matrix	IP-31	11	51	43%/57%		14:08	14:18	5.10	0:10	Bottom Up		
	Matrix	IP-31	8	51	43%/57%		14:18	14:25	7.29	0:07	Bottom Up		
	Matrix	IP-31	7	51	43%/57%		14:25	14:35	5.10	0:10	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/29/2015	Matrix	IP-37	20	51	43%/57%		15:00	15:08	6.38	0:08	Bottom Up	510	
	Matrix	IP-37	18	51	43%/57%		15:08	15:20	4.25	0:12	Bottom Up		
	Matrix	IP-37	16	51	43%/57%		15:20	15:28	6.38	0:08	Bottom Up		
	Matrix	IP-37	15	51	43%/57%		15:28	15:37	5.67	0:09	Bottom Up		
	Matrix	IP-37	14	51	43%/57%		15:37	15:45	6.38	0:08	Bottom Up		
	Matrix	IP-37	13	51	43%/57%		15:45	15:53	6.38	0:08	Bottom Up		
	Matrix	IP-37	12	51	43%/57%		15:53	16:03	5.10	0:10	Bottom Up		
	Matrix	IP-37	11	51	43%/57%		16:03	16:12	5.67	0:09	Bottom Up		
	Matrix	IP-37	8	51	43%/57%		16:12	16:21	5.67	0:09	Bottom Up		
	Matrix	IP-37	7	51	43%/57%		16:21	16:29	6.38	0:08	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/30/2015	Matrix	IP-36	20	51	43%/57%	25	7:22	7:32	5.10	0:10	Bottom Up	510	
	Matrix	IP-36	18	51	43%/57%	25	7:32	7:41	5.67	0:09	Bottom Up		
	Matrix	IP-36	16	51	43%/57%	25	7:41	7:49	6.38	0:08	Bottom Up		
	Matrix	IP-36	15	51	43%/57%	25	7:49	7:59	5.10	0:10	Bottom Up		
	Matrix	IP-36	14	51	43%/57%	25	7:59	8:15	3.19	0:16	Bottom Up		
	Matrix	IP-36	13	51	43%/57%	25	8:15	8:24	5.67	0:09	Bottom Up		
	Matrix	IP-36	12	51	43%/57%	25	8:24	8:31	7.29	0:07	Bottom Up		
	Matrix	IP-36	11	51	43%/57%	25	8:31	8:41	5.10	0:10	Bottom Up		
	Matrix	IP-36	8	51	43%/57%	25	8:41	8:50	5.67	0:09	Bottom Up		
	Matrix	IP-36	7	51	43%/57%	25	8:50	8:46	-	-	Bottom Up		interval miscount. (16 min is 2)mismatch stop time. Redox stop time 4 min after listed time for start/or end of interval 7.
4/30/2015	Matrix	IP-30	20	51	43%/57%	25	9:15	9:26	4.64	0:11	Bottom Up	510	
	Matrix	IP-30	18	51	43%/57%	25	9:26	9:36	5.10	0:10	Bottom Up		
	Matrix	IP-30	16	51	43%/57%	25	9:36	9:51	3.40	0:15	Bottom Up		
	Matrix	IP-30	15	51	43%/57%	25	9:51	9:58	7.29	0:07	Bottom Up		
	Matrix	IP-30	14	51	43%/57%	25	9:58	10:08	5.10	0:10	Bottom Up		
	Matrix	IP-30	13	51	43%/57%	25	10:08	10:15	7.29	0:07	Bottom Up		
	Matrix	IP-30	12	51	43%/57%	25	10:15	10:24	5.67	0:09	Bottom Up		
	Matrix	IP-30	11	51	43%/57%	25	10:24	10:32	6.38	0:08	Bottom Up		
	Matrix	IP-30	8	51	43%/57%	25	10:32	10:40	6.38	0:08	Bottom Up		
	Matrix	IP-30	7	51	43%/57%	25	10:40	10:46	8.50	0:06	Bottom Up		
4/30/2015	Matrix	IP-105	8	195	33%/67%	25	11:00	11:38	5.13	0:38	Bottom Up	390	
	Matrix	IP-105	3,5	195	33%/67%	25	11:38	12:03	7.80	0:25	Bottom Up		
4/30/2015	Matrix	IP-82	20	34	43%/57%	25	13:00	13:05	6.80	0:05	Bottom Up	510	
	Matrix	IP-82	19	34	43%/57%	25	13:05	13:14	3.78	0:09	Bottom Up		
	Matrix	IP-82	18	34	43%/57%	25	13:14	13:20	5.67	0:06	Bottom Up		
	Matrix	IP-82	17	34	43%/57%	25	13:20	13:26	5.67	0:06	Bottom Up		
	Matrix	IP-82	16	34	43%/57%	25	13:26	13:34	4.25	0:08	Bottom Up		
	Matrix	IP-82	15	34	43%/57%	25	13:34	13:40	5.67	0:06	Bottom Up		
	Matrix	IP-82	14	34	43%/57%	25	13:40	13:47	4.86	0:07	Bottom Up		
	Matrix	IP-82	13	34	43%/57%	25	13:47	13:54	4.86	0:07	Bottom Up		
	Matrix	IP-82	12	34	43%/57%	25	13:54	14:01	4.86	0:07	Bottom Up		
	Matrix	IP-82	11	34	43%/57%	25	14:01	14:10	3.78	0:09	Bottom Up		
	Matrix	IP-82	10	34	43%/57%	25	14:10	14:16	5.67	0:06	Bottom Up		
	Matrix	IP-82	9	34	43%/57%	25	14:16	14:20	8.50	0:04	Bottom Up		
	Matrix	IP-82	8	34	43%/57%	25	14:20	14:28	4.25	0:08	Bottom Up		
	Matrix	IP-82	7	34	43%/57%	25	14:28	14:35	4.86	0:07	Bottom Up		
	Matrix	IP-82	4,6	34	43%/57%	25	14:35	14:45	3.40	0:10	Bottom Up		

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
4/30/2015	Matrix	IP-81	20	34	43%/57%	25	14:51	15:00	3.78	0:09	Bottom Up	510	
	Matrix	IP-81	19	34	43%/57%	25	15:00	15:10	3.40	0:10	Bottom Up		
	Matrix	IP-81	18	34	43%/57%	25	15:10	15:18	4.25	0:08	Bottom Up		
	Matrix	IP-81	17	34	43%/57%	25	15:18	15:28	3.40	0:10	Bottom Up		
	Matrix	IP-81	16	34	43%/57%	25	15:28	15:34	5.67	0:06	Bottom Up		
	Matrix	IP-81	15	34	43%/57%	25	15:34	15:42	4.25	0:08	Bottom Up		
	Matrix	IP-81	14	34	43%/57%	25	15:42	15:52	3.40	0:10	Bottom Up		
	Matrix	IP-81	13	34	43%/57%	25	15:52	16:05	2.62	0:13	Bottom Up		
	Matrix	IP-81	12	34	43%/57%	25	16:05	16:10	6.80	0:05	Bottom Up		
	Matrix	IP-81	11	34	43%/57%	25	16:10	16:15	6.80	0:05	Bottom Up		
	Matrix	IP-81	10	34	43%/57%	25	16:15	16:18	11.33	0:03	Bottom Up		
	Matrix	IP-81	9	34	43%/57%	25	16:18	16:23	6.80	0:05	Bottom Up		
	Matrix	IP-81	8	34	43%/57%	25	16:23	16:30	4.86	0:07	Bottom Up		
	Matrix	IP-81	7	34	43%/57%	25	16:30	16:35	6.80	0:05	Bottom Up		
	Matrix	IP-81	4,6	34	43%/57%	25	16:35	16:40	6.80	0:05	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
5/1/2015	Matrix	IP-80	20	34	43%/57%	25	7:10	7:15	6.80	0:05	Bottom Up	510	
	Matrix	IP-80	19	34	43%/57%	25	7:15	7:20	6.80	0:05	Bottom Up		
	Matrix	IP-80	18	34	43%/57%	25	7:20	7:25	6.80	0:05	Bottom Up		
	Matrix	IP-80	17	34	43%/57%	25	7:25	7:30	6.80	0:05	Bottom Up		
	Matrix	IP-80	16	34	43%/57%	25	7:30	7:36	5.67	0:06	Bottom Up		
	Matrix	IP-80	15	34	43%/57%	25	7:36	7:43	4.86	0:07	Bottom Up		
	Matrix	IP-80	14	34	43%/57%	25	7:43	7:50	4.86	0:07	Bottom Up		
	Matrix	IP-80	13	34	43%/57%	25	7:50	8:00	3.40	0:10	Bottom Up		
	Matrix	IP-80	12	34	43%/57%	25	8:00	8:07	4.86	0:07	Bottom Up		
	Matrix	IP-80	11	34	43%/57%	25	8:07	8:13	5.67	0:06	Bottom Up		
	Matrix	IP-80	10	34	43%/57%	25	8:13	8:24	3.09	0:11	Bottom Up		
	Matrix	IP-80	9	34	43%/57%	25	8:24	8:36	2.83	0:12	Bottom Up		
	Matrix	IP-80	8	34	43%/57%	25	8:36	8:40	8.50	0:04	Bottom Up		
	Matrix	IP-80	7	34	43%/57%	25	8:40	8:45	6.80	0:05	Bottom Up		
	Matrix	IP-80	4,6	34	43%/57%	25	8:45	8:50	6.80	0:05	Bottom Up		
5/1/2015	Matrix	IP-19	20	46.4	43%/57%	25	9:00	9:10	4.64	0:10	Bottom Up	510.4	
	Matrix	IP-19	18	46.4	43%/57%	25	9:10	9:20	4.64	0:10	Bottom Up		
	Matrix	IP-19	16	46.4	43%/57%	25	9:20	9:30	4.64	0:10	Bottom Up		
	Matrix	IP-19	15	46.4	43%/57%	25	9:30	9:40	4.64	0:10	Bottom Up		
	Matrix	IP-19	14	46.4	43%/57%	25	9:40	9:45	9.28	0:05	Bottom Up		
	Matrix	IP-19	13	46.4	43%/57%	25	9:45	9:52	6.63	0:07	Bottom Up		
	Matrix	IP-19	12	46.4	43%/57%	25	9:52	9:57	9.28	0:05	Bottom Up		
	Matrix	IP-19	11	46.4	43%/57%	25	9:57	10:07	4.64	0:10	Bottom Up		
	Matrix	IP-19	10	46.4	43%/57%	25	10:07	10:15	5.80	0:08	Bottom Up		
	Matrix	IP-19	7	46.4	43%/57%	25	10:15	10:20	9.28	0:05	Bottom Up		
	Matrix	IP-19	4,6	46.4	43%/57%	25	10:20	10:30	4.64	0:10	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
5/4/2015	Matrix	IP-35	20	51	43%/57%	40	12:35	12:44	5.67	0:09	Bottom Up	510	
	Matrix	IP-35	18	51	43%/57%	40	12:44	12:55	4.64	0:11	Bottom Up		
	Matrix	IP-35	16	51	43%/57%	40	12:55	13:02	7.29	0:07	Bottom Up		
	Matrix	IP-35	15	51	43%/57%	40	13:02	13:10	6.38	0:08	Bottom Up		
	Matrix	IP-35	14	51	43%/57%	40	13:10	13:20	5.10	0:10	Bottom Up		
	Matrix	IP-35	13	51	43%/57%	40	13:20	13:30	5.10	0:10	Bottom Up		
	Matrix	IP-35	12	51	43%/57%	40	13:30	13:39	5.67	0:09	Bottom Up		
	Matrix	IP-35	11	51	43%/57%	40	13:39	13:48	5.67	0:09	Bottom Up		
	Matrix	IP-35	8	51	43%/57%	40	13:48	13:57	5.67	0:09	Bottom Up		
	Matrix	IP-35	7	51	43%/57%	40	13:57	14:05	6.38	0:08	Bottom Up		
5/4/2015	Matrix	IP-45	20	39.2	43%/57%	40	14:19	14:26	5.60	0:07	Bottom Up	509.6	
	Matrix	IP-45	19	39.2	43%/57%	40	14:26	14:36	3.92	0:10	Bottom Up		
	Matrix	IP-45	18	39.2	43%/57%	40	14:36	14:52	2.45	0:16	Bottom Up		
	Matrix	IP-45	17	39.2	43%/57%	40	14:52	15:03	3.56	0:11	Bottom Up		
	Matrix	IP-45	16	39.2	43%/57%	40	15:03	15:08	7.84	0:05	Bottom Up		
	Matrix	IP-45	15	39.2	43%/57%	40	15:08	15:14	6.53	0:06	Bottom Up		
	Matrix	IP-45	14	39.2	43%/57%	40	15:14	15:20	6.53	0:06	Bottom Up		
	Matrix	IP-45	13	39.2	43%/57%	40	15:20	15:25	7.84	0:05	Bottom Up		
	Matrix	IP-45	12	39.2	43%/57%	40	15:25	15:35	3.92	0:10	Bottom Up		
	Matrix	IP-45	10	39.2	43%/57%	40	15:35	15:40	7.84	0:05	Bottom Up		
	Matrix	IP-45	9	39.2	43%/57%	40	15:40	15:48	4.90	0:08	Bottom Up		
	Matrix	IP-45	7	39.2	43%/57%	40	15:48	15:51	13.07	0:03	Bottom Up		
	Matrix	IP-45	5	39.2	43%/57%	40	15:51	15:55	9.80	0:04	Bottom Up		
5/4/2015	Matrix	IP-23 (part.)	20	46.4	43%/57%	25	16:03	16:10	6.63	0:07	Bottom Up	232	
	Matrix	IP-23 (part.)	18	46.4	43%/57%	25	16:10	16:18	5.80	0:08	Bottom Up		
	Matrix	IP-23 (part.)	16	46.4	43%/57%	25	16:18	16:26	5.80	0:08	Bottom Up		
	Matrix	IP-23 (part.)	15	46.4	43%/57%	25	16:26	16:34	5.80	0:08	Bottom Up		
	Matrix	IP-23 (part.)	14	46.4	43%/57%	25	16:34	16:40	7.73	0:06	Bottom Up		

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

AECOM Injection Logs
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Rig Operator	Injection Point ID	Injection Intervals	Gallons Injected (target)	Concentration Wt%	Injection Pressure (psi)	Start	Stop	gpm	Min of Injection	Method	Gallons Injected (actual)	Comments
5/5/2015	Matrix	IP-23 (part.)	13	46.4	43%/57%	40	7:19	7:35	2.90	0:16	Bottom Up	278.4	
	Matrix	IP-23 (part.)	12	46.4	43%/57%	40	7:35	7:45	4.64	0:10	Bottom Up		
	Matrix	IP-23 (part.)	11	46.4	43%/57%	40	7:45	7:50	9.28	0:05	Bottom Up		
	Matrix	IP-23 (part.)	10	46.4	43%/57%	40	7:50	7:55	9.28	0:05	Bottom Up		
	Matrix	IP-23 (part.)	7	46.4	43%/57%	40	7:55	8:05	4.64	0:10	Bottom Up		
	Matrix	IP-23 (part.)	4,6	46.4	43%/57%	40	8:05	8:13	5.80	0:08	Bottom Up		
5/5/2015	Matrix	IP-34	20	51	43%/57%	40	8:27	8:37	5.10	0:10	Bottom Up	510	
	Matrix	IP-34	18	51	43%/57%	40	8:37	8:46	5.67	0:09	Bottom Up		
	Matrix	IP-34	16	51	43%/57%	40	8:46	8:58	4.25	0:12	Bottom Up		
	Matrix	IP-34	15	51	43%/57%	40	8:58	9:06	6.38	0:08	Bottom Up		
	Matrix	IP-34	14	51	43%/57%	40	9:06	9:16	5.10	0:10	Bottom Up		
	Matrix	IP-34	13	51	43%/57%	40	9:16	9:27	4.64	0:11	Bottom Up		
	Matrix	IP-34	12	51	43%/57%	40	9:27	9:36	5.67	0:09	Bottom Up		
	Matrix	IP-34	11	51	43%/57%	40	9:36	9:45	5.67	0:09	Bottom Up		
	Matrix	IP-34	8	51	43%/57%	40	9:45	9:57	4.25	0:12	Bottom Up		
	Matrix	IP-34	7	51	43%/57%	40	9:57	10:06	5.67	0:09	Bottom Up		
5/5/2015	Matrix	IP-78	20	34	43%/57%	40	10:24	10:29	6.80	0:05	Bottom Up	510	
	Matrix	IP-78	19	34	43%/57%	40	10:29	10:35	5.67	0:06	Bottom Up		
	Matrix	IP-78	18	34	43%/57%	40	10:35	10:41	5.67	0:06	Bottom Up		
	Matrix	IP-78	17	34	43%/57%	40	10:41	10:48	4.86	0:07	Bottom Up		
	Matrix	IP-78	16	34	43%/57%	40	10:48	10:55	4.86	0:07	Bottom Up		
	Matrix	IP-78	15	34	43%/57%	40	10:55	11:01	5.67	0:06	Bottom Up		
	Matrix	IP-78	14	34	43%/57%	40	11:01	11:08	4.86	0:07	Bottom Up		
	Matrix	IP-78	13	34	43%/57%	40	11:08	11:15	4.86	0:07	Bottom Up		
	Matrix	IP-78	12	34	43%/57%	40	11:15	11:20	6.80	0:05	Bottom Up		
	Matrix	IP-78	11	34	43%/57%	40	11:20	11:26	5.67	0:06	Bottom Up		
	Matrix	IP-78	10	34	43%/57%	40	11:26	11:31	6.80	0:05	Bottom Up		
	Matrix	IP-78	9	34	43%/57%	40	11:31	11:37	5.67	0:06	Bottom Up		
	Matrix	IP-78	8	34	43%/57%	40	11:37	11:43	5.67	0:06	Bottom Up		
	Matrix	IP-78	7	34	43%/57%	40	11:43	11:50	4.86	0:07	Bottom Up		
	Matrix	IP-78	4,6	34	43%/57%	40	11:50	12:10	1.70	0:20	Bottom Up		Last interval on last hole. included time for system flush.

RED - No injection at scheduled interval. ABC+ for this interval split between remaining intervals or injected into a different interval.
GREEN - interval received all or part of ABC+ for a canceled interval.

Appendix D

Boring Log (TP-6)

AECOM	*Client:*	Tyco Safety Products	***BORING ID:*** TP-6
	Project Number:	60155991	
	Boring Location:	Former Scott Aviation Facility	
		Area - 1 BCP, Lancaster, New York	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe 54UD	*Date/Time Started:* 04/13/15 9:15
	Weather:	60 deg F, mostly cloudy	
Logged By:	E. Laity		*Date/Time Finished:* 4/13/2015 11:00
Drilled By:	Matrix Environmental - Mark Janus (driller)		

Depth (ft)	Sample Number	Sample Type	Recovery (ft)	PID reading*	U.S.C.S	Lithologic Description	Lab Sample ID	Well Construction Details: Fill Mat.	Tube	Fill Mat.	Depth
0					GW	0-0.6' Asphalt and Asphalt gravel - grey, loose, dry.					
1					CL	0.6'-1.0' CLAY, medium brown, little silt, medium plasticity, medium stiff, moist.					1
2	0-4'	4' Macrocore	1.6	NA	GW	1.0'-1.6' GRAVEL (f-c), grey, subangular, little brown silt in matrix, little (f-c) sand, loose, moist.	0-3' Granular Bentonite				2
3											3
4											4
5						0-0.3' SAA - GRAVEL (f-c), grey, subangular, little brown silt in matrix, little (f-c) sand, loose, moist.	3-9' SAND				5
6	4-8'	4' Macrocore	1.8	NA		0.3'-1.1' CLAY, medium brown, little angular (m-c) gravel 1.1'-1.8' PEA GRAVEL, Grey, medium subrounded, wet (Sewer pipe bedding gravel.	4-9' 10-slot 1' Screen				6
7											7
8											8
9	8-9'	NA	NA	NA		NA					9
10						B.O.B @ 9'bsg 1" temporary piezometer					10
11						Screened 4-9'bsg Sand 3-9'bsg Bentonite 0-3'bsg					11
12											12
13											13
14											14
15											15
16											16
17											17
18											18
19											19
20											20

END OF BORING @ 9' below ground surface (bgs)

NOTES:

* units relative to isobutylene/methane span gas in parts per million (ppm)
f - fine; m - medium; c - coarse
NA - not applicable
SAA - Same as above

Checked by:_____ Date:_____

Appendix E

Community Air Monitoring Program Data Summary Report

Appendix E

Community Air Monitoring Program Data
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Time	Location	Wind Speed & Direction	TVOC (ppm)	Visible Dust Observed	Comments
4/13/2015	16:15	Upwind IP-125 & Ip-135	14 mph from SW[1]	0.0	No	
	16:15	Downwind IP-125 & Ip-135	14 mph from SW[1]	0.0	No	
	16:15	Upwind ZVI Mixer	14 mph from SW[1]	0.0	No	
	16:15	Downwind ZVI Mixer	14 mph from SW[1]	0.0	No	
4/14/2015	9:00	Upwind IP-123	7 mph from SSW[1]	0.0	No	
	9:00	Downwind IP-123	7 mph from SSW[1]	0.0	No	
	9:00	Residence 205 Erie Street	7 mph from SSW[1]	0.0	No	
4/14/2015	10:30	Upwind IP-115 & IP-123	14 mph from SSW[1]	0.0	No	
	10:30	Downwind IP-115 & IP-123	14 mph from SSW[1]	0.0	No	
	10:30	Residence 205 Erie Street	14 mph from SSW[1]	0.0	No	
4/14/2015	13:10	Upwind IP-46	13 mph from WNW[1]	0.0	No	
	13:10	Downwind IP-46	13 mph from WNW[1]	0.0	No	
	13:10	Upwind IP-115	13 mph from WNW[1]	0.0	No	
	13:10	Downwind IP-115	13 mph from WNW[1]	0.0	No	
4/14/2015	15:10	Upwind IP-47	13 mph from WNW[1]	0.0	No	
	15:10	Downwind IP-47	13 mph from WNW[1]	0.0	No	
	15:10	Residence 205 Erie Street	13 mph from WNW[1]	0.0	No	
	15:12	Upwind IP-131	13 mph from WNW[1]	0.0	No	
	15:12	Downwind IP-131	13 mph from WNW[1]	0.0	No	
4/15/2015	8:10	Residence 205 Erie Street	Calm[1]	0.0	No	
	8:10	Upwind IP-43	Calm[1]	0.0	No	
	8:10	Downwind IP-43	Calm[1]	0.0	No	
	8:10	Upwind IP-126	Calm[1]	0.0	No	
	8:10	Downwind IP-126	Calm[1]	0.0	No	
4/15/2015	9:30	Residence 205 Erie Street	3 mph from SSW[1]	0.0	No	
	9:30	Upwind IP-111 & IP-126	3 mph from SSW[1]	0.0	No	
	9:30	Downwind IP-111 & IP-126	3 mph from SSW[1]	0.0	No	
4/15/2015	11:30	Residence 205 Erie Street	10 mph from ENE[2]	0.0	No	
	11:30	Upwind IP-28	10 mph from ENE[2]	0.0	No	
	11:30	Downwind IP-28	10 mph from ENE[2]	0.0	No	

Appendix E

Community Air Monitoring Program Data
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Time	Location	Wind Speed & Direction	TVOC (ppm)	Visible Dust Observed	Comments
4/15/2015	12:50	Residence 205 Erie Street	14 mph from NE[1]	0.0	No	
	12:50	Upwind IP-21	14 mph from NE[1]	0.0	No	
	12:50	Downwind IP-21	14 mph from NE[1]	0.0	No	
	12:50	Upwind IP-83 & IP-89	14 mph from NE[1]	0.0	No	
	12:50	Downwind IP-83 & IP-89	14 mph from NE[1]	0.0	No	
4/15/2015	14:00	Residence 205 Erie Street	8 mph from N[1]	0.0	No	
	14:00	Upwind IP-16	8 mph from N[1]	0.0	No	
	14:00	Downwind IP-16	8 mph from N[1]	0.0	No	
	14:00	Upwind IP-89	8 mph from N[1]	0.0	No	
	14:00	Downwind IP-89	8 mph from N[1]	0.0	No	
4/16/2015	8:00	Residence 205 Erie Street	7 mph from S[2]	0.0	No	
	8:00	Upwind IP-54	7 mph from S[2]	0.0	No	
	8:00	Downwind IP-54	7 mph from S[2]	0.0	No	
	8:00	Upwind IP-124	7 mph from S[2]	0.0	No	
	8:00	Downwind IP-124	7 mph from S[2]	0.0	No	
	8:00	Catch Basin 2	7 mph from S[2]	0.1	No	
4/16/2015	9:35	Residence 205 Erie Street	9 mph from S[2]	0.0	No	
	9:35	Upwind IP-29	9 mph from S[2]	0.0	No	
	9:35	Downwind IP-29	9 mph from S[2]	0.0	No	
	9:35	Upwind IP-101	9 mph from S[2]	0.0	No	
	9:35	Downwind IP-101	9 mph from S[2]	0.0	No	
4/16/2015	11:05	Residence 205 Erie Street	3 mph variable winds[2]	0.0	No	
	11:05	Upwind IP-7	3 mph variable winds[2]	0.0	No	
	11:05	Downwind IP-7	3 mph variable winds[2]	0.0	No	
	11:05	Upwind IP-101	3 mph variable winds[2]	0.0	No	
	11:05	Downwind IP-101	3 mph variable winds[2]	0.0	No	
4/16/2015	12:00	Residence 205 Erie Street	Calm[1]	0.0	No	
	12:00	Upwind IP-7	Calm[1]	0.0	No	
	12:00	Downwind IP-7	Calm[1]	0.0	No	
	12:00	Upwind IP-134	Calm[1]	0.0	No	
	12:00	Downwind IP-134	Calm[1]	0.0	No	

Appendix E

Community Air Monitoring Program Data
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Time	Location	Wind Speed & Direction	TVOC (ppm)	Visible Dust Observed	Comments
4/16/2015	14:20	Residence 205 Erie Street	2 mph from E[2]	0.0	No	
	14:20	Upwind IP-41	2 mph from E[2]	0.0	No	
	14:20	Downwind IP-41	2 mph from E[2]	0.0	No	
	14:20	Upwind IP-73	2 mph from E[2]	0.0	No	
	14:20	Downwind IP-73	2 mph from E[2]	0.0	No	
4/16/2015	15:30	Residence 205 Erie Street	3 mph from W[1]	0.0	No	
	15:30	Upwind IP-41	3 mph from W[1]	0.0	No	
	15:30	Downwind IP-41	3 mph from W[1]	0.0	No	
	15:30	Upwind IP-119	3 mph from W[1]	0.0	No	
	15:30	Downwind IP-119	3 mph from W[1]	0.0	No	
4/17/2015	9:30	Residence 205 Erie Street	12 mph from SSW[1]	0.0	No	
	9:30	Upwind IP-8	12 mph from SSW[1]	0.0	No	
	9:30	Downwind IP-8	12 mph from SSW[1]	0.0	No	
	9:30	Upwind IP-88	12 mph from SSW[1]	0.0	No	
	9:30	Downwind IP-88	12 mph from SSW[1]	0.0	No	
4/17/2015	11:35	Residence 205 Erie Street	7 mph from SW[2]	0.0	No	
	11:35	Upwind IP-42	7 mph from SW[2]	0.0	No	
	11:35	Downwind IP-42	7 mph from SW[2]	0.0	No	
	11:35	Upwind IP-122	7 mph from SW[2]	0.0	No	
	11:35	Downwind IP-122	7 mph from SW[2]	0.0	No	0.3 ppm walking back to trailer, moisture in air today
4/20/2015	7:30	Residence 205 Erie Street	17 mph from SSE[2]	0.0	No	rain in morning
	7:30	Upwind IP-55	17 mph from SSE[2]	0.0	No	rain in morning
	7:30	Downwind IP-55	17 mph from SSE[2]	0.0	No	rain in morning
	7:30	Upwind IP-113	17 mph from SSE[2]	0.0	No	rain in morning
	7:30	Downwind IP-113	17 mph from SSE[2]	0.0	No	rain in morning
4/20/2015	9:30	Residence 205 Erie Street	24 mph from SSE[1]	0.2	No	
	9:30	Upwind IP-2	24 mph from SSE[1]	0.0	No	
	9:30	Downwind IP-2	24 mph from SSE[1]	0.0	No	
	9:30	Upwind IP-113	24 mph from SSE[1]	0.0	No	
	9:30	Downwind IP-113	24 mph from SSE[1]	0.0	No	

Community Air Monitoring Program Data
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Time	Location	Wind Speed & Direction	TVOC (ppm)	Visible Dust Observed	Comments
4/20/2015	11:00	Residence 205 Erie Street	18 mph from SSE[1]	0.0	No	
	11:00	Upwind IP-2	18 mph from SSE[1]	0.0	No	
	11:00	Downwind IP-2	18 mph from SSE[1]	0.0	No	
	11:00	Upwind IP-72	18 mph from SSE[1]	0.0	No	
	11:00	Downwind IP-72	18 mph from SSE[1]	0.0	No	
4/20/2015	13:00	Residence 205 Erie Street	18 mph from S[1]	0.0	No	
	13:00	Upwind IP-60	18 mph from S[1]	0.0	No	
	13:00	Downwind IP-60	18 mph from S[1]	0.0	No	
	13:00	Upwind IP-97	18 mph from S[1]	0.0	No	
	13:00	Downwind IP-97	18 mph from S[1]	0.0	No	
4/20/2015	14:05	Residence 205 Erie Street	16 mph from S[1]	0.0	No	
	14:05	Upwind IP-60	16 mph from S[1]	0.0	No	
	14:05	Downwind IP-60	16 mph from S[1]	0.0	No	
	14:05	Upwind IP-97	16 mph from S[1]	0.0	No	
	14:05	Downwind IP-97	16 mph from S[1]	0.0	No	
4/21/2015	8:00	Residence 205 Erie Street	14 mph from SSW[1]	0.0	No	
	8:00	Upwind IP-56	14 mph from SSW[1]	0.0	No	
	8:00	Downwind IP-56	14 mph from SSW[1]	0.0	No	
	8:00	Upwind IP-70	14 mph from SSW[1]	0.0	No	
	8:00	Downwind IP-70	14 mph from SSW[1]	0.0	No	
4/21/2015	9:45	Residence 205 Erie Street	18 mph from SW[1]	0.0	No	
	9:45	Upwind IP-59	18 mph from SW[1]	0.0	No	
	9:45	Downwind IP-59	18 mph from SW[1]	0.0	No	
	9:45	Upwind IP-110	18 mph from SW[1]	0.0	No	
	9:45	Downwind IP-110	18 mph from SW[1]	0.0	No	
4/21/2015	11:45	Residence 205 Erie Street	24 mph from WSW[2]	0.0	No	
	11:45	Upwind IP-63	24 mph from WSW[2]	0.0	No	
	11:45	Downwind IP-63	24 mph from WSW[2]	0.0	No	
	11:45	Upwind IP-53	24 mph from WSW[2]	0.0	No	
	11:45	Downwind IP-52	24 mph from WSW[2]	0.0	No	

Appendix E

Community Air Monitoring Program Data
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Time	Location	Wind Speed & Direction	TVOC (ppm)	Visible Dust Observed	Comments
4/21/2015	13:25	Residence 205 Erie Street	28 mph from SW[1]	0.0	No	
	13:25	Upwind IP-48	28 mph from SW[1]	0.0	No	
	13:25	Downwind IP-48	28 mph from SW[1]	0.0	No	
	13:25	Upwind IP-118	28 mph from SW[1]	0.0	No	
	13:25	Downwind IP-118	28 mph from SW[1]	0.0	No	
4/21/2015	14:15	Residence 205 Erie Street	27 mph from SW[2]	0.0	No	
	14:15	Upwind IP-48	27 mph from SW[2]	0.0	No	
	14:15	Downwind IP-48	27 mph from SW[2]	0.0	No	
	14:15	Upwind IP-118	27 mph from SW[2]	0.0	No	
	14:15	Downwind IP-118	27 mph from SW[2]	0.0	No	
4/22/2015	7:30	Residence 205 Erie Street	18 mph from SW[1]	0.0	No	
	7:30	Upwind IP-11	18 mph from SW[1]	0.0	No	
	7:30	Downwind IP-11	18 mph from SW[1]	0.0	No	
	7:30	Upwind IP-98	18 mph from SW[1]	0.0	No	
	7:30	Downwind IP-98	18 mph from SW[1]	0.0	No	
4/22/2015	9:30	Residence 205 Erie Street	17 mph from WSW[2]	0.1	No	
	9:30	Upwind IP-6	17 mph from WSW[2]	0.0	No	
	9:30	Downwind IP-6	17 mph from WSW[2]	0.1	No	
	9:30	Upwind IP-127	17 mph from WSW[2]	0.0	No	
	9:30	Downwind IP-127	17 mph from WSW[2]	0.1	No	
4/22/2015	10:55	Residence 205 Erie Street	20 mph from WSW[1]	0.0	No	
	10:55	Upwind IP-6	20 mph from WSW[1]	0.0	No	
	10:55	Downwind IP-6	20 mph from WSW[1]	0.0	No	
	10:55	Upwind IP-127	20 mph from WSW[1]	0.0	No	
	10:55	Downwind IP-127	20 mph from WSW[1]	0.1	No	
4/22/2015	14:00	Residence 205 Erie Street	28 mph from SW[1]	0.0	No	Gusty winds
	14:00	Upwind IP-51	28 mph from SW[1]	0.0	No	Gusty winds
	14:00	Downwind IP-51	28 mph from SW[1]	0.0	No	Gusty winds
4/22/2015	15:00	Residence 205 Erie Street	28 mph from SW[1]	0.0	No	Gusty winds
	15:00	Upwind IP-51	28 mph from SW[1]	0.0	No	Gusty winds
	15:00	Downwind IP-51	28 mph from SW[1]	0.0	No	Gusty winds

Community Air Monitoring Program Data
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Time	Location	Wind Speed & Direction	TVOC (ppm)	Visible Dust Observed	Comments
4/23/2015	7:40	Residence 205 Erie Street	15 mph from W[1]	0.0	No	
	7:40	Upwind IP-66	15 mph from W[1]	0.0	No	
	7:40	Downwind IP-66	15 mph from W[1]	0.0	No	
4/23/2015	9:40	Residence 205 Erie Street	15 mph from W[1]	0.0	No	
	9:40	Upwind IP-85	15 mph from W[1]	0.0	No	
	9:40	Downwind IP-85	15 mph from W[1]	0.0	No	
4/23/2015	11:30	Residence 205 Erie Street	17 mph from W[1]	0.0	No	
	11:30	Upwind IP-71	17 mph from W[1]	0.0	No	
	11:30	Downwind IP-71	17 mph from W[1]	0.0	No	
4/23/2015	13:00	Residence 205 Erie Street	16 mph from W[2]	0.0	No	
	13:00	Upwind IP-12	16 mph from W[2]	0.0	No	
	13:00	Downwind IP-12	16 mph from W[2]	0.0	No	
	13:00	Upwind IP-99 & IP-102	16 mph from W[2]	0.0	No	
	13:00	Downwind IP-99 & IP-102	16 mph from W[2]	0.0	No	
4/23/2015	15:00	Residence 205 Erie Street	13 mph from WNW[1]	0.0	No	
	15:00	Upwind IP-13	13 mph from WNW[1]	0.0	No	
	15:00	Downwind IP-13	13 mph from WNW[1]	0.0	No	
	15:00	Upwind IP-65	13 mph from WNW[1]	0.0	No	
	15:00	Downwind IP-65	13 mph from WNW[1]	0.0	No	
4/24/2015	8:00	Residence 205 Erie Street	10 mph from W[1]	0.0	No	
	8:00	Upwind IP-18	10 mph from W[1]	0.0	No	
	8:00	Downwind IP-18	10 mph from W[1]	0.2	No	
	8:00	Upwind IP-93	10 mph from W[1]	0.1	No	
	8:00	Downwind IP-93	10 mph from W[1]	0.2	No	
4/24/2015	10:20	Residence 205 Erie Street	14 mph from W[1]	0.0	No	
	10:20	Upwind IP-44	14 mph from W[1]	0.1	No	
	10:20	Downwind IP-44	14 mph from W[1]	0.2	No	
	10:20	Upwind IP-67	14 mph from W[1]	0.2	No	
	10:20	Downwind IP-67	14 mph from W[1]	0.1	No	

Appendix E

Community Air Monitoring Program Data
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Time	Location	Wind Speed & Direction	TVOC (ppm)	Visible Dust Observed	Comments
4/24/2015	12:00	Residence 205 Erie Street	17 mph from WNW[2]	0.0	No	
	12:00	Upwind IP-33	17 mph from WNW[2]	0.1	No	
	12:00	Downwind IP-33	17 mph from WNW[2]	0.0	No	
	12:00	Upwind IP-120	17 mph from WNW[2]	0.1	No	
	12:00	Downwind IP-120	17 mph from WNW[2]	0.1	No	
4/24/2015	13:25	Residence 205 Erie Street	15 mph from W[1]	0.0	No	
	13:25	Upwind IP-95	15 mph from W[1]	0.0	No	
	13:25	Downwind IP-95	15 mph from W[1]	0.0	No	
4/27/2015	9:13	Residence 205 Erie Street	9 mph from NNW[2]	0.4	No	PID affected by rain all readings (upwind/downwind) are 0.4 ppm
	9:13	Upwind IP-4	9 mph from NNW[2]	0.4	No	PID affected by rain all readings (upwind/downwind) are 0.4 ppm
	9:13	Downwind IP-4	9 mph from NNW[2]	0.4	No	PID affected by rain all readings (upwind/downwind) are 0.4 ppm
4/27/2015	13:15	Residence 205 Erie Street	7 mph from NW[2]	0.1	No	
	13:15	Upwind	7 mph from NW[2]	0.0	No	
	13:15	Downwind	7 mph from NW[2]	0.0	No	
	13:15	Fence	7 mph from NW[2]	0.0	No	
4/28/2015	8:40	Residence 205 Erie Street	6 mph from W[2]	0.2	No	
	8:40	Upwind IP-79	6 mph from W[2]	0.2	No	
	8:40	Downwind IP-79	6 mph from W[2]	0.2	No	
	15:40	Residence 205 Erie Street	22 mph from SW[2]	0.0	No	
	15:40	Upwind IP-27	22 mph from SW[2]	0.0	No	
	15:40	Downwind IP-27	22 mph from SW[2]	0.0	No	
4/29/2015	7:35	Residence 205 Erie Street	7 mph from SSW[1]	0.0	No	
	7:35	Upwind IP-25	7 mph from SSW[1]	0.0	No	
	7:35	Downwind IP-25	7 mph from SSW[1]	0.0	No	
	7:35	Upwind IP-69	7 mph from SSW[1]	0.0	No	
	7:35	Downwind IP-69	7 mph from SSW[1]	0.0	No	
4/29/2015	10:15	Residence 205 Erie Street	12 mph from SSW[1]	0.0	No	
	10:15	Upwind IP-103	12 mph from SSW[1]	0.0	No	
	10:15	Downwind IP-103	12 mph from SSW[1]	0.0	No	

Appendix E

Community Air Monitoring Program Data
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Time	Location	Wind Speed & Direction	TVOC (ppm)	Visible Dust Observed	Comments
4/29/2015	12:00	Residence 205 Erie Street	12 mph from SSW[1]	0.0	No	
	12:00	Upwind IP-32	12 mph from SSW[1]	0.0	No	
	12:00	Downwind IP-32	12 mph from SSW[1]	0.0	No	
4/29/2015	13:00	Residence 205 Erie Street	13 mph from SW[1]	0.0	No	
	13:00	Upwind IP-31	13 mph from SW[1]	0.0	No	
	13:00	Downwind IP-31	13 mph from SW[1]	0.0	No	
4/29/2015	15:45	Residence 205 Erie Street	15 mph from SW[1]	0.0	No	
	15:45	Upwind IP-37	15 mph from SW[1]	0.0	No	
	15:45	Downwind IP-37	15 mph from SW[1]	0.0	No	
4/30/2015	7:35	Residence 205 Erie Street	5 mph from SSW[1]	0.2	No	
	7:35	Upwind IP-30	5 mph from SSW[1]	0.1	No	
	7:35	Downwind IP-30	5 mph from SSW[1]	0.2	No	
4/30/2015	9:05	Residence 205 Erie Street	Calm[1]	0.2	No	
	9:05	Upwind IP-30	Calm[1]	0.1	No	
	9:05	Downwind IP-30	Calm[1]	0.2	No	
4/30/2015	12:10	Residence 205 Erie Street	Calm[2]	0.0	No	
	12:10	Upwind IP-105	Calm[2]	0.0	No	
	12:10	Downwind IP-105	Calm[2]	0.0	No	
4/30/2015	15:00	Residence 205 Erie Street	16 mph from NNE[1]	0.0	No	
	15:00	Upwind IP-81	16 mph from NNE[1]	0.0	No	
	15:00	Downwind IP-81	16 mph from NNE[1]	0.0	No	
5/1/2015	7:30	Residence 205 Erie Street	Calm[1]	0.0	No	
	7:30	Upwind IP-80	Calm[1]	0.0	No	
	7:30	Downwind IP-80	Calm[1]	0.0	No	
5/1/2015	10:30	Residence 205 Erie Street	6 mph from N[1]	0.0	No	
5/1/2015	13:15	Residence 205 Erie Street	10 mph from N[1]	0.0	No	
5/1/2015	14:30	Residence 205 Erie Street	12 mph from NW[1]	0.0	No	
5/4/2015	7:30	Residence 205 Erie Street	7 mph from S[1]	0.0	No	
5/4/2015	8:30	Residence 205 Erie Street	5 mph from S[1]	0.0	No	
5/4/2015	9:50	Residence 205 Erie Street	12 mph from S[1]	0.0	No	

Appendix E

Community Air Monitoring Program Data
Brownfield Cleanup Program
Former Scott Aviation Facility Area 1 (BCP Site #C915233)
Lancaster, New York

Date	Time	Location	Wind Speed & Direction	TVOC (ppm)	Visible Dust Observed	Comments
5/5/2015	7:20	Residence 205 Erie Street	5 mph from ESE[1]	0.0	No	
	7:20	Upwind IP-23	5 mph from ESE[1]	0.0	No	
	7:20	Downwind IP-23	5 mph from ESE[1]	0.0	No	
5/5/2015	10:55	Residence 205 Erie Street	5 mph from ESE[1]	0.0	No	
	10:55	Upwind IP-78	5 mph from ESE[1]	0.0	No	
	10:55	Downwind IP-78	5 mph from ESE[1]	0.0	No	

Notes:
1. Wind speed/direction data from Yahoo! mobile phone weather application - Lancaster, NY
2. Wind speed/direction data from Wunderground website - Lancaster, NY

Appendix F

Weekly Field Summary Reports

Zack, Dino

From:	Zack, Dino
Sent:	Monday, May 11, 2015 7:50 AM
To:	Janeczek, Joseph (jjaneczek@tyco.com); Jennifer.Davide@zodiacaerospace.com; May, Glenn (DEC) (glenn.may@dec.ny.gov); Doroski, Christopher (HEALTH) (christopher.doroski@health.ny.gov); Stuart Rixman (rixmans@gmail.com)
Cc:	Underhill, Scott; Laity, Emily; Steve Marchetti (smarchetti@matrixbiotech.com)
Subject:	Lancaster - Former Scott Aviation Facility BCP 2015 IRM status for week ending 05/08/15
Attachments:	tracking - ABC+ Injection Intervals 050815.xlsx; Scott Daily Logs.xlsx; Figure 2d - 60155991_115 Injection Zone Details - 050815.pdf

Good morning-

Below is a brief summary of work completed at the Lancaster - Former Scott Aviation Facility BCP (Site) during the 2015 IRM (groundwater treatment) for the week ending 05/06/15. Attached are two tracking logs and a tracking figure that correspond to the summary below.

Activities completed for week ending 05/08/15:

- AECOM (project manager and field tech), Matrix Environmental Technologies, Inc. (project manager, driller, and mixer), and Redox Tech, LLC (driller and mixer) completed activities associated with the 2015 IRM.
- Injections were completed with a track-mounted rig, injecting south of the visitors parking lot.
- During injections adjacent to the storm sewer system, piezometers TP-5 and TP-6, catch basins, manhole, and the outfall were monitored. No injectate was noted in the storm sewer piping during the reporting period.
- During the injection activity, injection pressures, injection flow rates, and injection zones were constantly optimized in an effort to minimize breakthrough of injectate to the ground surface; approximate pressures were 40 psi and average flow was 5.8 gpm.
- Air monitoring was performed periodically during injection activities and recorded; no issues were observed.
- AECOM met with AVOX Systems Inc. and Matrix Environmental Technologies, Inc. to review restoration activities.

Note final surveying is scheduled to be completed on 5/18/15 with restoration activities scheduled to be completed immediately following the final survey (5/19-20/15).

Please contact me with any comments or questions.

Thanks,
Dino

Dino Zack, P.G.
Project Manager/Geologist
Direct: 716-923-1125
Cell: 716-866-8222

dino.zack@aecom.com

AECOM
257 West Genesee Street
Buffalo, New York 14202-2657
www.aecom.com

From: Zack, Dino
Sent: Monday, May 04, 2015 2:00 PM
To: Janeczek, Joseph (jjaneczek@tyco.com); Jennifer.Davide@zodiacaerospace.com; May, Glenn (DEC) (glenn.may@dec.ny.gov); Doroski, Christopher (HEALTH) (christopher.doroski@health.ny.gov); Stuart Rixman (rixmans@gmail.com)
Cc: Underhill, Scott; Laity, Emily; Steve Marchetti (smarchetti@matrixbiotech.com)
Subject: Lancaster - Former Scott Aviation Facility BCP 2015 IRM status for week ending 05/01/15

Good afternoon-

Below is a brief summary of work completed at the Lancaster - Former Scott Aviation Facility BCP (Site) during the 2015 IRM (groundwater treatment) for the week ending 05/01/15. Attached are two tracking logs and a tracking figure that correspond to the summary below.

Activities completed for week ending 05/01/15:

- AECOM (project manager and field tech), Matrix Environmental Technologies, Inc. (project manager, driller, and mixer), and Redox Tech, LLC (driller and mixer) continued activities associated with the 2015 IRM.
- Injections continued with two rigs; the truck-mounted rig injecting at points located south of Plant 1 and the track-mounted rig injecting south of the visitors parking lot. The truck-mounted rig completed injections on the south side of Plant 1 on 4/29/15.
- During injections adjacent to the storm sewer system, piezometers TP-5 and TP-6, catch basins, manhole, and the outfall were monitored. As a contingency for managing injectate observed in the catch basins, a packer was deployed in the storm sewer piping and injectate/storm water collecting in the catch basin was pumped out and reused for injectate mixing. No injectate was noted in the storm sewer piping during the reporting period.
- During the injection activity, injection pressures, injection flow rates, and injection zones were constantly optimized in an effort to minimize breakthrough of injectate to the ground surface; approximate pressures were 25 psi and average flow is 5.5 gpm.
- Five injection locations remain and are scheduled to be completed by 5/5/15.
- Air monitoring was performed periodically during injection activities and recorded; no issues were observed.
- Final surveying is scheduled to be completed on 5/18/15.
- Restoration activities are scheduled to be completed immediately following the final survey (week of 5/18/15).

Please contact me with any comments or questions.

Thanks,
Dino

Dino Zack, P.G.
Project Manager
Direct: 716-923-1125
Cell: 716-866-8222
dino.zack@aecom.com

AECOM
257 West Genesee Street
Buffalo, New York 14202-2657
www.aecom.com

From: Zack, Dino
Sent: Monday, April 27, 2015 11:34 AM
To: Janeczek, Joseph (jjaneczek@tyco.com); Jennifer.Davide@zodiacaerospace.com; May, Glenn (DEC) (glenn.may@dec.ny.gov); Doroski, Christopher (HEALTH) (christopher.doroski@health.ny.gov)
Cc: Underhill, Scott; Laity, Emily; Steve Marchetti (smarchetti@matrixbiotech.com)
Subject: Lancaster - Former Scott Aviation Facility BCP 2015 IRM status for week ending 04/24/15

Good morning-

Below is a brief summary of work completed at the Lancaster - Former Scott Aviation Facility BCP (Site) during the 2015 IRM (groundwater treatment) for the week ending 04/24/15. Attached are two tracking logs and a tracking figure that correspond to the summary below.

Activities completed for week ending 04/24/15:

- AECOM (project manager and field tech), Matrix Environmental Technologies, Inc. (project manager, driller, and mixer), and Redox Tech, LLC (driller and mixer) continued activities associated with the 2015 IRM.

- Injections continued with two rigs, the truck-mounted rig injecting at points located south of Plant 1 and the track-mounted rig injecting south of the visitors parking lot. Note the track-mounted rig was down for a half a day on 4/22 and 4/23 to accommodate repairs.

- AECOM surveyor was on site 4/20 to resurvey injection locations in areas of utility clusters. Surveyor also surveyed completed injection locations for future Construction Completion Report.

- During injections adjacent to the storm sewer system, piezometers TP-5 and TP-6, catch basins, manhole, and the outfall were monitored. As a contingency for managing injectate observed in the catch basins, a packer was deployed in the storm sewer piping and injectate/storm water collecting in the catch basin was pumped out and reused for injectate mixing.

- During the injection activity, injection pressures, injection flow rates, and injection zones were constantly optimized in an effort to minimize breakthrough of injectate to the ground surface; approximate pressures are between 30 and 40 psi and average flow is 5.5 gpm.

- Approximately 8 injection locations were removed from the program due to the close proximity to utility clusters. Also, approximately 8 injection locations located along the south and southwest perimeter of the injection grid may tentatively be eliminated due to observations of injectate reaching these grid areas from adjacent injection locations. A proposal is being drafted for NYSDEC regarding using unused injectate to perform a second phase of injections at the adjacent NYSDEC Superfund site (West of Plant 2).

- Air monitoring was performed periodically during injection activities and recorded; no issues were observed.

Please contact me with any comments or questions.

Thanks,
Dino

Dino Zack, P.G.
Project Manager
Direct: 716-923-1125
Cell: 716-866-8222
dino.zack@aecom.com

AECOM
257 West Genesee Street
Buffalo, New York 14202-2657
www.aecom.com

From: Zack, Dino
Sent: Monday, April 20, 2015 10:48 AM
To: Janeczek, Joseph (jjaneczek@tyco.com); Jennifer.Davide@zodiacaerospace.com; May, Glenn (DEC) (glenn.may@dec.ny.gov); Doroski, Christopher (HEALTH) (christopher.doroski@health.ny.gov)
Cc: Underhill, Scott; Laity, Emily; Steve Marchetti (smarchetti@matrixbiotech.com)
Subject: Lancaster - Former Scott Aviation Facility BCP 2015 IRM status for week ending 04/17/15

Good morning-

Below is a brief summary of work completed at the Lancaster - Former Scott Aviation Facility BCP (Site) during the 2015 IRM (groundwater treatment) for the week ending 04/17/15. Attached are two tracking logs, a tracking figure, and a photo report that correspond to the summary below.

Note prior to the work described below, an AECOM surveyor demarcated injection points and the location of utilities identified during the geophysical activity; the surveyor will be onsite as needed to continue to demarcate utilities and collect survey information of completed injection locations. On 04/10/15 AECOM project manager met with the Lancaster Department of Public Works engineer to discuss the storm sewer system in the vicinity of the Site. AECOM was informed that the storm sewer was recently re-surveyed and that residences (the four homes along Erie Street between Walter Winter Road and Court Street) are not connected to the storm sewer. These residences include 175 Court Street (discharges storm water directly to Plumb Bottom Creek), 189 and 197 Erie Street (use "bubblers" and discharge storm water to the ground surface), and 205 Erie Street (discharges to the on-site storm sewer system). AECOM was given a drawing showing the storm sewer system along Erie Street and Walter Winter Drive.

Activities completed for week ending 04/17/15:

- AECOM (project manager and field tech), Matrix Environmental Technologies, Inc. (project manager, driller, and mixer), and Redox Tech, LLC (driller and mixer) mobilized to the site on 04/13/15.
    - Major equipment mobilized to the site included;

        - Two direct push technology drill rigs (54U track-mounted Geoprobe and 5410 truck-mounted Geoprobe)
        - Two injectate chem-grout mixing plants and transfer pumps mounted to flatbed trailers
        - Ingersoll Rand air compressor
        - Multiple poly tanks to store water and mix injectate
        - Rubber-tired Gehl RS6 42 forklift
        - Field trailer
        - Storage trailer
        - Port-a-john

    - Material mobilized to the site included;
        - 13 totes of ABC injectate (3,100 pounds each)
        - 10 super sacks of zero valent iron (2,200 pounds each)
        - 2 buckets of Perm Ox Plus (25 pounds each)
        - 1 pallet of Cetro c/s granular bentonite
        - Piezometer PVC casing and screen
        - Air monitoring equipment (Mini-RAE 2000)
        - Groundwater sampling equipment

- Prior to field activities, AECOM held a project kickoff and health and safety meeting with contractors.

- On 04/13/15, Matrix installed a piezometer just south of the manhole where the on-site storm sewer system meets the main storm sewer system at Erie Street. The piezometer (TP-6) was screened within the storm sewer pipe gravel bedding.

- Injections were performed with two rigs, the truck-mounted rig injecting at points located south of Plant 1 and the track-mounted rig injecting south of the visitors parking lot.

- The storm sewer bedding was targeted on 04/13/15 and 04/14/15. An additional injection point located in the visitors parking lot was added to treat the storm sewer pipe bedding between Erie Street and CB-1 (labeled injection point 142). During injections targeting the storm sewer bedding, piezometers TP-5 and TP-6, catch basins, manhole, and the outfall were monitored. As a contingency for managing injectate observed in the catch basins, a packer was installed in the storm sewer piping and injectate/storm water collecting in the catch basin was pumped out and reused for injectate mixing.

- During the injection activity, injection pressures, injection flow rates, and injection zones were constantly optimized in an effort to minimize breakthrough of injectate to the ground surface.

- Air monitoring was performed periodically during injection activities and recorded; no issues were observed.

- NYSDEC visited the site on 04/23/15; no issues were identified.

Please contact me with any comments or questions.

Thanks,
Dino

Dino Zack, P.G.
Project Manager
Direct: 716-923-1125
Cell: 716-866-8222
dino.zack@aecom.com

Appendix G

Photograph Log

AECOM **2015 IRM PHOTOGRAPH LOG**

Client Name: Tyco Safety Products **Project No.:** 60155991	**Site Location:** Former Scott Aviation Facility Area - 1 BCP, Lancaster, New York	**NYSDEC Project No.: C915233**

Photo No.	**Date:**
1	4/13/15

Direction Photo Taken:

South

Description:

View of Visitor's Parking Lot. Geoprobe installation of TP-6 in the NE corner of the lot.

Photo No.	**Date:**
2	4/21/15

Direction Photo Taken:

Southeast

Description:

View of Redox Tech Geoprobe 5410 at injection point #52. Note mixing water supply to the right side of the photograph.

Photo No. 3	Date: 4/13/15
Direction Photo Taken: Northeast	
Description: View of Matrix track-mounted Geoprobe 54U. Preparing to drill injection point #140.	

Photo No. 4	Date: 4/20/15
Direction Photo Taken: East	
Description: View of Chem-grout mixer with 2 hoppers used to mix and inject ABC+.	

Photo No. 5	Date: 4/14/15
Direction Photo Taken: West	
Description: View of workers measuring out liquid from tote of ABC®.	

Photo No. 6	Date: 4/14/15
Direction Photo Taken: Southwest	
Description: View of mixing ABC® with water in 500 gallon poly tank.	

Photo No. 7	Date: 4/23/15
Direction Photo Taken: West	
Description: View of ZVI 1000kg supersack on the right, and weighed buckets of ZVI for individual intervals on the left.	

Photo No. 8	Date: 5/5/15
Direction Photo Taken: South	
Description: View of Redox Tech personnel mixing ZVI in the chem-grout hopper during injection.	

Photo No. 9	Date: 4/16/15
Direction Photo Taken: East	
Description: View of Redox Tech's mixing and injection setup south of Plant 1.	

Photo No. 10	Date: 4/22/15
Direction Photo Taken: Southwest	
Description: View of surveyed injection points (pink flagged stakes). Matrix Environmental injecting at injection point #11in the background.	

Photo No. 11	Date: 4/24/15
Direction Photo Taken: East	
Description: View of Redox Tech at injection point #67 on the west side of Plant 1.	

Photo No. 12	Date: 4/17/15
Direction Photo Taken: Northwest	
Description: View of Redox Tech injecting at #88. Note breakthrough around previously injected location #89 (pink flagged stake on the left side of photograph).	

Photo No. 13	Date: 4/13/15
Direction Photo Taken: West	
Description: View of breakthrough along the fence line running south of Plant 1.	

Photo No. 14	Date: 4/24/15
Direction Photo Taken: South	
Description: View of Matrix Environmental injecting at #44. Note CB-2 in the center of the photo.	

Photo No. 15	Date: 4/17/15
Direction Photo Taken: East	
Description: View of bridge over Spring Creek on Erie Street. Note storm sewer outfall is located under bridge.	

Photo No. 16	Date: 5/30/14
Direction Photo Taken: West	
Description: View of completed injection point #67. Boring holes were backfilled with granulated bentonite.	

Photo No. 17	Date: 5/1/15
Direction Photo Taken: Southeast	
Description: View of asphalt patched injection point #73.	

Photo No. 18	Date: 5/1/15
Direction Photo Taken: Northeast	
Description: View of Matrix Environmental cleaning the concrete and asphalt behind Plant 1 following the completion of injections in that area.	

Photo No. 19	Date: 5/5/15
Direction Photo Taken: South	
Description: View across lawn of West side of injection area. Note brown grass is prior to restoration.	

Photo No. 20	Date: 5/18/15
Direction Photo Taken: Southeast	
Description: Post-completion injection point survey.	

Photo No. 21	Date: 5/26/15
Direction Photo Taken: South	
Description: View of restored grassy area on the west side of Plant 1.	

Photo No. 22	Date: 5/26/15
Direction Photo Taken: South	
Description: View of restored grassy area on the west side of Plant 1.	

Photo No. 15	Date: 5/26/15
Direction Photo Taken: East	
Description: View of restored grassy area on the west side of Plant 1..	

Photo No. 16	Date: 5/27/14
Direction Photo Taken: West	
Description: View of restored area on south side of Plant 1. Note Matrix replacing paved area with a crusher run pad.