TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

For use of this form, see ER 415-1-0; the proponent agency is CECW-CE

DATE	TRANSMITTAL NO.
11/17/2021	1800-59

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO:	FROM:	CONTRACT NO.	THIS IS A:
Eastern Resident Office US Army Corps of Engineers 355 RXR Plaza Uniondale, New York 11556	HydroGeoLogic, Inc. 11107 Sunset Hills Road, Suite 400 Reston VA20190 USA	W912DQ-17-D-3016 W912DQ20F3045	NEW TRANSMITTAL

SPECIFICATION SEC. NO. (Cover only one section with each transmittal)	PROJECT TITLE AND LOCATION 01	THIS TRANSMITTAL IS FOR: (Check one)
1800-Operation and Maintenace of Existing Systems	LAI Superfund Site OU 1-LTRA , Port Jefferson, New York	☐ FIO ☑ GA ☐ DA ☐ CR ☐ DA/CR ☐ DA/GA ☐ S

ITEM NO. (See Note 3) a.	DESCRIPTION OF SUBMITTAL ITEM (Type size, model number/etc) b.	SUBMITTAL TYPE CODE (See Note 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE (Note 9) i.
				SPEC. PARA NO. e.	DRAWING SHEET NO. f.			
7	Annual Groundwater Sampling Report	10 - OPERATIONS AND MAINTENANCE DATA	1	1.3.1.7		A	No	A

Remarks from Contractor

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

Eric Dambaugh - HydroGeoLogic, Inc.
Eric Dambaugh
Digitally signed by Eric Dambaugh
Date: 2021.11.17 10:13:55 -05'00'

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	BIAN.SHEWEN.12287283 37 Digitally signed by BIAN.SHEWEN.1228728337 Date: 2021.12.09 16:50:47 -05'00'	12/09/2021

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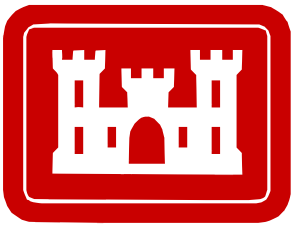
JUNE 2021 COMPREHENSIVE SAMPLING EVENT REPORT

LAWRENCE AVIATION INDUSTRIES SUPERFUND SITE
PORT JEFFERSON STATION
SUFFOLK COUNTY, NEW YORK

Prepared for:



U.S. Army Corps of Engineers
Kansas City District

Contract No. W912DQ17D3016
Task Order: W912DQ20F3045

November 2021

HGL
HydroGeoLogic, Inc

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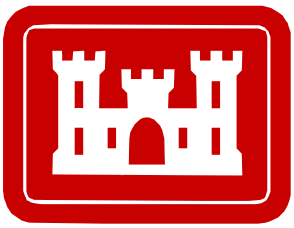
JUNE 2021 COMPREHENSIVE SAMPLING EVENT REPORT

LAWRENCE AVIATION INDUSTRIES SUPERFUND SITE
PORT JEFFERSON STATION
SUFFOLK COUNTY, NEW YORK

Prepared for



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November 2021

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This document was prepared by HydroGeoLogic, Inc. and has received the appropriate technical review and approval.

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Project Manager

Document Revision Log

Revision No.	Review/ Revision Date	Summary of Changes
0	11/2021	Original Submittal

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TABLE OF CONTENTS

Section **Page**

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

CoC	chain-of-custody
CVOC	chlorinated volatile organic compound
cis-1,2-DCE	cis-1,2-dichloroethene
1,1-DCE	1,1-dichloroethene
1,1-DCA	1,1-dichloroethane
DO	dissolved oxygen
FS	Feasibility Study
ft	feet
ft/ft	feet per foot
GAC	granular activated carbon
GWTF	groundwater treatment facility
gpm	gallons per minute
HGL	HydroGeoLogic, Inc.
ISCO	in situ chemical oxidation
LAI	Lawrence Aviation Industries
µg/L	micrograms per liter
mg/L	milligrams per liter
NYSDEC	New York State Department of Environmental Conservation
OMP	Old Mill Pond
ORP	oxidation-reduction potential
PCB	polychlorinated biphenyls
PCE	tetrachloroethene
PDI	Pre-Design Investigation
QA	quality assurance
QC	quality control
RA	remedial action
RAO	Remedial Action Objective
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
SU	standard unit
TAL	target analyte list

TCE	trichloroethene
trans-1,2-DCE.	trans-1,2-dichloroethylene
UFP-QAPP	Uniform Federal Policy-Quality Assurance Project Plan
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compounds
VC	vinyl chloride

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JUNE 2021 COMPREHENSIVE SAMPLING EVENT REPORT
LAWRENCE AVIATION INDUSTRIES SUPERFUND SITE
PORT JEFFERSON STATION
SUFFOLK COUNTY, NEW YORK

1.0 INTRODUCTION

1.1 PURPOSE OF THIS REPORT

This report for the Lawrence Aviation Industries (LAI) Superfund Site was prepared by HydroGeoLogic, Inc. (HGL) under the U.S. Army Corps of Engineers (USACE), Kansas City District Contract No. W912DQ17D3016, Task Order W912DQ20F3045. The purpose of this report is to present results of the June 2021 comprehensive sampling event, compare the results to the May 2008 baseline groundwater sampling results and subsequent groundwater sampling results, evaluate groundwater contamination plume capture, and monitor chlorinated volatile organic compounds (CVOC) to track remediation system effectiveness. This report includes the following information:

- Introduction (Section 1) - Includes a brief description of the site environmental setting and historical operations, site investigations, and remedial activities;
- 2021 Comprehensive Sampling Event and Results (Section 2) - Summarizes the June 2021 sampling event and area-wide groundwater plume contamination;
- Groundwater Contamination over Time (Section 3) - Provides a summary of changes in area-wide groundwater plume contamination from May 2008 through June 2021, including an evaluation of the effectiveness of the remedial action (RA); and
- References (Section 4) - Provides a list of documents relevant to the site activities.

1.2 SITE LOCATION AND DESCRIPTION

The LAI site (site) is located in Port Jefferson Station, Suffolk County, New York, and has been assigned U.S. Environmental Protection Agency (USEPA) identification number NYD002041531. A site location map is provided as Figure 1. The site encompasses approximately 126 acres and consists of the LAI industrial facility and the LAI outlying parcels (the wooded areas located east and northeast of the LAI industrial facility). The LAI industrial facility, approximately 42 acres in size, was an active manufacturer of titanium sheeting for the aeronautics industry. It encompasses 10 buildings located in the southwestern portion of the property. An abandoned, unlined earthen lagoon, which formerly received liquid wastes, lies west of the buildings, and was filled in by the property owner. A former drum crushing area is situated southeast of the buildings. The New York State Department of Transportation installed a mixed-use bicycle and pedestrian path with a right-of-way through the site in 2012. The LAI outlying parcels property is vacant and wooded and contains a site access road. The Long Island Railroad and Sheep Pasture Road form the northern border of the site, to the east and west are various residential single-family houses, and to the south is a power utility right-of-way and a

wooded area, which also is a residential area with single family houses. The Village of Port Jefferson and Port Jefferson Harbor lie approximately 1 mile to the north.

1.3 HISTORICAL SOURCES OF GROUNDWATER CONTAMINATION

The site was previously part of a turkey farm owned by LAI's corporate predecessor, Ledkote Products Co. (Ledkote) of New York. In 1951, Ledkote Products Co. established a business to produce lead gutters and downspouts for roof drains on the property. In 1959, the business was re-established as LAI and began to operate as a mill, manufacturing titanium sheet metal for the aeronautics industry and consumer products such as golf clubs. The 42-acre LAI industrial facility ceased operations in 2003.

Past disposal practices resulted in releases of various contaminants including trichloroethene (TCE), tetrachloroethene (PCE), acid wastes, oils, sludge, heavy metals, and other industrial plant wastes. Previous investigations in the vicinity of the site suggest that releases of hazardous substances from the facility have affected site soils and groundwater, and surface water, and sediments downgradient of the site.

Several investigations lead by Suffolk County and the New York State Department of Environmental Conservation (NYSDEC) concerning contamination of the LAI industrial facility were conducted during the 1970s and 1980s. During these studies, fluoride, toluene, carbon tetrachloride, and metals were detected in samples collected from sumps, puddles, laboratory cesspools, and surface water runoff at the LAI facility. Fluoride, nitrates, TCE, 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), PCE, and metals were detected in groundwater samples collected from adjacent residential wells. USEPA provided bottled water to homes with private wells affected by contaminated groundwater and subsequently connected those homes to the public water supply as part of response action conducted in 1987. The NYSDEC, Region 1 Resource Conservation and Recovery Act Hazardous Substance Group oversaw a major drum removal action at the site in 1991. The Suffolk County Water Authority under contract with the NYSDEC, connected homes affected by groundwater contamination attributed to LAI to public water supplies throughout the 1990s. NYSDEC conducted a limited Remedial Investigation (RI) in 1997. The results from this investigation revealed that CVOCs were detected in the groundwater and surface water. Based on the above investigations, USEPA prepared a hazard ranking system report and proposed the site for inclusion on the National Priorities List on October 22, 1999. The site was listed on the National Priorities List on March 6, 2000.

In April 2003, NYSDEC performed a multi-media inspection of the LAI site as a result of previous findings of contamination. NYSDEC documented violations of air, soil, solid waste, chemical bulk storage, and hazardous waste regulations. LAI was ordered by NYSDEC to cease production until all violations were resolved. Currently, the LAI industrial facility is not operating and most of the buildings are vacant and unused.

1.4 RECENT SITE HISTORY AND PROGRESS

USEPA conducted an RI at the site from August 2003 to May 2005 through the RA Contract program. The RI documented a CVOC plume and identified polychlorinated biphenyl (PCB)-contaminated soil at the site. USEPA personnel also noted conditions at the site that warranted

removal action. During the RI, USEPA Region 2's Removal Action Branch removed approximately 1,300 drums, cylinders, and other containers containing various flammable solids, acids, bases, gases, and unknown compounds, and inventoried the laboratory area; identifying at least 390 containers. Most of the drums and containers were disposed off site in October and November 2004. Non-hazardous materials were considered the property owner's responsibility and left at the site. Approximately 13.5-tons of transformers and capacitors filled with suspected PCB liquid were removed from the site and disposed of as part of the 2004 removal action. During these actions, USEPA personnel identified approximately 30 additional electrical transformers in several areas of the site. NYSDEC removed all the PCB-containing transformers in 2019. Eight non-PCB transformers are remaining at the site.

A Feasibility Study (FS) was completed in July 2006 by CDM Smith on behalf of USEPA and presented remedial alternatives for groundwater, soil, surface water, and sediment. The Record of Decision (ROD) for the site was signed on September 29, 2006, and addressed both soil and groundwater. The soil and sediment remedies were completed in March 2011 and included excavation and removal of approximately 550 tons of contaminated material from the site. The groundwater remedy included the installation of two groundwater extraction and treatment systems: one at LAI and one at Old Mill Pond (OMP) and in situ chemical oxidation (ISCO) at the LAI source area.

1.5 GROUNDWATER REMEDY

The purpose of the selected groundwater remedy is to comply with the Remedial Action Objectives (RAO) in the ROD. The RAOs for the site are as follows:

- Prevent or minimize potential, current, and future human exposures including inhalation, ingestion, and dermal contact with volatile organic compound (VOC)-contaminated groundwater;
- Minimize the potential for off-site migration of VOC-contaminated groundwater;
- Restore groundwater to levels that meet New York state groundwater and drinking water quality standards within a reasonable time frame; and
- Prevent or minimize VOC-contaminated groundwater from discharging into Port Jefferson Harbor.

The groundwater remedy established in the ROD included the following components:

- Construction of two groundwater extraction and treatment systems (one at the LAI facility and one within the downgradient plume area near OMP);
- ISCO application within the area of high TCE concentrations in groundwater at the LAI site;
- Imposition of institutional controls;
- Development of a Site Management Plan;
- Long-term groundwater and surface water sampling to monitor changes in contaminant concentrations and distribution over time; and

- Investigation of vapor intrusion into structures within the plume area, and implementation of an appropriate remedy (such as sub-slab ventilation systems) based upon the investigation results.

Section 2 of this report discusses implementation of the groundwater remedy and more recent site related sampling events.

USEPA completed the Remedial Design (RD) for the LAI and OMP groundwater pump and treatment systems and ISCO treatment at the LAI facility in April 2009. The goal of this design was to minimize the potential for off-site migration of VOC-contaminated groundwater by extracting and treating contaminated groundwater, and treating groundwater with the highest TCE concentrations (greater than 1 milligram per liter [mg/L]) with ISCO to reduce contaminant mass. Both pump and treat systems have multiple extraction wells, air strippers, and vapor-phase granular activated carbon (GAC) units. The OMP system also has liquid-phase GAC units.

In May 2009, USEPA initiated the RA for the components specified in the RD. Construction of the treatment system and ISCO injections at the LAI facility were performed from December 2009 through September 2010. The groundwater pump and treat facility startup testing at LAI was performed in September 2010. Operation and maintenance activities for the on-site groundwater treatment system will continue until the RAOs are met.

The design and installation of the downgradient groundwater pump and treat facility at OMP was completed by the USEPA Region 2 Removal Action Branch. Operations at the OMP facility started on August 22, 2011. In addition, indoor air testing at homes within the plume area and necessary mitigation measures were completed by USEPA's Environmental Response Team under the Response, Engineering and Analytical Contract.

Several upgrades were conducted at the downgradient OMP facility. A third extraction well was installed at the OMP facility (ERT-EW-6) and turned on in 2014. In April 2016, several conveyance components of the OMP treatment system, including all pipes, valves, and fittings between the extraction wells and the start of the effluent discharge lines to the OMP and Creek, were upgraded from 3 inch to 6-inch diameter parts. A 15-horsepower air stripper transfer pump was installed to replace the previous 7.5-horsepower transfer pump. The upgrade increased treatment capacity while expanding the capture zone of the distal end of the groundwater plume. The system flow capacity was increased from approximately 150 gallons per minute (gpm) to 225 gpm.

1.6 HYDROGEOLOGIC SETTING

To provide a framework for discussion of the sampling results in Section 2 and Section 3, the following sections summarize the site-specific geology and hydrogeology. Figure 2 shows monitoring well and surface water sample locations and cross-section A-A' aligned along the centerline of the plume from upgradient of the site to Port Jefferson Harbor. Figure 3 shows ground surface topography with baseline Upper Glacial Aquifer potentiometric surface contours and TCE isoconcentration contours from data collected May 2008 at the conclusion of the Pre-Design Investigation (PDI). Figure 4 is a cross section that shows baseline potentiometric surface contours

and TCE isoconcentration contours, collected May 2008 at the conclusion of the PDI with depth, and the approximate contact between the upper Glacial and Magothy aquifers.

1.6.1 Geology

Three aquifers are present beneath the LAI site: the Upper Glacial aquifer, the Magothy aquifer, and the Lloyd Sand Member of the Raritan Formation (Koszalka, 1984). The Magothy and underlying Lloyd Sand Aquifers are separated by the Raritan Clay member of the Raritan Formation, which limits the movement of groundwater between the two units. The presence of the Raritan Clay, directly underlying the Magothy aquifer, marks the lower boundary of the upper flow system. The RI (CDM Smith, 2006) concluded that the contaminant plume is migrating within the upper flow system, primarily within the Upper Glacial aquifer. The Upper Glacial deposits range in thickness from more than 300 feet (ft) at the LAI facility to approximately 100 ft at Port Jefferson Harbor and are composed primarily of sand and gravel with occasional lenses of silty sand and silt.

1.6.2 Hydrogeology

1.6.2.1 Groundwater Flow

The Upper Glacial aquifer is generally under unconfined conditions and the upper limit is defined by the water table. Saturated thickness ranges from approximately 110 to 140 ft. Synoptic groundwater level data from the 2008 baseline monitoring event were used to evaluate the horizontal and vertical distribution of hydraulic head at the site (Figures 3 and 4). Potentiometric surface contours from the baseline event (Figure 3) show that groundwater flow from the LAI facility is to the north, toward Port Jefferson Harbor under an average hydraulic gradient of approximately 0.0048 feet per foot (ft/ft). Viewed in cross-section, along the approximate centerline of the plume (Figure 4), a downward vertical hydraulic gradient is evident at the LAI facility that changes to an upward gradient further to the north, in proximity to Port Jefferson Harbor. These vertical gradients are indicative of groundwater recharge and discharge zones. The Upper Glacial aquifer appears to be under artesian conditions at MPW-09, which is near the OMP facility and Old Mill Pond as a result of low permeability silts, clay lenses, and silty sands in that area. Submarine groundwater discharge into Port Jefferson Harbor is unlikely and diffuse discharge along the shoreline, within the high and low tidal extents, is more likely. Diffuse discharge in the OMP vicinity is suggested by the upward vertical hydraulic gradient, artesian wells, natural springs that are developed along the escarpment, localized pond features, and transition to overland flow in drainages north of the escarpment.

1.6.2.2 Estimates of Hydraulic Conductivity and Transmissivity

During the RI/FS, USEPA performed a series of packer tests at the site to estimate hydraulic conductivity and transmissivity of the Upper Glacial and Magothy aquifer. Inflatable packers were used to isolate vertical sections of the well for sampling to define the vertical distribution of water quality parameters and hydraulic conductivity. Tests were performed at well MPW-07, located at the LAI industrial facility; at well MPW-10, located approximately 1,700 feet downgradient of the LAI industrial facility; and at well MPW-09, near Port Jefferson Harbor. Hydraulic conductivity values were calculated to range from less than 0.02 ft/day to 89 ft/day, and transmissivity

estimates ranged from 12 to 22,200 gallons per day/foot or 2,000 to 3,000 square ft/day (CDM Smith, 2006). Lithologic logs indicated that the saturated portion of the Upper Glacial and Magothy Aquifers at the site, where multi-port wells are screened, generally consisted of a layer of fine to medium sand overlying a silty sand layer.

During the PDI, a 48-hour constant rate aquifer test was performed using a test well in the area near well MPW-02. The upper 60 ft (180-240 ft below ground surface) of the aquifer was screened by the test well and piezometers also were screened within the zone from 205 to 225 ft below ground surface. The lithology observed in the screened zone was predominantly a mixture of fine to medium grained sands with silt. The aquifer test indicated hydraulic conductivity ranging from 31 to 63 ft/day and transmissivity estimates ranged from 4,400 to 8,800 square ft/day (CDM Smith, 2009).

The wide range of hydraulic conductivity values observed in the packer tests is consistent with the heterogeneity of the glacially deposited material encountered in the borings. The results of the 48-hour constant rate test represent the mean hydraulic properties of the material between the pumping well and the piezometers used to measure drawdown. Therefore, the estimates derived from the 48-hour constant rate test are considered to be more representative of the bulk hydraulic properties of the aquifer in that area.

1.7 SUMMARY OF AREA-WIDE CONTAMINATION IN 2008

The TCE plume originates in the vicinity of well MPW-07 at the LAI property and initially moves downward and to the northwest in response to the vertical and horizontal hydraulic gradients in that area. The direction of groundwater flow and the TCE plume shift north toward Port Jefferson Harbor in the vicinity of well MPW-10, approximately 1,800 ft from downgradient LAI property boundary. Analytical data indicate the TCE plume extends toward the harbor, approximately 4,500 ft north of MPW-10 based on concentrations measured at ERT-MW-2.

The vertical hydraulic gradient in downgradient portions of the plume near well MPW-09 is upward, indicating that groundwater is moving upward within the aquifer as it approaches Port Jefferson Harbor. Analytical data indicate that the TCE plume also begins to move upward in the area of MPW-09. This upward gradient also causes groundwater to discharge at the surface in the vicinity of OMP. A surface water sample from OMP, collected in October 2003 during the RI, showed TCE concentrations ranging from 180 to 340 micrograms per liter (µg/L) and cis-1,2- DCE concentrations ranging from 9.2 to 17 µg/L. Figures 3 and 4 show the TCE plume location and distribution in plan view and cross section, based on data collected during the 2008 comprehensive sampling event.

The highest TCE concentrations detected in the 2008 baseline sampling event (greater than 1,000 µg/L) were centered at two monitoring well locations; MPW-07, located at the LAI property, and MW-PD-16, located approximately 4,200 ft downgradient of the property and 1,100 ft upgradient of MPW-09. The sample at multiport well MPW-07 was collected from the shallowest port, just below the water table, while MW-PD-16 is screened approximately 125 ft below the water table and characterizes the maximum depth of plume migration.

The persistence of high TCE concentrations in the source area at the LAI property, more than 20 years after releases ended, indicates that residual subsurface soil contamination may be present, most likely in low permeability zones near the water table. The high TCE concentrations in the downgradient plume most likely indicates the presence of a more highly concentrated slug of TCE that coincides with larger releases that occurred when the LAI plant was in operation.

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2.0 2021 COMPREHENSIVE SAMPLING EVENT AND RESULTS

Groundwater samples were collected to measure performance of the two remediation systems. Analytical results are used to monitor contaminant levels over time and evaluate whether the extraction wells prevent or minimize downgradient migration of impacted groundwater and discharge to Port Jefferson Harbor.

2.1 SAMPLING AND MONITORING METHODS

HGL conducted the comprehensive annual sampling activities from June 8 to 17, 2021. Groundwater sampling followed standard operating procedures presented in the *Lawrence Aviation Industries Uniform Federal Policy-Quality Assurance Project Plan (UFP-QAPP)* (HDR Engineering, Inc., 2016; HGL, 2021). A total of 80 groundwater and process water samples, and 23 quality control (QC) samples were collected as part of the comprehensive annual sampling event.

A total of 74 groundwater samples were collected from 50 locations, consisting of 2 non-operational extraction wells, 15 multiport wells, 4 piezometers, and 29 conventional, single-completion wells.

Of the 29 conventional well samples collected, 11 were collected from ISCO injection and monitoring wells (IW-ISCO-2, IW-ISCO-3, IW-ISCO-4, IW-ISCO-6, IW-ISCO-7, IW-ISCO-8, IW-ISCO-10, IW-ISCO-11, IW-ISCO-13, MW-ISCO-1, and MW-ISCO-3) that are not part of the regular annual sampling program. These wells were sampled to help characterize the current distribution of contaminants in the source area.

Monthly system process water sampling for target compound list VOCs, fluoride, and target analyte list (TAL) metals is conducted as part of performance monitoring for the LAI and OMP groundwater treatment facilities (GWTF). The June 2021 monthly sampling event coincided with the annual long-term monitoring event, and six process water samples were collected from the treatment systems. Two QC samples, consisting of one duplicate sample and one trip blank sample, were collected in addition to the process water samples.

2.1.1 Groundwater Levels

HGL collected a total of 101 groundwater level measurements from extraction wells, multiport wells, piezometers, and monitoring wells (Table 1).

Conventional single-completion wells were manually measured using an electronic water level recorder. The depth to groundwater was measured to the nearest 0.01 ft from the top of the inner well casing. Multiport wells were recorded using the pressure transducers installed in each port. A pressure measurement was collected from each transducer and then used to calculate the water level elevation. Water levels from the extraction wells were recorded directly as elevations from the programable logic controller.

2.1.2 Monitoring Wells

HGL conducted sampling using USEPA Region 2 low flow groundwater sampling protocols. Conventional monitoring wells were purged with a submersible pump and sampled according to USEPA low-flow procedures with minimum groundwater drawdown. Multi-port wells (Waterloo Multilevel Systems) were purged and sampled using Nitrogen-activated bladder pumps, which are included as part of the Waterloo system, in accordance with manufacturer instructions. Groundwater from each monitoring well was pumped through a water quality meter flow-through cell. The water quality meter measured water quality parameters, consisting of temperature, pH, oxidation reduction potential (ORP), specific conductance, turbidity, and dissolved oxygen (DO). A turbidity meter was used to measure turbidity or to confirm turbidity measurements from the water quality meter. The water level in each well also was monitored during the purging process using an electronic water level meter to document minimal drawdown conditions. Groundwater samples were collected after stabilization of field parameters. Stabilized groundwater quality parameters measured prior to sampling each well are presented in Table 5.

The groundwater samples were analyzed for:

- VOCs by USEPA Method DW-1;
- TAL metals by USEPA Method 200.8;
- Mercury by USEPA Method 245.1;
- Chloride, fluoride, and sulfate by USEPA Method 300.0;
- Total alkalinity by Method SM 2320B;
- Ammonia (as nitrogen) by USEPA Method 350.1;
- Nitrogen, Total Kjeldahl by USEPA Method 351.2;
- Organic Carbon by Method SM 5310;
- Total dissolved solids by Method SM 2540C; and
- Total suspended solids by Method SM2540D.

Analytical samples were shipped to USEPA Region 2 Laboratory Services and Applied Sciences Division laboratory in Edison, New Jersey, under strict management and chain-of-custody (CoC) procedures in accordance with the *Lawrence Aviation Industries UFP-QAPP*. CoC documentation was generated using the Scribe software program.

2.2 QUALITY ASSURANCE/QUALITY CONTROL

The overall quality assurance (QA)/ QC objective was to develop and implement procedures for field sampling, CoC, laboratory analyses, and reporting so data was collected in a uniform manner and with consistently high quality. To collect and record data in a uniform manner, groundwater sampling was performed in accordance with the *Lawrence Aviation Industries UFP-QAPP*, which outlines the specific groundwater sampling QA and QC procedures.

2.3 FIELD QC

Field QC samples collected during this groundwater monitoring event included field duplicates, trip blanks, and matrix spike/matrix spike duplicate samples. Analytical results for trip blanks and field duplicate samples are included in Appendix A. Field duplicate results indicate acceptable precision in addition to QC field processes (see Appendix B).

2.4 FIELD DOCUMENTATION

CoC records, groundwater sampling logs, and equipment calibration logs were used as a means of documenting field activities each day on site. Equipment used to monitor the water quality indicator parameters was properly calibrated with reference standards at the start of each day of sampling. At the end of each day, the pH calibration was checked with standard buffer solutions to evaluate instrument drift. A well inventory and inspection of the monitoring wells was performed to evaluate the present condition of each well.

2.5 DATA VALIDATION

The purpose of validating data is to allow the data user to interpret and use the data with varying degrees of confidence, depending on how the data are qualified (i.e., unqualified, estimated, or rejected). Data validation of the groundwater sample results was performed by USEPA to evaluate if the laboratory met QC criteria cited in the method. HGL determines the usability for project purposes of the sample data with qualifiers.

2.6 DECONTAMINATION AND INVESTIGATION DERIVED WASTE

Decontamination of personnel and equipment was conducted for all non-dedicated materials that came in contact with potentially hazardous materials to prevent cross-contamination of samples. Personnel decontamination procedures were implemented to prevent worker exposure to contaminants as explained in the site-specific Health and Safety Plan. Waste material generated during the annual sampling activities included decontamination fluids containing wash/rinse water and decontamination chemicals, purged groundwater, and personal protective equipment consisting of nitrile gloves, N95 masks, and Tyvek coveralls. Purge water and decontamination fluids were transported to the LAI or OMP GWTF in enclosed buckets or tubs. The water was treated through the air stripper and GAC vessels prior to discharge. Personal protective equipment was disposed of as municipal waste.

2.7 2021 COMPREHENSIVE SAMPLING EVENT RESULTS

Groundwater sampling locations are shown on Figure 2. Analytical results from groundwater samples were compared to the NYSDEC 6 New York Codes, Rules and Regulations Part 703.5 Class GA standards (current through October 28, 2021). A full set of analytical results for 2021 Comprehensive Sampling Event is presented in Appendix A.

2.7.1 Data Usability

A Data Usability Report was prepared to verify conformance with the data quality indicators specified in the USEPA-approved QAPP and is provided in Appendix B. Sample data were

evaluated for precision, accuracy, representativeness, comparability, sensitivity, and completeness. Samples were analyzed and validated by USEPA Region 2 personnel.

The results provided by the USEPA Region 2 Laboratory Services and Applied Sciences Division laboratory are considered definitive data and underwent data validation by USEPA staff to provide assurance that the data were adequate for its intended use. The validation was summarized in data assessment reports that were provided to HGL.

The data usability report focused only on the samples included in the annual sampling event. The results of the data usability report indicate that sufficient data was collected to obtain a complete and usable data set.

The definitive data for June 2021 annual sampling event conducted in June 2021 fulfilled the site-specific QA/QC requirements. Overall, the data met the project data quality objectives, and was appropriate to characterize the levels of contamination in the aqueous samples collected from the site.

2.7.2 Groundwater Levels

Depth to water measurements are presented in Table 1. The programmable logic controller readings are direct groundwater elevation recordings and are listed on Table 1, with corresponding depth to water measurements reported as not recorded.

Vertical hydraulic gradients were calculated for a series of multiport wells and clustered or nested wells located on the approximate centerline of the plume. Data from the closest multiport well was used where only single completion wells were located along the centerline. Vertical hydraulic gradients were calculated between the shallowest completion zone and each successive deeper zone, and between adjacent zones.

Vertical gradients ranged from a downward gradient of 0.156 ft/ft at the LAI facility to an upward gradient of 0.043 at location ERT-MW-1. The calculated vertical gradients represent conditions at the time of data collection. The results are presented in Table 2. The vertical gradients at tidally-influence wells will likely change throughout the tide cycle. Data were not collected to characterize tidal fluctuations.

A potentiometric surface map for the Upper Glacial aquifer from the LAI site to the Port Jefferson Harbor, based on the June 2021 groundwater levels, is presented in Figure 6. Groundwater levels from the contaminated intervals were used at well cluster and multiport well locations. Well construction data is presented in Table 2. Extraction well data were not used to construct contours because well efficiency, and therefore actual drawdown in the formation, was not known.
The data indicate that groundwater flow conditions are generally consistent with baseline conditions both in terms of flow direction and hydraulic gradient in areas not impacted by the groundwater extraction and treatment facilities. The average hydraulic gradient for the plume area was approximately 0.0045 ft/ft.

Drawdown from the extraction wells is evident but appears to be limited to the immediate area of the extraction systems. Capture zones for EW-01 and EW-02 were estimated based on June 2021

water levels at the LAI facility (Figure 7). Capture zones were not estimated for the OMP facility because the impact of tidal fluctuations on monitoring wells near the facility has not been characterized. The resulting capture zones were approximately 80 to 90 ft wide at the extraction wells and 180 to 380 ft wide in the source area. As a check to these estimates, the theoretical capture zones were calculated using an analytical model (Grubb, 1993). This model calculates a theoretical capture zone for a pumping well under steady state conditions. The equation for unconfined conditions was used, along with the average transmissivity (6,600 ft^2/day) from the pre-design pumping test (CDM Smith, 2009), a hydraulic gradient (0.0114 ft/ft) measured between the source area and the extraction wells from the June 2021 monitoring event, and an extraction well pumping rate of 75 gpm. Additionally, an aquifer thickness of 60 ft and an average hydraulic conductivity of 47 ft/day was assumed. These estimates were taken from the 48-hour constant rate test conducted during the PDI, which are considered more representative of the bulk hydraulic properties of the aquifer in the area. The model calculated a theoretical capture zone with a width of 71.5 ft at the pumping well and approximately 185 ft at a point 300 ft upgradient of the pumping well, which is consistent with the distance to the source area. The theoretical calculations generally support the capture zones estimated from observed water levels. The difference in the upgradient width of the capture zone between the two methods is a result of the curvature in the observed water level contours compared to the uniform flow field used for theoretical calculations.

2.7.3 Sample Results

In addition to well construction details, Table 3 presents information on sample locations, where samples were not collected, and the reason for not collecting a sample. The site-related contaminants are primarily the CVOCs TCE and PCE. Historically, low concentrations of TCE degradation products cis-1,2-DCE, 1,1-DCE, and vinyl chloride (VC) also have been detected. Additional site-related VOCs are 1,1,1-trichloroethane, 1,1-dichloroethane (1,1-DCA), chloroform and 1,4-dioxane. Table 4 summarizes the June 2021 groundwater analytical results for these site-related VOCs. Exceedances of screening criteria are highlighted. Geochemical parameters measured during the low flow purging process are summarized in Table 5.

2.7.3.1 Groundwater and GWTF System Process Water Sample Results

The primary CVOC results for the 2021 comprehensive groundwater sampling event and the June 2021 monthly GWTF system process water sampling are discussed below:

- TCE was detected in 62 of the 80 groundwater samples with concentrations ranging from 0.520 to 1690 µg/L. Concentrations in 33 of the samples collected exceeded the remediation goal of 5 µg/L. The highest concentration of TCE, 1690 µg/L, was detected in the sample from source area well IW-ISCO-7, screened approximately 10 ft below the groundwater table.
- PCE was detected in 35 of the 80 groundwater samples with concentrations ranging from0.580 to 28.8 µg/L. Concentrations of PCE in 12 of the samples were greater than or equal to the remediation goal of 5 µg/L. The highest concentration of PCE, 28.8 µg/L, was detected in the groundwater sample collected from source area well IW-ISCO-7.
- Cis-1,2-DCE was detected in 9 of the 80 groundwater samples with concentrations ranging from 0.570 to 2.72 µg/L. All of the cis-1,2-DCE detections were below the remediation

goal. The highest concentration of cis-1,2-DCE, 2.72 µg/L, was detected in the groundwater sample collected from port D at the downgradient multiport well MPW-09.

- The following compounds were detected in one or more samples at concentrations less than their respective remediation goals: 1,1,1-trichloroethane, 1,1-DCA, 1,1-DCE, chloroform, methyl tert-butyl ether, and 1,2-trans-dichloroethylene (trans-1,2-DCE).
- VC was not detected in any of the groundwater samples collected.
- Only PCE and TCE were detected above their respective remediation goals at the additional ISCO wells sampled to characterize the current distribution of source area contamination. PCE was detected in nine wells at concentrations ranging from 0.690 to 28.8 µg/L. The highest PCE concentration of 28.8 µg/L was detected in ISCO injection well IW-ISCO-7. TCE was detected above the remediation goal of 5 µg/L in all 10 wells at concentration ranging from 4.49 to 1690 µg/L. As with PCE, the highest TCE concentration of 1690 µg/L detected in IW-ISCO-7.

Results for QA/QC samples are included in the Data Usability Report in Appendix B. Data summary tables for the complete list of analytes is included in Appendix A.

TCE isoconcentration contour maps (Figures 8 and 9) present the results of the 2021 comprehensive sampling event in plan view. Isoconcentration lines are based on the highest TCE concentration at multi-port and clustered well locations. Cross-section A-A' in Figure 10 shows the distribution of the CVOCs with depth for the 2021 comprehensive sampling event. The location of cross section A-A' is presented on Figure 8. TCE, PCE, cis-1,2-DCE, and VC results are provided in the cross-section. However, the contours are based on TCE concentrations only. The contours represent TCE levels that were determined to be representative of the centerline of the plume. Data from wells projected onto the cross-section from locations at the edges of the plume were not used. Results of the 2021 comprehensive event were superimposed on the May 2008 PDI results in both Figure 8 and Figure 10 to help visualize the impact of remedial action on the plume.

The current distribution of TCE in the source area is shown on Figure 9. Approximate capture zones for extraction wells EW-01 and EW-02 were superimposed on the TCE distribution to show the extent of source area containment. The additional ISCO well sampling indicated that the highest concentrations (IW-ISCO-7) are in the area where the floor drain system was reported to discharge to the subsurface. The high concentrations appear to be migrating downgradient from this area to MW-ISCO-2 and are captured by extraction well EW-01. Sampling also indicated that elevated concentrations (380 to 568 µg/L) extend to the southeast of the floor drain discharge point at IW-ISCO-6, IW-ISCO-2, and IW-ISCO-4, and to the northeast of the discharge point at IW-ISCO-8. Review of the TCE distribution (Figure 8) and groundwater flow direction (Figure 6) provide an explanation for the higher levels of TCE captured by EW-01 compared to EW-02.

2.7.3.2 Geochemical Parameters

General observations on the geochemical parameters measured during the 2021 comprehensive sampling event are as follows:

- Area-wide DO levels in groundwater ranged from 0.31 to 11.58 mg/L. The DO levels are generally indicative of oxidizing conditions. Levels below 1 mg/L were recorded at a few isolated locations, however, these results were not always supported by ORP results and were not considered to be representative of the overall conditions in the plume.
- Area-wide pH readings in groundwater ranged from 4.62 standard units (SU) in well MPW-08-A to 8.62 SU in well MPW-01-C and averaged 6.01 SU. The slightly acidic pH is consistent with previous measurements and groundwater in Long Island in general.
- Area-wide ORP levels in groundwater ranged from -119.7 millivolts in well MPW-05-D to 314.1 millivolts in well MPW-PD-16. ORP levels are generally indicative of oxidizing conditions.

Geochemical parameter data from 2013 through 2021 annual sampling events were reviewed to identify any changes over the duration of long-term monitoring. The review found that the 2021 results were consistent with the results of past sampling events.

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3.0 GROUNDWATER CONTAMINATION OVER TIME

3.1 Effects of Remedial Action

Removal of contaminant mass from the source area and the downgradient portion of the plumes has resulted in a general reduction in contaminant concentrations over the operational period of the remediation systems as shown in Figures 11 through 14. The data set used to prepare these figures is included in Appendices C and D. Evaluation of contaminant concentrations focused on chlorinated ethenes because these are the primary site-related contaminants. Further details of this evaluation will be discussed separately in terms of the source area plume and the downgradient portion of the plume.

Fate of the source area plume was evaluated using analytical results from ISCO wells MW-ISCO-2, MW-ISCO-4, and MW-ISCO-5 located at the LAI facility. These wells are located in the source area immediately upgradient of extraction wells EW-01 and EW-02. ISCO injection well IW-ISCO-10 also is part of the long-term monitoring program, but is further to the northeast than the three main source area wells.

As shown on Figure 11, groundwater in the source area experienced an initial rebound in total chlorinated ethene concentrations shortly after the completion of ISCO treatment and extraction system startup in 2010. Following the initial rebound, contaminant concentrations in each of the source area wells have generally exhibited reducing trends. Overall reducing trends continued in 2021 at MW-ISCO-2 and MW-ISCO-5. Contaminant concentrations at MW-ISCO-2 have shown a slight upward trend since 2016. MW-ISCO-4 concentrations increased to 1,209 µg/L in 2019, reversing the long-term trend before a decrease to 479 µg/L in 2020 and 481.72 µg/L in 2021 to re-establish the overall reducing trend in that well (Figure 11).

A plot of the average concentrations of the three main source area wells with time is shown on Figure 12. Average total ethene concentrations for source area wells are presented in Appendix C and the data used to calculate average concentrations are provided in Appendix D. Contaminant concentrations fluctuate over the monitoring period, which can effect the slope of the regression line from year to year. Slight increases in CVOC concentrations in one of the three source area wells (ISCO-4) and decreases in the other two (ISCO-2 and ISCO-5) during the 2021 event resulted in a horizontal average concentration trendline and a horizontal trendline in the 95% confidence limit of the source area wells. The overall trend in these data, following the 2021 Comprehensive Sampling event, indicates groundwater concentrations are in equilibrium with ethenes. Data indicate the plume had stabilized within the LAI GWTF capture zone by approximately 2016. Following plume stabilization, further reduction in total ethene concentrations within the source area is likely the result of a combination of the GWTF and natural attenuation processes other than degradation.

Fate of the downgradient portion of the plume was evaluated using a series of single completion monitoring wells and a multiport well located along the centerline of the plume. Single completion wells MW-PD-12, MW-PD-14 and MW-PD-16 are located between the LAI facility and the OMP facility. Multiport well MPW-09, which monitors four different zones between the depths of 10 and 135 ft (A through D ports), is located immediately downgradient of the OMP extraction wells. Contaminant concentrations in these wells show a downward trend since startup of the OMP

remediation system in 2010, which is consistent with the reduction in mass within the downgradient portion of the plume (Figure 13). This reduction can be seen at depth where the highest concentrations are migrating (MPW-09-B, MPW-09-C, MPW-09-D, MW-PD-12, and MW-PD-16) through 2018. The reduction also can be seen at shallow depths above silt and clay deposits in the Upper Glacial aquifer (MPW-09-A) through 2017. The contaminant concentrations in MPW-09-A doubled in 2018 and then decreased in 2019, 2020, and 2021 to below pre-2017 levels. The trend in contaminant concentrations in the downgradient plume is indicative of a detached segment of the plume being flushed from the system.

Average total ethene concentrations for downgradient portion of the plume wells are presented in Appendix C and the data used to calculate average concentration are presented in Appendix D. The overall downward trend is demonstrated in a plot of the average contaminant concentrations for these downgradient plume wells over time (Figure 14). The downward trend for the downgradient portion of the plume is present both in the general population and at the 95% confidence limit. The overall downward trend is maintained even though there was some rebound in 2021. This general reducing trend with some minor rebounds in the 2011 also can be seen at individual wells located at the plume lateral and distal limits as shown in Figures 15 through 19 and Appendix E. Although it is clear from the trend plots that contaminant mass is being removed by the OMP facility, extension of the average concentration trendline suggests the OMP facility also may have to operate longer than anticipated during the FS.

3.2 Groundwater Contamination Plume Extent

The pre-remediation groundwater contamination plume extent used for this evaluation was established based on data from the 2008 PDI. At that time, the plume extended approximately 6,000 ft northwest of the LAI facility to Port Jefferson Harbor and was approximately 1,000 ft in width (Figure 3**)**. Vertically, the plume was shown to migrate 200 to 250 ft downward at the facility, from the water table elevation of 37 ft above mean sea level to an elevation approaching -200 ft above mean sea level, and then upward as it approached Port Jefferson Harbor (Figure 4). Figures 3 and 4 are from the PDI that show plume distribution based on concentrations of TCE, the primary contaminant associated with the plume. The PDI concluded that both horizontal and vertical plume migration were consistent with the flow of groundwater from upland recharge areas near the LAI facility to discharge areas at the harbor as shown on Figures 3 and 4 (CDM Smith, 2008). Groundwater level data from the 2021 synoptic round (Figure 6) of groundwater measurement indicate that current plume migration remains consistent with the ambient groundwater flow and the original conceptual model of contaminant transport (Figures 8 and 10).

The 2021 comprehensive sampling event indicates the current plume extent is similar to the pre-remediation plume in overall length but has separated into on site or source area, and downgradient portion of the plumes over the course of remedial action (Figure 8). The current plume width, based on the 5 µg/L contour, is approximately 65% of the 2008 plume width. Figures 8 and 10, which show the current horizontal and vertical distribution of the plume, also were based on TCE concentrations to be consistent with Figures 3 and 4. The separation between the source area and downgradient portion of the plume shown on Figure 8 is consistent with the collection of contaminated groundwater by LAI facility extraction wells EW-01 and EW-02 and overall improvement to groundwater quality across the site.

The current downgradient extent of the source area plume was estimated based on groundwater flow conditions near the LAI facility and is shown as dashed contour lines on Figures 8 and 10. The lateral and vertical limits of the source area plume are generally consistent with the pre-remediation plume. The plume near the LAI facility is limited to the immediate area of the contaminant source and the upper 25 to 30 ft of the aquifer. The limits of the combined EW-01/EW-02 capture zone cannot be established by existing monitoring wells and piezometers. The presence of manufacturing buildings limited placement of these wells. However, continued mass removal by the extraction and treatment systems indicates the extraction wells continue to be effective in collecting contaminated groundwater in the source area.

The current downgradient portion of the plume extends from a point upgradient of MW-PD-12 to Port Jefferson Harbor. The estimated upgradient extent was based on groundwater flow conditions between the LAI facility and MW-PD-12 and is shown as dashed contour lines on Figures 8 and 10**.** Analytical data from the June 2021 sampling indicate the vertical migration pathway of the current plume is consistent with the pre-remediation plume. A comparison of the current distribution of the downgradient portion of the plume with OMP extraction wells indicates the OMP system is targeting the most highly concentrated portion of the plume both horizontally and vertically. Based on the width and thickness of the downgradient portion of the plume, it is unlikely the OMP system is resulting in complete capture of the plume, but it is resulting in a reduction in plume concentrations as discussed above. Recent enhancements to the remediation system that allow higher pumping rates are expected to increase mass removal and the remediation of the downgradient portion of the plume.

3.3 Plume Concentrations

In general, concentrations of site-related VOCs have decreased from pre-remedial action levels to present day levels throughout the plume as shown in Figures 15 through 19 and Appendix E. Fluctuations in contaminant concentrations have been observed, however, an overall decreasing trend is evident in the data as previously discussed. Decreases in concentrations of the primary contaminant TCE, accounted for most of the observed reduction in total VOCs. Concentrations of TCE degradation products, such as cis-1,2-DCE and VC, have been consistently low and have not changed significantly over time.

Average concentrations in the source area at the LAI property show a slight overall increase but are relatively stable compared to the downgradient portion of the plume (Figures 11 and 14). TCE concentrations had been increasing slightly for the past three monitoring events at MW-ISCO-2 (710 µg/L in 2018; 780 µg/L in 2019; and 880 µg/L in 2020). The TCE concentration in MW-ISCO-2 decreased to 516 µg/L for the 2021 sampling event. MW-ISCO-2 is located downgradient of the source area, just upgradient of extraction wells EW-01 and EW-02. Conversely, TCE concentrations at MW-ISCO-4, which is located in the suspected source area, increased in previous monitoring events. A marked increase was observed in 2019 (220 µg/L in 2017; 330 µg/L in 2018; and 1,200 µg/L in 2019) however, the TCE concentration in MW-ISCO-4 decreased significantly in 2020 and 2021 to 470 µg/L and 474 µg/L, respectively. MW-ISCO-5 has shown a more consistent reducing trend since remediation began compared to the other source area wells. The trend continued in 2021 (Figure 11).

Annual comprehensive sampling events have established that concentrations in the source area have historically fluctuated on the order of hundreds to more than a thousand µg/L. Short term

fluctuations such as these are consistent with changes in mass transfer from ethenes in the unsaturated zone or capillary fringe to the groundwater. Fluctuations in the rate of recharge or the elevation of the water table result in variable dissolution of sorbed ethenes trapped above the water table and fluctuating concentrations in groundwater. Rebound from the back diffusion of ethenes stored in clay-rich, low permeability zones within the saturated zone would be expected to be more gradual and consistent.

The increase of close to a thousand µg/L in MW-ISCO-4 in 2019, which is screened 16 to 26 ft below the water table, followed by a decrease by half in 2020 and 2021 suggests that the ethenes are stored in the capillary fringe relatively close to the water table. However, the relative consistency of concentrations at downgradient well MW-ISCO-2 indicates that the ethenes might be limited to immediate area of MW-ISCO-4.

Results of the additional ISCO well sampling in 2021 provide a more complete characterization of TCE distribution in the source area. The high TCE concentration of 1,690 µg/L at IW-ISCO-7 (Figure 9) supports potentially responsible party reports that the former floor drainpipe, next to IW-ISCO-7, is the primary location for the release of solvent to the subsurface. TCE present in hundreds of µg/L concentrations at ISCO wells to the northeast and southwest of this location indicate the solvent may have encountered low permeability clay or silt beds between the release point and the water table. These directions are cross gradient to the flow of groundwater and solvents have been shown to remain in a relatively contained area when migrating directly downward through unsaturated sandy soils. These results also indicate that MW-ISCO-5 is near the upgradient edge of the source area. This may explain the slight reducing trend in TCE concentrations in this well compared to MW-ISCO-4 and MW-ISCO-2. MW-ISCO-4 is closer to the floor drainpipe than MW-ISCO-5, and MW-ISCO-2 is directly downgradient of the floor drain. Influent concentrations at EW-01 and EW-02 have shown very little fluctuation since 2012, including the June 2021 annual monitoring event.

The 2021 TCE and total VOC concentrations at wells MW-PD-12, MW-PD-14, and MW-PD-16, ranged from slightly increasing to slightly decreasing. These wells are located along the approximate center line of the plume and represent the highest concentrations detected in the central part of the downgradient portion of the plume. The variations in contaminant concentrations at the source area reflected in the plume as it migrates downgradient from the site. The fluctuations are believed to be either a result of historical changes in VOC mass transfer at the LAI facility, most likely a result of variations in precipitation, or detached downgradient portion of the plume begin flushed from the system. Total VOC concentration versus time plots for these wells indicate that overall trends in contaminant concentrations are downward since the groundwater extraction and treatment facilities began operation (Figures 15 to 17). The data set used to prepare these time-series graphs is included in Appendix E. Based on historical data trends, the overall reduction in contaminant concentrations in the central part of the downgradient portion of the plume is expected to continue as long as the remediation systems continue to operate.

Monitoring wells located in the distal end of the plume also exhibit a general trend of short-term fluctuations with an overall reducing trend. Concentrations of total VOCs at well MPW-09, located immediately downgradient of the OMP system, show a greater reduction in concentration than MW-PD-16, which is located upgradient of the OMP facility (Figure 17 and 18). The greatest

overall reductions in concentrations are seen in the deeper intervals, ports B, C, and D that intercept the main part of the plume and correlate with screen zones of the OMP extraction wells. This evidence suggests that vertical plume attenuation may contribute to the overall improvement in groundwater quality, and the remedial action is protective of the deeper Magothy and Lloyd aquifers. The range in TCE concentrations for the 2021 annual event in MPW-09 ports C and D was 77.3 to 138 µg/L. Concentrations in port B have reduced the most, from hundreds of µg/L as recent as 2016 to 49 µg/L in 2021. Shallow port A, which is separated from the extraction well screens by silt and clay beds, has generally exhibited lower concentrations (Figure 18). Overall average trends observed through the 2021 event have continued to decrease.

The 2021 TCE concentration in groundwater samples from ERT-MW-2B (219 µg/L), located at the downgradient end of the plume to the west of the OMP extraction wells, was higher than the 2020 concentration (180 µg/L). The TCE concentration of 360 µg/L measured at ERT-MW-2B in 2019 was the highest level detected at this well during the long-term monitoring program. The lower levels of TCE detected in 2020 and 2021 compared with the 2019 level is more consistent with the overall reducing trend. The 2021 TCE concentrations in groundwater samples collected from ERT-MW-1B, located at the downgradient end of the plume to the east of the OMP extraction wells, have reduced slightly compared to 2020 levels. In ERT-MW-1B, historical data show an overall reducing trend. Plots of CVOC concentration with time for these wells are presented in Figure 19. TCE concentrations in groundwater samples collected from ERT-MW-3, MPW-05, MPW-06, ERT-MW-5A/B, and ERT-MW-4A/B ranged from non-detect to 5.85 µg/L and were used to define the western and eastern limits of the downgradient plume.

Based on the overall trends in total VOC concentrations from 2014 to 2021, operation of ERT-EW-6 and the increased overall extraction rate appears to have a direct influence on the MPW-09 cluster, located just downgradient of the OMP facility. The greatest impact appears to be on intermediate and deep portions of the plume, as shown in the graphs for MPW-09 ports B, C and D (Figure 18), where operating OMP extraction wells ERT-EW-1, ERT-EW-2, and ERT-EW-6 are completed. The sample from shallow port MPW-09-A, which is separated from the extraction well screen zones by low permeability silt and clay deposits, does not show the same reduction in concentration. This indicates that the OMP extraction wells are targeting the depth interval impacted by the plume and that their continued operation will continue to remove contaminant mass from the downgradient portion of the plume.

3.4 Natural Attenuation

The primary mechanism for natural attenuation of chlorinated ethenes is reductive dechlorination. If sufficient hydrogen, suitable bacteria and favorable hydrogeochemical conditions are present, chlorinated compounds such as PCE and TCE will be progressively dechlorinated, resulting in compounds that ultimately breakdown to carbon dioxide. As chlorine atoms are replaced by hydrogen, PCE degrades to TCE, which subsequently degrades to DCE, with the "cis" isomer (cis-1,2-DCE) predominant over the "trans" isomer (trans-1,2-DCE). As reductive dechlorination proceeds, VC is produced, and, ultimately, ethene and carbon dioxide as shown below (Chapelle, 1993; Wiedemeier et al., 1998).

PCE (C_2Cl_4) → TCE (C_2HCl_3) → DCE ($C_2H_2Cl_2$) → VC (C_2H_3Cl) → Ethene (C_2H_4) → CO_2

The 2021 comprehensive sampling event is consistent with past annual sampling events in indicating that favorable reductive dechlorination hydrogeochemical conditions do not exist at the site. The relatively high DO levels and positive ORP levels measured in groundwater during the 2021 groundwater sampling event indicate aerobic conditions are present in the aquifer, which does not support active reductive dechlorination. Low and/or non-detect concentrations of the degradation products of reductive dechlorination in groundwater samples, such as cis-1,2-DCE and VC, also indicate that limited reductive dechlorination is occurring. These conditions are consistent with those observed in groundwater during the RI, which also indicated limited reductive dechlorination of TCE. This suggests that decreases in contamination are due a combination of remedial activities performed at the site and natural attenuation processes other than biotic/abiotic degradation.

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FIGURES

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10/14/2021
JM
Source: HGL, HDR, ESRI
ArcGIS Online Imagery

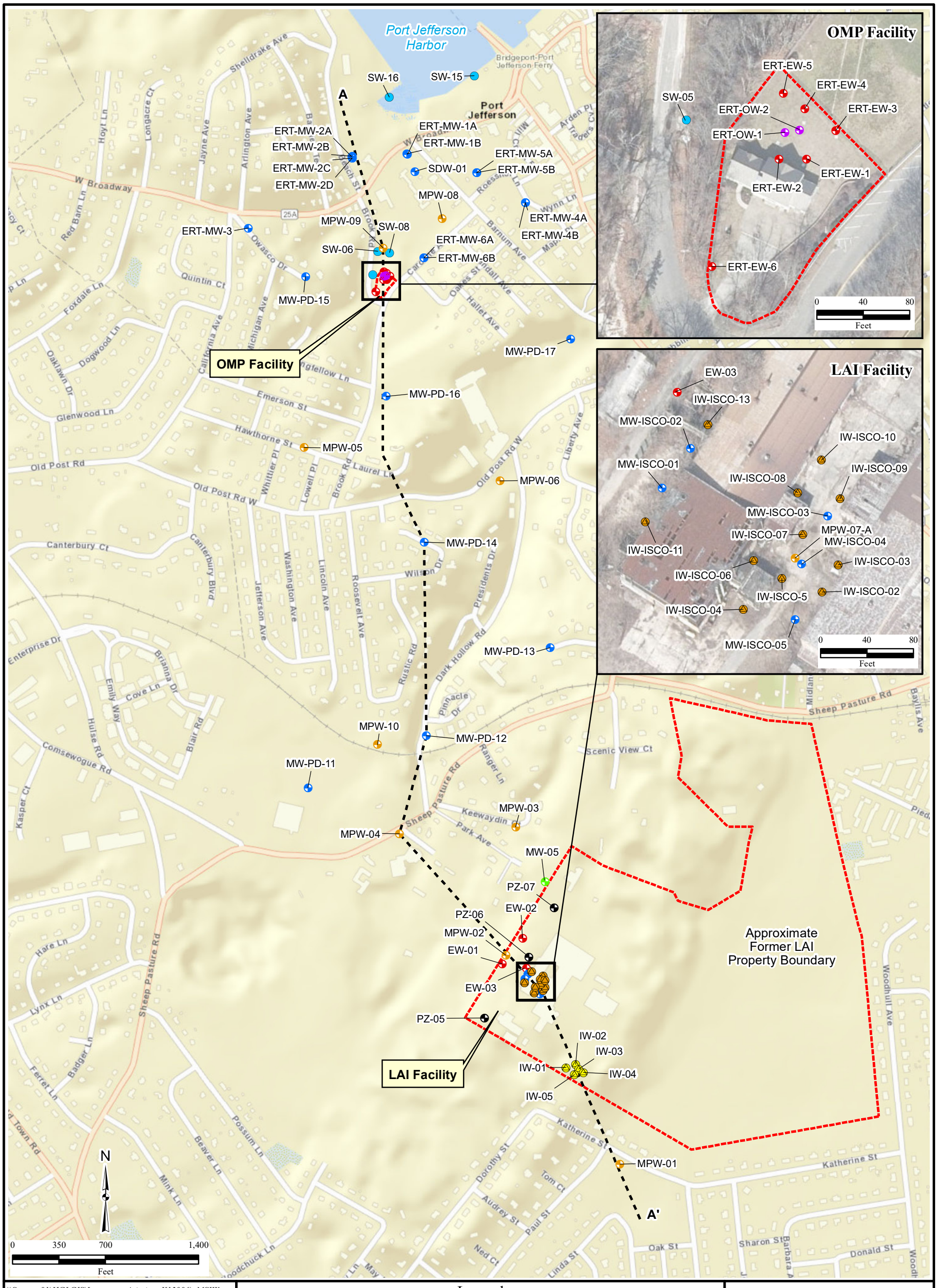
Legend

Site Location

Site Boundary

HGL HydroGeoLogic, Inc

Figure 1
Site Location Map



\\Srv-gst-01\HGLGIS\Lawrence_Aviation_K13006_MSIW\EW_3_ConnectionWP\(02)Sample_Locations.mxd
9/8/2021 JG
Source: HGL, HDR
ArcGIS Online Imagery

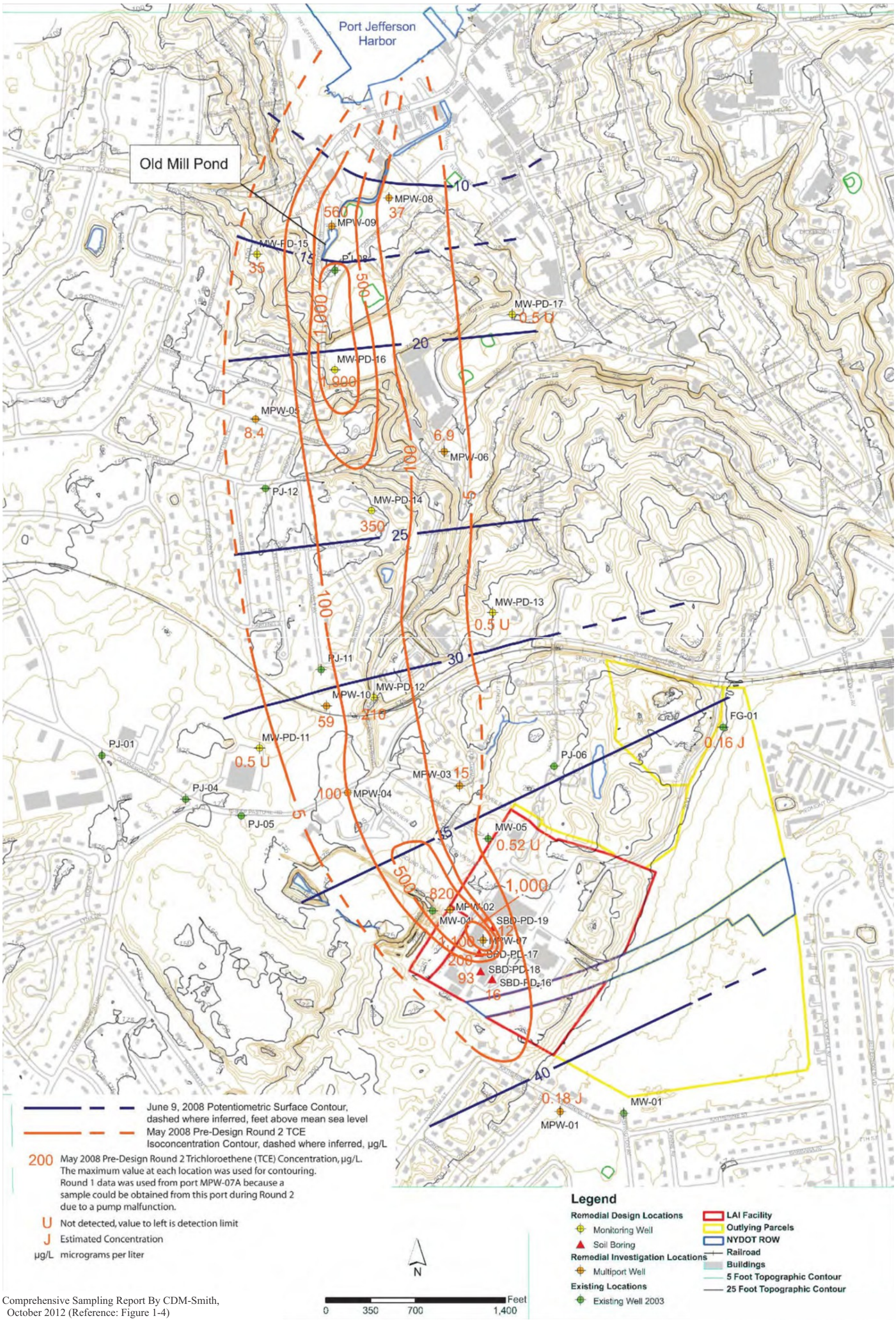
HGL HydroGeoLogic, Inc

Legend

- ERT Extraction Well
- Piezometer
- Multiport Well
- Monitoring Well
- ERT Monitoring or Observation Well
- DEC Monitoring Well
- ISCO Injection Well
- Injection Well
- Surface Water Location
- Cross Section A-A'
- Site Boundary

Notes:
DEC=Department of Environmental Conservation
ERT=Electrical Resistivity Tomography
ISCO=In Situ Chemical Oxidation
LAI=Lawrence Aviation Industries
OMP=Old Mill Pond

Figure 2
Monitoring Well Surface Water Sample Locations and Cross Section Location Map



Source: Comprehensive Sampling Report By CDM-Smith, October 2012 (Reference: Figure 1-4)

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10/13/2021 JM
Source: HGL

HGL HydroGeoLogic, Inc

Legend

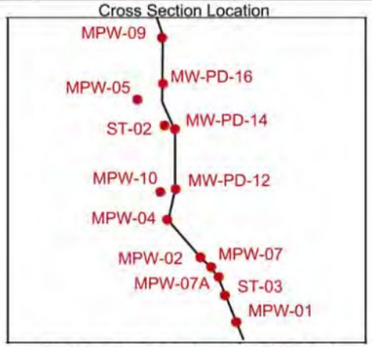
Note:
Topographic elevation data is in Feet above Mean Sea Level (datum is NAVD88)

Figure 3
May 2008 Pre-Design Round 2 TCE Isoconcentration Contours - Plan View

North
A

South
A'

Cross Section Location



Site Map Scale 1 inch equals 3,580 feet

Elevation (feet above mean sea level)

Distance Along Baseline (ft)

Upper Glacial Aquifer

Magothy Aquifer

Round 1

Screened Interval

Vertical Exaggeration: 10X Horizontal Scale (feet) Vertical Scale (feet)

Source: Comprehensive Sampling Report By CDM-Smith, October 2012 (Reference: Figure 1-3)

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10/13/2021 JM
Source: HGL

HydroGeoLogic, Inc

Legend

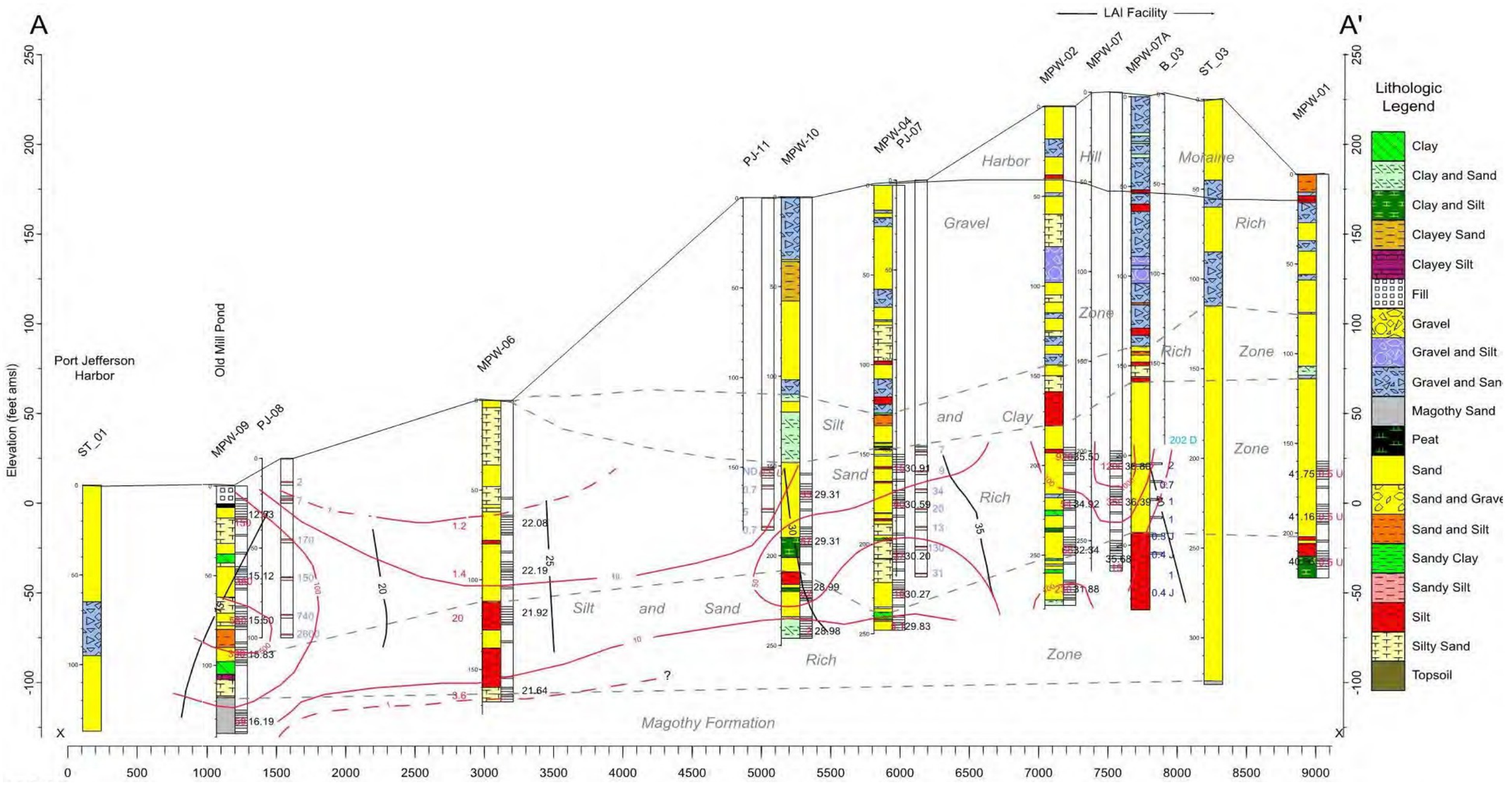
Stratigraphy
- USCS Clayey Sand
- USCS Well-graded Sand
- USCS Well-graded Gravelly Sand
- Silt
- USCS Silty Sand
- USCS Well-graded Sandy Gravel
- USCS Poorly-graded Sand
- USCS Well-graded Sand with Silt
- Sandy Silt
- USCS Low Plasticity Silty Clay
- USCS Silt
- USCS Poorly-graded Gravelly Sand

Well Construction
- Casing
- Well Screen
- Native Material

TCE Isoconcentration Contour (µg/l) Dashed where inferred
Water Table
AQUIFER BOUNDRY
Ground Surface Elevation

Notes:
Round 1 analytical results were used for MPW-07A because a sample could not be obtained from MPW-02-A during Round 2.
*Water level elevation from MPW-07-A was anomalous and was not used.
All results in micrograms per liter (µg/L).
Water Level and analytical data are posted at the mid point of screened interval.
Groundwater Sample Results:
Tetrachloroethene (PCE)
Trichloroethene (TCE)
cis-1,2-Dichloroethane (cis-1,2-DCE)
Vinyl Chloride
All U=all analytes not detected
U=not detected, detection limit is value to left (µg/L)
J=estimated concentration

Figure 4
May 2008 Pre-Design Round 2
TCE Groundwater Sampling Results
Cross Section



\\Srv-gst-01\hglgis\Lawrence_Aviation_K13006_MSIW\
2021_CSE
(04)TCE_Results_Cross_Section
10/13/2021 JM
Source: HGL

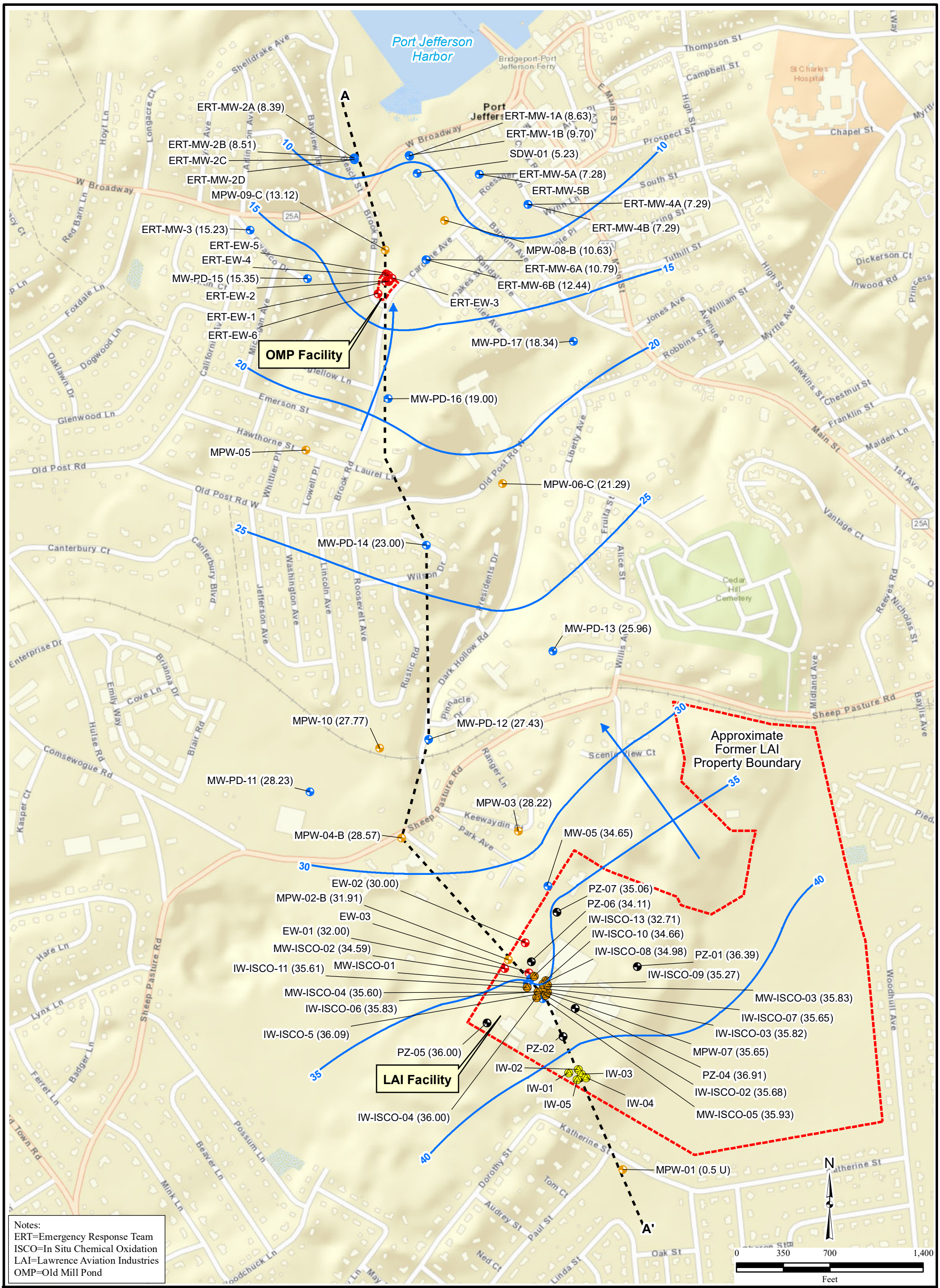
HGL HydroGeoLogic, Inc

Legend

U or ND - Not Detected, if U value to is the detection limit
59 - TCE Results, Round 1 Groundwater samples, February-March 2005
202 D - TCE Results, groundwater screening sample, 12/3/1997
J - Estimated
D - Dilluted Sample
E - Estimated, result above calibration range
U - Not Detected
2600 - SCHD TCE Groundwater Screening Data, July 1991-March 1992
1 - TCE Groundwater Screening Data, Summer 2004
0.5 U - TCE Results, 10/23/2003
12.53 - Water Level Elevation, feet amsl, March 7, 2005
MPW - multiport monitoring well
PJ - Suffolk County Health Dept. (SCHD) Groundwater Screening Location
ST - Stratigraphic boring
amsl - above mean sea level
- Potentiometric surface contour, dashed where inferred, March 7, 2005, feet amsl
- TCE Isoconcentration contour, dashed where inferred, March 2005, micrograms/liter
All TCE Data is in micrograms/liter

Vertical Exagerration: 14
Horizontal Scale: 1:8400
Vertical Scale: 1:600

Figure 5
Geologic Cross Section



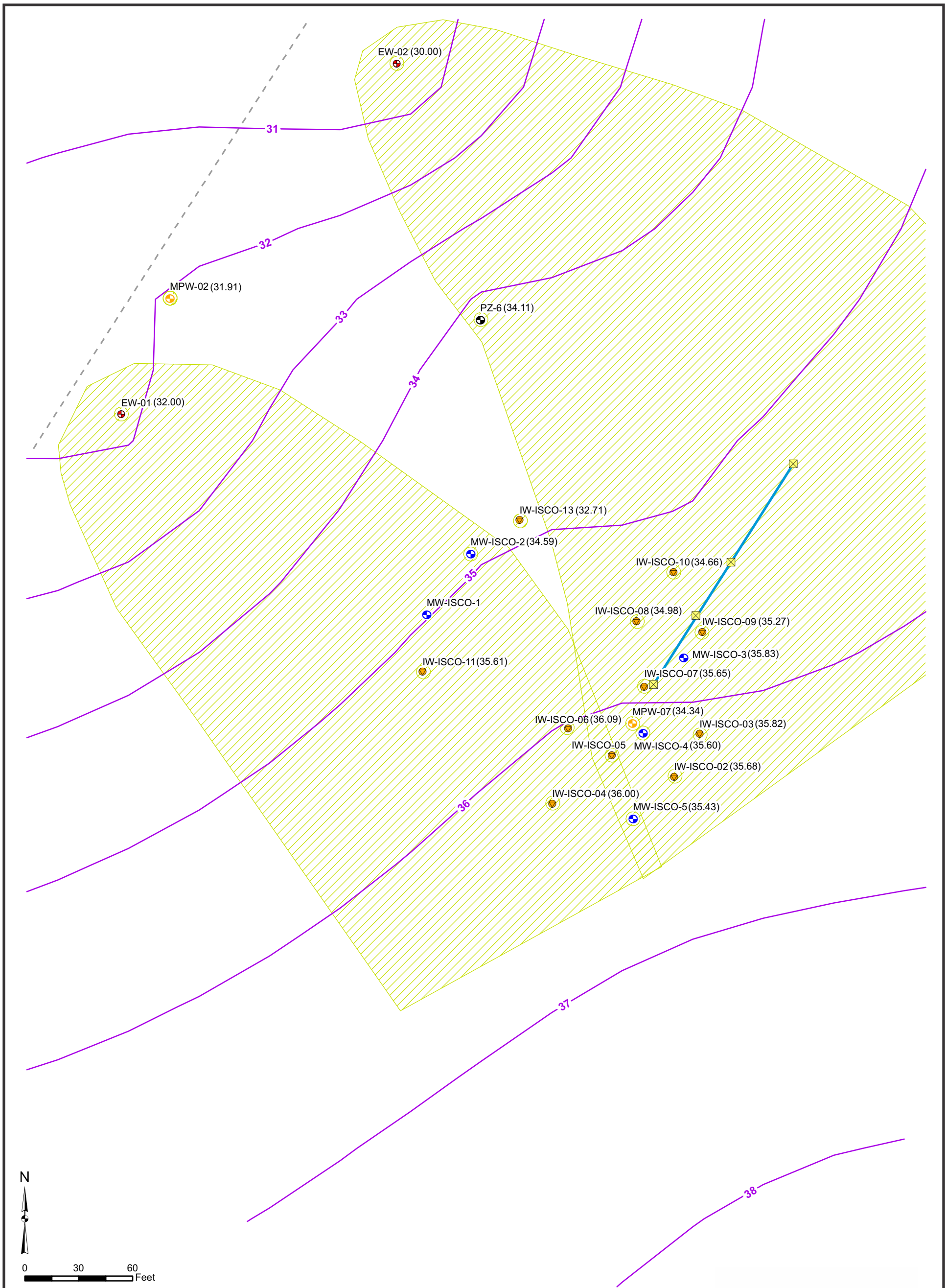
\\Srv-gst-01\HGLGIS\Lawrence_Aviation_K13006_MSIW\EW_3_ConnectionWP\(06)Upper_Aquifer_Pot_Surface.mxd
10/14/2021 JM
Source: HGL, HDR
ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

Legend

- ERT Extraction Well
- Multiport Well
- Piezometer
- Monitoring Well
- ISCO Injection Well
- Injection Well
- Cross Section A-A'
- Approximate Potentiometric Surface (ft amsl)
- Approximate Groundwater Flow Direction
- Surface Water Body
- Site Boundary

Figure 6
June 2021 Upper Glacial Aquifer Potentiometric Surface



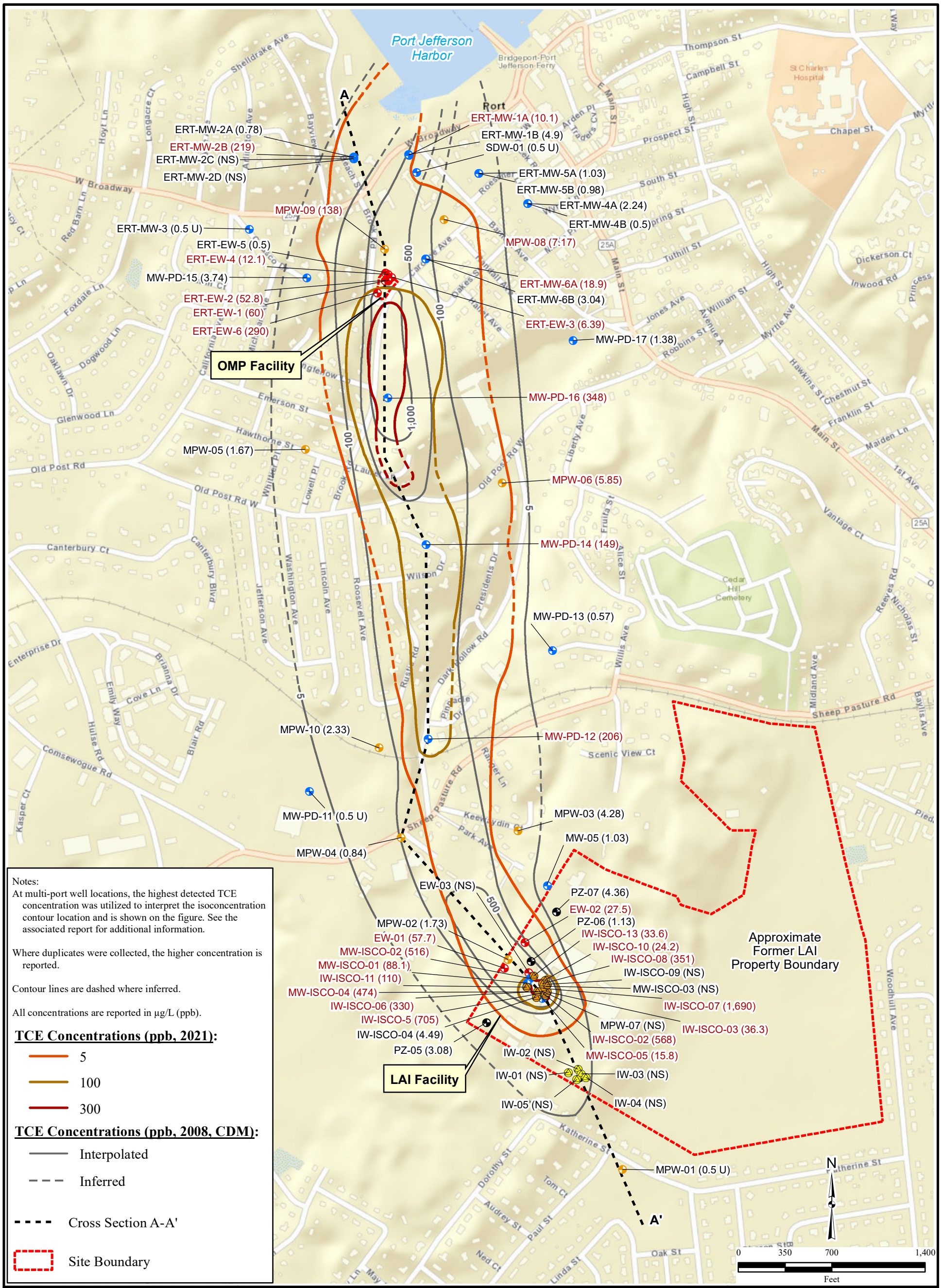
\\Srv-gst-01\hglgis\Lawrence_Aviation_K13006_MSIW\2021_CSE
(07)Capture_Zones
10/13/2021 JM
Source: HGL

HGL HydroGeoLogic, Inc

Legend

- Multiport Well
- Monitoring Well
- Piezometer
- ISCO Injection Well
- ERT Extraction Well
- Floor Drains
- Floor Drain Pipe
- 2021 Groundwater Contours (ft amsl)
- Well Capture Zones
- Approximate Former Lawrence Aviation Industries Property Boundary

Figure 7
Approximate Capture Zones for EW-01 and EW-02
June 2021



Notes:
At multi-port well locations, the highest detected TCE concentration was utilized to interpret the isoconcentration contour location and is shown on the figure. See the associated report for additional information.

Where duplicates were collected, the higher concentration is reported.

Contour lines are dashed where inferred.

All concentrations are reported in µg/L (ppb).

TCE Concentrations (ppb, 2021):

- 5
- 100
- 300

TCE Concentrations (ppb, 2008, CDM):

- Interpolated
- Inferred

- Cross Section A-A'
- Site Boundary

\\Srv-gst-01\HGLGIS\Lawrence_Aviation_K13006_MSIW\EW_3_ConnectionWP\(01)Well_Locations_TCE_June2021.mxd
9/9/2021 JG
Source: HGL, HDR
ArcGIS Online Imagery

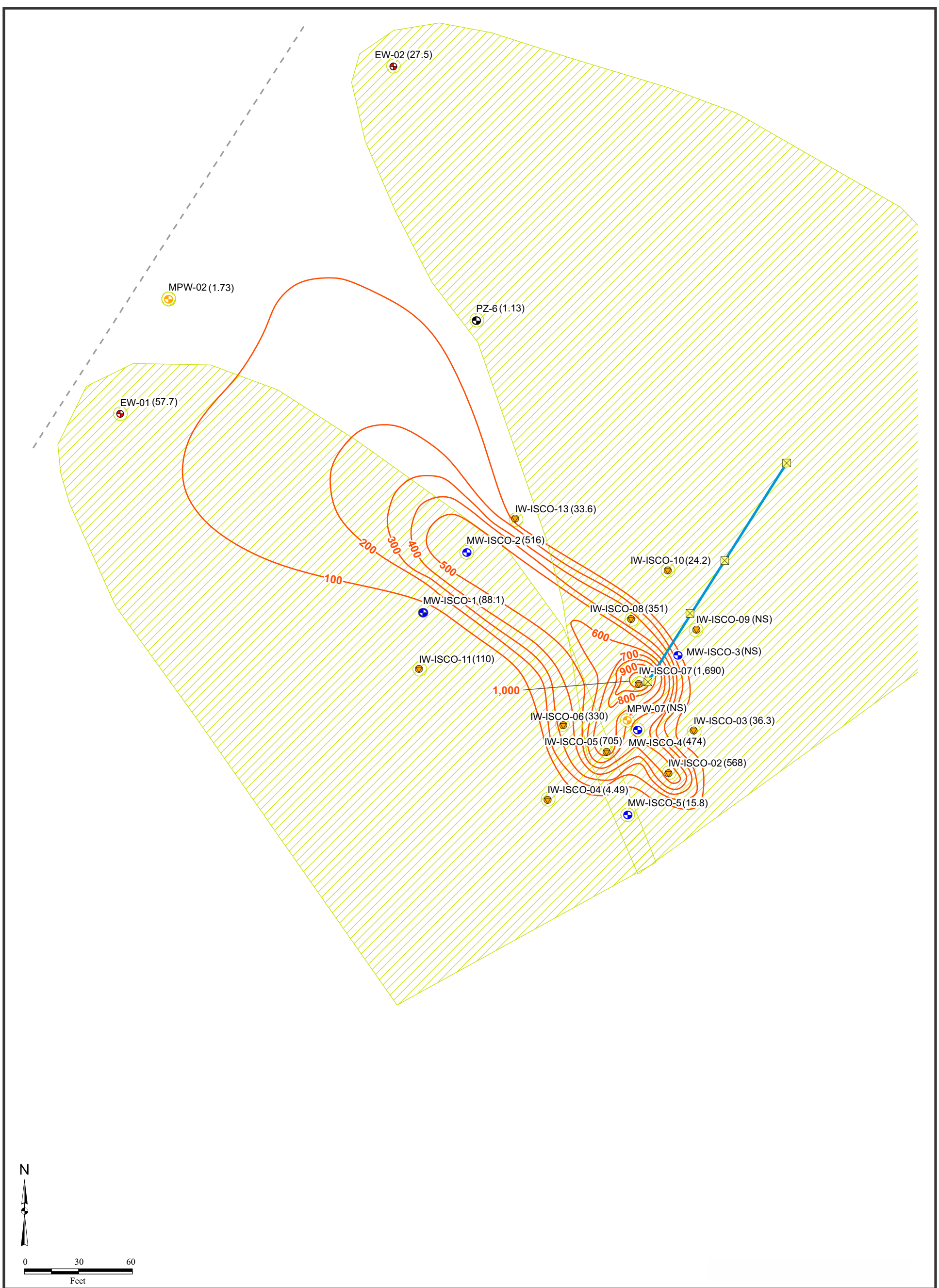
HGL HydroGeoLogic, Inc

Legend

- ERT Extraction Well
- Piezometer
- Multiport Well
- Monitoring Well
- ISCO Injection Well
- Injection Well

Notes:
Red indicates exceedance of NYSDEC Class GA Water Quality Standard for TCE of 5 µg/L.
µg/L=micrograms per liter
ERT=Electrical Resistivity Tomography
ISCO=In Situ Chemical Oxidation
J=concentration estimated
LAI=Lawrence Aviation Industries
NS=not sampled
OMP=Old Mill Pond
ppb=parts per billion
TCE=trichloroethene
U=non-detect

Figure 8
June 2021 Comprehensive Sampling TCE Isocentration Contours



\\Srv-gst-01\hglgis\Lawrence_Aviation_K13006_MSIW\2021_CSE
(09)TCE_Source_Area_Wells
11/10/2021 TH
Source: HGL

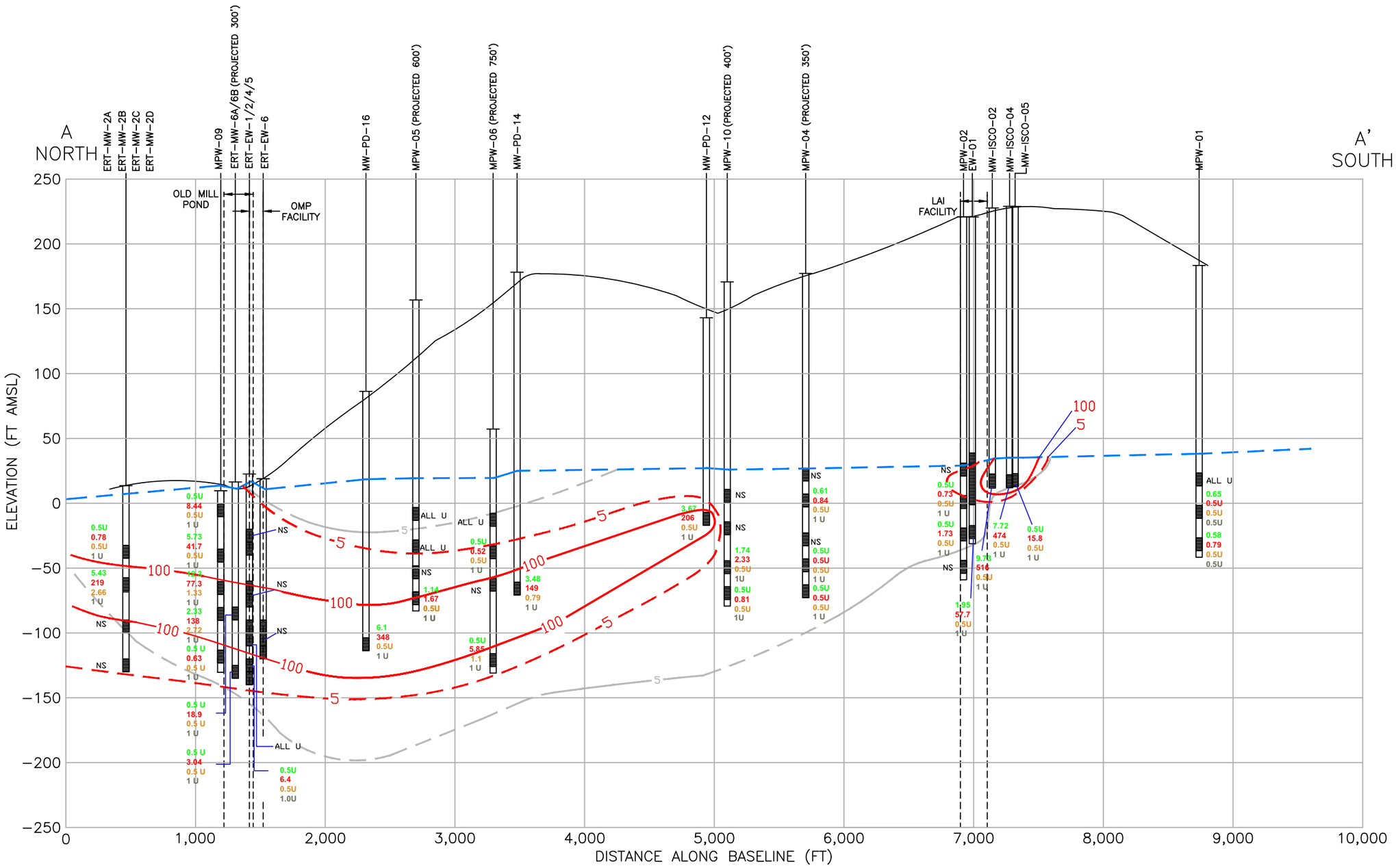
HGL HydroGeoLogic, Inc

Legend

- Multiport Well
- Monitoring Well
- Piezometer
- ISCO Injection Well
- ERT Extraction Well
- Floor Drains
- Floor Drain Pipe
- TCE Concentrations (2021, in ppb)
- Well Capture Zones
- Approximate Former Lawrence Aviation Industries Property Boundary

Note:
ppb=parts per billion

Figure 9
June 2021 TCE Distribution in Source Area Wells



\\Srv-gst-01\hglgis\Lawrence_Aviation_K13006_MSIW\2021_CSE (10)TCE_Cross_Section 11/10/2021 TH
Source: HGL

HGL HydroGeoLogic, Inc

LEGEND:

- WATER TABLE, ESTIMATED
- GROUND SURFACE ELEVATION
- TCE ISOCONCENTRATION CONTOUR IN PPB FROM JUNE 2021: PROJECTED WELLS NOT USED
- INFERRED TCE ISOCONCENTRATION CONTOUR IN PPB FROM JUNE 2021
- TCE ISOCONCENTRATION CONTOUR IN PPB FROM MAY 2008 (DASHED WHERE INFERRED)

GROUNDWATER SAMPLE RESULTS

- 0.5U TETRACHLOROETHENE(PCE)
- 3.2 TRICHLOROTHENE(TCE)
- 0.5U CIS-1,2-DICHLOROETHENE(CIS-1,2-DCE)
- 0.5U VINYL CHLORIDE

NOTE:
1. ALL RESULTS ARE SHOWN IN MICROGRAMS PER LITER.
2. AN AVERAGE WATER TABLE ELEVATION WAS USED FOR MPWS AND CLUSTERED WELLS.
3. GROUNDWATER GENERALLY TRENDS IN A NORTH – NORTHWESTERN DIRECTION FROM THE LAI FACILITY TO THE OMP FACILITY.
4. AT MULTI-PORT WELLS THE HIGHEST CONCENTRATIONS ARE SHOWN ON THIS FIGURE AND USED FOR TCE ISOCONCENTRATION CONTOUR CREATION.

ACRONYMS:

ERT – EMERGENCY RESPONSE TEAM
EW – EXTRACTION WELL
FT AMSL – FEET ABOVE MEAN SEA LEVEL
ISCO – IN-SITU CHEMICAL OXIDATION
J – ESTIMATED VALUES (– INDICATE LIKELY DIRECTION OF BIAS)
L – OFF-SCALE LOW
MPW – MULTIPORT WELL WITH PORT LETTER
MW – MONITORING WELL
NS – NOT SAMPLED
PPB – PARTS PER BILLION
PZ – PIEZOMETER
U – ANALYZED BUT NOT DETECTED

Figure 10
2021 Comprehensive Sampling Event
TCE Isoconcentration Contours
Cross Section

Figure 11
Total Ethene Concentrations in Source Area Wells vs Time

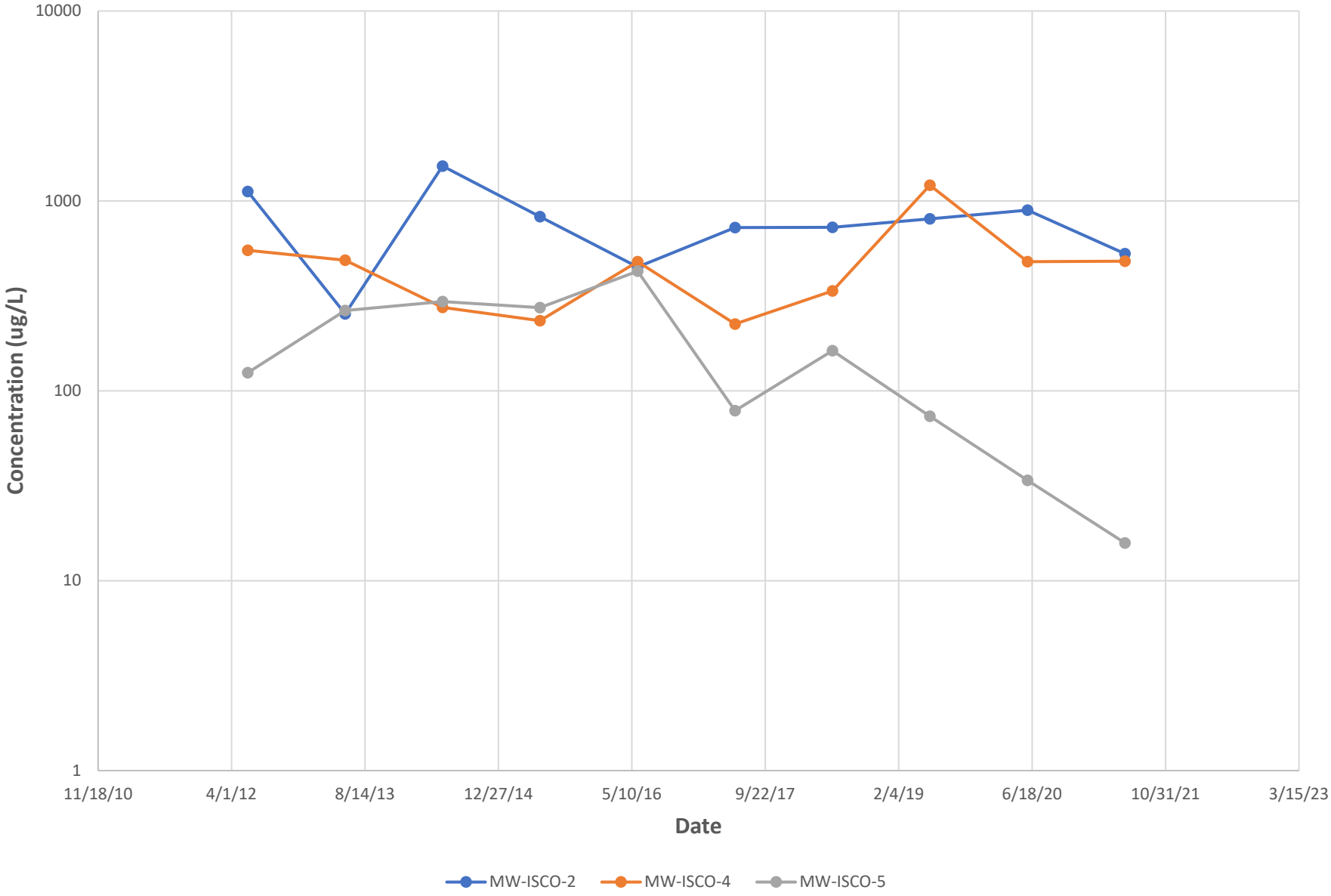


Figure 12
Average Total Ethene Concentrations in Source Area Wells vs Time

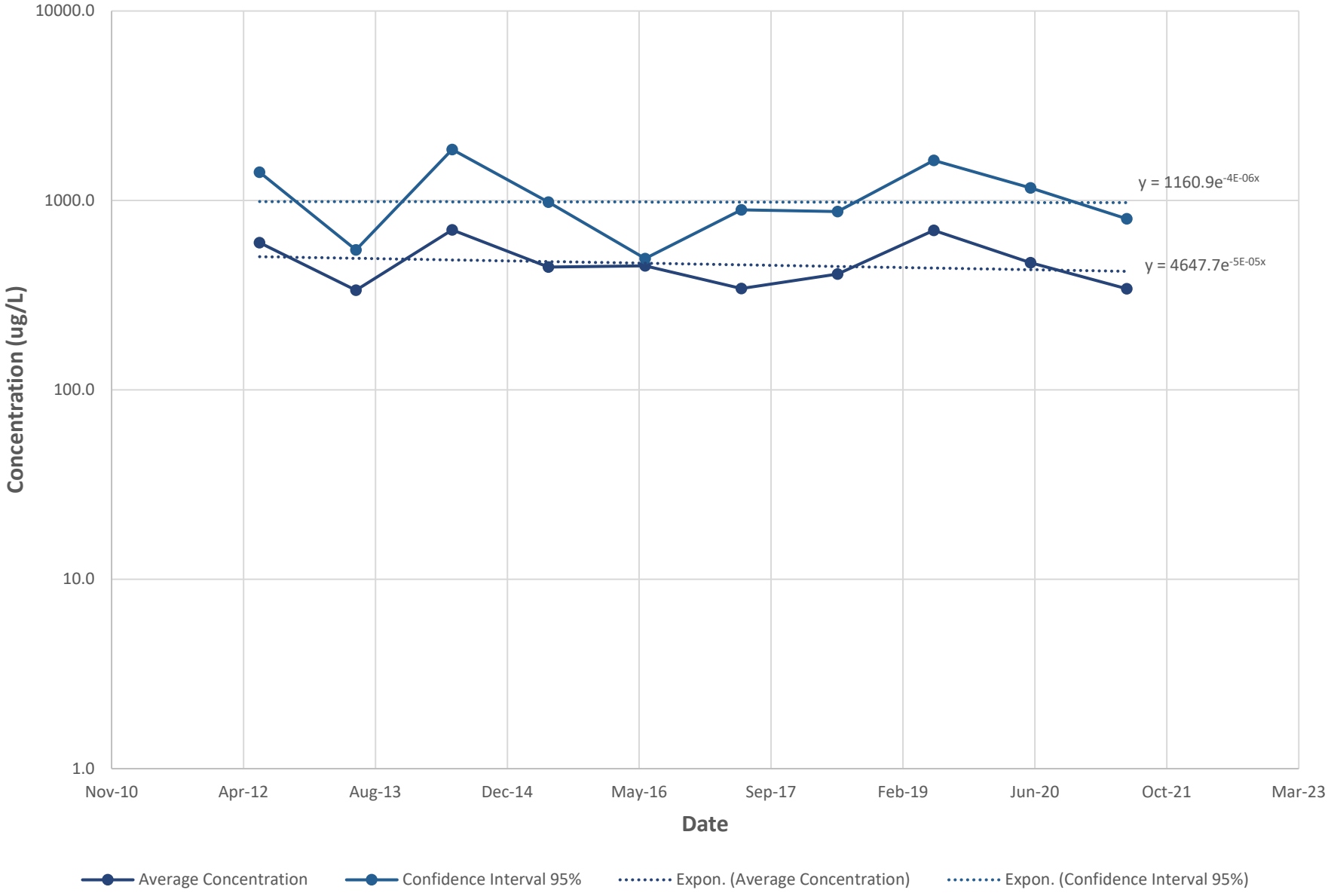


Figure 13
Total Ethene Concentrations in the Off-Site Plume vs Time

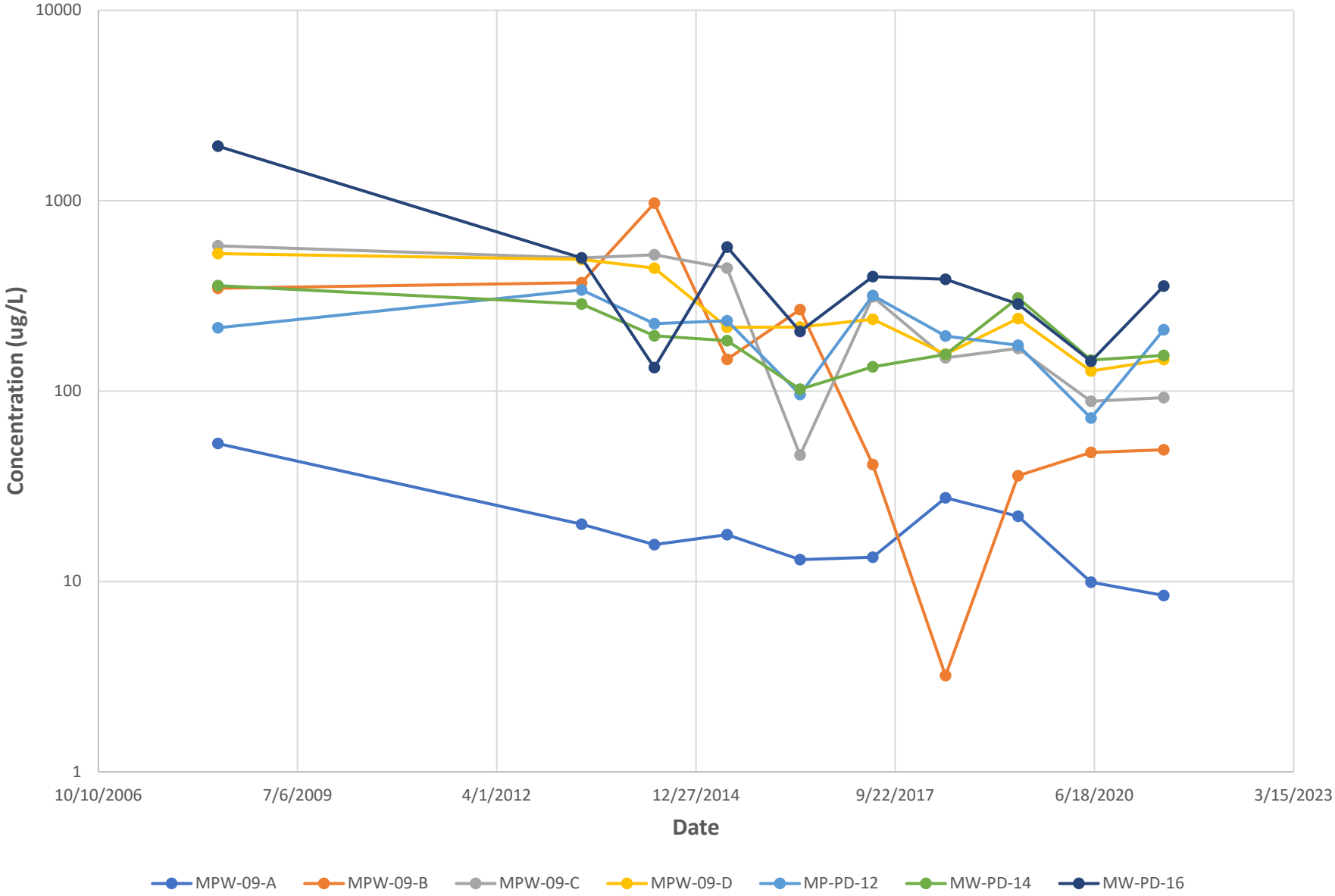


Figure 14
Average Total Ethene Concentrations in the Off-Site Plume vs Time

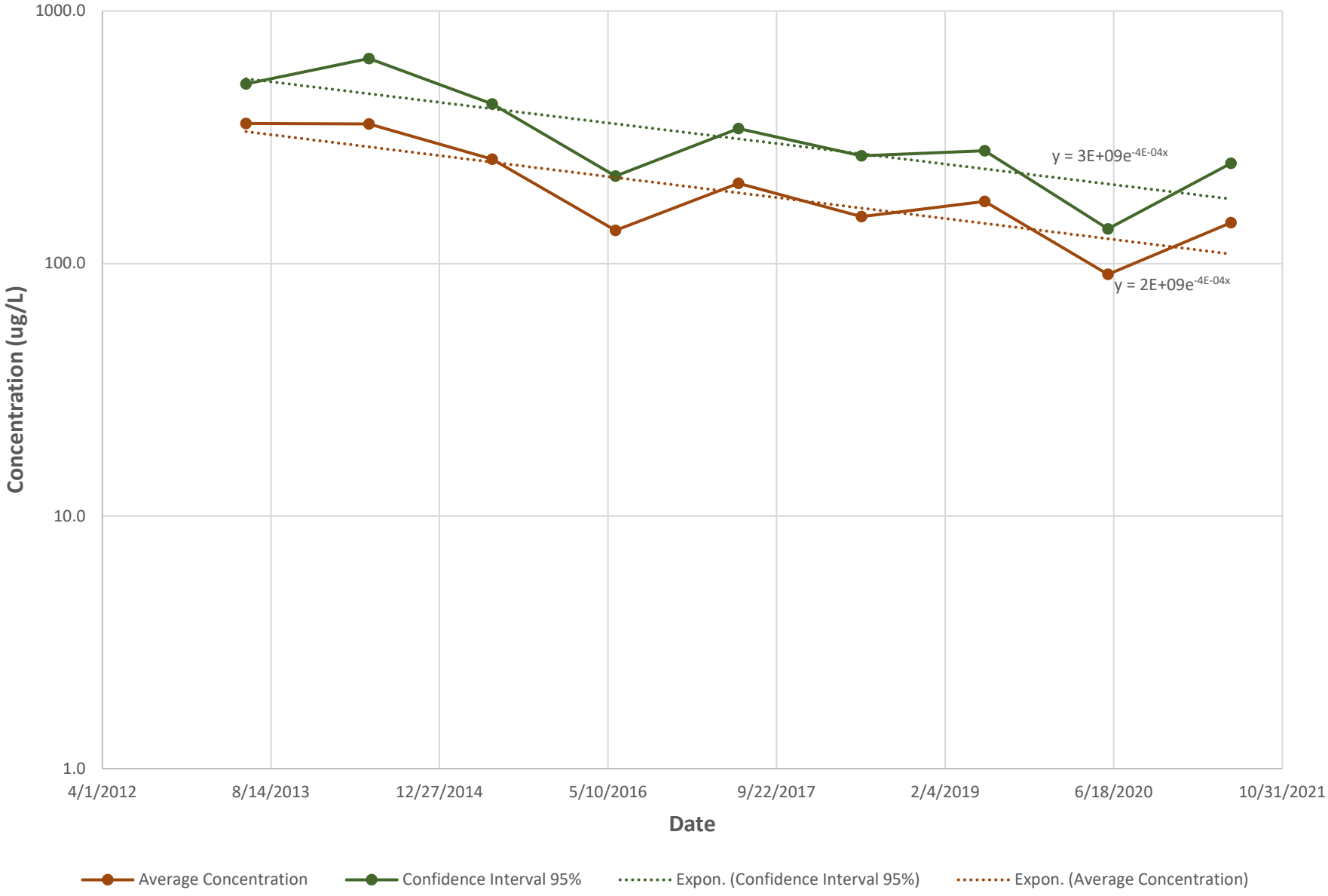


Figure 15
Total VOC Concentration Trend - MW-PD-12

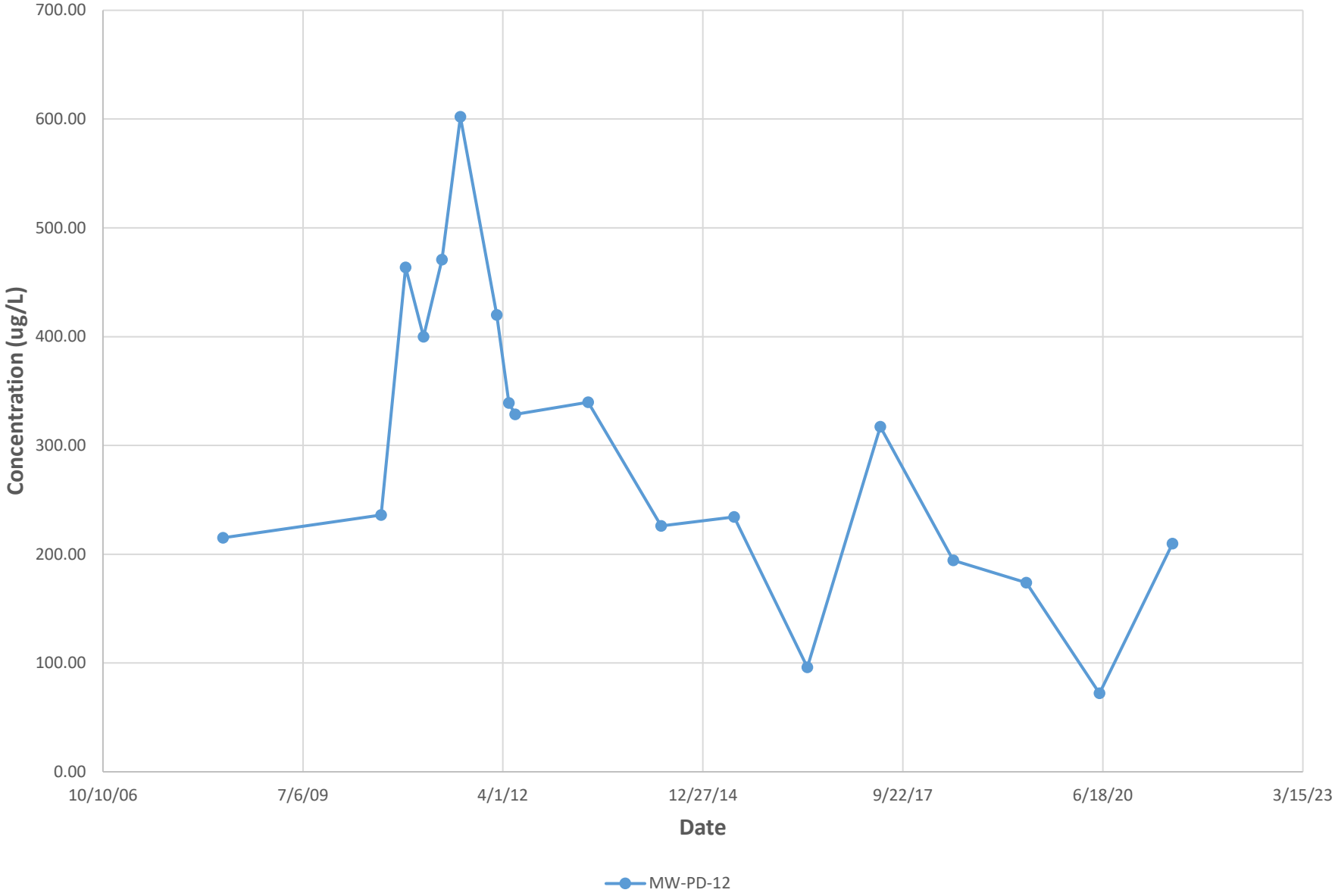


Figure 16
Total VOC Concentration Trend - MW-PD-14

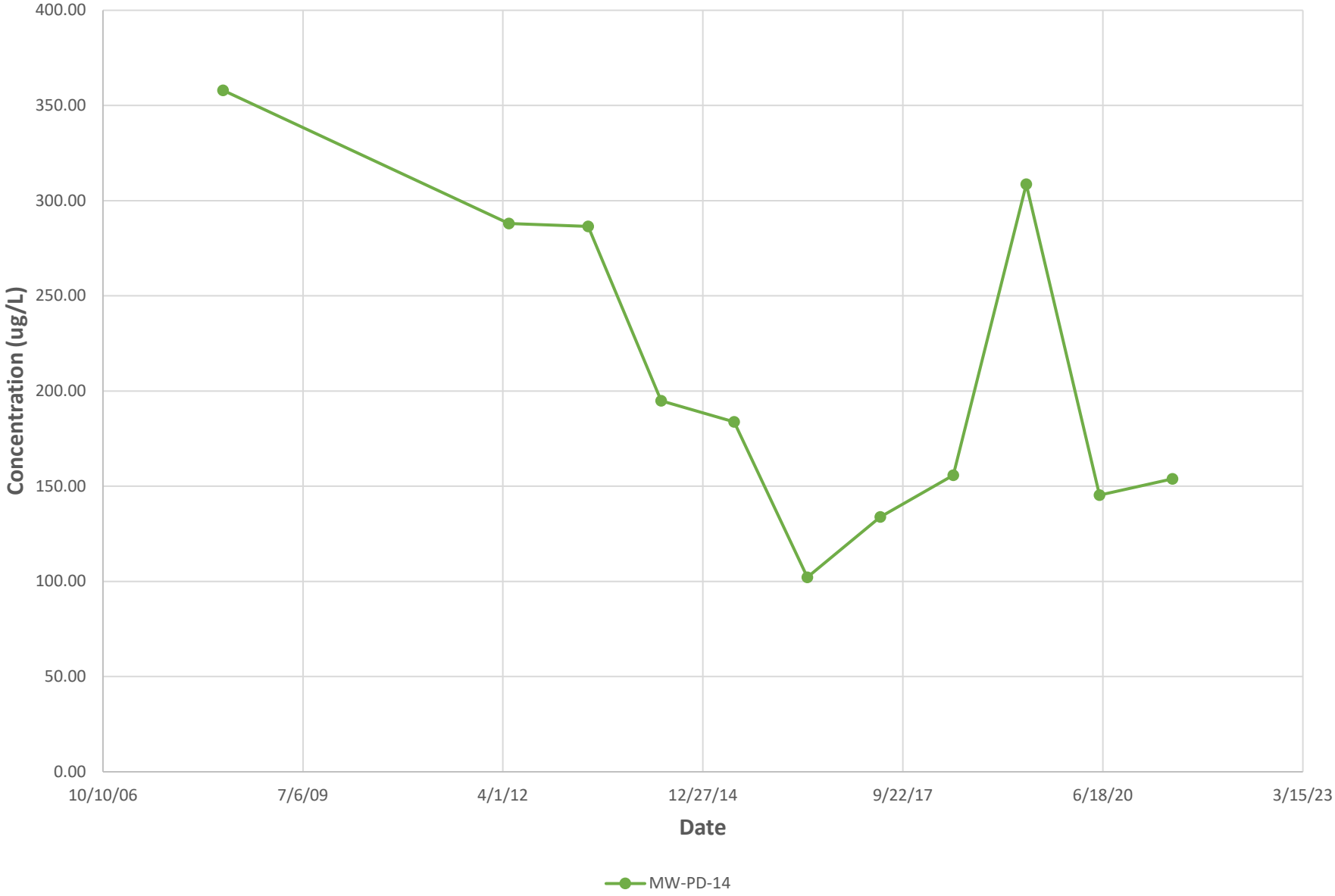


Figure 17
Total VOC Concentration Trend - MW-PD-16

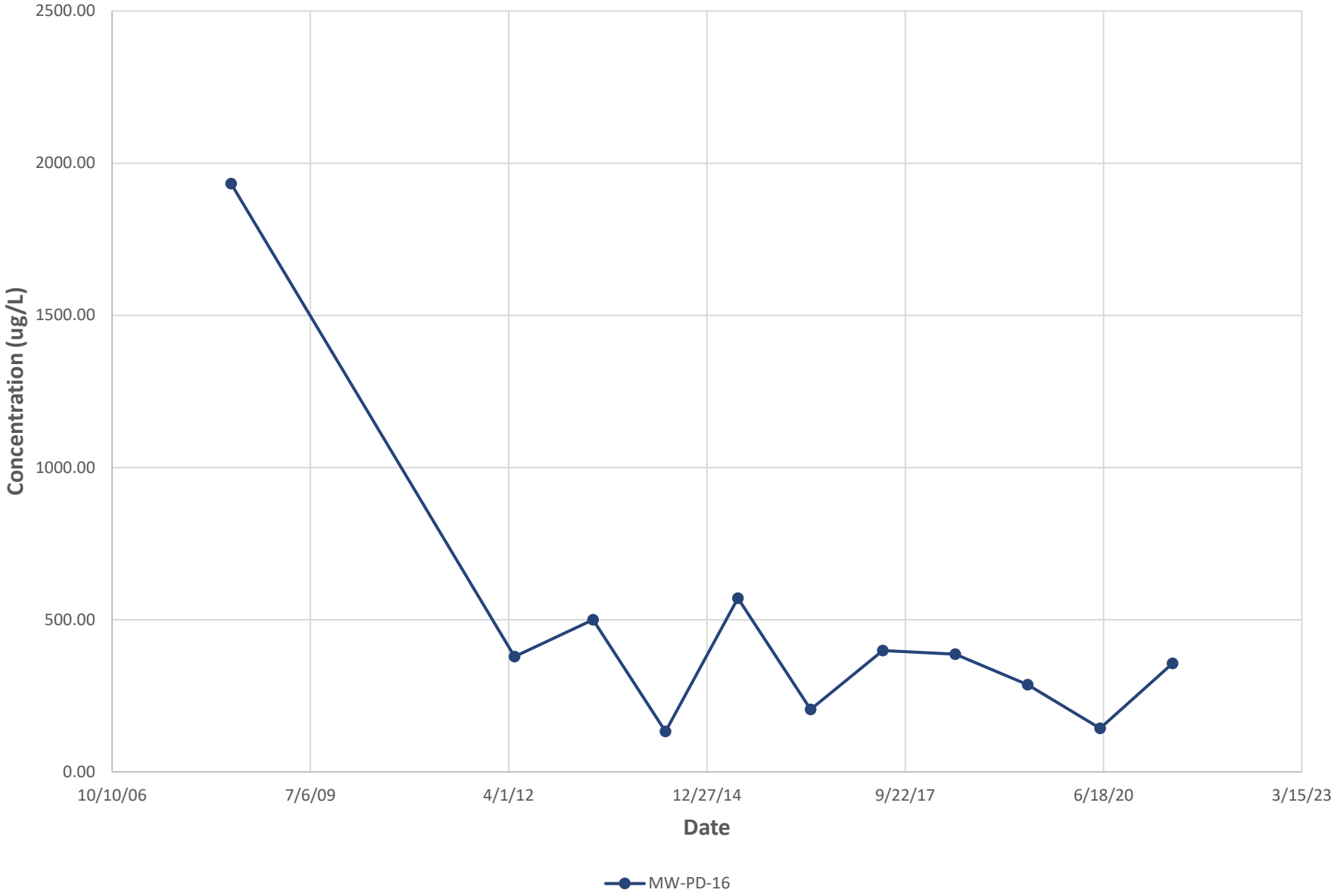


Figure 18
Total VOC Concentration Trend - MPW-09

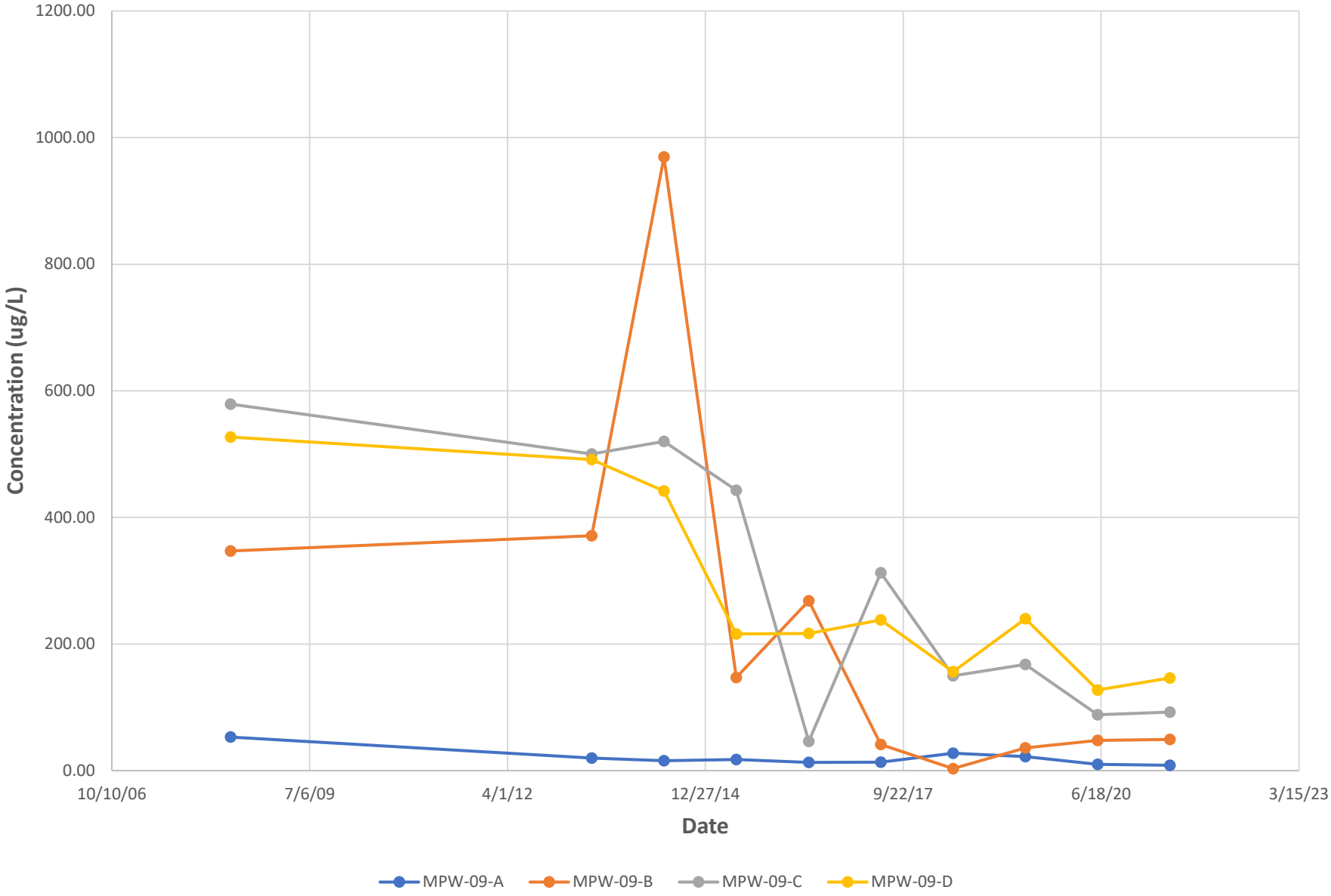
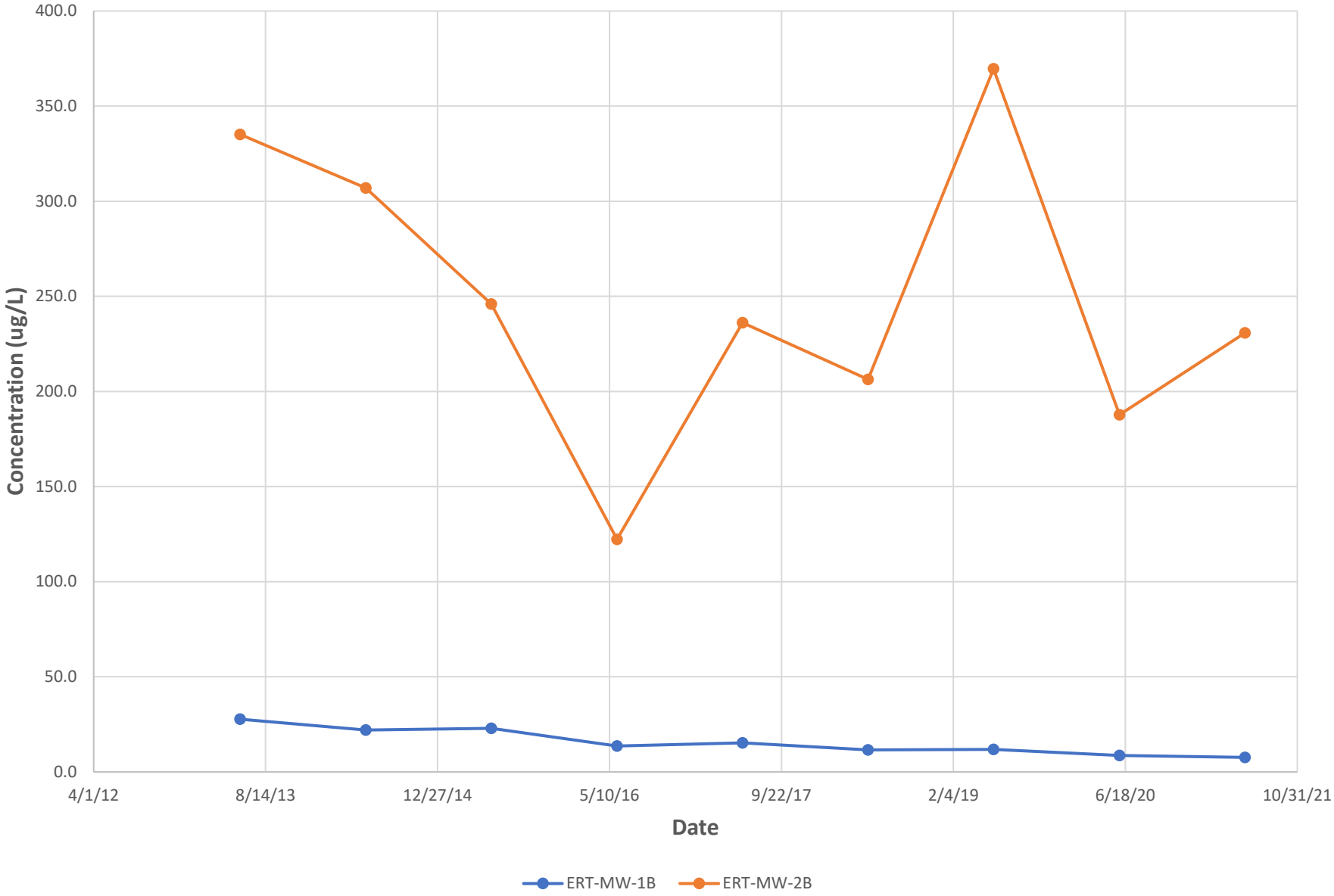


Figure 19
Total VOC Concentration Trend - ERT-MW-1B AND ERT-MW-2B



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TABLES

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Table 1
June 2021 Groundwater Elevations
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Well ID	Top of Casing Elevation (ft amsl)	Depth To Water (ft btoc)	June 2021 Groundwater Elevation Data (ft amsl)
ERT-EW-1 *	22.58	NR	NR
ERT-EW-2 *	22.76	NR	NR
ERT-EW-3	22.88	7.83	15.05
ERT-EW-4	22.56	7.21	15.35
ERT-EW-5	22.84	7.65	15.19
ERT-EW-6 *	18.97	NR	NR
ERT-MW-1A	11.33	2.70	8.63
ERT-MW-1B	11.38	1.68	9.70
ERT-MW-2A	12.61	4.22	8.39
ERT-MW-2B	12.71	4.20	8.51
ERT-MW-2C	8.81	NC	NC
ERT-MW-2D	8.67	NC	NC
ERT-MW-3	109.37	94.12	15.25
ERT-MW-4A	7.74	0.45	7.29
ERT-MW-4B	7.79	0.50	7.29
ERT-MW-5A	9.18	1.90	7.28
ERT-MW-5B	9.17	2.16	7.01
ERT-MW-6A	16.52	5.73	10.79
ERT-MW-6B	16.52	4.08	12.44
ERT-OW-1	22.65	NC	NC
ERT-OW-2	22.73	NC	NC
EW-01 *	219.30	187.30	32.00
EW-02 *	222.61	192.61	30.00
IW-01 *	225.99	162.00	63.99
IW-02 ***	225.27	302.00	-76.73
IW-03 *	224.99	178.00	46.99
IW-04 *	225.68	192.00	33.68
IW-05 *	224.48	196.00	28.48
IW-ISCO-2	228.50	192.82	35.68
IW-ISCO-3	228.50	192.68	35.82
IW-ISCO-4	228.50	192.50	36.00
IW-ISCO-5	228.50	192.41	36.09
IW-ISCO-6	228.50	192.67	35.83
IW-ISCO-7	228.50	192.85	35.65
IW-ISCO-8	228.50	193.52	34.98
IW-ISCO-9	228.50	193.23	35.27
IW-ISCO-10	228.50	193.84	34.66
IW-ISCO-11	228.10	192.49	35.61
IW-ISCO-13	227.20	194.49	32.71
MPW-01-A	183.40	143.10	40.30
MPW-01-B	183.40	143.90	39.50
MPW-01-C	183.40	143.94	39.46
MPW-02-A	221.02	188.52	32.50
MPW-02-B	221.02	189.11	31.91
MPW-02-C	221.02	190.67	30.35
MPW-02-D	221.02	191.32	29.70
MPW-03-A	189.73	NC	NC
MPW-03-B	189.73	161.51	28.22
MPW-03-C	189.73	161.59	28.14
MPW-03-D	189.73	173.54	16.19
MPW-04-A	177.23	148.24	28.99
MPW-04-B	177.23	148.66	28.57
MPW-04-C	177.23	149.25	27.98
MPW-04-D	177.23	148.78	28.45
MPW-04-E	177.23	149.32	27.91
MPW-05-A	156.80	135.83	20.97
MPW-05-B	156.80	136.32	20.48
MPW-05-C	156.80	136.05	20.75
MPW-05-D	156.80	136.61	20.19
MPW-06-A	57.29	36.41	20.88
MPW-06-B	57.29	36.86	20.43
MPW-06-C	57.29	37.14	20.15
MPW-06-D	57.29	37.60	19.69
MPW-07-A	229.11	191.65	37.46
MPW-07-B	229.11	194.77	34.34
MPW-07-C	229.11	195.16	33.95
MPW-08-A	17.08	NC	NC
MPW-08-B	17.08	6.45	10.63
MPW-08-C	17.08	6.17	10.91
MPW-08-D	17.08	6.99	10.09
MPW-08-E	17.08	6.68	10.40
MPW-09-A**	9.66	-1.91	11.57
MPW-09-B**	9.66	-73.18	82.84
MPW-09-C**	9.66	-3.46	13.12
MPW-09-D**	9.66	-24.49	34.15
MPW-09-E**	9.66	-3.21	12.87
MPW-10-A	170.73	142.94	27.79
MPW-10-B	170.73	142.96	27.77
MPW-10-C	170.73	143.28	27.45
MPW-10-D	170.73	143.66	27.07
MW-05	220.63	185.98	34.65
MW-ISCO-01	228.11	193.28	34.83
MW-ISCO-02	227.24	192.65	34.59
MW-ISCO-03	228.50	192.67	35.83
MW-ISCO-04	228.58	192.98	35.60
MW-ISCO-05	228.43	192.50	35.93
MW-PD-11	164.90	136.67	28.23
MW-PD-12	142.70	115.27	27.43
MW-PD-13	177.30	151.34	25.96
MW-PD-14	177.62	154.62	23.00
MW-PD-15	95.26	79.91	15.35
MW-PD-16	86.11	67.11	19.00
MW-PD-17	24.74	6.40	18.34
PZ-01	224.04	187.65	36.39
PZ-02	226.99	189.76	37.23
PZ-03	227.90	NC	NC
PZ-04	224.63	187.72	36.91
PZ-05	226.81	190.81	36.00
PZ-06	230.20	196.09	34.11
PZ-07	218.14	183.08	35.06
SDW-01	13.14	7.91	5.23

Notes:

ft amsl - Feet above mean sea level

ft boc - Feet below top of casing

NC - Not collected

NCA - Not collected due to artesian conditions

NR - Not reported because PLC reading was not representative of actual groundwater levels.
Samples were collected from treatment system's sampling port.

Depth to water and groundwater elevation readings in multiport wells were calculated using measured frequency output in accordance with manufacturer specifications.

* Groundwater elevation reading taken from PLC.

** Depth to water is calculated using in situ transducers. Wells under artesian conditions.

*** Possible error in measurement based on 6-15-21 measurements due to faulty pressure transducer.

Table 2
Vertical Hydraulic Gradients Along the Centerline of the Plume
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Well ID	Port	Top of Casing Elevation (ft amsl)	Top of Screened Interval (ft bgs)	Bottom of Screened Interval (ft bgs)	Depth To Water (ft btoc)	June 7 & 8 2021 Groundwater Elevation Data (ft amsl)	Hydraulic Gradient Relative to A Zone	Hydraulic Gradient Relative to Preceding Zone
MPW-01-A	A	183.40	160	170	143.10	40.30		
MPW-01-B	B	183.40	185	195	143.90	39.50	0.032	0.032
MPW-01-C	C	183.40	210	220	143.94	39.46	0.017	0.002
MPW-07-A	A	229.11	200	210	191.65	37.46		
MPW-07-B	B	229.11	220	230	194.77	34.34	0.156	0.156
MPW-07-C	C	229.11	250	260	195.16	33.95	0.070	0.013
MPW-02-A	A	221.02	190	200	188.52	32.50		
MPW-02-B	B	221.02	215	225	189.11	31.91	0.024	0.024
MPW-02-C	C	221.02	240	250	190.67	30.35	0.043	0.062
MPW-02-D	D	221.02	265	275	191.32	29.70	0.037	0.026
MPW-04-A	A	177.23	150	160	148.24	28.99		
MPW-04-B	B	177.23	170	180	148.66	28.57	0.021	0.021
MPW-04-C	C	177.23	200	210	149.25	27.98	0.020	0.020
MPW-04-D	D	177.23	220	230	148.78	28.45	0.008	-0.024
MPW-04-E	E	177.23	240	250	149.32	27.91	0.012	0.027
MPW-10-A	A	170.73	160	170	142.94	27.79		
MPW-10-B	B	170.73	185	195	142.96	27.77	0.001	0.001
MPW-10-C	C	170.73	215	225	143.28	27.45	0.006	0.010
MPW-10-D	D	170.73	235	245	143.66	27.07	0.010	0.019
MPW-05-A	A	156.80	160	170	135.83	20.97		
MPW-05-B	B	156.80	185	195	136.32	20.48	0.019	0.019
MPW-05-C	C	156.80	205	215	136.05	20.75	0.005	-0.013
MPW-05-D	D	156.80	225	235	136.61	20.19	0.012	0.028
MPW-09-A	A	9.66	10	20	-1.91	11.57		
MPW-09-B*	B	9.66	45	55	-73.18	82.84	-2.036	-2.036
MPW-09-C*	C	9.66	70	80	-3.46	13.12	-0.026	2.789
MPW-09-D*	D	9.66	90	100	-24.49	34.15	-0.282	-1.051
MPW-09-E	E	9.66	125	135	-3.21	12.87	-0.011	0.387
ERT-MW-2A	NA	12.61	46	56	4.22	8.39		
ERT-MW-2B	NA	12.71	71	81	4.20	8.51	-0.005	-0.005
ERT-MW-2C	C	5.67	90	100	NA	NA		
ERT-MW-2D	D	5.54	120	130	NA	NA		
ERT-MW-1A	NA	11.33	47	57	2.70	8.63		
ERT-MW-1B	NA	11.38	72	82	1.68	9.70	-0.043	-0.043

NOTES:

ft amsl - Feet above mean sea level ft bgs - Feet below ground surface

ft btoc - Feet below top of casing

NA - Measurement not available

* - Possible error in measurement based on June 2021 measurements

Table 3
Sample Location and Well Construction Information
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Well ID	Port	Top of Casing Elevation (ft amsl)	X Coordinate	Y Coordinate	Diameter of Well (inches)	Top of Screened Interval (ft bgs)	Bottom of Screened Interval (ft bgs)	Attempted for June 2021 Sampling Event	Sampled During June 2021 Event	Comment
ERT-EW-1*	NA	22.58	1240345.53	284149.95	6	120	140	x	x	Sampled as part of the Monthly Process Monitoring; transducer not functioning correctly. June 2021 collected expanded analyte list.
ERT-EW-2*	NA	22.76	1240321.71	284149.95	6	90	110	x	x	Sampled as part of the Monthly Process Monitoring; transducer not functioning correctly. June 2021 collected expanded analyte list.
ERT-EW-3*	NA	22.88	1240370.46	284174.31	6	90	110	x	x	
ERT-EW-4*	NA	22.56	1240343.76	284193.23	6	60	80	x	x	
ERT-EW-5*	NA	22.84	1240325.56	284206.51	4	20	40	x	x	
ERT-EW-6	NA	18.97	1240263.92	284057.195	6	90	120	x	x	Sampled as part of the Monthly Process Monitoring; transducer not functioning correctly. June 2021 collected expanded analyte list.
ERT-MW-1A	NA	11.33	1240501.82	285090.06	2	47	57	x	x	
ERT-MW-1B	NA	11.38	1240497.56	285093.63	2	72	82	x	x	
ERT-MW-2A	NA	12.61	1240083.17	285072.26	2	46	56	x	x	
ERT-MW-2B	NA	12.71	1240086.33	285075.08	2	71	81	x	x	
ERT-MW-2C	C	5.67	1240087.14	285062.176	2	90	100	x		No access. Marina storing floating docks on top of well.
ERT-MW-2D	D	5.54	1240087.02	285062.4	2	120	130	x		No access. Marina storing floating docks on top of well.
ERT-MW-3	NA	109.37	1239306.16	284533.89	2	223	233	x	x	
ERT-MW-4A	A	7.74	1241389.04	284724.897	2	70	80	x	x	
ERT-MW-4B	B	7.79	1241389.16	284725.116	2	120	130	x	x	
ERT-MW-5A	A	9.18	1241022.36	284951.901	2	90	100	x	x	
ERT-MW-5B	B	9.17	1241022.56	284952.129	2	120	130	x	x	
ERT-MW-6A	A	16.52	1240626.9	284309.368	2	80	90	x	x	
ERT-MW-6B	B	16.52	1240627.15	284309.238	2	125	135	x	x	
ERT-OW-1*	NA	22.65	1240326.9	284172.47	2	95	105			Observation Well
ERT-OW-2*	NA	22.73	1240339.27	284175.07	2	95	105			Observation Well
EW-01	NA	219.30	1241213.95	278985.42	10	182	248	x	x	Sampled as part of the Monthly Process Monitoring
EW-02	NA	222.61	1241367.23	279180.5	10	182	240	x	x	Sampled as part of the Monthly Process Monitoring
EW-03	NA	TBD	1241397.043	278955.772	6	185	225			Installed August-September 2021
FG-01	NA	201.43	1243376.35	280474.705	2	170	180			Paved over - well is lost
IW-01	NA	225.99	1241693.86	278204.79	6	183	248			Injection Well - injecting at time of synoptic
IW-02	NA	225.27	1241766.61	278227.33	6	183	248			Injection Well - injecting at time of synoptic
IW-03	NA	224.99	1241790.03	278192.12	6	183	248			Injection Well - injecting at time of synoptic
IW-04	NA	225.68	1241826.33	278167.07	6	183	248			Injection Well - injecting at time of synoptic
IW-05	NA	224.48	1241758.26	278150.73	6	183	248			Injection Well - injecting at time of synoptic
IW-ISCO-1	NA	228.50	1241495	278742	2	200	220			Well not accessible in June 2020
IW-ISCO-2	NA	228.50	1241522	278784	2	200	220	x	x	
IW-ISCO-3	NA	228.50	1241536	278807	2	200	220	x	x	
IW-ISCO-4	NA	228.50	1241454	278769	2	200	220	x	x	
IW-ISCO-5	NA	228.50	1241486.95	278795.69	2	200	220	x	x	
IW-ISCO-6	NA	228.50	1241462	278811	2	200	220	x	x	
IW-ISCO-7	NA	228.50	1241505	278834	2	200	220	x	x	
IW-ISCO-8	NA	228.50	1241501	278870	2	200	220	x	x	
IW-ISCO-9	NA	228.50	1241537	278864	2	200	220			
IW-ISCO-10	NA	228.50	1241521.28	278897.45	2	200	220	x	x	
IW-ISCO-11	NA	228.10	1241382	278842	2	200	220	x	x	
IW-ISCO-12	NA	227.60	1241408	278884	2	200	220			Well not accessible in June 2020. Well not found in June 2021, may be buried under debris.
IW-ISCO-13	NA	227.20	1241436	278926	2	200	220	x	x	
MPW-01-A	A	183.40	1242101.12	277475.448	4	160	170	x	x	
MPW-01-B	B	183.40	1242101.12	277475.448	4	185	195	x	x	
MPW-01-C	C	183.40	1242101.12	277475.448	4	210	220	x	x	
MPW-02-A	A	221.02	1241241.06	279049.859	4	190	200	x		Bladder non-functional in June 2020 and June 2021
MPW-02-B	B	221.02	1241241.06	279049.859	4	215	225	x	x	
MPW-02-C	C	221.02	1241241.06	279049.859	4	240	250	x	x	
MPW-02-D	D	221.02	1241241.06	279049.859	4	265	275	x		Bladder non-functional in June 2020 and June 2021
MPW-03-A	A	189.73	1241315.64	280017.573	4	175	185	x		Bladder non-functional in June 2020 and June 2021
MPW-03-B	B	189.73	1241315.64	280017.573	4	195	205	x	x	
MPW-03-C	C	189.73	1241315.64	280017.573	4	215	225	x	x	
MPW-03-D	D	189.73	1241315.64	280017.573	4	235	245	x	x	
MPW-04-A	A	177.23	1240440.96	279964.528	4	150	160	x		Bladder non-functional in June 2020 and June 2021
MPW-04-B	B	177.23	1240440.96	279964.528	4	170	180	x	x	
MPW-04-C	C	177.23	1240440.96	279964.528	4	200	210	x		Bladder non-functional in June 2020 and June 2021
MPW-04-D	D	177.23	1240440.96	279964.528	4	220	230	x	x	
MPW-04-E	E	177.23	1240440.96	279964.528	4	240	250	x	x	
MPW-05-A	A	156.80	1239723.03	282879.48	4	160	170	x	x	
MPW-05-B	B	156.80	1239723.03	282879.48	4	185	195	x	x	
MPW-05-C	C	156.80	1239723.03	282879.48	4	205	215	x		Bladder non-functional in June 2021
MPW-05-D	D	156.80	1239723.03	282879.48	4	225	235	x	x	
MPW-06-A	A	57.29	1241197.55	282627.237	4	65	75	x	x	
MPW-06-B	B	57.29	1241197.55	282627.237	4	90	100	x	x	
MPW-06-C	C	57.29	1241197.55	282627.237	4	115	125	x		Bladder non-functional in June 2020 and June 2021
MPW-06-D	D	57.29	1241197.55	282627.237	4	160	170	x	x	
MPW-07-A	A	229.11	1241498.44	278813.286	4	200	210	x		Bladders non-functional; transducer not functioning as of 2018.
MPW-07-B	B	229.11	1241498.44	278813.286	4	220	230	x		Bladders non-functional; transducer not functioning as of 2018
MPW-07-C	C	229.11	1241498.44	278813.286	4	250	260	x		Bladders non-functional; transducer not functioning as of 2018
MPW-08-A	A	17.08	1240764.77	284605.552	4	25	35	x	x	
MPW-08-B	B	17.08	1240764.77	284605.552	4	45	55	x	x	
MPW-08-C	C	17.08	1240764.77	284605.552	4	75	85	x	x	
MPW-08-D	D	17.08	1240764.77	284605.552	4	95	105	x	x	
MPW-08-E	E	17.08	1240764.77	284605.552	4	115	125	x	x	
MPW-09-A	A	9.66	1240317.25	284384.575	4	10	20	x	x	
MPW-09-B	B	9.66	1240317.25	284384.575	4	45	55	x	x	
MPW-09-C	C	9.66	1240317.25	284384.575	4	70	80	x	x	
MPW-09-D	D	9.66	1240317.25	284384.575	4	90	100	x	x	
MPW-09-E	E	9.66	1240317.25	284384.575	4	125	135	x	x	
MPW-10-A	A	170.73	1240276.04	280640.585	4	160	170	x		Bladder non-functional in June 2021
MPW-10-B	B	170.73	1240276.04	280640.585	4	185	195	x		Bladder non-functional in June 2021
MPW-10-C	C	170.73	1240276.04	280640.585	4	215	225	x	x	
MPW-10-D	D	170.73	1240276.04	280640.585	4	235	245	x	x	
MW-05	NA	220.63	1241539.11	279606.08	4	180	195	x	x	
MW-ISCO-01	NA	228.11	278874	1241384	4	206	216	x	x	
MW-ISCO-02	NA	227.24	1241408.33	278907.54	4	205	215	x	x	
MW-ISCO-03	NA	228.50	278850	1241527	4	205.75	215.75			
MW-ISCO-04	NA	228.58	1241504.14	278807.98	4	207	217	x	x	
MW-ISCO-05	NA	228.43	1241498.63	278760.26	4	206	216	x	x	
MW-PD-11	NA	164.90	1239752.51	280312.47	4	195	205	x	x	
MW-PD-12	NA	142.70	1240644.56	280706.4	4	150	160	x	x	
MW-PD-13	NA	177.30	1241574.79	281370.71	4	175	185	x	x	
MW-PD-14	NA	177.62	1240627.49	282166.23	4	239	249	x	x	
MW-PD-15	NA	95.26	1239734.72	284168.4	4	204	214	x	x	
MW-PD-16	NA	86.11	1240340.86	283265.25	4	190	200	x	x	
MW-PD-17	NA	24.74	1241728.59	283697.93	4	80	90	x	x	
PZ-01	NA	224.04	1242210.32	278999.38	2	198	208			
PZ-02	NA	226.99	1241653.38	278477.2	2	198	208			
PZ-03	NA	227.90	1242062.76	278320.85	2	198	208			
PZ-04	NA	224.63	1241742.8	278687.26	2	201	211	x	x	
PZ-05	NA	226.81	1241082	278576	2	196	206	x	x	
PZ-06	NA	230.20	1241414	279038	2	201.5	211.5	x	x	
PZ-07	NA	218.14	1241606	279410	2	190	200	x	x	
SDW-1	NA	13.14	1240558.67	284960.84	6	2	12	x	x	
SW-05	NA	NA	1240241.93	284183.55	NA	NA	NA			OMP Surface Water Sample
SW-06	NA	NA	1240278.21	284357.85	NA	NA	NA			OMP Surface Water Sample
SW-07	NA	NA	1240327.17	284371.39	NA	NA	NA			OMP Surface Water Sample
SW-08	NA	NA	1240366.23	284350.04	NA	NA	NA			OMP Surface Water Sample
SW-15	NA	NA	1241004.83	285682.85	NA	NA	NA			Port Jefferson Harbor Surface Water Sample
SW-16	NA	NA	1240364.29	285520.26	NA	NA	NA			Port Jefferson Harbor Surface Water Sample

NOTES:

Elevations for PZ-05 and PZ-07 are estimated

Coordinates are in New York State Plane - Long Island, Datum: NAD83, Units: feet ft amsl - Feet above mean sea level

ft amsl - feet above mean sea level

ft bgs - Feet below ground surface NA - Not available

* - Surface elevation not available, therefore, top of casing elevation used as surface elevation

Table 4
Groundwater Sampling Results - Site-Related VOCs June 2021
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Analyte					1,1,1-TCA		1,1-DCA		1,1-DCE		Chloroform		cis-1,2-DCE		PCE		TCE		VC	
Screening Criteria (µg/L)					5		5		5		7		5		5		5		2	
Location	HGL Field Sample ID	CLP ID	Matrix	Date Sampled	Results (µg/L)	Q	Results (µg/L)	Q	Results (µg/L)	Q	Results (µg/L)	Q	Results (µg/L)	Q	Results (µg/L)	Q	Results (µg/L)	Q	Results (µg/L)	Q
01-AS	LAI-AS-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
01-CINF	LAI-INF-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.76**		**37.7**		0.500	U
01-EFF	LAI-EFF-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
01-EFF (Dup)	LAI-EFF-2-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
01-EW01	EW-01-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.95**		**57.7**		1.00	U
01-EW02	EW-02-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.89**		**27.5**		1.00	U
02-AS	OMP-AS-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**3.23**		0.500	U
02-EFF	OMP-EFF-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
02-EW01	EW-1-061021	-	WG	6/10/2021	**0.870**		**1.77**		**0.510**	K	**0.750**		**0.780**		**2.10**		**60.0**		1.00	U
02-EW02	EW-2-061021	-	WG	6/10/2021	0.500	U	**0.670**		0.500	U	0.500	U	**0.750**		**4.60**		**52.8**		1.00	U
02-EW06	EW-6-061021	-	WG	6/10/2021	0.500	U	**0.530**		0.500	U	0.500	U	**1.30**		**8.58**		**290**		1.00	U
02-GAC	OMP-LGAC_MID-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**2.84**		0.500	U
ERT-EW-3	EW-3-060921	-	WG	6/9/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**6.39**		1.00	U
ERT-EW-4	EW-4-060821	-	WG	6/8/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.750**		**12.1**		1.00	U
ERT-EW-5	EW-5-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	**0.740**		0.500	U	0.500	U	0.500	U	1.00	U
ERT-MW-1A	MW-1A-061721	-	WG	6/17/2021	0.500	U	**0.910**		0.500	U	0.500	U	0.500	U	0.500	U	**10.1**		1.00	U
ERT-MW-1B	MW-1B-061721	-	WG	6/17/2021	**0.570**		**1.17**		0.500	U	0.500	U	0.500	U	0.500	U	**4.90**		1.00	U
ERT-MW-1B (Dup)	MW-1B-2-061721	-	WG	6/17/2021	**0.550**		**1.10**		0.500	U	0.500	U	0.500	U	0.500	U	**4.56**		1.00	U
ERT-MW-2A	MW-2A-061621	-	WG	6/16/2021	0.500	U	0.500	U	0.500	U	**2.12**		0.500	U	0.500	U	**0.780**		1.00	U
ERT-MW-2B	MW-2B-061621	-	WG	6/16/2021	**0.750**		**1.79**		**0.720**	K	**0.500**		**2.66**		**5.43**		**219**		1.00	U
ERT-MW-3	MW-03-061421	-	WG	6/14/2021	0.500	U	**0.510**		0.500	U	**0.820**		0.500	U	0.500	U	0.500	U	1.00	U
ERT-MW-4A	MW-4A-061621	-	WG	6/16/2021	0.500	U	**0.770**		0.500	U	0.500	U	0.500	U	0.500	U	**2.24**		1.00	U
ERT-MW-4B	MW-4B-061621	-	WG	6/16/2021	**0.970**		**1.72**		**0.790**	K	**0.510**		0.500	U	0.500	U	**1.58**		1.00	U
ERT-MW-5A	MW-5A-061021	-	WG	6/10/2021	**0.740**		**1.55**		0.500	U	**0.560**		**0.570**		0.500	U	**1.03**		1.00	U
ERT-MW-5B	MW-5B-061021	-	WG	6/10/2021	**1.20**		**1.93**		0.500	U	**0.600**		0.500	U	0.500	U	**0.980**		1.00	U
ERT-MW-6A	MW-6A-060821	-	WG	6/8/2021	0.500	U	**1.00**		0.500	U	0.500	U	0.500	U	0.500	U	**18.9**		1.00	U
ERT-MW-6B	MW-6B-060821	-	WG	6/8/2021	**0.510**		**0.940**		0.500	U	0.500	U	0.500	U	0.500	U	**3.04**		1.00	U
IW-ISCO-2	IW-ISCO-2-061621	-	WG	6/16/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**7.39**		**568**		1.00	U
IW-ISCO-3	IW-ISCO-3-061521	-	WG	6/15/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.59**		**36.3**		1.00	U
IW-ISCO-4	IW-ISCO-4-061621	-	WG	6/16/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**4.49**		1.00	U
IW-ISCO-5	IW-ISCO-5-061721	-	WG	6/17/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**10.2**		**705**		1.00	U
IW-ISCO-6	IW-ISCO-6-061721	-	WG	6/17/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**5.00**		**330**		1.00	U
IW-ISCO-7	IW-ISCO-7-061721	-	WG	6/17/2021	0.500	U	0.500	U	0.500	U	0.500	U	**0.730**		**28.8**		**1690**		1.00	U
IW-ISCO-7 (DUP)	IW-ISCO-7-2-061721	-	WG	6/17/2021	0.500	U	0.500	U	0.500	U	0.500	U	**0.690**		**26.0**		**1670**		1.00	U
IW-ISCO-8	IW-ISCO-8-061721	-	WG	6/17/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**7.69**		**351**		1.00	U
IW-ISCO-10	IW-ISCO-10-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.690**		**24.2**		1.00	U
IW-ISCO-11	IW-ISCO-11-061621	-	WG	6/16/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**2.32**		**110**		1.00	U
IW-ISCO-13	IW-ISCO-13-061621	-	WG	6/16/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.00**		**33.6**		1.00	U
MPW-01-A	MPW-01A-060821	-	WG	6/8/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.00	U
MPW-01-B	MPW-01B-060821	-	WG	6/8/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.650**		0.500	U	0.500	U
MPW-01-C	MPW-01C-060821	-	WG	6/8/2021	**0.660**		**1.61**		**0.600**		**0.670**		0.500	U	**0.580**		**0.790**		0.500	U
MPW-02-B	MPW-02B-060921	-	WG	6/9/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.730**		1.00	U
MPW-02-C	MPW-02C-060921	-	WG	6/9/2021	0.500	U	**0.670**		0.500	U	**0.890**		0.500	U	0.500	U	**1.73**		1.00	U
MPW-03-B	MPW-03B-060921	-	WG	6/9/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.69**		1.00	U
MPW-03-C	MPW-03C-060921	-	WG	6/9/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.960**		1.00	U
MPW-03-D	MPW-03D-060921	-	WG	6/9/2021	0.500	U	**0.780**		0.500	U	**0.890**		0.500	U	**0.720**		**4.28**		1.00	U
MPW-04-B	MPW-04B-061521	-	WG	6/15/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.610**		**0.840**		1.00	U
MPW-04-D	MPW-04D-061521	-	WG	6/15/2021	0.500	U	0.500	U	0.500	U	**0.670**		0.500	U	0.500	U	0.500	U	1.00	U
MPW-04-E	MPW-04E-061521	-	WG	6/15/2021	0.500	U	0.500	U	0.500	U	**0.740**		0.500	U	0.500	U	0.500	U	1.00	U
MPW-05-A	MPW-05A-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	**1.67**		0.500	U	0.500	U	0.500	U	1.00	U
MPW-05-B	MPW-05B-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.00	U
MPW-05-D	MPW-05D-061521	-	WG	6/15/2021	0.500	U	0.500	U	0.500	U	**0.710**		0.500	U	**1.14**		**1.67**		1.00	U
MPW-06-A	MPW-06A-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.00	U
MPW-06-B	MPW-06B-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.520**		1.00	U
MPW-06-D	MPW-06D-061021	-	WG	6/10/2021	**0.630**		**1.29**		0.500	U	0.500	U	0.500	U	0.500	U	**5.85**		1.00	U
MPW-08-A	MPW-08A-060821	-	WG	6/8/2021	0.500	U	0.500	U	0.500	U	**0.730**		0.500	U	0.500	U	0.500	U	0.500	U
MPW-08A (DUP)	MPW-08A-2-060821	-	WG	6/8/2021	0.500	U	0.500	U	0.500	U	**0.760**		0.500	U	0.500	U	0.500	U	1.00	U
MPW-08-B	MPW-08B-060821	-	WG	6/8/2021	0.500	U	0.500	U	0.500	U	**0.670**		0.500	U	0.500	U	0.500	U	1.00	U
MPW-08-C	MPW-08C-060821	-	WG	6/8/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**2.07**		1.00	U
MPW-08-D	MPW-08D-060821	-	WG	6/8/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**7.17**		1.00	U
MPW-08-E	MPW-08E-060821	-	WG	6/8/2021	**0.550**		**1.11**		0.500	U	0.500	U	0.500	U	0.500	U	**3.09**		1.00	U
MPW-09-A	MPW-09A-061421	-	WG	6/14/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**8.44**		1.00	U
MPW-09-B	MPW-09B-061421	-	WG	6/14/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**5.73**		**41.7**		1.00	U
MPW-09-C	MPW-09C-061421	-	WG	6/14/2021	**0.510**		**0.830**		0.500	U	0.500	U	**1.33**		**12.3**		**77.3**		1.00	U
MPW-09-D	MPW-09D-061421	-	WG	6/14/2021	**0.590**		**1.59**		**0.550**	K	**0.500**		**2.72**		**2.33**		**138**		1.00	U
MPW-09-E	MPW-09E-061421	-	WG	6/14/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.630**		1.00	U
MPW-10-C	MPW-10C-061721	-	WG	6/17/2021	0.500	U	0.500	U	0.500	U	**0.820**		0.500	U	**1.74**		**2.33**		1.00	U
MPW-10-D	MPW-10D-061721	-	WG	6/17/2021	0.500	U	0.500	U	0.500	U	**0.830**		0.500	U	0.500	U	**0.810**		1.00	U
MW-05	MW-05-061421	-	WG	6/14/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.00	U
MW-ISCO-1	MW-ISCO-1-061721	-	WG	6/17/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.58**		**88.1**		1.00	U
MW-ISCO-2	MW-ISCO-2-061621	-	WG	6/16/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**9.73**		**516**		1.00	U
MW-ISCO-4	MW-ISCO-4-061521	-	WG	6/15/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**7.72**		**474**		1.00	U
MW-ISCO-5	MW-ISCO-5-061521	-	WG	6/15/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**15.8**		1.00	U
MW-PD-11	MW-PD-11-061421	-	WG	6/14/2021	0.500	U	0.500	U	0.500	U	**0.570**		0.500	U	0.500	U	0.500	U	1.00	U
MW-PD-12	MW-PD-12-061421	-	WG	6/14/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**3.67**		**206**		1.00	U
MW-PD-13	MW-PD-13-061421	-	WG	6/14/2021	0.500	U	0.500	U	0.500	U	**0.600**		0.500	U	0.500	U	**0.570**		1.00	U
MW-PD-14	MW-PD-14-061421	-	WG	6/14/2021	0.500	U	0.500	U	0.500	U	**0.630**		**0.790**		**3.48**		**149**		1.00	U
MW-PD-15	MW-PD-15-061021	-	WG	6/10/2021	**0.740**		**1.05**		0.500	U	**0.520**		0.500	U	**2.11**		**3.74**		1.00	U
MW-PD-16	MW-PD-16-061621	-	WG	6/16/2021	0.500	U	**0.690**		0.500	U	0.500	U	**1.09**		**6.09**		**348**		1.00	U
MW-PD-16 (Dup)	MW-PD-16-2-061621	-	WG	6/16/2021	0.500	U	**0.640**		0.500	U	0.500	U	**1.17**		**6.10**		**382**		1.00	U
MW-PD-17	MW-PD-17-061621	-	WG	6/16/2021	**0.710**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.38**		1.00	U
PZ-04	PZ-04-061521	-	WG	6/15/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.680**		1.00	U
PZ-05	PZ-05-061521	-	WG	6/15/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**3.08**		1.00	U
PZ-06	PZ-06-061121	-	WG	6/11/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.13**		1.00	U
PZ-07	PZ-07-061121	-	WG	6/11/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.730**		**4.36**		1.00	U
SDW-01	SDW-1-061021	-	WG	6/10/2021	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.00	U

Acronyms:

µg/L - micrograms per liter
DCA - Dichloroethane
DCE - Dichloroethene
ID - Identification
ISCO - in situ chemical oxidation
J - Estimated values (+/- indicates likely bias direction)
K- The identification of the analyte is acceptable; the reported value may be biased high.
MPW - Multi-Port Well
MW - Monitoring Well
NS - Not Sampled
PCE - Tetrachloroethene
PZ - Piezometer
Q - Qualifier
TCA - Trichloroethane TCE -
U - Not Detected
K - The reported value may be biased high
VC - Vinyl Chloride
VOC - Volatile organic compound
WG - Groundwater

Detected values that are **bold and highlighted** exceed NYSDEC Class GA Standards: **110**
In 2020, New York adopted a state MCL of 1 ppb (µg/L) for 1,4-dioxane.

Table 5
June 2021 Water Quality Data
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Location	HGL Field Sample ID	CLP Sample ID	Date Sampled	Time of Reading (24-Hour)	Flow Rate (L/min)	Temperature (°C)	Specific Conductance (mS/cm)	Oxidation/Reduction Potential (mV)	Dissolved Oxygen (mg/L)	pH (s.u.)	Turbidity (NTU)	Depth To Water Collected During Synoptic Round (ft btic)
ERT-EW-1	EW-1-061021	-	6/10/2021	9:30	-	14.65	0.248	231.7	7.44	5.96	0.56	NA
ERT-EW-2	EW-2-061021	-	6/10/2021	9:35	-	12.52	0.269	208.3	7.77	5.76	0.12	NA
ERT-EW-3	EW-3-060921	-	6/8/2021	13:17	0.16	16.41	0.122	211.7	8.45	4.91	0.34	7.83
ERT-EW-4	EW-4-060821	-	6/8/2021	16:50	0.30	12.94	0.250	155.9	9.75	5.59	0.70	7.21
ERT-EW-5	EW-5-061021	-	6/10/2021	16:07	0.24	12.78	0.232	188.1	9.45	4.98	0.13	7.65
ERT-EW-6	EW-6-061021	-	6/10/2021	9:45	-	12.54	0.285	201.2	5.97	5.68	0.09	NA
ERT-MW-1A	MW-1A-061721	-	6/17/2021	10:15	0.30	12.73	0.076	164.1	8.21	6.48	4.95	2.70
ERT-MW-1B	MW-1B-061721	-	6/17/2021	9:20	0.30	13.01	0.072	130.8	7.61	6.85	42.6	1.68
ERT-MW-2A	MW-2A-061621	-	6/16/2021	15:05	0.30	16.11	0.160	237.4	4.34	5.22	45.9	4.22
ERT-MW-2B	MW-2B-061621	-	6/16/2021	16:00	0.30	15.43	0.154	216.4	2.92	5.78	44.7	4.20
ERT-MW-2C	No access. Marina storing floating docks on top of well. Not sampled 2021.											NA
ERT-MW-2D	No access. Marina storing floating docks on top of well. Not sampled 2021.											NA
ERT-MW-3	MW-03-061421	-	6/14/2021	16:05	0.20	13.68	0.275	182.1	1.82	5.75	4.44	94.12
ERT-MW-4A	MW-4A-061621	-	6/16/2021	9:55	0.30	15.73	0.092	170.0	10.00	5.80	104	0.45
ERT-MW-4B	MW-4B-061621	-	6/16/2021	10:40	0.00	16.04	0.098	118.2	6.25	5.87	48.4	0.50
ERT-MW-5A	MW-5A-061021	-	6/10/2021	11:35	0.15	15.5	0.1474	152.7	6.12	6.30	40.5	1.90
ERT-MW-5B	MW-5B-061021	-	6/10/2021	10:30	0.25	13	0.1684	139.2	6.79	6.41	17.40	2.16
ERT-MW-6A	MW-6A-060821	-	6/8/2021	13:10	0.30	14.20	0.154	123.6	7.41	6.33	14.20	5.73
ERT-MW-6B	MW-6B-060821	-	6/8/2021	14:25	0.20	16.44	0.153	103.7	6.11	6.51	20.6	4.08
EW-01	EW-01-061021	-	6/10/2021	10:50	-	14.41	0.232	203.0	11.58	5.85	0.42	NA
EW-02	EW-02-061021	-	6/10/2021	11:05	-	13.2	0.210	205.4	10.82	5.43	0.07	NA
IW-ISCO-2	IW-ISCO-2-061621	-	6/16/2021	9:45	0.50	21.1	0.2013	209.1	8.24	5.99	14.4	192.82
IW-ISCO-3	IW-ISCO-3-061521	-	6/15/2021	16:50	0.40	19.6	0.168	194.5	9.17	6.45	8.63	192.68
IW-ISCO-4	IW-ISCO-4-061621	-	6/16/2021	10:00	0.50	20.42	0.157	135.9	10.31	6.52	16.1	192.50
IW-ISCO-5	IW-ISCO-5-061721	-	6/17/2021	13:45	0.40	22.8	0.2743	236.8	5.82	5.99	13.9	192.41
IW-ISCO-6	IW-ISCO-6-061721	-	6/17/2021	12:05	0.50	21.58	0.128	166.6	9.41	5.71	17.9	192.67
IW-ISCO-7	IW-ISCO-7-061721	-	6/17/2021	9:55	0.50	20.6	0.1999	263.3	6.15	5.73	13.7	192.85
IW-ISCO-8	IW-ISCO-8-061721	-	6/17/2021	11:50	0.30	19.9	0.1614	260.3	5.17	6.05	21.4	193.52
IW-ISCO-10	IW-ISCO-10-061021	-	6/10/2021	13:55	0.40	19.6	0.2181	153.8	7.88	6.47	35.9	193.84
IW-ISCO-11	IW-ISCO-11-061621	-	6/16/2021	12:25	0.50	18.4	0.192	181.6	9.55	6.53	3.92	192.49
IW-ISCO-13	IW-ISCO-13-061621	-	6/16/2021	12:25	0.50	22.3	0.1627	176.2	7.46	6.22	226	194.49
MPW-01-A	MPW-01A-060821	-	6/8/2021	13:15	0.10	17.55	0.364	216.5	1.51	5.63	1.34	143.10
MPW-01-B	MPW-01B-060821	-	6/8/2021	15:35	0.10	15.35	0.293	282.4	7.22	5.07	0.29	143.90
MPW-01-C	MPW-01C-060821	-	6/8/2021	17:05	0.10	14.85	0.326	21.7	2.58	8.62	0.37	143.94
MPW-02-A	Port no longer functioning; not sampled in 2020 and 2021.											NA
MPW-02-B	MPW-02B-060921	-	6/9/2021	10:25	0.20	16.2	0.237	125.1	9.63	7.75	0.73	189.11
MPW-02-C	MPW-02C-060921	-	6/9/2021	11:40	0.20	15.3	0.2986	130.5	4.42	6.27	0.33	190.67
MPW-02-D	Port no longer functioning; not sampled in 2020 and 2021.											NA
MPW-03-A	Port no longer functioning; not sampled in 2020 and 2021.											NA
MPW-03-B	MPW-03B-060921	-	6/9/2021	14:35	0.20	14.6	0.1485	-44.3	0.47	6.31	1.10	161.51
MPW-03-C	MPW-03C-060921	-	6/9/2021	15:45	0.25	15.9	0.2300	107.9	2.01	6.40	0.41	161.59
MPW-03-D	MPW-03D-060921	-	6/9/2021	16:45	0.20	14.0	0.2643	8.9	1.75	6.18	0.61	173.54
MPW-04-A	Port no longer functioning; not sampled in 2020 and 2021.											NA
MPW-04-B	MPW-04B-061521	-	6/15/2021	10:00	0.10	15.3	0.2306	178.0	6.28	6.00	0.28	148.66
MPW-04-C	Port no longer functioning; not sampled in 2020 and 2021.											NA
MPW-04-D	MPW-04D-061521	-	6/15/2021	12:20	0.20	15.2	0.2404	150.1	6.85	5.82	0.64	148.78
MPW-04-E	MPW-04E-061521	-	6/15/2021	13:10	0.20	15.2	0.2477	157.1	6.93	6.02	0.41	149.32
MPW-05-A	MPW-05A-061021	-	6/10/2021	14:50	0.10	14.90	0.244	226.8	3.24	5.22	0.58	135.83
MPW-05-B	MPW-05B-061021	-	6/10/2021	13:55	0.10	13.82	0.358	231.4	1.37	5.31	0.33	136.32
MPW-05-C	Port no longer functioning; not sampled in 2021.											NA
MPW-05-D	MPW-05D-061521	-	6/15/2021	16:47	0.18	14.96	0.236	-119.7	6.06	7.13	6.21	136.61
MPW-06-A	MPW-06A-061021	-	6/10/2021	10:00	0.10	12.59	0.473	111.7	4.48	6.35	6.94	36.41
MPW-06-B	MPW-06B-061021	-	6/10/2021	10:55	0.15	13.19	0.131	83.0	1.12	5.61	0.61	36.86
MPW-06-C	Port no longer functioning; not sampled in 2020 and 2021.											NA
MPW-06-D	MPW-06D-061021	-	6/10/2021	12:10	0.10	13.83	0.181	120.9	6.54	7.46	0.44	37.60
MPW-07-A	Port no longer functioning; as of 2018.											NA
MPW-07-B	Port no longer functioning; as of 2018.											NA
MPW-07-C	Port no longer functioning; as of 2018.											NA
MPW-08-A	MPW-08A-060821	-	6/8/2021	12:07	0.35	14.29	0.265	212.8	8.46	4.62	0.25	NA
MPW-08-B	MPW-08B-060821	-	6/8/2021	13:12	0.12	16.47	0.256	234.8	8.97	4.68	0.33	6.45
MPW-08-C	MPW-08C-060821	-	6/8/2021	15:22	0.15	15.99	0.210	198.8	8.85	4.84	0.36	6.17
MPW-08-D	MPW-08D-060821	-	6/8/2021	16:02	0.20	14.76	0.170	133.1	9.01	5.31	0.32	6.99
MPW-08-E	MPW-08E-060821	-	6/8/2021	16:57	0.23	14.44	0.156	139.1	5.76	6.03	0.24	6.68
MPW-09-A	MPW-09A-061421	-	6/14/2021	11:17	0.10	11.85	0.122	141.3	8.85	5.64	1.60	-1.91
MPW-09-B	MPW-09B-061421	-	6/14/2021	12:07	0.24	11.50	0.175	158.0	1.94	5.67	1.42	-73.18
MPW-09-C	MPW-09C-061421	-	6/14/2021	12:52	0.25	11.76	0.317	69.8	0.31	6.24	0.87	-3.46
MPW-09-D	MPW-09D-061421	-	6/14/2021	13:47	0.25	11.34	0.166	95.5	2.77	6.29	2.02	-24.49
MPW-09-E	MPW-09E-061421	-	6/14/2021	15:17	0.15	11.85	0.072	75.8	4.55	6.65	0.81	-3.21
MPW-10-A	Port no longer functioning; not sampled in 2021.											NA
MPW-10-B	Port no longer functioning; not sampled in 2021.											NA
MPW-10-C	MPW-10C-061721	-	6/17/2021	10:02	0.21	14.26	0.164	288.6	6.08	5.91	1.52	143.28
MPW-10-D	MPW-10D-061721	-	6/17/2021	11:32	0.18	13.49	0.158	295.5	7.58	5.86	1.77	143.66
MW-05	MW-05-061421	-	6/14/2021	11:05	0.30	18.80	0.090	149.6	9.39	5.90	2.18	185.98
MW-ISCO-01	MW-ISCO-1-061721	-	6/17/2021	9:25	0.50	18.94	0.134	134.5	10.48	6.19	1.99	193.28
MW-ISCO-02	MW-ISCO-2-061621	-	6/16/2021	15:10	0.50	19.49	0.146	188.6	6.15	5.60	7.08	192.65
MW-ISCO-03	Not sampled in 2021.											NA
MW-ISCO-04	MW-ISCO-4-061521	-	6/15/2021	10:00	0.40	19.50	0.182	164.7	8.87	6.11	1.14	192.98
MW-ISCO-05	MW-ISCO-5-061521	-	6/15/2021	11:45	0.50	19.34	0.138	147.9	9.06	6.47	2.06	192.50
MW-PD-11	MW-PD-11-061421	-	6/14/2021	13:40	0.20	17.33	0.150	165.4	3.43	5.62	14.8	136.67
MW-PD-12	MW-PD-12-061421	-	6/14/2021	11:50	0.20	15.4	0.2325	133.8	5.64	6.13	241	115.27
MW-PD-13	MW-PD-13-061421	-	6/14/2021	14:05	0.50	17.4	0.2773	164.0	7.58	6.15	168	151.34
MW-PD-14	MW-PD-14-061421	-	6/14/2021	14:10	0.50	15.3	1.018	146.1	0.99	5.69	116	154.62
MW-PD-15	MW-PD-15-061021	-	6/10/2021	16:00	0.20	14.5	0.2637	174.5	5.44	6.18	9.70	79.91
MW-PD-16	MW-PD-16-061621	-	6/16/2021	14:25	0.40	13.5	0.1876	314.1	2.14	6.01	17.4	67.11
MW-PD-17	MW-PD-17-061621	-	6/16/2021	13:00	0.25	14.52	0.174	157.5	4.51	6.10	29.2	6.40
PZ-04	PZ-04-061521	-	6/15/2021	14:15	0.30	21.16	0.177	111.6	10.09	6.90	47.0	187.72
PZ-05	PZ-05-061521	-	6/15/2021	16:20	0.40	20.9	0.1181	176.0	8.86	6.00	20.9	190.81
PZ-06	PZ-06-061121	-	6/11/2021	9:45	0.30	22.21	0.174	160.1	8.91	6.23	24.6	196.09
PZ-07	PZ-07-061121	-	6/11/2021	9:45	0.30	20.4	0.1743	190.0	7.13	5.57	33.5	183.08
SDW-01	SDW-1-061021	-	6/10/2021	13:27	0.10	16.22	0.600	0.6	0.60	6.08	39.0	7.91

Notes

Table shows water quality parameters collected after stabilization was attained but just before the sample was collected.
* - Indicates measurement taken from initial reading, not after stabilization was attained.
°C - degrees in Celsius.
ft btic - depth to water measured in feet below the top of the inner well casing.
mg/L - milligrams per liter
L/min - liters per minute
mS/cm - millisiemens per centimeter
mV - millivolts
NA - Not applicable.
NTU - Nephelometric Turbidity Unit
s.u. - standardized pH units

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APPENDIX A

2021 COMPREHENSIVE SAMPLING REPORT EVENT ANALYTICAL DATA TABLES

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Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		01-EW01		01-EW02		02-EW01		02-EW02		ERT-EW-3		ERT-EW-4		ERT-EW-5		02-EW06		IW-ISCO-10		IW-ISCO-11		IW-ISCO-13		IW-ISCO-2		IW-ISCO-3		IW-ISCO-4		IW-ISCO-5	
Sample ID		EW-01-061021		EW-02-061021		EW-1-061021		EW-2-061021		EW-3-060921		EW-4-060821		EW-5-061021		EW-6-061021R		IW-ISCO-10-061021		IW-ISCO-11-061621		IW-ISCO-13-061621		IW-ISCO-2-061621		IW-ISCO-3-061521		IW-ISCO-4-061621		IW-ISCO-5-061721	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample	
Sample Date		6/10/2021		6/10/2021		6/10/2021		6/10/2021		6/9/2021		6/8/2021		6/10/2021		6/10/2021		6/10/2021		6/16/2021		6/16/2021		6/16/2021		6/15/2021		6/16/2021		6/17/2021	
Parameter	NYSDEC Class GA Standard (ng/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	5	0.500	U	0.500	U	**0.870**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2,2-Tetrachloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloroethane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	5	0.500	U	0.500	U	**1.77**		**0.670**		0.500	U	0.500	U	0.500	U	**0.530**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethene	5	0.500	U	0.500	U	**0.510**	K	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2,3-Trichlorobenzene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U
1,2,4-Trichlorobenzene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U
1,2-Dibromo-3-Chloropropane	0.04	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
1,2-Dibromoethane	0.0006	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloroethane	0.6	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloropropane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,3-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,4-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
2-Butanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
2-Hexanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
4-Methyl-2-Pentanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Acetone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Benzene	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromochloromethane	5	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromodichloromethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromoform	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromomethane	5	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
Carbon Disulfide	60	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	UJ	0.500	U
Carbon Tetrachloride	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chlorobenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	7	0.500	U	0.500	U	**0.750**		0.500	U	0.500	U	0.500	U	**0.740**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloromethane	5	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	5	0.500	U	0.500	U	**0.780**		**0.750**		0.500	U	0.500	U	0.500	U	**1.30**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
cis-1,3-Dichloropropene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Cyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Dibromochloromethane	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Dichlorodifluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Ethylbenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U
Isopropylbenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U
m,p-Xylene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl Acetate	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl tert-Butyl Ether	NA	0.500	U	0.500	U	0.500	U	**0.590**		0.500	U	0.500	U	0.500	U	**0.920**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylcyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylene Chloride	5	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
o-Xylene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Styrene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene	5	**1.95**		**1.89**		**2.10**		**4.60**		0.500	U	**0.750**		0.500	U	**8.58**		**0.690**		**2.32**		**1.00**		**7.39**		**1.59**		0.500	U	**10.2**	
Toluene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.17**		0.500	U	0.500	U	0.500	U	**1.37**		0.500	U
trans-1,2-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,3-Dichloropropene	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Trichloroethene	5	**57.7**		**27.5**		**60.0**		**52.8**		**6.39**		**12.1**		0.500	U	**290**		**24.2**		**110**		**33.6**		**568**		**36.3**		**4.49**		**705**	
Trichlorofluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Vinyl Chloride	2	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U

Notes:
All results are in µg/L.
Bold - Indicates the analyte was detected
Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard
Q - Data qualifier
U - The analyte was not detected at, or above the reporting limit.
J - Indicates an estimated value.
K- the reported value may be biased high.
L- The reported value may be biased low.
µg/L - micrograms per liter

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		IW-ISCO-6		IW-ISCO-7		IW-ISCO-7		IW-ISCO-8		01-AS		01-EFF		01-EFF		01-CINF		MPW-01-A		MPW01-B		MPW-01-D		MPW-02-B		MPW-02-C		MPW-03-B		MPW-03-C	
Sample ID		IW-ISCO-6-061721		IW-ISCO-7-061721		IW-ISCO-7-2-061721		IW-ISCO-8-061721		LAI-AS-061021		LAI-EFF-061021		LAI-EFF-2-061021		LAI-INF-061021		MPW-01A-060821		MPW-01B-060821		MPW-01C-060821		MPW-02B-060921		MPW-02C-060921		MPW-03B-060921		MPW-03C-060921	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Duplicate	
Sample Date		6/17/2021		6/17/2021		6/17/2021		6/17/2021		6/10/2021		6/10/2021		6/10/2021		6/10/2021		6/8/2021		6/8/2021		6/8/2021		6/9/2021		6/9/2021		6/6/2021		6/9/2021	
Parameter	NYSDEC Class GA Standard (ng/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.660**		0.500	U	0.500	U	0.500	U	0.500	U
1,1,2,2-Tetrachloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloroethane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.61**		0.500	U	**0.670**		0.500	U	0.500	U
1,1-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.600		0.500	U	0.500	U	0.500	U	0.500	U
1,2,3-Trichlorobenzene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2,4-Trichlorobenzene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dibromo-3-Chloropropane	0.04	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
1,2-Dibromoethane	0.0006	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloroethane	0.6	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloropropane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,3-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,4-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
2-Butanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
2-Hexanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
4-Methyl-2-Pentanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Acetone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Benzene	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromochloromethane	5	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromodichloromethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromoform	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromomethane	5	2.00	U	2.00	U	2.00	U	2.00	U	1.00	UJ	1.00	UJ	1.00	UJ	1.00	UJ	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
Carbon Disulfide	60	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Carbon Tetrachloride	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chlorobenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.00	UJ	1.00	UJ	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	7	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.670**		0.500	U	**0.890**		0.500	U	0.500	U
Chloromethane	5	2.00	U	2.00	U	2.00	U	2.00	U	1.00	U	1.00	U	1.00	U	1.00	U	2.00	U	2.00	UJ	2.00	UJ	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	5	0.500	U	**0.730**		**0.690**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
cis-1,3-Dichloropropene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Cyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Dibromochloromethane	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Dichlorodifluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Ethylbenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Isopropylbenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
m,p-Xylene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl Acetate	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl tert-Butyl Ether	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylcyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylene Chloride	5	1.00	U	1.00	U	1.00	U	1.00	U	0.500	U	0.500	U	0.500	U	0.500	U	1.00	U	0.500	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U
o-Xylene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Styrene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene	5	**5.00**		**28.8**		**26.0**		**7.69**		0.500	U	0.500	U	0.500	U	**1.76**		0.500	U	**0.650**		**0.580**		0.500	U	0.500	U	0.500	U	0.500	U
Toluene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,2-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,3-Dichloropropene	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Trichloroethene	5	**330**		**1690**		**1670**		**351**		0.500	U	0.500	U	0.500	U	**37.7**		0.500	U	0.500	U	**0.790**		**0.730**		**1.73**		**1.69**		**0.960**	
Trichlorofluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Vinyl Chloride	2	1.00	U	1.00	U	1.00	U	1.00	U	0.500	U	0.500	U	0.500	U	0.500	U	1.00	U	0.500	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U

Notes:
All results are in µg/L.
Bold - Indicates the analyte was detected
Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard
Q - Data qualifier
U - The analyte was not detected at, or above the reporting limit.
J - Indicates an estimated value.
K- the reported value may be biased high.
L- The reported value may be biased low.
µg/L - micrograms per liter

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MPW-03-D		MPW-04-B		MPW-04-D		MPW-04-E		MPW-05-A		MPW-05-B		MPW-05-D		MPW-06-A		MPW-06-B		MPW-06-D		MPW-08-A				MPW-08-B		MPW-08-C		MPW-08-D	
Sample ID		MPW-03D-060921		MPW-04B-061521		MPW-04D-061521		MPW-04E-061521		MPW-05A-061021		MPW-05B-061021		MPW-05D-061521		MPW-06A-061021		MPW-06B-061021		MPW-06D-061021		MPW-08A-060821		MPW-08A-2-060821		MPW-08B-060821		MPW-08C-060821		MPW-08D-060821	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample	
Sample Date		6/9/2021		6/15/2021		6/15/2021		6/15/2021		6/10/2021		6/10/2021		6/15/2021		6/10/2021		6/10/2021		6/10/2021		6/8/2021		6/8/2021		6/8/2021		6/8/2021		6/8/2021	
Parameter	NYSDEC Class GA Standard (ug/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.630**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2,2-Tetrachloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloroethane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	5	0.780		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.29**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2,3-Trichlorobenzene	NA	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2,4-Trichlorobenzene	NA	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dibromo-3-Chloropropane	0.04	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
1,2-Dibromoethane	0.0006	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloroethane	0.6	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloropropane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,3-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,4-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
2-Butanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
2-Hexanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
4-Methyl-2-Pentanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Acetone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Benzene	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromochloromethane	5	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromodichloromethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromoform	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromomethane	5	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
Carbon Disulfide	60	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Carbon Tetrachloride	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chlorobenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.00	UJ	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	7	0.500	U	0.500	U	**0.670**		**0.740**		**1.67**		0.500	U	**0.710**		0.500	U	0.500	U	0.500	U	**0.730**		**0.760**		**0.670**		0.500	U	0.500	U
Chloromethane	5	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	UJ	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
cis-1,3-Dichloropropene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Cyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Dibromochloromethane	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Dichlorodifluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Ethylbenzene	5	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Isopropylbenzene	5	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
m,p-Xylene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl Acetate	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl tert-Butyl Ether	NA	**0.850**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.740**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.680**		0.500	U	0.500	U
Methylcyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylene Chloride	5	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U
o-Xylene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Styrene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene	5	**0.720**		**0.610**		0.500	U	0.500	U	0.500	U	0.500	U	**1.14**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Toluene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**2.56**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,2-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,3-Dichloropropene	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Trichloroethene	5	**4.28**		**0.840**		0.500	U	0.500	U	0.500	U	0.500	U	**1.67**		0.500	U	**0.520**		**5.85**		0.500	U	0.500	U	0.500	U	**2.07**		**7.17**	
Trichlorofluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Vinyl Chloride	2	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U

Notes:
All results are in µg/L.
Bold - Indicates the analyte was detected
Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard
Q - Data qualifier
U - The analyte was not detected at, or above the reporting limit.
J - Indicates an estimated value.
K- the reported value may be biased high.
L- The reported value may be biased low.
µg/L - micrograms per liter

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MPW-08-E		MPW-09-A		MPW-09-B		MPW-09-C		MPW-09-D		MPW-09-E		MPW-10-C		MPW-10-D		MW-05		ERT-MW-1A		ERT-MW-1B				ERT-MW-2A		ERT-MW-2B		ERT-MW-3	
Sample ID		MPW-08E-060821		MPW-09A-061421		MPW-09B-061421		MPW-09C-061421		MPW-09D-061421		MPW-09E-061421		MPW-10C-061721		MPW-10D-061721		MW-05-061421		MW-1A-061721		MW-1B-061721		MW-1B-2-061721		MW-2A-061621		MW-2B-061621		MW-3-061421	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample	
Sample Date		6/8/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/17/2021		6/17/2021		6/14/2021		6/17/2021		6/17/2021		6/17/2021		6/16/2021		6/16/2021		6/14/2021	
Parameter	NYSDEC Class GA Standard (ng/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	5	**0.550**		0.500	U	0.500	U	**0.510**		**0.590**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.570**		**0.550**		0.500	U	**0.750**		0.500	U
1,1,2,2-Tetrachloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloroethane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	5	**1.11**		0.500	U	0.500	U	**0.830**		**1.59**		0.500	U	0.500	U	0.500	U	0.500	U	**0.910**		**1.17**		**1.10**		0.500	U	**1.79**		**0.510**	
1,1-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	**0.550**	K	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.720**	K	0.500	U
1,2,3-Trichlorobenzene	NA	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2,4-Trichlorobenzene	NA	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dibromo-3-Chloropropane	0.04	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
1,2-Dibromoethane	0.0006	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloroethane	0.6	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloropropane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,3-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,4-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
2-Butanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
2-Hexanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
4-Methyl-2-Pentanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Acetone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Benzene	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromochloromethane	5	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromodichloromethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromoform	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromomethane	5	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
Carbon Disulfide	60	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U
Carbon Tetrachloride	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chlorobenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	7	0.500	U	0.500	U	0.500	U	0.500	U	**0.500**		0.500	U	**0.820**		**0.830**		0.500	U	0.500	U	0.500	U	0.500	U	**2.12**		**0.500**		**0.820**	
Chloromethane	5	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	5	0.500	U	0.500	U	0.500	U	**1.33**		**2.72**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**2.66**		0.500	U
cis-1,3-Dichloropropene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Cyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Dibromochloromethane	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Dichlorodifluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Ethylbenzene	5	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Isopropylbenzene	5	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
m,p-Xylene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl Acetate	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl tert-Butyl Ether	NA	0.500	U	0.500	U	**1.74**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylcyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylene Chloride	5	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
o-Xylene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Styrene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene	5	0.500	U	0.500	U	**5.73**		**12.3**		**2.33**		0.500	U	**1.74**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**5.43**		0.500	U
Toluene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,2-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,3-Dichloropropene	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Trichloroethene	5	**3.09**		**8.44**		**41.7**		**77.3**		**138**		**0.630**		**2.33**		**0.810**		0.500	U	**10.1**		**4.90**		**4.56**		**0.780**		**219**		0.500	U
Trichlorofluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Vinyl Chloride	2	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U

Notes:
All results are in µg/L.
Bold - Indicates the analyte was detected
Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard
Q - Data qualifier
U - The analyte was not detected at, or above the reporting limit.
J - Indicates an estimated value.
K- the reported value may be biased high.
L- The reported value may be biased low.
µg/L - micrograms per liter

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		ERT-MW-4A		ERT-MW-4B		ERT-MW-5A		ERT-MW-5B		ERT-MW-6A		ERT-MW-6B		MW-ISCO-1		MW-ISCO-2		MW-ISCO-4		MW-ISCO-5		MW-PD-11		MW-PD-12		MW-PD-13		MW-PD-14		MW-PD-15	
Sample ID		MW-4A-061621		MW-4B-061621		MW-5A-061021		MW-5B-061021		MW-6A-060821		MW-6B-060821		MW-ISCO-1-061721		MW-ISCO-2-061621		MW-ISCO-4-061521		MW-ISCO-5-061521		MW-PD-11-061421		MW-PD-12-061421		MW-PD-13-061421		MW-PD-14-061421		MW-PD-15-061021	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample	
Sample Date		6/16/2021		6/16/2021		6/10/2021		6/10/2021		6/8/2021		6/8/2021		6/17/2021		6/16/2021		6/15/2021		6/15/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/10/2021	
Parameter	NYSDEC Class GA Standard (ng/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	5	0.500	U	**0.970**		**0.740**		**1.20**		0.500	U	**0.510**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.740**	
1,1,2,2-Tetrachloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloroethane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	5	**0.770**		**1.72**		**1.55**		**1.93**		**1.00**		**0.940**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.05**	
1,1-Dichloroethene	5	0.500	U	**0.790**	K	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2,3-Trichlorobenzene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL
1,2,4-Trichlorobenzene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL
1,2-Dibromo-3-Chloropropane	0.04	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
1,2-Dibromoethane	0.0006	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloroethane	0.6	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloropropane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,3-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,4-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
2-Butanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
2-Hexanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
4-Methyl-2-Pentanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Acetone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Benzene	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromochloromethane	5	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromodichloromethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromoform	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromomethane	5	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
Carbon Disulfide	60	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Carbon Tetrachloride	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chlorobenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	7	0.500	U	**0.510**		**0.560**		**0.600**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.570**		0.500	U	**0.600**		**0.630**		**0.520**	
Chloromethane	5	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	5	0.500	U	0.500	U	**0.570**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.790**		0.500	U
cis-1,3-Dichloropropene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Cyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Dibromochloromethane	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Dichlorodifluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Ethylbenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL
Isopropylbenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL
m,p-Xylene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl Acetate	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl tert-Butyl Ether	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylcyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylene Chloride	5	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
o-Xylene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Styrene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.58**		**9.73**		**7.72**		0.500	U	0.500	U	**3.67**		0.500	U	**3.48**		**2.11**	
Toluene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.08**		**2.22**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,2-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,3-Dichloropropene	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Trichloroethene	5	**2.24**		**1.58**		**1.03**		**0.980**		**18.9**		**3.04**		**88.1**		**516**		**474**		**15.8**		0.500	U	**206**		**0.570**		**149**		**3.74**	
Trichlorofluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Vinyl Chloride	2	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U

Notes:
All results are in µg/L.
Bold - Indicates the analyte was detected
Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard
Q - Data qualifier
U - The analyte was not detected at, or above the reporting limit.
J - Indicates an estimated value.
K- the reported value may be biased high.
L- The reported value may be biased low.
µg/L - micrograms per liter

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MW-PD-16		MW-PD-16		MW-PD-17		02-AS		02-EFF		02-GAC		PZ-04		PZ-05		PZ-06		PZ-07		SDW-1	
Sample ID		MW-PD-16-061621		MW-PD-16-2-061621		MW-PD-17-061621		OMP-AS-061021		OMP-EFF-061021		OMP-LGAC Mid-061021		PZ-04-061521		PZ-05-061521		PZ-06-061121		PZ-07-061121		SDW-1-061021	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample	
Sample Date		6/16/2021		6/16/2021		6/16/2021		6/10/2021		6/10/2021		6/10/2021		6/15/2021		6/15/2021		6/11/2021		6/11/2021		6/10/2021	
Parameter	NYSDEC Class GA Standard (µg/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	5	0.500	U	0.500	U	**0.710**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2,2-Tetrachloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloroethane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	5	**0.690**		**0.640**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2,3-Trichlorobenzene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	UL	0.500	UL
1,2,4-Trichlorobenzene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	UL	0.500	UL
1,2-Dibromo-3-Chloropropane	0.04	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
1,2-Dibromoethane	0.0006	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloroethane	0.6	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloropropane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,3-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,4-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
2-Butanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
2-Hexanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
4-Methyl-2-Pentanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Acetone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Benzene	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromochloromethane	5	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromodichloromethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromoform	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromomethane	5	2.00	U	2.00	U	2.00	U	1.00	UJ	1.00	UJ	1.00	UJ	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
Carbon Disulfide	60	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Carbon Tetrachloride	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chlorobenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	7	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloromethane	5	2.00	U	2.00	U	2.00	U	1.00	U	1.00	U	1.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	5	**1.09**		**1.17**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
cis-1,3-Dichloropropene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Cyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Dibromochloromethane	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Dichlorodifluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Ethylbenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	UL	0.500	UL
Isopropylbenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	UL	0.500	UL
m,p-Xylene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl Acetate	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl tert-Butyl Ether	NA	**0.560**		**0.600**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**1.38**	
Methylcyclohexane	NA	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	UL	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylene Chloride	5	1.00	U	1.00	U	1.00	U	0.500	U	0.500	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
o-Xylene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Styrene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene	5	**6.09**		**6.10**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	**0.730**		0.500	U
Toluene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,2-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,3-Dichloropropene	NA	0.500	UJ	0.500	UJ	0.500	UJ	0.500	U	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Trichloroethene	5	**348**		**382**		**1.38**		**3.23**		0.500	U	**2.84**		**0.680**		**3.08**		**1.13**		**4.36**		0.500	U
Trichlorofluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Vinyl Chloride	2	1.00	U	1.00	U	1.00	U	0.500	U	0.500	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U

Notes:
All results are in µg/L.
Bold - Indicates the analyte was detected
Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard
Q - Data qualifier
U - The analyte was not detected at, or above the reporting limit.
J - Indicates an estimated value.
K- the reported value may be biased high.
L- The reported value may be biased low.
µg/L - micrograms per liter

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		Trip Blanks										Equipment Blanks					
Sample ID		TB-061021		TB01-060821		TB02-1-061021		TB03-061421		TB04-061721		EB01-061021		EB02-061421		EB03-061621	
Matrix		Aqueous		Aqueous		Aqueous		Aqueous		Aqueous		Aqueous		Aqueous		Aqueous	
Sample Type		Trip Blank		Trip Blank		6/10/2021		Trip Blank		Trip Blank		Equipment Blank		Equipment Blank		Equipment Blank	
Sample Date		6/10/2021		6/8/2021		6/10/2021		6/14/2021		6/17/2021		6/10/2021		6/14/2021		6/16/2021	
Parameter	NYSDEC Class GA Standard (µg/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2,2-Tetrachloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1,2-Trichloroethane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2,3-Trichlorobenzene	NA	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U	0.500	UL	0.500	U
1,2,4-Trichlorobenzene	NA	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U	0.500	UL	0.500	U
1,2-Dibromo-3-Chloropropane	0.04	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
1,2-Dibromoethane	0.0006	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloroethane	0.6	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,2-Dichloropropane	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,3-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,4-Dichlorobenzene	3	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
2-Butanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
2-Hexanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
4-Methyl-2-Pentanone	NA	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Acetone	NA	**8.19**		5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
Benzene	1	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromochloromethane	5	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromodichloromethane	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Bromoform	NA	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Bromomethane	5	1.00	UJ	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
Carbon Disulfide	60	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Carbon Tetrachloride	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chlorobenzene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroethane	5	0.500	U	1.00	UJ	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	7	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloromethane	5	1.00	U	2.00	UJ	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
cis-1,3-Dichloropropene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Cyclohexane	NA	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Dibromochloromethane	NA	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Dichlorodifluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Ethylbenzene	5	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U	0.500	UL	0.500	U
Isopropylbenzene	5	0.500	U	0.500	U	0.500	U	0.500	UL	0.500	U	0.500	U	0.500	UL	0.500	U
m,p-Xylene	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl Acetate	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methyl tert-Butyl Ether	NA	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylcyclohexane	NA	0.500	UL	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Methylene Chloride	5	0.500	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
o-Xylene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Styrene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Toluene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,2-Dichloroethene	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
trans-1,3-Dichloropropene	NA	0.500	U	0.500	U	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ	0.500	UJ
Trichloroethene	5	**0.640**		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Trichlorofluoromethane	5	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Vinyl Chloride	2	0.500	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U

Notes:
All results are in µg/L.
Bold - Indicates the analyte was detected
Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard
Q - Data qualifier
U - The analyte was not detected at, or above the reporting limit.
J - Indicates an estimated value.
K- the reported value may be biased high.
L- The reported value may be biased low.
µg/L - micrograms per liter

Appendix A
Table A2 - Groundwater Metals Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		01-EW01		01-EW02		02-EW01		02-EW02		ERT-EW-3		ERT-EW-4		ERT-EW-5		02-EW06		IW-ISCO-10		IW-ISCO-11		IW-ISCO-13		IW-ISCO-2		IW-ISCO-3		IW-ISCO-4		IW-ISCO-5	
Sample ID		EW-01-061021		EW-02-061021		EW-1-061021		EW-2-061021		EW-3-060921		EW-4-060821		EW-5-061021		EW-6-061021R		IW-ISCO-10-061021		IW-ISCO-11-061621		IW-ISCO-13-061621		IW-ISCO-2-061621		IW-ISCO-3-061521		IW-ISCO-4-061621		IW-ISCO-5-061721	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample	
Sample Date		6/10/2021		6/10/2021		6/10/2021		6/10/2021		6/9/2021		6/8/2021		6/10/2021		6/10/2021		6/10/2021		6/16/2021		6/16/2021		6/16/2021		6/15/2021		6/16/2021		6/17/2021	
Parameter	**NYSDEC Class GA Standard (µg/L)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Aluminum	100	**726**		**138**		**30.9**		20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	**920**		**758**		**3500**		**8030**		**851**		**228**		**5110**	
Antimony	3	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Arsenic	25	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**1.33**		**1.00**		**31.1**		1.00	U	**1.26**		1.00	U	**1.70**	
Barium	1000	**42.2**		**81.5**		**113**		**116**		**53.7**		**107**		**60.8**		**122**		**85.0**		**63.8**		**115**		**35.4**		**56.0**		**28.5**		**139**	
Beryllium	11	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.69		1.00	U	1.00	U	**1.22**	
Cadmium	5	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Calcium	NA	**12300**		**12200**		**15800**		**17200**		**10300**		**16300**		**9870**		**17400**		**11500**		**15600**		**11900**		**14000**		**14100**		**12500**		**14400**	
Chromium	50	**19.5**		**9.19**		**4.14**		**8.00**		**2.22**		**1.85**		**1.01**		**8.48**		**62.9**		**23.9**		**160**		**32.2**		**34.9**		**41.7**		**82.4**	
Cobalt	5	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**1.39**		1.00	U	**4.95**		1.00	U	1.00	U	1.00	U	**1.68**	
Copper	200	1.00	U	**1.06**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**3.70**		**2.88**		**65.4**		**1.54**		**3.90**		**3.54**		**4.10**	
Hardness	NA	**55.9**		**53.8**		**62.0**		**72.6**		**43.7**		**68.9**		**53.8**		**74.7**		**52.5**		**68.8**		**51.0**		**64.3**		**61.7**		**55.6**		**66.4**	
Iron	300	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	**952**		**70.4**		**2550**		**217**		**497**		**306**		**309**	
Lead	25	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**3.53**		1.00	U	**6.92**		1.00	U	**2.38**		1.00	U	**1.44**	
Magnesium	35000	**6140**		**5690**		**5450**		**7210**		**4370**		**6860**		**7080**		**7600**		**5790**		**7250**		**5150**		**7130**		**6450**		**5910**		**7410**	
Manganese	300	**1.23**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**2.68**		**2.41**		**444**		**241**		**5730**		**117**		**261**		**202**		**196**	
Mercury	0.7	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U
Nickel	100	**5.59**		**3.56**		1.00	U	1.00	U	1.00	U	1.00	U	**2.63**		1.00	U	**70.3**		**13.5**		**206**		**13.4**		**23.6**		**25.5**		**29.3**	
Potassium	NA	**10200**		**3540**		**1320**		**13900**		**873**		**1170**		**1660**		**11100**		**5340**		**19400**		**7730**		**13000**		**9650**		**8770**		**14100**	
Selenium	10	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Silver	50	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Sodium	20000	**20600**		**19300**		**14800**		**18500**		**12100**		**24400**		**30300**		**23600**		**19500**		**22800**		**19500**		**21400**		**20400**		**20600**		**26800**	
Thallium	8	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Vanadium	14	**3.22**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**4.26**		**11.4**		**89.2**		**5.26**		**3.26**		**2.94**		**5.74**	
Zinc	NA	**11.6**		**9.55**		2.00	U	2.00	U	**34.0**		**6.69**		**12.6**		2.00	U	**8.15**		**8.73**		**87.9**		**11.9**		**7.19**		**6.29**		**61.6**	

Notes:

All results are in µg/L.

Bold - Indicates the analyte was detected

Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard

Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

J - Indicates an estimated value.

K- the reported value may be biased high.

L- The reported value may be biased low.

µg/L - micrograms per liter

Appendix A
Table A2 - Groundwater Metals Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		IW-ISCO-6		IW-ISCO-7		IW-ISCO-7		IW-ISCO-8		01-AS		01-EFF		01-EFF		01-CINF		MPW-01-A		MPW01-B		MPW-01-C		MPW-02-B		MPW-02-C		MPW-03-B		MPW-03-C	
Sample ID		IW-ISCO-6-061721		IW-ISCO-7-061721		IW-ISCO-7-2-061721		IW-ISCO-8-061721		LAI-AS-061021		LAI-EFF-061021		LAI-EFF-2-061021		LAI-INF-061021		MPW-01A-060821		MPW-01B-060821		MPW-01C-060821		MPW-02B-060921		MPW-02C-060921		MPW-03B-060921		MPW-03C-060921	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Duplicate	
Sample Date		6/17/2021		6/17/2021		6/17/2021		6/17/2021		6/10/2021		6/10/2021		6/10/2021		6/10/2021		6/8/2021		6/8/2021		6/8/2021		6/9/2021		6/9/2021		6/6/2021		6/9/2021	
Parameter	**NYSDEC Class GA Standard (µg/L)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Aluminum	100	**1670**		**9900**		**10100**		**2160**		**626**		**4010**		**484**		**475**		20.0	U	20.0	U	20.0	U	**35.1**		20.0	U	**424**		20.0	U
Antimony	3	1.00	U	1.00	U	1.00	U	1.00	U	20.0	U	20.0	U	20.0	U	20.0	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Arsenic	25	**1.34**		**1.31**		**1.36**		1.00	U	8.00	U	8.00	U	8.00	U	8.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Barium	1000	**96.8**		**38.7**		**38.7**		**78.2**		**100**	**U**	**100**	**U**	**100**	**U**	**100**	**U**	**103**		**122**		**133**		**40.5**		**93.5**		**23.9**		**76.5**	
Beryllium	11	1.00	U	**2.65**		**2.57**		1.00	U	3.00	U	3.00	U	3.00	U	3.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Cadmium	5	1.00	U	1.00	U	1.00	U	1.00	U	3.00	U	3.00	U	3.00	U	3.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Calcium	NA	**12300**		**9070**		**9440**		**11200**		**12900**		**13400**		**12800**		**13000**		**23900**		**14400**		**29100**		**12300**		**18900**		**11500**		**15800**	
Chromium	50	**43.4**		**28.1**		**28.0**		**12.0**		**14.9**		**15.5**		**14.8**		**15.4**		**6.58**		**1.98**		**3.53**		**19.2**		**1.63**		**5.02**		**1.46**	
Cobalt	5	1.00	U	1.00	U	1.00	U	1.00	U	20.0	U	20.0	U	20.0	U	20.0	U	**3.62**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Copper	200	**4.70**		**1.49**		**1.47**		**1.69**		10.0	U	10.0	U	10.0	U	10.0	U	**2.28**		1.00	U	**1.18**		1.00	U	1.00	U	**4.87**		**1.95**	
Hardness	NA	**55.7**		**40.6**		**42.0**		**45.5**		NA	NA	NA	NA	NA	NA	NA	NA	**81.8**		**61.1**		**124**		**56.7**		**76.7**		**48.8**		**62.5**	
Iron	300	**660**		**184**		**180**		**140**		50.0	U	**95.5**		50.0	U	50.0	U	**387**		20.0	U	20.0	U	20.0	U	20.0	U	**1270**		**56.3**	
Lead	25	**1.57**		1.00	U	1.00	U	1.00	U	8.00	U	8.00	U	8.00	U	8.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**1.73**		1.00	U
Magnesium	35000	**6070**		**4350**		**4470**		**4270**		**6620**		**6790**		**6630**		**6720**		**5370**		**6120**		**12400**		**6280**		**7170**		**4870**		**5610**	
Manganese	300	**296**		**308**		**280**		**124**		5.00	U	5.00	U	5.00	U	5.00	U	**266**		**28.9**		**1.00**		**3.94**		**1.29**		**48.5**		**43.5**	
Mercury	0.7	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U
Nickel	100	**23.8**		**26.1**		**24.9**		**47.4**		20.0	U	20.0	U	20.0	U	20.0	U	**1250**		**3.75**		1.00	U	1.00	U	**5.46**		**20.3**		**165**	
Potassium	NA	**10900**		**15600**		**15900**		**12700**		**7320**		**7460**		**7350**		**7430**		**5100**		**2870**		**1770**		**1300**		**2270**		**1600**		**1670**	
Selenium	10	1.00	U	1.00	U	1.00	U	1.00	U	20.0	U	20.0	U	20.0	U	20.0	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Silver	50	1.00	U	1.00	U	1.00	U	1.00	U	5.00	U	5.00	U	5.00	U	5.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Sodium	20000	**22800**		**18200**		**18600**		**12100**		**19000**		**19400**		**19000**		**19300**		**37800**		**34200**		**20900**		**21400**		**23700**		**10600**		**18600**	
Thallium	8	1.00	U	1.00	U	1.00	U	1.00	U	20.0	U	20.0	U	20.0	U	20.0	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Vanadium	14	**4.88**		**4.53**		**4.58**		**1.53**		20.0	U	20.0	U	20.0	U	20.0	U	1.00	U	1.00	U	**1.21**		1.00	U	**1.89**		**1.36**		1.00	U
Zinc	NA	**12.0**		**17.8**		**18.1**		**16.7**		**23.8**		**195**		20.0	U	20.0	U	**34.0**		**9.76**		**5.19**		2.00	U	**12.2**		**8.85**		**14.6**	

Notes:

All results are in µg/L.

Bold - Indicates the analyte was detected

Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard

Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

J - Indicates an estimated value.

K- the reported value may be biased high.

L- The reported value may be biased low.

µg/L - micrograms per liter

Appendix A
Table A2 - Groundwater Metals Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MPW-03-D		MPW-04-B		MPW-04-D		MPW-04-E		MPW-05-A		MPW-05-B		MPW-05-D		MPW-06-A		MPW-06-B		MPW-06-D		MPW-08-A				MPW-08-B		MPW-08-C		MPW-08-D	
Sample ID		MPW-03D-060921		MPW-04B-061521		MPW-04D-061521		MPW-04E-061521		MPW-05A-061021		MPW-05B-061021		MPW-05D-061521		MPW-06A-061021		MPW-06B-061021		MPW-06D-061021		MPW-08A-060821		MPW-08A-2-060821		MPW-08B-060821		MPW-08C-060821		MPW-08D-060821	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample	
Sample Date		6/9/2021		6/15/2021		6/15/2021		6/15/2021		6/10/2021		6/10/2021		6/15/2021		6/10/2021		6/10/2021		6/10/2021		6/8/2021		6/8/2021		6/8/2021		6/8/2021		6/8/2021	
Parameter	**NYSDEC Class GA Standard (µg/L)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Aluminum	100	20.0	U	**46.6**		20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	**32.4**		20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U
Antimony	3	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Arsenic	25	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**2.32**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Barium	1000	**79.1**		**76.6**		**109**		**219**		**22.8**		**60.4**		**72.4**		**61.5**		**22.1**		**5.49**		**91.4**		**91.2**		**98.2**		**50.1**		**27.0**	
Beryllium	11	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Cadmium	5	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Calcium	NA	**20900**		**17400**		**19700**		**20900**		**12400**		**24000**		**18300**		**62400**		**7880**		**19400**		**13200**		**13000**		**12600**		**13500**		**14000**	
Chromium	50	**1.24**		**4.24**		**23.6**		**1.92**		1.00	U	1.00	U	**1.66**		**19.0**		**4.27**		**2.57**		**1.50**		**1.52**		**5.68**		**2.35**		**1.94**	
Cobalt	5	**1.80**		1.00	U	1.00	U	1.00	U	**7.13**		**1.89**		1.00	U	**5.02**		**1.19**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Copper	200	**3.12**		1.00	U	**1.92**		1.00	U	**3.01**		1.00	U	**1.46**		1.00	U	1.00	U	**1.19**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Hardness	NA	**71.0**		**80.0**		**84.4**		**88.7**		**61.6**		**106**		**77.6**		**183**		**33.6**		**72.1**		**62.0**		**61.4**		**60.0**		**57.3**		**53.0**	
Iron	300	20.0	U	20.0	U	**69.6**		20.0	U	**438**		20.0	U	**38.0**		**345**		**1970**		20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U
Lead	25	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Magnesium	35000	**4590**		**8890**		**8520**		**8900**		**7450**		**11100**		**7740**		**6530**		**3370**		**5730**		**7060**		**7040**		**6940**		**5700**		**4400**	
Manganese	300	**221**		**1.55**		**11.3**		**1.95**		**129**		**70.8**		**1.22**		**113**		**275**		1.00	U	**2.98**		**2.93**		**3.71**		1.00	U	1.00	U
Mercury	0.7	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U
Nickel	100	**17.8**		1.00	U	**55.5**		1.00	U	**30.7**		**2.16**		**1.35**		**1540**		**43.6**		1.00	U	**4.95**		**4.60**		**6.07**		**3.14**		1.00	U
Potassium	NA	**1560**		**11300**		**4190**		**6440**		**2240**		**7550**		**1230**		**1530**		**787**		**1380**		**1610**		**1590**		**1400**		**1320**		**1040**	
Selenium	10	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**1.21**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Silver	50	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Sodium	20000	**20400**		**24900**		**27900**		**30500**		**23600**		**31300**		**18200**		**28500**		**12800**		**10400**		**29400**		**29000**		**29000**		**19900**		**12400**	
Thallium	8	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Vanadium	14	1.00	U	**1.23**		1.00	U	**1.62**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**3.48**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Zinc	NA	**18.4**		**2.68**		**4.54**		**4.20**		**71.6**		**2.31**		**5.57**		2.00	U	**5.73**		**2.29**		**6.12**		**5.63**		**6.56**		**3.27**		2.00	U

Notes:

All results are in µg/L.

Bold - Indicates the analyte was detected

Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard

Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

J - Indicates an estimated value.

K- the reported value may be biased high.

L- The reported value may be biased low.

µg/L - micrograms per liter

Appendix A
Table A2 - Groundwater Metals Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MPW-08-E		MPW-09-A		MPW-09-B		MPW-09-C		MPW-09-D		MPW-09-E		MPW-10-C		MPW-10-D		MW-05		ERT-MW-1A		ERT-MW-1B				ERT-MW-2A		ERT-MW-2B		ERT-MW-3	
Sample ID		MPW-08E-060821		MPW-09A-061421		MPW-09B-061421		MPW-09C-061421		MPW-09D-061421		MPW-09E-061421		MPW-10C-061721		MPW-10D-061721		MW-05-061421		MW-1A-061721		MW-1B-061721		MW-1B-2-061721		MW-2A-061621		MW-2B-061621		MW-3-061421	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample	
Sample Date		6/8/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/17/2021		6/17/2021		6/14/2021		6/17/2021		6/17/2021		6/17/2021		6/16/2021		6/16/2021		6/14/2021	
Parameter	NYSDEC Class GA Standard (µg/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	100	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	**25.3**		**22.9**		**287**		**292**		**779**		**671**		**27.4**	
Antimony	3	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Arsenic	25	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**2.43**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**1.25**		1.00	U
Barium	1000	**12.8**		**59.4**		**148**		**276**		**83.4**		**24.0**		**125**		**69.2**		**19.3**		**19.3**		**16.1**		**16.6**		**52.2**		**61.9**		**168**	
Beryllium	11	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Cadmium	5	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Calcium	NA	**13900**		**10900**		**24900**		**38800**		**16300**		**8760**		**17300**		**17600**		**9260**		**13900**		**13200**		**13600**		**11700**		**19100**		**28900**	
Chromium	50	**1.35**		**2.25**		**4.58**		**3.17**		**3.36**		**1.48**		**2.44**		**9.32**		**7.93**		**1.47**		**2.43**		**2.47**		**4.79**		**3.04**		**5.99**	
Cobalt	5	1.00	U	1.00	U	1.00	U	**1.62**		**1.25**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Copper	200	1.00	U	1.00	U	**4.56**		**29.5**		**1.42**		**5.82**		**1.89**		**1.37**		**1.26**		1.00	U	1.00	U	1.00	U	**2.30**		**1.74**		1.00	U
Hardness	NA	**54.5**		**46.1**		**109**		**159**		**64.7**		**33.8**		**75.5**		**77.4**		**39.3**		**54.0**		**52.1**		**53.8**		**56.7**		**78.8**		**127**	
Iron	300	20.0	U	20.0	U	20.0	U	**27.1**		20.0	U	**55.8**		20.0	U	20.0	U	**91.8**		**32.9**		**548**		**593**		**1420**		**1260**		**71.6**	
Lead	25	1.00	U	1.00	U	**1.48**		**1.88**		1.00	U	**3.73**		**1.07**		**2.03**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Magnesium	35000	**4810**		**4610**		**11400**		**15000**		**5860**		**2890**		**7870**		**8090**		**3940**		**4660**		**4690**		**4830**		**6670**		**7550**		**13400**	
Manganese	300	1.00	U	1.00	U	**2.52**		**49.4**		**5.52**		**12.6**		**1.22**		**3.22**		**3.31**		**1.03**		**12.5**		**13.5**		**29.8**		**41.0**		**5.39**	
Mercury	0.7	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U
Nickel	100	1.00	U	**3.60**		1.00	U	**5.15**		**2.05**		1.00	U	1.00	U	1.00	U	**6.80**		1.00	U	1.00	U	1.00	U	**2.87**		**1.59**		**4.15**	
Potassium	NA	**932**		**862**		**7110**		**7000**		**13500**		**765**		**18600**		**12800**		**928**		**945**		**934**		**957**		**2740**		**1430**		**1720**	
Selenium	10	1.00	U	**1.26**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**2.81**	
Silver	50	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Sodium	20000	**8910**		**12400**		**21000**		**45100**		**14500**		**6350**		**23500**		**27700**		**7060**		**9380**		**8560**		**8810**		**22200**		**16400**		**23600**	
Thallium	8	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Vanadium	14	1.00	U	1.00	U	1.00	U	1.00	U	**1.85**		1.00	U	1.00	U	**3.95**		1.00	U	1.00	U	**1.24**		**1.27**		**2.40**		**2.13**		1.00	U
Zinc	NA	2.00	U	**3.07**		**4.64**		**40.7**		**11.6**		**38.8**		**8.88**		**18.8**		**3.28**		2.00	U	2.00	U	2.00	U	**19.8**		**5.35**		**2.54**	

Notes:

All results are in µg/L.

Bold - Indicates the analyte was detected

Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard

Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

J - Indicates an estimated value.

K- the reported value may be biased high.

L- The reported value may be biased low.

µg/L - micrograms per liter

Appendix A
Table A2 - Groundwater Metals Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		ERT-MW-4A		ERT-MW-4B		ERT-MW-5A		ERT-MW-5B		ERT-MW-6A		ERT-MW-6B		MW-ISCO-1		MW-ISCO-2		MW-ISCO-4		MW-ISCO-5		MW-PD-11		MW-PD-12		MW-PD-13		MW-PD-14		MW-PD-15	
Sample ID		MW-4A-061621		MW-4B-061621		MW-5A-061021		MW-5B-061021		MW-6A-060821		MW-6B-060821		MW-ISCO-1-061721		MW-ISCO-2-061621		MW-ISCO-4-061521		MW-ISCO-5-061521		MW-PD-11-061421		MW-PD-12-061421		MW-PD-13-061421		MW-PD-14-061421		MW-PD-15-061021	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample	
Sample Date		6/16/2021		6/16/2021		6/10/2021		6/10/2021		6/8/2021		6/8/2021		6/17/2021		6/16/2021		6/15/2021		6/15/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/10/2021	
Parameter	**NYSDEC Class GA Standard (µg/L)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Aluminum	100	**1850**		**543**		**540**		**216**		**165**		**77.5**		**784**		**5540**		**4840**		**376**		**235**		**6470**		**996**		**249**		**23.6**	
Antimony	3	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.21		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Arsenic	25	**1.18**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**2.60**		**2.99**		1.00	U	1.00	U
Barium	1000	**52.7**		**38.7**		**18.8**		**11.3**		**20.1**		**19.3**		**13.2**		**27.3**		**39.4**		**21.0**		**61.1**		**53.1**		**168**		**130**		**103**	
Beryllium	11	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**1.18**		**1.21**		1.00	U	1.00	U	**2.13**		1.00	U	1.00	U	1.00	U
Cadmium	5	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Calcium	NA	**10900**		**10900**		**11300**		**13200**		**15000**		**15100**		**12100**		**10100**		**14700**		**10600**		**12400**		**10700**		**24300**		**14000**		**19400**	
Chromium	50	**4.80**		**2.84**		**20.0**		**6.91**		**2.26**		**2.31**		**39.5**		**57.3**		**29.7**		**19.5**		**48.7**		**199**		**1010**		**1600**		**136**	
Cobalt	5	**1.40**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**2.61**		**16.6**		**16.5**		**45.1**		**1.28**	
Copper	200	**4.08**		**2.18**		**1.82**		1.00	U	1.00	U	1.00	U	1.00	U	**6.22**		1.00	U	**1.21**		**5.35**		**10.1**		**32.3**		**54.9**		**2.99**	
Hardness	NA	**45.1**		**44.1**		**45.2**		**53.1**		**57.5**		**58.4**		**53.3**		**40.7**		**64.2**		**45.1**		**50.7**		**49.0**		**106**		**52.5**		**83.4**	
Iron	300	**2520**		**1230**		**753**		**597**		**277**		**117**		**90.9**		**278**		**25.9**		**48.0**		**747**		**2130**		**6670**		**8440**		**566**	
Lead	25	**2.86**		**1.08**		**1.00**		1.00	U	1.00	U	1.00	U	1.00	U	**1.10**		1.00	U	1.00	U	**1.26**		**2.28**		**2.53**		**1.18**		1.00	U
Magnesium	35000	**4360**		**4100**		**4130**		**4870**		**4890**		**5040**		**5580**		**3730**		**6680**		**4530**		**4780**		**5400**		**10900**		**4240**		**8510**	
Manganese	300	**68.8**		**79.1**		**11.2**		**13.9**		**5.10**		**2.98**		**9.71**		**31.2**		**6.21**		**10.4**		**105**		**66.9**		**508**		**605**		**8.34**	
Mercury	0.7	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U
Nickel	100	**3.31**		**2.12**		**12.5**		**3.48**		1.00	U	1.00	U	**10.1**		**27.9**		**5.55**		**4.86**		**40.1**		**227**		**252**		**3250**		**11.0**	
Potassium	NA	**1270**		**964**		**926**		**966**		**1090**		**1280**		**17300**		**19500**		**13900**		**7350**		**1730**		**29900**		**1720**		**9970**		**3430**	
Selenium	10	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Silver	50	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Sodium	20000	**9940**		**10900**		**11500**		**13300**		**9630**		**9860**		**22900**		**18000**		**19400**		**17300**		**15100**		**19100**		**26300**		**220000**		**19300**	
Thallium	8	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Vanadium	14	**4.06**		**2.07**		**1.23**		**1.01**		**1.11**		**1.21**		1.00	U	**1.64**		1.00	U	**1.33**		**4.22**		**8.07**		**8.70**		**7.22**		**1.14**	
Zinc	NA	**8.44**		**3.80**		**3.86**		**5.20**		2.00	U	2.00	U	**3.28**		**24.2**		**8.06**		**52.2**		**20.1**		**10.7**		**7.35**		**143**		**2.54**	

Notes:

All results are in µg/L.

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µg/L - micrograms per liter

Appendix A
Table A2 - Groundwater Metals Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MW-PD-16				MW-PD-17		02-AS		02-EFF		02-GAC		PZ-04		PZ-05		PZ-06		PZ-07		SDW-1		Equipment Blanks					
Sample ID		MW-PD-16-061621		MW-PD-16-2-061621		MW-PD-17-061621		OMP-AS-061021		OMP-EFF-061021		OMP-LGAC Mid-061021		PZ-04-061521		PZ-05-061521		PZ-06-061121		PZ-07-061121		SDW-1-061021		EB01-061021		EB02-061421		EB03-061621	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Aqueous		Aqueous		Aqueous	
Sample Type		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Equipment Blank		Equipment Blank		Equipment Blank	
Sample Date		6/16/2021		6/16/2021		6/16/2021		6/10/2021		6/10/2021		6/10/2021		6/15/2021		6/15/2021		6/11/2021		6/11/2021		6/10/2021		6/10/2021		6/14/2021		6/16/2021	
Parameter	NYSDEC Class GA Standard (µg/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	100	**100**		**114**		**230**		100	U	100	U	100	U	**1190**		**306**		**473**		**219**		**214**		20.0	U	20.0	U	20.0	U
Antimony	3	1.00	U	1.00	U	1.00	U	20.0	U	20.0	U	20.0	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Arsenic	25	1.00	U	1.00	U	1.00	U	8.00	U	8.00	U	8.00	U	**1.20**		1.00	U	1.00	U	1.00	U	**36.3**		1.00	U	1.00	U	1.00	U
Barium	1000	**108**		**112**		**116**		**123**		**121**		**123**		**48.4**		**39.5**		**58.0**		**30.4**		**46.7**		1.00	U	1.00	U	1.00	U
Beryllium	11	1.00	U	1.00	U	1.00	U	3.00	U	3.00	U	3.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Cadmium	5	1.00	U	1.00	U	1.00	U	3.00	U	3.00	U	3.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Calcium	NA	**13500**		**13900**		**20300**		**17700**		**17700**		**17900**		**11800**		**8480**		**11100**		**12500**		**76000**		200	U	200	U	200	U
Chromium	50	**63.7**		**63.7**		**205**		**7.22**		**7.34**		**7.65**		**106**		**20.5**		**53.3**		**48.4**		**7.45**		1.00	U	1.00	U	1.00	U
Cobalt	5	1.00	U	1.00	U	1.00	U	20.0	U	20.0	U	20.0	U	**2.51**		1.00	U	1.00	U	**1.07**		1.00	U	1.00	U	1.00	U	1.00	U
Copper	200	**1.15**		**1.13**		**2.70**		10.0	U	10.0	U	10.0	U	**4.90**		**1.16**		**1.23**		**6.00**		1.00	U	1.00	U	1.00	U	1.00	U
Hardness	NA	**58.1**		**59.5**		**80.5**		NA	NA	NA	NA	NA	NA	**52.6**		**36.9**		**50.8**		**52.2**		**247**		1.32	U	1.32	U	1.32	U
Iron	300	**203**		**202**		**963**		50.0	U	50.0	U	50.0	U	**1830**		**329**		**437**		**583**		**7110**		20.0	U	20.0	U	20.0	U
Lead	25	1.00	U	1.00	U	1.00	U	8.00	U	8.00	U	8.00	U	**1.30**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Magnesium	35000	**5910**		**6010**		**7270**		**7630**		**7620**		**7700**		**5590**		**3830**		**5610**		**5080**		**13800**		200	U	200	U	200	U
Manganese	300	**19.3**		**18.4**		**8.48**		5.00	U	5.00	U	5.00	U	**37.2**		**8.83**		**22.6**		**10.8**		**790**		1.00	U	1.00	U	1.00	U
Mercury	0.7	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U
Nickel	100	**6.85**		**6.51**		**33.7**		20.0	U	20.0	U	20.0	U	**59.8**		**11.8**		**31.7**		**36.5**		1.00	U	1.00	U	1.00	U	1.00	U
Potassium	NA	**9320**		**9590**		**1490**		**10100**		**10100**		**10300**		**8660**		**4940**		**5040**		**2130**		**11900**		200	U	200	U	200	U
Selenium	10	1.00	U	1.00	U	1.00	U	20.0	U	20.0	U	20.0	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Silver	50	1.00	U	1.00	U	1.00	U	5.00	U	5.00	U	5.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Sodium	20000	**22800**		**23400**		**18900**		**18400**		**18400**		**18700**		**19100**		**15000**		**20800**		**16900**		**59700**		200	U	200	U	200	U
Thallium	8	1.00	U	1.00	U	1.00	U	20.0	U	20.0	U	20.0	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Vanadium	14	**1.11**		**1.12**		**3.29**		20.0	U	20.0	U	20.0	U	**3.66**		**1.15**		**1.23**		**1.09**		**1.18**		1.00	U	1.00	U	1.00	U
Zinc	NA	**3.92**		**3.78**		2.00	U	20.0	U	20.0	U	20.0	U	**6.66**		2.00	U	**2.21**		**4.09**		**7.69**		2.00	U	2.00	U	2.00	U

Notes:

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Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

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µg/L - micrograms per liter

Appendix A
Table A3 - Groundwater General Chemistry Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		01-EW01		01-EW02		02-EW01		02-EW02		ERT-EW-3		ERT-EW-4		ERT-EW-5		02-EW06		IW-ISCO-10	
Sample ID		EW-01-061021		EW-02-061021		EW-1-061021		EW-2-061021		EW-3-060921		EW-4-060821		EW-5-061021		EW-6-061021R		IW-ISCO-10-061021	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample	
Sample Date		6/10/2021		6/10/2021		6/10/2021		6/10/2021		6/9/2021		6/8/2021		6/10/2021		6/10/2021		6/10/2021	
Parameter	**NYSDEC Class GA Standard (mg/L)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Alkalinity, Total	NA	**28.8**	J	**19.3**	J	**38.3**	J	**61.9**	J	**24.4**	J	**25.9**	J	**10.9**	J	**49.2**	J	**17.8**	J
Ammonia [As N]	2	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U
Chloride	250	**21.5**		**24.3**		**19.3**		**26.0**		**15.8**		**49.3**		**49.6**		**29.0**		**20.1**	
Fluoride	1.5	**5.39**		**1.15**		**0.104**		0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	**3.96**	
Nitrogen, Total Kjeldahl	10	**0.232**		0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U
Organic Carbon	NA	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Residue, Filterable	500	**206**		**181**		**170**		**207**		**115**		**235**		**186**		**237**		**169**	
Residue, Non-Filterable	NA	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	**20.0**	
Sulfate	250	**28.9**		**27.3**		**10.2**		**23.3**		**18.6**		**25.6**		**20.8**		**32.4**		**28.2**	

Notes:

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Appendix A
Table A3 - Groundwater General Chemistry Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		IW-ISCO-11		IW-ISCO-13		IW-ISCO-2		IW-ISCO-3		IW-ISCO-4		IW-ISCO-5		IW-ISCO-6		IW-ISCO-7			
Sample ID		IW-ISCO-11-061621		IW-ISCO-13-061621		IW-ISCO-2-061621		IW-ISCO-3-061521		IW-ISCO-4-061621		IW-ISCO-5-061721		IW-ISCO-6-061721		IW-ISCO-7-061721		IW-ISCO-7-2-061721	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Duplicate	
Sample Date		6/16/2021		6/16/2021		6/16/2021		6/15/2021		6/16/2021		6/17/2021		6/17/2021		6/17/2021		6/17/2021	
Parameter	NYSDEC Class GA Standard (mg/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Alkalinity, Total	NA	**48.9**	J	**13.3**	J	**19.5**		**34.6**	J	**18.2**	J	**49.7**	J	**28.3**	J	**39.2**	J	**40.2**	
Ammonia [As N]	2	0.0500	U	0.0659		0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U
Chloride	250	**20.1**		**20.9**		**18.0**		**18.1**		**22.6**		**15.2**		**18.0**		**6.95**		**7.44**	
Fluoride	1.5	**7.05**		**6.83**		**30.9**		**5.45**		**4.86**		**17.9**		**8.52**		**34.9**		**36.2**	
Nitrogen, Total Kjeldahl	10	0.100	U	0.100	U	**0.112**		**0.136**		0.100	U	**0.495**		0.100	U	0.100	U	0.100	U
Organic Carbon	NA	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**1.43**		1.00	U	1.00	U	**1.18**	
Residue, Filterable	500	**248**		**197**		**259**		**206**		**204**		**251**		**215**		**204**		**212**	
Residue, Non-Filterable	NA	10.0	U	**154**		10.0	U	**17.0**		**22.0**		**124**		**24.0**		**13.0**		**12.0**	
Sulfate	250	**35.6**		**29.1**		**32.3**		**29.4**		**30.4**		**38.4**		**31.7**		**19.3**		**19.7**	

Notes:

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Appendix A
Table A3 - Groundwater General Chemistry Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		IW-ISCO-8		MPW-01-A		MPW01-B		MPW-01-C		MPW-02-B		MPW-02-C		MPW-03-B		MPW-03-C		MPW-03-D		MPW-04-B		MPW-04-D	
Sample ID		IW-ISCO-8-061721		MPW-01A-060821		MPW-01B-060821		MPW-01C-060821		MPW-02B-060921		MPW-02C-060921		MPW-03B-060921		MPW-03C-060921		MPW-03D-060921		MPW-04B-061521		MPW-04D-061521	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample	
Sample Date		6/17/2021		6/8/2021		6/8/2021		6/8/2021		6/9/2021		6/9/2021		6/6/2021		6/9/2021		6/9/2021		6/15/2021		6/15/2021	
Parameter	**NYSDEC Class GA Standard (mg/L)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Alkalinity, Total	NA	**48.9**	J	**28.9**	J	**10.8**	J	**91.3**	J	**15.3**	J	**34.7**	J	**34.9**	J	**41.8**	J	**41.6**	J	**31.1**	J	**18.4**	J
Ammonia [As N]	2	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U
Chloride	250	**3.71**		**66.5**		**51.9**		**25.5**		**23.1**		**37.9**		**14.7**		**20.6**		**27.9**		**40.4**		**47.2**	
Fluoride	1.5	**11.0**		0.0500	U	0.0500	U	0.0500	U	**2.41**		**0.752**		**0.0708**		**0.560**		0.0500	U	**1.50**		**0.518**	
Nitrogen, Total Kjeldahl	10	0.100	U	0.100	U	0.100	U	0.100	U	**0.158**		0.100	U	0.100	U	0.100	U	**0.187**		**0.132**		0.100	U
Organic Carbon	NA	1.00	U	**1.04**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Residue, Filterable	500	**150**		**353**		**288**		**268**		**177**		**204**		**127**		**158**		**197**		**268**		**296**	
Residue, Non-Filterable	NA	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	**97.0**		10.0	U	10.0	U	10.0	U	10.0	U
Sulfate	250	**18.2**		**27.6**		**26.4**		**27.2**		**28.1**		**23.0**		**19.9**		**18.9**		**24.8**		**29.8**		**30.5**	

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Appendix A
Table A3 - Groundwater General Chemistry Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MPW-04-E		MPW-05-A		MPW-05-B		MPW-05-D		MPW-06-A		MPW-06-B		MPW-06-D		MPW-08-A				MPW-08-B	
Sample ID		MPW-04E-061521		MPW-05A-061021		MPW-05B-061021		MPW-05D-061521		MPW-06A-061021		MPW-06B-061021		MPW-06D-061021		MPW-08A-060821		MPW-08A-2-060821		MPW-08B-060821	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Duplicate		Field Sample	
Sample Date		6/15/2021		6/10/2021		6/10/2021		6/15/2021		6/10/2021		6/10/2021		6/10/2021		6/8/2021		6/8/2021		6/8/2021	
Parameter	NYSDEC Class GA Standard (mg/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Alkalinity, Total	NA	**29.4**	J	**22.6**	J	**97.4**	J	**39.0**	J	**123**	J	**18.3**	J	**61.2**	J	**15.0**	J	**13.8**	J	**15.8**	J
Ammonia [As N]	2	0.0500	U	0.0500	U	**1.16**		0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U
Chloride	250	**49.0**		**37.1**		**47.9**		**25.2**		**62.8**		**14.9**		**12.8**		**50.9**		**50.7**		**50.5**	
Fluoride	1.5	**0.0623**		0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U
Nitrogen, Total Kjeldahl	10	0.100	U	**0.106**		**2.05**		0.100	U	0.100	U	**0.116**		0.100	U	0.100	U	0.100	U	0.100	U
Organic Carbon	NA	1.00	U	1.00	U	**1.54**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Residue, Filterable	500	**299**		**193**		**237**		**193**		**377**		**115**		**136**		**237**		**244**		**10.0**	**U**
Residue, Non-Filterable	NA	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Sulfate	250	**28.9**		**31.2**		**22.7**		**38.6**		**23.6**		**29.0**		**6.11**		**21.8**		**21.7**		**22.4**	

Notes:

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Appendix A
Table A3 - Groundwater General Chemistry Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MPW-08-C		MPW-08-D		MPW-08-E		MPW-09-A		MPW-09-B		MPW-09-C		MPW-09-D		MPW-09-E		MPW-10-C		MPW-10-D		MW-05	
Sample ID		MPW-08C-060821		MPW-08D-060821		MPW-08E-060821		MPW-09A-061421		MPW-09B-061421		MPW-09C-061421		MPW-09D-061421		MPW-09E-061421		MPW-10C-061721		MPW-10D-061721		MW-05-061421	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample	
Sample Date		6/8/2021		6/8/2021		6/8/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/17/2021		6/17/2021		6/14/2021	
Parameter	**NYSDEC Class GA Standard (mg/L)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Alkalinity, Total	NA	**25.8**	J	**37.8**	J	**42.0**	J	**25.8**	J	**85.3**		**184**	J	**74.2**	J	**31.0**		**39.5**	J	**19.1**	J	**27.9**	J
Ammonia [As N]	2	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U
Chloride	250	**37.6**		**21.0**		**15.1**		**19.0**		**33.6**		**31.5**		**19.1**		**7.35**		**40.0**		**48.7**		**10.6**	
Fluoride	1.5	0.0500	U	0.0500	U	0.0525		0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	**1.22**		**0.163**		**0.0533**	
Nitrogen, Total Kjeldahl	10	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U
Organic Carbon	NA	1.00	U	1.00	U	1.00	U	1.00	U	**1.58**		**1.26**		1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Residue, Filterable	500	**188**		**148**		**140**		**125**		**253**		**331**		**188**		**87.0**		**302**		**285**		**100**	
Residue, Non-Filterable	NA	10.0	U	10.0	U	10.0	U	**12.0**		10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Sulfate	250	**18.1**		**12.7**		**7.50**		**16.4**		**33.1**		**23.8**		**4.94**		**3.88**		**31.0**		**31.5**		**13.4**	

Notes:

All results are in mg/L.

Bold - Indicates the analyte was detected

Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard

Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

J - Indicates an estimated value.

K- the reported value may be biased high.

L- The reported value may be biased low.

µg/L - micrograms per liter

Appendix A
Table A3 - Groundwater General Chemistry Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		ERT-MW-1A		ERT-MW-1B		ERT-MW-1B		ERT-MW-2A		ERT-MW-2B		ERT-MW-3		ERT-MW-4A		ERT-MW-4B		ERT-MW-5A		ERT-MW-5B		ERT-MW-6A	
Sample ID		MW-1A-061721		MW-1B-061721		MW-1B-2-061721		MW-2A-061621		MW-2B-061621		MW-3-061421		MW-4A-061621		MW-4B-061621		MW-5A-061021		MW-5B-061021		MW-6A-060821	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample	
Sample Date		6/17/2021		6/17/2021		6/17/2021		6/16/2021		6/16/2021		6/14/2021		6/16/2021		6/16/2021		6/10/2021		6/10/2021		6/8/2021	
Parameter	**NYSDEC Class GA Standard (mg/L)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Alkalinity, Total	NA	**40.0**	J	**38.8**	J	**38.8**	J	**19.3**	J	**50.0**	J	**87.7**	J	**22.7**	J	**22.0**	J	**24.2**	J	**29.6**	J	**47.9**	J
Ammonia [As N]	2	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	**0.0921**		0.0500	U	0.0500	U	**0.0507**	J	0.0500	U	0.0500	U
Chloride	250	**14.7**		**14.2**		**14.0**		**36.9**		**18.1**		**37.4**		**14.6**		**16.0**		**16.0**		**17.7**		**14.6**	
Fluoride	1.5	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U
Nitrogen, Total Kjeldahl	10	0.100	U	0.100	U	0.100	U	0.100	U	0.100	U	**0.201**		0.100	U	0.100	U	0.100	UJ	0.100	U	0.100	U
Organic Carbon	NA	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**1.80**		1.00	U	1.00	U	1.00	UJ	1.00	U	1.00	U
Residue, Filterable	500	**133**		**131**		**122**		**178**		**182**		**281**		**132**		**145**		**144**		**140**		**145**	
Residue, Non-Filterable	NA	10.0	U	**18.0**		**29.0**		**55.0**		**27.0**		10.0	U	**77.0**		**33.0**		**30.0**		**12.0**		**11.0**	
Sulfate	250	**8.05**		**6.94**		**6.94**		**21.9**		**9.68**		**30.1**		**13.8**		**8.98**		**6.59**		**9.60**		**7.58**	

Notes:

All results are in mg/L.

Bold - Indicates the analyte was detected

Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard

Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

J - Indicates an estimated value.

K- the reported value may be biased high.

L- The reported value may be biased low.

µg/L - micrograms per liter

Appendix A
Table A3 - Groundwater General Chemistry Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		ERT-MW-6B		MW-ISCO-1		MW-ISCO-2		MW-ISCO-4		MW-ISCO-5		MW-PD-11		MW-PD-12		MW-PD-13		MW-PD-14		MW-PD-15	
Sample ID		MW-6B-060821		MW-ISCO-1-061721		MW-ISCO-2-061621		MW-ISCO-4-061521		MW-ISCO-5-061521		MW-PD-11-061421		MW-PD-12-061421		MW-PD-13-061421		MW-PD-14-061421		MW-PD-15-061021	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
Sample Type		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample	
Sample Date		6/8/2021		6/17/2021		6/16/2021		6/15/2021		6/15/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/10/2021	
Parameter	NYSDEC Class GA Standard (mg/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Alkalinity, Total	NA	**46.3**	J	**31.5**	J	**33.9**	J	**35.5**	J	**14.7**	J	**22.6**	J	**36.5**	J	**38.1**	J	**13.1**	J	**60.8**	J
Ammonia [As N]	2	**0.165**		0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	**0.110**		**0.0570**		0.0500	U	0.0500	U
Chloride	250	**14.6**		**20.2**		**12.4**		**15.8**		**17.8**		**25.2**		**27.8**		**69.6**		**373**		**24.1**	
Fluoride	1.5	**0.0502**		**7.69**		**20.2**		**20.0**		**4.91**		0.0500	U	**11.6**		0.0500	U	0.0500	U	0.0500	U
Nitrogen, Total Kjeldahl	10	0.100	U	0.100	U	0.100	U	**0.113**		0.100	U	**0.190**		**0.181**		0.100	U	0.100	U	0.100	U
Organic Carbon	NA	1.00	U	1.00	U	**1.45**		1.00	U	1.00	U	**2.56**		1.00	U	1.00	U	1.00	U	1.00	U
Residue, Filterable	500	**136**		**216**		**181**		**232**		**172**		**192**		**238**		**307**		**824**		**216**	
Residue, Non-Filterable	NA	10.0	U	10.0	U	**10.0**		10.0	U	10.0	U	**16.0**		**179**		**78.0**		**71.0**		10.0	U
Sulfate	250	**9.23**		**32.4**		**22.5**		**28.2**		**23.6**		**14.5**		**26.1**		**21.0**		**24.1**		**15.6**	

Notes:

All results are in mg/L.

Bold - Indicates the analyte was detected

Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard

Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

J - Indicates an estimated value.

K- the reported value may be biased high.

L- The reported value may be biased low.

µg/L - micrograms per liter

Appendix A
Table A3 - Groundwater General Chemistry Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MW-PD-16		MW-PD-16		MW-PD-17		PZ-04		PZ-05		PZ-06		PZ-07		SDW-1		Equipment Blanks					
Sample ID		MW-PD-16-061621		MW-PD-16-2-061621		MW-PD-17-061621		PZ-04-061521		PZ-05-061521		PZ-06-061121		PZ-07-061121		SDW-1-061021		EB01-061021		EB02-061421		EB03-061621	
Matrix		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Aqueous		Aqueous		Aqueous	
Sample Type		Field Sample		Field Duplicate		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Field Sample		Equipment Blank		Equipment Blank		Equipment Blank	
Sample Date		6/16/2021		6/16/2021		6/16/2021		6/15/2021		6/15/2021		6/11/2021		6/11/2021		6/10/2021		6/10/2021		6/14/2021		6/16/2021	
Parameter	NYSDEC Class GA Standard (mg/L)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Alkalinity, Total	NA	**30.7**	J	**29.1**	J	**48.3**	J	**18.6**	J	**25.7**	J	**11.3**	J	**16.2**		**321**	J	1.00	UJ	1.00	UJ	1.00	UJ
Ammonia [As N]	2	**0.422**		**0.419**		0.0500	U	0.0500	U	0.0500	U	0.0500	U	0.0500	U	**2.25**		0.0500	U	0.0500	U	0.0500	U
Chloride	250	**26.2**		**26.2**		**35.2**		**21.8**		**11.3**		**21.9**		**23.3**		**64.7**		0.500	U	0.500	U	0.500	U
Fluoride	1.5	0.0500	U	0.0500	U	0.0500	U	**4.11**		**1.20**		**3.78**		0.0500	U	**0.134**		0.0500	U	0.0500	U	0.0500	U
Nitrogen, Total Kjeldahl	10	**0.491**		**0.513**		0.100	U	0.100	U	0.100	U	**0.186**		0.100	U	**4.57**		0.100	U	0.100	U	0.100	U
Organic Carbon	NA	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	**7.68**		1.00	U	1.00	U	1.00	U
Residue, Filterable	500	**229**		**230**		**195**		**229**		**176**		**177**		**183**		**482**		**26.0**		10.0	U	10.0	U
Residue, Non-Filterable	NA	10.0	U	10.0	U	**14.0**		**166**		**12.0**		**25.0**		**27.0**		**28.0**		10.0	U	10.0	U	10.0	U
Sulfate	250	**29.8**		**29.5**		**16.5**		**28.4**		**24.0**		**28.7**		**20.4**		**3.35**		1.00	U	1.00	U	1.00	U

Notes:

All results are in mg/L.

Bold - Indicates the analyte was detected

Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard

Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

J - Indicates an estimated value.

K- the reported value may be biased high.

L- The reported value may be biased low.

µg/L - micrograms per liter

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APPENDIX B

DATA USABILITY REPORT & TABLES

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DATA USABILITY REPORT

1.0 DATA ANALYSIS AND REVIEW

A data quality evaluation was performed on the laboratory analyses for all the samples collected during the reporting period, in accordance with the *Lawrence Aviation Industries Uniform Federal Policy-Quality Assurance Project Plan (UFP-QAPP)* (HDR, Engineering, Inc., 2016; HGL, 2021). The data quality evaluation included a review of analytical data reports for target VOCs, metals, and general chemistry parameters in aqueous media and analytical reports provided by U.S. Environmental Protection Agency (USEPA) Region 2 Laboratory Services and Applied Sciences Division (LSASD) laboratory in Edison, New Jersey. Sample results received from LSASD arrived validated and no further validation was performed.

1.1 ANALYTICAL RESULTS

Validated sample results were reported for samples submitted to the LSASD laboratory. The results are assumed to be acceptable as presented by the LSASD laboratory.

Data qualifiers were applied to analytical results by the LSASD laboratory. There are three broad categories of qualifiers, which classify data as usable, usable but estimated, and unusable. The definitions of the standard data qualifiers applied to the LAI Superfund site analytical results are as follows:

- **No qualifier -** The analyte was positively identified at the reported concentration. The reported concentration is within the calibrated range of the instrument, and the result is not affected by any deficiencies in the associated quality control (QC) criteria.
- **U -** The analyte was analyzed for but was not detected above the reporting limit.
- **J -** The identification of the analyte is acceptable; the reported value is an estimate with unknown bias.
- **J+ -** The identification of the analyte is acceptable; the reported result may be biased high.
- **J-** - The identification of the analyte is acceptable; the reported result may be biased low.
- **UJ –** The analyte was analyzed for but was not detected above the reporting limit; the associated numerical value is approximate.
- **K -** The identification of the analyte is acceptable; the reported value may be biased high.
- **L -** The identification of the analyte is acceptable; the reported value may be biased low.
- **NJ or N –** There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.

1.2 LABORATORY QC ANALYSIS RESULTS

All analytical results for the June 2021 sampling event that were submitted to the LSASD laboratory were reviewed and found by LSASD laboratory to be generated in compliance with LSASD laboratory internal standard operating procedures for analysis. All planned samples were collected, and field completeness is considered to be 100 percent (%), which meets the 90%

completeness goal stated in the *Lawrence Aviation Industries UFP-QAPP*. All analytical data points were judged to be usable during the validation process and completeness for the laboratories is considered to be 100%, which meets the 90% completeness goal stated in the *Lawrence Aviation Industries UFP-QAPP*.

1.2.1 Sample Integrity

No issues related to sample integrity were noted.

1.2.2 Holding Time

No issues related to holding time were noted.

1.2.3 Analysis of the Groundwater Samples

A total of 80 groundwater, and process water samples, and 23 QC samples were collected as part of the comprehensive annual June 2021 sampling event and were analyzed for:

- VOCs by USEPA Method DW-1;
- Target Analyte List (TAL) metals by USEPA Method 200.8;
- Mercury by USEPA Method 245.1;
- Chloride, fluoride, and sulfate by USEPA Method 300.0;
- Total alkalinity by Method SM 2320B;
- Ammonia (as nitrogen) by EPA Method 350.1;
- Nitrogen, Total Kjeldahl by EPA Method 351.2;
- Organic Carbon by Method SM 5310;
- Total dissolved solids by Method SM 2540C; and
- Total suspended solids by Method SM2540D.

Validated sample results are presented in Appendix A.

1.3 CHEMICAL ANALYTICAL QUALITY ASSURANCE/QC PROBLEMS ENCOUNTERED

Although some results required qualification, useable analyte results are reported for all samples from this quarter. The analytical results and corresponding final qualifiers for all samples collected are located in Appendix A.

1.3.1 Field Duplicate Comparison

The field sampling team collected five field duplicate pairs during the June 2021 sampling event. The field duplicate pairs are listed below:

- IW-ISCO-7-061721 / IW-ISCO-7-2-061721;
- LAI-EFF-061021 / LAI-EFF-2-061021;
- MPW-08A-060821 / MPW-08A-2-060821;
- MW-1B-061721 / MW-1B-2-061721; and
- MW-PD-16-061621 / MW-PD-16-2-061621.

Field duplicate results for VOCs are in Table B1, field duplicate results for metals are in Table B2, and field duplicate results for general chemistry parameters are in Table B3. The field duplicate results met the precision criteria with the exception of aluminum in field duplicate pair LAI-EFF-061021 / LAI-EFF-2-061021 and total suspended solids in field duplicate pair MW-1B-061721 / MW-1B-2-061721.

1.3.2 Trip Blank Results

The trip blank samples were free from contamination of reported analytes, with the exception of acetone in blank TB-061021.

1.4 ACHIEVEMENT OF PROJECT-SPECIFIC DQOs

All planned samples were collected and analyzed for the designated parameters stated in the *Lawrence Aviation Industries UFP-QAPP*. Field completeness is considered to be 100%, which meets the 90% completeness goal stated in the *Lawrence Aviation Industries UFP-QAPP*.

Completeness for the laboratory is considered to be 100%. This percentage meets the 90% completeness goal stated in the *Lawrence Aviation Industries UFP-QAPP*.

Overall project completeness is calculated to be 100%, which meets the 90% completeness goal stated in Worksheets #12-1 and #12-2 of the *Lawrence Aviation Industries UFP-QAPP*. Therefore, the project DQOs for completeness, identified in the *Lawrence Aviation Industries UFP-QAPP*, were met.

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2.0 REPORTS TO CHEMICAL QC MANAGER

No reports to the Chemical QC Manager were required as the field sampling team and laboratory performed properly in accordance with the project UFP-QAPP, method requirements, and SOPs.

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3.0 CORRECTIVE ACTION

No corrective actions were required during this period.

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4.0 REFERENCES

HDR Engineering, Inc., 2016. *Uniform Federal Policy Quality Assurance Project Plans, Region 2, Architect-Engineering Services Contract, Contract #EP-W-09-009. Lawrence Aviation Industries Long-Term Response Action.* Revision 3. April.

HydroGeoLogic, Inc., 2021. *Uniform Federal Policy Quality Assurance Project Plan, Lawrence Aviation Industries Superfund Site, Operable Unit 1, Long Term Remedial Action.* Final. February.

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TABLES

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Appendix B
Table B1 - Groundwater VOCs Field Duplicate Comparisons
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		IW-ISCO-7						01-EFF						MPW-08-A						ERT-MW-1B						MW-PD-16					
Sample ID		IW-ISCO-7-061721		IW-ISCO-7-2-061721				LAI-EFF-061021		LAI-EFF-2-061021				MPW-08A-060821		MPW-08A-2-060821				MW-1B-061721		MW-1B-2-061721				MW-PD-16-061621		MW-PD-16-2-061621			
Matrix		Groundwater		Groundwater				Groundwater		Groundwater				Groundwater		Groundwater				Groundwater		Groundwater				Groundwater		Groundwater			
Sample Type		Field Sample		Field Duplicate				Field Sample		Field Duplicate				Field Sample		Field Duplicate				Field Sample		Field Duplicate				Field Sample		Field Duplicate			
Sample Date		6/17/2021		6/17/2021		RPD Limit (%)	Calculated RPD (%)	6/10/2021		6/10/2021		RPD Limit (%)	Calculated RPD (%)	6/8/2021		6/8/2021		RPD Limit (%)	Calculated RPD (%)	6/17/2021		6/17/2021		RPD Limit (%)	Calculated RPD (%)	6/16/2021		6/16/2021		RPD Limit (%)	Calculated RPD (%)
Parameter	NYSDEC Class GA Standard (µg/L)	Result	Q	Result	Q			Result	Q	Result	Q			Result	Q	Result	Q			Result	Q	Result	Q			Result	Q	Result	Q		
1,1,1-Trichloroethane	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	**0.570**		**0.550**		30	**3.57**	0.500	U	0.500	U	30	NC
1,1,2,2-Tetrachloroethane	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	0.500	U	0.500	U	30	NC	0.500	UL	0.500	UL	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,1,2-Trichloroethane	1	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,1-Dichloroethane	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	**1.17**		**1.10**		30	**6.17**	**0.690**		**0.640**		30	**7.52**
1,1-Dichloroethene	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,2,3-Trichlorobenzene	NA	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,2,4-Trichlorobenzene	NA	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,2-Dibromo-3-Chloropropane	0.04	0.500	UJ	0.500	UJ	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	UJ	30	NC	0.500	UJ	0.500	UJ	30	NC	0.500	UJ	0.500	UJ	30	NC
1,2-Dibromoethane	0.0006	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,2-Dichlorobenzene	3	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,2-Dichloroethane	0.6	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,2-Dichloropropane	1	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,3-Dichlorobenzene	3	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
1,4-Dichlorobenzene	3	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
2-Butanone	NA	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC
2-Hexanone	NA	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC
4-Methyl-2-Pentanone	NA	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC
Acetone	NA	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC	5.00	U	5.00	U	30	NC
Benzene	1	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Bromochloromethane	5	0.500	UJ	0.500	UJ	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	UJ	30	NC	0.500	UJ	0.500	UJ	30	NC	0.500	UJ	0.500	UJ	30	NC
Bromodichloromethane	NA	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Bromoform	NA	0.500	UJ	0.500	UJ	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	UJ	30	NC	0.500	UJ	0.500	UJ	30	NC	0.500	UJ	0.500	UJ	30	NC
Bromomethane	5	2.00	U	2.00	U	30	NC	1.00	UJ	1.00	UJ	30	NC	2.00	U	2.00	U	30	NC	2.00	U	2.00	U	30	NC	2.00	U	2.00	U	30	NC
Carbon Disulfide	60	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	UJ	0.500	UJ	30	NC	0.500	U	0.500	U	30	NC
Carbon Tetrachloride	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Chlorobenzene	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Chloroethane	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	1.00	UJ	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Chloroform	7	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	**0.730**		**0.760**		30	**4.03**	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Chloromethane	5	2.00	U	2.00	U	30	NC	1.00	U	1.00	U	30	NC	2.00	UJ	2.00	U	30	NC	2.00	U	2.00	U	30	NC	2.00	U	2.00	U	30	NC
cis-1,2-Dichloroethene	5	**0.730**		**0.690**		30	**5.63**	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	**1.09**		**1.17**		30	**7.08**
cis-1,3-Dichloropropene	NA	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Cyclohexane	NA	0.500	U	0.500	U	30	NC	0.500	UL	0.500	UL	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Dibromochloromethane	NA	0.500	UJ	0.500	UJ	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	UJ	30	NC	0.500	UJ	0.500	UJ	30	NC	0.500	UJ	0.500	UJ	30	NC
Dichlorodifluoromethane	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Ethylbenzene	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Isopropylbenzene	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
m,p-Xylene	NA	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Methyl Acetate	NA	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Methyl tert-Butyl Ether	NA	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	**0.560**		**0.600**		30	**6.90**
Methylcyclohexane	NA	0.500	U	0.500	U	30	NC	0.500	UL	0.500	UL	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Methylene Chloride	5	1.00	U	1.00	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	1.00	U	30	NC	1.00	U	1.00	U	30	NC	1.00	U	1.00	U	30	NC
o-Xylene	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Styrene	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Tetrachloroethene	5	**28.8**		**26.0**		30	**10.22**	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	**6.09**		**6.10**		30	**0.16**
Toluene	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
trans-1,2-Dichloroethene	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
trans-1,3-Dichloropropene	NA	0.500	UJ	0.500	UJ	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	UJ	30	NC	0.500	UJ	0.500	UJ	30	NC	0.500	UJ	0.500	UJ	30	NC
Trichloroethene	5	**1690**		**1670**		30	**1.19**	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	**4.90**		**4.56**		30	**7.19**	**348**		**382**		30	**9.32**
Trichlorofluoromethane	5	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	0.500	U	30	NC
Vinyl Chloride	2	1.00	U	1.00	U	30	NC	0.500	U	0.500	U	30	NC	0.500	U	1.00	U	30	NC	1.00	U	1.00	U	30	NC	1.00	U	1.00	U	30	NC

Notes:
All results are in µg/L.
Bold - Indicates the analyte was detected
Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard
Q - Data qualifier
U - The analyte was not detected at, or above the reporting limit.
J - Indicates an estimated value.
K- the reported value may be biased high.
L- The reported value may be biased low.
µg/L - micrograms per liter
RPD = relative percent difference
NC = not calculated

Appendix B
Table B2 - Groundwater Metals Field Duplicate Comparisons
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		IW-ISCO-7				RPD Limit (%)	Calculated RPD (%)	01-EFF				RPD Limit (%)	Calculated RPD (%)	MPW-08-A				RPD Limit (%)	Calculated RPD (%)	ERT-MW-1B				RPD Limit (%)	Calculated RPD (%)	MW-PD-16				RPD Limit (%)	Calculated RPD (%)
Sample ID		IW-ISCO-7-061721		IW-ISCO-7-2-061721				LAI-EFF-061021		LAI-EFF-2-061021				MPW-08A-060821		MPW-08A-2-060821				MW-1B-061721		MW-1B-2-061721				MW-PD-16-061621		MW-PD-16-2-061621			
Matrix		Groundwater		Groundwater				Groundwater		Groundwater				Groundwater		Groundwater				Groundwater		Groundwater				Groundwater		Groundwater			
Sample Type		Field Sample		Field Duplicate				Field Sample		Field Duplicate				Field Sample		Field Duplicate				Field Sample		Field Duplicate				Field Sample		Field Duplicate			
Sample Date		6/17/2021		6/17/2021				6/10/2021		6/10/2021				6/8/2021		6/8/2021				6/17/2021		6/17/2021				6/16/2021		6/16/2021			
Parameter	NYSDEC Class GA Standard (µg/L)	Result	Q	Result	Q			Result	Q	Result	Q			Result	Q	Result	Q			Result	Q	Result	Q			Result	Q	Result	Q		
Aluminum	100	**9900**		**10100**		20	**2.00**	**4010**		**484**		20	**156.92**	20.0	U	20.0	U	20	NC	**287**		**292**		20	**1.73**	**100**		**114**		20	**13.08**
Antimony	3	1.00	U	1.00	U	20	NC	20.0	U	20.0	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC
Arsenic	25	**1.31**		**1.36**		20	**3.75**	8.00	U	8.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC
Barium	1000	**38.7**		**38.7**		20	**0.00**	**100**	**U**	**100**	**U**	20	**0.00**	**91.4**		**91.2**		20	**0.22**	**16.1**		**16.6**		20	**3.06**	**108**		**112**		20	**3.64**
Beryllium	11	2.65		2.57		20	NC	3.00	U	3.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC
Cadmium	5	1.00	U	1.00	U	20	NC	3.00	U	3.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC
Calcium	NA	**9070**		**9440**		20	**4.00**	**13400**		**12800**		20	**4.58**	**13200**		**13000**		20	**1.53**	**13200**		**13600**		20	**2.99**	**13500**		**13900**		20	**2.92**
Chromium	50	**28.1**		**28.0**		20	**0.36**	**15.5**		**14.8**		20	**4.62**	**1.50**		**1.52**		20	**1.32**	**2.43**		**2.47**		20	**1.63**	**63.7**		**63.7**		20	**0.00**
Cobalt	5	1.00	U	1.00	U	20	NC	20.0	U	20.0	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC
Copper	200	**1.49**		**1.47**		20	**1.35**	10.0	U	10.0	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	**1.15**		**1.13**		20	**1.75**
Hardness	NA	**40.6**		**42.0**		20	**3.39**	NA	NA	NA	NA	20	NC	**62.0**		**61.4**		20	**0.97**	**52.1**		**53.8**		20	**3.21**	**58.1**		**59.5**		20	**2.38**
Iron	300	**184**		**180**		20	**2.20**	**95.5**		50.0	U	20	NC	20.0	U	20.0	U	20	NC	**548**		**593**		20	**7.89**	**203**		**202**		20	**0.49**
Lead	25	1.00	U	1.00	U	20	NC	8.00	U	8.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC
Magnesium	35000	**4350**		**4470**		20	**2.72**	**6790**		**6630**		20	**2.38**	**7060**		**7040**		20	**0.28**	**4690**		**4830**		20	**2.94**	**5910**		**6010**		20	**1.68**
Manganese	300	**308**		**280**		20	**9.52**	5.00	U	5.00	U	20	NC	**2.98**		**2.93**		20	**1.69**	**12.5**		**13.5**		20	**7.69**	**19.3**		**18.4**		20	**4.77**
Mercury	0.7	0.200	U	0.200	U	20	NC	0.200	U	0.200	U	20	NC	0.200	U	0.200	U	20	NC	0.200	U	0.200	U	20	NC	0.200	U	0.200	U	20	NC
Nickel	100	**26.1**		**24.9**		20	**4.71**	20.0	U	20.0	U	20	NC	**4.95**		**4.60**		20	**7.33**	1.00	U	1.00	U	20	NC	**6.85**		**6.51**		20	**5.09**
Potassium	NA	**15600**		**15900**		20	**1.90**	**7460**		**7350**		20	**1.49**	**1610**		**1590**		20	**1.25**	**934**		**957**		20	**2.43**	**9320**		**9590**		20	**2.86**
Selenium	10	1.00	U	1.00	U	20	NC	20.0	U	20.0	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC
Silver	50	1.00	U	1.00	U	20	NC	5.00	U	5.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC
Sodium	20000	**18200**		**18600**		20	**2.17**	**19400**		**19000**		20	**2.08**	**29400**		**29000**		20	**1.37**	**8560**		**8810**		20	**2.88**	**22800**		**23400**		20	**2.60**
Thallium	8	1.00	U	1.00	U	20	NC	20.0	U	20.0	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC
Vanadium	14	**4.53**		**4.58**		20	**1.10**	20.0	U	20.0	U	20	NC	1.00	U	1.00	U	20	NC	**1.24**		**1.27**		20	**2.39**	**1.11**		**1.12**		20	**0.90**
Zinc	NA	**17.8**		**18.1**		20	**1.67**	**195**		20.0	U	20	NC	**6.12**		**5.63**		20	**8.34**	2.00	U	2.00	U	20	NC	**3.92**		**3.78**		20	**3.64**

Notes:

All results are in µg/L.

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Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard

Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

J - Indicates an estimated value.

K- the reported value may be biased high.

L- The reported value may be biased low.

µg/L - micrograms per liter

RPD = relative percent difference
NC = not calculated

Appendix B
Table B3 - Groundwater General Chemistry Field Duplicate Comparisons
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		IW-ISCO-7				RPD Limit (%)	Calculated RPD (%)	MPW-08-A				RPD Limit (%)	Calculated RPD (%)	ERT-MW-1B				RPD Limit (%)	Calculated RPD (%)	MW-PD-16				RPD Limit (%)	Calculated RPD (%)
Sample ID		IW-ISCO-7-061721		IW-ISCO-7-2-061721				MPW-08A-060821		MPW-08A-2-060821				MW-1B-061721		MW-1B-2-061721				MW-PD-16-061621		MW-PD-16-2-061621			
Matrix		Groundwater		Groundwater				Groundwater		Groundwater				Groundwater		Groundwater				Groundwater		Groundwater			
Sample Type		Field Sample		Field Duplicate				Field Sample		Field Duplicate				Field Sample		Field Duplicate				Field Sample		Field Duplicate			
Sample Date		6/17/2021		6/17/2021				6/8/2021		6/8/2021				6/17/2021		6/17/2021				6/16/2021		6/16/2021			
Parameter	**NYSDEC Class GA Standard (mg/L)**	**Result**	**Q**	**Result**	**Q**			**Result**	**Q**	**Result**	**Q**			**Result**	**Q**	**Result**	**Q**			**Result**	**Q**	**Result**	**Q**		
Alkalinity, Total	NA	**39.2**	J	**40.2**		20	**2.52**	**15.0**	J	**13.8**	J	20	**8.33**	**38.8**	J	**38.8**	J	20	**0.00**	**30.7**	J	**29.1**	J	20	**5.35**
Ammonia [As N]	2	0.0500	U	0.0500	U	20	NC	0.0500	U	0.0500	U	20	NC	0.0500	U	0.0500	U	20	NC	**0.422**		**0.419**		20	**0.71**
Chloride	250	**6.95**		**7.44**		20	**6.81**	**50.9**		**50.7**		20	**0.39**	**14.2**		**14.0**		20	**1.42**	**26.2**		**26.2**		20	**0.00**
Fluoride	1.5	**34.9**		**36.2**		20	**3.66**	0.0500	U	0.0500	U	20	**0.00**	0.0500	U	0.0500	U	20	NC	0.0500	U	0.0500	U	20	NC
Nitrogen, Total Kjeldahl	10	0.100	U	0.100	U	20	NC	0.100	U	0.100	U	20	NC	0.100	U	0.100	U	20	NC	**0.491**		**0.513**		20	**4.38**
Organic Carbon	NA	1.00	U	**1.18**		20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC	1.00	U	1.00	U	20	NC
Residue, Filterable	500	**204**		**212**		20	**3.85**	**237**		**244**		20	**2.91**	**131**		**122**		20	**7.11**	**229**		**230**		20	**0.44**
Residue, Non-Filterable	NA	**13.0**		**12.0**		20	**8.00**	10.0	U	10.0	U	20	NC	**18.0**		**29.0**		20	**46.81**	10.0	U	10.0	U	20	NC
Sulfate	250	**19.3**		**19.7**		20	**2.05**	**21.8**		**21.7**		20	**0.46**	**6.94**		**6.94**		20	**0.00**	**29.8**		**29.5**		20	**1.01**

Notes:

All results are in mg/L.

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Bold/Highlighted- Indicates detection above NYSDEC Class GA Standard

Q - Data qualifier

U - The analyte was not detected at, or above the reporting limit.

J - Indicates an estimated value.

K- the reported value may be biased high.

L- The reported value may be biased low.

µg/L - micrograms per liter

RPD = relative percent difference

NC = not calculated

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APPENDIX C

AVERAGE TOTAL ETHENE CONCENTRATION CALCULATIONS

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Appendix C - Average Total Ethene Concentration Calculations
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Well No.	Baseline CVOC Concentration (µg/L) June 2011	Total CVOC Concentration (µg/L) June 2012	Total CVOC Concentration (µg/L) June 2013	Total CVOC Concentration (µg/L) June 2014	Total CVOC Concentration (µg/L) June 2015	Total CVOC Concentration (µg/L) June 2016	Total CVOC Concentration (µg/L) June 2017	Total CVOC Concentration (µg/L) June 2018	Total CVOC Concentration (µg/L) June 2019	Total CVOC Concentration (µg/L) June 2020	Total CVOC Concentration (µg/L) June 2021
MW-ISCO-2	0.9	1121.2	254.4	1526.3	827	448.8	724.7	725.8	803.7	894	527.5
MW-ISCO-4	0	549.6	487.5	275	234.3	478.4	224.9	335.6	1209.4	479.4	481.72
MW-ISCO-5	1.1	124.4	264.7	294.9	274.4	426.4	78.6	162.8	73.5	33.8	15.8
Average Concentration	0.7	598.4	335.5	698.7	445.2	451.2	342.7	408.1	695.5	469.1	341.7
STD Deviation	0.6	500.2	131.7	716.8	331.2	26.1	338.8	288.4	575.6	430.2	283.1
STD Error	0.3	288.8	76.0	413.8	191.2	15.1	195.6	166.5	332.3	248.4	163.5
t (95%)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Confidence Interval 95%	**1.6**	**1407.0**	**548.4**	**1857.4**	**980.7**	**493.4**	**890.4**	**874.3**	**1626.1**	**1164.5**	**799.4**
MPW-09-A	*	*	20.0	15.6	17.6	13	13.4	27.5	22	9.9	8.44
MPW-09-B	*	*	371.2	969.4	147	268.1	41.1	3.2	35.9	47.6	49.17
MPW-09-C	*	*	500.2	519.9	442.9	46.1	312.6	149.6	167.7	88.3	92.27
MPW-09-D	*	*	491.6	441.8	215.9	216.6	237.9	156.3	240	127.4	146.28
MP-PD-12	470.9	328.5	339.8	226	234.3	96	317.2	194.4	173.8	72.1	209.67
MW-PD-14	*	*	286.5	194.9	183.8	102.2	133.9	155.8	308.7	145.3	153.9
MW-PD-16	*	*	500.2	132.7	570.4	205.4	398.9	386.8	286.7	143.5	356.43
Average Concentration			358.5	357.2	258.8	135.3	207.9	153.4	176.4	90.6	145.2
STD Deviation			172.3	321.2	187.0	95.5	148.0	125.6	113.6	51.4	115.2
STD Error			65.1	121.4	70.7	36.1	55.9	47.5	42.9	19.4	43.5
t (95%)			2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Confidence Interval 95%			**514.8**	**648.6**	**428.4**	**222.0**	**342.1**	**267.3**	**279.4**	**137.2**	**249.6**

Notes:
* Data not available for time series

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APPENDIX D

TOTAL VOC CONCENTRATIONS USED IN TIME SERIES GRAPHS

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Appendix D - Total VOC Concentration Data Used in Time Series Graphs
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Well ID	RI March 2005	RI May 2005	Pre-Design Round 2 May - June 2008	August 2010 (Baseline)	December 2010	March 2011	June 2011	September 2011	December 2011	March 2012	May 2012	June 2012	September 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021
MPW-09-A	157	71	53	NS	NS	NS	NS	NS	NS	NS	NS	NS	17	20	16	18	13	13	28	22	10	8
MPW-09-B	377	573	347	NS	NS	NS	NS	NS	NS	NS	NS	NS	642	371	969	147	268	41	3	36	48	49
MPW-09-C	597	786	579	NS	NS	NS	NS	NS	NS	NS	NS	NS	390	500	520	443	46	313	150	168	88	92
MPW-09-D	399	888	527	NS	NS	NS	NS	NS	NS	NS	NS	NS	672	492	442	216	217	238	156	240	127	146
MP-PD-12	NI	NI	215	236	463.6	400	471	602	NS	420	339	329	NU	340	226	234	96	317	194	174	72	210
MW-PD-14	NI	NI	358	NS	NS	NS	NS	NS	NS	NS	288	NS	NS	287	195	184	102	134	156	309	145	154
MW-PD-16	NI	NI	1933	NS	NS	NS	NS	NS	NS	NS	379	NS	NS	500	133	570	205	399	387	287	144	356

Notes:

All results in micrograms per liter
NI - Not Installed
NS - Not Sampled
NU - Not Used
RI - Remedial Investigation
VOC - Volatile Organic Compound

Total VOC Concentration values equal sum of the following compounds, not including non-detects:
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
Chloroform
cis-1,2-Dichloroethene
Tetrachloethene
Trichloroethene
Vinyl Chloride

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APPENDIX E

ANNUAL REPORT DATA 2012-2021

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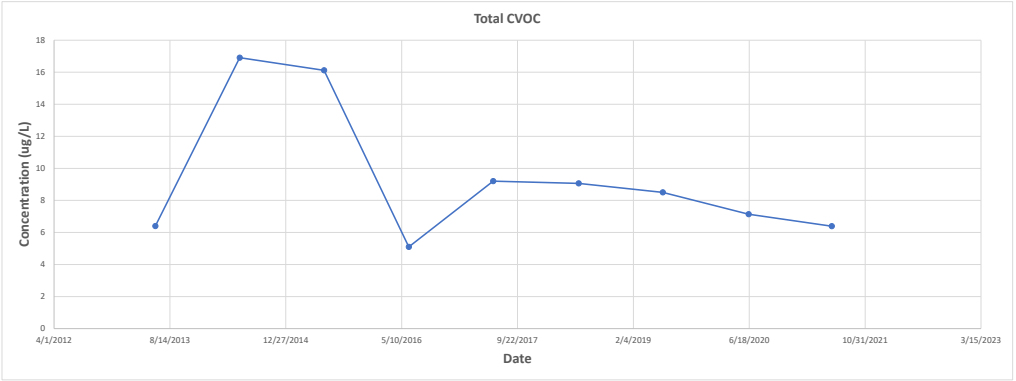
Sample Date		6/12/2013		6/11/2014		6/10/2015		6/10/2016		6/9/2017		6/13/2018		6/11/2019		6/15/2020		6/9/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L		U	0.11	J	0.11	J		U		U		U		U		U		U
1,1-Dichloroethane	µg/L		U		U	0.11	J		U		U		U		U		U		U
1,1-Dichloroethene	µg/L		U		U		U		UJ		U		U		U		U		U
Chloroform	µg/L		U		U		U		U		U	0.21	J		U		U		U
Chloromethane	µg/L		U		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L		U	0.41	J	0.45	J		UJ		U		U		U	0.1	J		U
Tetrachloroethene (PCE)	µg/L		U	0.39	J	0.45	J		U	0.3	J	0.25	J		U	0.24	J		U
Trichloroethene (TCE)	µg/L	6.4		16		15		5.1		8.9		8.6		8.5		6.8		6.39	
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**6.40**		**16.91**		**16.12**		**5.1**		**9.20**		**9.06**		**8.50**		**7.14**		**6.39**	

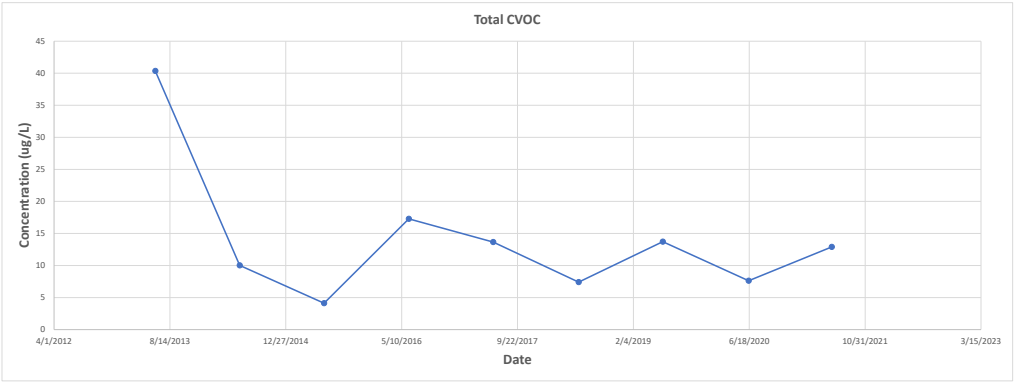


Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

Sample Date		6/12/2013		6/11/2014		6/10/2015		6/13/2016		6/9/2017		6/13/2018		6/11/2019		6/15/2020		6/8/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L		U		U		U		U		U		U		U		U		U
1,1-Dichloroethane	µg/L		U		U		U		U		U		U		U		U		U
1,1-Dichloroethene	µg/L		U		U		U		U		U		U		U		U		U
Chloroform	µg/L		U	0.11	J		U		U		U		U		U		U		U
Chloromethane	µg/L		U		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L	1.6		0.2	J		U	0.33	J	0.21	J		U		U	0.1	J		U
Tetrachloroethene (PCE)	µg/L	0.75		0.31	J	0.22	J	0.96		0.46	J	0.32	J	0.71	U	0.43	J	0.750	
Trichloroethene (TCE)	µg/L	38		9.4		3.9	J	16		13		7.1		13		7.1		12.1	
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**40.35**		**10.02**		**4.12**		**17.29**		**13.67**		**7.42**		**13.71**		**7.63**		**12.9**	



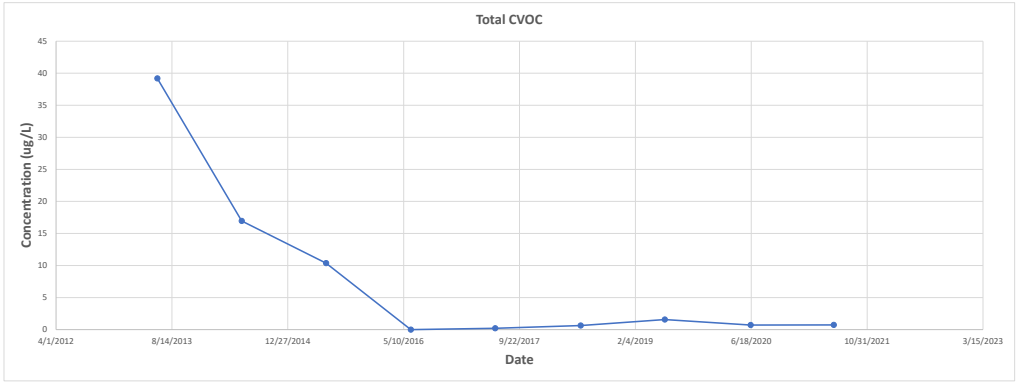
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

ERT-EW-5

Sample Date		6/12/2013		6/11/2014		6/10/2015		6/13/2016		6/9/2017		6/13/2018		6/11/2019		6/15/2020		6/10/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L		U		U		U		U		U		U		U		U		U
1,1-Dichloroethane	µg/L		U		U		U		U		U		U		U		U		U
1,1-Dichloroethene	µg/L		U		U		U		UJ		U		U		U		U		U
Chloroform	µg/L		U	0.22	J	0.4	J		U		U	0.34	J	0.69			U	0.740	
Chloromethane	µg/L		U		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L		U	0.22	J	0.14	J		UJ		U		U		U		U		U
Tetrachloroethene (PCE)	µg/L	1.2		0.52		0.43	J		U		U		U		U	0.18	J		U
Trichloroethene (TCE)	µg/L	38		16		9.4	J		U	0.2		0.3	J	0.88		0.53			U
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**39.20**		**16.96**		**10.37**		**0**		**0.20**		**0.64**		**1.57**		**0.71**		**0.740**	



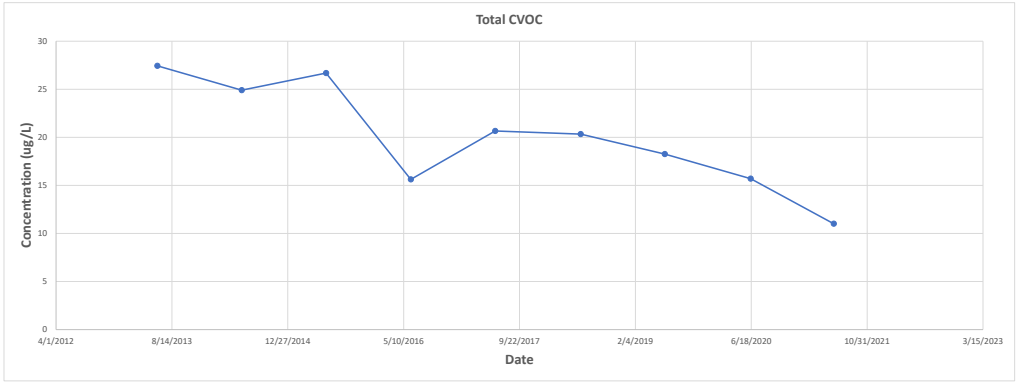
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

ERT-MW-1A

Sample Date		6/18/2013		6/13/2014		6/8/2015		6/10/2016		6/7/2017		6/6/2018		6/4/2019		6/10/2020		6/17/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L		U		U	0.36	J		U	0.29	J	0.33	J		U		U		U
1,1-Dichloroethane	µg/L	0.62			U	0.75		0..34	J	0.53		0.68		0.71		0.79		0.910	
1,1-Dichloroethene	µg/L		U		U		U		UJ		UJ	0.22	J		U	0.3	J		U
Chloroform	µg/L		U	0.22	J	0.41	J		U		U	0.33	J		U		U		U
Chloromethane	µg/L		U		U		U		U		U		U	0.55			U		U
cis-1,2-Dichloroethene	µg/L	0.82		0.22	J	0.82		0.29	J	0.57	J-	0.53			U	0.4	J		U
Tetrachloroethene (PCE)	µg/L		U	0.52		0.34	J		U	0.27	J	0.25	J		U	0.21	J		U
Trichloroethene (TCE)	µg/L	26		16		24		15		19		18	D	17		14		10.1	
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**27.44**		**24.91**		**26.68**		**15.63**		**20.66**		**20.34**		**18.26**		**15.7**		**11.0**	



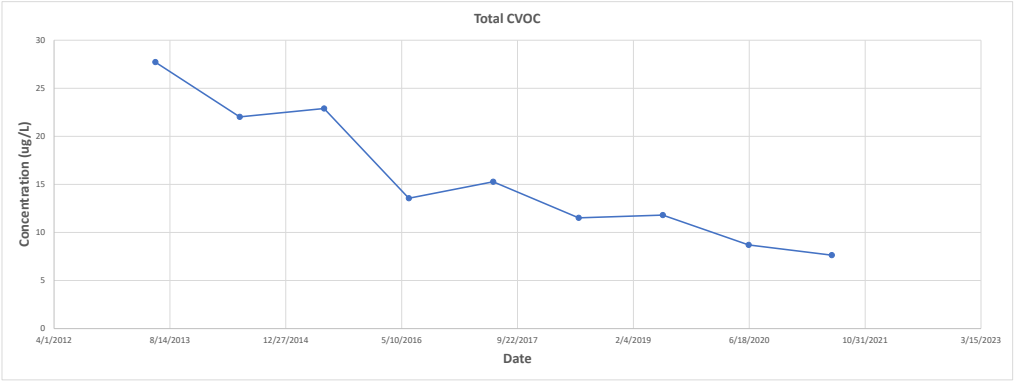
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

ERT-MW-1B

Sample Date		6/18/2013		6/13/2014		6/8/2015		6/10/2016		6/7/2017		6/6/2018		6/4/2019		6/10/2020		6/17/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L		U	0.21	J	0.29	J		U	0.27	J	0.27	J		U		U	0.570	
1,1-Dichloroethane	µg/L		U	0.48	J	0.63		0.3	J	0.59		0.57		0.81		0.98		1.17	
1,1-Dichloroethene	µg/L		U	0.14	J		U		U		U	0.18	J		U		U		U
Chloroform	µg/L		U	0.37	J		U		U		U	0.25	J		U		U		U
Chloromethane	µg/L		U		UJ		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L	0.72		0.67	J+	0.72		0.26	J	0.41	J	0.25	J		U	0.21	J		U
Tetrachloroethene (PCE)	µg/L		U	0.16	J	0.26	J		U		U		U		U	0.22	J		U
Trichloroethene (TCE)	µg/L	27		20	J	21		13		14		10		11		7.3		4.90	
Vinyl Chloride	µg/L		U		UJ		U		U		U		U		UJ		U	1.00	U
Total CVOCs	µg/L	**27.72**		**22.03**		**22.90**		**13.56**		**15.27**		**11.52**		**11.81**		**8.71**		**7.6**	



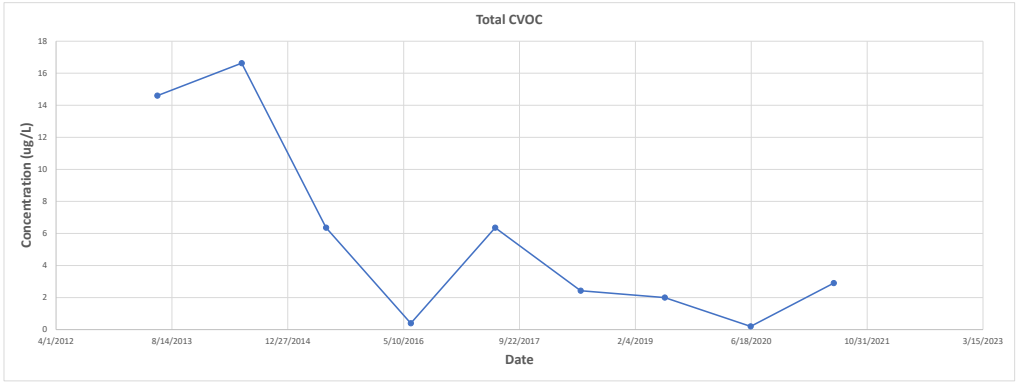
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

ERT-MW-2A

Sample Date		6/17/2013		6/16/2014		6/8/2015		6/8/2016		6/6/2017		6/5/2018		6/4/2019		6/9/2020		6/16/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L		U	0.16	J	0.13	J		U		U		U		U		U		U
1,1-Dichloroethane	µg/L		U		U		U		U		U		U		U		U		U
1,1-Dichloroethene	µg/L		U		U		U		UJ		U		U		U		U		U
Chloroform	µg/L		U	0.49	J	0.53			U	0.56		0.6		1.3			U	2.12	
Chloromethane	µg/L		U		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L		U	0.28	J+		U		UJ		U		U		U		U		U
Tetrachloroethene (PCE)	µg/L	0.6		1.70		1.40		0.39	J	1.70		0.63			U	0.20	J		U
Trichloroethene (TCE)	µg/L	14		14		4.3			U	4.1		1.2		0.7			U	0.780	
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**14.60**		**16.63**		**6.36**		**0.39**		**6.36**		**2.43**		**2.00**		**0.2**		**2.9**	



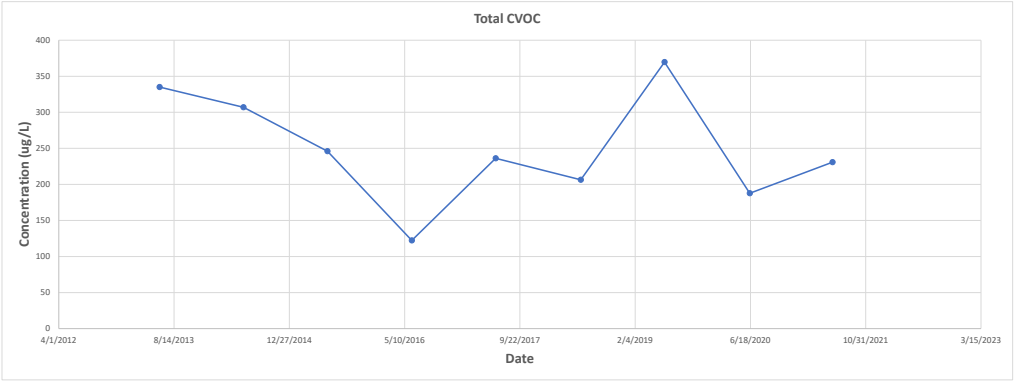
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

ERT-MW-2B

Sample Date		6/17/2013		6/16/2014		6/8/2015		6/8/2016		6/6/2017		6/5/2018		6/4/2019		6/9/2020		6/16/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L		U	0.35	J	0.39	J		U	0.51		0.52		0.93		0.65		0.750	
1,1-Dichloroethane	µg/L	0.58		0.82		0.85		0.39	J	1.3		1.2		2		1.4		1.79	
1,1-Dichloroethene	µg/L		U	0.24	J+		U		U		U	0.34	J	0.56			U	0.720	K
Chloroform	µg/L		U	0.48	J	0.42	J		U		U	0.38	J	0.55			U	0.500	
Chloromethane	µg/L		U		U		J		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L	2.9		3.2	J+	2.4		0.93		2.3		2.1		2.6		2		2.66	
Tetrachloroethene (PCE)	µg/L	1.6		1.90		1.90		0.96		2.10		1.90		3.00		3.70		5.43	
Trichloroethene (TCE)	µg/L	330		300		240		120	D	230		200	D	360		180		219	
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**335.08**		**307.00**		**246.00**		**122.3**		**236.20**		**206.40**		**369.60**		**187.8**		**230.9**	



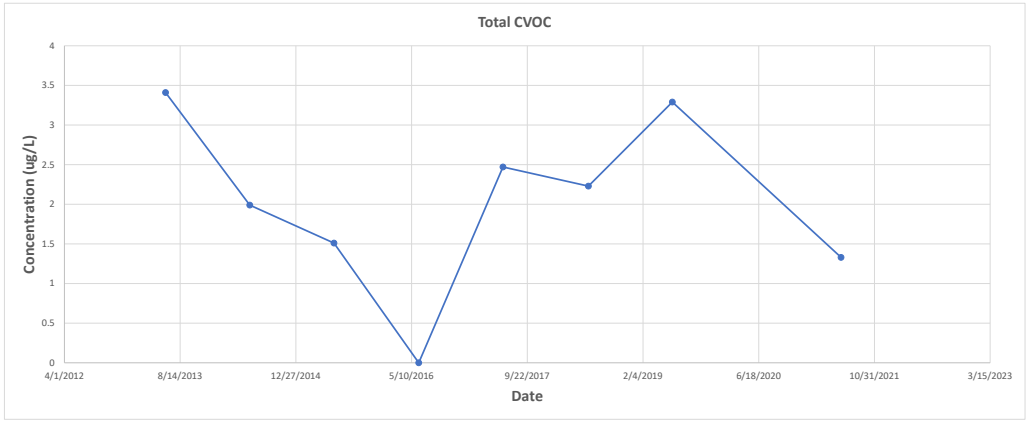
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value
   - K- the reported value may be biased high.

ERT-MW-3

Sample Date		6/14/2013		6/11/2014		6/4/2015		6/16/2016		6/8/2017		6/7/2018		6/5/2019		6/14/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L	0.85		0.47	J	0.54	J		U	0.48	J	0.4	J	0.74			U
1,1-Dichloroethane	µg/L	0.86		0.46	J	0.51	J		U	0.58		0.52		1		0.510	
1,1-Dichloroethene	µg/L		U	0.2	J		U		U		UJ	0.17	J		U		U
Chloroform	µg/L	0.55		0.44	J		U		U	0.6		0.56		0.8		0.820	
Chloromethane	µg/L		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L		U		U		U		U		UJ		U		U		U
Tetrachloroethene (PCE)	µg/L	0.7		0.42	J	0.46	J		U	0.48	J	0.40	J	0.75			U
Trichloroethene (TCE)	µg/L	0.5			U		U		U	0.33	J	0.18	J		U		U
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U
Total CVOCs	µg/L	**3.41**		**1.99**		**1.51**		**0**		**2.47**		**2.23**		**3.29**		**1.3**	



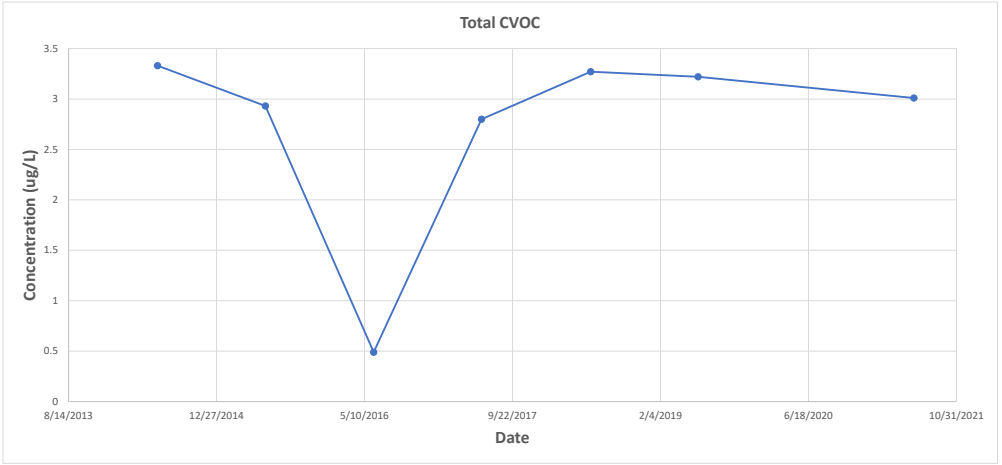
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value
   - K- the reported value may be biased high.

ERT-MW-4A

Sample Date		6/17/2014		6/5/2015		6/9/2016		6/7/2017		6/7/2018		6/5/2019		6/16/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L	0.39	J	0.46	J		U	0.47	J	0.44	J	0.61			U
1,1-Dichloroethane	µg/L	0.63		0.73	J	0.49	J	0.64		0.8		0.91		0.770	
1,1-Dichloroethene	µg/L	0.21	J		U		U		U	0.18	J		U		U
Chloroform	µg/L	0.37	J		U		U		U	0.26	J		U		U
Chloromethane	µg/L		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L	0.39	J	0.35	J		U	0.3	J	0.22	J		U		U
Tetrachloroethene (PCE)	µg/L	0.24	J	0.29	J		U	0.29	J	0.27	J		U		U
Trichloroethene (TCE)	µg/L	1.1		1.1	J		U	1.1		1.1		1.7		2.24	
Vinyl Chloride	µg/L		U		U		U		U		U		UJ		U
Total CVOCs	µg/L	**3.33**		**2.93**		**0.49**		**2.80**		**3.27**		**3.22**		**3.0**	



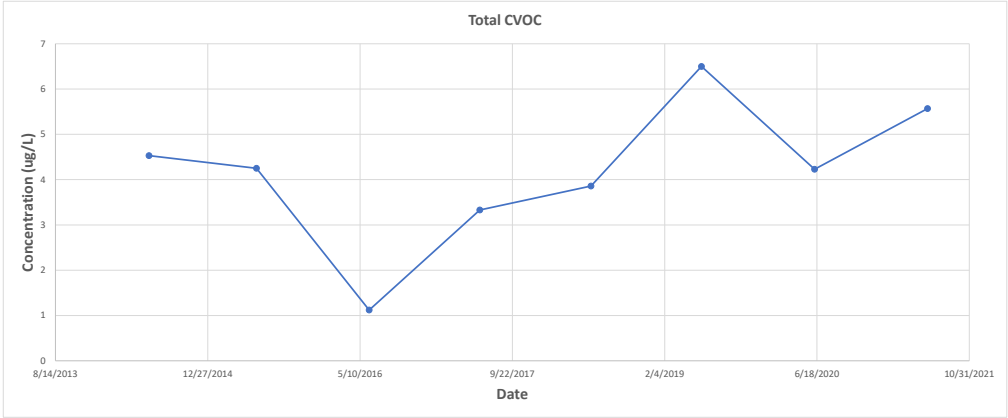
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value
   - K- the reported value may be biased high.

ERT-MW-4B

Sample Date		6/17/2014		6/5/2015		6/9/2016		6/7/2017		6/7/2018		6/5/2019		6/10/2020		6/16/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L	0.61		0.62	J	0.37	J	0.69		0.64		1.2		0.96		0.970	
1,1-Dichloroethane	µg/L	1		0.91	J	0.75		1.1		1.1		1.9		1.4		1.72	
1,1-Dichloroethene	µg/L	0.27	J	0.5	UJ		U		U	0.32	J	0.65			U	0.790	K
Chloroform	µg/L	0.47	J	0.37	J		U		U	0.35	J	0.57			U	0.510	
Chloromethane	µg/L		U	0.5	UJ		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L	0.53	J+	0.42	J		U	0.38	J	0.28	J		U	0.28	J		U
Tetrachloroethene (PCE)	µg/L	0.35	J	0.29	J		U	0.31	J	0.33	J	0.58		0.39	J		U
Trichloroethene (TCE)	µg/L	1.3		0.64	J		U	0.85		0.84		1.6		1.2		1.58	
Vinyl Chloride	µg/L		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**4.53**		**4.25**		**1.12**		**3.33**		**3.86**		**6.50**		**4.23**		**5.6**	



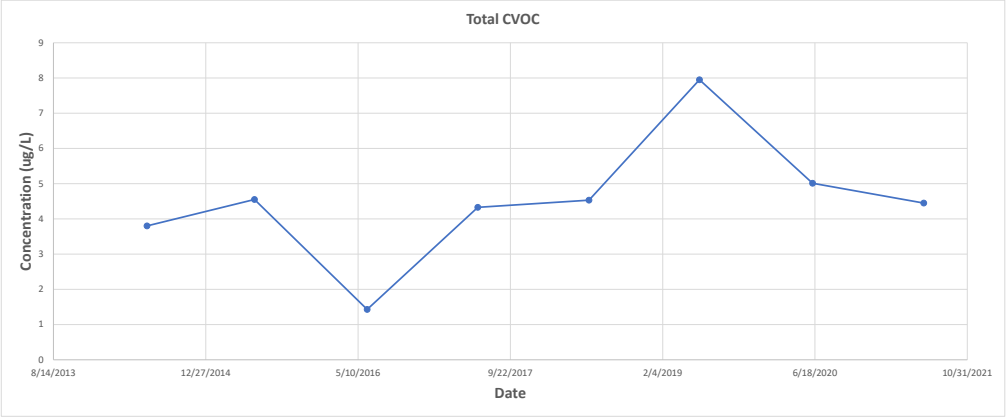
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value
   - K- the reported value may be biased high.

ERT-MW-5A

Sample Date		6/17/2014		6/5/2015		6/9/2016		6/7/2017		6/7/2018		6/5/2019		6/10/2020		6/10/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L	0.84		0.88	J	0.38	J	0.75		0.78		1.4		0.92		0.740	
1,1-Dichloroethane	µg/L	1.3		1.4	J	0.79		1.4		1.3		2.3		1.5		1.55	
1,1-Dichloroethene	µg/L	0.31	J+		U		U		U	0.36	J	0.53		0.53			U
Chloroform	µg/L	0.52		0.57	J		U	0.57		0.47	J	0.83			U	0.560	
Chloromethane	µg/L		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L	0.53	J+	0.59	J	0.26	J	0.5		0.47	J	0.83		0.57		0.570	
Tetrachloroethene (PCE)	µg/L	0.30	J	0.38	J		U	0.38	J	0.37	J	0.66		0.39	J		U
Trichloroethene (TCE)	µg/L		U	0.73	J		U	0.73		0.78		1.4		1.1		1.03	
Vinyl Chloride	µg/L		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**3.80**		**4.55**		**1.43**		**4.33**		**4.53**		**7.95**		**5.01**		**4.5**	



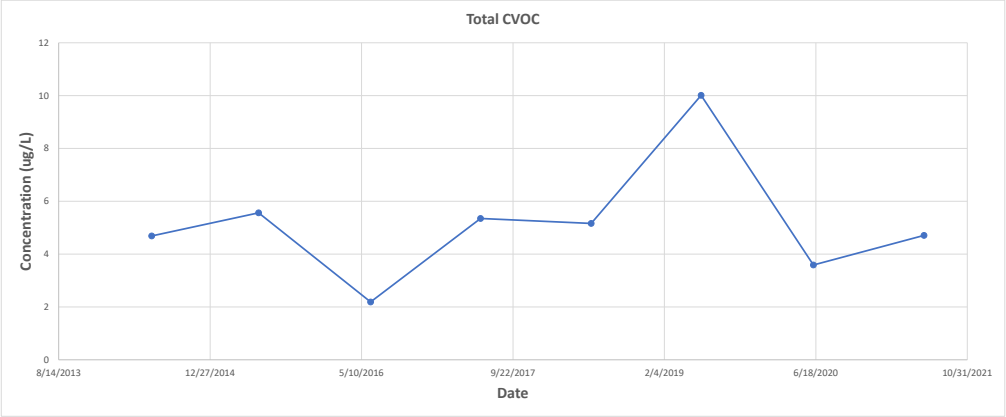
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value
   - K- the reported value may be biased high.

ERT-MW-5B

Sample Date		6/17/2014		6/5/2015		6/9/2016		6/7/2017		6/7/2018		6/5/2019		6/10/2020		6/10/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L	1.2		1.3	J	0.64		1.1		1.1		2.1			U	1.20	
1,1-Dichloroethane	µg/L	1.7		1.9	J	1.3		1.8		1.8		3.1		1.9		1.93	
1,1-Dichloroethene	µg/L	0.35	J+		U		UJ	0.45	J	0.43	J	1		0.74			U
Chloroform	µg/L	0.53		0.57	J		U	0.56		0.49	J	0.93			U	0.600	
Chloromethane	µg/L		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L	0.55	J+	0.57	J	0.25	J	0.39	J	0.33	J	0.6		0.48	J		U
Tetrachloroethene (PCE)	µg/L	0.36	J	0.44	J		U	0.38	J	0.40	J	0.88		0.47	J		U
Trichloroethene (TCE)	µg/L		U	0.78	J		U	0.67		0.61		1.4			U	0.980	
Vinyl Chloride	µg/L		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**4.69**		**5.56**		**2.19**		**5.35**		**5.16**		**10.01**		**3.59**		**4.7**	



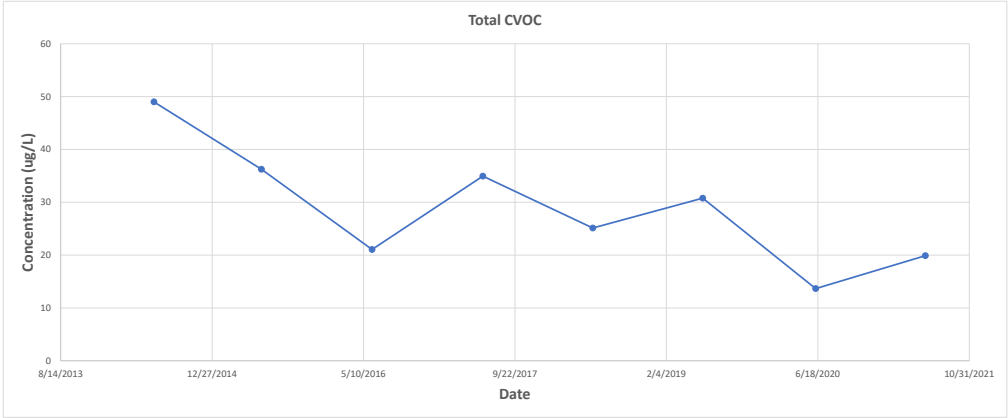
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value
   - K- the reported value may be biased high.

ERT-MW-6A

Sample Date		6/18/2014		6/8/2015		6/7/2016		6/8/2017		6/6/2018		6/4/2019		6/11/2020		6/8/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L	0.81		0.62			U	0.52		0.49	J	0.59		0.35	J		U
1,1-Dichloroethane	µg/L	1.4		1.2		0.57		1.1		0.95		1.1		0.69		1.00	
1,1-Dichloroethene	µg/L	0.4	J		U		UJ		UJ	0.3	J		U	0.25	J		U
Chloroform	µg/L	0.51		0.48	J		U		U	0.4	J	0.51			U		U
Chloromethane	µg/L		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L	1.2	J+	1.3		0.5	J-	0.89	J-	0.64		0.57		0.2	J		U
Tetrachloroethene (PCE)	µg/L	0.68		0.64			U	0.45	J	0.35	J		U	0.17	J		U
Trichloroethene (TCE)	µg/L	44		32		20	D	32		22	D	28		12		18.9	
Vinyl Chloride	µg/L		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**49.00**		**36.24**		**21.07**		**34.96**		**25.13**		**30.77**		**13.66**		**19.9**	



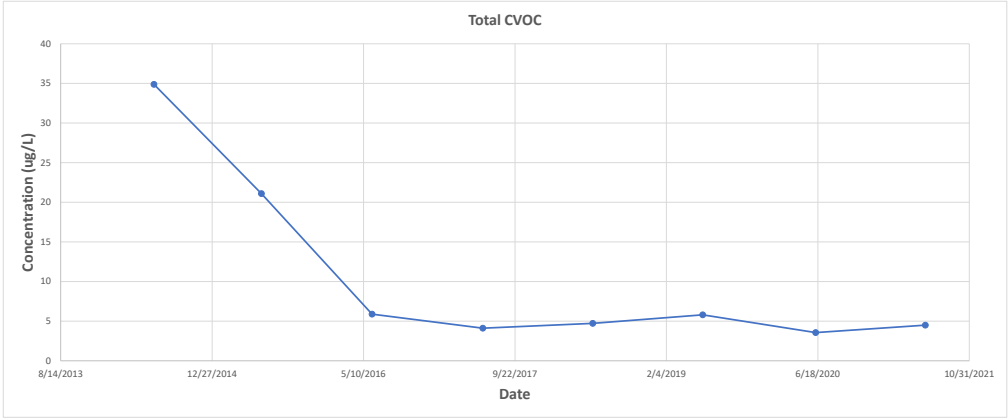
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value
   - K- the reported value may be biased high.

ERT-MW-6B

Sample Date		6/18/2014		6/8/2015		6/7/2016		6/8/2017		6/6/2018		6/4/2019		6/11/2020		6/8/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L	0.7		0.58			U	0.36	J	0.4	J	0.51		0.47	J	0.510	
1,1-Dichloroethane	µg/L	1.1		1.1		0.49	J	0.66		0.72		0.89		0.81		0.940	
1,1-Dichloroethene	µg/L	0.32	J		U		UJ		U	0.21	J		U	0.28	J		U
Chloroform	µg/L	0.46	J	0.46	J		U		U	0.29	J		U		U		U
Chloromethane	µg/L		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L	0.78	J+	0.58			UJ		U		U		U		U		U
Tetrachloroethene (PCE)	µg/L	0.52		0.37	J		U		U		U		U		U		U
Trichloroethene (TCE)	µg/L	31		18		5.4		3.1		3.1		4.4		2		3.04	
Vinyl Chloride	µg/L		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**34.88**		**21.09**		**5.89**		**4.12**		**4.72**		**5.80**		**3.56**		**4.5**	

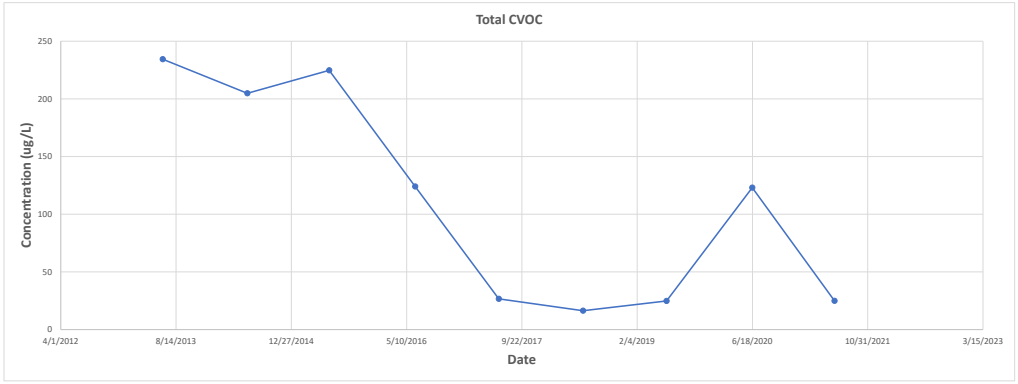


Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value
   - K- the reported value may be biased high.

Sample Date		6/17/2013		6/19/2014		6/9/2015		6/16/2016		6/14/2017		6/14/2018		6/11/2019		6/17/2020		6/10/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L		U		U		U		U		U		U		U		U		U
1,1-Dichloroethane	µg/L		U		U		U		U		U		U		U		U		U
1,1-Dichloroethene	µg/L		U		U		U		U		U		U		U		U		U
Chloroform	µg/L		U		U		U		U		U		U		U		U		U
Chloromethane	µg/L		U		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L		U	0.25	J	0.33	J	0.32	J		U		U		U	0.12	J		U
Tetrachloroethene (PCE)	µg/L	4.4		4.50		4.50		3.70		0.72		0.38	J	0.78		3.00		0.690	
Trichloroethene (TCE)	µg/L	230		200		220		120	D	26		16	J	24		120		24.2	
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**234.40**		**204.80**		**224.80**		**124**		**26.72**		**16.38**		**24.78**		**123.1**		**24.9**	

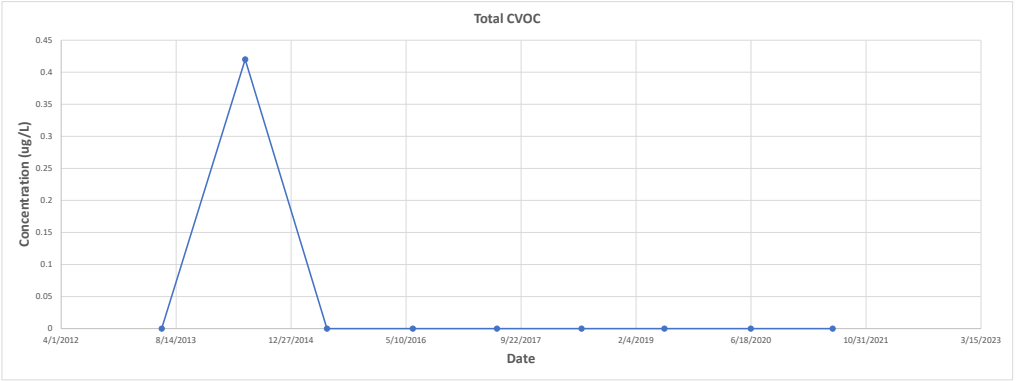


Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

Sample Date		6/12/2013		6/10/2014		6/1/2015		6/8/2016		6/9/2017		6/12/2018		6/7/2019		6/17/2020		6/8/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L		U		U		U		U		U		U		U		U		U
1,1-Dichloroethane	µg/L		U		U		U		U		U		U		U		U		U
1,1-Dichloroethene	µg/L		U		U		U		U		U		U		U		U		U
Chloroform	µg/L		U	0.3	J		U		U		U		U		U		U		U
Chloromethane	µg/L		U		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L		U		U		U		U		U		U		U		U		U
Tetrachloroethene (PCE)	µg/L		U	0.12	J		U		U		U		U		U		U		U
Trichloroethene (TCE)	µg/L		U		U		U		U		U		U		U		U		U
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**0.00**		**0.42**		**0.00**		**0**		**0.00**		**0.00**		**0.00**		**0**		**0.0**	



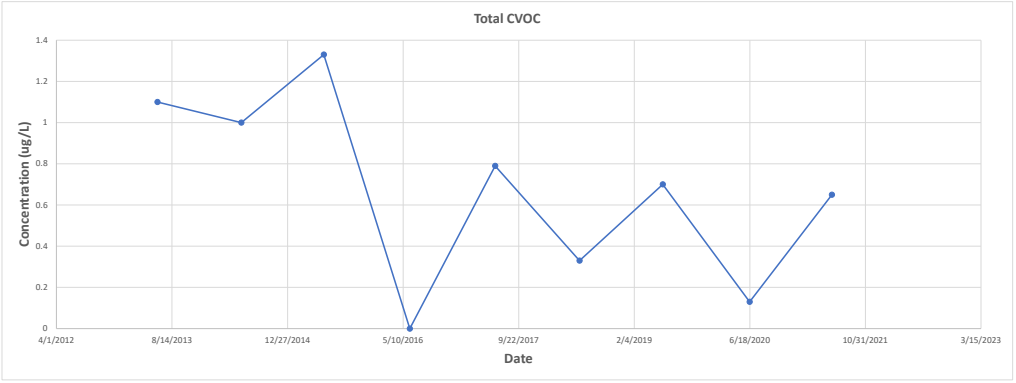
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

MPW-01-B

Sample Date		6/12/2013		6/10/2014		6/2/2015		6/8/2016		6/12/2017		6/12/2018		6/7/2019		6/17/2020		6/8/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L		U		UJ		U		U		U		U		U		U		U
1,1-Dichloroethane	µg/L		U		U		U		U		U		U		U		U		U
1,1-Dichloroethene	µg/L		U		U		U		U		U		U		U		U		U
Chloroform	µg/L	1.1		0.82		1.1			U	0.79		0.33	J	0.7			U		U
Chloromethane	µg/L		U		U		U		U		U		U		U		U		UJ
cis-1,2-Dichloroethene	µg/L		U		U		U		U		U		U		U		U		U
Tetrachloroethene (PCE)	µg/L		U	0.18	J	0.23	J		U		U		U		U	0.13	J	0.650	
Trichloroethene (TCE)	µg/L		U		U		U		U		U		U		U		U		U
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**1.10**		**1.00**		**1.33**		**0**		**0.79**		**0.33**		**0.70**		**0.13**		**0.7**	



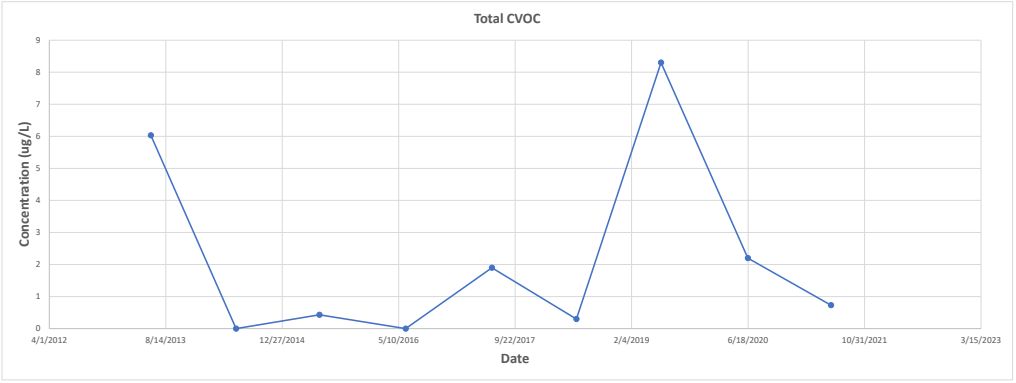
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

MPW-02-B

Sample Date		6/11/2013		6/12/2014		6/5/2015		6/9/2016		6/14/2017		6/12/2018		6/10/2019		6/17/2020		6/9/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L	0.57			UJ		U		U		U		U		U		U		U
1,1-Dichloroethane	µg/L	0.79			UJ		U		U		U		U		U		U		U
1,1-Dichloroethene	µg/L		U		UJ		U		U		U		U		U		U		U
Chloroform	µg/L	0.5			UJ		U		U		U		U		U		U		U
Chloromethane	µg/L		U		UJ		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L		U		UJ		U		U		U		U		U		U		U
Tetrachloroethene (PCE)	µg/L	0.6			UJ		U		U		U		U		U		U		U
Trichloroethene (TCE)	µg/L	3.6			UJ	0.43	J		U	1.9		0.3	J	8.3		2.2		0.730	
Vinyl Chloride	µg/L		U		UJ		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**6.03**		**0.00**		**0.43**		**0**		**1.90**		**0.30**		**8.30**		**2.2**		**0.7**	



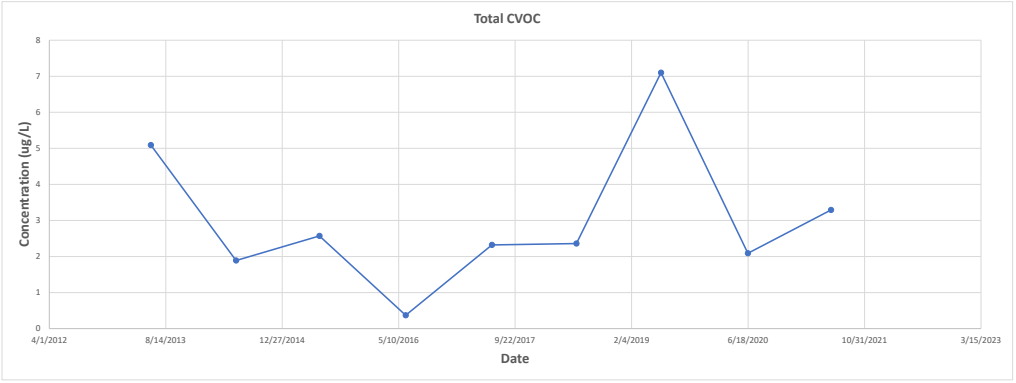
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

MPW-02-C

Sample Date		6/11/2013		6/12/2014		6/5/2015		6/9/2016		6/14/2017		6/12/2018		6/10/2019		6/17/2020		6/9/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L	0.7		0.31	J	0.27	J		U	0.33	J	0.26	J		U	0.22	J		U
1,1-Dichloroethane	µg/L	0.99		0.37	J	0.34	J	0.37	J	0.62		0.45	J		U	0.51		0.670	
1,1-Dichloroethene	µg/L		U	0.17	J		U		U		U	0.21	J		U	0.22	J		U
Chloroform	µg/L	1.3		0.93	J	1			U	0.95		1.1		1			U	0.890	
Chloromethane	µg/L		U		UJ		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L		U		UJ		U		U		U		U		U		U		U
Tetrachloroethene (PCE)	µg/L		U	0.11	J	0.13	J		U		U		U		U	0.14	J		U
Trichloroethene (TCE)	µg/L	2.1			UJ	0.83			U	0.42	J	0.34	J	6.1		1		1.73	
Vinyl Chloride	µg/L		U		UJ		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**5.09**		**1.89**		**2.57**		**0.37**		**2.32**		**2.36**		**7.10**		**2.09**		**3.3**	



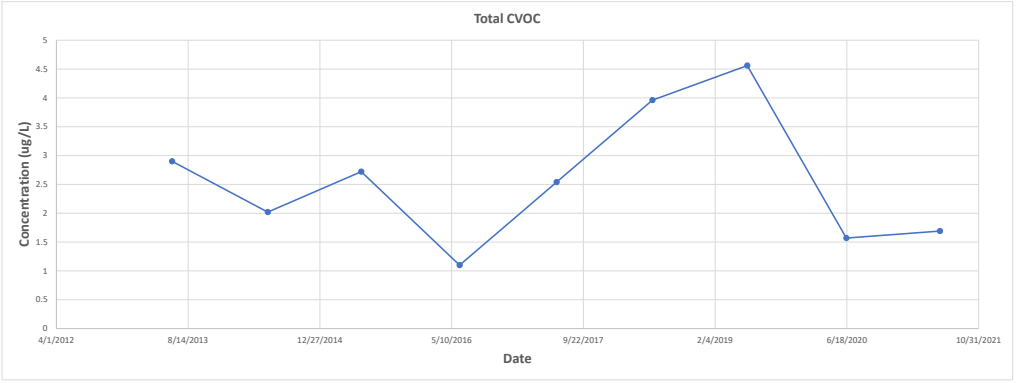
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

MPW-03-B

Sample Date		6/14/2013		6/12/2014		6/2/2015		6/9/2016		6/12/2017		6/11/2018		6/6/2019		6/16/2020		6/6/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L		U		UJ		U		U		U		U		U		U		U
1,1-Dichloroethane	µg/L		U		UJ		U		U		U		U		U		U		U
1,1-Dichloroethene	µg/L		U		UJ		U		U		U		U		U		U		U
Chloroform	µg/L		U		UJ		U		U		U	0.27	J		U		U		U
Chloromethane	µg/L		U		UJ		U		U		U		U	0.93	K		U		U
cis-1,2-Dichloroethene	µg/L		U		UJ		U		U		U		U		U		U		U
Tetrachloroethene (PCE)	µg/L		U	0.22	J	0.32	J		U	0.34	J	0.39	J	0.53		0.17	J		U
Trichloroethene (TCE)	µg/L	2.9		1.8	J	2.4	J	1.1		2.2		3.3		3.1		1.4		1.69	
Vinyl Chloride	µg/L		U		UJ		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**2.90**		**2.02**		**2.72**		**1.1**		**2.54**		**3.96**		**4.56**		**1.57**		**1.7**	



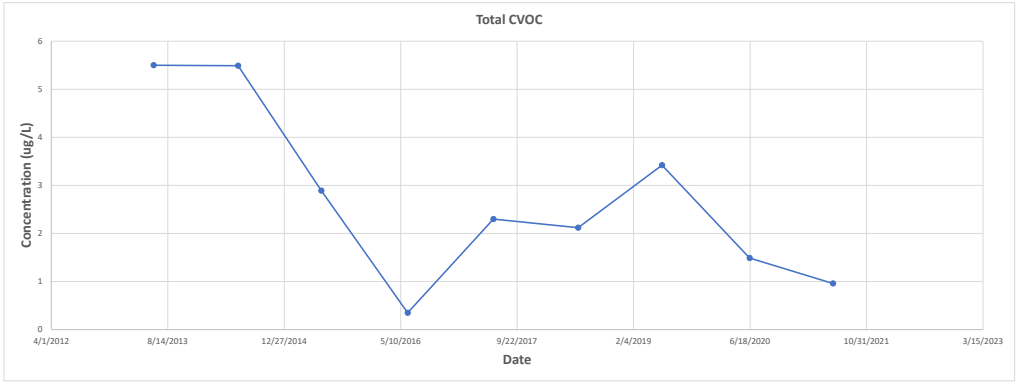
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

MPW-03-C

Sample Date		6/14/2013		6/12/2014		6/4/2015		6/9/2016		6/12/2017		6/11/2018		6/6/2019		6/16/2020		6/9/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L		U	0.36	J	0.45	J		U	0.37	J	0.28	J+	0.51		0.34	J		U
1,1-Dichloroethane	µg/L		U	0.5	J	0.65	J+	0.35	J	0.61		0.53		0.83		0.71			U
1,1-Dichloroethene	µg/L		U	0.17	J		U		U		U		U		U	0.28	J		U
Chloroform	µg/L		U	0.38	J		U		U		U	0.44	J		U		U		U
Chloromethane	µg/L		U		UJ		U		U		U		U	0.98	K		U		U
cis-1,2-Dichloroethene	µg/L		U		UJ		U		U		U		U		U		U		U
Tetrachloroethene (PCE)	µg/L		U	0.38	J	0.19	J		U	0.22	J		U		U	0.16	J		U
Trichloroethene (TCE)	µg/L	5.5		3.7	J	1.6			U	1.1		0.87		1.1			U	0.960	
Vinyl Chloride	µg/L		U		UJ		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**5.50**	U	**5.49**		**2.89**		**0.35**		**2.30**		**2.12**		**3.42**		**1.49**		**1.0**	



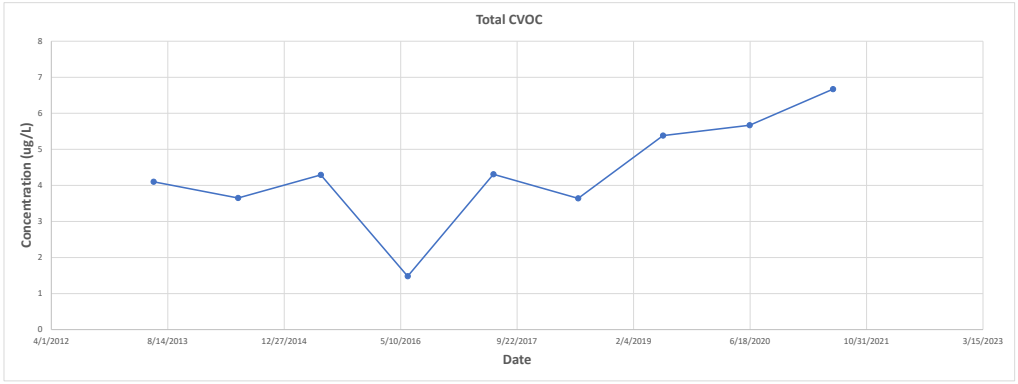
Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

MPW-03-D

Sample Date		6/14/2013		6/12/2014		6/2/2015		6/9/2016		6/12/2017		6/11/2018		6/10/2019		6/16/2020		6/9/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L		U	0.2	J	0.32	J		U	0.32	J	0.28	J+		U	0.34	J		U
1,1-Dichloroethane	µg/L	1.2		0.95	J	1		0.48	J	0.81		0.61		0.83		0.67		0.780	
1,1-Dichloroethene	µg/L		U		UJ		U		U		U		U		U		U		U
Chloroform	µg/L		U		UJ		U		U		U	0.21	J		U		U	0.89	U
Chloromethane	µg/L		U		UJ		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L		U	0.11	J		U		U		U		U		U		U		U
Tetrachloroethene (PCE)	µg/L		U	0.29	J	0.37	J		U	0.38	J	0.34	J	0.55		0.56		0.720	
Trichloroethene (TCE)	µg/L	2.9		2.1	J	2.6		1		2.8		2.2		4		4.1		4.28	
Vinyl Chloride	µg/L		U		UJ		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**4.10**		**3.65**		**4.29**		**1.48**		**4.31**		**3.64**		**5.38**		**5.67**		**6.7**	



Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		01-EW01		01-EW02		02-EW01		02-EW02		ERT-EW-3		ERT-EW-4		ERT-EW-5		02-EW06		IW-ISCO-10		IW-ISCO-11		IW-ISCO-13		IW-ISCO-2		IW-ISCO-3		IW-ISCO-4		IW-ISCO-5	
Sample Date		6/10/2021		6/10/2021		6/10/2021		6/10/2021		6/9/2021		6/8/2021		6/10/2021		6/10/2021		6/10/2021		6/16/2021		6/16/2021		6/16/2021		6/15/2021		6/16/2021		6/17/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L	0.500	U	0.500	U	0.870		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	µg/L	0.500	U	0.500	U	1.77		0.670		0.500	U	0.500	U	0.500	U	0.530		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethene	µg/L	0.500	U	0.500	U	0.510	K	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	µg/L	0.500	U	0.500	U	0.750		0.500	U	0.500	U	0.500	U	0.740		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloromethane	µg/L	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	µg/L	0.500	U	0.500	U	0.780		0.750		0.500	U	0.500	U	0.500	U	1.30		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene (PCE)	µg/L	1.95		1.89		2.10		4.60		0.500	U	0.750		0.500	U	8.58		0.690		2.32		1.00		7.39		1.59		0.500	U	10.2	
Trichloroethene (TCE)	µg/L	57.7		27.5		60.0		52.8		6.39		12.1		0.500	U	290		24.2		110		33.6		568		36.3		4.49		705	
Vinyl Chloride	µg/L	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Total CVOCs	µg/L																														

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		IW-ISCO-6		IW-ISCO-7		IW-ISCO-7		IW-ISCO-8		01-AS		01-EFF		01-EFF		01-CINF		MPW-01-A		MPW01-B		MPW-01-D		MPW-02-B		MPW-02-C		MPW-03-B		MPW-03-C	
Sample Date		6/17/2021		6/17/2021		6/17/2021		6/17/2021		6/10/2021		6/10/2021		6/10/2021		6/10/2021		6/8/2021		6/8/2021		6/8/2021		6/9/2021		6/9/2021		6/6/2021		6/9/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.660		0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.61		0.500	U	0.670		0.500	U	0.500	U
1,1-Dichloroethene	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.600		0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.670		0.500	U	0.890		0.500	U	0.500	U
Chloromethane	µg/L	2.00	U	2.00	U	2.00	U	2.00	U	1.00	U	1.00	U	1.00	U	1.00	U	2.00	U	2.00	UJ	2.00	UJ	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	µg/L	0.500	U	0.730		0.690		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene (PCE)	µg/L	5.00		28.8		26.0		7.69		0.500	U	0.500	U	0.500	U	1.76		0.500	U	0.650		0.580		0.500	U	0.500	U	0.500	U	0.500	U
Trichloroethene (TCE)	µg/L	330		1690		1670		351		0.500	U	0.500	U	0.500	U	37.7		0.500	U	0.500	U	0.790		0.730		1.73		1.69		0.960	
Vinyl Chloride	µg/L	1.00	U	1.00	U	1.00	U	1.00	U	0.500	U	0.500	U	0.500	U	0.500	U	1.00	U	0.500	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U
Total CVOCs	µg/L																														

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MPW-03-D		MPW-04-B		MPW-04-D		MPW-04-E		MPW-05-A		MPW-05-B		MPW-05-D		MPW-06-A		MPW-06-B		MPW-06-D		MPW-08-A				MPW-08-B		MPW-08-C		MPW-08-D	
Sample Date		6/9/2021		6/15/2021		6/15/2021		6/15/2021		6/10/2021		6/10/2021		6/15/2021		6/10/2021		6/10/2021		6/10/2021		6/8/2021		6/8/2021		6/8/2021		6/8/2021		6/8/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.630		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	µg/L	0.780		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.29		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethene	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	µg/L	0.500	U	0.500	U	0.670		0.740		1.67		0.500	U	0.710		0.500	U	0.500	U	0.500	U	0.730		0.760		0.670		0.500	U	0.500	U
Chloromethane	µg/L	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	UJ	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene (PCE)	µg/L	0.720		0.610		0.500	U	0.500	U	0.500	U	0.500	U	1.14		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Trichloroethene (TCE)	µg/L	4.28		0.840		0.500	U	0.500	U	0.500	U	0.500	U	1.67		0.500	U	0.520		5.85		0.500	U	0.500	U	0.500	U	2.07		7.17	
Vinyl Chloride	µg/L	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U
Total CVOCs	µg/L																														

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		MPW-08-E		MPW-09-A		MPW-09-B		MPW-09-C		MPW-09-D		MPW-09-E		MPW-10-C		MPW-10-D		MW-05		ERT-MW-1A		ERT-MW-1B				ERT-MW-2A		ERT-MW-2B		ERT-MW-3	
Sample Date		6/8/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/17/2021		6/17/2021		6/14/2021		6/17/2021		6/17/2021		6/17/2021		6/16/2021		6/16/2021		6/14/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L	0.550		0.500	U	0.500	U	0.510		0.590		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.570		0.550		0.500	U	0.750		0.500	U
1,1-Dichloroethane	µg/L	1.11		0.500	U	0.500	U	0.830		1.59		0.500	U	0.500	U	0.500	U	0.500	U	0.910		1.17		1.10		0.500	U	1.79		0.510	
1,1-Dichloroethene	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.550	K	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.720	K	0.500	U
Chloroform	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500		0.500	U	0.820		0.830		0.500	U	0.500	U	0.500	U	0.500	U	2.12		0.500		0.820	
Chloromethane	µg/L	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	µg/L	0.500	U	0.500	U	0.500	U	1.33		2.72		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	2.66		0.500	U
Tetrachloroethene (PCE)	µg/L	0.500	U	0.500	U	5.73		12.3		2.33		0.500	U	1.74		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	5.43		0.500	U
Trichloroethene (TCE)	µg/L	3.09		8.44		41.7		77.3		138		0.630		2.33		0.810		0.500	U	10.1		4.90		4.56		0.780		219		0.500	U
Vinyl Chloride	µg/L	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Total CVOCs	µg/L																														

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		ERT-MW-4A		ERT-MW-4B		ERT-MW-5A		ERT-MW-5B		ERT-MW-6A		ERT-MW-6B		MW-ISCO-1		MW-ISCO-2		MW-ISCO-4		MW-ISCO-5		MW-PD-11		MW-PD-12		MW-PD-13		MW-PD-14		MW-PD-15	
Sample Date		6/16/2021		6/16/2021		6/10/2021		6/10/2021		6/8/2021		6/8/2021		6/17/2021		6/16/2021		6/15/2021		6/15/2021		6/14/2021		6/14/2021		6/14/2021		6/14/2021		6/10/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L	0.500	U	0.970		0.740		1.20		0.500	U	0.510		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.740	
1,1-Dichloroethane	µg/L	0.770		1.72		1.55		1.93		1.00		0.940		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.05	
1,1-Dichloroethene	µg/L	0.500	U	0.790	K	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	µg/L	0.500	U	0.510		0.560		0.600		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.570		0.500	U	0.600		0.630		0.520	
Chloromethane	µg/L	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	µg/L	0.500	U	0.500	U	0.570		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.790		0.500	U
Tetrachloroethene (PCE)	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	1.58		9.73		7.72		0.500	U	0.500	U	3.67		0.500	U	3.48		2.11	
Trichloroethene (TCE)	µg/L	2.24		1.58		1.03		0.980		18.9		3.04		88.1		516		474		15.8		0.500	U	206		0.570		149		3.74	
Vinyl Chloride	µg/L	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Total CVOCs	µg/L																														

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

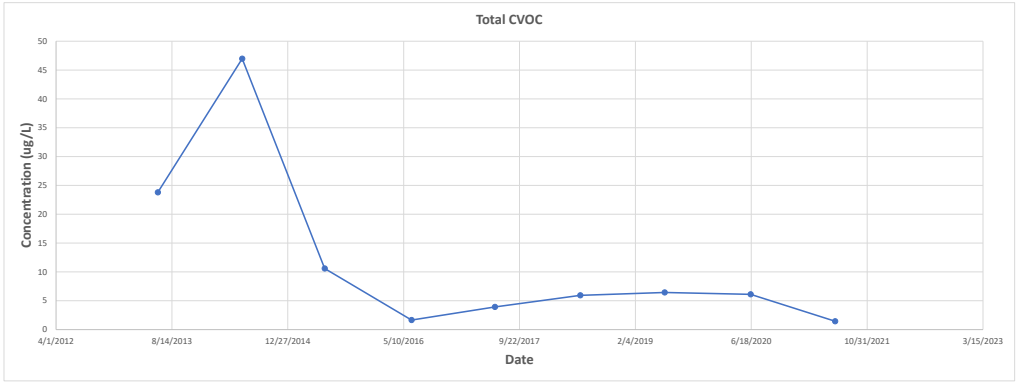
Location ID		MW-PD-16				MW-PD-17		02-AS		02-EFF		02-GAC		PZ-04		PZ-05		PZ-06		PZ-07		SDW-1	
Sample Date		6/16/2021		6/16/2021		6/16/2021		6/10/2021		6/10/2021		6/10/2021		6/15/2021		6/15/2021		6/11/2021		6/11/2021		6/10/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L	0.500	U	0.500	U	0.710		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	µg/L	0.690		0.640		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethene	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloromethane	µg/L	2.00	U	2.00	U	2.00	U	1.00	U	1.00	U	1.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	µg/L	1.09		1.17		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene (PCE)	µg/L	6.09		6.10		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.730		0.500	U
Trichloroethene (TCE)	µg/L	348		382		1.38		3.23		0.500	U	2.84		0.680		3.08		1.13		4.36		0.500	U
Vinyl Chloride	µg/L	1.00	U	1.00	U	1.00	U	0.500	U	0.500	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Total CVOCs	µg/L																						

Appendix A
Table A1 - Groundwater VOCs Analytical Sampling Results (June 2021)
Lawrence Aviation Industries Site
Port Jefferson Station, NY

Location ID		Trip Blanks										Equipment Blanks					
Sample Date		6/10/2021		6/8/2021		6/10/2021		6/14/2021		6/17/2021		6/10/2021		6/14/2021		6/16/2021	
CVOC	Units	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethane	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
1,1-Dichloroethene	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloroform	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Chloromethane	µg/L	1.00	U	2.00	UJ	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U
cis-1,2-Dichloroethene	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Tetrachloroethene (PCE)	µg/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Trichloroethene (TCE)	µg/L	0.640		0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
Vinyl Chloride	µg/L	0.500	U	0.500	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U
Total CVOCs	µg/L																

MPW-04-B

Sample Date		6/14/2013		6/13/2014		6/4/2015		6/13/2016		6/8/2017		6/11/2018		6/10/2019		6/15/2020		6/15/2021	
CVOC	**Units**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane	µg/L		U		U	0.11	J		U	0.2	J		U		U		U		U
1,1-Dichloroethane	µg/L		U		U	0.16	J		U	0.28	J		U		U		U		U
1,1-Dichloroethene	µg/L		U		U		U		UJ		UJ		U		U		U		U
Chloroform	µg/L		U	0.42	J	0.72	J	0.75		0.65		0.45	J	0.63			U		U
Chloromethane	µg/L		U		U		U		U		U		U		U		U		U
cis-1,2-Dichloroethene	µg/L		U	0.55	J+		U		UJ		UJ		U		U	0.11	J		U
Tetrachloroethene (PCE)	µg/L	8.8		14.00		3.30	J	0.91		1.30		2.30		2.40		2.20		0.610	
Trichloroethene (TCE)	µg/L	15		32		6.3	J		U	1.5	J	3.2		3.4		3.8		0.840	
Vinyl Chloride	µg/L		U		U		U		U		U		U		UJ		U		U
Total CVOCs	µg/L	**23.80**		**46.97**		**10.59**		**1.66**		**3.93**		**5.95**		**6.43**		**6.11**		**1.5**	



Notes:

Q = Qualifier

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - cis-1,2-Dichloroethene
   - Tetrachloethene
   - Trichloroethene
   - Vinyl Chloride
2. For non-detect (U qualified) results, a value of 0 was used
3. NS = Not Sampled
4. Qualifiers were defined as:
   - J - Estimated value (- indicates likely biased low, + indicates likely biased high
   - U - Non-Detect Value