FINAL 2017 COMPREHENSIVE SAMPLING REPORT

March 2017

United States Environmental Protection Agency
Lawrence Aviation Industries Superfund Site
Port Jefferson Station, Suffolk County, New York

Contract No. EP-W-09-009
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HDR

REMEDIAL ACTION CONTRACT (RAC) 2 PROGRAM

2017 COMPREHENSIVE SAMPLING EVENT REPORT

MARCH 13, 2018

LAWRENCE AVIATION INDUSTRIES SUPERFUND SITE

LONG-TERM RESPONSE ACTION

PORT JEFFERSON STATION, NEW YORK

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bgs	below ground surface
CHEM	Chemtech
CVOCs	chlorinated volatile organic compounds
DCA	Dichloroethane
DCE	Dichloroethene
DO	dissolved oxygen
DQIs	data quality indicators
EPA	United States Environmental Protection Agency
ERT	Environmental Response Team
FS	feasibility study
GPM	Gallons per Minute
HASP	Health and Safety Plan
HP	Horse Power
HRS	hazard ranking system
ISCO	in-situ chemical oxidation
LAI	Lawrence Aviation Industries
LDPE	Low Density Polyethylene
LTRA	Long Term Remedial Action
mg/l	milligrams per liter
msl	mean sea level
mV	Millivolts
NPL	National Priorities List
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOT`	New York State Department of Transportation
O&M	Operations and Maintenance
OMP	Old Mill Pond
ORP	Oxidation/Reduction Potential
OSWER	Office of Solid Waste and Emergency Response
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethene
PDI	Pre-Design Investigation
PPE	Personal Protective Equipment
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RA	Remedial Action
RAC	Remedial Action Contract
RAOs	Remedial Action Objectives
RCRA	Resource Conservation and Recovery Act
RD	remedial design
REAC	Response, Engineering and Analytical Contract
RI	remedial investigation
ROD	Record of Decision
SCWA	Suffolk County Water Authority
SMP	site management plan
TCA	Trichloroethane
TCE	Trichloroethene
TCL	target compound list
VC	Vinyl Chloride
VOC	volatile organic compounds
µg/l	micrograms per liter

1.0 INTRODUCTION

1.1 Purpose of this Report

This report for the Lawrence Aviation Industries (LAI) Superfund Site was prepared by Henningson, Durham & Richardson, Architecture and Engineering PC, in association with HDR Engineering, Inc. (HDR) under the United States Environmental Protection Agency (EPA) Region 2 Remedial Action Contract (RAC) 2 Contract No. EP-W-09-009 and EPA Work Assignment No. C01-LTRA-02NS in accordance with the EPA Close-Out Procedures for National Priorities List (NPL) Sites, Office of Solid Waste and Emergency Response (OSWER) Directive 9320.2-22, dated May 2011. The comprehensive sampling event report was prepared pursuant to Subtask 9.2 (Evaluate System Performance) of the November 2012 approved work plan. The purpose of this report is to present results of the June 2017 comprehensive sampling event, compare the results to the May 2008 baseline groundwater sampling results and subsequent groundwater sampling results, and confirm plume capture and monitor Chlorinated Volatile Organic Compounds (CVOCs) 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.
- Comprehensive Sampling Event and Results (**Section 2**) - Summarizes the June 2017 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 2017, including an evaluation of the effectiveness of the remedial action.
- References (**Section 4**) - Provides a list of documents relevant to the site activities.

1.2 Site Location and Description

The LAI Site (EPA identification number NYD002041531) is located in Port Jefferson Station, Suffolk County, New York (henceforth referred to as "Site"). 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 LAI Outlying Parcels property is mostly vacant and wooded, but contains a few small residential single family houses and three access roads. 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 beyond which is a residential area with single family houses. The Village of Port Jefferson and Port Jefferson Harbor lie approximately one mile to the north. A mixed-use bicycle and pedestrian path and right-of-way were installed by the New York State Department of Transportation (NYSDOT) and runs through the LAI industrial facility property.

The remediation system is comprised of two groundwater pump and treat facilities. The first system exists at the LAI industrial facility (near the source area) and the second is located downgradient at Old Mill Pond (OMP) near Port Jefferson Harbor. Both systems have multiple extraction wells, air strippers and vapor-phase granular activated carbon (GAC) units. The OMP system also has liquid-phase GAC units.

1.3 Historical Sources of Groundwater Contamination

The LAI industrial facility was previously part of a turkey farm owned by LAI's corporate predecessor, Ledkote Products Co. (Ledkote) of New York. Established in Port Jefferson Station in 1951, Ledkote produced items including lead gutters and downspouts for roof drains. Since 1959, the 42-acre LAI industrial facility has manufactured products from titanium sheet metal, including golf clubs and products for the aeronautics industry, under the LAI name.

Past disposal practices have 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, surface water, and sediments downgradient of the Site. The Remedial Action (RA) is being conducted to hydraulically contain and to treat groundwater at the source area at the LAI Site and to prevent further migration of contaminated groundwater farther downgradient into OMP, Old Mill Creek and Port Jefferson Harbor.

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. 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-DCE, PCE and metals were detected in groundwater samples collected from adjacent residential wells. EPA 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 a removal action conducted in 1987. The NYSDEC, Region 1 Resource Conservation and Recovery Act (RCRA) Hazardous Substance Group oversaw a major drum removal action at the Site in 1991. The

Suffolk County Water Authority (SCWA), under contract with the NYSDEC, connected homes that were affected by groundwater contamination attributed to LAI to public water supplies throughout the 1990s. The 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, the EPA prepared a hazard ranking system (HRS) report and proposed the Site for inclusion on the NPL on October 22, 1999. The Site was listed on the NPL 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. The NYSDEC found violations of air, soil, solid waste, chemical bulk storage and hazardous waste regulations. LAI was ordered by the 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

EPA conducted an RI at the Site from August 2003 to May 2005 through the RAC program. The RI documented a CVOC plume and identified polychlorinated biphenyl (PCB)-contaminated soil at the Site. EPA personnel noted conditions at the Site, including, but not limited to, leaking vats and drums, that warranted removal action. EPA Region 2's Removal Action Branch addressed approximately 1,300 drums, containers and cylinders 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 properly disposed off-site in October and November 2004. Approximately 13.5-tons of transformers and capacitors filled with suspected PCB liquid were removed from the Site and properly disposed as part of the removal action. During these actions, EPA personnel identified approximately 30 additional electrical transformers in several areas of the Site.

A Feasibility Study (FS) was completed in July 2006 by CDM Smith on behalf of the EPA 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 which addressed both soil and groundwater. The soil remedy has been addressed by another contract through excavation and removal of approximately 550 tons of contaminated soil from the Site in March 2011. The groundwater remedy included the installation of the two groundwater extraction and treatment systems at LAI and OMP, respectively.

1.5 Groundwater Remedy

The purpose of the selected groundwater remedy is to comply with the Remedial Action Objectives (RAOs) in the ROD, which are listed below:

- 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 NYS Groundwater and Drinking Water Quality Standards within a reasonable time frame; and
- Prevent or minimize VOC-contaminated groundwater from discharging into Port Jefferson Harbor.

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

TCE and PCE were detected in groundwater at multiple depths at concentrations exceeding the clean-up criteria, which are the NYSDEC Groundwater Quality Standards and New York State Department of Health (NYSDOH) Drinking Water Quality Standards. The groundwater remedy called for in the ROD specified plume / source containment and treatment of contaminated groundwater, which included:

- Construction of two groundwater extraction and treatment systems (one at the LAI facility and one within the downgradient plume area near OMP);
- In situ chemical oxidation (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 (SMP);
- 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.

The Remedial Design (RD) was completed by EPA for the LAI and OMP groundwater pump and treat systems and ISCO treatment at the LAI facility in April 2009. This was performed under the EPA Region 2 RAC 2 Contract No. 68-W-98-210, Work Assignment No. 173-RDRD-02PF. The goal of this design was to maintain hydraulic control of the source area by extracting and treating contaminated groundwater and to treat the area with the highest TCE concentrations (greater than 1 milligram per liter [mg/l]) with ISCO to reduce contaminant mass in groundwater.

In May 2009, EPA initiated the RA for the components specified in the RD under the Region 2 RAC 2 Contract No. EP-W-05-049, Work Assignment Nos. 234-RARA-02NS, 238-RARA-02NS and 338-RARA-02NS. Construction of the treatment facilities and ISCO injections were performed from December 2009 to September 2010. The groundwater pump and treat facility startup testing at LAI was performed in September 2010 and full operation and maintenance (O&M) activities for the on-site groundwater treatment system are ongoing.

The design and installation of the downgradient groundwater pump and treat facility at OMP was completed by the EPA 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 EPA's Environmental Response Team (ERT) under the Response, Engineering and Analytical Contract (REAC).

Several recent 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 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 Old Mill Pond and Creek, were upgraded from three inch to six inch diameter parts. A 15 horsepower (HP) air stripper transfer pump (previously 7.5 HP) was installed to expand the capture zone of the distal end of the 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 sample locations and Cross-section A-A'. Cross-section A-A' presents view of the lithology, potentiometric data and TCE concentrations along the centerline of the plume from the site to Port Jefferson Harbor. **Figure 3** and **Figure 4** depict water levels, hydrogeology, lithology, and TCE data collected during groundwater sampling in May 2008 at the conclusion of the Pre-Design Investigation (PDI).

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. Consequently, water is interchanged much more readily between the Upper Glacial and Magothy Aquifers than between the Magothy and Lloyd Aquifers. The presence of the

Raritan Clay, directly underlying the Magothy Aquifer, marks the lower boundary of the upper flow system. Investigations at the site have only addressed the upper flow system.

Magothy Aquifer

The Magothy Aquifer consists of Upper Cretaceous Magothy deposits from base of the Upper Glacial Aquifer to the top of the confining clay unit of the Raritan Formation. It consists of fine to medium sand with interbedded silts and clays. The aquifer has a fluvial-deltaic depositional origin, is wedge shaped, and thickens progressively towards the south and southeast. The Magothy deposits were unconformably overlain by glacial deposits (Franke and McClymonds 1972). Discontinuous clay bodies are present in the Magothy Formation. As seen on Cross-section A-A' (**Figure 4**), the contact between the Magothy and Upper Glacial Aquifers, was observed at a depth of 324 feet below ground surface (bgs), which is equivalent to an elevation of 99 feet below mean sea level [msl], in stratigraphic boring ST-03. This contact was also observed in the boring for MPW-09 at a depth of 108 feet bgs (98.34 feet below msl).

Upper Glacial Aquifer

The Site is directly underlain by the Pleistocene-age Harbor Hill moraine, a remnant of the most recent glaciation. The moraine is up to 70 feet thick and composed primarily of sand and gravel with occasional lenses of silty sand and silt. The moraine deposits thin to the south and to the north. Cross-section A-A' (**Figure 4**) shows the extent and lithology of the Upper Glacial Aquifer underlying the LAI industrial facility as compared to downgradient of the Site.

At the LAI industrial facility, the moraine deposits are underlain by well graded fine to medium grained sands and silts with occasional layers of silt and clay or sand and gravel. The clay-rich layers observed in this zone were thin and discontinuous, likely derived from Magothy Formation materials (or Smithtown Clays), reworked and then re-deposited during the creation of the local moraine. The localized glacial activity at the Site has reworked the upper layers of the Magothy Formation and left very complex heterogeneous glacial deposits at the base of the Upper Glacial Aquifer; this material is not differentiated from the reworked Magothy material described above.

During the PDI, an aquifer test was performed on a test well in the area near well MPW-02. The upper 60 feet (180-240 feet bgs) of the aquifer was screened by the test well and piezometers were also screened within the zone from 205 to 225 feet bgs. The lithology observed in the screened zone was predominantly a mixture of fine to medium grained sands with silt.

1.7 Hydrogeology

Groundwater Flow

The Upper Glacial Aquifer is generally under unconfined conditions and the upper limit is the water table. Synoptic groundwater elevation data collected in June 2017 was used to prepare a potentiometric surface map for the Upper Glacial Aquifer from the LAI Site to the Port Jefferson Harbor (**Figure 5**).

The potentiometric surface map shows that groundwater flow is to the north towards Port Jefferson Harbor in the vicinity of the LAI industrial facility. There is a downward vertical gradient at top of the moraine at the LAI facility as observed in Figure 4. Further to the north and off of the moraine, a significant upward hydraulic gradient is present as the upper flow system discharges to Port Jefferson Harbor. The Upper Glacial Aquifer is 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.

Estimates of Hydraulic Conductivity and Transmissivity

During the RI/FS, EPA performed a series of packer tests at the Site to estimate hydraulic conductivity and transmissivity of the aquifer. Packer tests are used to isolate vertical sections of the well with inflatable bladders 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 <0.02 feet/day to 89 feet/day, and transmissivity estimates ranged from 12 to 22,200 gallons per day/foot (or 2 to 3,000 $feet^2$/day). Lithologic logs indicated that the saturated portion of the Upper Glacial and Magothy Aquifers at the Site, where the multi-port wells were screened, generally consisted of a layer of fine to medium sand overlying a silty sand layer. The aquifer test performed as part of the PDI near the LAI extraction wells estimated hydraulic conductivity ranging from 31 to 63 feet/day and transmissivity estimates ranged from 4,400 to 8,800 $feet^2$/day.

The wide range of hydraulic conductivity values is not unexpected considering 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.

1.8 Summary of Area-Wide Contamination in 2008

The TCE plume originates from the vicinity of wells MPW-02 and MPW-07 at the Site and moves downgradient to the northwest. In the vicinity of well MPW-10, approximately 1,000 feet from the western Site boundary, groundwater flow and the TCE plume bend to the north toward Port Jefferson Harbor. The vertical hydraulic gradient near well MPW-09 indicates that groundwater is moving upward as it moves northward in the vicinity of this well. This upward gradient causes groundwater to discharge at the surface in the vicinity of OMP. The surface water sample results from OMP collected during the RI in October 2003 showed TCE concentrations ranging from 180 micrograms per liter (µg/l) to 340 µg/l and cis-1,2-DCE concentrations ranging from 9.2 to 17 µg/l. Refer to **Figure 3** for plume location and isoconcentration contours, as interpreted based on data collected during the 2008 comprehensive sampling event.

The highest concentration of TCE in 2008, approximately 1,100 µg/l, were measured in the groundwater sampled at well MPW-07 from a depth of approximately 190 to 230 feet bgs. Residual subsurface soil contamination was assumed to still exist in low permeability zones serving as sources for groundwater contamination based on the following knowledge:

- High TCE concentrations in groundwater were detected at the Site more than 20 years after releases of the contaminants had stopped;
- Only a limited number of deep borings/monitoring wells had been advanced at the Site; and
- Residual soil contamination generally exists in thin layers.

2.0 2017 COMPREHENSIVE SAMPLING EVENT AND RESULTS

2.1 2017 Comprehensive Sampling Event Field Investigation Procedures

Groundwater samples were collected to measure the performance of the two remediation systems. Analytical results are used to monitor contaminant levels over time and determine whether the capture zone is maintained by the extraction wells. Both groundwater quality and water level data were collected from the wells and are summarized in **Table 1**.

2.1.1 Sampling Methodology

HDR conducted the comprehensive annual sampling event from June 5 to 15, 2017. During this time, water quality parameters were measured including temperature, pH, oxidation reduction potential (ORP), specific conductance, turbidity and dissolved oxygen (DO) (refer to **Table 2**). A total of 65 groundwater samples were collected from 46 locations, including eight extraction wells, nine multiport wells, three piezometers, and 26 monitoring wells. A total of 29 quality assurance / quality control (QA/QC) samples were collected as part of the comprehensive annual sampling event. The performance of both groundwater treatment facilities is monitored routinely, which includes monthly system process water sampling for target compound list (TCL) VOCs, fluoride, and target analyte list (TAL) metals. Eleven process water samples were collected from the treatment systems as part of the June 2017 monthly sampling event and are presented in the attached tables for reference. A synoptic round of groundwater level measurements was collected on June 5th, 2017 which included 83 readings. The data is presented in **Table 3** and was used to prepare a potentiometric surface map for the Upper Glacial Aquifer at the LAI Site and north of the Site to the Village of Port Jefferson (**Figure 5**).

2.1.1.1 Monitoring Wells

Sampling was conducted using USEPA Region 2 low flow groundwater protocols. Conventional wells were purged with a Grundfos Rediflow 2 submersible pump or a bladder pump and sampled according to EPA low-flow techniques, minimum drawdown groundwater sampling procedures. Multi-port wells were purged and sampled using Nitrogen-filled bladder pumps that are included as part of the Waterloo system in accordance with manufacturer instructions. Groundwater samples were analyzed for trace-level TCL VOCs by the EPA Contract Laboratory Program (CLP) by Chemtech Consulting Group (CHEM) of Mountainside, New Jersey. Analytical samples were shipped under proper management and Chain of Custody procedures to the laboratory. Sample handling and custody was performed according to the EPA OSWER 9200.2-147, CLP Guidance for Field Samplers (EPA-540-R-014-013, October 2014). Scribe was used for sample custody and sample management documentation.

2.1.2 Quality Control / Quality Assurance Samples

Groundwater sampling followed standard operating procedures presented in the EPA-approved Quality Assurance Project Plan (QAPP) dated April 2016 (Revision 3). QA/QC samples collected included field duplicates (1 per 20 samples collected), trip blanks (daily, for VOCs only), equipment blanks (minimum 5% of samples collected) and field blanks (daily). A total of 29 QA/QC samples were collected for this event, including field duplicates, equipment blanks, field blanks, and trip blanks, two of which were collected as part of the monthly compliance sampling.

2.2 Decontamination and Investigation Derived Waste (IDW)

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 (HASP). Waste material generated during the annual sampling event included decontamination wash water, purged groundwater and personal protective equipment (PPE). Purge water and decontamination water were transported to the LAI and OMP groundwater treatment facilities in enclosed buckets or tubs. The water was treated through the air stripper and GAC vessels prior to discharge, in accordance with the Waste Management Plan for the Site. The PPE was disposed of as municipal waste.

2.3 2017 Comprehensive Sampling Event Results

Well construction information for all monitoring wells sampled is provided in **Table 1**. Groundwater sampling locations are shown on **Figure 2**. Analytical results from groundwater samples were compared to criteria from the NYSDOH Drinking Water Quality standards (Part 5, Subpart 5.1, dated November 2011) and the NYSDEC for Class GA Groundwater (Technical & Operational Guidance Series (TOGS) 1.1.1, June 1998). NYSDOH and NYSDEC Standards for class GA Groundwater for VOC criteria are similar with the exception of chloroform. In this instance, the lower NYSDEC Standard for class GA Groundwater of 7 µg/l was used. **Table 4** depicts the groundwater analytical sampling results from the June 2017 event for site-related VOCs. Exceedances of the criteria are highlighted in the tables.

2.4 Data Usability

A Data Usability Report was prepared to verify conformance with the data quality indicators (DQIs) specified in the EPA-approved QAPP, Revision 3 (HDR April 2016) and is provided in **Appendix A**. Sample data were evaluated for precision, accuracy, representativeness,

comparability, sensitivity and completeness. Samples were analyzed through the CLP by Chemtech (CHEM) and validated by EPA Region 2 personnel.

The results provided by the CLP laboratory are considered definitive data and underwent a systematic data validation to provide assurance that the data were adequate for its intended use. The validation was performed based on an evaluation of project objectives, method-specific QA/QC information (such as holding times, calibration records, laboratory- and field-supplied blanks, duplicate precision, and surrogate and spike recovery), relevant sections of the EPA Region 2 Data Validation Standard Operating Procedures (SOPs) [HW-34 (Rev3) and HW-35 (Rev2) for VOA and SVOA, respectively], relevant sections of the EPA National Functional Guidelines for Organic Data Validation, and/or the best professional judgment of the validator. Validation was performed by EPA personnel with the appropriate training and/or experience in performing data validation for the analyses of interest associated with the project. Qualifiers (as appropriate) were added to the data based on the results of the validation.

Upon validation, several of the sample results were qualified "J" or "J-" with an estimated quantity bias low, U for a non-detect result above the CRQL, UJ with an estimated non-detect result value, and UL for a non-detect value with a CRQL biased low. These qualifiers were added due to laboratory QC spike sample recoveries and initial and continuing calibration that were outside the recovery limits. The data qualified was primarily low-level detections at or near the CRQL. No sample results were rejected for the annual sampling event, monthly performance, or compliance sampling.

The Data Usability Report focused only on the samples included in the comprehensive sampling event. The data generated during the 2017 comprehensive sampling event are considered definitive data generated under an EPA-approved QAPP, following EPA methods and validated according to EPA Region 2 standard operating procedures. The results of the data usability report indicate that sufficient data were collected to obtain a complete and usable data set.

Thirteen of the 16 field and equipment blanks were contaminated with one or more low level concentrations of VOCs. Also, six of the 8 trip blanks were contaminated with low level concentrations of VOCs including ethylbenzene, styrene, and / or TCE. In subsequent comprehensive annual sampling events, further precautions will be taken including preparation and storage of the de-ionized water used to prepare the blanks and the sample containers in a confirmed non-contaminated environment. New supplies of de-ionized water were purchased from Environmental Sampling Supply (ESS) in glass amber containers (instead of Low-Density Polyethylene [LDPE]) and the water selected will have the lowest TCE contamination certification available. Blank samples were collected outside the LAI facility.

2.5 Groundwater Sample Results

The site-related contaminants are primarily TCE and PCE. Historically, low concentrations of TCE degradation products cis-1,2-DCE, 1,1-DCE, 1,1-dichloroethane, and vinyl chloride (VC) have also been detected. Additional site related VOCs include 1,1,1-trichloroethane (1,1,1-TCA) and (1,1-DCA), chloroform.

The results of the 2017 comprehensive groundwater sampling event are provided in **Table 4** and are discussed below:

- TCE was detected in 57 of the 65 groundwater samples with concentrations ranging from 0.2 µg/l to 710 µg/l. Concentrations in 26 of the samples collected exceeded the remediation goal of 5 µg/l. The highest concentration of TCE, 710 µg/l, was detected in the sample from source area well MW-ISCO-2.
- PCE was detected in 41 of the 65 groundwater samples with concentrations ranging from 0.22 µg/l, estimated below the quantitation limit, to 14 µg/l. Concentrations of PCE in six of the samples were greater than or equal to the remediation goal of 5 µg/l. The highest concentration of PCE, 14 µg/l, was detected in the groundwater sample collected from source area well MW-ISCO-2.
- Cis-1,2-DCE was detected in 22 of the 65 groundwater samples with concentrations ranging from 0.27 µg/l estimated below the quantitation limit, to 5.4 µg/l. The highest concentration of cis-1,2-DCE, 5.4 µg/l, just exceeding the remediation goal of 5 µg/l, was detected in the groundwater sample collected from the D port at offsite well MPW-09-D.
- The following compounds were detected in one or more samples but concentrations were less than their respective remediation goals: 1,1,1-TCA, 1,1-DCA, 1,1-DCE, MTBE, and chloroform.
- VC was not detected above the analytical reporting limit in any of the groundwater samples collected.

Results for QA/QC samples are included in the Data Usability Report in Appendix A. Complete data tables for all VOCs and associated QA/QC sampling are included in Appendix B.

TCE results for the 2017 comprehensive sampling event are presented in plan view with isoconcentration contours in **Figure 6**. The highest TCE concentration at each multi-port well location was used to create the isoconcentration contours. Cross-section A-A' in **Figure 7** shows the distribution of the contaminant plume with depth for the 2017 comprehensive sampling event. TCE, PCE, cis-1,2-DCE, and VC groundwater sample results are included in the cross-section. These wells were determined to be representative of the centerline of the plume. Results of the 2017 comprehensive event were superimposed on the May 2008 PDI results for comparison. Results of the 2017 event are compared to results of the 2008 event.

2.6 Geochemical Parameters

Geochemical parameters are summarized in **Table 2**. In 2017, the following measurements were collected:

- Area-wide DO levels ranged from 0 mg/l in sample MPW-09-C to 9.27 mg/L in MPW-08-A indicating an aerobic environment. PZ-06 DO level was recorded as 11.38 mg/L which is considered an outlier as it is above the saturation limit.
- Area-wide pH readings ranged from 5.52 in sample MPW-08-A to 7.77 in sample MPW-06-D. MPW-01-C had a pH reading of 9.08 which has been consistently higher in previous sampling rounds than the Site wide range.
- Area-wide ORP levels ranged from -66 millivolts (mV) in sample MPW-01-C to 293 mV in sample MPW-08-B. Most samples had positive ORP levels suggesting an oxidative environment.

3.0 GROUNDWATER CONTAMINATION OVER TIME

3.1 Impact of Remedial Action

As reported in the most recent monthly Operations and Maintenance Report, approximately 961 pounds of CVOC have been removed from the contaminant plume since HDR assumed operation of the remediation systems at the Site. The majority of contaminant mass removal was associated with the OMP system, which is consistent with a reduction in source area mass from ISCO treatment.

Removal of contaminant mass from the source area and offsite plumes has resulted in a general reduction in contaminant concentrations over the operational period of the remediation systems as shown in **Figures 8** through **11**. The data set used to prepare these time-series graphs is included in **Appendix C**. 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 offsite 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. Although MW-ISCO-10 is also located in this area, there was not sufficient historical water quality data to include it in the evaluation. As shown on **Figure 8**, groundwater in the source area experienced an initial rebound in chlorinated ethene concentrations shortly after ISCO treatment was completed and extraction system startup. Since the initial rebound, contaminant concentrations in each of the source area wells exhibit a reducing trend (**Figure 8**). This reducing trend is further evidenced by a plot of the average concentrations of all of the source area wells with time (**Figure 9**). Contaminant concentrations fluctuate over the monitoring period, but the overall downward trend is maintained, both in the general population and at the 95% confidence limit.

Fate of the offsite 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 (A through D ports) is located immediately downgradient of the OMP extraction wells. Contaminant concentrations in these wells also show a downward trend since startup of the OMP remediation system in 2010, consistent with the removal of mass from the offsite plume (**Figure 10**). This reduction is seen both at depth where the highest concentrations are migrating (MPW-09-B, MPW-09-B, MPW-09-C, MPW-09-D, MW-PD-12, MW-PD-14 and MW-PD-16) and at shallow depths above silt and clay deposits in the upper Glacial aquifer (MPW-09-A). The downward trend is demonstrated in a plot of the average contaminant concentrations for these offsite plume wells over time (**Figure 11**). As with the onsite plume, the downward trend is present both in the general population and at the 95% confidence limit. This general reducing

trend can also be seen in wells located at the plume lateral and distal limits as shown in Appendix C.

3.2 Plume Extent

The pre-remediation plume extent was established during the 2008 PDI. At that time, the plume extended approximately 6,000 feet northwest of the LAI facility to Port Jefferson Harbor and was approximately 1000 feet in width (**Figure 3)**. Vertically, the plume was shown to migrate downward from the facility to depths of 250 to 300 feet and then upward as it approached Port Jefferson Harbor (**Figure-4**). **Figures 3** and **4** were based figures from the PDI and show plume distribution based on concentrations of TCE, the primary contaminant associated with the plume. It was further concluded that both horizontal and vertical plume migration was consistent with the flow of groundwater from upland recharge areas near the LAI facility to discharge areas at the harbor (**Figures 3** and **4**). Groundwater level data from the 2017 event indicate that current plume migration remains consistent with the ambient flow of groundwater (**Figure-5**).

The 2017 comprehensive sampling event indicates that the current plume extent is similar to the pre-remediation plume in overall length and width, but has separated into onsite or source area and offsite plumes over the course of remedial action (**Figure 6**). **Figures 6** and **7**, which show the current horizontal and vertical distribution of the plume were also based on TCE concentrations to be consistent with **Figures 3** and **4**. The separation of source area and offsite plumes is consistent with capture of impacted groundwater by LAI facility extraction wells EW-01 and EW-02.

The current downgradient extent of the source area plume was estimated based on groundwater flow conditions in the area of the LAI facility and is shown as dashed contour lines on **Figures 6** and **7**. The horizontal and vertical extent of the source area plume is generally consistent with the pre-remediation plume. It is limited to the immediate area of the contaminant source and the upper 25 to 30 feet of the aquifer.

The current offsite plume extends from a point upgradient of MW-PD-12 to Port Jefferson Harbor. The 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 6** and **7.** 2017 data indicate that vertical migration of the current plume is consistent with the pre-remediation plume. A comparison of the current distribution of the offsite plume with OMP extraction wells indicates that the OMP system is targeting the most highly concentrated portion of the plume both horizontally and vertically. A reduction in the width of the offsite plume is further evidence of the impact of the OMP system. Based on the width and thickness of the offsite plume, it is unlikely that the OMP system is resulting in complete capture of the plume, but the reduction in mass in this area is resulting in a consistent reduction in plume concentrations as discussed above. Recent enhancements to the remediation system that allow higher rates to be captured and treated are expected to increase mass removal and the remediation of the offsite plume.

3.3 Plume Concentrations

In general, concentrations of site-related CVOCs have decreased from pre-remedial action levels to present day levels throughout the plume as shown in **Figures 12** through **15** and **Appendix D**. Fluctuations in contaminant concentrations have been observed, however an overall decreasing trend is evident in the data as previously discussed. Decreases in concentration of the primary contaminant TCE, accounted for most of the observed reduction in total CVOCs. Concentrations of TCE degradation products, such as cis-1,2-DCE and VC, have been consistently low and have not changed significantly over time.

An increase in concentrations was observed at source area monitoring points during the 2017 event relative to the 2016 event. For example, a TCE concentration of 710 µg/l was detected at source area well MW-ISCO-2 in 2017 compared to a level of 440 µg/l in 2016. As previously discussed, the overall trend in TCE and total ethene concentrations has been downward since treatment began. Based on these overall trends and the history of fluctuating concentrations, it is concluded that the increase in TCE concentration is a short term fluctuation. Short term fluctuations such as this can be expected in source areas where variations in the rate of recharge or the elevation of the water table result in changes in mass transfer from residual source material to the groundwater.

The TCE concentrations at wells MW-PD-12, MW-PD-14 and MW-PD-16, located in the central part of the offsite plume also showed increases in TCE and total CVOC concentrations between the 2016 and 2017 events. These wells are located along the center line of the plume and represent the highest concentrations detected in the central part of the offsite plume. These fluctuations are believed to be a result of historical changes in mass transfer at the LAI facility. The variations in contaminant concentrations at the source area are reflected in the plume as it migrates downgradient from the site. Concentration versus time plots for these wells indicate that the increase from 2016 to 2017 is a short term fluctuation within an overall downward trend in contaminant concentrations (**Figures 12** to **15)**. The data set used to prepare these time-series graphs is included in **Appendix D**. Based on historical data trends; the overall reduction in contaminant concentrations is expected to continue at a similar rate as long as the remediation systems continue to operate.

Monitoring wells located in the distal end of the plume, exhibit the same general trend of short term fluctuations with an over reducing trend. Concentrations of total CVOCs at well MPW-09, located immediately downgradient of the OMP system, show slightly different trends based on depth (**Figure 15**). The greatest reductions in concentrations are seen in the deeper intervals port B, C, and D that intercept the main part of the plume and correlate with screen zones of the OMP extraction wells. The range in concentrations for the 2017 annual event in these deeper ports was 41 to 315 µg/l. Concentrations in shallow port A, which is separated from the extraction well screens by silt and clay beds exhibits both lower concentrations (13 µg/l in 2016 and 2017) and a lower overall rate of reduction.

TCE concentrations in groundwater samples collected at ERT-MW-2B (on the mid-western side of the plume) have increased from 120 µg/l in 2016 to 230 µg/l in 2017. TCE concentrations in groundwater samples collected at ERT-MW-1B (on the mid-eastern side of the plume) have increased from 13 µg/l in 2016 to 19 µg/l in 2017. Plots of concentration with time for these wells are presented in **Appendix E**. TCE concentrations in groundwater samples collected farther west, in ERT-MW-3 and MPW-05, and farther east, in MPW-06-A and –B, MW-5A/B, MW-4A/B, were non-detect

As a result of the addition of a third extraction well and increased pumping capacity of the OMP facility, the slug of TCE that was previously centered on MW-PD-16 (as shown in the 2012 and 2013 sampling events seen in Figure 10) appears to continue migrating north. Historical total VOC concentrations detected in groundwater samples collected from MW-PD-16 are shown in **Figure 14,** which shows a general decrease in contamination at this location until 2012. In 2017, the TCE concentration in the groundwater sample collected at this well was 390 µg/l. Concentration data indicate that the OMP system is capturing the contamination north of MW-PD-16.

Based on the overall trends in total VOC concentrations from 2014 to 2017, operation of ERT-EW-6 appears to have a direct influence on the MPW-09 cluster. 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 on **Figure 15**. Shallow port MPW-09-A, which is above the low permeability silt and clay lenses in the upper flow zone shows less of an impact. This indicates that ERT-EW-6 is targeting the most highly contaminated portion of the plume and that it's continued operation will enhance the plume capture near the OMP groundwater pump and treat system.

3.4 Natural Attenuation

The primary mechanism for natural attenuation of chlorinated ethenes is reductive dechlorination. If sufficient electron donors, 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 2017 comprehensive sampling event indicated that favorable hydrogeochemical conditions for reductive dechlorination do not exist at the Site. The relatively high DO levels and positive ORP levels observed in most groundwater samples collected during the 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, 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 primarily due to remedial activities performed at the Site, including source mass removal and operation of two groundwater pump and treat systems, as well as dilution and dispersion.

4.0 REFERENCES

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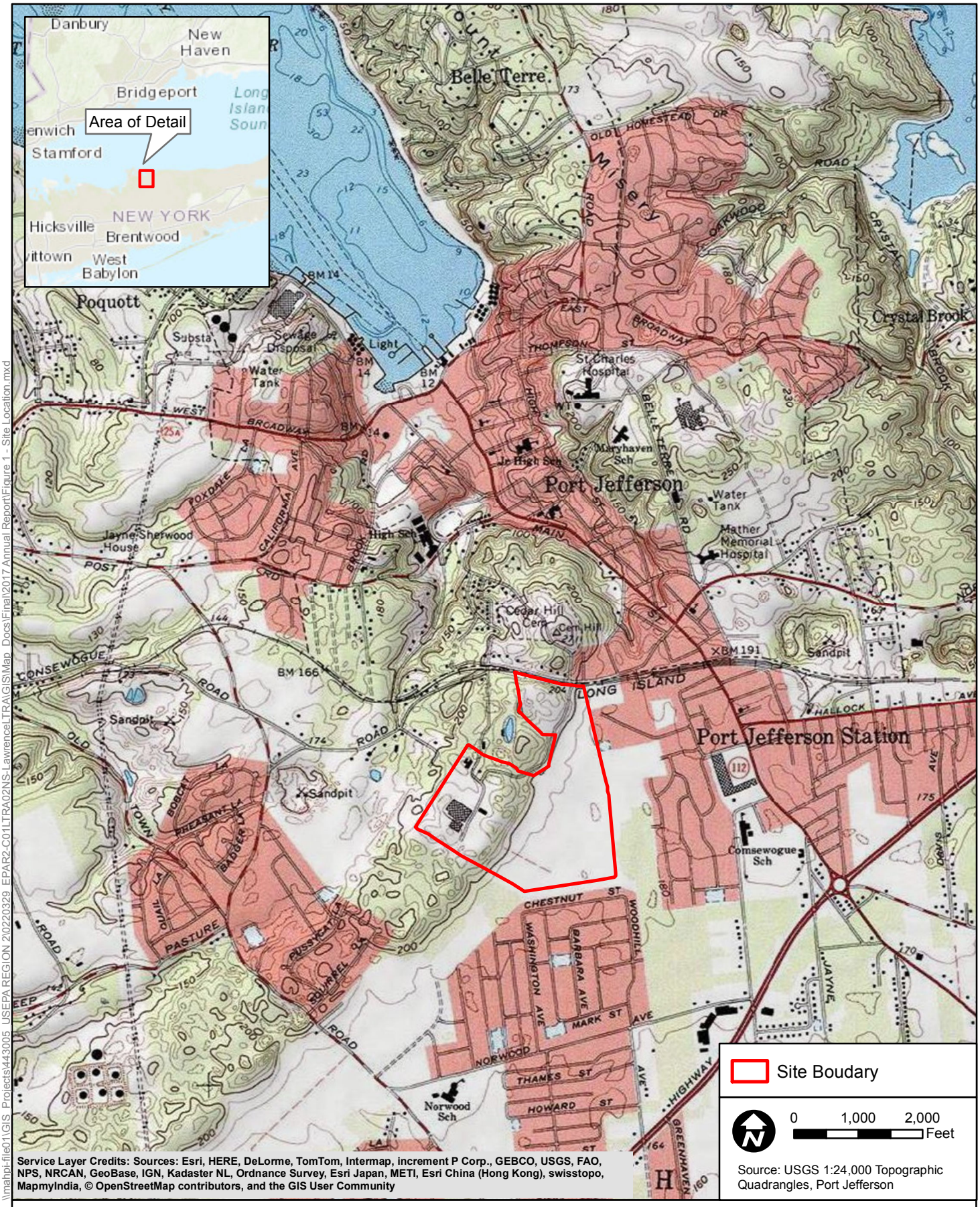
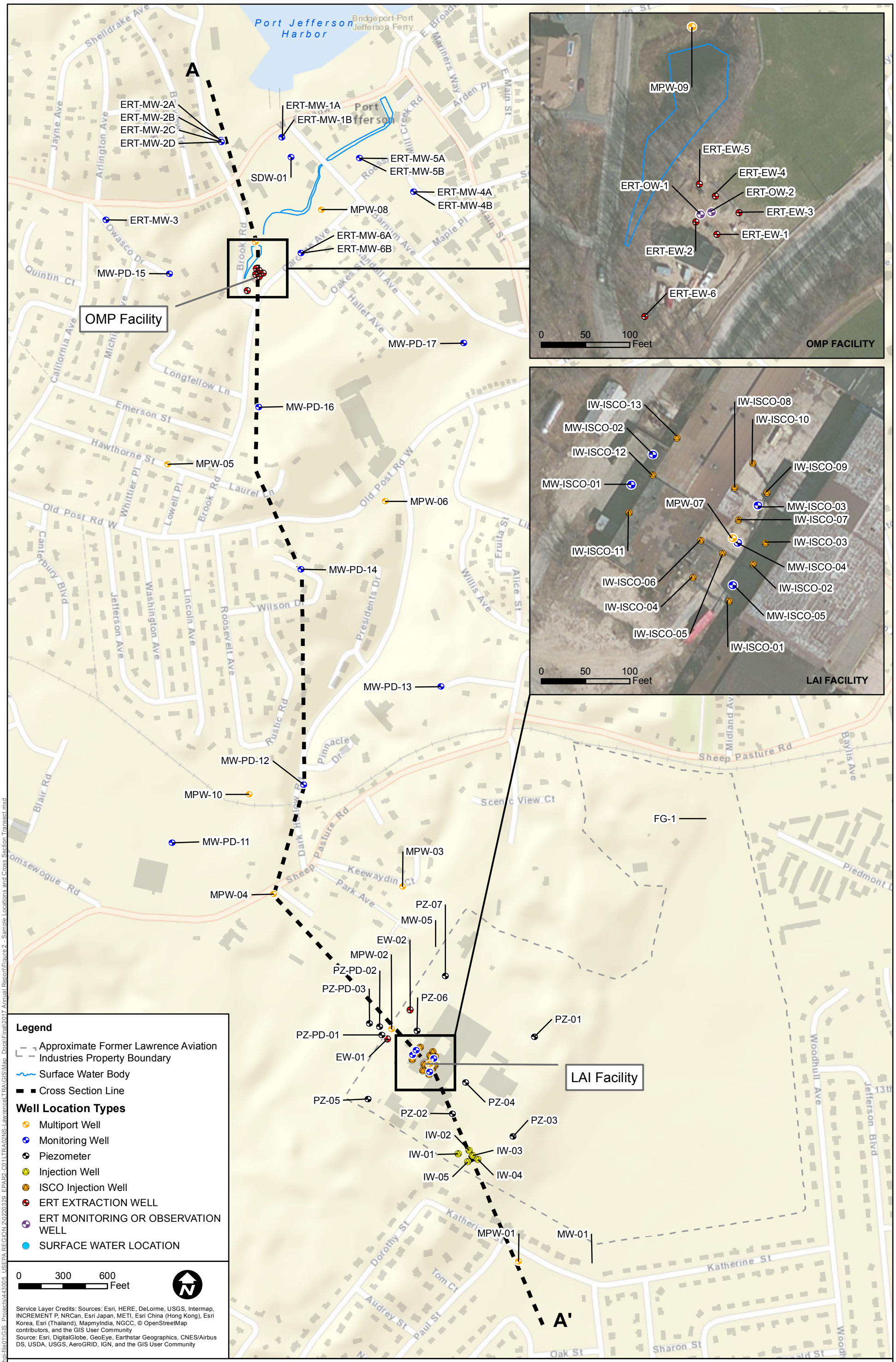
FIGURES



\\mahpi-file01\GIS_Projects\443005_USEPA REGION 2\20220929_EPAR2-C01LTRA02NS-LawrenceLTRA\GIS\Map_Docs\Final\2017 Annual Report\Figure 1 - Site Location.mxd

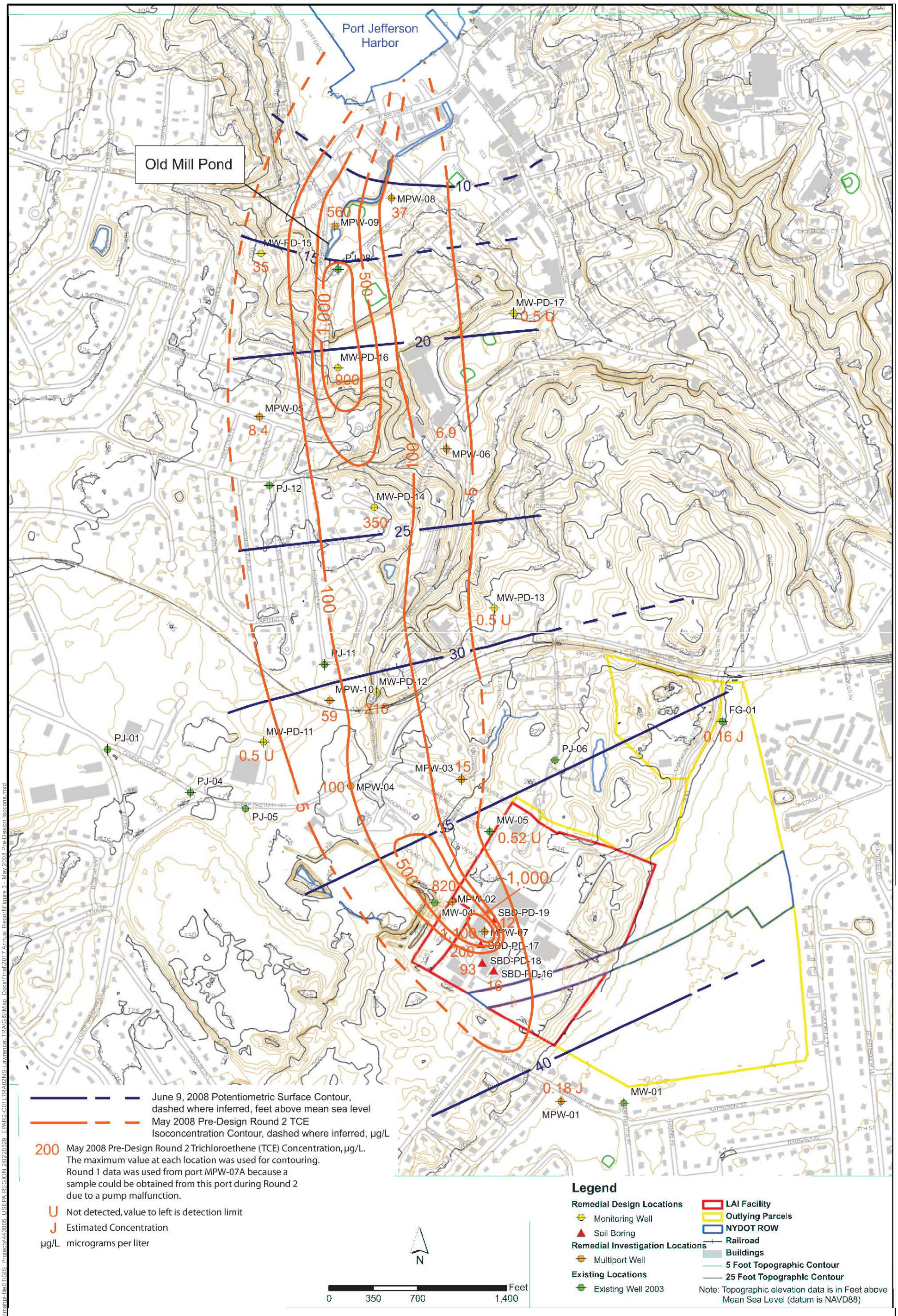
2017 COMPREHENSIVE SAMPLING REPORT
LAWRENCE AVIATION INDUSTRIES SITE
PORT JEFFERSON STATION, NY

Figure 1
Site Location Map
November, 2017



2017 COMPREHENSIVE SAMPLING REPORT
LAWRENCE AVIATION INDUSTRIES SITE
PORT JEFFERSON STATION, NY

Figure 2
Monitoring Well and Cross Section Location Map
November, 2017



SOURCE: COMPREHENSIVE SAMPLING EVENT REPORT BY CDM-SMITH. OCTOBER 2012 (REFERENCE: FIGURE 1-4)

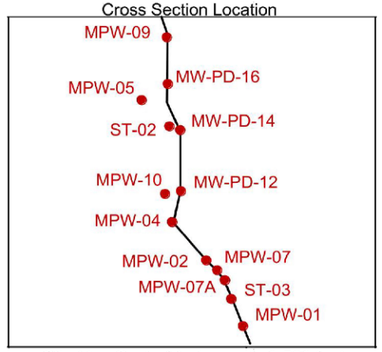
Document Path: \\nahpl-file01\GIS_Projects\443006_USEPA REGION 2\20220329_EPAR2-C01LTRA02\NS-Lawrence_TRA\GISMap_Docs\Final\2017 Annual Report\Figure 3 - May 2008 Pre-Design Isocons.mxd

2017 COMPREHENSIVE SAMPLING REPORT
LAWRENCE AVIATION INDUSTRIES SITE
PORT JEFFERSON STATION, NY

Figure 3
May 2008 Pre-Design Round 2 TCE Isoconcentration Contours
November, 2017

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

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 Isococentration Contour (µg/l) Dashed where inferred

Water Table

Ground Surface Elevation

Round 1 — Round 1 analytical results were used for MPW-07-A because a sample could not be obtained from MPW-02-A during Round 2.

* — Water level elevation from MPW-07-A was anomolus and was not used.

Groundwater Sample Results:
Tetrachloroethene (PCE)
Trichloroethene (TCE)
cis-1,2-Dichloroethane (cis-1,2-DCE)
Vinyl Chloride
All U - all analytes not detected

All results in micrograms per liter
U - not detected, detection limit is value to left (µg/L)
J - estimated concentration

Water level and analytical data are posted at the mid point of screened interval.

Water Level Elevation, feet above mean sea level, (Port) — 30.2
Date: June 9, 2008

—?— AQUIFER BOUNDRY

Screened Interval

Horizontal Scale (feet) 0 700

Vertical Scale (feet) 0 70

Vertical Exaggeration: 10x

SOURCE: COMPREHENSIVE SAMPLING EVENT REPORT BY CDM-SMITH, OCTOBER 2012 (REFERENCE: FIGURE 1-3)

LAWRENCE AVIATION INDUSTRIES SITE
PORT JEFFERSON STATION, NY

Figure 4
Geologic Cross Section & May 2008 Pre-Design Round 2 TCE Groundwater Sampling Results
November 2017

\\prj-srv3\GIS_Projects\443005_USEPA REGION 2\20220329_EPAR2-C01LTRA02NS-LawrenceLTRA\GIS\Map_Docs\Final\2014_ReportFigure_04_May 2008CrossSection.mxd

Port Jefferson Harbor
A
A'
ERT-MW-2A (9.09)
ERT-MW-2B (9.19)
ERT-MW-2C (5.25)
ERT-MW-2D
ERT-MW-1A (8.84)
ERT-MW-1B (9.69)
ERT-MW-5A (6.63)
ERT-MW-5B (6.76)
ERT-MW-4A (6.96)
ERT-MW-4B (7.07)
MPW-08-B (9.34)
ERT-MW-3 (14.39)
MPW-09-C (12.15)
ERT-OW-1 (10.35)
ERT-MW-6A (10.06)
ERT-MW-6B (11.46)
ERT-EW-5
ERT-EW-4
ERT-EW-3
ERT-OW-2 (11.98)
ERT-EW-1
ERT-EW-2
ERT-EW-6
MW-PD-15 (14.65)
10
15
MW-PD-17 (17.97)
OMP Facility
MW-PD-16 (17.74)
MPW-05-D (18.48)
MPW-06-C (17.98)
20
MW-PD-14 (21.85)
MW-PD-13 (23.78)
MW-PD-12 (25.48)
25
MPW-10-B (24.92)
MW-PD-11 (25.36)
MPW-03-B (25.12)
MPW-04-B (25.71)
MW-5 (31.47)
PZ-7 (32.91)
30
EW-02
PZ-01 (34.1)
MPW-02-B (28.58)
EW-01
MW-ISCO-2 (32.27)
IW-ISCO-10 (32.22)
MPW-07-A (32.03)
IW-ISCO-05 (33.53)
MW-ISCO-4 (35.47)
MW-ISCO-5 (33.65)
PZ-04 (34.53)
PZ-5 (33.57)
PZ-02 (35.2)
PZ-3 (36.04)
LAI Facility
IW-02
IW-01
IW-04
IW-03
IW-05
MPW-01-B (35.88)
Legend
Approxiamte Groundwater Flow Direction
Approximate Potentiometric Surface (in feet above mean sea level [ft amsl])
Approximate Former Lawrence Aviation Industries Property Boundary
Cross Section Line
Locations
MULTIPORT WELL
MONITORING WELL
PIEZOMETER
INJECTION WELL
ISCO INJECTION WELL
ERT EXTRACTION WELL
ERT MONITORING OR OBSERVATION WELL
0 300 600 Feet
N
Note: For multi-port wells, the groundwater elevation from the contaminated zone was used. Some data points were considered outliers and were not used in creation of the potentiometric surface contour lines.
Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

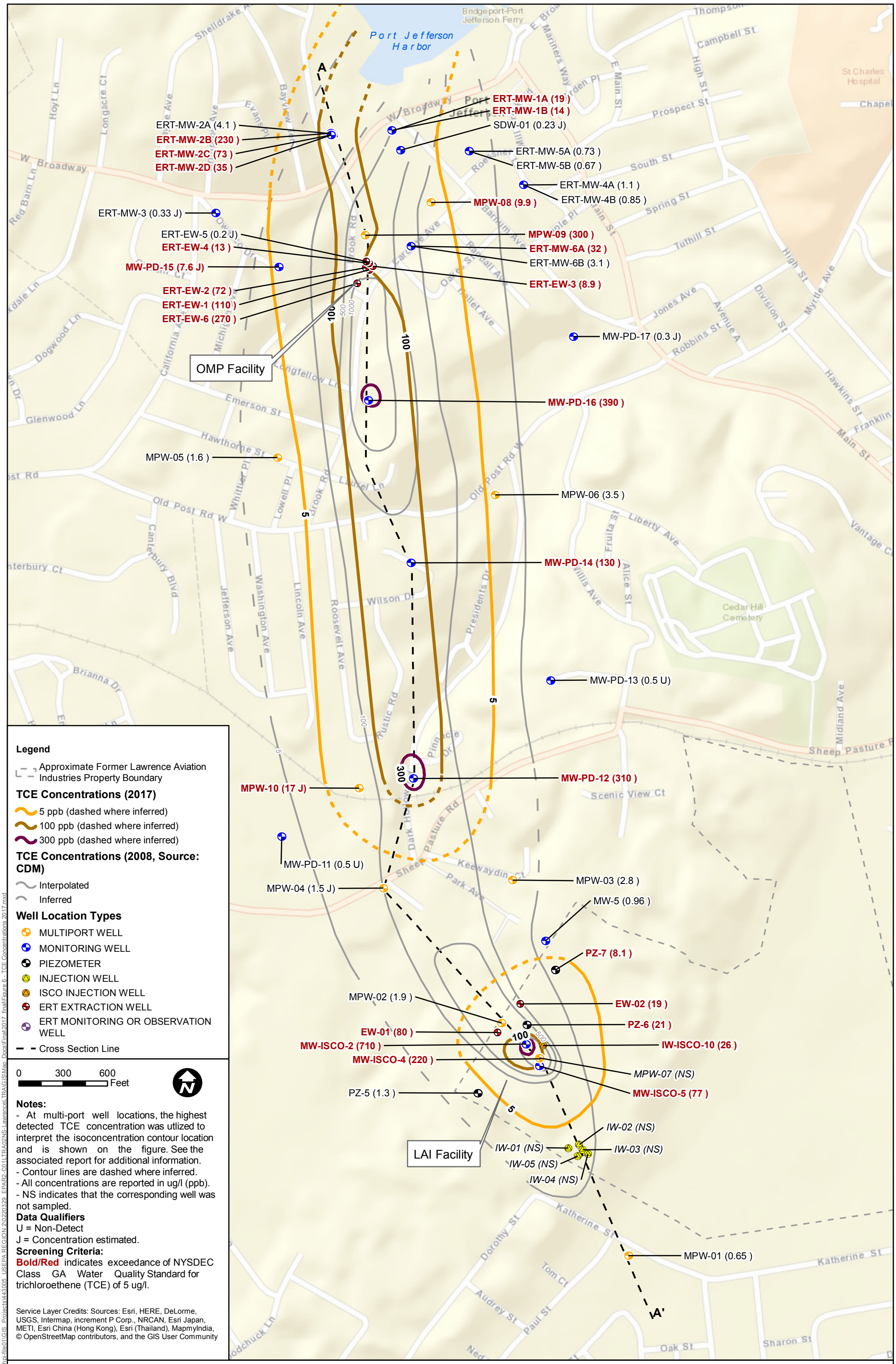
Document Path: \\mahpi-file01\GIS_Projects\443005_USEPA REGION 2\0220329_EPAR2-C01LTRA02NS-LawrenceLTRA\GIS\Map_Docs\Final\2017_final\Figure 5 - Potentiometric Surface 2017.mxd

2017 COMPREHENSIVE SAMPLING REPORT
LAWRENCE AVIATION INDUSTRIES SITE
PORT JEFFERSON STATION, NY

Figure 5

June 2017 Upper Glacial Aquifer Potentiometric Surface

November, 2017

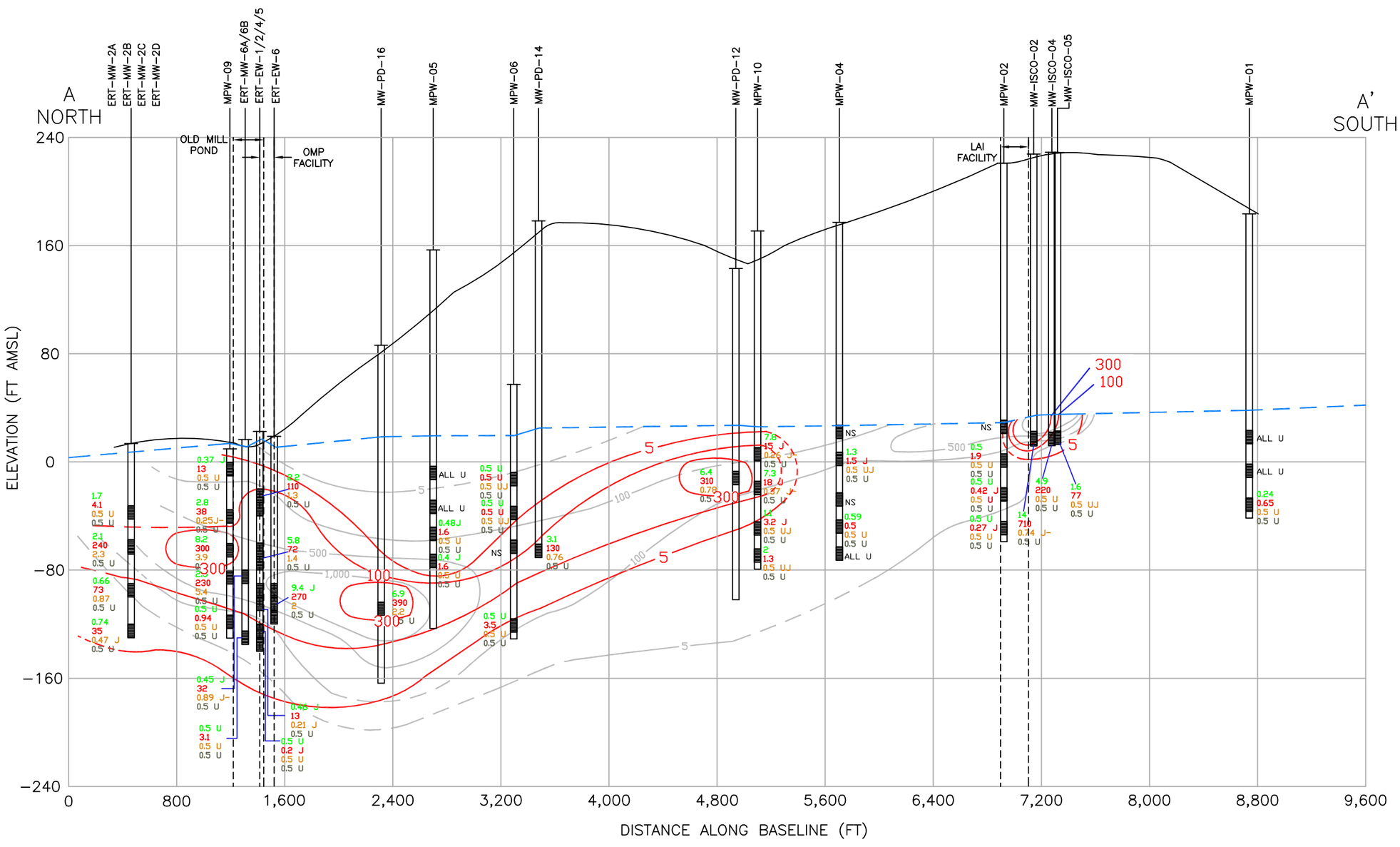


2017 COMPREHENSIVE SAMPLING REPORT
LAWRENCE AVIATION INDUSTRIES SITE
PORT JEFFERSON STATION, NY

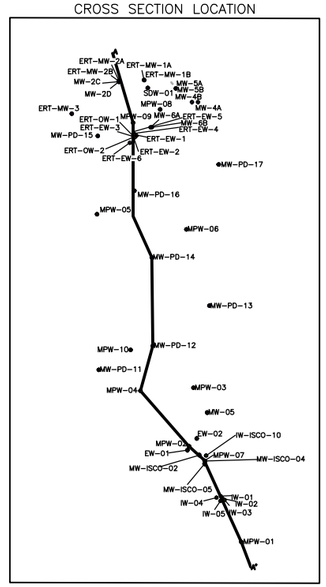
Figure 6

June 2017 Comprehensive Sampling TCE Isoconcentration Contours

November, 2017



CROSS SECTION LOCATION



SITE MAP SCALE 1 INCH EQUALS 4,000 FEET

LEGEND:

- WATER TABLE, ESTIMATED
- GROUND SURFACE ELEVATION
- TCE ISOCONCENTRATION CONTOUR IN PPB FROM JUNE 2017 (DASHED WHERE INFERRED)
- TCE ISOCONCENTRATION CONTOUR IN PPB FROM MAY 2008 (DASHED WHERE INFERRED)

GROUNDWATER SAMPLE RESULTS

- 0.5 U TETRACHLOROETHENE(PCE)
- 3.2 TRICHLOROTHENE(TCE)
- 0.5 U CIS−1,2−DICHLOROETHENE(CIS−1,2−DCE)
- 0.5 U **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)
K − OFF−SCALE LOW
MPW − MULTIPORT WELL WITH PORT LETTER
MW − MONITORING WELL
NS − NOT SAMPLED
PPB − PARTS PER BILLION
PZ − PIEZOMETER
UJ − ANALYZED BUT NOT DETECTED, ESTIMATED

0 800
HORIZONTAL SCALE (FT)

0 80
VERTICAL SCALE (FT)

CROSS SECTION A-A' AND JUNE 2017 COMPREHENSIVE SAMPLING EVENT TCE GROUNDWATER SAMPLING RESULTS LAWRENCE AVIATION INDUSTRIES SITE PORT JEFFERSON STATION, NEW YORK

DATE
NOVEMBER 2017

DRAWING SHEET
FIGURE 7

Figure 8: Concentration of Total Ethenes in Source Area Wells

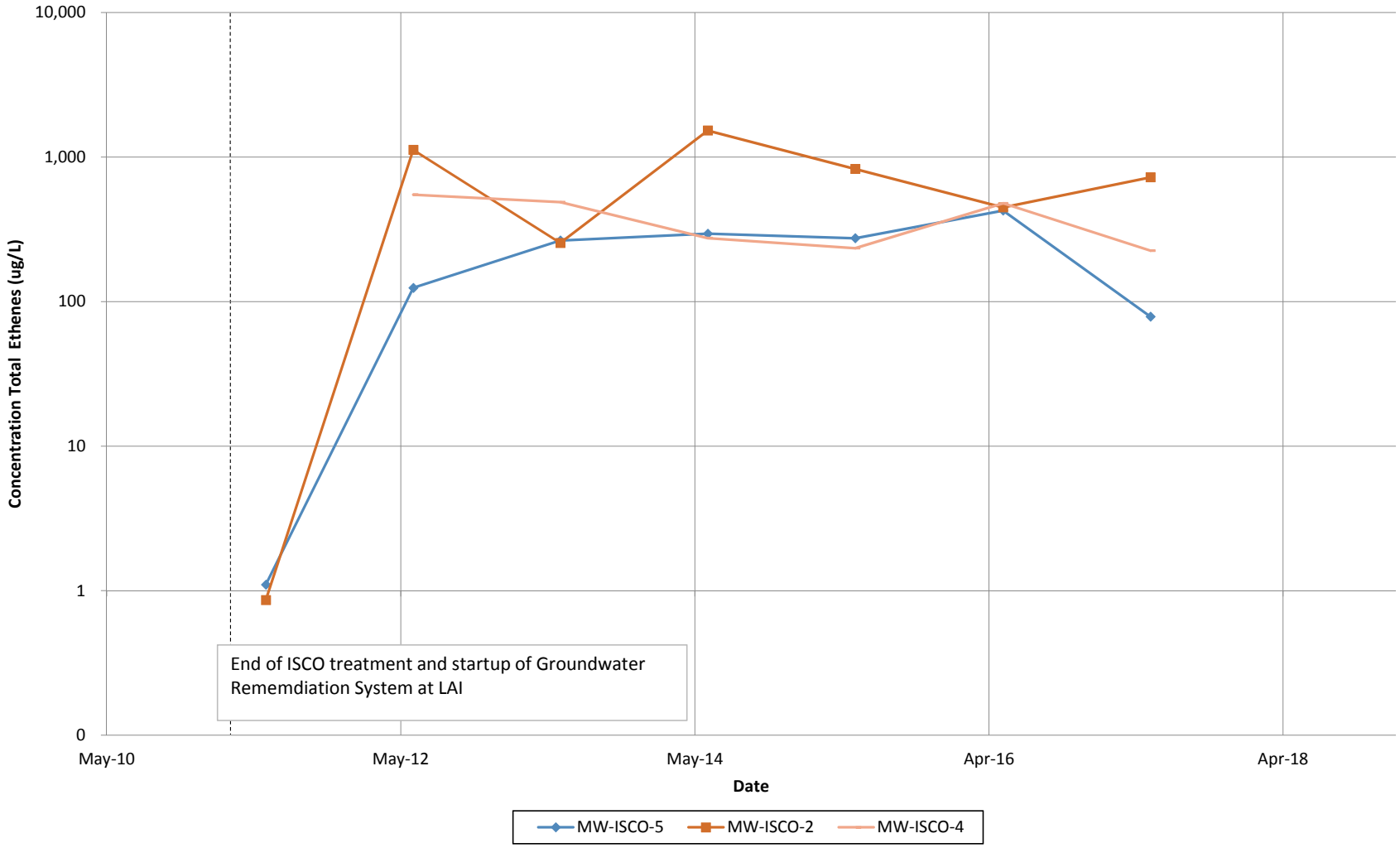


Figure 9: Average Concentration in Source Wells vs Time

Concentrations include MW-ISCO-2, MW-ISCO-4, and MW-ISCO-5

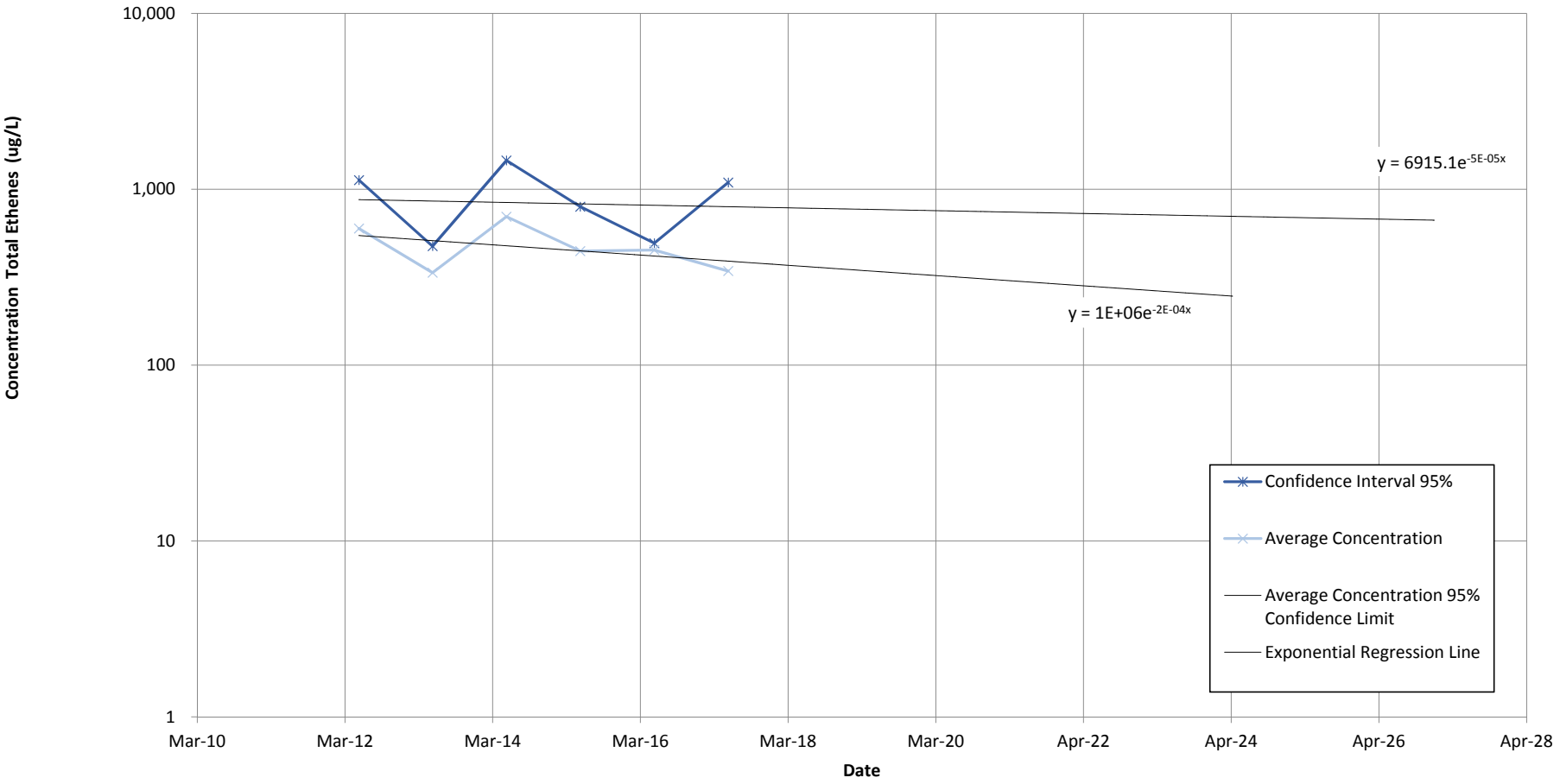


Figure 10: Concentration of Total Ethenes Along Centerline of Plume

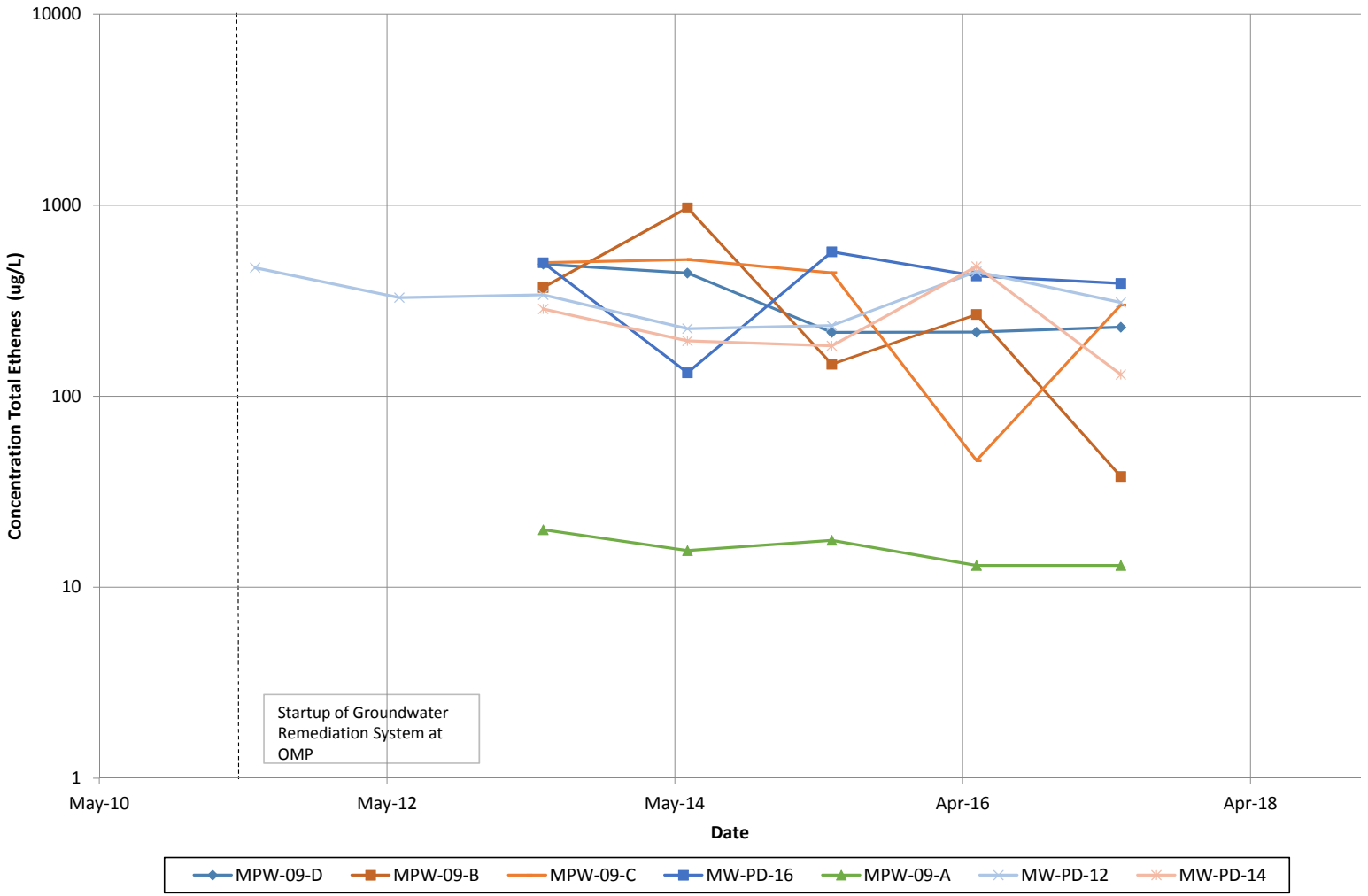


Figure 11: Average Concentration of Offsite Plume vs Time

Concentrations include 8 wells along the centerline of the plume including: MPW-09-A,B,C,D, MW-PD-16, MW-PD-12, AND MW-PD-14

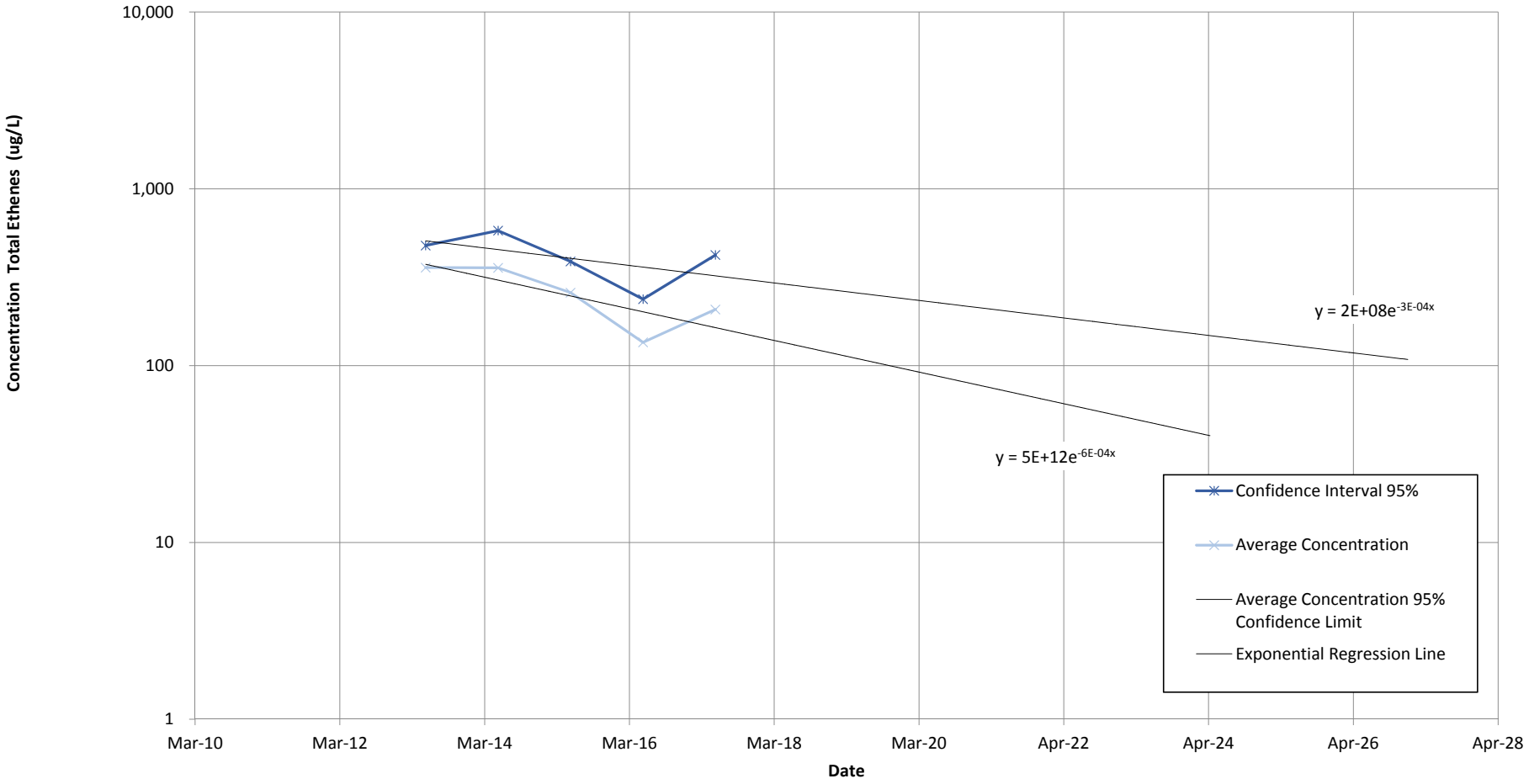


Figure 12: Total VOC Concentration Trend -MW-PD-12 June 2017
Lawrence Aviation Industries Site
Port Jefferson Station, New York

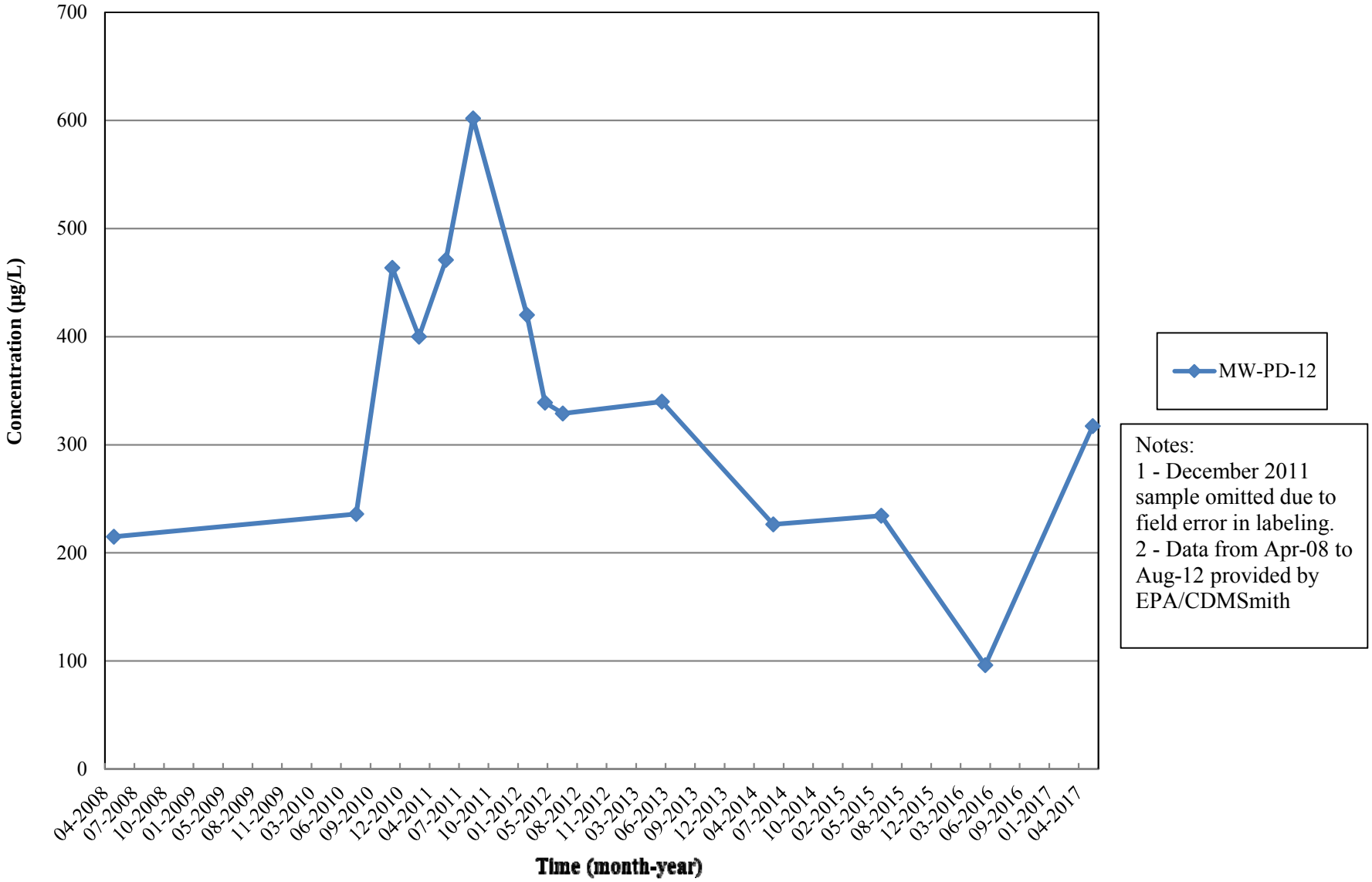


Figure 13: Total VOC Concentration Trend -MW-PD-14 June 2017
Lawrence Aviation Industries Site
Port Jefferson Station, New York

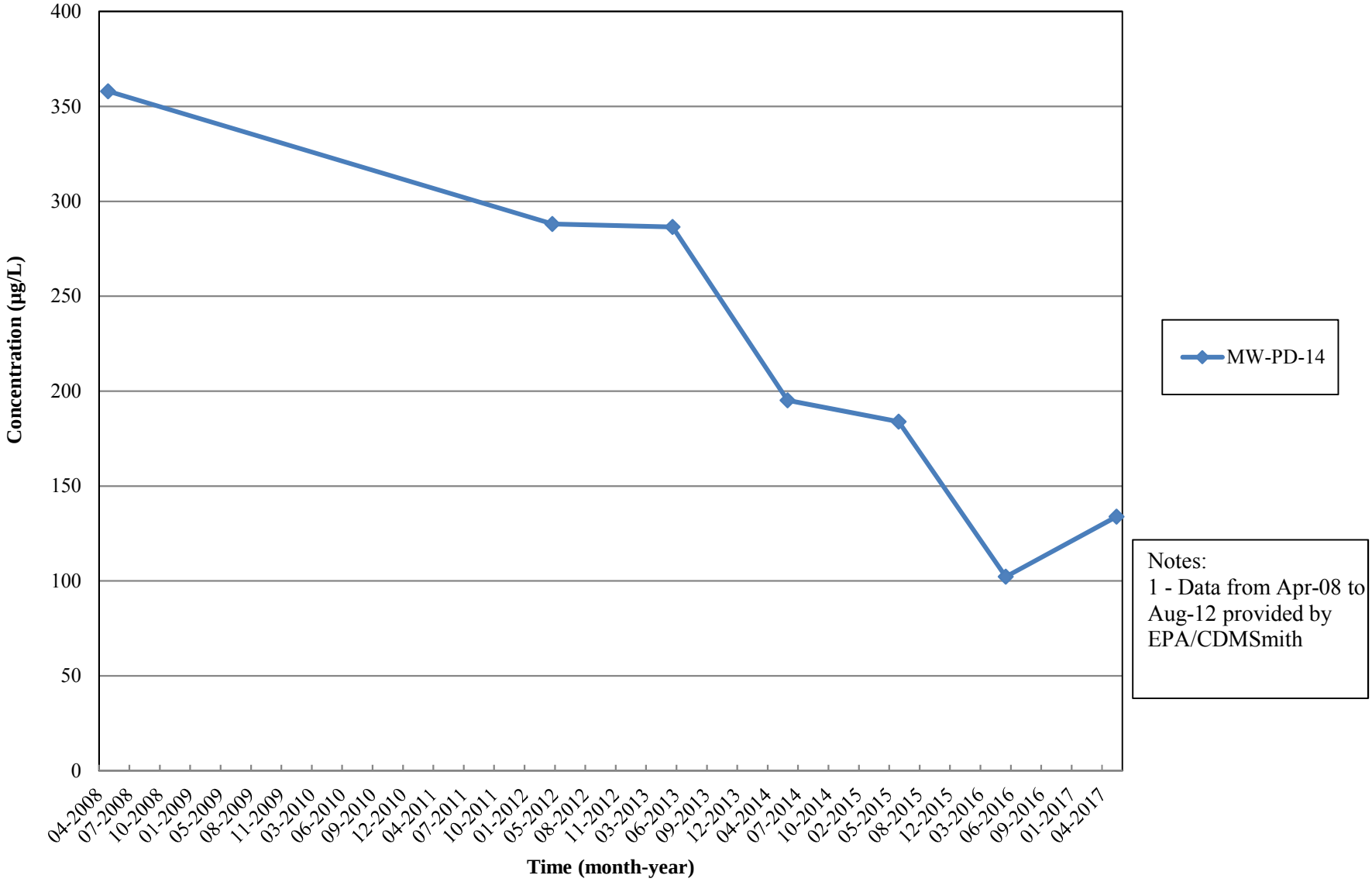


Figure 14: Total VOC Concentration Trend -MW-PD-16
June 2017
Lawrence Aviation Industries Site
Port Jefferson Station, New York

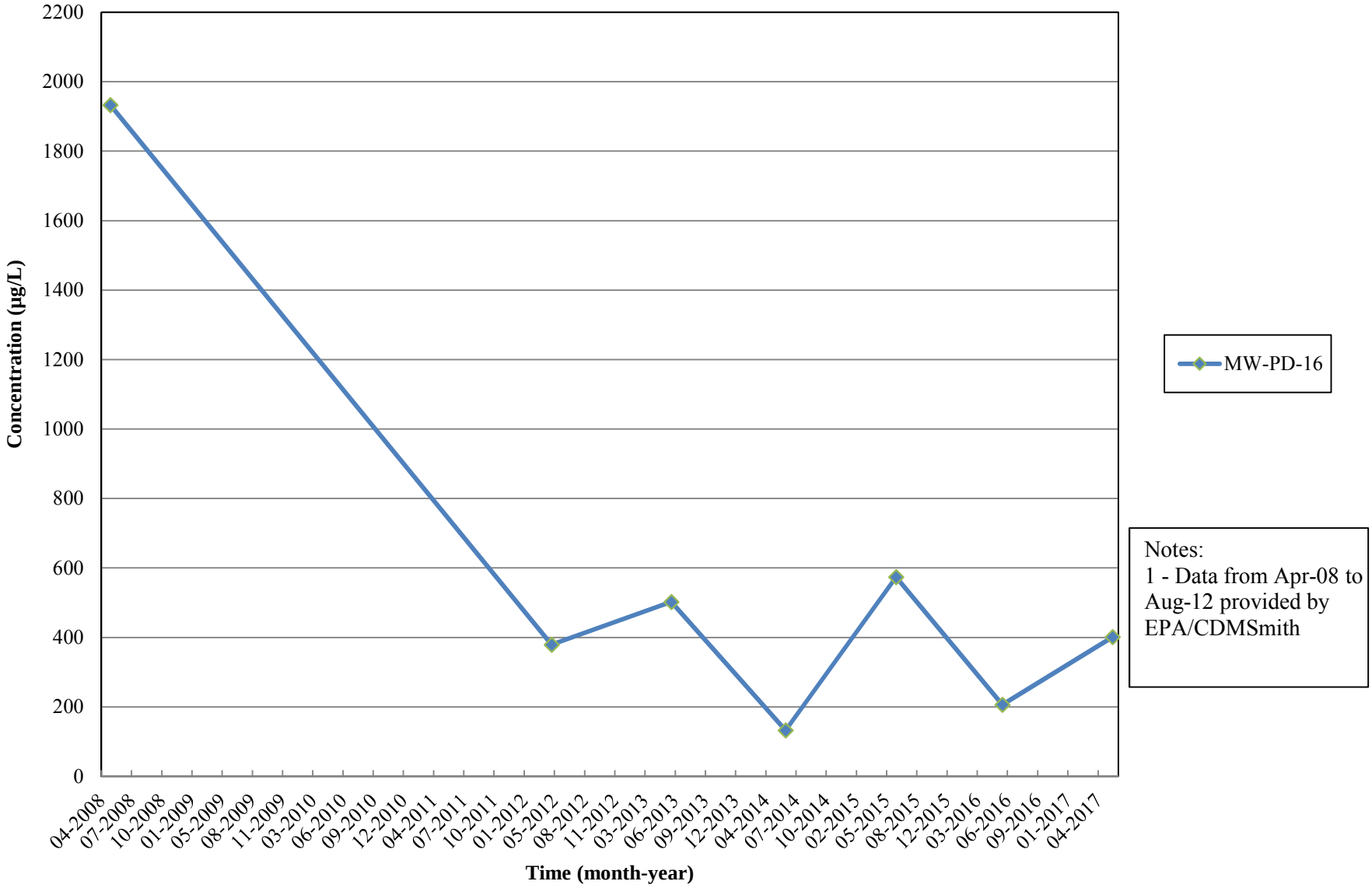
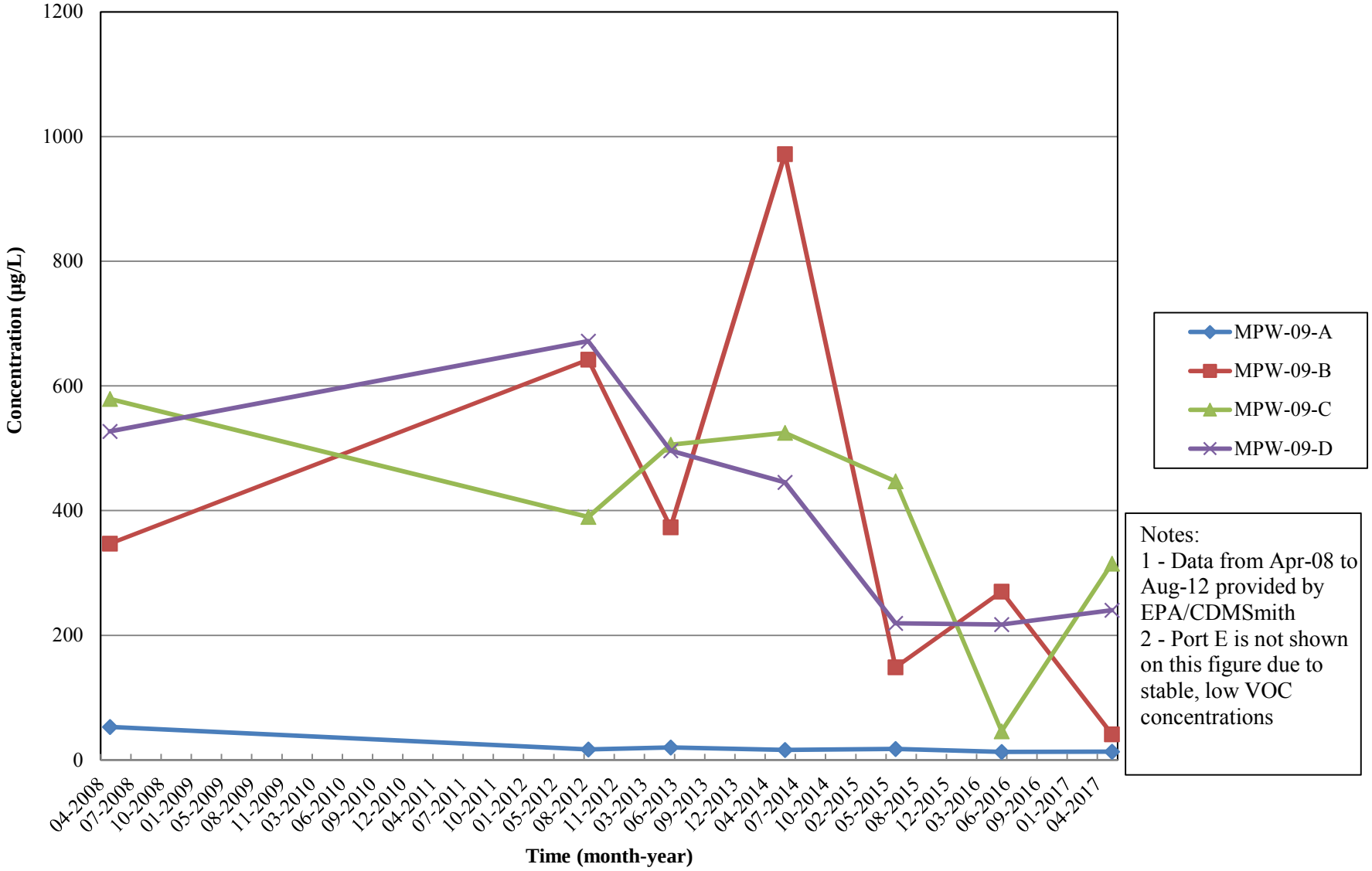


Figure 15: Total VOC Concentration Trend - MPW-09
June 2017
Lawrence Aviation Industries Site
Port Jefferson Station, New York



TABLES

Table 1
Sample Location and Well Construction Information
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Well ID	Port	Top of Casing (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 2017 Sampling Event	Sampled During June 2017 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
ERT-EW-2*	NA	22.76	1240321.71	284149.95	6	90	110	X	X	Sampled as part of the Monthly Process Monitoring
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-EW6	NA	18.97	1240263.916	284057.195	6	90	120	X	X	Sampled as part of the Monthly Process Monitoring
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	13.53	1240083.17	285072.26	2	46	56	X		
ERT-MW-2B*	NA	13.63	1240086.33	285075.08	2	71	81	X		
ERT-MW-2C	C	5.667	1240087.142	285062.176	2	90	100	X	X	
ERT-MW-2D	D	5.542	1240087.024	285062.4	2	120	130	X	X	
ERT-MW-3*	NA	109.37	1239306.16	284533.89	2	223	233	X	X	
ERT-MW-4A	A	7.736	1241389.039	284724.897	2	70	80	X	X	
ERT-MW-4B	B	7.791	1241389.157	284725.116	2	120	130	X	X	
ERT-MW-5A	A	9.176	1241022.358	284951.901	2	90	100	X	X	
ERT-MW-5B	B	9.169	1241022.564	284952.129	2	120	130	X	X	
ERT-MW-6A	A	16.523	1240626.904	284309.368	2	80	90	X	X	
ERT-MW-6B	B	16.517	1240627.145	284309.238	2	125	135	X	X	
ERT-OW-1	NA	22.65	1240326.9	284172.47	2	95	105	X	X	Observation Well
ERT-OW-2	NA	22.73	1240339.27	284175.07	2	95	105	X	X	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
FG-01	NA	201.43	1243376.354	280474.705	2	170	180	X	X	
IW-01	NA	225.99	1241693.86	278204.79	6	183	248	X	X	Injection well
IW-02	NA	225.27	1241766.61	278227.33	6	183	248	X	X	Injection well
IW-03	NA	224.99	1241790.03	278192.12	6	183	248	X	X	Injection well
IW-04	NA	225.68	1241826.33	278167.07	6	183	248	X	X	Injection well
IW-05	NA	224.48	1241758.26	278150.73	6	183	248	X	X	Injection well
IW-ISCO-10	NA	228.50	1241521.28	278897.45	2	200	220	X	X	
IW-ISCO-5	NA	228.50	1241486.95	278795.69	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	1241241.061	279049.859	4	190	200	X	X	
MPW-02-B	B	221.02	1241241.061	279049.859	4	215	225	X	X	
MPW-02-C	C	221.02	1241241.061	279049.859	4	240	250	X	X	
MPW-02-D	D	221.02	1241241.061	279049.859	4	265	275	X	X	
MPW-03-A	A	189.73	1241315.641	280017.573	4	175	185	X	X	
MPW-03-B	B	189.73	1241315.641	280017.573	4	195	205	X	X	
MPW-03-C	C	189.73	1241315.641	280017.573	4	215	225	X	X	
MPW-03-D	D	189.73	1241315.641	280017.573	4	235	245	X	X	
MPW-04-A	A	177.23	1240440.958	279964.528	4	150	160	X	X	
MPW-04-B	B	177.23	1240440.958	279964.528	4	170	180	X	X	
MPW-04-C	C	177.23	1240440.958	279964.528	4	200	210	X	X	
MPW-04-D	D	177.23	1240440.958	279964.528	4	220	230	X	X	
MPW-04-E	E	177.23	1240440.958	279964.528	4	240	250	X	X	

Table 1
Sample Location and Well Construction Information
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Well ID	Port	Top of Casing (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 2017 Sampling Event	Sampled During June 2017 Event	Comment
MPW-05-A	A	156.80	1239723.031	282879.48	4	160	170	X	X	
MPW-05-B	B	156.80	1239723.031	282879.48	4	185	195	X	X	
MPW-05-C	C	156.80	1239723.031	282879.48	4	205	215	X	X	
MPW-05-D	D	156.80	1239723.031	282879.48	4	225	235	X	X	
MPW-06-A	A	57.29	1241197.553	282627.237	4	65	75	X	X	
MPW-06-B	B	57.29	1241197.553	282627.237	4	90	100	X	X	
MPW-06-C	C	57.29	1241197.553	282627.237	4	115	125	X	X	
MPW-06-D	D	57.29	1241197.553	282627.237	4	160	170	X	X	
MPW-07-A	A	229.11	1241498.444	278813.286	4	200	210	X	X	
MPW-07-B	B	229.11	1241498.444	278813.286	4	220	230	X	X	
MPW-07-C	C	229.11	1241498.444	278813.286	4	250	260	X	X	
MPW-08-A	A	17.08	1240764.773	284605.552	4	25	35	X	X	
MPW-08-B	B	17.08	1240764.773	284605.552	4	45	55	X	X	
MPW-08-C	C	17.08	1240764.773	284605.552	4	75	85	X	X	
MPW-08-D	D	17.08	1240764.773	284605.552	4	95	105	X	X	
MPW-08-E	E	17.08	1240764.773	284605.552	4	115	125	X	X	
MPW-09-A	A	9.66	1240317.248	284384.575	4	10	20	X	X	
MPW-09-B	B	9.66	1240317.248	284384.575	4	45	55	X	X	
MPW-09-C	C	9.66	1240317.248	284384.575	4	70	80	X	X	
MPW-09-D	D	9.66	1240317.248	284384.575	4	90	100	X	X	
MPW-09-E	E	9.66	1240317.248	284384.575	4	125	135	X	X	
MPW-10-A	A	170.73	1240276.043	280640.585	4	160	170	X	X	
MPW-10-B	B	170.73	1240276.043	280640.585	4	185	195	X	X	
MPW-10-C	C	170.73	1240276.043	280640.585	4	215	225	X	X	
MPW-10-D	D	170.73	1240276.043	280640.585	4	235	245	X	X	
MW-05	NA	222.08	1241539.108	279606.08	4	180	195	X	X	
MW-ISCO-2	NA	227.24	1241408.33	278907.54	2	205	215	X	X	
MW-ISCO-4	NA	228.58	1241504.14	278807.98	2	207	217			
MW-ISCO-5	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			
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	178.20	1240627.49	282166.23	4	239	249	X	X	
MW-PD-15	NA	95.54	1239734.72	284168.4	4	204	214	X	X	
MW-PD-16	NA	86.31	1240340.86	283265.25	4	190	200	X	X	
MW-PD-17	NA	25.49	1241728.59	283697.93	4	80	90	X	X	
PZ-01	NA	224.04	1242210.32	278999.38	2	198	208	X	X	
PZ-02	NA	226.99	1241653.38	278477.2	2	198	208	X	X	
PZ-03	NA	227.90	1242062.76	278320.85	2	198	208			Could not be sampled due to lack of access.
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	217.88	1241606	279410	2	190	200	X	X	
SDW-1	NA	NA	1240558.67	284960.84	6	2	12	X	X	Redrilled and not finished as of 2017 event

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 bgs - Feet below ground surface

NA - Not available

* - Top of casing elevation not available, therefore, surface elevation was used

Table 2
June 2017 Water Quality Data
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Location	HDR Field Sample ID	CLP Sample ID	Date Sampled	Time of Reading (24-hour)	Temp-erature (°C)	pH (s.u.)	Oxidation / Reduction Potential (mV)	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Flow Rate (mL/min)	Depth To Water (ft btic)
ERT-EW-1	Sampled as part of the Monthly Process Monitoring											
ERT-EW-2	Sampled as part of the Monthly Process Monitoring											
ERT-EW-3	ERT-EW-3-N-HDR-R5-06092017	BDZB9	6/9/2017	0830	12.08	5.97	189	0.15	0.9	8.4	300	9.08
ERT-EW-4	ERT-EW-4-N-HDR-R5-06092017	BDZC0	6/9/2017	0930	12.53	5.95	196	0.219	1	7.99	250	8.28
ERT-EW-5	ERT-EW-5-N-HDR-R5-06092017	BDZC2	6/9/2017	1035	13.39	5.62	243	0.193	0.3	7.25	300	8.54
ERT-EW-6	Sampled as part of the Monthly Process Monitoring											
ERT-MW-1A	ERT-MW-1-A-N-HDR-R5-06072017	BDZ98	6/7/2017	1345	12.85	6.75	129	0.133	0.1	4.48	350	2.63
ERT-MW-1B	ERT-MW-1-B-N-HDR-R5-06072017	BDZA0	6/7/2017	1430	12.91	6.94	112	0.112	0.4	3.42	300	1.95
ERT-MW-2A	ERT-MW-2-A-N-HDR-R5-06062017	BDZ77	6/6/2017	950	11.64	5.58	241	0.209	2.9	4.9	300	4.47
ERT-MW-2B	ERT-MW-2-B-N-HDR-R5-06062017	BDZ79	6/6/2017	1050	12.12	6.52	179	0.112	1	4.2	200	4.46
ERT-MW-2C	ERT-MW-2-C-N-HDR-R5-06062017	BDZ82	6/6/2017	1205	11.12	6.59	179	0.083	0.9	3.47	350	0.49
ERT-MW-2D	ERT-MW-2-D-N-HDR-R5-06062017	BDZ85	6/6/2017	1355	10.61	6.82	134	0.115	5.6	4.64	350	NR
ERT-MW-3	ERT-MW-3-N-HDR-R5-06082017	BDZB1	6/8/2017	1125	12.84	6.14	125	0.278	1.7	0	250	94.96
ERT-MW-4A	ERT-MW-4-A-N-HDR-R5-06072017	BDZ95	6/7/2017	1120	14.57	6.32	171	0.123	7.4	6.17	280	0.79
ERT-MW-4B	ERT-MW-4-B-N-HDR-R5-06072017	BDZ96	6/7/2017	1205	14.5	6.23	175	0.12	3.1	6.02	330	0.68
ERT-MW-5A	ERT-MW-5-A-N-HDR-R5-06072017	BDZ91	6/7/2017	0855	11.46	6	184	0.131	3.6	6.1	300	2.82
ERT-MW-5B	ERT-MW-5-B-N-HDR-R5-06072017	BDZ93	6/7/2017	945	11.98	6.18	172	0.158	4.4	4.8	200	2.42
ERT-MW-6A	ERT-MW-6-A-N-HDR-R5-06082017	BDZA6	6/8/2017	0840	12.64	6.77	118	0.165	0.3	6.71	240	6.71
ERT-MW-6B	ERT-MW-6-B-N-HDR-R5-06082017	BDZA7	6/8/2017	0930	12.92	7.24	70	0.131	0.6	4.44	200	5.18
EW-01	Sampled as part of the Monthly Process Monitoring											
EW-02	Sampled as part of the Monthly Process Monitoring											
IW-ISCO-10	IW-ISCO-10-N-HDR-R5-06142017	BDZF9	6/14/2017	1610	14.7	6.45	210	0.213	0	10.6	240	196.88
MPW-01-A	MPW-01-A-N-HDR-R5-06092017	BDZC4	6/9/2017	1250	13.92	6.12	95	0.209	0	0.2	100	46.74
MPW-01-B	MPW-01-B-N-HDR-R5-06122017	BDZD0	6/12/2017	1035	18.24	5.57	206	0.204	0	2.78	180	36.12
MPW-01-C	MPW-01-C-N-HDR-R5-06122017	BDZD1	6/12/2017	1205	17.58	9.08	-66	0.209	0	0.27	100	36.10
MPW-02-B	MPW-02-B-N-HDR-R5-06142017	BDZF3	6/14/2017	920	17.02	6.24	228	0.204	0	9.77	100	28.61
MPW-02-C	MPW-02-C-N-HDR-R5-06142017	BDZF5	6/14/2017	1110	20.4	6.34	157	0.252	0	2.66	50	27.00
MPW-02-D	MPW-02-D-N-HDR-R5-06142017	BDZF7	6/14/2017	1245	20.98	6.13	167	0.269	0	4.5	50	26.41
MPW-03-B	MPW-03-B-N-HDR-R5-06122017	BDZD3	6/12/2017	1425	18.25	6.42	37	0.107	30.9	2.1	100	25.28
MPW-03-C	MPW-03-C-N-HDR-R5-06122017	BDZD6	6/12/2017	1530	20.82	6.72	44	0.168	0	1.65	40	25.19
MPW-03-D	MPW-03-D-N-HDR-R5-06122017	BDZD7	6/12/2017	1640	16.1	6.32	99	0.152	0	0	100	25.67
MPW-04-B	MPW-04-B-N-HDR-R5-06082017	BDZB5	6/8/2017	1615	13.61	5.95	196	0.22	0	5	200	25.94
MPW-04-D	MPW-04-D-N-HDR-R5-06092017	BDZC1	6/9/2017	0920	13.65	5.9	190	0.218	0	4.66	75	25.45
MPW-04-E	MPW-04-E-N-HDR-R5-06092017	BDZC3	6/9/2017	1055	16.75	6.27	151	0.23	0	3.93	50	24.82
MPW-05-A	MPW-05-A-N-HDR-R5-06072017	BDZ97	6/7/2017	1305	12.66	5.82	80	0.179	0	0	160	19.05
MPW-05-B	MPW-05-B-N-HDR-R5-06072017	BDZ99	6/7/2017	1400	13.18	5.74	204	0.221	0	0	180	18.71
MPW-05-C	MPW-05-C-N-HDR-R5-06072017	BDZA1	6/7/2017	1455	11.86	5.87	234	0.165	5	2.29	240	18.82
MPW-05-D	MPW-05-D-N-HDR-R5-06072017	BDZA2	6/7/2017	1540	14.91	5.96	90	0.178	0	2.99	150	18.67
MPW-06-A	MPW-06-A-N-HDR-R5-06072017	BDZ90	6/7/2017	0850	11.45	6.97	161	0.341	4.3	2.03	80	18.90
MPW-06-B	MPW-06-B-N-HDR-R5-06072017	BDZ92	6/7/2017	0945	11.04	5.9	60	0.089	0	0	95	18.49
MPW-06-D	MPW-06-D-N-HDR-R5-06072017	BDZ94	6/7/2017	1105	11.52	7.77	78	0.118	0	2.8	110	17.98
MPW-08-A	MPW-08-A-N-HDR-R5-06062017	BDZ76	6/6/2017	0919	12.15	5.52	281	0.224	3	9.27	200	17.83
MPW-08-B	MPW-08-B-N-HDR-R5-06062017	BDZ78	6/6/2017	1025	11.94	5.62	293	0.203	2.3	7.82	150	9.51

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June 2017 Water Quality Data
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Location	HDR Field Sample ID	CLP Sample ID	Date Sampled	Time of Reading (24-hour)	Temp-erature (°C)	pH (s.u.)	Oxidation / Reduction Potential (mV)	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Flow Rate (mL/min)	Depth To Water (ft btic)
MPW-08-C	MPW-08-C-N-HDR-R5-06062017	BDZ81	6/6/2017	1125	12.08	5.97	249	0.188	2.2	7.32	190	9.81
MPW-08-D	MPW-08-D-N-HDR-R5-06062017	BDZ83	6/6/2017	1225	11.97	6.42	204	0.148	2.1	7.3	150	9.01
MPW-08-E	MPW-08-E-N-HDR-R5-06062017	BDZ84	6/6/2017	1340	11.84	7.01	157	0.121	2.1	3.55	150	9.33
MPW-09-A	MPW-09-A-N-HDR-R5-06132017	BDZE3	6/13/2017	0940	20.77	6.03	158	0.145	0	4.54	50	Surface
MPW-09-B	MPW-09-B-N-HDR-R5-06132017	BDZE4	6/13/2017	1042	19.21	5.87	153	0.199	0.1	1.98	120	Surface
MPW-09-C	MPW-09-C-N-HDR-R5-06132017	BDZE5	6/13/2017	1145	23.1	6.14	166	0.286	0	0	50	Surface
MPW-09-D	MPW-09-D-N-HDR-R5-06132017	BDZE7	6/13/2017	1505	24.54	6.6	115	0.155	0	1	100	Surface
MPW-09-E	MPW-09-E-N-HDR-R5-06132017	BDZE8	6/13/2017	1640	24.4	7	105	0.081	0	2.2	60	Surface
MPW-10-A	MPW-10-A-N-HDR-R5-06082017	BDZA8	6/8/2017	0940	12.83	6.04	231	0.257	0	0.2	60	25.16
MPW-10-B	MPW-10-B-N-HDR-R5-06082017	BDZA9	6/8/2017	1050	13.27	6.08	208	0.218	0	2	50	25.15
MPW-10-C	MPW-10-C-N-HDR-R5-06082017	BDZB2	6/8/2017	1230	14.73	6.21	137	0.231	0	3.35	30	24.82
MPW-10-D	MPW-10-D-N-HDR-R5-06082017	BDZB3	6/8/2017	1420	12.99	6.07	165	0.218	0	4.55	50	24.58
MW-05	MW-5-N-HDR-R5-06132017	BDZE6	6/13/2017	1250	20.76	6.05	156	0.083	15.2	6.87	350	190.51
MW-ISCO-2	MW-ISCO-2-N-HDR-R5-06152017	BDZG4	6/15/2017	0905	15.55	5.82	185	0.187	1.16	3	200	195.54
MW-ISCO-4	MW-ISCO-4-N-HDR-R5-06142017	BDZF8	6/14/2017	1425	19.34	6.09	159	0.183	0.9	7.91	280	195.91
MW-ISCO-5	MW-ISCO-5-N-HDR-R5-06152017	BDZG5	6/15/2017	0935	13.38	6.6	244	0.244	0	8.56	200	195.42
MW-PD-11	MW-PD-11-N-HDR-R5-06122017	BDZC9	6/12/2017	1030	16.49	5.94	170	0.178	7.7	2.44	300	139.23
MW-PD-12	MW-PD-12-N-HDR-R5-06132017	BDZE2	6/13/2017	0920	13.14	5.81	189	0.204	13.4	2.96	250	117.82
MW-PD-13	MW-PD-13-N-HDR-R5-06092017	BDZC5	6/9/2017	1225	14.52	6.19	147	0.237	6.4	7.3	300	153.39
MW-PD-14	MW-PD-14-N-HDR-R5-06122017	BDZD8	6/12/2017	1745	15.8	5.72	164	0.403	8.16	0.77	220	157.54
MW-PD-15	MW-PD-15-N-HDR-R5-06082017	BDZB4	6/8/2017	1630	13.47	6.6	106	0.398	4.2	0.06	250	81.11
MW-PD-16	MW-PD-16-N-HDR-R5-06122017	BDZD4	6/12/2017	1520	13.43	5.71	208	0.232	3.7	1.7	300	68.69
MW-PD-17	MW-PD-17-N-HDR-R5-06122017	BDZD2	6/12/2017	1215	14.76	6.62	145	0.169	3.1	6.2	280	7.73
PZ-05	PZ-5-N-HDR-R5-06132017	BDZE9	6/13/2017	1655	19.18	6.06	177	0.145	8.22	6.97	350	NR
PZ-06	PZ-6-N-HDR-R5-06142017	BDZF6	6/14/2017	1140	19.96	6.12	183	0.158	8.38	11.38	280	199.20
PZ-07	PZ-7-N-HDR-R5-06142017	BDZF4	6/14/2017	1000	20.75	5.79	180	0.132	37.5	7.53	480	185.79
SDW-01	SDW-01-N-HDR-R5-06062017	BDZ86	6/6/2017	1548	12.34	6.94	-61	0.411	22.9	1.12	NA	12.31

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

Table 3
June 2017 Groundwater Elevations
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Well ID	June 2017 Groundwater Elevation Data (ft amsl)
ERT-EW-1*	22.58
ERT-EW-2*	22.76
ERT-EW-3	13.78
ERT-EW-4	14.32
ERT-EW-5	14.27
ERT-EW-6*	18.97
ERT-MW-1A	8.84
ERT-MW-1B	9.69
ERT-MW-2A	9.09
ERT-MW-2B	9.19
ERT-MW-2C	5.25
ERT-MW-2D	NC
ERT-MW-3	14.39
ERT-MW-4A	6.96
ERT-MW-4B	7.07
ERT-MW-5A	6.63
ERT-MW-5B	6.76
ERT-MW-6A	10.06
ERT-MW-6B	11.46
ERT-OW-1	10.35
ERT-OW-2	11.98
IW-ISCO-10	32.22
MPW-01-A	40.78
MPW-01-B	35.88
MPW-01-C	35.88
MPW-02-A	29.21
MPW-02-B	28.58
MPW-02-C	27.05
MPW-02-D	26.42
MPW-03-A	27.28
MPW-03-B	25.12
MPW-03-C	25.02
MPW-03-D	25.53
MPW-04-A	26.03
MPW-04-B	25.71
MPW-04-C	25.13
MPW-04-D	25.44
MPW-04-E	24.87
MPW-05-A	18.90
MPW-05-B	18.56
MPW-05-C	18.66

Table 3
June 2017 Groundwater Elevations
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Well ID	June 2017 Groundwater Elevation Data (ft amsl)
MPW-05-D	18.48
MPW-06-A	18.76
MPW-06-B	18.33
MPW-06-C	17.98
MPW-06-D	17.67
MPW-07-A	32.03
MPW-07-B	30.96
MPW-07-C	30.53
MPW-08-A	NC
MPW-08-B	9.36
MPW-08-C	9.52
MPW-08-D	8.72
MPW-08-E	9.07
MPW-09-A	18.75
MPW-09-B	11.74
MPW-09-C	12.15
MPW-09-D	12.28
MPW-09-E	12.15
MPW-10-A	24.92
MPW-10-B	24.92
MPW-10-C	24.58
MPW-10-D	24.35
MW-05	31.57
MW-ISCO-02	32.27
MW-ISCO-05	33.65
MW-PD-12	25.48
MW-PD-13	23.78
MW-PD-14	21.85
MW-PD-15	14.65
MW-PD-16	17.74
MW-PD-17	17.97
PZ-01	34.10
PZ-02	35.20
PZ-04	34.53
PZ-05	33.57
PZ-06	31.50
PZ-07	32.91

NOTES:
ft amsl - Feet above mean sea level.
NC - Not collected.
* Groundwater elevation reading taken from PLC.

Table 4
Groundwater Sampling Results - Site-Related VOCs June 2017
Lawrence Aviation Industries Site
Port Jefferson, New York

				Analyte	1,1,1-TCA		1,1-DCA		1,1-DCE		Chloroform		cis-1,2-DCE		PCE		TCE		VC	
				Screening Criteria (ug/l)	5		5		5		7		5		5		5		2	
Location	Sample ID	CLP ID	Matrix	Date Sampled	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q
ERT-EW-3	ERT-EW-3-N-HDR-R5-06092017	BDZB9	WG	6/9/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	J	**8.9**		0.5	U
ERT-EW-4	ERT-EW-4-N-HDR-R5-06092017	BDZC0	WG	6/9/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.21	J	0.46	J	**13**		0.5	U
ERT-EW-5	ERT-EW-5-N-HDR-R5-06092017	BDZC2	WG	6/9/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	J	0.5	U
ERT-MW-1A	ERT-MW-1-A-N-HDR-R5-06072017	BDZ98	WG	6/7/2017	0.29	J	0.53		0.5	UJ	0.5	U	0.57	J-	0.27	J	**19**		0.5	U
ERT-MW-1B	ERT-MW-1-B-N-HDR-R5-06072017	BDZA0	WG	6/7/2017	0.27	J	0.59		0.5	U	0.5	U	0.41	J	0.5	U	**14**		0.5	U
ERT-MW-2A	ERT-MW-2-A-N-HDR-R5-06062017	BDZ77	WG	6/6/2017	0.5	U	0.5	U	0.5	U	0.56		0.5	U	1.7		4.1		0.5	U
ERT-MW-2B	ERT-MW-2-B-N-HDR-R5-06062017	BDZ79	WG	6/6/2017	0.51		1.3		0.5	U	0.5	U	2.3		2.1		**230**		0.5	U
ERT-MW-2C	ERT-MW-2-C-N-HDR-R5-06062017	BDZ82	WG	6/6/2017	0.29	J	0.49	J	0.5	U	0.5	U	0.87		0.66		**73**		0.5	U
ERT-MW-2D	ERT-MW-2-D-N-HDR-R5-06062017	BDZ85	WG	6/6/2017	0.65		0.97		0.5	U	0.5	U	0.47	J	0.74		**35**		0.5	U
ERT-MW-3	ERT-MW-3-N-HDR-R5-06082017	BDZB1	WG	6/8/2017	0.48	J	0.58		0.5	UJ	0.6		0.5	UJ	0.48	J	0.33	J	0.5	U
ERT-MW-4A	ERT-MW-4-A-N-HDR-R5-06072017	BDZ95	WG	6/7/2017	0.47	J	0.64		0.5	U	0.5	U	0.3	J	0.29	J	1.1		0.5	U
ERT-MW-4B	ERT-MW-4-B-N-HDR-R5-06072017	BDZ96	WG	6/7/2017	0.69		1.1		0.5	U	0.5	U	0.38	J	0.31	J	0.85		0.5	U
ERT-MW-5A	ERT-MW-5-A-N-HDR-R5-06072017	BDZ91	WG	6/7/2017	0.75		1.4		0.5	U	0.57		0.5		0.38	J	0.73		0.5	U
ERT-MW-5B	ERT-MW-5-B-N-HDR-R5-06072017	BDZ93	WG	6/7/2017	1.1		1.8		0.45	J	0.56		0.39	J	0.38	J	0.67		0.5	U
ERT-MW-6A	ERT-MW-6-A-N-HDR-R5-06082017	BDZA6	WG	6/8/2017	0.52		1.1		0.5	UJ	0.5	U	0.89	J-	0.45	J	**32**		0.5	U
ERT-MW-6B	ERT-MW-6-B-N-HDR-R5-06082017	BDZA7	WG	6/8/2017	0.36	J	0.66		0.5	U	0.5	U	0.5	U	0.5	U	3.1		0.5	U
IW-ISCO-10	IW-ISCO-10-N-HDR-R5-06142017	BDZF9	WG	6/14/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.72		**26**		0.5	U
MPW-01-A	MPW-01-A-N-HDR-R5-06092017	BDZC4	WG	6/9/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
MPW-01-B	MPW-01-B-N-HDR-R5-06122017	BDZD0	WG	6/12/2017	0.5	U	0.5	U	0.5	U	0.79		0.5	U	0.5	U	0.5	U	0.5	U
MPW-01-C	MPW-01-C-N-HDR-R5-06122017	BDZD1	WG	6/12/2017	0.87		2.4		0.5	U	0.78		0.5	U	0.24	J	0.65		0.5	U
MPW-02-B	MPW-02-B-N-HDR-R5-06142017	BDZF3	WG	6/14/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.9		0.5	U
MPW-02-C	MPW-02-C-N-HDR-R5-06142017	BDZF5	WG	6/14/2017	0.33	J	0.62		0.5	U	0.95		0.5	U	0.5	U	0.42	J	0.5	U
MPW-02-D	MPW-02-D-N-HDR-R5-06142017	BDZF7	WG	6/14/2017	0.5	U	0.25	J	0.5	U	1.1		0.5	U	0.5	U	0.27	J	0.5	U
MPW-03-B	MPW-03-B-N-HDR-R5-06122017	BDZD3	WG	6/12/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.34	J	2.2		0.5	U
MPW-03-C	MPW-03-C-N-HDR-R5-06122017	BDZD6	WG	6/12/2017	0.37	J	0.61		0.5	U	0.5	U	0.5	U	0.22	J	1.1		0.5	U
MPW-03-D	MPW-03-D-N-HDR-R5-06122017	BDZD7	WG	6/12/2017	0.32	J	0.81		0.5	U	0.5	U	0.5	U	0.38	J	2.8		0.5	U
MPW-04-B	MPW-04-B-N-HDR-R5-06082017	BDZB5	WG	6/8/2017	0.2	J	0.28	J	0.5	UJ	0.65		0.5	UJ	1.3		1.5	J	0.5	U
MPW-04-D	MPW-04-D-N-HDR-R5-06092017	BDZC1	WG	6/9/2017	0.57		0.99		0.5	U	0.72		0.5	U	0.59		0.5		0.5	U
MPW-04-E	MPW-04-E-N-HDR-R5-06092017	BDZC3	WG	6/9/2017	0.26	J	0.34	J	0.5	U	0.68		0.5	U	0.26	J	0.4	J	0.5	U
MPW-05-A	MPW-05-A-N-HDR-R5-06072017	BDZ97	WG	6/7/2017	0.5	U	0.5	U	0.5	U	1.1		0.5	U	0.5	U	0.5	U	0.5	U
MPW-05-B	MPW-05-B-N-HDR-R5-06072017	BDZ99	WG	6/7/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
MPW-05-C	MPW-05-C-N-HDR-R5-06072017	BDZA1	WG	6/7/2017	0.51		0.64		0.5	U	0.56		0.5	U	0.48	J	1.6		0.5	U
MPW-05-D	MPW-05-D-N-HDR-R5-06072017	BDZA2	WG	6/7/2017	0.73		0.94		0.5	U	0.56		0.5	U	0.4	J	1.6		0.5	U
MPW-06-A	MPW-06-A-N-HDR-R5-06072017	BDZ90	WG	6/7/2017	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
MPW-06-B	MPW-06-B-N-HDR-R5-06072017	BDZ92	WG	6/7/2017	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
MPW-06-D	MPW-06-D-N-HDR-R5-06072017	BDZ94	WG	6/7/2017	0.57		1.2		0.5	U	0.51		0.5	U	0.5	U	3.5		0.5	U
MPW-08-A	MPW-08-A-N-HDR-R5-06062017	BDZ76	WG	6/6/2017	0.5	U	0.5	U	0.5	U	0.67		0.5	U	0.5	U	0.53		0.5	U
MPW-08-B	MPW-08-B-N-HDR-R5-06062017	BDZ78	WG	6/6/2017	0.5	U	0.5	U	0.5	U	0.59		0.5	U	0.5	U	0.91		0.5	U
MPW-08-C	MPW-08-C-N-HDR-R5-06062017	BDZ81	WG	6/6/2017	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	UJ	0.5	U	1.8		0.5	U
MPW-08-D	MPW-08-D-N-HDR-R5-06062017	BDZ83	WG	6/6/2017	0.5	U	0.23	J	0.5	U	0.5	U	0.5	U	0.5	U	**9.9**		0.5	U
MPW-08-E	MPW-08-E-N-HDR-R5-06062017	BDZ84	WG	6/6/2017	0.36	J	0.6		0.5	U	0.5	U	0.21	J	0.5	U	**7.6**		0.5	U
MPW-09-A	MPW-09-A-N-HDR-R5-06132017	BDZE3	WG	6/13/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.37	J	**13**		0.5	U
MPW-09-B	MPW-09-B-N-HDR-R5-06132017	BDZE4	WG	6/13/2017	0.5	U	0.5	U	0.5	UJ	0.5	U	0.25	J-	2.8		**38**		0.5	U
MPW-09-C	MPW-09-C-N-HDR-R5-06132017	BDZE5	WG	6/13/2017	0.84		1.5		0.49	J	0.5	U	3.9		**8.2**		**300**		0.5	U
MPW-09-D	MPW-09-D-N-HDR-R5-06132017	BDZE7	WG	6/13/2017	0.5		1.3		0.5	U	0.59		**5.4**		2.5		**230**		0.5	U
MPW-09-E	MPW-09-E-N-HDR-R5-06132017	BDZE8	WG	6/13/2017	0.38	J	0.78		0.5	U	0.53		0.5	U	0.5	U	0.94		0.5	U
MPW-10-A	MPW-10-A-N-HDR-R5-06082017	BDZA8	WQ	6/8/2017	0.5	U	0.5	U	0.5	UJ	0.5	U	0.26	J-	**7.8**		**15**	**J**	0.5	U
MPW-10-B	MPW-10-B-N-HDR-R5-06082017	BDZA9	WG	6/8/2017	0.5	U	0.5	U	0.5	UJ	0.63		0.35	J-	**7.2**		**17**	**J**	0.5	U
MPW-10-C	MPW-10-C-N-HDR-R5-06082017	BDZB2	WG	6/8/2017	0.52		0.93		0.5	UJ	0.74		0.5	UJ	1.1		3.2	J	0.5	U
MPW-10-D	MPW-10-D-N-HDR-R5-06082017	BDZB3	WG	6/8/2017	0.24	J	0.21	J	0.5	UJ	0.64		0.5	UJ	2		1.3	J	0.5	U
MW-05	MW-5-N-HDR-R5-06132017	BDZE6	WG	6/13/2017	0.5	U	0.5	U	0.5	U	1.4		0.5	U	0.5	U	0.96		0.5	U
MW-ISCO-2	MW-ISCO-2-N-HDR-R5-06152017	BDZG4	WG	6/15/2017	0.5	U	0.5	U	0.5	UJ	0.5	U	0.74	J-	**14**		**710**		0.5	U
MW-ISCO-4	MW-ISCO-4-N-HDR-R5-06142017	BDZF8	WG	6/14/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	4.9		**220**		0.5	U
MW-ISCO-5	MW-ISCO-5-N-HDR-R5-06152017	BDZG5	WG	6/15/2017	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	UJ	1.6		**77**		0.5	U
MW-PD-11	MW-PD-11-N-HDR-R5-06122017	BDZC9	WG	6/12/2017	0.5	U	0.5	U	0.5	U	1.1		0.5	U	0.5	U	0.5	U	0.5	U
MW-PD-12	MW-PD-12-N-HDR-R5-06132017	BDZE2	WG	6/13/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.78		**6.4**		**310**		0.5	U
MW-PD-13	MW-PD-13-N-HDR-R5-06092017	BDZC5	WG	6/9/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Table 4
Groundwater Sampling Results - Site-Related VOCs June 2017
Lawrence Aviation Industries Site
Port Jefferson, New York

				Analyte	1,1,1-TCA		1,1-DCA		1,1-DCE		Chloroform		cis-1,2-DCE		PCE		TCE		VC	
				Screening Criteria (ug/l)	5		5		5		7		5		5		5		2	
Location	Sample ID	CLP ID	Matrix	Date Sampled	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q	Results (ug/l)	Q
MW-PD-14	MW-PD-14-N-HDR-R5-06122017	BDZD8	WG	6/12/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.76		3.1		**130**		0.5	U
MW-PD-15	MW-PD-15-N-HDR-R5-06082017	BDZB4	WG	6/8/2017	0.47	J	0.66		0.5	UJ	0.5	U	0.33	J-	1.4		**7.6**	**J**	0.5	U
MW-PD-16	MW-PD-16-N-HDR-R5-06122017	BDZD4	WG	6/12/2017	0.41	J	1		0.5	U	0.63		2.2		**6.7**		**390**		0.5	U
MW-PD-17	MW-PD-17-N-HDR-R5-06122017	BDZD2	WG	6/12/2017	1.4		0.63		0.46	J	0.5	U	0.5	U	0.5	U	0.3	J	0.5	U
PZ-06	PZ-6-N-HDR-R5-06142017	BDZF6	WG	6/14/2017	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	UJ	0.53		**21**		0.5	U
PZ-07	PZ-7-N-HDR-R5-06142017	BDZF4	WG	6/14/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.87		**8.1**		0.5	U
PZ-5	PZ-5-N-HDR-R5-06132017	BDZE9	WG	6/13/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.44	J	1.3		0.5	U
SDW-01	SDW-01-N-HDR-R5-06062017	BDZ86	WG	6/6/2017	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.23	J	0.5	U

Acronyms:

ug/l - micrograms per liter
DCA - dichloroethane
DCE - dichloroethene
ID - identification
ISCO - in situ chemical oxidation
J - estimated values
MPW - multi-port well
MW - monitoring well
NS - not sampled
PCE - tetrachloroethene
PZ - Piezometer
Q - qualifier
TCA - tricholoroethane
TCE - trichloroethene
U - not detected
VC - Vinyl Chloride
VOC - Volatile organic compound
WG - groundwater
NA - not applicable

(1). Screening Criteria: the lower of the following two sets of criteria were used as screening criteria. Sample results equal to or exceeding screening criteria are highlighted in gray
NYSDOH Drinking Water Quality Standards (as of 10/09/12): http://www.health.ny.gov/environmental/water/drinking/bulk_bottle/docs/subpart5_6.pdf
New York State Standards of Class GA Groundwater (as of 10/09/12)
Note: All NYSDOH standards are the same as NYS Standards for Class GA except for chloroform. The lower standard, NYS Standards for Class GA Groundwater, of 7 ug/l was used

APPENDIX A
DATA USABILITY REPORT AND TABLES

DATA USABILITY ANALYSIS
LAWRENCE AVIATION INDUSTRIES SITE

To meet the primary objectives of the Long-Term Response Action (LTRA) program at the Lawrence Aviation Industries (LAI) Site, in August 2012 the United States Environmental Protection Agency (EPA), Region 2 issued a work assignment to Henningson, Durham & Richardson, Architecture and Engineering PC, in association with HDR Engineering, Inc. (HDR) for the operation and maintenance (O&M) of the groundwater treatment systems at the LAI Site. The system at the LAI facility was completed on September 28, 2010 and is currently in its 6th year of LTRA. Construction of the Old Mill Pond (OMP) treatment facility was completed in August 2011 and is currently in its 5th year of LTRA. This data usability analysis is for aqueous samples collected in June 2017 as part of the annual sampling program at the Site. Seventy-eight groundwater samples were collected from well locations at the LAI and OMP facilities. In addition, quality assurance/quality control (QA/QC) samples were collected including field duplicates (seven), equipment blanks (eight), field blanks (eight), and trip blanks (18) as well as 19 laboratory blanks for a total of 138 samples. A sample summary is presented as **Table A1**. Note that summary tables include samples analyzed as part of the monthly sampling at LAI as well for comparison purposes; however, this data has been evaluated separately for usability. All aqueous analytical sample results from samples collected as part of the annual sampling were generated by the EPA Contract Laboratory Program (CLP) (Chemtech Consulting Group) for the following analyses and methods:

Analysis	**Method**
TVOA	CLP SOW SOM02.4

Note: SOW = Statement of Work; TVOA = Trace-level Volatile Organic Analysis

The results provided by the CLP laboratory are considered definitive data and underwent a systematic data validation to provide assurance that the data were adequate for its intended use. The validation was performed based on an evaluation of project objectives, method-specific QA/QC information (such as holding times, calibration records, laboratory- and field-supplied blanks, duplicate precision, and surrogate and spike recovery), relevant sections of the EPA Region 2 Data Validation Standard Operating Procedures (SOPs), relevant sections of the EPA National Functional Guidelines for Organic Data Validation, and/or the best professional judgment of the validator. Validation was performed by EPA personnel with the appropriate training and/or experience in performing data validation for the analyses of interest associated with the project. Qualifiers (as appropriate) were added to the data based on the results of the validation.

Note that since this project is in the LTRA phase, the focus was placed on site-specific contaminants of concern with regard to the VOAs: 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), chloroform, cis-1,2-dichloroethene (cis-1,2-DCE), trichloroethene (TCE), tetrachloroethene (PCE), and vinyl chloride (VC) with regard to evaluation of the results. The attached results tables that summarize the QA/QC data (i.e., **Table A2** and **Table A4**) provide the full list as well as the sample number, sample location, sample collection date, and the result and qualifiers for these constituents.

As part of the data assessment by the CLP laboratory, data qualifiers are presented along with the analytical results. Qualifiers used with regard to the assessment of the 2017 annual (aqueous) samples collected are highlighted in bold for clarity.

- **U - The analyte analyzed for, but was not detected at a level greater than or equal to the level of the adjusted CRQL for sample and method.**
- **J - The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).**
- J+ - The result is an estimated quantity, but the result may be biased high.
- **J- - The result is an estimated quantity, but the result may be biased low.**
- **UJ- The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.**
- **UL – The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be biased low.**
- R- The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- N- The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- NJ- The analysis indicated the presence of an analyte that has been "tentatively identified" and the associated numerical value represent its approximate concentration.

The data assessment for organic aqueous samples was performed for the following criteria per the EPA SOW: holding time, deuterated monitoring compounds (DMCs), blank contamination, mass spectrometer tuning, calibration, internal standards performance GC/MS, field duplicates, compound identification, contract problems - non-compliance, field documentation, other problems, and dilutions, re-extractions & reanalysis. Five sample delivery groups (SDGs) were received for the samples analyzed during the annual sampling event in June 2017. The following issues were identified in the EPA narratives for the aqueous samples collected for trace-level VOCs.

A major finding indicates a level of uncertainty exists that may not meet the data quality objectives for the project. A bias is likely present in the results. Data has been qualified "J" estimated. "J+" and "J-" represent likely direction of the bias. All five SDGs included this major finding. The results are useable as qualified. The reasons for these qualifications are explained further below.

All samples are spiked with DMC compounds prior to sample preparation to evaluate laboratory overall laboratory performance and efficiency of the analytical technique. In all five SDGs, one or more DMC compounds was reported to be either over and/or under their respective recovery limit criteria and therefore associated detectable sample results were qualified "J+" or "J-" , respectively. When the lower limit was not met but the expanded lower limit was met, non-detects were qualified "UJ". In instances where the upper limit was exceeded, non-detects were not qualified. The analytes where qualifications were applied include the COCs 1,1-DCE, cis-1,2'-DCE, and trans-1,2'-DCE.

QA blanks (method, field, rinse, and trip blanks) are prepared to identify contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinseate (equipment) blanks measure cross-contamination of samples during field operations. Trip blanks measure cross-contamination of samples during shipment. Estimated concentrations of styrene, below the CRQL, or very low-level concentrations detected slightly above the

CRQL were found in six equipment blanks, seven field blanks, and six trip blanks. Sample concentrations were all non-detect at the CRQL; styrene is also not a COC. Ethylbenzene was detected at an estimated concentration, below the CRQL, in one trip blank sample. Ethylbenzene is not a COC. TCE was detected in one equipment blank, one field blank, and one trip blank at concentrations that were estimated, below the CRQL. Even though TCE is a COC, the concentrations of TCE in the field samples were largely detected at an order of magnitude or more; therefore, the field sample results would only be biased very slightly high. No qualification was applied during data validation due to the blank contamination.

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance. Percent Relative Standard Deviation (RSD) is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of continuing calibration check to the mean response factor from the initial calibration. Percent RSD and Percent D must be less than or equal to 30 percent for all TCL analytes, respectively. For the opening or closing CCV, %D must be within the inclusive opening or closing %D limits. A value outside of these limits indicates potential detection and quantitation errors. For this reason, all positive results are qualified "J" and non-detects are qualified "UJ" for %D values outside criteria only. If %RSD exceeds QC criteria, detects may be qualified as "J" and use professional judgment of the data validator to qualify non-detects. Select samples were associated with either a Percent RSD or Percent D outside of the limits with regard to cis-1,2-DCE, TCE, bromomethane, and carbon disulfide, where detects were qualified "J" and non-detects were qualified "UJ", and cis-1,3-dichloropropene, where detects were qualified "J" and non-detects were not qualified.

Select samples were reanalyzed after dilution, re-extraction, or for other QC reasons. In these cases, the best result values are consolidated into one report and the other report is invalidated and not reportable. These are summarized in the data tables attached to the report.

Although not provided in the narrative, based on a follow up email with EPA two samples were re-injected/reanalyzed due to suspect carryover. Sample BDZA7 was analyzed following BDZA6 and sample BDZD6 was analyzed following samples BDZD3 and BDZD4. BDZA6, BDZD3 and BDZD4 had concentrations above calibration levels for TCE and the samples that were analyzed following these samples were considered to have carryover and were therefore reanalyzed The reanalysis confirmed the initial results and the reanalyzed results were reported in the EDDs.

The following sections provide an evaluation of the usability of the data for the Site, as compared to the site-specific QA/QC requirements outlined in the EPA-approved Final QAPP (EPA, 2014).

Precision

Precision is the measurement of agreement in repeated tests of the same or identical samples, under prescribed conditions. Precision data indicate how consistent and reproducible the field sampling or analytical procedures have been. For the Site data, precision was determined through replicate measurements of the same or identical samples, i.e., a field duplicate sample. The acceptance criterion for the duplicate is a relative percent difference (RPD) of less than 25 percent. The RPD was not calculated for any set of sample

pairs where concentrations were not detected in one or both of the data sets; agreement between the original sample and the duplicate can be inferred when both of the results are non-detects. The remainder of the sample pairs contained detections in both of the data sets and were within the RPD limits prescribed. The field duplicate data is summarized on **Table A2**. All of the RPD results were less than or equal to 25% and therefore indicate the sampling program achieved overall good reproducibility.

Accuracy

Accuracy is the degree of agreement of a measured sample result or average of results with an accepted reference or true value. It is the quantitative measurement of the bias of a system, and is expressed in terms of percent recovery (%R). Accuracy of the data can be determined through the use of surrogate compounds, internal standard compounds, matrix spike samples, and laboratory control spike samples. Aside from the issues described above, all of the results provided by the CLP laboratory were within QC limits. Based on the information provided and available results, the laboratories achieved a good degree of accuracy.

Representativeness

Representativeness is the degree to which the results of the analyses accurately and precisely represent a characteristic of a population, a process condition, or an environmental condition. In this case, representativeness is the degree to which the data reflect the contaminants present and their concentration magnitudes in the sampled site areas. Representativeness of data occurs through the selection of appropriate sampling locations and the implementation of approved sampling procedures. The sampling locations for this round of sampling consisted solely of fixed sample locations in the instance of the groundwater monitoring wells. In addition, field personnel followed the procedures outlined in the EPA-approved QAPP (EPA, 2014) for the Site.

Comparability

To increase the degree of comparability between data results and between past, present and future sampling events, standard environmental analytical methods were employed by the off-site laboratory. Routine Analytical Service (RAS) sample analyses available through the EPA CLP were utilized for the VOCs as specified in the CLP SOWs.

Completeness

Completeness is determined by the percentage of samples that meet or exceed all of the criteria objective levels (i.e., the number of usable sample results for the data set). All of the sample results were determined to be usable. See **Table A3**.

Sensitivity

Sensitivity is the ability of the analytical method or instrument to detect a target analyte at the level of interest. The method detection limit (MDL) is a statistically-derived value that represents a 99 percent confidence level that the reported instrument signal is different from a blank sample. The quantitation limit (QL) is the minimum concentration of an analyte that can be routinely identified by the laboratory, and is generally between three and ten times the MDL. Analytical methods are matrix-, moisture-and dilution-

dependent. The sample quantitation limit (SQL) actually determined for a constituent for a specific sample may be higher than the QL due to these issues. The laboratory was able to achieve the standard reporting limits for each analyte requested for trace level VOCs. Note however, select DMCs as discussed above were reported above and/or below limits which resulted in qualifying sample results for COCs as "J" qualified and biased low accordingly.

Blank Contamination Elimination

Blanks were prepared to identify any contamination that may have been introduced into the samples. Validation determines the need for qualification of sampling analytical results based on blank contamination. Field, equipment, and trip blank samples were prepared by the field crew and submitted with the aqueous samples for the June 2017 annual sampling event. The results are provided in **Table A4**. In addition method blank samples were prepared by the laboratory. As summarized above, field, equipment and/or trip related blanks contained low-level contamination including concentrations of TCE, a Site COC. None of the results were rejected or qualified; results are useable as reported.

Usability Summary

The definitive data for the LTRA annual sampling event conducted in June 2017 fulfilled the site-specific QA/QC requirements. Overall, the data met the project DQOs, and are appropriate to characterize the levels of contamination in the aqueous samples collected from the Site.

References

EPA, 2014. Uniform Federal Policy of Quality Assurance Project Plans, Region 2 Architect-Engineering Services Contract, Contract #EP-W-09-009, Project-Specific UFP-QAPP, Lawrence Aviation Industries Long-Term Response Action. Revised June 2014.

Appendix A Table A1 - Sample Summary (June 2017)
2017 Comprehensive Sampling Event Report
Lawrence Aviation Industries Site
Port Jefferson Station, New York

HDR Field Sample ID	CLP ID	Well ID	Sample Type	Parent Sample ID	Laboratory Name	Sample Collected By	Sample Date	Matrix	VOCs by EPA Method E524.2		
									Initial	Dilution1	Reinjec1
									Number of Analytes		
ERT-EW-3-N-HDR-R5-06092017	BDZB9	ERT-EW-3	N		CHM	HDR	6/9/2017	WG		51	
ERT-EW-4-N-HDR-R5-06092017	BDZC0	ERT-EW-4	N		CHM	HDR	6/9/2017	WG		51	
ERT-EW-5-N-HDR-R5-06092017	BDZC2	ERT-EW-5	N		CHM	HDR	6/9/2017	WG		51	
ERT-MW-1-A-N-HDR-R5-06072017	BDZ98	ERT-MW-1A	N		CHM	HDR	6/7/2017	WG		51	
ERT-MW-1-B-N-HDR-R5-06072017	BDZA0	ERT-MW-1B	N		CHM	HDR	6/7/2017	WG		51	
ERT-MW-2-A-N-HDR-R5-06062017	BDZ77	ERT-MW-2A	N		CHM	HDR	6/6/2017	WG		51	
ERT-MW-2-B-N-HDR-R5-06062017	BDZ79	ERT-MW-2B	N		CHM	HDR	6/6/2017	WG	1	50	
ERT-MW-2-C-N-HDR-R5-06062017	BDZ82	ERT-MW-2C	N		CHM	HDR	6/6/2017	WG	1	50	
ERT-MW-2-D-N-HDR-R5-06062017	BDZ85	ERT-MW-2D	N		CHM	HDR	6/6/2017	WG	1	50	
ERT-MW-3-N-HDR-R5-06082017	BDZB1	ERT-MW-3	N		CHM	HDR	6/8/2017	WG		51	
ERT-MW-4-A-N-HDR-R5-06072017	BDZ95	ERT-MW-4A	N		CHM	HDR	6/7/2017	WG		51	
ERT-MW-4-B-N-HDR-R5-06072017	BDZ96	ERT-MW-4B	N		CHM	HDR	6/7/2017	WG		51	
ERT-MW-5-A-N-HDR-R5-06072017	BDZ91	ERT-MW-5A	N		CHM	HDR	6/7/2017	WG		51	
ERT-MW-5-B-N-HDR-R5-06072017	BDZ93	ERT-MW-5B	N		CHM	HDR	6/7/2017	WG		51	
ERT-MW-6-A-N-HDR-R5-06082017	BDZA6	ERT-MW-6A	N		CHM	HDR	6/8/2017	WG	1	50	
ERT-MW-6-B-N-HDR-R5-06082017	BDZA7	ERT-MW-6B	N		CHM	HDR	6/8/2017	WG			51
IW-ISCO-10-N-HDR-R5-06142017	BDZF9	IW-ISCO-10	N		CHM	HDR	6/14/2017	WG	1	50	
LAI-EB-HDR-R5-06062017	BDZ75	Equipment Blank	EB		CHM	HDR	6/6/2017	W		51	
LAI-EB-HDR-R5-06072017	BDZ87	Equipment Blank	EB		CHM	HDR	6/7/2017	W		51	
LAI-EB-HDR-R5-06082017	BDZA3	Equipment Blank	EB		CHM	HDR	6/8/2017	W		51	
LAI-EB-HDR-R5-06092017	BDZB6	Equipment Blank	EB		CHM	HDR	6/9/2017	W		51	
LAI-EB-HDR-R5-06122017	BDZC6	Equipment Blank	EB		CHM	HDR	6/12/2017	W		51	
LAI-EB-HDR-R5-06132017	BDZD9	Equipment Blank	EB		CHM	HDR	6/13/2017	W		51	
LAI-EB-HDR-R5-06142017	BDZF0	Equipment Blank	EB		CHM	HDR	6/14/2017	W		51	
LAI-EB-HDR-R5-06152017	BDZG1	Equipment Blank	EB		CHM	HDR	6/15/2017	W		51	
LAI-FB-HDR-R5-06062017	BDZ73	Field Blank	FB		CHM	HDR	6/6/2017	W		51	
LAI-FB-HDR-R5-06072017	BDZ89	Field Blank	FB		CHM	HDR	6/7/2017	W		51	
LAI-FB-HDR-R5-06082017	BDZA4	Field Blank	FB		CHM	HDR	6/8/2017	W		51	
LAI-FB-HDR-R5-06092017	BDZB7	Field Blank	FB		CHM	HDR	6/9/2017	W		51	
LAI-FB-HDR-R5-06122017	BDZC7	Field Blank	FB		CHM	HDR	6/12/2017	W		51	
LAI-FB-HDR-R5-06132017	BDZE0	Field Blank	FB		CHM	HDR	6/13/2017	W		51	
LAI-FB-HDR-R5-06142017	BDZF1	Field Blank	FB		CHM	HDR	6/14/2017	W		51	
LAI-FB-HDR-R5-06152017	BDZG2	Field Blank	FB		CHM	HDR	6/15/2017	W		51	
LAI-FD-2-HDR-R5-06062017	BDZ80	ERT-MW-2B	FD	ERT-MW-2-B-N-HDR-R5-06062017	CHM	HDR	6/6/2017	WG	1	50	
LAI-FD-2-HDR-R5-06082017	BDZB0	MPW-10-B	FD	MPW-10-B-N-HDR-R5-06082017	CHM	HDR	6/8/2017	WG		51	
LAI-FD-2-HDR-R5-06122017	BDZD5	MW-PD-16	FD	MW-PD-16-N-HDR-R5-06122017	CHM	HDR	6/12/2017	WG	1	50	
LAI-FD-2-HDR-R5-06142017	BDZG0	IW-ISCO-10	FD	IW-ISCO-10-N-HDR-R5-06142017	CHM	HDR	6/14/2017	WG	1	50	
LAI-FD-2-HDR-R5-06152017	BDZG6	MW-ISCO-5	FD	MW-ISCO-5-N-HDR-R5-06152017	CHM	HDR	6/15/2017	WG	1	50	
LAI-TB-HDR-R5-06062017	BDZ74	Trip Blank	TB		CHM	HDR	6/6/2017	W		51	
LAI-TB-HDR-R5-06072017	BDZ88	Trip Blank	TB		CHM	HDR	6/7/2017	W		51	
LAI-TB-HDR-R5-06082017	BDZA5	Trip Blank	TB		CHM	HDR	6/8/2017	W		51	
LAI-TB-HDR-R5-06092017	BDZB8	Trip Blank	TB		CHM	HDR	6/9/2017	W		51	
LAI-TB-HDR-R5-06122017	BDZC8	Trip Blank	TB		CHM	HDR	6/12/2017	W		51	
LAI-TB-HDR-R5-06132017	BDZE1	Trip Blank	TB		CHM	HDR	6/13/2017	W		51	
LAI-TB-HDR-R5-06142017	BDZF2	Trip Blank	TB		CHM	HDR	6/14/2017	W		51	
LAI-TB-HDR-R5-06152017	BDZG3	Trip Blank	TB		CHM	HDR	6/15/2017	W		51	
MPW-01-A-N-HDR-R5-06092017	BDZC4	MPW-01-A	N		CHM	HDR	6/9/2017	WG		51	
MPW-01-B-N-HDR-R5-06122017	BDZD0	MPW-01-B	N		CHM	HDR	6/12/2017	WG		51	
MPW-01-C-N-HDR-R5-06122017	BDZD1	MPW-01-C	N		CHM	HDR	6/12/2017	WG		51	

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HDR Field Sample ID	CLP ID	Well ID	Sample Type	Parent Sample ID	Laboratory Name	Sample Collected By	Sample Date	Matrix	VOCs by EPA Method E524.2		
									Initial	Dilution1	Reinjec1
									Number of Analytes		
MPW-02-B-N-HDR-R5-06142017	BDZF3	MPW-02-B	N		CHM	HDR	6/14/2017	WG		51	
MPW-02-C-N-HDR-R5-06142017	BDZF5	MPW-02-C	N		CHM	HDR	6/14/2017	WG		51	
MPW-02-D-N-HDR-R5-06142017	BDZF7	MPW-02-D	N		CHM	HDR	6/14/2017	WG		51	
MPW-03-B-N-HDR-R5-06122017	BDZD3	MPW-03-B	N		CHM	HDR	6/12/2017	WG		51	
MPW-03-C-N-HDR-R5-06122017	BDZD6	MPW-03-C	N		CHM	HDR	6/12/2017	WG			51
MPW-03-D-N-HDR-R5-06122017	BDZD7	MPW-03-D	N		CHM	HDR	6/12/2017	WG		51	
MPW-04-B-N-HDR-R5-06082017	BDZB5	MPW-04-B	N		CHM	HDR	6/8/2017	WG		51	
MPW-04-D-N-HDR-R5-06092017	BDZC1	MPW-04-D	N		CHM	HDR	6/9/2017	WG		51	
MPW-04-E-N-HDR-R5-06092017	BDZC3	MPW-04-E	N		CHM	HDR	6/9/2017	WG		51	
MPW-05-A-N-HDR-R5-06072017	BDZ97	MPW-05-A	N		CHM	HDR	6/7/2017	WG		51	
MPW-05-B-N-HDR-R5-06072017	BDZ99	MPW-05-B	N		CHM	HDR	6/7/2017	WG		51	
MPW-05-C-N-HDR-R5-06072017	BDZA1	MPW-05-C	N		CHM	HDR	6/7/2017	WG		51	
MPW-05-D-N-HDR-R5-06072017	BDZA2	MPW-05-D	N		CHM	HDR	6/7/2017	WG		51	
MPW-06-A-N-HDR-R5-06072017	BDZ90	MPW-06-A	N		CHM	HDR	6/7/2017	WG		51	
MPW-06-B-N-HDR-R5-06072017	BDZ92	MPW-06-B	N		CHM	HDR	6/7/2017	WG		51	
MPW-06-D-N-HDR-R5-06072017	BDZ94	MPW-06-D	N		CHM	HDR	6/7/2017	WG		51	
MPW-08-A-N-HDR-R5-06062017	BDZ76	MPW-08-A	N		CHM	HDR	6/6/2017	WG		51	
MPW-08-B-N-HDR-R5-06062017	BDZ78	MPW-08-B	N		CHM	HDR	6/6/2017	WG		51	
MPW-08-C-N-HDR-R5-06062017	BDZ81	MPW-08-C	N		CHM	HDR	6/6/2017	WG		51	
MPW-08-D-N-HDR-R5-06062017	BDZ83	MPW-08-D	N		CHM	HDR	6/6/2017	WG		51	
MPW-08-E-N-HDR-R5-06062017	BDZ84	MPW-08-E	N		CHM	HDR	6/6/2017	WG		51	
MPW-09-A-N-HDR-R5-06132017	BDZE3	MPW-09-A	N		CHM	HDR	6/13/2017	WG		51	
MPW-09-B-N-HDR-R5-06132017	BDZE4	MPW-09-B	N		CHM	HDR	6/13/2017	WG	1	50	
MPW-09-C-N-HDR-R5-06132017	BDZE5	MPW-09-C	N		CHM	HDR	6/13/2017	WG	1	50	
MPW-09-D-N-HDR-R5-06132017	BDZE7	MPW-09-D	N		CHM	HDR	6/13/2017	WG	1	50	
MPW-09-E-N-HDR-R5-06132017	BDZE8	MPW-09-E	N		CHM	HDR	6/13/2017	WG		51	
MPW-10-A-N-HDR-R5-06082017	BDZA8	MPW-10-A	N		CHM	HDR	6/8/2017	WQ		51	
MPW-10-B-N-HDR-R5-06082017	BDZA9	MPW-10-B	N		CHM	HDR	6/8/2017	WG		51	
MPW-10-C-N-HDR-R5-06082017	BDZB2	MPW-10-C	N		CHM	HDR	6/8/2017	WG		51	
MPW-10-D-N-HDR-R5-06082017	BDZB3	MPW-10-D	N		CHM	HDR	6/8/2017	WG		51	
MW-5-N-HDR-R5-06132017	BDZE6	MW-05	N		CHM	HDR	6/13/2017	WG		51	
MW-ISCO-2-N-HDR-R5-06152017	BDZG4	MW-ISCO-2	N		CHM	HDR	6/15/2017	WG	1	50	
MW-ISCO-4-N-HDR-R5-06142017	BDZF8	MW-ISCO-4	N		CHM	HDR	6/14/2017	WG	1	50	
MW-ISCO-5-N-HDR-R5-06152017	BDZG5	MW-ISCO-5	N		CHM	HDR	6/15/2017	WG	1	50	
MW-PD-11-N-HDR-R5-06122017	BDZC9	MW-PD-11	N		CHM	HDR	6/12/2017	WG		51	
MW-PD-12-N-HDR-R5-06132017	BDZE2	MW-PD-12	N		CHM	HDR	6/13/2017	WG	1	50	
MW-PD-13-N-HDR-R5-06092017	BDZC5	MW-PD-13	N		CHM	HDR	6/9/2017	WG		51	
MW-PD-14-N-HDR-R5-06122017	BDZD8	MW-PD-14	N		CHM	HDR	6/12/2017	WG	1	50	
MW-PD-15-N-HDR-R5-06082017	BDZB4	MW-PD-15	N		CHM	HDR	6/8/2017	WG		51	
MW-PD-16-N-HDR-R5-06122017	BDZD4	MW-PD-16	N		CHM	HDR	6/12/2017	WG	1	50	
MW-PD-17-N-HDR-R5-06122017	BDZD2	MW-PD-17	N		CHM	HDR	6/12/2017	WG		51	
PZ-5-N-HDR-R5-06132017	BDZE9	PZ-5	N		CHM	HDR	6/13/2017	WG		51	
PZ-6-N-HDR-R5-06142017	BDZF6	PZ-06	N		CHM	HDR	6/14/2017	WG	1	50	
PZ-7-N-HDR-R5-06142017	BDZF4	PZ-07	N		CHM	HDR	6/14/2017	WG		51	
SDW-01-N-HDR-R5-06062017	BDZ86	SDW-01	N		CHM	HDR	6/6/2017	WG		51	
VBLK46_6/21/2017_WQ	VBLK46	Lab Blank	LB		CHM	HDR	6/21/2017	W		51	
VBLK60_6/16/2017_	VBLK60	Lab Blank	LB		CHM	HDR	6/16/2017	W		51	
VBLK60_6/16/2017_WQ	VBLK60	Lab Blank	LB		CHM	HDR	6/16/2017	W		51	
VBLK61_6/9/2017_	VBLK61	Lab Blank	LB		CHM	HDR	6/9/2017	W		51	

Appendix A Table A1 - Sample Summary (June 2017)
2017 Comprehensive Sampling Event Report
Lawrence Aviation Industries Site
Port Jefferson Station, New York

HDR Field Sample ID	CLP ID	Well ID	Sample Type	Parent Sample ID	Laboratory Name	Sample Collected By	Sample Date	Matrix	VOCs by EPA Method E524.2		
									Initial	Dilution1	Reinjec1
									Number of Analytes		
VBLK62_6/14/2017_	VBLK62	Lab Blank	LB		CHM	HDR	6/14/2017	W		51	
VBLK63_6/15/2017_	VBLK63	Lab Blank	LB		CHM	HDR	6/15/2017	W		51	
VBLK63_6/8/2017_WQ	VBLK63	Lab Blank	LB		CHM	HDR	6/8/2017	W		51	
VBLK64_6/17/2017_WQ	VBLK64	Lab Blank	LB		CHM	HDR	6/17/2017	W		51	
VBLK64_6/9/2017_WQ	VBLK64	Lab Blank	LB		CHM	HDR	6/9/2017	W		51	
VBLK65_6/17/2017_	VBLK65	Lab Blank	LB		CHM	HDR	6/17/2017	W		51	
VBLK65_6/9/2017_WQ	VBLK65	Lab Blank	LB		CHM	HDR	6/9/2017	W		51	
VBLK67_6/19/2017_WQ	VBLK67	Lab Blank	LB		CHM	HDR	6/19/2017	W		51	
VBLK68_6/19/2017_WQ	VBLK68	Lab Blank	LB		CHM	HDR	6/19/2017	W		51	
VBLK70_6/21/2017_WQ	VBLK70	Lab Blank	LB		CHM	HDR	6/21/2017	W		51	
VBLK71_6/22/2017_WQ	VBLK71	Lab Blank	LB		CHM	HDR	6/22/2017	W		51	
VBLK86_6/12/2017_WQ	VBLK86	Lab Blank	LB		CHM	HDR	6/12/2017	W		51	
VBLK90_6/14/2017_WQ	VBLK90	Lab Blank	LB		CHM	HDR	6/14/2017	W		51	
VBLK95_6/19/2017_WQ	VBLK95	Lab Blank	LB		CHM	HDR	6/19/2017	W		51	
VBLK97_6/20/2017_WQ	VBLK97	Lab Blank	LB		CHM	HDR	6/20/2017	W		51	

Notes:
Numbers in the VOCs/SVOCs column represent the number of VOCs/SVOCs analytes reported for each sample.
The methods listed for VOCs/SVOCs included in the electronic data deliverables from the laboratories and is based on standard operating procedures (SOPs) consistent with the quality assurance project plan requested methods.

Abbreviations:

CHM = Chemtech Consulting Group
EB = equipment blank
FB = field blank
FD = field duplicate
HDR = Henningson, Durham & Richardson, Architecture and Engineering PC, in association with HDR Engineering, Inc.
LB = laboratory blank
N = normal sample
NA = not applicable
SVOC = semi-volatile organic compounds
TB = trip blank
USEPA = United States Environmental Protection Agency
VOC = volatile organic compounds
W = blank water
WG = groundwater
WS = surface water

Appendix A Table A2 - Groundwater VOCs Field Duplicate Analytical Sampling Results
2017 Comprehensive Sampling Event Report
Lawrence Aviation Industries Site
Port Jefferson Station, New York

					ERT-MW-2B		ERT-MW-2B		RPD	ABS	IW-ISCO-10		IW-ISCO-10		RPD	ABS	MPW-10-B		MPW-10-B		RPD	ABS
					ERT-MW-2-B-N-HDR-R5-06062017		LAI-FD-2-HDR-R5-06062017				IW-ISCO-10-N-HDR-R5-06142017		LAI-FD-2-HDR-R5-06142017				LAI-FD-2-HDR-R5-06082017		MPW-10-B-N-HDR-R5-06082017			
					BDZ79		BDZ80				BDZF9		BDZG0				BDZB0		BDZA9			
					6/6/2017		6/6/2017				6/14/2017		6/14/2017				6/8/2017		6/8/2017			
	Cas No.	Units	NYSDEC Class GA Standards	5 x CRQL	Results (ug/l)	Qual.	Results	Qual.			Results (ug/l)	Qual.	Results	Qual.			Results (ug/l)	Qual.	Results	Qual.		
Volatile Organic Compounds (VOCs)																						
1,1,1-Trichloroethane	71-55-6	ug/l	5	2.5	0.51		0.49	J	4%	0.02	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,1,2-Trichloro-1,2,2-	76-13-1	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,1,2-Trichloroethane	79-00-5	ug/l	1	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,1-Dichloroethane	75-34-3	ug/l	5	2.5	1.3		1.2		8%	0.1	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,1-Dichloroethene	75-35-4	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	UJ	0.5	UJ	0%	0
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2-Dibromoethane	106-93-4	ug/l	0.0006	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2-Dichlorobenzene	95-50-1	ug/l	3	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2-Dichloroethane	107-06-2	ug/l	0.6	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2-Dichloropropane	78-87-5	ug/l	1	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,3-Dichlorobenzene	541-73-1	ug/l	3	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,4-Dichlorobenzene	106-46-7	ug/l	3	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
2-Butanone	78-93-3	ug/l	NA	25	5	U	5	U	-	-	5	U	5	U	-	-	5	U	5	U	-	-
2-Hexanone	591-78-6	ug/l	NA	25	5	U	5	U	-	-	5	U	5	U	-	-	5	U	5	U	-	-
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	25	5	U	5	U	-	-	5	U	5	U	-	-	5	U	5	U	-	-
Acetone	67-64-1	ug/l	NA	25	5	U	5	U	-	-	5	U	5	U	-	-	5	U	5	U	-	-
Benzene	71-43-2	ug/l	1	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Bromochloromethane	74-97-5	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Bromodichloromethane	75-27-4	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Bromoform	75-25-2	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Bromomethane	74-83-9	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Carbon Disulfide	75-15-0	ug/l	60	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Carbon Tetrachloride	56-23-5	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Chlorobenzene	108-90-7	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Chloroethane	75-00-3	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Chloroform	67-66-3	ug/l	7	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.63		0.63		0%	0
Chloromethane	74-87-3	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
cis-1,2-Dichloroethylene	156-59-2	ug/l	5	2.5	2.3		2.2		4%	0.1	0.5	U	0.5	U	-	-	0.37	J-	0.35	J-	6%	0.02
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Cyclohexane	110-82-7	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Dibromochloromethane	124-48-1	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Dichlorodifluoromethane	75-71-8	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-

Appendix A Table A2 - Groundwater VOCs Field Duplicate Analytical Sampling Results
2017 Comprehensive Sampling Event Report
Lawrence Aviation Industries Site
Port Jefferson Station, New York

					ERT-MW-2B		ERT-MW-2B		RPD	ABS	IW-ISCO-10		IW-ISCO-10		RPD	ABS	MPW-10-B		MPW-10-B		RPD	ABS
					ERT-MW-2-B-N-HDR-R5-06062017		LAI-FD-2-HDR-R5-06062017				IW-ISCO-10-N-HDR-R5-06142017		LAI-FD-2-HDR-R5-06142017				LAI-FD-2-HDR-R5-06082017		MPW-10-B-N-HDR-R5-06082017			
					BDZ79		BDZ80				BDZF9		BDZG0				BDZB0		BDZA9			
					6/6/2017		6/6/2017				6/14/2017		6/14/2017				6/8/2017		6/8/2017			
	Cas No.	Units	NYSDEC Class GA Standards	5 x CRQL	Results (ug/l)	Qual.	Results	Qual.			Results (ug/l)	Qual.	Results	Qual.			Results (ug/l)	Qual.	Results	Qual.		
Ethylbenzene	100-41-4	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Isopropylbenzene	98-82-8	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
M, P Xylenes	179601-23-1	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Methyl Acetate	79-20-9	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	1.2		1.2		0%	0
Methylcyclohexane	108-87-2	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Methylene Chloride	75-09-2	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Styrene	100-42-5	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Tetrachloroethylene(PCE)	127-18-4	ug/l	5	2.5	2.1		2.1		0%	0	0.72		0.77		7%	0.05	7.3		7.2		1%	0.1
Toluene	108-88-3	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
trans-1,2-Dichloroethene	156-60-5	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	UJ	0.5	UJ	0%	0
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Trichloroethylene (TCE)	79-01-6	ug/l	5	variable	**230**		**240**		4%	10	**26**		**26**		0%	0	**18**	**J**	**17**	**J**	6%	1
Trichlorofluoromethane	75-69-4	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Vinyl Chloride	75-01-4	ug/l	2	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-

Notes:
U: Non-Detect Value
J: Estimated values (- indicates likely biased low)
NA: Not Available
ug/l: microgram per liter
RPD: Relative Percent Difference
CRQL: Contract Required Quantitation Limit
-: RPD and ABS values can not be calculated as one or both results are U qualified.
Variable: 5x CRQL results are variable due to varying dilution factors between samples.
Values that are **bold and highlighted** exceed NYSDEC
Class GA Standards, for example **150**

Appendix A Table A2 - Groundwater VOCs Field Duplicate Analytical Sampling Results
2017 Comprehensive Sampling Event Report
Lawrence Aviation Industries Site
Port Jefferson Station, New York

					MW-ISCO-5		MW-ISCO-5		RPD	ABS	MW-PD-16		MW-PD-16		RPD	ABS
					LAI-FD-2-HDR-R5-06152017		MW-ISCO-5-N-HDR-R5-06152017				LAI-FD-2-HDR-R5-06122017		MW-PD-16-N-HDR-R5-06122017			
					BDZG6		BDZG5				BDZD5		BDZD4			
					6/15/2017		6/15/2017				6/12/2017		6/12/2017			
	Cas No.	Units	NYSDEC Class GA Standards	5 x CRQL	Results (ug/l)	Qual.	Results	Qual.			Results (ug/l)	Qual.	Results	Qual.		
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	71-55-6	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.43	J	0.41	J	5%	0.02
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,1,2-Trichloro-1,2,2-	76-13-1	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,1,2-Trichloroethane	79-00-5	ug/l	1	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,1-Dichloroethane	75-34-3	ug/l	5	2.5	0.5	U	0.5	U	-	-	1.1		1		10%	0.1
1,1-Dichloroethene	75-35-4	ug/l	5	2.5	0.5	UJ	0.5	UJ	0%	0	0.5	U	0.5	U	-	-
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2-Dibromoethane	106-93-4	ug/l	0.0006	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2-Dichlorobenzene	95-50-1	ug/l	3	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2-Dichloroethane	107-06-2	ug/l	0.6	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,2-Dichloropropane	78-87-5	ug/l	1	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,3-Dichlorobenzene	541-73-1	ug/l	3	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
1,4-Dichlorobenzene	106-46-7	ug/l	3	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
2-Butanone	78-93-3	ug/l	NA	25	5	U	5	U	-	-	5	U	5	U	-	-
2-Hexanone	591-78-6	ug/l	NA	25	5	U	5	U	-	-	5	U	5	U	-	-
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	25	5	U	5	U	-	-	5	U	5	U	-	-
Acetone	67-64-1	ug/l	NA	25	5	U	5	U	-	-	5	U	5	U	-	-
Benzene	71-43-2	ug/l	1	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Bromochloromethane	74-97-5	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Bromodichloromethane	75-27-4	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Bromoform	75-25-2	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Bromomethane	74-83-9	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Carbon Disulfide	75-15-0	ug/l	60	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Carbon Tetrachloride	56-23-5	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Chlorobenzene	108-90-7	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Chloroethane	75-00-3	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Chloroform	67-66-3	ug/l	7	2.5	0.5	U	0.5	U	-	-	0.67		0.63		6%	0.04
Chloromethane	74-87-3	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
cis-1,2-Dichloroethylene	156-59-2	ug/l	5	2.5	0.5	UJ	0.5	UJ	0%	0	2.2		2.2		0%	0
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Cyclohexane	110-82-7	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Dibromochloromethane	124-48-1	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Dichlorodifluoromethane	75-71-8	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-

Appendix A Table A2 - Groundwater VOCs Field Duplicate Analytical Sampling Results
2017 Comprehensive Sampling Event Report
Lawrence Aviation Industries Site
Port Jefferson Station, New York

					MW-ISCO-5		MW-ISCO-5		RPD	ABS	MW-PD-16		MW-PD-16		RPD	ABS
					LAI-FD-2-HDR-R5-06152017		MW-ISCO-5-N-HDR-R5-06152017				LAI-FD-2-HDR-R5-06122017		MW-PD-16-N-HDR-R5-06122017			
					BDZG6		BDZG5				BDZD5		BDZD4			
					6/15/2017		6/15/2017				6/12/2017		6/12/2017			
	Cas No.	Units	NYSDEC Class GA Standards	5 x CRQL	Results (ug/l)	Qual.	Results	Qual.			Results (ug/l)	Qual.	Results	Qual.		
Ethylbenzene	100-41-4	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Isopropylbenzene	98-82-8	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
M, P Xylenes	179601-23-1	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Methyl Acetate	79-20-9	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Methylcyclohexane	108-87-2	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Methylene Chloride	75-09-2	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Styrene	100-42-5	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Tetrachloroethylene(PCE)	127-18-4	ug/l	5	2.5	1.6		1.6		0%	0	**6.9**		**6.7**		3%	0.2
Toluene	108-88-3	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
trans-1,2-Dichloroethene	156-60-5	ug/l	5	2.5	0.5	UJ	0.5	UJ	0%	0	0.5	U	0.5	U	-	-
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Trichloroethylene (TCE)	79-01-6	ug/l	5	variable	**65**		**77**		17%	12	**390**		**390**		0%	0
Trichlorofluoromethane	75-69-4	ug/l	5	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-
Vinyl Chloride	75-01-4	ug/l	2	2.5	0.5	U	0.5	U	-	-	0.5	U	0.5	U	-	-

Notes:
U: Non-Detect Value
J: Estimated values (- indicates likely biased low)
NA: Not Available
ug/l: microgram per liter
RPD: Relative Percent Difference
CRQL: Contract Required Quantitation Limit
-: RPD and ABS values can not be calculated as one or both results are U qualified.
Variable: 5x CRQL results are variable due to varying dilution factors between samples.
Values that are **bold and highlighted** exceed NYSDEC
Class GA Standards, for example **150**

Appendix A Table A3 - Groundwater Sample Results Completeness
2017 Comprehensive Sampling Event Report
Lawrence Aviation Industries Site
Port Jefferson Station, New York

Groundwater Results	VOCs
	Total Numbers
Non-Detects	3114
No. of Detects	279
No. of Estimated Hits (with Qualifier J, J-, J+ and NJ)	97
No. of Rejects	0
Total	3393
Percent Rejected	0%
Percent Estimated Hits	2.86%
Total Completeness	100%

Notes:

The counts and calculations above do not include field, equipment or trip blank samples, only environmental samples (including field duplicate and MS/MSD samples)

Appendix A Table A4 - Groundwater VOCs Field and Equipment Blanks and VOCs Trip Blank Analytical Sampling Results
2017 Comprehensive Sampling Event Report
Lawrence Aviation Industries Site
Port Jefferson Station, New York

			Sample ID	LAI-EB-HDR-R5-06062017		LAI-EB-HDR-R5-06072017		LAI-EB-HDR-R5-06082017		LAI-EB-HDR-R5-06092017		LAI-EB-HDR-R5-06122017		LAI-EB-HDR-R5-06132017		LAI-EB-HDR-R5-06142017		LAI-EB-HDR-R5-06152017		LAI-FB-HDR-R5-06062017	
			CLP ID	BDZ75		BDZ87		BDZA3		BDZB6		BDZC6		BDZD9		BDZF0		BDZG1		BDZ73	
			Sample Date	6/6/2017		6/7/2017		6/8/2017		6/9/2017		6/12/2017		6/13/2017		6/14/2017		6/15/2017		6/6/2017	
Analyte	Cas No.	Units	NYSDEC Class GA Standards (ug/l)	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual
Volatile Organic Compounds (VOCs)																					
1,1,1-Trichloroethane	71-55-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	75-35-4	ug/l	5	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane	74-87-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	156-59-2	ug/l	5	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylcyclohexane	108-87-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.35	J	0.3	J	0.27	J	0.29	J	0.5	U	0.54		0.52		0.5	U	0.33	J
Tetrachloroethylene(PCE)	127-18-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	5	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.3	J	0.5	U	0.5	U
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:

U - Non-Detect Value

J - Estimated values (- indicates likely biased low)

NA - Not Available

ug/l - microgram per liter

Values detected

Appendix A Table A4 - Groundwater VOCs Field and Equipment Blanks and VOCs Trip Blank Analytical Sampling Results
2017 Comprehensive Sampling Event Report
Lawrence Aviation Industries Site
Port Jefferson Station, New York

			Sample ID	LAI-FB-HDR-R5-06072017		LAI-FB-HDR-R5-06082017		LAI-FB-HDR-R5-06092017		LAI-FB-HDR-R5-06122017		LAI-FB-HDR-R5-06132017		LAI-FB-HDR-R5-06142017		LAI-FB-HDR-R5-06152017		LAI-TB-HDR-R5-06062017		LAI-TB-HDR-R5-06072017	
			CLP ID	BDZ89		BDZA4		BDZB7		BDZC7		BDZE0		BDZF1		BDZG2		BDZ74		BDZ88	
			Sample Date	6/7/2017		6/8/2017		6/9/2017		6/12/2017		6/13/2017		6/14/2017		6/15/2017		6/6/2017		6/7/2017	
Analyte	Cas No.	Units	NYSDEC Class GA Standards (ug/l)	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual
Volatile Organic Compounds (VOCs)																					
1,1,1-Trichloroethane	71-55-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	75-35-4	ug/l	5	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane	74-87-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	156-59-2	ug/l	5	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylcyclohexane	108-87-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.37	J	0.29	J	0.29	J	0.23	J	0.49	J	0.54		0.5	U	0.39	J	0.33	J
Tetrachloroethylene(PCE)	127-18-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	5	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.22	J	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:

U - Non-Detect Value

J - Estimated values (- indicates likely biased low)

NA - Not Available

ug/l - microgram per liter

Values detected

Appendix A Table A4 - Groundwater VOCs Field and Equipment Blanks and VOCs Trip Blank Analytical Sampling Results
2017 Comprehensive Sampling Event Report
Lawrence Aviation Industries Site
Port Jefferson Station, New York

			Sample ID	LAI-TB-HDR-R5-06082017		LAI-TB-HDR-R5-06092017		LAI-TB-HDR-R5-06122017		LAI-TB-HDR-R5-06132017		LAI-TB-HDR-R5-06142017		LAI-TB-HDR-R5-06152017	
			CLP ID	BDZA5		BDZB8		BDZC8		BDZE1		BDZF2		BDZG3	
			Sample Date	6/8/2017		6/9/2017		6/12/2017		6/13/2017		6/14/2017		6/15/2017	
Analyte	Cas No.	Units	NYSDEC Class GA Standards (ug/l)	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual	Results (ug/l)	Qual
Volatile Organic Compounds (VOCs)															
1,1,1-Trichloroethane	71-55-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	75-35-4	ug/l	5	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane	74-87-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	156-59-2	ug/l	5	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.2	J	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylcyclohexane	108-87-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.35	J	0.27	J	0.5	U	0.53		0.54		0.5	U
Tetrachloroethylene(PCE)	127-18-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	5	0.5	UJ	0.5	U	0.5	U	0.5	U	0.2	J	0.5	U
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:

U - Non-Detect Value

J - Estimated values (- indicates likely biased low)

NA - Not Available

ug/l - microgram per liter

Values detected

APPENDIX B
2017 COMPREHENSIVE SAMPLING
EVENT ANALYTICAL DATA TABLES

Appendix B
Table B1 - Groundwater VOCs Analytical Sampling Results (June 2017)
Lawrence Aviation Industries Site
Port Jefferson Station, New York

				Well ID	01-AS		01-CINF		01-CINF		01-EFF		01-EW01		01-EW02		02-AS		02-EFF		02-EW01		02-EW02		02-EW06	
				Sample ID	01-AS-20170613		01-INF-20170613		11-INF-20170613		01-EFF-20170613		01-EW01-20170613		01-EW02-20170613		02-AS-20170613		02-EFF-20170613		02-EW01-20170613		02-EW02-20170613		02-EW06-20170613	
				CLP ID	01-AS-20170613*		01-INF-20170613*		11-INF-20170613*		01-EFF-20170613*		01-EW01-20170613*		01-EW02-20170613*		02-AS-20170613*		02-EFF-20170613*		02-EW01-20170613*		02-EW02-20170613*		02-EW06-20170613*	
				Sample Date	6/13/2017		6/13/2017		6/13/2017		6/13/2017		6/13/2017		6/13/2017		6/13/2017		6/13/2017		6/13/2017		6/13/2017		6/13/2017	
Analyte	**CAS No.**	**Units**	**NYSDEC Class GA Standards**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Volatile Organic Compounds (VOCs)																									
1,1,1-Trichloroethane	71-55-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.99		0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	UL	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.6		0.6		0.66	
1,1-Dichloroethene	75-35-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.73		0.5	U	0.5	U
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	UL	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane	74-87-3	ug/l	5	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
cis-1,2-Dichloroethylene	156-59-2	ug/l	**5**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.3		1.4		2	
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	UL	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	UL	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	UL	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.63		0.78	
Methylcyclohexane	108-87-2	ug/l	NA	0.5	UL	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene(PCE)	127-18-4	ug/l	**5**	0.5	U	2		2		0.5	U	2.4		1.7		0.5	U	0.5	U	2.2		**5.8**		**9.4**	
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	**5**	0.5	U	**54**		**49**		0.5	U	**80**		**19**		**7**		0.5	U	**110**		**72**		**270**	
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:
U - Non-Detect Value
J - Estimated value (- indicates result may be biased low)
UJ - Non-Detect Value; The reported quantitation limit is approximate and may be inaccurate or imprecise.
UL - Non-Detect Value; The reported value may be biased low.
NA - Not Available
ug/l - microgram per liter

Values that are **bold and highlighted** exceed NYSDEC Class GA Standards. For example: **110**
* DESA sample identification provided. Samples were collected as part of the routine monthly sampling event.

Appendix B
Table B1 - Groundwater VOCs Analytical Sampling Results (June 2017)
Lawrence Aviation Industries Site
Port Jefferson Station, New York

			Well ID	02-GAC		ERT-EW-3		ERT-EW-4		ERT-EW-5		ERT-MW-1A		ERT-MW-1B		ERT-MW-2A		ERT-MW-2B		ERT-MW-2B		ERT-MW-2C		ERT-MW-2D	
			Sample ID	02-GAC-20170613		ERT-EW-3-N-HDR-R5-06092017		ERT-EW-4-N-HDR-R5-06092017		ERT-EW-5-N-HDR-R5-06092017		ERT-MW-1-A-N-HDR-R5-06072017		ERT-MW-1-B-N-HDR-R5-06072017		ERT-MW-2-A-N-HDR-R5-06062017		ERT-MW-2-B-N-HDR-R5-06062017		LAI-FD-2-HDR-R5-06062017		ERT-MW-2-C-N-HDR-R5-06062017		ERT-MW-2-D-N-HDR-R5-06062017	
			CLP ID	02-GAC-20170613*		BDZB9		BDZC0		BDZC2		BDZ98		BDZA0		BDZ77		BDZ79		BDZ80		BDZ82		BDZ85	
			Sample Date	6/13/2017		6/9/2017		6/9/2017		6/9/2017		6/7/2017		6/7/2017		6/6/2017		6/6/2017		6/6/2017		6/6/2017		6/6/2017	
Analyte	CAS No.	Units	NYSDEC Class GA Standards	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organic Compounds (VOCs)																									
1,1,1-Trichloroethane	71-55-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.29	J	0.27	J	0.5	U	0.51		0.49	J	0.29	J	0.65	
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.53		0.59		0.5	U	1.3		1.2		0.49	J	0.97	
1,1-Dichloroethene	75-35-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	2.9	J	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.56		0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane	74-87-3	ug/l	5	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	156-59-2	ug/l	**5**	0.5	U	0.5	U	0.21	J	0.5	U	0.57	J-	0.41	J	0.5	U	2.3		2.2		0.87		0.47	**J**
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.38	J	0.5	U	0.5	U	0.5	U	0.5	U
Methylcyclohexane	108-87-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene(PCE)	127-18-4	ug/l	**5**	0.5	U	0.3	J	0.46	J	0.5	U	0.27	J	0.5	U	1.7		2.1		2.1		0.66		0.74	
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	**5**	1		**8.9**		**13**		0.2	**J**	**19**		**14**		4.1		**230**		**240**		**73**		**35**	
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:
U - Non-Detect Value
J - Estimated value (- indicates result may be biased low)
UJ - Non-Detect Value; The reported quantitation limit is approximate and may be inaccurate or imprecise.
UL - Non-Detect Value; The reported value may be biased low.
NA - Not Available
ug/l - microgram per liter

Values that are **bold and highlighted** exceed NYSDEC Class GA Standards. For example: **110**
* DESA sample identification provided. Samples were collected as part of the routine monthly sampling event.

Appendix B
Table B1 - Groundwater VOCs Analytical Sampling Results (June 2017)
Lawrence Aviation Industries Site
Port Jefferson Station, New York

				Well ID	ERT-MW-3		ERT-MW-4A		ERT-MW-4B		ERT-MW-5A		ERT-MW-5B		ERT-MW-6A		ERT-MW-6B		IW-ISCO-10		IW-ISCO-10		MPW-01-A		MPW-01-B	
				Sample ID	ERT-MW-3-N-HDR-R5-06082017		ERT-MW-4-A-N-HDR-R5-06072017		ERT-MW-4-B-N-HDR-R5-06072017		ERT-MW-5-A-N-HDR-R5-06072017		ERT-MW-5-B-N-HDR-R5-06072017		ERT-MW-6-A-N-HDR-R5-06082017		ERT-MW-6-B-N-HDR-R5-06082017		IW-ISCO-10-N-HDR-R5-06142017		LA1-FD-2-HDR-R5-06142017		MPW-01-A-N-HDR-R5-06092017		MPW-01-B-N-HDR-R5-06122017	
				CLP ID	BDZB1		BDZ95		BDZ96		BDZ91		BDZ93		BDZA6		BDZA7		BDZF9		BDZG0		BDZC4		BDZD0	
				Sample Date	6/8/2017		6/7/2017		6/7/2017		6/7/2017		6/7/2017		6/8/2017		6/8/2017		6/14/2017		6/14/2017		6/9/2017		6/12/2017	
Analyte	**CAS No.**	**Units**	**NYSDEC Class GA Standards**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Volatile Organic Compounds (VOCs)																										
1,1,1-Trichloroethane	71-55-6	ug/l	5	0.48	J	0.47	J	0.69		0.75		1.1		0.52		0.36	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	0.58		0.64		1.1		1.4		1.8		1.1		0.66		0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	75-35-4	ug/l	5	0.5	UJ	0.5	U	0.5	U	0.5	U	0.45	J	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.6		0.5	U	0.5	U	0.57		0.56		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.79	
Chloromethane	74-87-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	156-59-2	ug/l	**5**	0.5	UJ	0.3	J	0.38	J	0.5		0.39	J	0.89	J-	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.85	
Methylcyclohexane	108-87-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene(PCE)	127-18-4	ug/l	**5**	0.48	J	0.29	J	0.31	J	0.38	J	0.38	J	0.45	J	0.5	U	0.72		0.77		0.5	U	0.5	U
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	**5**	0.33	J	1.1		0.85		0.73		0.67		**32**		3.1		**26**		**26**		0.5	U	0.5	U
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:
U - Non-Detect Value
J - Estimated value (- indicates result may be biased low)
UJ - Non-Detect Value; The reported quantitation limit is approximate and may be inaccurate or imprecise.
UL - Non-Detect Value; The reported value may be biased low.
NA - Not Available
ug/l - microgram per liter

Values that are **bold and highlighted** exceed NYSDEC Class GA Standards. For example: **110**
* DESA sample identification provided. Samples were collected as part of the routine monthly sampling event.

Appendix B
Table B1 - Groundwater VOCs Analytical Sampling Results (June 2017)
Lawrence Aviation Industries Site
Port Jefferson Station, New York

				Well ID	MPW-01-C		MPW-02-B		MPW-02-C		MPW-02-D		MPW-03-B		MPW-03-C		MPW-03-D		MPW-04-B		MPW-04-D		MPW-04-E		MPW-05-A	
				Sample ID	MPW-01-C-N-HDR-R5-06122017		MPW-02-B-N-HDR-R5-06142017		MPW-02-C-N-HDR-R5-06142017		MPW-02-D-N-HDR-R5-06142017		MPW-03-B-N-HDR-R5-06122017		MPW-03-C-N-HDR-R5-06122017		MPW-03-D-N-HDR-R5-06122017		MPW-04-B-N-HDR-R5-06082017		MPW-04-D-N-HDR-R5-06092017		MPW-04-E-N-HDR-R5-06092017		MPW-05-A-N-HDR-R5-06072017	
				CLP ID	BDZD1		BDZF3		BDZF5		BDZF7		BDZD3		BDZD6		BDZD7		BDZB5		BDZC1		BDZC3		BDZ97	
				Sample Date	6/12/2017		6/14/2017		6/14/2017		6/14/2017		6/12/2017		6/12/2017		6/12/2017		6/8/2017		6/9/2017		6/9/2017		6/7/2017	
Analyte	**CAS No.**	**Units**	**NYSDEC Class GA Standards**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Volatile Organic Compounds (VOCs)																										
1,1,1-Trichloroethane	71-55-6	ug/l	5	0.87		0.5	U	0.33	J	0.5	U	0.5	U	0.37	J	0.32	J	0.2	J	0.57		0.26	J	0.5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	2.4		0.5	U	0.62		0.25	J	0.5	U	0.61		0.81		0.28	J	0.99		0.34	J	0.5	U
1,1-Dichloroethene	75-35-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.78		0.5	U	0.95		1.1		0.5	U	0.5	U	0.5	U	0.65		0.72		0.68		1.1	
Chloromethane	74-87-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	156-59-2	ug/l	**5**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	0.39	J	0.25	J	0.79		1.3		0.52		1		0.82		1.2		1.9		0.44	J	0.5	U
Methylcyclohexane	108-87-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene(PCE)	127-18-4	ug/l	**5**	0.24	J	0.5	U	0.5	U	0.5	U	0.34	J	0.22	J	0.38	J	1.3		0.59		0.26	J	0.5	U
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	**5**	0.65		1.9		0.42	J	0.27	J	2.2		1.1		2.8		1.5	J	0.5		0.4	J	0.5	U
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:
U - Non-Detect Value
J - Estimated value (- indicates result may be biased low)
UJ - Non-Detect Value; The reported quantitation limit is approximate and may be inaccurate or imprecise.
UL - Non-Detect Value; The reported value may be biased low.
NA - Not Available
ug/l - microgram per liter

Values that are **bold and highlighted** exceed NYSDEC Class GA Standards. For example: **110**
* DESA sample identification provided. Samples were collected as part of the routine monthly sampling event.

Appendix B
Table B1 - Groundwater VOCs Analytical Sampling Results (June 2017)
Lawrence Aviation Industries Site
Port Jefferson Station, New York

			Well ID	MPW-05-B		MPW-05-C		MPW-05-D		MPW-06-A		MPW-06-B		MPW-06-D		MPW-08-A		MPW-08-B		MPW-08-C		MPW-08-D		MPW-08-E	
			Sample ID	MPW-05-B-N-HDR-R5-06072017		MPW-05-C-N-HDR-R5-06072017		MPW-05-D-N-HDR-R5-06072017		MPW-06-A-N-HDR-R5-06072017		MPW-06-B-N-HDR-R5-06072017		MPW-06-D-N-HDR-R5-06072017		MPW-08-A-N-HDR-R5-06062017		MPW-08-B-N-HDR-R5-06062017		MPW-08-C-N-HDR-R5-06062017		MPW-08-D-N-HDR-R5-06062017		MPW-08-E-N-HDR-R5-06062017	
			CLP ID	BDZ99		BDZA1		BDZA2		BDZ90		BDZ92		BDZ94		BDZ76		BDZ78		BDZ81		BDZ83		BDZ84	
			Sample Date	6/7/2017		6/7/2017		6/7/2017		6/7/2017		6/7/2017		6/7/2017		6/6/2017		6/6/2017		6/6/2017		6/6/2017		6/6/2017	
Analyte	**CAS No.**	**Units**	**NYSDEC Class GA Standards**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Volatile Organic Compounds (VOCs)																									
1,1,1-Trichloroethane	71-55-6	ug/l	5	0.5	U	0.51		0.73		0.5	U	0.5	U	0.57		0.5	U	0.5	U	0.5	U	0.5	U	0.36	J
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	0.5	U	0.64		0.94		0.5	U	0.5	U	1.2		0.5	U	0.5	U	0.5	U	0.23	J	0.6	
1,1-Dichloroethene	75-35-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	4.9	J	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.5	U	0.56		0.56		0.5	U	0.5	U	0.51		0.67		0.59		0.5	U	0.5	U	0.5	U
Chloromethane	74-87-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	156-59-2	ug/l	**5**	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.21	J
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	0.5	U	0.5		0.42	J	0.32	J	0.28	J	0.5	U	0.33	J	1.2		1.2		0.43	J	0.5	U
Methylcyclohexane	108-87-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene(PCE)	127-18-4	ug/l	**5**	0.5	U	0.48	J	0.4	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	1.8		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	**5**	0.5	U	1.6		1.6		0.5	U	0.5	U	3.5		0.53		0.91		1.8		**9.9**		**7.6**	
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:
U - Non-Detect Value
J - Estimated value (- indicates result may be biased low)
UJ - Non-Detect Value; The reported quantitation limit is approximate and may be inaccurate or imprecise.
UL - Non-Detect Value; The reported value may be biased low.
NA - Not Available
ug/l - microgram per liter

Values that are **bold and highlighted** exceed NYSDEC Class GA Standards. For example: **110**
* DESA sample identification provided. Samples were collected as part of the routine monthly sampling event.

Appendix B
Table B1 - Groundwater VOCs Analytical Sampling Results (June 2017)
Lawrence Aviation Industries Site
Port Jefferson Station, New York

				Well ID	MPW-09-A		MPW-09-B		MPW-09-C		MPW-09-D		MPW-09-E		MPW-10-A		MPW-10-B		MPW-10-B		MPW-10-C		MPW-10-D		MW-05	
				Sample ID	MPW-09-A-N-HDR-R5-06132017		MPW-09-B-N-HDR-R5-06132017		MPW-09-C-N-HDR-R5-06132017		MPW-09-D-N-HDR-R5-06132017		MPW-09-E-N-HDR-R5-06132017		MPW-10-A-N-HDR-R5-06082017		LAI-FD-2-HDR-R5-06082017		MPW-10-B-N-HDR-R5-06082017		MPW-10-C-N-HDR-R5-06082017		MPW-10-D-N-HDR-R5-06082017		MW-5-N-HDR-R5-06132017	
				CLP ID	BDZE3		BDZE4		BDZE5		BDZE7		BDZE8		BDZA8		BDZB0		BDZA9		BDZB2		BDZB3		BDZE6	
				Sample Date	6/13/2017		6/13/2017		6/13/2017		6/13/2017		6/13/2017		6/8/2017		6/8/2017		6/8/2017		6/8/2017		6/8/2017		6/13/2017	
Analyte	**CAS No.**	**Units**	**NYSDEC Class GA Standards**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Volatile Organic Compounds (VOCs)																										
1,1,1-Trichloroethane	71-55-6	ug/l	5	0.5	U	0.5	U	0.84		0.5		0.38	J	0.5	U	0.5	U	0.5	U	0.52		0.24	J	0.5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.31	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	0.5	U	0.5	U	1.5		1.3		0.78		0.5	U	0.5	U	0.5	U	0.93		0.21	J	0.5	U
1,1-Dichloroethene	75-35-4	ug/l	5	0.5	U	0.5	UJ	0.49	J	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	U
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.5	U	0.5	U	0.5	U	0.59		0.53		0.5	U	0.63		0.63		0.74		0.64		1.4	
Chloromethane	74-87-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	156-59-2	ug/l	**5**	0.5	U	0.25	J-	3.9		**5.4**		0.5	U	0.26	J-	0.37	J-	0.35	J-	0.5	UJ	0.5	UJ	0.5	U
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	2.4		0.37	J	0.22	J	0.5	U	0.5	U	0.48	J	1.2		1.2		2		2.3		0.5	U
Methylcyclohexane	108-87-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene(PCE)	127-18-4	ug/l	**5**	0.37	J	2.8		**8.2**		2.5		0.5	U	**7.8**		**7.3**		**7.2**		1.1		2		0.5	U
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	U
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	**5**	**13**		**38**		**300**		**230**		0.94		**15**	**J**	**18**	**J**	**17**	**J**	3.2	J	1.3	J	0.96	
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:
U - Non-Detect Value
J - Estimated value (- indicates result may be biased low)
UJ - Non-Detect Value; The reported quantitation limit is approximate and may be inaccurate or imprecise.
UL - Non-Detect Value; The reported value may be biased low.
NA - Not Available
ug/l - microgram per liter

Values that are **bold and highlighted** exceed NYSDEC Class GA Standards. For example: **110**
* DESA sample identification provided. Samples were collected as part of the routine monthly sampling event.

Appendix B
Table B1 - Groundwater VOCs Analytical Sampling Results (June 2017)
Lawrence Aviation Industries Site
Port Jefferson Station, New York

			Well ID	MW-ISCO-2		MW-ISCO-4		MW-ISCO-5		MW-ISCO-5		MW-PD-11		MW-PD-12		MW-PD-13		MW-PD-14		MW-PD-15		MW-PD-16		MW-PD-16	
			Sample ID	MW-ISCO-2-N-HDR-R5-06152017		MW-ISCO-4-N-HDR-R5-06142017		LAI-FD-2-HDR-R5-06152017		MW-ISCO-5-N-HDR-R5-06152017		MW-PD-11-N-HDR-R5-06122017		MW-PD-12-N-HDR-R5-06132017		MW-PD-13-N-HDR-R5-06092017		MW-PD-14-N-HDR-R5-06122017		MW-PD-15-N-HDR-R5-06082017		LAI-FD-2-HDR-R5-06122017		MW-PD-16-N-HDR-R5-06122017	
			CLP ID	BDZG4		BDZF8		BDZG6		BDZG5		BDZC9		BDZE2		BDZC5		BDZD8		BDZB4		BDZD5		BDZD4	
			Sample Date	6/15/2017		6/14/2017		6/15/2017		6/15/2017		6/12/2017		6/13/2017		6/9/2017		6/12/2017		6/8/2017		6/12/2017		6/12/2017	
Analyte	**CAS No.**	**Units**	**NYSDEC Class GA Standards**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
Volatile Organic Compounds (VOCs)																									
1,1,1-Trichloroethane	71-55-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.47	J	0.43	J	0.41	J
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.66		1.1		1	
1,1-Dichloroethene	75-35-4	ug/l	5	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	2.5	J	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.5	U	0.5	U	0.5	U	0.5	U	1.1		0.5	U	0.5	U	0.5	U	0.5	U	0.67		0.63	
Chloromethane	74-87-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	156-59-2	ug/l	**5**	0.74	J-	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.78		0.5	U	0.76		0.33	J-	2.2		2.2	
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.44	J	0.59		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylcyclohexane	108-87-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene(PCE)	127-18-4	ug/l	**5**	**14**		4.9		1.6		1.6		0.5	U	**6.4**		0.5	U	3.1		1.4		**6.9**		**6.7**	
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	**5**	**710**		**220**		**65**		**77**		0.5	U	**310**		0.5	U	**130**		**7.6**	**J**	**390**		**390**	
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:
U - Non-Detect Value
J - Estimated value (- indicates result may be biased low)
UJ - Non-Detect Value; The reported quantitation limit is approximate and may be inaccurate or imprecise.
UL - Non-Detect Value; The reported value may be biased low.
NA - Not Available
ug/l - microgram per liter

Values that are **bold and highlighted** exceed NYSDEC Class GA Standards. For example: **110**
* DESA sample identification provided. Samples were collected as part of the routine monthly sampling event.

Appendix B
Table B1 - Groundwater VOCs Analytical Sampling Results (June 2017)
Lawrence Aviation Industries Site
Port Jefferson Station, New York

			Well ID	MW-PD-17		PZ-06		PZ-07		PZ-5		SDW-01	
			Sample ID	MW-PD-17-N-HDR-R5-06122017		PZ-6-N-HDR-R5-06142017		PZ-7-N-HDR-R5-06142017		PZ-5-N-HDR-R5-06132017		SDW-01-N-HDR-R5-06062017	
			CLP ID	BDZD2		BDZF6		BDZF4		BDZE9		BDZ86	
			Sample Date	6/12/2017		6/14/2017		6/14/2017		6/13/2017		6/6/2017	
Analyte	CAS No.	Units	NYSDEC Class GA Standards	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organic Compounds (VOCs)													
1,1,1-Trichloroethane	71-55-6	ug/l	5	1.4		0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	75-34-3	ug/l	5	0.63		0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	75-35-4	ug/l	5	0.46	J	0.5	UJ	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	87-61-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-Chloropropane	96-12-8	ug/l	0.04	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	106-93-4	ug/l	0.0006	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	95-50-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	107-06-2	ug/l	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	78-87-5	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	541-73-1	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/l	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	78-93-3	ug/l	NA	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/l	NA	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	108-10-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/l	NA	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/l	1	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromochloromethane	74-97-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	75-27-4	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	75-25-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Disulfide	75-15-0	ug/l	60	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	56-23-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	67-66-3	ug/l	7	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane	74-87-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	156-59-2	ug/l	**5**	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	10061-01-5	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	110-82-7	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	124-48-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dichlorodifluoromethane	75-71-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	98-82-8	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M, P Xylenes	179601-23-1	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	79-20-9	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl tert-Butyl Ether	1634-04-4	ug/l	NA	0.43	J	0.5	U	0.5	U	0.5	U	0.4	J
Methylcyclohexane	108-87-2	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene Chloride	75-09-2	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	100-42-5	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrachloroethylene(PCE)	127-18-4	ug/l	**5**	0.5	U	0.53		0.87		0.44	J	0.5	U
Toluene	108-88-3	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	156-60-5	ug/l	5	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	10061-02-6	ug/l	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethylene (TCE)	79-01-6	ug/l	**5**	0.3	J	**21**		**8.1**		1.3		0.23	J
Trichlorofluoromethane	75-69-4	ug/l	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	75-01-4	ug/l	2	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Notes:
U - Non-Detect Value
J - Estimated value (- indicates result may be biased low)
UJ - Non-Detect Value; The reported quantitation limit is approximate and may be inaccurate or imprecise.
UL - Non-Detect Value; The reported value may be biased low.
NA - Not Available
ug/l - microgram per liter

Values that are **bold and highlighted** exceed NYSDEC Class GA Standards. For example: **110**
* DESA sample identification provided. Samples were collected as part of the routine monthly sampling event.

APPENDIX C
AVERAGE TOTAL ETHENE CONCENTRATION CALCULATIONS

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

Well No.	Baseline Total CVOC Concentration (ug/L) June-11	Total VOC Concentration (ug/L) June-12	Total VOC Concentration (ug/L) June-13	Total VOC Concentration (ug/L) June-14	Total VOC Concentration (ug/L) June-15	Total VOC Concentration (ug/L) June-16	Total VOC Concentration (ug/L) June-17
MW-ISCO-2	1	1,121	254	1,526	827.00	449	724.74
MW-ISCO-4	-	550	488	275	234.25	478	224.9
MW-ISCO-5	1	124	265	295	274.40	426	78.6
Average Concentration	1	598	336	699	445	451	343
STD Deviation	1	500	132	717	331	26	339
STD Error	0	289	76	414	191	15	196
t (95%)	1.83	1.83	1.83	1.83	1.83	2.83	3.83
Confidence Interval 95%	**1**	**1,128**	**475**	**1,457**	**796**	**494**	**1,093**
MPW-09-A	*	*	20	15.55	17.61	13	13
MPW-09-B	*	*	371	969.36	147.00	268	41
MPW-09-C	*	*	500	519.86	442.90	46	313
MPW-09-D	*	*	492	441.79	215.90	217	238
MW-PD-12	471	329	340	225.98	234.30	96	317
MW-PD-14	*	*	287	194.90	183.80	102	134
MW-PD-16	*	*	500	132.66	570.40	205	399
Average Concentration			359	357	259	135	208
STD Deviation			172	321	187	95	148
STD Error			65	121	71	36	56
t (95%)			1.83	1.83	1.83	2.83	3.83
Confidence Interval 95%			**478**	**580**	**388**	**238**	**422**
* Data not available for time series							

APPENDIX D
TOTAL VOCS TIME SERIES CONCENTRATION DATA

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	July 2012	September 2012	June 2013	June 2014	June 2015	June 2016	June 2017
MPW-09-A	157	71	53	NS	NS	NS	NS	NS	NS	NS	NS	NS	17	20	16	18	13	13
MPW-09-B	377	573	347	NS	NS	NS	NS	NS	NS	NS	NS	NS	642	373	972	149	270	41
MPW-09-C	597	786	579	NS	NS	NS	NS	NS	NS	NS	NS	NS	390	506	525	447	46	315
MPW-09-D	399	888	527	NS	NS	NS	NS	NS	NS	NS	NS	NS	672	496	446	219	217	240
MW-PD-12	NI	NI	215	236	463.6	400	471	602	NS	420	339	329	NU	340	226	234	96	**317**
MW-PD-14	NI	NI	358	NS	NS	NS	NS	NS	NS	NS	288	NS	NS	287	195	184	102	**134**
MW-PD-16	NI	NI	1933	NS	NS	NS	NS	NS	NS	NS	379	NS	NS	502	133	574	206	**401**

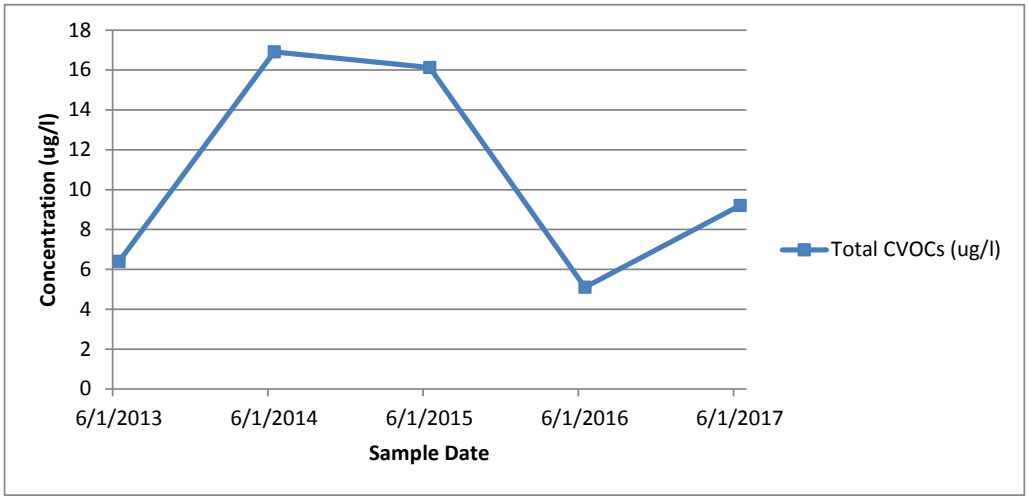
Notes:
All results in micrograms per liter
DP - Defective port
ND - Not Detected
NI - Not Installed
NS - Not Sampled
NU - Not Used
RI - Remedial Investigation
VOC - Volatile Organic Compound

Total VOC Concentration values equal sum of the following compounds, not detect values are not included in the total:
Trichloroethene
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
Chloroform
cis-1,2-Dichloroethene
Tetrachloroethene
Vinyl Chloride

APPENDIX E
HISTORICAL DATA AND TIME SERIES CONCENTRATION DATA

ERT-EW-3

		Sample Date	6/12/2013		6/11/2014		6/10/2015		6/10/2016		6/9/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.11	J	0.11	J		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U	0.11	J		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		UJ		U
Chloroform	67-66-3	ug/l		U		U		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.41	J	0.45	J		UJ		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.39	J	0.45	J		U	0.3	J
Trichloroethene (TCE)	79-01-6	ug/l	6.4		16		15	J	5.1		8.9	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**6.40**		**16.91**		**16.12**		**5.10**		**9.20**	

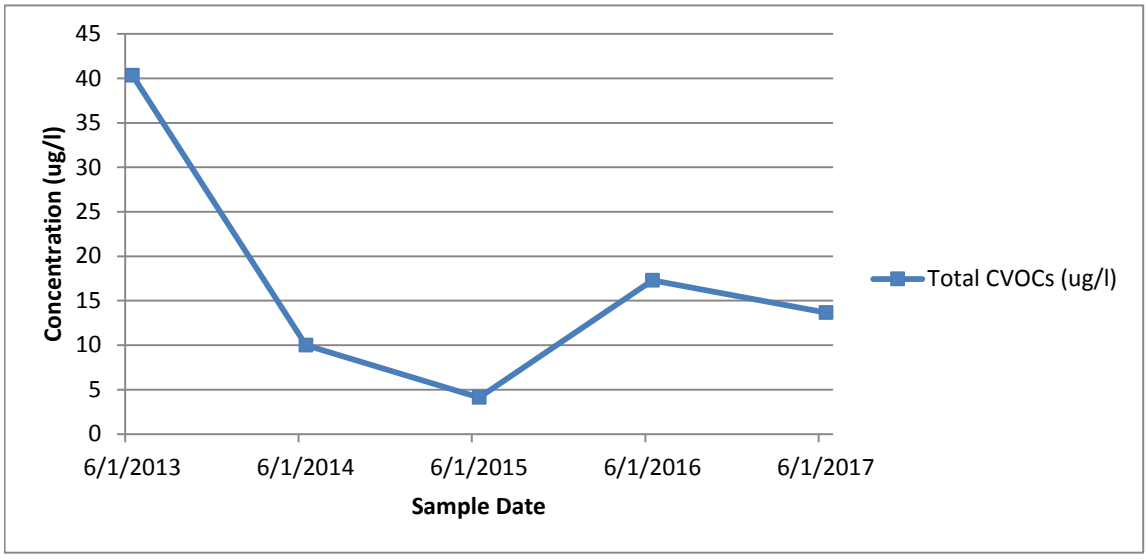


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

ERT-EW-4

		Sample Date	6/12/2013		6/11/2014		6/10/2015		6/13/2016		6/9/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l		U	0.11	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	1.6		0.2	J		U	0.33	J	0.21	J
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.75		0.31	J	0.22	J	0.96		0.46	J
Trichloroethene (TCE)	79-01-6	ug/l	38		9.4		3.9	J	16		13	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**40.35**		**10.02**		**4.12**		**17.29**		**13.67**	

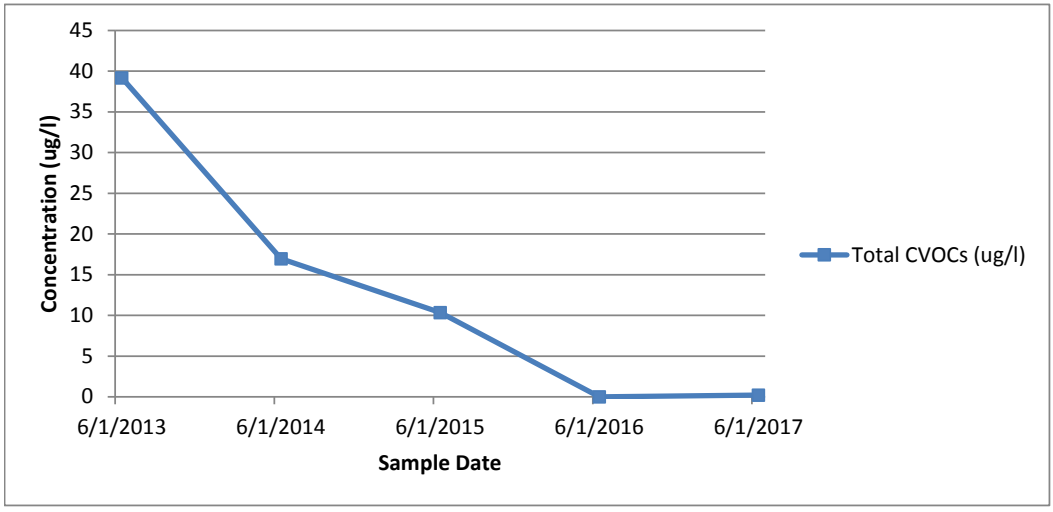


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		UJ		U
Chloroform	67-66-3	ug/l		U	0.22	J	0.4	J		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.22	J	0.14	J		UJ		U
Tetrachloroethylene(PCE)	127-18-4	ug/l	1.2		0.52		0.43	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l	38		16		9.4	J		U	0.2	J
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**39.20**		**16.96**		**10.37**		**0.00**	**U**	**0.20**	

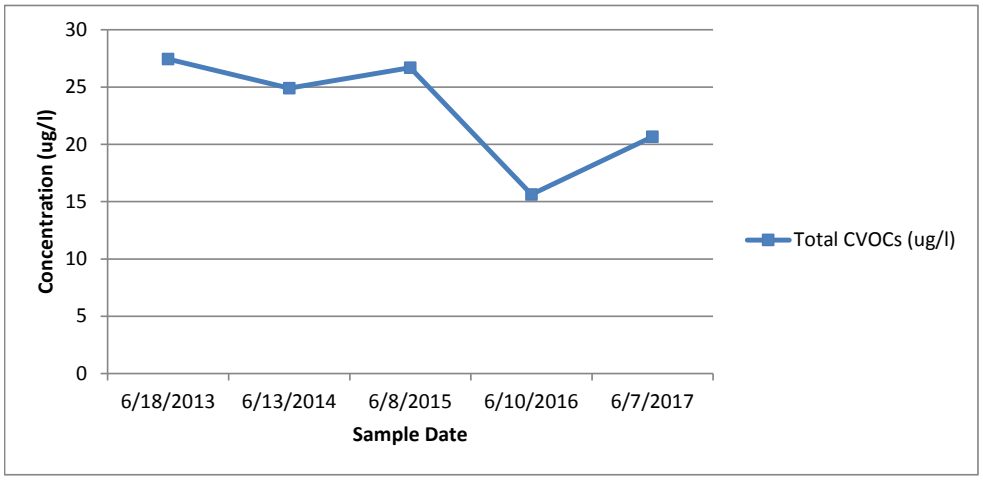


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.4	J	0.36	J		U	0.29	J
1,1-Dichloroethane	75-34-3	ug/l	0.62		0.73	J	0.75		0.34	J	0.53	
1,1-Dichloroethene	75-35-4	ug/l		U	0.2	J		U		UJ		UJ
Chloroform	67-66-3	ug/l		U	0.38	J	0.41	J		U		U
Chloromethane	74-87-3	ug/l		U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	0.82		0.9	J	0.82		0.29	J	0.57	J-
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.3	J	0.34	J		U	0.27	J
Trichloroethene (TCE)	79-01-6	ug/l	26		22	J	24		15		19	
Vinyl Chloride	75-01-4	ug/l		U		UJ		U		U		U
Total CVOCs		**ug/l**	**27.44**		**24.91**		**26.68**		**15.63**		**20.66**	

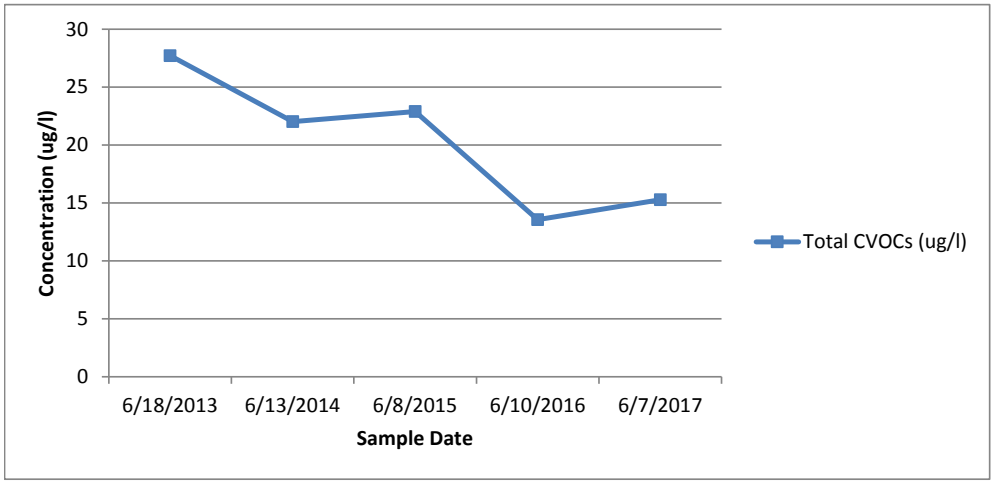


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.21	J	0.29	J		U	0.27	J
1,1-Dichloroethane	75-34-3	ug/l		U	0.48	J	0.63		0.3	J	0.59	
1,1-Dichloroethene	75-35-4	ug/l		U	0.14	J		U		U		U
Chloroform	67-66-3	ug/l		U	0.37	J		U		U		U
Chloromethane	74-87-3	ug/l		U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	0.72		0.67	J+	0.72		0.26	J	0.41	J
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.16	J	0.26	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l	27		20	J	21		13		14	
Vinyl Chloride	75-01-4	ug/l		U		UJ		U		U		U
Total CVOCs		**ug/l**	**27.72**		**22.03**		**22.9**		**13.56**		**15.27**	

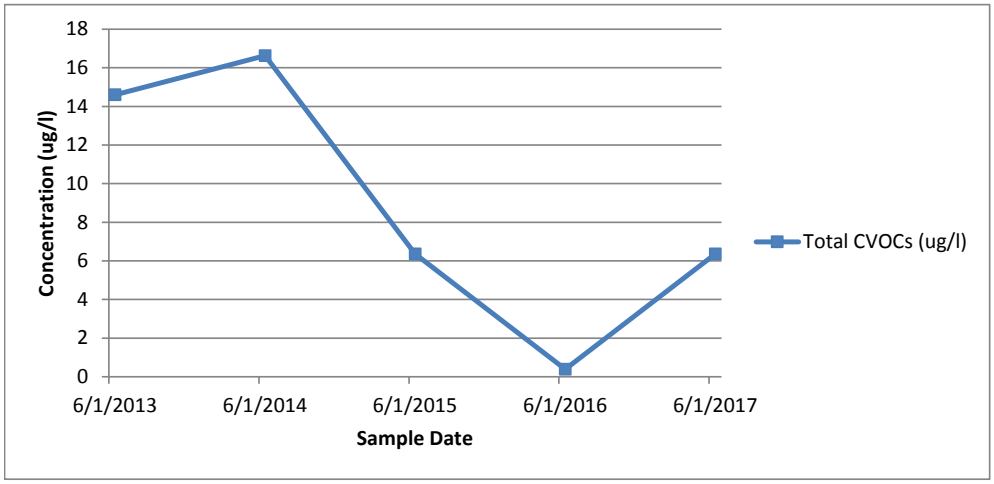


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.16	J	0.13	J		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		UJ		U
Chloroform	67-66-3	ug/l		U	0.49	J	0.53			U	0.56	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.28	J+		U		UJ		U
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.6		1.7		1.4		0.39	J	1.7	
Trichloroethene (TCE)	79-01-6	ug/l	14		14		4.3			U	4.1	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**14.6**		**16.63**		**6.36**		**0.39**		**6.36**	

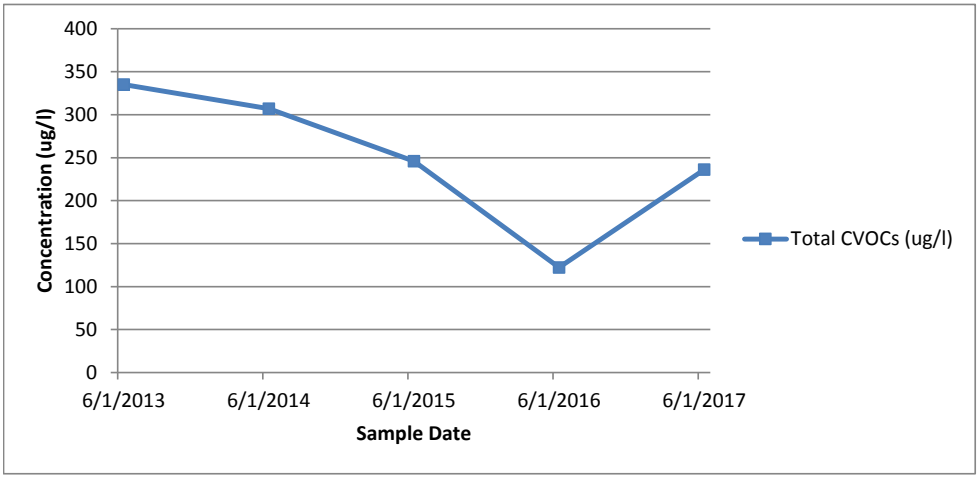


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.35	J	0.39	J		U	0.51	
1,1-Dichloroethane	75-34-3	ug/l	0.58		0.82		0.85		0.39	J	1.3	
1,1-Dichloroethene	75-35-4	ug/l		U	0.24	J+		U		U		U
Chloroform	67-66-3	ug/l		U	0.48	J	0.42	J		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	2.9		3.2	J+	2.4		0.93		2.3	
Tetrachloroethylene(PCE)	127-18-4	ug/l	1.6		1.9		1.9		0.96		2.1	
Trichloroethene (TCE)	79-01-6	ug/l	330		300		240		120	D	230	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**335.08**	**U**	**307**		**246**		**122.3**		**236.2**	

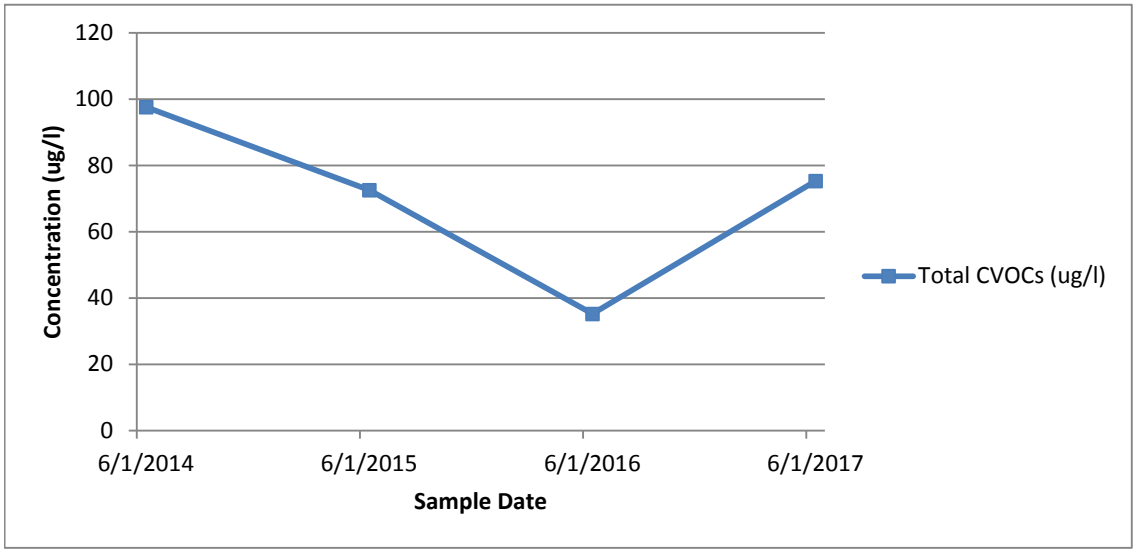


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

ERT-MW-2C

		Sample Date	6/16/2014		6/8/2015		6/8/2016		6/6/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.16	J	0.22	J		U	0.29	J
1,1-Dichloroethane	75-34-3	ug/l	0.33	J	0.47	J		U	0.49	J
1,1-Dichloroethene	75-35-4	ug/l	0.12	J+		U		UJ		U
Chloroform	67-66-3	ug/l	0.32	J	0.38	J		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	1.2	J+	0.9		0.25	J-	0.87	
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.48	J	0.59			U	0.66	
Trichloroethene (TCE)	79-01-6	ug/l	95		70		35	D	73	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U
Total CVOCs		**ug/l**	**97.61**		**72.56**		**35.25**		**75.31**	

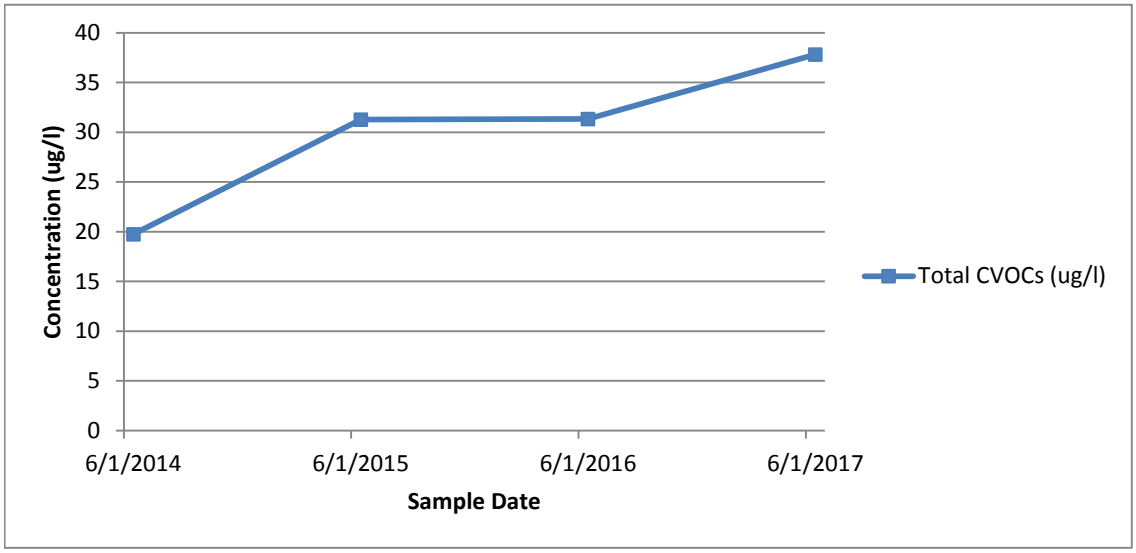


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

ERT-MW-2D

		Sample Date	6/16/2014		6/8/2015		6/8/2016		6/6/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.29	J	0.55		0.36	J	0.65	
1,1-Dichloroethane	75-34-3	ug/l	0.54		1.2		0.6		0.97	
1,1-Dichloroethene	75-35-4	ug/l	0.16	J+		U		UJ		U
Chloroform	67-66-3	ug/l	0.27	J	0.49	J		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	0.23	J+	0.46	J		UJ	0.47	J
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.27	J	0.57		0.37	J	0.74	
Trichloroethene (TCE)	79-01-6	ug/l	18		28		30	D	35	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U
Total CVOCs		**ug/l**	**19.76**		**31.27**		**31.33**		**37.83**	

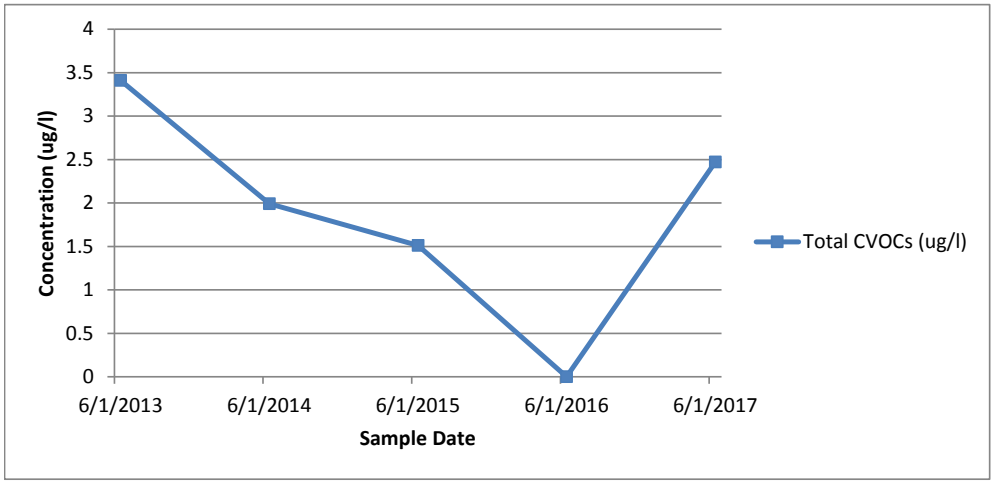


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

ERT-MW-3

		Sample Date	6/14/2013		6/11/2014		6/4/2015		6/16/2016		6/8/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.85		0.47	J	0.54	J		U	0.48	J
1,1-Dichloroethane	75-34-3	ug/l	0.86		0.46	J	0.51	J		U	0.58	
1,1-Dichloroethene	75-35-4	ug/l		U	0.2	J		U		U		UJ
Chloroform	67-66-3	ug/l	0.55		0.44	J		U		U	0.6	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		UJ
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.65		0.42	J	0.46	J		U	0.48	J
Trichloroethene (TCE)	79-01-6	ug/l	0.5			U		U		U	0.33	J
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**3.41**		**1.99**		**1.51**		0		2.47	

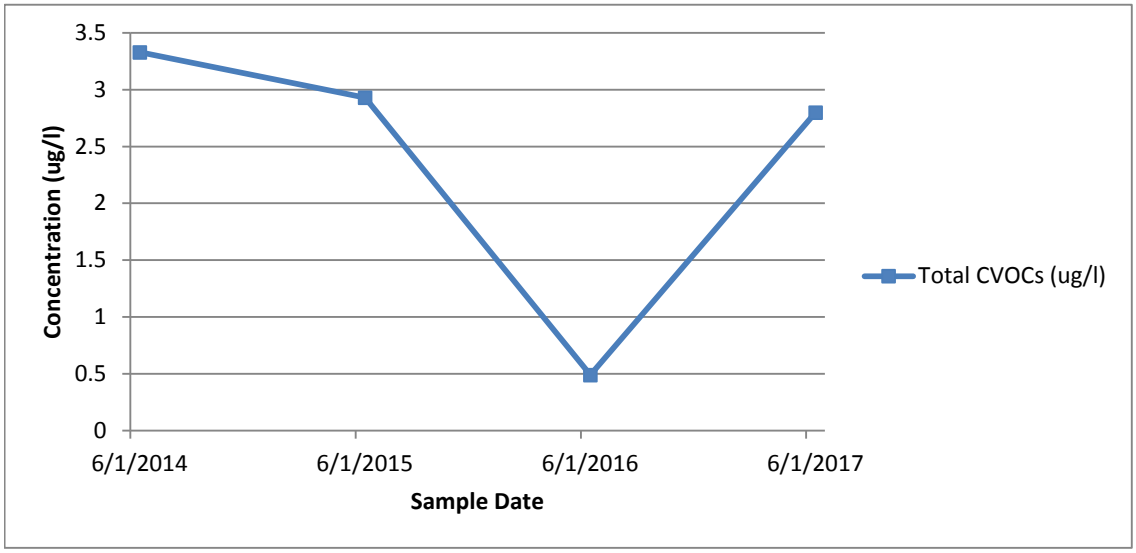


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

ERT-MW-4A

		Sample Date	6/17/2014		6/5/2015		6/9/2016		6/7/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.39	J	0.46	J		U	0.47	J
1,1-Dichloroethane	75-34-3	ug/l	0.63		0.73	J	0.49	J	0.64	
1,1-Dichloroethene	75-35-4	ug/l	0.21	J		U		U		U
Chloroform	67-66-3	ug/l	0.37	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	0.39	J	0.35	J		U	0.3	J
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.24	J	0.29	J		U	0.29	J
Trichloroethene (TCE)	79-01-6	ug/l	1.1		1.1	J		U	1.1	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U
Total CVOCs		**ug/l**	**3.33**		**2.93**		**0.49**		**2.8**	

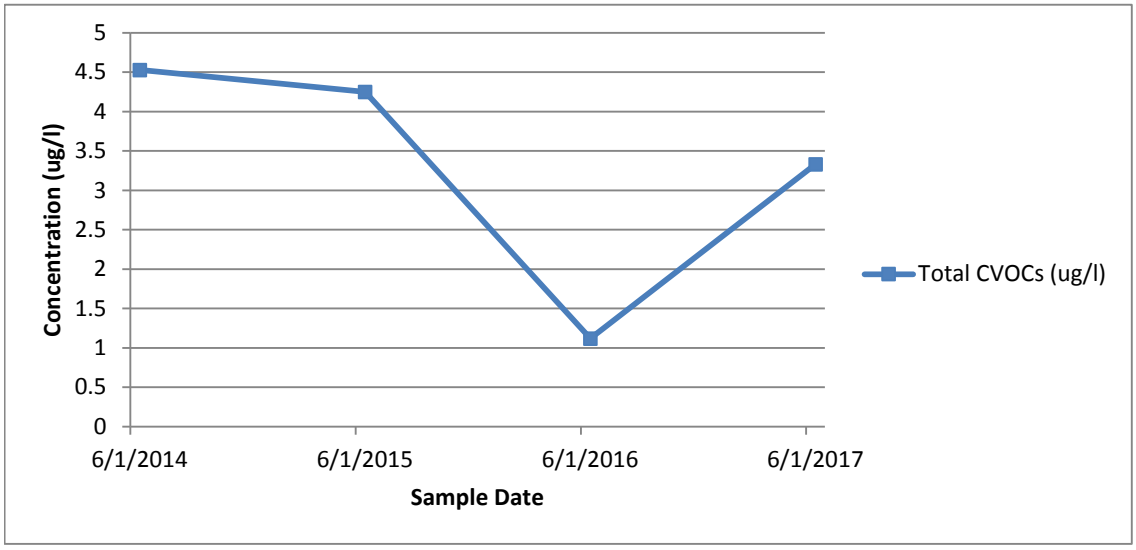


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

ERT-MW-4B

		Sample Date	6/17/2014		6/5/2015		6/9/2016		6/7/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.61		0.62	J	0.37	J	0.69	
1,1-Dichloroethane	75-34-3	ug/l	1		0.91	J	0.75		1.1	
1,1-Dichloroethene	75-35-4	ug/l	0.27	J	0.5	UJ		U		U
Chloroform	67-66-3	ug/l	0.47	J	0.37	J		U		U
Chloromethane	74-87-3	ug/l		U	0.5	UJ		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	0.53	J+	0.42	J		U	0.38	J
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.35	J	0.29	J		U	0.31	J
Trichloroethene (TCE)	79-01-6	ug/l	1.3		0.64	J		U	0.85	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U
Total CVOCs		**ug/l**	**4.53**		**4.25**		**1.12**		**3.33**	

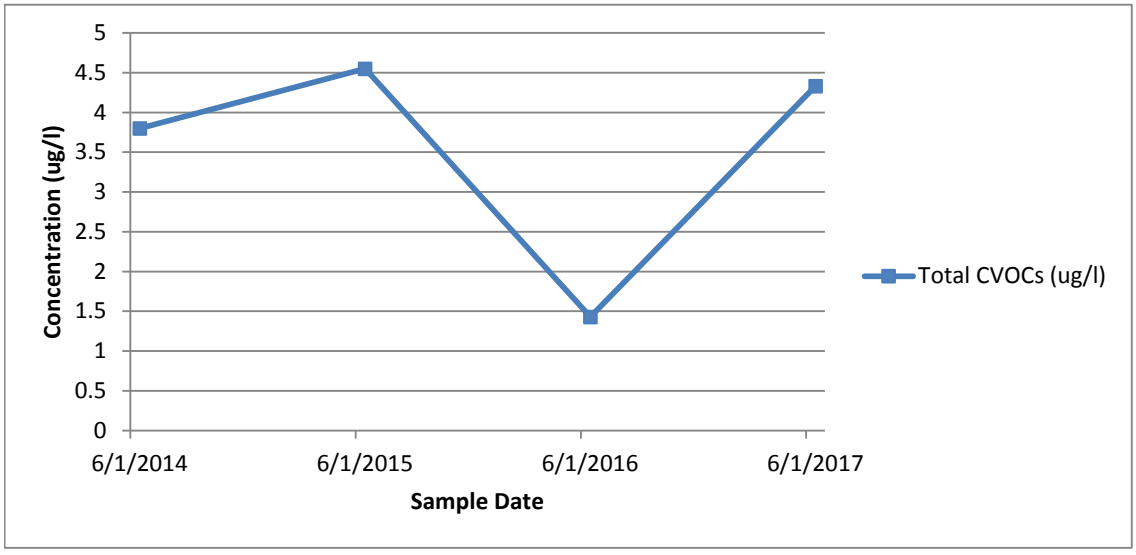


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

ERT-MW-5A

		Sample Date	6/17/2014		6/5/2015		6/9/2016		6/7/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.84		0.88	J	0.38	J	0.75	
1,1-Dichloroethane	75-34-3	ug/l	1.3		1.4	J	0.79		1.4	
1,1-Dichloroethene	75-35-4	ug/l	0.31	J+		U		U		U
Chloroform	67-66-3	ug/l	0.52		0.57	J		U	0.57	
Chloromethane	74-87-3	ug/l		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	0.53	J+	0.59	J	0.26	J	0.5	
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.3	J	0.38	J		U	0.38	J
Trichloroethene (TCE)	79-01-6	ug/l		U	0.73	J		U	0.73	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U
Total CVOCs		**ug/l**	**3.8**		**4.55**		**1.43**		**4.33**	

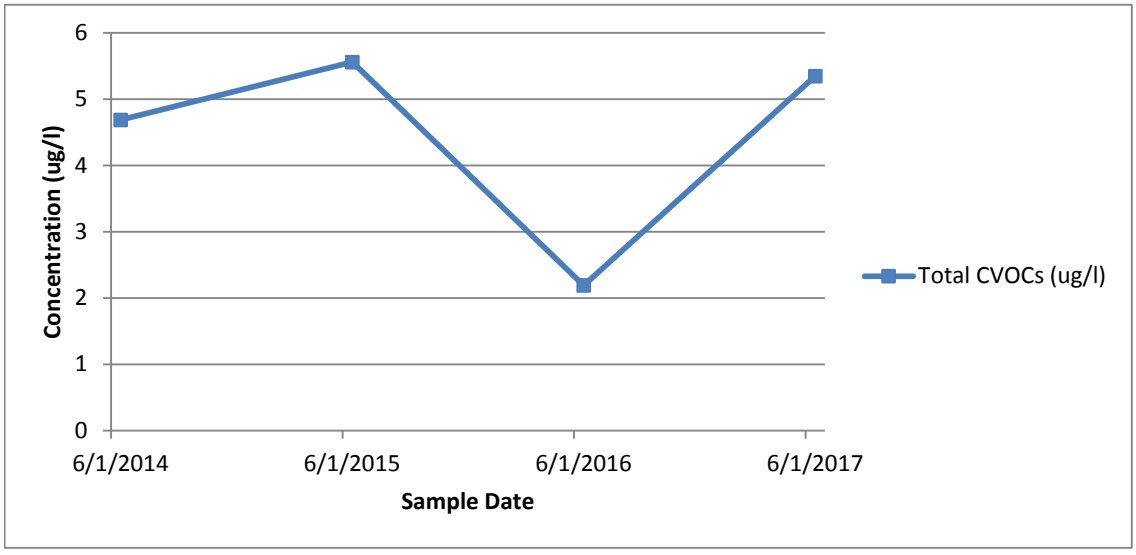


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

ERT-MW-5B

		Sample Date	6/17/2014		6/5/2015		6/9/2016		6/7/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	1.2		1.3	J	0.64		1.1	
1,1-Dichloroethane	75-34-3	ug/l	1.7		1.9	J	1.3		1.8	
1,1-Dichloroethene	75-35-4	ug/l	0.35	J+		U		UJ	0.45	J
Chloroform	67-66-3	ug/l	0.53		0.57	J		U	0.56	
Chloromethane	74-87-3	ug/l		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	0.55	J+	0.57	J	0.25	J	0.39	J
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.36	J	0.44	J		U	0.38	J
Trichloroethene (TCE)	79-01-6	ug/l		U	0.78	J		U	0.67	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U
Total CVOCs		**ug/l**	**4.69**		**5.56**		**2.19**		**5.35**	

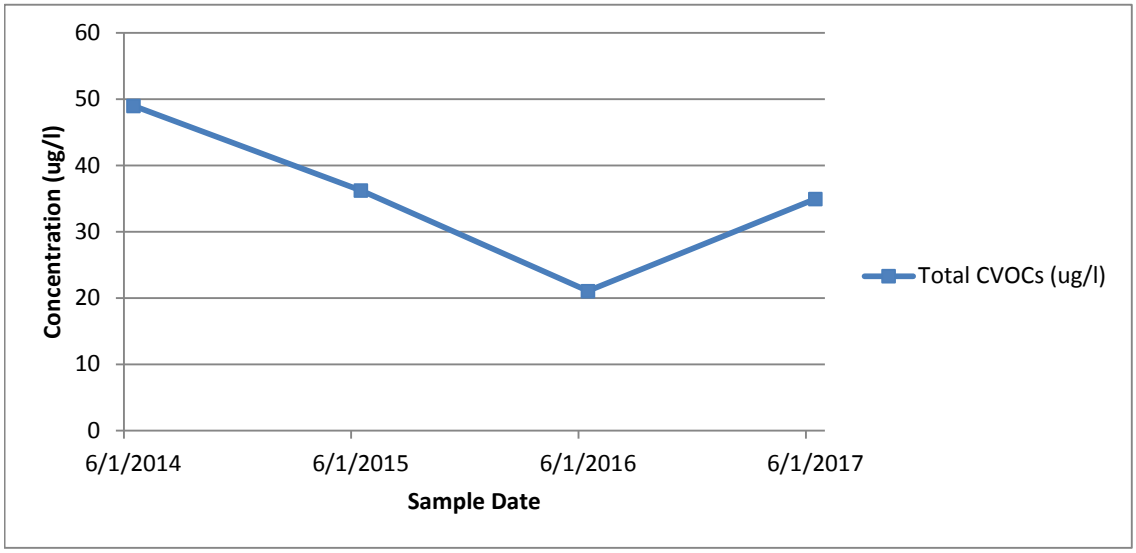


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

ERT-MW-6A

		Sample Date	6/18/2014		6/8/2015		6/7/2016		6/8/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.81		0.62			U	0.52	
1,1-Dichloroethane	75-34-3	ug/l	1.4		1.2		0.57		1.1	
1,1-Dichloroethene	75-35-4	ug/l	0.4	J		U		UJ		UJ
Chloroform	67-66-3	ug/l	0.51		0.48	J		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	1.2	J+	1.3		0.5	J-	0.89	J-
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.68		0.64			U	0.45	J
Trichloroethene (TCE)	79-01-6	ug/l	44		32		20	D	32	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U
Total CVOCs		**ug/l**	**49**		**36.24**		**21.07**		**34.96**	

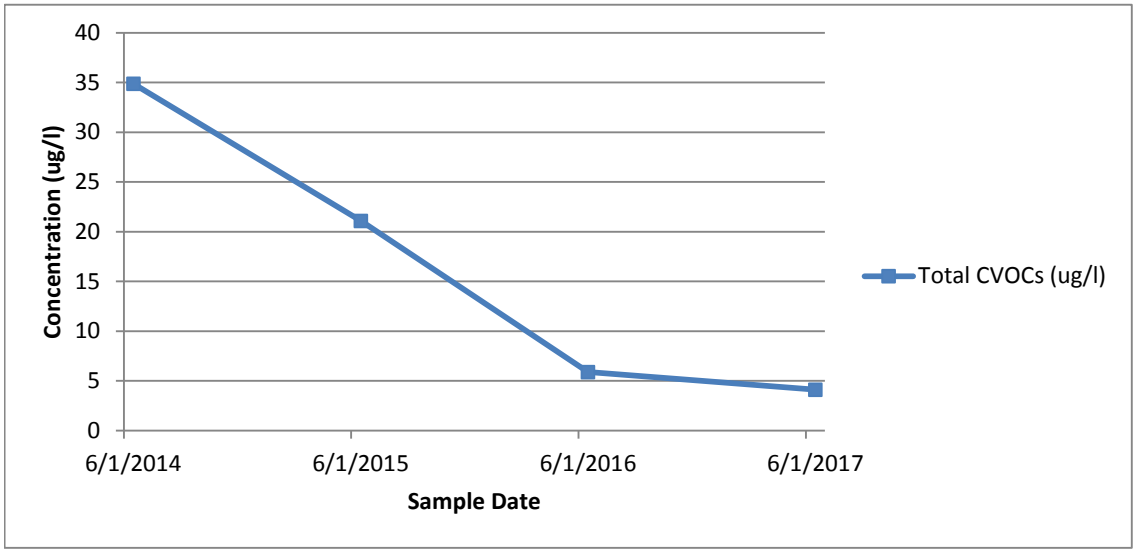


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

ERT-MW-6B

		Sample Date	6/18/2014		6/8/2015		6/7/2016		6/8/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.7		0.58			U	0.36	J
1,1-Dichloroethane	75-34-3	ug/l	1.1		1.1		0.49	J	0.66	
1,1-Dichloroethene	75-35-4	ug/l	0.32	J		U		UJ		U
Chloroform	67-66-3	ug/l	0.46	J	0.46	J		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	0.78	J+	0.58			UJ		U
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.52		0.37	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l	31		18		5.4		3.1	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U
Total CVOCs		**ug/l**	**34.88**		**21.09**		**5.89**		**4.12**	

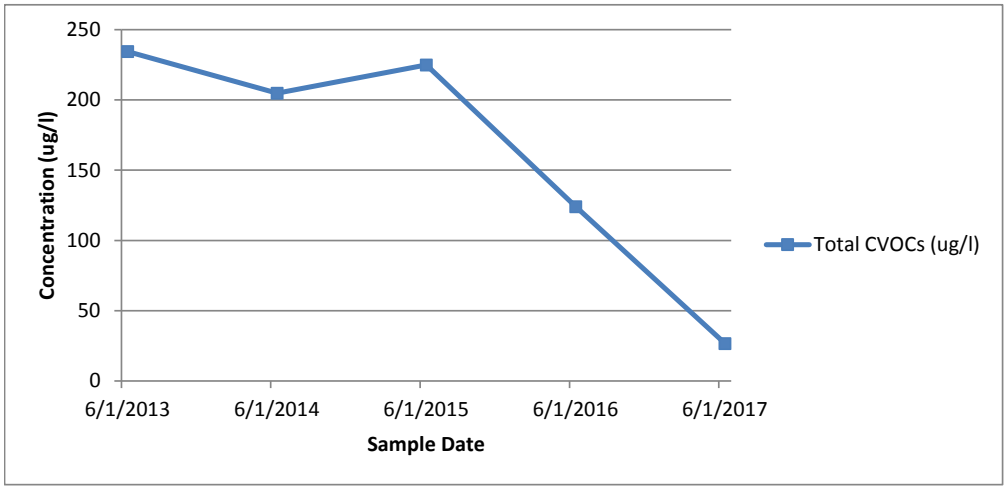


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

IW-ISCO-10

			Sample Date	6/17/2013		6/19/2014		6/9/2015		6/16/2016		6/14/2017	
CVOC	CAS RN	Units		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l			U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l			U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l			U		U		U		U		U
Chloroform	67-66-3	ug/l			U		U		U		U		U
Chloromethane	74-87-3	ug/l			U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l			U	0.25	J	0.33	J	0.32	J		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		4.4		4.5		4.5		3.7		0.72	
Trichloroethene (TCE)	79-01-6	ug/l		230		200		220		120	D	26	
Vinyl Chloride	75-01-4	ug/l			U		U		U		U		U
Total CVOCs		**ug/l**		**234.4**		**204.8**		**224.8**		**124**		**26.72**	

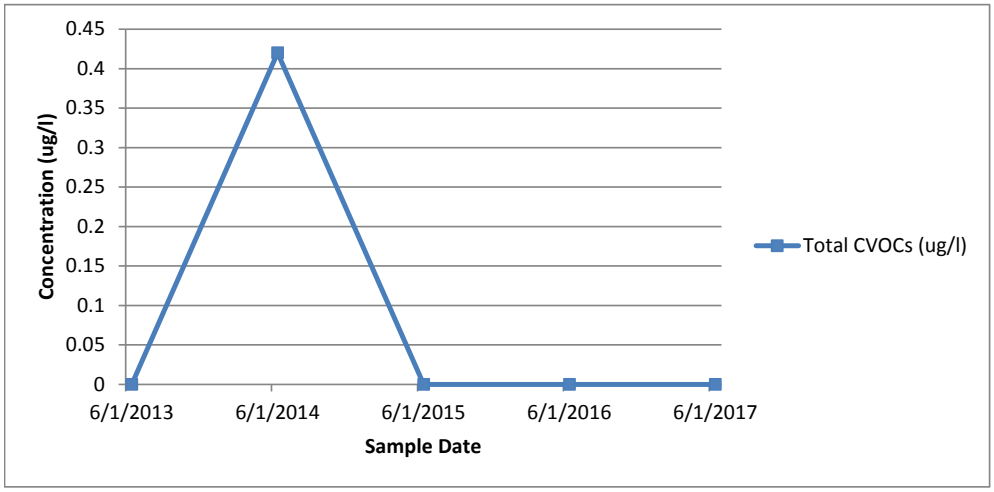


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-01-A

		Sample Date	6/12/2013		6/10/2014		6/1/2015		6/8/2016		6/9/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l		U	0.3	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.12	J		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l		U		U		U		U		U
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**0**		**0.42**		**0**		**0**		**0**	

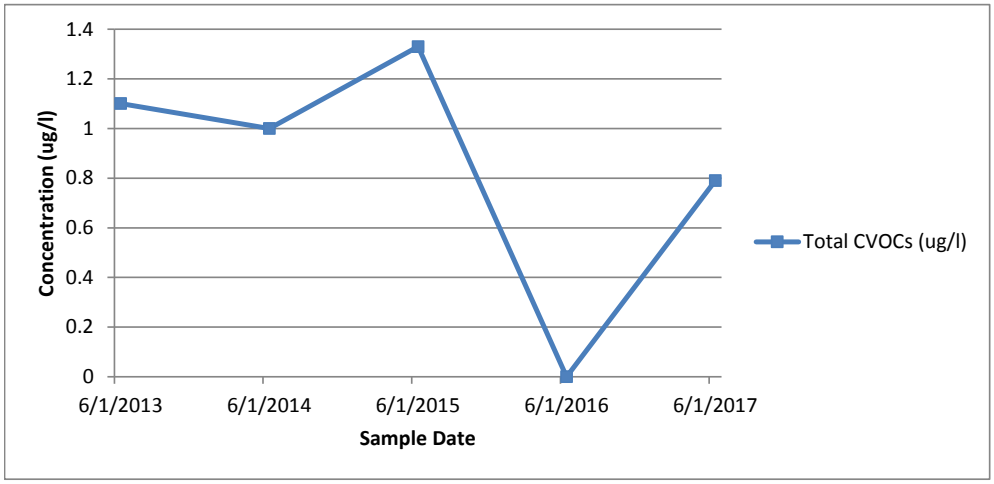


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		UJ		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l	1.1		0.82		1.1			U	0.79	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.18	J	0.23	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l		U		U		U		U		U
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**1.1**		**1**		**1.33**		**0**		**0.79**	

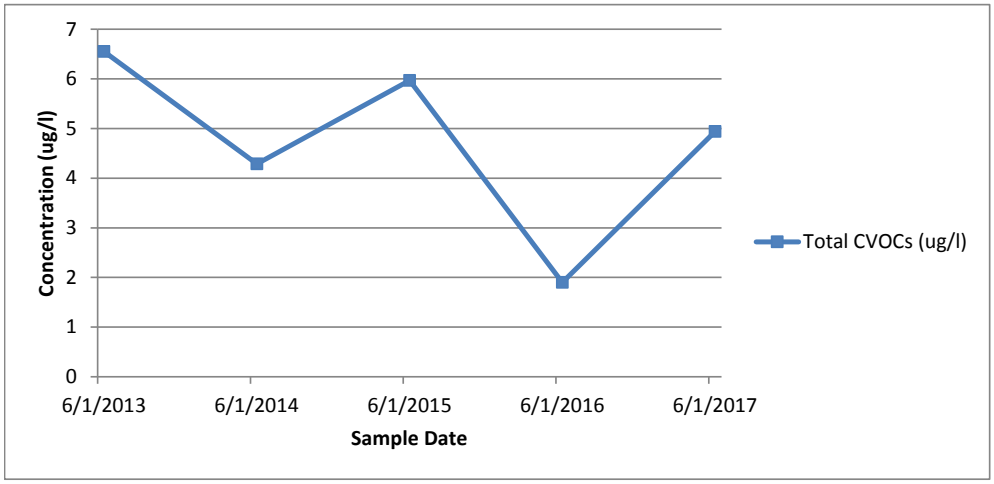


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-01-C

		Sample Date	6/12/2013		6/10/2014		6/2/2015		6/8/2016		6/12/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	1.5		1		1.1		0.5		0.87	
1,1-Dichloroethane	75-34-3	ug/l	3		2.2		2.8		1.4		2.4	
1,1-Dichloroethene	75-35-4	ug/l	0.63		0.4	J	0.62			U		U
Chloroform	67-66-3	ug/l	0.66		0.56		0.68			U	0.78	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.13	J	0.19	J		U	0.24	J
Trichloroethene (TCE)	79-01-6	ug/l	0.76			U	0.58			U	0.65	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**6.55**		**4.29**		**5.97**		**1.9**		**4.94**	

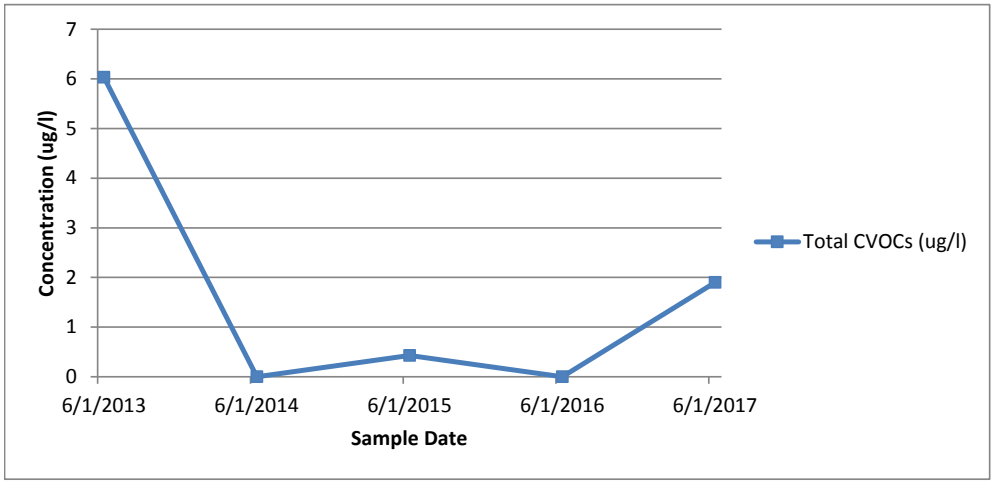


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.57			UJ		U		U		U
1,1-Dichloroethane	75-34-3	ug/l	0.79			UJ		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		UJ		U		U		U
Chloroform	67-66-3	ug/l	0.5			UJ		U		U		U
Chloromethane	74-87-3	ug/l		U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		UJ		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.57			UJ		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l	3.6			UJ	0.43	J		U	1.9	
Vinyl Chloride	75-01-4	ug/l		U		UJ		U		U		U
Total CVOCs		**ug/l**	**6.03**		**0**		**0.43**		**0**		**1.9**	

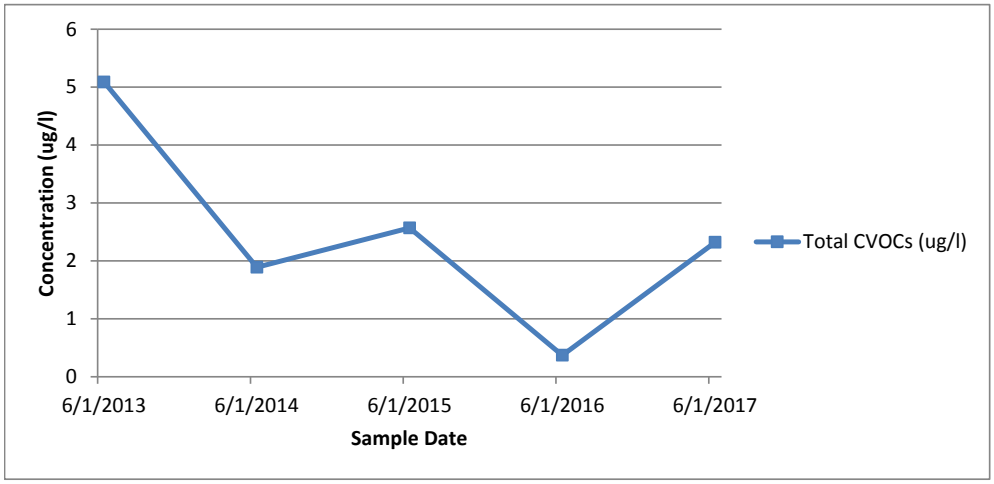


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.7		0.31	J	0.27	J		U	0.33	J
1,1-Dichloroethane	75-34-3	ug/l	0.99		0.37	J	0.34	J	0.37	J	0.62	
1,1-Dichloroethene	75-35-4	ug/l		U	0.17	J		U		U		U
Chloroform	67-66-3	ug/l	1.3		0.93	J	1			U	0.95	
Chloromethane	74-87-3	ug/l		U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		UJ		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.11	J	0.13	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l	2.1			UJ	0.83			U	0.42	J
Vinyl Chloride	75-01-4	ug/l		U		UJ		U		U		U
Total CVOCs		**ug/l**	**5.09**		**1.89**		**2.57**		**0.37**		**2.32**	

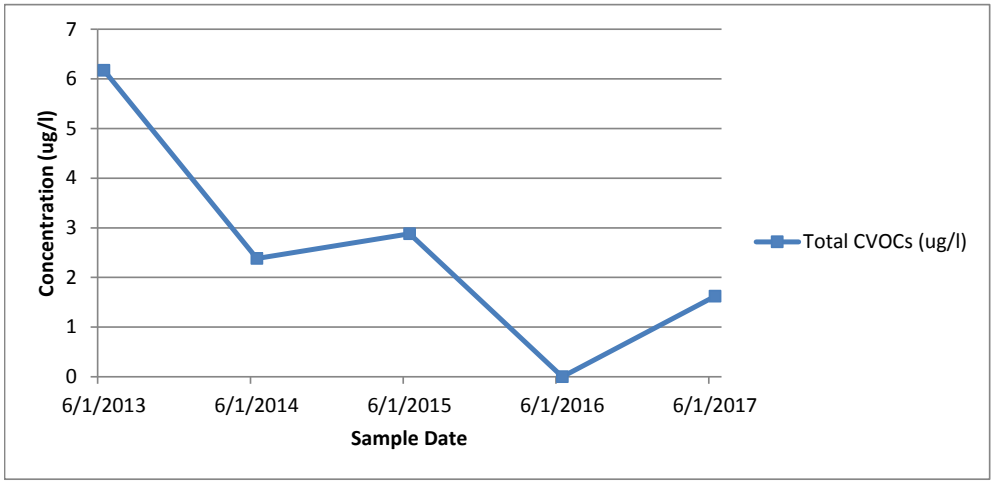


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-02-D

		Sample Date	6/11/2013		6/12/2014		6/5/2015		6/9/2016		6/14/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	1.3		0.35	J	0.38	J		U		U
1,1-Dichloroethane	75-34-3	ug/l	1.7		0.42	J	0.49	J		U	0.25	J
1,1-Dichloroethene	75-35-4	ug/l	0.57		0.22	J		U		U		U
Chloroform	67-66-3	ug/l	1.2		1.2	J	1.2			U	1.1	
Chloromethane	74-87-3	ug/l		U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		UJ		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.19	J	0.23	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l	1.4			UJ	0.58			U	0.27	J
Vinyl Chloride	75-01-4	ug/l		U		UJ		U		U		U
Total CVOCs		**ug/l**	**6.17**		**2.38**		**2.88**		**0**		**1.62**	

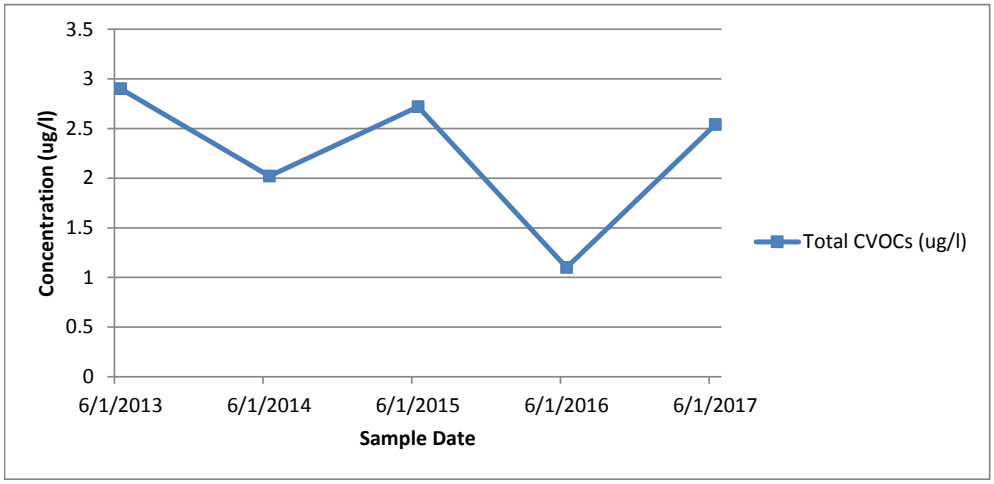


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l			U		UJ		U		U		U
1,1-Dichloroethane	75-34-3	ug/l			U		UJ		U		U		U
1,1-Dichloroethene	75-35-4	ug/l			U		UJ		U		U		U
Chloroform	67-66-3	ug/l			U		UJ		U		U		U
Chloromethane	74-87-3	ug/l			U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l			U		UJ		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l			U	0.22	J	0.32	J		U	0.34	J
Trichloroethene (TCE)	79-01-6	ug/l		2.9		1.8	J	2.4	J	1.1		2.2	
Vinyl Chloride	75-01-4	ug/l			U		UJ		U		U		U
Total CVOCs		**ug/l**		**2.9**		**2.02**		**2.72**		**1.1**		**2.54**	

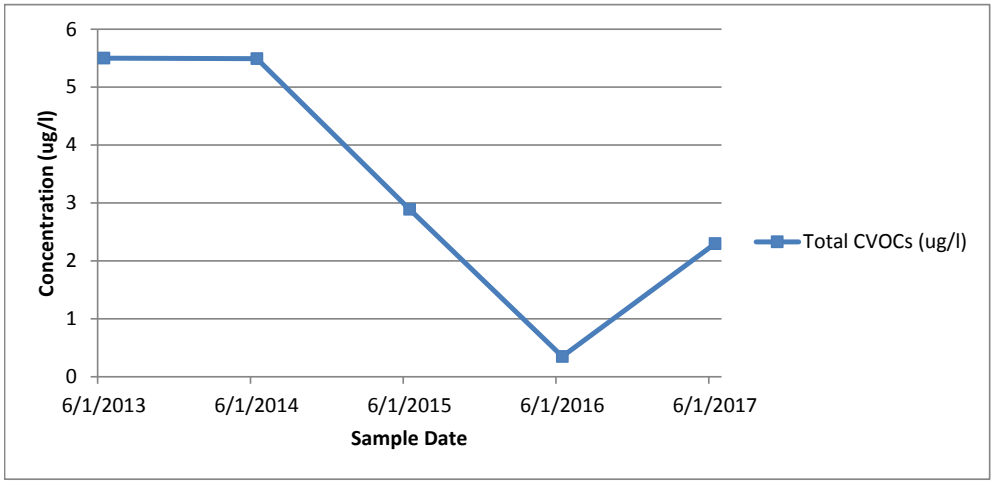


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.36	J	0.45	J		U	0.37	J
1,1-Dichloroethane	75-34-3	ug/l		U	0.5	J	0.65	J+	0.35	J	0.61	
1,1-Dichloroethene	75-35-4	ug/l		U	0.17	J		U		U		U
Chloroform	67-66-3	ug/l		U	0.38	J		U		U		U
Chloromethane	74-87-3	ug/l		U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		UJ		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.38	J	0.19	J		U	0.22	J
Trichloroethene (TCE)	79-01-6	ug/l	5.5		3.7	J	1.6			U	1.1	
Vinyl Chloride	75-01-4	ug/l		U		UJ		U		U		U
Total CVOCs		**ug/l**	**5.5**	**U**	**5.49**		**2.89**		**0.35**		**2.3**	

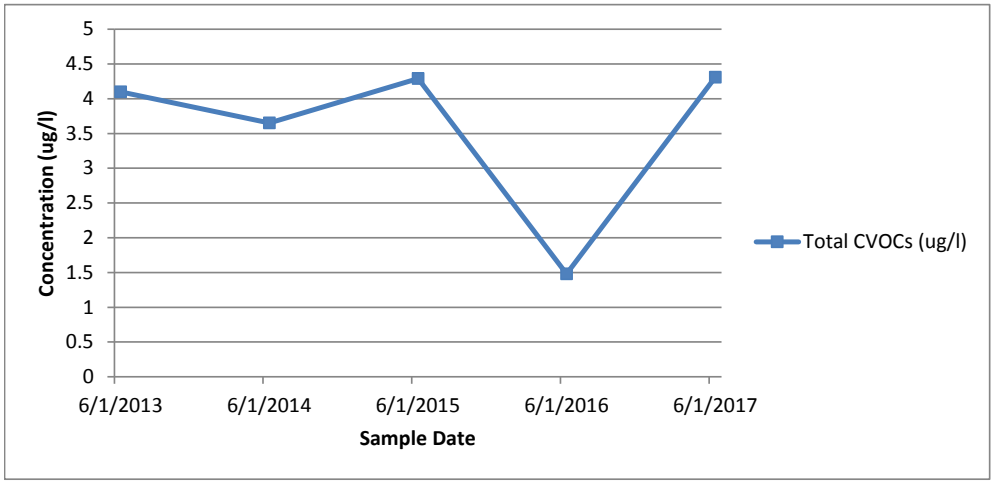


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- 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	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.2	J	0.32	J		U	0.32	J
1,1-Dichloroethane	75-34-3	ug/l	1.2		0.95	J	1		0.48	J	0.81	
1,1-Dichloroethene	75-35-4	ug/l		U		UJ		U		U		U
Chloroform	67-66-3	ug/l		U		UJ		U		U		U
Chloromethane	74-87-3	ug/l		U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.11	J		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.29	J	0.37	J		U	0.38	J
Trichloroethene (TCE)	79-01-6	ug/l	2.9		2.1	J	2.6		1		2.8	
Vinyl Chloride	75-01-4	ug/l		U		UJ		U		U		U
Total CVOCs		**ug/l**	**4.1**		**3.65**		**4.29**		**1.48**		**4.31**	

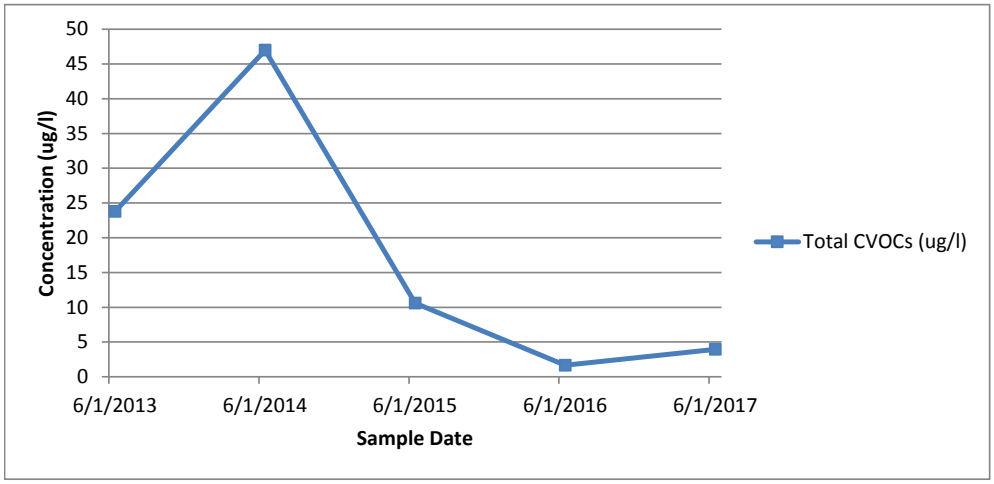


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-04-B

		Sample Date	6/14/2013		6/13/2014		6/4/2015		6/13/2016		6/8/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U	0.11	J		U	0.2	J
1,1-Dichloroethane	75-34-3	ug/l		U		U	0.16	J		U	0.28	J
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		UJ		UJ
Chloroform	67-66-3	ug/l		U	0.42	J	0.72	J	0.75		0.65	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.55	J+		U		UJ		UJ
Tetrachloroethylene(PCE)	127-18-4	ug/l	8.8		14		3.3	J	0.91		1.3	
Trichloroethene (TCE)	79-01-6	ug/l	15		32		6.3	J		U	1.5	J
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**23.8**		**46.97**		**10.59**		**1.66**		**3.93**	

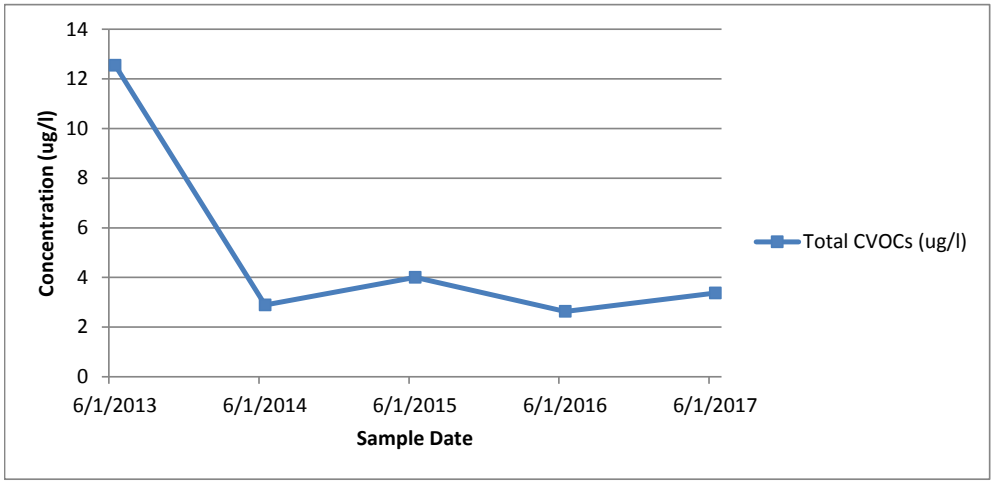


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-04-D

		Sample Date	6/14/2013		6/13/2014		6/4/2015		6/13/2016		6/9/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.6		0.91		0.84		0.57	
1,1-Dichloroethane	75-34-3	ug/l		U	0.9		1.3		1.2		0.99	
1,1-Dichloroethene	75-35-4	ug/l		U	0.27	J		U		UJ		U
Chloroform	67-66-3	ug/l	0.55		0.7		0.77			U	0.72	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		UJ		U
Tetrachloroethylene(PCE)	127-18-4	ug/l	2		0.42	J	0.56		0.59		0.59	
Trichloroethene (TCE)	79-01-6	ug/l	10			U	0.46	J		U	0.5	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**12.55**		**2.89**		**4**		**2.63**		**3.37**	

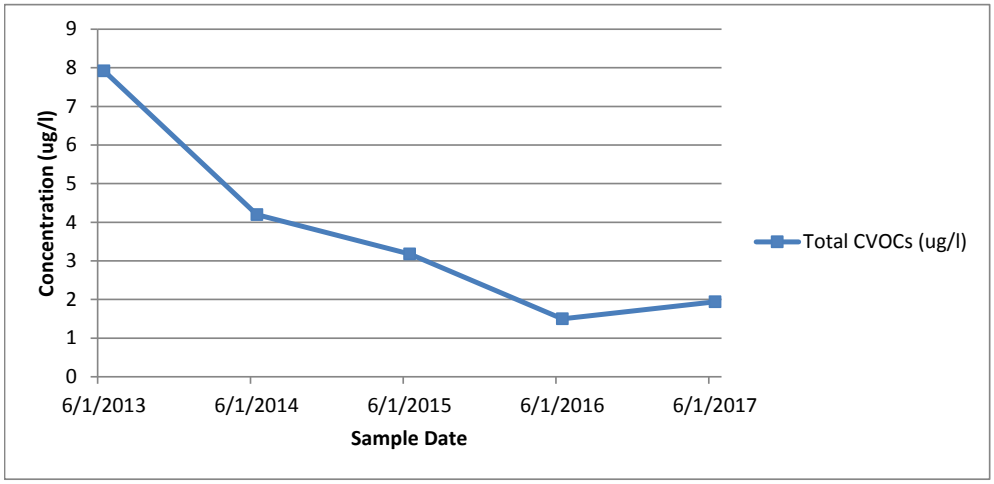


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-04-E

		Sample Date	6/14/2013		6/13/2014		6/9/2015		6/13/2016		6/9/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	2.2		0.91		0.73		0.39	J	0.26	J
1,1-Dichloroethane	75-34-3	ug/l	2.6		1.6		0.96		0.58		0.34	J
1,1-Dichloroethene	75-35-4	ug/l	0.74		0.52	J+		U		U		U
Chloroform	67-66-3	ug/l	0.8		0.76		0.65		0.53		0.68	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l	0.7		0.41	J	0.38	J		U	0.26	J
Trichloroethene (TCE)	79-01-6	ug/l	0.88			U	0.46	J		U	0.4	J
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**7.92**		**4.2**		**3.18**		**1.5**		**1.94**	

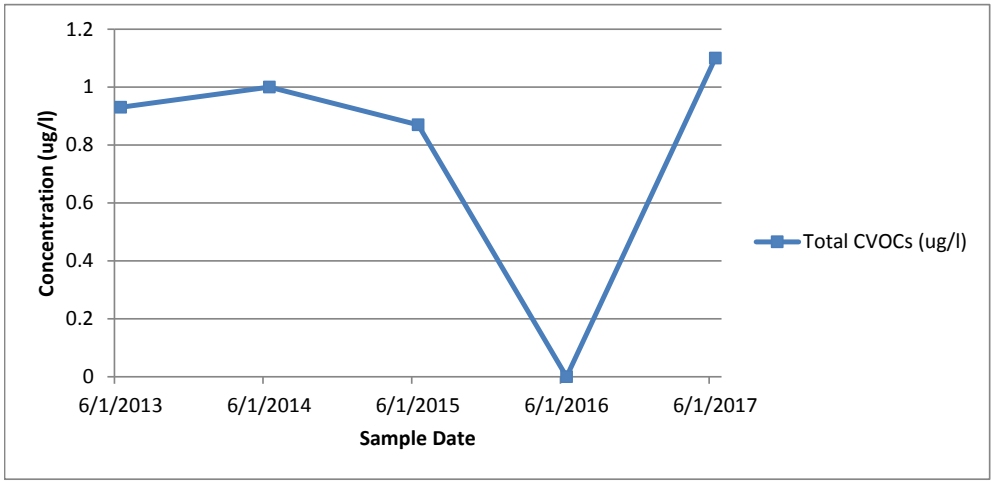


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-05-A

		Sample Date	6/13/2013		6/16/2014		6/8/2015		6/10/2016		6/7/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l	0.93		1		0.87	J		U	1.1	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U		U		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l		U		U		U		U		U
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**0.93**		**1**		**0.87**		**0**		**1.1**	

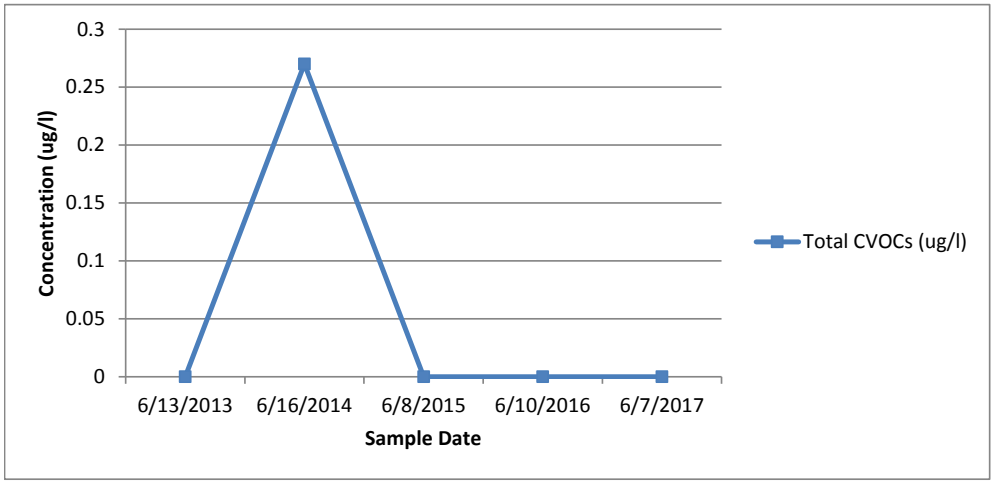


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-05-B

		Sample Date	6/13/2013		6/16/2014		6/8/2015		6/10/2016		6/7/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l		U	0.27	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U		U		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l		U		U		U		U		U
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**0**		**0.27**		**0**		**0**		**0**	

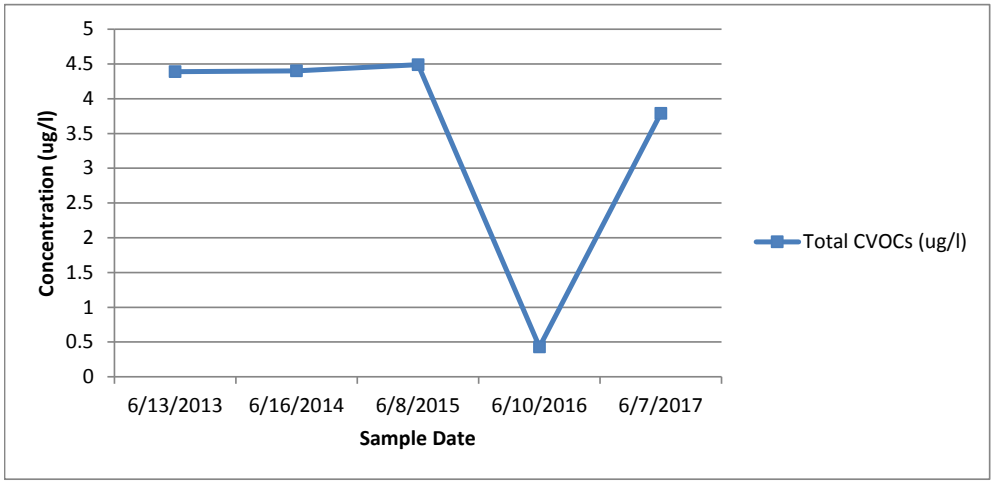


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-05-C

		Sample Date	6/13/2013		6/16/2014		6/8/2015		6/10/2016		6/7/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.69		0.64		0.71			U	0.51	
1,1-Dichloroethane	75-34-3	ug/l	0.7		0.66		0.77		0.43	J	0.64	
1,1-Dichloroethene	75-35-4	ug/l		U	0.19	J+		U		UJ		U
Chloroform	67-66-3	ug/l		U	0.44	J	0.48	J		U	0.56	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		UJ		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.27	J	0.33	J		U	0.48	J
Trichloroethene (TCE)	79-01-6	ug/l	3		2.2		1.7			U	1.60	
Vinyl Chloride	75-01-4	ug/l		U		U	0.5	UJ		U		U
Total CVOCs		**ug/l**	**4.39**		**4.4**		**4.49**		**0.43**		**3.79**	

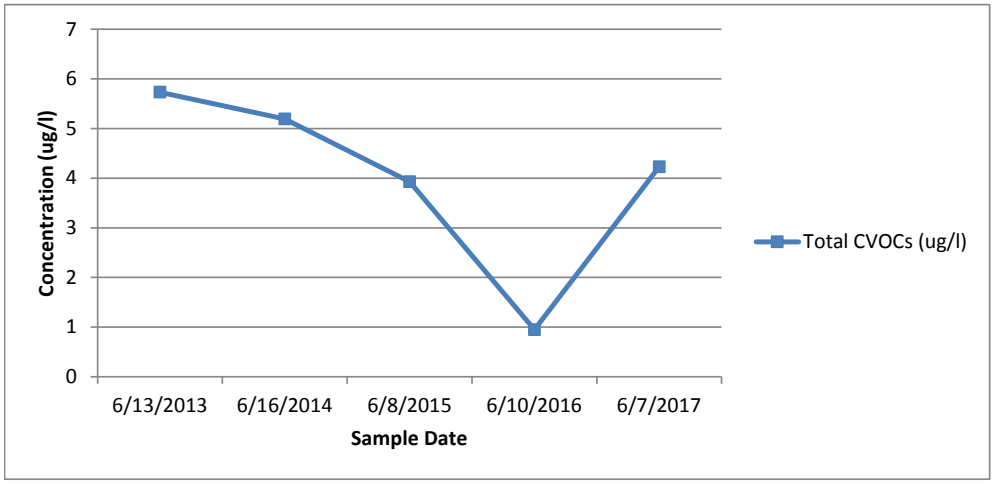


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-05-D

		Sample Date	6/13/2013		6/16/2014		6/8/2015		6/10/2016		6/7/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.78		0.71		0.65		0.41	J	0.73	
1,1-Dichloroethane	75-34-3	ug/l	0.85		0.89		0.76		0.54		0.94	
1,1-Dichloroethene	75-35-4	ug/l		U	0.23	J+		U		UJ		U
Chloroform	67-66-3	ug/l		U	0.36	J		U		U	0.56	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		UJ		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.3	J	0.32	J		U	0.40	J
Trichloroethene (TCE)	79-01-6	ug/l	4.1		2.7		2.2			U	1.60	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**5.73**		**5.19**		**3.93**		**0.95**		**4.23**	

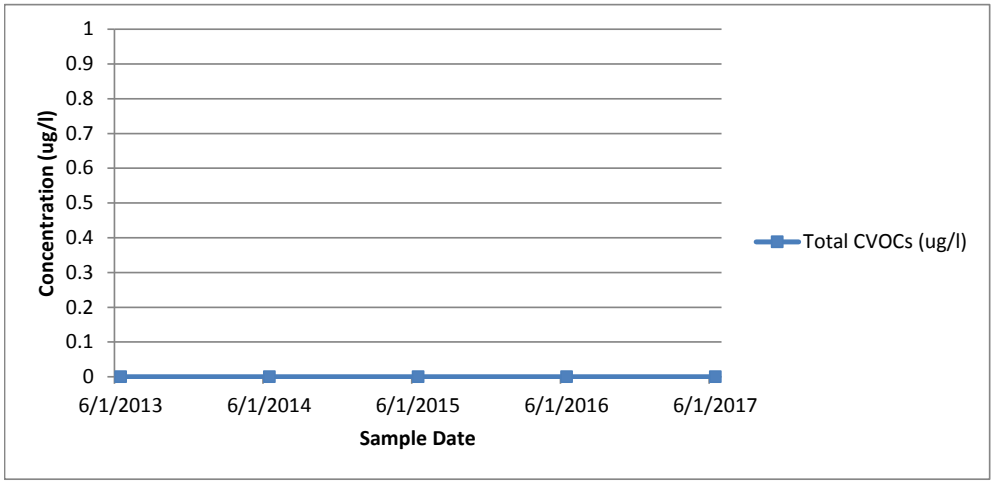


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-06-A

			Sample Date	6/17/2013		6/18/2014		6/8/2015		6/14/2016		6/7/2017	
CVOC	CAS RN	Units		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l			U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l			U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l			U		U		U		U		UJ
Chloroform	67-66-3	ug/l			U		U		U		U		U
Chloromethane	74-87-3	ug/l			U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l			U		U		U		U		UJ
Tetrachloroethylene(PCE)	127-18-4	ug/l			U		U		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l			U		U		U		U		U
Vinyl Chloride	75-01-4	ug/l			U		U		U		U		U
Total CVOCs		**ug/l**		**0**		**0**		**0**		**0**		**0**	

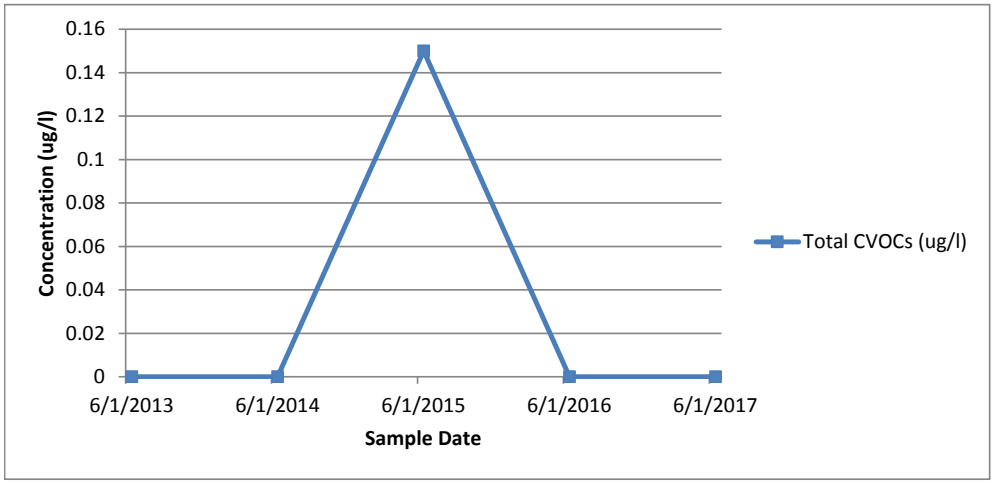


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-06-B

		Sample Date	6/17/2013		6/18/2014		6/8/2015		6/14/2016		6/7/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		UJ
Chloroform	67-66-3	ug/l		U		U		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		UJ
Tetrachloroethylene(PCE)	127-18-4	ug/l		U		U		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l		U		U	0.15	J		U		U
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**0**		**0**		**0.15**		**0**		**0**	

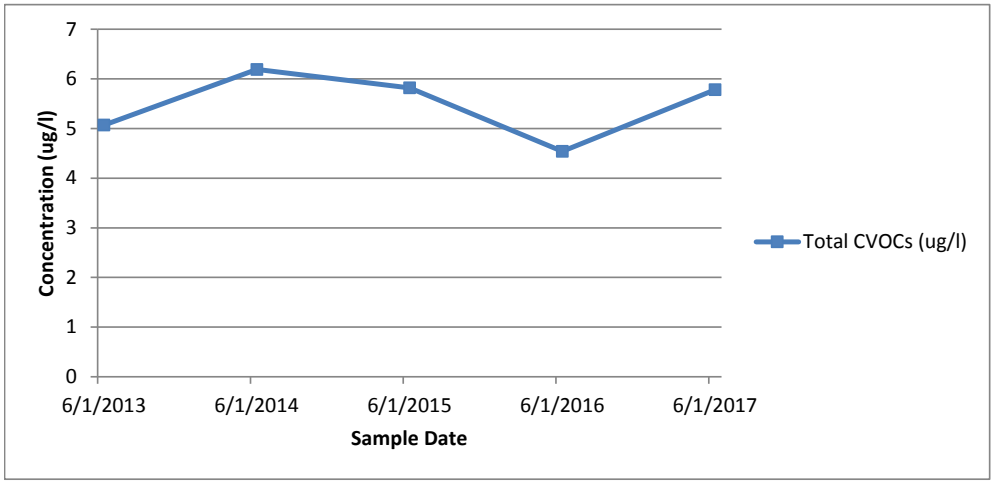


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-06-D

		Sample Date	6/17/2013		6/18/2014		6/8/2015		6/14/2016		6/7/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.4	J	0.47	J	0.4	J	0.57	
1,1-Dichloroethane	75-34-3	ug/l	0.77		0.8		1		0.84		1.2	
1,1-Dichloroethene	75-35-4	ug/l		U	0.25	J		U		U		U
Chloroform	67-66-3	ug/l		U	0.53		0.54			U	0.51	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.11	J		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U		U	0.11	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l	4.3		4.1		3.7		3.3		3.5	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**5.07**		**6.19**		**5.82**		**4.54**		**5.78**	

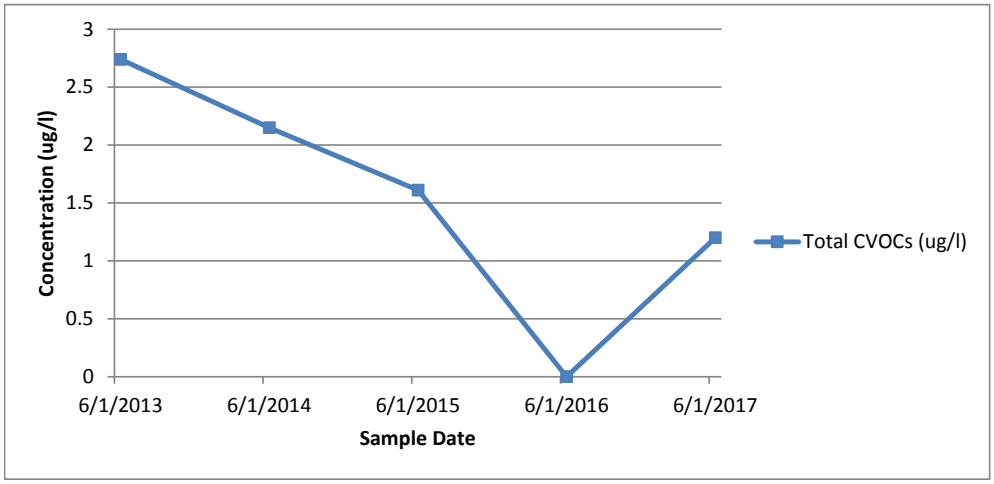


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-08-A

		Sample Date	6/12/2013		6/17/2014		6/9/2015		6/7/2016		6/6/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l	0.84		0.85		0.85			U	0.67	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U		U		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l	1.9		1.3		0.76			U	0.53	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**2.74**		**2.15**		**1.61**		**0**		**1.2**	

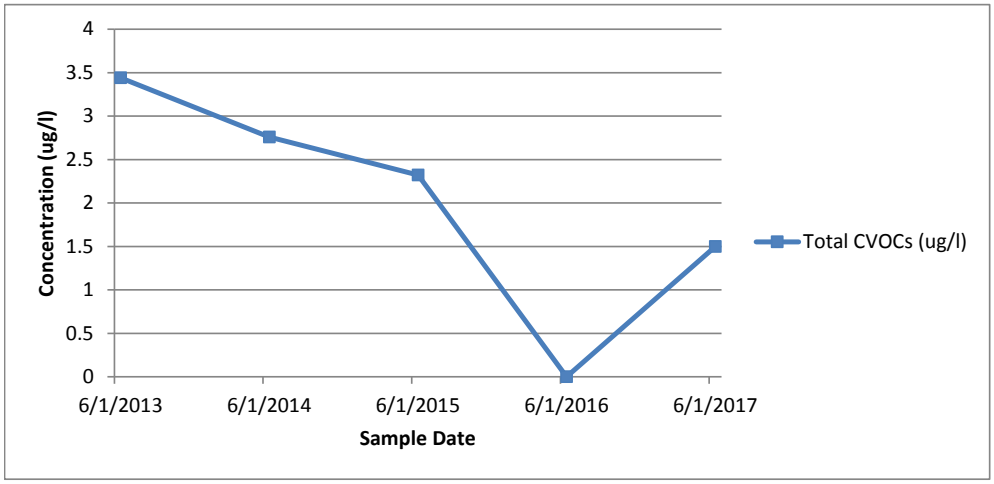


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-08-B

		Sample Date	6/12/2013		6/17/2014		6/9/2015		6/8/2016		6/6/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l	0.54		0.64		0.72			U	0.59	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.12	J	0.1	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l	2.9		2		1.5			U	0.91	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**3.44**		**2.76**		**2.32**		**0**	**U**	**1.5**	

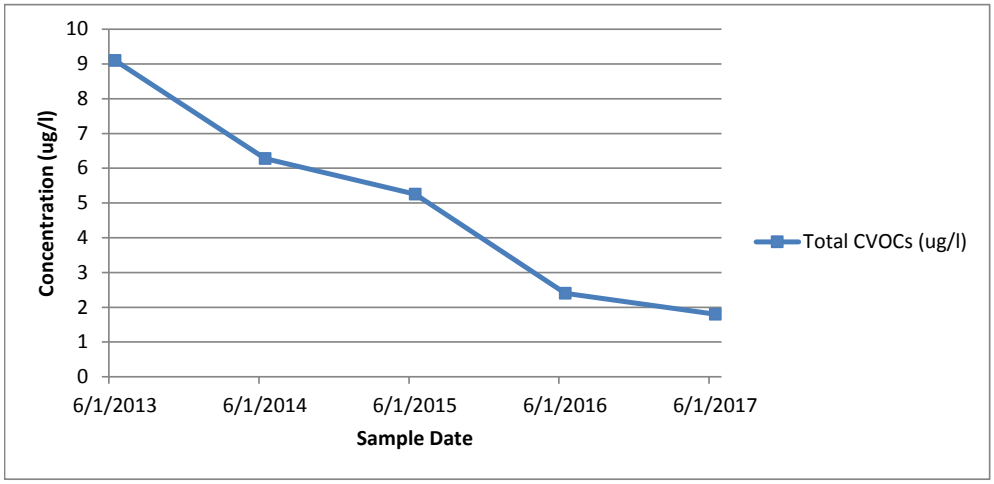


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-08-C

		Sample Date	6/12/2013		6/17/2014		6/9/2015		6/8/2016		6/6/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U	0.13	J	0.15	J		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		UJ
Chloroform	67-66-3	ug/l		U	0.44	J	0.4	J		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		UJ
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.11	J		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l	9.1		5.6		4.7		2.4		1.8	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**9.1**		**6.28**		**5.25**		**2.4**		**1.8**	

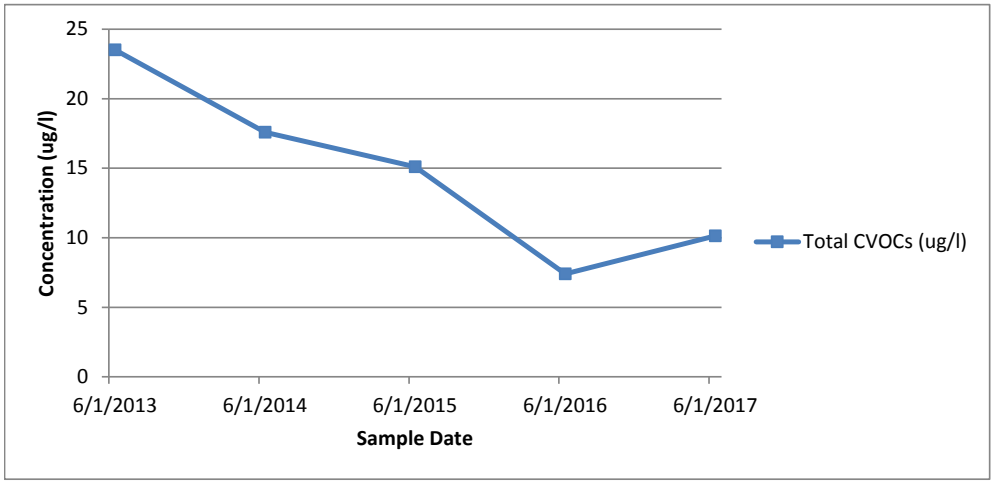


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-08-D

		Sample Date	6/12/2013		6/17/2014		6/9/2015		6/8/2016		6/6/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.21	J	0.2	J		U		U
1,1-Dichloroethane	75-34-3	ug/l		U	0.37	J	0.39	J		U	0.23	J
1,1-Dichloroethene	75-35-4	ug/l		U	0.15	J		U		UJ		U
Chloroform	67-66-3	ug/l		U	0.29	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	0.51		0.37	J	0.3	J		UJ		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.2	J	0.21	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l	23		16		14		7.4		9.9	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**23.51**	**U**	**17.59**		**15.1**		**7.4**		**10.13**	

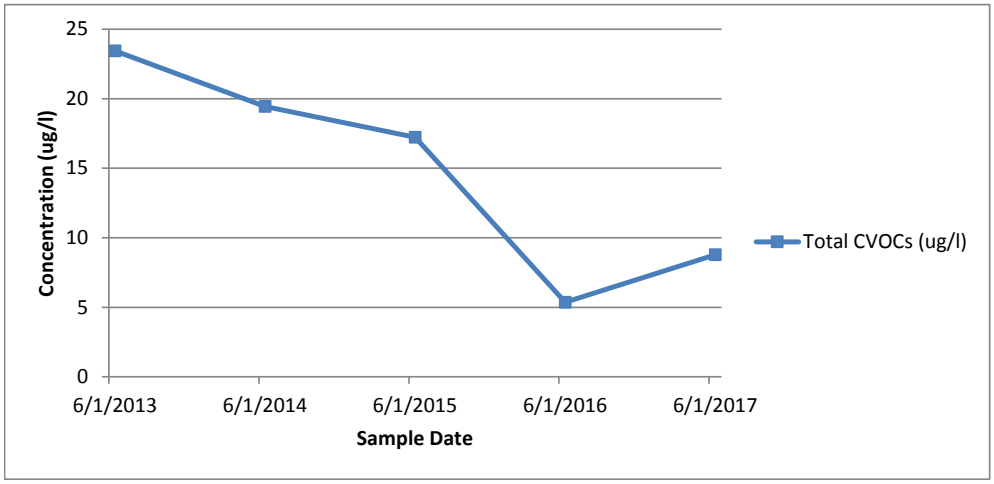


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-08-E

		Sample Date	6/12/2013		6/17/2014		6/9/2015		6/8/2016		6/6/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.59		0.42	J	0.41	J		U	0.36	J
1,1-Dichloroethane	75-34-3	ug/l	0.85		0.69		0.75		0.36	J	0.6	
1,1-Dichloroethene	75-35-4	ug/l		U	0.23	J		U		U		U
Chloroform	67-66-3	ug/l		U	0.4	J	0.39	J		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.46	J	0.46	J		U	0.21	J
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.25	J	0.21	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l	22		17		15		5		7.6	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**23.44**		**19.45**		**17.22**		**5.36**		**8.77**	

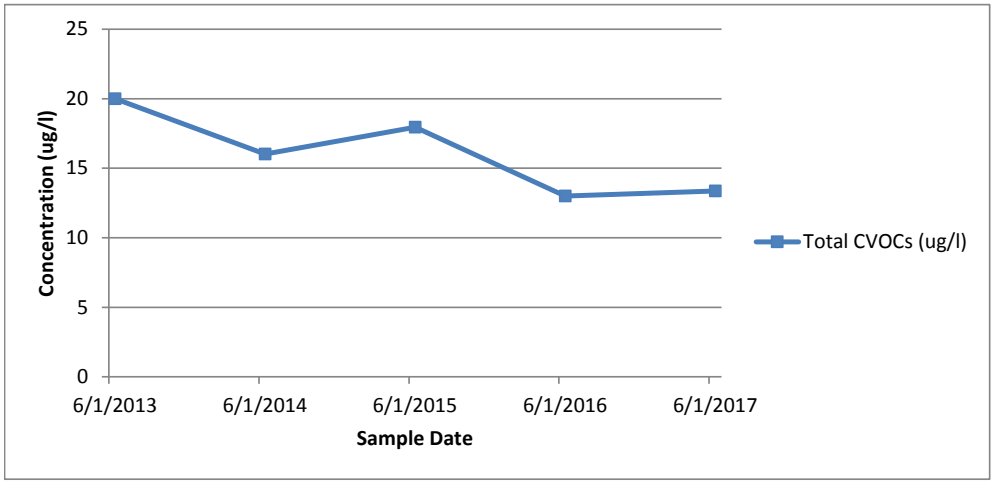


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-09-A

		Sample Date	6/13/2013		6/13/2014		6/4/2015		6/14/2016		6/13/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.13	J	0.17	J		U		U
1,1-Dichloroethane	75-34-3	ug/l		U	0.14	J	0.17	J		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l		U	0.2	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.22	J	0.24	J		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	0.33	J	0.37	J		U	0.37	J
Trichloroethene (TCE)	79-01-6	ug/l	20		15		17	J	13		13	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**20**		**16.02**		**17.95**		**13**		**13.37**	

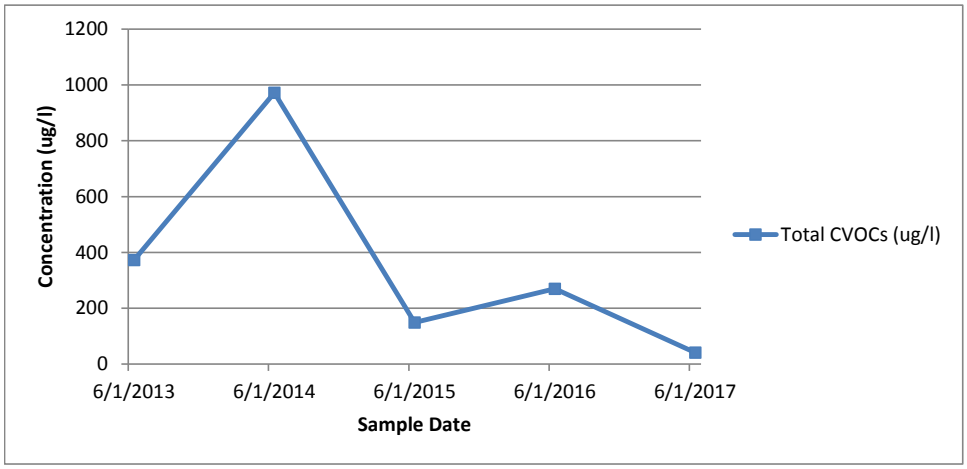


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-09-B

		Sample Date	6/13/2013		6/13/2014		6/4/2015		6/14/2016		6/13/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.88		0.77		0.13	J	0.73			U
1,1-Dichloroethane	75-34-3	ug/l	1.2		1.4		0.19	J	1.2			U
1,1-Dichloroethene	75-35-4	ug/l		U	0.56	J+		U	0.37	J		UJ
Chloroform	67-66-3	ug/l		U	0.42	J	1.3			U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	5.7		8.8	J+	1.3		2.9		0.25	J-
Tetrachloroethylene(PCE)	127-18-4	ug/l	5.5		10		5.7		4.8		2.8	
Trichloroethene (TCE)	79-01-6	ug/l	360		950		140		260	D	38	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**373.28**		**971.95**		**148.62**		**270**		**41.05**	

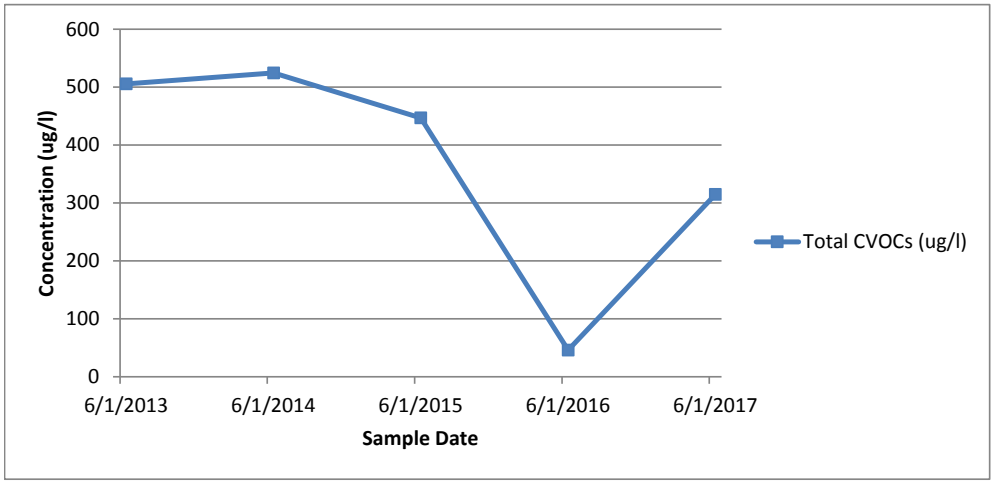


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-09-C

		Sample Date	6/13/2013		6/13/2014		6/4/2015		6/14/2016		6/13/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	1.5		1.4		1.2			U	0.84	
1,1-Dichloroethane	75-34-3	ug/l	2.8		2.7		1.8			U	1.5	
1,1-Dichloroethene	75-35-4	ug/l	0.71		0.66	J+		U		U	0.49	J
Chloroform	67-66-3	ug/l	0.54		0.59		0.94			U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	4.8		4.1	J+	4.9		0.5		3.9	
Tetrachloroethylene(PCE)	127-18-4	ug/l	5.4		5.1		8		2.6		8.2	
Trichloroethene (TCE)	79-01-6	ug/l	490		510		430		43	D	300	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**505.8**		**524.6**		**446.8**		**46.1**		**314.9**	

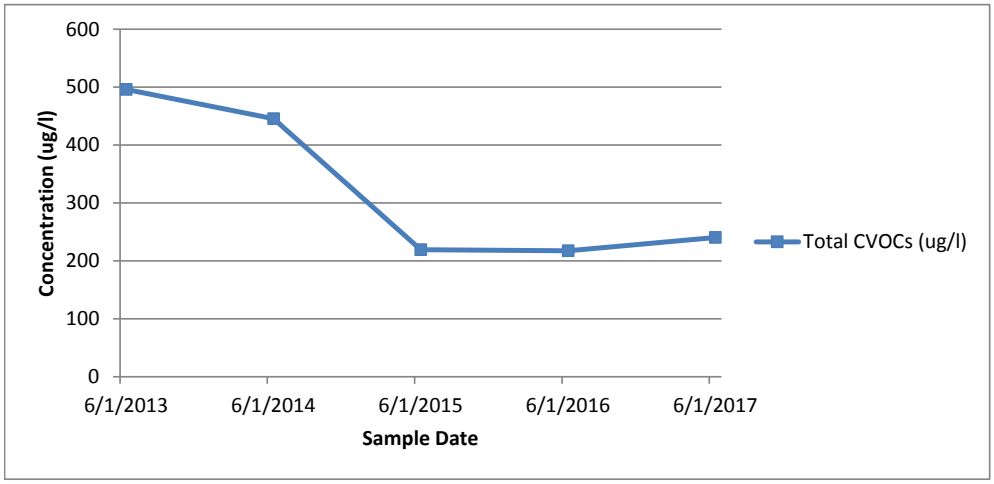


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-09-D

		Sample Date	6/13/2013		6/13/2014		6/4/2015		6/14/2016		6/13/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	1.2		1.2		0.95			U	0.5	
1,1-Dichloroethane	75-34-3	ug/l	2.1		2.1		1.3		0.88		1.3	
1,1-Dichloroethene	75-35-4	ug/l	0.6		0.69	J+		U		U		U
Chloroform	67-66-3	ug/l	0.53		0.5		1.1			U	0.59	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	6.9		5.8	J+	3.9		4.8		5.4	
Tetrachloroethylene(PCE)	127-18-4	ug/l	4.7		5.3		12		1.8		2.5	
Trichloroethene (TCE)	79-01-6	ug/l	480		430		200		210	D	230	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**496**		**445.6**		**219.3**		**217.5**		**240.3**	

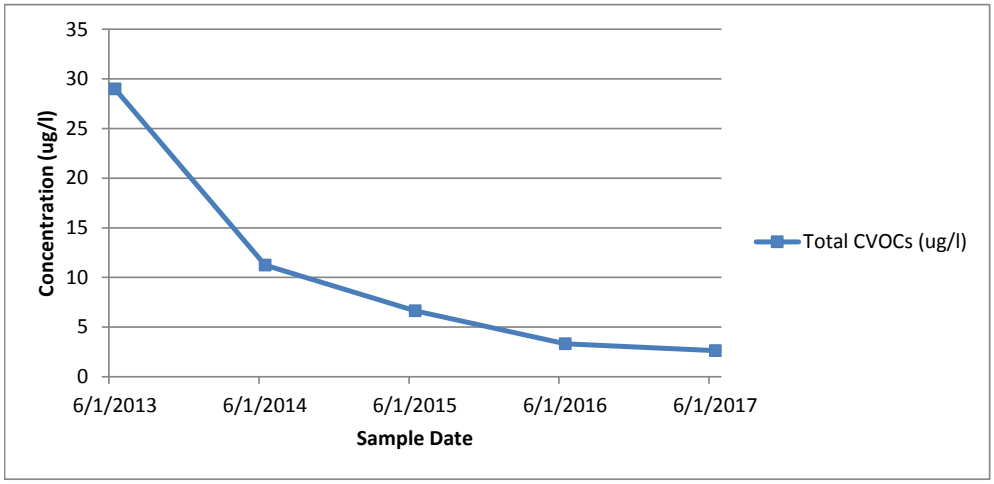


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-09-E

			Sample Date	6/13/2013		6/13/2014		6/4/2015		6/15/2016		6/13/2017	
CVOC	CAS RN	Units		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		1.2		0.78		0.72		0.37	J	0.38	J
1,1-Dichloroethane	75-34-3	ug/l		1.5		1.2		1.1		0.56		0.78	
1,1-Dichloroethene	75-35-4	ug/l			U	0.34	J		U		U		U
Chloroform	67-66-3	ug/l		0.55		0.5			U		U	0.53	
Chloromethane	74-87-3	ug/l			U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l			U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		0.73		0.41	J	0.31	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l		25		8		4.5		2.4		0.94	
Vinyl Chloride	75-01-4	ug/l			U		U		U		U		U
Total CVOCs		**ug/l**		**28.98**		**11.23**		**6.63**		**3.33**		**2.63**	

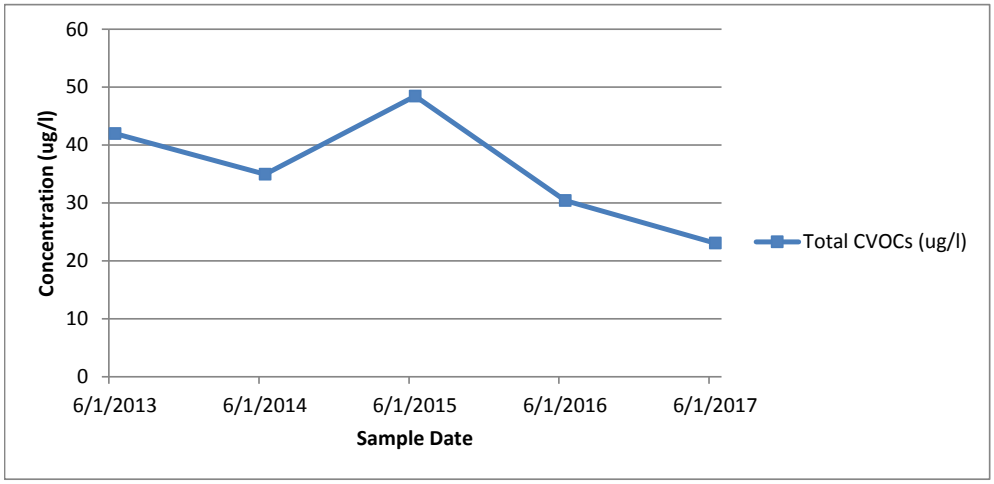


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-10-A

		Sample Date	6/11/2013		6/11/2014		6/3/2015		6/13/2016		6/8/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.14	J		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U	0.14	J		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		UJ		UJ
Chloroform	67-66-3	ug/l	0.5		0.38	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.29	J	0.45	J	0.4	J	0.26	J-
Tetrachloroethylene(PCE)	127-18-4	ug/l	7.5		8		16	J	10		7.8	
Trichloroethene (TCE)	79-01-6	ug/l	34		26		32	J	20	D	15	J
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**42**		**34.95**		**48.45**		**30.4**		**23.06**	

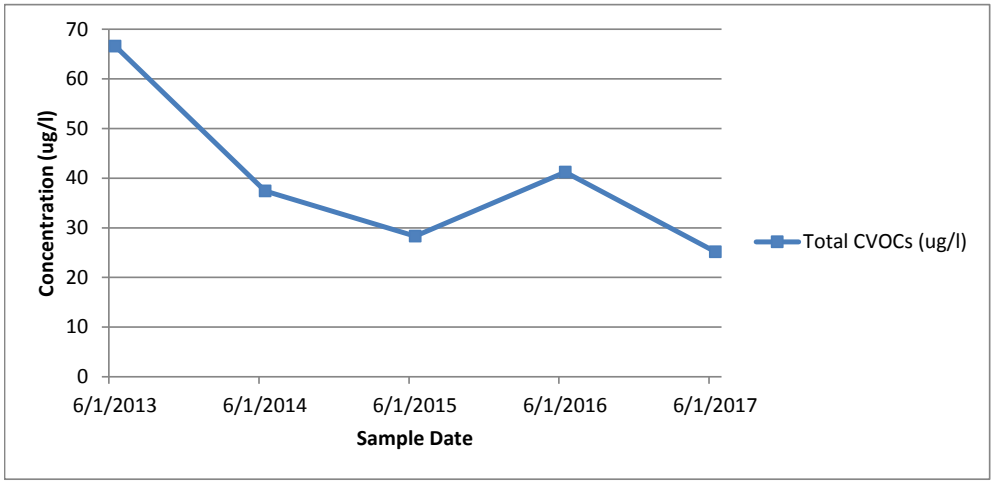


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-10-B

			Sample Date	6/11/2013		6/11/2014		6/3/2015		6/13/2016		6/8/2017	
CVOC	CAS RN	Units		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l			U	0.12	J		U		U		U
1,1-Dichloroethane	75-34-3	ug/l			U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l			U	0.1	J		U		U		UJ
Chloroform	67-66-3	ug/l			U	0.38	J	0.59			U	0.63	
Chloromethane	74-87-3	ug/l			U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		0.61		0.31	J	0.45	J	0.4	J	0.35	J-
Tetrachloroethylene(PCE)	127-18-4	ug/l		13		8.5		7.3		5.8		7.2	
Trichloroethene (TCE)	79-01-6	ug/l		53		28		20		35	D	17	J
Vinyl Chloride	75-01-4	ug/l			U		U		U		U		U
Total CVOCs		**ug/l**		**66.61**		**37.41**		**28.34**		**41.2**		**25.18**	

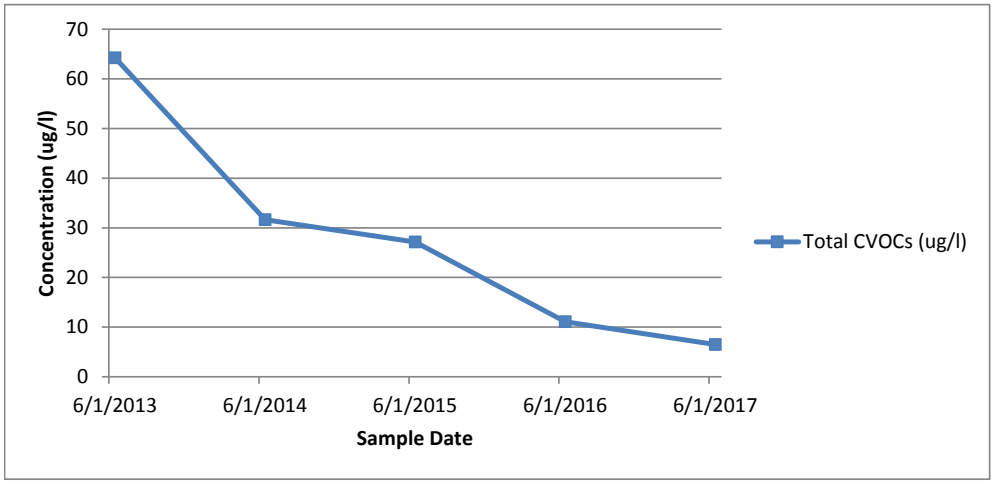


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-10-C

		Sample Date	6/11/2013		6/11/2014		6/3/2015		6/13/2016		6/8/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	0.31	J	0.28	J		U	0.52	
1,1-Dichloroethane	75-34-3	ug/l		U	0.32	J	0.3	J	0.41	J	0.93	
1,1-Dichloroethene	75-35-4	ug/l		U	0.17	J		U		U		UJ
Chloroform	67-66-3	ug/l	0.5		0.41	J	0.51			U	0.74	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	0.73		0.31	J	0.35	J		U		UJ
Tetrachloroethylene(PCE)	127-18-4	ug/l	12		6.1		3.7		1.7		1.1	
Trichloroethene (TCE)	79-01-6	ug/l	51		24		22		9		3.2	J
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**64.23**		**31.62**		**27.14**		**11.11**		**6.49**	

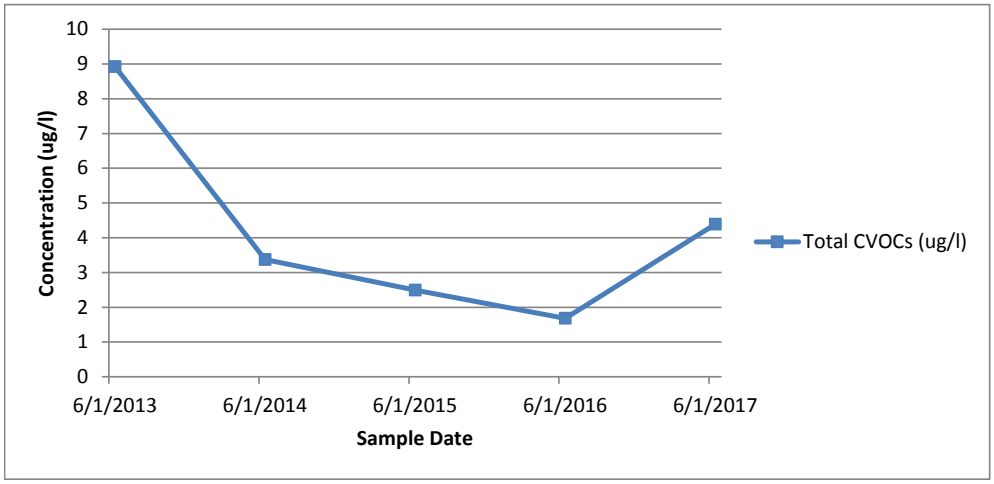


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MPW-10-D

		Sample Date	6/11/2013		6/11/2014		6/3/2015		6/14/2016		6/8/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	1		0.53		0.41	J		U	0.24	J
1,1-Dichloroethane	75-34-3	ug/l	1.2		0.62		0.42	J		U	0.21	J
1,1-Dichloroethene	75-35-4	ug/l		U	0.28	J		U		U		UJ
Chloroform	67-66-3	ug/l	0.62		0.54		0.68			U	0.64	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		UJ
Tetrachloroethylene(PCE)	127-18-4	ug/l	3.7		1.4		0.98		0.88		2	
Trichloroethene (TCE)	79-01-6	ug/l	2.4			U			0.8		1.3	J
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**8.92**		**3.37**		**2.49**		**1.68**		**4.39**	

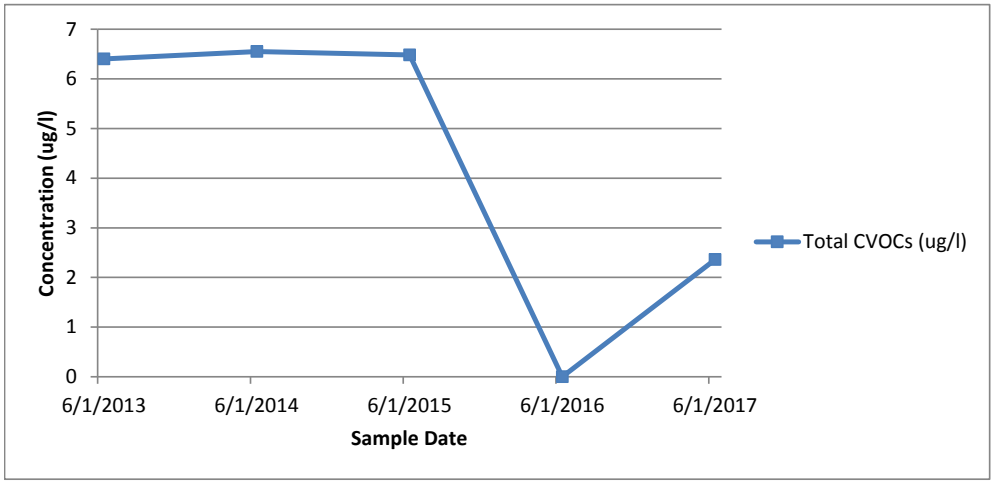


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-05

			Sample Date	6/20/2013		6/18/2014		6/3/2015		6/16/2016		6/13/2017	
CVOC	CAS RN	Units		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l			U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l			U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l			U		U		U		UJ		U
Chloroform	67-66-3	ug/l			U	0.25	J	0.91	J		U	1.4	
Chloromethane	74-87-3	ug/l			U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l			U		U		U		UJ		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		0.5		0.5		0.47	J		U		U
Trichloroethene (TCE)	79-01-6	ug/l		5.9		5.8		5.1	J		U	0.96	
Vinyl Chloride	75-01-4	ug/l			U		U		U		U		U
Total CVOCs		**ug/l**		**6.4**		**6.55**		**6.48**		**0**		**2.36**	

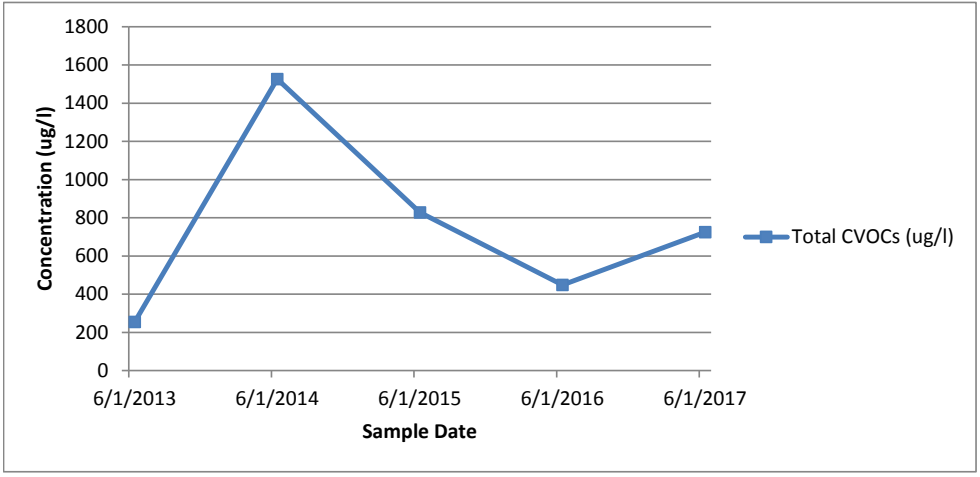


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-ISCO-02

		Sample Date	6/19/2013		6/18/2014		6/3/2015		6/15/2016		6/15/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		UJ
Chloroform	67-66-3	ug/l		U		U		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	1.3	J+		U	0.49	J	0.74	J-
Tetrachloroethylene(PCE)	127-18-4	ug/l	4.4		25		17		8.3		14	
Trichloroethene (TCE)	79-01-6	ug/l	250		1500		810		440	D	710	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**254.4**		**1526.3**		**827**		**448.8**		**724.7**	

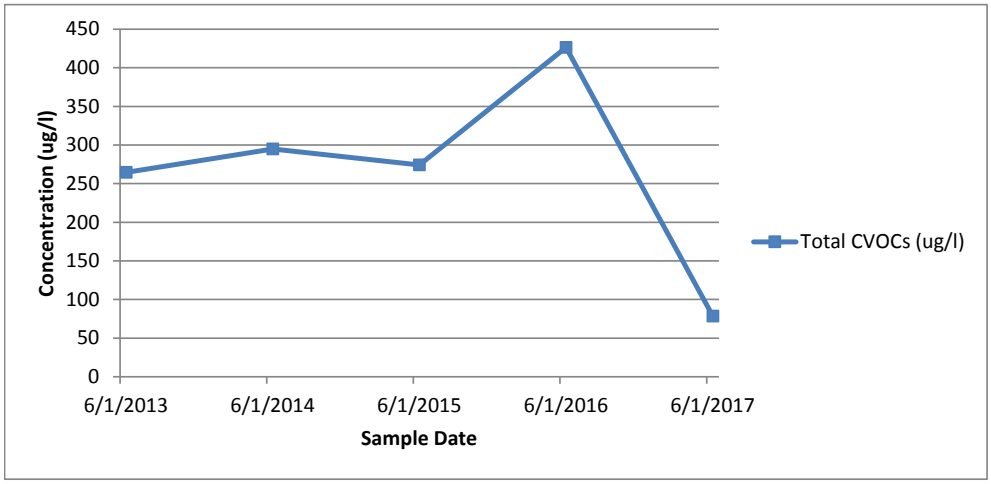


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-ISCO-05

		Sample Date	6/18/2013		6/17/2014		6/9/2015		6/15/2016		6/15/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		UJ
Chloroform	67-66-3	ug/l		U		U		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.31	J	0.3	J	0.41	J		UJ
Tetrachloroethylene(PCE)	127-18-4	ug/l	4.7		4.6		4.1		6		1.6	
Trichloroethene (TCE)	79-01-6	ug/l	260		290		270		420	D	77	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**264.7**		**294.91**		**274.4**		**426.4**		**78.6**	

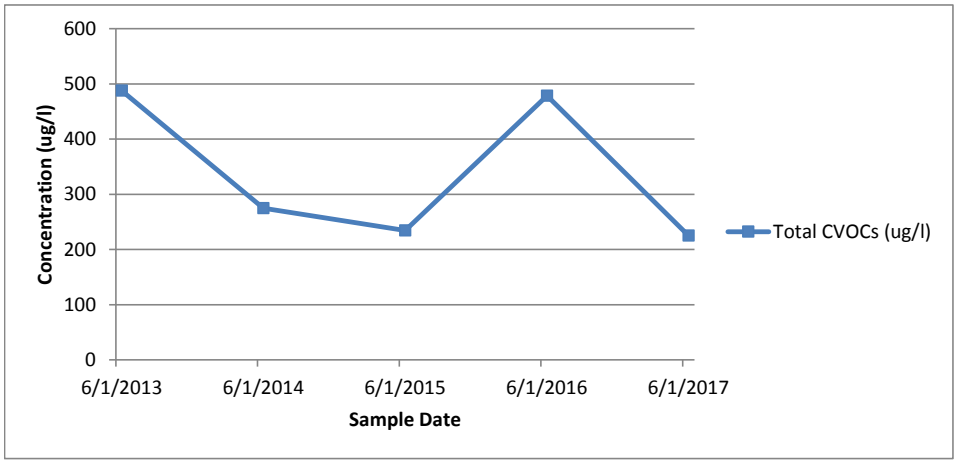


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-ISCO-4

		Sample Date	6/18/2013		6/18/2014		6/10/2015		6/15/2016		6/14/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l		U		U		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	0.25	J	0.25	J	0.61	J		U
Tetrachloroethylene(PCE)	127-18-4	ug/l	7.5		4.7		4	J	7.8		4.9	
Trichloroethene (TCE)	79-01-6	ug/l	480		270		230	J	470	D	220	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**487.5**		**274.95**		**234.3**		**478.41**		**224.9**	

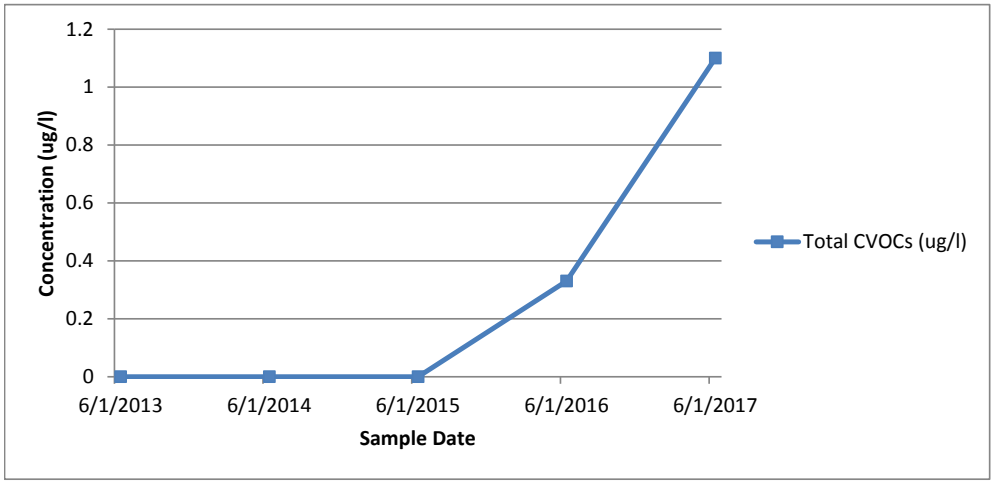


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-PD-11

		Sample Date	6/17/2013		6/12/2014		6/4/2015		6/16/2016		6/12/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U	0.33	J		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l		U		U		U		U	1.1	
Chloromethane	74-87-3	ug/l		U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U		U		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l		U		U		U		U		U
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**0**		**0**		**0**		**0.33**		**1.1**	

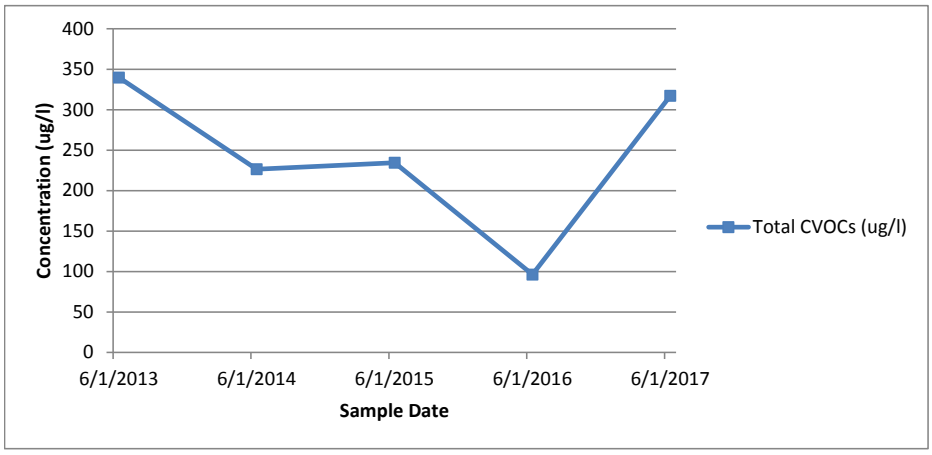


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-PD-12

		Sample Date	6/13/2013		6/11/2014		6/3/2015		6/15/2016		6/13/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U	0.12	J		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l		U	0.32	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U	0.27	J		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	1.2		0.58	J+		U	0.44	J	0.78	
Tetrachloroethylene(PCE)	127-18-4	ug/l	8.6		5.4		4.3	J	3.6		6.4	
Trichloroethene (TCE)	79-01-6	ug/l	330		220		230	J	92	D	310	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**339.8**		**226.3**		**234.3**		**96.31**		**317.18**	

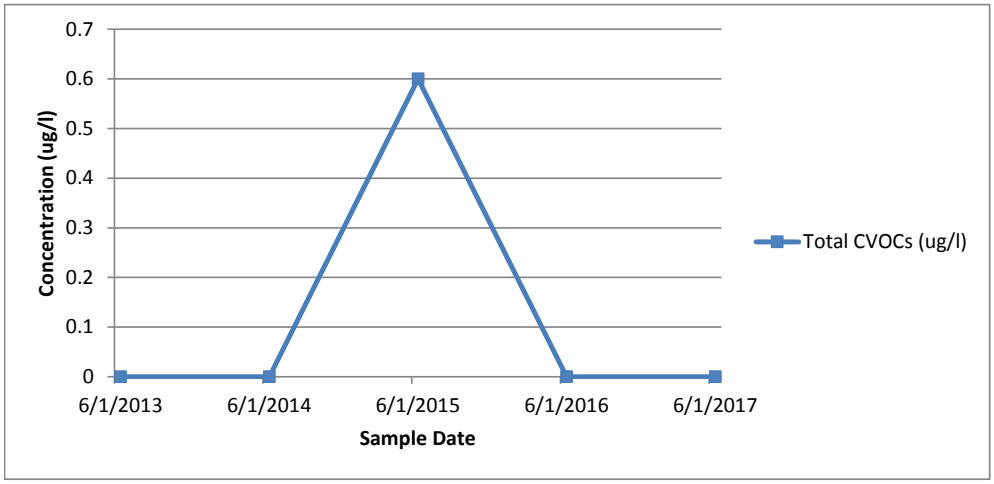


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-PD-13

			Sample Date	6/13/2013		6/13/2014		6/3/2015		6/16/2016		6/9/2017	
CVOC	CAS RN	Units		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l			U		UJ		U		U		U
1,1-Dichloroethane	75-34-3	ug/l			U		UJ		U		U		U
1,1-Dichloroethene	75-35-4	ug/l			U		UJ		U		U		U
Chloroform	67-66-3	ug/l			U		UJ	0.6	J		U		U
Chloromethane	74-87-3	ug/l			U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l			U		UJ		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l			U		UJ		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l			U		UJ		U		U		U
Vinyl Chloride	75-01-4	ug/l			U		UJ		U		U		U
Total CVOCs		**ug/l**		**0**		**0**		**0.6**		**0**		**0**	

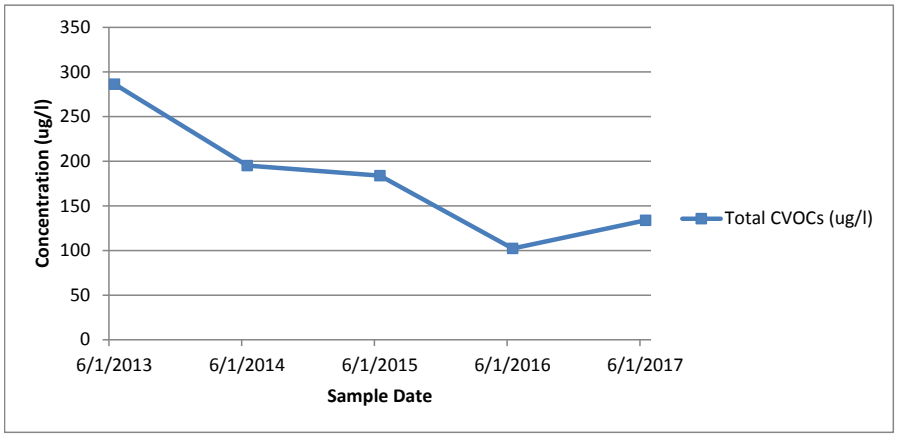


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-PD-14

		Sample Date	6/13/2013		6/12/2014		6/4/2015		6/16/2016		6/12/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U	0.1	J	0.11	J		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		UJ		U
Chloroform	67-66-3	ug/l		U	0.17	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	1.8		1.2		1.2	J	0.84	J-	0.76	
Tetrachloroethylene(PCE)	127-18-4	ug/l	4.7		3.7		2.6	J	2.4		3.1	
Trichloroethene (TCE)	79-01-6	ug/l	280		190		180	J	99	D	130	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**286.5**		**195.17**		**183.91**		**102.24**		**133.86**	

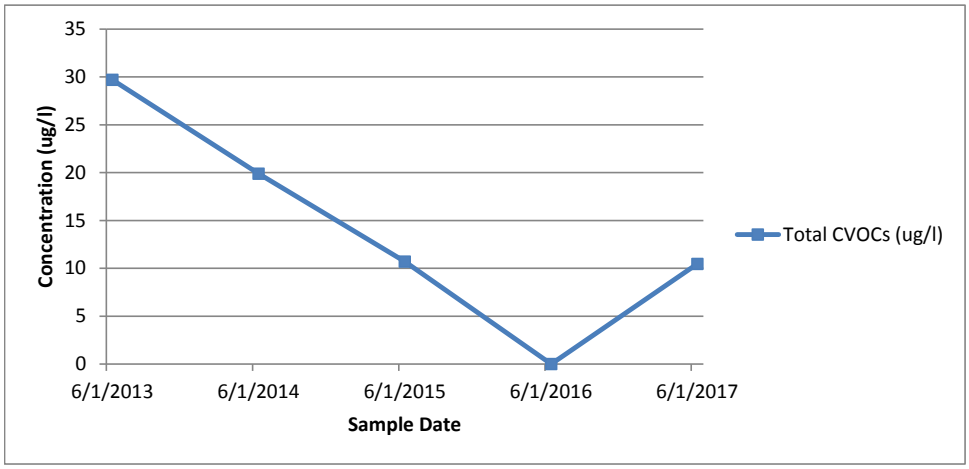


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-PD-15

		Sample Date	6/13/2013		6/11/2014		6/4/2015		6/16/2016		6/8/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	1.1		0.58		0.45	J		U	0.47	J
1,1-Dichloroethane	75-34-3	ug/l	1.5		0.89		0.52	J		U	0.66	
1,1-Dichloroethene	75-35-4	ug/l		U	0.23	J		U		U		UJ
Chloroform	67-66-3	ug/l		U	0.36	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	1.2		0.73	J+	0.45	J		U	0.33	J-
Tetrachloroethylene(PCE)	127-18-4	ug/l	1.9		1.1		1.1	J		U	1.4	
Trichloroethene (TCE)	79-01-6	ug/l	24		16		8.2	J		U	7.6	J
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**29.7**		**19.89**		**10.72**		**0**		**10.46**	

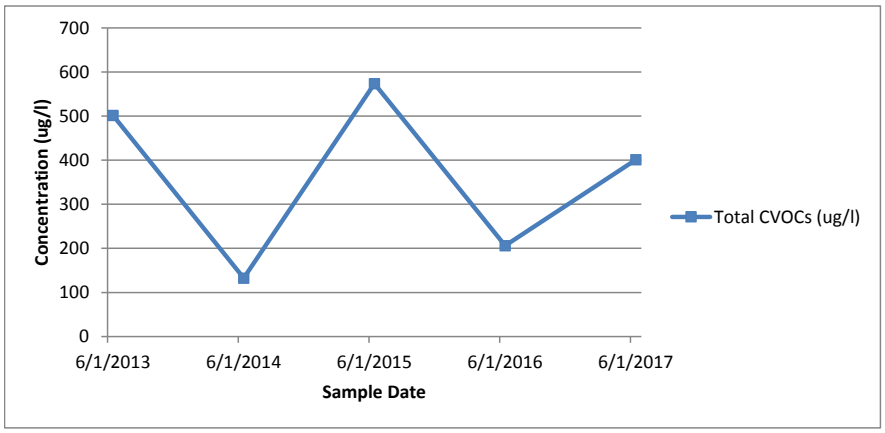


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-PD-16

		Sample Date	6/14/2013		6/12/2014		6/3/2015		6/13/2016		6/12/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.64			U	0.82	J		U	0.41	J
1,1-Dichloroethane	75-34-3	ug/l	0.97			U	1.5	J	0.55	J-	1	
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		UJ		U
Chloroform	67-66-3	ug/l		U		U	0.89	J		UJ	0.63	
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l	3.5		0.56	J+	3.2	J	1.4	J-	2.2	
Tetrachloroethylene(PCE)	127-18-4	ug/l	6.7		2.1		7.2	J	4		6.7	
Trichloroethene (TCE)	79-01-6	ug/l	490		130		560	J	200	D	390	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**501.8**		**132.66**		**573.61**		**205.95**		**400.94**	

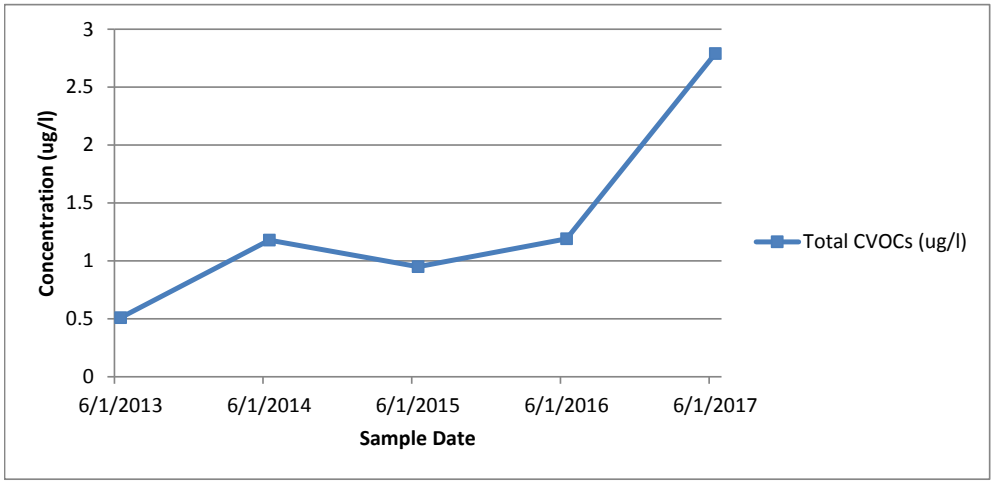


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

MW-PD-17

		Sample Date	6/12/2013		6/12/2014		6/4/2015		6/13/2016		6/12/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l	0.51		0.52	J	0.65	J	0.89		1.4	
1,1-Dichloroethane	75-34-3	ug/l		U	0.29	J	0.3	J	0.3	J	0.63	
1,1-Dichloroethene	75-35-4	ug/l		U	0.16	J		U		U	0.46	J
Chloroform	67-66-3	ug/l		U	0.21	J		U		U		U
Chloromethane	74-87-3	ug/l		U		UJ		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		UJ		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U		UJ		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l		U		UJ		U		U	0.3	J
Vinyl Chloride	75-01-4	ug/l		U		UJ		U		U		U
Total CVOCs		**ug/l**	**0.51**		**1.18**		**0.95**		**1.19**		**2.79**	

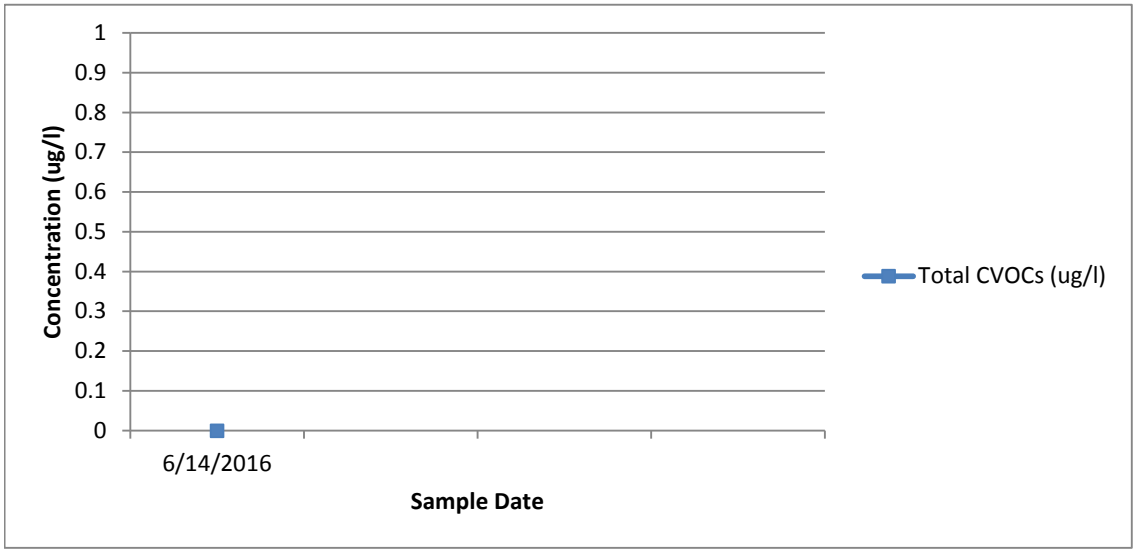


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

PZ-03

		Sample Date	6/14/2016		6/13/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U	NS	
1,1-Dichloroethane	75-34-3	ug/l		U	NS	
1,1-Dichloroethene	75-35-4	ug/l		U	NS	
Chloroform	67-66-3	ug/l		U	NS	
Chloromethane	74-87-3	ug/l		U	NS	
cis-1,2-Dichloroethylene	156-59-2	ug/l		U	NS	
Tetrachloroethylene(PCE)	127-18-4	ug/l		U	NS	
Trichloroethene (TCE)	79-01-6	ug/l		U	NS	
Vinyl Chloride	75-01-4	ug/l		U	NS	
Total CVOCs		**ug/l**	**0**		**0**	

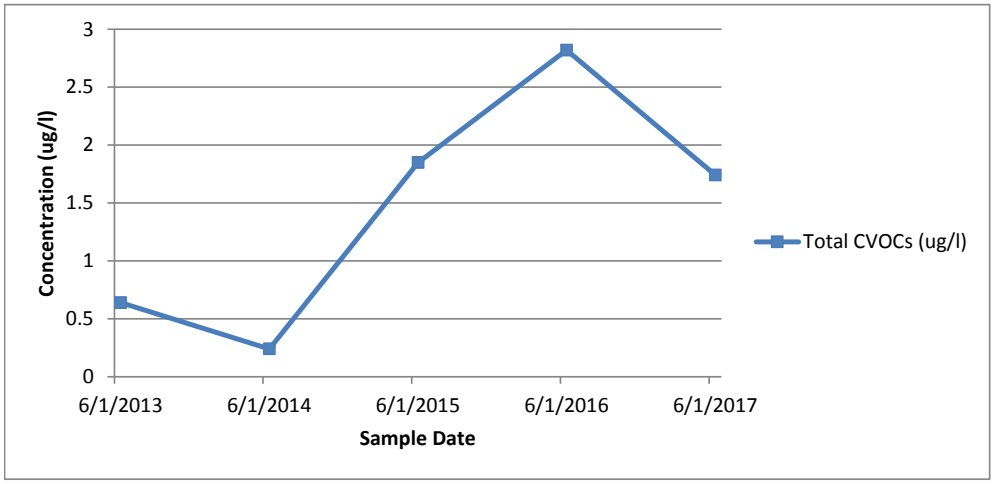


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

PZ-05

		Sample Date	6/19/2013		6/10/2014		6/2/2015		6/14/2016		6/13/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l	0.64		0.24	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U		U	0.45	J	0.52		0.44	J
Trichloroethene (TCE)	79-01-6	ug/l		U		U	1.4	J	2.3		1.3	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**0.64**		**0.24**		**1.85**		**2.82**		**1.74**	

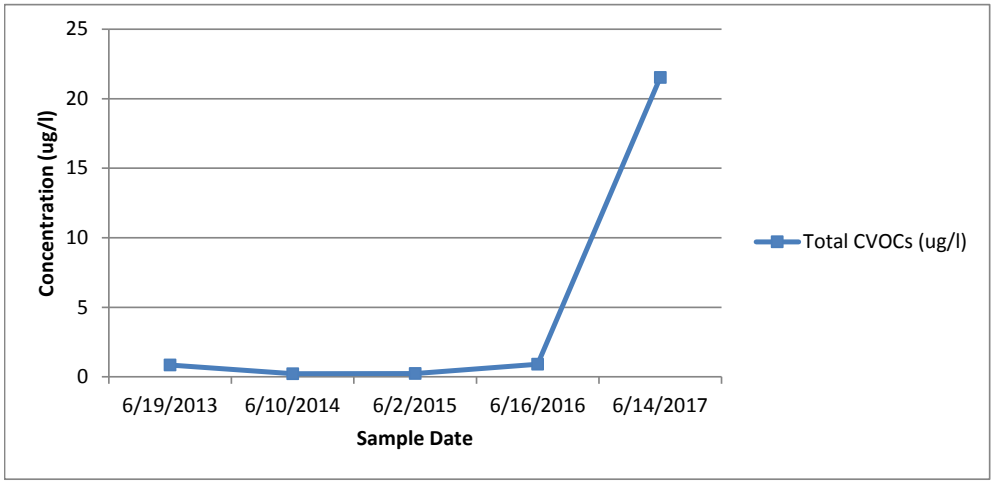


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

PZ-06

		Sample Date	6/19/2013		6/10/2014		6/2/2015		6/16/2016		6/14/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		UJ		UJ
Chloroform	67-66-3	ug/l		U	0.22	J		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		UJ		UJ
Tetrachloroethylene(PCE)	127-18-4	ug/l		U		U		U		U	0.53	
Trichloroethene (TCE)	79-01-6	ug/l	0.84			U	0.23	J	0.9		21	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**0.84**		**0.22**		**0.23**		**0.9**		**21.53**	

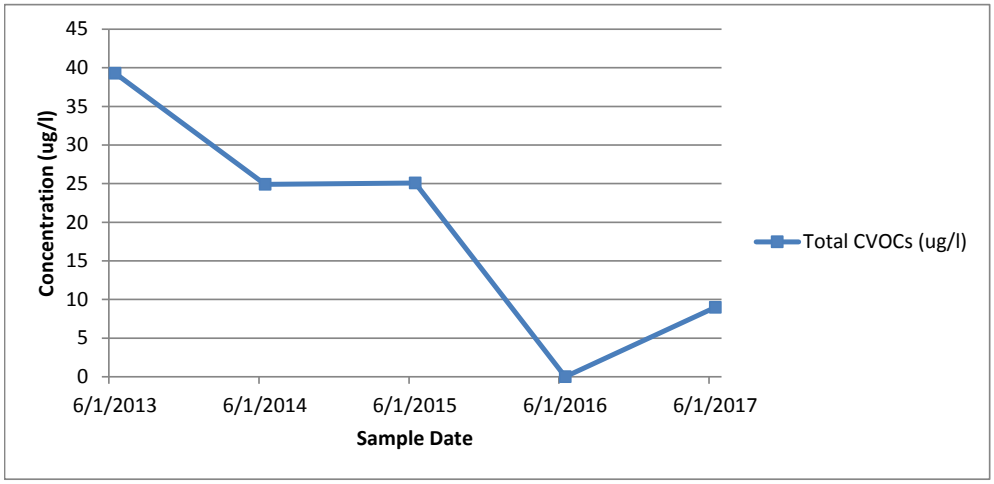


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

PZ-07

		Sample Date	6/19/2013		6/10/2014		6/2/2015		6/15/2016		6/14/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		UJ		U
Chloroform	67-66-3	ug/l		U		U		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U	0.1	J		UJ		U
Tetrachloroethylene(PCE)	127-18-4	ug/l	2.3		1.9		2	J		U	0.87	
Trichloroethene (TCE)	79-01-6	ug/l	37		23		23	J		U	8.1	
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**39.3**		**24.9**		**25.1**		**0**		**8.97**	

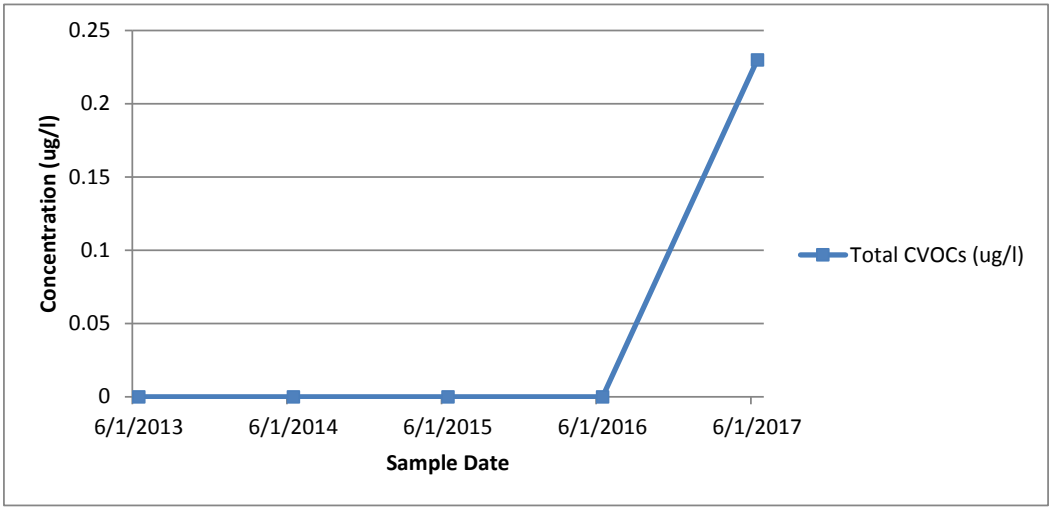


Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value

SDW-01

		Sample Date	6/13/2013		6/11/2014		6/5/2015		6/7/2016		6/6/2017	
CVOC	CAS RN	Units	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
1,1,1-Trichloroethane	71-55-6	ug/l		U		U		U		U		U
1,1-Dichloroethane	75-34-3	ug/l		U		U		U		U		U
1,1-Dichloroethene	75-35-4	ug/l		U		U		U		U		U
Chloroform	67-66-3	ug/l		U		U		U		U		U
Chloromethane	74-87-3	ug/l		U		U		U		U		U
cis-1,2-Dichloroethylene	156-59-2	ug/l		U		U		U		U		U
Tetrachloroethylene(PCE)	127-18-4	ug/l		U		U		U		U		U
Trichloroethene (TCE)	79-01-6	ug/l		U		U		U		U	0.23	J
Vinyl Chloride	75-01-4	ug/l		U		U		U		U		U
Total CVOCs		**ug/l**	**0**		**0**		**0**		**0**		**0.23**	



Notes:

1. Total CVOCs were calculated by adding the concentrations of the following VOCs:
   - 1,1,1-Trichloroethane
   - 1,1-Dichloroethane
   - 1,1-Dichloroethene
   - Chloroform
   - Chloromethane
   - cis-1,2-Dichloroethene
   - Tetrachloroethene
   - 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 follows:
   - J - Estimated values (- indicates likely biased low, + indicates likely biased high)
   - U - Non-Detect Value