# 2017 Second Quarter Groundwater Monitoring Report

## April - June 2017

Claremont Polychemical Corporation Site

*505 Winding Road*
*150 Winding Road (Groundwater Treatment Facility)*
*Old Bethpage, Nassau County, New York 11804*
*Contract/WA No. D0076025-28; Site No. 130015*

Prepared for:

New York State
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# 1 Introduction

This quarterly groundwater monitoring report prepared by Henningson, Durham & Richardson Architecture and Engineering, P.C. (HDR) presents groundwater sampling analytical results for the second quarter (April through June) of 2017 and supporting information on the history, groundwater extraction and treatment (GWE&T) system configuration and hydrogeologic conditions at the Claremont Polychemical Corporation Site (NYSDEC Site #130015); hereinafter referred to as CPC or the “Site” (Figure 1). The groundwater monitoring event and the preparation of this deliverable are part of the on-going site management activities associated with Work Assignment #28 under contract D007625 and includes the following:

- Brief overview of historical Site activities;
- Discussion of the on-site GWE&T system including discharge monitoring;
- Hydrological data;
- Brief description of the field activities;
- Analytical results of monitoring well sampling, specifically those for chlorinated volatile organic compounds (VOCs) including trends and plume evaluation; and
- Conclusions and Recommendations.

# 2 Site Background

## 2.1 Site History

Claremont Polychemical Corporation, a former manufacturer of pigments for plastics and inks, coated metal flakes, and vinyl stabilizers, operated at the Site from 1966 to 1980. According to the “Second Five-Year Review Report for Claremont Polychemical Corporation” prepared by the Environmental Protection Agency (EPA), dated March 2014, during its operation, CPC disposed of liquid waste in three leaching basins and deposited solid wastes and treatment sludges in drums or in aboveground metal tanks. The principal wastes generated were organic solvents, resins, and wash wastes (mineral spirits). A solvent recovery system (steam distillation), two pigment dust collectors and a sump were located inside the Process Building. Five concrete treatment basins, each with a capacity of 5,000 gallons which contained sediments and water, were to the west of the building. Six aboveground tanks, three of which contained wastes, were located east of the building. Other features included an underground tank farm, construction and demolition debris, dry wells and a water supply well (EPA 2014).

In 1979, the Nassau County Department of Health (NCDH) found 2,000 to 3,000 drums of inks, resins, and organic solvents throughout the Site during a series of inspections. Inspectors' identified releases associated with damaged or mishandled drums in several areas including one larger release located east of the Process Building (referred to as the "spill area"). CPC sorted and removed the drums in 1980 (EPA 2014). In October 1980, the New York State Department of Environmental Conservation (NYSDEC) ordered CPC to commence clean-up activities at the Site. CPC did not perform the clean-up activities required by NYSDEC and CPC ceased operations at the Site in 1980 (EPA 2014). EPA proposed the Site for listing on the National Priorities List (NPL) in October 1984 (because of CPC's refusal to perform the clean-up) and CPC was subsequently listed on the NPL as a Superfund site in June 1986.

A Remedial Investigation Feasibility Study (RI/FS) was initiated in March 1988 under the oversight of the EPA. Surface and subsurface soil, groundwater, underground storage tanks, and the Process Building were sampled as part of the RI. The RI/FS reports were released to the public in August 1990. The RI/FS findings indicated that on-site soils contaminated with tetrachloroethylene (PCE), located in the former "spill area", constituted a potential threat to groundwater resources. The spill area is adjacent to and east of the former Process Building (Figure 1). Other VOCs including 2-butanone, toluene, xylene, 1,2-dichloroethene (DCE), trichloroethene (TCE), 1,1,1-trichloroethane (TCA), ethylbenzene, 1,2-dichloroethane (DCA), methylene chloride, and vinyl chloride were detected in groundwater at concentrations exceeding federal and state standards. EPA issued two Records of Decision (RODs) signed in September 1989 and September 1990 and two Explanations of Significant Differences (ESDs) signed in September 2000 and April 2003 since completion of the RI/FS. The operable units (OUs) addressed by the RODs and ESDs are described in Table 1.

### Table 1 – CPC Operable Units

| Operable Unit | Description | Status |
|---|---|---|
| OU 1 | Treatment and removal of wastes in 14 underground storage tanks | 14 USTs and contents removed. Achieved cleanup levels allowing for unlimited use and unrestricted exposure. |
| OU 2 | Wastes stabilized during the Sept. 1988 removal action | Testing, consolidation, treatment and disposal of wastes in containers and basins performed. Achieved unlimited use and unrestricted exposure, later changed to commercial/light industrial because of remaining contamination below the building.<br>2003 ESD added additional remedial actions for OU 2 under the former Process Building including an SVE system and using the building's concrete slab as a cap for cadmium contaminated soil. |
| OU 3 | Soil contaminated with PCE at the "spill area" | Approximately 8,800 tons of PCE contaminated soils excavated, treated and backfilled on Site. Achieved cleanup levels allowing for unlimited use and unrestricted exposure. |
| OU 4 | Contaminated groundwater on the CPC property | Extraction and treatment of groundwater via metals precipitation, air stripping and carbon adsorption. On-site reinjection. |

| Operable Unit | Description | Status |
|---|---|---|
| OU 5 | Contaminated groundwater off of the CPC property. | Extraction and treatment of groundwater via air stripping and off-site reinjection using the Old Bethpage Landfill treatment system extraction wells south-southeast of the CPC Site. |
| OU 6 | Decontamination of the former Process Building | Vacuuming and dusting surfaces, asbestos abatement, pressure washing walls and interior surfaces. Achieved cleanup levels allowing for unlimited use and unrestricted exposure. |

A GWE&T system was installed on-site by the EPA and Army Corps of Engineers (ACOE) to hydraulically contain VOCs in groundwater as the OU 4 remedy. GWE&T system operation began in February 2000, reportedly pumping and treating over 400 gallons per day (gpd). SAIC Inc. operated and maintained the GWE&T system, collected plant effluent samples and performed quarterly groundwater sampling at 41 wells from 2000 to May 2011. In May 2011, the project was transferred from the ACOE/EPA to the NYSDEC. HRP Associates, Inc. performed the same scope of work as SAIC under contract to NYSDEC from May 2011 to August 2015. HDR, also under contract to NYSDEC, took over HRP's scope of work on September 1, 2015.

EPA issued an Explanation of Significant Differences (ESD) on September 29, 2000 that the Old Bethpage Landfill's (OBL) GWE&T was inadvertently capturing the CPC OU-5 off-site groundwater plume; therefore the OBL GWE&T would be used to capture the off-site plume instead of constructing a new treatment facility. At that time the Town of Oyster Bay owned and operated the OBL GWE&T (USEPA 2000).

The Town of Oyster Bay operated the OBL GWE&T under a Municipal Response Action Reimbursement Agreement for treating the contaminated groundwater associated with CPC OU-5 from January 1997 through January 2007, followed by a State Assistance Contract (SAC No. C303223) from January 2007 through 2017. The NYSDEC terminated the SAC with the Town of Oyster Bay in August 2016 in a Site Transfer Agreement that outlined the schedule, terms, and responsibilities of the transfer (NYSDEC 2016).

NYSDEC's Division of Environmental Remediation (DER) issued HDR Work Assignment (WA# 28) under contract D007625 for CPC OU-5. The purpose of the assignment was to transfer operations, maintenance, and monitoring of the OBL/CPC OU-5 GWE&T from Town of Oyster Bay's consultant Lockwood, Kessler & Barlett, Inc. (LKB) to HDR. In October 2016, the OU-4 GWE&T was shut down, and HDR took over the operation of the OBL/OU-5 GWE&T. At that time, NYSDEC had also given the Town of Oyster Bay permission to discontinue treatment for the OBL plume which involved shutting down recovery wells RW-1 and RW-2. HDR will continue operations, maintenance and monitoring activities (collectively Site Management or SM) for CPC OU-5 consisting of former OBL GWE&T recovery wells RW-3, RW-4 and RW-5 for the period October 1, 2016 through February 28, 2018.

## 2.2 Location

The CPC site is located on a 9.5-acre parcel in an industrial section of Old Bethpage, Nassau County, New York (Figure 1). The former 35,000 square foot Process Building, demolished in 2012, was the only building historically on the property. The concrete slab from this building remains. The 5,200 square foot GWE&T system building was constructed as part of the OU-4 remedy. The OU-4 GWE&T system was shut down on October 1, 2016 and has not been in operation since that time.

The OU-5 GWE&T system is located across the street at 150 Winding Road within the Town of Oyster Bay Solid Waste Disposal Complex (OBSWDC). The OU-5 GWE&T system includes a groundwater recovery system, water conveyance system, discharge system, monitoring wells, air stripper, and a 3,100 square foot facility for monitoring and controlling the system. The treated effluent discharges to Recharge Basin No. 1 located west of the OBL. Secondary discharge is directed to a recharge basin west of the Bethpage State Park Black Course for golf course irrigation in the summer. The five extraction/recovery well pump houses (RW-1, RW-2, RW-3, RW-4 and RW-5) are located on the Bethpage Black Course.

The CPC Site lies approximately 800 feet west of the border between Nassau and Suffolk Counties and is accessed via Winding Road on the property's western border. Adjacent properties include (Figure 2):

- South and Southeast - Bethpage State Park and golf course;
- East – State University of New York (SUNY) - Farmingdale Campus;
- West – OBSWDC and OU-5 GWE&T; and
- North – Commercial and Light Industrial.

The OBSWDC includes the closed OBL, solid waste transfer operations and the OU-5 GWE&T system currently operated by HDR under contract to NYSDEC. The Nassau County Fireman's Training Center (FTC), which has also contributed to soil and groundwater contamination in the area, is located approximately 500 feet south of the OBL portion of the OBSWDC. FTC had a GWE&T system that ceased operations in 2013 having achieved the cleanup objectives. The closest residences are approximately one-half mile from the Site, immediately west of the OBL. The nearest public supply well is located 3,500 feet northwest of the Site.

## 2.3 Site Hydrogeological Setting

The CPC site is underlain primarily by sand with interbedded, discontinuous silt and lignitic clay lenses. Upper glacial aquifer deposits are mostly absent in the area, rather the Magothy Formation is the uppermost geologic unit with a thickness of approximately 750 feet. The Raritan clay below acts as a barrier between the Magothy and Lloyd aquifers.

Sixteen wells were added to the CPC monitoring program as a result of the transition on October 1, 2016 to the OU-5 GWE&T system (Figure 2). The water table and Magothy aquifer groundwater flow directions at the eastern portion of the CPC site shifted from a southeast direction to a south-southeast direction following shut down of the OU-4 system (Figures 3 and 4). A synoptic round of groundwater levels was measured on June 7, 2017. The average water table elevation (NAVD88) across the site is 56.76 feet with regional groundwater flow to the south-southeast. Depths to groundwater (DTW) in June 2017 ranged from 26.83 feet (well MW-11B) to 113.50 feet (well EW-05) below ground surface (bgs). Monitoring well MW-6A was dry at the time of the quarterly synoptic DTW measurements. Access to wells EW-6A, EW-6C, and MW-10D wasn't possible at the time of the quarterly synoptic DTW measurements.

The "Claremont Polychemical Superfund Site Long-Term Groundwater Monitoring Old Bethpage, New York" report dated December 2001 prepared by SAIC indicated historical gradients ranging from 0.001-0.002 feet/year and horizontal flow velocities of 0.43 feet/day or 157 feet/year (Ebasco, 1990).

Groundwater contour maps produced from the June 2017 DTW measurements show groundwater flow direction in the water table wells continue to be south-southeast (Figure 5). In the 2nd Quarter 2017, MW-6A, was dry. The contour map produced from wells screened in the Magothy aquifer also depicts a south-southeast flow direction (Figure 6). The recent contour maps are generally consistent with previous maps produced from the CPC wells and from investigations by others.

# 3 Groundwater Extraction and Treatment System

A description of the GWE&T system and a review of its contaminant recovery and hydraulic control effectiveness are provided below.

## 3.1 Groundwater Extraction and Treatment System Description

The OU-5 GWE&T system was originally designed to capture and treat organic contaminants associated with the contaminated groundwater plume identified as a result of the disposal of hazardous substances at the Old Bethpage Landfill site (NYDEC Site No. 130001). The system consists of groundwater recovery through three extraction wells, water conveyance, treatment via an air stripper and discharge to recharge basins. Each of the system components are discussed below.

<u>GWE&T System Extraction Wells</u>

The groundwater collection system originally consisted of five extraction wells known as RW-1, RW-2, RW-3, RW-4 and RW-5 approximately 800 feet apart located in Bethpage State Park Black Golf Course south of the CPC site (Figure 2). The recovery wells were designed with the total maximum pumping capacity of 1.76 million gallons per day (gpd) and a designed flow of 1.5 million gpd to the treatment system (LKB, 1993). Table 2 provides extraction well screen intervals and total depths.

**Table 2 – Extraction Well Construction Details**

| Well | Total Depth | Top of Screen (bgs) | Bottom of Screen (bgs) |
|---|---|---|---|
| RW-1* | 280 ft. | 185 ft. | 265 ft. |
| RW-2* | 290 ft. | 230 ft. | 271 ft. |
| RW-3 | 275 ft. | 163 ft. | 255 ft. |
| RW-4 | 270 ft. | 147 ft. | 250 ft. |
| RW-5 | 283 ft. | 153 ft. | 263 ft. |

*RW-1 and RW-2 captured the OBL plume which has been remediated. These wells are no longer in service.

Recovery wells RW-1 and RW-2 were petitioned to be discontinued by the Town of Oyster Bay prior to the transition to HDR operating the OU-5 GWE&T (Town of Oyster Bay, 2016). These recovery wells historically had non-detectable or very low values for total VOCs, and did not capture the CPC off-site plume. The individual VOC results were lower than their Consent Decree and Class GA standards as stated in the LKB Quarterly Remedial Action Report dated June 2016. On October 2, 2016 at the direction of the NYSDEC, RW-1 and RW-2 were taken off-line.

<u>GWE&T System Path of Remediation</u>

Groundwater is currently pumped from three extraction wells; designated RW-3, RW-4 and RW-5, installed in 1992 at what was then the leading edge of the off-site VOC plume from the OBL. The combined flow from the three extraction wells is directed through common conveyance piping to the air stripper wet-well. A triplex pump arrangement delivers the collected groundwater into the top of the air stripper, which contains packing media. As the groundwater passes through and saturates the packing, it contacts air that is directed from the bottom of the air stripper via the blower. Dissolved VOCs pass from the liquid phase (groundwater) into the gas phase (air), and exit the stripper through a stack. Non-volatile organic compounds and inorganic contaminants, if any, are not removed by the treatment system.

The effluent is directed into a receiving wet-well, where another triplex pump arrangement delivers it to two recharge basins. The primary recharge basin, Recharge Basin No. 1, contains a system of eight diffusion wells and is located upgradient of the OBL. The secondary recharge basin is Town Recharge Basin No. 33, which is located on Winding Road west of the Bethpage Black Course. The secondary basin receives effluent in the summer that is used beneficially for watering the golf course.

The GWE&T system is staffed by a plant manager and an operator working 40-hour weeks, and an autodialer (telemetry unit) is installed to contact the plant manager in case of plant alarms. Typical response time is 30 minutes. The plant manager can monitor the plant remotely from the CimView- PROFICY HMI/SCADA- Cimplicity Version 8.10 control system and make adjustments to the system operations.

<u>GWE&T System Operating Permits</u>

*Water Permit*

The OU-5 GWE&T operates under a State Pollutant Discharge Elimination System (SPDES) permit equivalency dated October 24, 2012 which was valid until May 11, 2016. A permit equivalency renewal application was submitted to the NYSDEC Bureau of Water Permits on March 30, 2016, and is pending approval. Effluent Limitations and Monitoring Requirements outlined in the permit are enforced by the NYSDEC Division of Environmental Remediation, Remedial Bureau E.

*Air Permit*

An air permit is not required for the GWE&T system operation since 6 NYCRR Part 375-1.7 states that "no permit is required when the substantive compliance is achieved as indicated by the NYSDEC approval of the workplan". Emissions from the air stripper have historically been negligible and are compliant with air guideline concentrations.

## 3.2 Groundwater Extraction and Treatment System Performance Evaluation

### 3.2.1 Flow Rate

Since startup, the OU-4 GWE&T system treated more than approximately 2.41 billion gallons of groundwater associated with the CPC site until operation was suspended and transitioned to the OU-5 plant. The OU-5 GWE&T system historically operated at a rate of approximately one million gpd. During the second quarter of 2017 (April – June), the OU-5 GWE&T processed 76.28 million gallons resulting in an average daily flow rate of 820,033 gpd during this quarter. Daily flow readings are provided in the O&M reports submitted monthly to NYSDEC (refer to the June 2017 O&M report for the most recent data). A summary of the flow in each recovery well is included in Table 3.

**Table 3 – Recovery Well Flow Summary**

| Well | April Total Flow (gallons) | May Total Flow (gallons) | June Total Flow (gallons) |
|---|---|---|---|
| RW-3 | 8,096,076 | 8,023,795 | 7,780,975 |
| RW-4 | 10,556,467 | 10,467,526 | 10,052,093 |
| RW-5 | 7,851,938 | 7,559,161 | 7,058,527 |
| Total Influent | 26,446,759 | 26,012,68 | 25,047,258 |
| Total Effluent | 26,032,000 | 25,647,000 | 24,601,000 |

The volume of treated water discharged by the GWE&T system to the recharge basins is determined daily from readings of the magnetic flow meter on the plant effluent line. The recharge basins are designed to receive 1.5 million gpd. Currently, the recharge basins receive approximately 0.82 million gpd. The plant's effluent is discharged to Recharge Basin No. 1 during the winter months and is currently discharged to Recharge Basin No. 33 in the summer months.

### 3.2.2 Groundwater Extraction and Treatment System Contaminant Removal

To evaluate the treatment system's contaminant removal rate, HDR reviewed available GWE&T system influent and effluent analytical results from monthly operation and maintenance records. The OU-4 GWE&T system removed 8.1 kg during the time it was operated in 2016, and 947 kg cumulatively since 2002 until being taken offline in the first week of October 2016. Most of the mass removed by the OU-4 GWE&T system has been TCE (749 kilograms or 1,651 pounds) and PCE (170 kilograms or 375 pounds). Since October 1, 2016, when HDR took over operations of the OU-5 GWE&T system, approximately 88.7 kilograms (195.14 pounds) of TCE and 10.8 kilograms (23.76 pounds) of PCE have been removed. The operator prior to October 1, 2016 did not calculate VOC load, or track the contaminants of concern cumulatively over time. The LKB reports provided to HDR did not include historical data for daily flow rates.

**Table 4 – VOC Mass Removed per Quarter 2017 (kg)**

| | Quarter 1-2017 | Quarter 2-2017 | Total VOC Removal 2017 | Cumulative Totals |
|---|---|---|---|---|
| **OU-4 GWE&T** | offline | offline | offline | 947 |
| **OU-5 GWE&T** | 29.3 | 39.5* | 68.80 | 100.80 |
| *Quarter 1 2017 reported as 18.3 in March. Quarterly updated to include March 2017 data. | | | | |

### 3.2.3 Groundwater Extraction and Treatment System Discharge Monitoring

Samples of the system effluent are collected quarterly and are analyzed for VOCs, semi-volatiles (BNA), metals, total dissolved solids (TDS), total Kjehldahl nitrogen (TKN), cyanide, and anions. Effluent data for select VOC compounds (PCE, TCE, and 1,1-DCE) and semi-volatiles (BNA) are analyzed to evaluate compliance with effluent discharge limits. Figure 7 shows that effluent concentrations for the main contaminants, PCE and TCE, were below permissible discharge limits of 5 µg/l at the OU-5 GWE&T system during this quarter. Effluent concentrations were below the discharge limits in a February 16, 2017 effluent sample when the plant was fully operational. The effluent concentrations of iron (non-detect with a reporting limit of 150 µg/l) and manganese (non-detect with a reporting limit of 150 µg/l) were both under the permissible levels of 600 µg/l for the second quarter 2017 sampling results. Refer to the May O&M report for additional information on remediation system performance and daily operations.

# 4 Groundwater Monitoring Program

A network of 43 monitoring wells is used to monitor the groundwater quality and effectiveness of the GWE&T system (Figure 2). The network consists of 28 wells which were part of the OU-4

GWE&T system and 15 wells which were part of the OBL's OU-5 GWE&T system. On June 12 and 13, 2017, HDR sampled a total of 42 of the 43 monitoring wells; the exception being well MW-6A that was dry at the time of sampling. OU-4 monitoring wells included DW-1, DW-2, EW-5, EW-7C, EW-7D, and SW-1. OU-5 wells included BP-3A, BP-3B, BP-3C, EW-1A, EW-1B, EW-1C, EW-2A, EW-2B, EW-2C, EW-2D, EW-4A, EW-4B, EW-4C, EW-4D, EW-11D, EW-12D, EW-14D, LF-1, M-30B-R, MW-5B, MW-6B, MW-6C, MW-6D, MW-6E, MW-6F, MW-7B-R, MW-8A, MW-8B, MW-8C, MW-9B, MW-9C, MW-10D, MW-11A, MW-11B, and OSB-1. A description of the groundwater sampling event and results is provided below.

## 4.1 Hydrological Data

Depth to water measurements were collected on June 7, 2017. Measurements were not collected at one well because it was dry (MW-6A), and at three wells (EW-6A, EW-6C, and MW-10D) due to lack of physical access. DTW during this event ranged from 26.83 feet (well MW-11B) to 113.50 feet (well EW-05) bgs. Potentiometric surfaces were calculated by subtracting the DTW from each measurement from the top of casing elevation. HDR plotted the water levels from the OU-4 system and sketched the contours of the water table and potentiometric surface in the Magothy aquifer depicting the groundwater flow directions. These data show the groundwater flow direction is southeast to the west of the CPC site; south-southeast to the east of the site at the water table (Figure 3); and southeast in the Magothy (Figure 4). The effect on the aquifer from pumping of the OU-5 extraction wells is observed from the slight bends in otherwise straight potentiometric surface contours nearest the OU-4 extraction wells.

Water level elevations for the OU-5 well network were also used to construct groundwater flow contours. The wells screened in the water table across the entire site depict a south-southeast flow (Figure 5), and the wells screened in the Magothy depict a general south southeast flow, with a pumping influence observed near the three (RW-3, RW-4, and RW-5) OU-5 recovery wells (Figure 6). Overall, groundwater elevations and inferred groundwater flow direction based on groundwater elevation contours were consistent with previous data.

## 4.2 Groundwater Sample Collection

The monitoring well groundwater samples were collected on June 12 and 13, 2017, and the extraction well samples were collected on May 17, 2017. The groundwater samples were collected using passive diffusion bags (PDBs) inserted at mid-point in the screens in each monitoring well.[1] Each PDB bag was retrieved, pierced with a decontaminated sharp object and the water inside was collected in VOC vials with septum caps, and preserved with hydrochloric acid (HCl). The VOC vials are labeled, recorded on a chain of custody, and placed in a cooler with ice. New PDBs were installed at the mid-point of the screens of each monitoring well for the next scheduled sampling event.

[1] PDBs were first used for the May 2012 OU-4 sampling event. The 4th Quarter in 2016 was the first time PDBs were used in OU-5 monitoring wells.

A total of 44 (including two field duplicates samples) samples were submitted to Test America Laboratory, of Edison, New Jersey, an NYSDOH ELAP-approved laboratory (#12028), to be analyzed for VOCs via EPA Method 8260. A list of wells sampled and analytical results are presented in Table 5 and Attachment A. One trip blank was also sent for analysis.

# 4.3 Groundwater Analytical Results

Groundwater sampling results are summarized on Table 5 and shown on the trend charts (Figures 7 through 30). Of note, acetone was detected in 40 samples including two duplicates and exceeded the criterion for 25 of the samples in which it was detected. It is likely a laboratory contaminant and not present in groundwater since acetone was also detected in the trip blank (8.4 µg/l).

**Table 5 – Monitoring and Extraction Wells with VOC Exceedances – 2nd Quarter 2017**

| Well | PCE | TCE | C DCE | DCE | TCA | 1,2-DCA | 1,1 DCA | Acetone | Toluene |
|---|---|---|---|---|---|---|---|---|---|
| BP-3A | ND | ND | ND | ND | ND | ND | ND | ***66*** | ND |
| BP-3B | ***110*** | ***12*** | ***95*** | 0.88 J | 1.1 | ***0.68 J*** | ***17*** | 12 | ND |
| BP-3C | ***150*** | ***9.6*** | ***56*** | 0.46 J | 0.49 J | 0.29 J | 3.3 | 5.2 | ND |
| EW-02A | ND | 0.49 J | ND | ND | ND | ND | ND | 26 | **8.7** |
| EW-04A | ***10*** | 1.8 | ***18*** | ND | ND | ND | ND | 3.2 J | ND |
| EW-04C | ***65*** | ***53*** | 2.1 | ND | 1.8 | ND | 1.1 | 4.7 J | ND |
| EW-04D | ***8.8*** | 4.7 | ND | ND | ND | ND | ND | 4.3 J | ND |
| EW-07C | ***12*** | ***240*** | 4.2 | 0.41 J | 0.54 J | ND | 0.29 J | 7.9 | ND |
| EW-12D | ***22*** | ***250*** | ***9.1*** | ***23*** | ***11*** | ND | 3.0 | 4.4 J | ND |
| EW-14D | 3.2 | ***210*** | 1.2 | ***21*** | ***16*** | ***4.4*** | 0.40 J | 6.8 | ND |
| MW-08A | ***5.5*** | 0.33 J | ND | ND | ND | ND | ND | 4.0 J | ND |
| MW-11A | 4.4 | ***6.3*** | ***68*** | 1.0 | 1.0 | 0.27 J | ***7.3*** | 5.6 | ND |
| MW-11B | ND | 0.44 J | ***21*** | 0.89 J | 0.91 J | 0.38 J | 4.8 | 6.2 | ND |
| MW-7B-R* | ***23*** | ***690*** | ***39*** | ***7.6*** | ***5.9*** | ***0.94 J*** | 0.76 J | ND | ND |

Results units are µg/l. Bold, underlined, italicized results are exceedances of the NYSDEC Part 703 Class GA criteria; duplicate sample results in parenthesis. See Attachment A for complete analytical results and comparison criteria. TCE – trichloroethylene; C DCE – cis-1,2-dichloroethylene; 1,1-DCA – 1,1-dichloroethane; 1,2-DCA – 1,2-dichloroethane; DCE – 1,1-dichloroethene; PCE – tetrachloroethylene; TCA – 1,1,1-trichloroethane, ND – not detected; J – estimated value, * Sample has a dilution factor of 2.

## 4.3.1 Evaluation of Plumes

The groundwater contamination distribution was evaluated by creating sample location pie chart figures for contaminants PCE, TCE, 1,1-Dichloroethene, trans-1,2-Dichloroethene, cis-1,2-Dichloroethylene, and vinyl chloride in cross section (Figures 33 and 34) and plan view (Figures 31, 32 and 35). The horizontal and vertical distribution of PCE and TCE continues to demonstrate a shallow PCE comingled with deeper a TCE plume.

OU-4 on-site plume. This plume originates on the CPC site with the highest concentrations most frequently measured at well SW-1, a water table well. The on-site plume is predominantly PCE, with PCE concentrations an order of magnitude greater than the TCE concentrations (Figure 10). PCE showed an overall increasing trend in well SW-1 with spikes in 2015 including a concentration of 210 µg/l in the second quarter and 190 µg/l in the fourth. However in 2016, the PCE concentration has decreased with detections of 150 µg/l during the first quarter, 100 µg/l in the second quarter, 93 µg/l in the third quarter, and 30 µg/L in the fourth quarter of 2016. SW-1 was not sampled in the first and second quarter of 2017 because it was dry. PCE is also the dominant contaminant of concern with an overall increasing trend in wells EW-04C, with a detection of 110 µg/l in the first quarter and 65 µg/l in the second quarter of 2017 (Refer to Table 5).

Off-site plume upgradient of CPC site. This plume is first detected at the farthest upgradient well cluster, the EW-7 series, and flows to the southeast. When in operation, it was partially captured by the OU-4 GWE&T. The off-site upgradient plume is predominantly TCE, with TCE concentrations typically an order of magnitude greater than the PCE concentrations (Figure 16 and 17). In well EW-7C, TCE concentrations increased over 200 µg/l in the first three quarters of 2015. However, these concentrations returned to the December 2014 level of 190 µg/l by the end of the fourth quarter of 2015. TCE concentrations were the same during the first and second quarter sampling rounds of 2016 with a concentration of 220 µg/l, increased to 250 µg/l in the third quarter and decreased to 230 µg/L by the fourth quarter. In March 2017, the concentration remained 230 µg/L. However, in June 2017, the concentration slightly increased to 240 µg/l. The overall trend in TCE concentrations since 2011 has been decreasing in the EW-7 well cluster. The off-site, upgradient plume extends at least as far south-southeast as the MW-7B-R series wells. The TCE dominant wells include: EW-07C, EW-07D, EW-04B, EW-12D, MW-7B-R, EW-05, EW-01C, EW-01B, and DW-1.

Well EW-14D. The groundwater contamination at EW-14D is high in TCE, similar to the off-site, upgradient plume (Figure 20). The PCE concentration, however, is below the criterion (5 µg/l). Well EW-14D has the greatest variability in TCE concentrations of all of the wells evaluated for contaminant concentration trends. In 2016, TCE concentrations have been decreasing with the exception of the third quarter with a slight increase (Figure 20). The concentration decreased to the second quarter level of 110 µg/l by the fourth quarter. However, in the 1st quarter of 2017, the concentration increased to 150 µg/l and continued to increase to 210 µg/l in June 2017

Southern Area. This location is centered on the BP-3 series wells far south of the CPC site (Figures 21 through 23). The PCE concentrations at wells BP-3B and BP-3C is higher than the concentrations of TCE by more than an order of magnitude, whereas BP-3A was ND for those compounds (Table 5). The source of groundwater contamination at the BP-3 series wells is undergoing investigation by others.

Cross Sections. The cross sections generated depict the contaminants of concern along two separate transects (Figures 33 and 34). Cross section A-A' (Figure 33) starts at DW-1 along the direction of groundwater flow (south-southeast) to the BP-3 series wells. The PCE dominant plume is at a higher elevation closer to CPC site in wells SW-1 and is moving south-southeast to well MW-08A. PCE is detected deeper in the BP-3 series wells which are the farthest downgradient wells from the CPC site. The TCE dominant plume is deeper than the PCE dominant plume closer to the CPC site.

Cross section B-B' (Figure 34) starts east of A-A' at the EW-7 series wells along the direction of groundwater flow to well MW-7B-R. The PCE concentrations observed in wells in this cross section are below the 5 µg/l standard. The TCE plume is moving from the upgradient EW-7 series wells to the downgradient MW-7B-R well.

### 4.3.2 Comparison to Historical Groundwater Quality

Figures 8 through 30 illustrate the historical concentration trends for PCE and TCE in multiple wells. Table 6 summarizes the concentration trends in each of the wells.

**Table 6 – PCE and TCE Concentration Trends in Select Monitoring Wells**

| Well | Screen Depth | Location | PCE Trend | TCE Trend | Figure |
|---|---|---|---|---|---|
| CPC Plume Wells | | | | | |
| DW-1 | 93-98 | South-southwest of CPC | Slightly decreasing | Slightly decreasing | Figure 8 |
| EW-1A | 65-75 | Southwest of CPC | Decreasing | Slightly increasing | Figure 9 |
| SW-1 | 65-70 | Southwest, closest to CPC | Increasing | Slightly increasing | Figure 10 |
| EW-5 | 165-175 | South-southeast of CPC | Decreasing | Decreasing | Figure 11 |
| Off-Site Plume(s) Wells | | | | | |
| EW-4A | 100-115 | East of CPC | Increasing | Increasing | Figure 12 |
| EW-4B | 120-130 | East of CPC | Decreasing | Decreasing | Figure 13 |
| EW-4C | 145-155 | East of CPC | Increasing | Decreasing | Figure 14 |
| EW-4D | 285-295 | East of CPC | Slightly Decreasing | Decreasing | Figure 15 |
| EW-7C | 189-199 | Upgradient, North of CPC | Slightly decreasing | Slightly decreasing | Figure 16 |
| EW-7D | 273-283 | Upgradient, North of CPC | Slightly decreasing | Decreasing | Figure 17 |
| MW-10D | 346-351 | Southeast of CPC | Decreasing | Decreasing | Figure 18 |
| EW-12D | 209-219 | East of CPC | Increasing | Increasing | Figure 19 |
| EW-14D | 185-195 | Southeast of CPC | Slightly increasing | Slightly increasing | Figure 20 |
| BP-3A | 54-74 | South-southeast of CPC | No trend observed | No trend observed | Figure 21 |
| BP-3B | 215-235 | South-southeast of CPC | Increasing | Increasing | Figure 22 |
| BP-3C | 280-300 | South-southeast of CPC | Increasing | Slightly decreasing | Figure 23 |
| MW-11A | 140-145 | South-southeast of CPC | Slightly Increasing | Slightly Increasing | Figure 24 |

| Well | Screen Depth | Location | PCE Trend | TCE Trend | Figure |
|---|---|---|---|---|---|
| MW-11B | 240-245 | South-southeast of CPC | No trend observed | No trend observed | Figure 25 |
| MW-7B-R | 230-235 | South-southeast of CPC | Decreasing | Slightly decreasing | Figure 26 |
| Extraction Wells and Plant Influent | | | | | |
| RW-3 | 163-255 | Extraction well south-southeast of CPC | Decreasing | Slightly decreasing | Figure 27 |
| RW-4 | 147-250 | Extraction well south-southeast of CPC | Decreasing | Decreasing | Figure 28 |
| RW-5 | 153-263 | Extraction well south-southeast of CPC | Decreasing | Decreasing | Figure 29 |
| ASF-CP | NA | Plant influent | Slightly decreasing | Increasing | Figure 30 |

Decreasing trends indicate mass removal from groundwater in the area around the well. Increasing and no trend observed are indicative of partial capture and/or additional source(s) contributing to groundwater contamination in the area of the well.

# 5 Conclusions and Recommendations

## 5.1 Conclusions

The second quarter 2017 groundwater monitoring event at the CPC site covering both OU-4 and OU-5 included collection of a total of 43 groundwater samples (41 normal samples and 2 field duplicates from 42 groundwater monitoring wells) and process water samples including three recovery wells, influent and effluent samples. Analysis of the data has resulted in the following conclusions:

- A groundwater plume of VOCs, primarily PCE, originates proximate to the former Process Building (on-site plume). The OU-4 GWE&T system previously captured most of the PCE plume reducing the concentration in groundwater related to this site. HDR will monitor the well network to observe the effect of the OU-4 shut down. No conclusions on the capture of the CPC PCE plume will be discussed until the Remedial System Optimization is conducted.
- An off-site, upgradient plume consisting mostly of TCE originates to the north or northwest of the former CPC site. The TCE contamination is only partially captured by the CPC OU-4 GWE&T system. This system was turned off the first week in October 2016.
- 39.5 kilograms (87 pounds) of total VOCs were removed during the 2$^{nd}$ quarter period via operation of the OU-5 GWE&T system. The cumulative amount of 14.23 kilograms (31 pounds) was removed during the first three quarters of 2016 using the OU-4 GWE&T system. This difference is likely due to the proximity of high concentrations of TCE in well

MW-7B-R to the OU-5 GWE&T Recovery Wells 3 and 4, rather than a difference in the efficacy of the two GWE&T systems.

- Contaminant concentrations in effluent groundwater samples collected during the reporting period met discharge limits.
- The results from the second quarter 2017 groundwater sampling event showed compounds detected above the NYSDEC Part 703 Class GA groundwater criteria including Toluene, TCA, Acetone, DCA, 1,2-DCA, DCE, C DCE, , PCE and TCE.
- An increasing trend in PCE concentrations was observed at well SW-1 in the onsite plume nearest the former Process Building beginning in mid-2015. In 2016, the PCE concentration decreased to 150µg/l during the first quarter, 100 µg/l in the second quarter, 93 µg/l the third quarter, and 30 µg/L in the fourth quarter. SW-1 was not sampled in March and June 2017 because it was dry.
- PCE concentrations in 2016 have increased in BP-3C from 99 µg/l, during the first 2016 quarter, to 150 µg/l, in the second 2016 quarter, and 180 µg/l the third 2016 quarter. The PCE concentration decreased slightly to 170 µg/L in the fourth quarter of 2016. The concentration has decreased to 150 µg/l in the 1st quarter of 2017 and remained at 150 µg/l in June 2017.
- Monitoring well EW-12D had significant concentration increases between the September and December 2016 sampling events including cis-1,2-DCE from 2.3 µg/l to 17 µg/l, PCE from 3.3 µg/l to 35 µg/l, TCE from 17 µg/l to 210 µg/l, and 1,1,1-TCA from 3.1 µg/l to 37 µg/l. These results are the highest concentrations since 2011, which is the earliest data made available to HDR. In the first quarter of 2017, most of the concentrations decreased. PCE decreased from 35 µg/l to 23 µg/l, C DCE decreased from 17 µg/l to 10 µg/l, and TCA decreased from 37 µg/l to 18 µg/l. However, TCE continued to increase from 210 µg/l to 220 µg/l. In the second quarter of 2017, the concentrations remained within the same ranges as the first quarter of 2017 and the changes were all slight. PCE decreased from 23 µg/l to 22 µg/l and C DCE decreased from 10 µg/l to 9.1 µg/l. TCA decreased from 18 µg/l to 11 µg/l and TCE increased from 220 µg/l to 250 µg/l.
- The TCE in monitoring well MW-7B-R has increased from 357 µg/l in May 2016, to 720 µg/l in December 2016. LKB previously collected the historic data for this well under a different sampling methodology. The concentration continued to increase to 900 µg/l in the 1st quarter of 2017. However, in June 2017, the concentration decreased to 690 µg/l.
- The groundwater flow at the site is predominately south-southeast with no regionally significant changes observed from the flow direction during operation of the OU-4 GWE&T system.

## 5.2 Recommendations

In order for the GWE&T system to continue to operate effectively, HDR recommends repair and/or replacement of components of the OU-5 GWE&T system to maintain continuous uninterrupted operations without run time interruption. HDR is in the process of developing a comprehensive list of equipment issues to be addressed in the near term. Once the near term issues have been addressed the remedial system optimization study can proceed to refine the limits of the system capture zone.

Initially, although not directly related to system operations, HDR is in the process of scheduling roof repairs at the OU-5 GWE&T facility. Some equipment (e.g. ceiling-mounted heating system) may have been damaged by roof leaks. Water damage can be found throughout the facility.

# 6 References

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Attachment A
Summary of Analytical Results
June 2017 (2Q17) Sampling Event
Claremont Polychemical Superfund Site OU5
Old Bethpage, NY

| CAS RN: | | 127-18-4 | 79-01-6 | 156-59-2 | 156-60-5 | 75-35-4 | 75-01-4 | 79-34-5 | 71-55-6 | 79-00-5 | 107-06-2 | 75-34-3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit: | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| NYSDEC 703 Class GA: | | 5 | 5 | 5 | 5 | 5 | 2 | 5 | 5 | 1 | 0.6 | 5 |
| Sample Description | Date Collected | Tetrachloroethylene (PCE) | Trichloroethylene (TCE) | Cis-1,2-Dichloroethylene | Trans-1,2-Dichloroethene | 1,1-Dichloroethene | Vinyl Chloride | 1,1,2,2-Tetrachloroethane | 1,1,1-Trichloroethane | 1,1,2-Trichloroethane | 1,2-Dichloroethane | 1,1-Dichloroethane |
| BP-3A | 6/12/2017 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| BP-3B | 6/12/2017 | 110 | 12 | 95 | 0.61 J | 0.88 J | 1.6 | < 1.0 U | 1.1 | 0.14 J | 0.68 J | 17 |
| BP-3C | 6/12/2017 | 150 | 9.6 | 56 | 0.33 J | 0.46 J | 0.41 J | < 1.0 U | 0.49 J | < 1.0 U | 0.29 J | 3.3 |
| DW-1 | 6/13/2017 | 0.71 J | 1.2 | 2.3 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| DW-2 | 6/13/2017 | 0.72 J | 0.29 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01A | 6/13/2017 | 3.6 | 1.4 | 2.3 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01A DUP | 6/13/2017 | 3.6 | 1.5 | 2.2 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01B | 6/13/2017 | 0.29 J | 1.4 | 0.29 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01C | 6/13/2017 | < 1.0 U | 2.9 | 0.58 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02A | 6/12/2017 | < 1.0 U | 0.49 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02B | 6/12/2017 | 0.16 J | 0.53 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02C | 6/12/2017 | 0.52 J | 1.4 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02D | 6/12/2017 | 0.57 J | 0.40 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-04A | 6/13/2017 | 10 | 1.8 | 18 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-04B | 6/13/2017 | 1.3 | 3.7 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.30 J | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-04C | 6/13/2017 | 65 | 53 | 2.1 | 0.28 J | < 1.0 U | < 1.0 U | < 1.0 U | 1.8 | < 1.0 U | < 1.0 U | 1.1 |
| EW-04D | 6/13/2017 | 8.8 | 4.7 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-05 | 6/13/2017 | 0.34 J | 2.1 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-07C | 6/13/2017 | 12 | 240 | 4.2 | < 1.0 U | 0.41 J | < 1.0 U | < 1.0 U | 0.54 J | < 1.0 U | < 1.0 U | 0.29 J |
| EW-07D | 6/13/2017 | 2.5 | 3.7 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-11D | 6/13/2017 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-12D | 6/13/2017 | 22 | 250 | 9.1 | < 1.0 U | 23 | < 1.0 U | < 1.0 U | 11 | 0.14 J | < 1.0 U | 3.0 |
| EW-14D | 6/12/2017 | 3.2 | 210 | 1.2 | < 1.0 U | 21 | < 1.0 U | < 1.0 U | 16 | 0.44 J | 4.4 | 0.40 J |
| LF-1 | 6/12/2017 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| M-30B-R | 6/13/2017 | < 1.0 U | 0.39 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-05B | 6/12/2017 | < 1.0 U | 1.2 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06A | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MW-06B | 6/12/2017 | < 1.0 U | 0.24 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06C | 6/12/2017 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06D | 6/12/2017 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06E | 6/12/2017 | < 1.0 U | < 1.0 U | 0.28 J | < 1.0 U | < 1.0 U | 0.30 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06F | 6/12/2017 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.57 J |
| MW-7B-R* | 6/12/2017 | 23 | 690 | 39 | < 2.0 U | 7.6 | < 2.0 U | < 2.0 U | 5.9 | 0.27 J | 0.94 J | 0.76 J |
| MW-08A | 6/12/2017 | 5.5 | 0.33 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-08B | 6/12/2017 | < 1.0 U | 0.27 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-08C | 6/12/2017 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-09B | 6/12/2017 | < 1.0 U | 0.81 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-09C | 6/12/2017 | < 1.0 U | 1.2 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-10D | 6/12/2017 | 1.3 | 1.1 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.41 J | < 1.0 U |
| MW-11A | 6/12/2017 | 4.4 | 6.3 | 68 | 0.53 J | 1.0 | < 1.0 U | < 1.0 U | 1.0 | < 1.0 U | 0.27 J | 7.3 |
| MW-11B | 6/12/2017 | < 1.0 U | 0.44 J | 21 | 0.22 J | 0.89 J | 0.33 J | < 1.0 U | 0.91 J | < 1.0 U | 0.38 J | 4.8 |
| OBS-1 | 6/12/2017 | < 1.0 U | 0.47 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| WT-01 | 6/13/2017 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| WT-01 DUP | 6/13/2017 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |

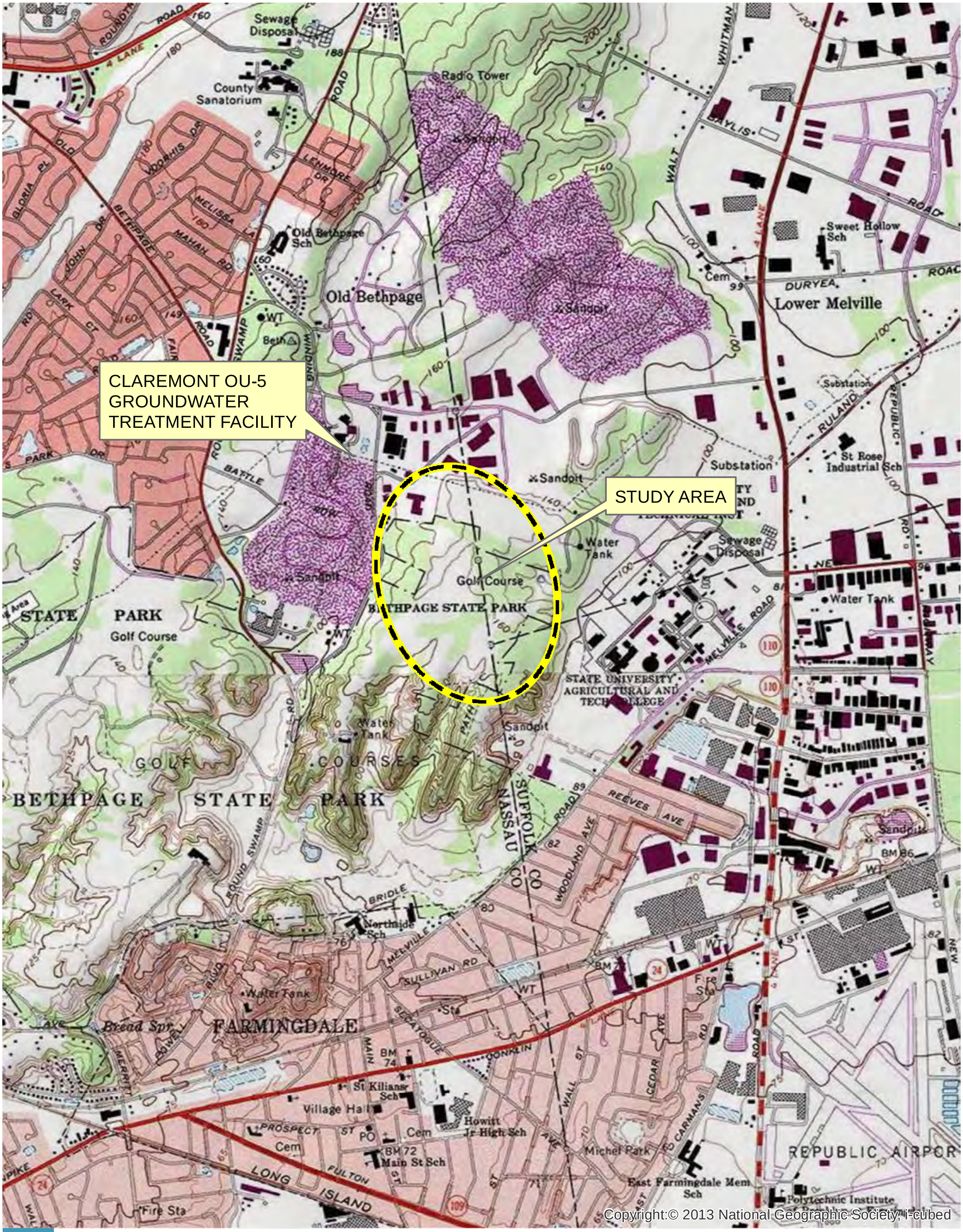
| CAS RN: | 76-13-1 | 87-61-6 | 120-82-1 | 96-12-8 | 106-93-4 | 95-50-1 | 78-87-5 | 541-73-1 | 106-46-7 | 123-91-1 | 591-78-6 | 67-64-1 | 71-43-2 | 74-97-5 | 75-27-4 | 75-25-2 | 74-83-9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit: | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| NYSDEC 703 Class GA: | | | | 0.04 | 0.0006 | 3 | 1 | 3 | 3 | | | 50 | 1 | 5 | | | 5 |
| Sample Description | 1,1,2-Trichloro-1,2,2-Trifluoroethane | 1,2,3-Trichlorobenzene | 1,2,4-Trichlorobenzene | 1,2-Dibromo-3-Chloropropane | 1,2-Dibromoethane (Ethylene Dibromide) | 1,2-Dichlorobenzene | 1,2-Dichloropropane | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane (P-Dioxane) | 2-Hexanone | Acetone | Benzene | Bromochloromethane | Bromodichloromethane | Bromoform | Bromomethane |
| BP-3A | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 66 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| BP-3B | 1.7 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 12 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| BP-3C | 0.66 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 5.2 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| DW-1 | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 13 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| DW-2 | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 25 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01A | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 4.3 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01A DUP | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 5.0 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01B | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 16 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01C | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 13 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02A | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 26 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 16 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 10 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 3.9 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-04A | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 3.2 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-04B | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 5.8 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-04C | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 4.7 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-04D | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 4.3 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-05 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 11 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-07C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 7.9 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-07D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 3.8 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-11D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 6.3 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-12D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 4.4 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-14D | 0.73 J | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 6.8 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| LF-1 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 7.9 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| M-30B-R | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 16 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-05B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 9.9 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06A | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MW-06B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.30 J | < 1.0 U | < 1.0 U | 0.94 J | < 50 U | < 5.0 U | 13 | 0.58 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.43 J | < 50 U | < 5.0 U | 8.5 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.32 J | < 1.0 U | < 1.0 U | 0.54 J | < 50 U | < 5.0 U | 9.6 | 0.45 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06E | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.36 J | < 1.0 U | 0.33 J | 1.1 | < 50 U | < 5.0 U | 15 | 0.51 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06F | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 13 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-7B-R* | < 2.0 U | < 2.0 UT | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 10 U | < 10 U | < 10 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U |
| MW-08A | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 4.0 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-08B | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 8.9 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-08C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 7.9 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-09B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 6.4 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-09C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 9.4 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-10D | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-11A | 1.2 | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 5.6 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-11B | 0.93 J | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 6.2 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| OBS-1 | < 1.0 U | < 1.0 UT | < 1.0 U | < 1.0 U | < 1.0 U | 0.38 J | < 1.0 U | < 1.0 U | 0.98 J | < 50 U | < 5.0 U | 8.5 | 0.21 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| WT-01 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 3.9 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| WT-01 DUP | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 50 U | < 5.0 U | 3.8 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |

*Sample has a dilution factor = 2
Note: NS = not sampled; U = not detected; J = estimated value; B = analyte found in blank; T = quality control parameter exceeded laboratory limits
Values in shaded cells exceed NYSDEC 703 Class GA criteria.

Attachment A
Summary of Analytical Results
June 2017 (2Q17) Sampling Event
Claremont Polychemical Superfund Site OU5
Old Bethpage, NY

| CAS RN: | 75-15-0 | 56-23-5 | 108-90-7 | 75-00-3 | 67-66-3 | 74-87-3 | 10061-01-5 | 110-82-7 | 124-48-1 | 75-71-8 | 100-41-4 | 98-82-8 | 179601-23-1 | 79-20-9 | 78-93-3 | 108-10-1 | 108-87-2 | 75-09-2 | 95-47-6 | 100-42-5 | 75-65-0 | 1634-04-4 | 108-88-3 | 10061-02-6 | 75-69-4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit: | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| NYSDEC 703 Class GA: | 60 | 5 | 5 | 5 | 7 | 5 | | | | 5 | 5 | 5 | | | 50 | | | 5 | 5 | 5 | | 10 | 5 | | 5 |
| Sample Description | Carbon Disulfide | Carbon Tetrachloride | Chlorobenzene | Chloroethane | Chloroform | Chloromethane | Cis-1,3-Dichloropropene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene (Cumene) | m,p-Xylene | Methyl Acetate | Methyl Ethyl Ketone (2-Butanone) | Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | Methylcyclohexane | Methylene Chloride | O-Xylene (1,2-Dimethylbenzene) | Styrene | Tert-Butyl Alcohol | Tert-Butyl Methyl Ether | Toluene | Trans-1,3-Dichloropropene | Trichlorofluoromethane |
| BP-3A | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 1.1 | < 1.0 U | < 1.0 U | 0.50 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | 2.5 J | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| BP-3B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.37 J | < 1.0 U | < 1.0 U | 0.57 J | < 1.0 U | 4.1 | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.61 J |
| BP-3C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.27 J | < 1.0 U | 1.3 | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| DW-1 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.76 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| DW-2 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.42 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | 3.8 | < 1.0 U | < 1.0 U |
| EW-01A | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.31 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01A DUP | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.27 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-01C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02A | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | 8.7 | < 1.0 U | < 1.0 U |
| EW-02B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.28 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-02D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-04A | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-04B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.16 J |
| EW-04C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.33 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | 0.39 J | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-04D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.24 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-05 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.35 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-07C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.37 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | 0.89 J | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-07D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.36 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-11D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-12D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.36 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | 0.38 J | < 1.0 U | < 1.0 U | < 1.0 U |
| EW-14D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.75 J | < 1.0 U | < 1.0 U | 0.29 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| LF-1 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.32 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| M-30B-R | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.35 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | 0.26 J | < 1.0 U | < 1.0 U |
| MW-05B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06A | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MW-06B | < 1.0 U | < 1.0 U | 1.6 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.35 J | < 1.0 U | < 1.0 U | < 1.0 U | 0.52 J | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | 0.94 J | 0.34 J | < 1.0 U | < 1.0 U |
| MW-06C | < 1.0 U | < 1.0 U | 0.38 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.27 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | 0.63 J | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06D | < 1.0 U | < 1.0 U | 0.85 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 1.2 | < 1.0 U | < 1.0 U | < 1.0 U | 0.41 J | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | 0.60 J | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06E | < 1.0 U | < 1.0 U | 3.2 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.43 J | < 1.0 U | < 1.0 U | < 1.0 U | 1.0 | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | 0.35 J | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-06F | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.71 J | < 1.0 U | < 1.0 U | 0.45 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | 0.23 J | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-7B-R* | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | 1.7 J | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 10 U | < 10 U | < 10 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U | < 20 U | < 2.0 U | < 2.0 U | < 2.0 U | < 2.0 U |
| MW-08A | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-08B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.41 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | 0.39 J | < 1.0 U | < 1.0 U |
| MW-08C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.49 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-09B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-09C | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-10D | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| MW-11A | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.32 J | < 1.0 U | < 1.0 U | 0.41 J | < 1.0 U | 4.3 | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | 0.25 J | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | 2.1 |
| MW-11B | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.27 J | < 1.0 U | < 1.0 U | 0.36 J | < 1.0 U | 3.8 | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| OBS-1 | < 1.0 U | < 1.0 U | 1.7 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | 0.18 J | < 1.0 U | < 1.0 U | < 1.0 U |
| WT-01 | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | 0.32 J | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |
| WT-01 DUP | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 5.0 U | < 5.0 U | < 5.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U | < 10 U | < 1.0 U | < 1.0 U | < 1.0 U | < 1.0 U |

*Sample has a dilution factor = 2
Note: NS = not sampled; U = not detected; J = estimated value; B = analyte found in blank; T = quality control parameter exceeded laboratory limits
Values in shaded cells exceed NYSDEC 703 Class GA criteria.

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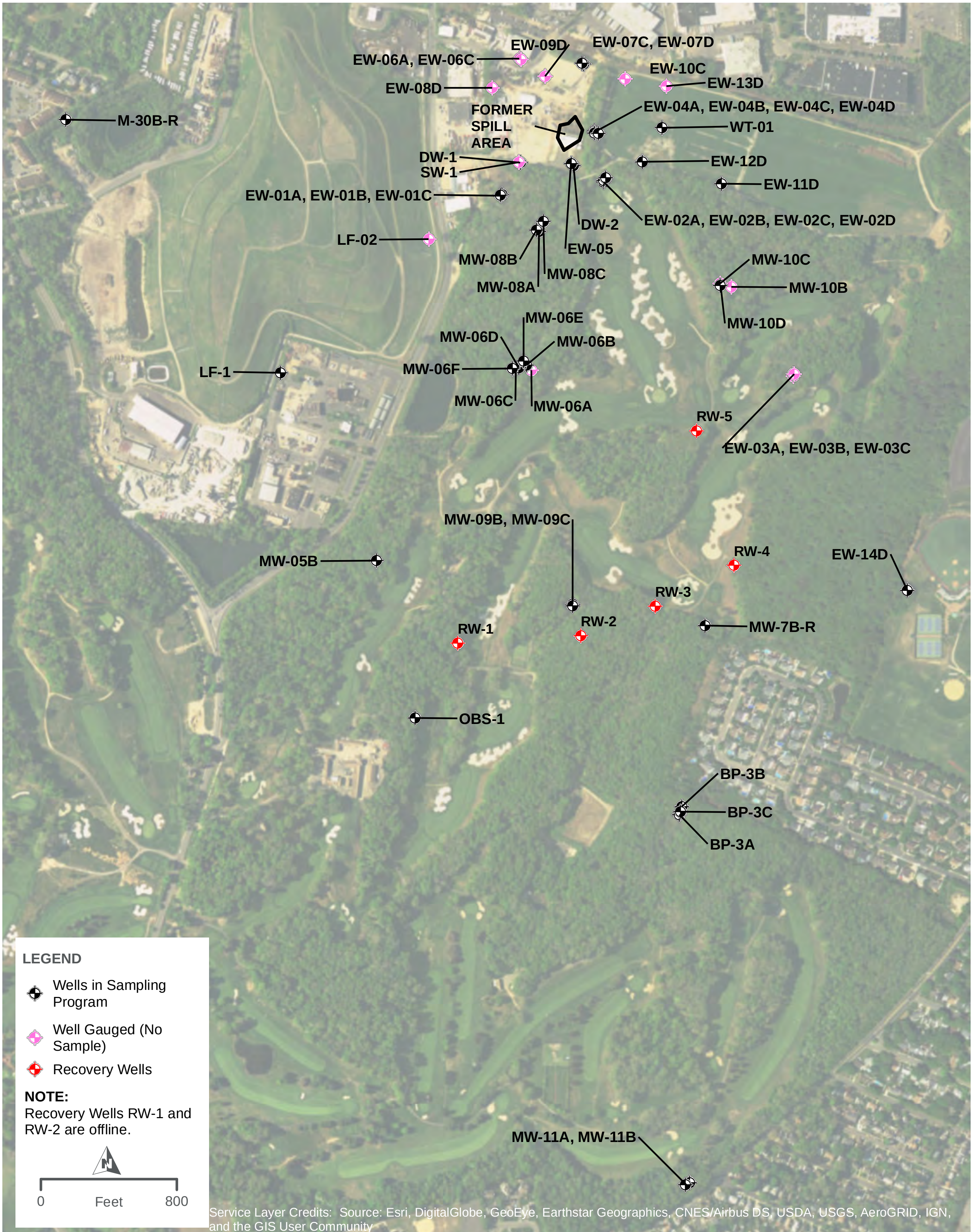
0 Miles 0.5

## SITE LOCATION

### CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 1

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\275962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\FIG1_SITELOCATION.MXD - USER: CWEAVER - DATE: 4/5/2017

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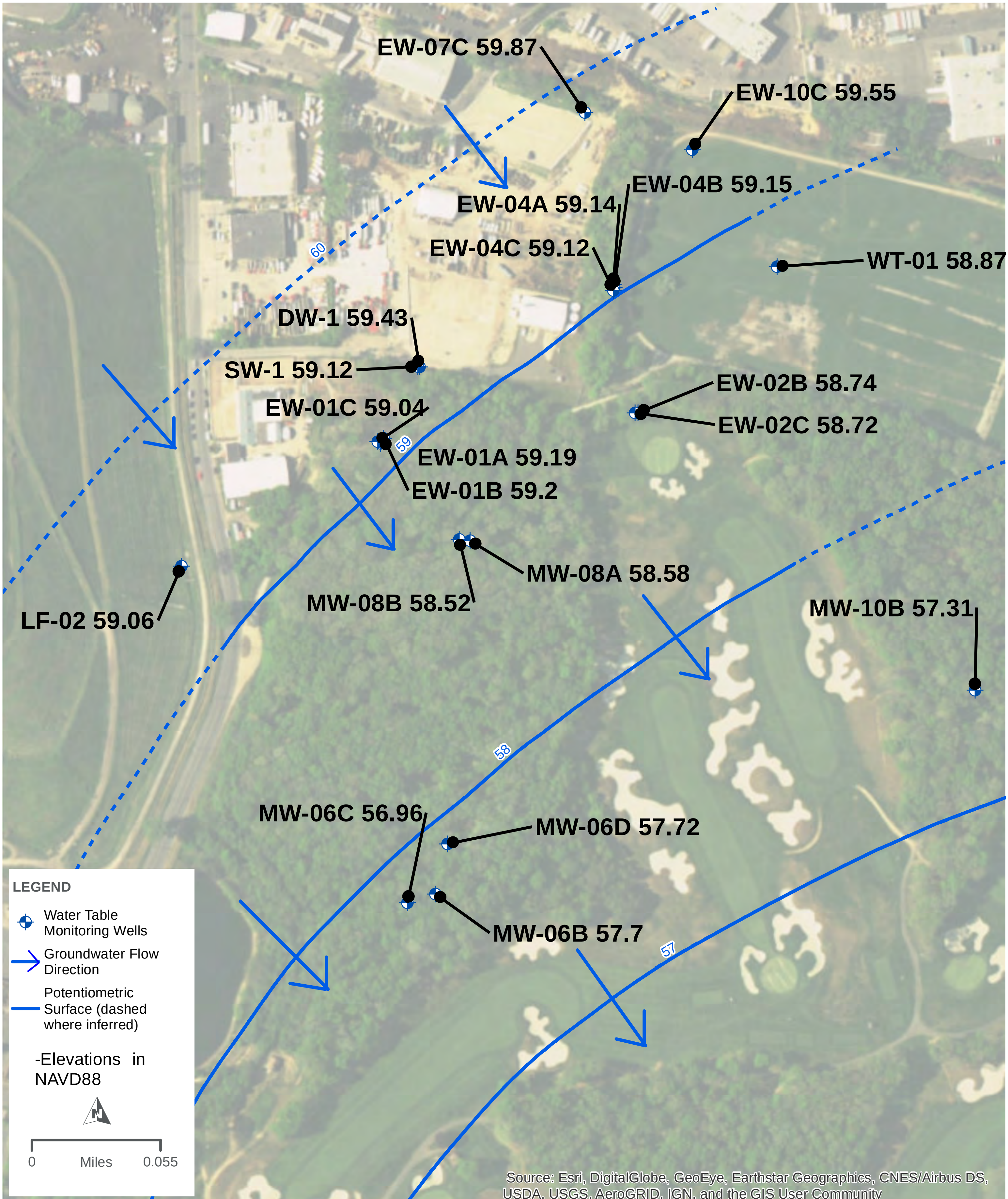
**WELLS SAMPLED**

**CLAREMONT POLYCHEMICAL CORPORATION**

**FIGURE 2**

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\275962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\FIG2_SAMPLELOCATION.MXD - USER: CWEAVER - DATE: 4/20/2017



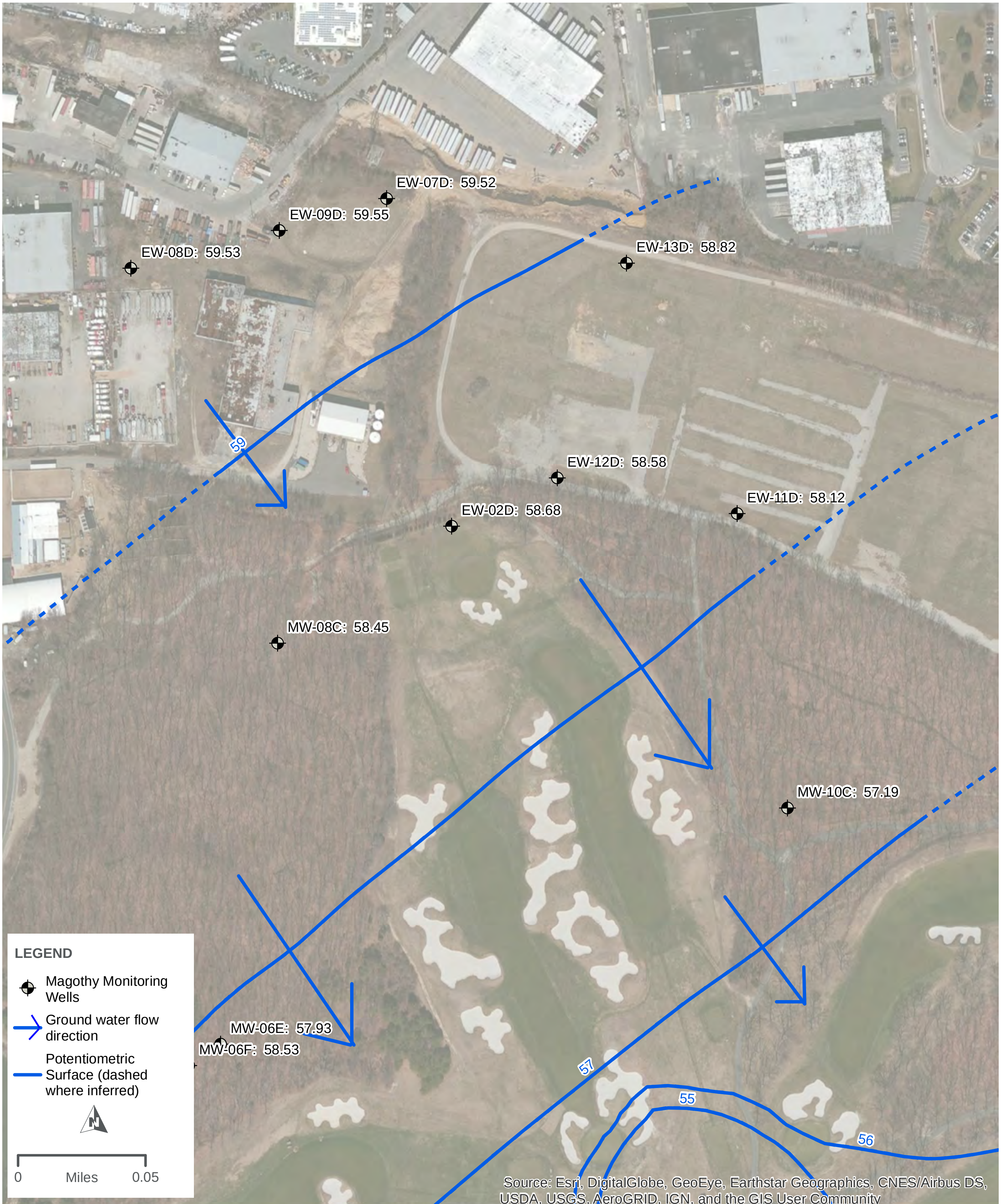

**JUNE 2017 POTENTIONETRIC SURFACE- WATER TABLE**

**CLAREMONT POLYCHEMICAL CORPORATION**

DW-2, EW-02A, EW-4D, EW-05, EW-6A, EW-6B, LF-1, MW-6A, MW-10D and MW-30B-R are not included in the June 2017 contours

**FIGURE 3**

PATH: \\MAHPI-FILE01\GIS_PROJECTS\202315_NEW YORK STATE DEPT OF ENVIRONMENTAL CON\250751_NYSDECPPWA19_CLAREMONT\REPORT_2Q2017\2017_06_2Q2017_FIGURE_3.MXD - USER: ATRESSLER - DATE: 8/3/2017

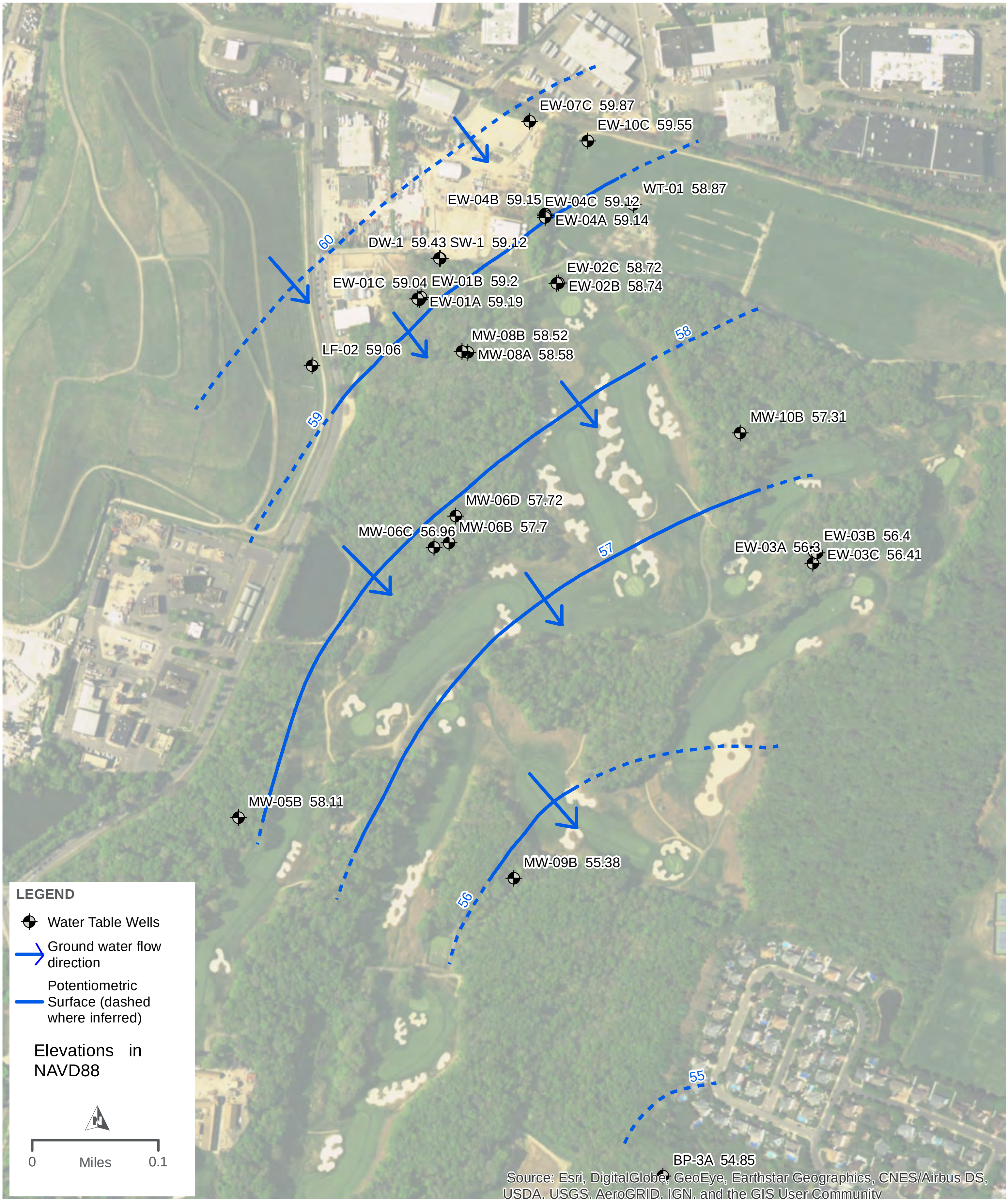



# JUNE 2017 POTENTIOMETRIC SURFACE - MAGOTHY AQUIFER AT CPC (WELLS SCREENED DEEPER THAN -58 FT AMSL)

DW-2, EW-02A, EW-4D, EW-05, EW-6A, EW-6B, LF-1, MW-6A, MW-10D and MW-30B-R are not included in the June 2017 contours

CLAREMONT POLYCHEMICAL CORPORATION FIGURE 4

PATH: \\MAHPI-FILE01\GIS_PROJECTS\202315_NEW YORK STATE DEPT OF ENVIRONMENTAL CON\250751_NYSDECPPWA19_CLAREMONT\REPORT_2Q2017\2017_06_2Q2017_FIGURE_4.MXD - USER: ATRESSLER - DATE: 8/3/2017

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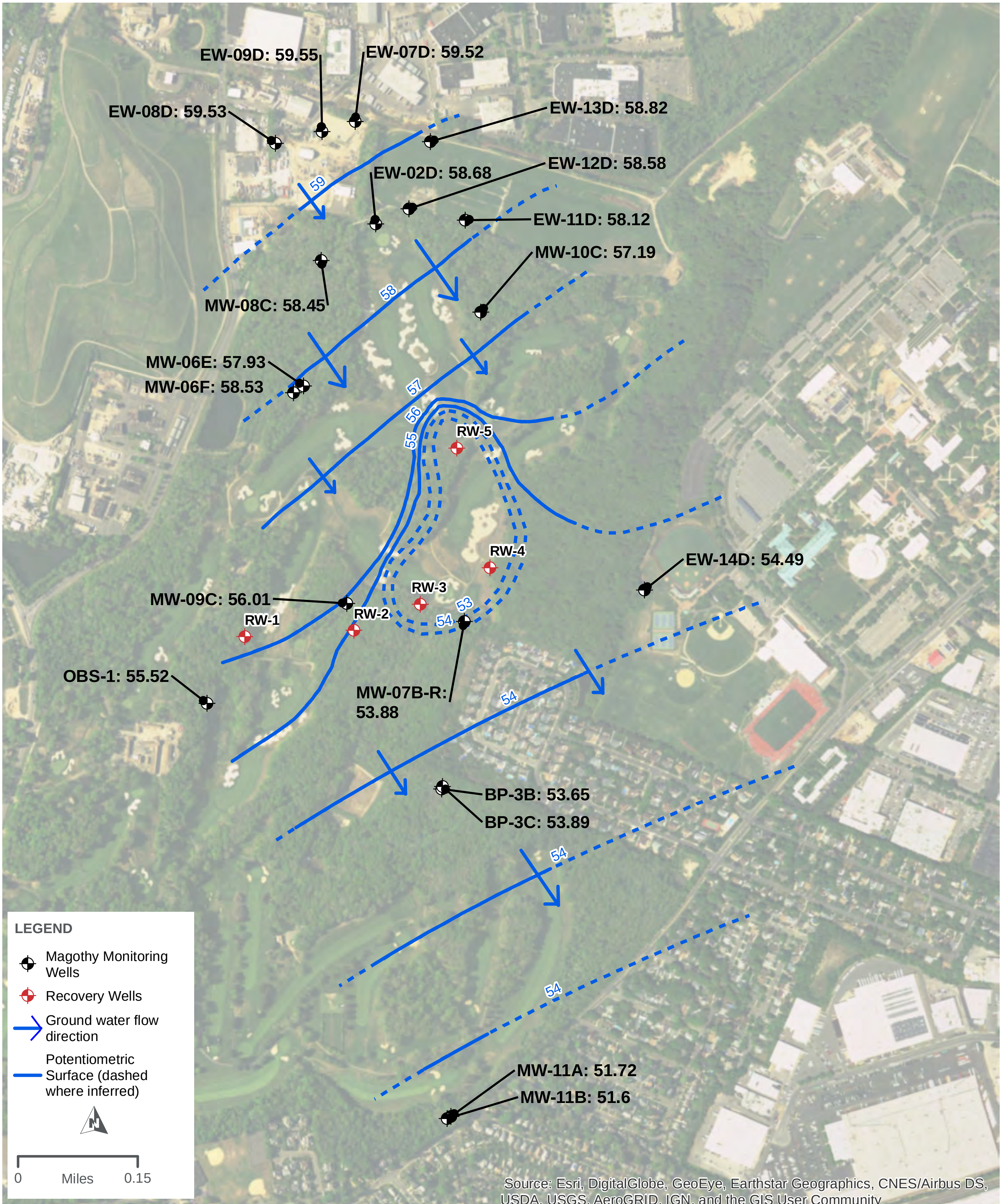
# JUNE 2017 POTENTIONETRIC SURFACE- WATER TABLE

## CLAREMONT POLYCHEMICAL CORPORATION

DW-2, EW-02A, EW-4D, EW-05, EW-6A, EW-6B, LF-1, MW-6A, MW-10D and MW-30B-R are not included in the June 2017 contours

FIGURE 5

PATH: \\MAHPI-FILE01\GIS_PROJECTS\202315_NEW YORK STATE DEPT OF ENVIRONMENTAL CON\250751_NYSDECPPWA19_CLAREMONT\REPORT_2Q2017\2017_06_2Q2017_FIGURE_5.MXD - USER: ATRESSLER - DATE: 8/1/2017

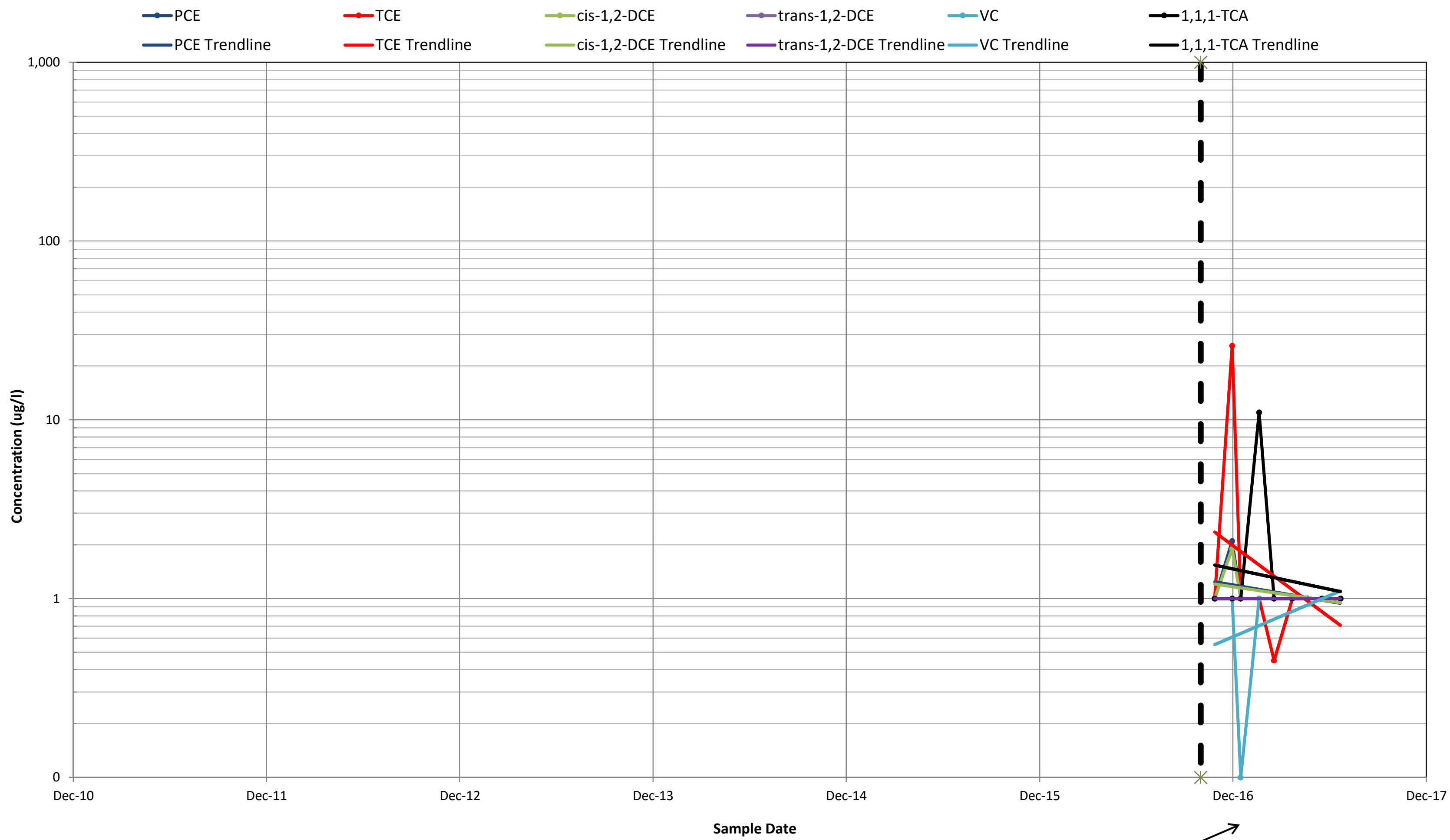



# JUNE 2017 POTENTIOMETRIC SURFACE - MAGOTHY AQUIFER (WELLS SCREENED DEEPER THAN -58 FT AMSL)

## CLAREMONT POLYCHEMICAL CORPORATION FIGURE 6

DW-2, EW-02A, EW-4D, EW-05, EW-6A, EW-6B, LF-1, MW-6A, MW-10D and MW-30B-R are not included in the June 2017 contours

PATH: \\MAHPI-FILE01\GIS_PROJECTS\202315_NEW YORK STATE DEPT OF ENVIRONMENTAL CON\250751_NYSDECPPWA19_CLAREMONT\REPORT_2Q2017\2017_06_2Q2017_FIGURE_6.MXD - USER: ATRESSLER - DATE: 8/1/2017




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l;  VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

**DRAFT: PROVISIONAL AND SUBJECT TO CHANGE UPON ADDITIONAL DATA COLLECTION AND INTERPRETATION**

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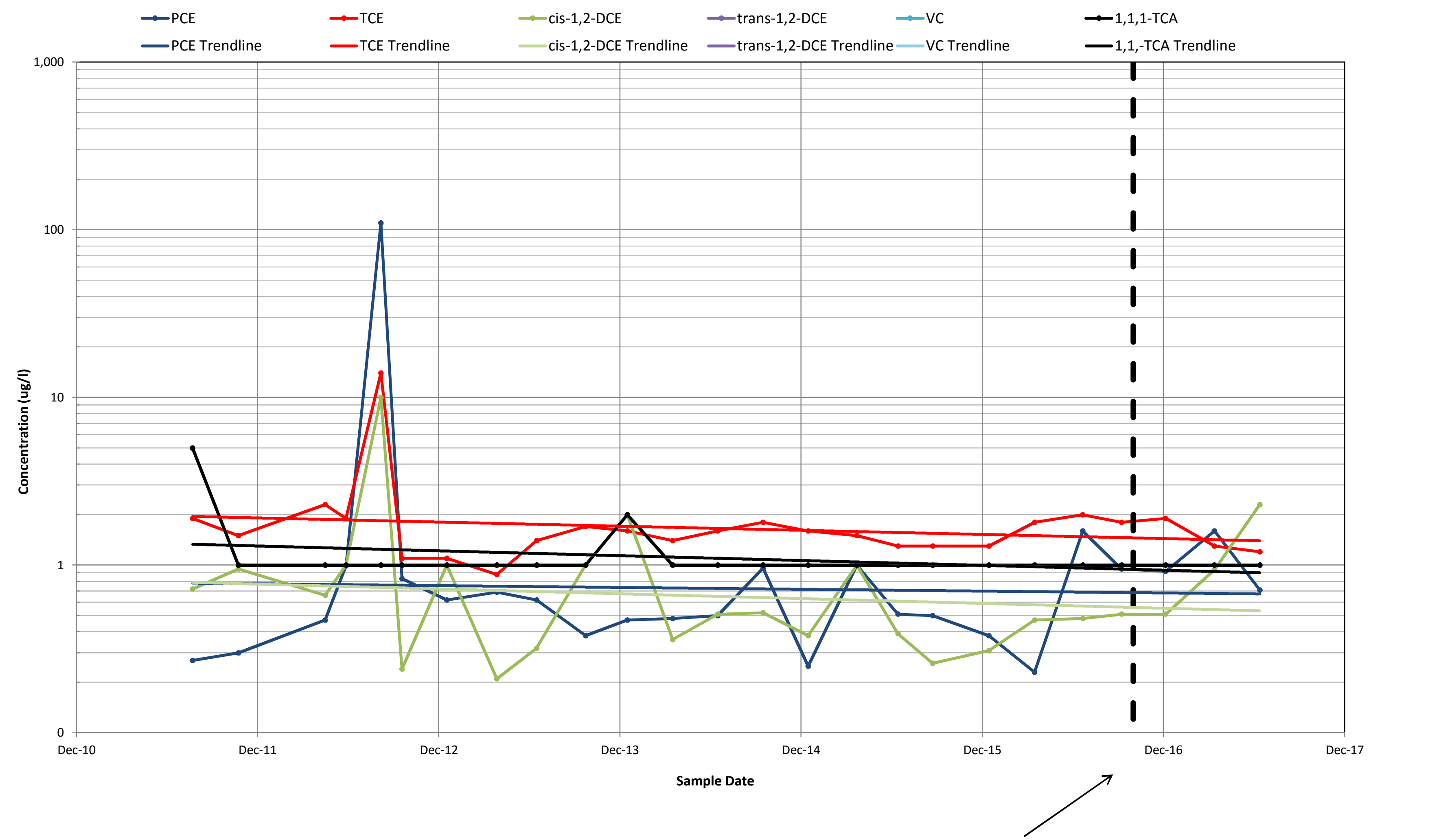
**CHLORINATED VOC CONCENTRATIONS**
**PCE and TCE Concentration in Effluent**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
7




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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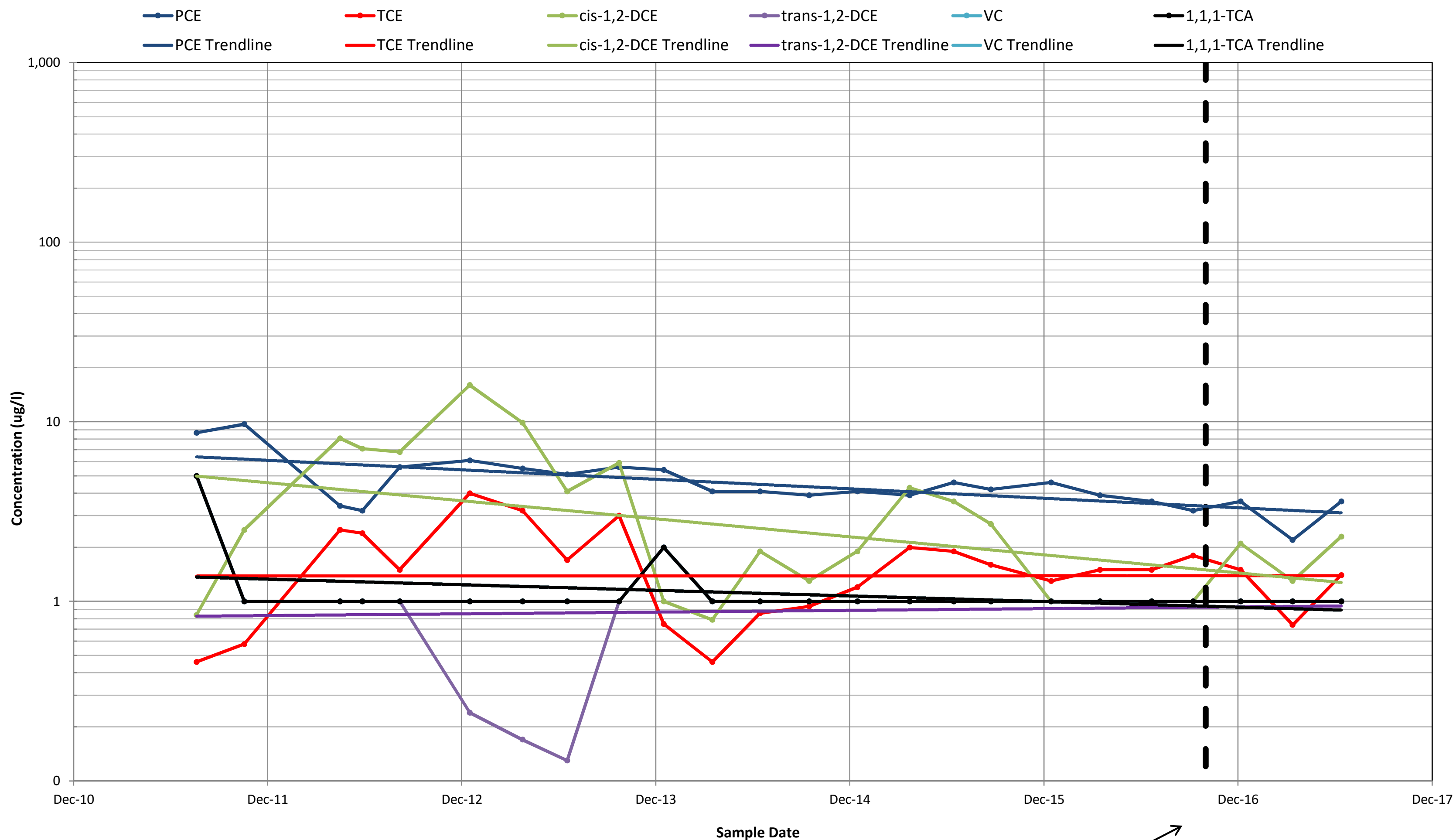
**CHLORINATED VOC CONCENTRATIONS**
**WELL DW-1**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
8




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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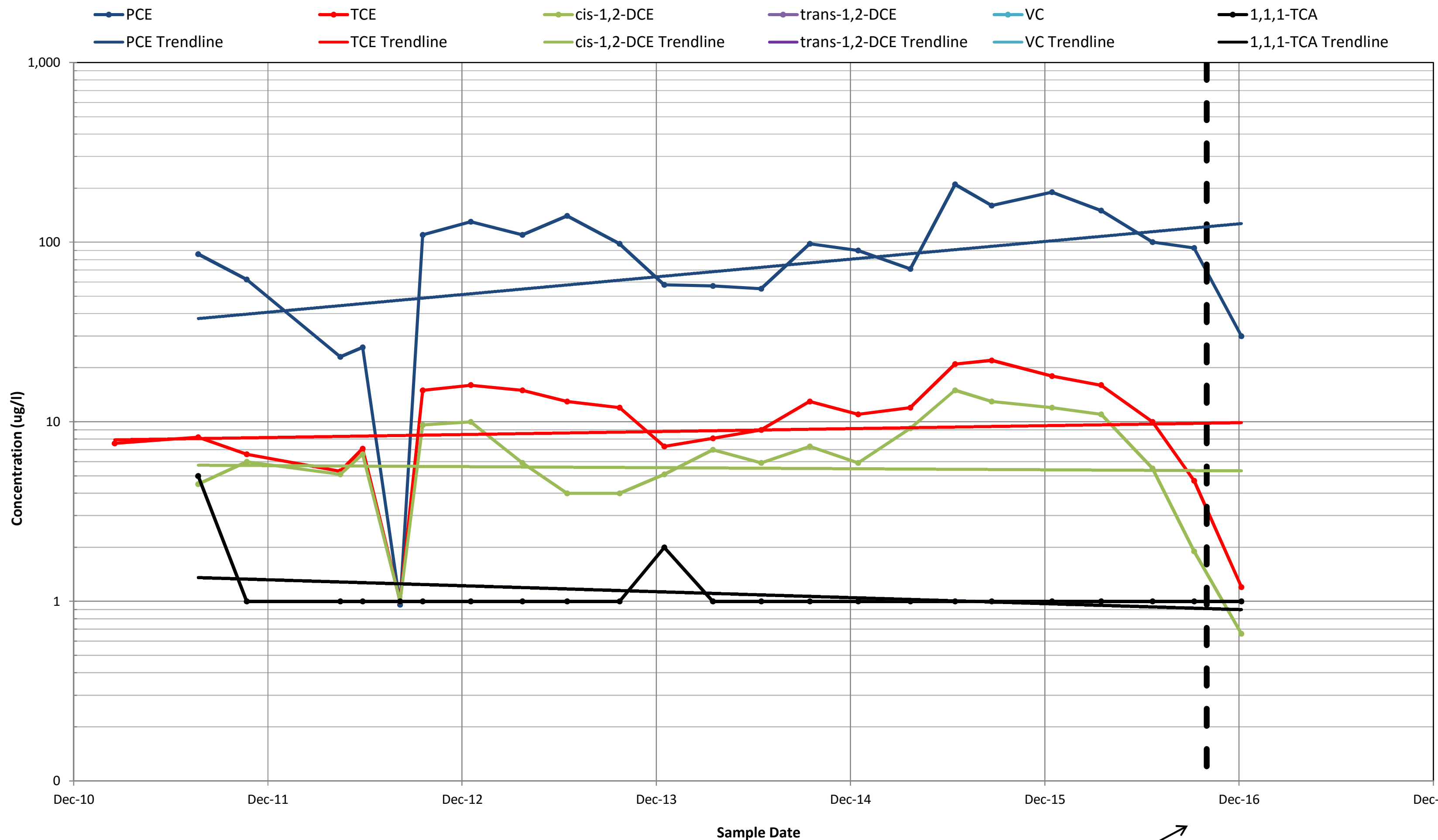
**CHLORINATED VOC CONCENTRATIONS**
**WELL EW-1A**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
9




*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.
Well was dry in 1st Quarter 2017 and 2nd Quarter 2017

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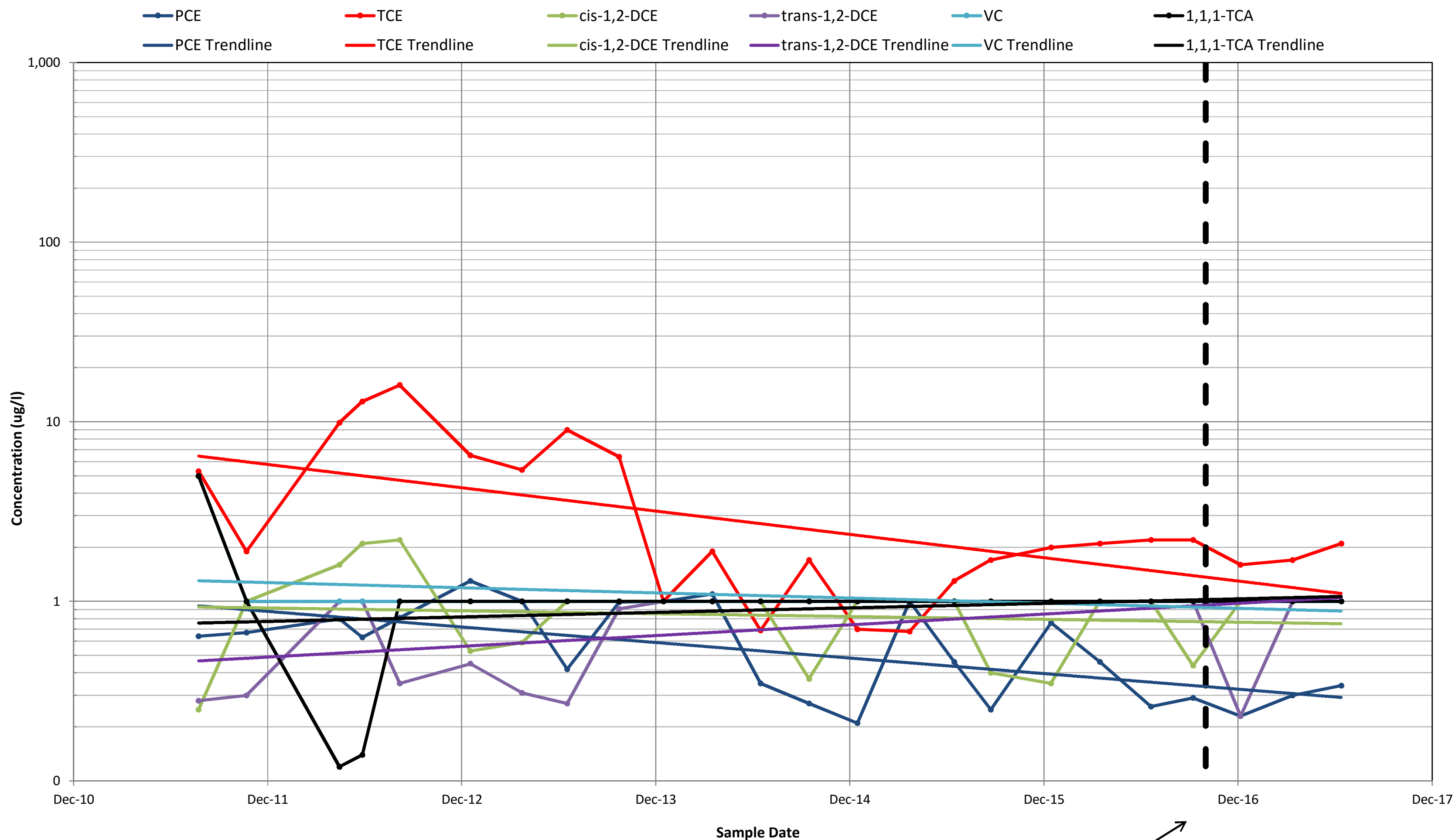
**CHLORINATED VOC CONCENTRATIONS**
**WELL SW-1**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
10




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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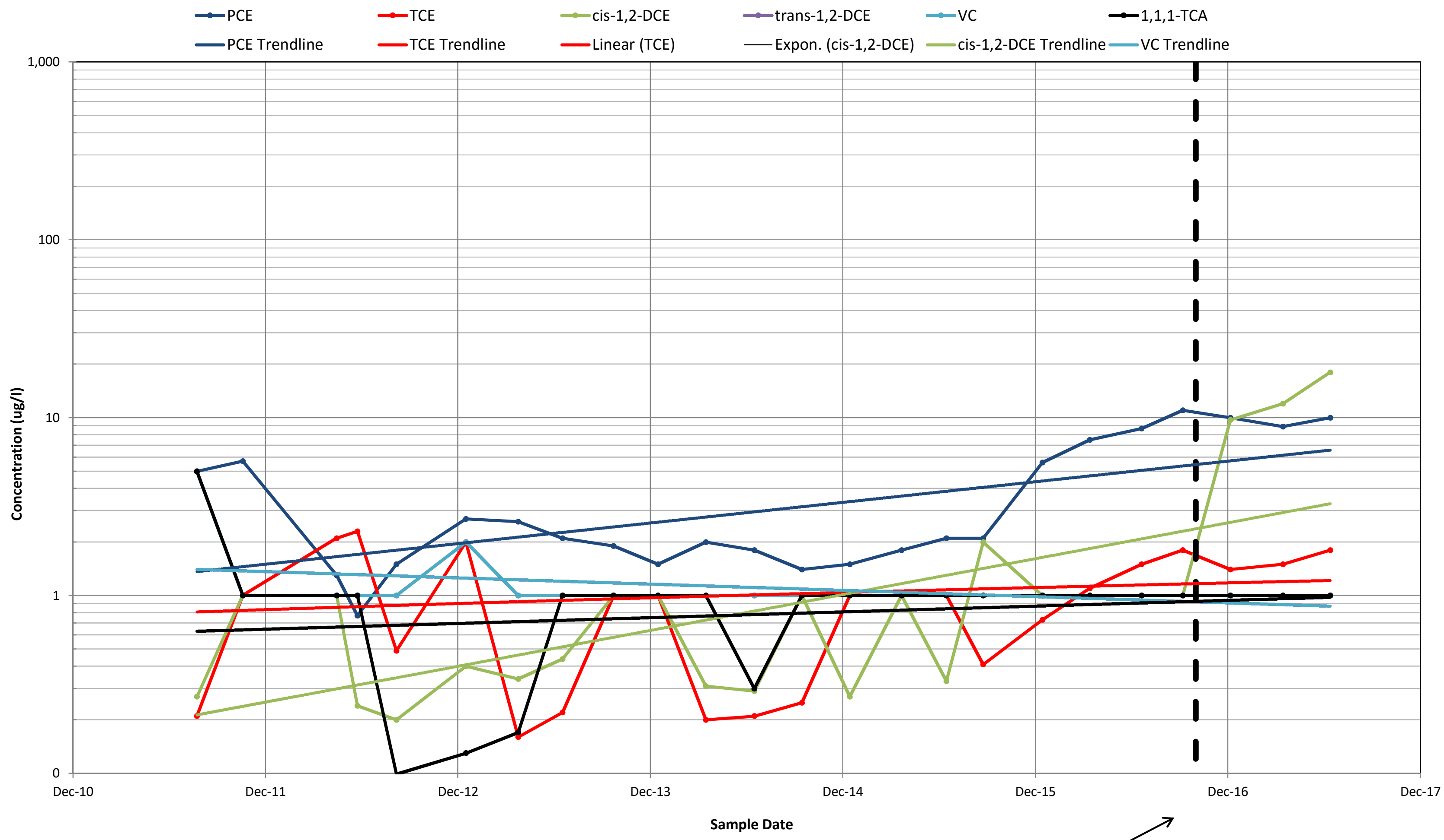
**CHLORINATED VOC CONCENTRATIONS**
**WELL EW-5**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
11




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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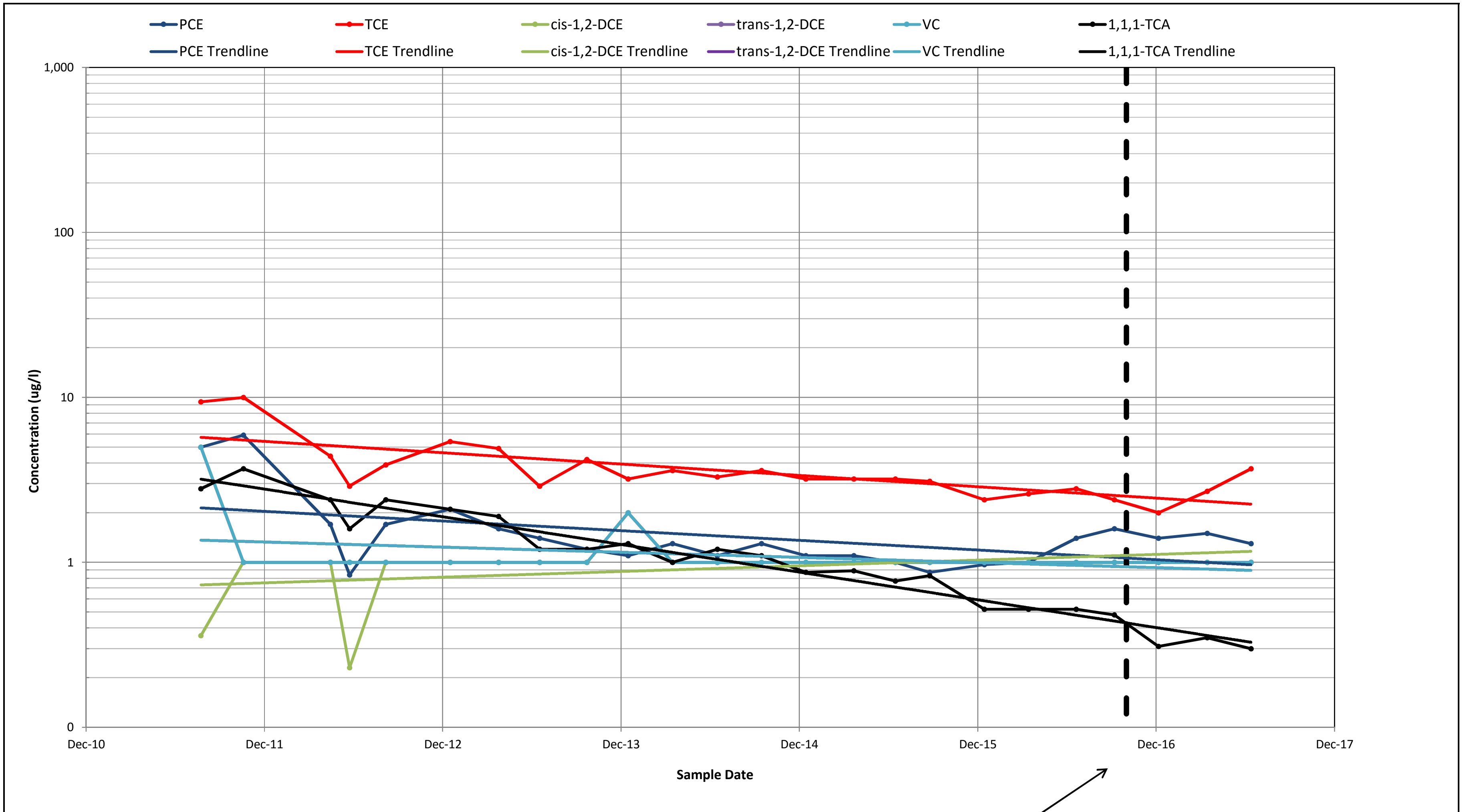
**CHLORINATED VOC CONCENTRATIONS**
**WELL EW-4A**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
12




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

**DRAFT: PROVISIONAL AND SUBJECT TO CHANGE UPON ADDITIONAL DATA COLLECTION AND INTERPRETATION**

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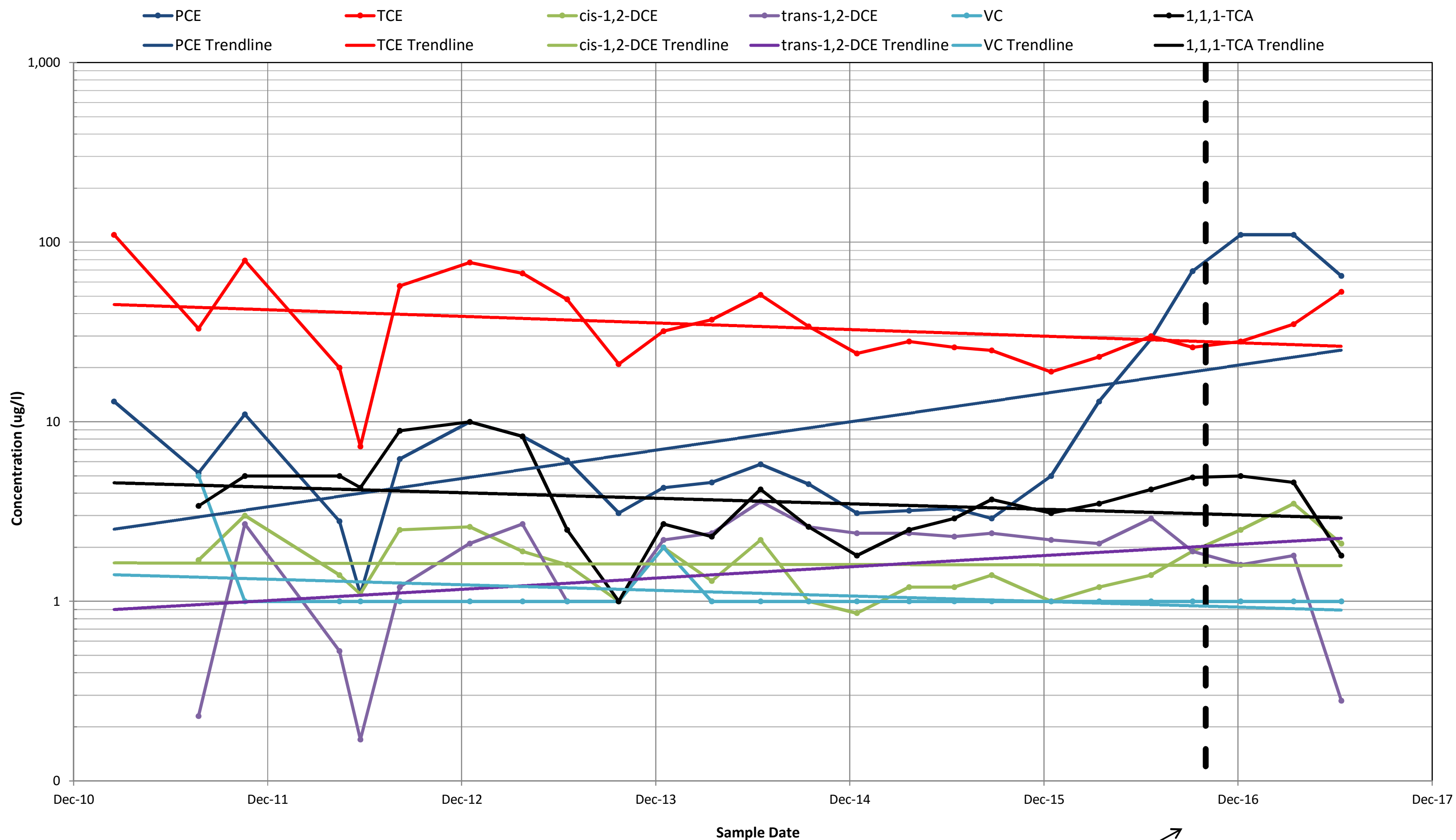
**CHLORINATED VOC CONCENTRATIONS**
**WELL EW-4B**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
13




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

**DRAFT: PROVISIONAL AND SUBJECT TO CHANGE UPON ADDITIONAL DATA COLLECTION AND INTERPRETATION**

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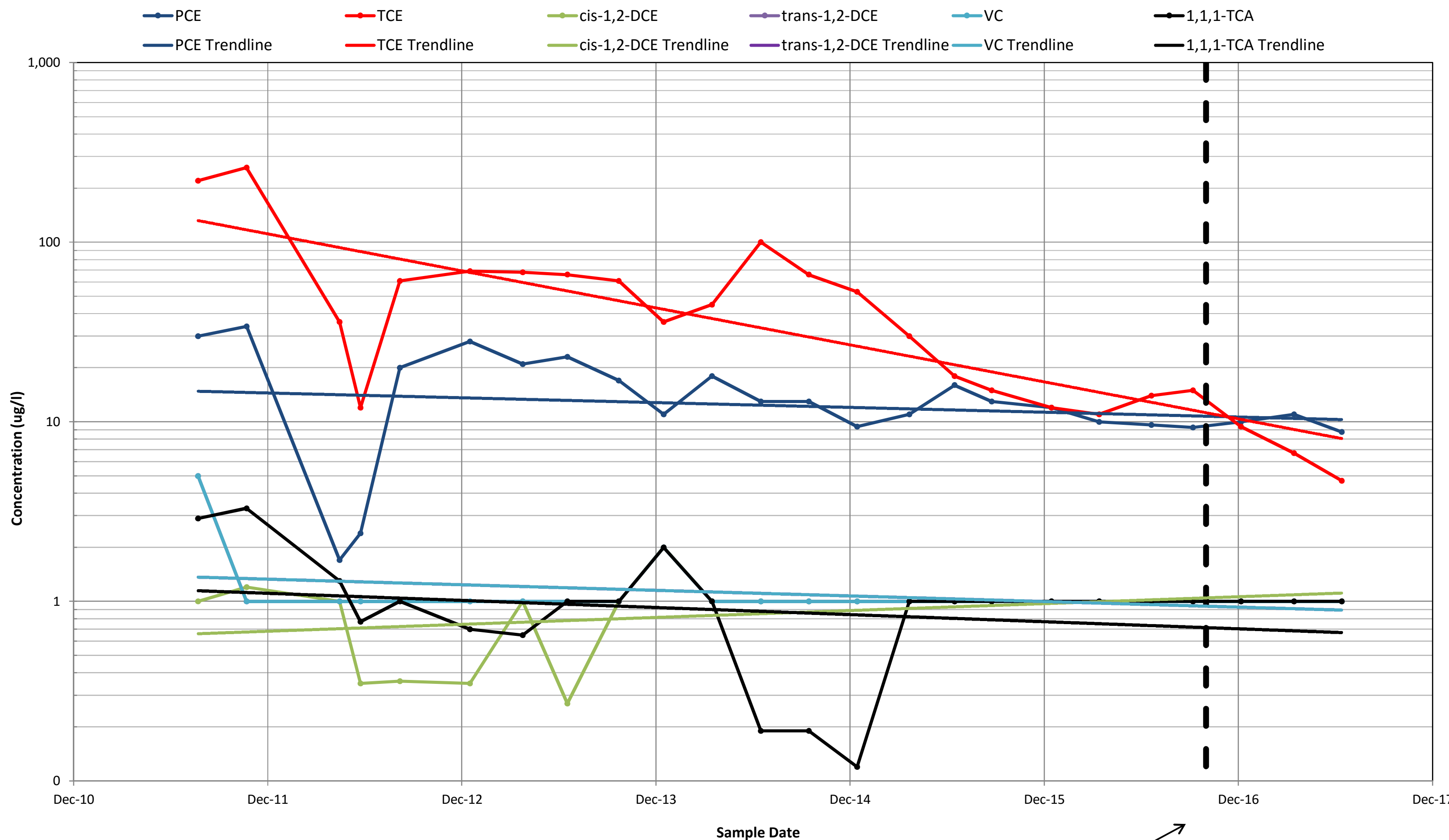
**CHLORINATED VOC CONCENTRATIONS**
**WELL EW-4C**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
14




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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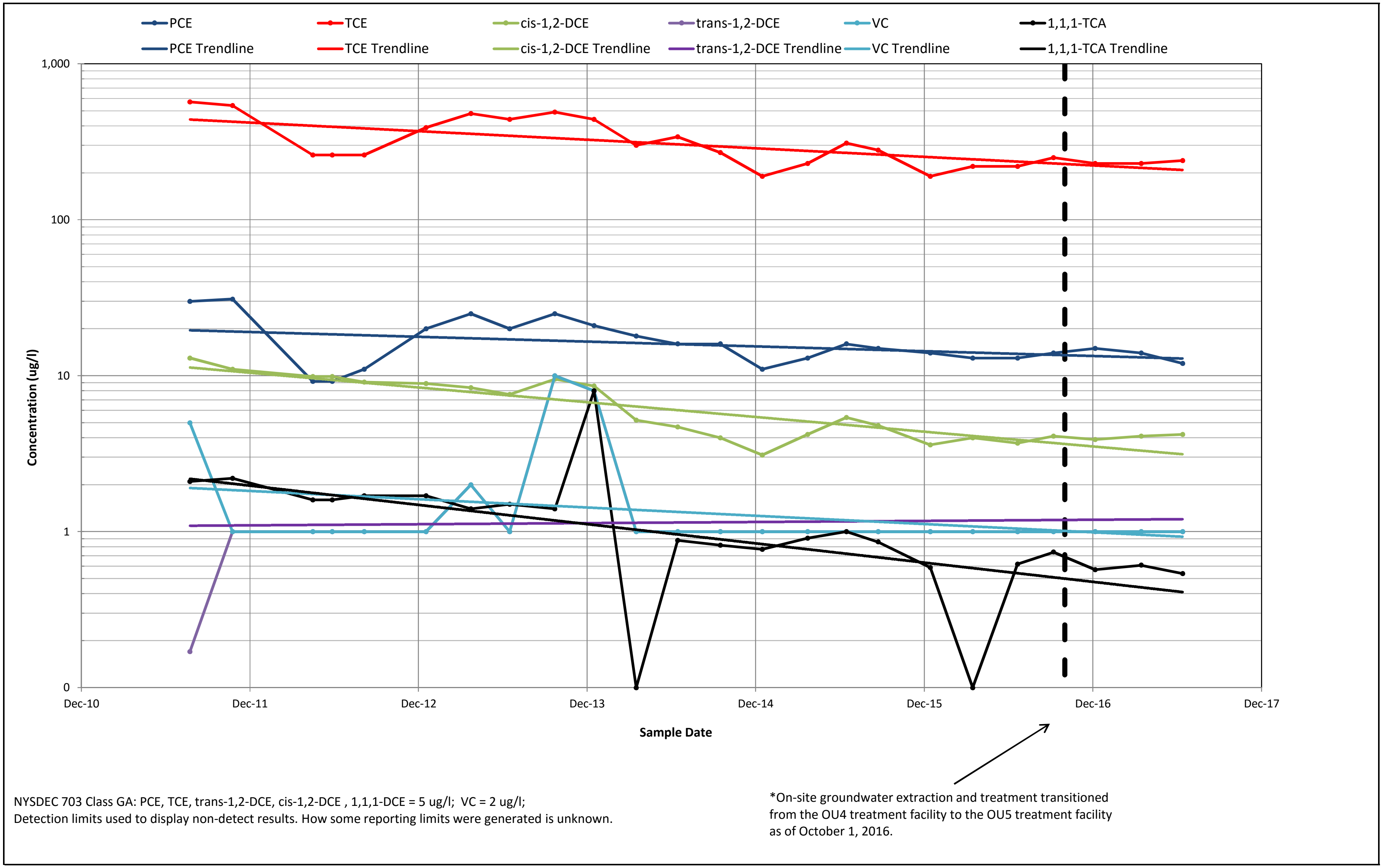
**CHLORINATED VOC CONCENTRATIONS**
**WELL EW-4D**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
15

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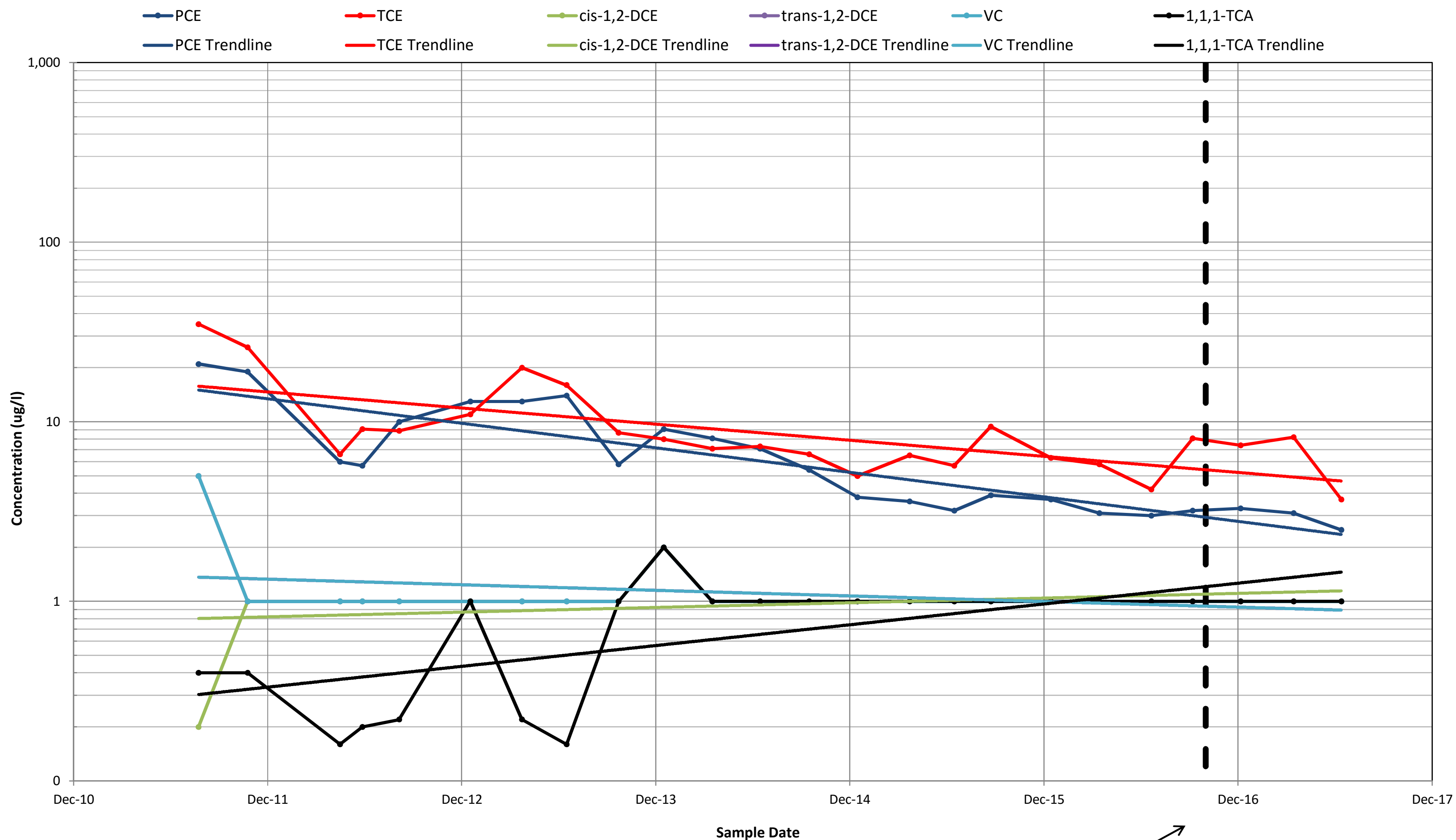
**CHLORINATED VOC CONCENTRATIONS**
**WELL EW-7C**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
16




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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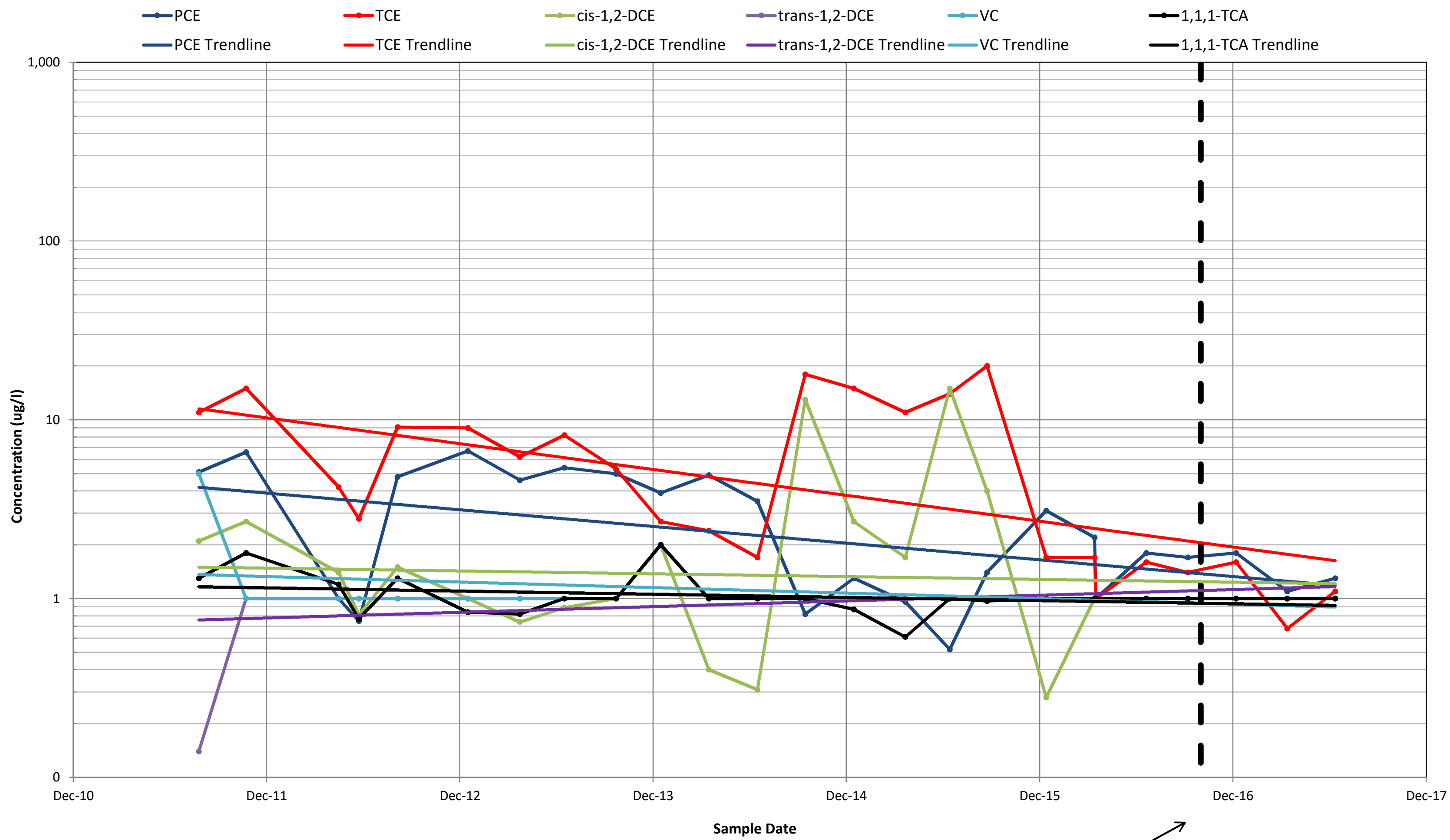
**CHLORINATED VOC CONCENTRATIONS**
**WELL EW-7D**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
17




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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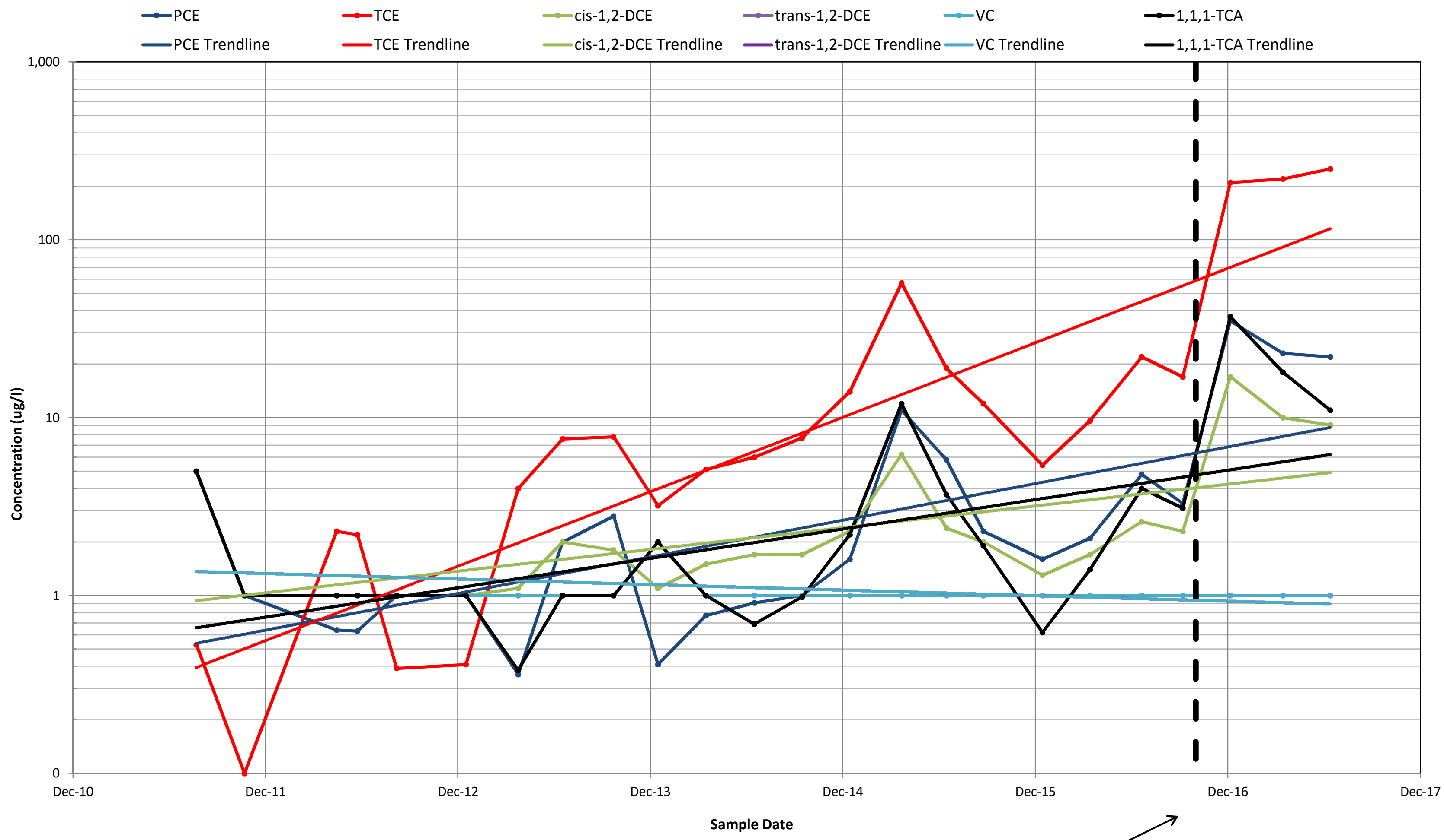
CHLORINATED VOC CONCENTRATIONS
WELL MW-10D
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JULY 2017

FIGURE
18




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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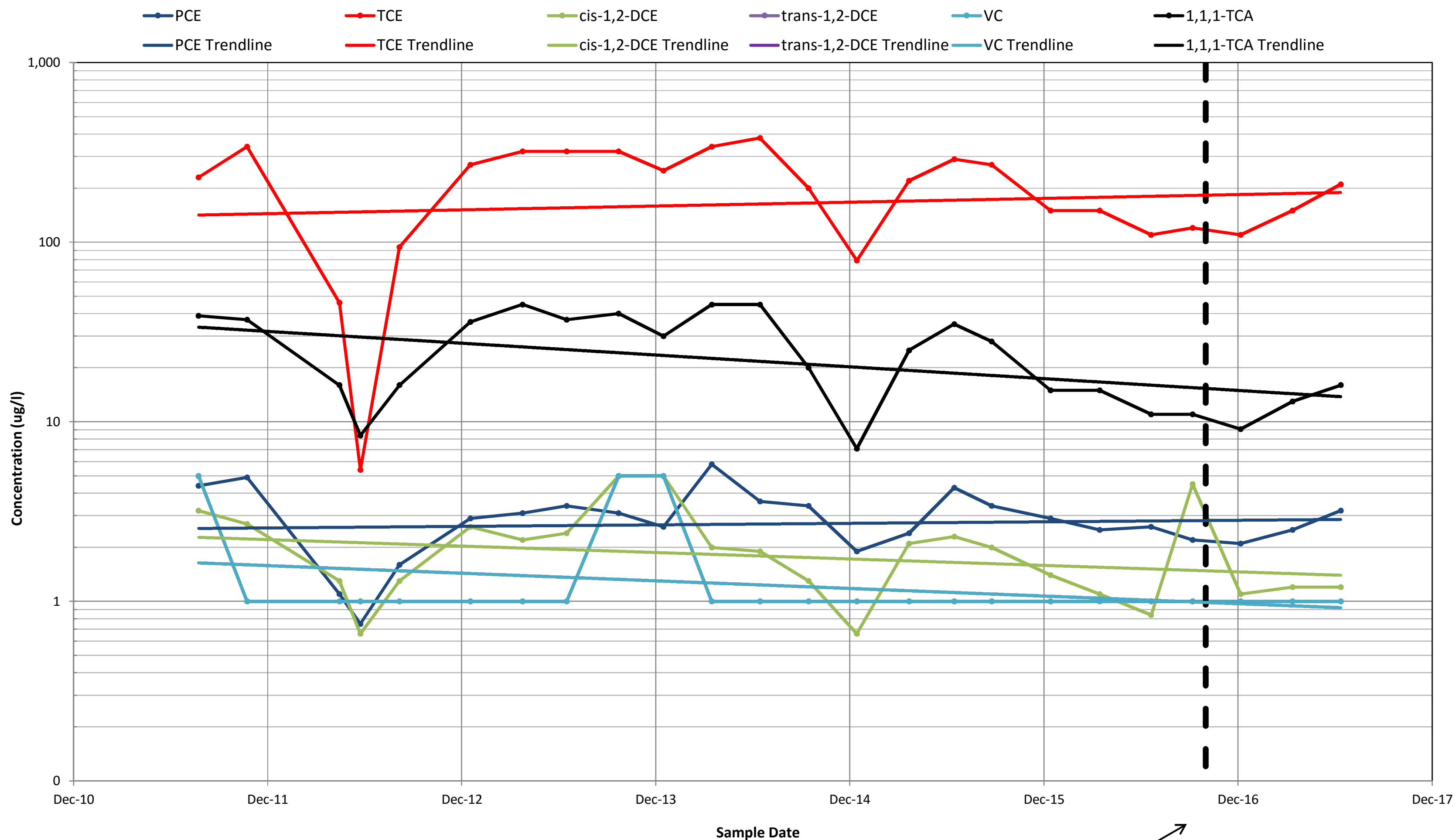
**CHLORINATED VOC CONCENTRATIONS**
**WELL EW-12D**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
19




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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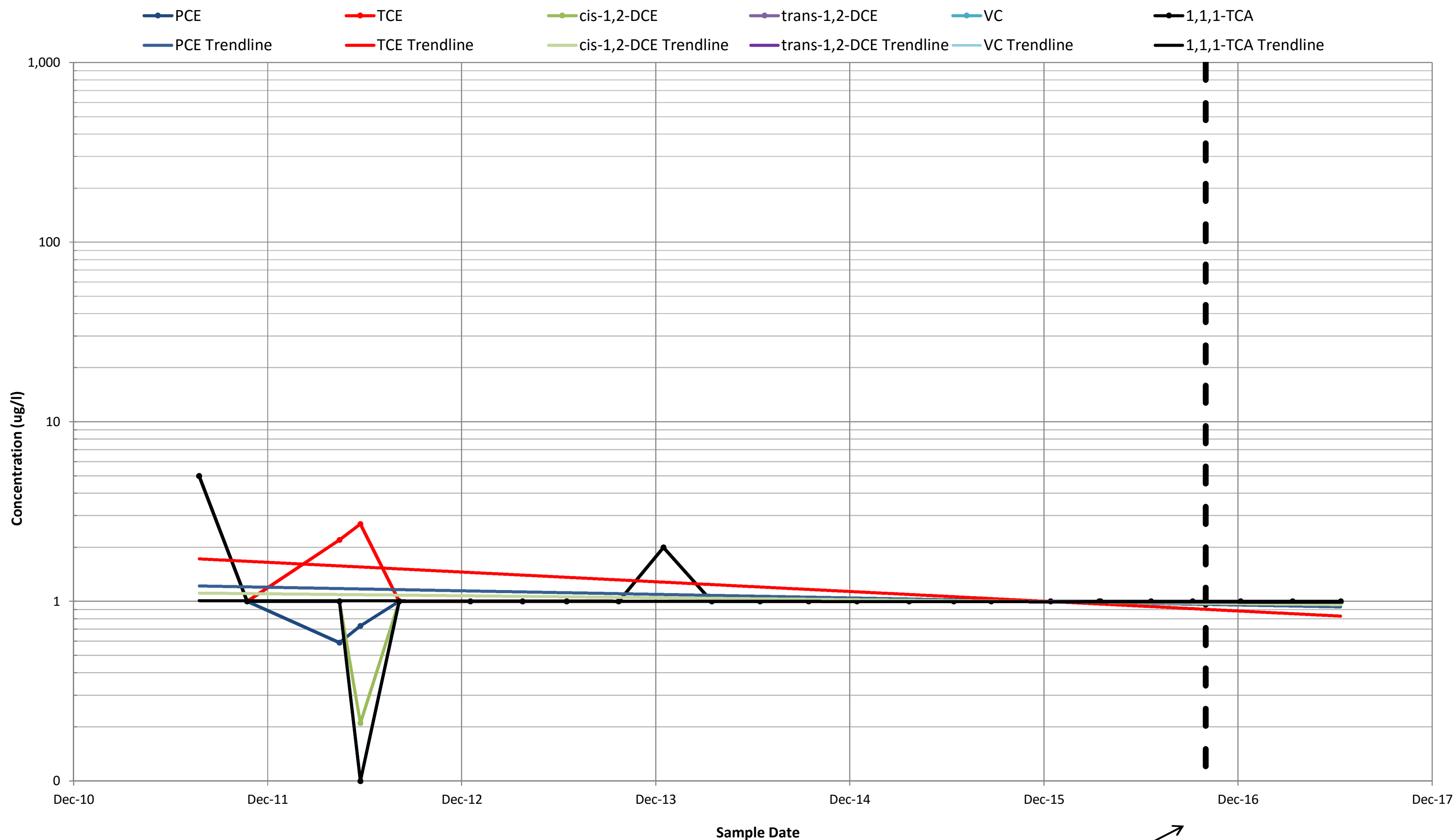
**CHLORINATED VOC CONCENTRATIONS**
**WELL EW-14D**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
20




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.
A dllution factor of 2 was used in December 2013 reporting

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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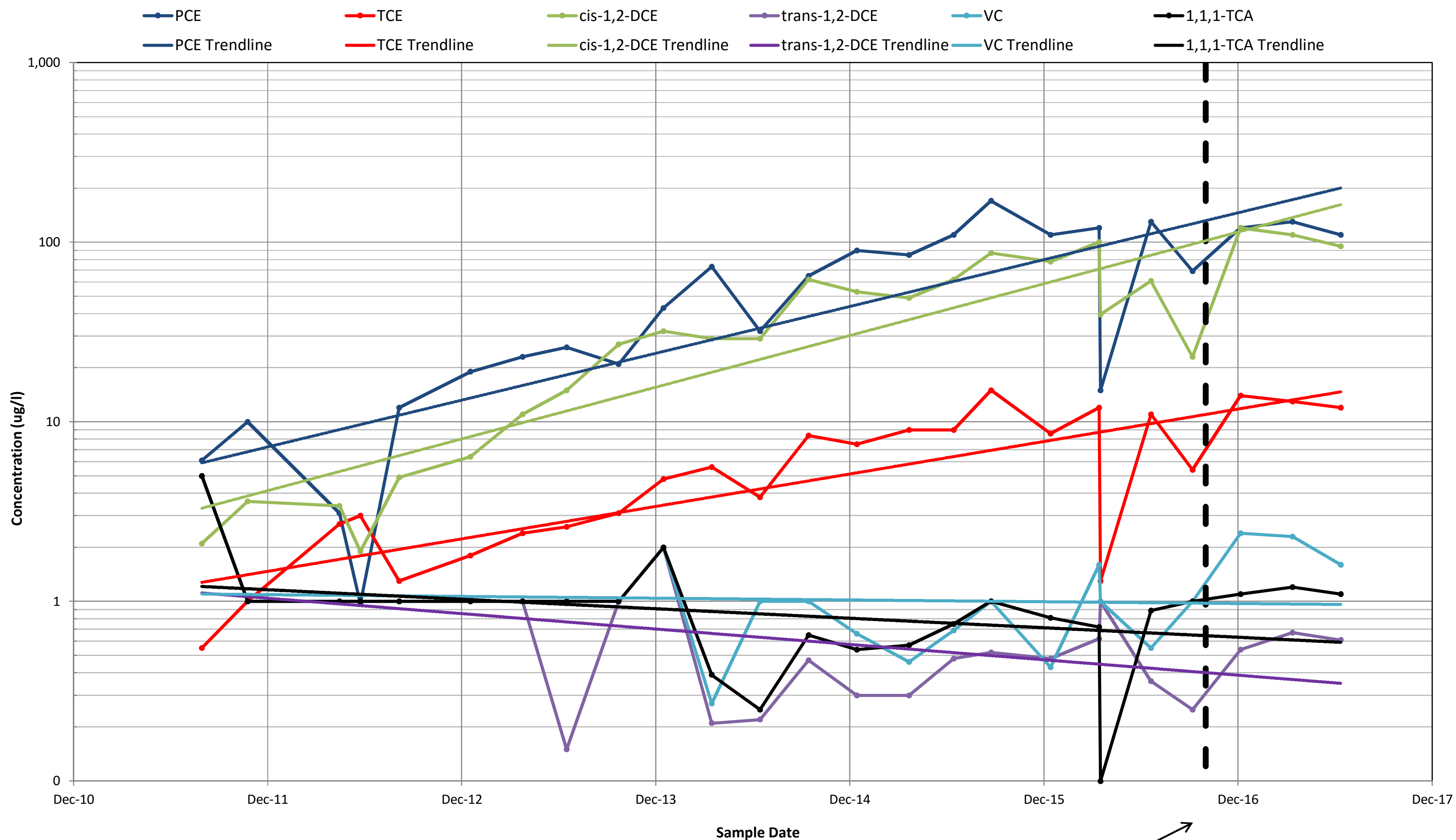
**CHLORINATED VOC CONCENTRATIONS**
**WELL BP-3A**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
21




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l;  VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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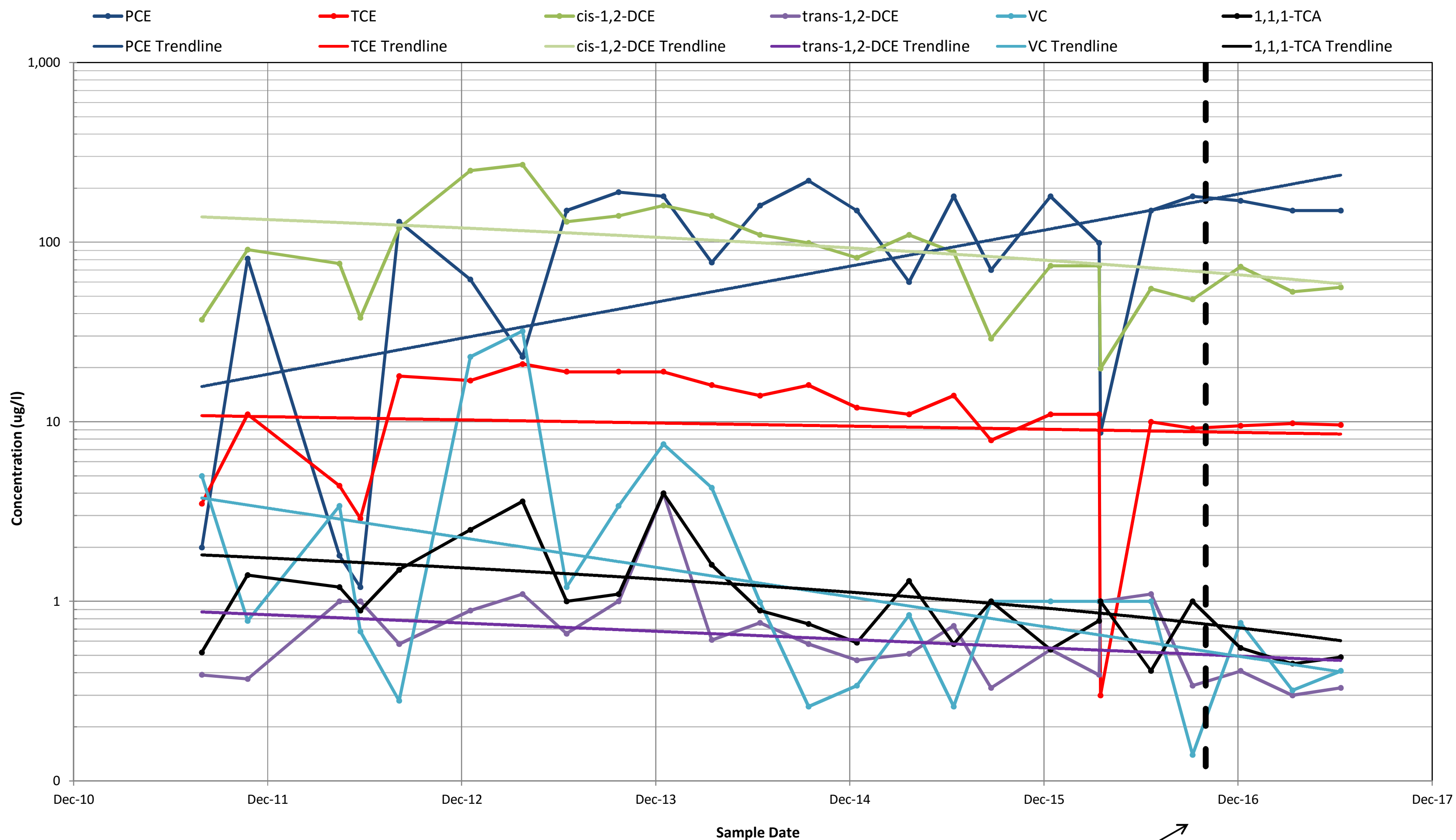
**CHLORINATED VOC CONCENTRATIONS**
**WELL BP-3B**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
22




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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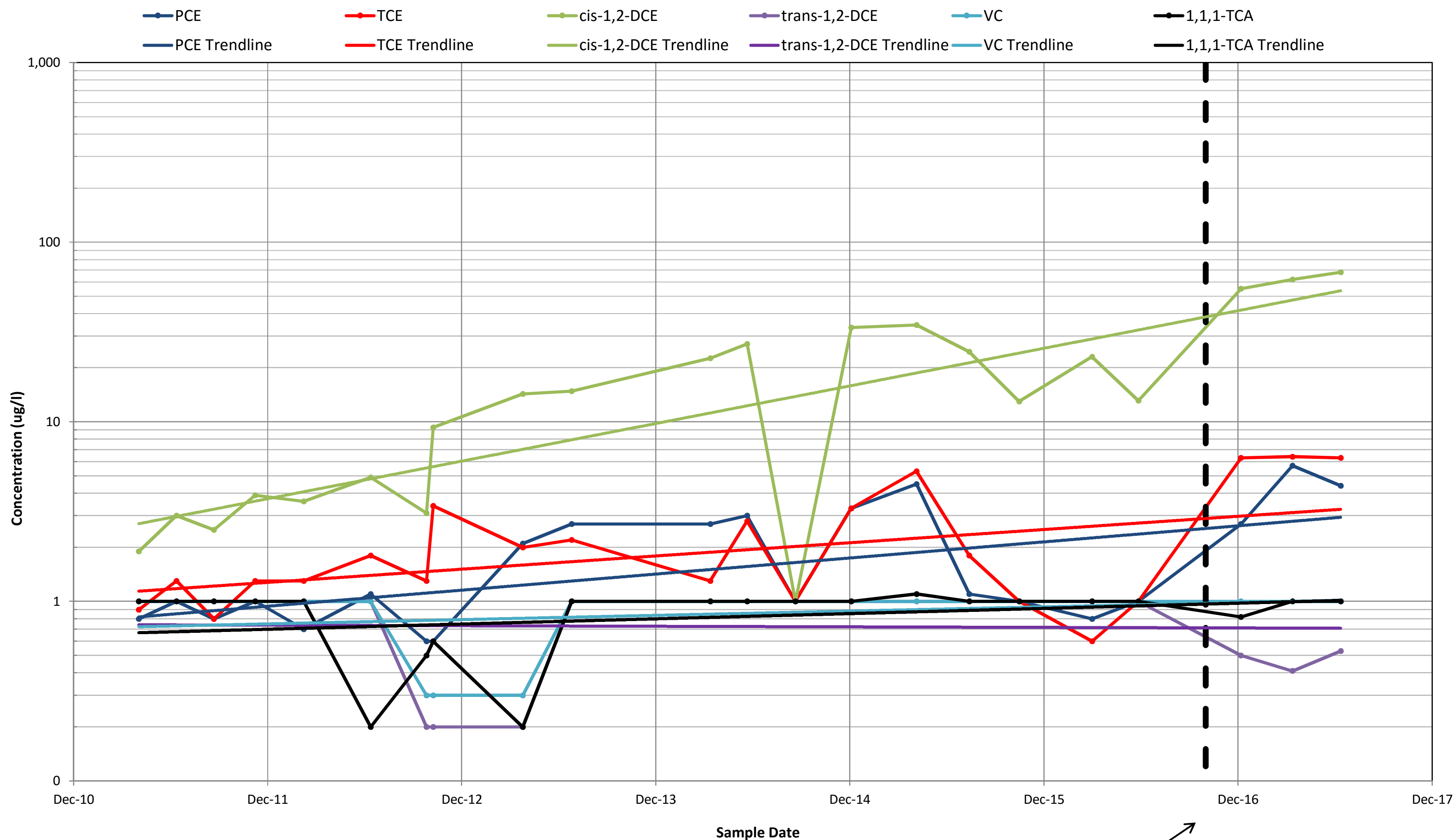
**CHLORINATED VOC CONCENTRATIONS**
**WELL BP-3C**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**

JULY 2017

**FIGURE**

23




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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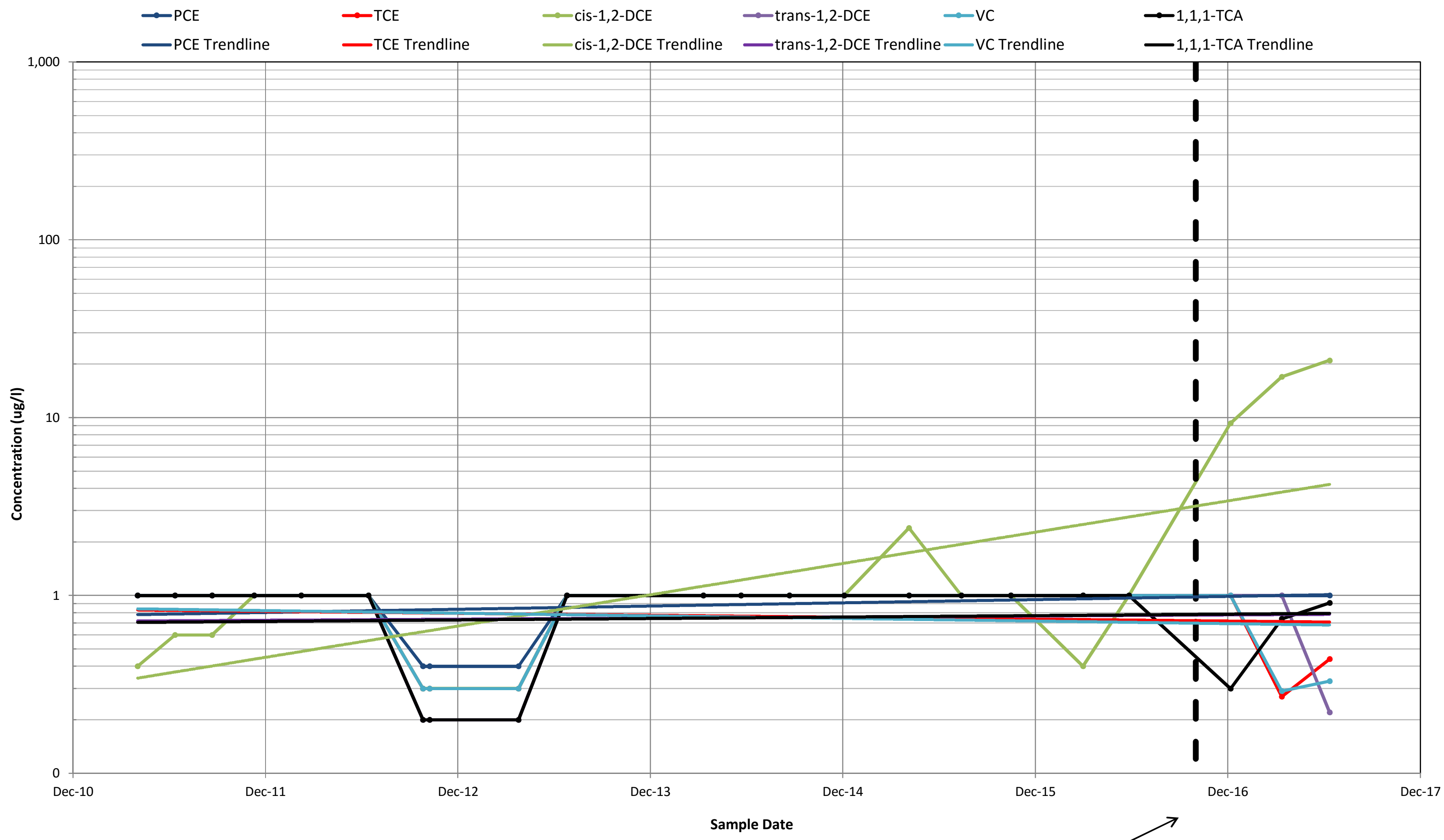
**CHLORINATED VOC CONCENTRATIONS**
**WELL MW-11A**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
24




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l;  VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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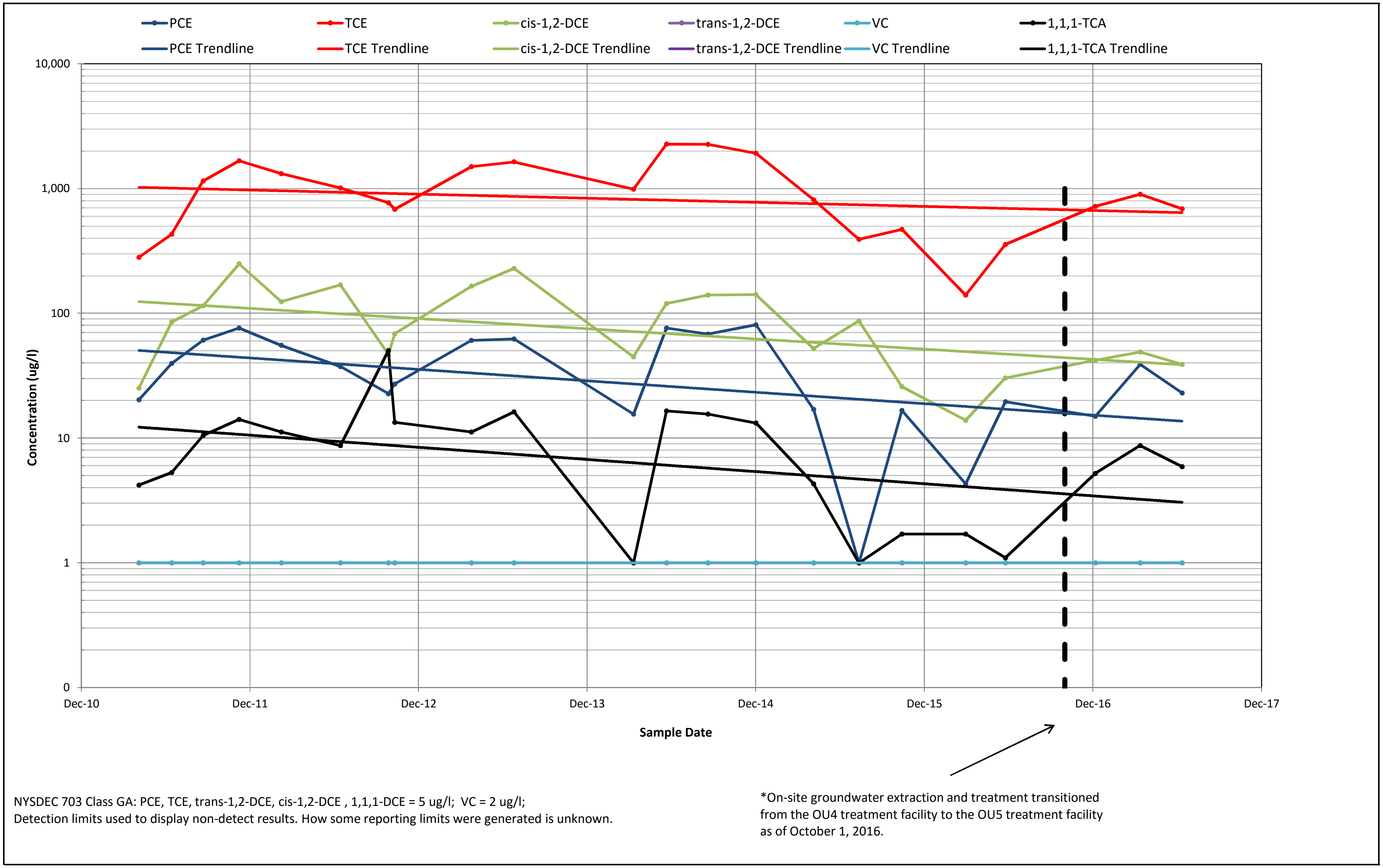
**CHLORINATED VOC CONCENTRATIONS**
**WELL MW-11B**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE** JULY 2017

**FIGURE** 25

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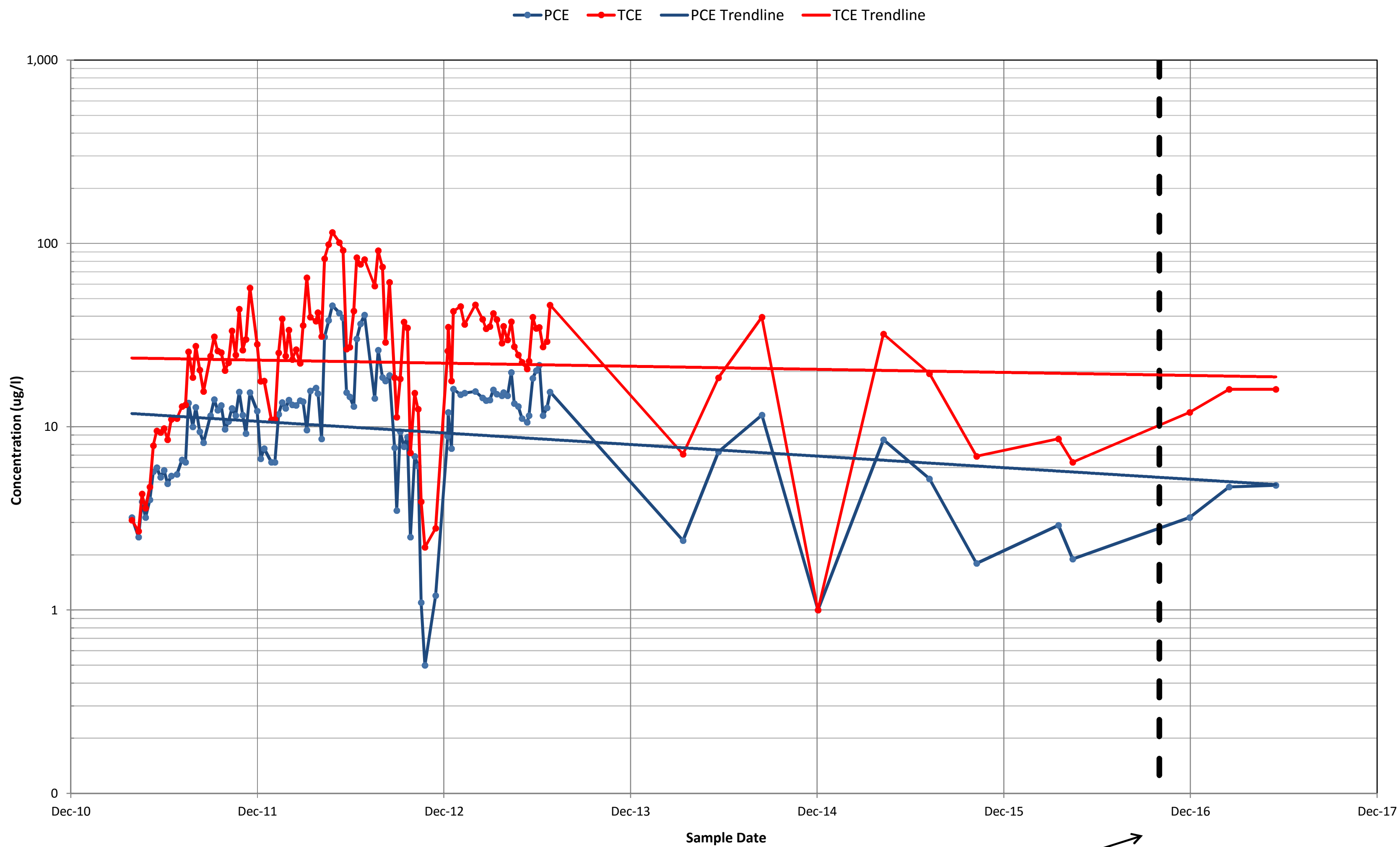
**CHLORINATED VOC CONCENTRATIONS**
**WELL MW-7B-R**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**

JULY 2017

**FIGURE**

26




NYSDEC 703 Class GA: PCE, TCE = 5 ug/l
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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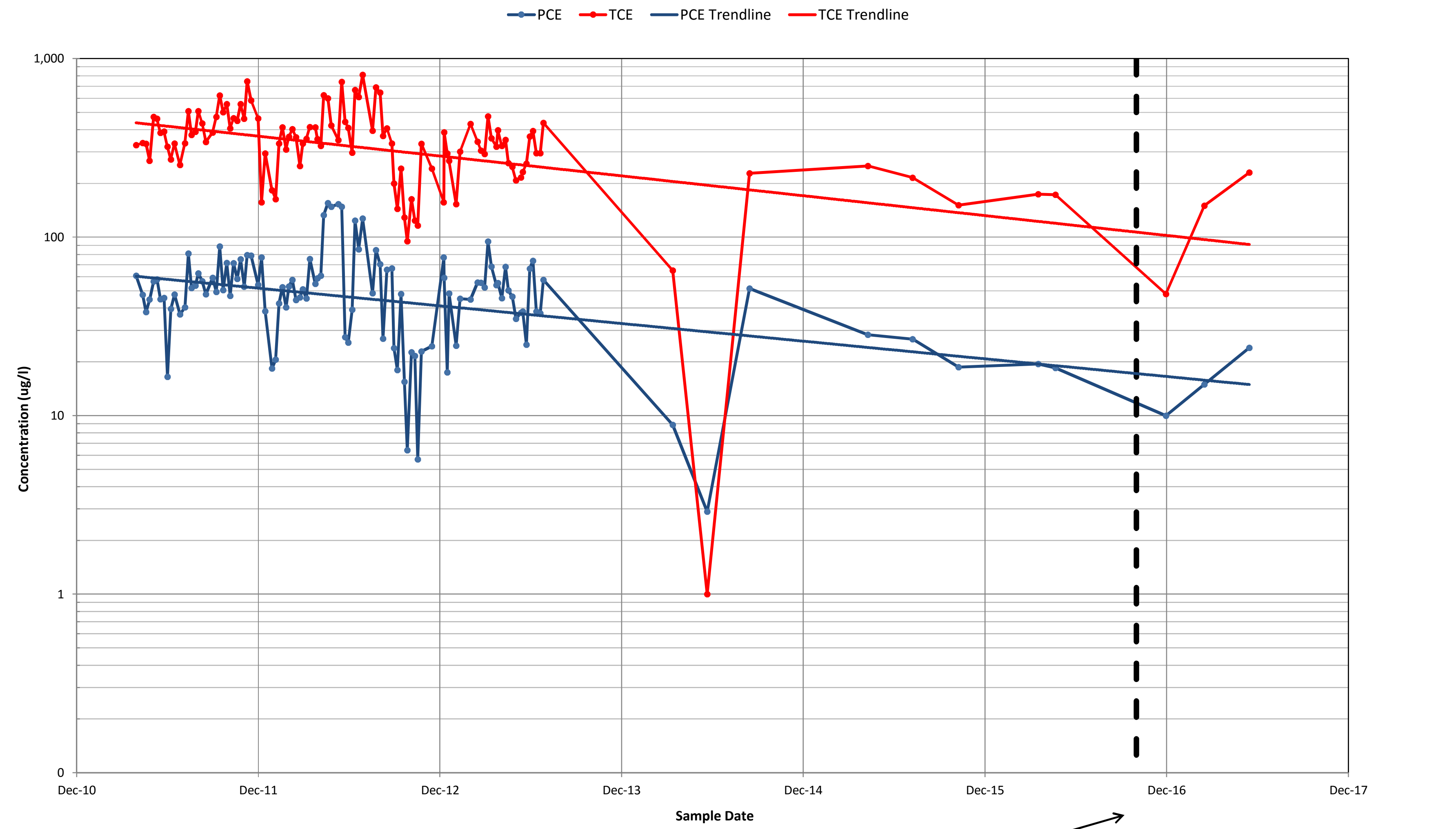
**PCE AND TCE CONCENTRATIONS**
**WELL RW-3**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
27




NYSDEC 703 Class GA: PCE, TCE = 5 ug/l
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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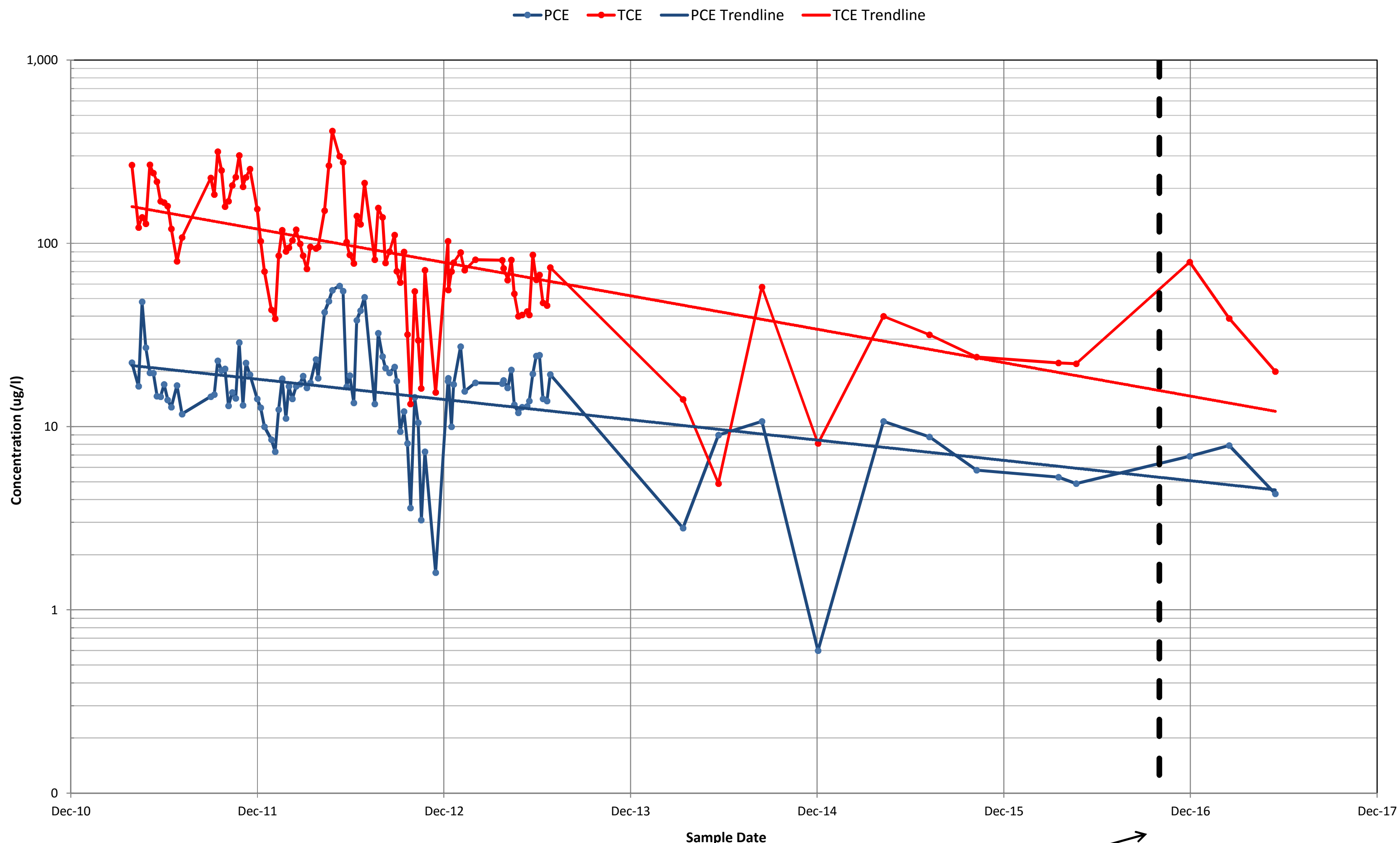
**PCE AND TCE CONCENTRATIONS**
**WELL RW-4**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
28




NYSDEC 703 Class GA: PCE, TCE = 5 ug/l
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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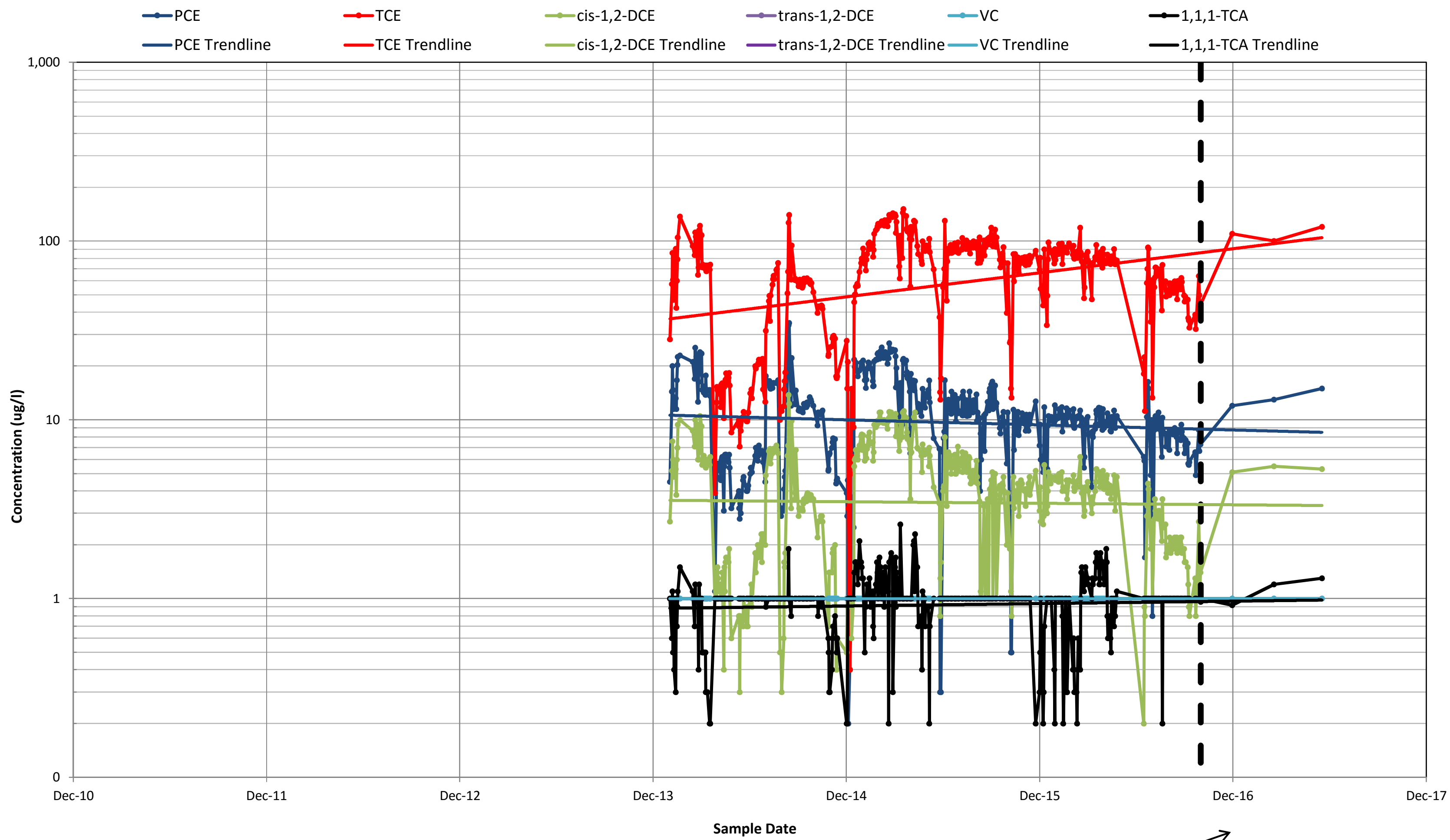
**PCE AND TCE CONCENTRATIONS**
**WELL RW-5**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**
JULY 2017

**FIGURE**
29




NYSDEC 703 Class GA: PCE, TCE, trans-1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

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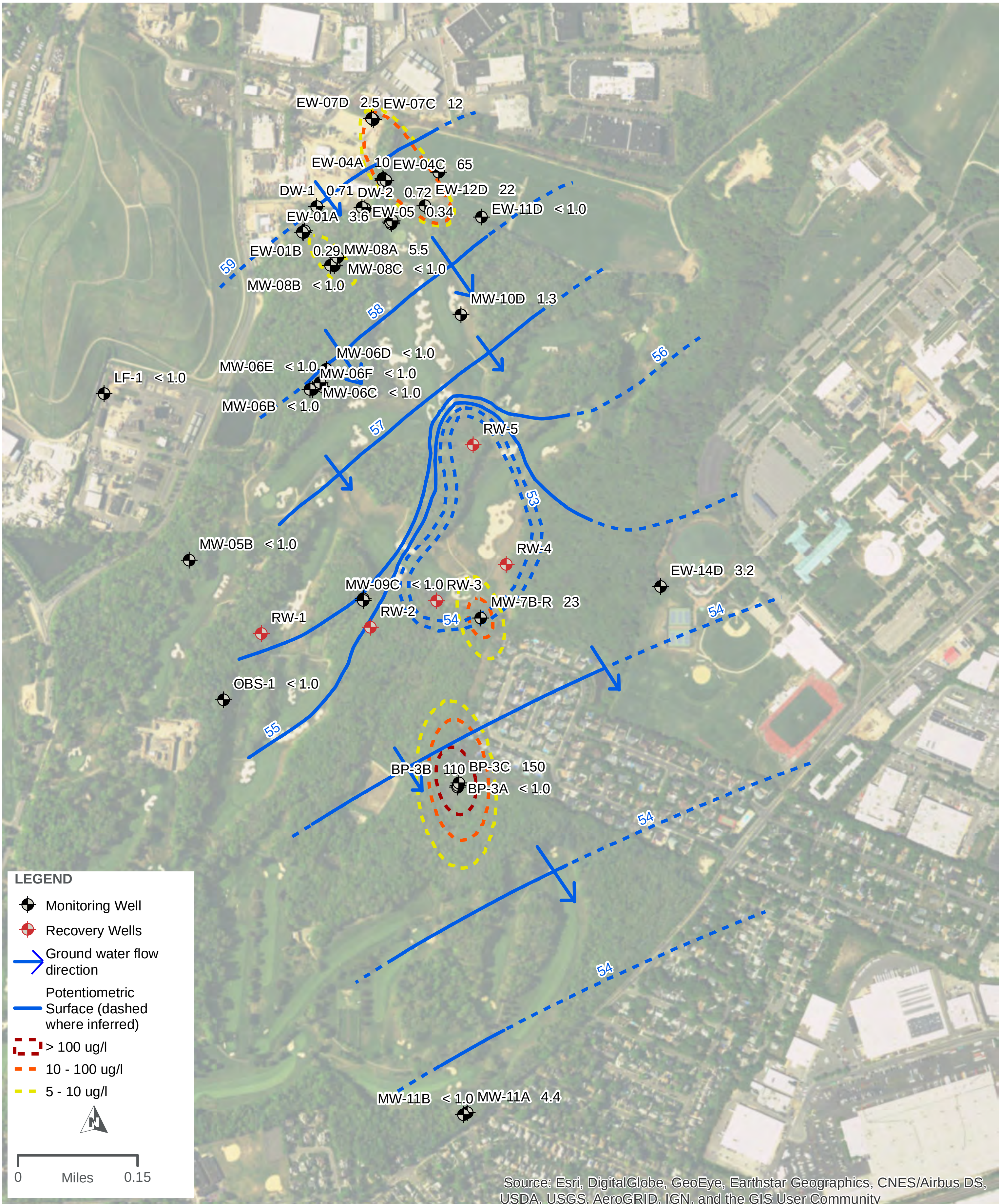
**CHLORINATED VOC CONCENTRATIONS**
**WELL OU5 Influent**
**CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5**
**NYSDEC SITE #130015**

**DATE**

APRIL 2017

**FIGURE**

30



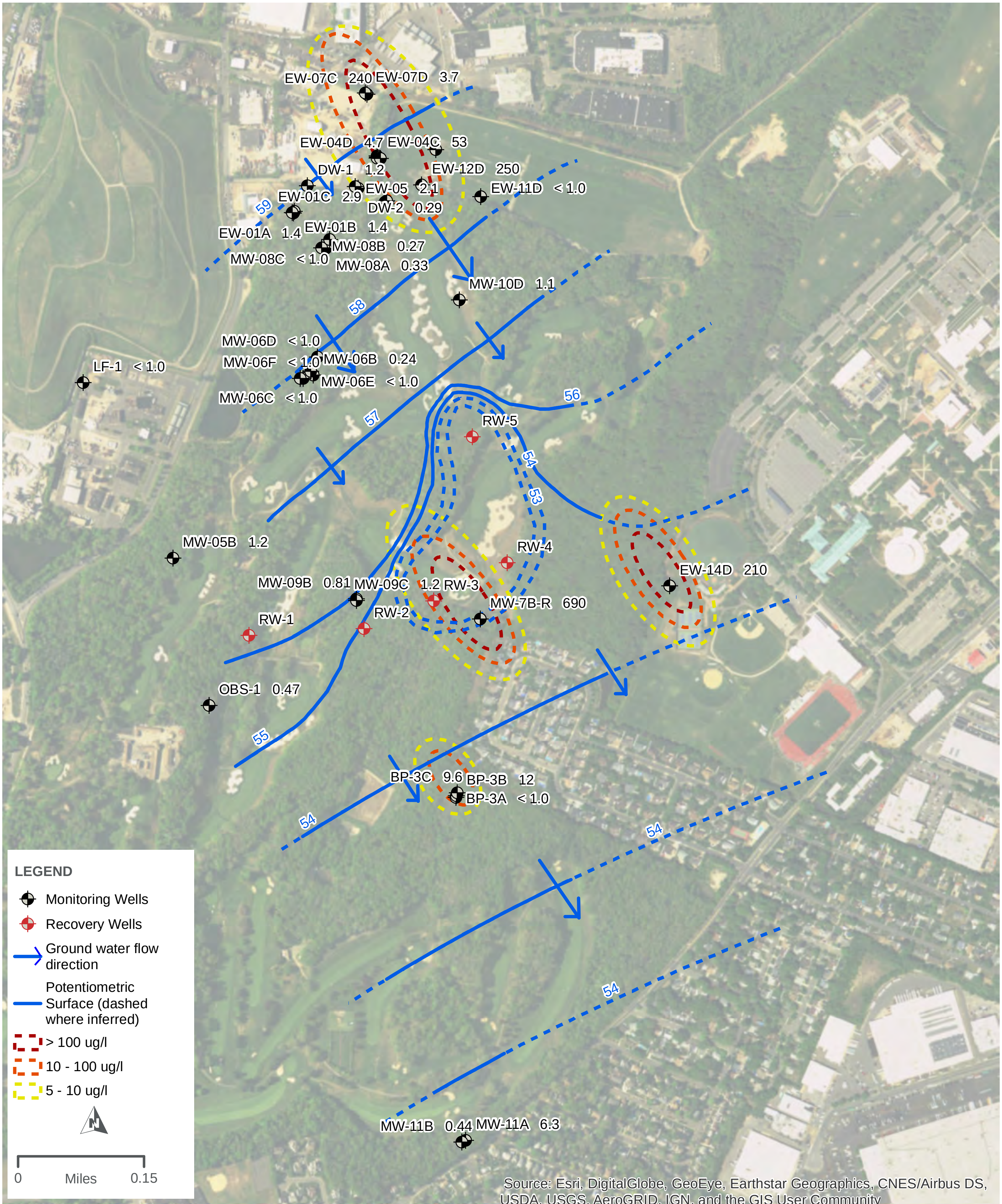

# JUNE 2017 TETRACHLOROETHENE (PCE) PLUME

## CLAREMONT POLYCHEMICAL CORPORATION

**FIGURE 31**

DW-2, EW-02A, EW-4D, EW-05, EW-6A, EW-6B, LF-1, MW-6A, MW-10D and MW-30B-R are not included in the June 2017 contours

PATH: \\MAHPI-FILE01\GIS_PROJECTS\202315_NEW YORK STATE DEPT OF ENVIRONMENTAL CON\250751_NYSDECPPWA19_CLAREMONT\REPORT_2Q2017\2017_06_2Q2017_FIGURE_31.MXD - USER: ATRESSLER - DATE: 8/1/2017




# JUNE 2017 TRICHLOROETHENE (TCE) PLUME

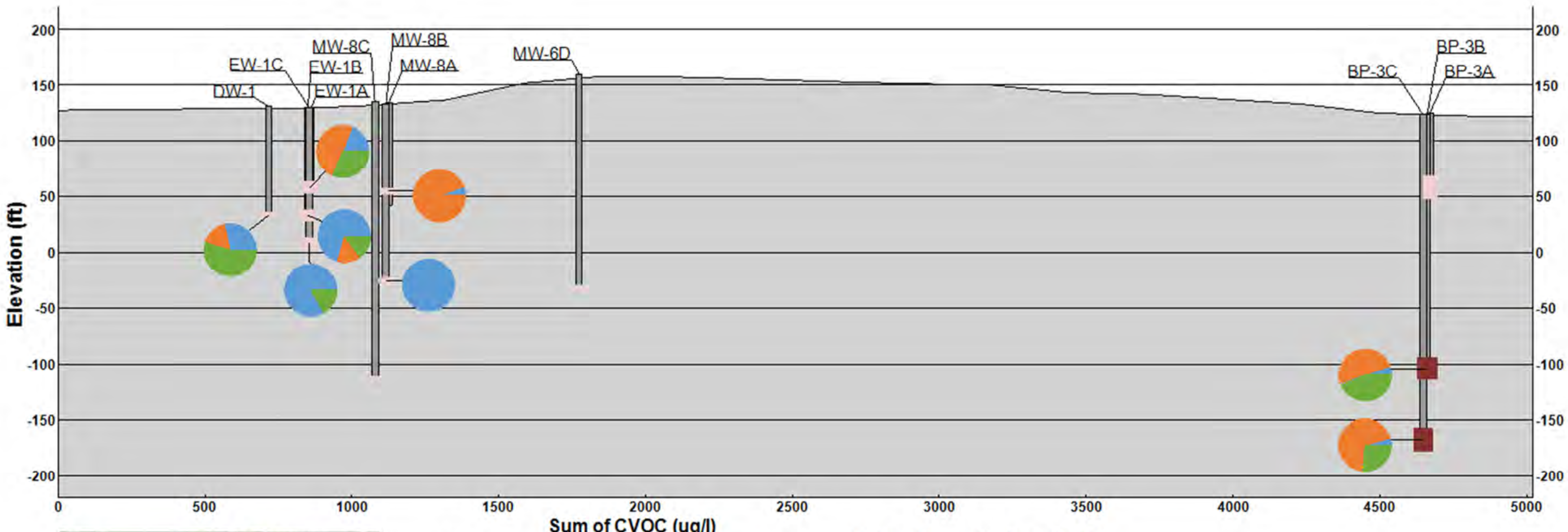
## CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 32

DW-2, EW-02A, EW-4D, EW-05, EW-6A, EW-6B, LF-1, MW-6A, MW-10D and MW-30B-R are not included in the June 2017 contours

PATH: \\MAHPI-FILE01\GIS_PROJECTS\202315_NEW YORK STATE DEPT OF ENVIRONMENTAL CON\250751_NYSDECPPWA19_CLAREMONT\REPORT_2Q2017\2017_06_2Q2017_FIGURE_32.MXD - USER: ATRESSLER - DATE: 8/1/2017

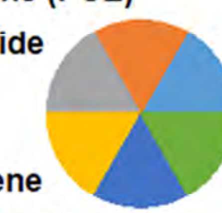
# A — A'




Wells

- Casing
- Screen

- 0 - 10
- 10 - 100
- 100 - 500
- 500 - 1000




NOTES:
- Capture distance to transect line is 200 feet
- Pie Charts shown are for samples with results from the selected constituents that were above the detection limit (no U qualified data).
- Wells without a Pie Chart did not have reported results above the detection limit for the selcted constituents.

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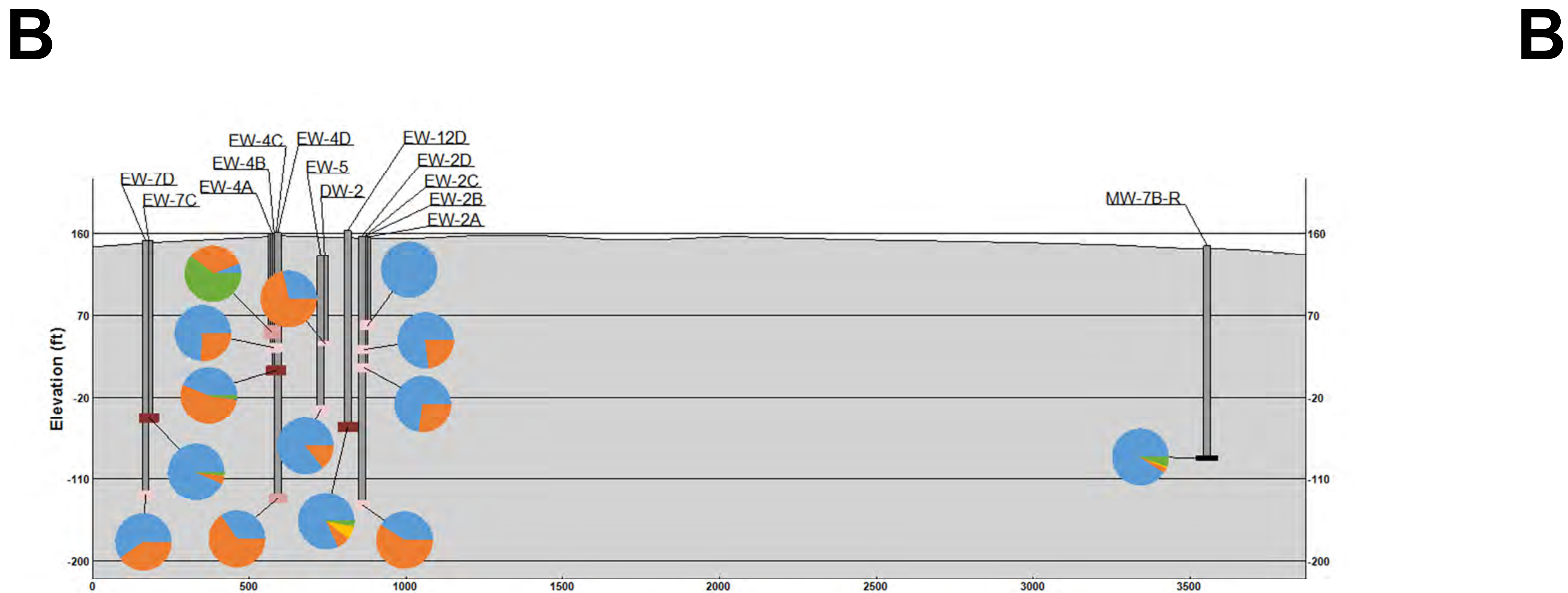
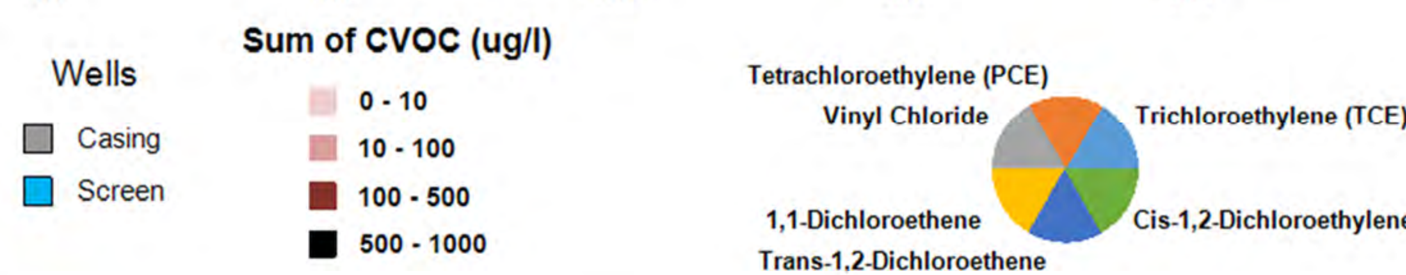
**CROSS SECTION TRANSECT A**

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 33

PATH: \\mahpi-file01\ActiveProjects\275962\8.0_Deliverables\8.2_Work_In_Progress\Quarterly Reports\2017_Q2\Enviroinsite TRANSECT A.MXD - USER: ATRESSLER - DATE: 7/31/2017




NOTES:
- Capture distance to transect line is 200 feet
- Pie Charts shown are for samples with results from the selected constituents that were above the detection limit (no U qualified data).
- Wells without a Pie Chart did not have reported results above the detection limit for the selcted constituents.

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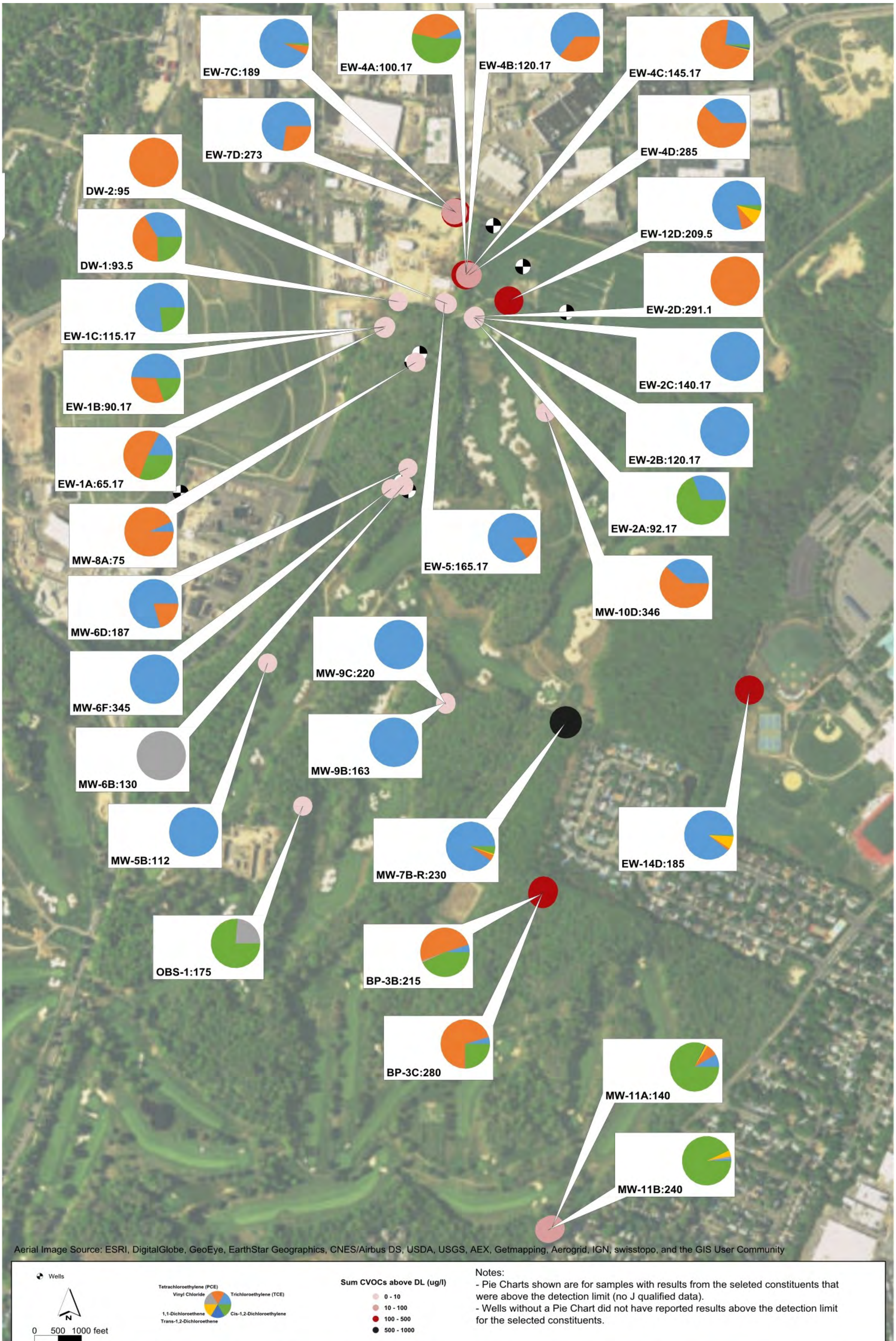
**CROSS SECTION TRANSECT B**

**CLAREMONT POLYCHEMICAL CORPORATION**

FIGURE 34

PATH: \\mahpi-file01\ActiveProjects\275962\8.0_Deliverables\8.2_Work_In_Progress\Quarterly Reports\2017_Q2\Enviroinsite TRANSECT A.MXD - USER: ATRESSLER - DATE: 7/31/2017

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DETECTED CHLORINATED BREAKDOWN PRODUCTS
CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 35

\\mahpi-file01\ActiveProjects\275962\8.0_Deliverables\8.2_Work_In_Progress\Quarterly Reports\2017_Q2\Enviroinsite USER ARESSLER 7/31/2017