2019 Fourth Quarter Groundwater Monitoring Report

October – December 2019

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
Department of Environmental Conservation
Division of Environmental Remediation
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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 fourth quarter (October through December) of 2019 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. 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	Remedy
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. 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.

Operable Unit	Description	Remedy
OU-4	Contaminated groundwater on the CPC property	Extraction and treatment of groundwater via metals precipitation, air stripping and carbon adsorption. On-site reinjection.
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. (SAIC) 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. (HRP) 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 continued 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. Amendment #1 was approved April 16, 2018 for HDR to extend the operations and maintenance of the treatment facility through February 28, 2019, and Amendment #2 was approved on April 11, 2019 further extending the period of performance through February 28, 2020.

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 Recharge Basin No. 33 west of the Bethpage State Park Black Course for golf course irrigation in the summer (Figure 2). 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 (Figure 2).

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 1):

- 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 that are often observed 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.

The average water table elevation across the site is 63 feet (vertical datum NAVD88). Depths to groundwater (DTW) in December 2019 ranged from 18.62 feet (well ORW-7) to 100.61 feet (well EW-11D) below ground surface (bgs).

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/foot and horizontal flow velocities of 0.43 feet/day or 157 feet/year (Ebasco, 1990).

The contour maps produced from wells screened in both the upper glacial aquifer and the deeper Magothy aquifer depict a south-southeast flow direction (Figure 3, 4 and 5). 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 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 (ft)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
RW-1*	280	185	265
RW-2*	290	230	271
RW-3	275	163	255
RW-4	270	147	250

Well	Total Depth (ft)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
RW-5	283	153	263

*RW-1 and RW-2 captured the OBL plume which has been remediated. These wells are no longer online or operated for purposes of groundwater remediation.

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.

Prior to October 2017, the system's average influent flow rate was 628 gallons per minute (gpm), or 904,396 gpd, and the average effluent flow rate was 624 gpm, or 899,233 gpd. In October 2017, pump failures stemming from a possible power surge resulted in substantial system downtime and, thus, decreased average flow rates for influent (539 gpm, or 775,450 gpd) and effluent (532 gpm, or 765,700 gpd). The suspected power surge also caused process control issues that precluded automatic operation of the system. As such, the system was only run manually and only during working hours from November 2017 through July 2018. The restricted operation of the system in manual mode, along with the process alarms and interlock gauges not functioning required oversight of the facility while online. In early July, NYSDEC instructed HDR to add a second shift operator to accommodate NYS Parks, Recreation and Historic Preservation (Parks) request for additional irrigation water for the golf course. Recovery wells RW-1 and RW-2 were brought on-line to increase the water level in Basin 33 from which Parks obtains its irrigation water. On September 6, 2018, the control system was fully functional and RW-1 and RW-2 were taken off-line.

In September 2018, the process control system, controls and alarm system became fully functional which allowed the treatment system to operate without onsite staff supervision. The recovery wells currently run in automatic mode with remote start up, and the process pumps are operated in fully automatic mode.

Average system flow rates on days during the fourth quarter of 2019 were 687 gpm in October, 568 gpm in November, and 668 gpm in December. Under current conditions, the PLC and the control system are stable and fully functional. Flows from the individual recovery wells are remotely read, transmitted, and totalized. The plant experienced a power interruption at the end of October. The system was down for 346 minutes in October and an additional 4478 minutes in November. In December the plant experienced an alarm condition, which shut down the production well pumps and accounted for 205 minutes of downtime. On December 31, 2019 RW-4 tripped offline and diagnostics run confirm the motor and pump will need replacement. RW-4 remains offline as of January 30, 2020. Refer to the Monthly O&M reports for October through December 2019 for details on the status of GWE&T system upgrades, issues encountered, and impacts on system operations and performance.

GWE&T System Path of Remediation

Groundwater is 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 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. Recharge Basin No. 1 contains a system of eight diffusion wells and is located upgradient of the OBL. Recharge Basin No. 33 receives effluent in the summer that is used beneficially for watering the golf course.

The GWE&T system is staffed by a plant manager/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 FactoryTalk View Site Edition Client control system and make adjustments to the system operations.

GWE&T System Operating Permits

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 fourth quarter of 2019, the system processed 82.1 million gallons at an average daily flow rate of 980,742 gpd for October, 816,000 gpd for November, and 957,885 gpd for December. Daily flow readings are provided in the O&M reports submitted monthly to NYSDEC (refer to the December 2019 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 for Fourth Quarter 2019

Location	October Total Flow (gallons)	November Total Flow (gallons)	December Total Flow (gallons)
RW-1*	1856	1680	1368
RW-2*	2052	1610	1750
RW-3	11,696,000	10,759,000	9,138,000
RW-4	4,776,339	9,437,799	9,020,081
RW-5	11,339,774	10,040,000	8,955,711
Total Influent	31,043,000	22,710,000	30,531,944
Total Effluent	30,403,000	22,019,360	29,694,420

*Recovery wells RW-1 and RW-2 were taken offline at the conclusion of the Remedial System Optimization evaluation. Flows associated with RW-1 and RW-2 are from monthly operational tests.

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 difference between the total influent and total effluent is due to a calibration error in the existing flow meters. The recharge basins are designed to receive 1.5 million gpd of effluent. During the fourth quarter of 2019, the treated water was initially directed to Basin No. 1, with discharge redirected to Basin No. 33 after the park's irrigation season ended in October. Effluent was discharged at an average volume of 892,500 gpd during the fourth quarter of 2019.

3.2.2 Groundwater Extraction and Treatment System Contaminant Removal

To quantify the treatment system 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 its 2016 operational period, and 947 kg cumulatively (combined mass of TCE, PCE and 1,1-DCE) from 2002 until the first week of October 2016, when it was taken offline. Most of the mass removed by the OU-4 GWE&T system was 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 327.58 kilograms (722.19 pounds) of TCE and 39.44 kilograms (86.95 pounds) of PCE have been removed by the OU-5 system. 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 in 2019 (kg)

	Quarter 1 2019	Quarter 2 2019	Quarter 3 2019	Quarter 4 2019	Cumulative Totals (Sum of TCE, PCE and 1,1-DCE)
OU-4 GWE&T	offline	offline	offline	offline	947 (2002-2016)
OU-5 GWE&T	38.8	32.5	36.95	49.64	373 (10/1/2016 to present)

3.2.3 Groundwater Extraction and Treatment System Discharge Monitoring

System effluent samples are collected quarterly for the following analyses: 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 6 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 the fourth quarter of 2019. In addition, the effluent concentration of iron (38.3 µg/L) and manganese (117 µg/L) were both under the permissible levels of 600 µg/L in the fourth quarter of 2019. System effluent pH through the fourth quarter remained above or equal to the 6.50 su minimum requirement with average readings of 6.86 in October, 6.88 in November, and 6.84 in December. Refer to the December Monthly 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). On December 9-10, 2019, HDR sampled 42 of the 43 monitoring wells (no sample was collected at MW-6A due to insufficient water to collect a sample). The groundwater monitoring program includes wells both on the CPC property (OU-4) and off the CPC property (OU-5). OU-4 monitoring wells sampled were DW-1, DW-2, EW-5, EW-7C, EW-7D, SW-1 and WT-01. OU 5 wells sampled were 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 OBS-1. Following approval from the NYSDEC on August 21, 2019, an additional six wells were sampled from the western extent of the study area. These wells were BP-5B, BP-5C, BP-12B, BP-12C, BP-13B, and BP-13C. A description of the groundwater sampling event and results is provided below.

4.1 Hydrological Data

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). In addition to the sixteen CPC monitoring wells, the fourth quarter 2019 synoptic water level round conducted on December 6, 2019 also included Nassau County DPW Fireman's Training Center wells to the west, four new wells installed as part of the NYSDEC WA#43 Claremont RI/FS to the south, and 6 existing wells not previously included. These wells are BP-5B, BP-5C, BP-12B, BP-12C, BP-13B, and BP-13C (Attachment B). DTW measurements ranging from 18.62 feet (well ORW-7) to 100.61 feet (well EW-11D) bgs were collected on December 6, 2019 (see Attachment B). Potentiometric surface elevations at each well were calculated by subtracting the DTW from each measurement from the top of casing elevation. HDR plotted the water level elevations and sketched the water table contours of the upper Magothy and the potentiometric surface in the middle and lower Magothy aquifers. These data show the groundwater flow direction is south-southeast at the water table (Figure 3), middle Magothy (Figure 4) and in the lower Magothy (Figure 5). The potentiometric surface contours in the middle Magothy depict notable pumping influence near and immediately down gradient from the OU5 recovery wells, RW-3 through RW-5. The average water table elevation across the site is 63 feet (vertical datum NAVD88). 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 December 9, 10, and 16 2019. The groundwater samples were collected using passive diffusion bags (PDBs) inserted at mid-point in the screens in each monitoring well. 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.

Fifty two samples (including three field duplicates and trip blanks) 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.

4.3 Groundwater Analytical Results

Fourth quarter 2019 groundwater sampling exceedances are summarized on Table 5 and are plotted in trend charts in Figures 7 through 28; treatment system effluent and influent water sampling results are shown in trend charts in Figures 6 and 29. In addition to the results below, acetone was detected in 46 samples, with nine wells where acetone concentrations exceeded the GWQS of 50 µg/L. Although acetone is a common laboratory contaminant, its continued detections in the quarterly samples as well as in samples from the new monitoring wells tend towards it being a contaminant of concern rather than a laboratory contaminant.

Table 5 – Monitoring Well VOC Exceedances –Fourth Quarter 2019

Well	PCE	TCE	cis-1,2-DCE	1,1-DCA	1,2-DCA	VC	Acetone
BP-3B	**20**	2.5	**15**	2.4	ND	ND	35
BP-3C	**63**	**6**	**46**	**9.9**	**0.64 J**	**2.9**	40

Well	PCE	TCE	cis-1,2-DCE	1,1-DCA	1,2-DCA	VC	Acetone
DW-1	2.1	1.7	**17**	ND	ND	ND	38
DW-2	2.2	0.84 J	ND	ND	ND	ND	**51**
EW-4A	**31**	**6.8**	**97**	ND	ND	ND	42
EW-4C	3.9	**29**	0.90 J	ND	ND	ND	37
EW-7C	**8.1**	**83**	2.7	0.29 J	ND	ND	41
EW-12D	**15**	**210**	**5.7**	0.90 J	ND	ND	**54**
EW-14D	1.2	**36**	0.66 J	ND	**1.1**	ND	**70**
LF-1	1.1	1.4	ND	ND	ND	ND	**64**
M-30B-R	0.62 J	0.94 J	ND	ND	ND	ND	**52**
MW-5B	0.61 J	2.2	ND	ND	ND	ND	**76**
MW-6C	0.84 J	0.88 J	0.45 J	ND	ND	ND	**63**
MW-6D	1.1	0.95 J	ND	ND	ND	ND	**55**
MW-6E	0.70 J	0.70 J	ND	ND	ND	ND	**61**
MW-7B-R	3.3	**120**	**7.4**	ND	ND	ND	39
MW-10D	1.1	1.5	0.46 J	ND	**0.89 J**	ND	21
MW-11A	2.8	3	**21**	2.3	ND	ND	30
MW-11B	0.60 J	1.9	**26**	**7.9**	ND	0.46 J	42
SW-1	**190**	**11**	**7.6**	ND	ND	ND	36

Results units are µg/L. Bold, underlined, italicized results are exceedances of the NYSDEC Part 703 Class GA criteria. See Attachment A for complete analytical results and comparison criteria. PCE – tetrachloroethylene; TCE – trichloroethylene; cis-1,2-DCE – cis-1,2-dichloroethylene; 1,1-DCA – 1,1-dichloroethane; 1,2-DCA – 1,2-dichloroethane; VC – Vinyl Chloride; ND – not detected; J – estimated value.

4.3.1 Evaluation of Plumes

Figures 30 and 31 depict the horizontal plume location with isoconcentration lines in plan view for PCE and TCE. The groundwater contamination distribution was further evaluated by creating sample location pie chart figures for the contaminants PCE, TCE, 1,1-Dichloroethene, trans-1,2-Dichloroethene, cis-1,2-Dichloroethylene, and vinyl chloride in cross section (Figures 32 and 33) and plan view (Figure 34). The horizontal and vertical distribution of PCE and TCE continues to demonstrate a shallow PCE plume comingled with a deeper TCE plume.

OU-4 on-site plume. This plume originates on the CPC site with the highest PCE concentrations historically measured at well SW-1, a water table well. Currently, the on-site plume is predominantly PCE with concentrations an order of magnitude greater than those of TCE. In 2015, PCE showed an increasing trend in well SW-1, with spikes in the second quarter (210 µg/L) and in the fourth (190 µg/L). However in 2016, the PCE concentration steadily decreased from 150 µg/L during the first quarter down to 30 µg/L in the fourth. SW-1 was not sampled between the fourth quarter of 2016 and the second quarter of 2019, due to it becoming dry and subsequent low water levels. The PDB bag in SW-1, which was in the well since the fourth quarter of 2016, was submerged in the first and second quarter of 2019, due to an increase in the water level. It was subsequently sampled in the second quarter of 2019. The PCE concentration in SW-1 was the highest of the on-site wells, with a concentration of 180 µg/L. This is similar to concentrations collected in 2015 and the first quarter of 2016, prior to the well becoming dry. PCE concentration in SW-1 was consistently high for the third and fourth quarter of 2019, with a concentration of 200 and 190 µg/L, respectively. At well EW-4C, PCE was the dominant contaminant of concern observed until concentrations decreased from 110 µg/L in the first quarter of 2017 to 3.9 µg/L in the fourth quarter of 2019 (Figure 13). TCE is now the dominant contaminant of concern observed, as of the third quarter of 2017 to the fourth quarter of 2019, where the concentrations have ranged from 24 µg/L to 52 µg/L.

Off-site plume upgradient of CPC site. This plume contains VOCs from upgradient sources such as Former Aluminum Louvre (FAL) and is detected as far upgradient as the EW-7-series well cluster and stretches to the southeast into OU5 as far as well MW-7B-R. The FAL (OU-1) and off-site (OU-2) investigations were completed in 2015, with the most recent Record of Decision (ROD) for OU-2 issued in March 2019. Groundwater containing VOCs, primarily TCE, migrated from FAL to beneath the Bethpage State Park Black Golf Course. The source area at FAL is at the east side of the facility and a large storm water recharge basin at Winding Road and Old Bethpage-Sweethollow Road is thought to influence shallow groundwater flow direction beneath FAL in an easterly direction. The FAL plume contains TCE, PCE, and 1,1,1-TCA and flows south-southeast after it moves off-site. When it reaches the CPC site, the FAL plume is found to the east of the CPC source areas. The plume is predominantly TCE, with TCE concentrations typically an order of magnitude greater than those of PCE in EW-7C (Figure 15). TCE-dominant wells include: EW-7C, EW-4C, EW-12D, EW-14D, and MW-7B-R. The overall trend in TCE concentrations since 2011 has been decreasing in the EW-7 well cluster (Figure 15 and 16). EW-7C, EW-12D, and MW-7B-R have the highest TCE concentration compared to other wells, with concentration at 97 µg/L, 210 µg/L, and 120 µg/L respectively in the fourth quarter of 2019. MW-7B-R TCE concentrations have been generally trending downward since the OU-4 plant was shut down (Figure 25).

The selected remedy outlined in the March 2019 ROD include enhanced bioremediation, vapor mitigation, and various intuitional controls.

Well EW-14D. Groundwater contamination at EW-14D is high in TCE, similar to the off-site, upgradient plume). The PCE concentration is below the criterion of 5 µg/L. Well EW-14D has the greatest variability in TCE concentrations. In the first quarter of 2018, concentrations decreased to 29 µg/L (from 250 µg/L in the fourth quarter of 2017), increased to 59 µg/L in the second quarter, increased to 100 µg/L in the third quarter, and then decreased to 45 µg/L in the fourth quarter of 2018. The TCE concentration in each of the four quarters of 2019 were 32, 19, 24, and 36 µg/L, respectively. (Figure 19).

Southern Area. This location is centered on the BP-3 series wells far south of the CPC site and downgradient of the extraction wells (Figures 20 through 22). The PCE concentrations at BP-3B and BP-3C are historically higher than those for TCE; BP-3C had a PCE concentration of 63 µg/L compared to a TCE concentration of 6.0 µg/L. However the TCE concentrations in BP-3A are typically higher than the PCE concentrations. PCE and TCE concentrations in BP-3A during the fourth quarter of 2019 were 0.54J µg/L and 0.56J µg/L, respectively. The source(s) of groundwater contamination at the BP-3 series wells is unknown.

Cross Sections. Two cross section figures depict the contaminants of concern along two transects (Figures 32 and 33). Cross section A-A’ (Figure 32) begins at DW-1 and continues along the direction of groundwater flow (south-southeast) to the BP-3 series wells. The PCE-dominant plume is at a higher elevation than the TCE-dominant plume in the vicinity of the CPC site and moves 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.

Cross section B-B’ (Figure 33) begins east of A-A’ at the EW-7-series wells and continues along the direction of groundwater flow to well MW-7B-R. PCE concentrations observed in wells in this cross section are below the 5 µg/L standard in the EW-2 series wells and at wells DW-2, EW-5, EW-4B, EW-4C, EW-4D, EW-7D, and MW-7B-R. TCE concentrations observed in wells in this cross section are below the 5 µg/L standard in the EW-2 series wells and at wells DW-2, EW-4B, EW-4D, EW-5, and EW-7D.

4.3.2 Comparison to Historical Groundwater Quality

Figures 7 through 29 illustrate the historical trends for VOC concentrations in multiple wells. Table 6 summarizes the concentration trends of PCE and TCE 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 7
SW-1	65-70	South-southwest of CPC	Increasing	Slightly increasing	Figure 8
EW-1A	65-75	Southwest of CPC	Slightly decreasing	Slightly increasing	Figure 9
EW-5	165-175	South-southeast of CPC	Slightly decreasing	Decreasing	Figure 10
Off-Site Plume(s) Wells					
EW-4A	100-115	East of CPC	Increasing	Increasing	Figure 11
EW-4B	120-130	East of CPC	Slightly decreasing	Slightly decreasing	Figure 12
EW-4C	145-155	East of CPC	Increasing	Slightly decreasing	Figure 13
EW-4D	285-295	East of CPC	Decreasing	Decreasing	Figure 14
EW-7C	189-199	Upgradient, North of CPC	Decreasing	Decreasing	Figure 15
EW-7D	273-283	Upgradient, North of CPC	Decreasing	Decreasing	Figure 16
MW-10D	346-351	Southeast of CPC	Decreasing	Decreasing	Figure 17
EW-12D	209-219	East of CPC	Increasing	Increasing	Figure 18
EW-14D	185-195	Southeast of CPC	Slightly decreasing	Decreasing	Figure 19

Well	Screen Depth	Location	PCE Trend	TCE Trend	Figure
BP-3A	54-74	South-southeast of CPC	Slightly decreasing	Slightly increasing	Figure 20
BP-3B	215-235	South-southeast of CPC	Increasing	Increasing	Figure 21
BP-3C	280-300	South-southeast of CPC	Increasing	Decreasing	Figure 22
MW-11A	140-145	South-southeast of CPC	Increasing	Increasing	Figure 23
MW-11B	240-245	South-southeast of CPC	Slightly increasing	Increasing	Figure 24
MW-7B-R	230-235	South-southeast of CPC	Decreasing	Decreasing	Figure 25
Extraction Wells and Plant Influent					
RW-3	163-255	Extraction well south-southeast of CPC	Decreasing	Decreasing	Figure 26
RW-4	147-250	Extraction well south-southeast of CPC	Decreasing	Decreasing	Figure 27
RW-5	153-263	Extraction well south-southeast of CPC	Decreasing	Decreasing	Figure 28
ASF-CP	NA	Plant influent	Slightly decreasing	Increasing	Figure 29

Decreasing trends indicate mass removal from groundwater in the area around the well. Increasing and stable trends indicate 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 fourth quarter 2019 groundwater monitoring event at the CPC site covered both the on-site plume (OU-4) and off-site plume (OU-5). 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). Recent data obtained from OU-4 monitoring well SW-1, which had been dry for an extended period of time, indicates localized PCE concentrations are similar to those prior to the cessation of OU-4 pumping. The recently completed Remedial System Optimization (RSO) report for the OU-5 GWE&T concluded that the combined capture zone of recovery wells RW-3, RW-4 and RW-5 captures the estimated width of the OU-4 plume migrating directly south from the CPC Site.

- An off-site, upgradient plume consisting mostly of TCE originates to the north or northwest of the former CPC site. The TCE contamination was only partially captured by the CPC OU-4 GWE&T system. Similarly, the combined capture zone of OU-5 recovery wells RW-3, RW-4 and RW-5 is not sufficient to capture the upgradient TCE plume, only extending about 200 feet to the east of RW-4, the eastern-most recovery well.

- 49.64 kilograms (109.4 pounds) of total VOCs were removed during the fourth quarter of 2019 via operation of the OU-5 GWE&T system. This removal rate is a significant increase from the four quarters of 2018 and the three quarters of 2019(38.75 kg, or 85.43 pounds, 32.54 kg, or 71.74 pounds, and 36.95 kg, or 81.46 pounds, respectively). The OU-5 GWE&T system influent concentration of TCE increased from 94 µg/L to 140 µg/L between the third and fourth quarter of 2019.

- Contaminant concentrations in effluent groundwater samples collected during the reporting period met discharge limits.

- The results from the fourth quarter 2019 groundwater sampling event show the following compounds detected above the NYSDEC Part 703 Class GA groundwater criteria: PCE, TCE, cis-1,2-DCE, 1,1-DCA, 1,2-DCA, vinyl chloride, and acetone.

- In BP-3C, PCE concentrations increased from 60 µg/L to 65 µg/L to 150 µg/l in the first through third quarters of 2018. In the fourth quarter of 2018, PCE decreased to 89 µg/L and further decreased to 61 µg/L in the first quarter of 2019. PCE concentrations increased to 91 µg/L in the second quarter of 2019. PCE concentrations have continue to fluctuate in BP-3C, with concentrations decreasing from 91 µg/L in the second quarter, 64 µg/L in the third quarter of 2019, and 63 µg/L in the fourth quarter of 2019. The individual capture zones of RW-3, RW-4, and RW-5 connect, making it seem unlikely that VOCs could migrate further south to the BP-3 series monitoring wells. However, given the vertical anisotropy resulting from the presence of clay beds, and limited recovery well influence on the deep zone potentiometric surface, it is possible that the mass is migrating beneath the vertical limits of the combined capture zone. The current operation of the OU-5 recovery wells is not capable of capturing groundwater contamination around the BP-3 series wells.

- For monitoring well EW-12D, PCE concentration has fluctuated from 16 µg/L to 30 µg/L throughout the four quarters of 2018 and the first three quarters of 2019. PCE concentration further decreased with a concentration of 15 µg/L in the fourth quarter of 2019. Cis-1,2-DCE concentrations were stable throughout all quarters of 2018, as well as the first, second, and third quarter of 2019 at 5.1 µg/L, 4.5 µg/L, and 5.2 µg/L, respectively. Cis-1,2-DCE concentrations slightly increased to 5.7 µg/L in the fourth quarter of 2019. 1,1,1-TCA concentrations were stable below the NYSDEC 703 Class GA value of 5 µg/L throughout all quarters of 2018 and 2019, with concentrations ranging from 1.4 to 4.5 µg/L. TCE concentrations have fluctuated significantly during all four quarters of 2018 and 2019, ranging from 110 to 290 µg/L.

- The highest TCE concentration in monitoring well MW-7B-R since October 2016 when treatment transitioned from the OU-4 facility to the OU-5 facility was 900 µg/L in the first quarter of 2017. The concentration decreased during each successive quarter of 2017, and fluctuated throughout the four quarters of 2018 from 170 µg/L in the first quarter, 270 µg/L in the second quarter, 390 µg/L in the third quarter, and 240 µg/L in the fourth quarter. The TCE concentration was consistent in the first and second quarter of 2019 at 170 µg/L, decreased to 140 µg/L in the third quarter of 2019, and further decreased to 120 µg/L in the fourth quarter of 2019.
- The groundwater flow at the site remains predominately south-southeast with no regionally significant changes observed in flow direction during and since operation of the OU-4 GWE&T system.

5.2 Recommendations

- Recondition recovery wells RW-3, RW-4 and RW-5 to improve performance and well efficiency which may increase contaminant mass removed.
- Evaluate defective, non-functioning, and critical components of the conveyance and treatment system to confirm the capacity of the piping system, condition of conveyance vaults, adequacy of treatment and recharge, and potential modifications necessary. Perform repairs to components adversely affecting current capacity and treatment (e.g. replacing defective air inlets on conveyance line).
- Determine vertical extent of TVOC contamination and depth of clay units at the location of the recovery wells and horizontal and vertical extent of the plume to the east by installing vertical profile borings (VPB) between RW-3 and RW-4 and east of monitoring well EW-14D.
- Based on the findings of the VPB investigation, upgrade and/or expand the system with additional extraction wells. Upgrade via installation of new pumps/motors in one or more of the existing recovery wells to increase pumping capacity and extend capture to the east. Install one or two new extraction wells screened deeper and further east.
- Recovery wells RW-1 and RW-2 should remain offline.

6 References

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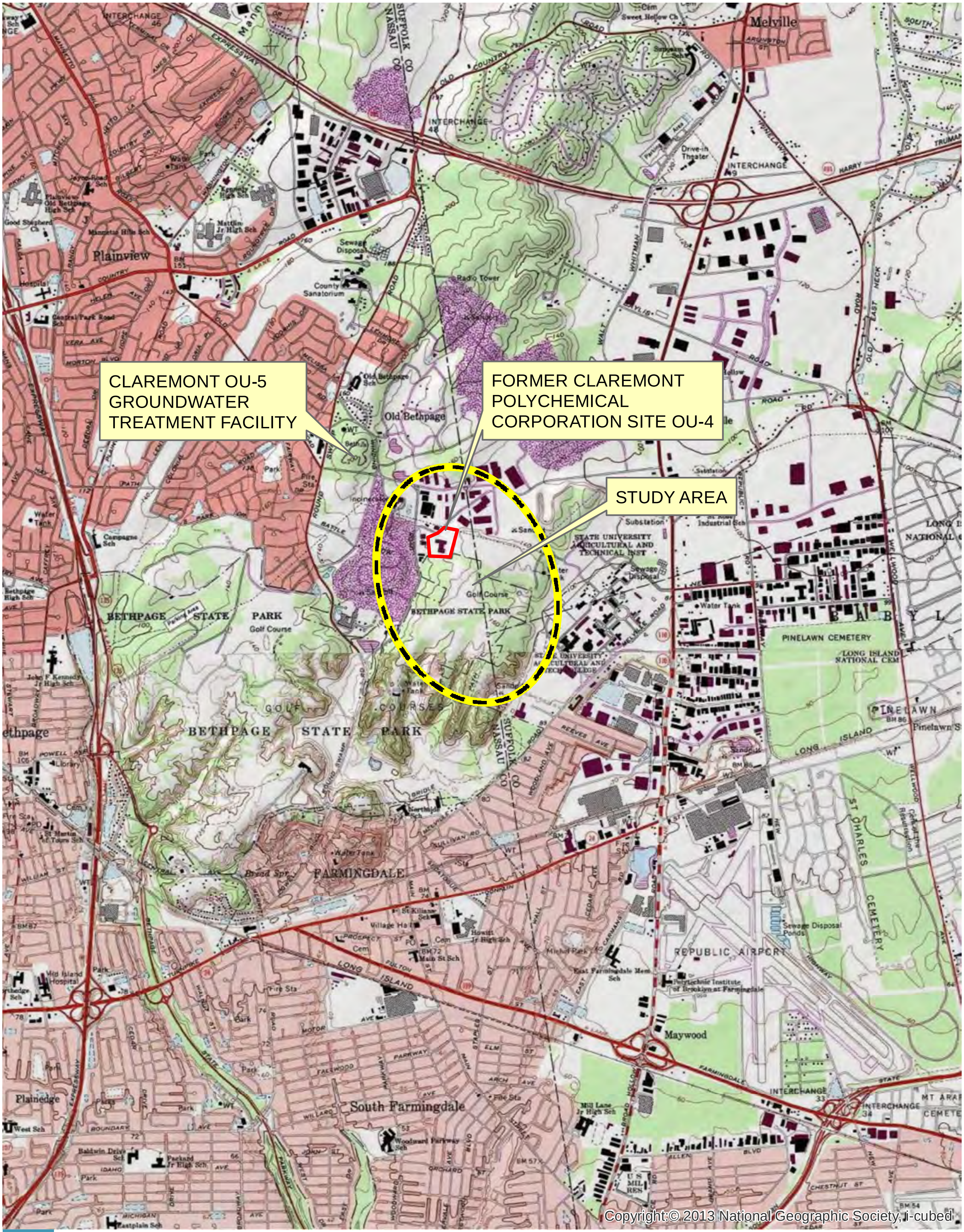
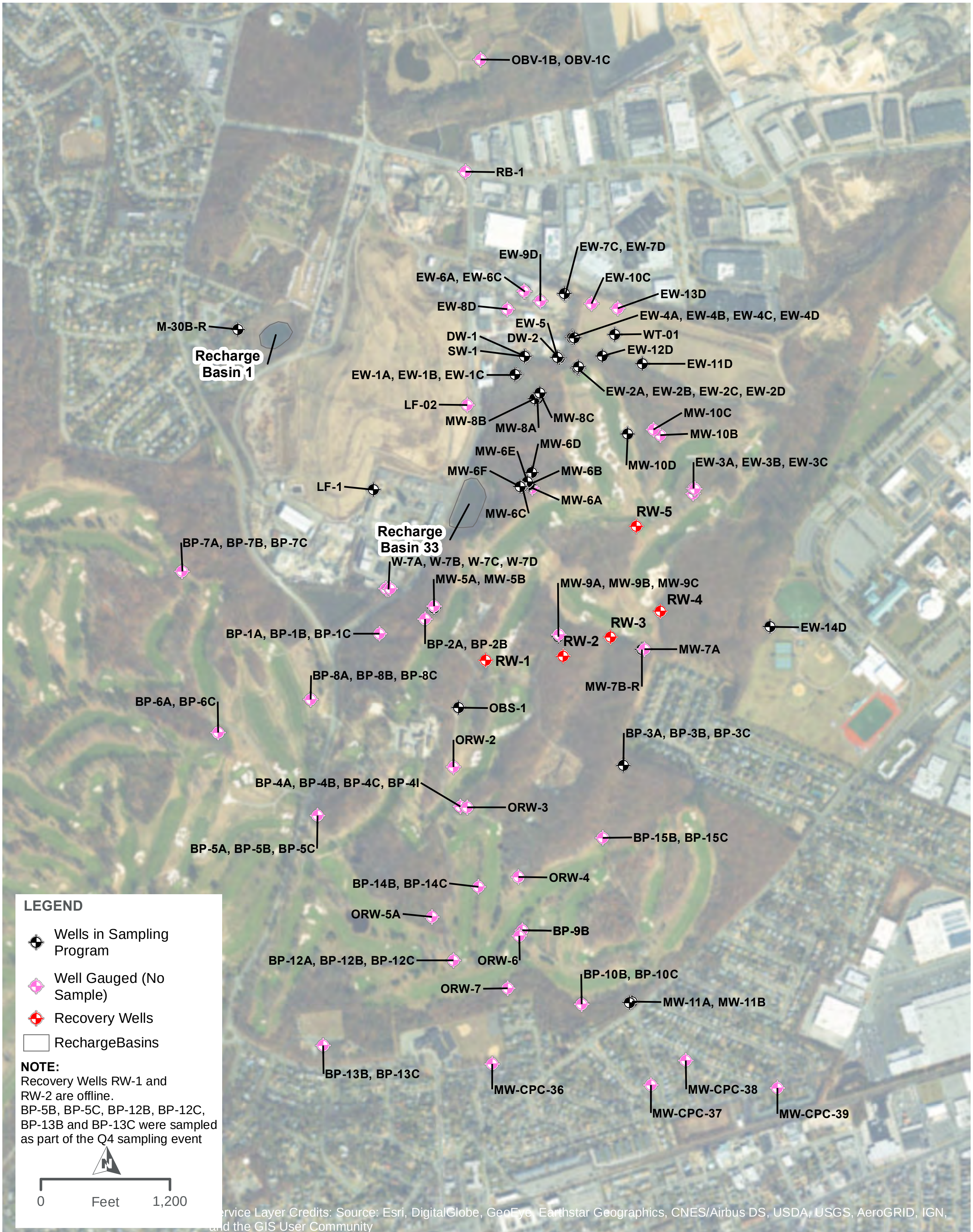


SITE LOCATION

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 1

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\202315\CON0105889\0000000000275962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\2019_Q4\FIG1_SITELOCATION.MXD - USER: KMARKOWI - DATE: 1/13/2020



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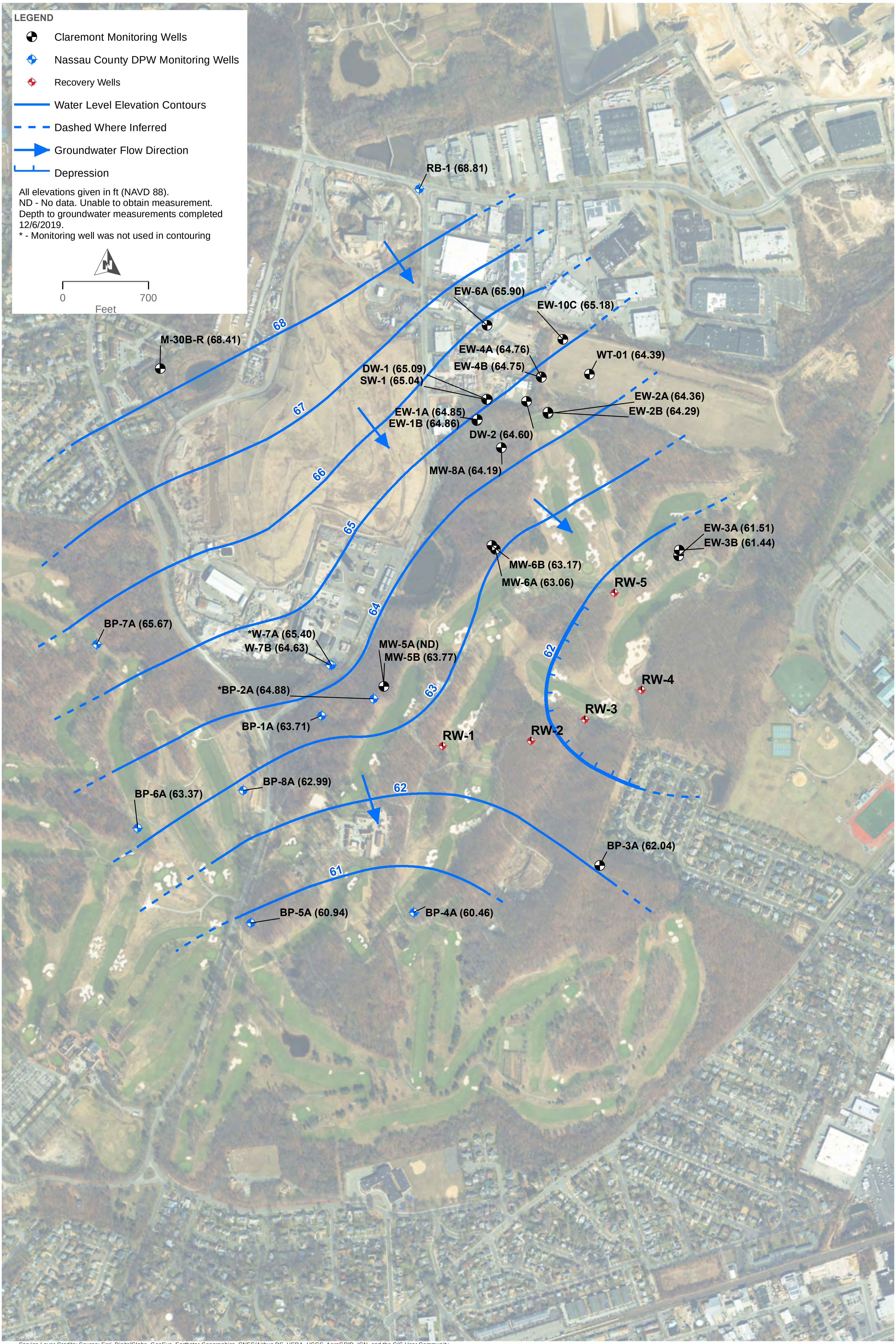
WELLS SAMPLED

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 2

PATH: \\NJ-MAHWAH\ACTIVEPROJECTS\202315\CON0105889\000000000275962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\2019_Q3\FIG2_SAMPLELOCATION_UPDATED.MXD - USER: KMARKOWI - DATE: 1/21/2020

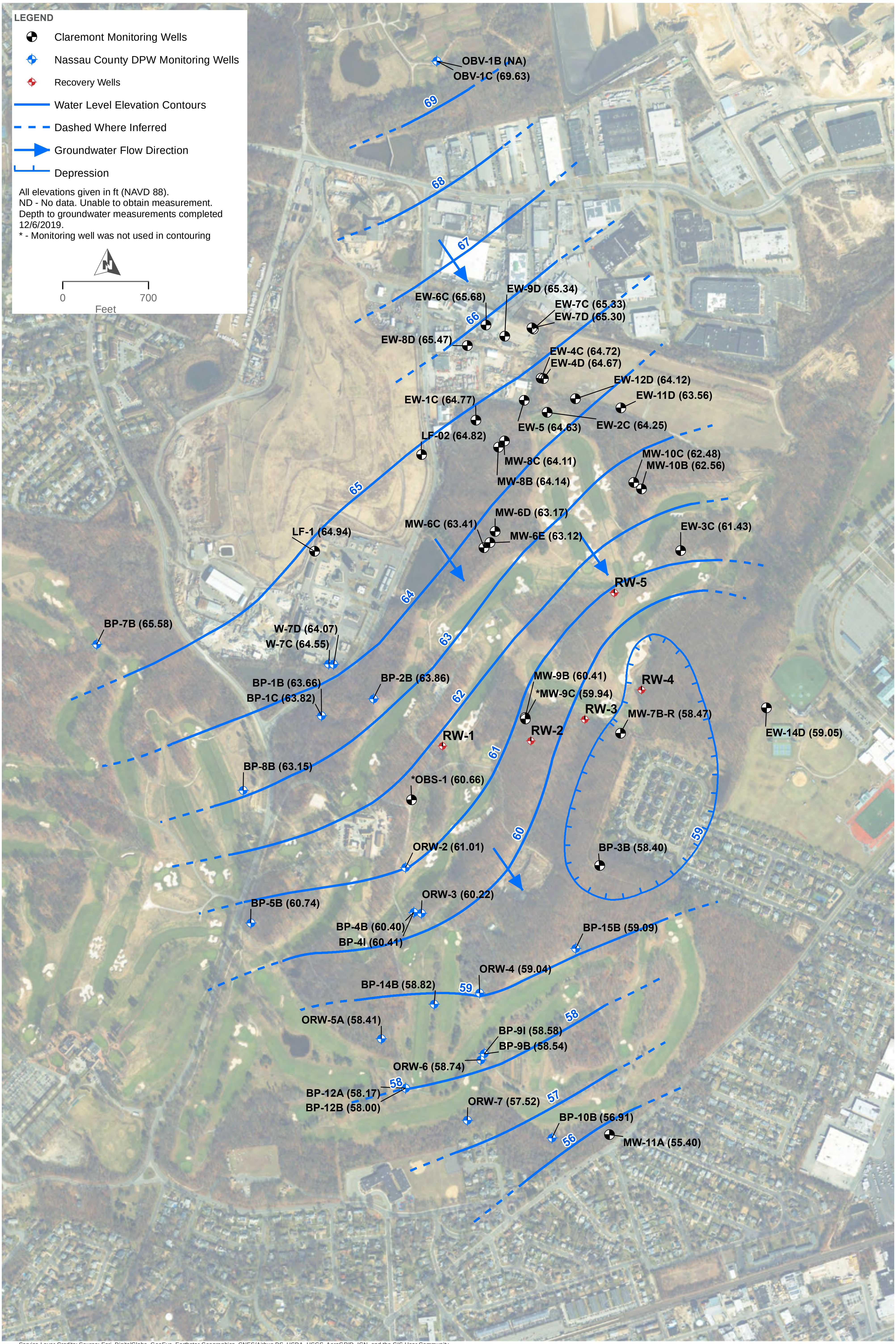


FDR

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

DECEMBER 2019 POTENTIOMETRIC SURFACE - UPPER MAGOTHY
+78 TO +20 FT (NAVD 88)
CLAREMONT POLYCHEMICAL CORPORATION
FIGURE 3

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\202315\CON0105889\000000002759962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\2019_Q4\FIG3_TO_5_GROUNDWATERCONTOURS_Q4_20200116.MXD - USER: KMARKOWI - DATE: 1/29/2020

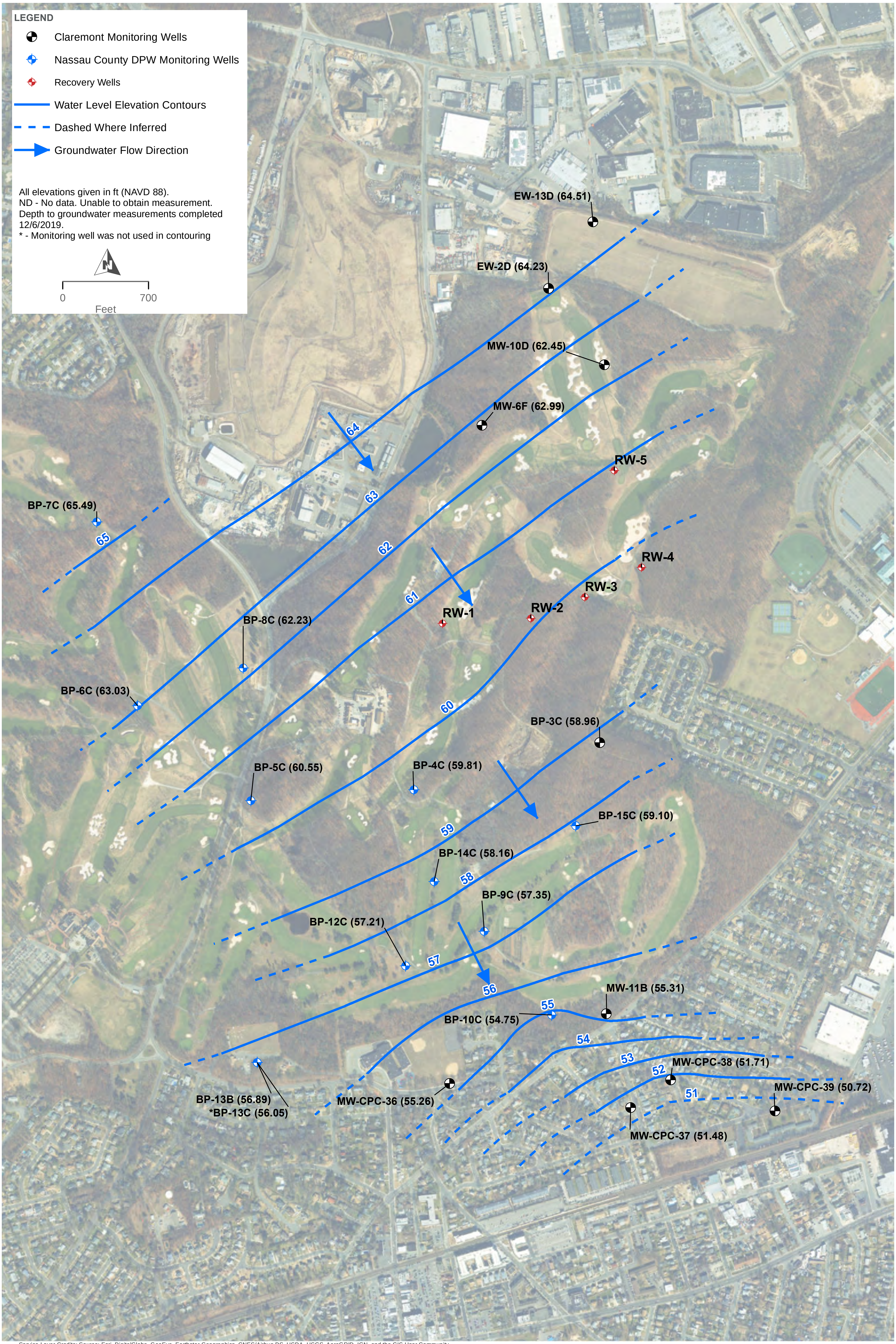


FDR

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

DECEMBER 2019 POTENTIOMETRIC SURFACE - MIDDLE MAGOTHY
+20 TO -131 FT (NAVD 88)
CLAREMONT POLYCHEMICAL CORPORATION
FIGURE 4

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\202315\CON0105889\0000000002759627.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\2019_Q4\FIG3_TO_5_GROUNDWATERCONTOURS_Q4_20200116.MXD - USER: KMARKOWI - DATE: 1/29/2020



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

FDR

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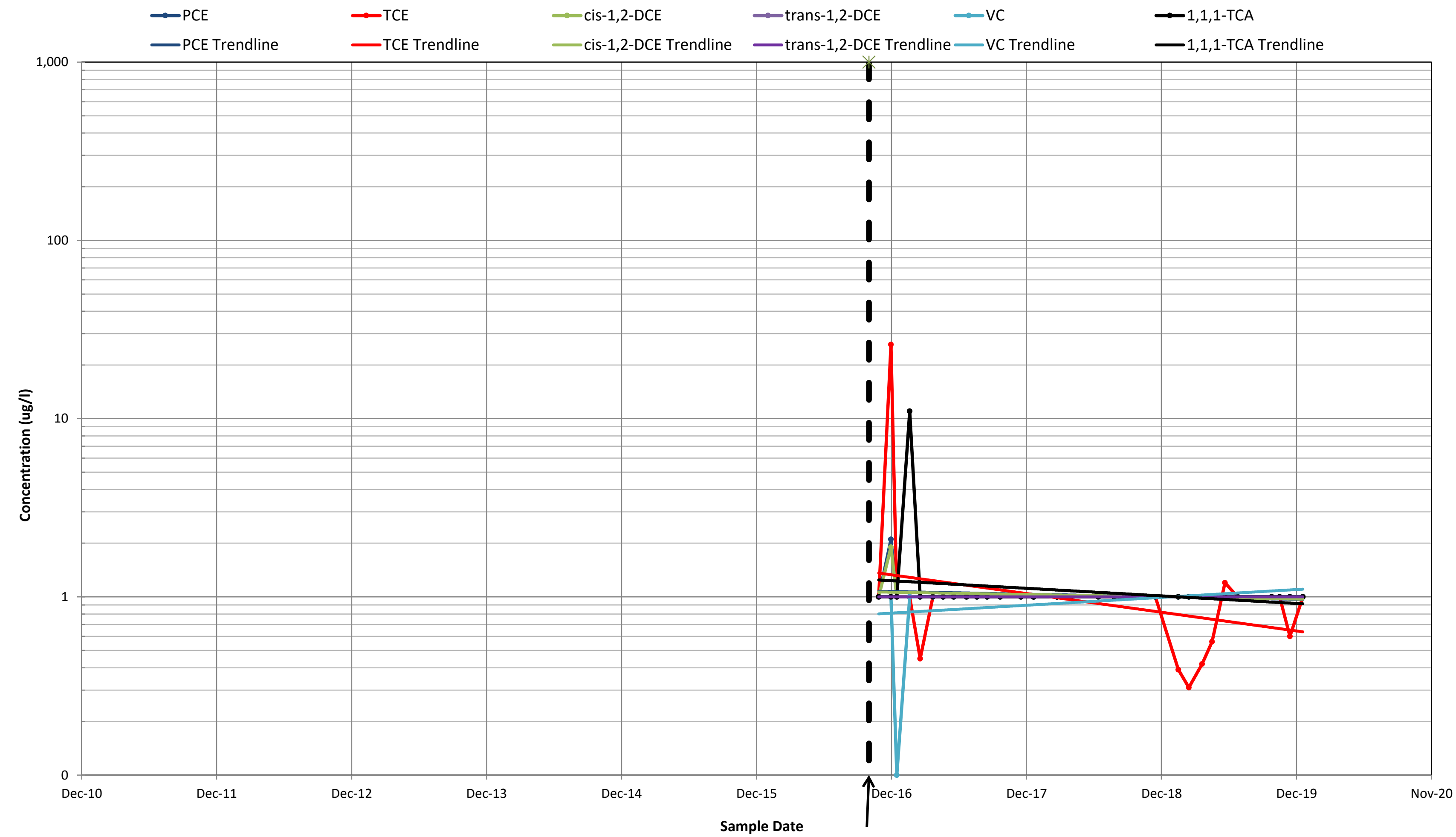
DECEMBER 2019 POTENTIOMETRIC SURFACE - LOWER MAGOTHY

DEEPER THAN -131 FT (NAVD 88)

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 5

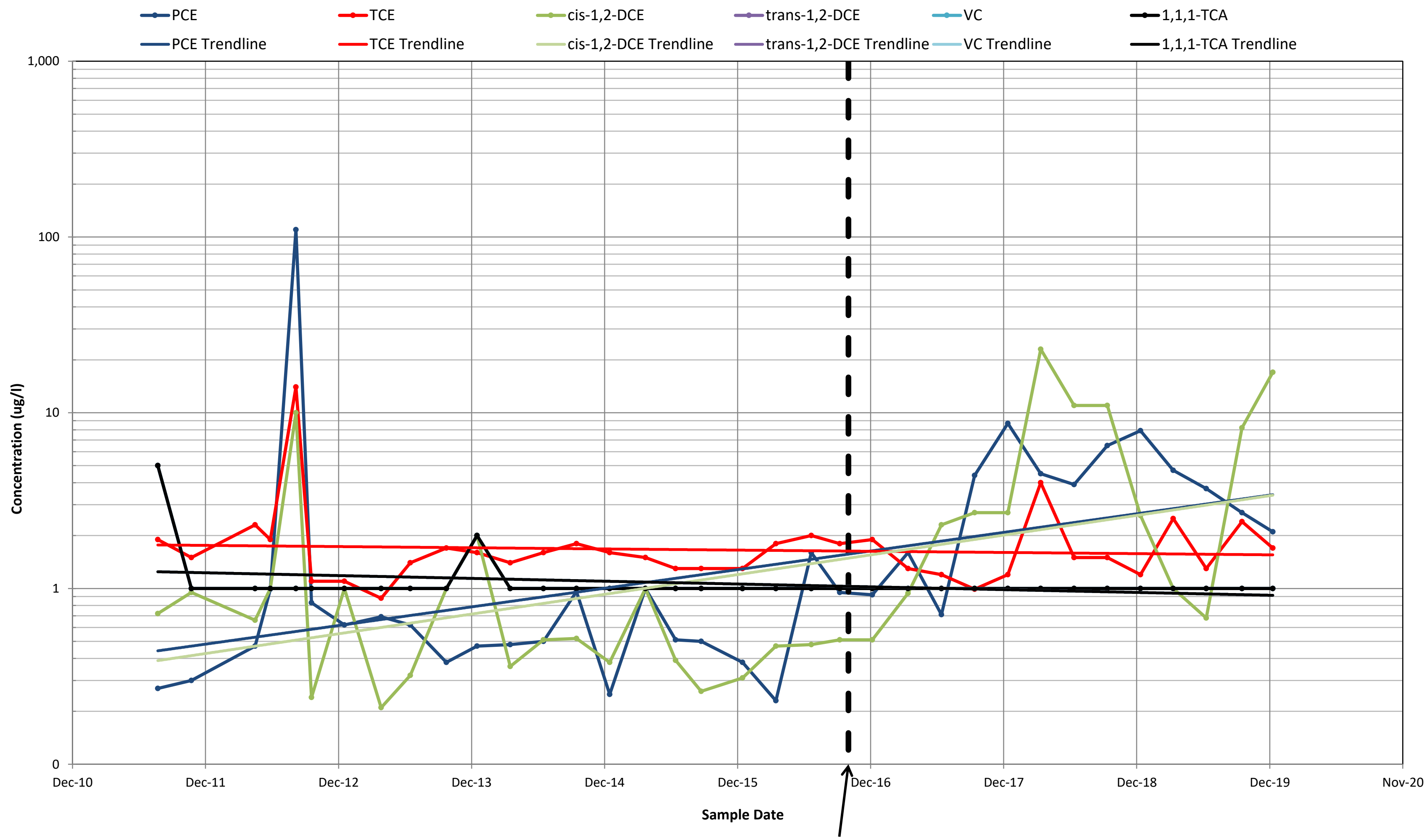
PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\202315\CON0105889\0000000002759627.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\2019_Q4\FIG3_TO_5_GROUNDWATERCONTOURS_Q4_20200116.MXD - USER: KMARKOWI - DATE: 1/29/2020



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.

CHLORINATED VOC CONCENTRATIONS EFFLUENT CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5 NYSDEC SITE #130015	DATE DECEMBER 2019	FIGURE 6



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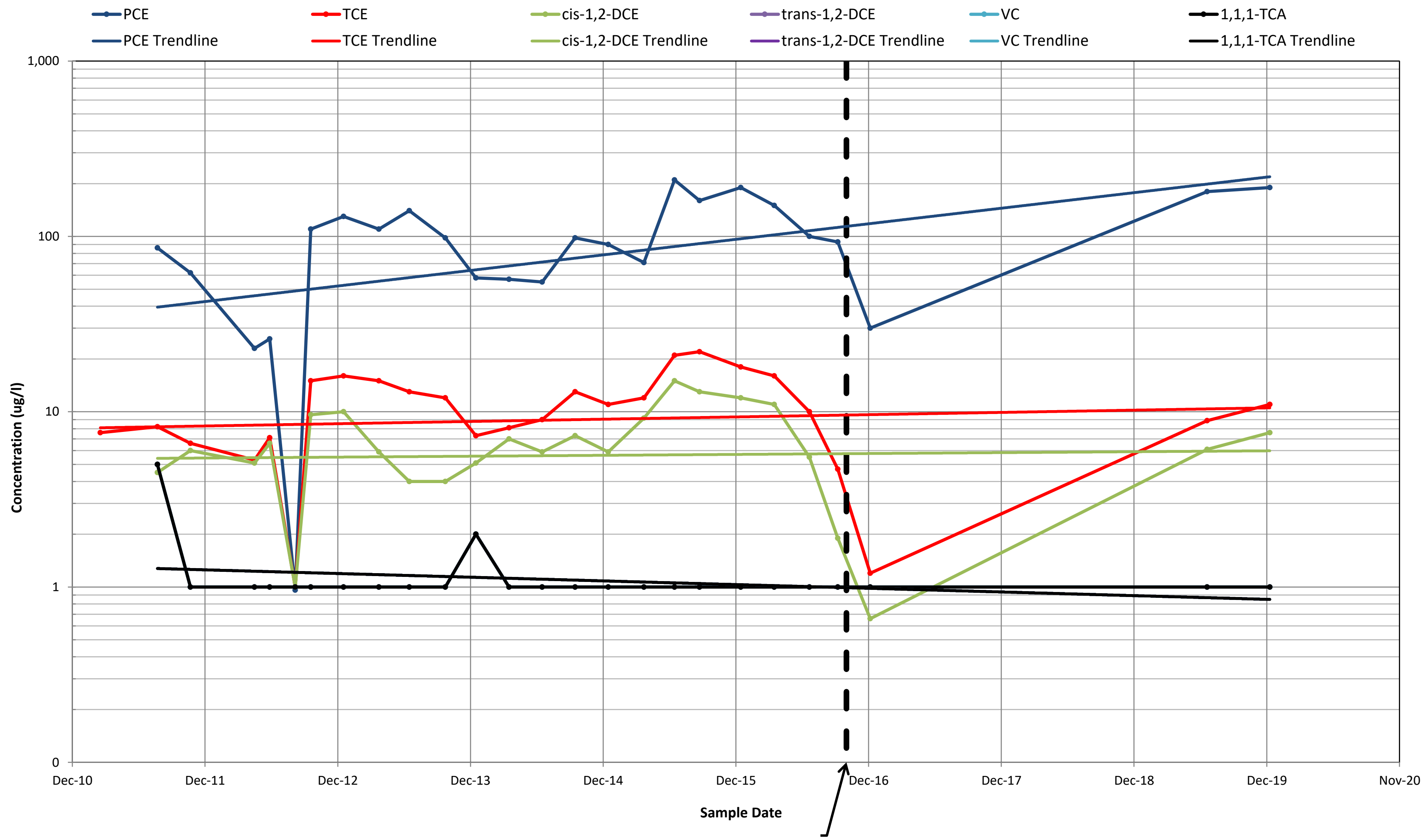
CHLORINATED VOC CONCENTRATIONS
WELL DW-1
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

DECEMBER 2019

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.
Well was dry in for all four quarters of 2017.

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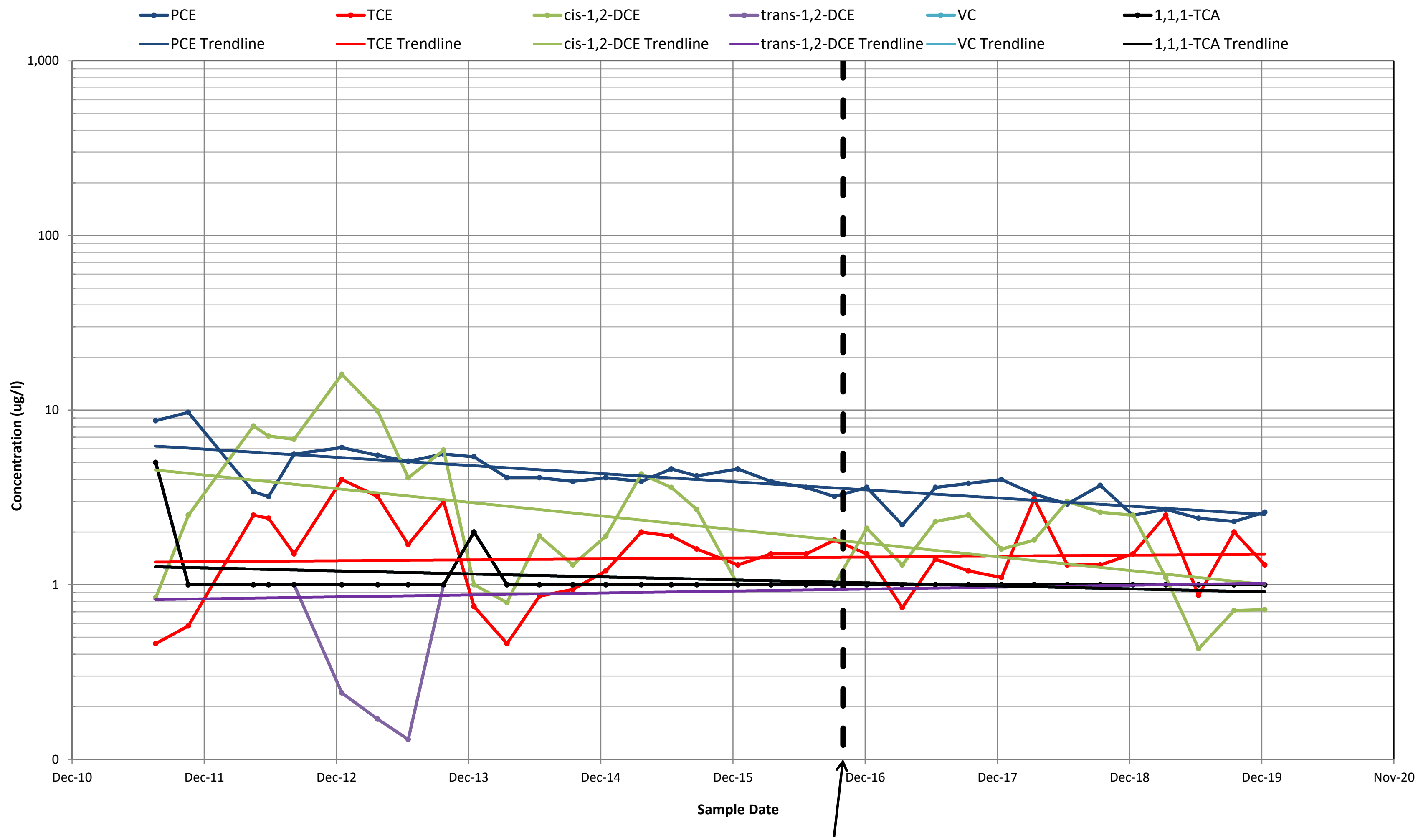
CHLORINATED VOC CONCENTRATIONS
WELL SW-1
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

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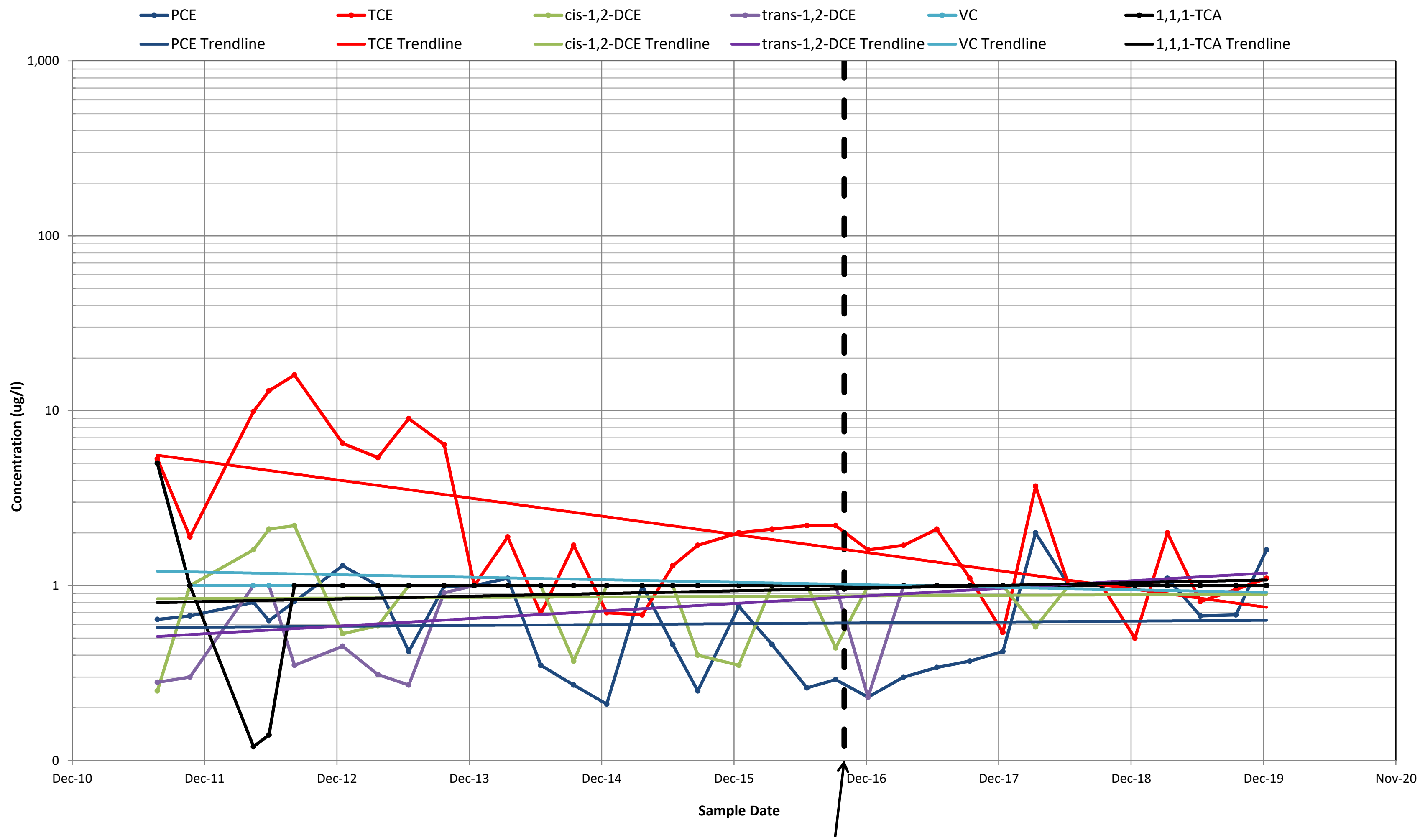
CHLORINATED VOC CONCENTRATIONS
WELL EW-1A
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

FIGURE
9



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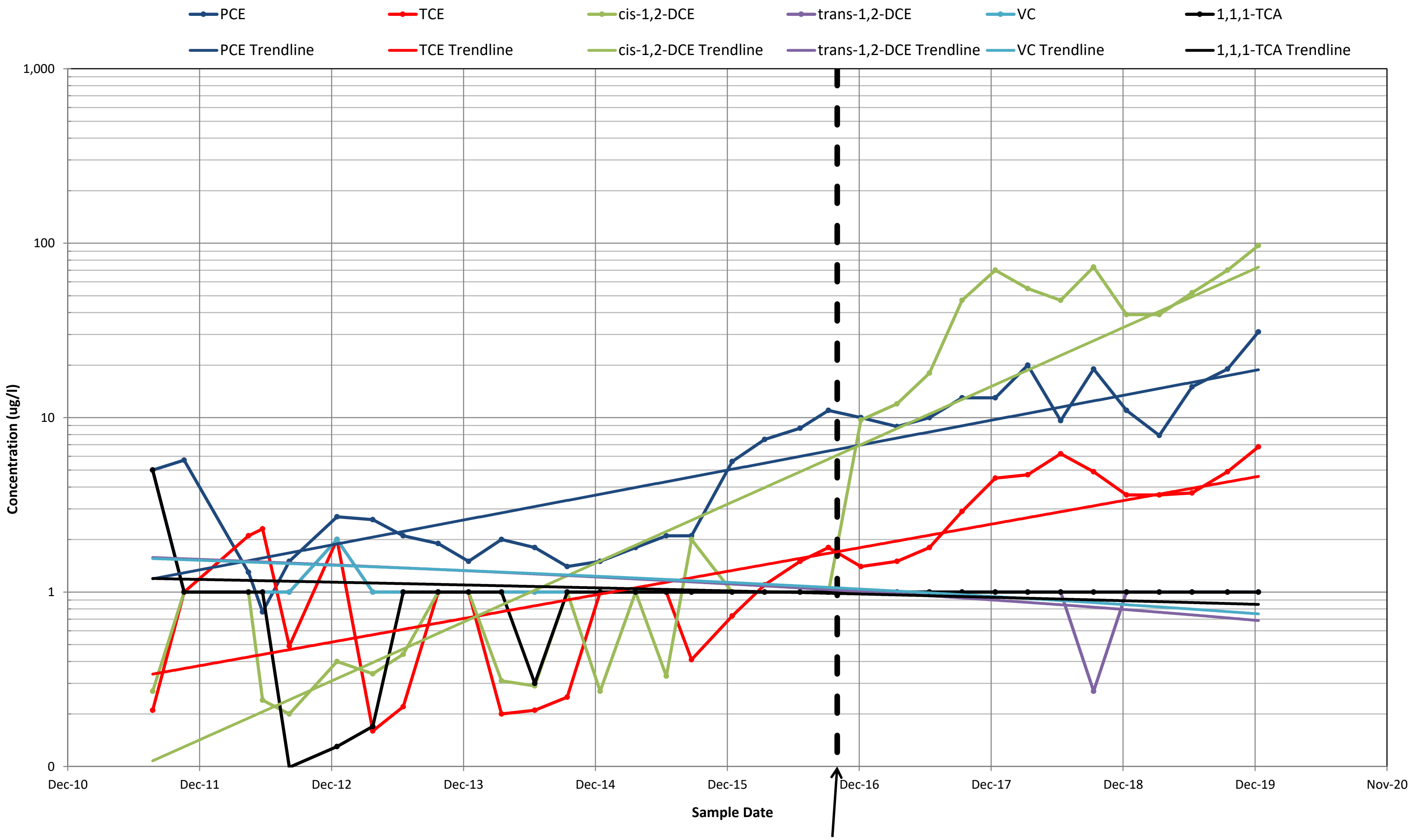
CHLORINATED VOC CONCENTRATIONS
WELL EW-5
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

DECEMBER 2019

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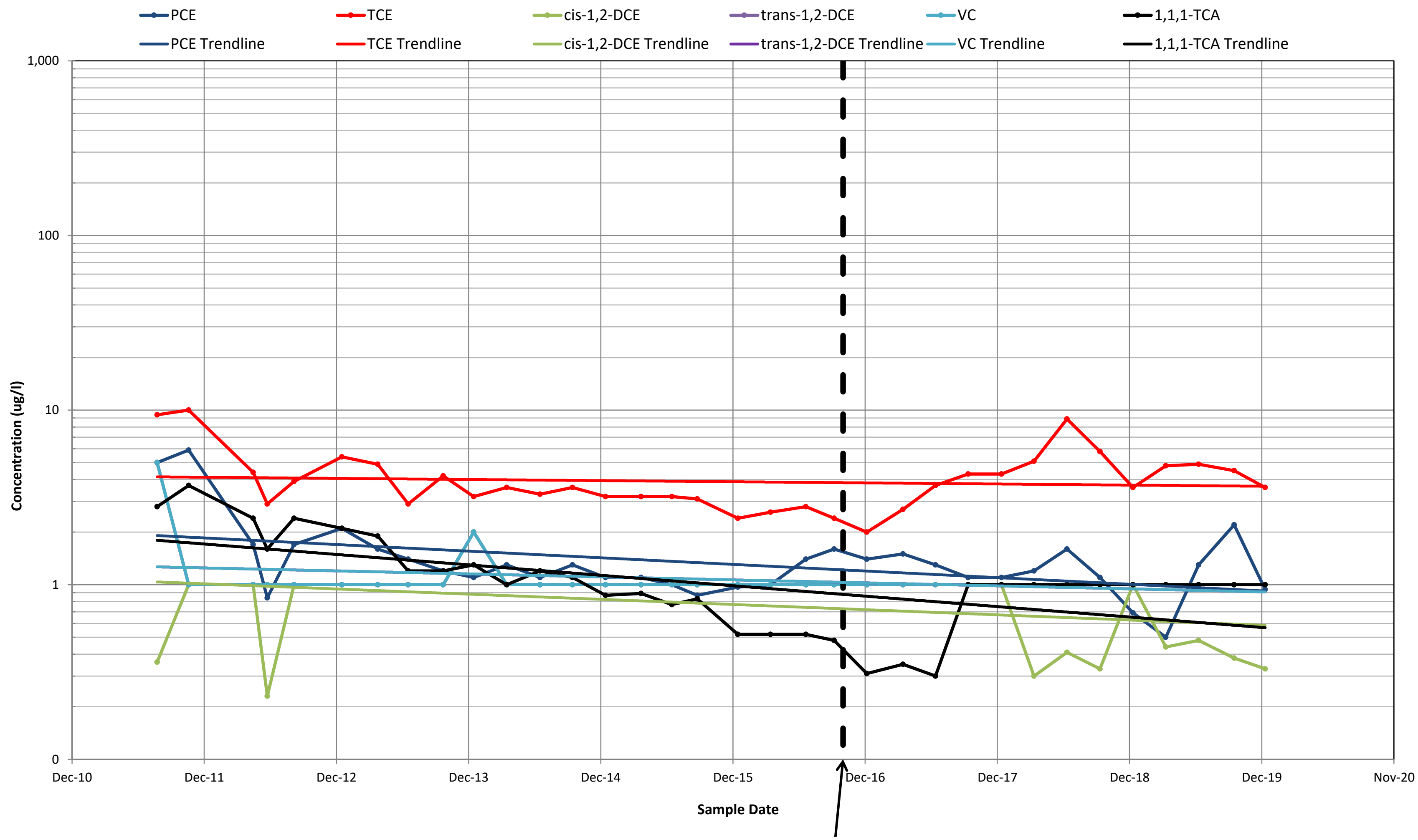
CHLORINATED VOC CONCENTRATIONS
WELL EW-4A
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

DECEMBER 2019

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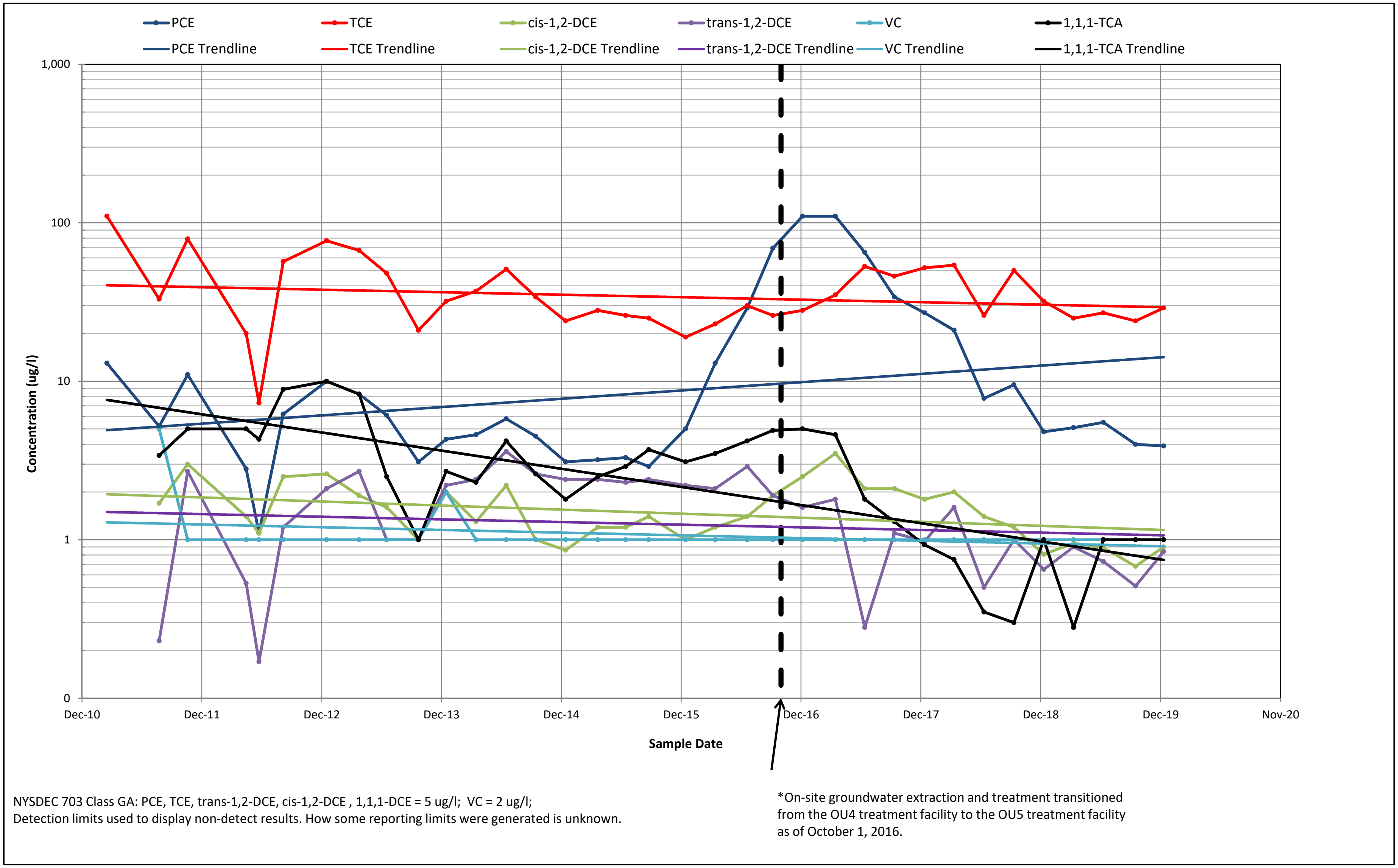
CHLORINATED VOC CONCENTRATIONS
WELL EW-4B
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

DECEMBER 2019

FIGURE

12



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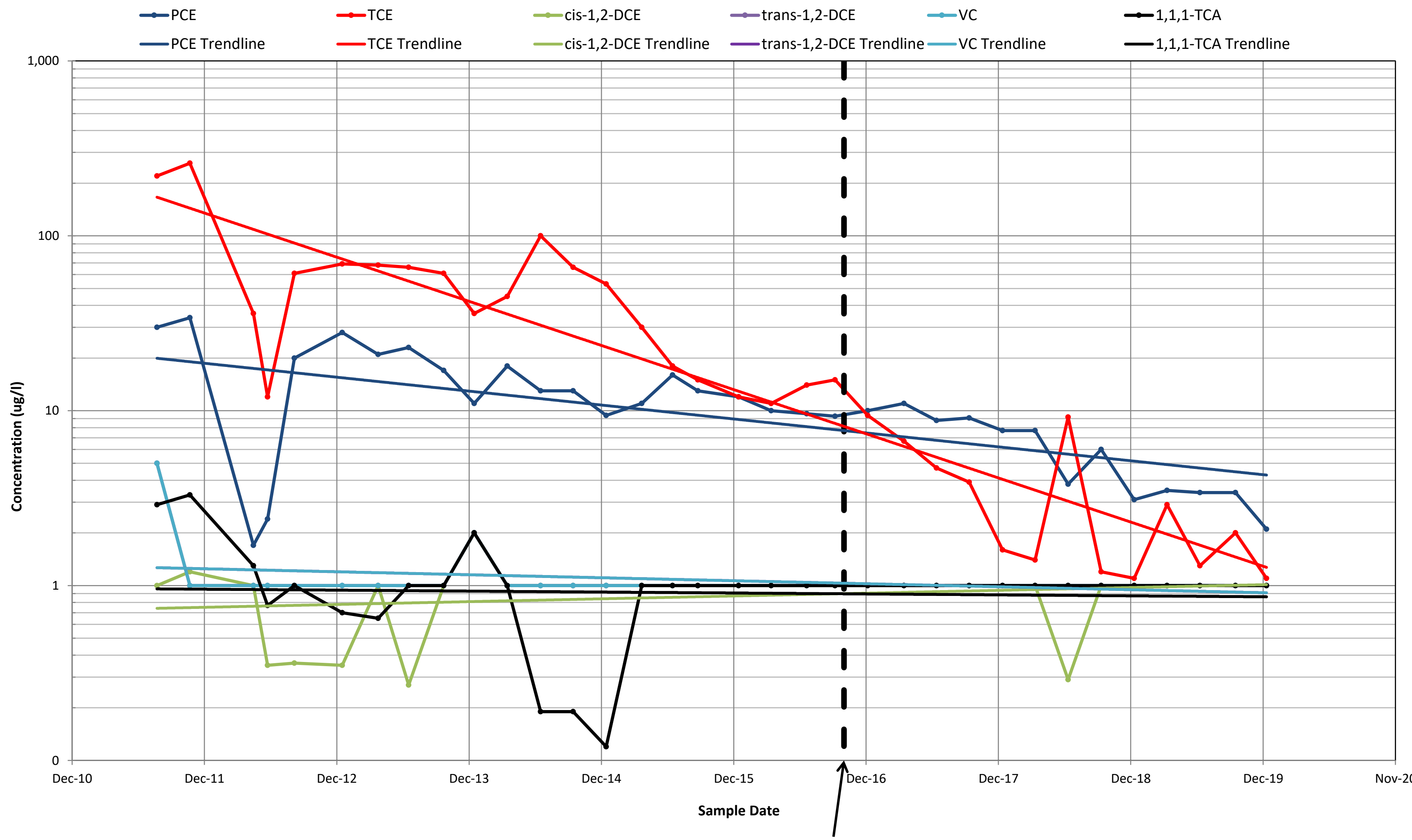
CHLORINATED VOC CONCENTRATIONS
WELL EW-4C
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

DECEMBER 2019

FIGURE

13



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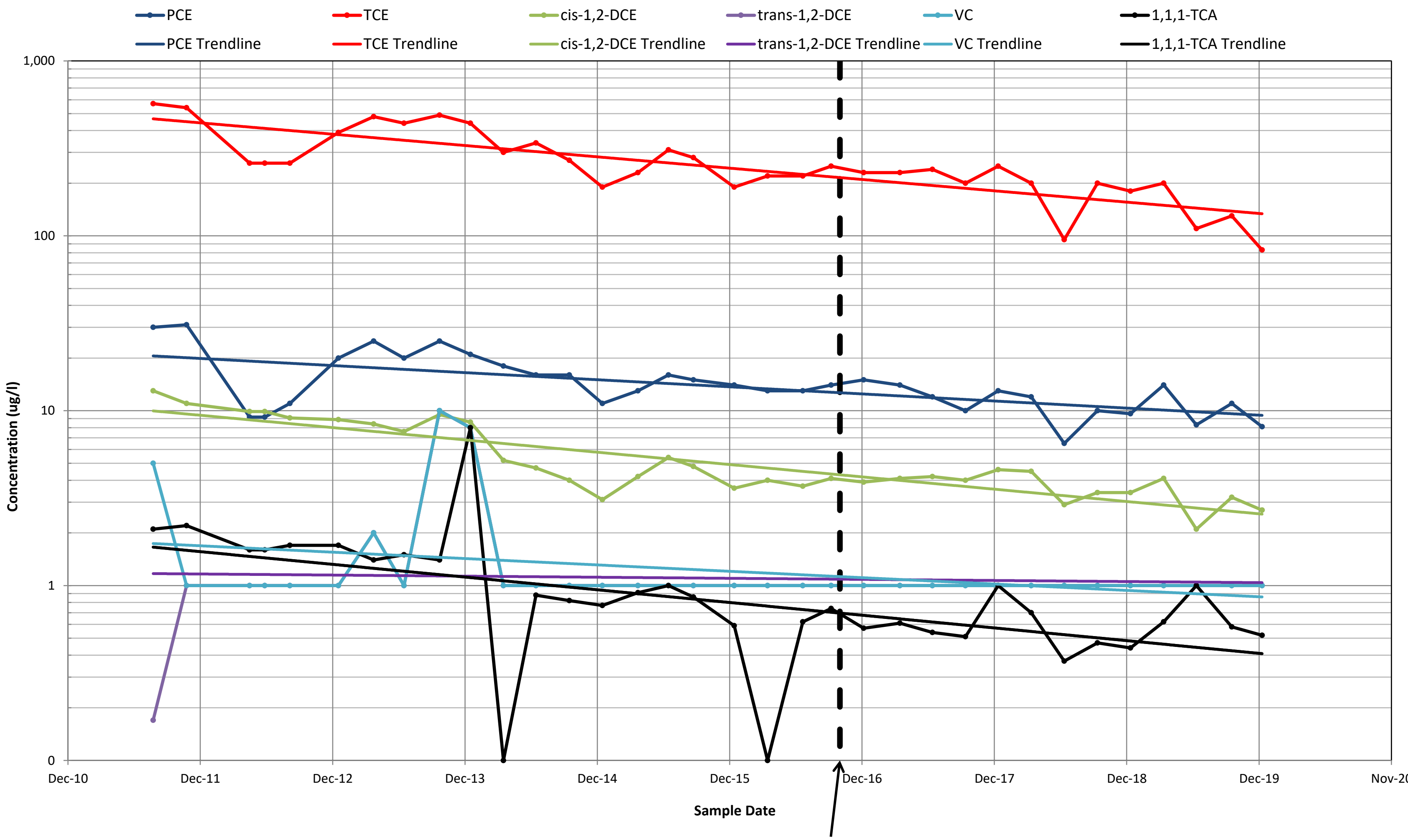
CHLORINATED VOC CONCENTRATIONS
WELL EW-4D
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

DECEMBER 2019

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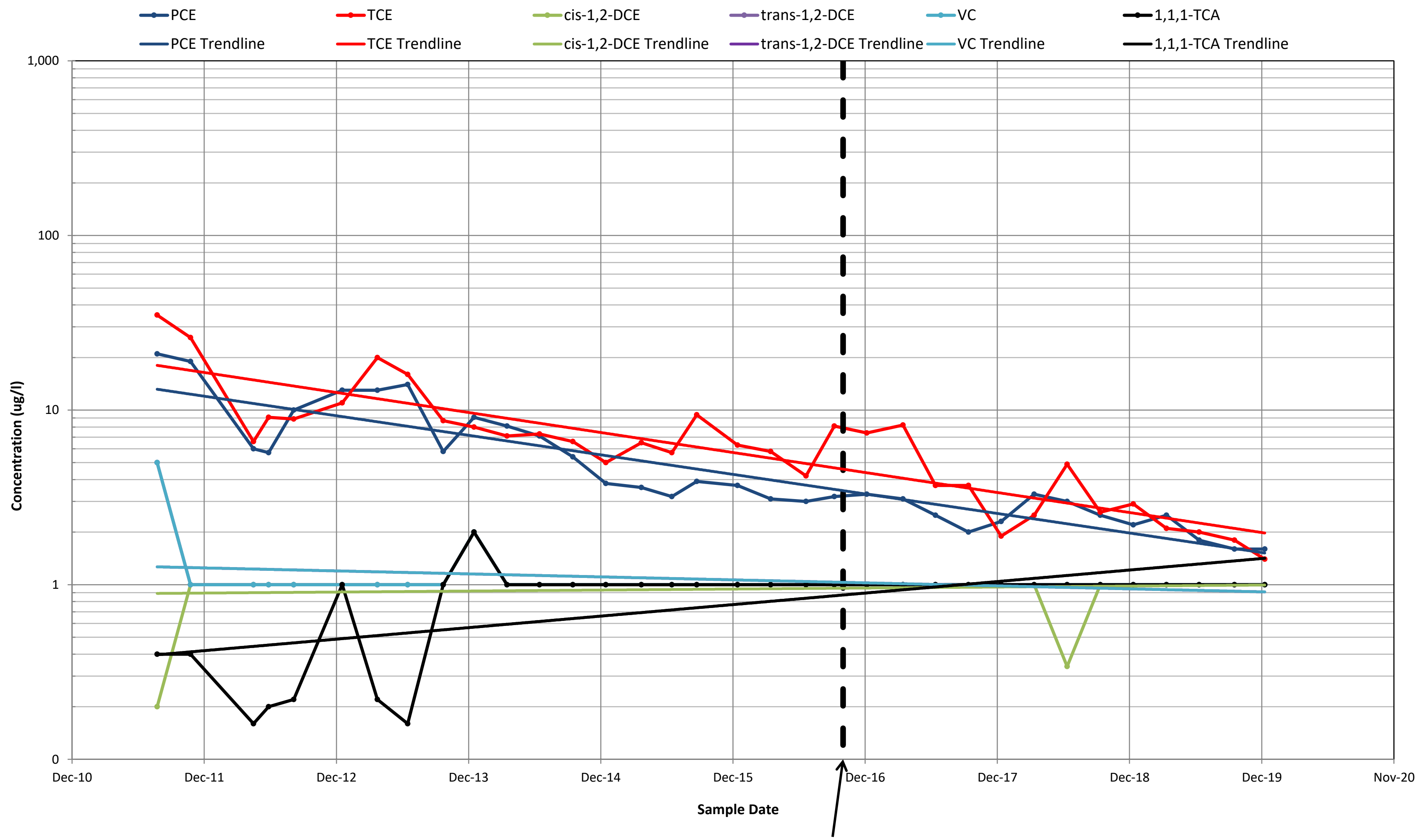
CHLORINATED VOC CONCENTRATIONS
WELL EW-7C
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

FIGURE
15



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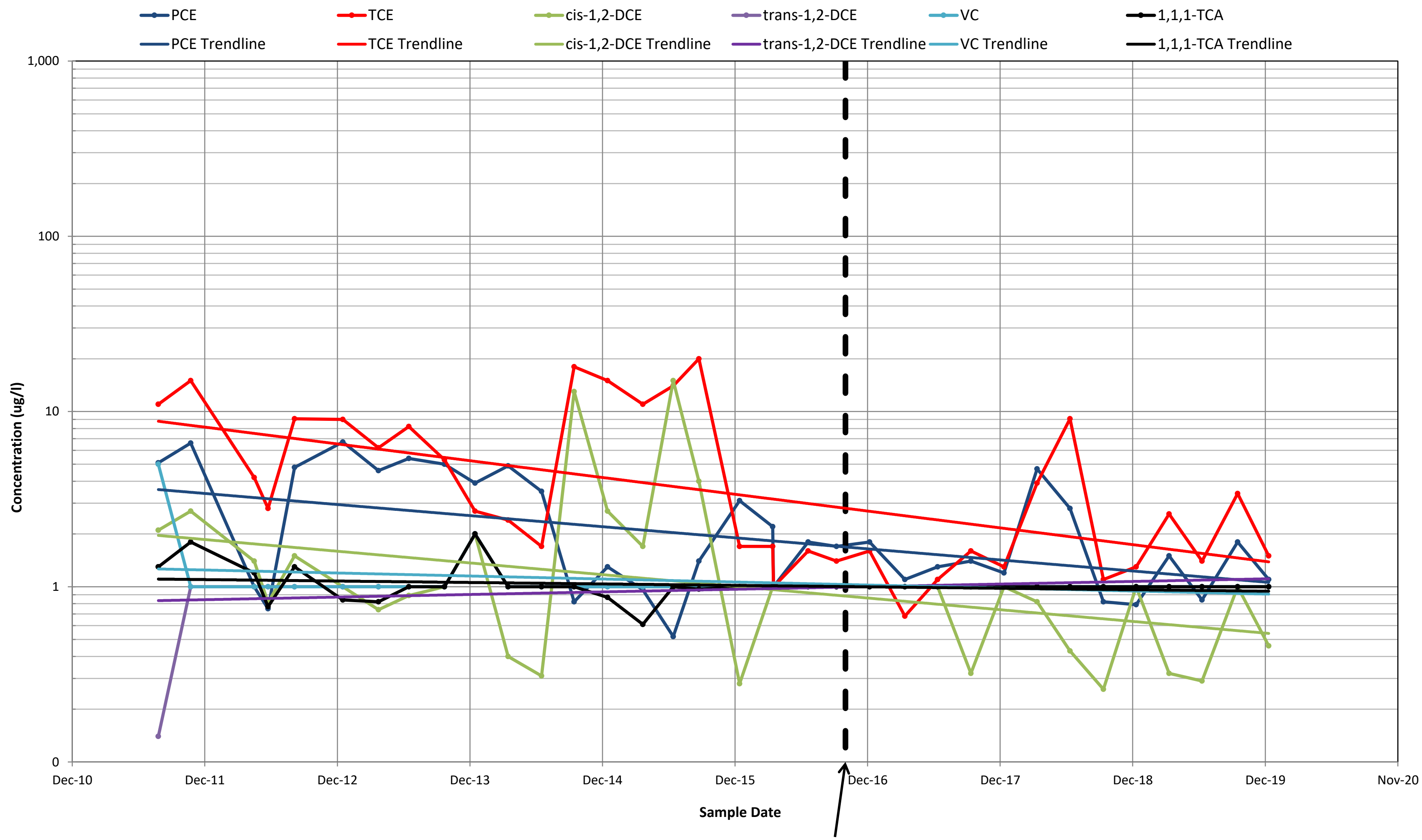
CHLORINATED VOC CONCENTRATIONS
WELL EW-7D
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

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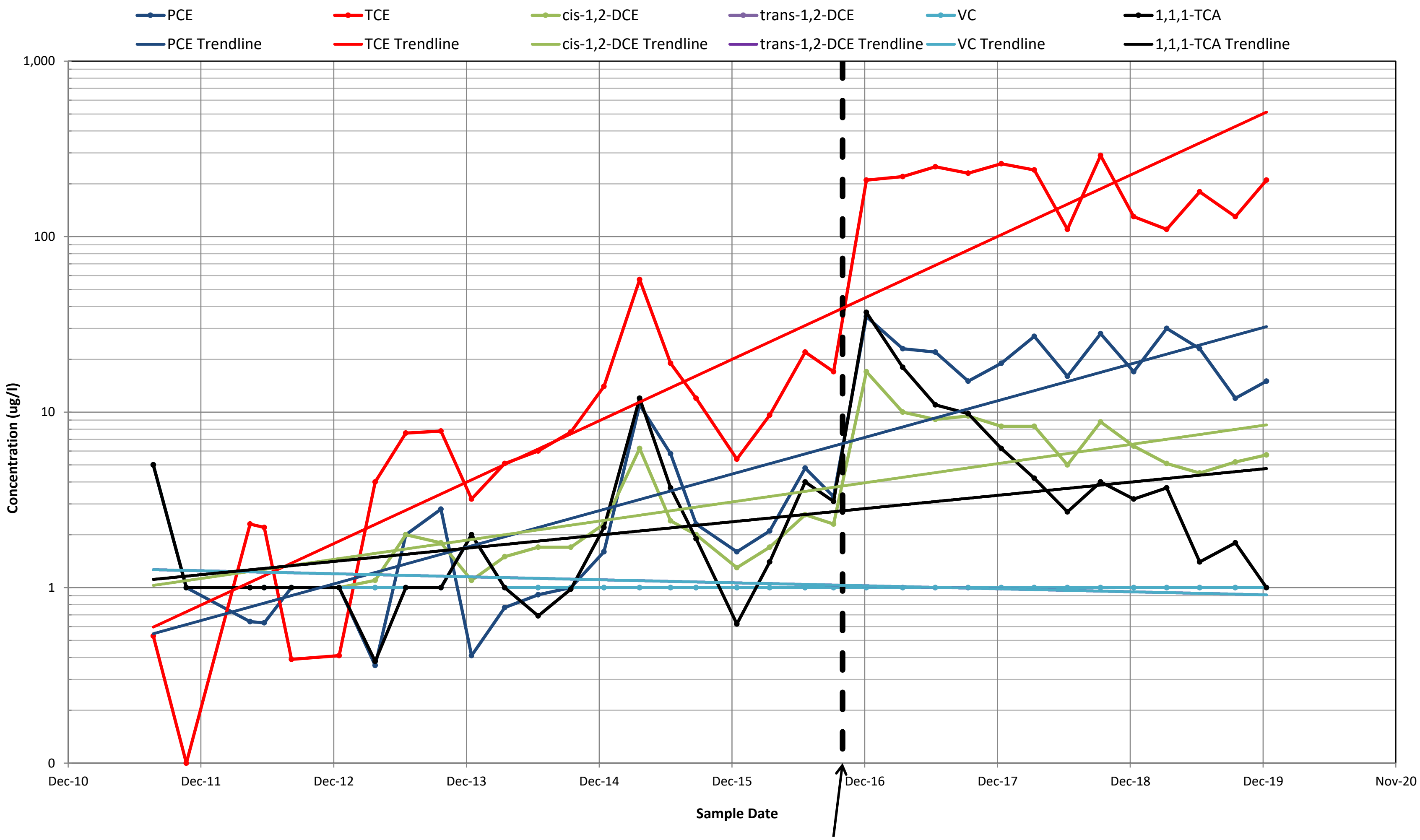
CHLORINATED VOC CONCENTRATIONS
WELL MW-10D
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

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 EW-12D
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

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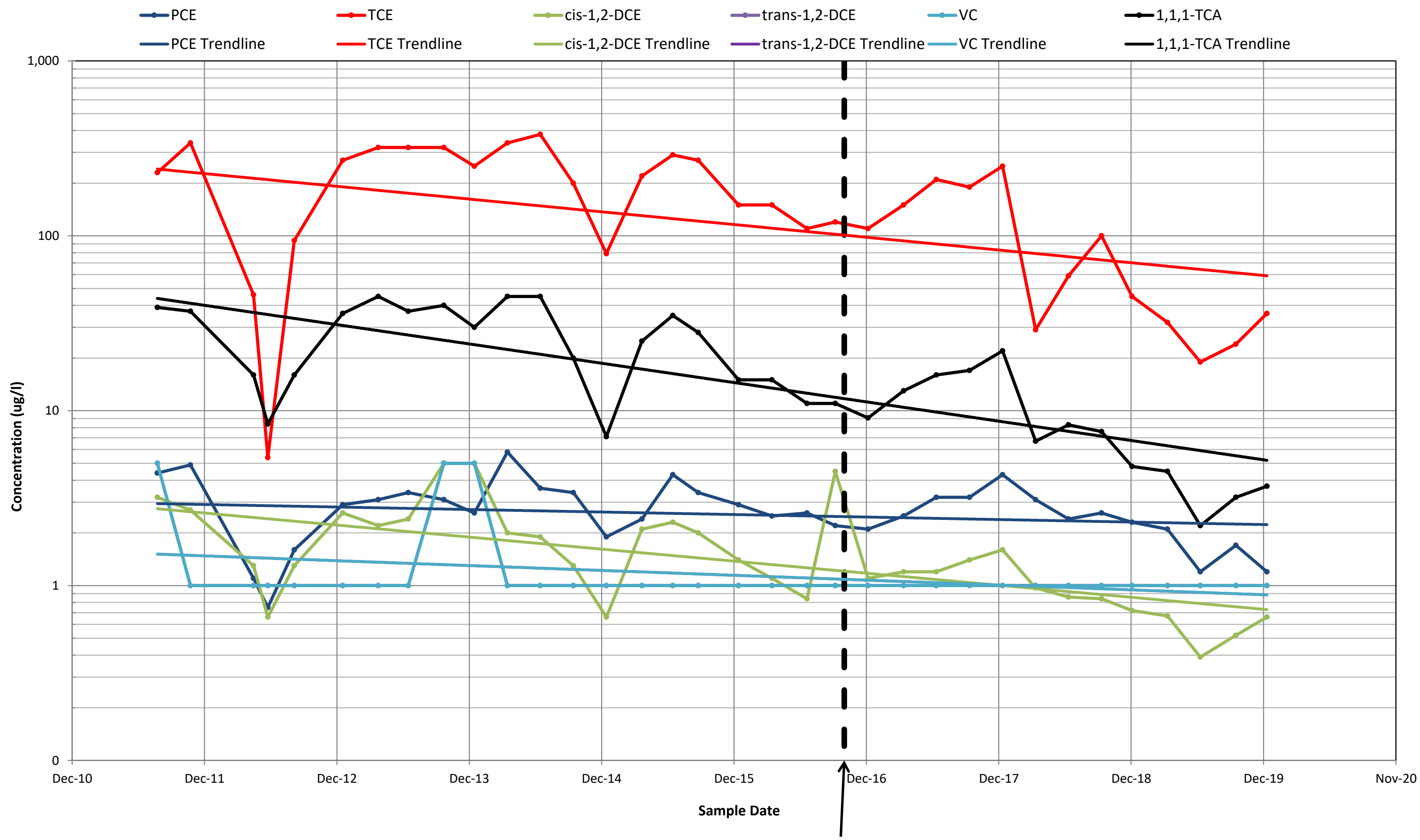
FIGURE

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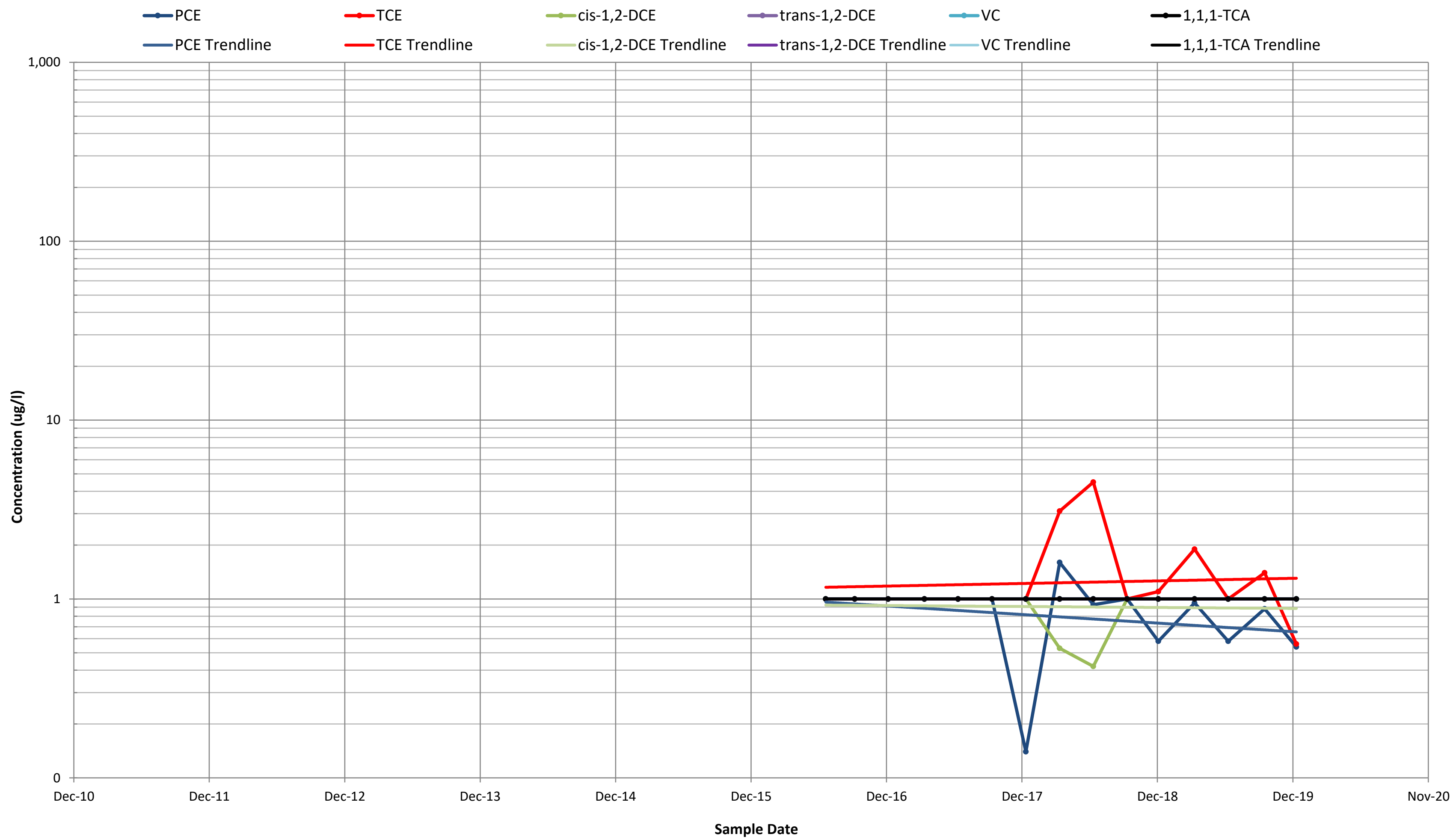
CHLORINATED VOC CONCENTRATIONS
WELL EW-14D
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

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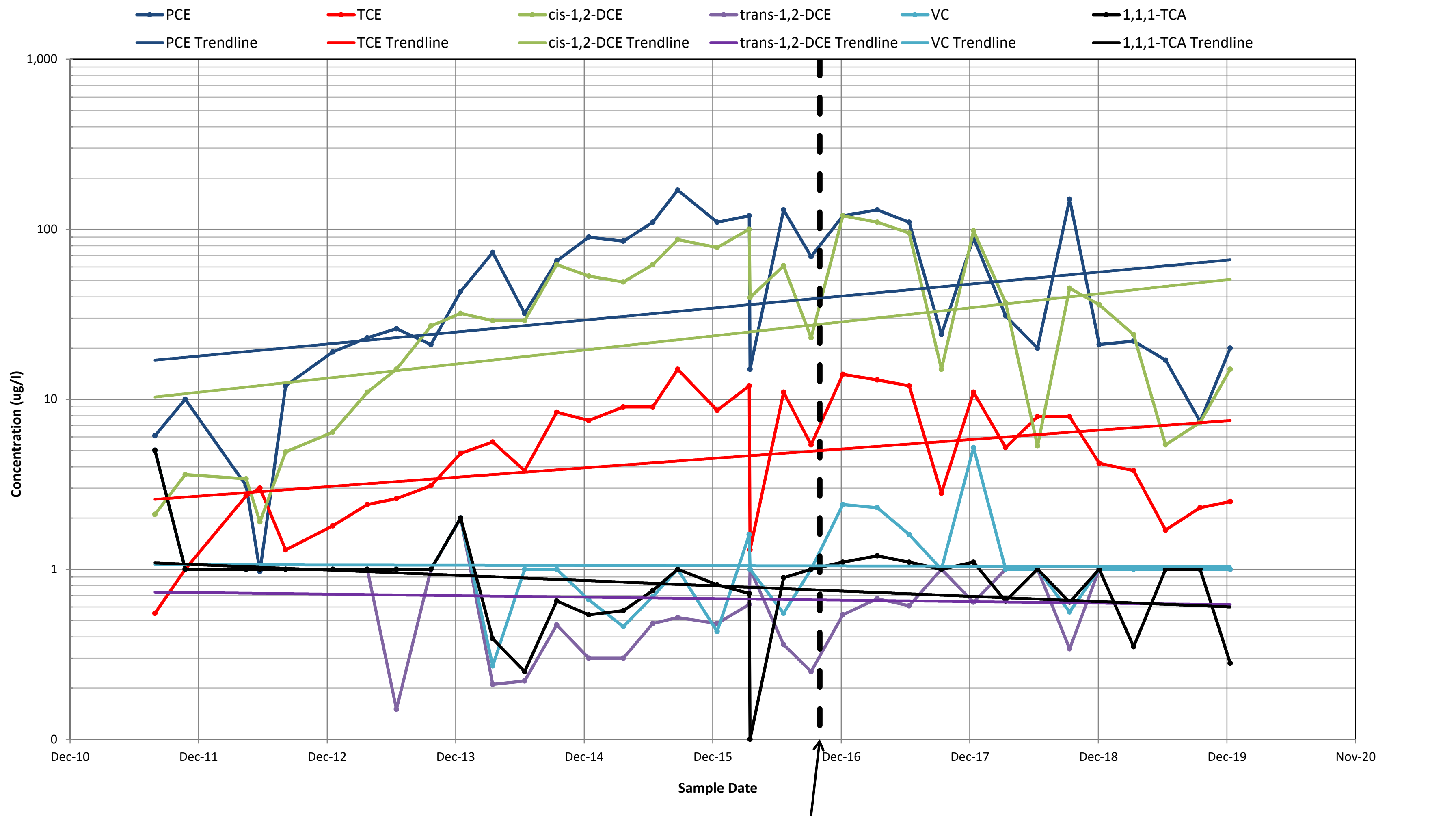
CHLORINATED VOC CONCENTRATIONS
WELL BP-3A
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

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.

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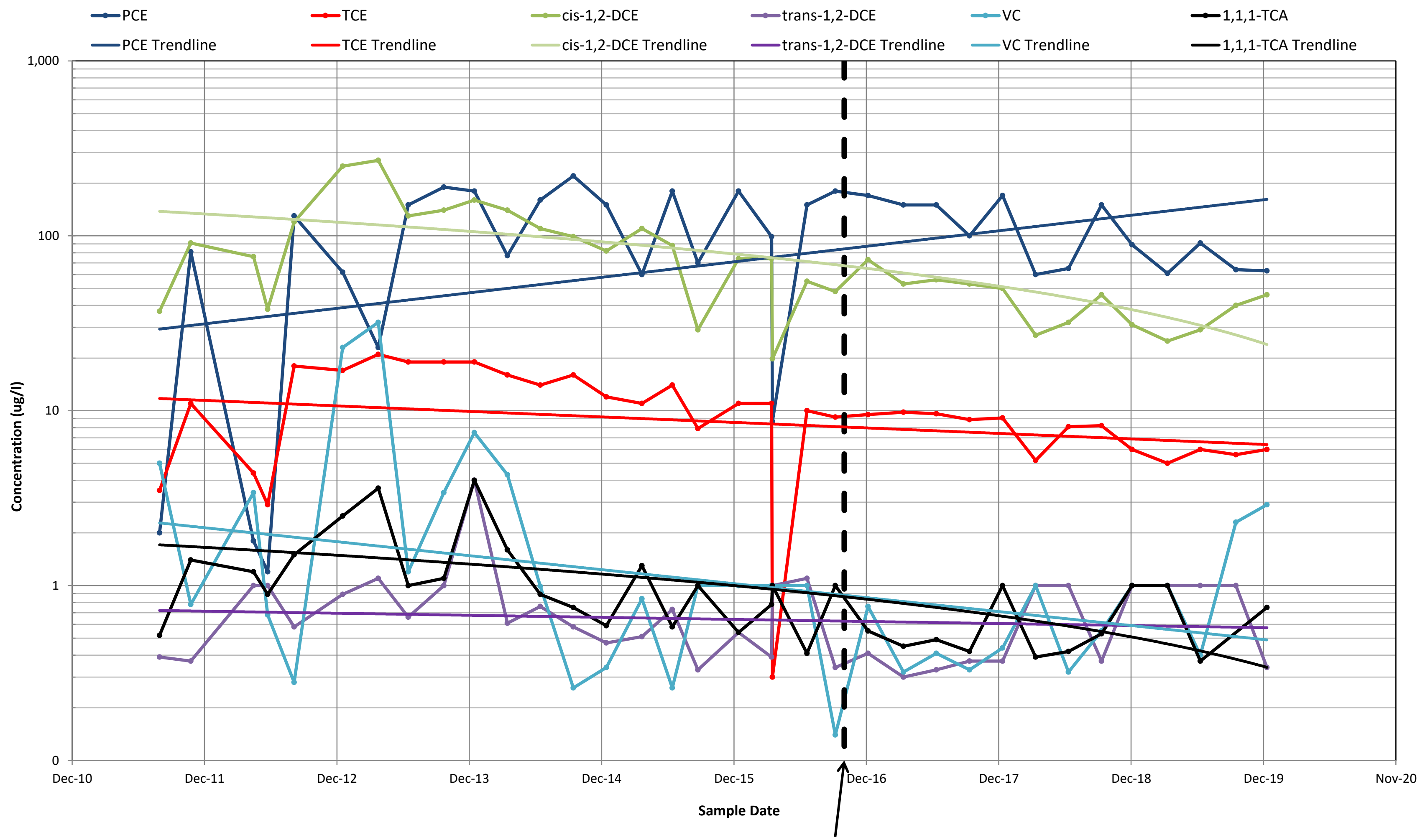
CHLORINATED VOC CONCENTRATIONS
WELL BP-3B
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

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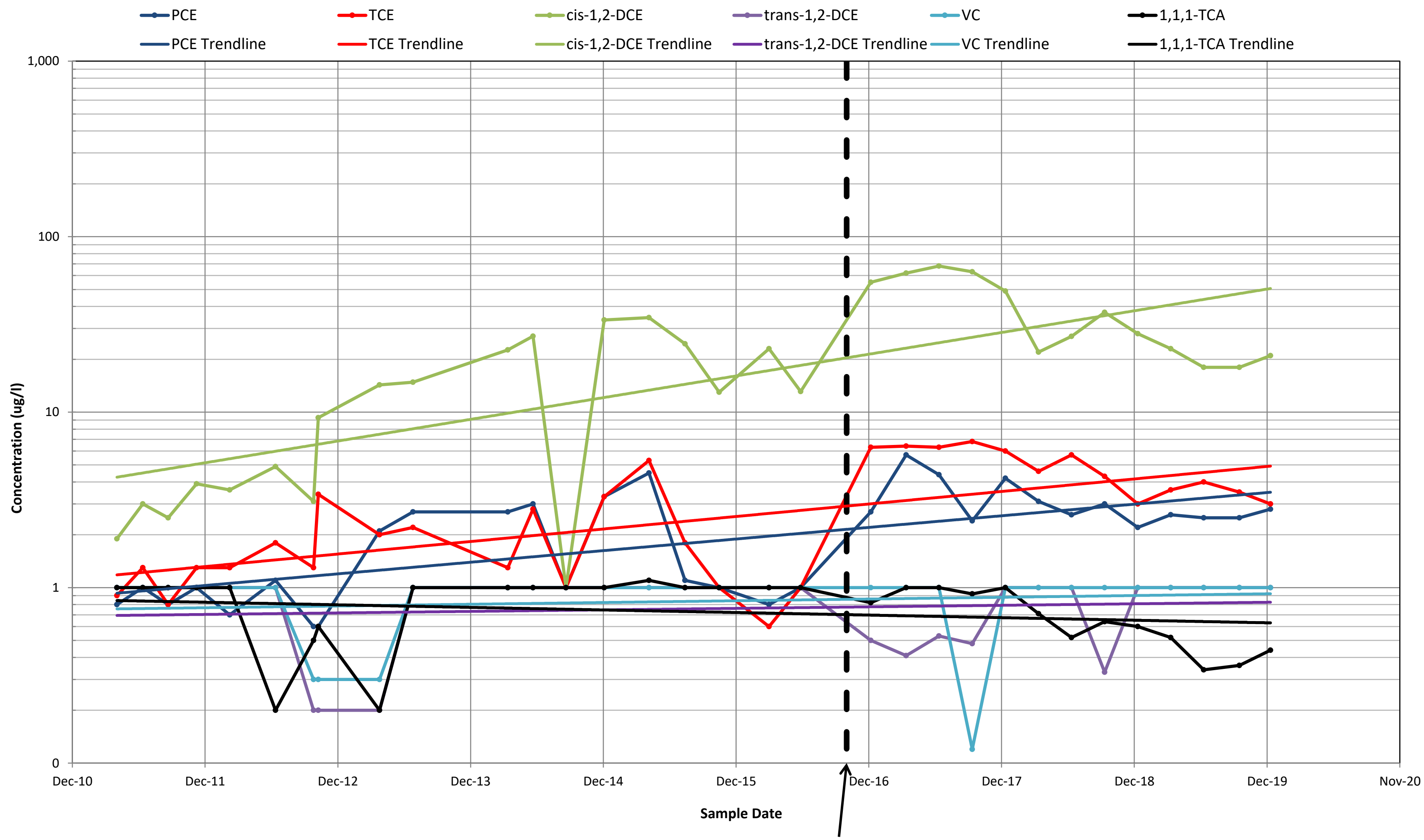
CHLORINATED VOC CONCENTRATIONS
WELL BP-3C
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

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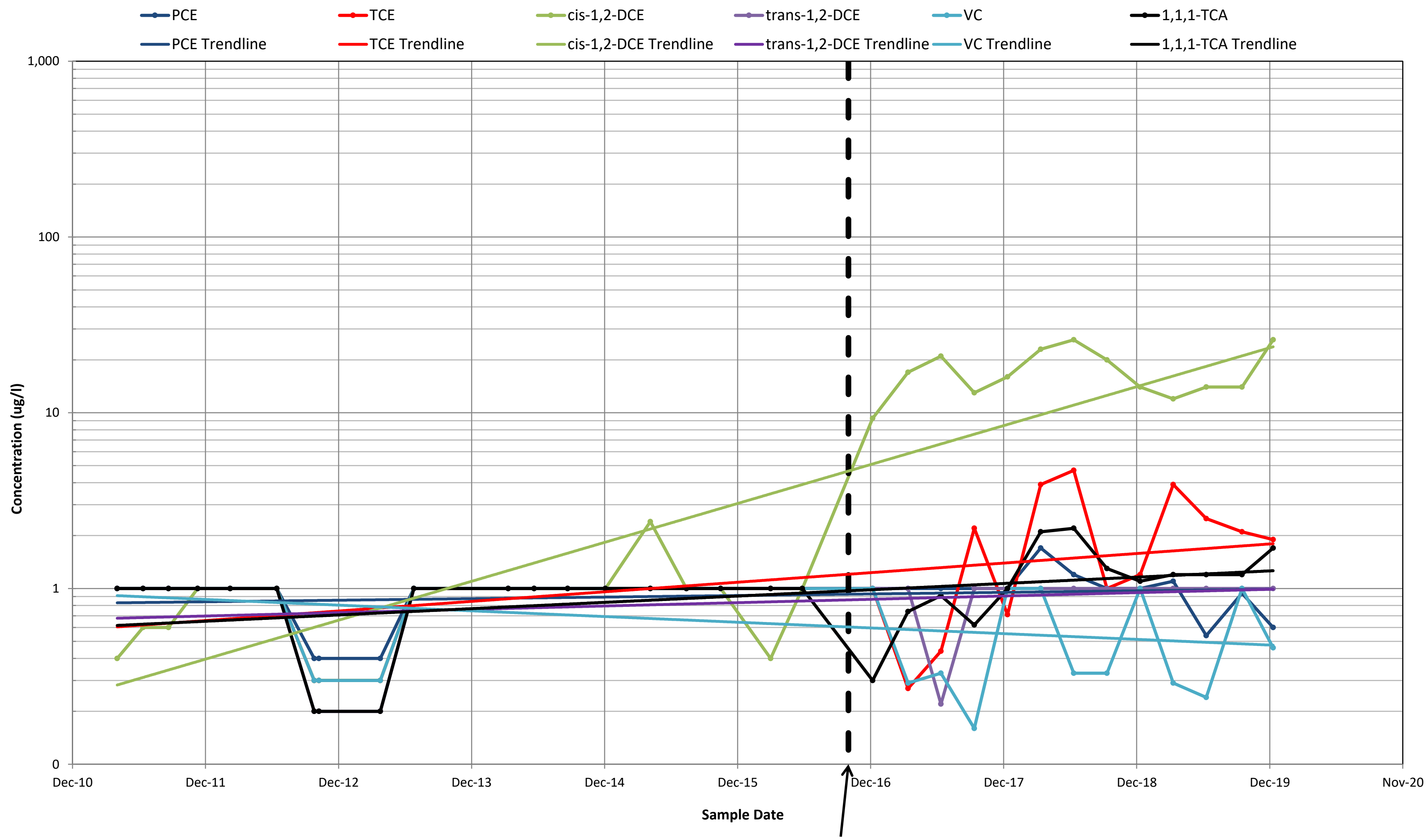
CHLORINATED VOC CONCENTRATIONS
WELL MW-11A
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

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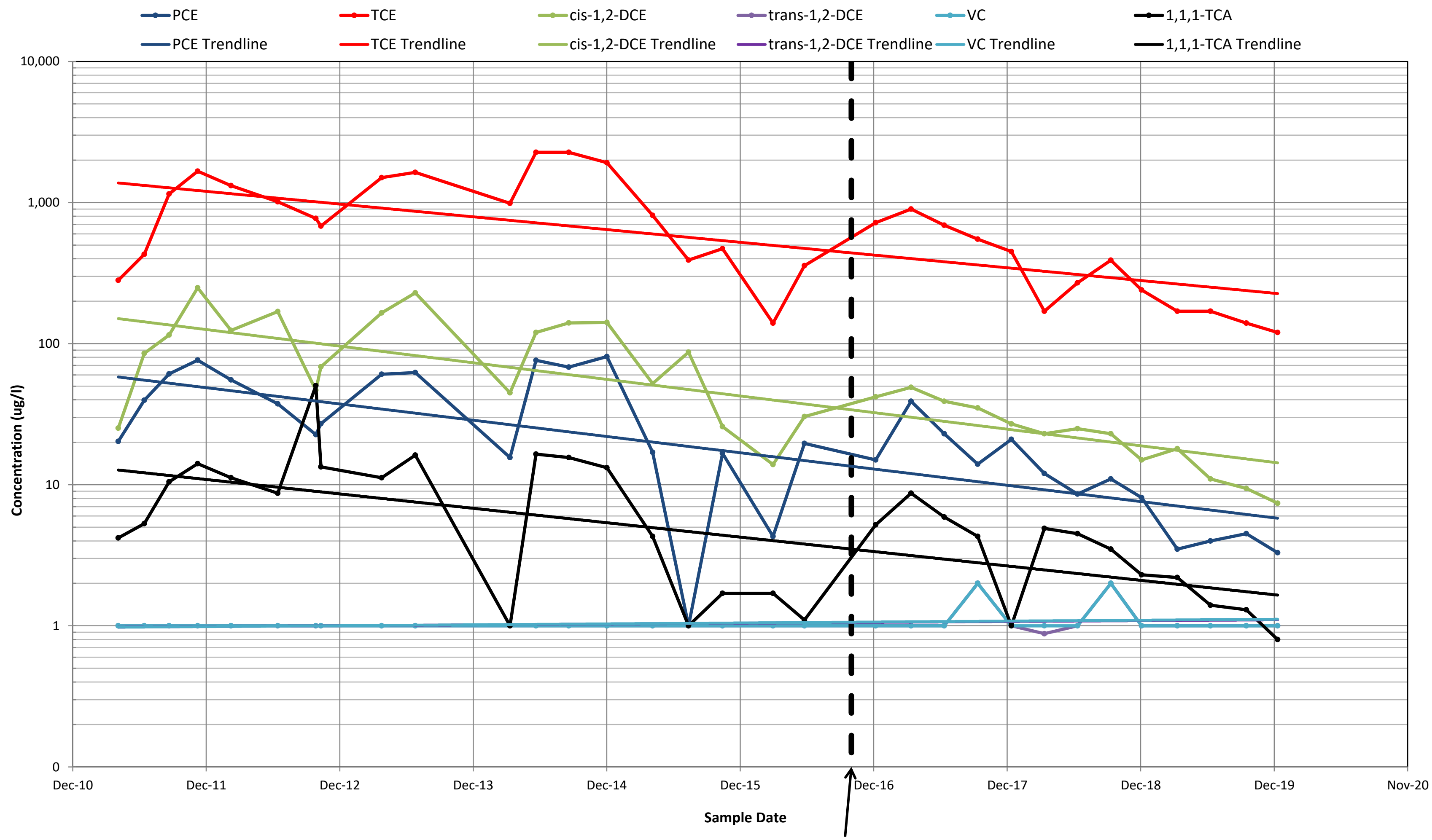
CHLORINATED VOC CONCENTRATIONS
WELL MW-11B
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

DECEMBER 2019

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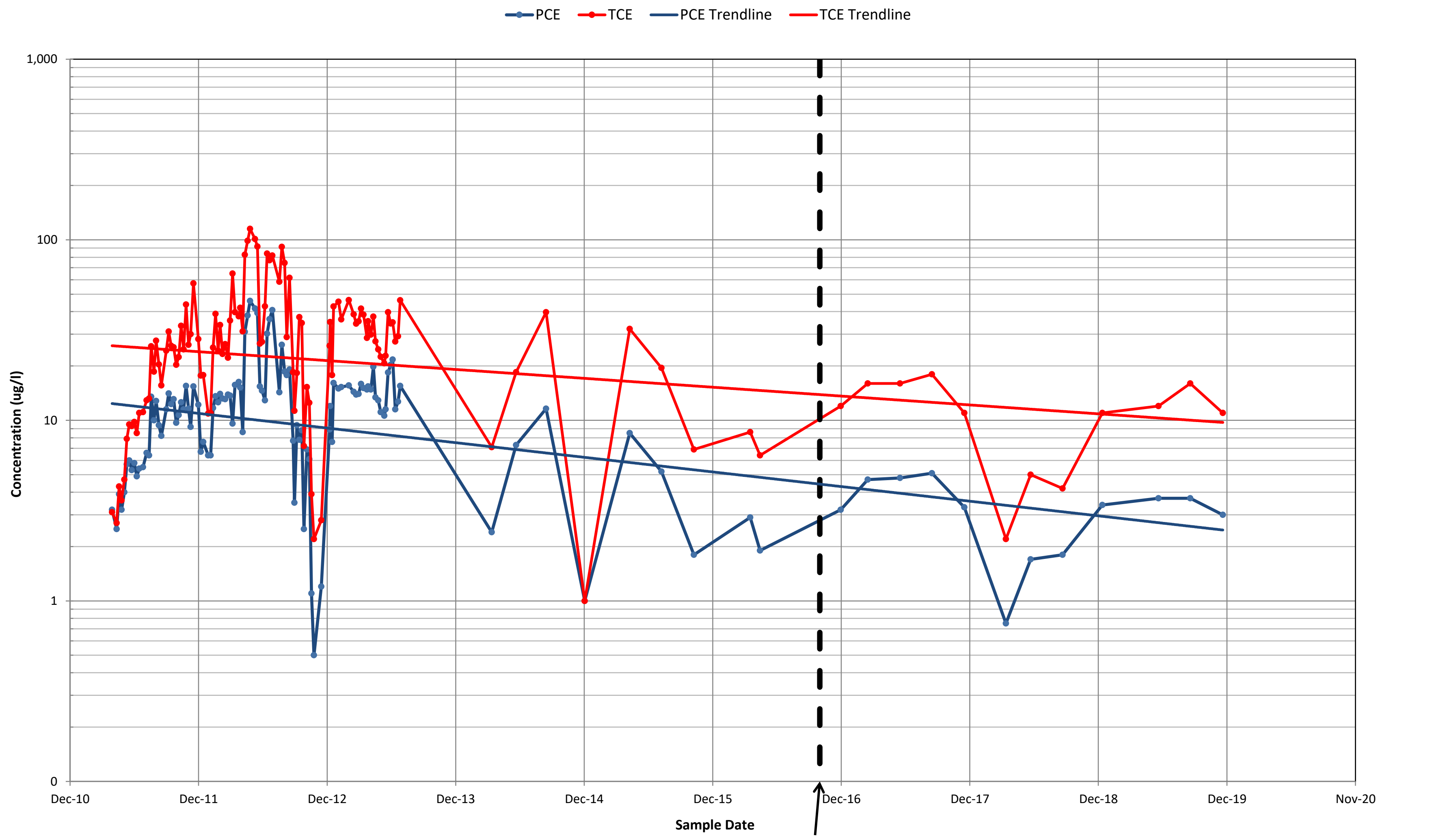
CHLORINATED VOC CONCENTRATIONS
WELL MW-7B-R
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

FIGURE
25



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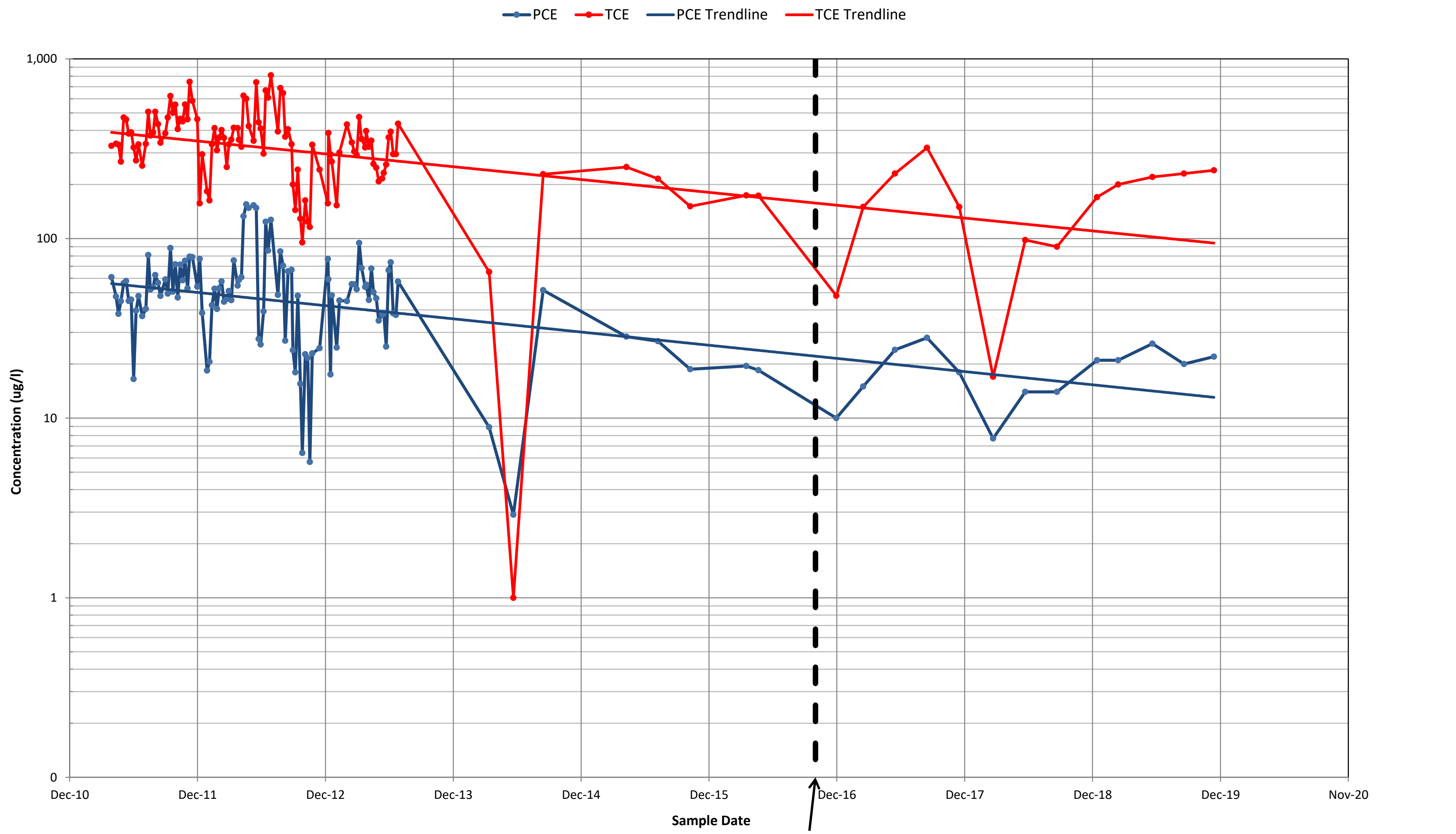
PCE AND TCE CONCENTRATIONS
WELL RW-3
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
SEPTEMBER 2019

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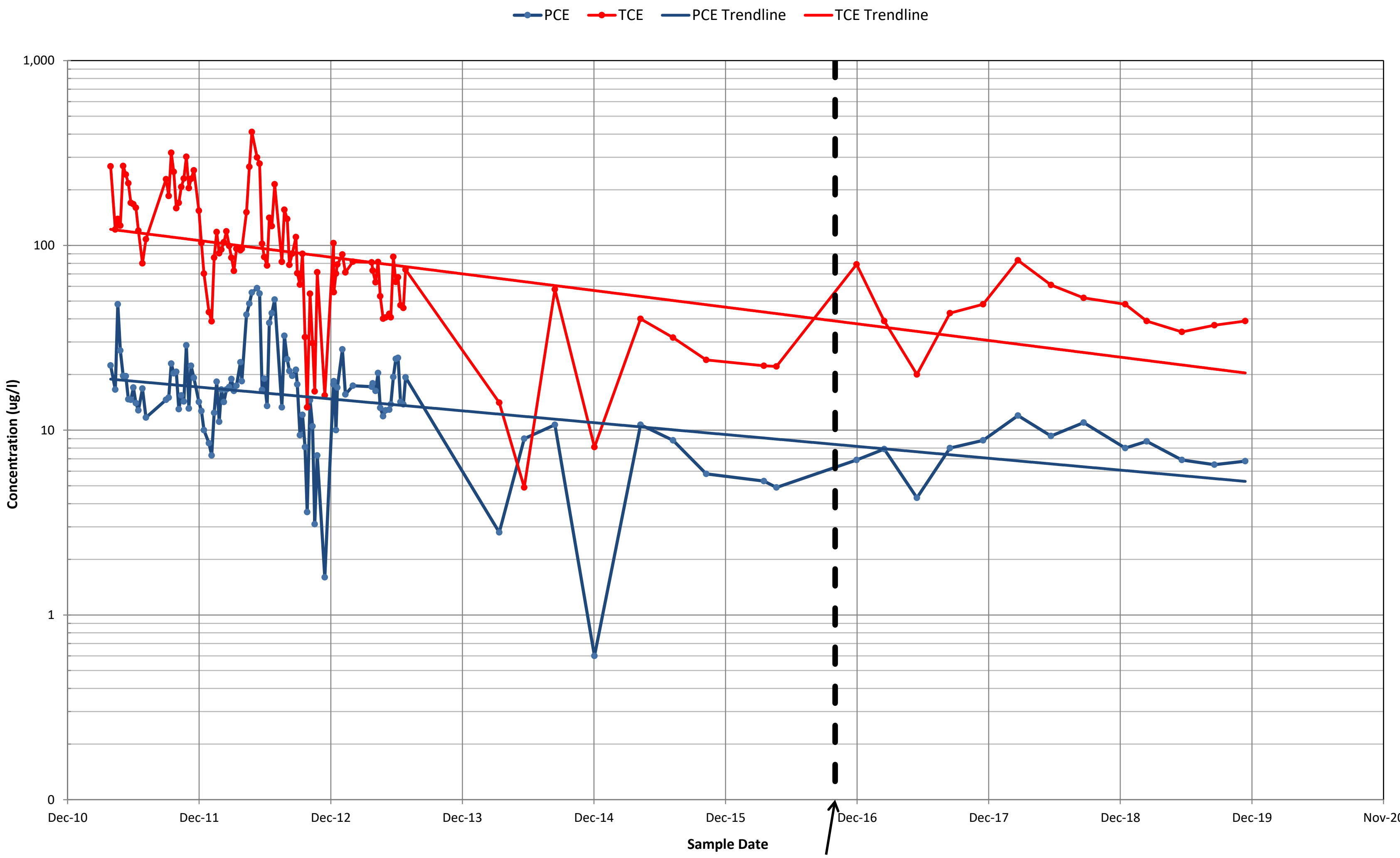
PCE AND TCE CONCENTRATIONS
WELL RW-4
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
SEPTEMBER 2019

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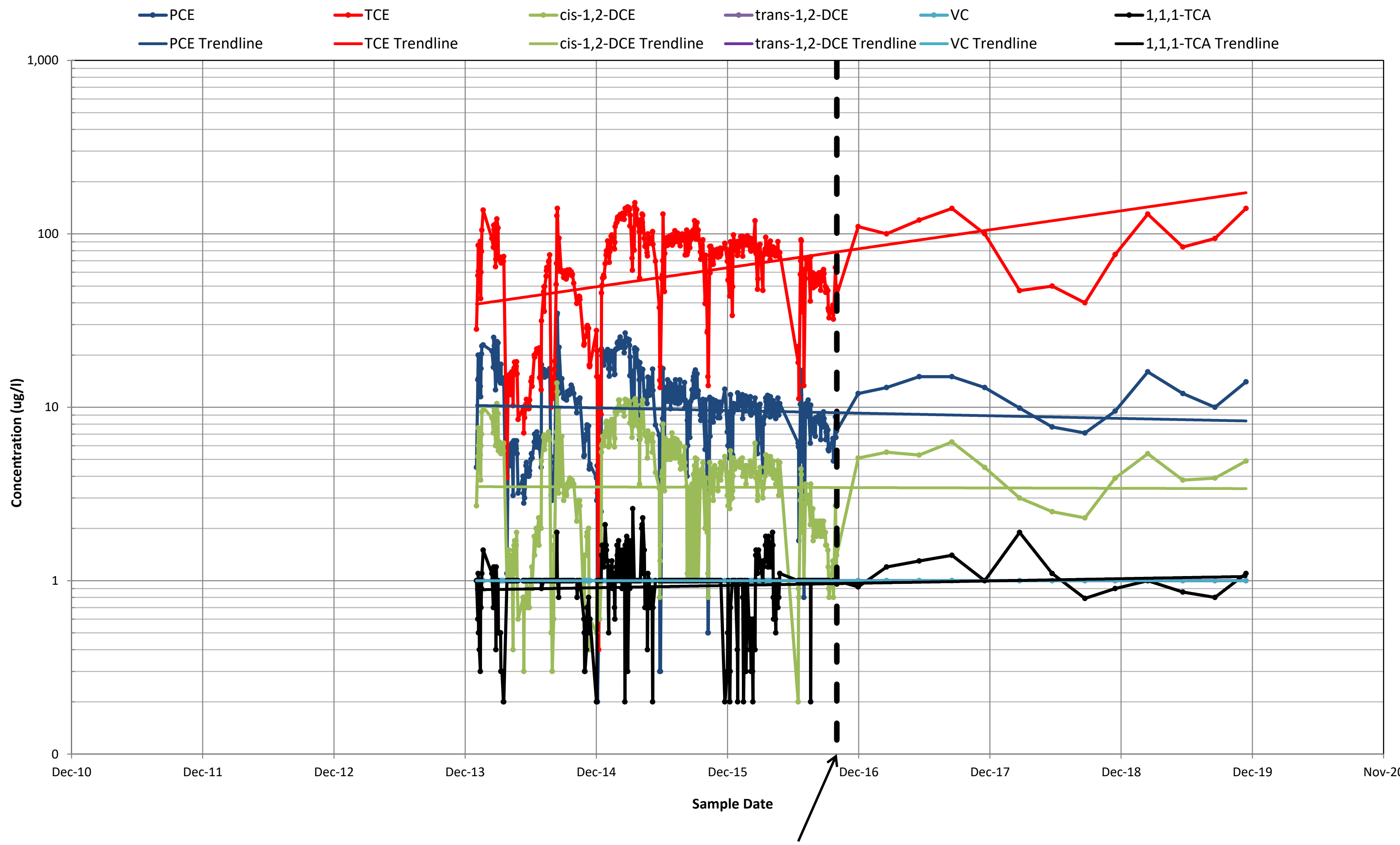
PCE AND TCE CONCENTRATIONS
WELL RW-5
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

SEPTEMBER 2019

FIGURE

28



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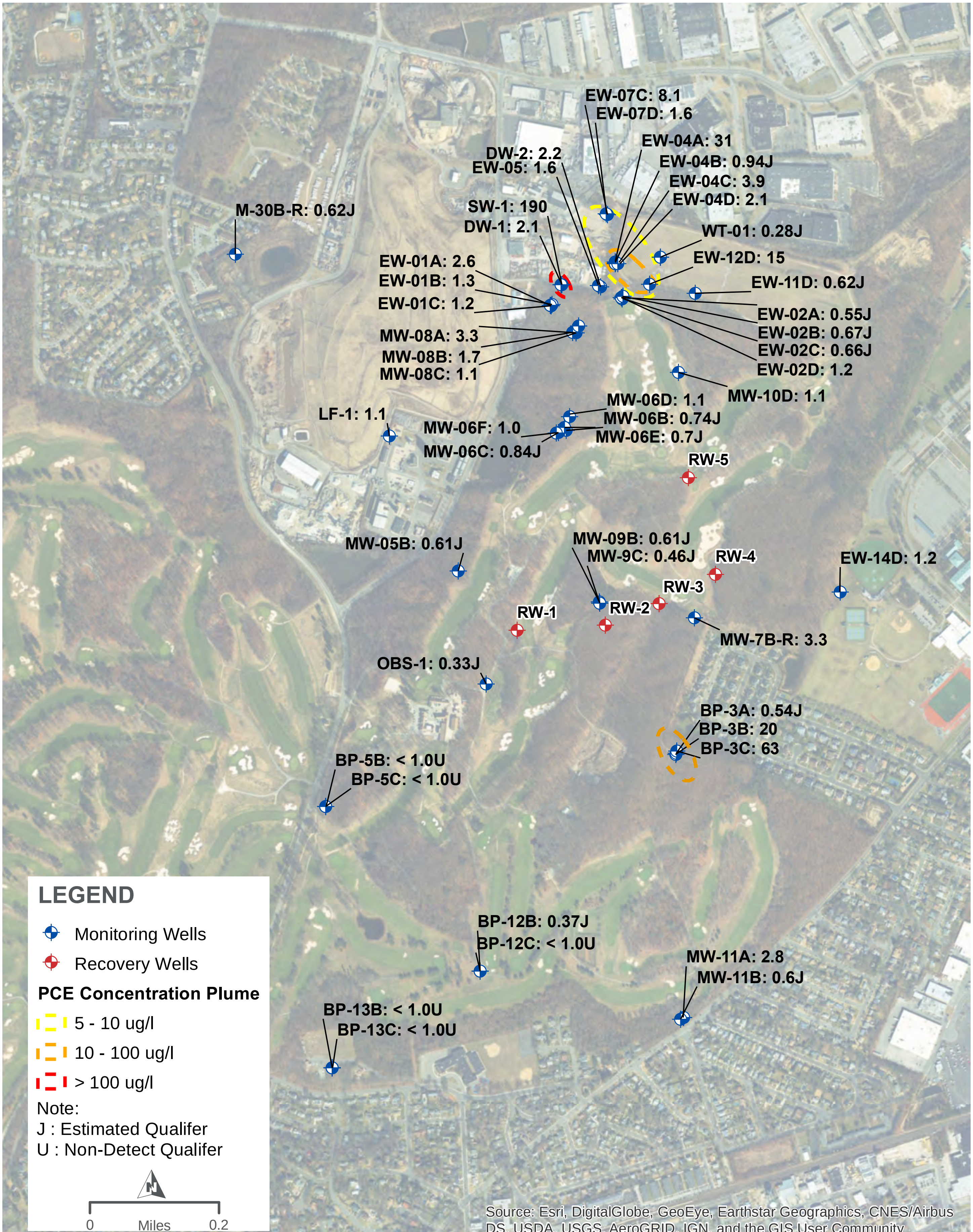
CHLORINATED VOC CONCENTRATIONS
WELL OU5 Influent
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
DECEMBER 2019

FIGURE
29



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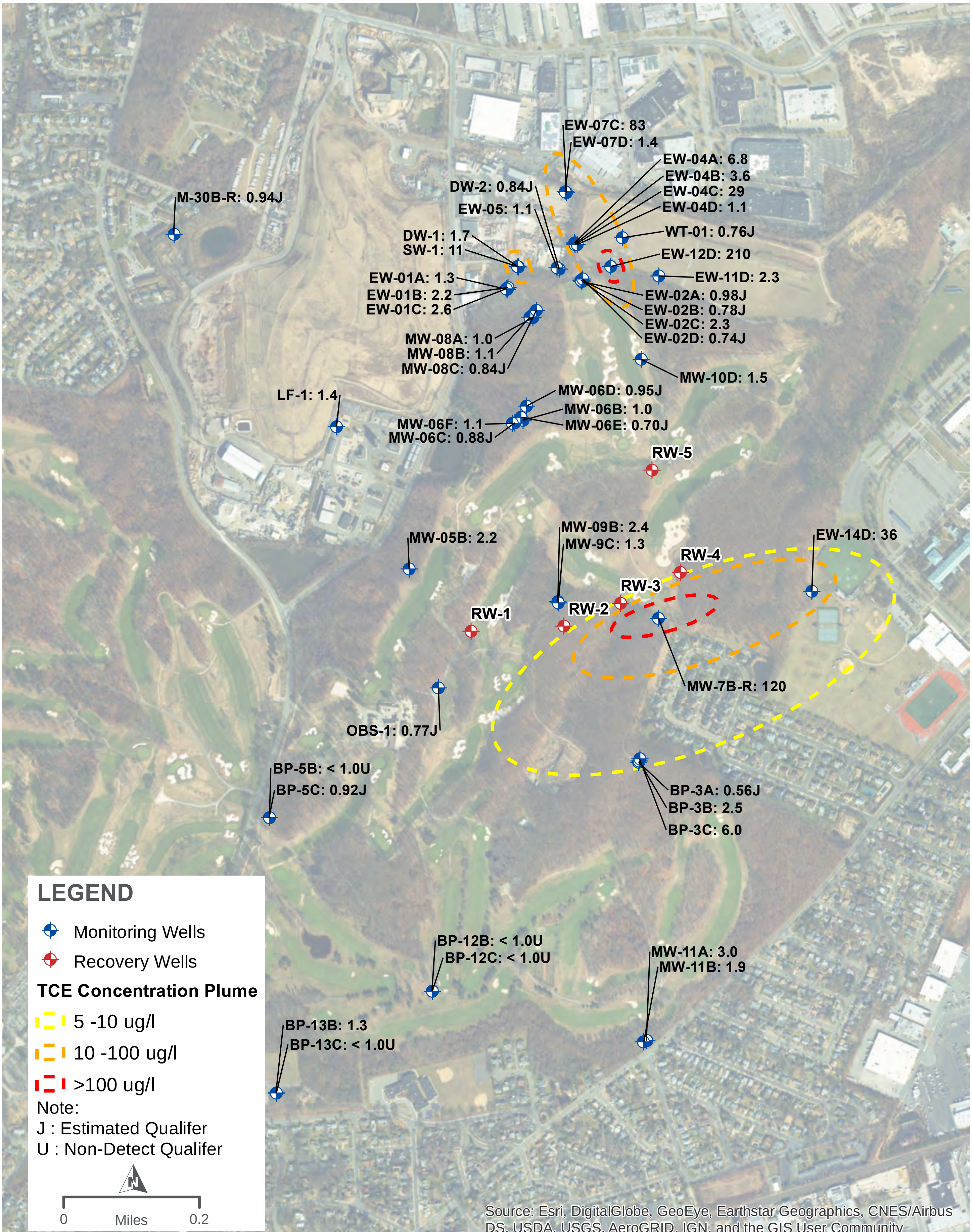
DECEMBER 2019 TETRACHLOROETHENE (PCE) PLUME

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 30

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\202315\CON0105889\000000000275962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\2019_Q4\FIG30_PCEPLUME_20200117_UPDATED.MXD - USER: KMARKOWI - DATE: 1/24/2020



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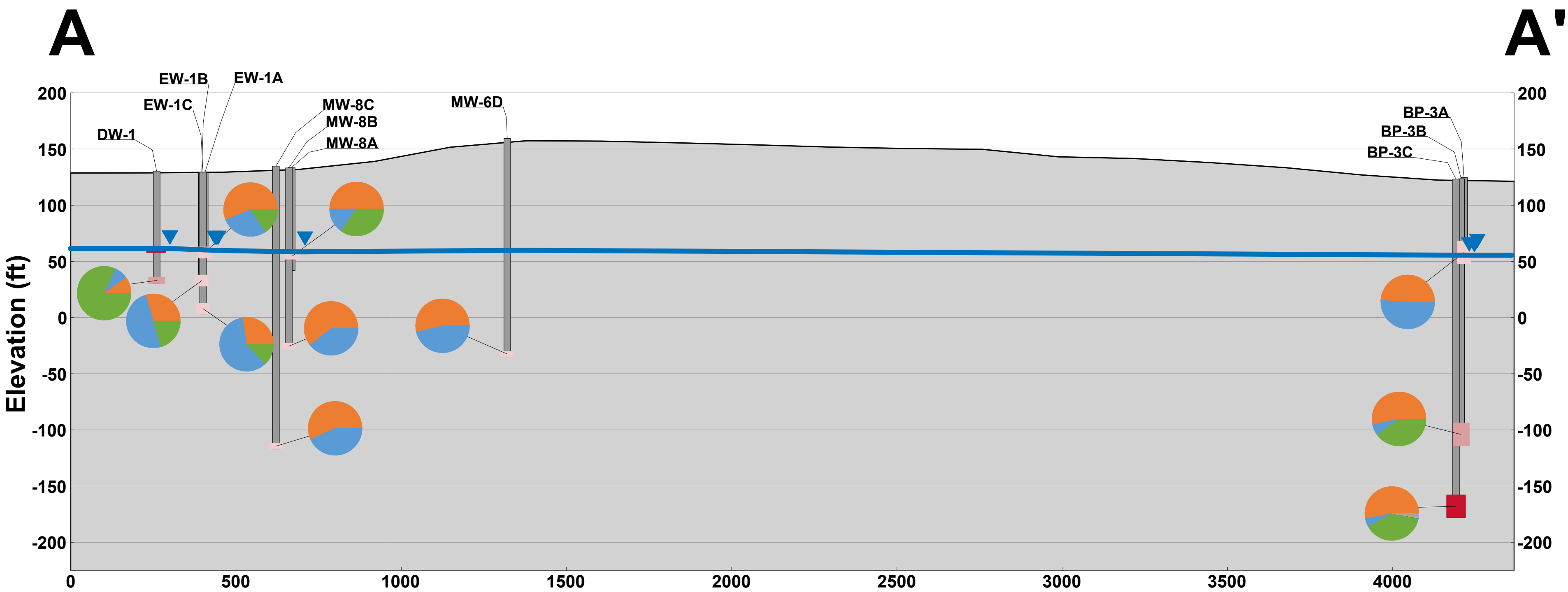
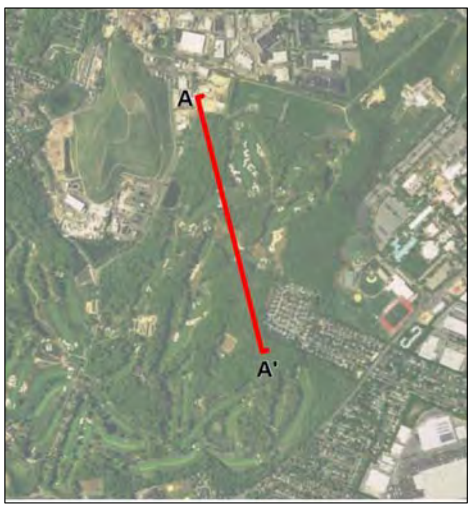
DECEMBER 2019 TRICHLOROETHENE (TCE) PLUME

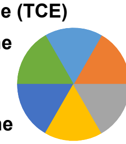
CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 31

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\202315\CON0105889\000000000275962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\2019_Q4\FIG31_TCEPLUME_20191024.MXD - USER: KMARKOWI - DATE: 1/29/2020







Wells

- Casing
- Sceen Interval
- *Groundwater Elevation (ft amsl)*

Sum of CVOCs (ug/l)

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

NOTES:
- Capture distance to transect line is 250 feet.
- Pie Charts shown are for samples with results from the seleted constituents that were above the detection limit.
- Wells without a Pie Chart did not have reported results above the detection limit for the selected constituents.

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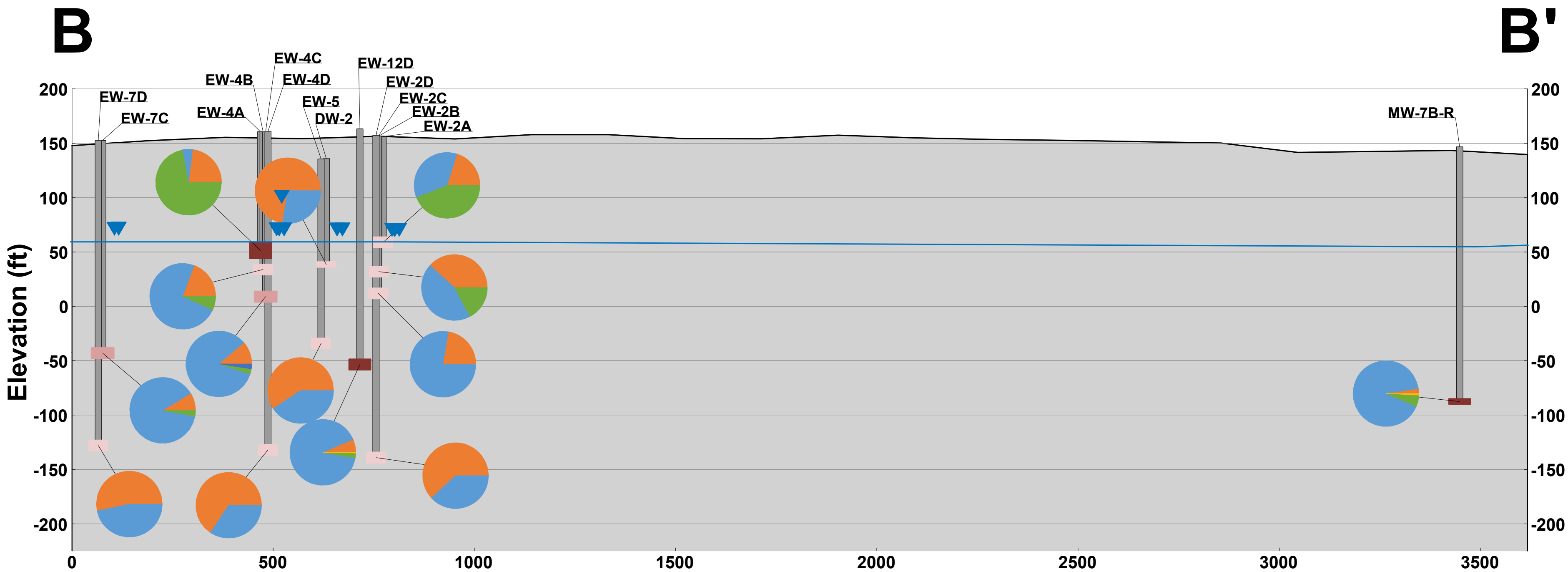
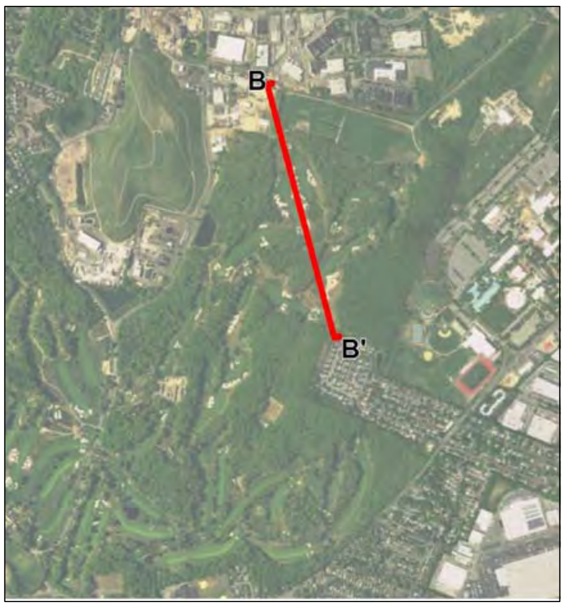
CROSS SECTION TRANSECT A
CLAREMONT POLYCHEMICAL CORPORATION
FIGURE 32

\\nj-mahwah\ActiveProjects\202315\CON0105889\000000000275962\8.0_Deliverables\8.2_Work_In_Progress\Quarterly Reports\2019_Q4\EnviroInsite\Claremont Polychemical Q4-2019 Report.vizx 12/30/2019





Trichloroethylene (TCE)
Cis-1,2-Dichloroethylene
Tetrachloroethylene (PCE)
Trans-1,2-Dichloroethene
Vinyl Chloride
1,1-Dichloroethene

Wells

Casing

Screen

Groundwater Elevation (ft amsl)

Sum of CVOCs (ug/l)

0 - 10

10 - 100

100 - 500

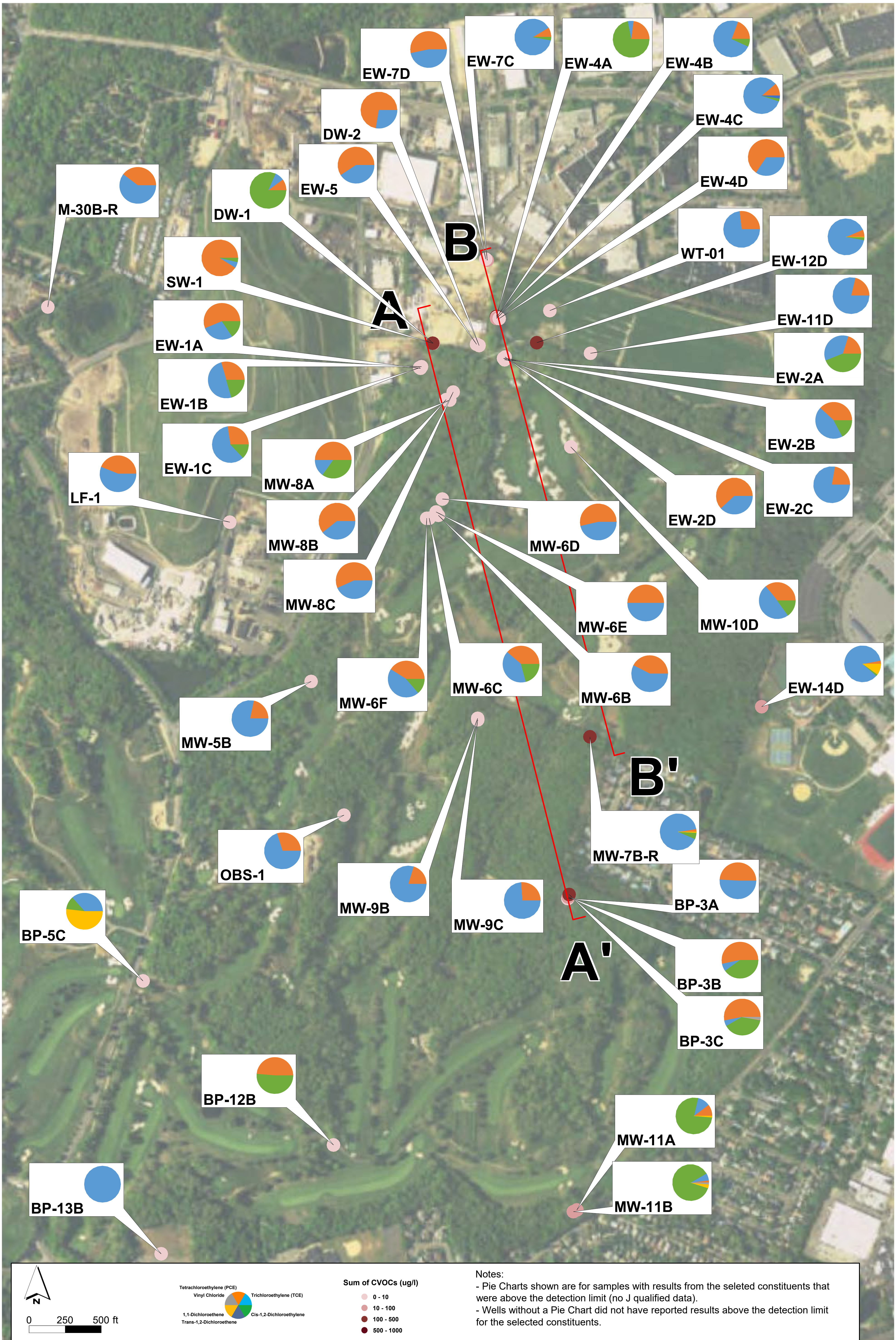
500 - 1000

NOTES:
- Capture distance to transect line is 250 feet.
- Pie Charts shown are for samples with results from the seleted constituents that were above the detection limit.
- Wells without a Pie Chart did not have reported results above the detection limit for the selected constituents.

CROSS SECTION TRANSECT B

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 33



Aerial Image Source: ESRI, DigitalGlobe, GeoEye, EarthStar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, swisstopo, and the GIS User Community

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DETECTED CHLORINATED BREAKDOWN PRODUCTS
CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 34

\\nj-mahwah\ActiveProjects\202315\CON0105889\000000000275962\8.0_Deliverables\8.2_Work_In_Progress\Quarterly Reports\2019_Q4\EnviroInsite\Claremont Polychemical Q4-2019 Report.vizx 12/30/2019

Attachment A
Summary of Analytical Results
December 2019 (4Q19) 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	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	75-15-0	56-23-5	108-90-7	75-00-3	67-66-3	74-87-3	10061-01-5	110-82-7
	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	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				0.04	0.0006	3	1	3	3	0.67		50	1	5			5	60	5	5	5	7	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	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	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cis-1,3-Dichloropropene	Cyclohexane
BP-3A	12/10/2019	0.54 J	0.56 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	< 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	41	< 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	0.67 J	< 1.0 U	< 1.0 U	< 1.0 U
BP-3B	12/10/2019	20	2.5	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.28 J	< 1.0 U	< 1.0 U	2.4	< 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	< 50 U	< 5.0 U	35	< 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
BP-3C	12/10/2019	63	6	46	0.34 J	0.39 J	2.9	< 1.0 U	0.75 J	< 1.0 U	0.64 J	9.9	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	< 50 U	< 5.0 U	40	0.94 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	< 1.0 U	< 1.0 U	< 1.0 U
DW-1	12/9/2019	2.1	1.7	17	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 50 U	< 5.0 U	38	< 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
DW-2	12/9/2019	2.2	0.84 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	< 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	51	< 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
EW-01A	12/9/2019	2.6	1.3	0.72 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	< 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	41	< 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	0.35 J	< 1.0 U	< 1.0 U	< 1.0 U
EW-01A DUP	12/9/2019	2.5	1.3	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	< 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	41	< 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	0.34 J	< 1.0 U	< 1.0 U	< 1.0 U
EW-01B	12/9/2019	1.3	2.2	0.90 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	< 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	< 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	12/9/2019	1.2	2.6	0.56 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	< 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	43	< 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
EW-02A	12/10/2019	0.55 J	0.98 J	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	< 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	27	< 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
EW-02B	12/10/2019	0.67 J	0.78 J	0.30 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	< 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	31	< 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
EW-02C	12/10/2019	0.66 J	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	< 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	< 50 U	< 5.0 U	41	< 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
EW-02D	12/10/2019	1.2	0.74 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	< 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	27	< 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
EW-04A	12/10/2019	31	6.8	97	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 50 U	< 5.0 U	42	< 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
EW-04B	12/10/2019	0.94 J	3.6	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	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.1
EW-04C	12/10/2019	3.9	29	0.90 J	0.84 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	< 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	37	< 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
EW-04D	12/10/2019	2.1	1.1	< 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	< 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	37	< 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
EW-05	12/9/2019	1.6	1.1	< 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	< 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	49	< 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
EW-07C	12/9/2019	8.1	83	2.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.52 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 50 U	< 5.0 U	41	< 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
EW-07D	12/9/2019	1.6	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	< 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	47	< 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
EW-11D	12/10/2019	0.62 J	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	< 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	< 50 U	< 5.0 U	37	< 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
EW-12D	12/10/2019	15	210	5.7	< 1.0 U	0.78 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.90 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	< 50 U	< 5.0 U	54	< 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
EW-14D	12/10/2019	1.2	36	0.66 J	< 1.0 U	4.1	< 1.0 U	< 1.0 U	3.7	< 1.0 U	1.1	< 1.0 U	0.46 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	70	< 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	0.33 J	< 1.0 U	< 1.0 U	< 1.0 U
LF-1	12/9/2019	1.1	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	< 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	64	< 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
M-30B-R	12/9/2019	0.62 J	0.94 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	< 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	52	< 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
MW-05B	12/10/2019	0.61 J	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	< 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	< 50 U	< 5.0 U	76	< 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
MW-06B	12/9/2019	0.74 J	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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.94 J	< 50 U	< 5.0 U	49	0.38 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.9	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06C	12/9/2019	0.84 J	0.88 J	0.45 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.57 J	< 50 U	< 5.0 U	63	0.32 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.86 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06D	12/9/2019	1.1	0.95 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.74 J	< 50 U	< 5.0 U	55	0.25 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.77 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06E	12/9/2019	0.70 J	0.70 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.3	< 50 U	< 5.0 U	61	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	3.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06F	12/9/2019	1	1.1	0.33 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.59 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	< 50 U	< 5.0 U	34	< 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 UT	0.74 J	< 1.0 U	< 1.0 U	< 1.0 U
MW-7B-R	12/10/2019	3.3	120	7.4	< 1.0 U	1	< 1.0 U	< 1.0 U	0.80 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	< 1.0 U	< 1.0 U	< 1.0 U	< 50 U	< 5.0 U	39	< 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 UT	0.66 J	< 1.0 U	< 1.0 U	< 1.0 U
MW-08A	12/9/2019	3.3	1	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	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UT	0.54 J	< 1.0 UT	< 1.0 U	< 1.0 U
MW-08B	12/9/2019	1.7	1.1	< 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	< 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	24	< 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 UT	< 1.0 U	< 1.0 UT	< 1.0 U	< 1.0 U
MW-08C	12/9/2019	1.1	0.84 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	< 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	40	< 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 UT	< 1.0 U	< 1.0 UT	< 1.0 U	< 1.0 U
MW-09B	12/10/2019	0.61 J	2.4	< 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	< 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	30	< 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 UT	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-09C	12/10/2019	0.46 J	1.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	< 50 U	< 5.0 U	37	< 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 UT	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-10D	12/10/2019	1.1	1.5	0.46 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.89 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	< 1.0 U	< 50 U	< 5.0 U	21	< 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 UT	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-11A	12/10/2019	2.8	3	21	< 1.0 U	0.35 J	< 1.0 U	< 1.0 U	0.44 J	< 1.0 U	< 1.0 U	2.3	0.49 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	30	< 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 UT	< 1.0 U	< 1.0 UT	< 1.0 U	< 1.0 U
MW-11B	12/10/2019	0.60 J	1.9	26	< 1.0 U	1	0.46 J	< 1.0 U	1.7	< 1.0 U	< 1.0 U	7.9	1.1	< 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	42	< 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 UT	0.34 J	< 1.0 UT	< 1.0 U	< 1.0 U
OBS-1	12/10/2019	0.33 J	0.77 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	< 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	31	< 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 UT	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
SW-1	12/9/2019	190	11	7.6	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 50 U	< 5.0 U	36	< 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 UT	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
WT-01	12/10/2019	0.28 J	0.76 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	< 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	42	< 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
WT-01 DUP	12/10/2019	0.26 J	0.61 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	< 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	27	< 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
BP-12B	12/16/2019	0.37 J	< 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	< 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	0.69 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	< 1.0 U	< 1.0 U	< 1.0 U
BP-12C	12/16/2019	< 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	< 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	< 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-13B	12/16/2019	< 1.0 U	1.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.32 J	< 1.0 U	< 1.0 U	1.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	< 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-13C	12/16/2019	< 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	< 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	< 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-13C DUP	12/16/2019	< 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	< 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	< 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-5B	12/16/2019	< 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	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.89 J	< 1.0 U	< 1.0 U
BP-5C	12/16/2019	< 1.0 U	0.92 J	0.29 J	< 1.0 U	1.3	< 1.0 U	< 1.0 U	1.6	< 1.0 U	< 1.0 U	4.5	< 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 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	0.34 J	< 1.0 U	< 1.0 U	< 1.0 U
Trip Blank	12/11/2019	< 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	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UT	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Note: U = not detected; J = estimated value; T = quality control parameter exceeded laboratory limits (LCS/LCSD failed recovery criteria)
Values in shaded cells exceed NYSDEC 703 Class GA criteria.

Attachment A
Summary of Analytical Results
December 2019 (4Q19) Sampling Event
Claremont Polychemical Superfund Site OU5
Old Bethpage, NY

	CAS RN:	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
	NYSDEC 703 Class GA:		5	5	5			50			5	5	5		10	5		5
Sample Description	Date Collected	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	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.6 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	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.6 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-3C	12/10/2019	< 1.0 U	3.9	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	8.6	< 5.0 U	< 1.0 U	1.4	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
DW-1	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	5.8	< 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	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.2 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
EW-01A	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.5 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
EW-01A DUP	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	5.2	< 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	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.0 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
EW-01C	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	5.3	< 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	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.0 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
EW-02B	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.2 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
EW-02C	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.9 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
EW-02D	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	2.8 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
EW-04A	12/10/2019	< 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	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	0.58 J	1.1	< 5.0 U	2.7 J	< 5.0 U	1.5	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	0.74 J	0.42 J	< 1.0 U	< 1.0 U
EW-04C	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.1 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
EW-04D	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.5 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
EW-05	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.8 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
EW-07C	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.7 J	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	0.94 J	< 1.0 U	< 1.0 U	< 1.0 U
EW-07D	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	5.1	< 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	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.7 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
EW-12D	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.7 J	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	0.88 J	< 1.0 U	< 1.0 U	< 1.0 U
EW-14D	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	5	< 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	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.4 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
M-30B-R	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.0 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
MW-05B	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	2.9 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
MW-06B	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	0.53 J	< 1.0 U	< 5.0 U	2.4 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
MW-06C	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	0.49 J	< 1.0 U	< 5.0 U	4.2 J	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	0.84 J	< 1.0 U	< 1.0 U	< 1.0 U
MW-06D	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	0.93 J	< 1.0 U	< 5.0 U	4.4 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
MW-06E	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	0.36 J	< 1.0 U	< 5.0 U	3.7 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
MW-06F	12/9/2019	< 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-7B-R	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.3 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
MW-08A	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.1 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
MW-08B	12/9/2019	< 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-08C	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.8 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
MW-09B	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.4 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
MW-09C	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	2.8 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
MW-10D	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	2.3 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
MW-11A	12/10/2019	< 1.0 U	1.5	< 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
MW-11B	12/10/2019	< 1.0 U	3.8	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.1 J	< 5.0 U	< 1.0 U	0.63 J	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	0.97 J
OBS-1	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.3 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
SW-1	12/9/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	2.8 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
WT-01	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.1 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
WT-01 DUP	12/10/2019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	3.5 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-12B	12/16/2019	< 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
BP-12C	12/16/2019	< 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
BP-13B	12/16/2019	< 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
BP-13C	12/16/2019	< 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
BP-13C DUP	12/16/2019	< 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
BP-5B	12/16/2019	< 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
BP-5C	12/16/2019	< 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
Trip Blank	12/11/2019	< 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

Note: U = not detected; J = estimated value; T = quality control parameter exceeded laboratory limits (LCS/LCSD failed recovery criteria)
Values in shaded cells exceed NYSDEC 703 Class GA criteria.

ATTACHMENT B

Synoptic Water Level Data

Date of Recording:		6-Dec-19		Data Recorded By:		PET/MK
Well ID	**9-12-19 DTW Reading**	**Time**	**DTW**	**Riser Elevation**	**Water Elevation**	**Comments/Notes**
BP-3A	60.48	11:05	62.12	124.16	**62.04**	
BP-3B	63.73	11:09	64.79	123.19	**58.40**	
BP-3C	63.97	11:11	64.95	123.91	**58.96**	
DW-1	64.47	12:35	65.04	130.13	**65.09**	
DW-2	70.31	12:42	70.92	135.52	**64.60**	
EW-1A	63.28	12:25	63.90	128.75	**64.85**	
EW-1B	63.86	12:27	64.45	129.31	**64.86**	
EW-1C	63.92	12:30	64.39	129.16	**64.77**	
EW-2A	91.31	8:49	91.73	156.09	**64.36**	
EW-2B	91.55	8:52	92.21	156.50	**64.29**	
EW-2C	91.59	8:54	92.25	156.50	**64.25**	
EW-2D	92.42	8:56	92.89	157.12	**64.23**	
EW-3A	95.36	9:05	96.37	157.88	**61.51**	
EW-3B	95.61	9:11	96.55	157.99	**61.44**	
EW-3C	95.47	9:08	96.44	157.87	**61.43**	
EW-4A	95.20	11:37	95.82	160.58	**64.76**	
EW-4B	95.24	11:39	95.84	160.59	**64.75**	
EW-4C	95.04	11:42	95.61	160.33	**64.72**	
EW-4D	95.58	11:43	95.95	160.62	**64.67**	
EW-5	70.06	12:40	70.42	135.05	**64.63**	
EW-6A	62.57	12:55	63.02	128.92	**65.90**	
EW-6C	63.11	12:53	63.34	129.02	**65.68**	
EW-7C	81.75	13:01	87.12	152.45	**65.33**	
EW-7D	86.71	13:04	87.05	152.35	**65.30**	
EW-8D	64.52	12:47	64.74	130.21	**65.47**	
EW-9D	70.53	12:57	70.86	136.20	**65.34**	
EW-10C	94.11	11:47	94.62	159.80	**65.18**	
EW-11D	100.07	11:32	100.61	164.17	**63.56**	
EW-12D	98.72	11:35	99.22	163.34	**64.12**	
EW-13D	98.97	11:49	99.10	163.61	**64.51**	
EW-14D	40.48	10:48	41.53	100.58	**59.05**	
LF-1	44.32	8:28	44.89	109.83	**64.94**	
LF-02	51.82	13:12	52.36	117.18	**64.82**	
M-30BR	84.78	13:19	84.66	153.07	**68.41**	
MW-5B	72.23	8:38	73.22	136.99	**63.77**	
MW-6A	94.95	12:01	95.77	158.83	**63.06**	
MW-6B	95.09	12:04	95.85	159.02	**63.17**	
MW-6C	94.50	12:10	95.24	158.65	**63.41**	
MW-6D	95.14	12:09	96.42	159.01	**62.59**	
MW-6E	95.64	12:06	96.42	159.54	**63.12**	
MW-6F	95.23	12:12	95.72	158.71	**62.99**	
MW-7BR	86.84	9:14	87.80	146.27	**58.47**	
MW-8A	68.63	12:16	69.33	133.52	**64.19**	
MW-8B	68.17	12:19	68.70	132.84	**64.14**	

MW-8C	69.75	12:21	70.16	134.27	**64.11**	
MW-9B	90.40	9:20	91.37	151.78	**60.41**	
MW-9C	91.13	9:25	92.03	151.97	**59.94**	
MW-10B	96.51	9:01	97.34	159.90	**62.56**	
MW-10C	95.70	11:23	96.41	158.89	**62.48**	
MW-10D	96.82	11:25	97.22	159.67	**62.45**	
MW-11A	21.88	10:16	23.31	78.71	**55.40**	
MW-11B	21.79	10:13	23.12	78.43	**55.31**	
OBS-1	47.54	9:30	48.37	109.03	**60.66**	
SW-1	64.63	12:37	65.20	130.24	**65.04**	DTB 70.99 ft , was dry previously
WT-01	98.19	11:52	98.89	163.28	**64.39**	
55 wells						
MW CPC-36	19.73	10:02	20.64	75.90	**55.26**	
MW CPC-37	26.29	10:35	26.42	77.90	**51.48**	
MW CPC-38	26.95	10:28	27.19	78.90	**51.71**	
MW CPC-39	24.12	10:23	24.58	75.30	**50.72**	
BP-5B	35.05	9:37	35.73			
BP-5C	35.24	9:40	35.74			
BP-12B	19.36	9:46	20.19			
BP-12C	21.04	9:47	20.13			
BP-13B	76.09	9:56	76.61			
BP-13C	77.67	9:54	77.65			

GROUNDWATER ELEVATIONS
BETHPAGE STATE PARK
WATER LEVEL MEASUREMENTS

December 6, 2019 VE, MF

WELL	TIME	MEASURING POINT ELEV	DEPTH TO WATER	WATER TABLE	ORW FLOW RATE	COMMENTS
BP-1A	1400	109.77	46.06	63.71		
BP-1B	1402	109.53	45.87	63.66		
BP-1C	1404	109.37	45.55	63.82		
BP-2A	1343	151.00	86.12	64.88		
BP-2B*	1342	151.13	87.27	63.86		
BP-3A	1105	124.54	62.12	62.42		*measured by HDR*
BP-3B	1109	123.57	64.79	58.78		*measured by HDR*
BP-3C	1111	123.68	64.95	58.73		*measured by HDR*
BP-4A	1112	92.69	32.23	60.46		
BP-4B*	1114	91.92	31.52	60.40		
BP-4C*	1113	91.68	31.87	59.81		
BP-4I	116	92.10	31.69	60.41		
BP-5A	1106	96.34	35.40	60.94		
BP-5B	1104	96.48	35.74	60.74		*PDB in well*
BP-5C	1103	96.28	35.73	60.55		*PDB in well*
BP-6A	1029	102.55	39.18	63.37		
BP-6B	NA	102.58	NA	NA		*LOCK FROZEN*
BP-6C	1031	102.35	39.32	63.03		
BP-7A	1043	147.54	81.87	65.67		
BP-7B	1041	148.76	83.18	65.58		
BP-7C	1040	148.40	82.91	65.49		
BP-8A	1115	89.88	26.89	62.99		
BP-8B	1125	89.82	26.67	63.15		
BP-8C	1120	89.53	27.30	62.23		
BP-9B*	1201	85.09	26.55	58.54		
BP-9C*	1205	84.88	27.53	57.35		
BP-9I	1203	85.18	26.60	58.58		
BP-10B*	1154	81.21	24.30	56.91		
BP-10C*	1155	80.94	26.19	54.75		
BP-11	NA	81.76	NA	NA		*WELL BURIED*
BP-12A*	1057	78.33	20.16	58.17		
BP-12B*	1056	78.24	20.24	58.00		*PDB in well*
BP-12C*	1055	78.56	21.35	57.21		*PDB in well*
BP-13B*	1225	133.37	76.48	56.89		*PDB in well*
BP-13C*	1224	133.67	77.62	56.05		*PDB in well*
BP-14B*	1135	81.50	22.68	58.82		*discharge hose missing*
BP-14C*	1136	81.48	23.32	58.16		
BP-15B	1141	98.38	39.29	59.09		
BP-15C	1142	98.45	39.35	59.10		
OBV-1B	1011	157.26	NA	NA		
OBV-1C	1013	156.69	87.06	69.63		
W-7A	1059	104.44	39.04	65.40		
W-7B	1056	104.55	39.92	64.63		
W-7C	1103	104.68	40.13	64.55		
W-7D	1053	104.58	40.51	64.07		
RB-1	1030	135.02	66.21	68.81		
UM-1	1210	115.64	49.76	65.88		
U-6A	1015	153.94	81.80	72.14		
ORW-1	NA	147.68	NA	NA	*Off*	*Vault Door Jammed*
ORW-2	1350	97.88	36.87	61.01	*Off*	
ORW-3	1122	91.39	31.17	60.22	*Off*	
ORW-4	1124	88.88	29.84	59.04	*Off*	
ORW-5A	1101	100.38	41.97	58.41	*Off*	
ORW-6	1200	83.42	24.68	58.74	*Off*	
ORW-7	1209	76.14	18.62	57.52	*Off*	

* = DEDICATOR PUMP IN WELL

ATTACHMENT C

Full Labratory Delieverable available on Claremont OU4 Sharepoint Site.