2016 Fourth Quarter Groundwater Monitoring Report

October - December 2016

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
625 Broadway Albany, New York 12233

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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 2016 and supporting information on the history, groundwater extraction and treatment (GWE&T) system configuration and hydrogeologic conditions at the Claremont Polychemical Corporation Site (NYSDEC Site #130015); hereinafter referred to as CPC or the "Site" (Figure 1). The groundwater monitoring event and the preparation of this deliverable are part of the on-going site management activities associated with Work Assignment #28 under contract D007625 and includes the following:

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

2 Site Background

2.1 Site History

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

In 1979, the Nassau County Department of Health (NCDH) found 2,000 to 3,000 drums of inks, resins, and organic solvents throughout the Site during a series of inspections. Inspectors' identified releases associated with damaged or mishandled drums in several areas including one larger release located east of the Process Building (referred to as the "spill area"). CPC sorted and removed the drums in 1980 (EPA 2014). In October 1980, the New York State Department of

Environmental Conservation (NYSDEC) ordered CPC to commence clean-up activities at the Site. CPC did not perform the clean-up activities required by NYSDEC and CPC ceased operations at the Site in 1980 (EPA 2014). EPA proposed the Site for listing on the National Priorities List (NPL) in October 1984 (because of CPC's refusal to perform the clean-up) and CPC was subsequently listed on the NPL as a Superfund site in June 1986.

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

Table 1 - CPC Operable Units

Operable Unit	Description	Status
OU 1	Treatment and removal of wastes in 14 underground storage tanks	14 USTs and contents removed. Achieved cleanup levels allowing for unlimited use and unrestricted exposure.
OU 2	Wastes stabilized during the Sept. 1988 removal action	Testing, consolidation, treatment and disposal of wastes in containers and basins performed. Achieved unlimited use and unrestricted exposure, later changed to commercial/light industrial because of remaining contamination below the building. 2003 ESD added additional remedial actions for OU 2 under the former Process Building including an SVE system and using the building's concrete slab as a cap for cadmium contaminated soil.
OU 3	Soil contaminated with PCE at the "spill area"	Approximately 8,800 tons of PCE contaminated soils excavated, treated and backfilled on Site. Achieved cleanup levels allowing for unlimited use and unrestricted exposure.
OU 4	Contaminated groundwater on the CPC property	Extraction and treatment of groundwater via metals precipitation, air stripping and carbon adsorption. On-site reinjection.
OU 5	Contaminated	Extraction and treatment of groundwater via air

Operable Unit	Description	Status
	groundwater off of the CPC property.	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. GWET system operation began in February 2000, reportedly pumping and treating over 400 gallons per day (gpd). SAIC Inc. operated and maintained the GWET system, collected plant effluent samples and performed quarterly groundwater sampling at 41 wells from 2000 to May 2011. In May 2011, the project was transferred from the ACOE/EPA to the NYSDEC. HRP Associates, Inc. performed the same scope of work as SAIC under contract to NYSDEC from May 2011 to August 2015. HDR, also under contract to NYSDEC, took over HRP's scope of work on September 1, 2015.

EPA issued an Explanation of Significant Differences (ESD) on September 29, 2000 that the Old Bethpage Landfill's (OBL) GWET was inadvertently capturing the CPC OU-5 off-site groundwater plume; therefore the OBL GWET 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 GWET (USEPA 2000).

The Town of Oyster Bay operated the OBL GWET 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 GWET from Town of Oyster Bay's consultant Lockwood, Kessler & Barlett, Inc. (LKB) to HDR. In October 2016, the OU-4 GWET was shut down, and HDR took over the operation of the OBL/OU-5 GWET. At that time, NYSDEC had also given the Town of Oyster Bay permission to discontinue treatment for the OBL plume which involved shutting down recovery wells RW-1 and RW-2. HDR will continue operations, maintenance and monitoring activities (collectively Site Management or SM) for CPC OU-5 consisting of former OBL GWET recovery wells RW-3, RW-4 and RW-5 for the period October 1, 2016 through February 28, 2018.

2.2 Location

The CPC site is located on a 9.5-acre parcel in an industrial section of Old Bethpage, Nassau County, New York (Figure 1). The former 35,000 square foot Process Building, demolished in

2012, was the only building historically on the property. The concrete slab from this building remains. The 5,200 square foot GWET 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 OBSWDC. The OU-5 GWE&T system includes a groundwater recovery system, water conveyance system, discharge system, monitoring wells, air stripper, and a 3,100 square foot facility for monitoring and controlling the system. The treated effluent discharges to Recharge Basin No. 1 located west of the OBL. Secondary discharge is directed to a recharge basin west of the Bethpage State Park Black Course for golf course irrigation in the summer. The five extraction/recovery well pump houses (RW-1, RW-2, RW-3, RW-4 and RW-5) are located on the Bethpage Black Course.

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

- South and Southeast - Bethpage State Park and golf course;
- East – State University of New York (SUNY) - Farmingdale Campus;
- West – Town of Oyster Bay Solid Waste Disposal Complex (OBSWDC) and OU-5 GWET; and
- North – Commercial and Light Industrial.

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

2.3 Site Hydrogeological Setting

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

Sixteen wells were added to the CPC monitoring program as a result of the transition on October 1, 2016 to the OU-5 GWE&T system (Figure 2). The water table and Magothy aquifer groundwater flow directions at the eastern portion of the CPC site shifted from a southeast direction to a south-southeast direction following shut down of the OU-4 system (Figures 3 and 4). The average water table elevation (amsl) across the site is 55 feet with regional groundwater flow to the south-southeast. Depths to groundwater (DTW) in December 2016 ranged from 29.62 feet (well MW-11B) to 107.70 feet (well EW-11D) below ground surface (bgs). Monitoring

wells WT-01 and SW-1 were dry at the time of the quarterly synoptic DTW measurements. DTW measurements for monitoring wells EW-3A, EW-6A, EW-6C, MW-8 and MW-10C were not recorded due to equipment malfunction. A new dedicated water level meter was purchased for the project to replace the old malfunctioning meter.

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

Groundwater contour maps produced from the December 2016 DTW measurements show groundwater flow direction in the water table wells to be south southeast (Figure 5). Monitoring wells M-30B-R, DW-2 and EW-05 were not included in the development of the water table contour map for this report to maintain consistency with and to compare to the water table contour map in the 3rd Quarter 2016 report. Monitoring wells WT-01 and SW-1 adjacent to CPC and the OU-4 infiltration gallery were dry during the November 2016 DTW measurements following shut down of the OU-4 GWE&T system. The contour map produced from wells screened in the Magothy aquifer also depicts a south-southeast flow direction (Figure 6). The recent contour maps are generally consistent with previous maps produced from the CPC wells and from investigations by others.

3 Groundwater Extraction and Treatment System

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

3.1 Groundwater Extraction and Treatment System Description

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

GWE&T System Extraction Wells

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

Table 2 - Extraction Well Construction Details

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

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

Recovery wells RW-1 and RW-2 were petitioned to be discontinued by the Town of Oyster Bay prior to the transition to HDR operating the OU-5 GWET (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.

The plant shut down on November 24, 2016 without the auto-dialer functioning properly to alert the plant operator of the malfunction. There appeared to be an imbalance in the power supply which caused the pumps and blower to phase in and out of operation and the control panel to be disrupted. PSEG, the local electrical utility company, was called and power was restored to the system November 29, 2016. The power issue was apparently related to utility owned equipment outside of the plant.

On December 9, 2016 the well pump for RW-5 went off-line, with all other system processes fully operational. A leak in the pump discharge feeding the pressure switch at the RW-5 pump control was found and repaired but RW-5 remained non-functional. An HDR electrical engineer and the plant manager determined the problem to be the communication between the RW-5 pump and its fiber optic control module. Testing of the control module indicated that it was defective. It was swapped with the unused module from RW-2 which did not work. It appeared that the redundant nature of the ring circuit required that the fiber optic cables remain connected even to the unused recovery wells. Turning off the power to the module or removing the module breaks the circuit and effective ring communication. Once this was determined, a connection was made directly to the connector plate between the incoming and outgoing cables to RW-2 bypassing the control module allowing its removal for use in RW-5. On January 23, 2017, RW-3, RW-4 and RW-5 were fully operational.

As of December 2016, the average flow rate was 442 gpm equaling approximately 636,516 gpd (refer to the December 2016 O&M report for the most recent data).

GWE&T System Path of Remediation

Groundwater is currently pumped from three extraction wells; designated RW-3, RW-4 and RW-5 installed in 1992 at what was then the leading edge of the off-site VOC plume from the OBL.

The combined flow from the three extraction wells is directed through common conveyance piping to the air stripper wet-well. A triplex pump arrangement delivers the collected groundwater into the top of the air stripper, which contains packing media. As the groundwater passes through and saturates the packing, it contacts air that is directed from the bottom of the air stripper via the blower. Dissolved VOCs pass from the liquid phase (groundwater) into the gas phase (air), and exit the stripper through a stack. Non-volatile organic compounds and inorganic contaminants, if any, are not removed by the treatment system.

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

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

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 2.34 billion gallons of groundwater associated with the CPC site until operation was suspended in favor of the OU-5 plant. The OU-5 GWE&T system historically operated at a rate of approximately one million gallons per. During the fourth quarter of 2016 (October – December), the OU-5 GWE&T processed 68.5 million gallons of water resulting in an average daily flow rate of 744,651 gallons/day during this

quarter. Daily flow readings are provided in the O&M reports submitted monthly to NYSDEC (refer to the December 2016 O&M report for the most recent data).

The volume of treated water discharged by the GWET system to the recharge basins is determined daily from readings of the magnetic flow meter on the plant effluent line. The recharge basins are designed to receive 1.5 million gallons per day (gpd). Currently, the recharge basins receive approximately 0.6 million gpd. The plant's effluent is discharged to Recharge Basin No. 1 during the winter months and to Recharge Basin No. 33 in the summer months.

3.2.2 Groundwater Extraction and Treatment System Contaminant Removal

To evaluate the treatment system's contaminant removal rate, HDR reviewed available GWE&T system influent and effluent analytical results from monthly operation and maintenance records. The OU-4 GWE&T system removed 8.1 kg during the time it was operated in 2016, and 947 kg cumulatively since 2002 until being taken offline. Most of the mass removed by the OU-4 GWE&T system has been TCE (749 kilograms or 1,651 pounds) and PCE (170 kilograms or 375 pounds). Since October 1, 2016, when HDR took over operations of the OU-5 GWE&T system, approximately 29 kilograms of TCE and 3 kilograms of PCE have been removed. The operator prior to October 1, 2016 did not calculate VOC load, or track the contaminates of concern cumulatively over time. The LKB reports provided to HDR did not include historical data for daily flow rates.

Table 3 – Mass of VOC Removed per Quarter 2016 (kg)

	Quarter 1- 2016	Quarter 2- 2016	Quarter 3- 2016	Quarter 4- 2016	Total VOC Removal 2016	Cumulative Totals
OU-4 GWE&T	2.9	2.5	2.7	offline	8.1	947
OU-5 GWE&T	*	*	*	32	*	*
* LKB did not provide necessary flow data to calculate VOC removal in 2016						

3.2.3 Groundwater Extraction and Treatment System Discharge Monitoring

Samples of the system effluent are collected quarterly and are analyzed for VOCs, semi-volatiles (BNA), metals, total dissolved solids (TDS), total Kjehldahl nitrogen (TKN), cyanide, and anions. Effluent data for select VOC compounds (PCE, TCE, and 1,1-DCE) and semi-volatiles (BNA) are analyzed to evaluate compliance with effluent discharge limits. Figure 7 shows that effluent concentrations for the main contaminants, PCE and TCE, have remained below permissible discharge limit levels of 5 µg/L at the OU-5 GWE&T system. The only exception was in November 24, 2016 when a power outage lead to the shut down of the GWE&T system for four days, resulting in a TCE concentration of 26 µg/L in effluent in a sample collected shortly after start up on November 29, 2016 when the power was restored. Effluent concentrations were below the discharge limits in a December 15, 2016 effluent sample when the plant was fully operational. The effluent concentrations of iron and manganese were under the permissible levels of 600

µg/L for the fourth quarter 2016 sampling results. Refer to the monthly O&M reports for additional information on remediation system performance and daily operations.

4 Groundwater Monitoring Program

A network of 43 monitoring wells is used to monitor the groundwater quality and effectiveness of the GWE&T system (Figure 2). The network consists of 28 wells which were part of the OU-4 GWE&T system and 15 wells which were part of the OBL's OU-5 GWE&T system. On December 5 through 6, 2016 HDR sampled a total of 41 of the 43 monitoring wells, the two exceptions being WT-01 and MW-6A that were dry at the time of sampling. OU-4 monitoring wells included DW-1, DW-2, EW-5, EW-7C, EW-7D, and SW-1. OU-5 wells included BP-3A, BP-3B, BP-3C, EW-1A, EW-1B, EW-1C, EW-2A, EW-2B, EW-2C, EW-2D, EW-4A, EW-4B, EW-4C, EW-4D, EW-11D, EW-12D, EW-14D, LF-1, M-30B-R, MW-5B, MW-6B, MW-6C, MW-6D, MW-6E, MW-6F, MW-7B-R, MW-8A, MW-8B, MW-8C, MW-9B, MW-9C, MW-10D, MW-11A, MW-11B, and OSB-1. A description of the groundwater sampling event and results is provided below.

4.1 Hydrological Data

Depth to water measurements were collected on December 2, 2016. Measurements were not collected at five wells due to inaccessibility, and two wells, MW-6A and SW-1, were dry. DTW during this event ranged from 29.62 feet (well MW-11B) to 107.70 feet (well EW-11D) bgs. Water level elevations were calculated by subtracting the DTW from each measurement from the top of casing elevation. HDR plotted the water levels from the OU-4 system and sketched the contours of the water table and potentiometric surface in the Magothy aquifer depicting the groundwater flow directions. These data show the groundwater flow direction is south and southeast to the west of the CPC site; south-southeast to the east of the site at the water table (Figure 3); and southeast in the Magothy (Figure 4). The effect on the aquifer from pumping of the OU-5 extraction wells is observed from the slight bends in otherwise straight potentiometric surface contours nearest the OU-4 extraction wells.

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

4.2 Groundwater Sample Collection

The monitoring well groundwater samples were collected on December 5-6, 2016 and the extraction well samples were collected November 29, 2016. The groundwater samples were collected using passive diffusion bags (PDBs) inserted at mid-point in the screens in each

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

A total of 41 (and two duplicate) samples were submitted to Test America Laboratory, of Edison, New Jersey, an NYSDOH ELAP-approved laboratory, 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

Groundwater sampling results are summarized on Table 3 and shown on the trend chart figures (Figures 7 through 30). Of note, acetone was detected in 40 samples including two duplicates and exceeded the criterion for 27 of the samples in which it was detected. It is likely a laboratory contaminant and not present in groundwater.

Table 4 - Monitoring and Extraction Wells with VOC Exceedances – 4th Quarter 2016

Well	TCA	1,2-DCA	DCE	C DCE	PCE	TCE	Acetone	VC	DCA	Freon 12
SW-1	ND	ND	ND	0.66 J	***30***	1.2	***82***	ND	ND	ND
BP-3B	1.1	***0.86 J***	0.74 J	***120***	***120***	***14***	***85***	***2.4***	***17***	***5.9***
BP-3C	0.55 J	0.33 J	0.43 J	***73***	***170***	***9.5***	***99***	0.76 J	4.1	3.7
DW-1	ND	ND	ND	*0.51 J*	0.92 J	1.9	***51***	ND	ND	ND
DW-2	ND	ND	ND	ND	1.1	ND	***82***	ND	ND	ND
EW-1A	ND	ND	ND	2.1	3.6	1.5	***81***	ND	ND	ND
EW-1B	ND (ND)	ND (ND)	ND (ND)	ND (ND)	0.33 J (0.34 J)	1.1 (0.92 J)	***110*** ***(110)***	ND (ND)	ND (ND)	ND (ND)
EW-1C	ND	ND	ND	0.53 J	ND	2.5	***75***	ND	ND	ND
EW-2A	ND	ND	ND	ND	ND	ND	***63***	ND	ND	ND
EW-2B	ND	ND	ND	ND	0.29 J	ND	***79***	ND	ND	ND
EW-2C	ND	ND	ND	ND	ND	0.72 J	***61***	ND	ND	ND
EW-2D	ND	ND	ND	ND	0.31 J	ND	***87***	ND	ND	ND
EW-4A	ND	ND	ND	***9.7***	***10***	1.4	***83***	ND	ND	ND
EW-4C	5.0	ND	0.97 J	2.5	***110***	***28***	***68***	ND	3.4	ND
EW-4D	ND	ND	ND	ND	***10***	***9.4***	***74***	ND	ND	ND
EW-5	ND	ND	ND	ND	0.23 J	1.6	***86***	ND	ND	ND
EW-7C	0.57 J	ND	ND	3.9	***15***	***230***	***61***	ND	0.25 J	ND

[1] PDBs were first used for the May 2012 OU-4 sampling event. This is the first time PDBs were used in OU-5 monitoring wells.

Well	TCA	1,2-DCA	DCE	C DCE	PCE	TCE	Acetone	VC	DCA	Freon 12
EW-7D	ND	ND	ND	ND	3.3	***7.4***	***110***	ND	ND	ND
EW-11D	ND	ND	ND	ND	ND	ND	**93**	ND	ND	ND
EW-12D	***37***	0.38 J	***70***	***17***	***35***	***210***	***72***	ND	***6.5***	ND
EW-14D	***9.1***	***2.4***	***9.2***	1.1	2.1	***110***	***96***	ND	0.25 J	ND
MW-7BR	***5.2***	ND	***6.4***	***42***	***15***	***720***	ND	ND	ND	ND
MW-8A	ND	ND	ND	ND	***5.3***	0.44 J	***59***	ND	ND	ND
MW-8B	ND	ND	ND	ND	0.35 J	0.33 J	***88***	ND	ND	ND
MW-8C	ND	ND	ND	ND	ND	0.35 J	***87***	ND	ND	ND
MW-10D	ND	0.57 J	ND	ND	1.8	1.6	***73***	ND	ND	ND
MW-11A	0.82 J	0.27 J	0.74 J	***55***	2.7	***6.3***	23	ND	4.8	***7.3***
MW-11B	0.30 J	ND	ND	**9.3**	ND	ND	29	ND	1.2	3.0

Results units are µg/L. Bold, underlined, italicized results are exceedances of the NYSDEC Part 703 Class GA criteria; duplicate sample results in parenthesis. See Table 5 for complete analytical results and comparison criteria. TCE – trichloroethylene; C DCE – cis-1,2-dichloroethylene; 1,1-DCA – 1,1-dichloroethane; 1,2-DCA – 1,2-dichloroethane; DCE – 1,1-dichloroethene; PCE – tetrachloroethylene; PDB – 1,4-Dichlorobenzene; TCA – 1,1,1-trichloroethane, Freon 12 - Dichlorodifluoromethane; VC – Vinyl Chloride; ND – not detected; J – estimated value.

4.3.1 Plume Evaluation

The groundwater contamination distribution was evaluated by creating sample location pie chart figures for contaminants PCE, TCE, 1,1-Dichloroethene, trans-1,2-Dichloroethene, cis-1,2-Dichloroethylene, and vinyl chloride in plan view and cross section (Figures 33-35).

OU-4 on-site plume. This plume originates on the CPC site with the highest concentrations most frequently measured at well SW-1, a water table well. The on-site plume is predominantly PCE, with PCE concentrations an order of magnitude greater than the TCE concentrations (Figure 10). PCE showed an overall increasing trend in well SW-1 with recent spikes in 2015 including a concentration of 210 µg/L in the second quarter and 190 µg/L in the fourth. However in 2016, the PCE concentration has decreased with detections of 150 µg/L during the first quarter, 100 µg/L in the second quarter, 93 µg/L in the third quarter, and 30 µg/L in the fourth. PCE is also the dominant contaminant of concern with an increasing trend in wells EW-04C.

Off-site plume upgradient of CPC site. This plume is first detected at the farthest upgradient well cluster, the EW-7 series, and flows southeast. When in operation, it was partially captured by the OU-4 GWET. The off-site upgradient plume is predominantly TCE, with TCE concentrations typically an order of magnitude greater than the PCE concentrations (Figure 16 and 17). TCE concentrations increased over 200 µg/L in the first three quarters of 2015 in well EW-7C. However, these concentrations returned to the December 2014 level of 190 µg/l by the end of the fourth quarter of 2015. TCE concentrations were the same during the first and second quarter sampling rounds of 2016 with a concentration of 220 µg/L, increased to 250 µg/L in the

third quarter and decreased to 230 µg/L by the fourth quarter. The overall trend in TCE concentrations since 2011 has been decreasing. The off-site, upgradient plume extends at least as far south-southeast as the MW-7B-R series wells. The TCE dominant wells include: EW-07C, EW-07D, EW-04B, EW-12D, MW-7B-R, EW-05, EW-01C, EW-01B, and DW-1.

Well EW-14D. The groundwater contamination at EW-14D is high in TCE, similar to the off-site, upgradient plume (Figure 26). The PCE concentration, however, is below the criterion. Well EW-14D has the greatest variability in TCE concentrations of all of the wells evaluated for contaminant concentration trends. In the past year, TCE concentrations have been decreasing with the exception of the third quarter with a slight increase (Figure 20). However, the concentration decreased to the second quarter level of 110 µg/l by the fourth quarter.

Southern Area. This location is centered on the BP-3 series wells far south of the CPC site (Figures 22 through 24). The concentration of PCE is higher than the concentration of TCE by more than an order of magnitude (Table 3). The source of groundwater contamination at the BP-3 series wells is undergoing investigation by others.

Cross Sections

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

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

4.3.2 Comparison to Historical Groundwater Quality

Figures 8 through 31 illustrate the historical concentration trends for PCE and TCE in multiple wells. Table 4 summarizes the concentration trends in each of the wells.

Table 5 - 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 Increasing	No trend observed, slightly increasing	Figure 8
EW-1A	65-75	Southwest of CPC	Slightly Decreasing	Slightly Decreasing	Figure 9
SW-1	65-70	Southwest, closest to CPC	Increasing	Slightly increasing	Figure 10
EW-5	165-175	South-southeast of CPC	Flat, slightly decreasing	Decreasing	Figure 11

Well	Screen Depth	Location	PCE Trend	TCE Trend	Figure
Off-Site Plume(s) Wells					
EW-4A	100-115	East of CPC	Increasing	Slightly Increasing	Figure 12
EW-4B	120-130	East of CPC	Decreasing	Slightly decreasing	Figure 13
EW-4C	145-155	East of CPC	Increasing	Decreasing, with small increases in 1st, 2nd and 4th Qtrs. of 2016	Figure 14
EW-4D	285-295	East of CPC	Slightly decreasing	Decreasing	Figure 15
EW-7C	189-199	Upgradient, North of CPC	No trend observed	Decreasing	Figure 16
EW-7D	273-283	Upgradient, North of CPC	Decreasing	No trend observed	Figure 17
MW-10D	346-351	Southeast of CPC	Slightly decreasing	Slightly decreasing	Figure 18
EW-12D	209-219	East of CPC	Flat, 10 µg/L increase mid-2015, returned to pre-2015 levels. **32 µg/L increase in 4th Qtr. of 2016**	Increasing, spike of>50 µg/L mid-2015, >20 µg/L 2nd quarter, **and 210 µg/L in 4th quarter of 2016**	Figure 19
EW-14D	185-195	Southeast of CPC	No trend observed	Decreasing with very large fluctuations	Figure 20
MW-7B-R	230-235	South-southeast of CPC	No trend observed	Slightly increasing	Figure 21
BP-3A	54-74	South-southeast of CPC	No trend observed	No trend observed	Figure 22
BP-3B	215-235	South-southeast of CPC	Increasing	Increasing	Figure 23
BP-3C	280-300	South-southeast of CPC	Increasing	Increasing	Figure 24
MW-11A	140-145	South-southeast of CPC	Increasing with very large fluctuations	Increasing with very large fluctuations	Figure 25
MW-11B	240-245	South-southeast of CPC	No trend observed	No trend observed	Figure 26
Extraction Wells and Plant Influent					
RW-3	163-255	Extraction well south-southeast of CPC	Decreasing	Decreasing	Figure 27
RW-4	147-250	Extraction well south-southeast of CPC	Decreasing	Decreasing	Figure 28
RW-5	153-263	Extraction well south-southeast of CPC	Decreasing	Decreasing, **spike of 79 µg/L in November 2016**	Figure 29

Well	Screen Depth	Location	PCE Trend	TCE Trend	Figure
ASF-CP	NA	Plant influent	No trend observed **, spike of >10 µg/L in November 2016**	Decreasing, **spike of >100 µg/L in November 2016**	Figure 30

Decreasing trends indicate mass removal from groundwater in the area around the well. Increasing and stable trends are indicative of partial capture and/or additional source(s) contributing to groundwater contamination in the area of the well.

5 Conclusions and Recommendations

5.1 Conclusions

The fourth quarter 2016 groundwater monitoring event at the CPC site covering both OU-4 and OU-5 included collection of 41 groundwater samples (38 groundwater monitoring wells and 3 extraction wells). Analysis of the data has resulted in the following conclusions:

- A groundwater plume of VOCs, primarily PCE, originates proximate to the former Process Building (on-site plume). The OU-4 GWE&T system previously captured most of the PCE plume reducing the concentration in groundwater at the site. HDR will monitor the well network to observe the affect of the OU-4 shut down. No conclusions on the capture of the CPC PCE plume will be discussed until the Remedial System Optimization is finalized.
- An off-site, upgradient plume consisting mostly of TCE originates to the north or northwest of the former CPC site. The TCE contamination is only partially captured by the CPC GWE&T system.
- 32.1 kilograms (70 pounds) of total VOCs were removed during the reporting period via operation of the OU-5 GWE&T system. The cumulative amount of 14.23 kilograms (31 pounds) was removed during the first three quarters of 2016 using the OU-4 GWE&T system. This difference is likely due to the proximity of high concentrations of TCE in well MW-7B-R to the OU-5 GWE&T Recovery Wells 3 and 4, rather than a difference in the efficacy of the two GWE&T systems.
- Contaminant concentrations in effluent groundwater samples collected during the reporting period met discharge limits with the exception for TCE which had a concentration of 26 µg/L during the November 2016 sampling event. The failure to meet discharge limits was due to a power failure experienced at the plant on the weekend of November 26, 2016 just prior to sampling on November 29, 2016. The effluent TCE concentration returned to non-detect during the December 2016 sampling event.
- The results from the fourth quarter 2016 groundwater sampling event showed compounds detected above the NYSDEC Part 703 Class GA groundwater criteria including TCA, Acetone, DCA, 1,2-DCA, DCE, C DCE, VC, Freon 12, PCE and TCE.
- An increasing trend in PCE concentrations was observed at well SW-1 in the onsite plume nearest the former Process Building beginning in mid-2015. In 2016, the PCE concentration

decreased to 150µg/L during the first quarter, 100 µg/L in the second quarter, 93 µg/L the third quarter, and 30 µg/L in the fourth quarter.

- PCE concentrations in 2016 have increased in BP-3C from 99 µg/L during the first quarter, 150 µg/L in the second quarter, and 180 µg/L the third quarter. The PCE concentration decreased slightly to 170 µg/L in the fourth quarter of 2016.
- Monitoring well EW-12D had significant concentration increases between the September and December 2016 sampling events including cis-1,2-DCE from 2.3 µg/L to 17 µg/L, PCE from 3.3 µg/L to 35 µg/L, TCE from 17 µg/L to 210 µg/L, and 1,1,1-TCA from 3.1 µg/L to 37 µg/L. These results are the highest concentrations since 2011, which is the earliest data made available to HDR.
- The TCE in monitoring well MW-7B-R has increased from 357 µg/L in May 2016, to 720 µg/L in December 2016. LKB previously collected the historic data for this well under a different sampling methodology.
- The groundwater flow at the site is predominately south-southeast with no regionally significant changes observed from the flow direction during operation of the OU-4 GWE&T system.

5.2 Recommendations

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

6 References

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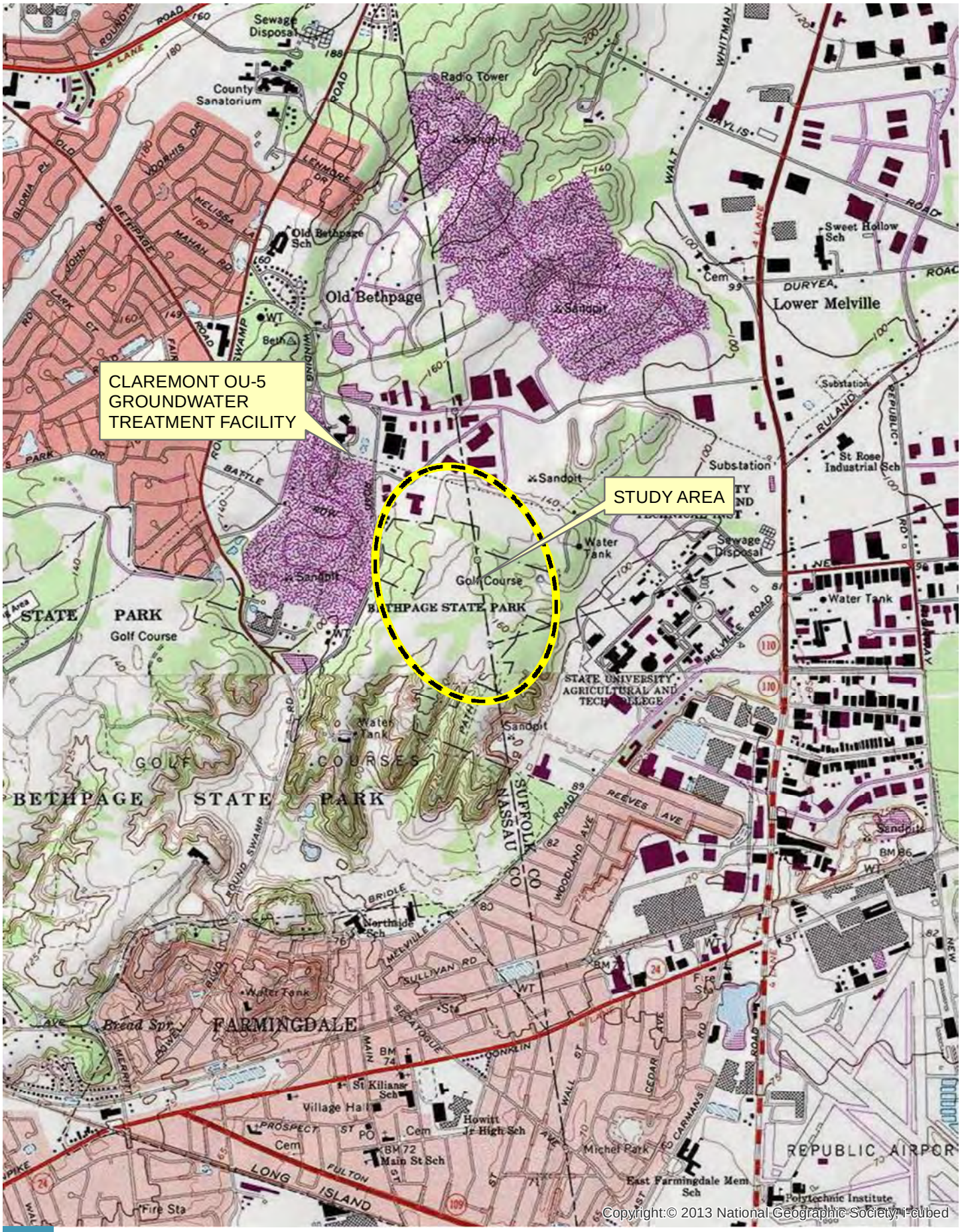
Table 5
Summary of Analytical Results
December 2016 (4Q16) Sampling Event
Claremont Polychemical Superfund Site OU5
Old Bethpage, NY

Note: NS = not sampled.		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
Values in shaded cells exceed		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 criteria.		5	5	5	5	5	2	5	5	1	0.6	5				0.04	0.0006	3	1	3	3			50	1	5			5	60
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
BP-3A	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	77	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BP-3B	12/5/2016	120	14	120	0.54 J	0.74 J	2.4	< 1.0 U	1.1	< 1.0 U	0.86 J	17	0.93 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	85	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BP-3C	12/5/2016	170	9.5	73	0.41 J	0.43 J	0.76 J	< 1.0 U	0.55 J	< 1.0 U	0.33 J	4.1	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	< 50 U	< 5.0 U	99	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
DW-1	12/5/2016	0.92 J	1.9	0.51 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	110	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.2
DW-2	12/5/2016	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	< 1.0 U	< 50 U	< 5.0 U	82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-01A	12/5/2016	3.6	1.5	2.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	81	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-01B	12/5/2016	0.33 J	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	110	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-01B DUP	12/5/2016	0.34 J	0.92 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	110	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-01C	12/5/2016	< 1.0 U	2.5	0.53 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	75	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-02A	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	63	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-02B	12/6/2016	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	< 1.0 U	< 1.0 U	< 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	79	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-02C	12/6/2016	< 1.0 U	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	< 1.0 U	< 50 U	< 5.0 U	61	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-02D	12/6/2016	0.31 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	87	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-04A	12/5/2016	10	1.4	9.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	83	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-04B	12/5/2016	1.4	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.31 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 50 U	< 5.0 U	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-04C	12/5/2016	110	28	2.5	1.6	0.97 J	< 1.0 U	< 1.0 U	5	< 1.0 U	< 1.0 U	3.4	< 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	68	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-04D	12/5/2016	10	9.4	< 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	74	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-05	12/5/2016	0.23 J	1.6	< 1.0 U	0.23 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	86	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-07C	12/5/2016	15	230	3.9	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.57 J	< 1.0 U	< 1.0 U	0.25 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	61	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-07D	12/5/2016	3.3	7.4	< 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	110	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-11D	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	93	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-12D	12/5/2016	35	210	17	< 1.0 U	70	< 1.0 U	< 1.0 U	37	0.12 J	0.38 J	6.5	0.73 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	72	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-14D	12/5/2016	2.1	110	1.1	< 1.0 U	9.2	< 1.0 U	< 1.0 U	9.1	0.14 J	2.4	0.25 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	96	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
LF-1	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	23	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
M-30B-R	12/5/2016	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 50 U	< 5.0 U	9.5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-05B	12/6/2016	< 1.0 U	0.31 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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
MW-06A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-06B	12/6/2016	< 1.0 U	0.24 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.38 J	< 1.0 U	< 1.0 U	1.3	< 50 U	< 5.0 U	17	0.56 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06C	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.82 J	< 50 U	< 5.0 U	26	0.18 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06D	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.46 J	< 1.0 U	< 1.0 U	1.1	22 J	< 5.0 U	21	0.27 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06E	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.63 J	< 50 U	< 5.0 U	38	0.15 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06F	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.39 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	< 50 U	< 5.0 U	35	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-7B-R*	12/6/2016	15	720	42	< 5.0 U	6.4	< 5.0 U	< 5.0 U	5.2	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 250 U	< 25 U	< 25 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
MW-08A	12/6/2016	5.3	0.44 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	59	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-08B	12/6/2016	0.35 J	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	< 1.0 U	< 50 U	< 5.0 U	88	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-08C	12/6/2016	< 1.0 U	0.35 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	87	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-09B	12/6/2016	< 1.0 U	0.52 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	18	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-09C	12/6/2016	< 1.0 U	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	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-10D	12/6/2016	1.8	1.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.57 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	73	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-11A	12/6/2016	2.7	6.3	55	0.50 J	0.74 J	< 1.0 U	< 1.0 U	0.82 J	< 1.0 U	0.27 J	4.8	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	< 50 U	< 5.0 U	23	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-11B	12/6/2016	< 1.0 U	< 1.0 U	9.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.30 J	< 1.0 U	< 1.0 U	1.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 50 U	< 5.0 U	29	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
OBS-1	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	18	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
OBS-1 DUP	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	19	0.13 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
SW-1	12/5/2016	30	1.2	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	82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
WT-01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Summary of Analytical Results
December 2016 (4Q16) Sampling Event
Claremont Polychemical Superfund Site OU5
Old Bethpage, NY

Note: NS = not sampled.		56-23-5	108-90-7	75-00-3	67-66-3	74-87-3	10061-01-5	110-82-7	124-48-1	75-71-8	100-41-4	98-82-8	79601-23-	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
Values in shaded cells exceed		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 criteria.		5	5	5	7	5				5	5	5			50			5	5	5		10	5		5
Sample Description	Date Collected	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cis-1,3-Dichloropropene	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	Methyl Acetate	Methyl Ethyl Ketone (2-Butanone)	Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	Methylcyclohexane	Methylene Chloride	O-Xylene (1,2-Dimethylbenzene)	Styrene	Tert-Butyl Alcohol	Tert-Butyl Methyl Ether	Toluene	Trans-1,3-Dichloropropene	Trichlorofluoromethane
BP-3A	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	1	< 1.0 U	< 1.0 U	1.1	< 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
BP-3B	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.42 J	< 1.0 U	< 1.0 U	1.5	< 1.0 U	5.9	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	0.89 J	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	0.53 J
BP-3C	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.39 J	< 1.0 U	< 1.0 U	1.1	< 1.0 U	3.7	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	0.27 J	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	0.22 J
DW-1	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.8	< 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
DW-2	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.3	< 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-01A	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.27 J	< 1.0 U	< 1.0 U	0.95 J	< 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
EW-01B	12/5/2016	< 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	< 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-01B DUP	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.75 J	< 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-01C	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.2	< 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-02A	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.45 J	< 1.0 U	< 1.0 U	0.80 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-02B	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.1	< 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
EW-02C	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.69 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	2.2 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-02D	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.60 J	< 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
EW-04A	12/5/2016	< 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	< 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-04B	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.42 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-04C	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.84 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	0.18 J	< 1.0 U	< 1.0 U	< 1.0 U
EW-04D	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.25 J	< 1.0 U	< 1.0 U	0.68 J	< 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
EW-05	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.8	< 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-07C	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.25 J	< 1.0 U	< 1.0 U	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	2.5 J	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	0.96 J	< 1.0 U	< 1.0 U	< 1.0 U
EW-07D	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.40 J	< 1.0 U	< 1.0 U	0.66 J	< 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
EW-11D	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.87 J	< 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
EW-12D	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.38 J	< 1.0 U	< 1.0 U	1.2	< 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	0.20 J	< 1.0 U	< 1.0 U	< 1.0 U
EW-14D	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.60 J	< 1.0 U	< 1.0 U	0.97 J	< 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
LF-1	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.44 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
M-30B-R	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.42 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-05B	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-06B	12/6/2016	< 1.0 U	2.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.33 J	< 1.0 U	< 1.0 U	< 1.0 U	0.36 J	0.29 J	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	0.29 J	< 1.0 U	< 1.0 U	< 1.0 U
MW-06C	12/6/2016	< 1.0 U	1.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.27 J	< 1.0 U	< 1.0 U	< 1.0 U	0.40 J	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	0.18 J	< 1.0 U	< 1.0 U	< 1.0 U
MW-06D	12/6/2016	< 1.0 U	0.97 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.2	< 1.0 U	< 1.0 U	< 1.0 U	0.71 J	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	0.94 J	< 1.0 U	< 1.0 U	< 1.0 U
MW-06E	12/6/2016	< 1.0 U	2.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.37 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06F	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.78 J	< 1.0 U	< 1.0 U	0.35 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-7B-R*	12/6/2016	< 5.0 U	< 5.0 U	< 5.0 U	1.9 J	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25 U	< 25 U	< 25 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 50 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
MW-08A	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.72 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-08B	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	2.3	< 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
MW-08C	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.9 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-09B	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.42 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-09C	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.40 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-10D	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-11A	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.62 J	< 1.0 U	7.3	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	0.27 J	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	1.8
MW-11B	12/6/2016	< 1.0 U	< 1.0 U	< 1.0 U	0.25 J	< 1.0 U	< 1.0 U	0.53 J	< 1.0 U	3.0	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	0.43 J
OBS-1	12/6/2016	< 1.0 U	0.93 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.98 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
OBS-1 DUP	12/6/2016	< 1.0 U	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	< 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
SW-1	12/5/2016	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.64 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	4.7 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
WT-01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS



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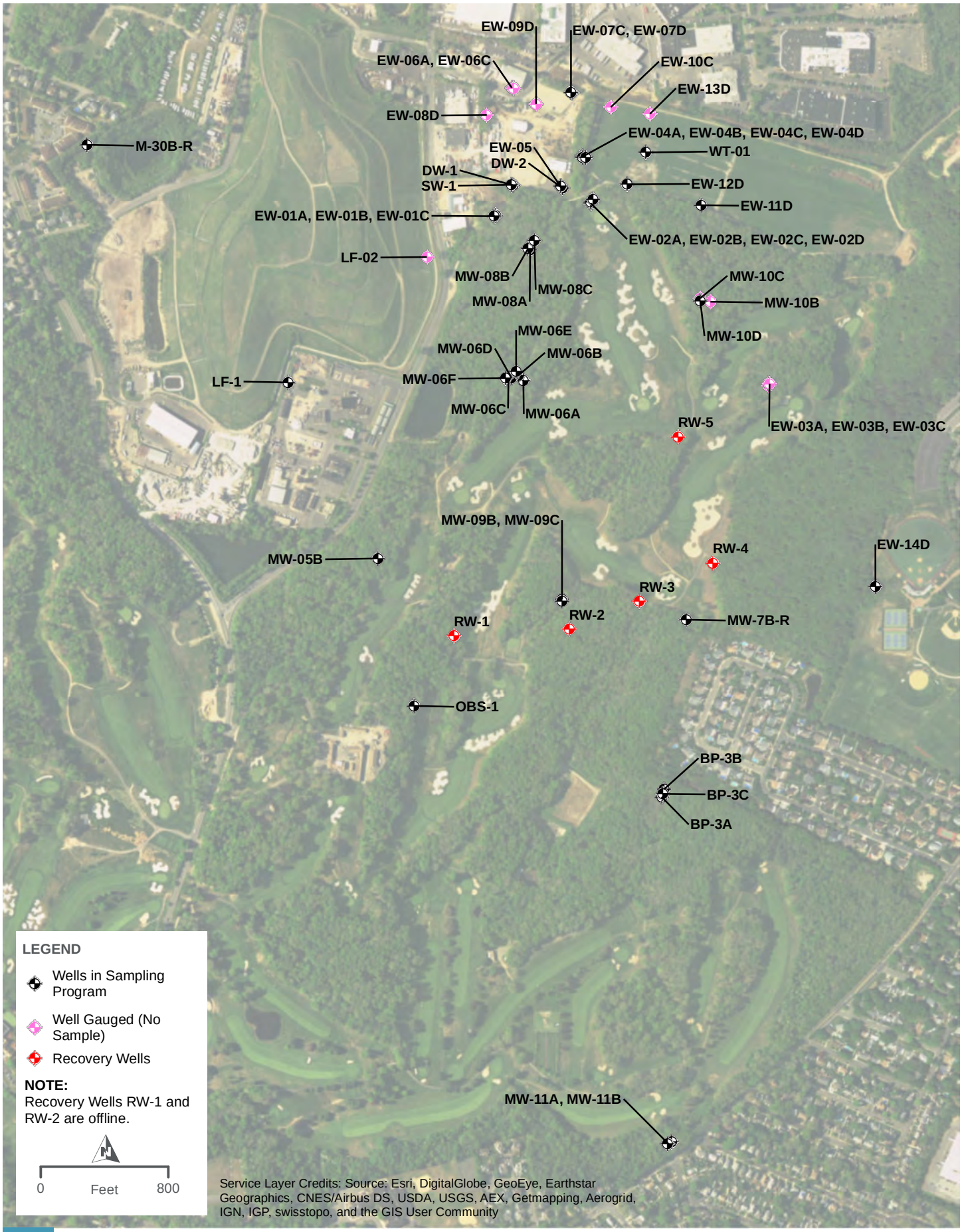
0 Miles 0.5

SITE LOCATION

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 1

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\27596217.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\SITELOCATION.MXD - USER: CMILLS - DATE: 1/24/2017



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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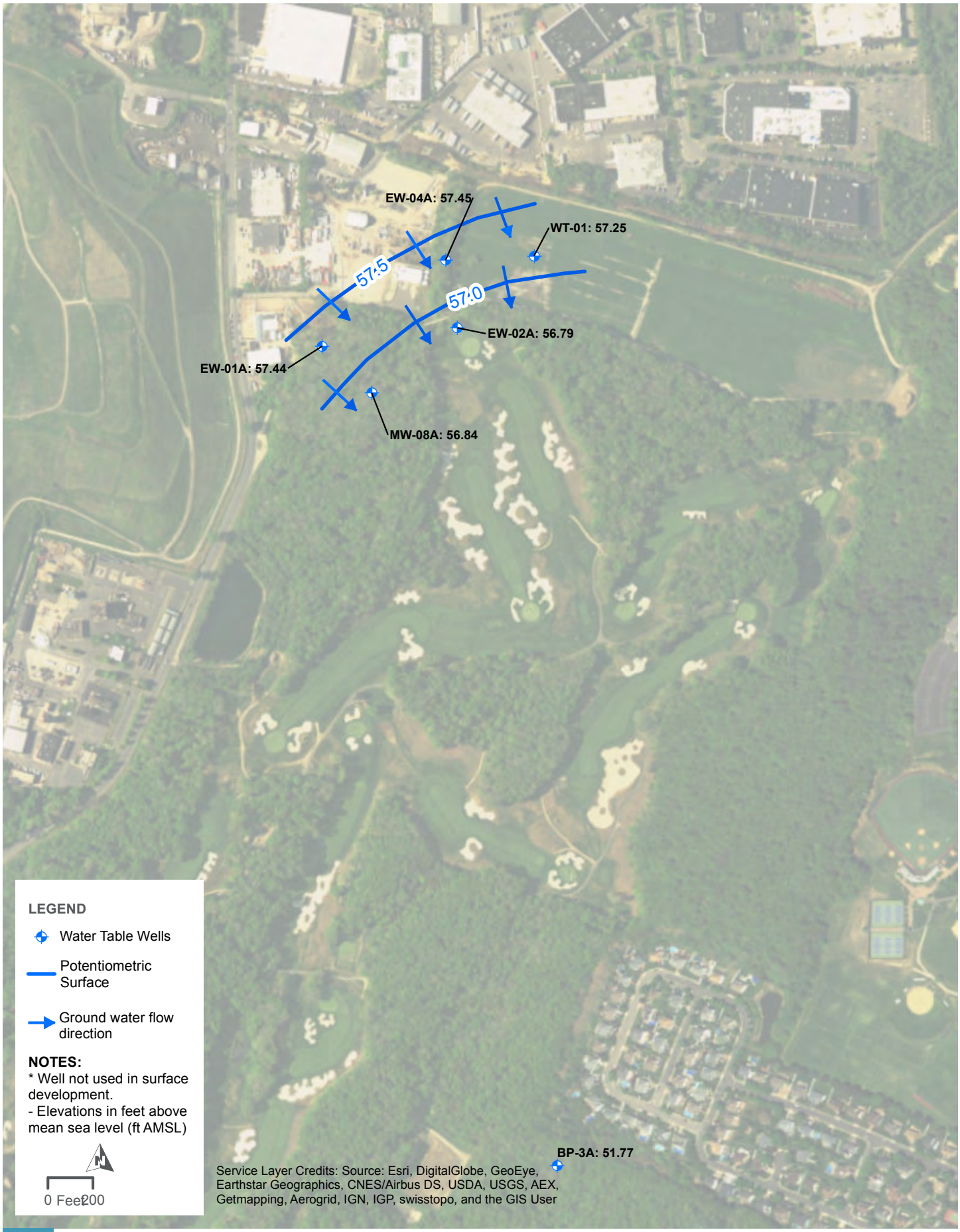
WELLS SAMPLED

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 2



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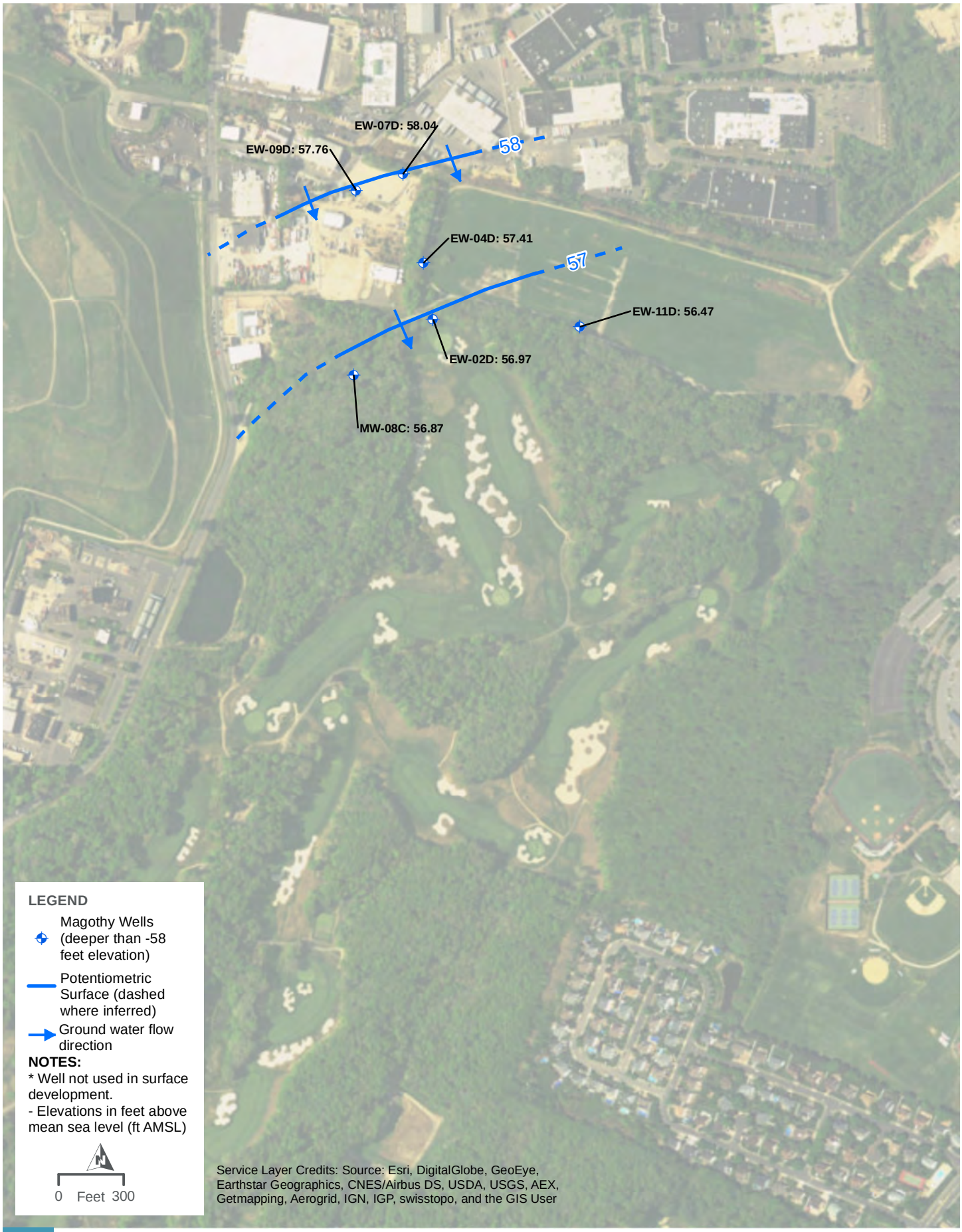
WATER TABLE ELEVATION CONTOURS

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 3

PATH: A:\275962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\FIG3_WATERTABLECONTOURS_JB.MXD - USER: HROSADO - DATE: 2/14/2017



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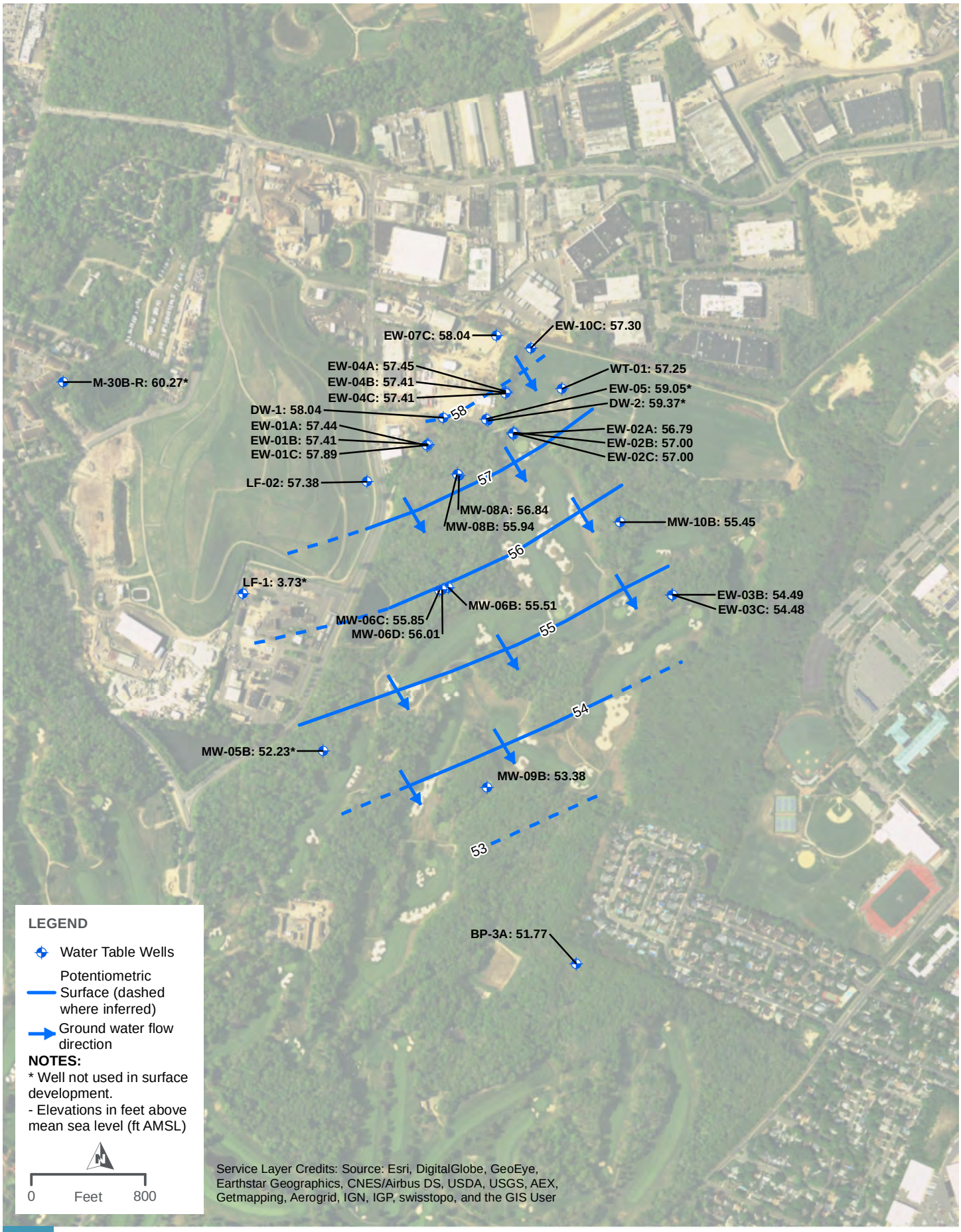
POTENTIOMETRIC SURFACE - MAGOTHY AQUIFER (WELLS SCREENED DEEPER THAN -58 FT AMSL)

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 4

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\27596217.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\FIG4_MAGOTHYCONTOURS_REV_HER_JB.MXD - USER: JEBECKER - DATE: 2/13/2017

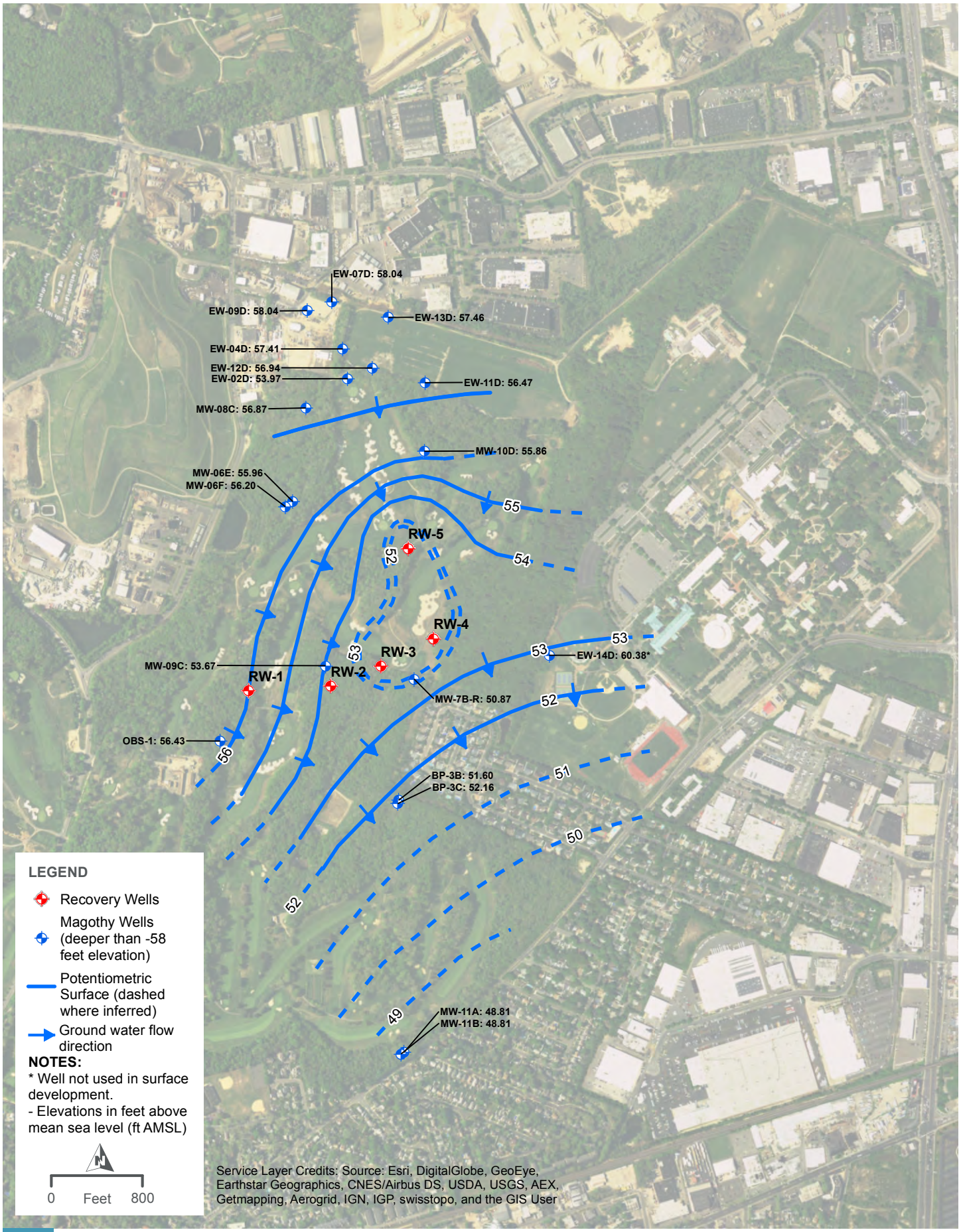


WATER TABLE ELEVATION CONTOURS

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 5

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\27596217.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\FIG5_WATERTABLECONTOURS_REV.MXD - USER: JEBECKER - DATE: 2/14/2017



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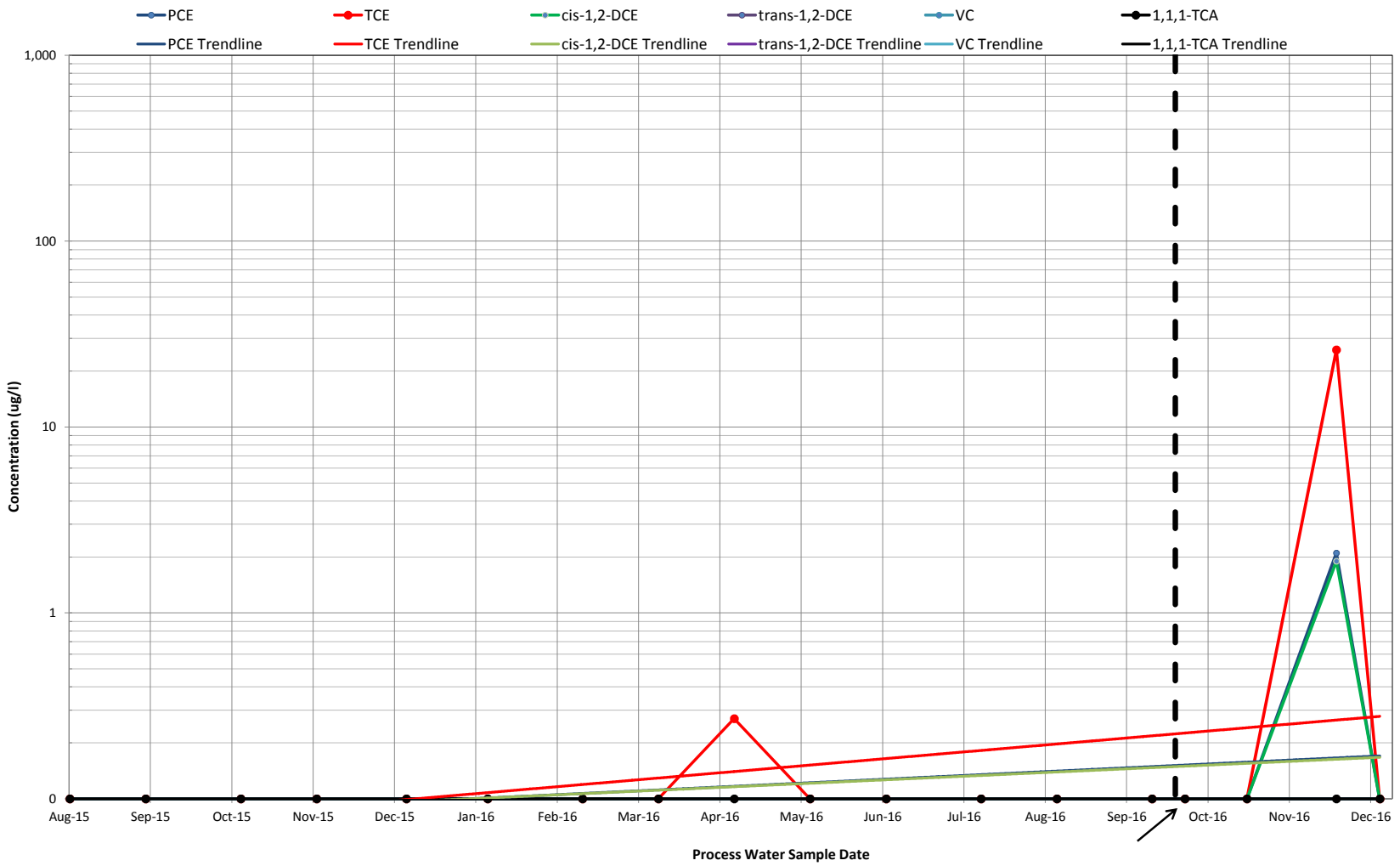
POTENTIOMETRIC SURFACE - MAGOTHY AQUIFER (WELLS SCREENED DEEPER THAN -58 FT AMSL)

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 6

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\275962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\FIG6_MAGOTHYCONTOURS_REV.MXD - USER: HROSADO - DATE: 2/23/2017



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

*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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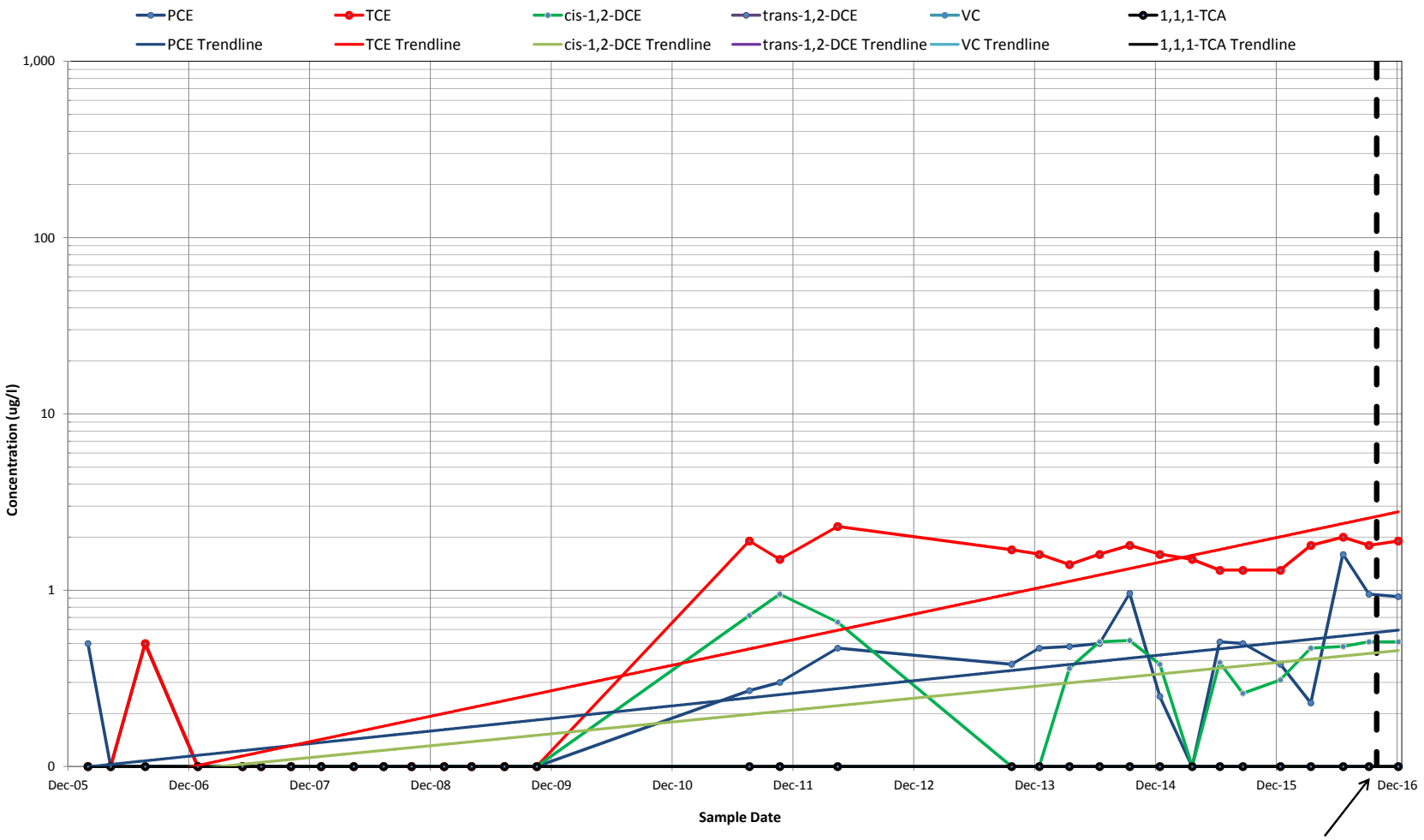
CHLORINATED VOC CONCENTRATIONS
SAMPLE PD-009 Effluent
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
7



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

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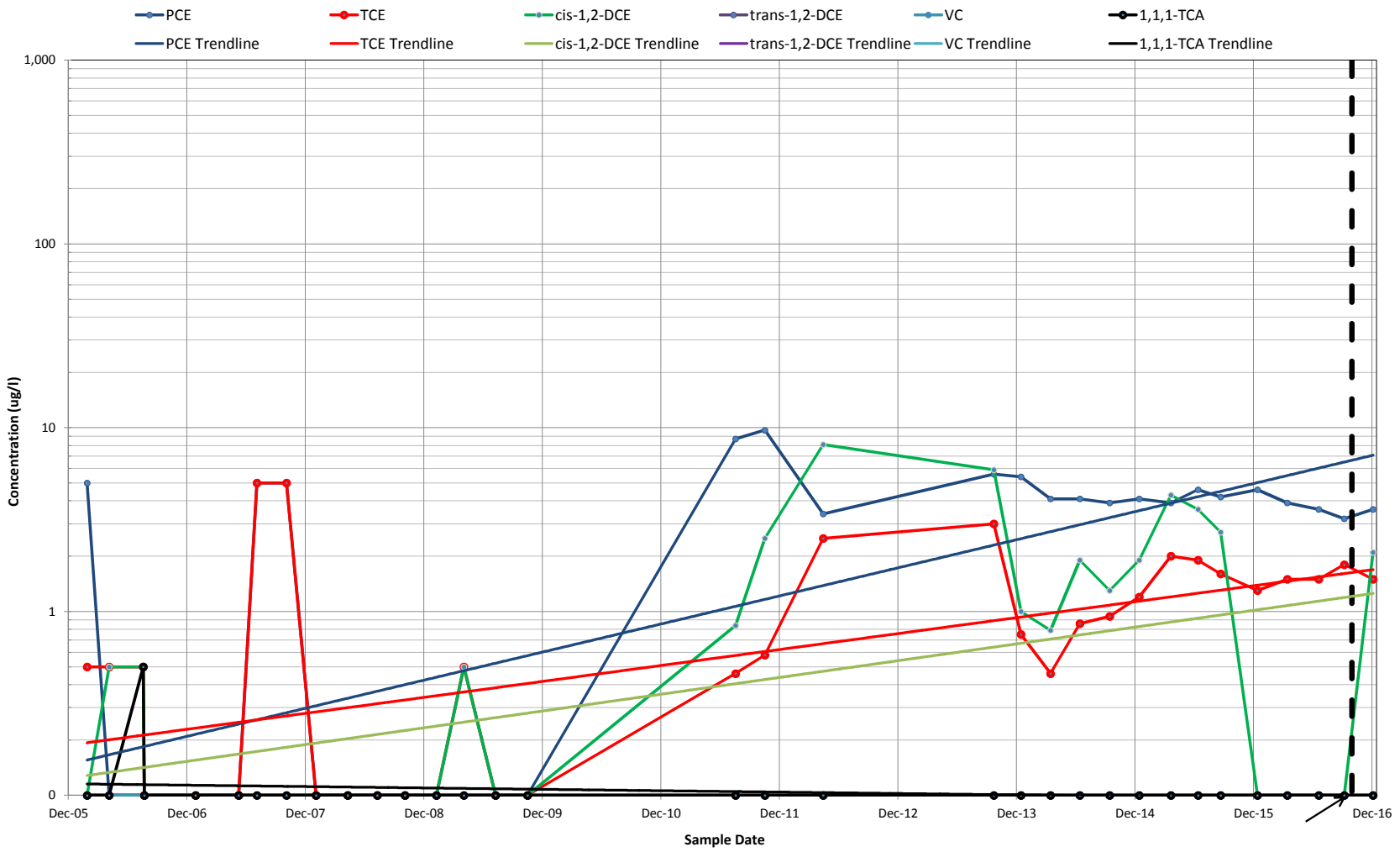
CHLORINATED VOC CONCENTRATIONS
WELL DW-1
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
8



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

*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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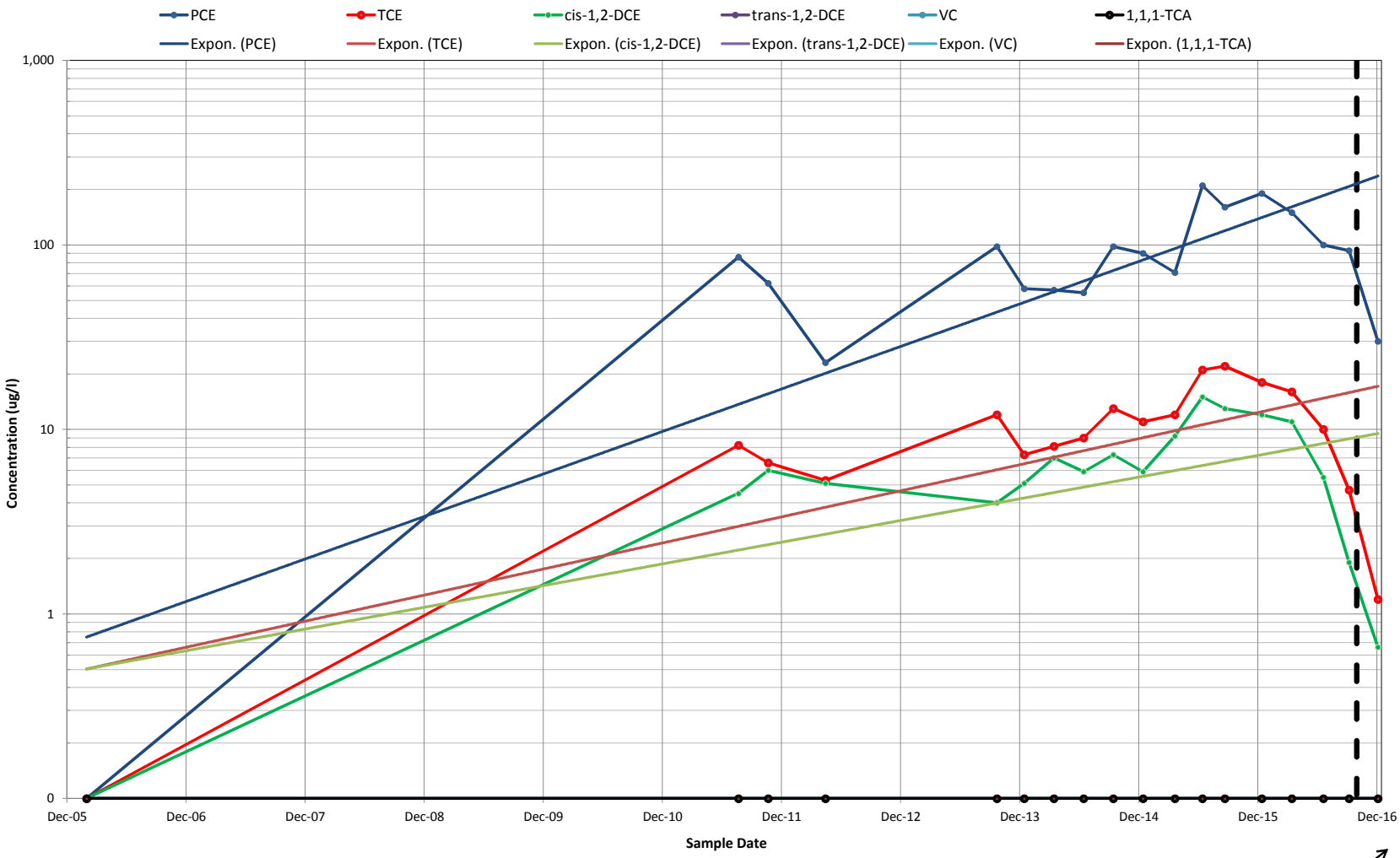
CHLORINATED VOC CONCENTRATIONS
WELL EW-01A
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

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.

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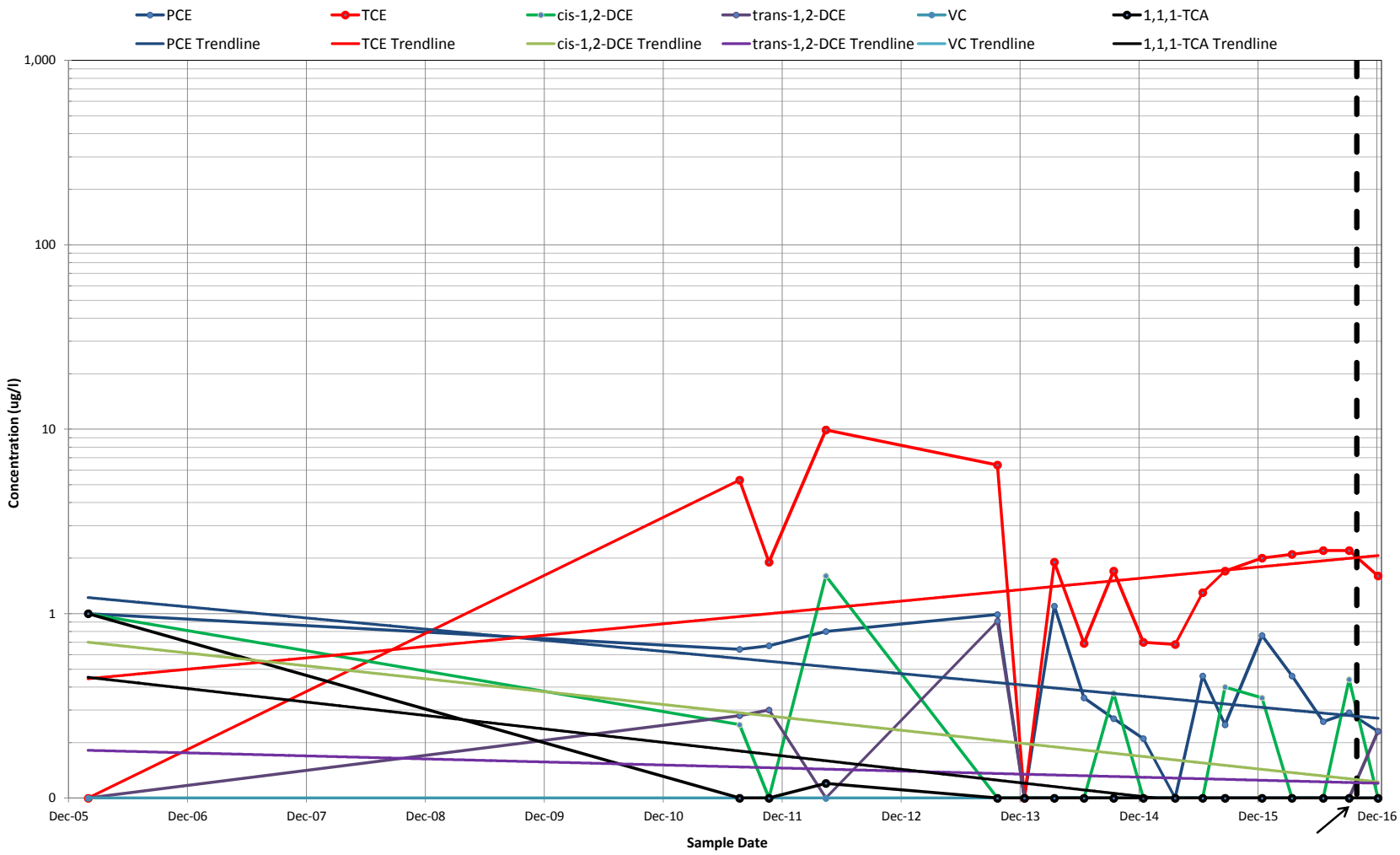
CHLORINATED VOC CONCENTRATIONS
WELL SW-1
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
10



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

*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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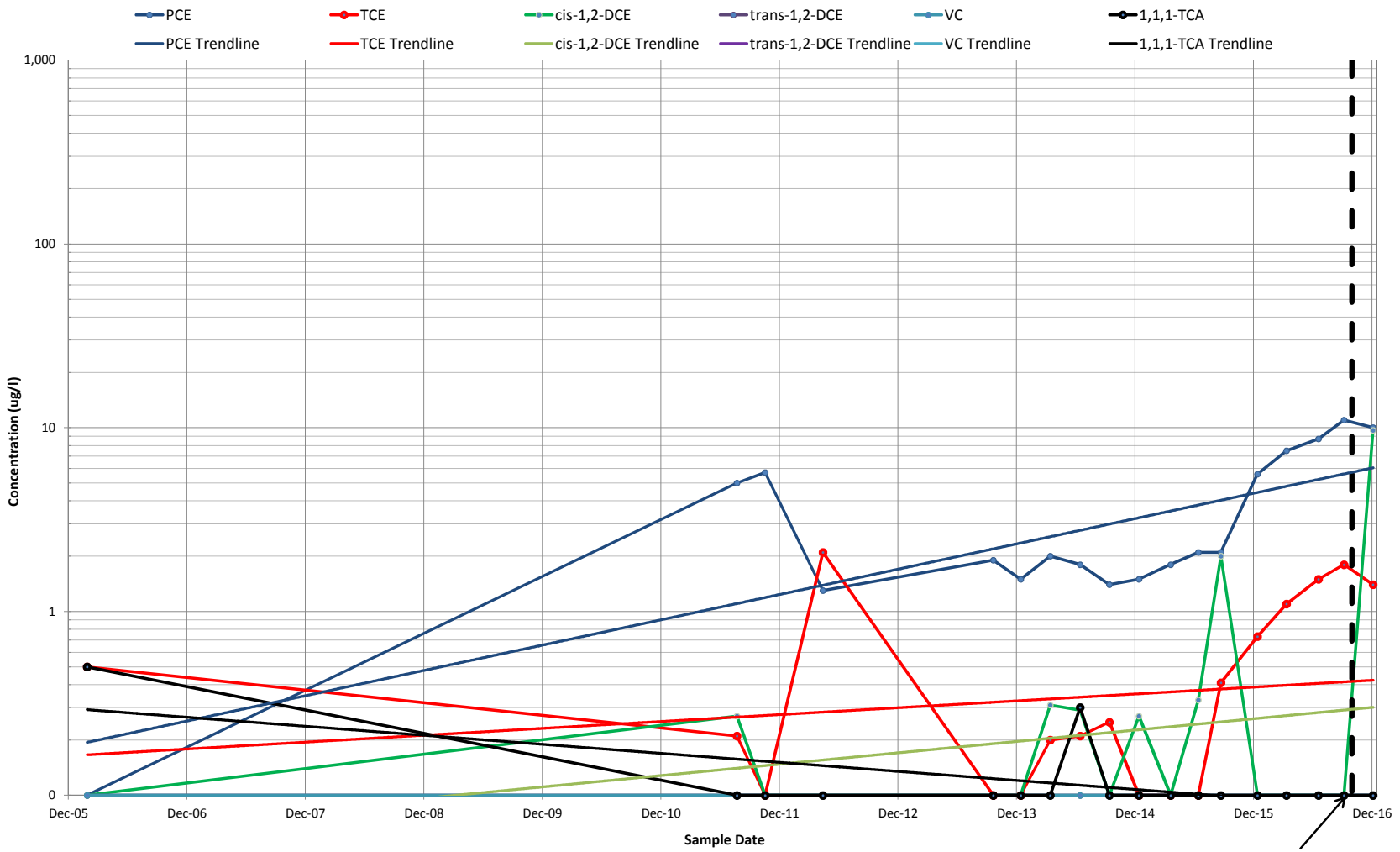
CHLORINATED VOC CONCENTRATIONS
WELL EW-05
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
11



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

*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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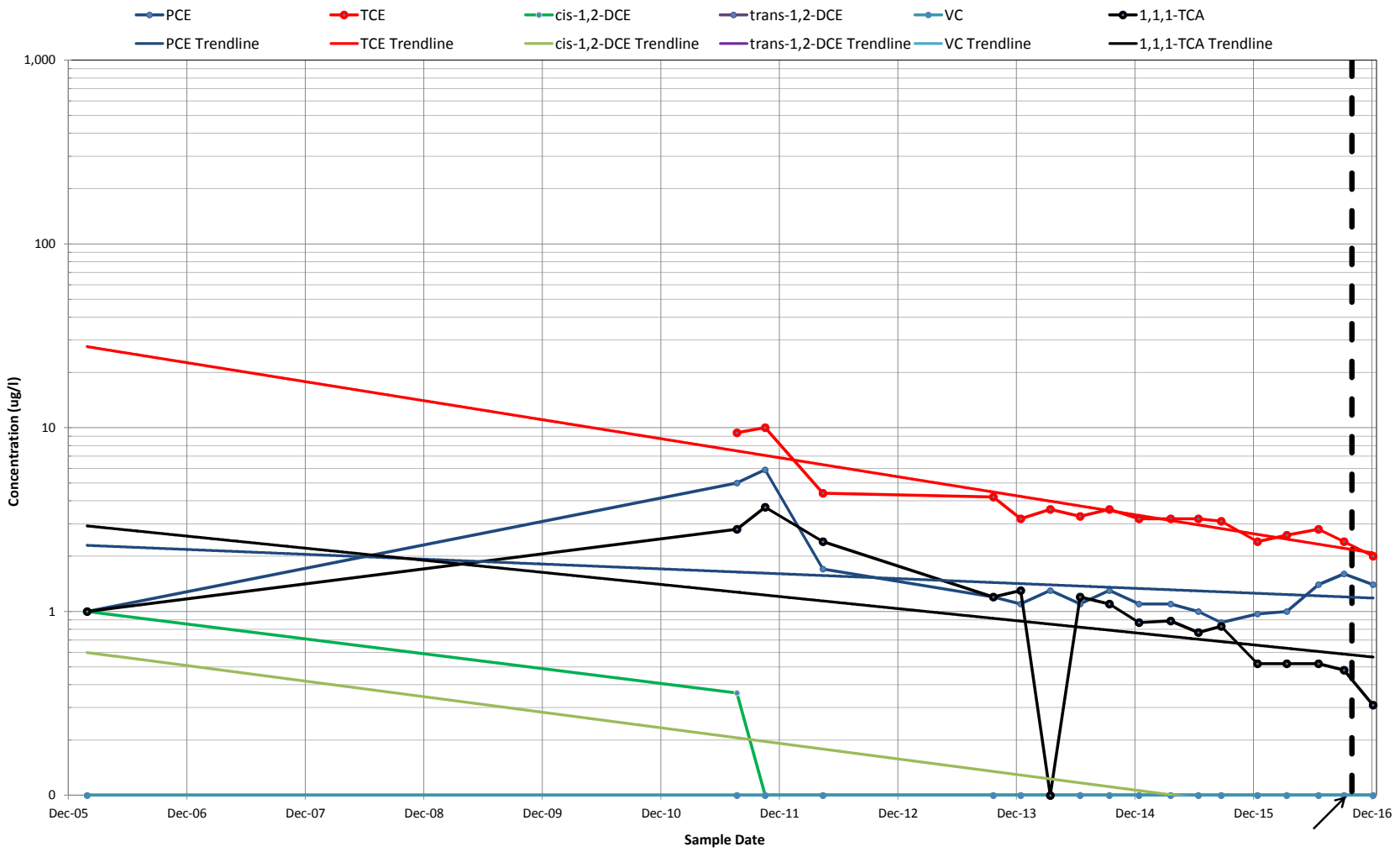
CHLORINATED VOC CONCENTRATIONS
WELL EW-04A
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
12



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

*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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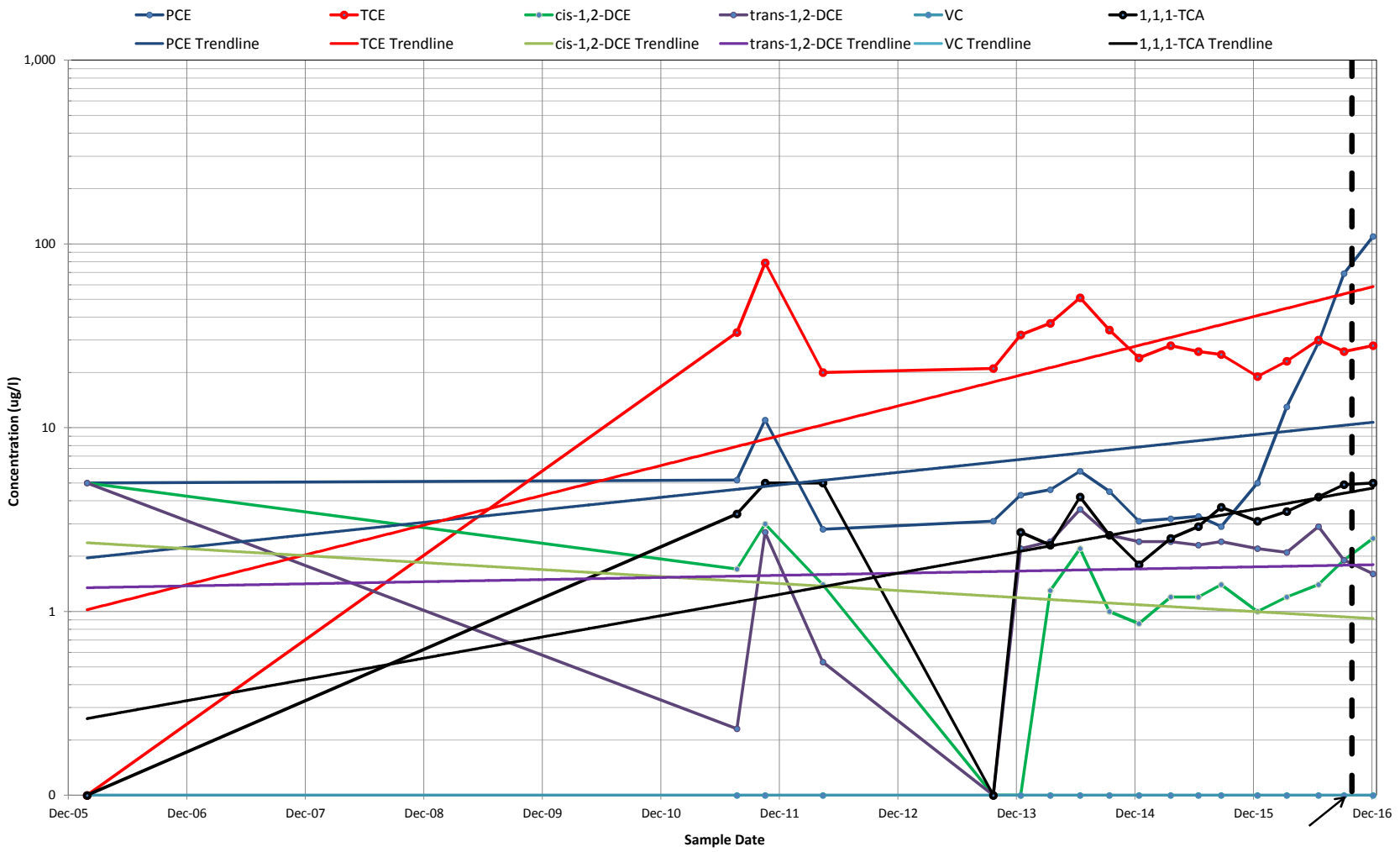
CHLORINATED VOC CONCENTRATIONS
WELL EW-04B
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
13



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

*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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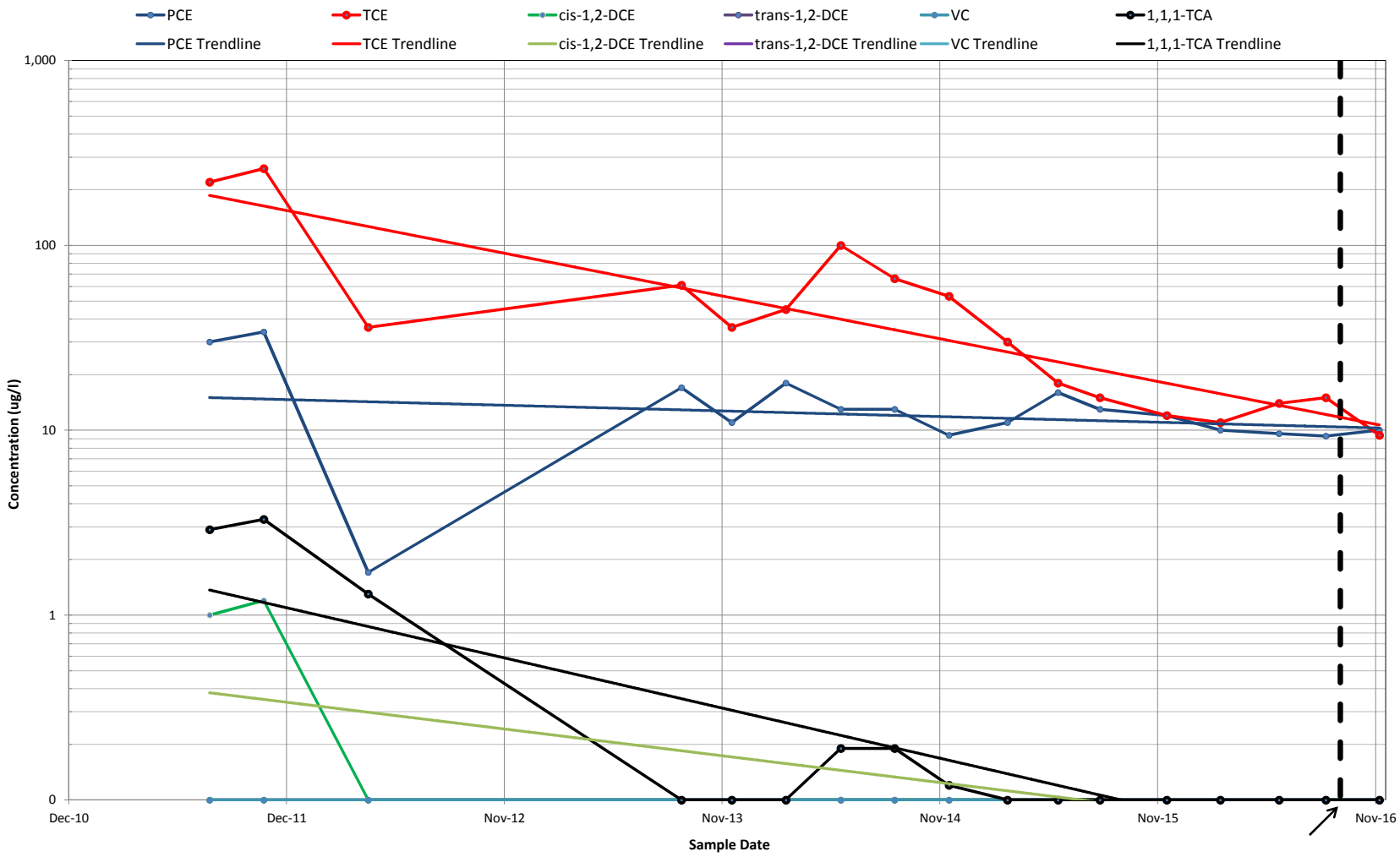
CHLORINATED VOC CONCENTRATIONS
WELL EW-04C
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
14



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

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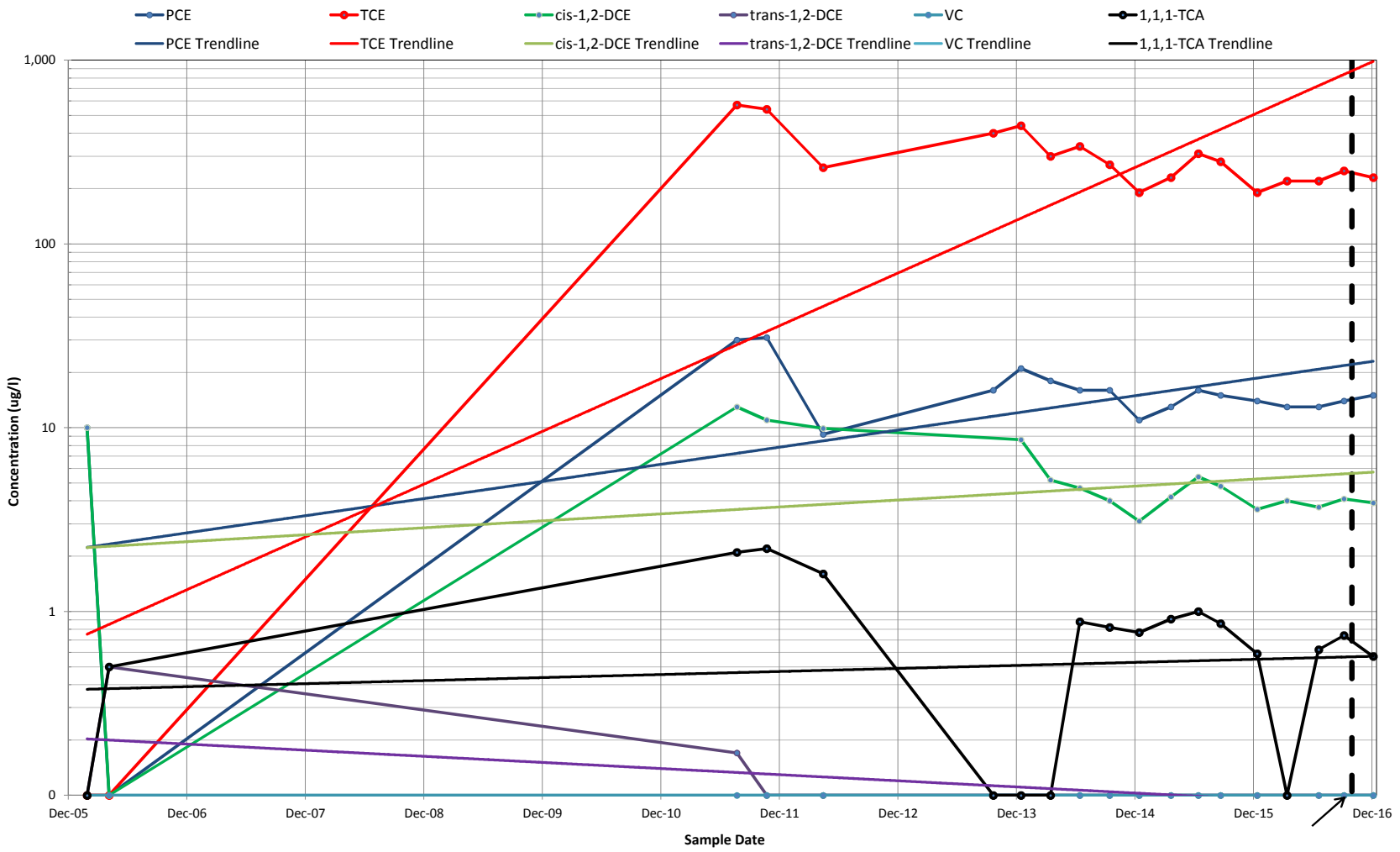
CHLORINATED VOC CONCENTRATIONS
WELL EW-04D
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

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.

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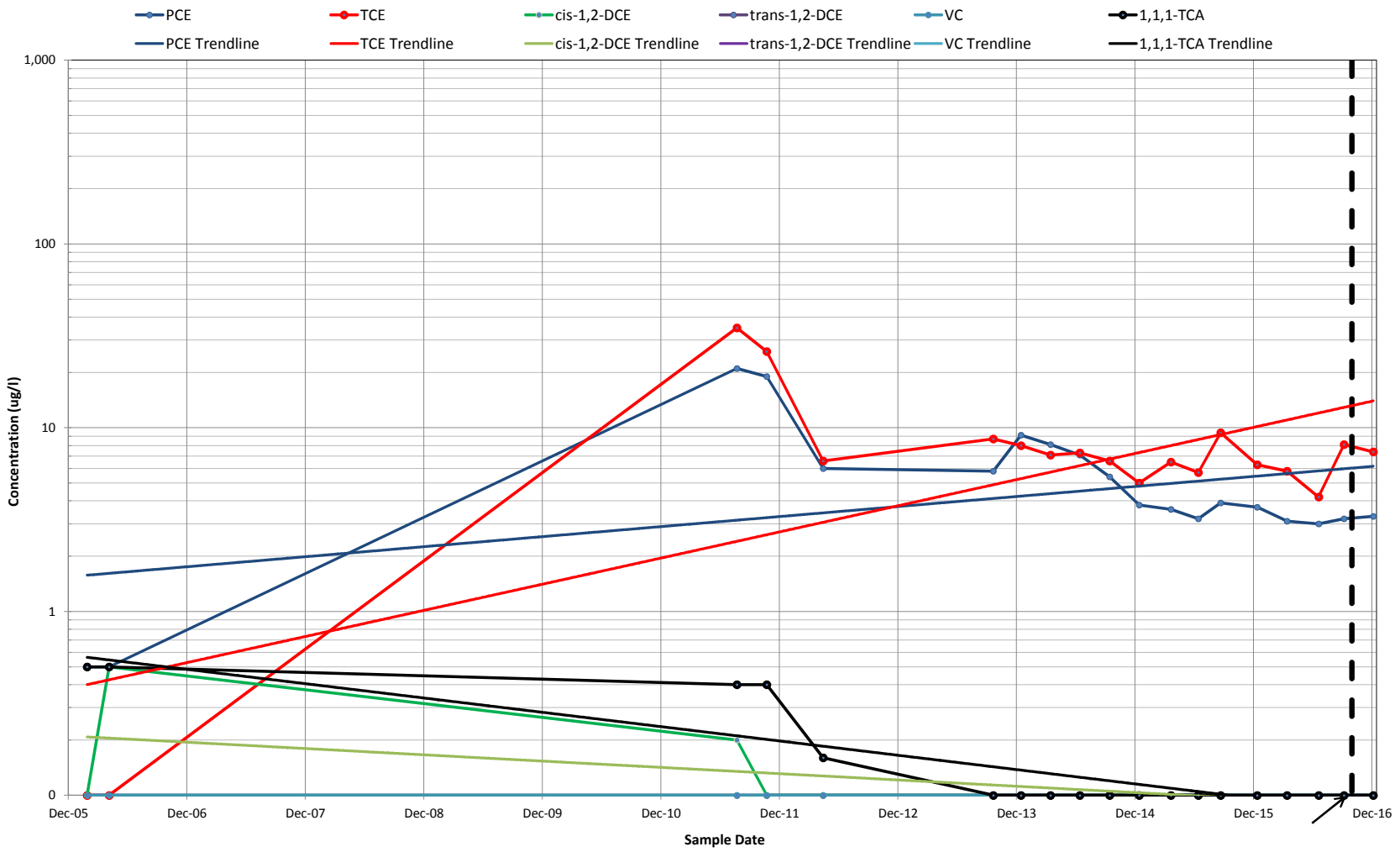
CHLORINATED VOC CONCENTRATIONS
WELL EW-07C
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
16



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

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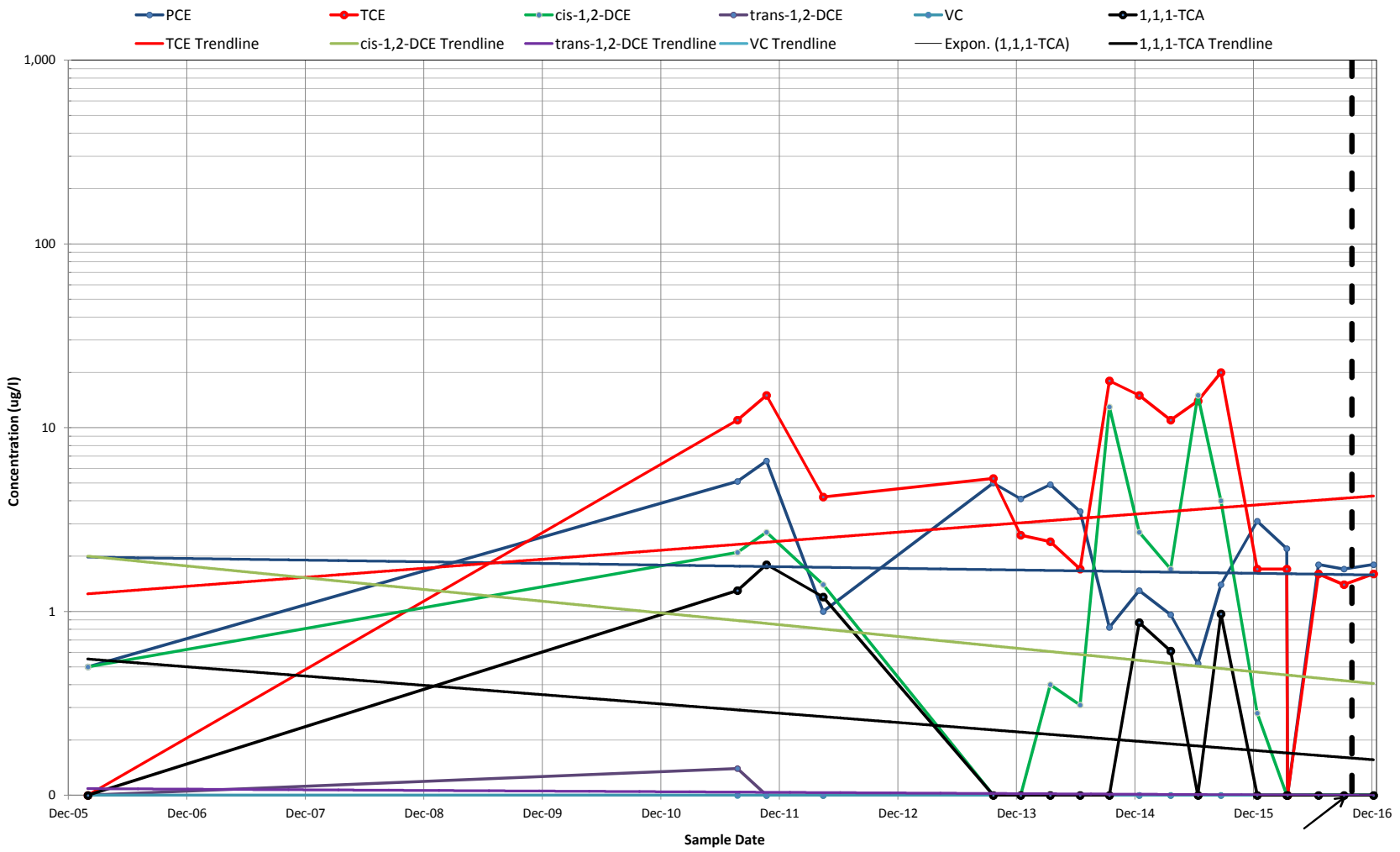
CHLORINATED VOC CONCENTRATIONS
WELL EW-07D
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
17



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Detection limits used to display non-detect results.

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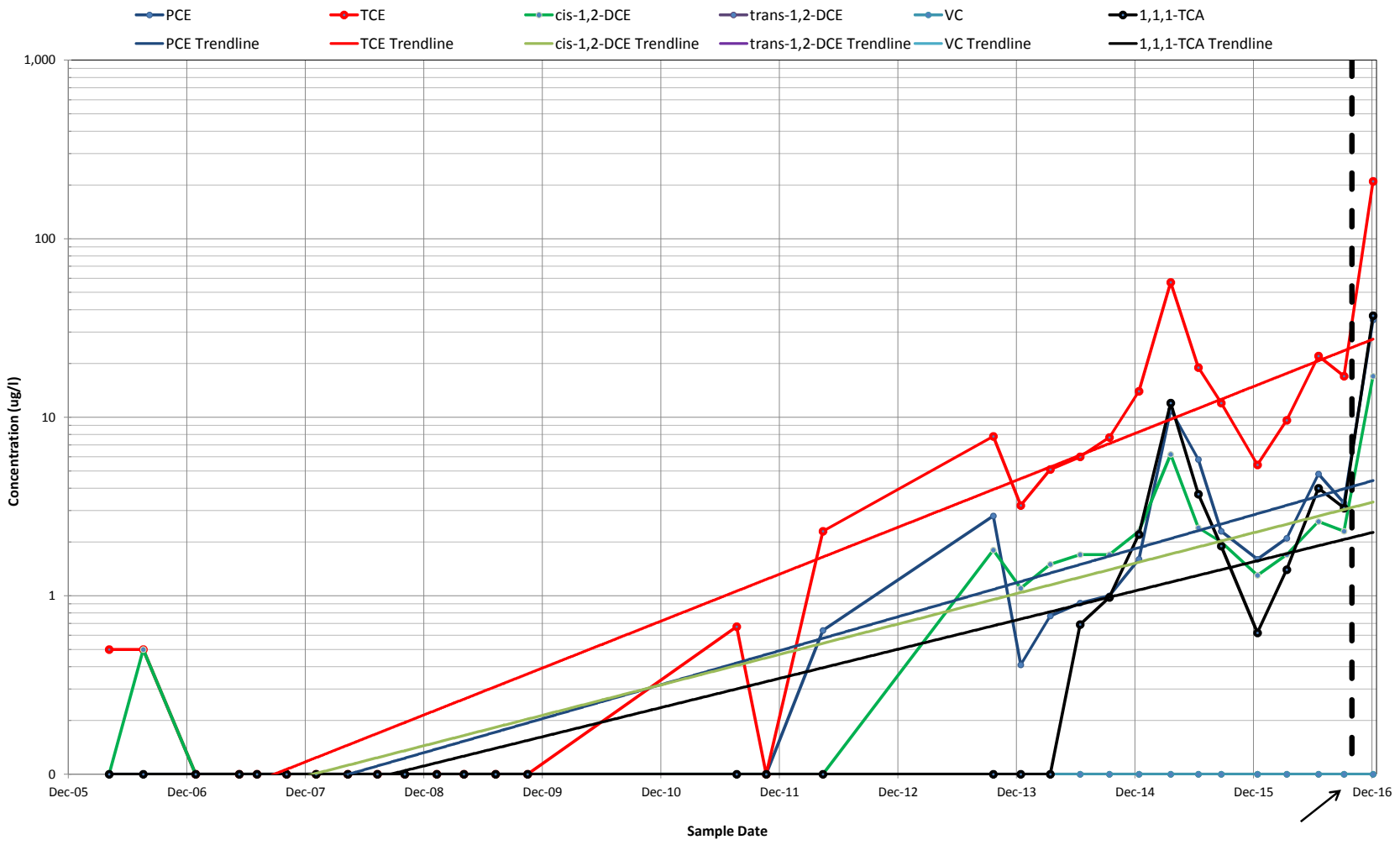
CHLORINATED VOC CONCENTRATIONS
WELL EW-10D
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
18



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

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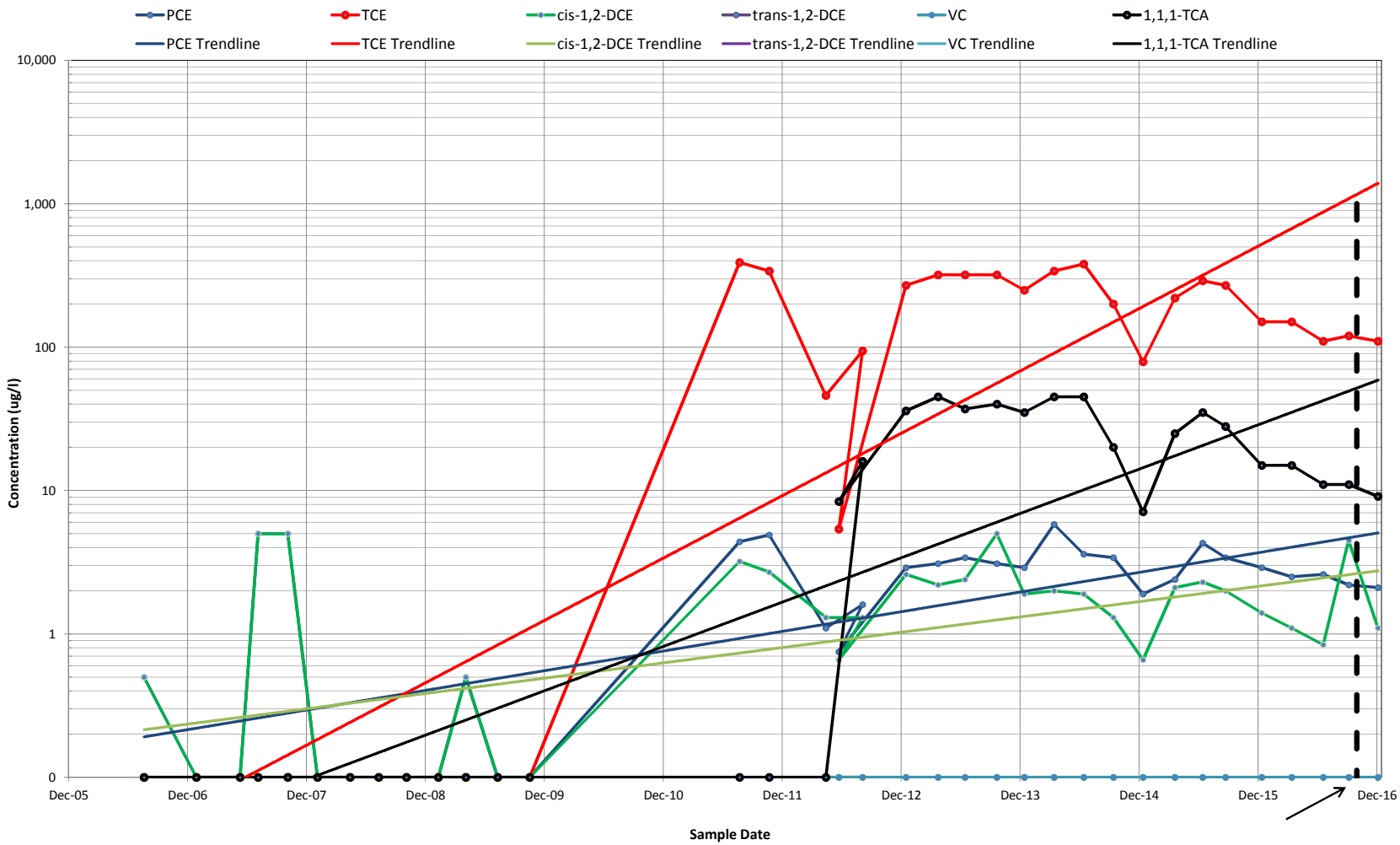
CHLORINATED VOC CONCENTRATIONS
WELL EW-12D
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
19



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

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

DATE
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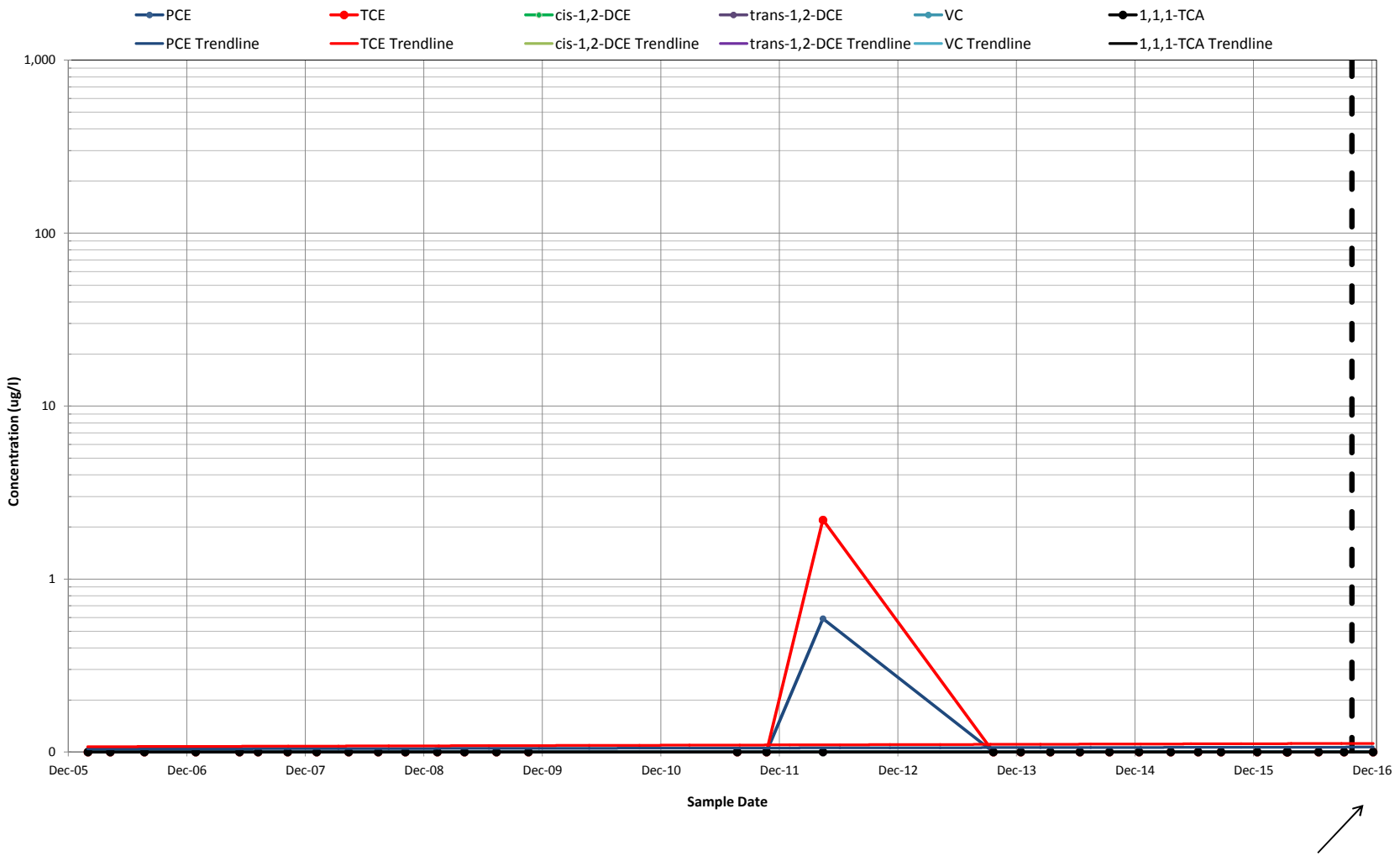
FIGURE
20



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.

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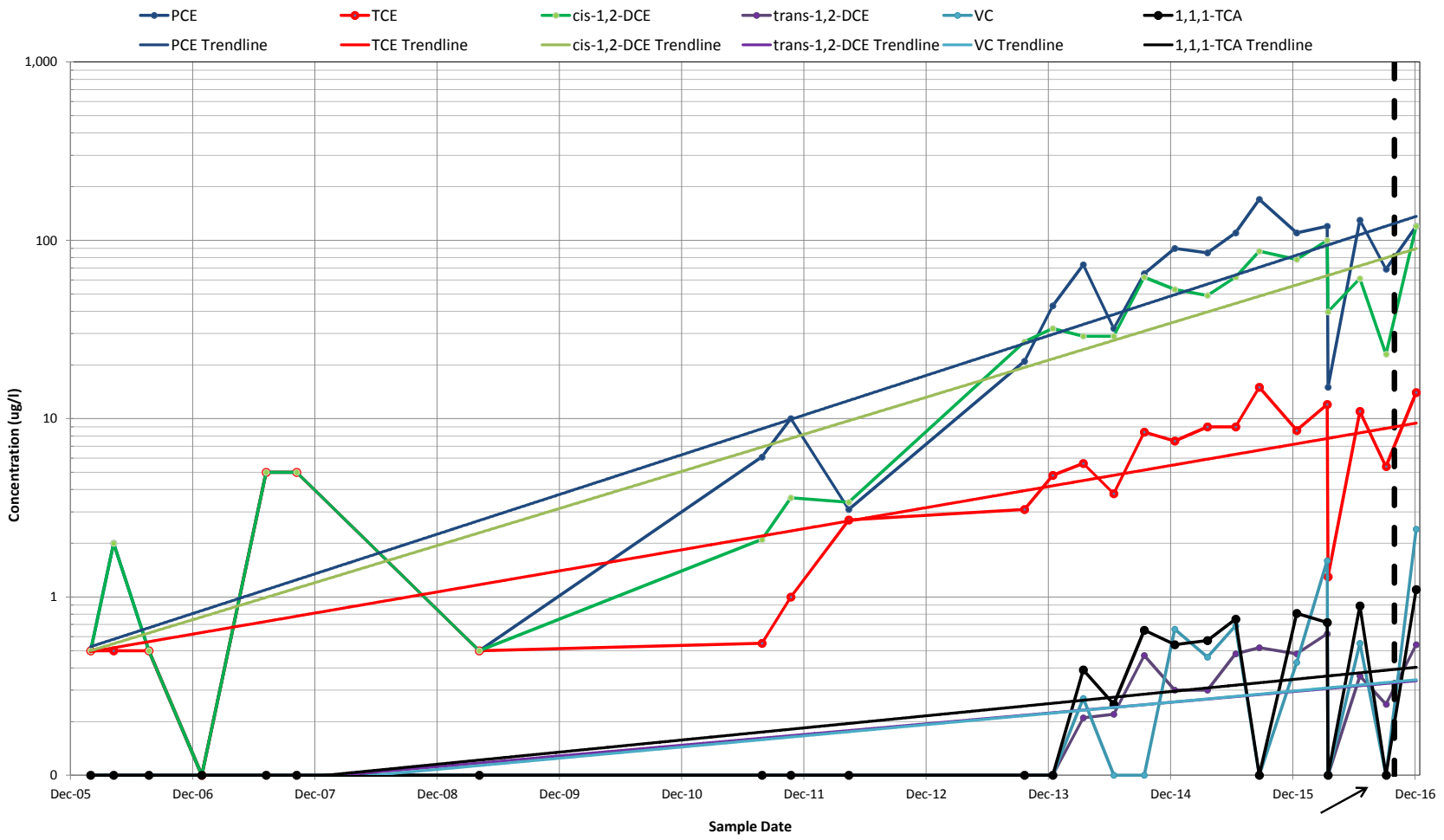
CHLORINATED VOC CONCENTRATIONS
WELL BP-3A
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
21



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

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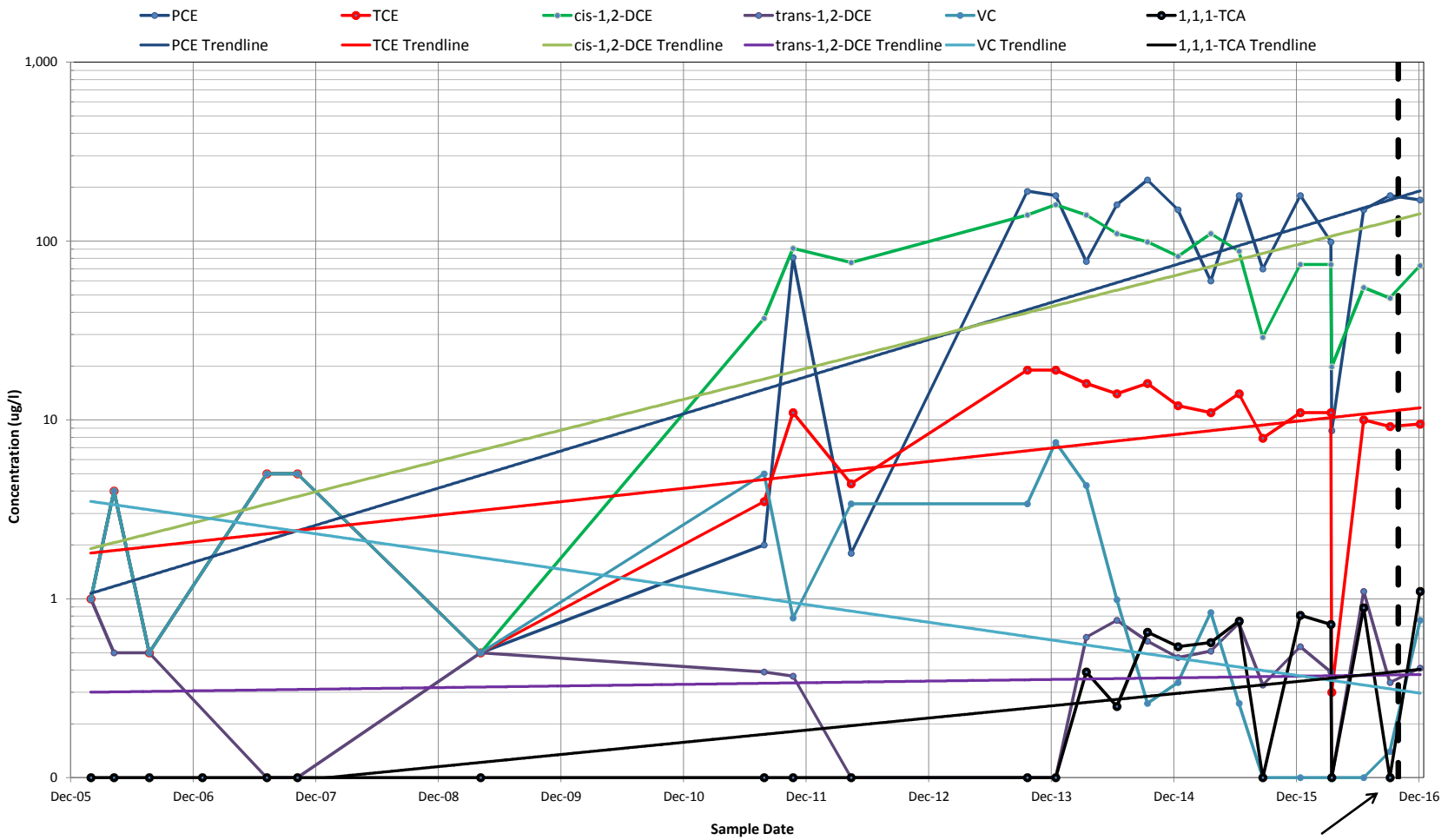
CHLORINATED VOC CONCENTRATIONS
WELL BP-3B
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
22



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

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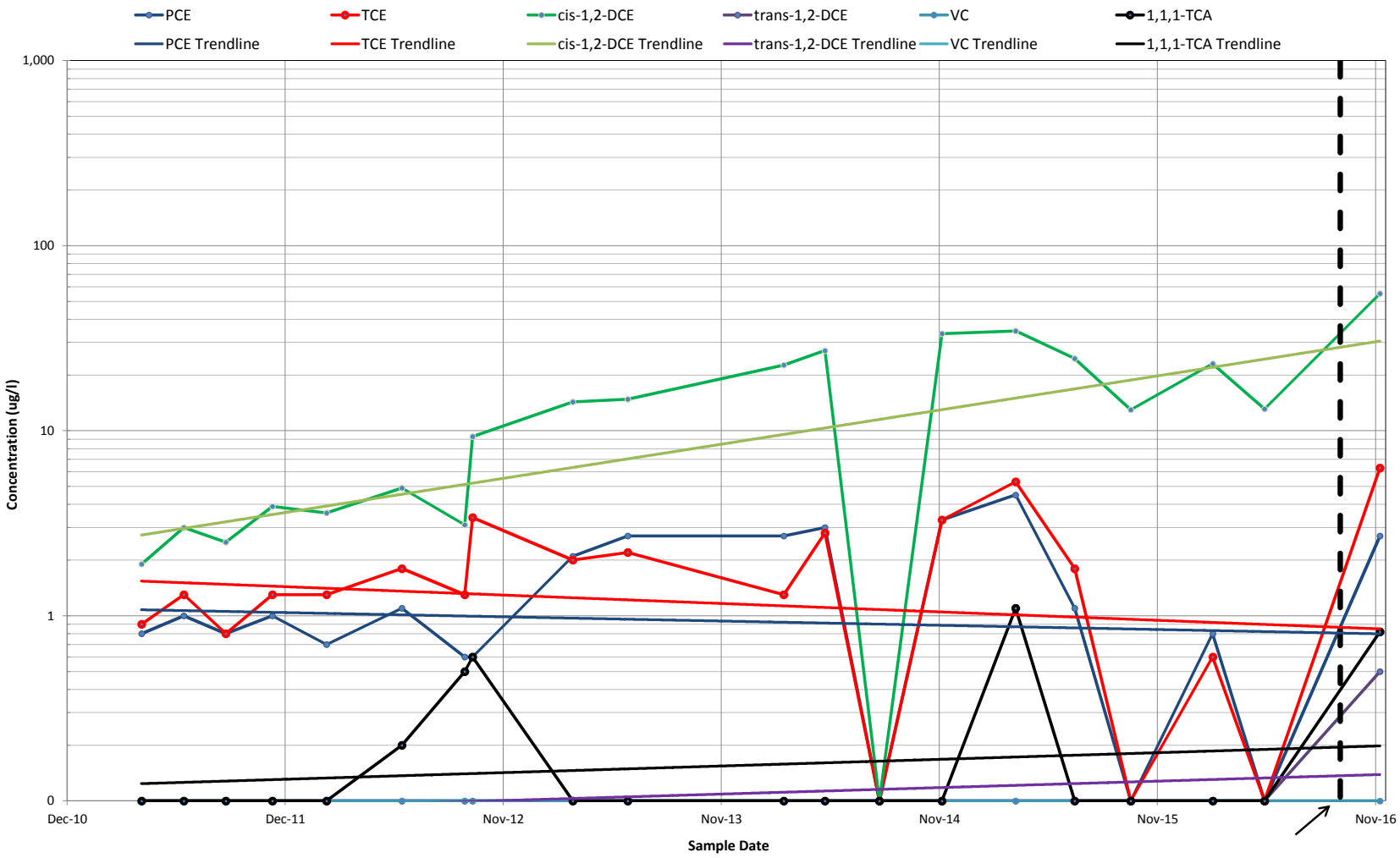
CHLORINATED VOC CONCENTRATIONS
WELL BP-3C
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
23



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

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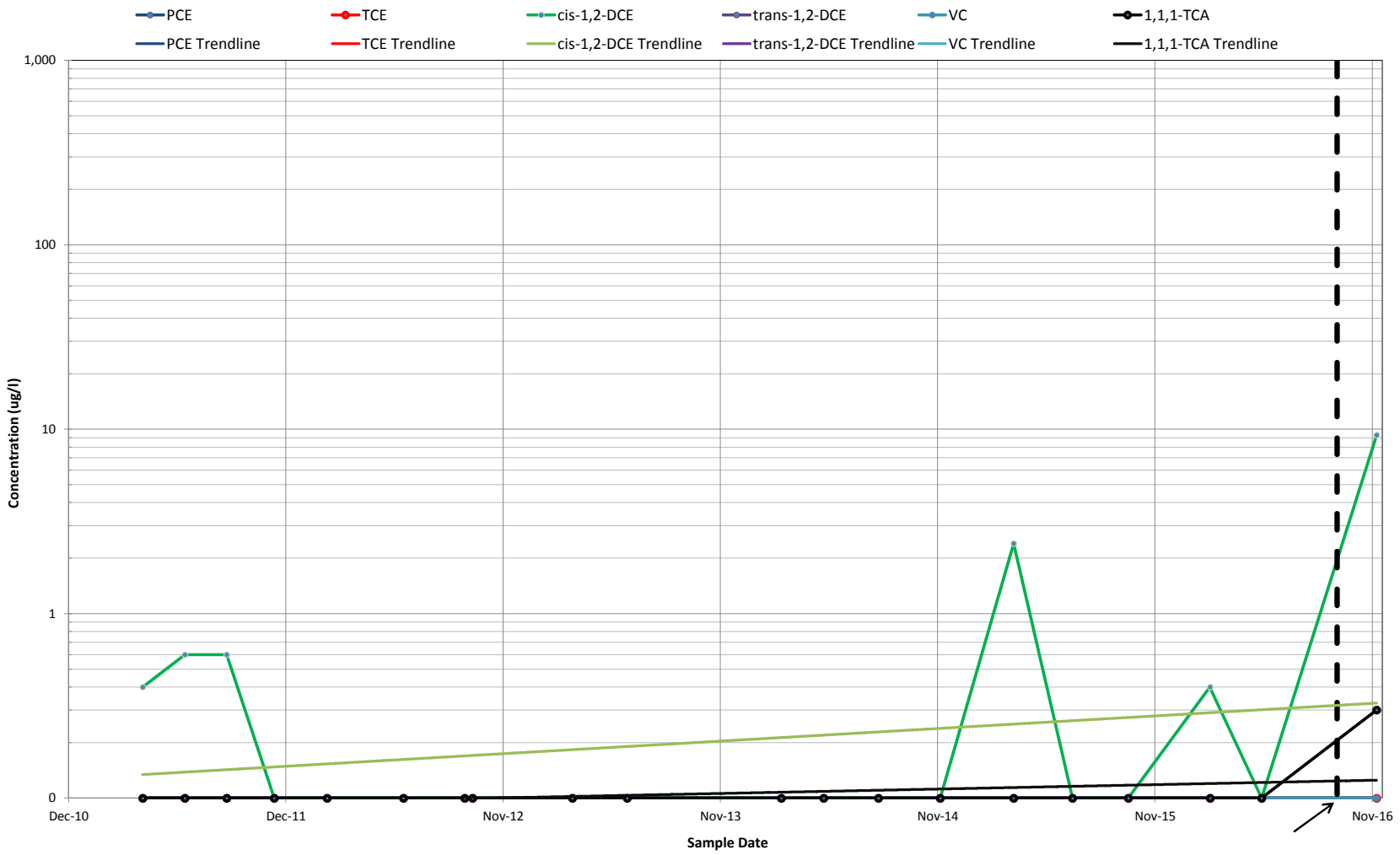
CHLORINATED VOC CONCENTRATIONS
WELL MW-11A
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
24



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

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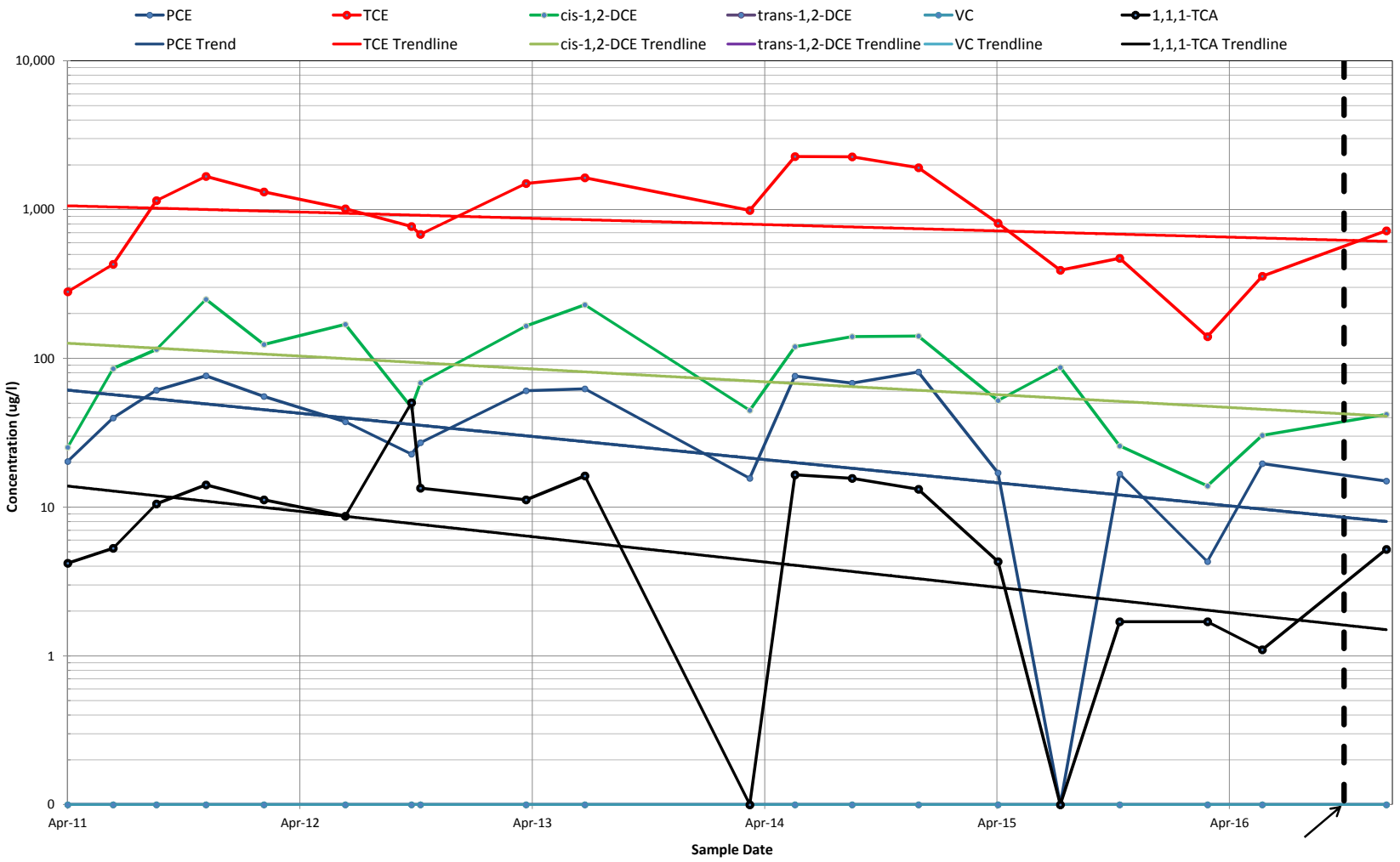
CHLORINATED VOC CONCENTRATIONS
WELL MW-11B
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
25



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.

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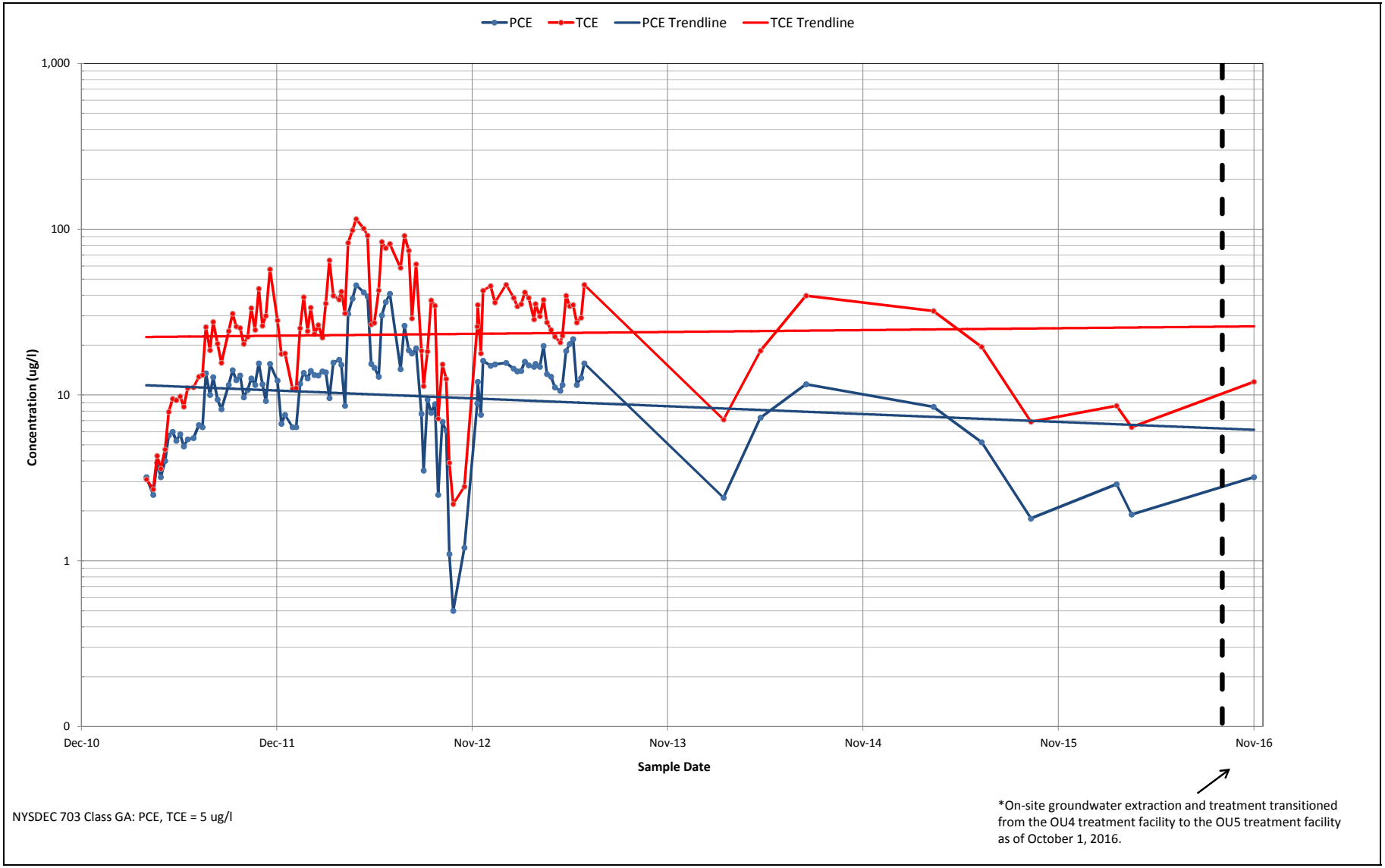
CHLORINATED VOC CONCENTRATIONS
WELL MW-7B-R
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
26



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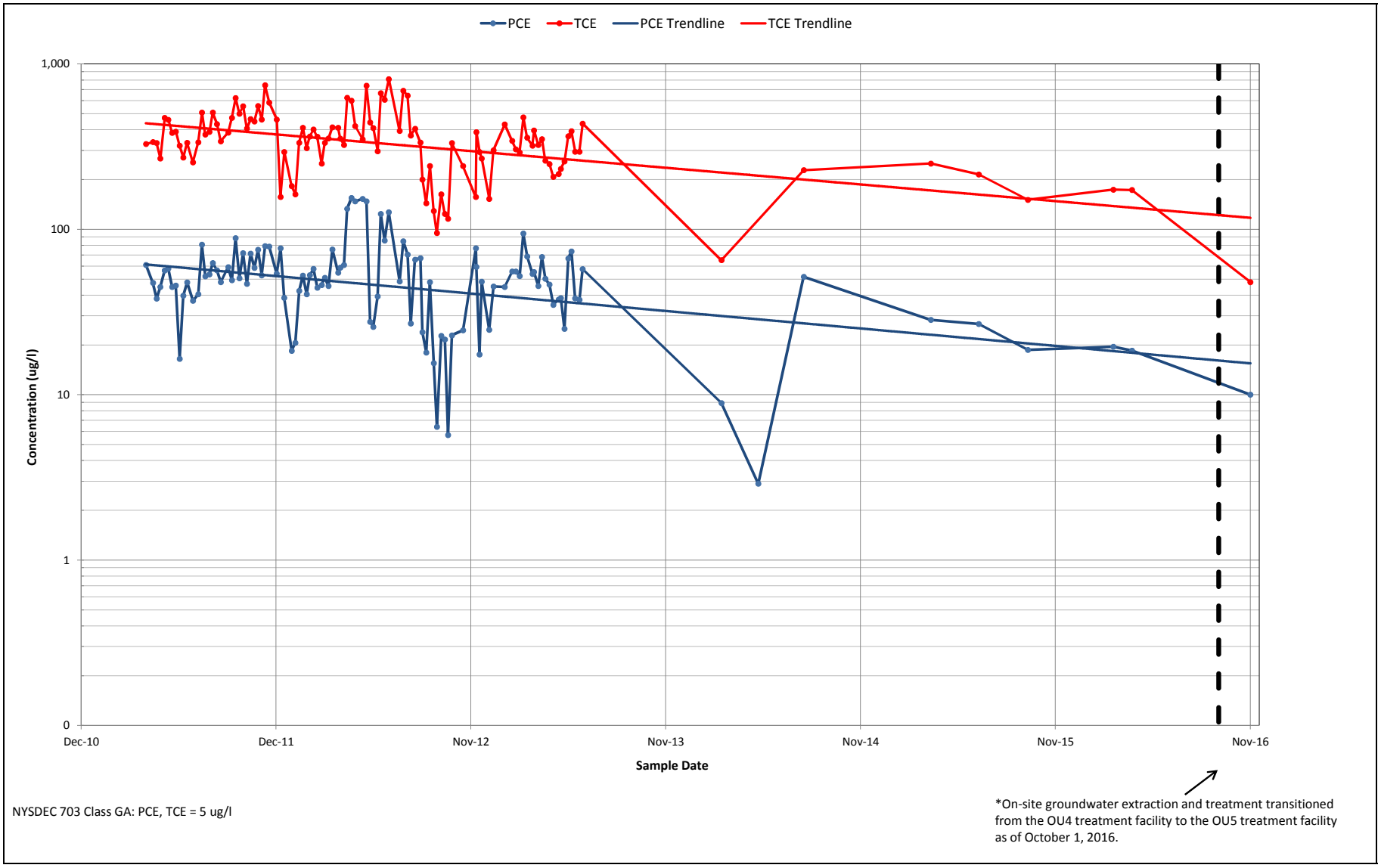
PCE AND TCE CONCENTRATIONS
WELL RW-3
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
27



NYSDEC 703 Class GA: PCE, TCE = 5 ug/l

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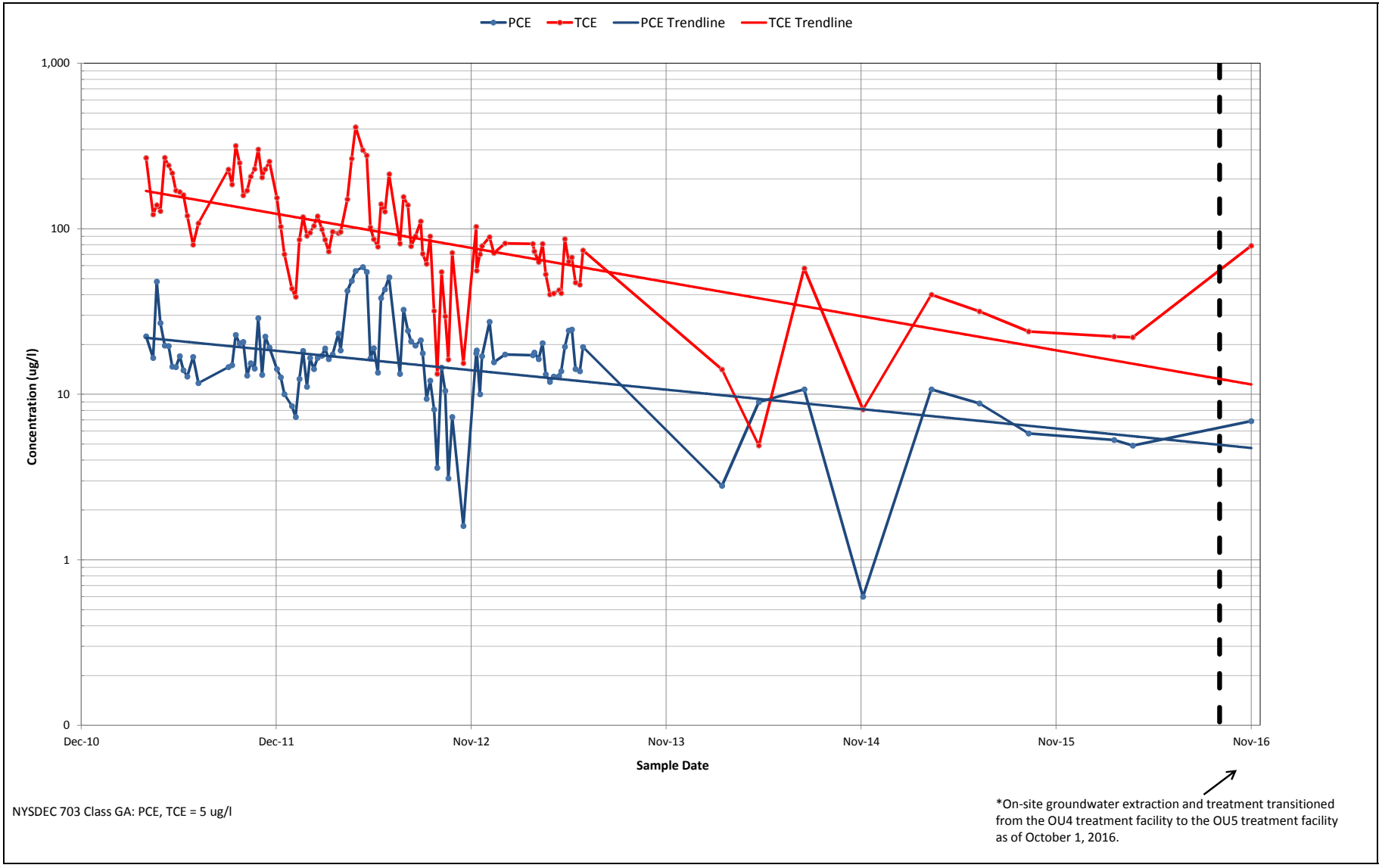
PCE AND TCE CONCENTRATIONS
WELL RW-4
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
28



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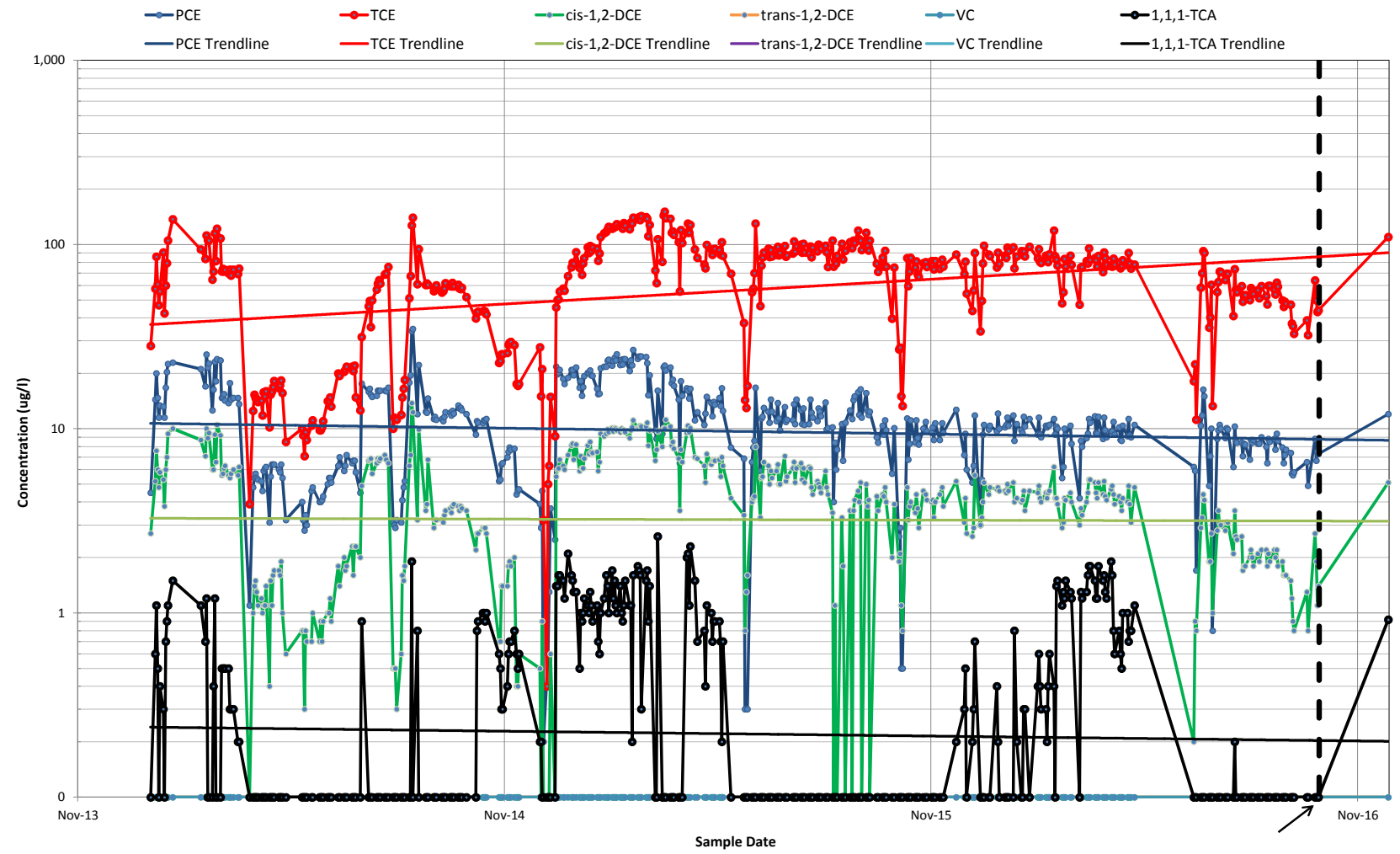
PCE AND TCE CONCENTRATIONS
WELL RW-5
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
29



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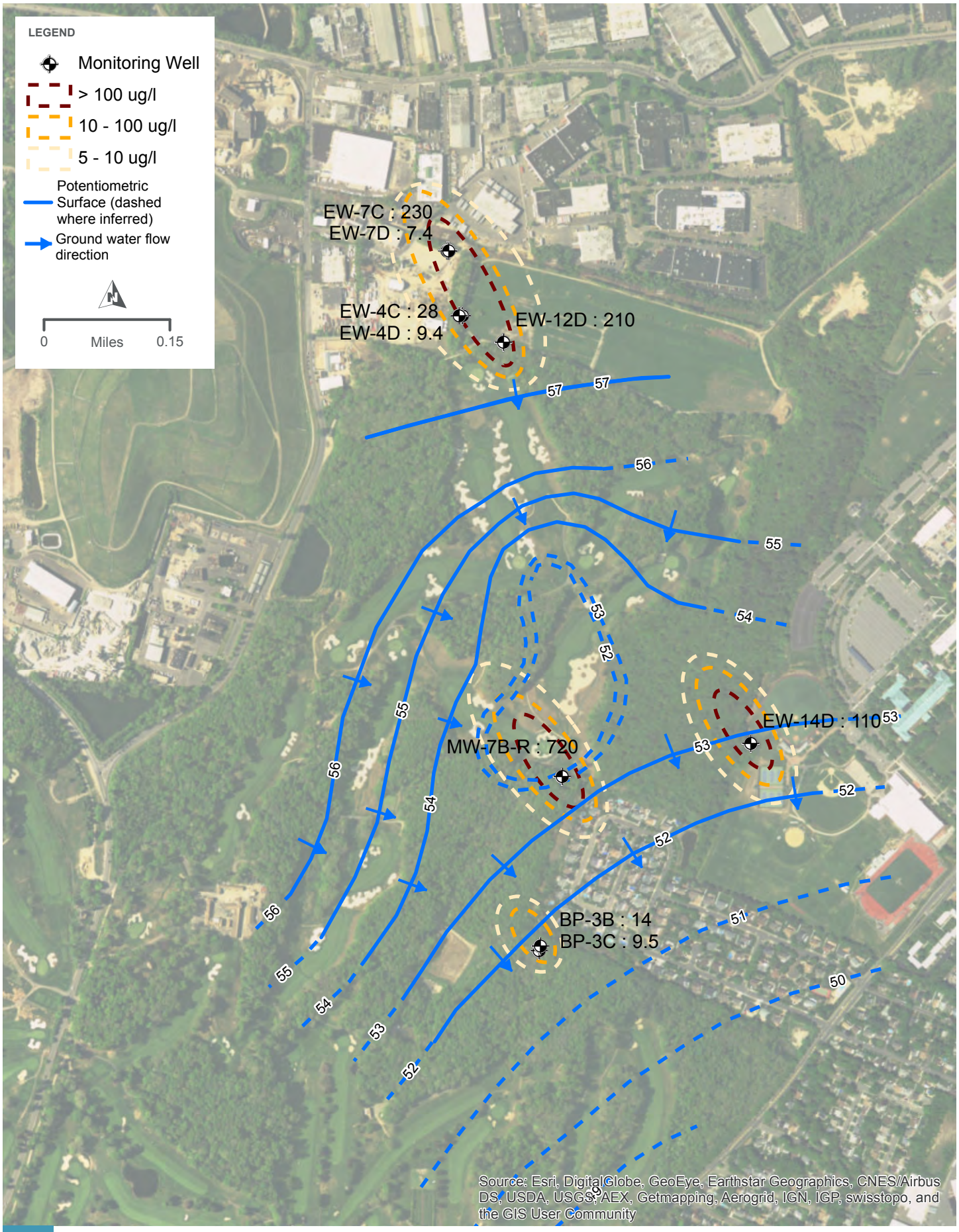
CHLORINATED VOC CONCENTRATIONS
SAMPLE OU5 Influent
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE
JANUARY 2017

FIGURE
30



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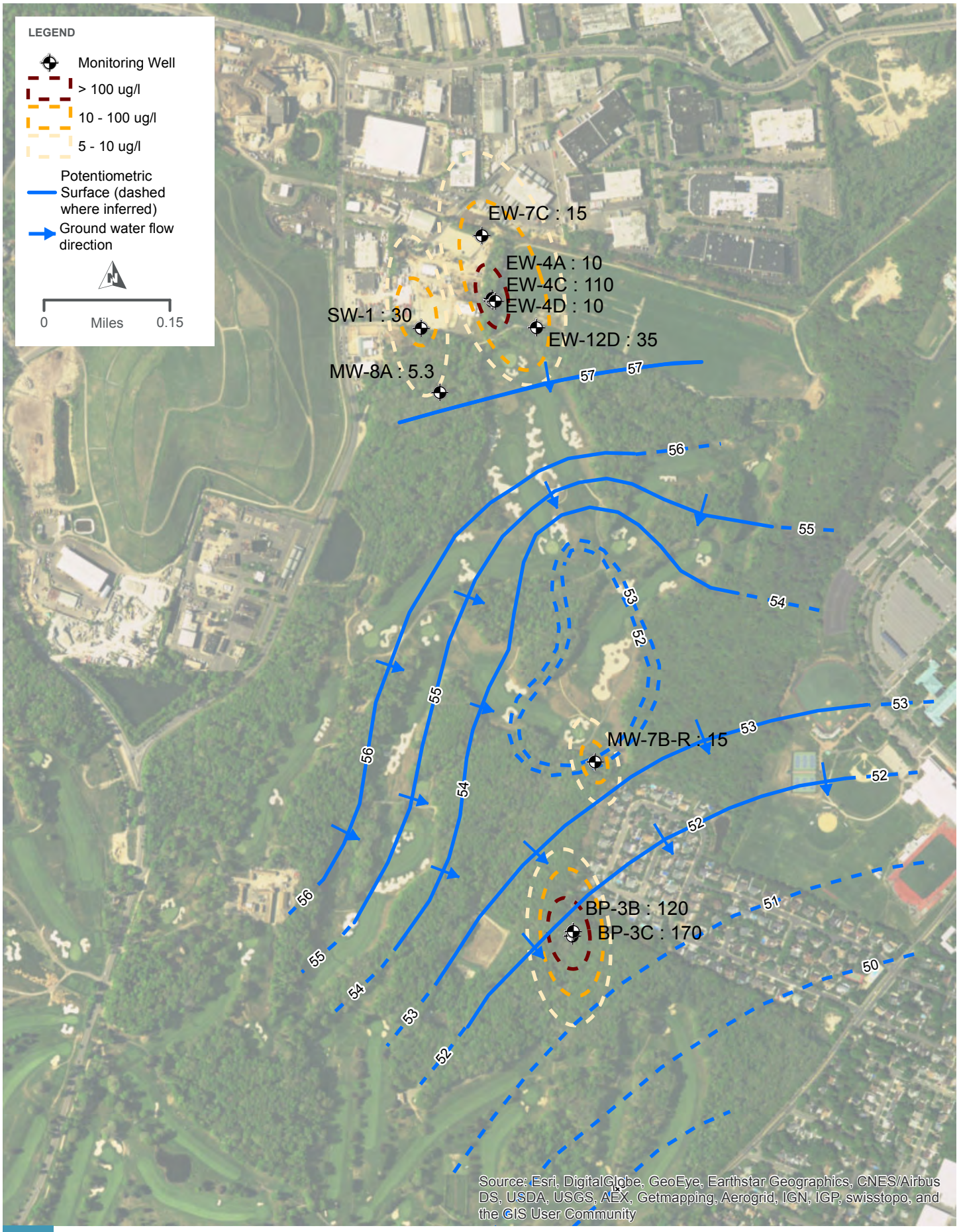
TRICHLOROETHENE (TCE) PLUME

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 32

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\275962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\TCE_PLUME.MXD - USER: HROSADO - DATE: 2/23/2017



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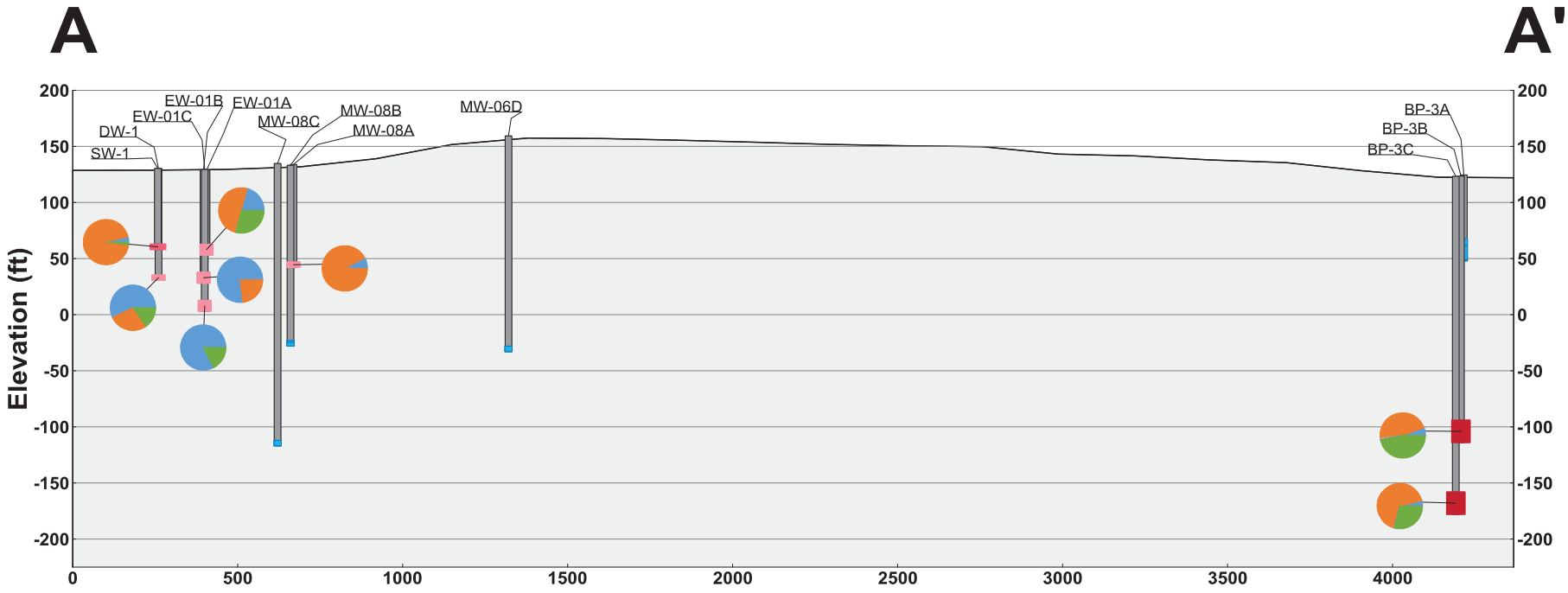
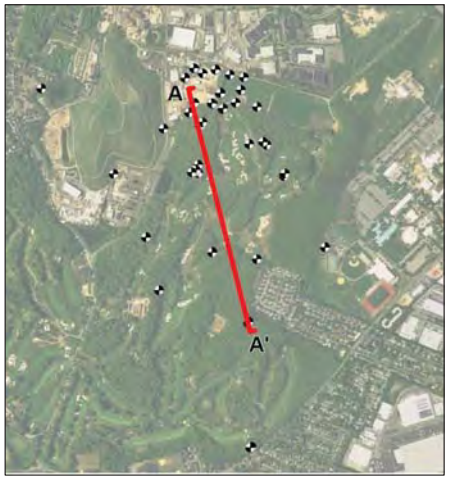
TETRACHLOROETHENE (PCE) PLUME

CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 31

PATH: \\MAHPI-FILE01\ACTIVEPROJECTS\275962\7.0_GIS_MODELS\7.2_WORK_IN_PROGRESS\MAP_DOCS\PCE_PLUME_V2.MXD - USER: HROSADO - DATE: 2/23/2017





Wells

Casing

Sceen Interval

Sum CVOC Above DL (ug/l)

0 - 10

10 - 100

100 - 500

500 - 1000

Tetrachloroethylene (PCE)

Vinyl Chloride

Trichloroethylene (TCE)

1,1-Dichloroethene

Cis-1,2-Dichloroethylene

Trans-1,2-Dichloroethene

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

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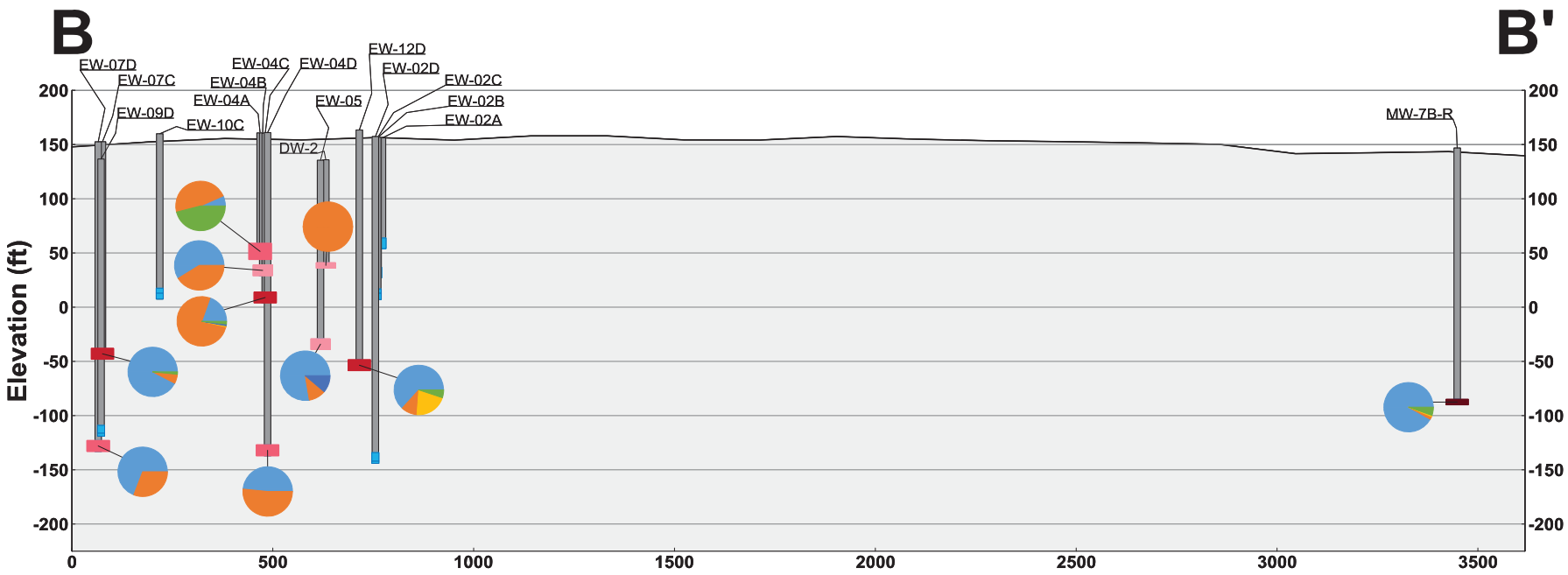
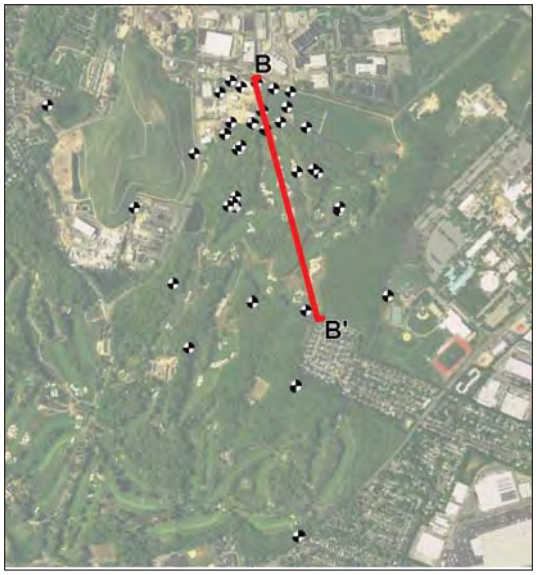
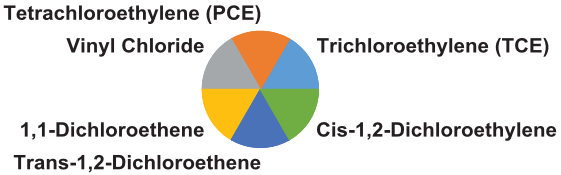
CROSS SECTION TRANSECT A
CLAREMONT POLYCHEMICAL CORPORATION
FIGURE 33





Wells
- Casing
- Screen

Sum CVOC Above DL (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 (no J qualified data).
- 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 B
CLAREMONT POLYCHEMICAL CORPORATION
FIGURE 34

SW-1:65

EW-07C:189

EW-07D:273

EW-04A:100.17

DW-1:93.5

EW-04B:120.17

EW-01A:65.17

EW-04C:145.17

EW-04D:285

EW-01B:90.17

EW-01C:115.17

EW-12D:209.5

MW-08A:85

DW-2:95

EW-05:165.17

MW-10D:346

EW-14D:185

MW-7B-R:230

BP-3B:215

BP-3C:280

MW-11A:140

MW-11B:240

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

Wells

N

0 250 500 ft

Tetrachloroethylene (PCE)

Vinyl Chloride

Trichloroethylene (TCE)

1,1-Dichloroethene

Cis-1,2-Dichloroethylene

Trans-1,2-Dichloroethene

Sum CVOC Above DL (ug/l)

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

Notes:
- Pie Charts shown are for samples with results from the seleted constituents that were above the detection limit (no J qualified data).
- Wells without a Pie Chart did not have reported results above the detection limit for the selected constituents.

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DETECTED CHLORINATED BREAKDOWN PRODUCTS
CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 35

ATTACHMENT A

Full Labratory Delieverable available on Claremont OU4 Sharepoint Site.