



2021 Second Quarter Groundwater Monitoring Report

April - June 2021

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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**Department of
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Attachments (following figures)

Attachment A	Summary of Analytical Results – Second Quarter 2021 Groundwater Samples
Attachment A1	Summary of Emerging Contaminant Results – Second Quarter 2021 Groundwater Samples
Attachment B	Synoptic Water Level Data
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1 Introduction

This quarterly groundwater monitoring report prepared by Henningson, Durham & Richardson Architecture and Engineering, P.C. (HDR) presents groundwater sampling analytical results for the second quarter of 2021 (April through June) 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 was historically part of the on-going site management and long-term monitoring (LTM) activities associated with Work Assignment #28 under contract D007625-28. In February 2020 the quarterly collection of groundwater samples and the preparation of this deliverable were transferred to WA#43 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;
- Analytical results of the six monitoring wells installed in the downgradient investigation for VOCs, and emerging contaminants including per- and polyfluoroylalkyl substances (PFAS) and 1,4-dioxane; 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.

Operable Unit	Description	Remedy
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 groundwater offsite 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	Vacuumping 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. NYSDEC approved Amendment #3 on February 13, 2020, extending the operations and maintenance of the Claremont OU5 facility through February 28, 2022. The monitoring and reporting task including LTM with quarterly collection of groundwater samples was transferred to WA#43 through February 28, 2022. This task includes the field efforts, coordination, oversight, and reporting for eight quarterly sampling events, with the addition of the six downgradient monitoring wells into the sampling network.

In 2018 an investigation downgradient from the Claremont Polychemical Site was performed as part of the NYSDEC Contract D007625, Work Assignment #43. This RI was conducted to further delineate the extent of off-site VOC contamination in the underlying aquifers and to evaluate the potential for contamination to reach downgradient public supply wells. The investigation involved installation of six vertical profile borings (VPBs) with push ahead groundwater sampling up to 450 ft. below ground surface (bgs), and installation and sampling of six permanent monitoring wells. The RI field activities were conducted in two phases from July 2018 through November 2018 for the installation of the first four VPBs south southeast of the CPC Site, and December 2019 through January 2020 for two VPBs to the south southwest.

All groundwater samples were analyzed for Target Compound List (TCL) VOCs by EPA method 8260; 1,4-dioxane by EPA Method 8270 SIM; Perfluorooctane sulfonic acid (PFOS), Perfluorooctanoic acid (PFOA), and 19 other perfluorinated compounds by modified EPA Method 537. Groundwater samples collected during the RI contained elevated concentrations of VOCs and the emerging contaminants PFOS, PFOA, and 1,4-dioxane. Refer to the Final Remedial Investigation Report Claremont Polychemical RI/FS Offsite Groundwater Plume (March 2019) for additional details. The six monitoring wells associated with the RI were added to the Claremont OU5 well program in March 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 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 "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). Historically, groundwater contour maps produced from wells screened in both the upper glacial aquifer and the deeper Magothy aquifer depict a south-southeast flow direction across the site. The recent CPC contour maps are generally consistent with previous maps produced from the CPC monitoring well network and from investigations by others. The current hydrogeologic conditions and groundwater contour mapping (Figures 3, 4 and 5) are discussed in Section 4.1

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 from each other 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 bgs)	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
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 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 Recharge 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.

On December 31, 2019 RW-4 tripped offline and diagnostic efforts confirmed the motor and pump needed replacement. The pump and motor for RW-4 were replaced April 7, 2020 and RW-4 was again fully functional. During the 2020 reporting year there were no upgrades or significant maintenance items at the facility, following the RW-4 pump replacement.

Refer to the Monthly O&M reports for April through June 2021 for details on the status of GWE&T system upgrades, issues encountered, and impacts on system operations and performance. Average daily system flow rates during the second quarter of 2021 were 720 gpm in April, 718 gpm in May, and 690 gpm in June.

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 facility was operated without downtime for the months of April, May, and June.

GWE&T System - Path of Remediation

Groundwater is pumped from three extraction wells; designated RW-3, RW-4, and RW-5, that were 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 an exhaust 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 adjust the system operations as needed.

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. Daily flow readings are provided in the O&M reports submitted monthly to NYSDEC (refer to the June 2021 O&M report for the most recent data). A summary of the flow in each recovery well is included in the table below.

Table 3 – Recovery Well Monthly Flow Summary for this Quarter

Location	April Total Flow (gallons)	May Total Flow (gallons)	June Total Flow (gallons)
RW-1*	211	3,854	0
RW-2*	4,110	1,220	17,308
RW-3	10,023,000	10,251,000	8,577,000
RW-4	12,362,000	12,810,000	12,403,000
RW-5	9,453,000	9,658,000	9,419,000
Total Influent	31,114,000	32,062,000	29,794,000
Total Effluent	31,107,000	32,045,107	29,787,743
*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 second quarter of 2021, the system processed approximately 92.9 million gallons with the following average daily flow rates:

Table 4 – Average Daily Flow by Month for this Quarter Summary

Month (2021)	Average Daily Flow (gallons per day)
April	1,061,411
May	1,055,615
June	1,013,887
Quarterly Average	1,043,769

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 947 kg cumulatively (combined mass of TCE, PCE and 1,1-DCE) from 2002 until 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 485.5 kilograms (1,070 pounds) of TCE, 60 kilograms (132 pounds) of PCE, and 9.7 kilograms (21 pounds) of 1,1-DCE have been removed by the OU-5 system as of this quarter's process sampling event performed May 2021.

The previous OU-5 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 5 – VOC Mass Removed per Quarter for 2019, 2020, and 2021 (kg)

Year	Quarter	OU-4 GWE&T	OU-5 GWE&T
Pre 2019	-	947 *	215.35
2019	Q1	Offline	38.75
	Q2	Offline	32.54
	Q3	Offline	36.95
	Q4	Offline	49.64
2020	Q1	Offline	8.35
	Q2	Offline	31.72
	Q3	Offline	37.09
	Q4	Offline	36.25
2021	Q1	Offline	34.11
	Q2	Offline	35.51
Cumulative Total		947 *	555.26 **

*Cumulative totals presented for OU-4 are from 2002 through 2016.

**Cumulative totals presented for OU-5 are from October 1st, 2016 to present and include TCE, PCE, and 1,1-DCE.

3.2.3 Groundwater Extraction and Treatment System Discharge Monitoring

System effluent samples are collected and analyzed quarterly for: VOCs, base neutral acid (BNA) semi-volatile list, metals, total dissolved solids (TDS), total Kjeldahl 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 second quarter of 2021. In addition, the effluent concentration of iron and manganese (not detected) were both under the permissible levels of 600 µg/L in the second quarter of 2021 when sampled in May. All other constituents monitored for discharge requirements

met their respective discharge limitations as indicated in the monthly O&M reports relevant to this quarter.

System effluent pH remained within the required limitations (6.5 to 8.5 su) for this quarter with the following average monthly readings:

Table 6 – Average Monthly Discharge pH

	April	May	June
Average Effluent pH (su)	7.28	7.53	7.44

Refer to the Monthly O&M reports for additional information on remediation system performance and daily operations.

3.3 Plant Process Water Emerging Contaminant Sampling

At the request of NYSDEC, HDR collected samples from the plant's influent, effluent, and the active recovery wells (RW-3, RW-4, and RW-5) December 15, 2020. Samples were submitted to Eurofins TestAmerica, of Edison, New Jersey, an NYSDOH ELAP-approved laboratory (#12028), for analysis of PFAS compounds by modified EPA Method 537 and 1,4-dioxane by method 8270 SIM.

Samples were collected from sample ports off the pump discharges at each recovery well and the plant's influent and effluent conveyance, after flushing the port and valve with several gallons of water. Process water was collected directly into the laboratory supplied glassware.

Five samples were collected from the plant's influent, effluent, and active recovery wells. Recovery well locations are shown on Figure 2.

1,4-dioxane was detected in all five samples and at concentrations exceeding the standard of 1 µg/L. Figure 38 depicts 1,4-dioxane results exceeding comparison criteria.

PFOS was detected at concentrations exceeding its criteria in four of the five samples except in the sample from RW-4 which was detected below the criteria. PFOA was detected in all five samples. Numerous other PFAS compounds were detected but did not exceed their individual criteria. The sum of PFAS compounds did not exceed criteria. Figure 39 depicts the PFOS and PFOA results exceeding comparison criteria.

Detected concentrations for compounds that exceeded their respective evaluation criteria or standards are shown in the summary table below. The sum of PFOA and PFOS as well as the total PFAS are provided for informational purposes. Full results for the emerging contaminant sampling of plant process water are presented in Attachment A2 of the 2020 Fourth Quarter Groundwater Monitoring Report.

Table 7 – Process Water EC Exceedances

EC Exceedances	1,4-D	PFOS	PFOA	PFOA+PFOS	Total PFAS
Criteria:	1 ^(a)	10 ^(b)	10 ^(b)	70 ^(c)	500 ^(b)
Reporting Unit:	(µg/L)	(ng/L)			
Influent	4	11.7	31.3	43	137.98

EC Exceedances	1,4-D	PFOS	PFOA	PFOA+PFOS	Total PFAS
Criteria:	1 ^(a)	10 ^(b)	10 ^(b)	70 ^(c)	500 ^(b)
Reporting Unit:	(µg/L)	(ng/L)			
Effluent (PD-009)	<u>13</u>	<u>11.3</u>	<u>30</u>	41.3	135.12
RW-3	<u>17</u>	<u>14.4</u>	<u>36.5</u>	50.9	161.22
RW-4	<u>12</u>	8.13	<u>27</u>	35.13	112.75
RW-5	<u>6.9</u>	<u>12.2</u>	<u>25.5</u>	37.7	126.91

Bold and underlined results indicate exceedance of the criteria indicated as follows:

- (a) For 1,4-dioxane: New York State Department of Health Drinking Water Program Part 5, Subpart 5-1, Section 5-1.52 Maximum Contaminant Level (MCL) for 1,4-dioxane adopted on August 26th, 2020.
- (b) For PFAS compounds: *NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remediation Programs* (October 2020).
- (c) For PFOA + PFOS: *USEPA Fact Sheet PFOA & PFOS Drinking Water Health Advisories*, November 2016.

Abbreviations: 1,4-D – 1,4-Dioxane; PFOS – Perfluorooctanesulfonic acid; PFOA – Perfluorooctanoic acid; PFOA+PFOS – sum of PFOA and PFOS; Total PFAS – sum of all detected Per- and polyfluoroalkyl substances (a total of 21 substances, not all of which are listed above); ND – not detected; J – estimated value.

4 Groundwater Monitoring Program

A network of 55 monitoring wells is used to monitor groundwater quality and effectiveness of the GWE&T system (Figure 2). The groundwater monitoring program includes wells on the CPC property (OU-4) and off the CPC property (OU-5).

OU-4 monitoring wells included in the network are:

- DW-1, DW-2, EW-5, SW-1 and WT-01.

OU-5 monitoring wells included in the network are:

- 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-7C, EW-7D, EW-11D, EW-12D, EW-14D, LF-1, M-30B-R, MW-5B, MW-6A, 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 from the western extent of the study area were added to the program. These wells are:

- BP-5B, BP-5C, BP-12B, BP-12C, BP-13B, and BP-13C.

In February 2020 under WA#43 an additional six downgradient monitoring wells were added to the quarterly monitoring.

- MW-CPC-36, MW-CPC-37, MW-CPC-38, MW-CPC-39, MW-CPC-40, and MW-CPC-41.

A description of the groundwater sampling event and results is provided below.

4.1 Hydrological Data

HDR and Nassau County perform a synoptic round of water level measurements each quarter. The network of approximately 120 gauged wells includes wells that are not in the quarterly sampling program. Measurements from 67 wells collected by HDR are combined with data provided by Nassau County. Measurements collected by HDR are provided in Attachment B. The synoptic groundwater level measurement for this quarter was performed on June 3, 2021.

The average water table elevation across the OU-5 site for this quarter's synoptic measurement event was 61.73 feet (vertical datum NAVD88) as measured by HDR. Depths to groundwater (DTW) in June 2021 ranged from 18.88 feet (well MW-CPC-41) to 100.86 feet (well EW-11D) below ground surface (bgs) (see Attachment B). Potentiometric surface elevations at each well were calculated for each well by subtracting the DTW from the top of casing elevation. HDR plotted the water level elevations, grouping wells by the aquifer unit they are screened in, to develop and interpret potentiometric contours of the in the upper (water table), middle, and lower Magothy aquifers.

Groundwater flow direction is predominantly 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 pumping influence is expressed in the upper Magothy as well. In the vicinity of BP-13, MW-CPC-40, and MW-CPC-41 within the lower Magothy aquifer there is a south-southwest component to groundwater flow. Horizontal gradients increase in this in the area ranging from 0.003-0.004 feet/foot. Overall, groundwater elevations and the inferred groundwater flow directions are consistent with previous quarterly observations.

4.2 Groundwater Sample Collection

The monitoring well groundwater samples were collected for this quarter between June 14th and 17th, 2021. HDR sampled 48 of the 49 CPC monitoring network wells. No sample was collected at MW-6A due to insufficient water to collect a sample.

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.

Groundwater samples from the downgradient MW-CPC series wells (MW-CPC-##) were collected using the low-flow sampling method "USEPA Low Stress (Low Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from monitoring Wells" dated January 19, 2010. The intake of the Geo-Tech PFC free portable bladder pump was installed at the mid-point of the screened zone or biased to a depth where a higher VOC concentration was observed during the VPB sampling. Monitoring wells were purged until low-flow parameters (turbidity, dissolved oxygen, specific conductivity, temperature, pH, and oxidation/reduction potential) stabilized in accordance with EPA's

low-flow method protocols. Low-flow sampling logs, chains of custody (COC), and PFC daily checklists are provided in Attachment D.

A list of sampled wells and analytical results are presented in Table 8 and Attachments A and A1 at the end of this report.

Sixty-one samples (including four field duplicates and three trip blanks) were collected and submitted to Eurofins TestAmerica, of Edison, New Jersey, an NYSDOH ELAP-approved laboratory (#12028), to be analyzed for VOCs via EPA Method 8260. Seven samples (including one field duplicate) were collected from the MW-CPC wells and analyzed for PFAS by modified EPA Method 537 and 1,4-dioxane by method 8270 SIM.

4.3 Groundwater Analytical Results

4.3.1 Groundwater VOC Analytical Results

Second quarter 2021 groundwater sampling event VOC exceedances are summarized in Table 8 and are plotted in trend charts provided as Figures 7 through 28; treatment system effluent and influent water sampling results are shown in trend charts on Figures 6 and 29, respectively. The six downgradient MW-CPC monitoring well VOC exceedances are summarized on Figure 37. Water classification GA standards and guidance values obtained from Table 1 of NYSDEC's *Division of Water Technical, and Operational Guidance Series (TOGS) (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* dated June 1998 and subsequent addenda were used to evaluate VOC results. TOGS 1.1.1 incorporates 6 NYCRR Part 703.5 Class GA groundwater criteria and supplements with additional guidance values.

In addition to the results below, acetone was detected in 8 field samples (including field duplicates) collected from PDBs. Acetone was not detected in the MW-CPC series wells. Detected concentrations of acetone did not exceed the NYSDEC TOGS 1.1.1. guidance value of 50 µg/L in any groundwater sample. Although acetone is a common laboratory contaminant, its continued detection in the quarterly samples indicates that it may be present in the groundwater rather than a laboratory contaminant.

Table 8 – Monitoring Well VOC Exceedances (in µg/L)

	PCE	TCE	cis-1,2-DCE	VC	1,2-DCA	1,1-DCA	1,4-DCB	Benzene	Chloro-benzene
Criteria:	5	5	5	2	0.6	5	3	1	5
BP-3B	<u>23</u>	2.7	<u>18</u>	< 1.0 U	< 1.0 U	4.0	< 1.0 U	< 1.0 U	< 1.0 U
BP-3C	<u>62/ 59</u>	4.6/ 4.4	<u>24/ 23</u>	1.1	< 1.0 U	4.2/ 4.2	< 1.0 U	0.57 J/ 0.56 J	< 1.0 U
DW-1	<u>6.4</u>	0.97 J	<u>20</u>	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-04A	<u>44</u>	<u>8.0</u>	<u>150</u>	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-04B	0.92 J	<u>5.6</u>	0.38 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-04C	4.0	<u>41</u>	0.73 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-07C	<u>17</u>	<u>290</u>	4.0	< 1.0 U	< 1.0 U	0.26 J	< 1.0 U	< 1.0 U	< 1.0 U
EW-11D	<u>23</u>	<u>110</u>	4.9	< 1.0 U	< 1.0 U	0.45 J	< 1.0 U	< 1.0 U	< 1.0 U

EW-12D	<u>19</u>	<u>370</u>	<u>6.4</u>	< 1.0 U	< 1.0 U	0.61 J	< 1.0 U	< 1.0 U	< 1.0 U
EW-14D	0.74 J	<u>28</u>	0.39 J	< 1.0 U	0.48 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-06B	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.31 J	<u>3.3</u>	<u>3.8</u>	<u>12</u>
MW-10D	0.86 J	<u>10</u>	3.2	< 1.0 U	< 1.0 U	0.82 J	< 1.0 U	< 1.0 U	< 1.0 U
MW-11A	4.9	4.1	<u>33</u>	< 1.0 U	< 1.0 U	2.7	< 1.0 U	< 1.0 U	< 1.0 U
MW-11B	1.2	4.3	<u>40</u>	<u>2.1</u>	<u>0.81 J</u>	<u>16</u>	< 1.0 U	0.71 J	< 1.0 U
MW-7B-R	2.1	<u>89</u>	3.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
MW-CPC-36	<u>21</u>	3.7	<u>54</u>	0.61 J	<u>1.8</u>	0.78 J	< 1.0 U	<u>27</u>	< 1.0 U
MW-CPC-37	< 1.0 U	0.32 J	<u>6.4</u>	1.8	< 1.0 U	1.7	< 1.0 U	0.31 J	< 1.0 U
MW-CPC-40	< 1.0 U	1.6	< 1.0 U	< 1.0 U	< 1.0 U	<u>5.8</u>	< 1.0 U	< 1.0 U	< 1.0 U
SW-1	<u>350</u>	<u>22</u>	<u>11</u>	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Result values presented in µg/L. ND – not detected above the reporting limit; J – estimated value. Bold, underlined results are exceedances of the NYSDEC Part 703 Class GA criteria, which is incorporated into the TOGS 1.1.1 (June 1998 and subsequent addenda). See Attachment A for complete analytical results and comparison criteria. Abbreviations: PCE – tetrachloroethylene; TCE – trichloroethylene; cis-1,2-DCE – cis-1,2-dichloroethylene; VC – vinyl chloride, 1,2-DCA – 1,2-dichloroethane, 1,1-DCA – 1,1-dichloroethane; 1,4-DCB – 1,4-dichlorobenzene.

4.3.2 Groundwater Emerging Contaminant Results

In the second quarter of 2021, the six downgradient MW-CPC series monitoring wells (Figure 2) were analyzed for the emerging contaminants 1,4-Dioxane and the PFAS group of contaminants.

The criteria used to evaluate 1,4-dioxane results is the New York State Department of Health Drinking Water Program Maximum Contaminant Level (MCL) of 1 µg/L, which became effective on August 26th, 2020.

Per- and polyfluoroalkyl substances (PFAS) results were evaluated against *NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remediation Programs* dated October 2020. The compounds perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) individually have criteria of 10 ng/L (nanograms per liter) while all other PFAS compounds have the criterion of 100 ng/L. The criteria for total PFAS (including PFOS and PFOA) is 500 ng/L. The sum of PFOS and PFOA were compared to the United States Environmental Protection Agency's *Fact Sheet PFOA & PFOS Drinking Water Health Advisories*, which was published in November 2016, value of 70 parts per trillion (ppt, equivalent to ng/L).

Detected concentrations of compounds exceeding their respective criteria as listed above are shown on Figures 35 and 36, Attachment A1, and summarized in the table below.

Table 9 – Monitoring Well Emerging Contaminant Exceedances

	1,4-D	PFNA	PFOS	PFOA	PFOA+PFOS	Total PFAS
Criteria:	1 ^(a)	100 ^(b)	10 ^(b)	10 ^(b)	70 ^(c)	500 ^(b)
Reporting Unit:	(µg/L)	(ng/L)				
MW-CPC-36	<u>4.8</u>	<u>281</u>	<u>137</u>	<u>122</u>	<u>259</u>	<u>804</u>
MW-CPC-37	<u>13</u>	0.35 J	<u>17.9</u>	<u>46.7</u>	64.6	117.75

	1,4-D	PFNA	PFOS	PFOA	PFOA+PFOS	Total PFAS
Criteria:	1 ^(a)	100 ^(b)	10 ^(b)	10 ^(b)	70 ^(c)	500 ^(b)
Reporting Unit:	(µg/L)	(ng/L)				
MW-CPC-40	<u>9.5</u>	ND	ND	ND	ND	12.43
MW-CPC-41	<u>1.7 / 1.8</u>	62.0 B / 64.2 B	<u>18.3 B / 18.1 B</u>	<u>29.5 / 30</u>	47.8 / 48.1	204.17 / 205.63

No detected concentrations of the compounds presented above exceeded their respective criteria in the sample from MW-CPC-38 and MW-CPC-39. Parent/duplicate results displayed for MW-CPC-41. Bold and underlined results indicate exceedance of the criteria indicated as follows:

- (a) For 1,4-dioxane: New York State Department of Health Drinking Water Program Part 5, Subpart 5-1, Section 5-1.52 Maximum Contaminant Level (MCL) for 1,4-dioxane adopted on August 26th, 2020.
- (b) For PFAS compounds: *NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remediation Programs* (October 2020).
- (c) For PFOA + PFOS: *USEPA Fact Sheet PFOA & PFOS Drinking Water Health Advisories*, November 2016.

Abbreviations: 1,4-D – 1,4-Dioxane; PFNA – Perfluorononanoic acid; PFOS – Perfluorooctanesulfonic acid; PFOA – Perfluorooctanoic acid; PFOA+PFOS – sum of PFOA and PFOS; Total PFAS – sum of all detected Per- and polyfluoroalkyl substances (a total of 21 substances, not all of which are listed above); ND – not detected; J – estimated value.

4.3.3 Evaluation of Plumes

Figures 30 and 31 depict the horizontal plume location with approximated isoconcentration lines for PCE and TCE in plan view. The groundwater contamination distribution was further evaluated by creating sample location pie charts depicting the relative contributions of the chlorinated VOC contaminants PCE, TCE, 1,1-Dichloroethene, trans-1,2-Dichloroethene, cis-1,2-Dichloroethylene, and vinyl chloride to their sum 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) of that year. 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 table elevation. It was subsequently sampled in the second quarter of 2019 and had the highest concentration of PCE (180 µg/L) out of all on-site wells. The PCE concentration in SW-1 has increased overall since 2019 and is 350 µg/L as of the second quarter 2021. See Figure 8 for overall trends.

Off-site plume upgradient of CPC site. This plume contains VOCs from upgradient sources such as Former Aluminum Louvre (FAL). The plume can be detected as far upgradient as the EW-7-series well cluster and stretches 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-4B, EW-4C, EW-7C, EW-11D, EW-12D, EW-14D, MW-7B-R, and MW-10D. MW-7B-R TCE concentrations have been generally trending downward since the OU-4 plant was shut down (Figure 25). A sharp upward trend of TCE concentrations in EW-12D has been observed since the plant shutdown (Figure 18). An upward trend at of TCE at EW-7C is also observed since the 4th quarter in 2019 (Figure 15).

The selected remedy for FAL (OU-1) and off-site (OU-2) outlined in the March 2019 ROD includes enhanced bioremediation, vapor mitigation, and various institutional controls.

Well EW-14D. Groundwater contamination at EW-14D is typically TCE dominant, similar to the off-site, upgradient plume. The PCE concentration is typically below the groundwater quality standard of 5 µg/L (see Figure 19). Well EW-14D has the greatest variability in TCE concentrations. The concentration of TCE increased slightly in the second quarter of 2021 to 28 µg/L, however, is still decreasing overall.

Southern Area. This location is centered on the BP-3 series wells (BP-3A, B, and C) 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 of TCE. These wells downgradient also have exceedances above standard for cis-1,2-DCE.

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, DW-2, EW-4B, EW-4C, EW-4D, EW-5, 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.

4.3.4 Comparison to Historical Groundwater Quality

Figures 7 through 29 illustrate the historical trends for VOC concentrations in multiple wells. The following table summarizes the concentration trends of PCE and TCE in each of the wells.

Table 10 – PCE and TCE Concentration Trends in Select Monitoring Wells

Well	Screen Depth ⁽¹⁾	Location	PCE Trend	TCE Trend	Figure
CPC Plume Wells					
DW-1	93-98	South-southwest of CPC	Increasing	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 decreasing	Figure 9
EW-5	165-175	South-southeast of CPC	Slightly increasing	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	Slightly 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
BP-3A	54-74	South-southeast of CPC	Slightly decreasing	Slightly decreasing	Figure 20
BP-3B	215-235	South-southeast of CPC	Increasing	Increasing	Figure 21
BP-3C	280-300	South-southeast of CPC	Increasing	Slightly 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	Slightly increasing	Figure 24
MW-7B-R	230-235	South-southeast of CPC	Decreasing	Decreasing	Figure 25
Extraction Wells and OU5 Plant Influent					
RW-3	163-255	Extraction well south-southeast of CPC	Decreasing	Decreasing	Figure 26

Well	Screen Depth ⁽¹⁾	Location	PCE Trend	TCE Trend	Figure
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
OU5 Plant Influent	NA	Plant influent	Slightly decreasing	Increasing	Figure 29

(1) Screen depths given in feet below ground surface.

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 second quarter 2021 groundwater monitoring event at the CPC site covered the on-site plume (OU-4), off-site plume (OU-5), and the downgradient area covered by the newly added MW-CPC series monitoring 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). Recent data obtained from OU-4 monitoring well SW-1, 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 (HDR, 2019).
- 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 based on the RSO report finding (HDR, 2019).
- 35.51 kilograms (78 pounds) of PCE, TCE, and 1,1-DCE combined were removed during the first quarter of 2021 via operation of the OU-5 GWE&T system. This removal rate is commensurate with the four quarters of 2019 and four quarters of 2020 (refer to Table 5 for specific quantities).
- The OU-5 GWE&T system influent concentrations of PCE, TCE, and cis-1,2-DCE have increased since the first quarter of 2020 (see Figure 29).

- Contaminant concentrations in effluent groundwater samples collected during the reporting period met discharge limits.
- The results from the second quarter 2021 groundwater sampling event show the following VOC compounds detected above the NYSDEC Part 703 Class GA groundwater criteria: PCE, TCE, cis-1,2-DCE, VC, 1,1-DCA, 1,2-DCA, 1,4, DCB, chlorobenzene and benzene.
- BP-3C: The current OU-5 recovery well network is not capable of capturing groundwater contamination around the BP-3 series of wells as indicated by the continued fluctuation of PCE concentrations. It is possible that contaminant mass is migrating beneath the limited influence of the combined capture zones of RW-3, RW-4, and RW-5 in the deeper aquifer aided by the vertical anisotropy created by the presence of clay beds within the formation.
- EW-12D: TCE and PCE concentrations have fluctuated significantly since 2018 and showed an upward trend throughout 2020 and into the first quarter of 2021 (see Figure 18).
- TCE concentrations at MW-7B-R have continued to show a decline since treatment was transferred from the OU-4 facility to the OU-5 facility. The TCE concentration in the first quarter of 2021 was almost one order of magnitude lower than its post OU-4 shutdown peak (see Figure 25). This reduction is likely due to the OU-5 recovery wells intercepting the contaminant mass, given the well's position downgradient of the OU-5 recovery wells.
- The direction of groundwater flow at the site remains predominately south-southeast with no regionally significant changes observed in flow direction during operation of the OU-4 GWE&T system or since operation ceased.
- The results from the second quarter 2021 groundwater sampling event show 1,4-Dioxane was detected above the NYSDOH Maximum Contaminant Level of 1 µg/L at four of the downgradient MW-CPC series monitoring wells: MW-CPC-36, MW-CPC-37, MW-CPC-40, and MW-CPC-41. The highest result values were found in MW-CPC-36 and MW-CPC-37 which are upgradient from a public water supply well N-07852.
- PFNA, PFOS, and PFOA continue to be the dominant PFAS compounds detected at the MW-CPC series of wells. Exceedances are limited to MW-CPC-36, MW-CPC-37, and MW-CPC-41, which are located approximately upgradient to side gradient of the public water supply wells. Total PFAS results remain highest in MW-CPC-36.

5.2 Recommendations

- Recondition recovery wells RW-3, RW-4, and RW-5 to improve performance and well efficiency which may improve contaminant mass removal.
- 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 as deemed

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.
- The GWE&T system should be upgraded or replaced in order to treat 1,4-dioxane and PFAS compounds found to be present above New York State's applicable standards.

6 References

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- NYSDEC, "Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Programs" October, 2020. https://www.dec.ny.gov/docs/remediation_hudson_pdf/pfassampanaly.pdf
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- NYSDOH, New York Department of Health Drinking Water Program Part 5, Subpart 5-1, Section 5-1.52 Table 3 Maximum Contaminant Levels. August 26, 2020.
- US Army Corps of Engineers. "Claremont Polychemical Superfund Site Long-term Groundwater Monitoring Old Bethpage, New York." 2001.
- US Environmental Protection Agency, Region 2. "Explanation of Significant Differences Claremont Polychemical Corporation Superfund Site, Town of Oyster Bay, Nassau County, New York." New York, NY, 2001.



US Environmental Protection Agency, Region 2. "Explanation of Significant Differences Claremont Polychemical Corporation Superfund Site, Town of Oyster Bay, Nassau County, New York." New York, NY, 2003.

US Environmental Protection Agency. "Second Five-Year Review Report for the Claremont Polychemical Corporation Superfund Site." New York, NY, 2014.

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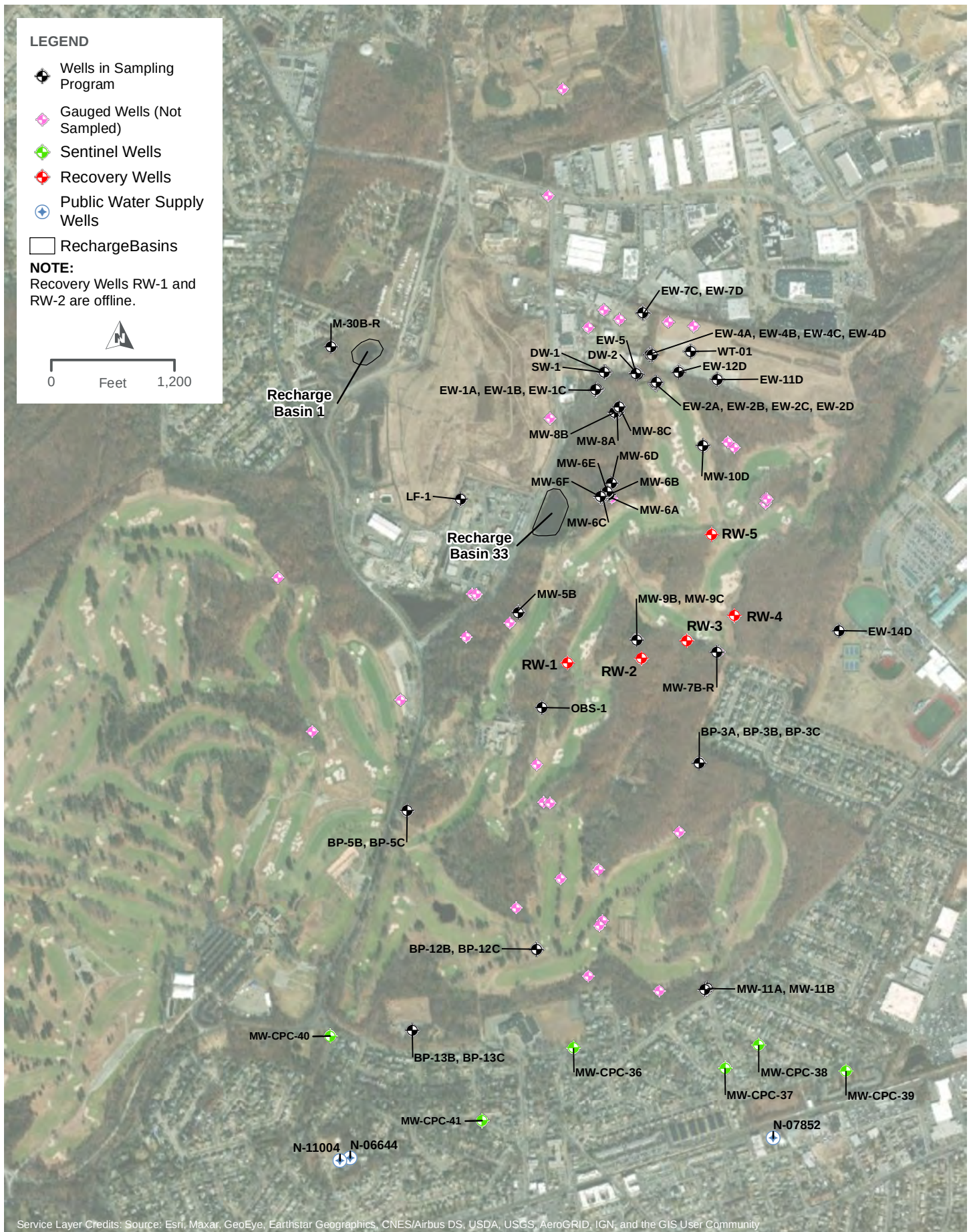


FIGURE 1

LEGEND

-  Wells in Sampling Program
-  Gauged Wells (Not Sampled)
-  Sentinel Wells
-  Recovery Wells
-  Public Water Supply Wells
-  Recharge Basins

NOTE:
Recovery Wells RW-1 and RW-2 are offline.



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



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WELLS SAMPLED CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 2

LEGEND

Recovery Wells

Claremont Monitoring Wells

Nassau County DPW Monitoring Wells

Recharge Basin (Treatment System Discharge)

Potentiometric Surface Contour

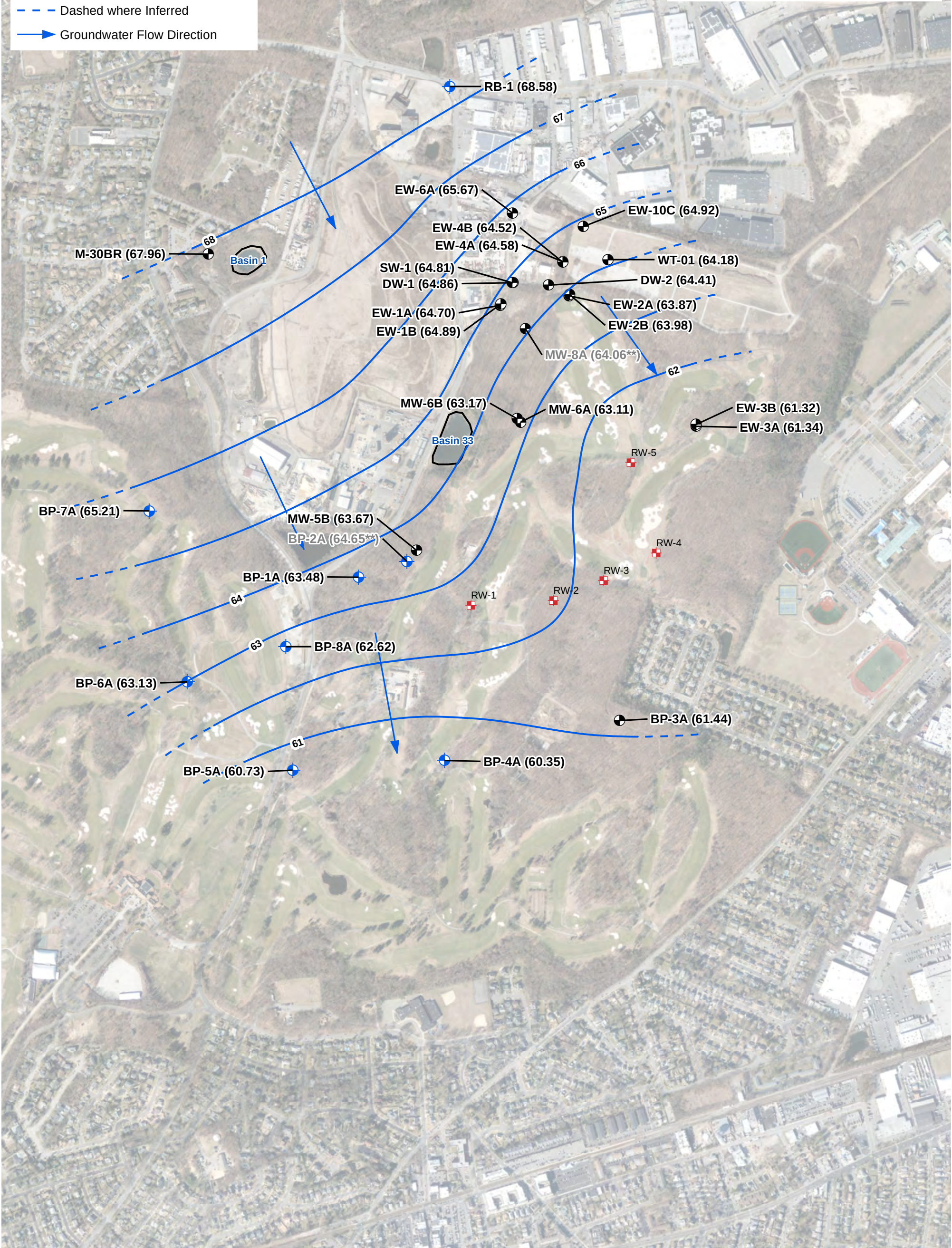
Dashed where Inferred

Groundwater Flow Direction

Depth to groundwater measurements completed 6/3/2021.
All elevations given in ft (NAVD 88).
ND - No data. Unable to obtain measurement.
** - Monitoring well was not used in contouring
Claremont Monitoring Wells - Measurements collected by HDR.
Nassau County DPW Wells - Measurements collected and provided to HDR by Nassau County.

Well ID (Groundwater Elevation)

0800
Feet



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

LEGEND

Recovery Wells

Claremont Monitoring Wells

Nassau County DPW Monitoring Wells

Recharge Basin (Treatment System Discharge)

Potentiometric Surface Contour

Dashed where Inferred

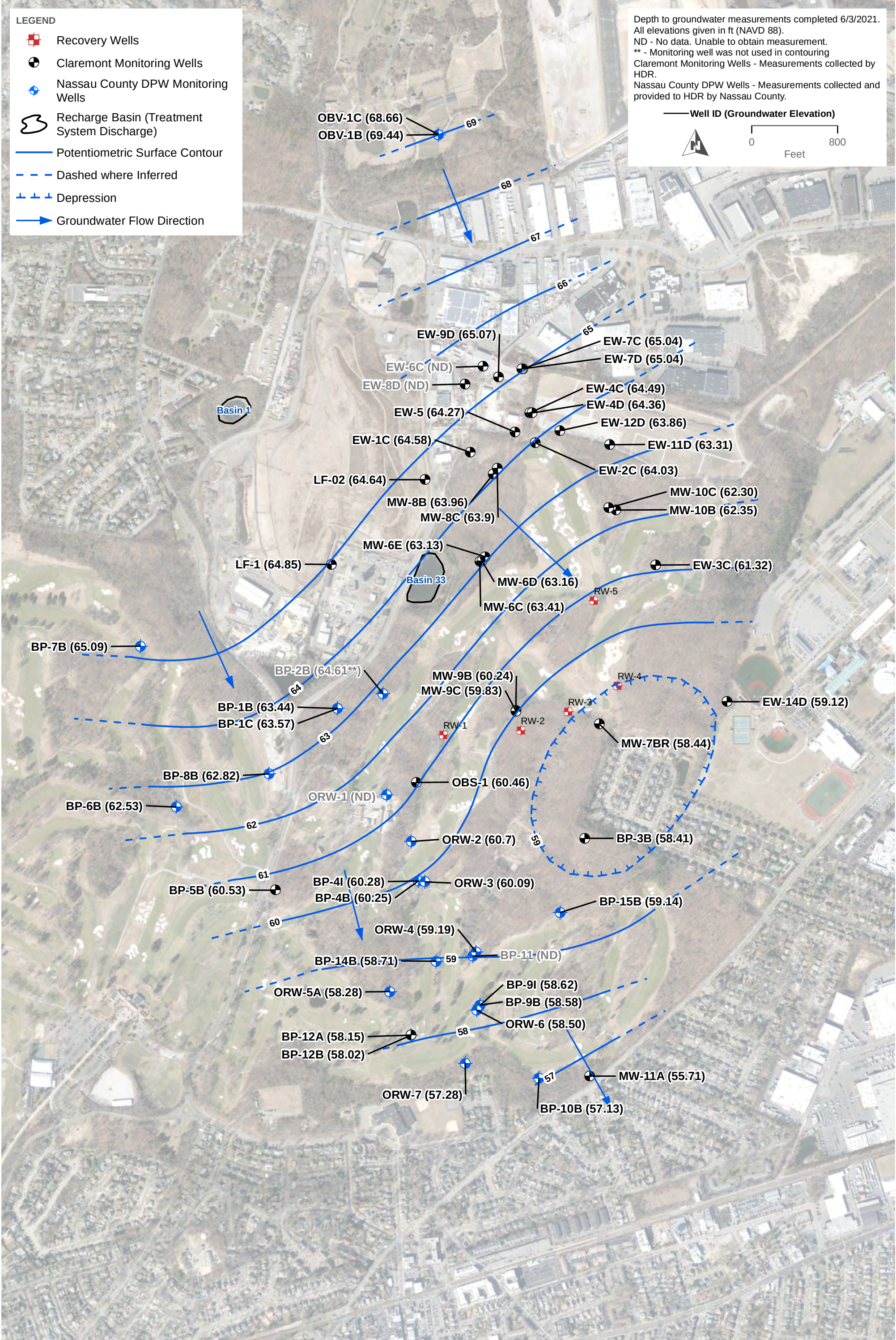
Depression

Groundwater Flow Direction

Depth to groundwater measurements completed 6/3/2021.
All elevations given in ft (NAVD 88).
ND - No data. Unable to obtain measurement.
** - Monitoring well was not used in contouring
Claremont Monitoring Wells - Measurements collected by HDR.
Nassau County DPW Wells - Measurements collected and provided to HDR by Nassau County.

Well ID (Groundwater Elevation)

0800
Feet



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

LEGEND

Recovery Wells

Claremont Monitoring Wells

Nassau County DPW Monitoring Wells

Recharge Basin (Treatment System Discharge)

Potentiometric Surface Contour

Dashed where Inferred

Groundwater Flow Direction

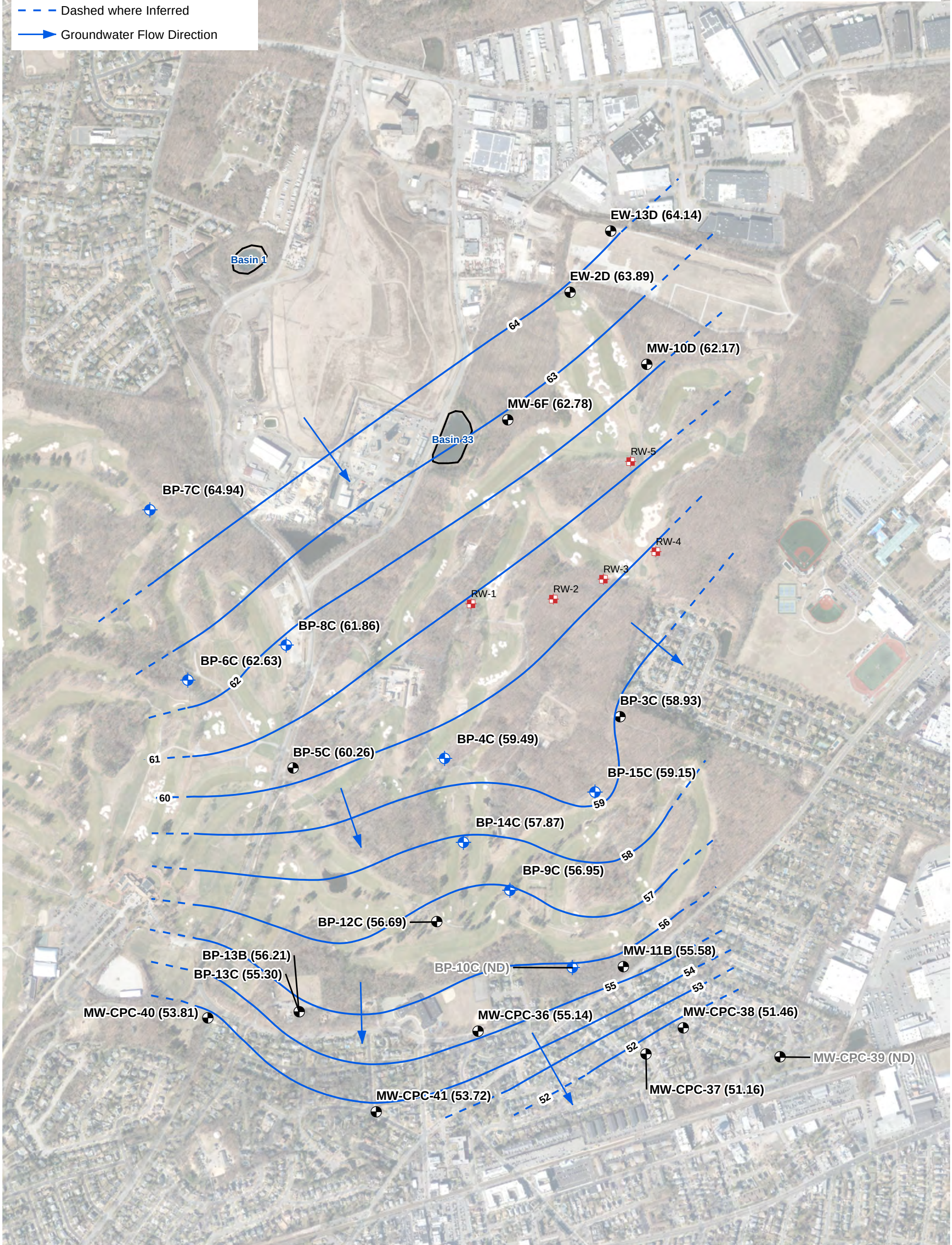
Depth to groundwater measurements completed 6/3/2021.
All elevations given in ft (NAVD 88).
ND - No data. Unable to obtain measurement.
** - Monitoring well was not used in contouring
Claremont Monitoring Wells - Measurements collected by HDR.
Nassau County DPW Wells - Measurements collected and provided to HDR by Nassau County.

Well ID (Groundwater Elevation)

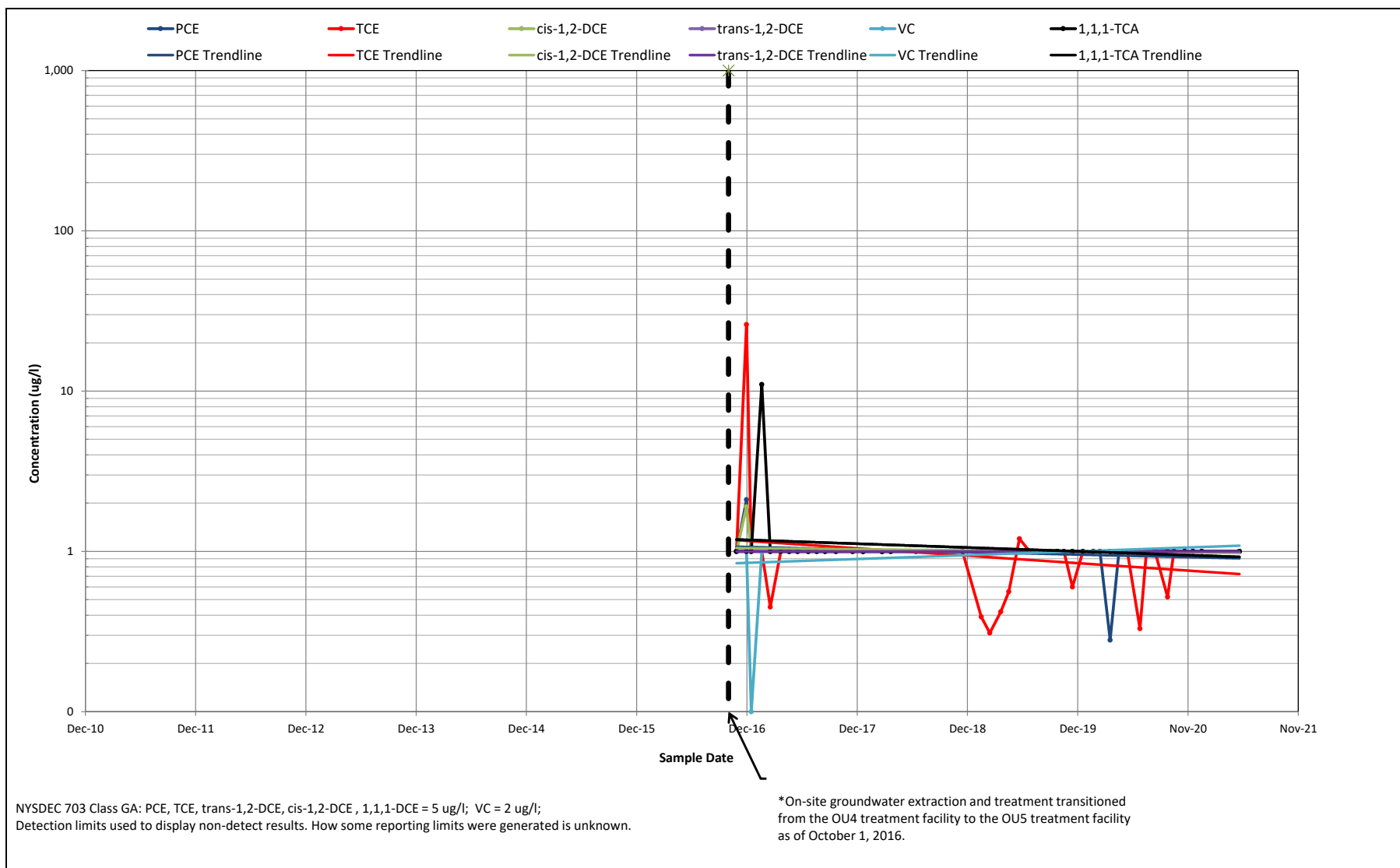
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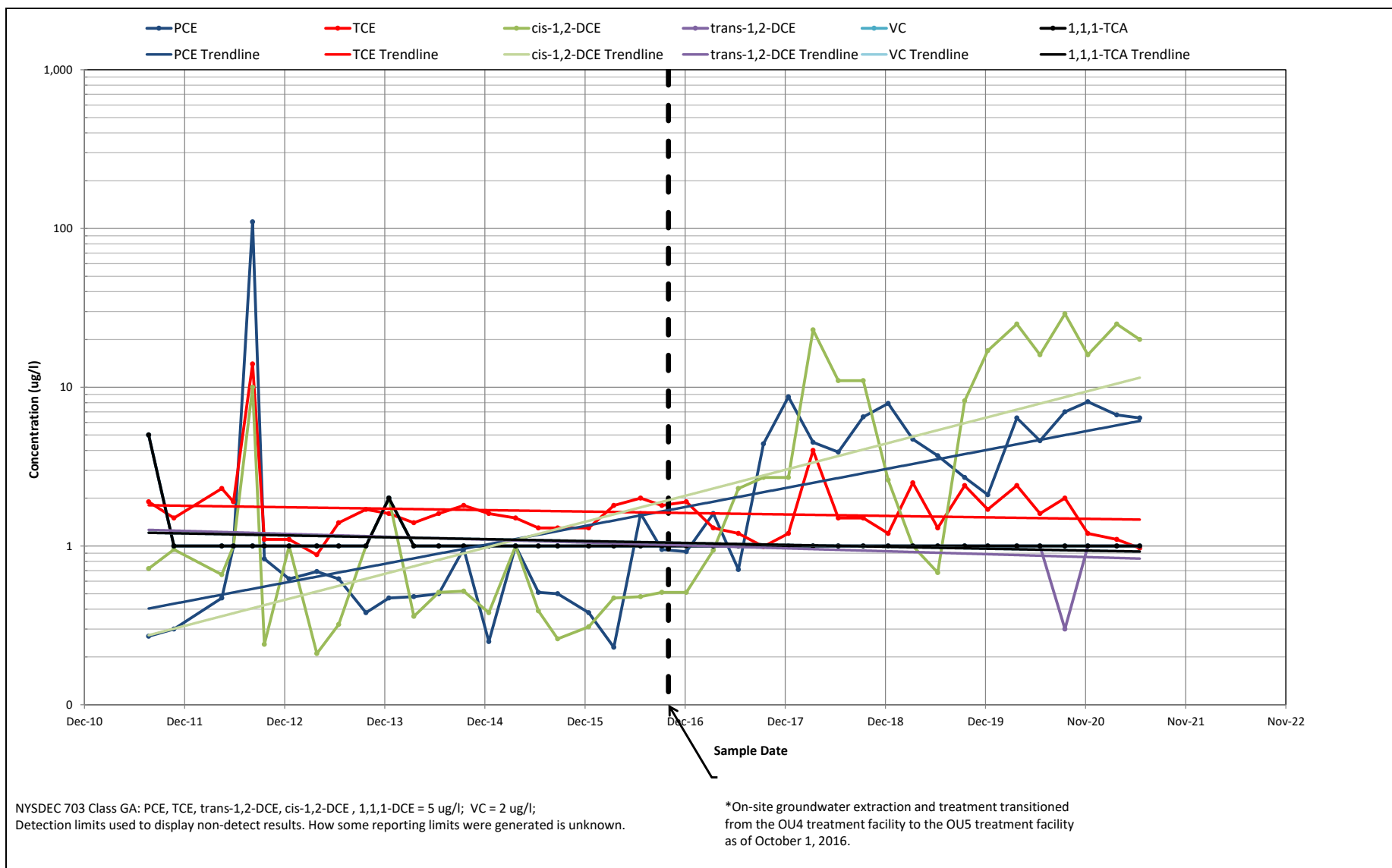
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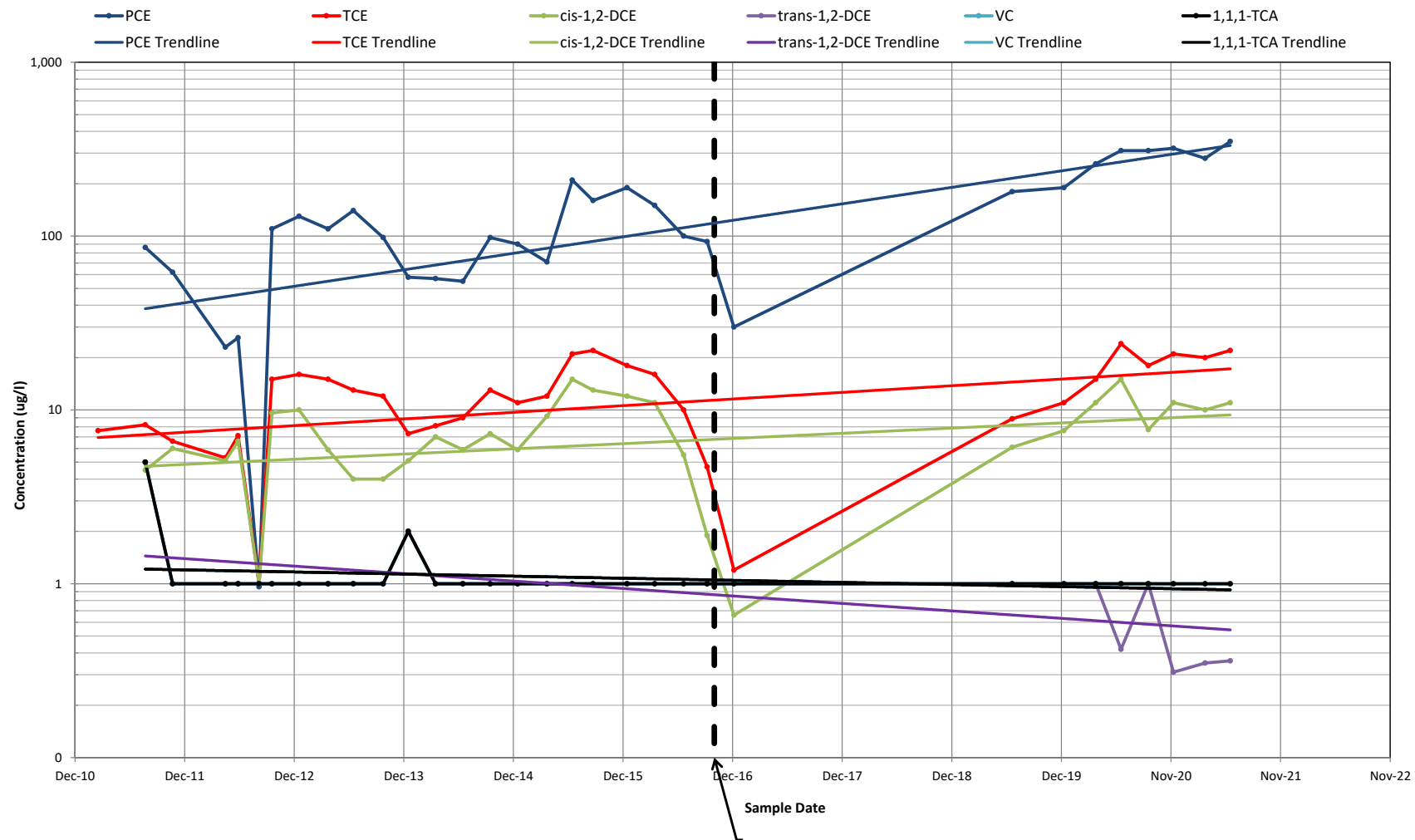
Feet



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







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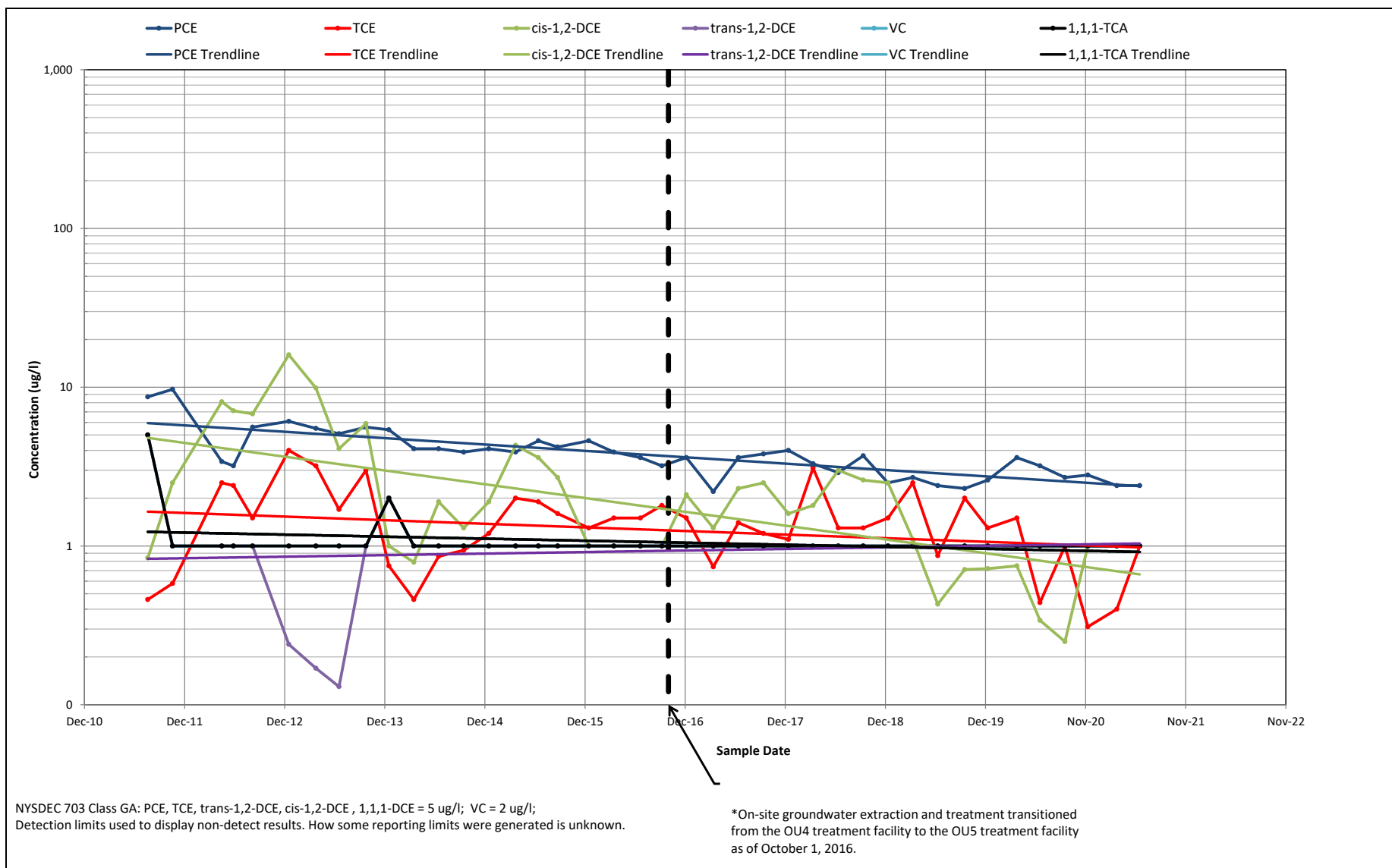
CHLORINATED VOC CONCENTRATIONS
 WELL SW-1
 CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
 NYSDEC SITE #130015

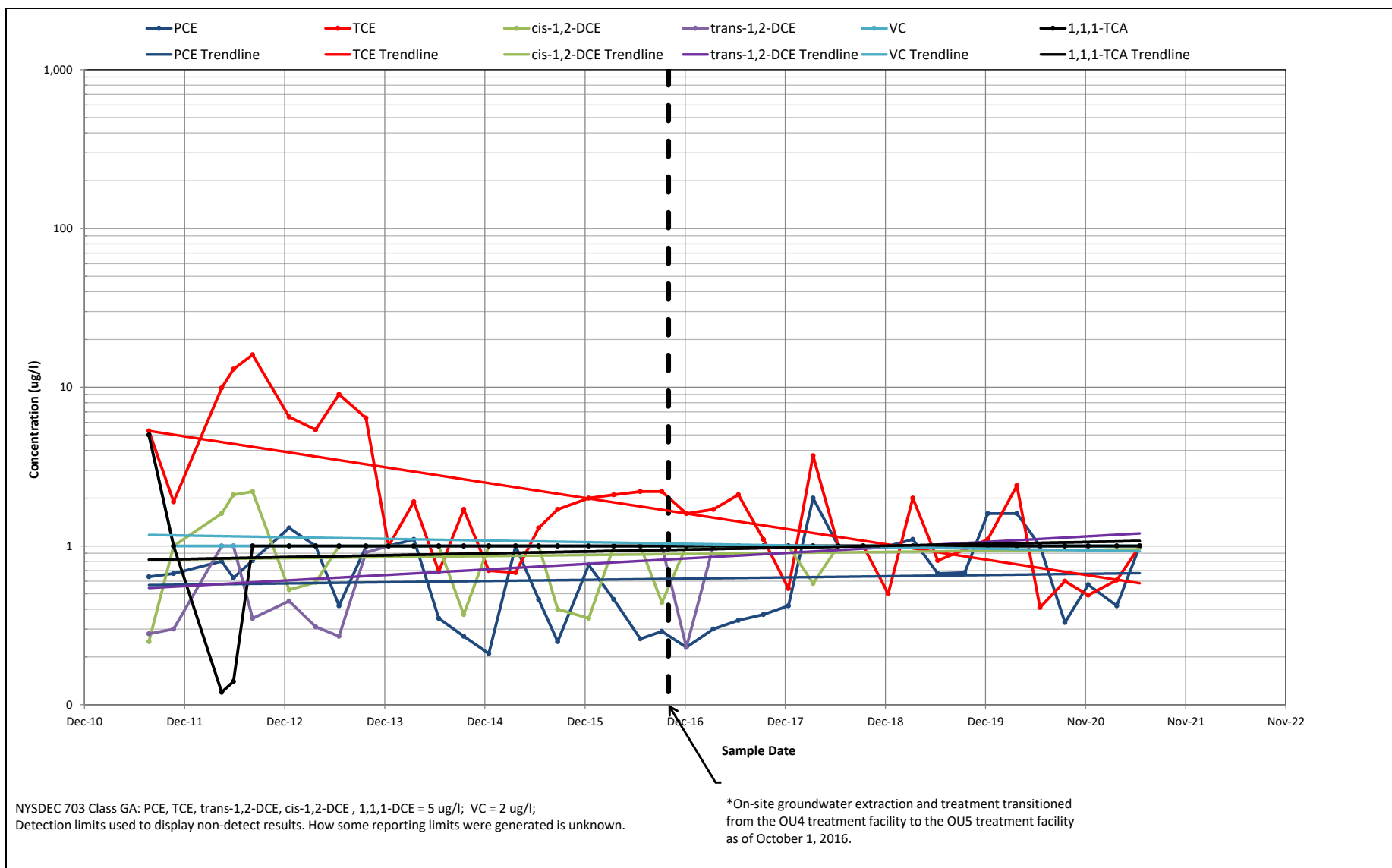
DATE

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FIGURE

8





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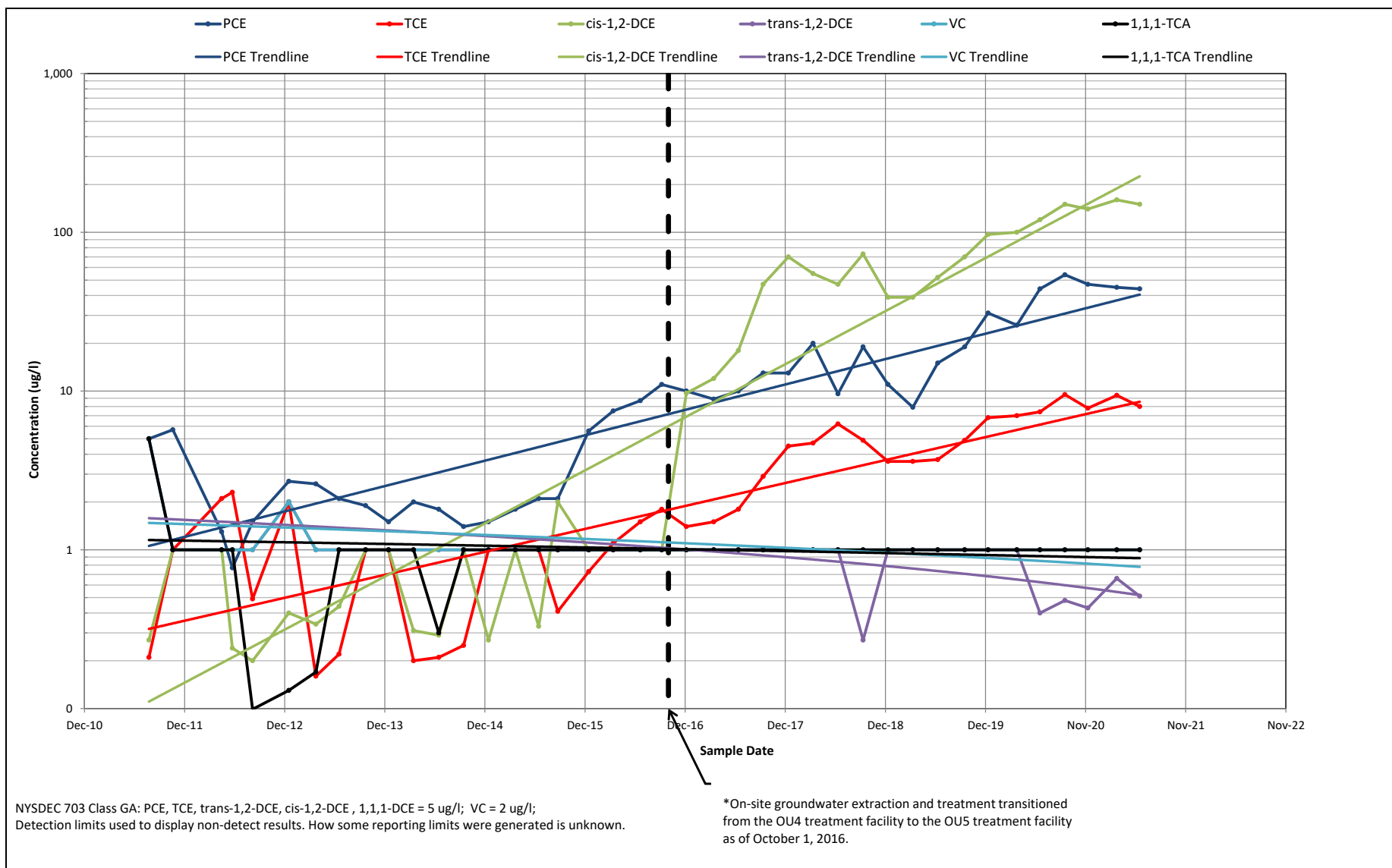
CHLORINATED VOC CONCENTRATIONS
WELL EW-5
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

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FIGURE

10



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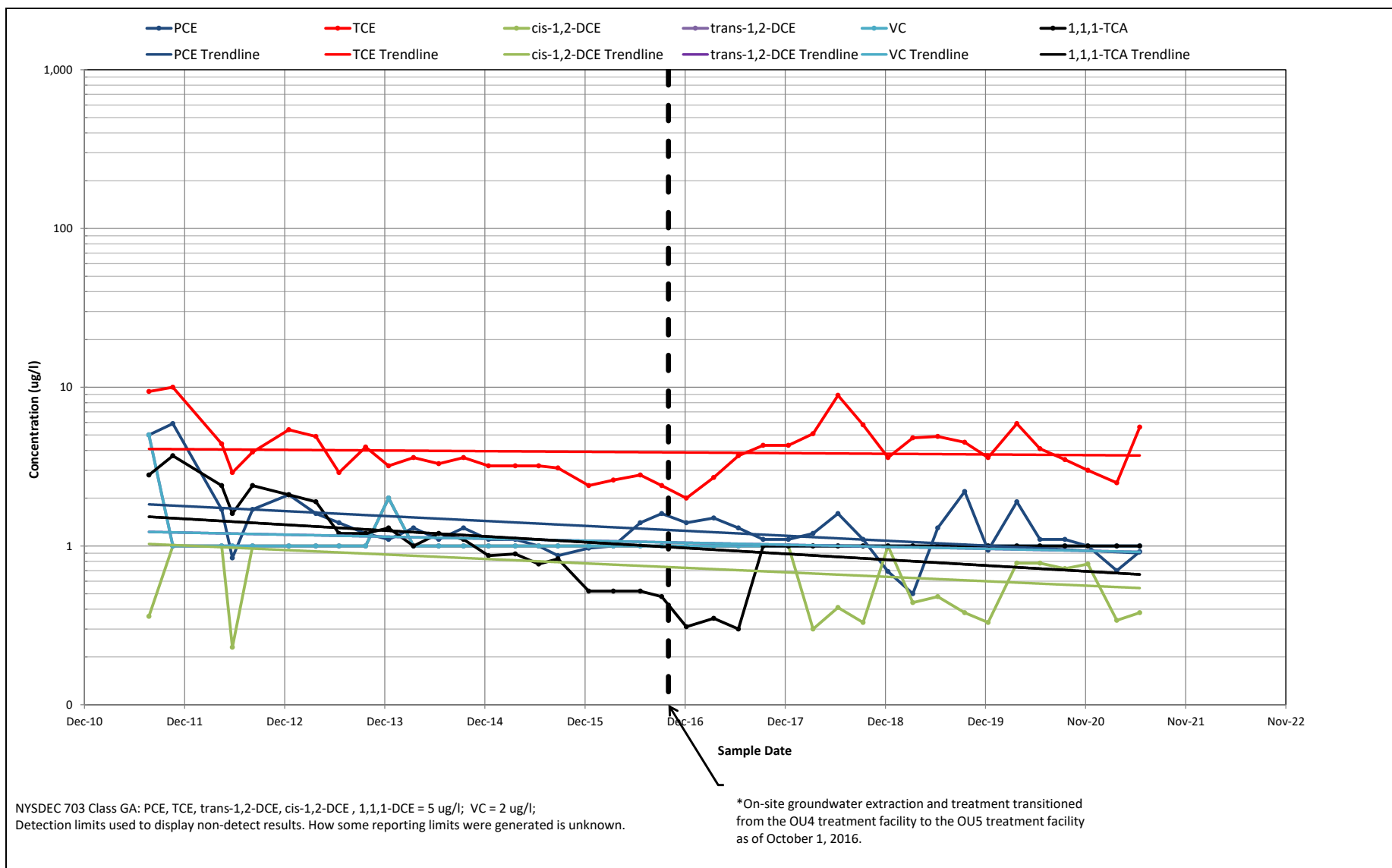
CHLORINATED VOC CONCENTRATIONS
 WELL EW-4A
 CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
 NYSDEC SITE #130015

DATE

JUNE 2021

FIGURE

11



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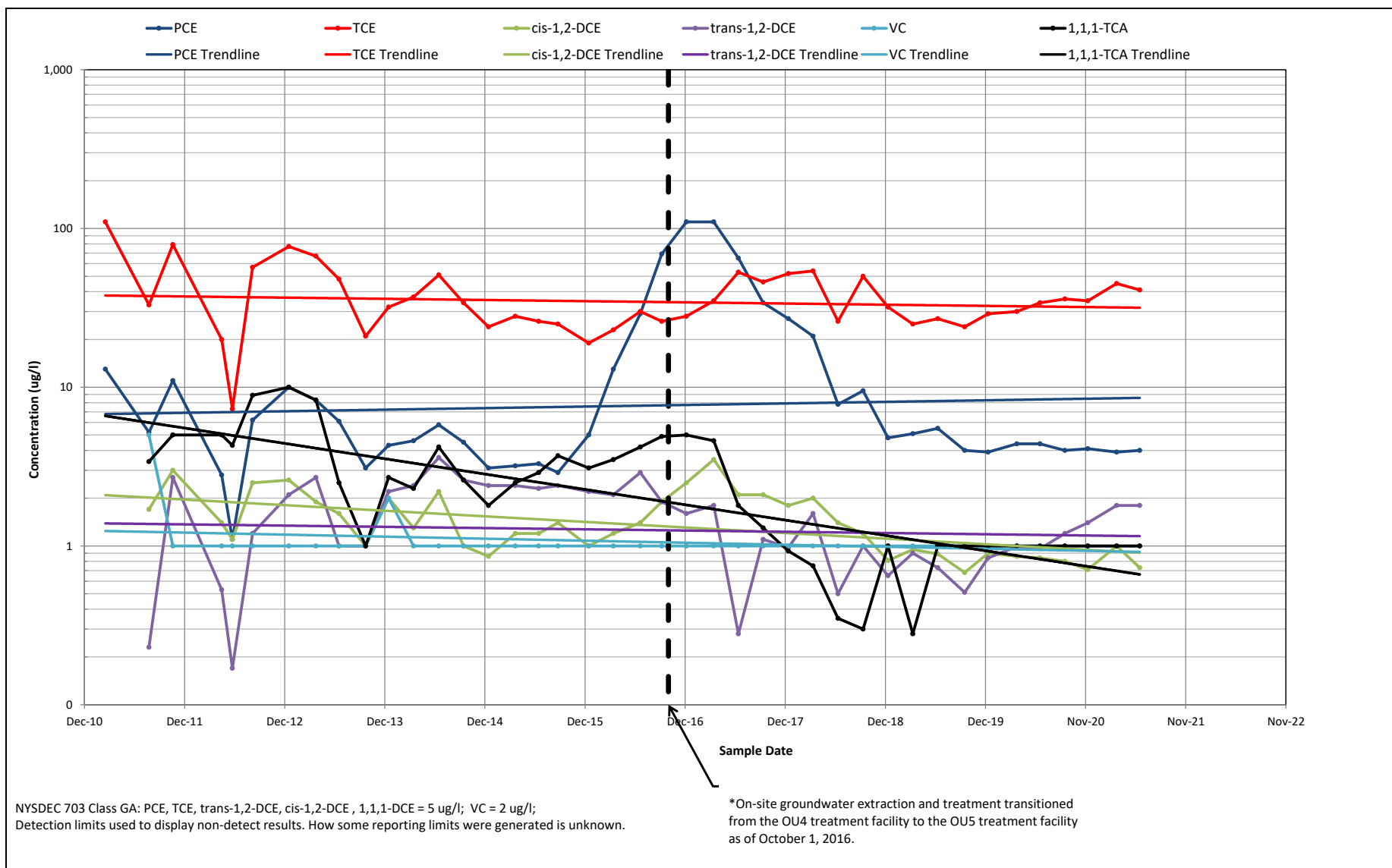
CHLORINATED VOC CONCENTRATIONS
WELL EW-4B
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

DATE

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FIGURE

12



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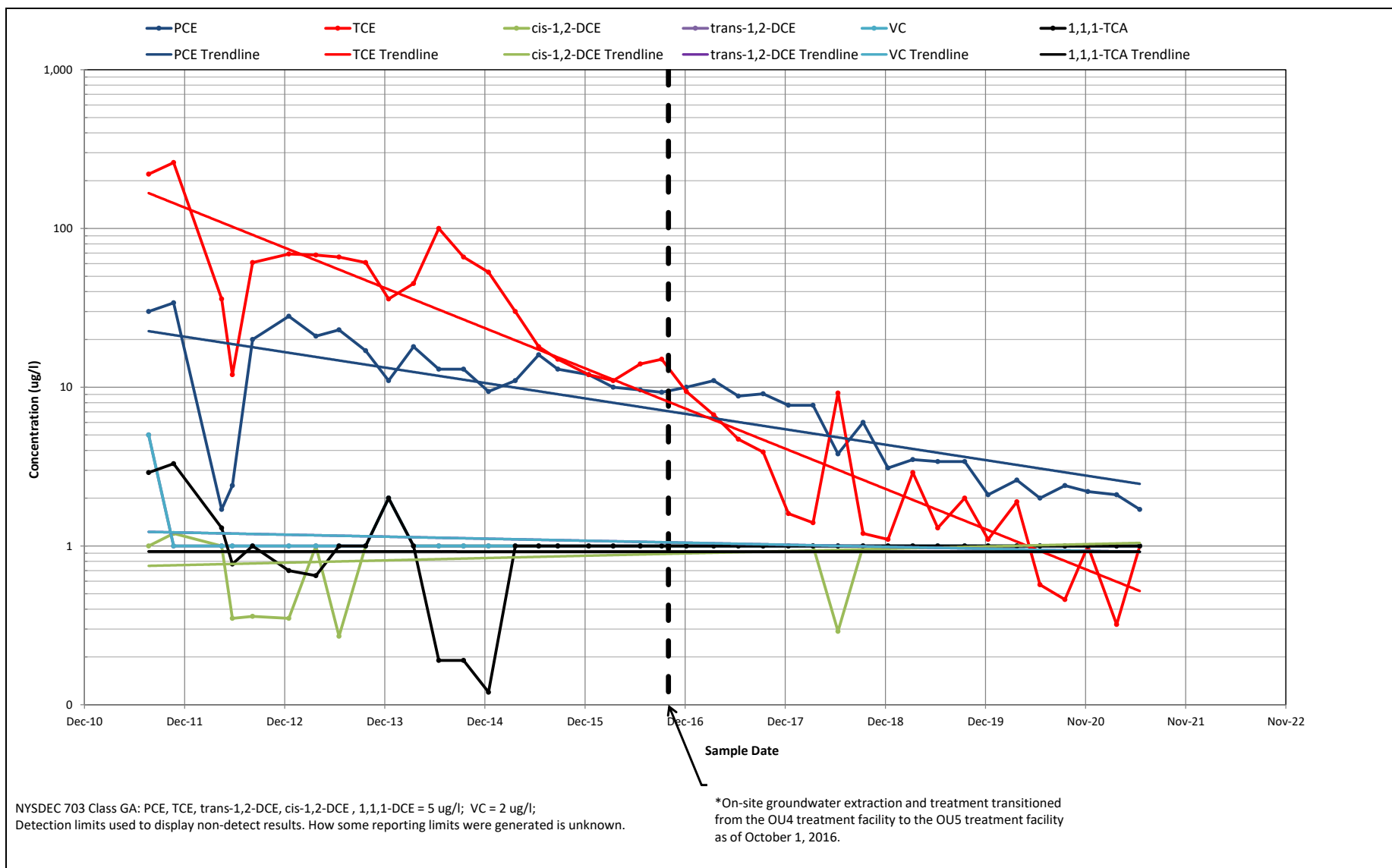
CHLORINATED VOC CONCENTRATIONS
WELL EW-4C
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

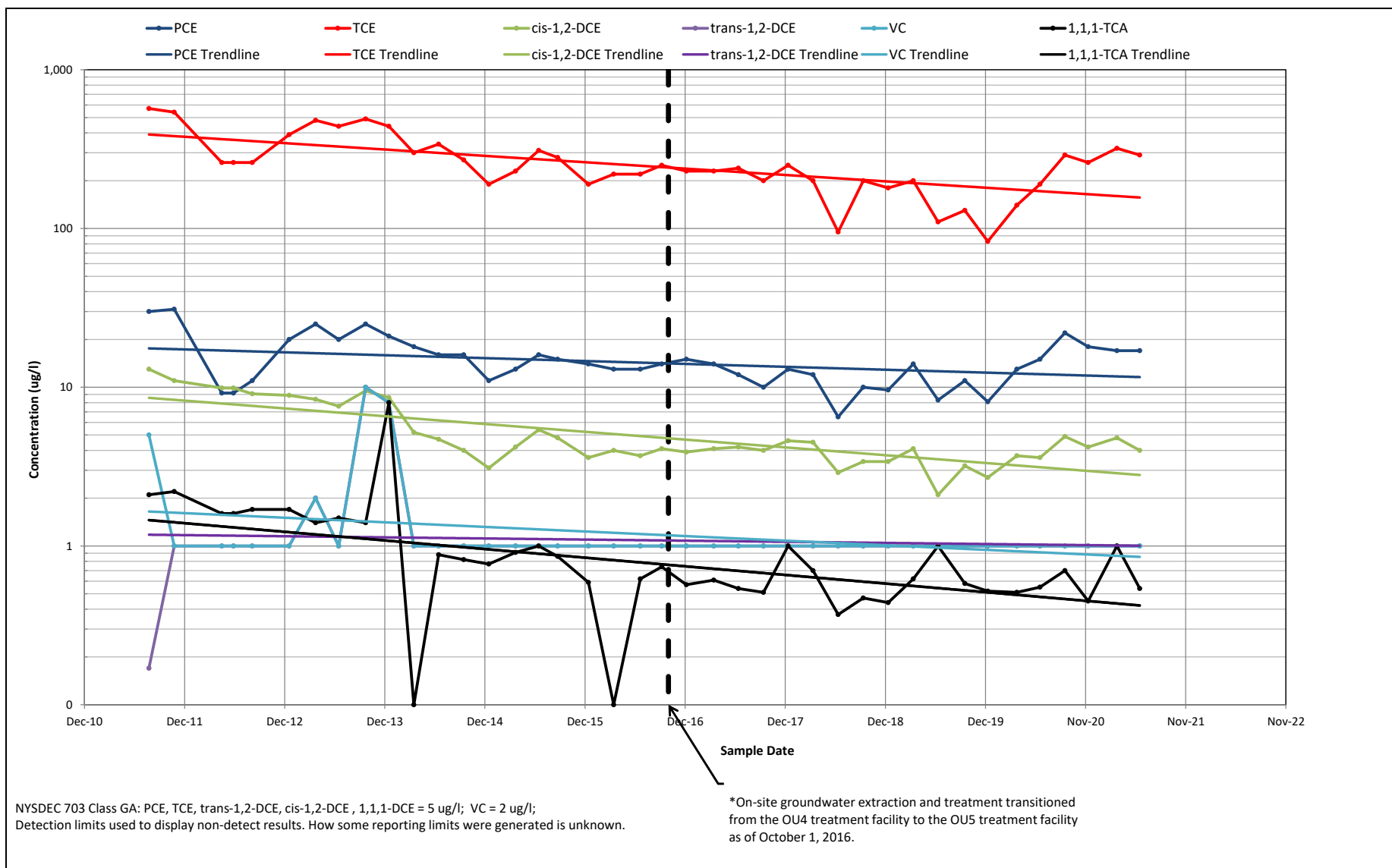
DATE

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FIGURE

13





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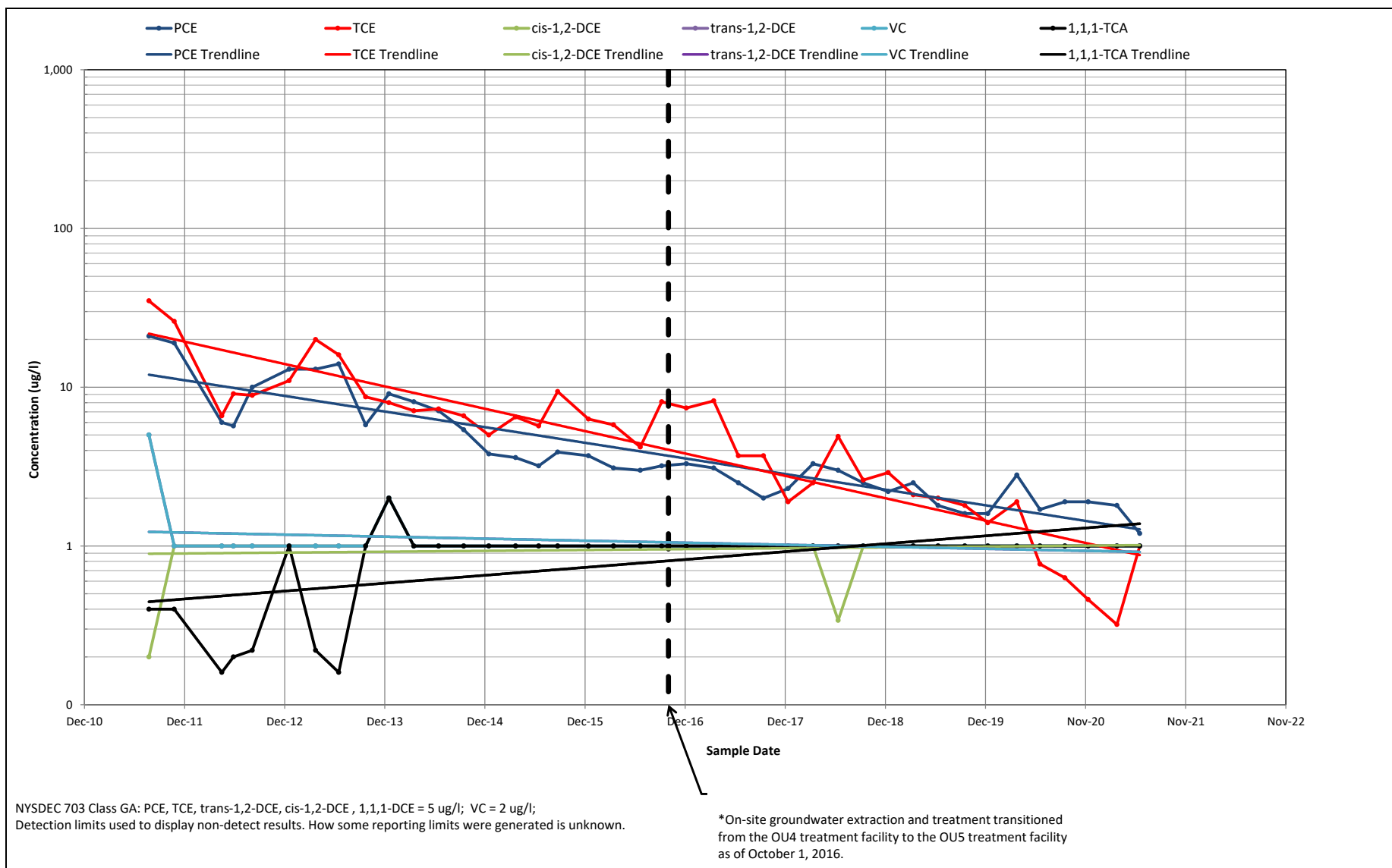
CHLORINATED VOC CONCENTRATIONS
WELL EW-7C
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

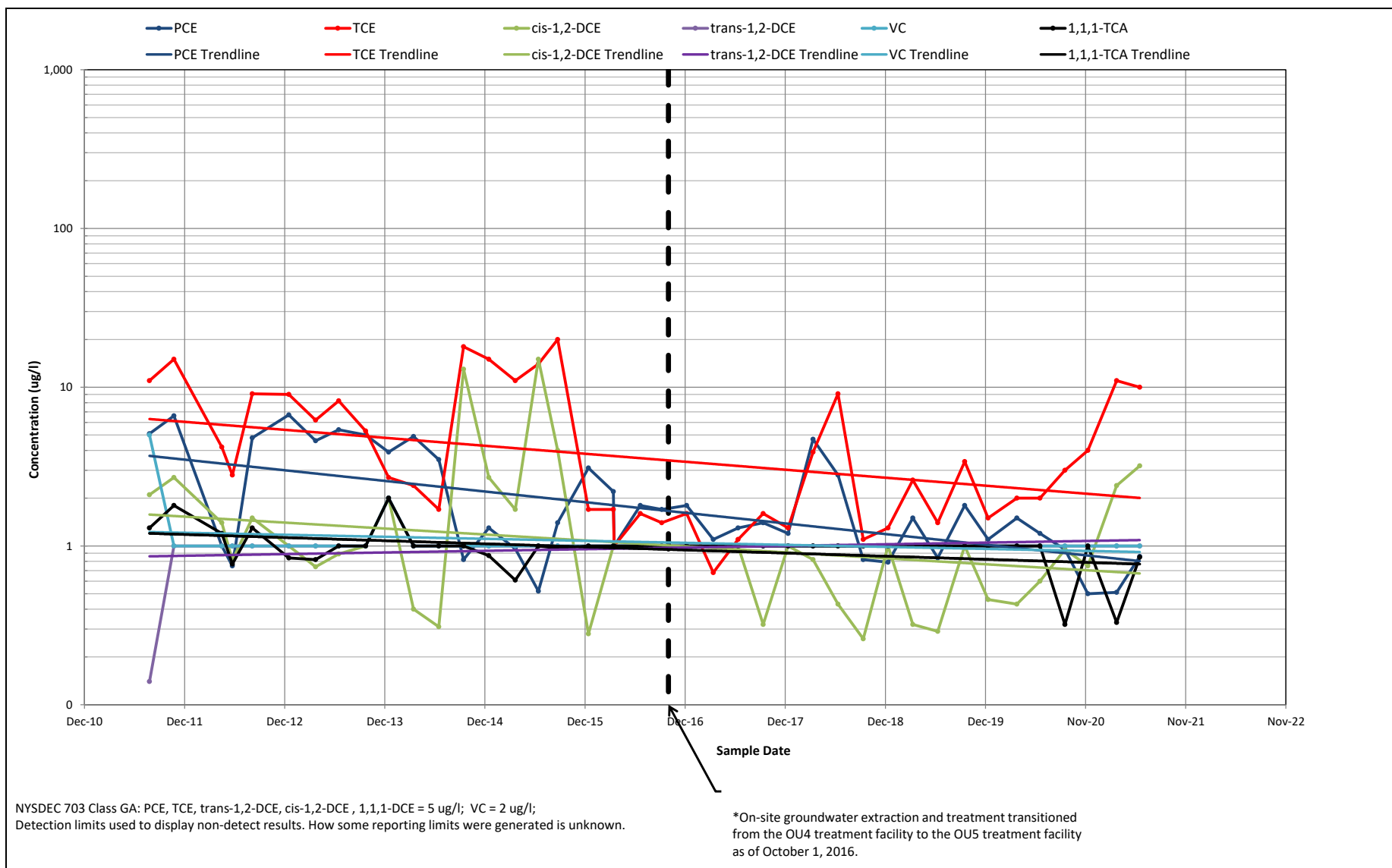
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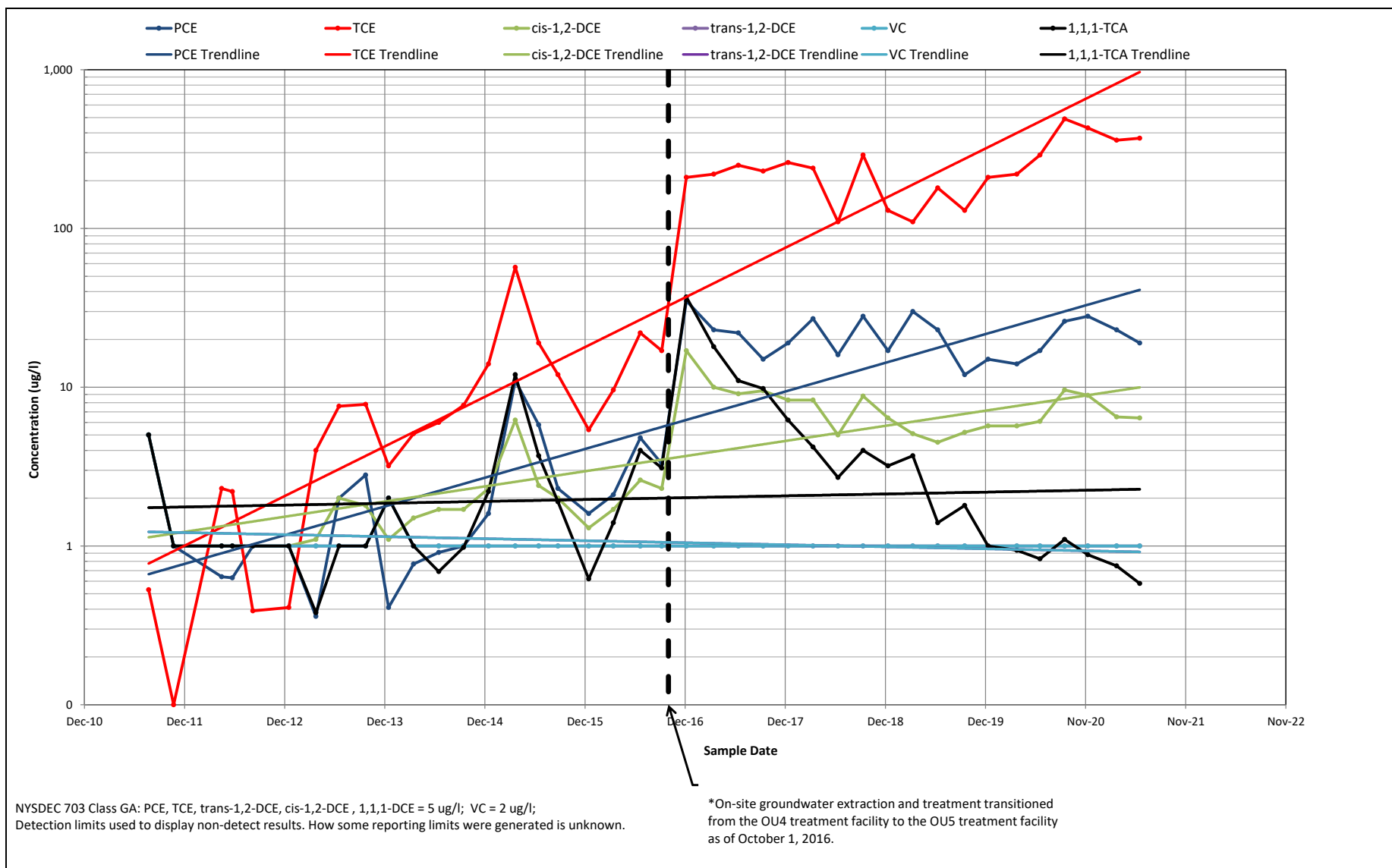
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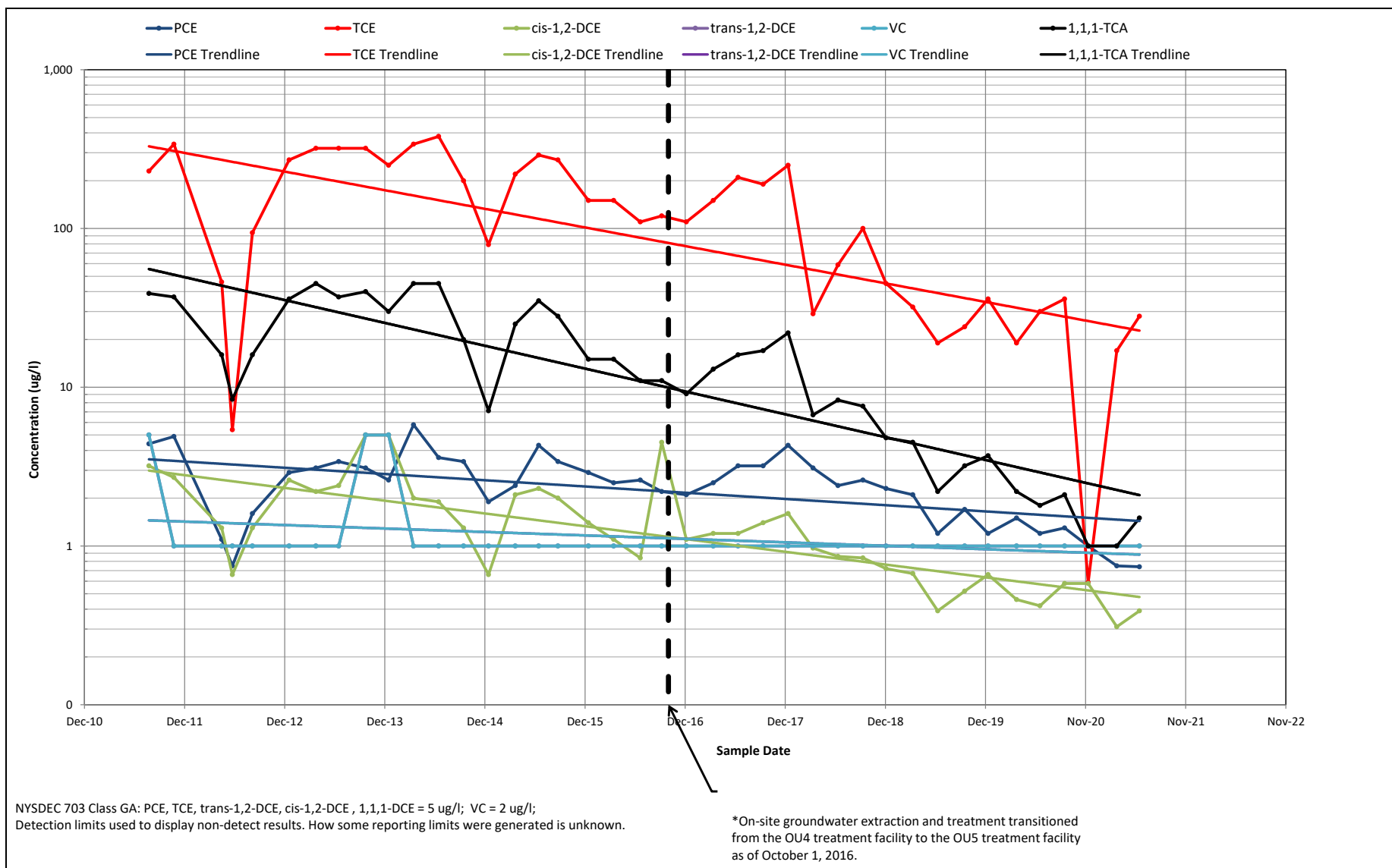
FIGURE

15









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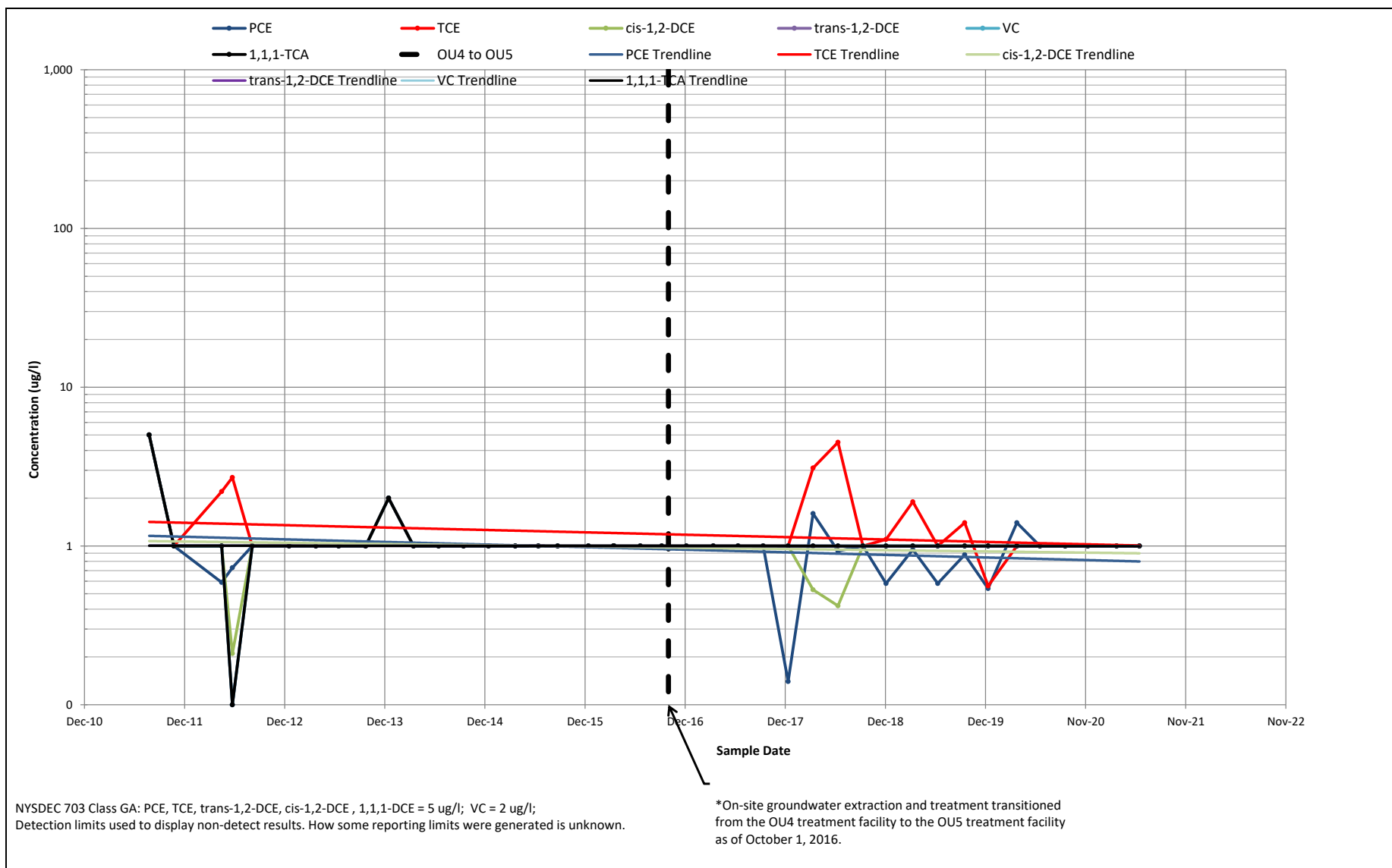
CHLORINATED VOC CONCENTRATIONS
 WELL EW-14D
 CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
 NYSDEC SITE #130015

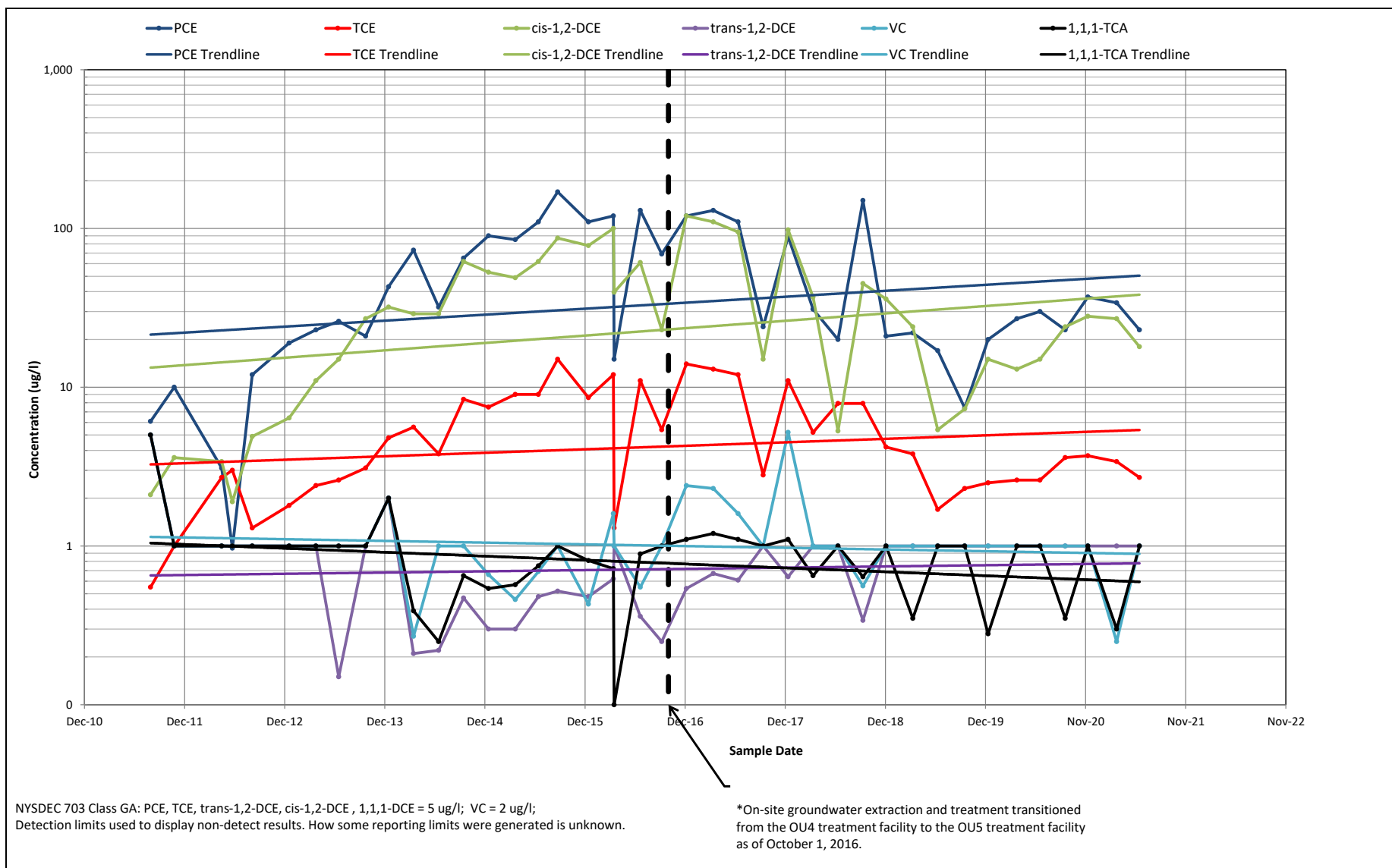
DATE

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FIGURE

19





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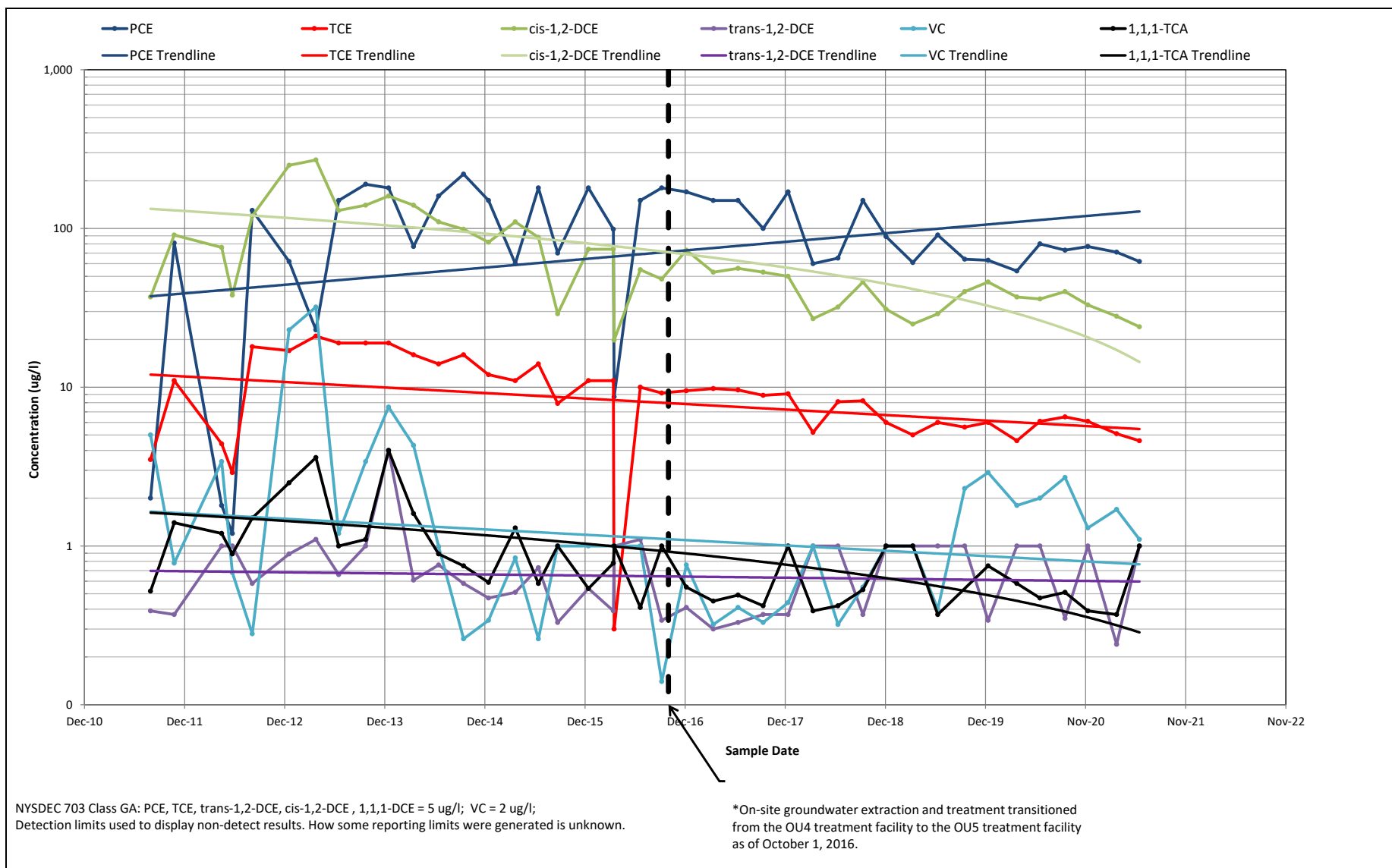
CHLORINATED VOC CONCENTRATIONS
 WELL BP-3B
 CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
 NYSDEC SITE #130015

DATE

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FIGURE

21



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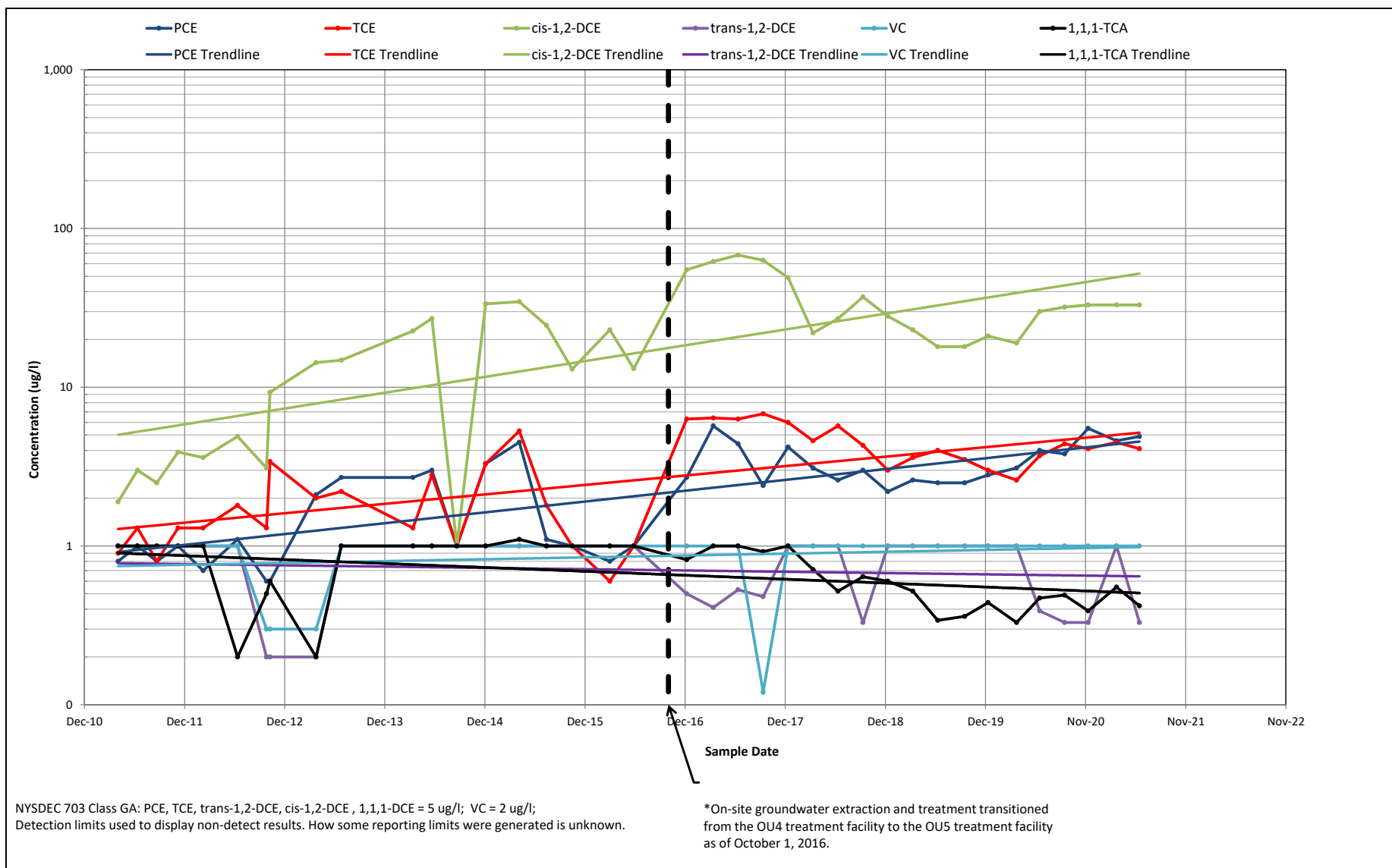
CHLORINATED VOC CONCENTRATIONS
WELL BP-3C
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

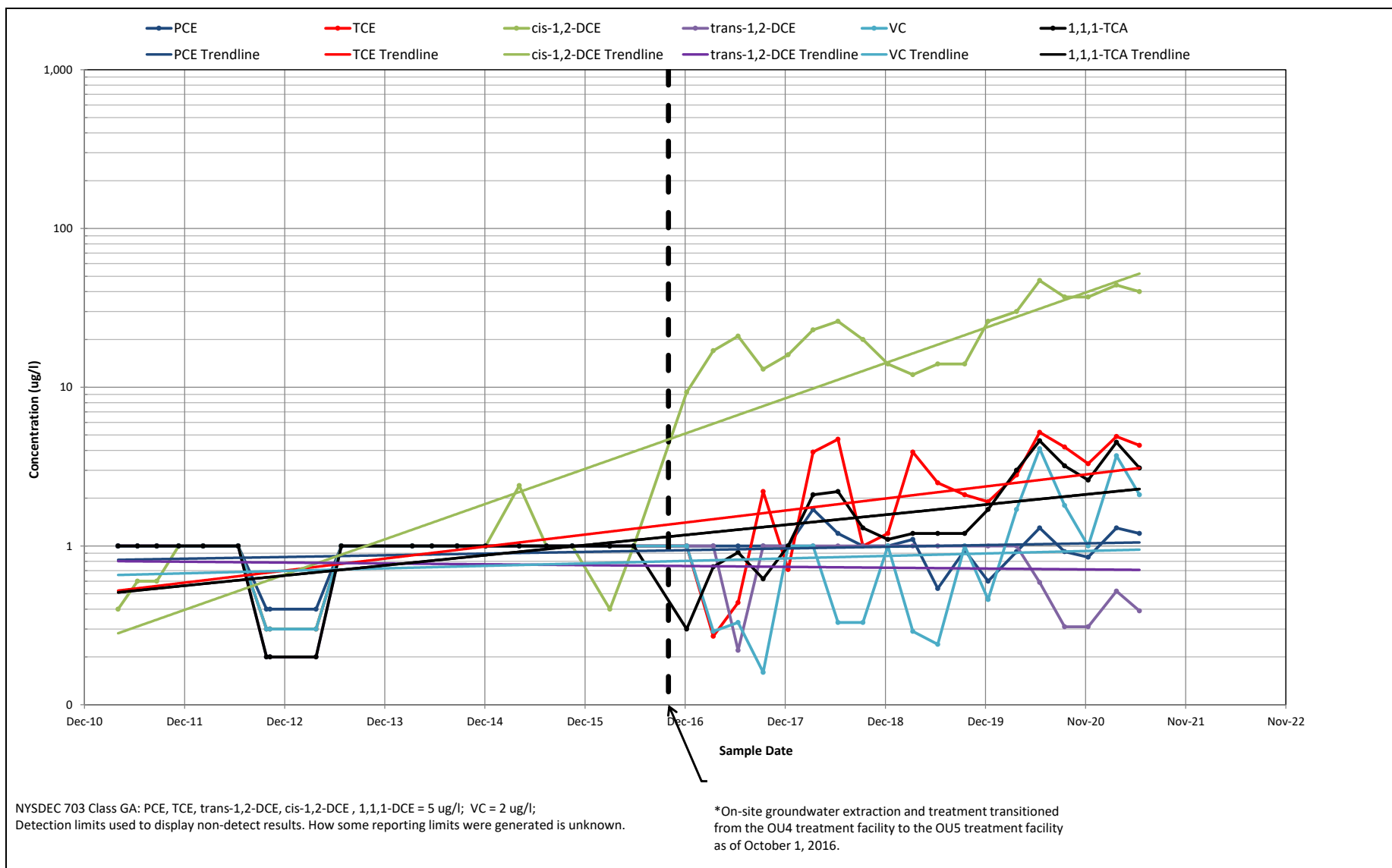
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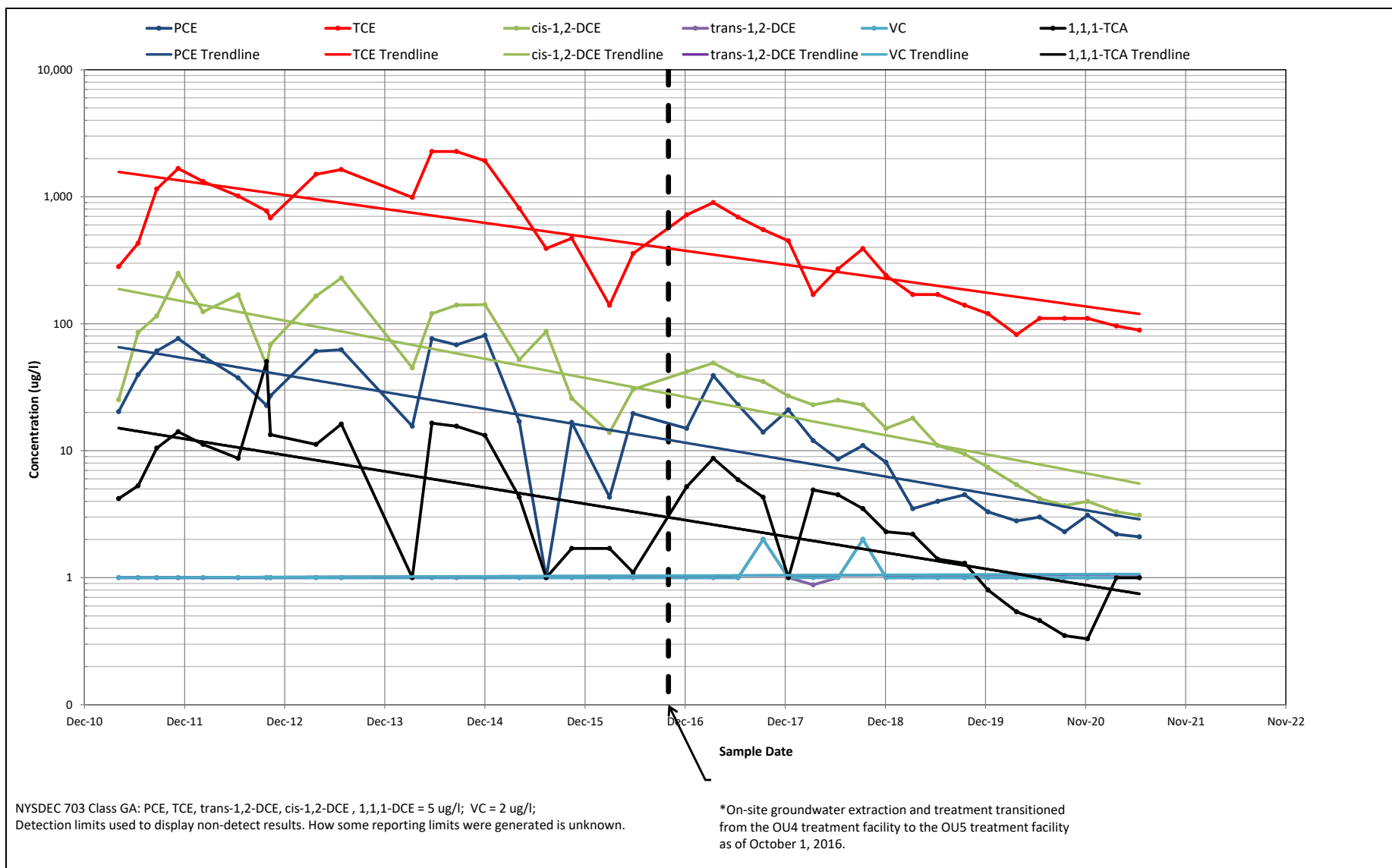
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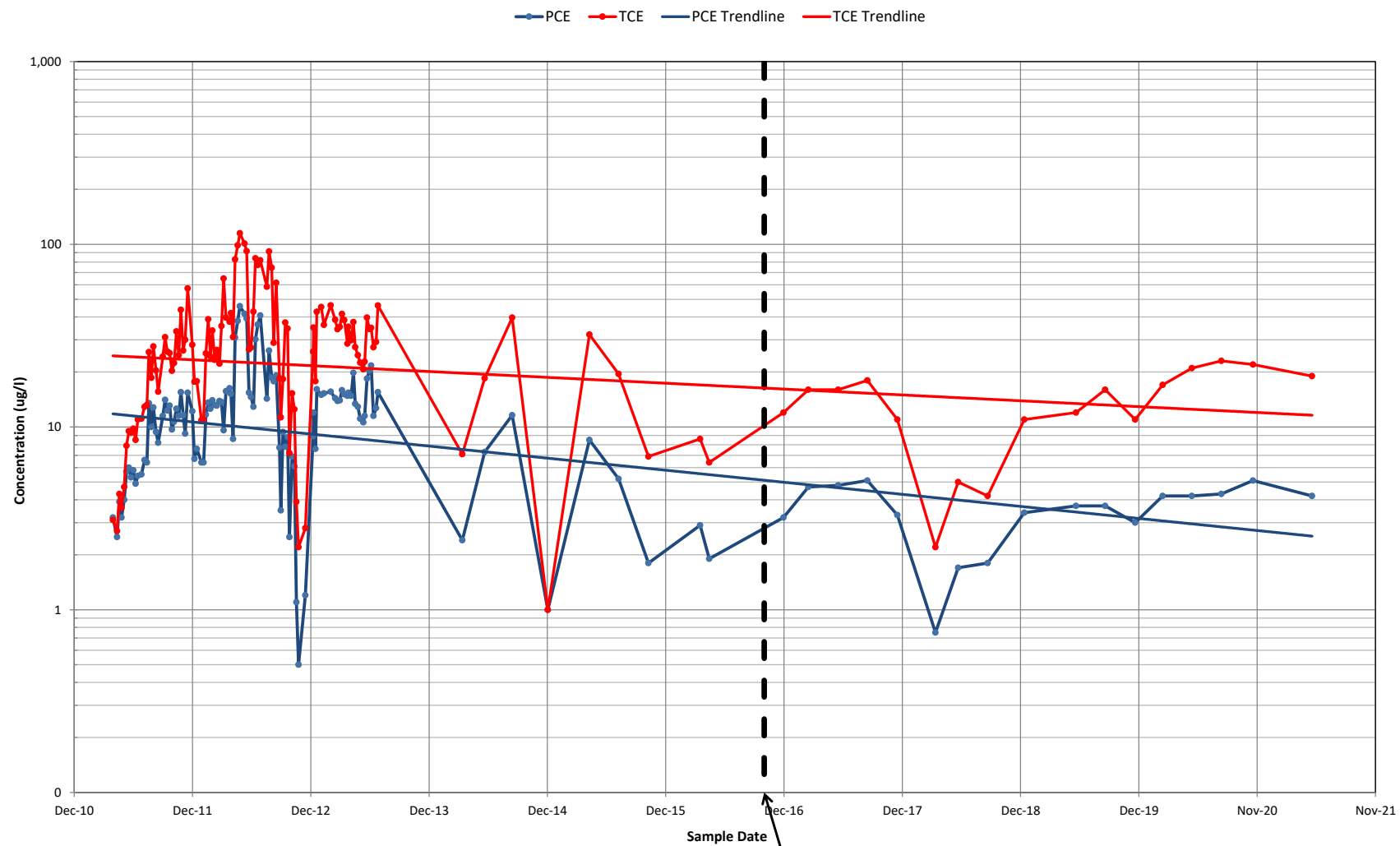
FIGURE

22









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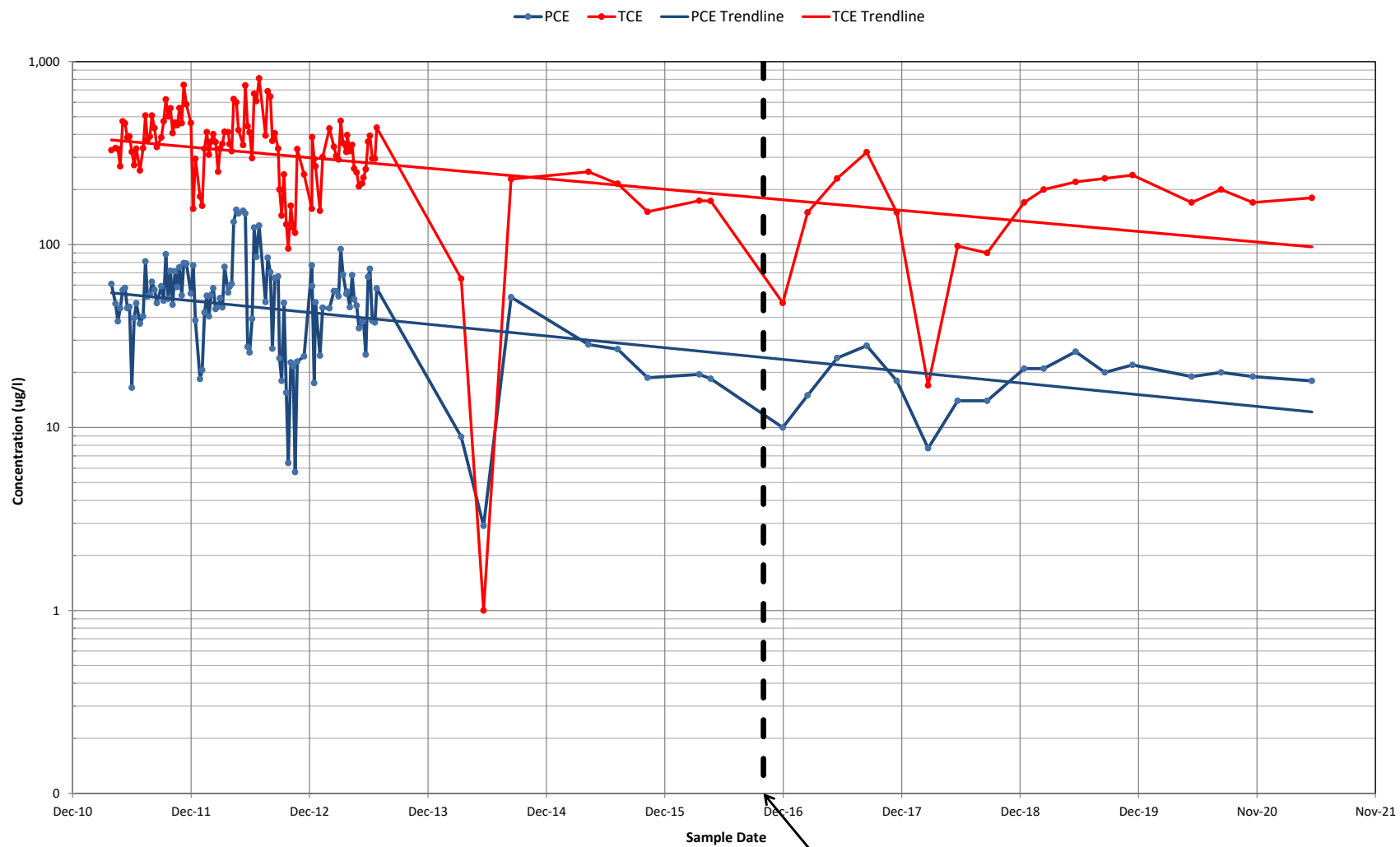
PCE AND TCE CONCENTRATIONS
 WELL RW-3
 CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
 NYSDEC SITE #130015

DATE

JUNE 2021

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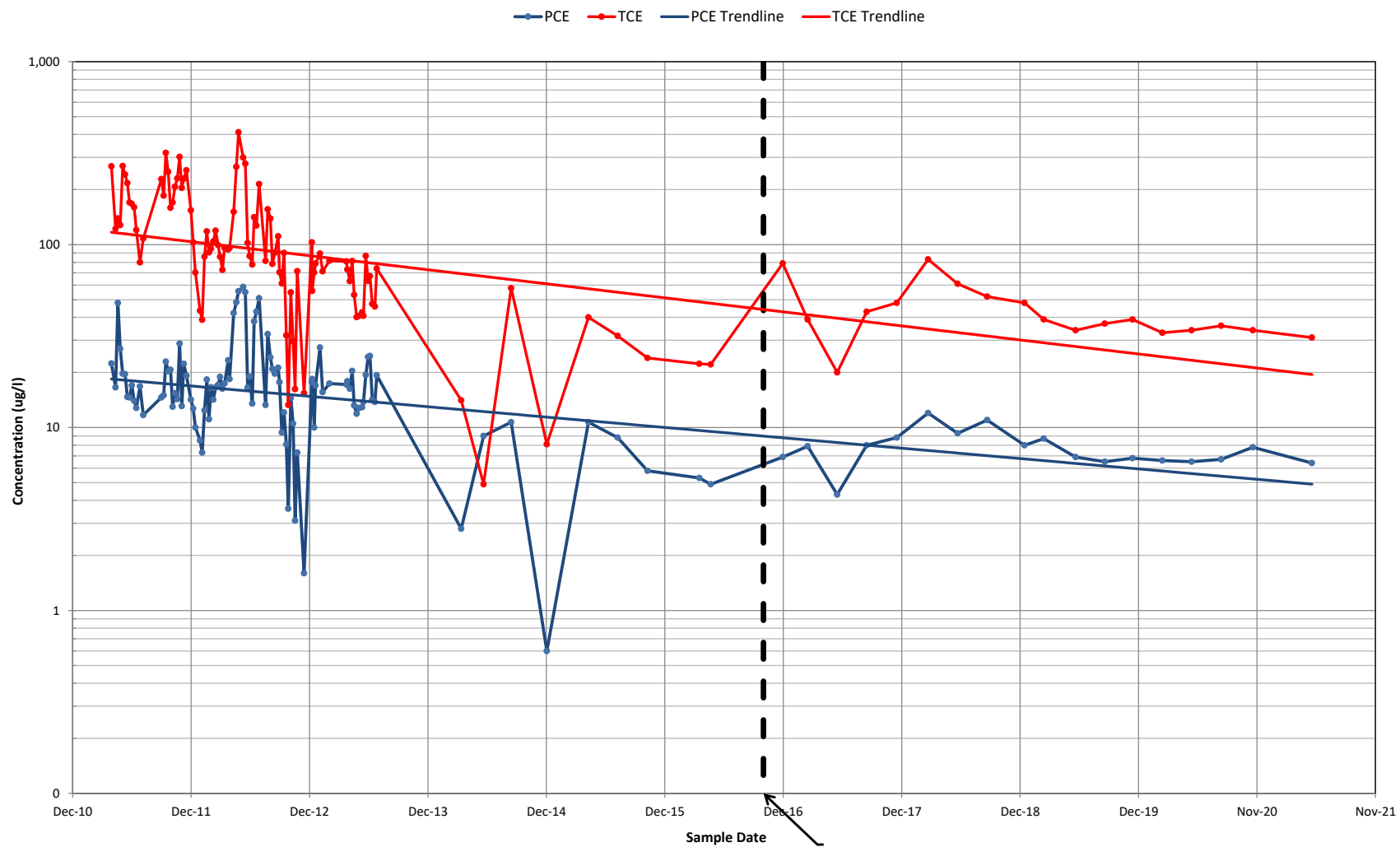
PCE AND TCE CONCENTRATIONS
 WELL RW-4
 CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
 NYSDEC SITE #130015

DATE

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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 OUS treatment facility as of October 1, 2016.



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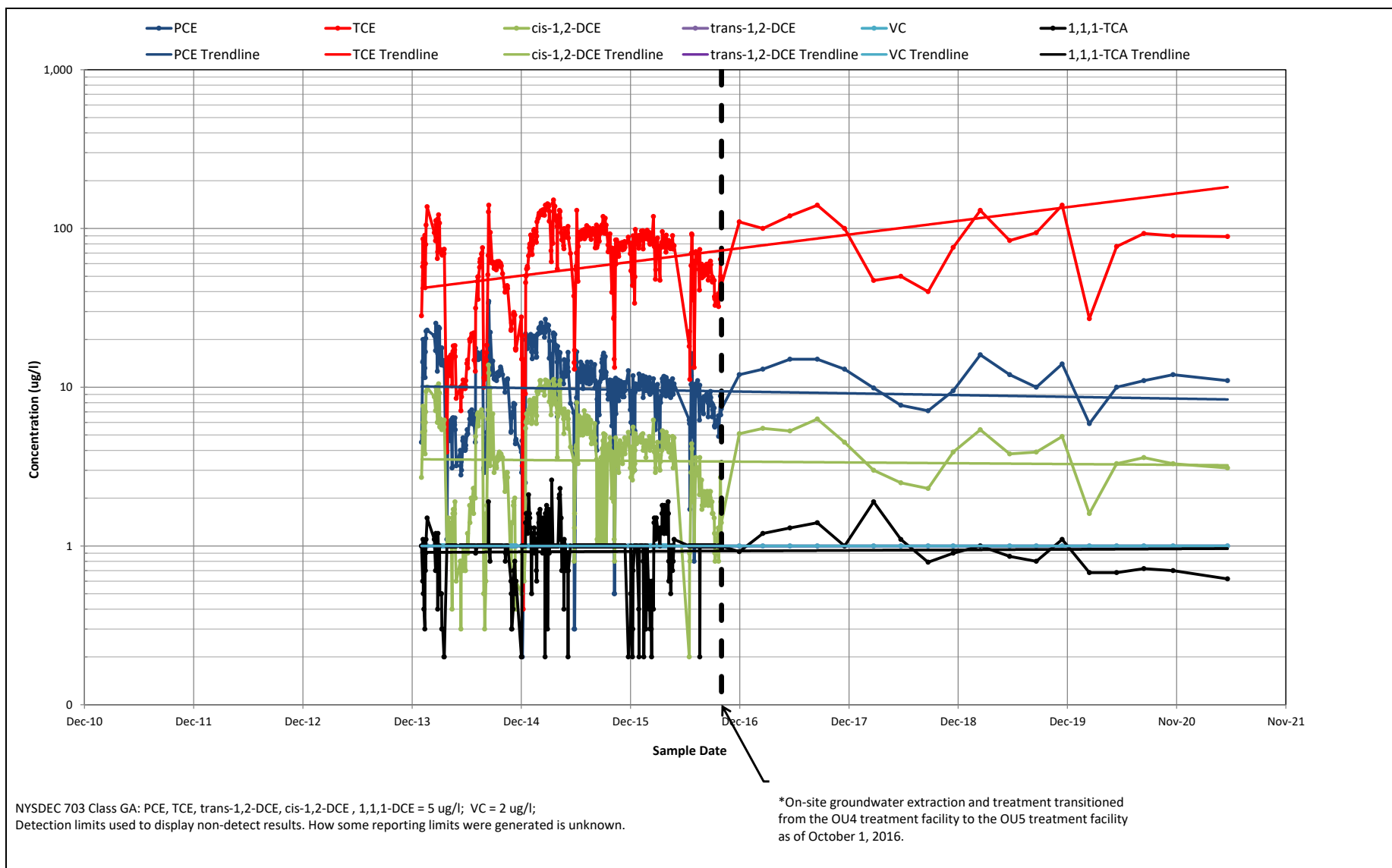
PCE AND TCE CONCENTRATIONS
WELL RW-5
CLAREMONT POLYCHEMICAL CORPORATION OPERABLE UNIT 5
NYSDEC SITE #130015

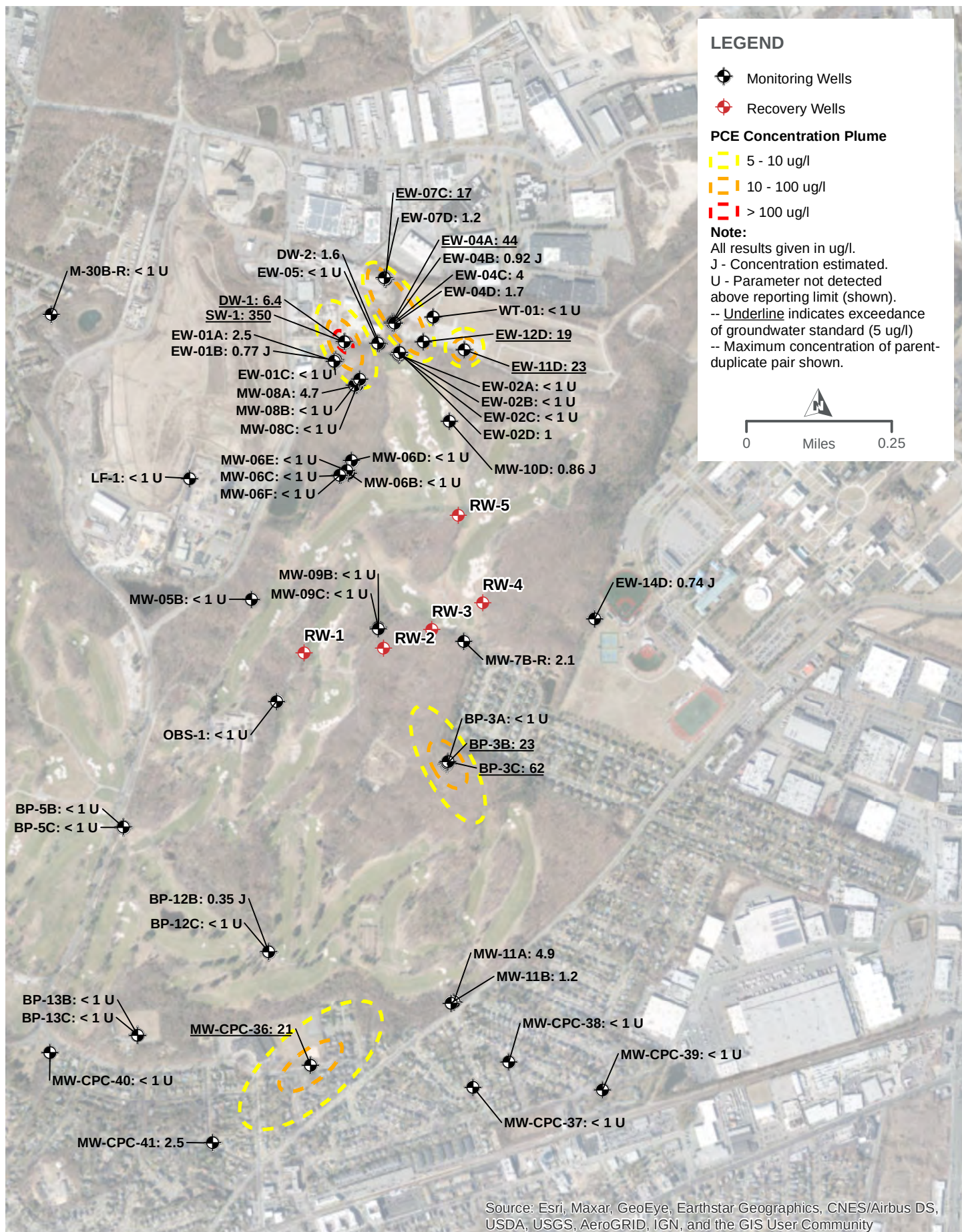
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JUNE 2021

FIGURE

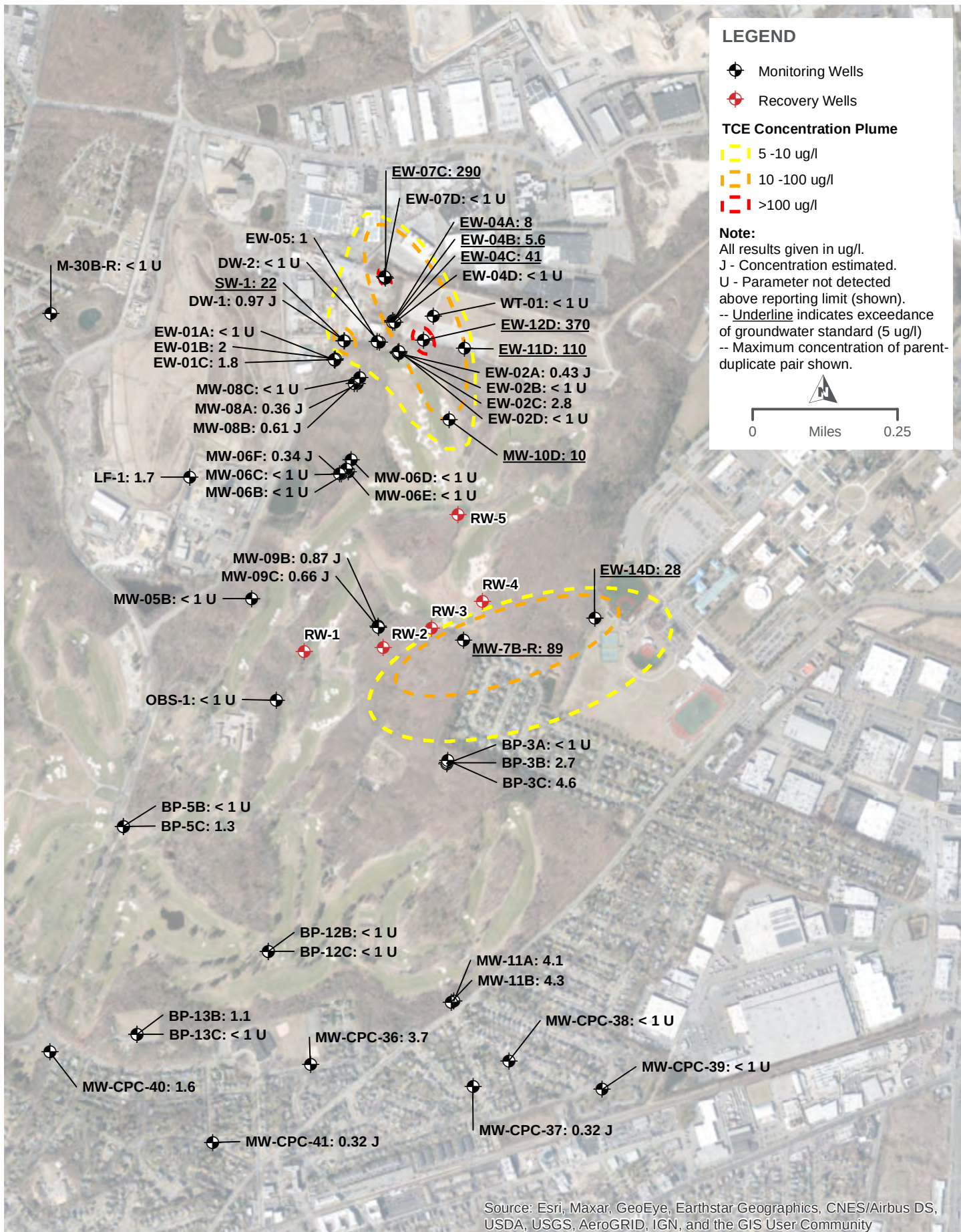
28





JUNE 2021 TETRACHLOROETHENE (PCE) PLUME CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 30

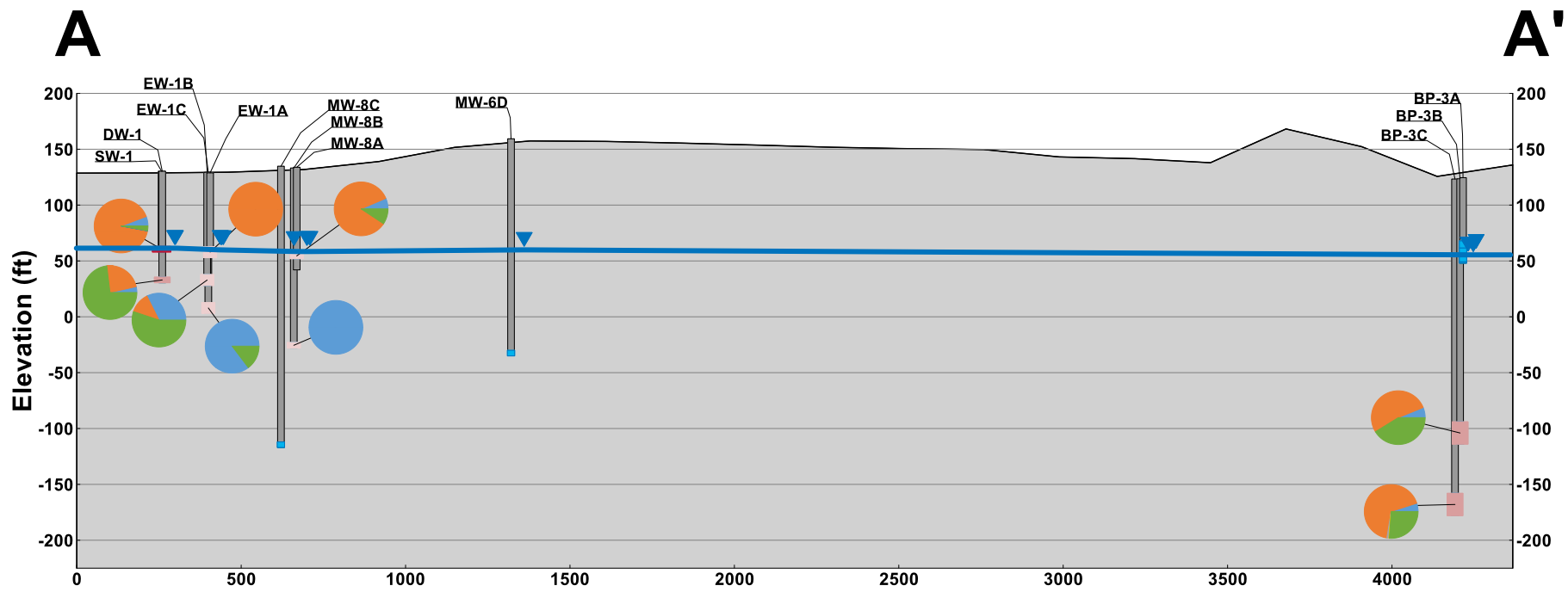


Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



JUNE 2021 TRICHLOROETHENE (TCE) PLUME CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 31



Wells

- Casing
- Screen Interval
- ▼ Groundwater Elevation (ft amsl)

Sum of CVOCs (ug/l)

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

TETRACHLOROETHYLENE (PCE)
 VINYL CHLORIDE
 TRICHLOROETHYLENE (TCE)
 1,1-DICHLOROETHENE
 TRANS-1,2-DICHLOROETHENE
 CIS-1,2-DICHLOROETHYLENE

NOTES:

- Samples collected during Q1 2021.
- Capture distance to transect line is 250 feet.
- Pie Charts shown are for samples with results from the selected 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.

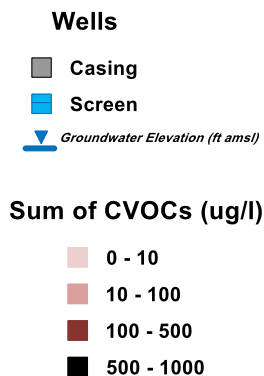
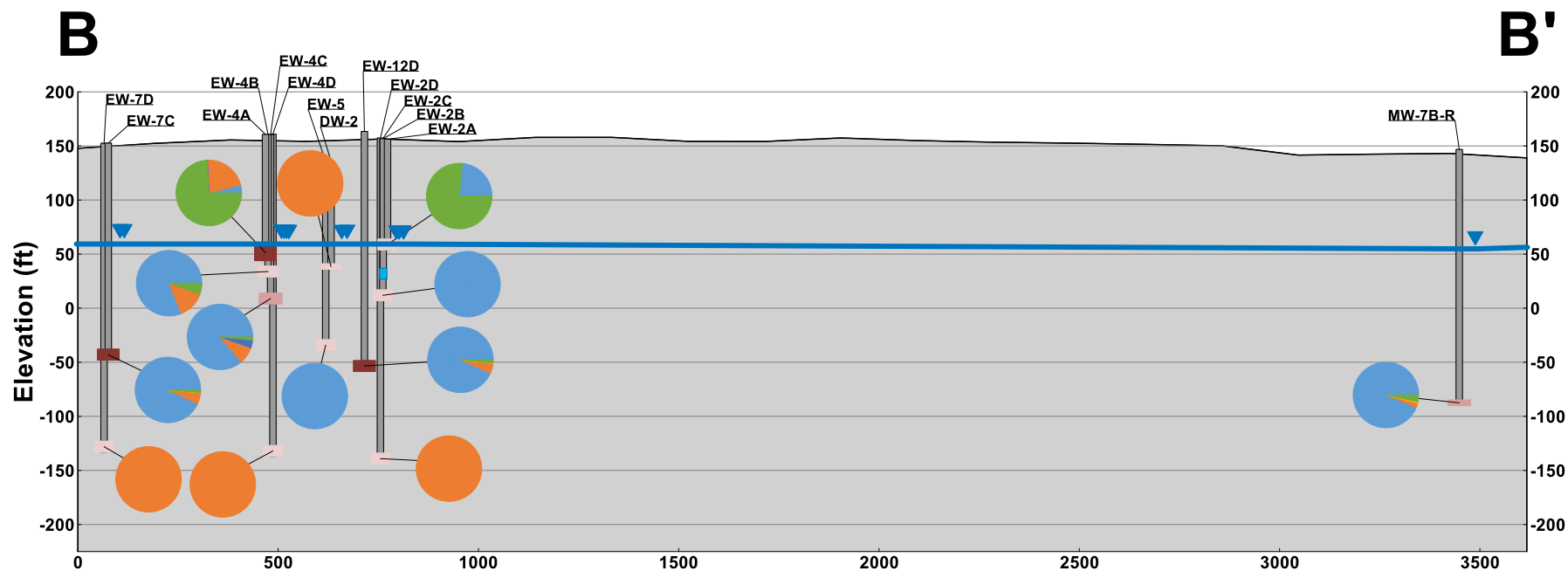


HDR

NEW YORK
STATE OF
OPPORTUNITY

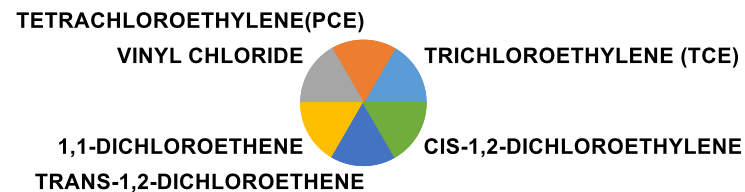
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**CROSS SECTION TRANSECT A
CLAREMONT POLYCHEMICAL CORPORATION
FIGURE 32**



NOTES:

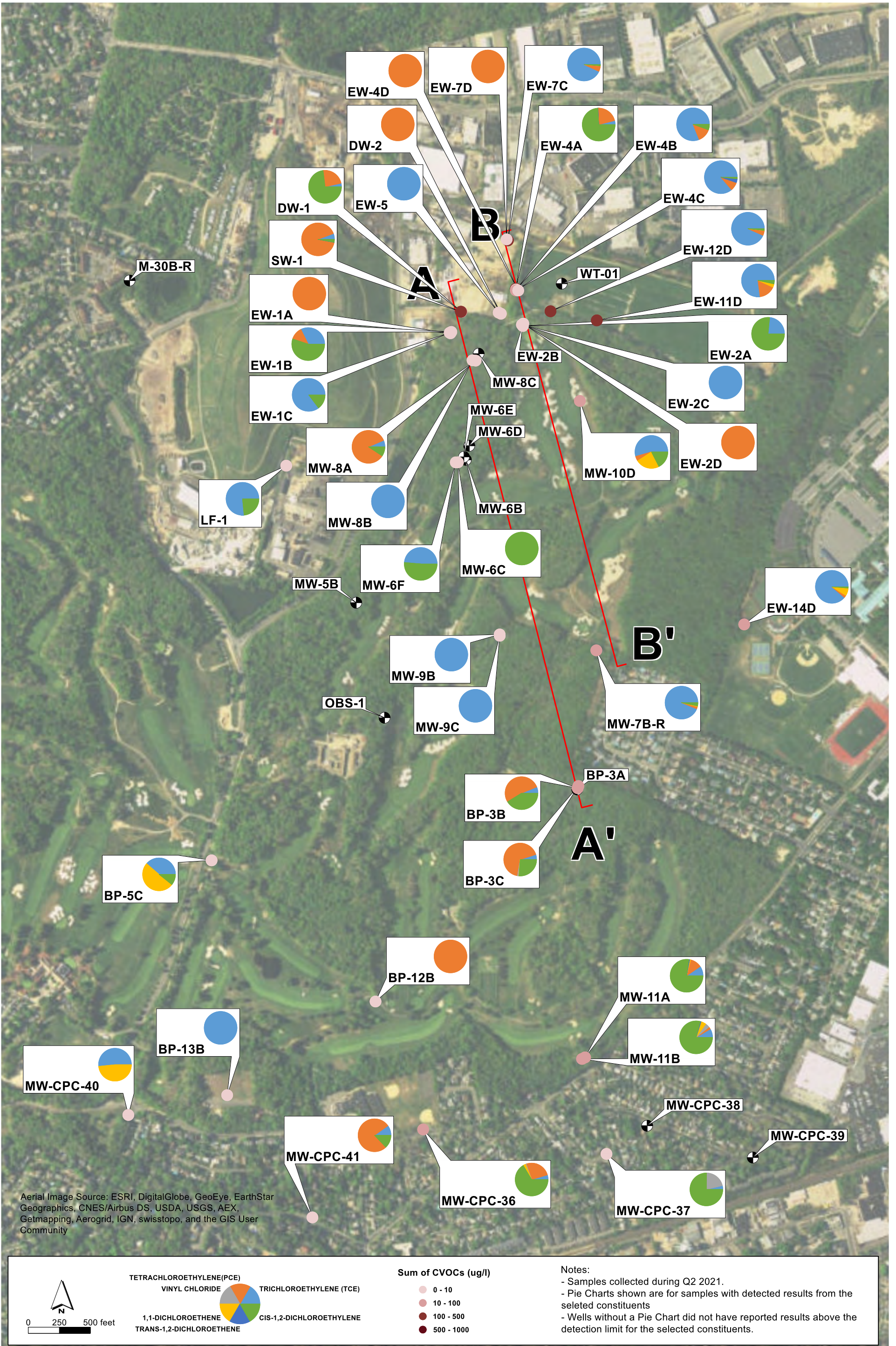
- Samples collected during Q1 2021.
- Capture distance to transect line is 250 feet.
- Pie Charts shown are for samples with results from the selected constituents that were above the detection limit.
- Wells without a Pie Chart did not have reported results above the detection limit for the selected constituents.



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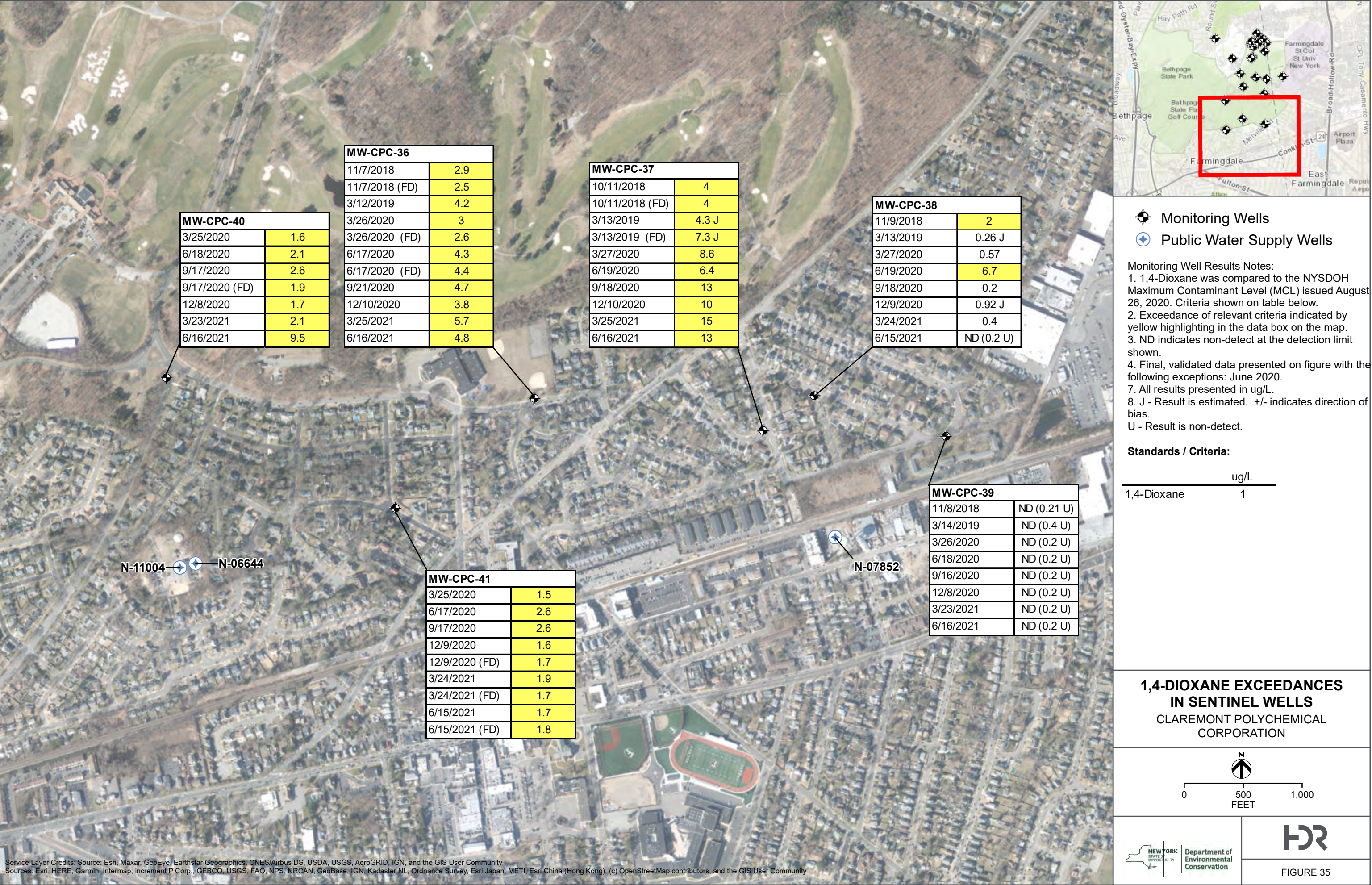
**CROSS SECTION TRANSECT B
CLAREMONT POLYCHEMICAL CORPORATION**

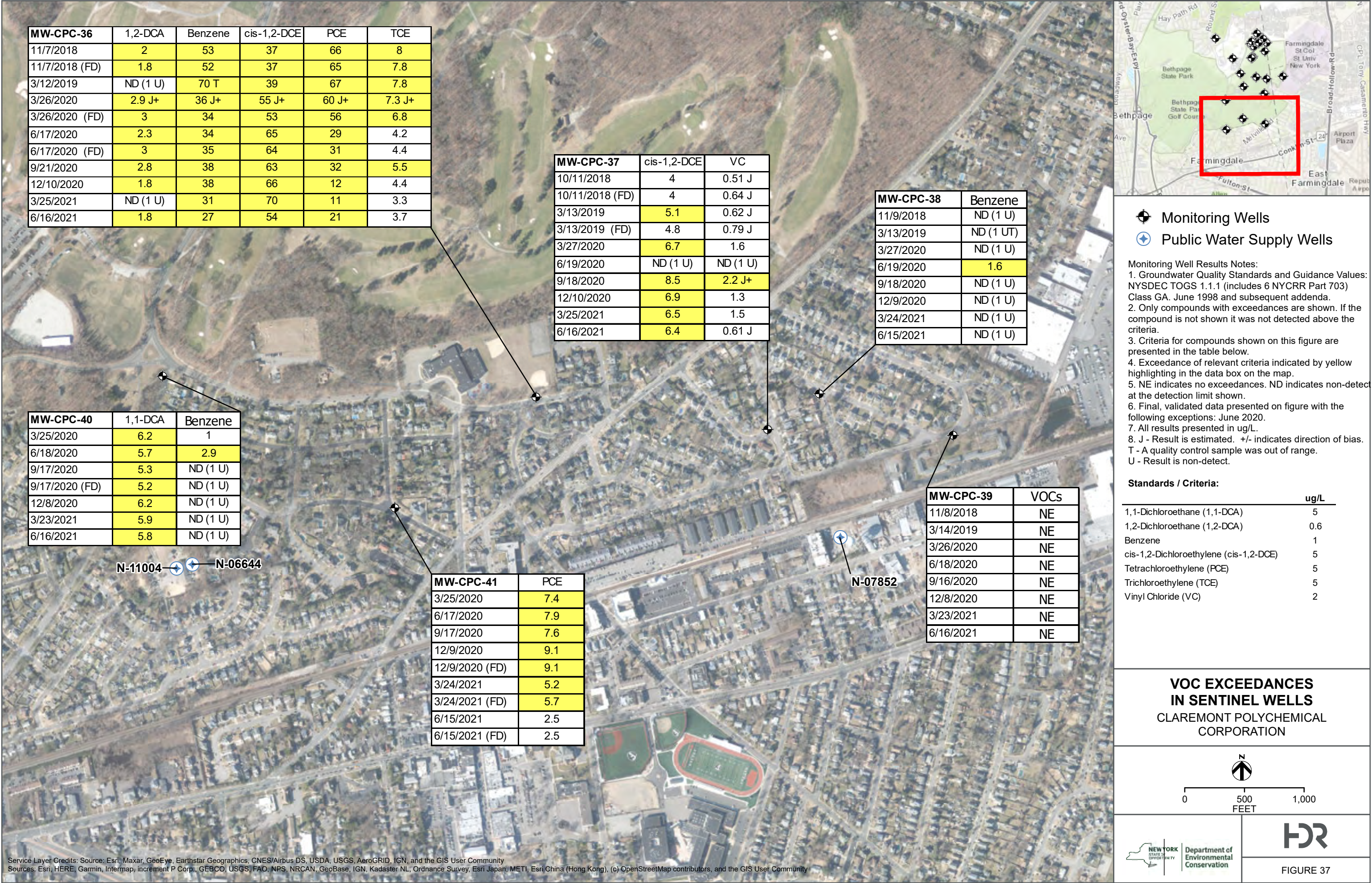
FIGURE 33

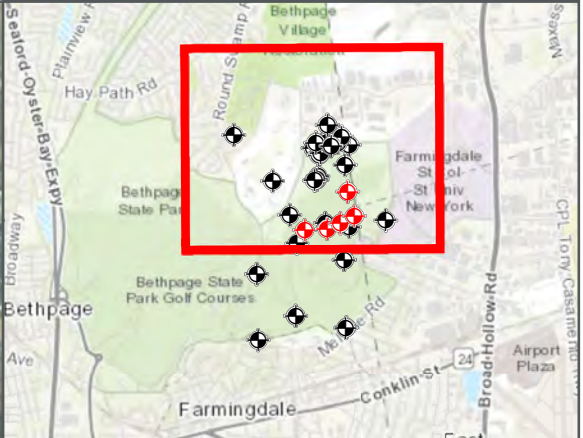


DETECTED CHLORINATED BREAKDOWN PRODUCTS
CLAREMONT POLYCHEMICAL CORPORATION

FIGURE 34







- Monitoring Wells
- Recovery Wells
- Treatment Building

Process Sample Results Notes:

- 1,4-Dioxane was compared to the NYSDOH Maximum Contaminant Level (MCL) issued August 26, 2020. Criteria shown on table below.
- Exceedance of relevant criteria indicated by yellow highlighting in the data box on the map.
- Final, validated data presented on figure.
- All results presented in ug/L.

Standards / Criteria:	
	ug/L
1,4-Dioxane	1

1,4-DIOXANE EXCEEDANCES
IN PROCESS SAMPLES
CLAREMONT POLYCHEMICAL
CORPORATION

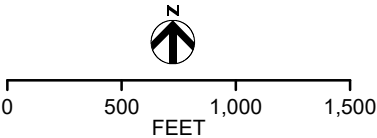
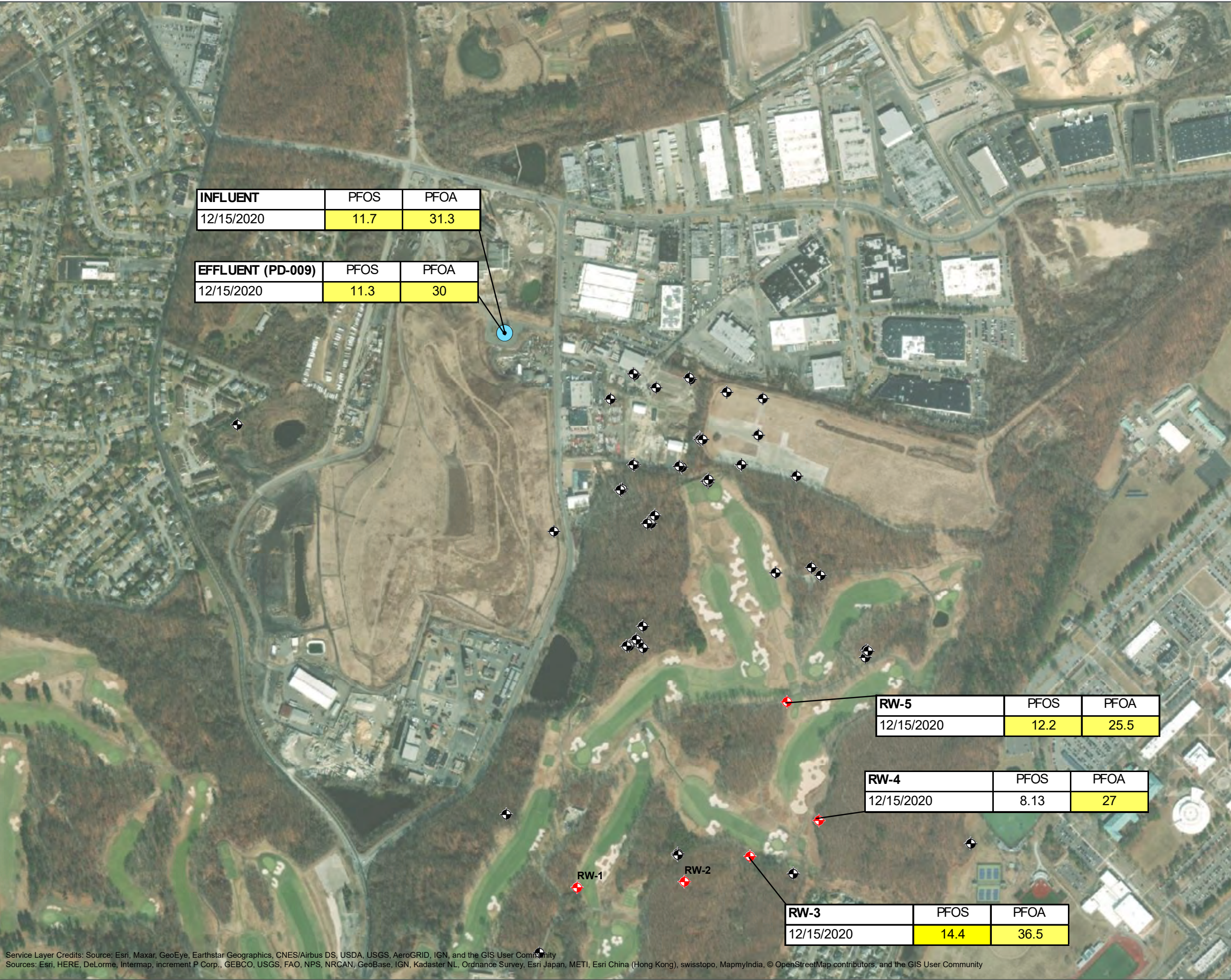


FIGURE 38



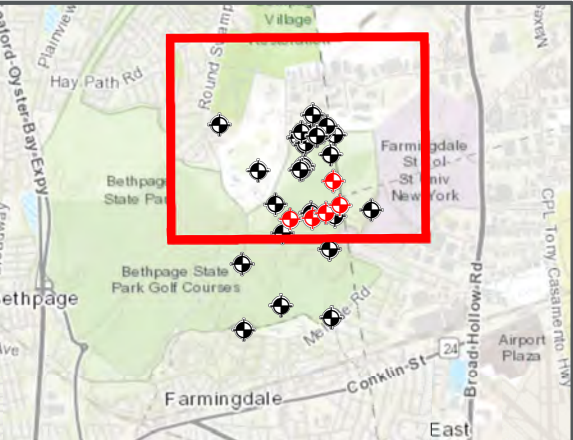
INFLUENT	PFOS	PFOA
12/15/2020	11.7	31.3

EFFLUENT (PD-009)	PFOS	PFOA
12/15/2020	11.3	30

RW-5	PFOS	PFOA
12/15/2020	12.2	25.5

RW-4	PFOS	PFOA
12/15/2020	8.13	27

RW-3	PFOS	PFOA
12/15/2020	14.4	36.5



- Monitoring Wells
- Recovery Wells
- Treatment Building

Process Sample Results Notes:

1. Individual PFAS compound results compared to NYSDEC Part 375 Guidelines for Sampling and Analysis of PFAS (October 2020).
2. Only compounds with exceedances are shown. If the compound is not shown it was not detected above the criteria in any sample.
3. Criteria for compounds shown on this figure are presented in the table below.
4. Exceedance of relevant criteria indicated by yellow highlighting in the data box on the map.
5. Final, validated data presented on figure.
6. All results presented in ng/L.

Standards / Criteria:	ng/L
Perfluorooctanesulfonic acid (PFOS)	10
Perfluorooctanoic acid (PFOA)	10

PFAS EXCEEDANCES
IN PROCESS SAMPLES
CLAREMONT POLYCHEMICAL
CORPORATION

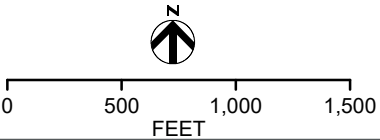


FIGURE 39

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

ATTACHMENT A

**Summary of Analytical Results – Second Quarter 2021 Groundwater
Samples**



Attachment A
Summary of Analytical Results
June 2021 (2Q21) Sampling Event
Claremont Polychemical Superfund Site OU5
Old Bethpage, NY

CAS RN: Unit:		127-18-4 ug/l	79-01-6 ug/l	156-59-2 ug/l	156-60-5 ug/l	75-35-4 ug/l	75-01-4 ug/l	79-34-5 ug/l	71-55-6 ug/l	79-00-5 ug/l	107-06-2 ug/l	75-34-3 ug/l	76-13-1 ug/l	87-61-6 ug/l	120-82-1 ug/l	96-12-8 ug/l	106-93-4 ug/l	95-50-1 ug/l	78-87-5 ug/l	541-73-1 ug/l	542-75-6 ug/l	106-46-7 ug/l	123-91-1 ug/l	591-78-6 ug/l	67-64-1 ug/l	71-43-2 ug/l	74-97-5 ug/l	75-27-4 ug/l	75-25-2 ug/l	74-83-9 ug/l
NYSDEC TOGS 1.1.1 Class GA (a):		5	5	5	5	5	2	5	5	1	0.6	5	5	5	5	0.04	0.0006	3	1	3	0.4	3	1	50	50	1	5	50	50	5
Sample Description	Date Collected	Tetrachloroethylene (PCE)	Trichloroethylene (TCE)	Cs-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	1,3-Dichloropropene (Sum of cis & trans)	1,4-Dichlorobenzene	1,4-Dioxane (P-Dioxane) (EPA 8260 Method; See Attachment A1 for 8270 SIM)	2-Hexanone	Acetone	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane
MW-CPC-36	6/16/2021	21	3.7	54	< 1.0 U	2.0	0.61 J	< 1.0 U	1.8	0.73 J	1.8	0.78 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	< 5.0 U	27	NA	< 1.0 U	< 1.0 U	< 1.0 U
MW-CPC-37	6/16/2021	< 1.0 U	0.32 J	6.4	< 1.0 U	< 1.0 U	1.8	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 50 U	< 5.0 U	< 5.0 U	0.31 J	NA	< 1.0 U	< 1.0 U	< 1.0 U
MW-CPC-38	6/15/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	NA	< 1.0 U	< 1.0 U	< 1.0 U
MW-CPC-39	6/16/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	NA	< 1.0 U	< 1.0 U	< 1.0 U
MW-CPC-40	6/16/2021	< 1.0 U	1.6	< 1.0 U	< 1.0 U	1.5	< 1.0 U	< 1.0 U	1.6	< 1.0 U	< 1.0 U	5.8	< 1.0 U	< 1.0 U	< 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	NA	< 1.0 U	< 1.0 U	< 1.0 U
MW-CPC-41	6/15/2021	2.5	0.32 J	0.42 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	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	< 50 U	< 5.0 U	< 5.0 U	< 1.0 U	NA	< 1.0 U	< 1.0 U	< 1.0 U
MW-CPC-41 (DUP)	6/15/2021	2.5	< 1.0 U	0.40 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.32 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	NA	< 1.0 U	< 1.0 U	< 1.0 U
BP-3A	6/14/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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
BP-3B	6/14/2021	23	2.7	18	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	4.0	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	< 50 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BP-3C	6/14/2021	62	4.6	24	< 1.0 U	0.27 J	1.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	4.2	0.67 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	< 5.0 U	0.57 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BP-3C (DUP)	6/14/2021	59	4.4	23	< 1.0 U	0.27 J	1.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	4.1	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	< 50 U	< 5.0 U	< 5.0 U	0.56 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
DW-1	6/15/2021	6.4	0.97 J	20	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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
DW-2	6/15/2021	1.6	< 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	< 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
EW-01A	6/15/2021	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	< 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
EW-01A (DUP)	6/15/2021	2.5	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 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
EW-01B	6/15/2021	0.77 J	2.0	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	< 1.0 U	< 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
EW-01C	6/15/2021	< 1.0 U	1.8	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	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-02A	6/14/2021	< 1.0 U	0.43 J	1.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	5.5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-02B	6/14/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	5.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-02C	6/14/2021	< 1.0 U	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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
EW-02D	6/14/2021	1.0	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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
EW-04A	6/15/2021	44	8.0	150	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	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-04B	6/15/2021	0.92 J	5.6	0.38 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	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-04C	6/15/2021	4.0	41	0.73 J	1.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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
EW-04D	6/15/2021	1.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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
EW-05	6/15/2021	< 1.0 U	1.0	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 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	5.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-07C	6/15/2021	17	290	4.0	< 1.0 U	0.42 J	< 1.0 U	< 1.0 U	0.54 J	< 1.0 U	< 1.0 U	0.26 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	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-07D	6/15/2021	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	< 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
EW-11D	6/15/2021	23	110	4.9	< 1.0 U	4.8	< 1.0 U	< 1.0 U	1.8	< 1.0 U	< 1.0 U	0.45 J	0.42 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	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-12D	6/15/2021	19	370	6.4	< 1.0 U	0.67 J	< 1.0 U	< 1.0 U	0.58 J	< 1.0 U	< 1.0 U	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	< 50 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
EW-14D	6/14/2021	0.74 J	28	0.39 J	< 1.0 U	2.4	< 1.0 U	< 1.0 U	1.5	< 1.0 U	0.48 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1														



Attachment A
Summary of Analytical Results
June 2021 (2Q21) Sampling Event
Claremont Polychemical Superfund Site OU5
Old Bethpage, NY

CAS RN: Unit:		75-15-0 ug/l 60	56-23-5 ug/l 5	108-90-7 ug/l 5	75-00-3 ug/l 5	67-66-3 ug/l 7	74-87-3 ug/l 5	10061-01-5 ug/l See sum	110-82-7 ug/l NS	124-48-1 ug/l 50	75-71-8 ug/l 5	100-41-4 ug/l 5	98-82-8 ug/l 5	179601-23-1 ug/l 5**	79-20-9 ug/l NS	78-93-3 ug/l 50	108-10-1 ug/l NS	108-87-2 ug/l NS	75-09-2 ug/l 5	95-47-6 ug/l 5	100-42-5 ug/l 5	75-65-0 ug/l NS	1634-04-4 ug/l 10	108-88-3 ug/l 5	10061-02-6 ug/l See sum	75-69-4 ug/l 5	1330-20-7 ug/l 5**
NYSDEC TOGS 1.1.1 Class GA (a):																											
Sample Description	Date Collected	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cis-1,3-Dichloropropene	Cyclohexane	Dibromochloromethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	Methyl Acetate	Methyl Ethyl ketone (2-Butanone)	Methyl Isobutyl ketone (4-Methyl-2-Pentanone)	Methylcyclohexane	Methylene Chloride	O-Xylene (1,2-Dimethylbenzene)	Styrene	Tert-Butyl Alcohol	Tert-Butyl Methyl Ether	Toluene	Trans-1,3-Dichloropropene	Trichlorofluoromethane	Xylenes (Total)
MW-CPC-36	6/16/2021	< 1.0 U	< 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	NA	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 10 U	0.26 J	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U
MW-CPC-37	6/16/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	NA	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U
MW-CPC-38	6/15/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	NA	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U
MW-CPC-39	6/16/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	NA	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U
MW-CPC-40	6/16/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	NA	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U
MW-CPC-41	6/15/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.40 J	< 1.0 U	NA	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U
MW-CPC-41 (DUP)	6/15/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.40 J	< 1.0 U	NA	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U
BP-3A	6/14/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.70 J	< 1.0 U	< 1.0 U	0.90 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	NA
BP-3B	6/14/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.90 J	< 1.0 U	0.95 J	< 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	NA
BP-3C	6/14/2021	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	0.68 J	< 1.0 U	1.6	< 1.0 U	< 1.														

Note: U = not detected; J = estimated value; T = quality control parameter exceeded laboratory limits; B = contamination in an associated blank
Values in shaded cells exceed TOGS 1.1.1 Class GA standard or guidance value.



Attachment A1
Summary of Analytical Results
June 2021 (2Q21) Sampling Event
Claremont Polychemical Superfund Site OU5
Old Bethpage, NY

CAS RN:		1763-23-1	335-67-1			123-91-1	2058-94-8	2706-90-3	307-24-4	307-55-1	335-76-2	335-77-3	355-46-4	375-22-4	375-73-5	375-85-9
Unit:		ng/l	ng/l	ng/l	ng/l	ug/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l
Criteria:		10	10	70	500	1	100	100	100	100	100	100	100	100	100	100
Criteria Reference:		(b)	(b)	(c)	(b)	(d)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Sample Description	Date Collected	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)	Total PFOA & PFOS	Total PFAS (see reference (c))	1,4-Dioxane (P-Dioxane) (EPA Method 8270E SIM)	Perfluoroundecanoic Acid (PFUnA)	Perfluoropentanoic Acid (PFPeA)	Perfluorohexanoic acid (PFHxA)	Perfluorododecanoic acid (PFDoA)	Perfluorodecanoic acid (PFDA)	Perfluorodecane Sulfonic Acid (PFDS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanoic Acid (PFBA)	Perfluorobutanesulfonic acid (PFBS)	Perfluoroheptanoic acid (PFHpA)
MW-CPC-36	6/16/2021	137	122	259	804	4.8	3.28	46.1	52.2	< 1.98 U	2.51	< 1.98 U	34.6	24.8	8.30	31.8
MW-CPC-37	6/16/2021	17.9	46.7	64.6	117.75	13	< 1.78 U	5.53	11.9	< 1.78 U	< 1.78 U	< 1.78 U	5.47	16.0	3.55	5.45
MW-CPC-38	6/15/2021	0.47 BJ	< 1.70 U	0.47 BJ	22.46	< 0.20 U	< 1.70 U	< 1.70 U	0.69 J	< 1.70 U	< 1.70 U	< 1.70 U	< 1.70 U	< 4.25 U	< 1.70 U	< 1.70 U
MW-CPC-39	6/16/2021	< 1.72 U	< 1.72 U	< 1.72 U	< 0	< 0.20 U	< 1.72 U	< 1.72 U	< 1.72 U	< 1.72 U	< 1.72 U	< 1.72 U	< 1.72 U	< 4.30 U	< 1.72 U	< 1.72 U
MW-CPC-40	6/16/2021	< 1.92 U	< 1.92 U	< 1.92 U	12.43	9.5	< 1.92 U	< 1.92 U	0.68 J	< 1.92 U	< 1.92 U	< 1.92 U	0.47 J	< 4.80 U	0.38 J	< 1.92 U
MW-CPC-41	6/15/2021	18.3 B	29.5	47.8	204.17	1.7	< 1.79 U	30.4	23.0	< 1.79 U	< 1.79 U	< 1.79 U	7.72 B	14.3	3.65 B	12.1 B
MW-CPC-41 (DUP)	6/15/2021	18.1 B	30	48.1	205.63	1.8	< 1.65 U	29.7	23.0	< 1.65 U	< 1.65 U	< 1.65 U	7.79 B	14.0	3.39 B	12.4 B

Note: U = not detected; J = estimated value; B = contamination in an associated blank
Values in shaded cells exceed criteria. See notes page for references.
(b) NYSDEC Guidelines for Sampling and Analysis of PFAS Under Part 375 (October 2020)
(c) USEPA Fact Sheet PFOA and PFOS Drinking Water Health Advisory (November 2016)
(d) NYSDOH Drinking Water Program 1,4-Dioxane MCL (August 2020)



Attachment A1
Summary of Analytical Results
June 2021 (2Q21) Sampling Event
Claremont Polychemical Superfund Site OU5
Old Bethpage, NY

CAS RN:		375-92-8	375-95-1	376-06-7	39108-34-4	72629-94-8	754-91-6	2355-31-9	27619-97-2	2991-50-6
Unit:		ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l
Criteria:		100	100	100	100	100	100	100	100	100
Criteria Reference:		(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Sample Description	Date Collected	Perfluoroheptane Sulfonate (PFHPS)	Perfluorononanoic acid (PFNA)	Perfluorotetradecanoic acid (PFTA)	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	Perfluorotridecanoic Acid (PFTrIA)	Perfluorooctane Sulfonamide (FOSA)	2-(N-methyl perfluorooctanesulfonamido) acetic acid	Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine
MW-CPC-36	6/16/2021	2.71	281	< 1.98 U	13.1	< 1.98 U	< 1.98 U	< 4.94 U	44.6	< 4.94 U
MW-CPC-37	6/16/2021	0.63 J	0.35 J	< 1.78 U	< 1.78 U	< 1.78 U	< 1.78 U	< 4.46 U	4.27 J	< 4.46 U
MW-CPC-38	6/15/2021	< 1.70 U	< 1.70 U	< 1.70 U	< 1.70 U	< 1.70 U	< 1.70 U	< 4.25 U	21.3	< 4.25 U
MW-CPC-39	6/16/2021	< 1.72 U	< 1.72 U	< 1.72 U	< 1.72 U	< 1.72 U	< 1.72 U	< 4.30 U	< 4.30 U	< 4.30 U
MW-CPC-40	6/16/2021	< 1.92 U	< 1.92 U	< 1.92 U	< 1.92 U	< 1.92 U	< 1.92 U	< 4.80 U	10.9	< 4.80 U
MW-CPC-41	6/15/2021	0.60 J	62.0 B	< 1.79 U	< 1.79 U	< 1.79 U	< 1.79 U	< 4.49 U	2.60 J	< 4.49 U
MW-CPC-41 (DUP)	6/15/2021	0.55 J	64.2 B	< 1.65 U	< 1.65 U	< 1.65 U	< 1.65 U	< 4.12 U	2.50 J	< 4.12 U

Note: U = not detected; J = estim
Values in shaded cells exceed criteri
(b) NYSDEC Guidelines for Sampling
(c) USEPA Fact Sheet PFOA and PF
(d) NYSDOH Drinking Water Program

Qualifiers	Definitions
J	Indicates an estimated value.
T	Indicates one or more laboratory control limit was exceeded.
U	Indicates result was not detected. Reporting detection limit is listed instead.

Matrix	Applicable Criteria	Defintions
Groundwater	NYS Groundwater Class GA	New York State Part 703.5 Criteria, Class GA (a)
	NYSDEC Part 375 PFAS	NYSDEC Part 375 (b)
	PFOA & PFOS Sum	EPA PFOA & PFOS HAL (c)
	NYSDOH Title 10 Part 5	NYSDOH (d)

References:

(a) New York State Department of Environmental Conservation Division of Water *Technical and Operational Guidance Series (TOGS) 1.1.1 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* (June 1998 and subsequent addenda). Table 1 [Class GA].

<https://www.dec.ny.gov/regulations/2384.html>

(b) Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Programs, October 2020

https://www.dec.ny.gov/docs/remediation_hudson_pdf/pfassampanaly.pdf

(c) US Environmental Protection Agency Fact Sheet PFOA & PFOS Drinking Water Health Advisories, November 2016

https://www.epa.gov/sites/production/files/2016-06/documents/drinkingwaterhealthadvisories_pfoa_pfes_updated_5.31.16.pdf

(d) New York State Department of Health (NYSDOH) Drinking Water Program Maximum Contaminant Level (MCL), effective August 26, 2020 as indicated in the New York State Register and NYSDOH Title 10 Part 5-1.52 Table 3.

https://www.health.ny.gov/regulations/nycrr/title_10/part_5/docs/subpart_5-1_tables.pdf

<https://www.dos.ny.gov/info/register.htm>

Notes:

1,3-Dichloropropene includes the total of cis-1,3-dichloropropene and trans-1,3-dichloropropene.

Totaled fields include the total of all detected results of constituents. If all results are non-detect, the total is equal to the maximum result detection limit.

** Standards are given for individual xylene isomers. For mixtures (e.g. m&p or total xylenes) the criteria is provided for reference only.

NA - Constituent was not analyzed for, due to variations in requested lab methods.

NS - No standard or guidance value provided.

1,4-Dioxane - Method 8270 SIM (Attachment A1) provides lower detection limits and is used for evaluating the presence of the contaminant. Method 8260 is provided for reference only.

ATTACHMENT B
Synoptic Water Level Data

Water Level Data Sheet

Claremont GWTF OU5

Old Bethpage, New York

Date of Recording:		3-Jun-21		Data Recorded By:		PET, JBR
Well ID	03-17-21 DTW Reading	Time	DTW	Riser Elevation	Water Elevation	Comments/Notes
BP-3A	63.64	820	62.72	124.16	61.44	
BP-3B	65.07	810	64.78	123.19	58.41	
BP-3C	65.24	815	64.98	123.91	58.93	
BP-5B	36.06	1128	35.95	96.48	60.53	
BP-5C	36.11	1130	36.02	96.28	60.26	
BP-12B	20.12	955	20.22	78.24	58.02	
BP-12C	21.61	950	21.87	78.56	56.69	
BP-13B	76.85	935	77.16	133.37	56.21	
BP-13C	77.91	940	78.37	133.67	55.30	
DW-1	65.79	1330	65.27	130.13	64.86	
DW-2	71.66	1345	71.11	135.52	64.41	
EW-1A	64.42	1320	64.05	128.75	64.70	
EW-1B	65.00	1315	64.42	129.31	64.89	
EW-1C	65.06	1325	64.58	129.16	64.58	
EW-2A	92.78	1035	92.22	156.09	63.87	
EW-2B	93.09	1040	92.52	156.50	63.98	
EW-2C	93.01	1045	92.47	156.50	64.03	
EW-2D	93.54	1050	93.23	157.12	63.89	
EW-3A	97.15	1058	96.54	157.88	61.34	
EW-3B	97.22	1100	96.67	157.99	61.32	
EW-3C	97.10	1105	96.55	157.87	61.32	
EW-4A	96.54	1155	96.00	160.58	64.58	
EW-4B	96.60	1200	96.07	160.59	64.52	
EW-4C	96.34	1205	95.84	160.33	64.49	
EW-4D	96.61	1210	96.26	160.62	64.36	
EW-5	71.67	1340	70.78	135.05	64.27	
EW-6A	63.82	1350	63.25	128.92	65.67	
EW-6C	64.46	1355		129.02	--	inaccessible
EW-7C	87.79	1405	87.41	152.45	65.04	
EW-7D	87.69	1410	87.31	152.35	65.04	
EW-8D	65.39	1345		130.21	--	inaccessible
EW-9D	71.51	1400	71.13	136.20	65.07	
EW-10C	95.33	1215	94.88	159.80	64.92	
EW-11D	101.23	1145	100.86	164.17	63.31	
EW-12D	99.89	1150	99.48	163.34	63.86	
EW-13D	99.61	1220	99.47	163.61	64.14	
EW-14D	41.87	820	41.46	100.58	59.12	
LF-1	45.55	1010	44.98	109.83	64.85	
LF-02	53.04	1420	52.54	117.18	64.64	
M-30BR	85.23	1430	85.11	153.07	67.96	
MW-5B	74.05	1020	73.32	136.99	63.67	
MW-6A	96.47	1235	95.72	158.83	63.11	
MW-6B	96.61	1240	95.85	159.02	63.17	
MW-6C	95.92	1245	95.24	158.65	63.41	

Water Level Data Sheet

Claremont GWTF OU5

Old Bethpage, New York

MW-6D	96.54	1248	95.85	159.01	63.16	
MW-6E	97.11	1250	96.41	159.54	63.13	
MW-6F	96.31	1255	95.93	158.71	62.78	
MW-7BR	88.32	1110	87.83	146.27	58.44	
MW-8A	70.10	1300	69.46	133.52	64.06	
MW-8B	69.42	1305	68.88	132.84	63.96	
MW-8C	70.78	1310	70.37	134.27	63.90	
MW-9B	92.10	1115	91.54	151.78	60.24	
MW-9C	92.67	1120	92.14	151.97	59.83	
MW-10B	98.07	1055	97.55	159.90	62.35	
MW-10C	97.04	1135	96.59	158.89	62.30	
MW-10D	97.71	1140	97.50	159.67	62.17	
MW-11A	23.06	905	23.00	78.71	55.71	
MW-11B	22.91	910	22.85	78.43	55.58	
MW CPC-36	20.81	915	20.79	75.93	55.14	
MW CPC-37	26.38	920	26.71	77.87	51.16	
MW CPC-38	26.38	925	27.45	78.91	51.46	
MW CPC-39	27.40	915		75.25	--	not accessible
MW CPC-40	55.89	945	56.19	110.00	53.81	
MW CPC-41	18.69	930	18.88	72.60	53.72	
OBS-1	48.88	1125	48.57	109.03	60.46	
SW-1	65.95	1335	65.43	130.24	64.81	
WT-01	99.59	1230	99.10	163.28	64.18	

GROUNDWATER ELEVATIONS

BETHPAGE STATE PARK

WATER LEVEL MEASUREMENTS

June 3, 2021

VE, KF, MF

WELL	TIME	MEASURING POINT ELEV	DEPTH TO WATER	WATER TABLE	ORW FLOW RATE	COMMENTS
BP-1A	1208	109.77	46.29	63.48		
BP-1B	1206	109.53	46.09	63.44		
BP-1C	1205	109.37	45.80	63.57		
BP-2A	1043	151.00	86.35	64.65		
BP-2B*	1040	151.13	86.52	64.61		
BP-3A		124.54				<i>measured by HDR</i>
BP-3B		123.57				<i>measured by HDR</i>
BP-3C		123.68				<i>measured by HDR</i>
BP-4A	1057	92.69	32.34	60.35		
BP-4B*	1058	91.92	31.67	60.25		
BP-4C*	1100	91.68	32.19	59.49		
BP-4I	1101	92.10	31.82	60.28		
BP-5A	1027	96.34	35.61	60.73		
BP-5B		96.48				<i>PDB in B & C wells</i>
BP-5C		96.28				<i>PDB in B & C wells</i>
BP-6A	0953	102.55	39.42	63.13		
BP-6B	0955	102.58	40.05	62.53		
BP-6C	0957	102.35	39.72	62.63		
BP-7A	1013	147.54	82.33	65.21		
BP-7B	1012	148.76	83.67	65.09		
BP-7C	1010	148.40	83.46	64.94		
BP-8A	1055	89.88	27.26	62.62		
BP-8B	1045	89.82	27.00	62.82		
BP-8C	1050	89.53	27.67	61.86		
BP-9B*	1142	85.09	26.51	58.58		
BP-9C*	1139	84.88	27.93	56.95		
BP-9I	1140	85.18	26.56	58.62		
BP-10B*	1132	81.21	24.08	57.13		
BP-10C*	NA	80.94	NA	NA		<i>LOGGER in WELL</i>
BP-11	NA	81.76	NA	NA		<i>WELL BURIED</i>
BP-12A*	1152	78.33	20.18	58.15		
BP-12B*		78.24				<i>PDB in B & C wells</i>
BP-12C*		78.56				<i>PDB in B & C wells</i>
BP-13B*		133.37				<i>PDB in B & C wells</i>
BP-13C*		133.67				<i>PDB in B & C wells</i>
BP-14B*	1114	81.50	22.79	58.71		
BP-14C*	1115	81.48	23.61	57.87		
BP-15B	1124	98.38	39.24	59.14		
BP-15C	1123	98.45	39.30	59.15		
OBV-1B	0947	157.26	87.82	69.44		
OBV-1C	0949	156.69	88.03	68.66		
W-7A	1110	104.44	40.10	64.34		
W-7B	1115	104.55	39.16	65.39		
W-7C	1120	104.68	40.36	64.32		
W-7D	1105	104.58	40.79	63.79		
RB-1	1130	135.02	66.44	68.58		
UM-1	1035	115.64	50.05	65.59		
U-6A	NA	153.94	NA	NA		<i>Leak in casing</i>
ORW-1	NA	147.68	NA	NA	Off	<i>Vault Door Jammed</i>
ORW-2	1052	97.88	37.18	60.70	Off	
ORW-3	1105	91.39	31.30	60.09	Off	
ORW-4	1110	88.88	29.69	59.19	Off	
ORW-5A	1031	100.38	42.10	58.28	Off	
ORW-6	1137	83.42	24.92	58.50	Off	
ORW-7	1145	76.14	18.86	57.28	Off	

* = DEDICATOR PUMP IN WELL

ATTACHMENT C

Full Laboratory Data Deliverable available on Claremont OU4 Sharepoint Site

ATTACHMENT D
Field Documentation

Eurofins TestAmerica, Edison

777 New Durham Road

Edison, NJ 08817

Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record

Environment Testing
America

Client Information

Client Contact:

Jennifer Rhee

Company:

HDR

Address:

1 International Blvd, 10th Floor, Suite 1000

City:

Mahwah

State, Zip:

New Jersey 07945

Phone:

845-821-1801

Email:

Jennifer.Rhee@hdrinc.com

Project Name:

WA#43 Claremont Polychemical RI/FS

Site:

Old Bethpage, NY

Sampler:

Matthew T. Papula

Phone:

845-263-0241

Lab PM:

Julie Gilmore

E-Mail:

Julie.Gilmore@Eurofinset.com

Carrier Tracking No(s):

COC #:

Page 1 of 1

Job #:

46026810

Analysis Requested

Preservation Codes:

A - HCL M - Hexane
B - NaOH N - None
C - Zn Acetate O - AsNaO2
D - Nitric Acid P - Na2O4S
E - NaHSO4 Q - Na2SO3
F - MeOH R - Na2S2O3
G - Amchlor S - H2SO4
H - Ascorbic Acid T - TSP Dodecahydrate
I - Ice U - Acetone
J - DI Water V - MCAA
K - EDTA W - pH 4-5
L - EDA Z - other (specify)

Other:

Sample Identification

Sample Date

Sample Time

Sample Type
(C=comp,
G=grab)Matrix
(W=water,
S=solid,
O=waste/oil,
BT=Tissue, A=Air)

MW-CPC-38-R9-GW-391-20210615-0

06/15/2021

10:55

G

W

MW-CPC-41-R9-GW-258-20210615-0

06/15/2021

13:55

G

W

MW-CPC-41-R9-GW-258-20210615-1

06/15/2021

13:55

G

W

TB-20210615

06/15/2021

G

W

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant

☐ Poison B

☐ Unknown

☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

NY Cat B

NYSDEC EDD Format & Excel

Empty Kit Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Date/Time:

6/16

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Company:

HDR

Company:

Company:

Company:

Company:

Company:

Company:

Company:

Company:

Company:

Company:

Time:

Received by:

Received by:

Received by:

Received by:

Received by:

Received by:

Received by:

Received by:

Received by:

Received by:

Received by:

Received by:

Received by:

Method of Shipment:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Custody Seals Intact:

☐ Yes ☐ No

Custody Seal No.:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client

☐ Disposal By Lab

☐ Ship For

Months

Special Instructions/QC Requirements:

Callout ID 138032

Send invoices to jennifer.rhee@hdrinc.com

Cooler Temperature(s) °C and Other Remarks:

Environment Testing America

[illegible]

TestAmerica Edison

777 New Durham Road
Edison, NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record



Client Information

Client Contact:
Caroline Jalanti

Company:
NYS DEC

Address:
625 Broadway, 12th Floor

City:
Albany

State, Zip:
NY 12233-7017

Phone:

Email:
caroline.jalanti@dec.ny.gov

Project Name:
DEC-Claremont 130015

Site:
Claremont Polychemical GWTF OUS

Sampler:
HDR, Inc.

Phone:
516-777-7242

Due Date Requested:
Standard TAT

TAT Requested (days):

10 Day

PO #:
CallOut: 138032; Site: 130015

WO #:
150 Winding Road, Old Bethpage

Project #:
46008579

SSOW#:

Lab PM:
Julie Gilmore

E-Mail:
julie.gillmore@testamericainc.com

Carrier Tracking No(s):

COC No:
CPC GW COC 061721

Page:
Page 1 of 5

Analysis Requested

Field Filled Sample (Yes or No)

Performs Method (Yes or No)

8260C - Routine SOW VOC List+TBA

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - Na2SO4
F - HNO3
G - Ammonia
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification

Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filled Sample (Yes or No)	Performs Method (Yes or No)	8260C - Routine SOW VOC List+TBA	Total Number of containers	Special Instructions/Note:
3P3A-CP-00-061421	6/14/21	8:30	G	W	N	3	3	field samples
3P3B-CP-00-061421	6/14/21	8:35	G	W	N	3	3	field samples
3P3C-CP-00-061421	6/14/21	8:25	G	W	N	3	3	field samples
3P5B-CP-00-061421	6/14/21	12:40	G	W	N	3	3	field samples
3P5C-CP-00-061421	6/14/21	12:35	G	W	N	3	3	field samples
3P12B-CP-00-061421	6/14/21	13:00	G	W	N	3	3	field samples
3P12C-CP-00-061421	6/14/21	13:35	G	W	N	3	3	field samples
3P3C-CP-01-061421	6/14/21	8:25	G	W	N	3	3	field duplicate samples
3P13B-CP-00-061421	6/14/21	10:00	G	W	N	3	3	field samples
3P13C-CP-00-061421	6/14/21	10:05	G	W	N	3	3	field samples
3W1-CP-00-061521	6/15/21	10:50	G	W	N	3	3	field samples
3W2-CP-00-061521	6/15/21	11:10	G	W	N	3	3	field samples

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Neurological

Deliverable Requested: I, II, III, IV, Other (specify)

NY Cat B
NYSDEC EDD Format & Excel

Special Instructions/QC Requirements: Send invoices to caroline.jalanti@dec.ny.gov (625 Broadway 12th Floor Albany, NY 12233-7017)

Empty Kit Relinquished by:
Relinquished by:
Relinquished by:
Relinquished by:

Date/Time: 6/17/21 11:43:30

Company: HDR

Received by: [Signature]

Date/Time: 6/17/21 14:30

Company: [Signature]

Custody Seals Intact:
Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

TestAmerica Edison

777 New Durham Road
Edison, NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record



Client Information Client Contact: Caroline Jalanti Company: NYS DEC Address: 625 Broadway, 12th Floor City: Albany State, Zip: New York, 12233-7017 Phone: Email: caroline.jalanti@dec.ny.gov Project Name: NYSDEC Claremont OU5, 130015 Site: Claremont Polychemical GWTF OU5		Sampler: HDR Inc Phone: 516-777-7242 Lab PM: Julie Gilmore E-Mail: julie.gillmore@testamericainc.com Carrier Tracking No(s):		COC No: CPC GW COC 061721 Page: Page 2 of 5 Job: Analysis Requested:																																																																																																																																			
Due Date Requested: Standard TAT TAT Requested (days): 10 Day PO #: CallOut: 1338032; Site: 130015 WO #: 150 Winding Road, Old Bethpage Project #: 46008579 SSOW#:		Analysis Requested:		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2C4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:																																																																																																																																			
Sample Identification <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample ID</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=air)</th> <th>Field Duplicate Sample (Yes or No)</th> <th>Field Duplicate Sample (Yes or No)</th> <th>B280C - Routine SOW VOC List+TBA</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> </thead> <tbody> <tr><td>EW01A-CP-00-061521</td><td>6/15/21</td><td>10:30</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> <tr><td>EW01A-CP-01-061521</td><td>6/15/21</td><td>10:30</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field duplicate samples</td></tr> <tr><td>EW01B-CP-00-061521</td><td>6/15/21</td><td>10:35</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> <tr><td>EW01C-CP-00-061521</td><td>6/15/21</td><td>10:40</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> <tr><td>EW02A-CP-00-061421</td><td>6/14/21</td><td>11:00</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> <tr><td>EW02B-CP-00-061421</td><td>6/14/21</td><td>11:05</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> <tr><td>EW02C-CP-00-061421</td><td>6/14/21</td><td>11:10</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> <tr><td>EW02D-CP-00-061421</td><td>6/14/21</td><td>11:15</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> <tr><td>EW04A-CP-00-061521</td><td>6/15/21</td><td>8:50</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> <tr><td>EW04B-CP-00-061521</td><td>6/15/21</td><td>8:45</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> <tr><td>EW04C-CP-00-061521</td><td>6/15/21</td><td>8:55</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> <tr><td>EW04D-CP-00-061521</td><td>6/15/21</td><td>9:00</td><td>G</td><td>W</td><td>N</td><td>3</td><td></td><td></td><td>Field samples</td></tr> </tbody> </table>		Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=air)	Field Duplicate Sample (Yes or No)	Field Duplicate Sample (Yes or No)	B280C - Routine SOW VOC List+TBA	Total Number of Containers	Special Instructions/Note:	EW01A-CP-00-061521	6/15/21	10:30	G	W	N	3			Field samples	EW01A-CP-01-061521	6/15/21	10:30	G	W	N	3			Field duplicate samples	EW01B-CP-00-061521	6/15/21	10:35	G	W	N	3			Field samples	EW01C-CP-00-061521	6/15/21	10:40	G	W	N	3			Field samples	EW02A-CP-00-061421	6/14/21	11:00	G	W	N	3			Field samples	EW02B-CP-00-061421	6/14/21	11:05	G	W	N	3			Field samples	EW02C-CP-00-061421	6/14/21	11:10	G	W	N	3			Field samples	EW02D-CP-00-061421	6/14/21	11:15	G	W	N	3			Field samples	EW04A-CP-00-061521	6/15/21	8:50	G	W	N	3			Field samples	EW04B-CP-00-061521	6/15/21	8:45	G	W	N	3			Field samples	EW04C-CP-00-061521	6/15/21	8:55	G	W	N	3			Field samples	EW04D-CP-00-061521	6/15/21	9:00	G	W	N	3			Field samples	Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Ship For _____ Months Special Instructions/QC Requirements: Send invoices to caroline.jalanti@dec.ny.gov (625 Broadway 12th Floor Albany, NY 12233-7017)	
Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=air)	Field Duplicate Sample (Yes or No)	Field Duplicate Sample (Yes or No)	B280C - Routine SOW VOC List+TBA	Total Number of Containers	Special Instructions/Note:																																																																																																																														
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777 New Durham Road
Edison, NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Ver: 08/04/2016

TestAmerica Edison

777 New Durham Road
Edison, NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information

Client Contact:
Caroline Jalanti
Company:
NYSDEC

Sampler:
HDR

Phone:
516-777-7242

Lab PM:
Julie Gilmore

E-Mail:
julie.gillmore@testamericainc.com

Carrier Tracking No(s):

Job #:
CFC GW COC 061721

Page:
Page 4 of 5

Address:
625 Broadway, 12 Floor
City:
Albany
State, Zip:
NY, 12233-7017
Phone:

Email:
caroline.jalanti@dec.ny.gov

Project Name:
NYSDEC Claremont OU5, 130015

Site:
Claremont Polychemical GWTF OU5

Due Date Requested:
Standard TAT

TAT Requested (days):

10 Day

PO #:
CallOut: 138032; Site: 130015

WO #:
150 Winding Road, Old Bethpage

Project #:
46008579

SSOW#:

Analysis Requested

Preservation Codes:

A - HCL M - Hexane
B - NaOH N - None
C - Zn Acetate O - AsNaO2
D - Nitric Acid P - Na2O4S
E - NaHSO4 Q - Na2SO3
F - MeOH R - Na2S2O3
G - Amchlor S - H2SO4
H - Ascorbic Acid T - TSP Dodecahydrate
I - Ice U - Acetone
J - DI Water V - MCAA
K - EDTA W - pH 4-5
L - EDA Z - other (specify)

Other:

Sample Identification

Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	MATRIX (W=water, S=solid, O=waste/oil, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform Matrix (Yes or No)	8260C - Routine SOW VOC List+TBA	Total Number of Containers	Special Instructions/Note:
MW06E-CP-00-061521	6/15/21	9:55	G	W	N	3		3	field samples
MW06F-CP-00-061521	6/15/21	10:00	G	W	N	3		3	field samples
MW07BR-CP-00-061421	6/14/21	11:30	G	W	N	3		3	field samples
MW08A-CP-00-061521	6/15/21	10:15	G	W	N	3		3	field samples
MW08B-CP-00-061521	6/15/21	10:10	G	W	N	3		3	field samples
MW08C-CP-00-061521	6/15/21	10:05	G	W	N	3		3	field samples
MW09B-CP-00-061421	6/14/21	11:50	G	W	N	3		3	field samples
MW09C-CP-00-061421	6/14/21	11:55	G	W	N	3		3	field samples
MW10D-CP-00-061521	6/15/21	8:00	G	W	N	3		3	field samples
MW11A-CP-00-061421	6/14/21	9:30	G	W	N	3		3	field samples
MW11B-CP-00-061421	6/14/21	9:35	G	W	N	3		3	field samples
OBS1-CP-00-061421	6/14/21	12:05	G	W	N	3		3	field samples

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant

☐ Poison B

☐ Unknown

☐ Neurological

Deliverable Requested: I, II, III, IV, Other (specify)

NY Cat B

NYSDEC EDD Format & Excel

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client

☐ Disposal By Lab

☐ Ship For

Months

Special Instructions/QC Requirements:

Send invoices to caroline.jalanti@dec.ny.gov (625 Broadway 12th Floor Albany NY 12233-7017)

Empty Kit Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Date/Time:

6/17/21 1430

Company

HDR

Company

Company

Time:

Received by:

Received by:

Received by:

Method of Shipment:

Date/Time:

6/17/21 1430

Date/Time:

Date/Time:

Company

Company

Company

Custody Seals Intact:

Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Phone (732) 549-3900 Fax (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Ver. 08/04/2016

PFCs Sampling Checklist

Date: 6/15/2021

Weather (temp./precipitation): 67°F, 3/4" H₂O, overcast Site Name: Claremont

Field Clothing and PPE:

- ☒ No clothing or boots containing Gore-Tex™
- ☒ All safety boots made from polyurethane and PVC
- ☒ No materials containing Tyvek®
- ☒ Field crew has not used fabric softener on clothing
- ☒ Field crew has not used cosmetics, moisturizers, hand cream, or other related products this morning
- ☒ Field crew has not applied unauthorized sunscreen or insect repellent

Field Equipment:

- ☒ No Teflon® or LDPE containing materials on-site
- ☒ All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- ☒ No waterproof field books on-site
- ☒ No plastic clipboards, binders, or spiral hard cover notebooks on-site
- ☒ No adhesives (Post-It Notes) on-site

- ☒ Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- ☒ All sample containers made of HDPE or polypropylene
- ☒ Caps are unlined and made of HDPE or polypropylene

Wet Weather (as applicable):

- ☒ Wet weather gear made of polyurethane and PVC only

Equipment Decontamination:

- ☒ "PFC-free" water on-site for decontamination of sample equipment. No other water sources to be used.
- ☒ Alconox and Liquinox to be used as decontamination materials

Food Considerations:

- ☒ No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Lead shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

Field Lead Name: Matthew T. Papala

Field Lead Signature: [Signature] Time: 0730

PFCs Sampling Checklist

Date: 4/16/2021

Weather (temp./precipitation): 64°F, 9 MPH N, C-l-w Site Name: decont 04.5

Field Clothing and PPE:

- ☒ No clothing or boots containing Gore-Tex™
- ☒ All safety boots made from polyurethane and PVC
- ☒ No materials containing Tyvek®
- ☒ Field crew has not used fabric softener on clothing
- ☒ Field crew has not used cosmetics, moisturizers, hand cream, or other related products this morning
- ☒ Field crew has not applied unauthorized sunscreen or insect repellent

Field Equipment:

- ☒ No Teflon® or LDPE containing materials on-site
- ☒ All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- ☒ No waterproof field books on-site
- ☒ No plastic clipboards, binders, or spiral hard cover notebooks on-site
- ☒ No adhesives (Post-It Notes) on-site

- ☒ Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- ☒ All sample containers made of HDPE or polypropylene
- ☒ Caps are unlined and made of HDPE or polypropylene

Wet Weather (as applicable):

- ☒ Wet weather gear made of polyurethane and PVC only

Equipment Decontamination:

- ☒ "PFC-free" water on-site for decontamination of sample equipment. No other water sources to be used.
- ☒ Alconox and Liquinox to be used as decontamination materials

Food Considerations:

- ☒ No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Lead shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

Field Lead Name: Matthew T. Pupala

Field Lead Signature: [Signature] Time: 0730

PFCs Sampling Checklist

Date: 6/17/2021

Weather (temp./precipitation): 59°F, 3 MPH WNW
Clear Site Name: Claremont 04-5

Field Clothing and PPE:

- ☒ No clothing or boots containing Gore-Tex™
- ☒ All safety boots made from polyurethane and PVC
- ☒ No materials containing Tyvek®
- ☒ Field crew has not used fabric softener on clothing
- ☒ Field crew has not used cosmetics, moisturizers, hand cream, or other related products this morning
- ☒ Field crew has not applied unauthorized sunscreen or insect repellent

Field Equipment:

- ☒ No Teflon® or LDPE containing materials on-site
- ☒ All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- ☒ No waterproof field books on-site
- ☒ No plastic clipboards, binders, or spiral hard cover notebooks on-site
- ☒ No adhesives (Post-It Notes) on-site

- ☒ Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- ☐ All sample containers made of HDPE or polypropylene
- ☒ Caps are unlined and made of HDPE or polypropylene

Wet Weather (as applicable):

- ☒ Wet weather gear made of polyurethane and PVC only

Equipment Decontamination:

- ☒ "PFC-free" water on-site for decontamination of sample equipment. No other water sources to be used.
- ☒ Alconox and Liquinox to be used as decontamination materials

Food Considerations:

- ☒ No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Lead shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

Field Lead Name: Matthew T. Papula

Field Lead Signature: [Signature] Time: 6/17/2021



Well Sampling Log

Well ID No.: MW-CPC-36

Well Casing Type: 2.5" Sch 80 PVC

Well Depth**: 256

Screened Interval: 246 - 255.7

Well Elevation**: 75.93

Well Diameter (in.) 2.5

Well Condition: Good

Weather Conditions: 58°F, 3 MPH NNW, Clear

Comments:

Start SWL: 21.00

Water Column Ht.: 235.00

Well Volume (gallons): 60

SWL During Sampling: 21.16

Sample Time: 0950

Sample Method: Pump

Sample Analyses: VOC, PFCs, 1,4-Dioxane

Project: WA#43 Claremont Polychemical Quarterly Sampling

Date: 6/17/2021

Crew: MTP/DJM

Pump Intake (ft) 251

Meters Used: YSI Dss Pro, Hach 2100Q

PID Head Space (ppm): 0

Sample ID: MW-CPC-36-R9-GW-251-20210617-0

Notes: * - Measurement taken from top of well casing

Time	Est. Liters. Purged	Purge Rate (Lpm)	Temp. (C°)	Cond. (ms/cm)	ORP (mV)	D.O. (mg/L)	pH	TDS (g/L)	Salinity (ppth)	Turbidity (NTU)	Depth to Water*	Comments
0810	0	0.2	15	0.431	340	6.08	5.3	0.2808	0.21	7.12	21.10	
0815	1	0.2	12.7	0.484	336	5.37	5.4	0.3237	0.24	17.9	21.18	
0820	2	0.2	12.6	0.519	313	1.05	5.6	0.338	0.25	0.15	21.12	
0825	3	0.2	12.6	0.522	249	0.34	5.7	0.3393	0.25	114	21.18	
0830	4	0.2	12.5	0.528	180	0.05	5.8	0.3432	0.26	484	21.14	
0835	5	0.2	12.7	0.529	93	0.15	5.9	0.3445	0.26	251	21.05	
0840	6	0.2	12.5	0.532	25	0.27	6.4	0.3464	0.26	186	21.20	
0845	7	0.2	12.5	0.532	-3	0.3	6.1	0.3458	0.26	170	21.18	
0850	8	0.2	12.5	0.52	-12	0.3	6.1	0.3387	0.25	169	21.18	
0855	9	0.2	12.5	0.512	-11	0.3	6.1	0.3328	0.25	212	21.16	
0900	10	0.2	12.4	0.501	-7	0.3	6.1	0.3244	0.24	166	21.14	
0905	11	0.2	12.4	0.488	0	0.31	6.0	0.3172	0.24	165	21.12	
0910	12	0.2	12.4	0.478	7	0.3	5.9	0.31	0.23	166	21.06	
0915	13	0.2	12.4	0.462	17	0.32	5.9	0.2996	0.22	137	21.20	
0920	14	0.2	12.4	0.451	26	0.34	5.8	0.2931	0.22	90.4	21.12	
0925	15	0.2	12.4	0.446	32	0.33	5.8	0.2886	0.22	75.3	21.12	
0930	16	0.2	12.5	0.435	39	0.34	5.7	0.2834	0.21	52.6	21.05	
0935	17	0.2	12.4	0.429	44	0.34	5.7	0.2775	0.21	61.2	21.06	
0940	18	0.2	12.5	0.422	49	0.34	5.6	0.275	0.2	54.3	21.05	
0945	19	0.2	12.4	0.417	54	0.33	5.6	0.271	0.2	54.7	21.10	
0950	20	0.2	12.4	0.414	58	0.33	5.6	0.2691	0.2	55.9	21.16	
0950	Sampling											

Comments: 15/15



Well Sampling Log

Well ID No.: MW-CPC-37

Well Casing Type: 2.5" Sch 80 PVC

Well Depth**: 450

Screened Interval: 440 - 450

Well Elevation**: 77.87

Well Diameter (in.) 2.5

Well Condition: Good

Weather Conditions: 73°F, 7 MPH NNW, Clear

Comments: None.

Start SWL: 27.75

Water Column Ht.: 422.25

Well Volume (gallons): 108

SWL During Sampling: 26.97

Sample Time: 1315

Sample Method: Pump

Sample Analyses: VOC, PFCs, 1,4-Dioxane

Project: WA#43 Claremont Polychemical Quarterly Sampling

Date: 6/17/2021

Crew: MTP/DJM

Pump Intake (ft) 445

Meters Used: YSI Dss Pro, Hach 2100Q

PID Head Space (ppm): 0

Sample ID: MW-CPC-37-R9-GW-445-20210617-0

Notes: * - Measurement taken from top of well casing

Time	Est. Liters. Purged	Purge Rate (Lpm)	Temp. (C°)	Cond. (ms/cm)	ORP (mV)	D.O. (mg/L)	pH	TDS (g/L)	Salinity (ppth)	Turbidity (NTU)	Depth to Water*	Comments
1110	0	0.225	17.8	0.239	276	2.31	6.2	0.1528	0.11	10.5	27.70	
1115	1.125	0.225	16.3	0.231	312	0.8	5.4	0.1508	0.11	8.64	27.75	
1120	2.25	0.225	15.7	0.232	299	0.71	5.4	0.1508	0.11	7.92	27.88	
1125	3.375	0.225	15.7	0.234	279	0.65	5.4	0.1508	0.11	0.02	27.84	
1130	4.5	0.225	16.10	0.233	256	0.63	5.5	0.1502	0.11	1.86	27.83	
1135	5.625	0.225	15.80	0.232	237	0.63	5.5	0.1514	0.11	2.34	27.88	
1140	6.75	0.225	15.80	0.294	235	0.6	4.6	0.1924	0.14	6.94	27.78	
1145	7.875	0.225	15.4	0.327	242	0.57	4.1	0.2139	0.16	8.88	27.88	
1150	9	0.225	15.4	0.34	242	0.52	3.9	0.2203	0.16	9.28	27.92	
1155	10.125	0.225	15.2	0.342	243	0.5	3.9	0.2223	0.16	5.76	27.85	
1200	11.25	0.225	14.3	0.35	241	0.5	3.8	0.2217	0.16	7.34	27.95	Air was being vilently pushed from the line. Found out
	12.375											The bladder slipped down. Redeployed pump.
1225	12.375	0.3	15.6	0.357	320	1.04	4.1	0.2314	0.17	4.75	27.63	
1230	13.875	0.3	15.3	0.356	324	0.65	3.8	0.232	0.17	3.17	27.53	
1235	15.375	0.3	15.3	0.356	314	0.45	3.8	0.2314	0.17	3.96	27.42	
1240	16.875	0.3	15.1	0.356	304	0.42	3.8	0.2314	0.17	4.44	27.23	
1245	18.375	0.3	14.7	0.346	287	0.41	4.0	0.2243	0.17	10.1	27.23	
1250	19.875	0.3	15.2	0.346	279	0.36	4.0	0.2249	0.17	19	27.15	
1255	21.375	0.3	14.7	0.355	273	0.35	3.9	0.2314	0.17	14.5	27.10	
1300	22.875	0.3	14.7	0.357	270	0.36	3.9	0.2327	0.17	12.3	27.08	
1305	24.375	0.3	14.7	0.358	266	0.35	3.8	0.2334	0.17	9.5	26.95	
1310	25.875	0.3	14.7	0.36	262	0.34	3.8	0.2334	0.17	6.05	26.97	
1315	Sampling											

Comments: GeoTech 15/15

Well Sampling Log

Well ID No.: MW-CPC-38

Well Casing Type: 2.5" Sch 80 PVC

Well Depth:** 394.5

Screened Interval: 384 - 395

Well Elevation:** 78.91

Well Diameter (in.) 2.5

Well Condition: Good

Weather Conditions: 70°F, 5 MPH SSW, Pt. Cloudy

Comments:

Start SWL: 26.41

Water Column Ht.: 368.59

Well Volume (gallons): 94

SWL During Sampling: 28.45

Sample Time: 1055

Sample Method: Pump

Sample Analyses: VOC, PFCs, 1,4-Dioxane

Project: WA#43 Claremont Polychemical Quarterly Sampling

Date: 6/15/2021

Crew: MTP/DJM

Pump Intake (ft) 391

Meters Used: YSI Dss Pro, Hach 2100Q

PID Head Space (ppm): 0

Sample ID: MW-CPC-38-R9-GW-391-20210615-0

Notes: * - Measurement taken from top of well casing

[illegible]

Well Sampling Log

Well ID No.: MW-CPC-39

Well Casing Type: 2.5" Sch 80 PVC

Start SWL: 24.39

Project: WA#43 Claremont Polychemical Quarterly Sampling

Well Depth:** 390

Water Column Ht.: 365.61

Date: 6/16/2021

Screened Interval: 370.6 - 390

Well Volume (gallons): 93

Crew: MTP/JI

Well Elevation:** 75.25

SWL During Sampling: 25.83

Pump Intake (ft) 374

Well Diameter (in.) 2.5

Sample Time: 1050

Meters Used: YSI Dss Pro, Hach 2100Q

Well Condition: Good

Sample Method: Pump

PID Head Space (ppm): 0

Weather Conditions: 67°F, 1 MPH NNW, Clear

Sample Analyses: VOC, PFCs, 1,4-Dioxane

Sample ID: MW-CPC-39-R9-GW-374-20210616-0

Comments: Collected Equipment Blank MW-CPC-30-R9-GW-374-20210616-2 On bladder and pump before this well was purged.

Notes: * - Measurement taken from top of well casing

[illegible]



Well Sampling Log

Well ID No.: MW-CPC-40

Well Casing Type: 2.5" Sch 80 PVC

Well Depth**: 317

Screened Interval: 307-317

Well Elevation**: 110

Well Diameter (in.) 2.5

Well Condition: Good

Weather Conditions: 76°F, 10 MPH NNW, Clear

Comments:

Start SWL: 56.15

Water Column Ht.: 260.85

Well Volume (gallons): 66.5

SWL During Sampling: 56.84

Sample Time: 1430

Sample Method: Bladder Pump

Sample Analyses: VOC, PFCs, 1,4-Dioxane

Project: WA#43 Claremont Polychemical Quarterly Sampling

Date: 6/16/2021

Crew: MTP/JI

Pump Intake (ft) 312

Meters Used: YSI Dss Pro, Hach 2100Q

PID Head Space (ppm): 0

Sample ID: MW-CPC-40-R9-GW-312-20210616-0

Notes: * - Measurement taken from top of well casing

Time	Est. Liters. Purged	Purge Rate (Lpm)	Temp. (C°)	Cond. (ms/cm)	ORP (mV)	D.O. (mg/L)	pH	TDS (g/L)	Salinity (ppth)	Turbidity (NTU)	Depth to Water*	Comments
1315	0	0.15	16.5	0.144	263	6.22	4.7	0.936	0.07	4.88	56.08	
1320	0.75	0.15	17	0.142	276	2.78	4.3	0.0936	0.07	0.75	56.06	
1325	1.5	0.15	16.8	0.141	270	1.78	4.3	0.0917	0.07	2.46	56.08	
1330	2.25	0.15	16.5	0.14	262	1.45	4.3	0.091	0.07	1.39	56.10	
1335	3	0.15	16.6	0.139	249	1.39	4.3	0.0903	0.07	3.14	56.17	
1340	3.75	0.15	16.6	0.139	233	1.36	4.4	0.0903	0.07	2.57	56.22	
1345	4.5	0.15	16.8	0.138	216	1.36	4.4	0.0897	0.07	1.96	56.32	
1350	5.25	0.15	16.4	0.138	210	1.43	4.4	0.0897	0.07	1.48	56.40	
1355	6	0.15	16.4	0.137	213	1.51	4.35	0.089	0.07	0.02	56.49	
1400	6.75	0.15	16.6	0.137	218	1.54	4.4	0.089	0.07	0.59	56.56	
1405	7.5	0.15	16.4	0.137	226	1.56	4.4	0.089	0.07	0.02	56.62	
1410	8.25	0.15	16.4	0.136	232	1.56	4.4	0.0884	0.07	0.53	56.69	
1415	9	0.15	16.6	0.136	238	1.55	4.4	0.0884	0.07	0.59	56.74	
1420	9.75	0.15	16.6	0.136	244	1.55	4.4	0.0884	0.07	0.76	56.78	
1425	10.5	0.15	16.7	0.136	244	1.52	4.4	0.0884	0.07	0.02	56.84	
1430	Sampling											

Comments: GeoTech 20/10

Well Sampling Log

Well ID No.: MW-CPC-41

Well Casing Type: 2.5" Sch 80 PVC

Well Depth:** 263

Screened Interval: 253 - 263

Well Elevation:** 72.6

Well Diameter (in.) 2.5

Well Condition: Good

Weather Conditions: 74°F, 7 MPH N, Pt. Cloudy

Comments: Collected field duplicate MW-CPC-41-R9-GW-258-20210615-1 at this location.

Start SWL: 18.74

Water Column Ht.: 239.26

Well Volume (gallons): 61

SWL During Sampling: 18.74

Sample Time: 1355

Sample Method: Bladder Pump

Sample Analyses: VOC, PFCs, 1,4-Dioxane

Project: WA#43 Claremont Polychemical Quarterly Sampling

Date: 6/15/2021

Crew: MTP/DJM

Pump Intake (ft) 258

Meters Used: YSI Dss Pro, Hach 2100Q

PID Head Space (ppm): 0

Sample ID: MW-CPC-41-R9-GW-258-20210615-0

Notes: * - Measurement taken from top of well casing

[illegible]