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# **2022 FOURTH QUARTER GROUNDWATER MONITORING REPORT CLAREMONT POLYCHEMICAL CORPORATION SITE**

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## 1. INTRODUCTION

This quarterly groundwater monitoring report, prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll), presents groundwater sampling analytical results for the fourth quarter of 2022 (October through December) 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 Assignments #28 and #43 under contract to Henningson, Durham & Richardson Architecture and Engineering, P.C. (HDR). In March 2022, the quarterly collection of groundwater samples and the preparation of this deliverable were transferred to WA#24, under Ramboll's contract (D009810), 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 polyfluoroalkyl 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 above ground 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 above ground tanks, three of which contained wastes, were located east of the building.

Other features included an underground tank farm, construction and demolition debris, drywells, and a water supply well (EPA 2014).

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

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

Table 1 – CPC Operable Units

Operable Unit	Description	Remedy
OU-1	Treatment and removal of wastes in 14 underground storage tanks	14 USTs and contents removed. Achieved cleanup levels allowing for unlimited use and unrestricted exposure.
OU-2	Wastes stabilized during the Sept. 1988 removal action	Testing, consolidation, treatment, and disposal of wastes in containers and basins performed. Achieved unlimited use and unrestricted exposure, later changed to commercial/light industrial because of remaining contamination below the building.  2003 ESD added additional remedial actions for OU-2 under the former Process Building including an SVE system and using the building's concrete slab as a cap for cadmium contaminated soil.
OU-3	Soil contaminated with PCE at the "spill area"	Approximately 8,800 tons of PCE contaminated soils excavated, treated, and backfilled on Site. Achieved cleanup levels allowing for unlimited use and unrestricted exposure.
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	Vacuuming and dusting surfaces, asbestos abatement, pressure washing walls and interior surfaces. Achieved cleanup levels allowing for unlimited use and unrestricted exposure.

A GWE&T system was installed on-site by the EPA and United States Army Corps of Engineers (USACE) 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 pant effluent samples, and performed quarterly groundwater sampling at 41 wells from 2000 to May 2011. In May 2011, the project was transferred from the USACE/EPA to the NYSDEC. NYSDEC then contracted the same scope of work as SAIC to HRP Associates, Inc. (HRP) from May 2011 to

August 2015, HDR from September 1, 2015 through February 28, 2022 and Ramboll from March 1, 2022 to present.

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 Work Assignment (WA# 28) to HDR for CPC OU-5, the purpose being 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. A series of amendments (#1 through #3) were subsequently approved which allowed for HDR to continue operations and maintenance through February 28, 2022. On March 1, 2022, SM was transferred to Ramboll via WA#24, under Ramboll's contract (D009810).

In 2018 a RI downgradient from the Site was performed by HDR. 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; Perfluorooctanesulfonic 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 Ramboll 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 because 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.

##### 3.1.1 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 obtain 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.

On March 12, 2022, the treatment system experienced problems with RW-5 that, following attempts to reset the system, remained nonfunctional. Inspections on March 28, 2022, revealed one of the motor wires was snapped and the pump would require replacement. Similarly, on August 17<sup>th</sup>, 2022, RW-4 shut down and was unable to be restarted. RW-4 has remained nonfunctional since pump failure and will be returned to operation following pump removal and replacement. RW-5 has been repaired but is currently only able to run on manual hand mode.

Refer to the Monthly O&M reports for October through December 2022 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 fourth quarter of 2022 were 250 gpm in October, 261 gpm in November, and 244 gpm in December.

Under current conditions, the PLC and the control system are stable and fully functional. Flows from the individual recovery wells are remotely read, transmitted, and totalized. The facility was fully functional in November and December and offline for 491 minutes in October due to a pressure filter tank high-level alarm.

### **3.1.2 GWE&T System - Path of Remediation**

Groundwater is currently 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 to any alarms 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.

### 3.1.3 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 2.77 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 December 2022 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**

<b>Location</b>	<b>October Total Flow (gallons)</b>	<b>November Total Flow (gallons)</b>	<b>December Total Flow (gallons)</b>
RW-1*	745*	745*	0
RW-2*	1,045*	1,045*	0
RW-3	10,082,000	11,017,000	12,132,000

Location	October Total Flow (gallons)	November Total Flow (gallons)	December Total Flow (gallons)
RW-4	0	0	0
RW-5	2,700	2,000	2,000
Total Influent	9,702,000	10,558,000	11,635,000
Total Effluent	10,353,000	11,264,000	12,390,000
*Recovery wells RW-1 and RW-2 were taken offline at the conclusion of the Remedial System Optimization evaluation. Flows associated with RW-1 and RW-2 are from monthly operational tests.			

The volume of treated water discharged by the GWE&T system to the recharge basins is determined daily from readings of the magnetic flow meter on the plant effluent line. The difference between the total influent and total effluent is due to a calibration error in the existing flow meters. The recharge basins are designed to receive 1.5 million gpd of effluent.

During the fourth quarter of 2022, the system processed approximately 34 million gallons with the following average daily flow rates:

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

Month (2022)	Average Daily Flow (gallons per day)
October	357,000
November	375,000
December	373,290
Quarterly Average	369,307

### 3.2.2 Groundwater Extraction and Treatment System Contaminant Removal

To quantify the treatment system contaminant removal rate, available GWE&T system influent and effluent analytical results from monthly operation and maintenance records were reviewed. 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, approximately 597.41 kilograms (1,317.06 pounds) of TCE, 74.04 kilograms (163.23 pounds) of PCE, and 11.28 kilograms (24.87 pounds) of 1,1-DCE have been removed by the OU-5 system (as of the 2022 fourth quarter process sampling event which was performed in December 2022).

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 did not include historical data for daily flow rates.

**Table 5 – VOC Mass Removed per Quarter for 2019 through 2022 (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	30.72
	Q3	Offline	37.09
	Q4	Offline	36.25
2021	Q1	Offline	34.11
	Q2	Offline	35.51
	Q3	Offline	25.43
	Q4	Offline	30.21
2022	Q1	Offline	15.52
	Q2	Offline	36.39
	Q3	Offline	3.71
	Q4	Offline	4.04
Cumulative Total		947*	670.56
*Cumulative totals presented for OU-4 are from 2002 through 2016.			
**Cumulative totals presented for OU-5 are from October 1 <sup>st</sup> , 2016 to present and include TCE, PCE, and 1,1-DCE.			

### 3.2.3 Groundwater Extraction and Treatment System Discharge Monitoring

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 fourth quarter of 2022. In addition, the effluent concentrations of detected parameters, were under permissible levels: manganese (200 µg/l), total nitrogen (8.8 mg/l), total dissolved solids (210 mg/l), chloride ion (130 mg/l), and sulfate ion (24 mg/l) during the fourth quarter of 2022 when sampled in December 2022. The addition of emerging contaminant sampling to system monitoring is detailed in the following section. 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**

	<b>October</b>	<b>November</b>	<b>December</b>
Average Effluent pH (su)	7.62	7.68	7.52

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**

On December 15, 2020, plant influent, effluent, and active recovery wells (RW-3, RW-4, and RW-5) were sampled for 1,4-dioxane by method 8270 SIM and PFAS by modified EPA Method 537. Samples were submitted to Eurofins TestAmerica, of Edison, New Jersey, an NYSDOH ELAP-approved laboratory (#12028).

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.

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. Full results for the emerging contaminant sampling of plant process water are presented in Attachment A2 of the 2020 Fourth Quarter Groundwater Monitoring Report (HDR, 2020).

At the direction of the NYSDEC in an August 17, 2022 email, analysis of Per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane were added to monthly sampling for both influent and effluent for the foreseeable future.

Samples were collected from sample ports at the plant's influent and effluent conveyance, after flushing the port and valve with several gallons of water, directly into the laboratory supplied glassware. Samples were analyzed by Pace Analytical, of East Longmeadow, MA, an NYSDOH-ELAP approved laboratory, for PFAS by modified EPA Method 537 (modified) and 1,4-dioxane by method 8270 SIM.

Detected concentrations for compounds that exceeded their respective evaluation criteria or standards for the fourth quarter of 2022 are shown in the summary table below. The sum of PFOA and PFOS as well as the total PFAS are provided for informational purposes. **Figure 7** depicts 1,4-dioxane results exceeding comparison criteria. **Figure 8** depicts the PFOS and PFOA results exceeding comparison criteria.

*NOTE: Criteria presented in the following table are those that were used to evaluate the results at the time the sampling was performed and may not represent current standards, guidance values, or other evaluation criteria.*

**Table 7– 3Q2022 Process Water EC Exceedances**

EC Exceedances		1,4-D	PFOS	PFOA	PFOA+PFOS
Criteria:		1 <sup>(a)</sup>	10 <sup>(b)</sup>	10 <sup>(b)</sup>	10 <sup>(c)</sup>
Reporting Unit:		(µg/L)		(ng/L)	
Influent	October 2022	<b><u>35</u></b>	<b><u>16</u></b>	<b><u>44</u></b>	<b><u>60</u></b>
	November 2022	<b><u>36</u></b>	<b><u>18</u></b>	<b><u>47</u></b>	<b><u>65</u></b>
	December 2022	<b><u>34</u></b>	<b><u>23</u></b>	<b><u>55</u></b>	<b><u>78</u></b>
Effluent (PD-009)	October 2022	<b><u>34</u></b>	<b><u>18</u></b>	<b><u>46</u></b>	<b><u>64</u></b>
	November 2022	<b><u>34</u></b>	<b><u>18</u></b>	<b><u>48</u></b>	<b><u>66</u></b>
	December 2022	<b><u>33</u></b>	<b><u>21</u></b>	<b><u>50</u></b>	<b><u>71</u></b>

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

- 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 26<sup>th</sup>, 2020.
- For PFAS compounds: *NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remediation Programs* (June 2021).
- New York State Department of Health Drinking Water Program Part 5, Subpart 5-1, Section 5-1.52 Maximum Contaminant Level (MCL) for PFOA+PFOS adopted on August 26<sup>th</sup>, 2020.

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); NS – not sampled; ND – not detected; J – estimated value; µg/L – micrograms per liter, ng/L – nanograms per liter.

## 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, 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 Hydrologic Data

The network of approximately 120 gauged wells includes wells that are not in the quarterly sampling program. Measurements from 66 wells collected by Ramboll are combined with data provided by Nassau County. Measurements collected by Ramboll are provided in **Attachment A**. The synoptic groundwater level measurement for this quarter was performed on December 13, 2022. It should be noted that wells BP-11 and ORW-1 were not accessible and UM-1 was missed during this synoptic round.

The average water table elevation across the OU-5 site for this quarter's synoptic measurement event was 59.14 feet (vertical datum NAVD88) as measured by Ramboll. Depths to groundwater (DTW) in December 2022 ranged from 21.39 feet (well MW-CPC-41) to 103.29 feet (well EW-11D) below ground surface (bgs) (see **Attachment A**). Potentiometric surface elevations at each well were calculated for each well by subtracting the DTW from the top of casing elevation. Groundwater elevations, grouping wells by the aquifer unit they are screened in, were used 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 minor pumping influence near and immediately down gradient from the OU5 recovery wells, RW-2 through RW-4. 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. 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 December 14<sup>th</sup> and 20<sup>th</sup>, 2022. Ramboll sampled 48 of the 49 CPC monitoring network wells. No sample was collected at MW-6A due to insufficient water.

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 six 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. A list of sampled wells and analytical results are presented in **Table 8** and **Attachments B** and **B1** at the end of this report (see **Attachment C** for full lab deliverable). Low-flow sampling logs, chains of custody (COC), and PFC daily checklists are provided in **Attachment D**.

A total of 60 samples (including three field duplicates, two trip blanks, and one equipment blank) were collected and submitted to Pace Analytical, of East Longmeadow, MA, an NYSDOH-ELAP approved laboratory. With exception to the equipment blank, each sample was analyzed for VOCs via EPA Method 8260. Of the aforementioned samples, eight samples (including one field duplicate and one equipment blank [PFAS only]), collected from the MW-CPC wells, were also analyzed for PFAS by modified EPA Method 537 (modified) and 1,4-dioxane by method 8270 SIM.

## 4.3 Groundwater Analytical Results

### 4.3.1 Groundwater VOC Analytical Results

Fourth quarter 2022 groundwater sampling event VOC exceedances are summarized in **Table 8** and are plotted in trend charts provided as **Figures 9** through **31**; treatment system effluent and influent water sampling results are shown in trend charts on **Figures 9** and **31**, respectively. The six downgradient MW-CPC monitoring well VOC exceedances are summarized on **Figure 32**. 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 55 field samples (including the field duplicate) collected from PDBs and MW-CPC series wells (5 out of 6). Detected concentrations of acetone exceeded the NYSDEC TOGS 1.1.1. guidance value of 50 µg/L in 44 groundwater samples (BP-3A, BP-3B, BP-3C, BP-5B, BP-5C, BP-12C, BP-13C, DW-1, DW-2 [primary and duplicate sample], EW-1A, EW-1B, EW-1C, EW-2A, EW-2D, EW-4A, EW-4B, EW-4C, EW-4D, EW-5, EW-7C, EW-7D, EW-11D, EW-12D, EW-14D, LF-1, M-30B-R, MW-5B, MW-6B, MW-6C, MW-6D [primary and duplicate sample], MW-6E, MW-6F, MW-7B-R, MW-8A, MW-8B, MW-8C, MW-9B, MW-9C, MW-10D, MW-11A, OBS-1, and SW-1). 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	Benzene
Criteria:	5	5	5	2	0.6	5	1
BP-3B	<b>13</b>	1.5	<b>9.4</b>	0.21 J	< 0.31 U	2.5	< 0.2 U
BP-3C	<b>35</b>	3.5	<b>16</b>	1.6 J	< 0.31 U	3.3	0.78 J
BP-5C	< 0.19 U	1.3	0.39 J	< 0.21 U	< 0.31 U	<b>5.2</b>	< 0.2 U
DW-1	<b>8.6</b>	1.2	<b>18</b>	< 0.21 U	< 0.31 U	< 0.14 U	< 0.2 U
EW-04A	<b>48</b>	<b>6.4</b>	<b>75</b>	< 0.21 U	< 0.31 U	< 0.14 U	< 0.2 U
EW-04C	3.5	<b>27</b>	0.34 J	< 0.21 U	< 0.31 U	< 0.14 U	< 0.2 U
EW-07C	<b>24 D</b>	<b>380 D</b>	<b>5.0 D</b>	< 0.83 U	< 1.2 U	< 0.57 U	< 0.8 U
EW-11D	<b>77 D</b>	<b>260 D</b>	<b>9.6 D</b>	< 0.83 U	< 1.2 U	3.7 JD	< 0.8 U
EW-12D	<b>21 D</b>	<b>480 D</b>	<b>8.9 D</b>	< 0.83 U	< 1.2 U	< 0.57 U	< 0.8 U
EW-14D	0.96 J	<b>29</b>	0.45 J	< 0.21 U	< 0.31 U	< 0.14 U	< 0.2 U
LF-1	0.62 J	<b>8.9</b>	0.83 J	< 0.21 U	< 0.31 U	0.22 J	< 0.2 U
MW-08A	<b>8.8</b>	0.92 J	1.4	< 0.21 U	< 0.31 U	< 0.14 U	< 0.2 U
MW-10D	4.9 D	<b>160 D</b>	<b>6.9 D</b>	< 0.42 U	<b>0.86 JD</b>	2.5 D	< 0.4 U
MW-11A	<b>5.1</b>	4.7	<b>42</b>	< 0.21 U	< 0.31 U	4.5	< 0.2 U
MW-11B	3.4	<b>6.6</b>	<b>47</b>	<b>2.4</b>	<b>1.3</b>	<b>23</b>	<b>1.1</b>
MW-7B-R	2.4	<b>71</b>	1.6	< 0.21 U	< 0.31 U	< 0.14 U	< 0.2 U
MW-CPC-36	<b>29/28</b>	<b>6.9/6.7</b>	<b>50/50</b>	0.72 J/0.68 J	<b>2.0/2.0</b>	0.99 J/0.95 J	<b>19/19</b>
MW-CPC-37	< 0.19 U	< 0.19 U	2.1	0.51 J	< 0.31 U	1.0	0.77 J
MW-CPC-40	< 0.19 U	2.4	< 0.15 U	< 0.21 U	< 0.31 U	<b>7.6</b>	< 0.2 U
MW-CPC-41	<b>5.4</b>	0.32 J	0.33 J	< 0.21 U	< 0.31 U	0.33	0.23 J
SW-1	<b>150 D</b>	<b>22 D</b>	<b>18 D</b>	< 0.42 U	< 0.62 U	< 0.28 U	< 0.4 U

Result values presented in µg/L. ND – not detected above the reporting limit; J – estimated value; D – diluted. 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. Parent/duplicate results displayed for MW-CPC-36.

#### 4.3.2 Groundwater Emerging Contaminant Results

In the fourth quarter of 2022, 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 26<sup>th</sup>, 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 November 2022. 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 was compared to the New York State Department of Health Drinking Water Program Maximum Contaminant Level (MCL) of 10 ng/L, which became effective on August 26<sup>th</sup>, 2020.

Detected concentrations of compounds exceeding their respective criteria as listed above are shown on **Figures 33** and **34, Attachment B1**, and summarized in the table below.

**Table 9 – Monitoring Well Emerging Contaminant Exceedances**

	<b>1,4-D</b>	<b>PFOS</b>	<b>PFOA</b>	<b>PFOA+PFOS</b>
Criteria:	1 (a)	10 (b)	10 (b)	10 (c)
Reporting Unit:	(µg/L)	(ng/L)		
MW-CPC-36	<b><u>8.1/8.3</u></b>	<b><u>140/160</u></b>	<b><u>120/120</u></b>	<b><u>260/280</u></b>
MW-CPC-37	<b><u>3</u></b>	8.2	<b><u>27</u></b>	<b><u>35.2</u></b>
MW-CPC-40	<b><u>3.5</u></b>	<3.9	<3.9	<3.9
MW-CPC-41	<b><u>3.4/5.6</u></b>	<b><u>18</u></b>	<b><u>28</u></b>	<b><u>46</u></b>

No detected concentrations of the compounds presented above exceeded their respective criteria in the samples from MW-CPC-38 and MW-CPC-39. Parent/duplicate results displayed for MW-CPC-36. Bold and underlined results indicate exceedance of the criteria indicated as follows:

- 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 26<sup>th</sup>, 2020.
- For PFAS compounds: *NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remediation Programs* (November, 2022).
- New York State Department of Health Drinking Water Program Part 5, Subpart 5-1, Section 5-1.52 Maximum Contaminant Level (MCL) for PFOA+PFOS adopted on August 26<sup>th</sup>, 2020.

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. B – analyte found in associated blank as well as in the sample µg/L – micrograms per liter, ng/L – nanograms per liter.

#### 4.3.3 Evaluation of Plumes

**Figures 35 and 36** 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 37 and 38**) and plan view (**Figure 39**). 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 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 generally increased since 2019. However, PCE concentrations have decreased throughout 2022 with a high of 500 µg/L observed in the first quarter 2022 and a low of 150 µg/L observed in the fourth quarter 2022 (**Figure 10**).

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 17**). TCE-dominant wells include EW-4A, 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 27**). An upward trend of TCE concentrations in EW-12D has been observed since the plant shutdown (**Figure 20**). A slight upward trend at of TCE at EW-7C is also observed since the third quarter in 2020 (**Figure 17**).

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 21**). Well EW-14D has the greatest variability in TCE concentrations. The concentration of TCE decreased in the third quarter of 2022 to 16 µg/L but increased to 29 µg/L in the fourth quarter of 2022. However, the overall TCE trend is decreasing.

**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 22 through 24**). The PCE concentrations at BP-3B and BP-3C are historically higher than those of TCE. Both BP-3B and BP-3C 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 37 and 38**). Cross section A-A' (**Figure 37**) 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 38**) 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-4D, EW-5, and EW-7D.

#### 4.3.4 Comparison to Historic Groundwater Quality

**Figures 7 through 29** illustrate the historic 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 <sup>(1)</sup>	Location	PCE Trend	TCE Trend	Figure
<b>CPC Plume Wells</b>					
DW-1	93-98	South-southwest of CPC	Increasing	Slightly decreasing	Figure 9
SW-1	65-70	South-southwest of CPC	Increasing	Increasing	Figure 10
EW-1A	65-75	Southwest of CPC	Slightly decreasing	Slightly decreasing	Figure 11

Well	Screen Depth <sup>(1)</sup>	Location	PCE Trend	TCE Trend	Figure
EW-5	165-175	South-southeast of CPC	Slightly increasing	Decreasing	Figure 12
<b>Off-Site Plume(s) Wells</b>					
EW-4A	100-115	East of CPC	Increasing	Increasing	Figure 13
EW-4B	120-130	East of CPC	Slightly decreasing	Slightly increasing	Figure 14
EW-4C	145-155	East of CPC	Slightly decreasing	Slightly decreasing	Figure 15
EW-4D	285-295	East of CPC	Decreasing	Decreasing	Figure 16
EW-7C	189-199	Upgradient, North of CPC	Slightly decreasing	Slightly decreasing	Figure 17
EW-7D	273-283	Upgradient, North of CPC	Decreasing	Decreasing	Figure 18
MW-10D	346-351	Southeast of CPC	Decreasing	Increasing	Figure 19
EW-12D	209-219	East of CPC	Increasing	Increasing	Figure 20
EW-14D	185-195	Southeast of CPC	Decreasing	Decreasing	Figure 21
BP-3A	54-74	South-southeast of CPC	Slightly decreasing	Slightly decreasing	Figure 22
BP-3B	215-235	South-southeast of CPC	Slightly decreasing	Slightly decreasing	Figure 23
BP-3C	280-300	South-southeast of CPC	Slightly increasing	Decreasing	Figure 24
MW-11A	140-145	South-southeast of CPC	Increasing	Increasing	Figure 25
MW-11B	240-245	South-southeast of CPC	Slightly increasing	Increasing	Figure 26
MW-7B-R	230-235	South-southeast of CPC	Decreasing	Decreasing	Figure 27

Well	Screen Depth <sup>(1)</sup>	Location	PCE Trend	TCE Trend	Figure
<b>Extraction Wells and OU5 Plant Influent</b>					
RW-3	163-255	Extraction well south-southeast of CPC	Decreasing	Slightly decreasing	Figure 28
RW-4	147-250	Extraction well south-southeast of CPC	Decreasing <sup>(2)</sup>	Decreasing <sup>(2)</sup>	Figure 29
RW-5	153-263	Extraction well south-southeast of CPC	Decreasing <sup>(3)</sup>	Decreasing <sup>(3)</sup>	Figure 30
OU5 Plant Influent	NA	Plant influent	Slightly decreasing	Increasing	Figure 31

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

(2) Due to pump being inoperable during the fourth quarter 2022 sampling, no sample was collected. Displayed trend was last updated as part of sampling conducted during the second quarter 2022.

(3) Due to pumps being inoperable during the second and third quarter 2022 sampling, no sample was collected. Displayed trend was updated during the fourth quarter 2022.

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

## 5. CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Conclusions

The fourth quarter 2022 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 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 CPC Process Building (on-site plume). Recent data obtained from OU-4 monitoring well SW-1, indicates localized PCE concentrations have increased since the cessation of OU-4 pumping in 2016. However, 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).
- The OU-5 GWE&T system influent concentrations of PCE, TCE, and cis-1,2-DCE increased from the third quarter of 2021 through the second quarter of 2022 (see **Figure 31**). However, due to the pump issue associated with recovery well RW-4, influent concentrations decreased in the third quarter of 2022 (TCE and PCE concentrations at RW-4 are, in general, an order of magnitude higher than concentrations observed at both RW-3 and RW-5) with a slight increase observed during the fourth quarter of 2022.
- A total of 4.04 kilograms (8.91 pounds) of PCE, TCE, and 1,1-DCE combined were removed during the fourth quarter of 2022 via operation of the OU-5 GWE&T system. This removal rate is significantly lower than removal rates observed during the second quarter 2020 through the second quarter 2022. This low removal rate is attributed to the pump issue associated with recovery well RW-4 (as discussed in the previous bullet). See **Table 5** for specific removal quantities.
- Contaminant concentrations in effluent groundwater samples collected during the reporting period met discharge limits.
- The results from the fourth quarter 2022 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, acetone, and benzene.
- BP-3C: Based on an evaluation of the current OU-5 recovery well network conducted by HDR, it is not capable of capturing groundwater contamination around the BP-3 series of wells as indicated by the continued fluctuation of PCE concentrations. HDR concluded that 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 with an upward trend throughout 2020 and into the fourth quarter of 2022 (see **Figure 20**).
- 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 fourth

quarter of 2022 was approximately one order of magnitude lower than its post OU-4 shutdown peak (see **Figure 27**). 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 fourth quarter 2022 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.
- Resumption of emerging contaminant samples in plant influent and effluent on a monthly basis began in August 2022. Exceedances of 1,4-dioxane, PFOS, and PFOA were reported in influent and effluent samples in the fourth quarter. Reported detections of 1,4-dioxane, PFOS, and PFOA in the fourth quarter 2022 were above results associated with emerging contaminant sampling conducted in December 2020 (see **Figures 7 and 8**).

## 5.2 Recommendations

- Return the pump in RW-4 and RW-5 to continuous operational status (RW-5 remains in manual hand mode).
- 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.



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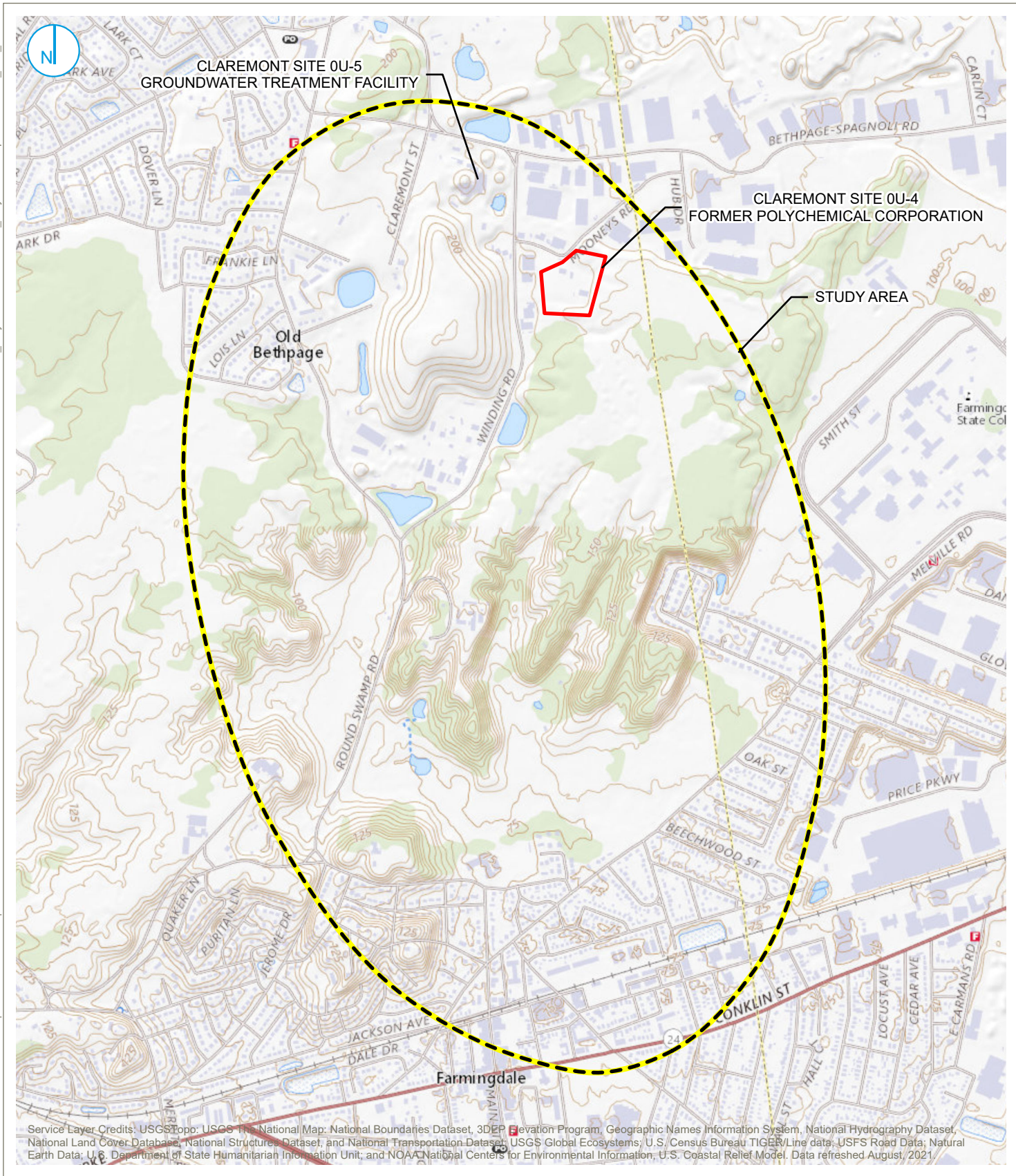
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US Environmental Protection Agency, Region 2. "Explanation of Significant Differences Claremont Polychemical Corporation Superfund Site, Town of Oyster Bay, Nassau County, New York." New York, NY, 2003.

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## FIGURES



KEY MAP (not to scale)

0 1,000 2,000 Feet

## SITE LOCATION

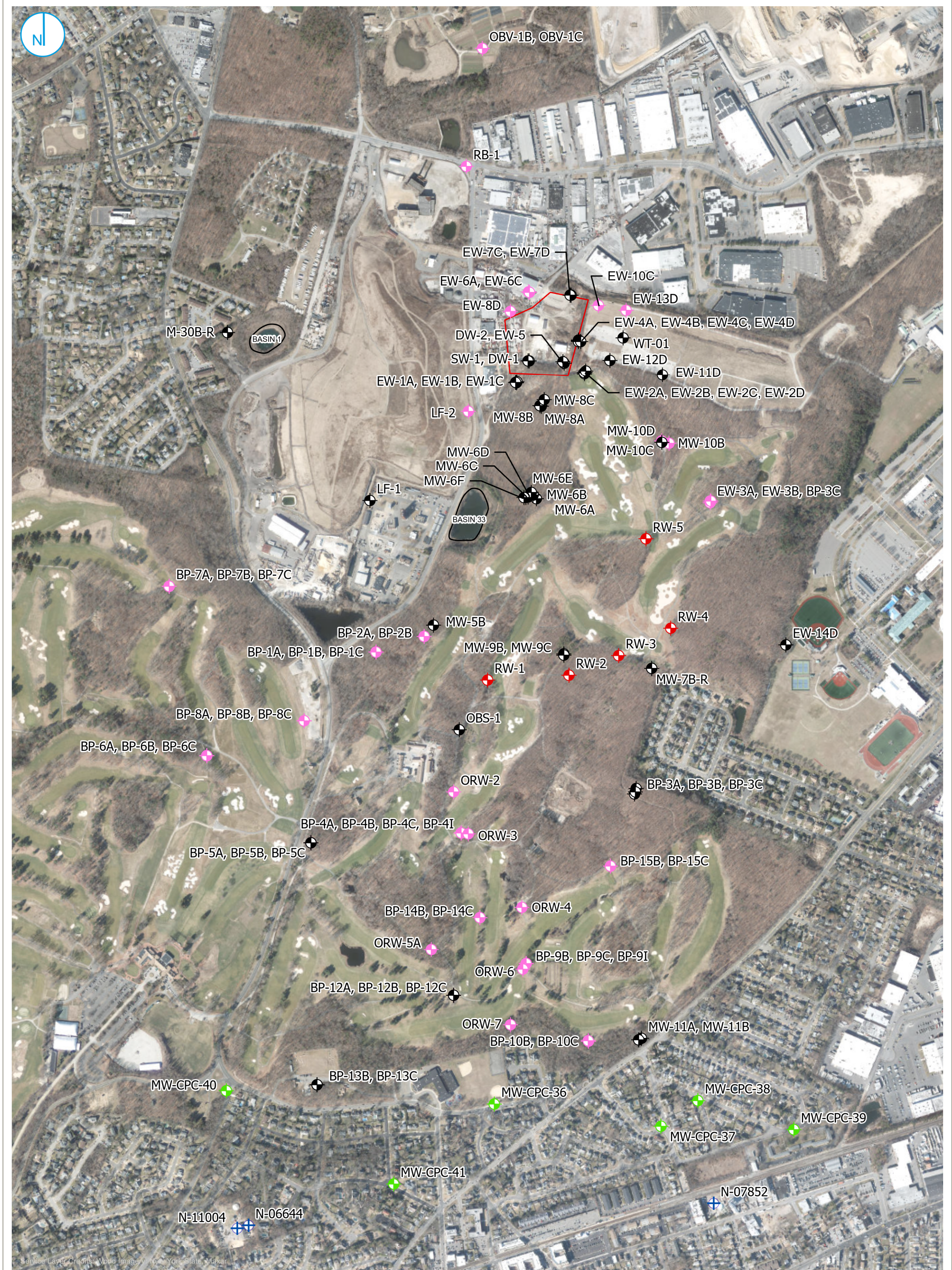
## FIGURE 01

**CLAREMONT  
POLYCHEMICAL CORPORATION**  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK


RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY











MONITORING WELL

 GAUGED ONLY

 GAUGED AND SAMPLED

 SENTINEL WELL GAUGED AND SAMPLED  
 RECOVERY WELL  
 MUNICIPAL WELL

 RECHARGE BASIN  
 SITE BOUNDARY

## WELLS SAMPLED

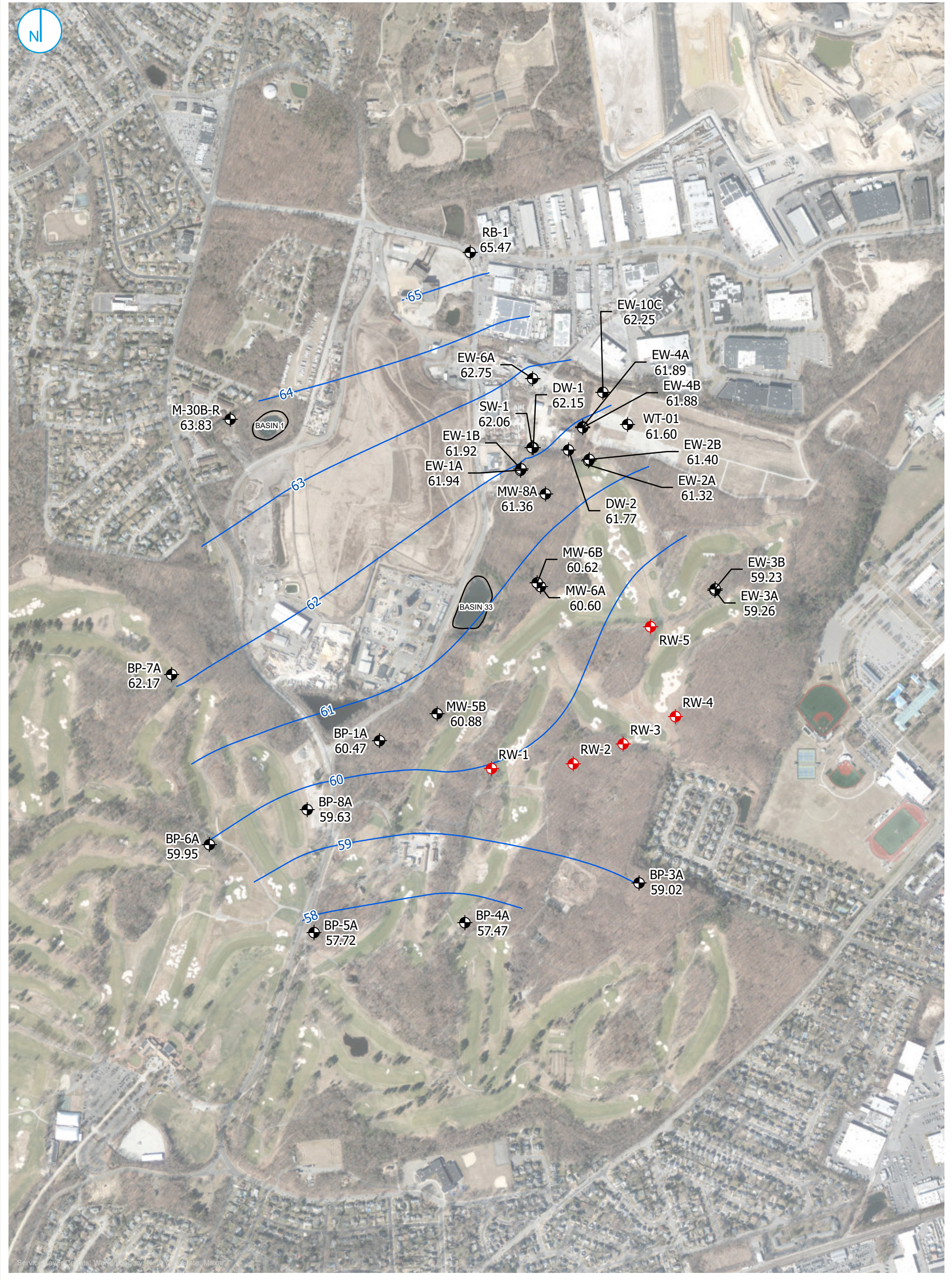
## FIGURE 02

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**CLAREMONT POLYCHEMICAL CORPORATION**  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK







- MONITORING WELL
- RECOVERY WELL
- POTENTIOMETRIC CONTOUR
- RECHARGE BASIN

**Notes**

- Well BP-2A was excluded from contour drawing.
- All elevations recorded in feet in NAVD 88.

DECEMBER 2022  
POTENTIOMETRIC CONTOURS  
UPPER MAGOTHY

FIGURE 03

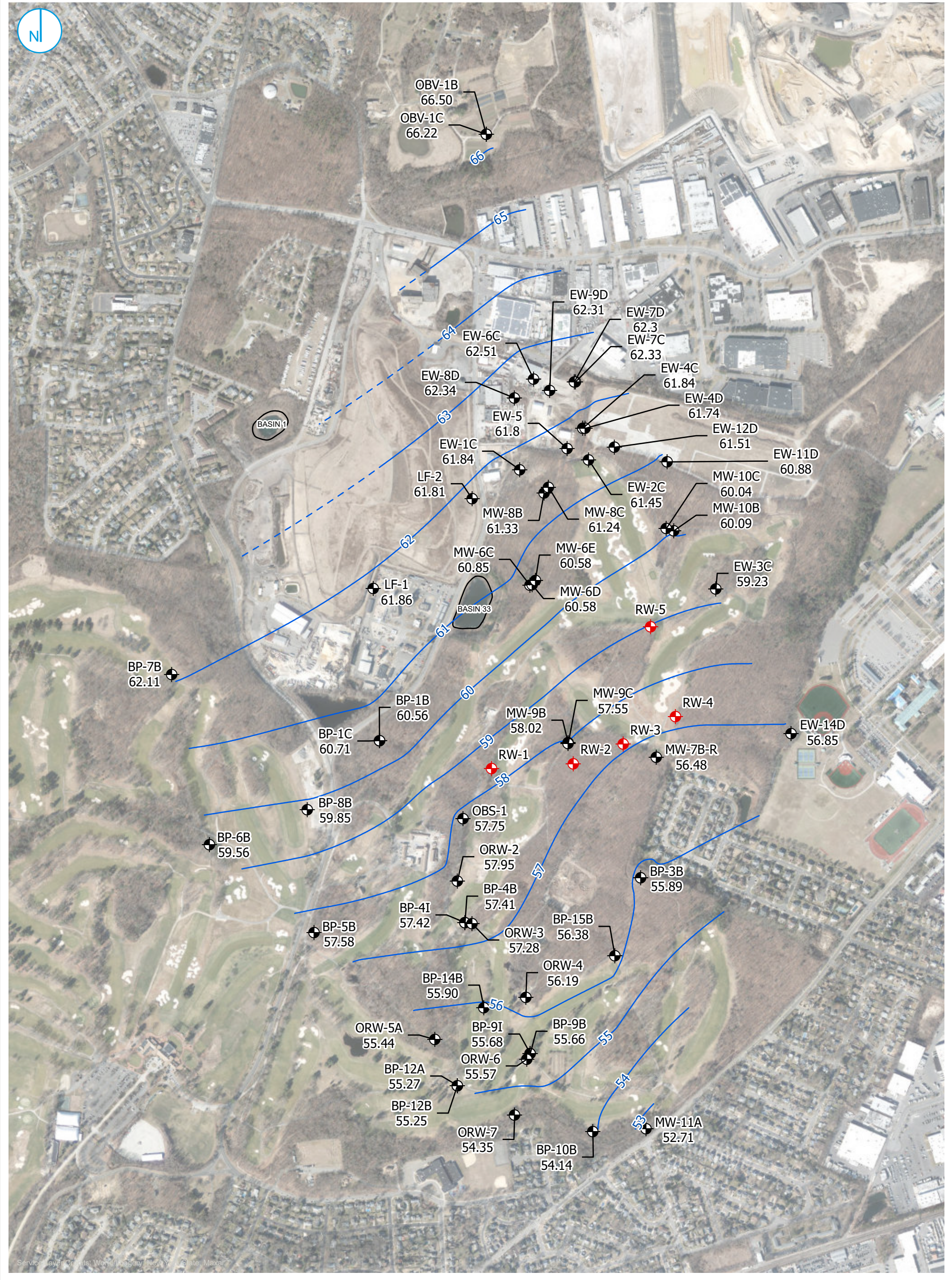
0 400 800  
Feet

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A RAMBOLL COMPANY







- MONITORING WELL
- RECOVERY WELL
- POTENTIOMETRIC CONTOUR
- INFERRED POTENTIOMETRIC CONTOUR
- RECHARGE BASIN

**Notes**

- Well BP-2B was excluded from contour drawing.
- All elevations recorded in feet in NAVD 88.

DECEMBER 2022  
POTENTIOMETRIC CONTOURS  
MIDDLE MAGOTHY

FIGURE 04

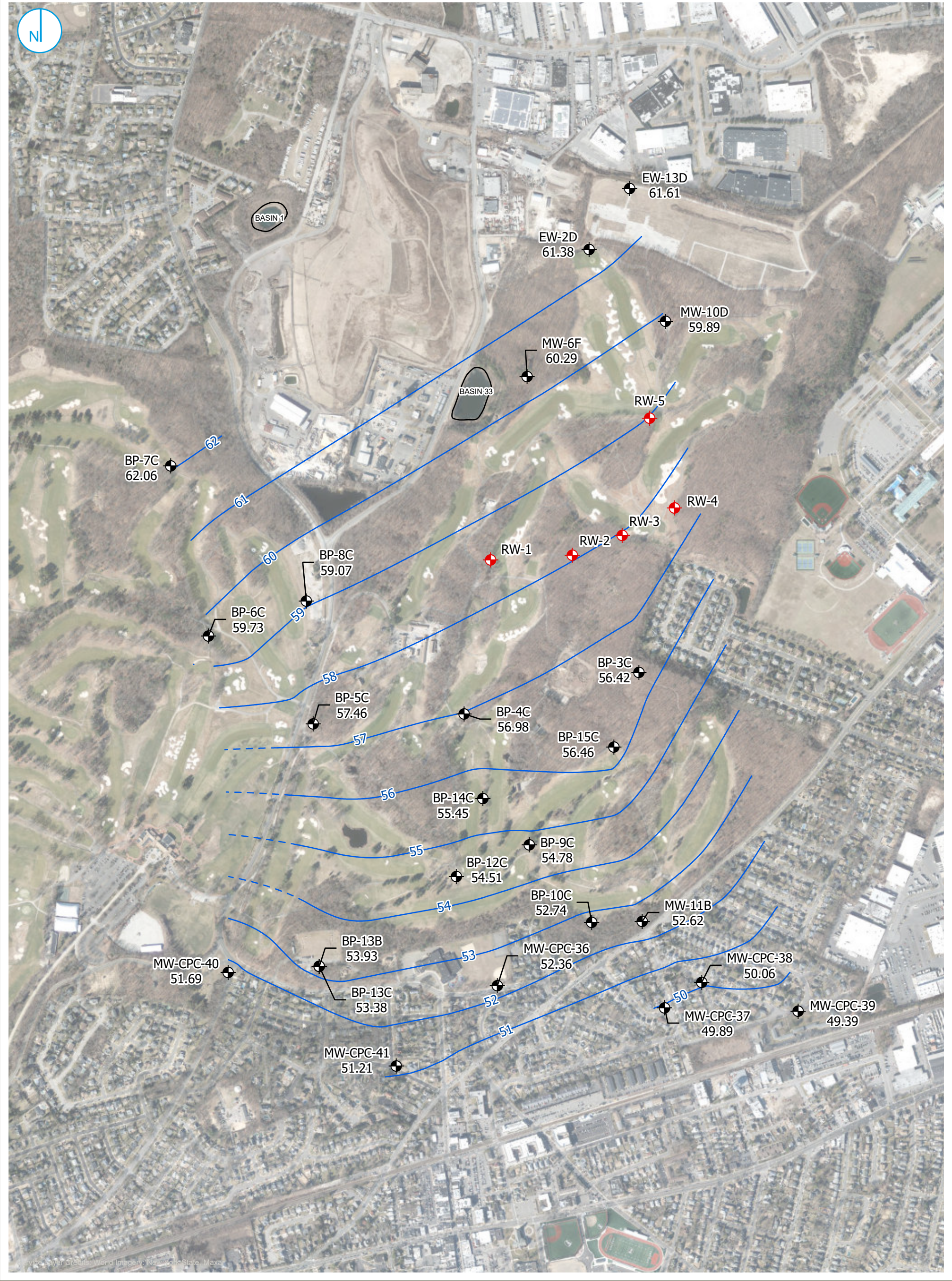


CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

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A RAMBOLL COMPANY







- MONITORING WELL
- RECOVERY WELL
- POTENTIOMETRIC CONTOUR
- INFERRED POTENTIOMETRIC CONTOUR
- RECHARGE BASIN

**Notes**  
- All elevations recorded in feet in NAVD 88.



DECEMBER 2022  
POTENTIOMETRIC CONTOURS  
LOWER MAGOTHY

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 05

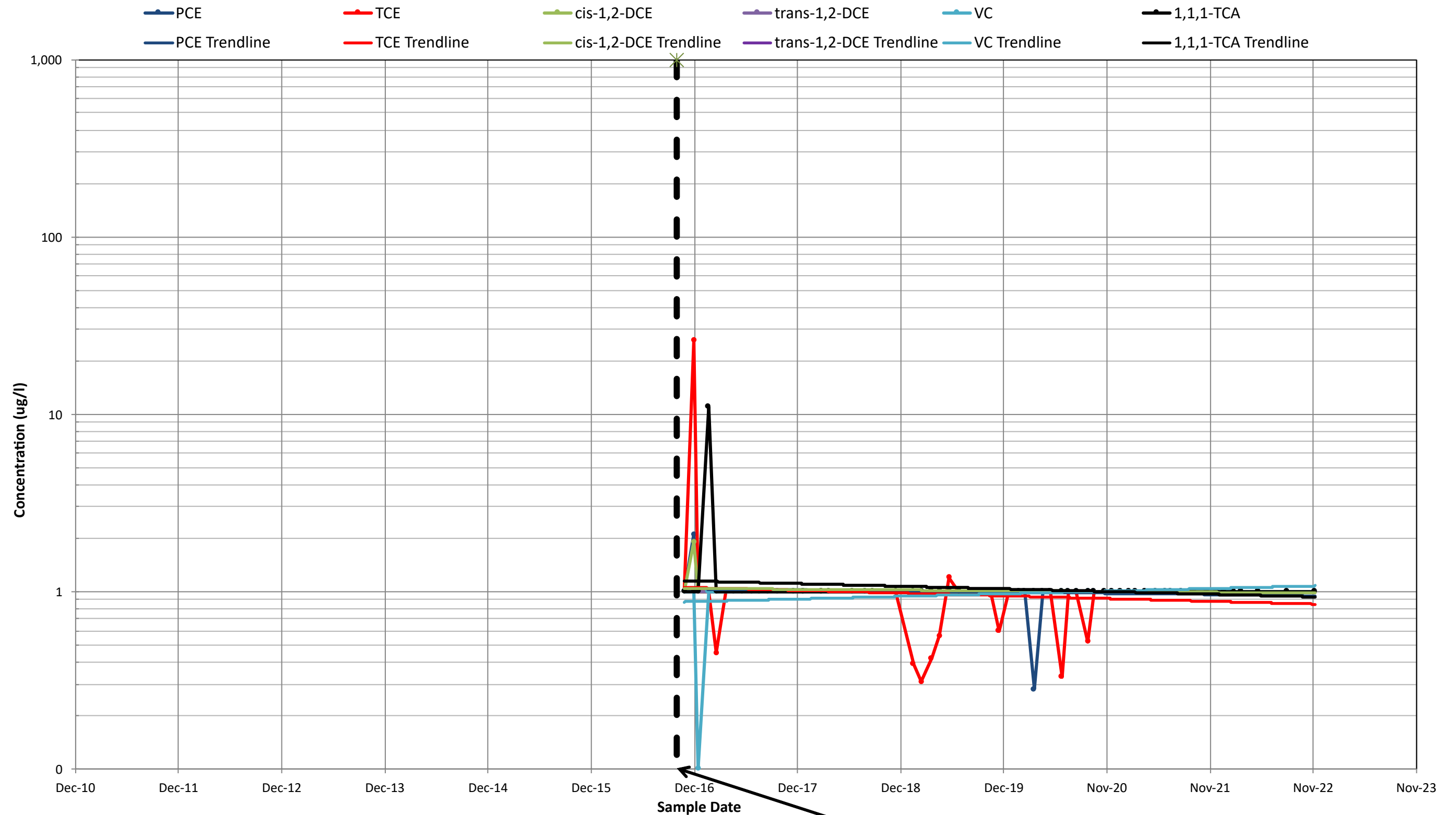
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ENGINEERING SOLUTIONS, INC.  
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K:\NYS-DEC\1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022.aprx\Fig06-Chlorinated\_VOC\_Effluent

PROJECT: 1940101703 | DATED: 1/25/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE, 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

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

## CHLORINATED VOC CONCENTRATIONS EFFLUENT

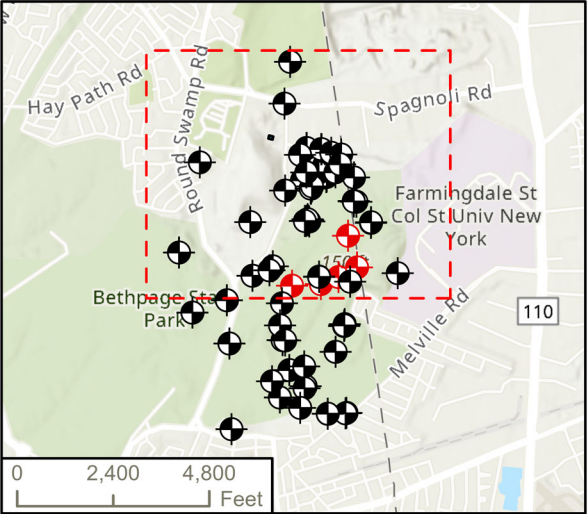
CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 06

RAMBOLL AMERICAS  
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- MONITORING WELL (GAUGED)
- RECOVERY WELL
- 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.
- X / X - Indicates primary / duplicate results.
- All results presented in ug/L.

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



1,4-DIOXANE EXCEEDANCES  
IN PROCESS SAMPLES

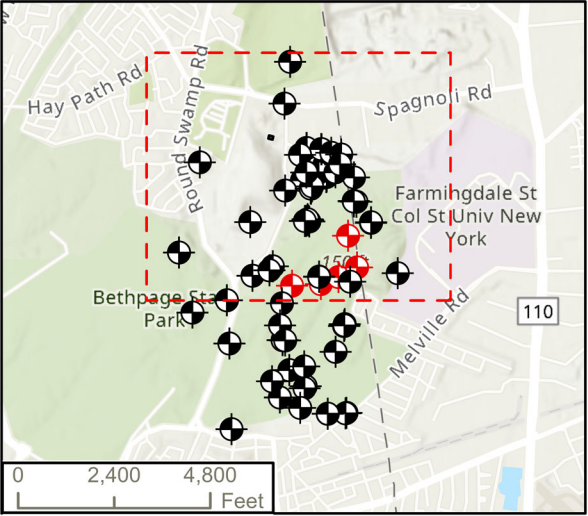
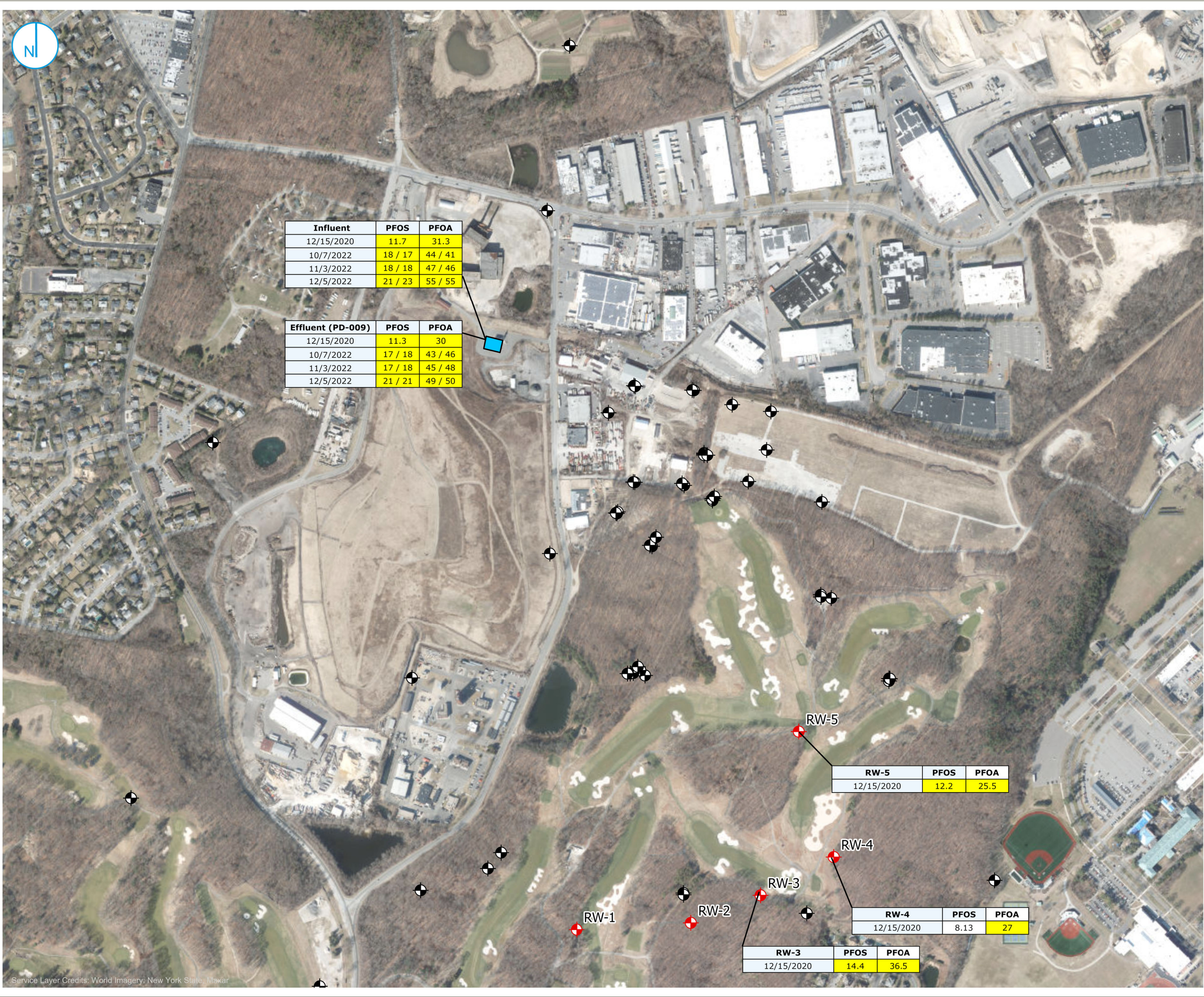
CLAREMONT POLYCHEMICAL  
CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 07

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- MONITORING WELL (GAUGED)
- RECOVERY WELL
- TREATMENT BUILDING

- Process Sample Results Notes:**
- Individual PFAS compound results compared to NYSDEC Part 375 Guidelines for Sampling and Analysis of PFAS (October 2020).
  - Only compounds with exceedances are shown. If the compound is not shown it was not detected above the criteria in any sample.
  - Criteria for compounds shown on this figure are presented in the table below.
  - Exceedance of relevant criteria indicated by yellow highlighting in the data box on the map.
  - Final, validated data presented on figure.
  - X / X - Indicates primary / duplicate results.
  - All results presented in ng/L.

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



PFAS EXCEEDANCES

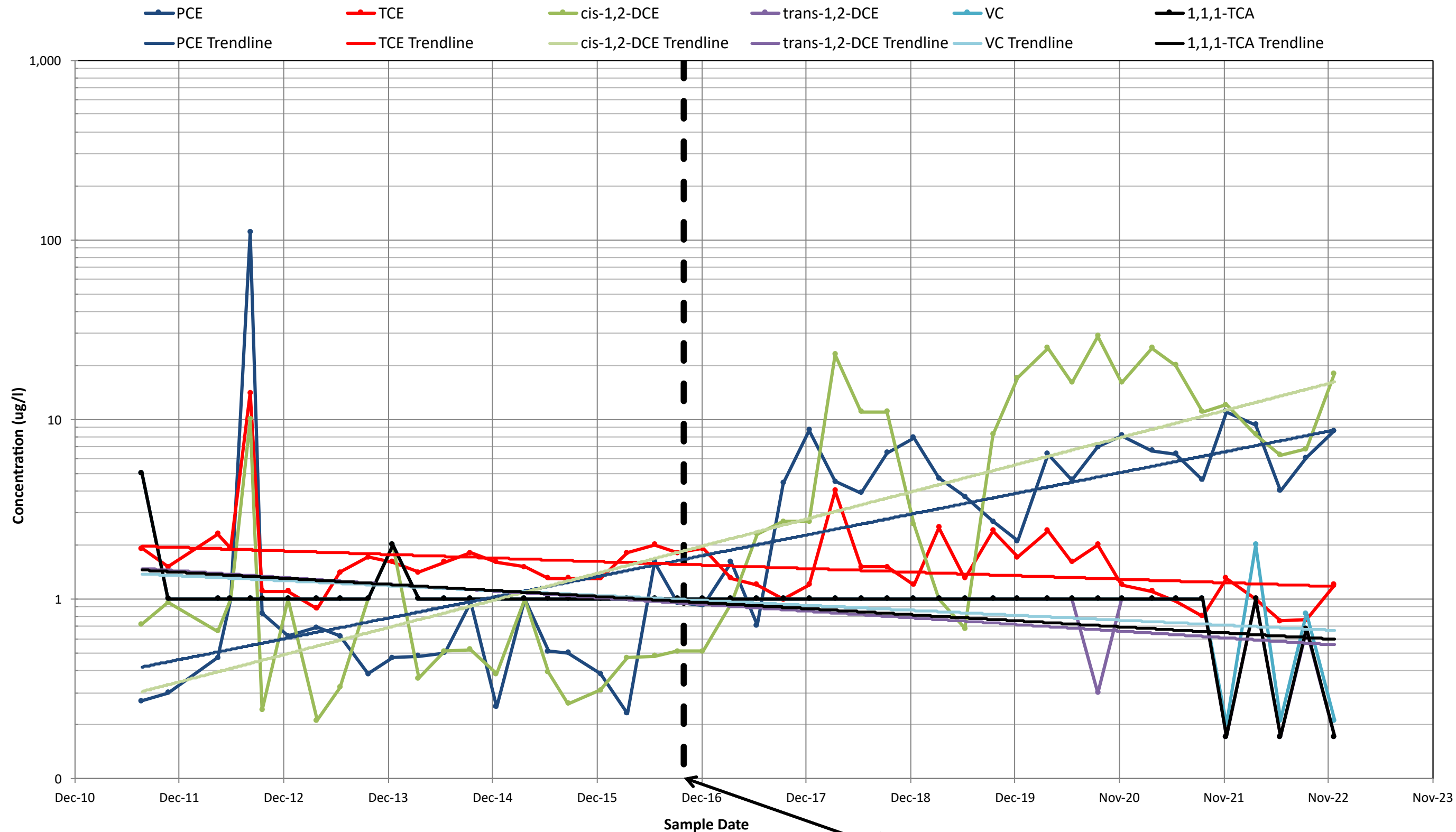
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FIGURE 08

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NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

### CHLORINATED VOC CONCENTRATIONS DW-1

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OLD BETHPAGE, NEW YORK

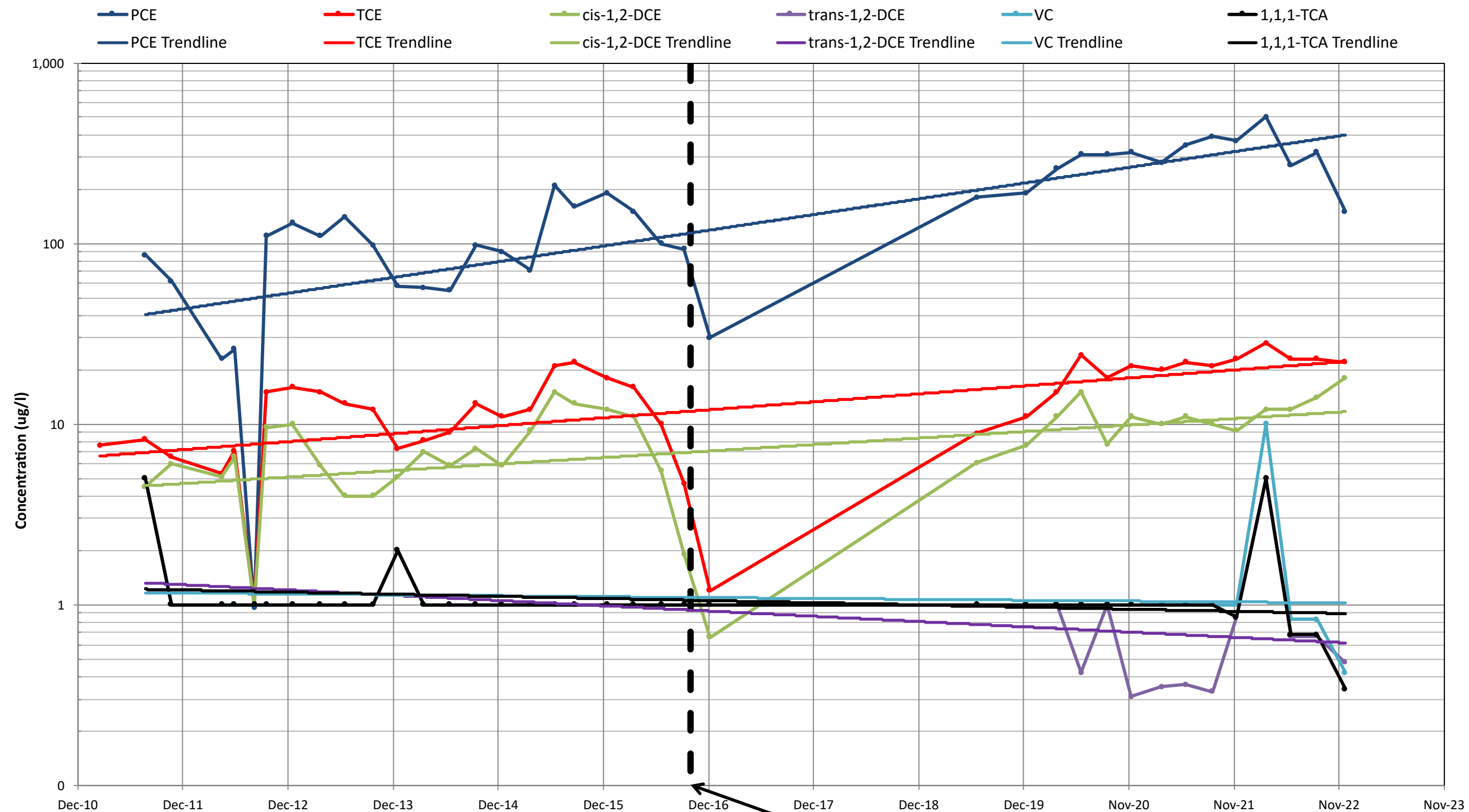
FIGURE 09

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K:\NYS-DEC-1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022\Claremont\_Polychemical\_4Q2022.aprx\Fig10-Chlorinated\_VOC\_SW-10

PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-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.

Sample Date

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

## CHLORINATED VOC CONCENTRATIONS SW-1

CLAREMONT POLYCHEMICAL CORPORATION  
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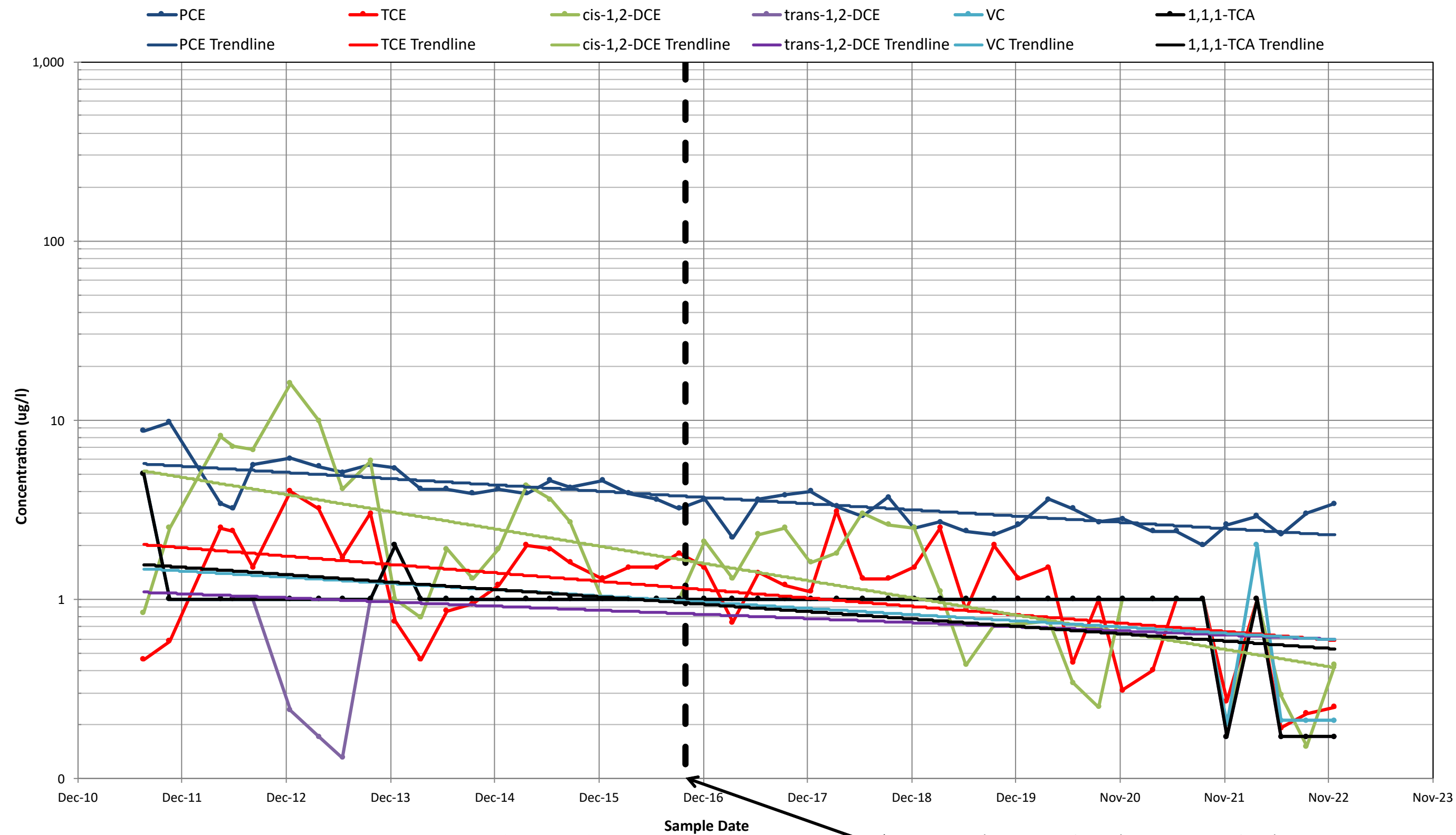
FIGURE 10

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K:\NYS-DEC-1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022.aprx\Fig11-Chlorinated\_VOC\_EW-1A

PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

### CHLORINATED VOC CONCENTRATIONS EW-1A

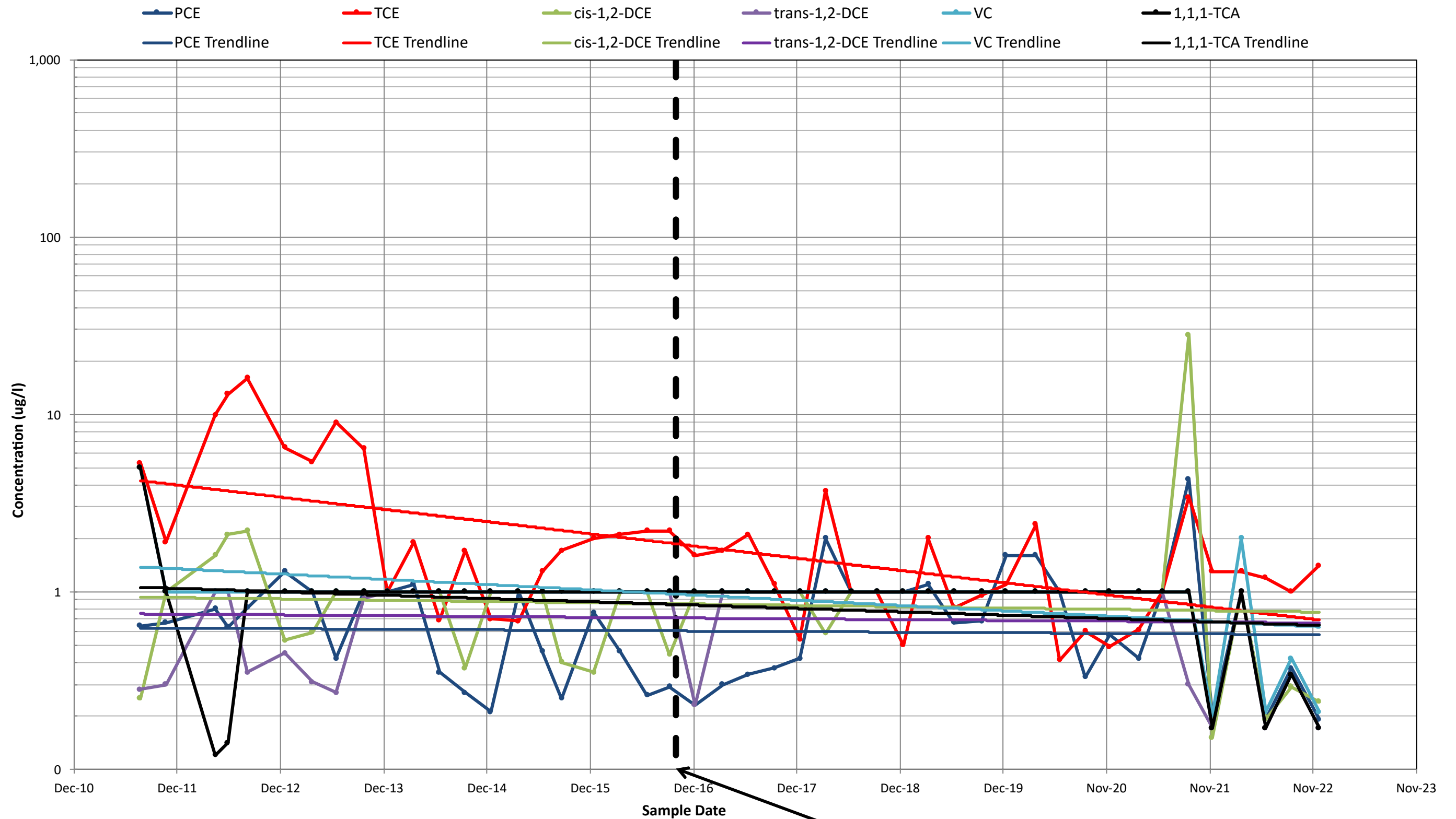
CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
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FIGURE 11

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PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE  
K:\NYS-DEC-1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022\Claremont\_Polychemical\_4Q2022.aprx\Fig12-Chlorinated\_VOC\_EW-5



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE, 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

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

CHLORINATED VOC CONCENTRATIONS  
EW-5

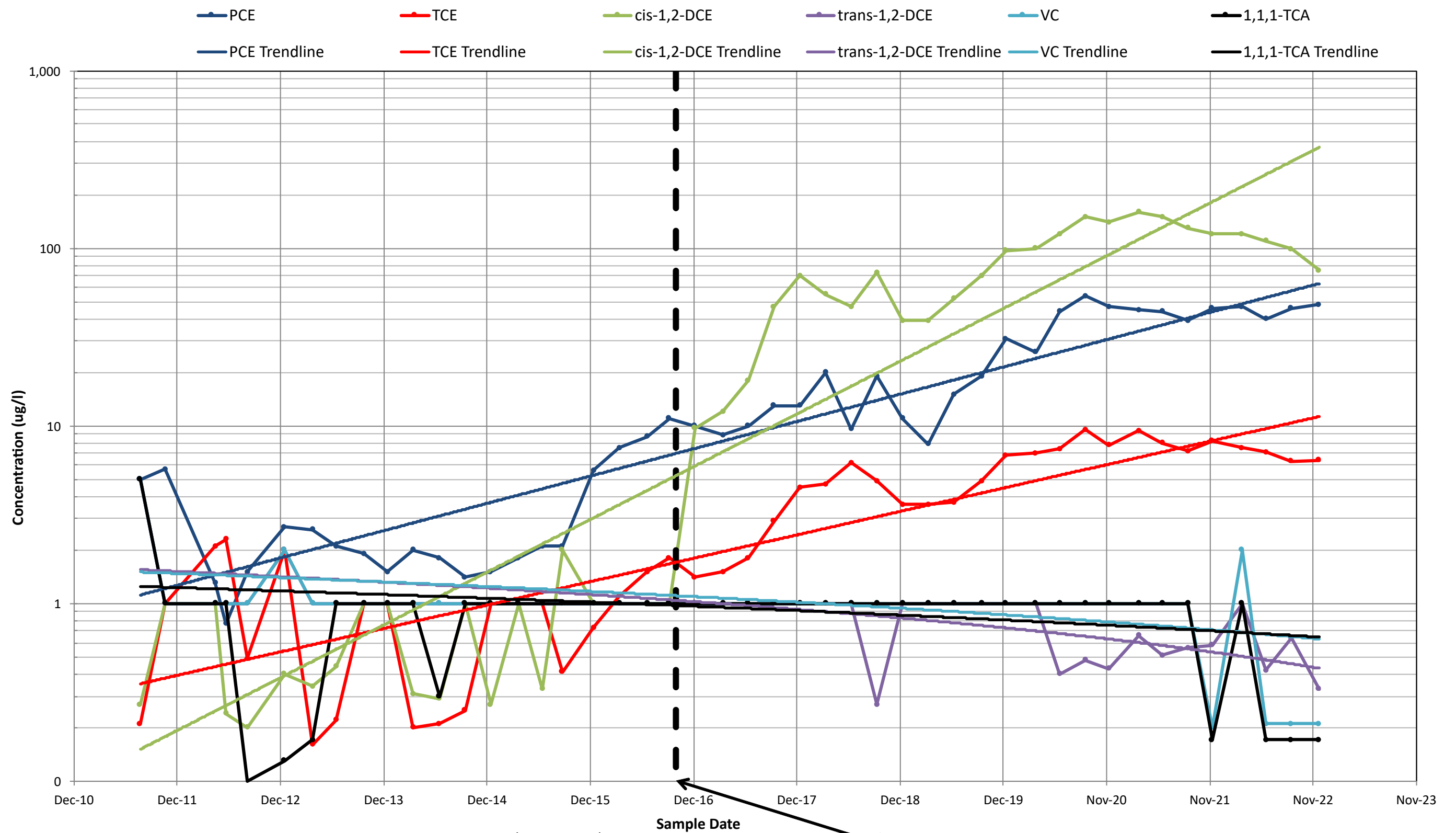
FIGURE 12

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PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE  
K:\NYS-DEC-1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022\Claremont\_Polychemical\_4Q2022.aprx\Fig13-Chlorinated\_VOC\_EW-4A



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE, 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

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

### CHLORINATED VOC CONCENTRATIONS EW-4A

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
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FIGURE 13

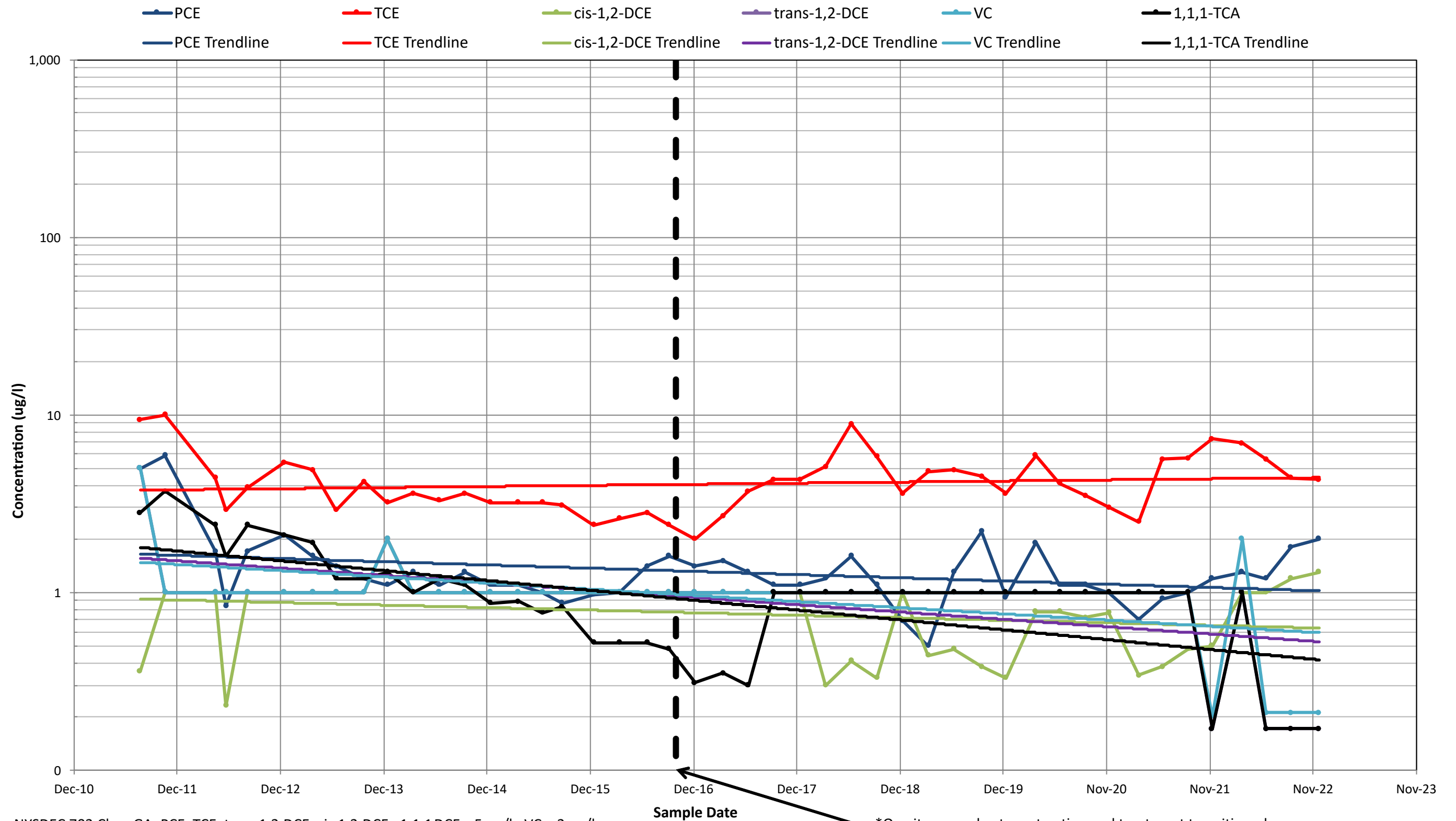
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K:\NYS-DEC-1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022.aprx\Fig10-Chlorinated\_VOC\_EW-4B

PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

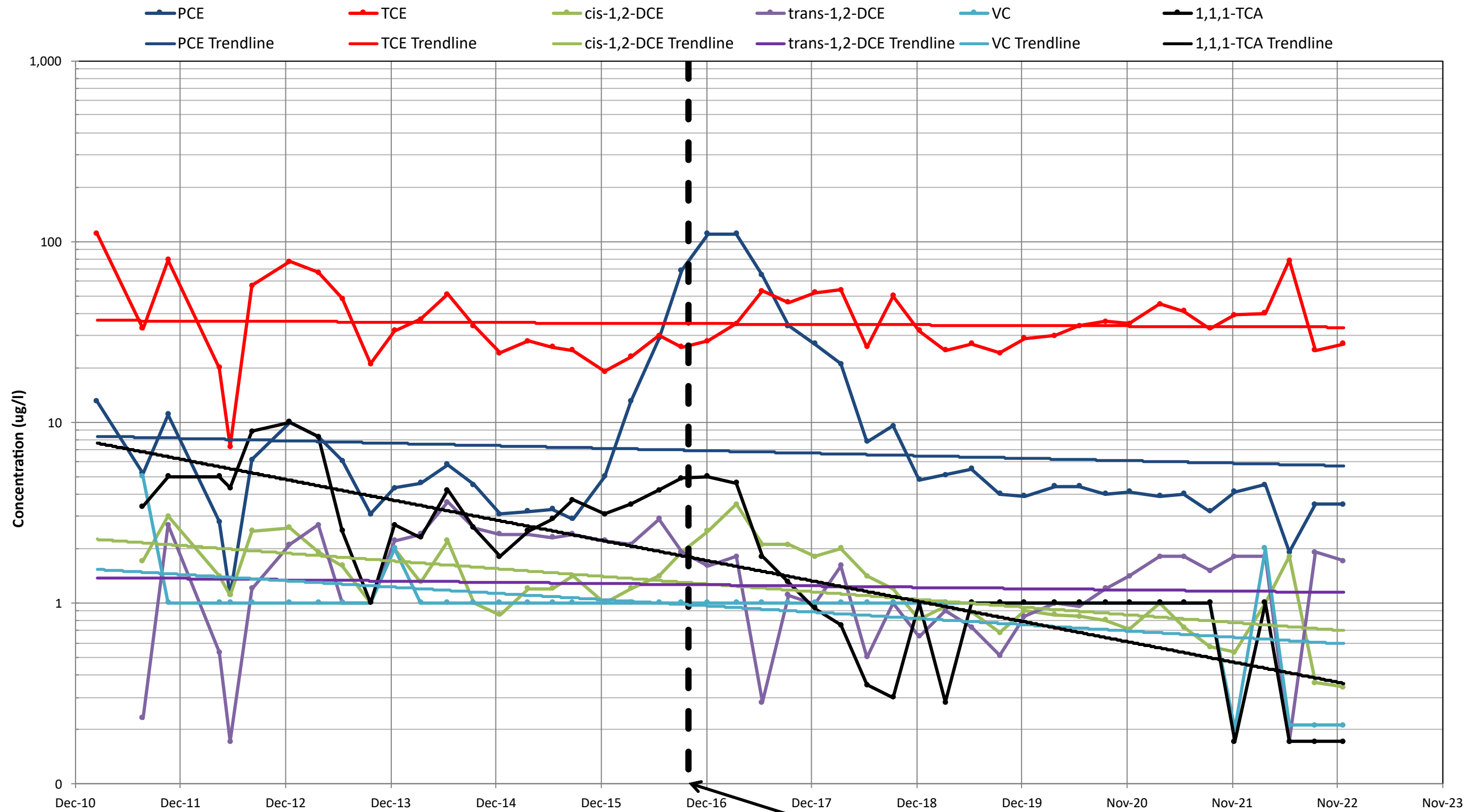
## CHLORINATED VOC CONCENTRATIONS EW-4B

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 14

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NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

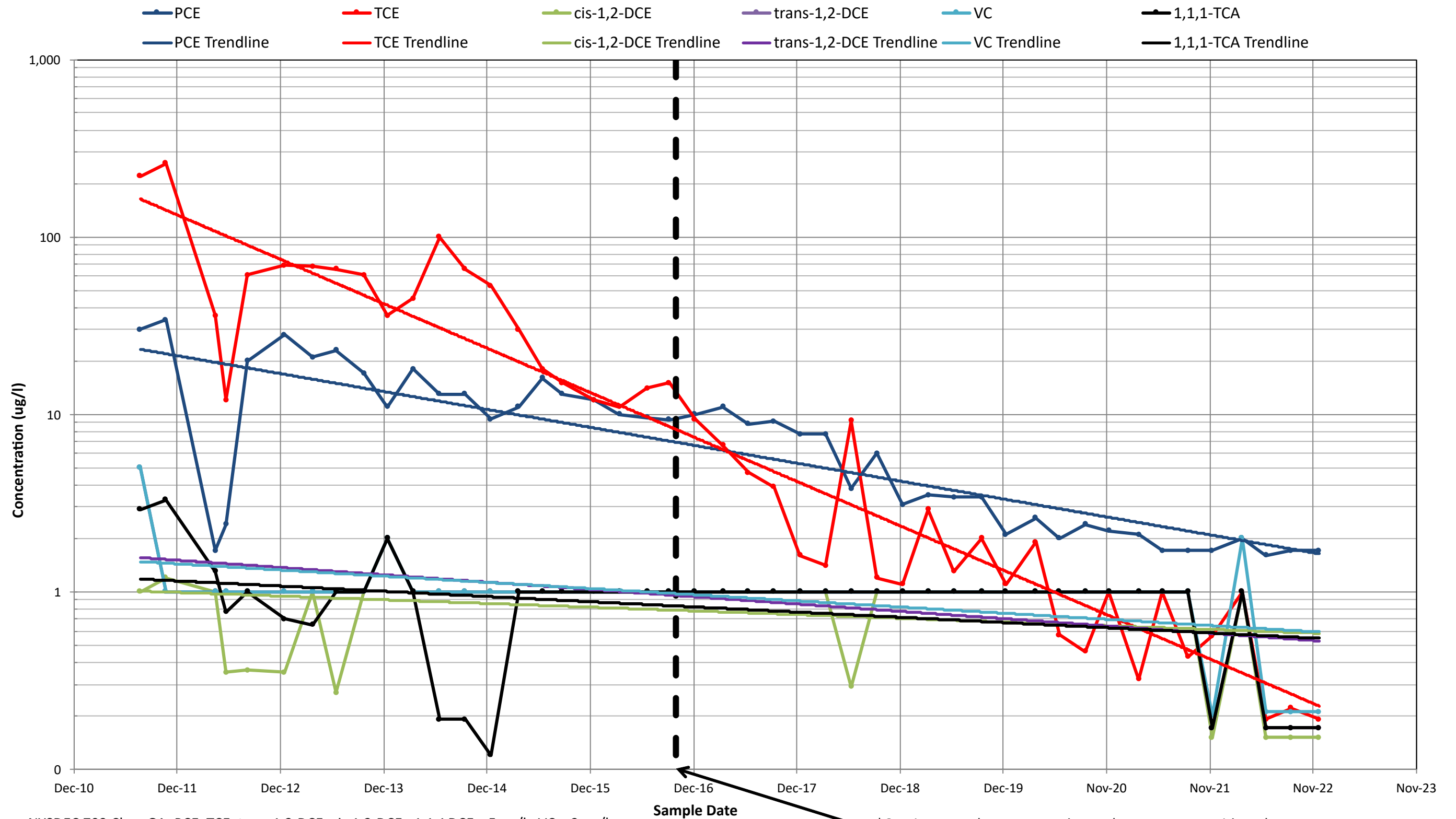
\*On-site groundwater extraction and treatment transitioned from the OU4 treatment facility to the OU5 treatment facility as of October 1, 2016.

CHLORINATED VOC CONCENTRATIONS  
EW-4C

FIGURE 15

K:\NYS-DEC-10878\15Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022\Claremont\_Polychemical\_4Q2022.aprx\Fig16-Chlorinated\_VOC\_EW-4D

PROJECT: 940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

### CHLORINATED VOC CONCENTRATIONS EW-4D

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

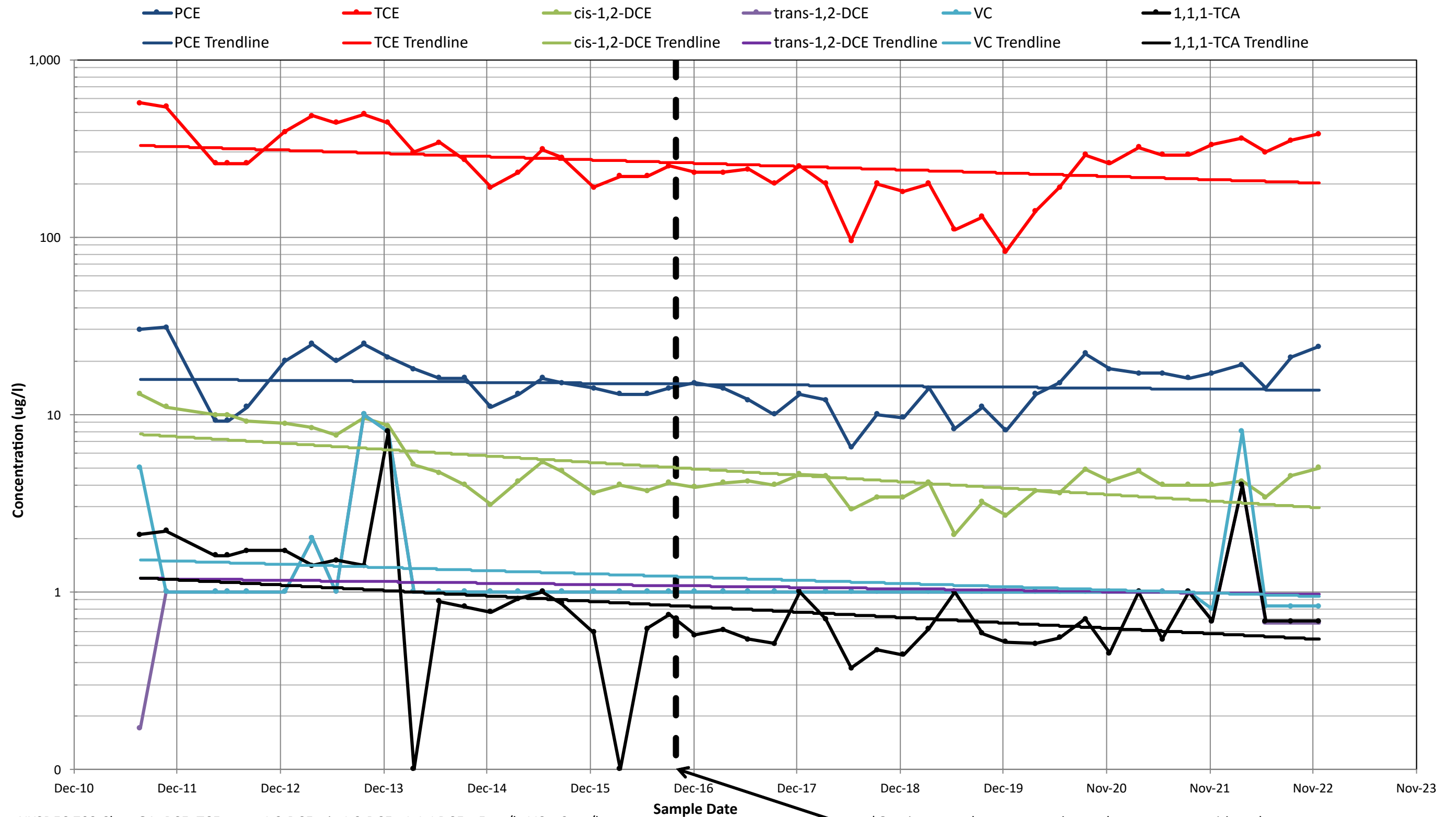
FIGURE 16

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K:\NYS-DEC-10878\15\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022\Claremont\_Polychemical\_4Q2022.aprx\Fig17-Chlorinated\_VOC\_EW-7C

PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

### CHLORINATED VOC CONCENTRATIONS EW-7C

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

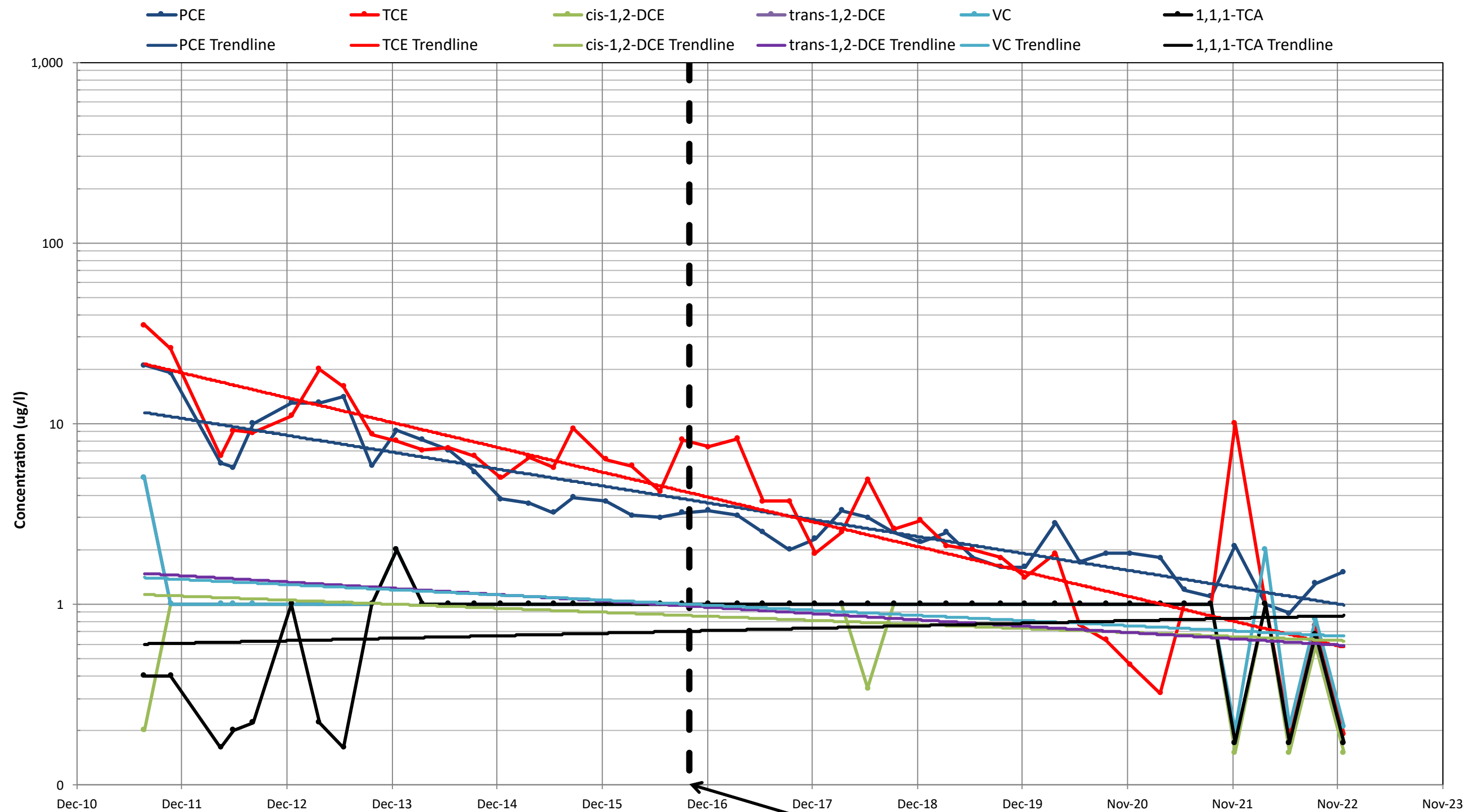
FIGURE 17

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY



K:\NYS-DEC-10878\15\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022.aprx\Fig18-Chlorinated\_VOC\_EW-7D

PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE, 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

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

## CHLORINATED VOC CONCENTRATIONS EW-7D

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

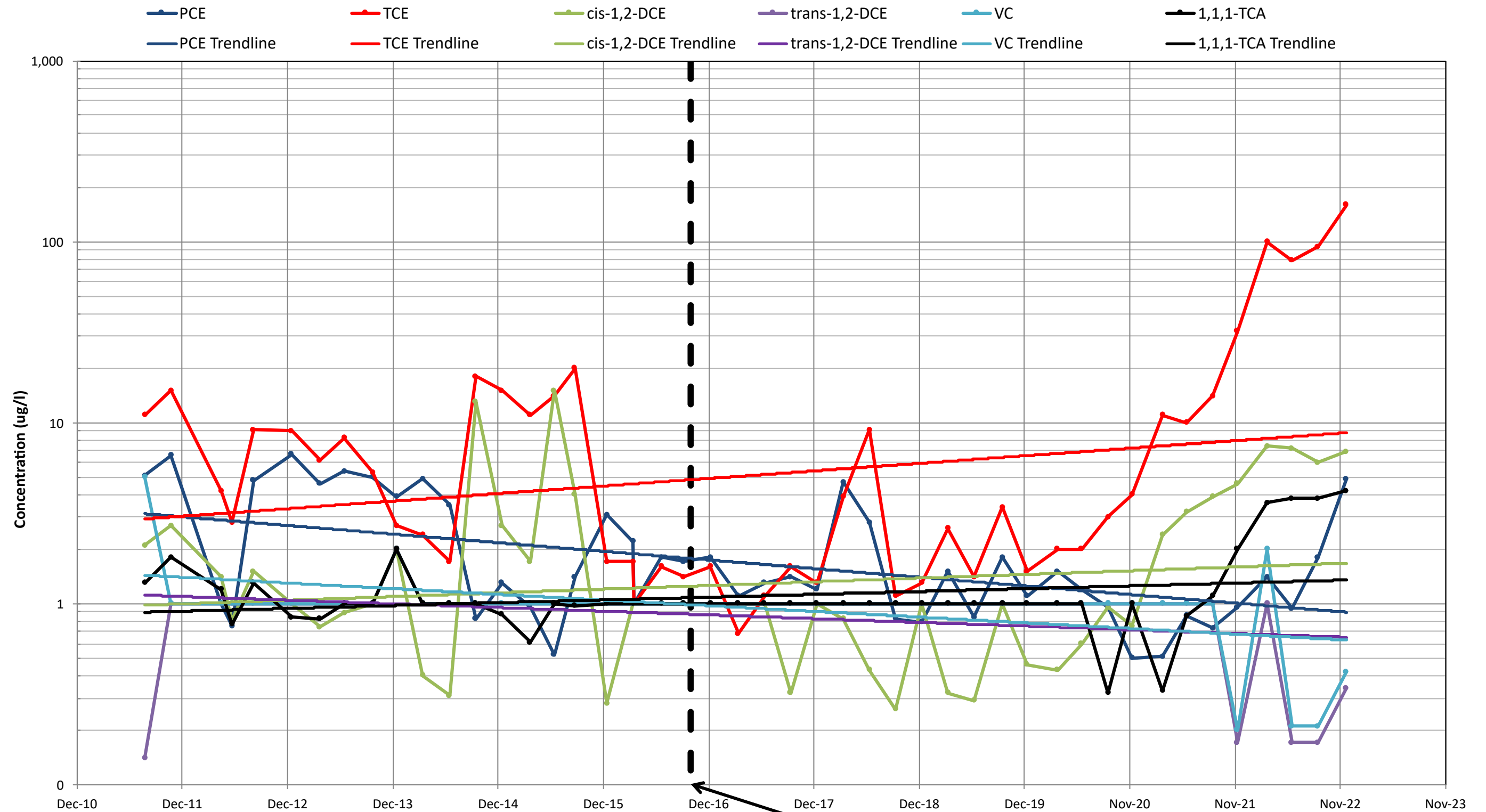
FIGURE 18

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY



K:\NYS-DEC-1087815\Standards\GIS\Claremont\ProClaremont\_Polychemical\_4Q2022\Claremont\_Polychemical\_4Q2022.aprxFig19-Chlorinated\_VOC\_MW-100

PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

Sample Date

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

## CHLORINATED VOC CONCENTRATIONS MW-10D

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

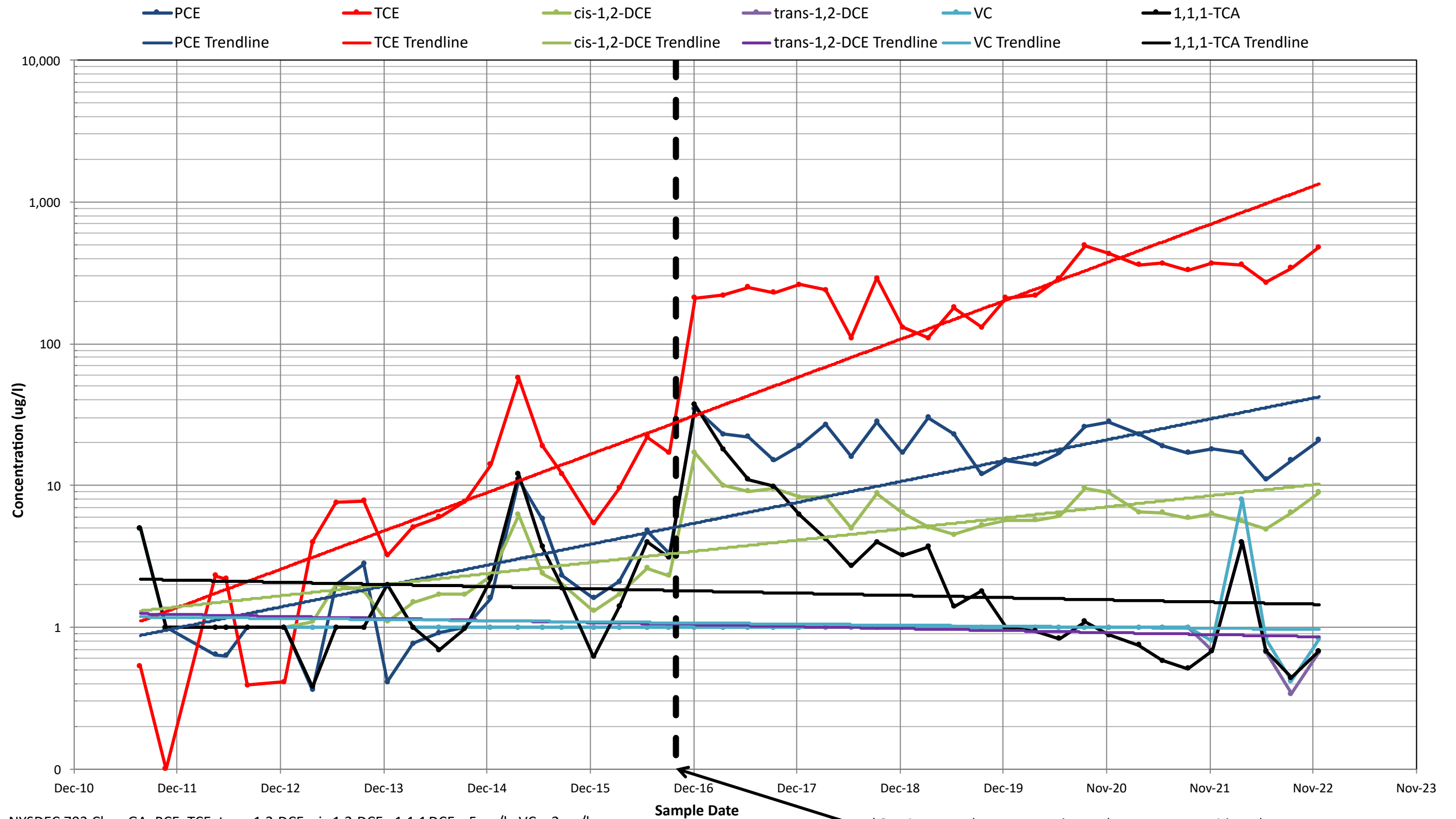
FIGURE 19

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY



K:\NYS-DEC.1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022\Claremont\_Polychemical\_4Q2022.aprx\Fig20-Chlorinated\_VOC\_EW-12D

PROJECT: 1940101703 | DATED: 1/27/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

## CHLORINATED VOC CONCENTRATIONS EW-12D

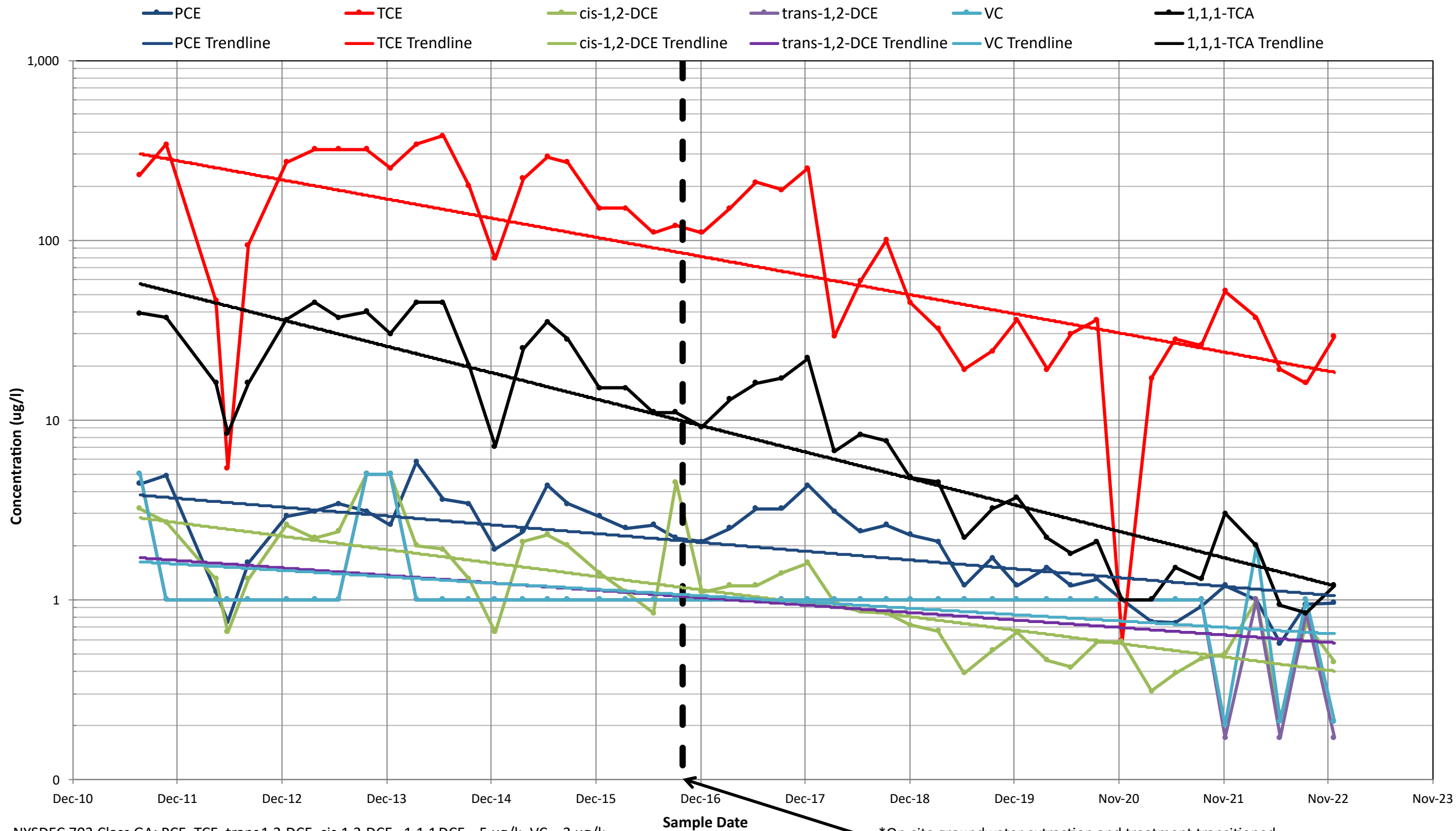
CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 20

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY







NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

CHLORINATED VOC CONCENTRATIONS  
EW-14D

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 21

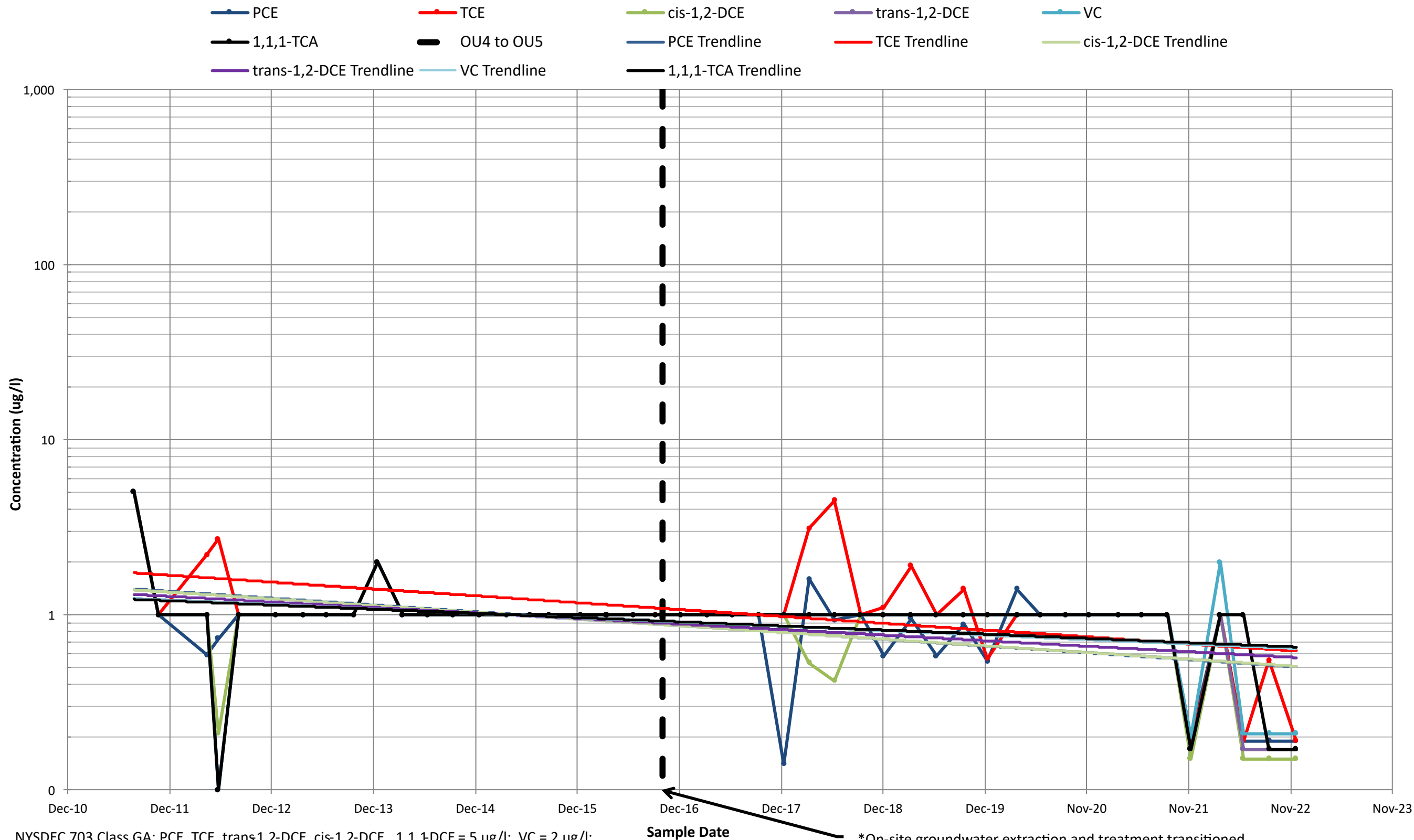
RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY





K:\NYS-DEC-1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022.aprxFig22-Chlorinated\_VOC\_BP-3A

PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE, 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

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

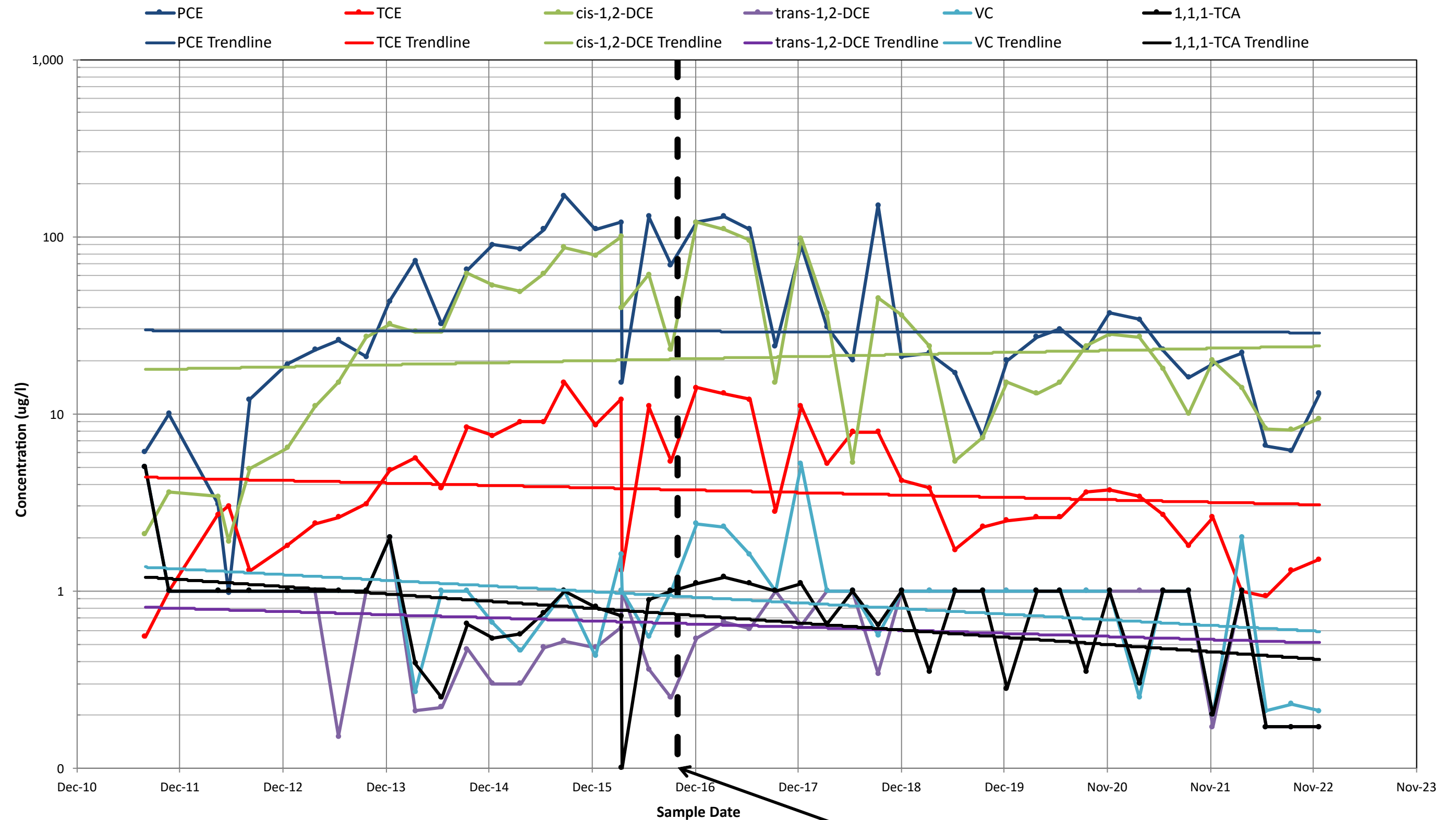
CHLORINATED VOC CONCENTRATIONS  
BP-3A

FIGURE 22

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK





NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

### CHLORINATED VOC CONCENTRATIONS BP-3B

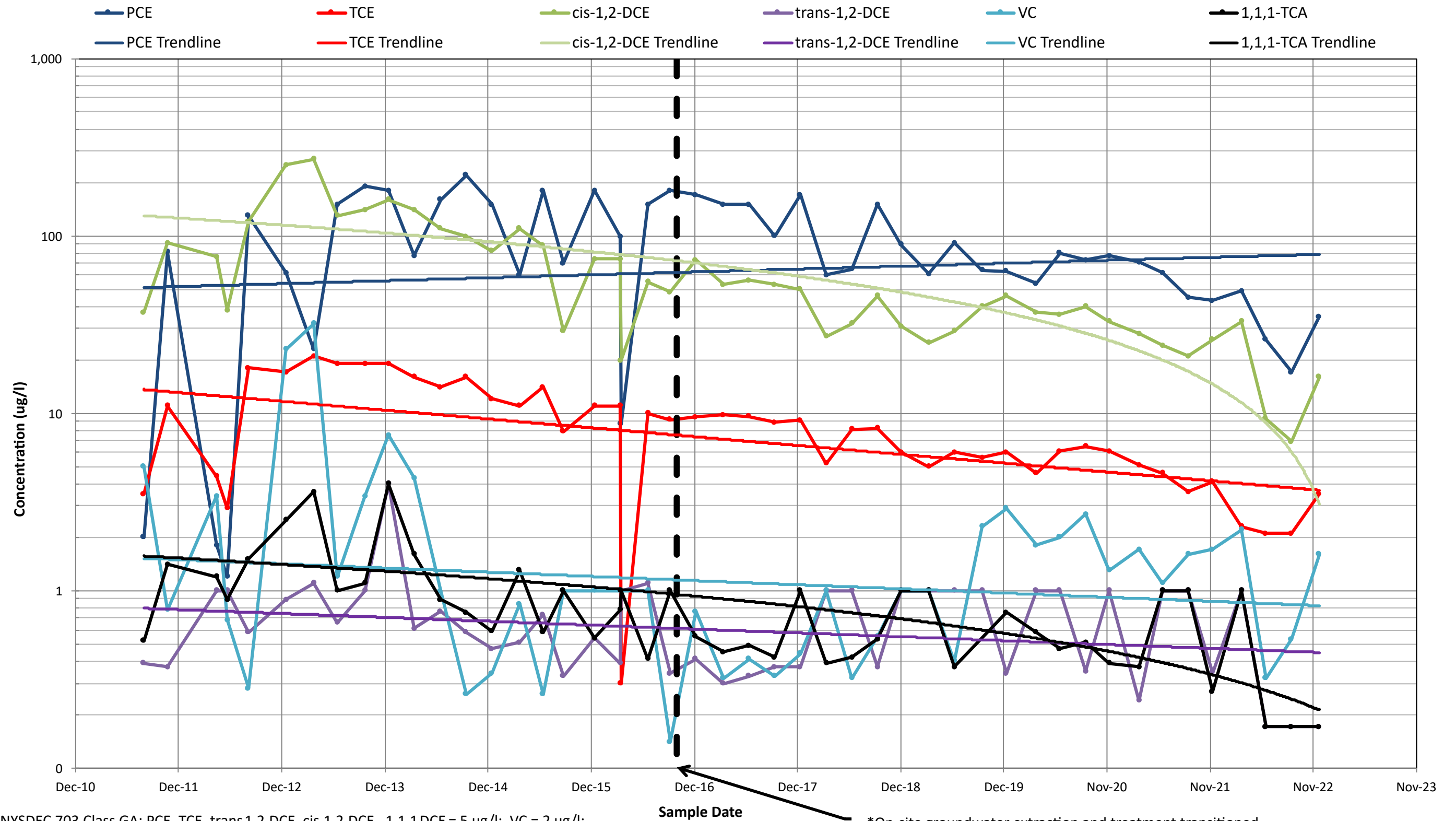
CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 23

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY



PROJECT: 1690001940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE  
K:\NYS-DEC-1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_3Q2022.aprx\Fig24-Chlorinated\_VOC\_BP-3C



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

### CHLORINATED VOC CONCENTRATIONS BP-3C

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

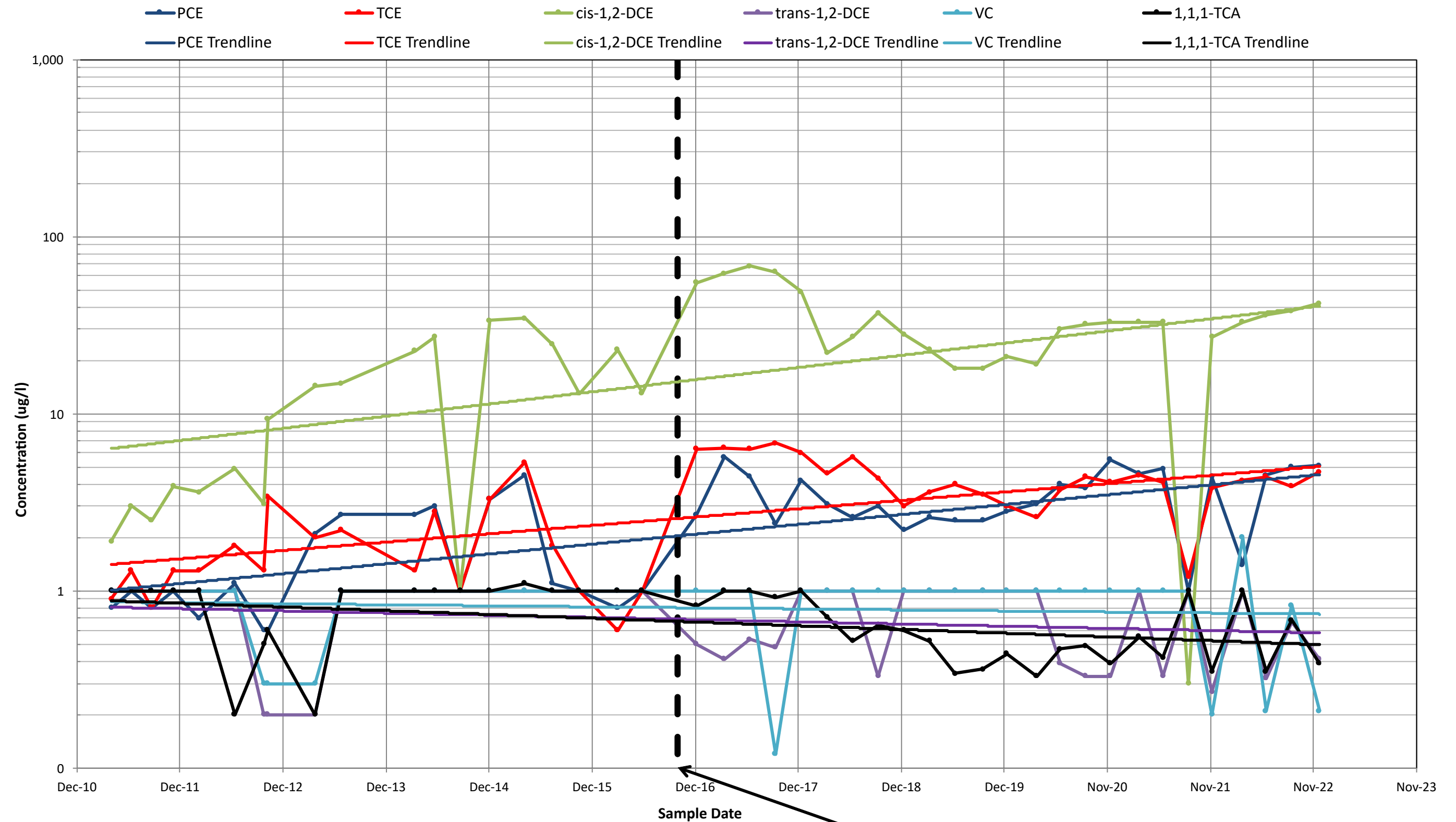
FIGURE 24

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY



K:\NYS-DEC-1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_Polychemical\_4Q2022.aprx\Fig25-Chlorinated\_VOC\_MW-11A

PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

## CHLORINATED VOC CONCENTRATIONS MW-11A

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

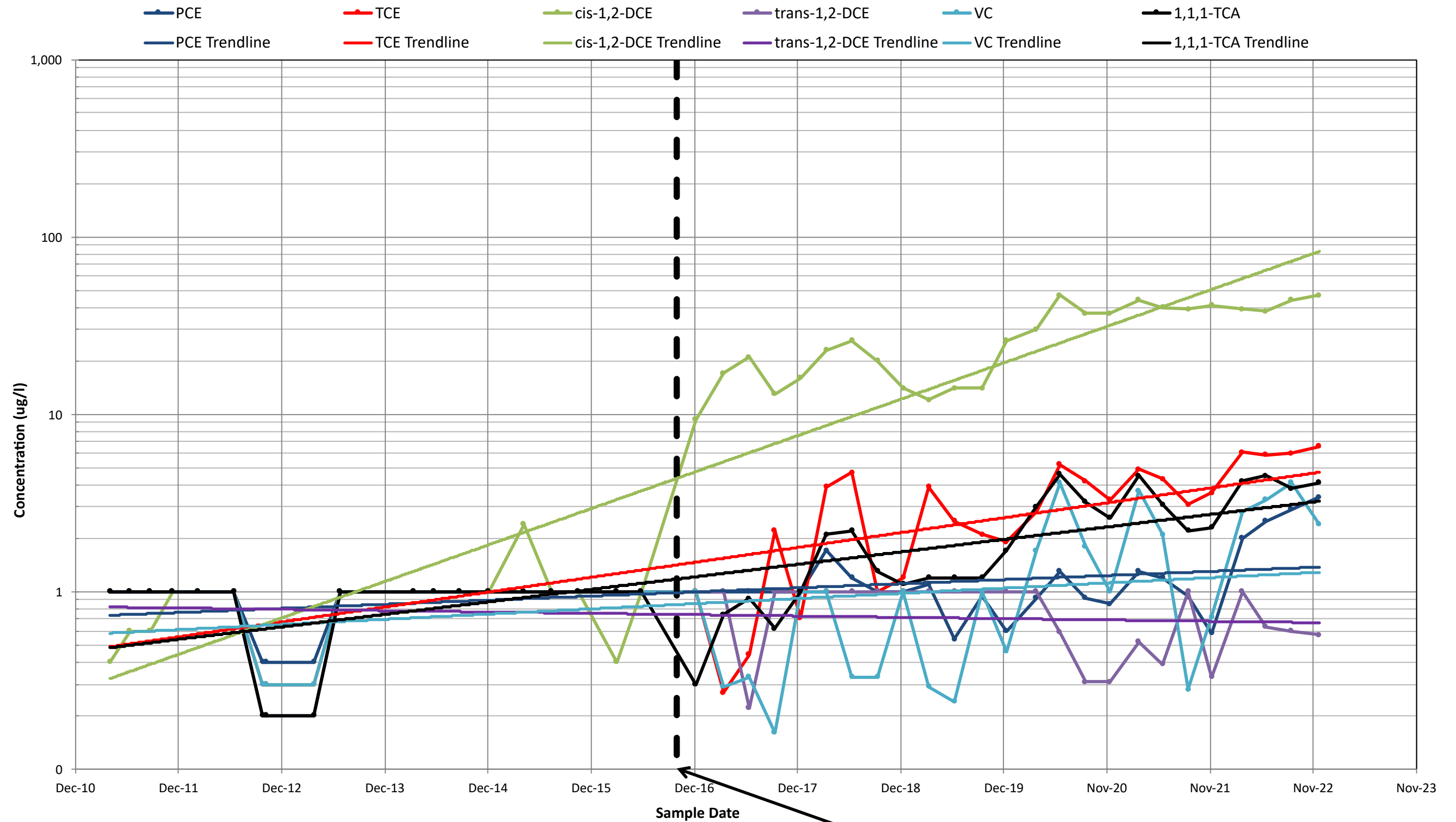
FIGURE 25

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY



K:\NYS-DEC-1087815\Standards\GIS\Claremont\Pro\Claremont\_Polychemical\_4Q2022\Claremont\_Polychemical\_4Q2022.aprx\Fig26-Chlorinated\_VOC\_MW-11B

PROJECT: 1940101703 | DATED: 1/24/2023 | DESIGNER: SSOULE



NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.

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

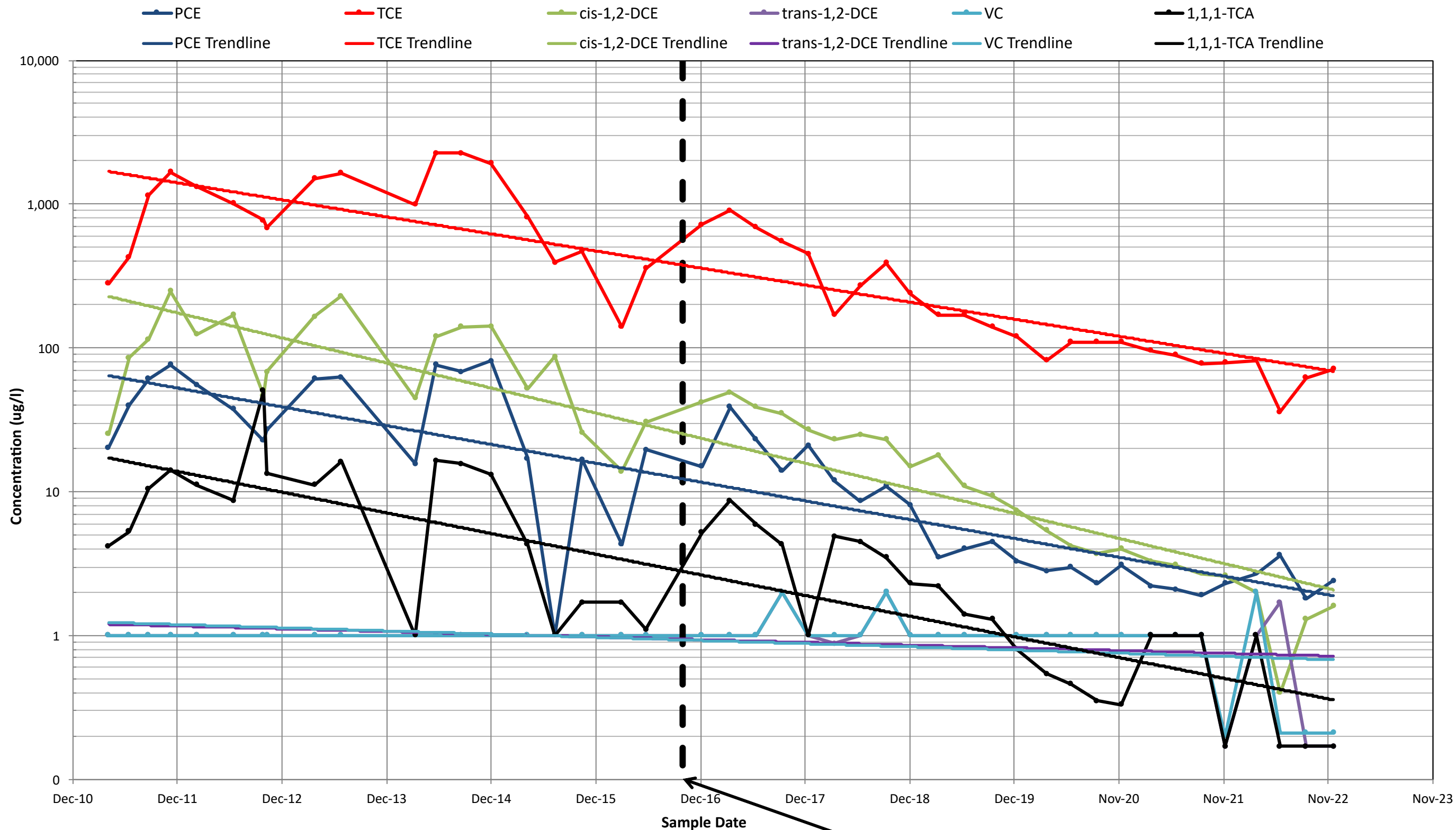
### CHLORINATED VOC CONCENTRATIONS MW-11B

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 26

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY





NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results.How some reporting limits were generated is unknown.

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

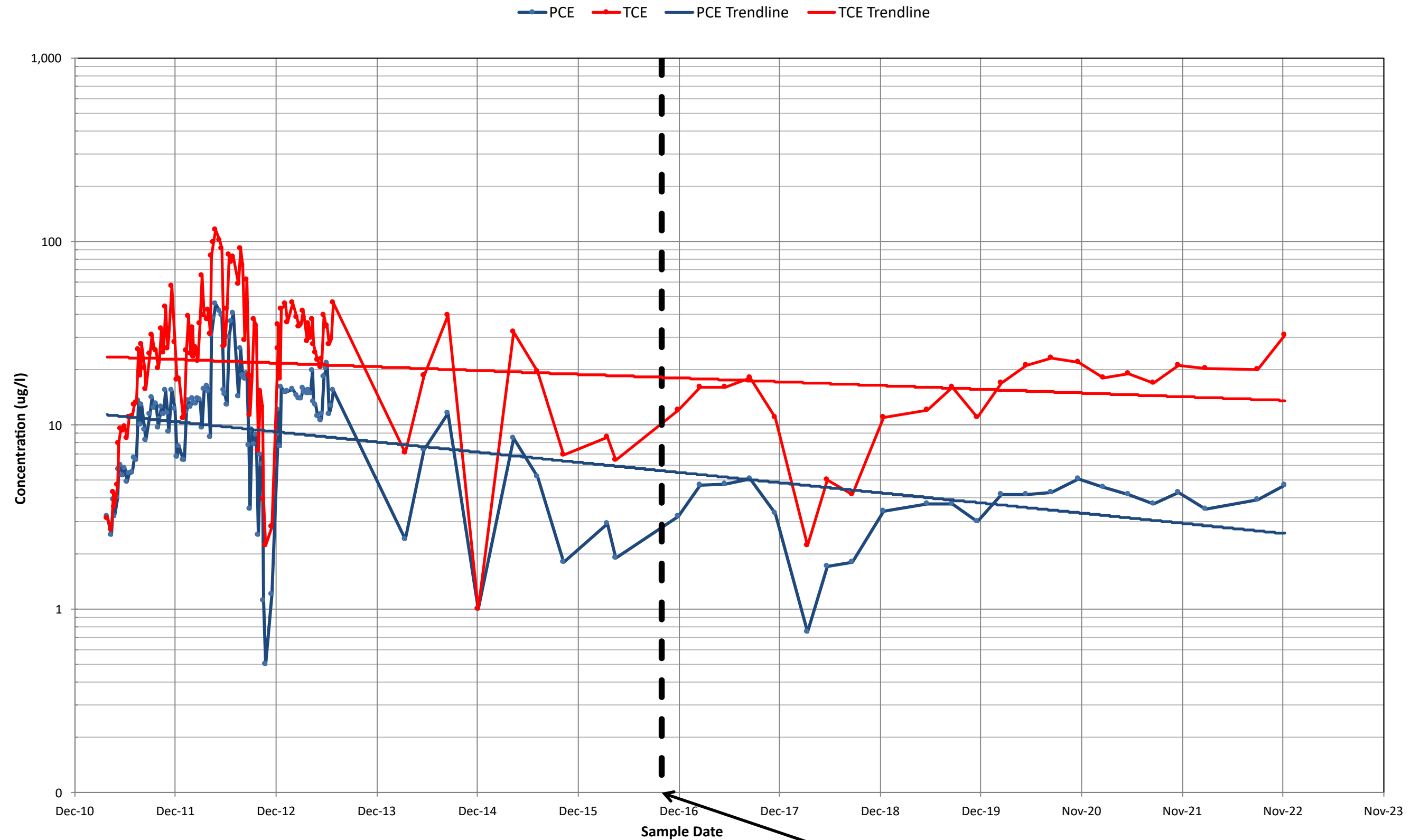
### CHLORINATED VOC CONCENTRATIONS MW-7B-R

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 27

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY





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.  
Samples are collected quarterly in the month prior to each quarterly groundwater sampling round.

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

## CHLORINATED VOC CONCENTRATIONS RW-3

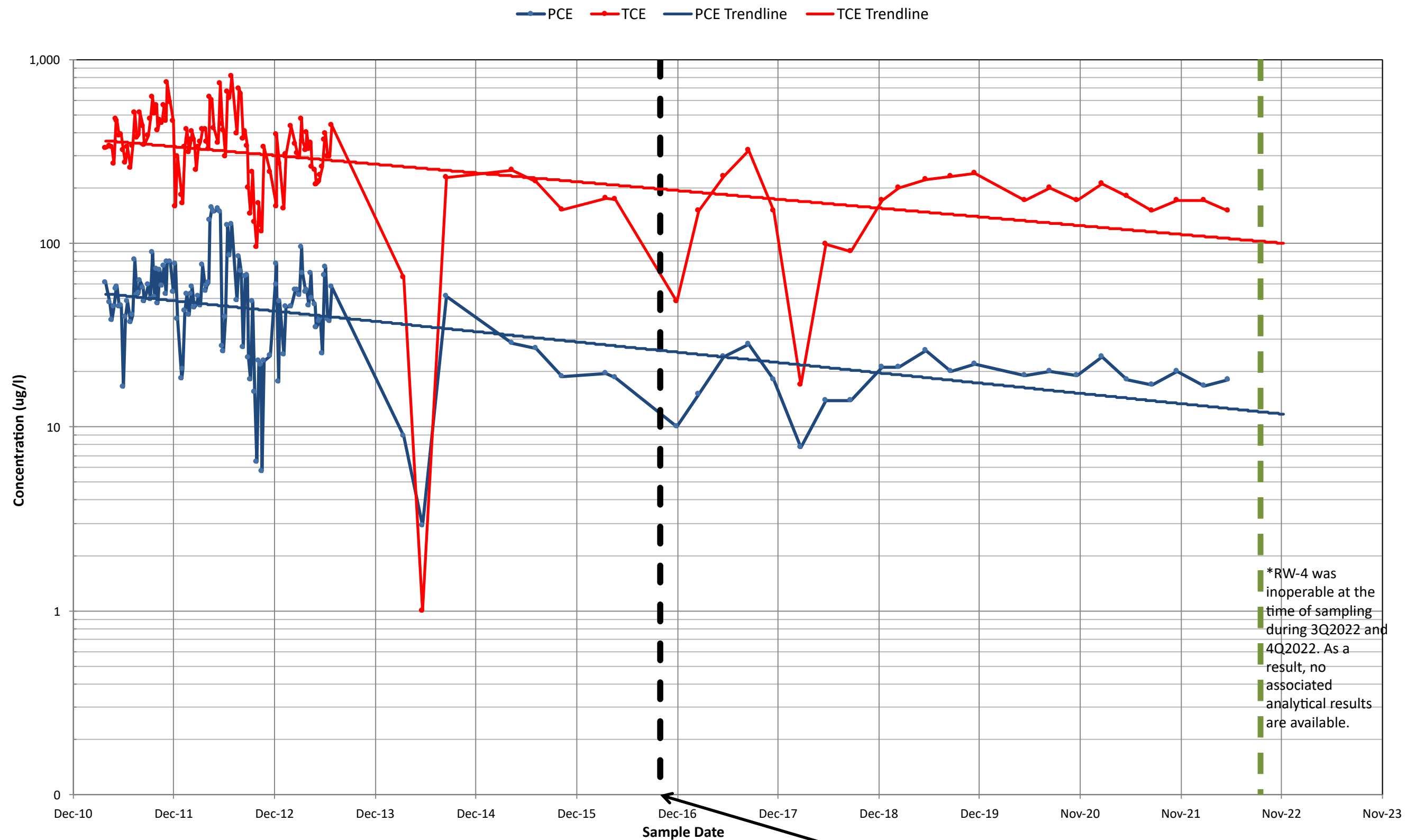
CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 28

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY







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.  
Samples are collected quarterly in the month prior to each quarterly groundwater sampling round.

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

## CHLORINATED VOC CONCENTRATIONS RW-4

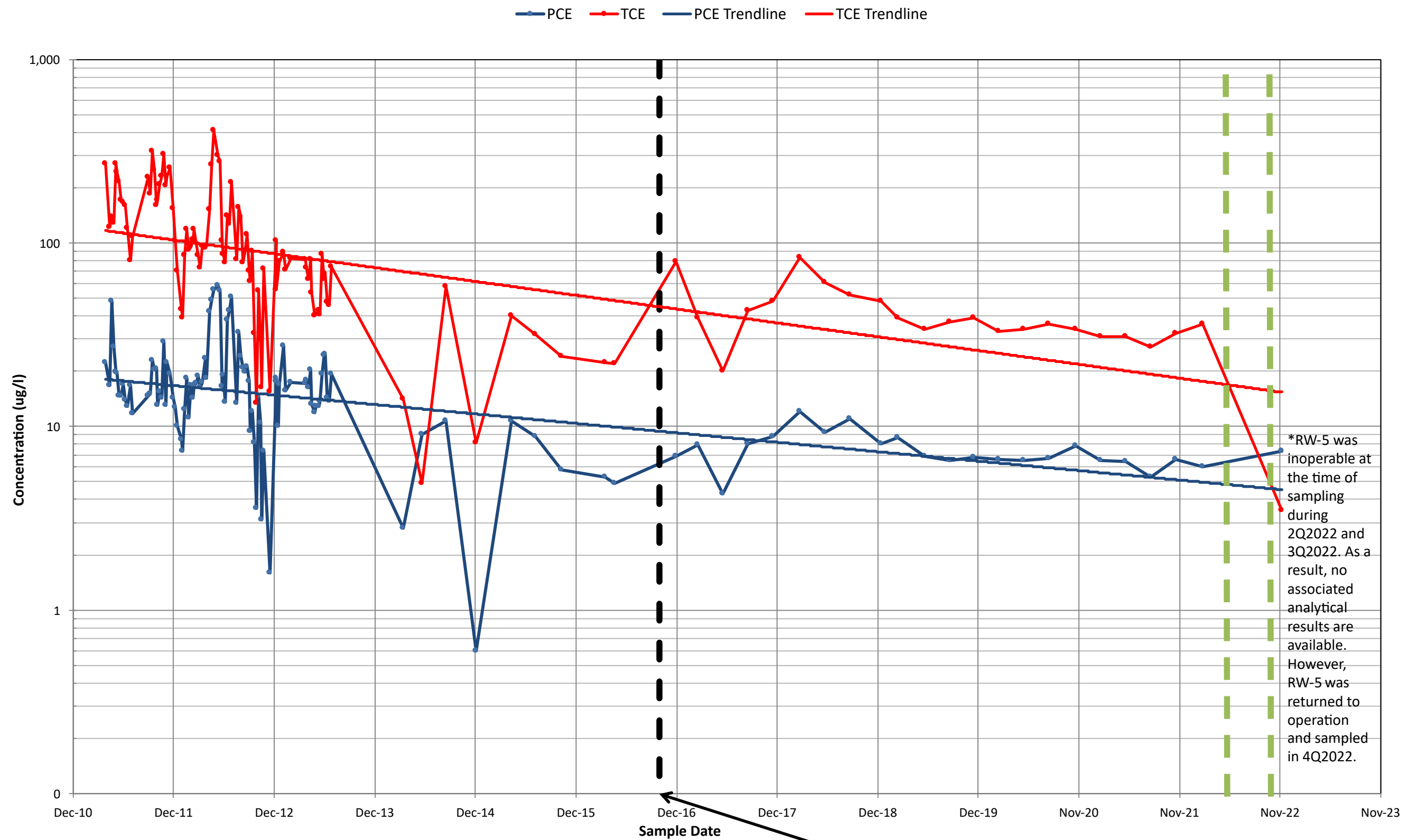
CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 29

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY







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. Samples are collected quarterly in the month prior to each quarterly groundwater sampling round.

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

## CHLORINATED VOC CONCENTRATIONS RW-5

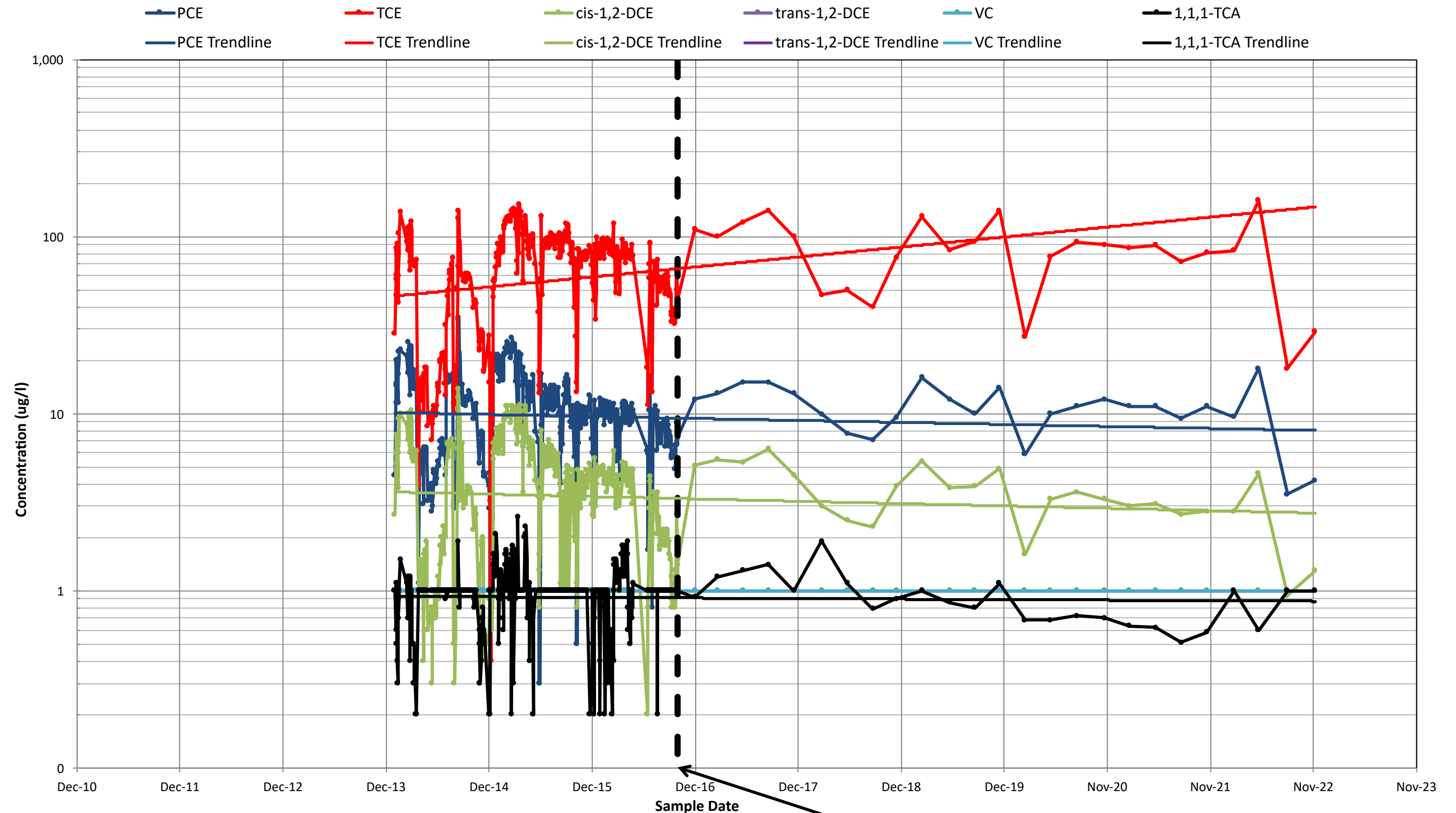
CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 30

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY

K:\NYS-DEC-1087815\Standards\GIS\Claremont\_Polychemical\_4Q2022\Claremont\_Polychemical\_4Q2022.aprx\Fig31-Chlorinated\_VOC\_OU-5\_influent

PROJECT: 1940101703 | DATED: 1/25/2023 | DESIGNER: SSOULE



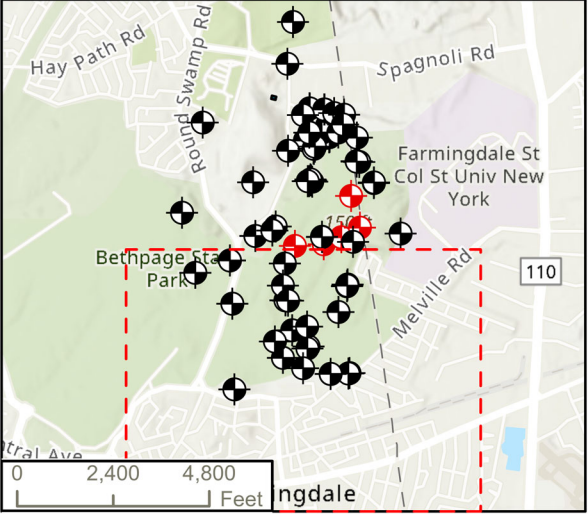
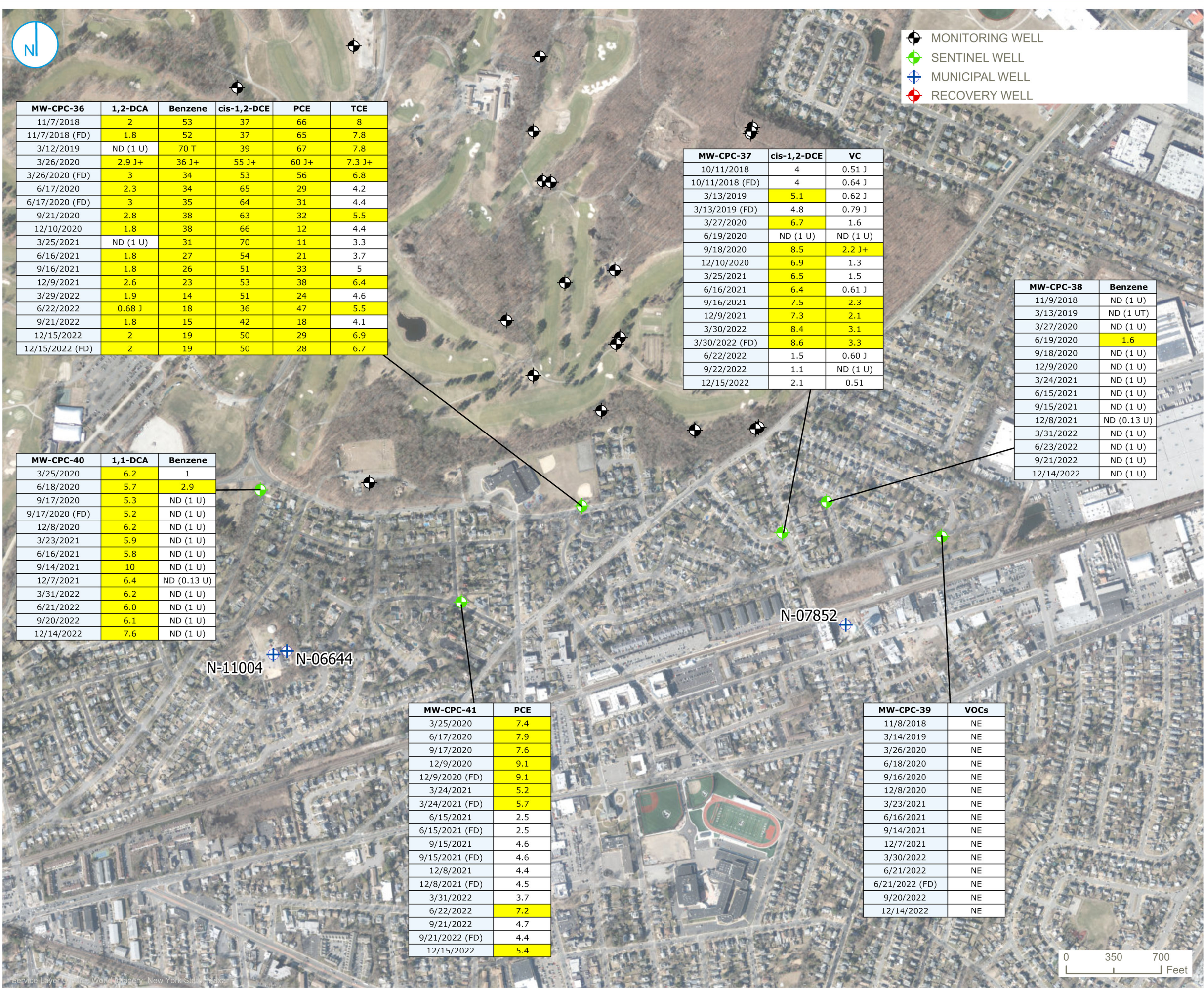
NYSDEC 703 Class GA: PCE, TCE, trans1,2-DCE, cis-1,2-DCE , 1,1,1-DCE = 5 ug/l; VC = 2 ug/l;  
Detection limits used to display non-detect results. How some reporting limits were generated is unknown.  
Samples are collected quarterly in the month prior to each quarterly groundwater sampling round.

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

CHLORINATED VOC CONCENTRATIONS  
WELL OU5 INFLUENT

FIGURE 31





**Monitoring Well Results Notes:**

- Groundwater Quality Standards and Guidance Values: NYSDEC TOGS 1.1.1 (includes 6 NYCRR Part 703) Class GA. June 1998 and subsequent addenda.
- Only compounds with exceedances are shown. If the compound is not shown it was not detected above the criteria.
- Criteria for compounds shown on this figure are presented in the table below.
- Exceedance of relevant criteria indicated by yellow highlighting in the data box on the map.
- NE indicates no exceedances. ND indicates non-detect at the detection limit shown.
- Quarter 3 2021 data has not been validated.
- All results presented in ug/L.
- J - Result is estimated. +/- indicates direction of bias. T - A lab quality control sample was out of range. U - Result is non-detect.

Standards / Criteria:	ug/L
1,1-Dichloroethane (1,1-DCA)	5
1,2-Dichloroethane (1,2-DCA)	0.6
Benzene	1
cis-1,2-Dichloroethylene (cis-1,2-DCE)	5
Tetrachloroethylene (PCE)	5
Trichloroethylene (TCE)	5
Vinyl Chloride (VC)	2

## VOC EXCEEDANCES IN SENTINEL WELLS

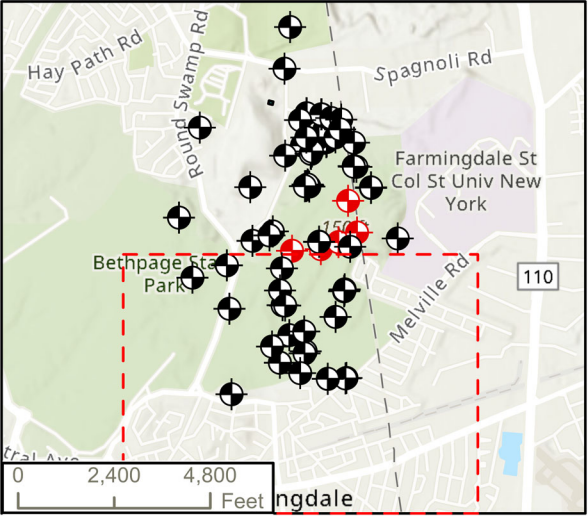
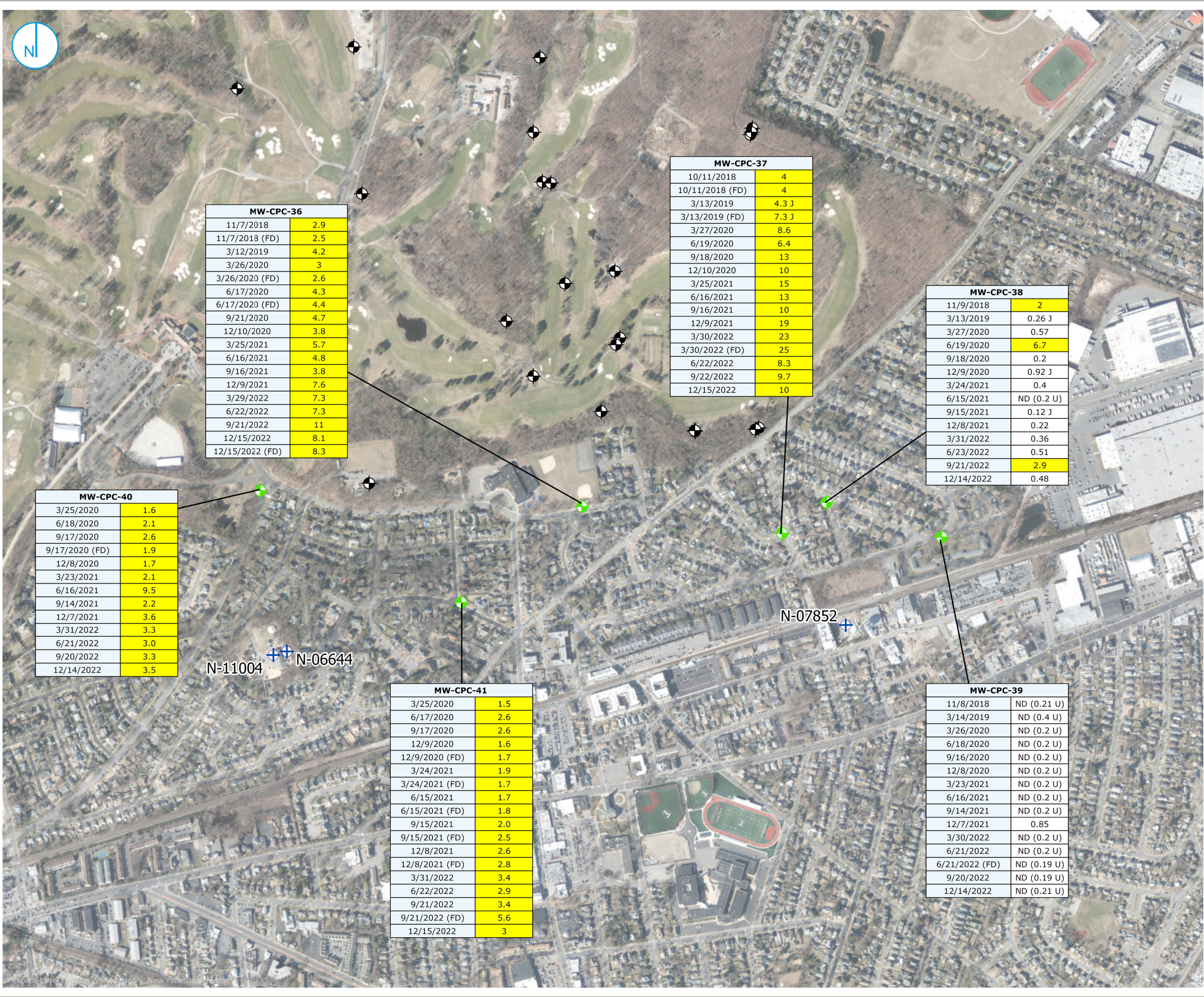
**CLAREMONT POLYCHEMICAL CORPORATION**  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

**FIGURE 32**

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY



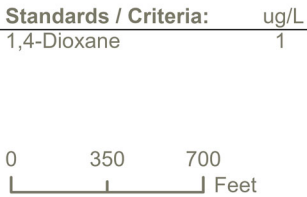




- MONITORING WELL
- SENTINEL WELL
- MUNICIPAL WELL
- RECOVERY WELL

**Monitoring Well 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.
- ND indicates non-detect at the detection limit shown.
- Quarter 3 2021 data has not been validated.
- All results presented in ug/L.
- J - Result is estimated. +/- indicates direction of bias.
- U - Result is non-detect.



1,4-DIOXANE EXCEEDANCES  
IN SENTINEL WELLS

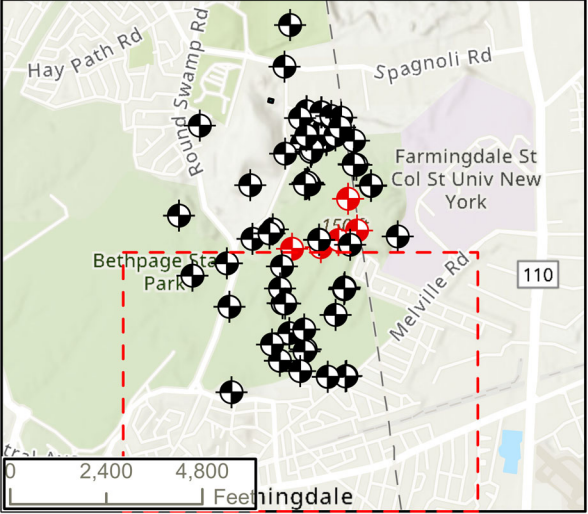
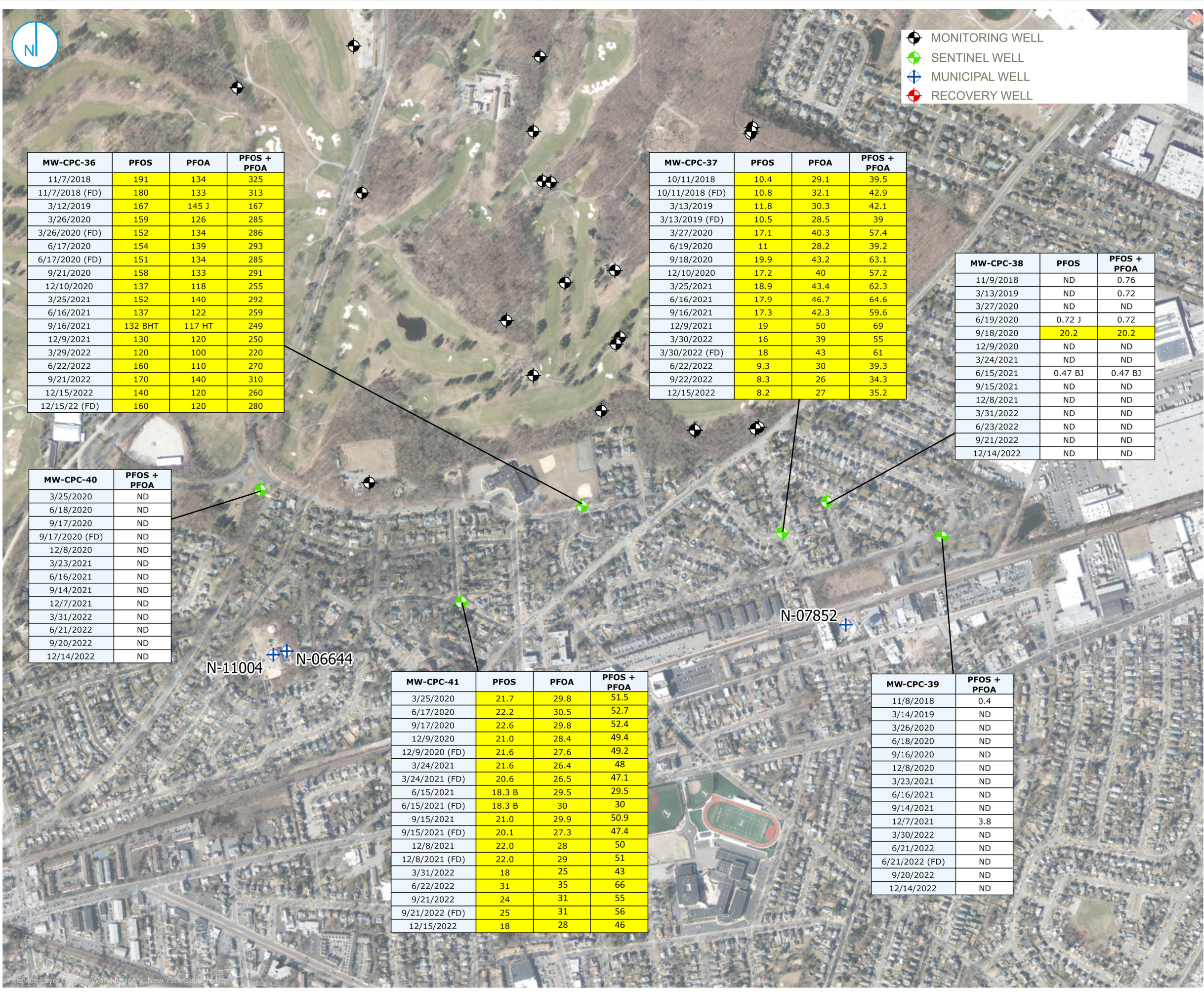
CLAREMONT POLYCHEMICAL  
CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 33

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY







**Monitoring Well Results Notes:**

- Individual and summed PFOS/PFOA compound results compared to NYSDOH Title 10 Part 5-1.52 Table 3 (Aug. 26, 2020).
- Only compounds with exceedances are shown. If the compound is not shown it was not detected above the criteria.
- Criteria for compounds shown on this figure are presented in the table below.
- Exceedance of relevant criteria indicated by yellow highlighting in the data box on the map.
- ND indicates constituents of total are nondetect.
- Quarter 3 2021 data has not been validated.
- All results presented in ng/L.
- B - Detected in associated blank.  
H - Analyzed outside of hold time.  
J - Result is estimated.  
T - A lab quality control sample is out of range.

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



## PFAS EXCEEDANCES IN SENTINEL WELLS

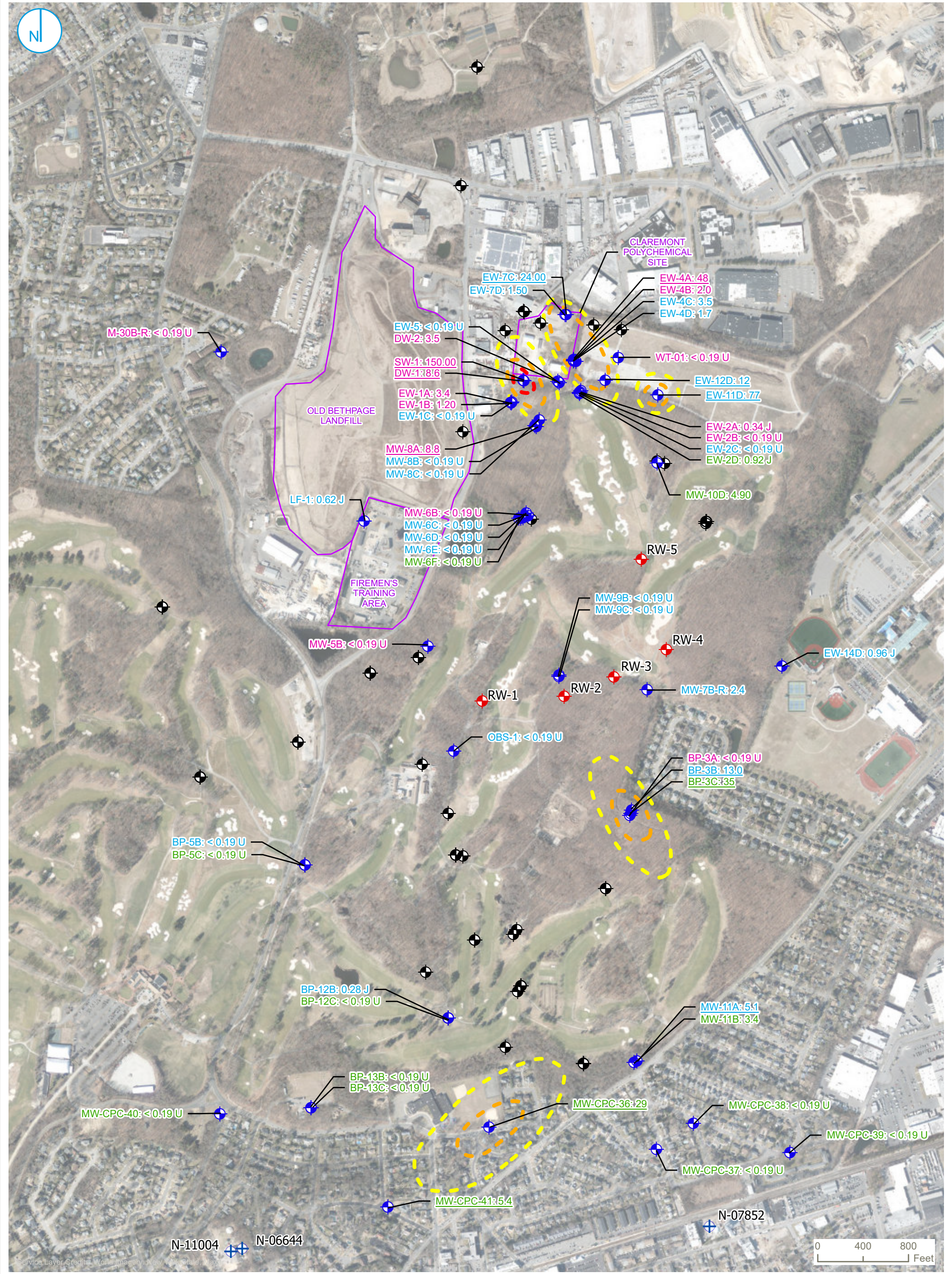
**CLAREMONT POLYCHEMICAL CORPORATION**  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 34

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY







- SAMPLED MONITORING WELL
  - UNSAMPLED MONITORING WELL
  - RECOVERY WELL
  - MUNICIPAL WELL
- PCE CONCENTRATION PLUME
- 5 - 10 ug/L
  - 10 - 100 ug/L
  - > 100 ug/L

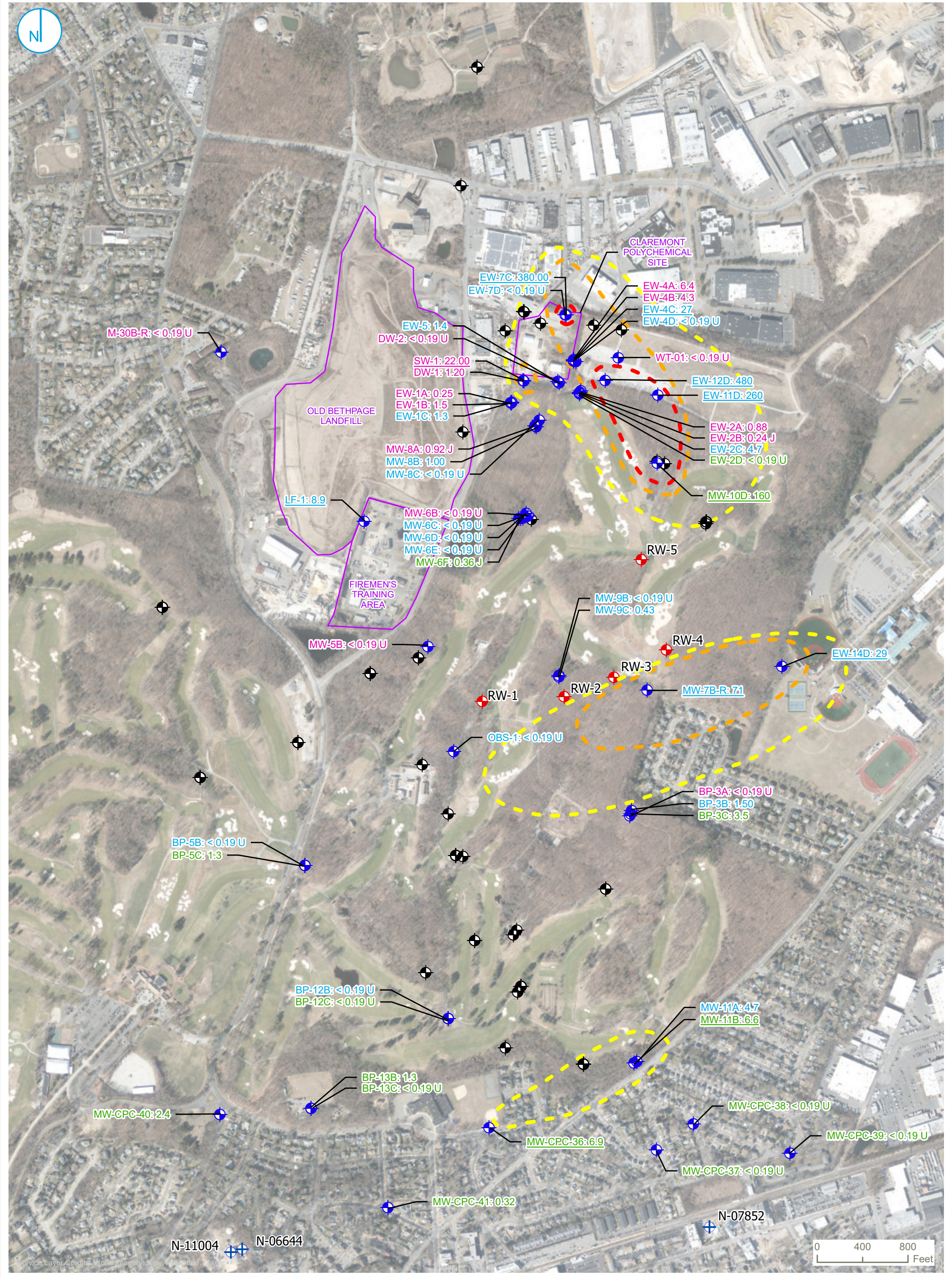
**Notes:**  
All results given in ug/L.  
J - Concentration estimated.  
U - Parameter not detected above reporting limit (shown).  
-- Underline indicates exceedance of groundwater standard (5 ug/L).  
-- Maximum concentration of parent-duplicate pair shown.

**AQUIFER POSITION**

UPPER MAGOTHY  
MIDDLE MAGOTHY  
LOWER MAGOTHY

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY





- SAMPLED MONITORING WELL
  - UNSAMPLED MONITORING WELL
  - RECOVERY WELL
  - MUNICIPAL WELL
- TCE CONCENTRATION PLUME
- 5 - 10 ug/L
  - 10 - 100 ug/L
  - > 100 ug/L

**Notes:**

- All results given in ug/L.
- J - Concentration estimated.
- U - Parameter not detected above reporting limit (shown).
- Underline indicates exceedance of groundwater standard (5 ug/L).
- Maximum concentration of parent-duplicate pair shown.

AQUIFER POSITION

- UPPER MAGOTHY
- MIDDLE MAGOTHY
- LOWER MAGOTHY

DECEMBER 2022  
TRICHLOROETHENE  
(TCE) PLUME

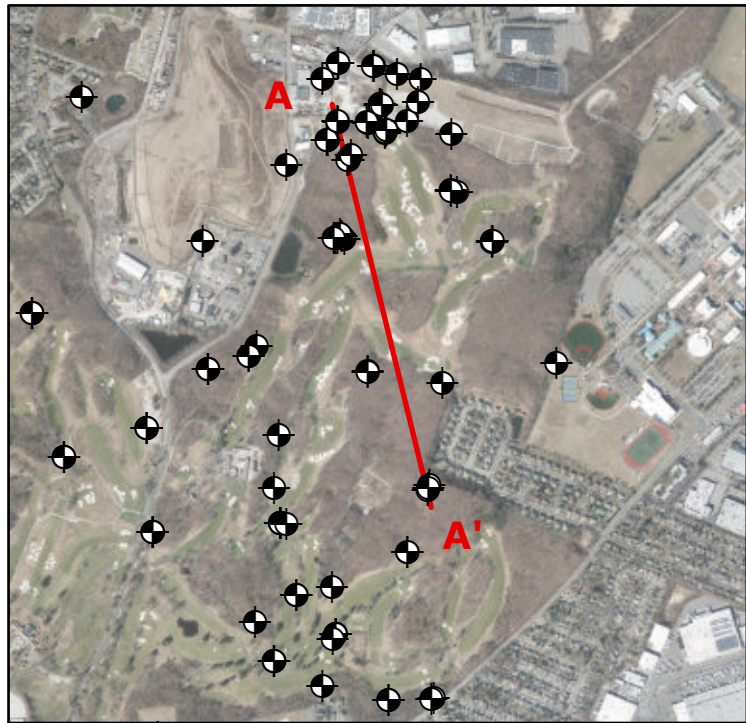
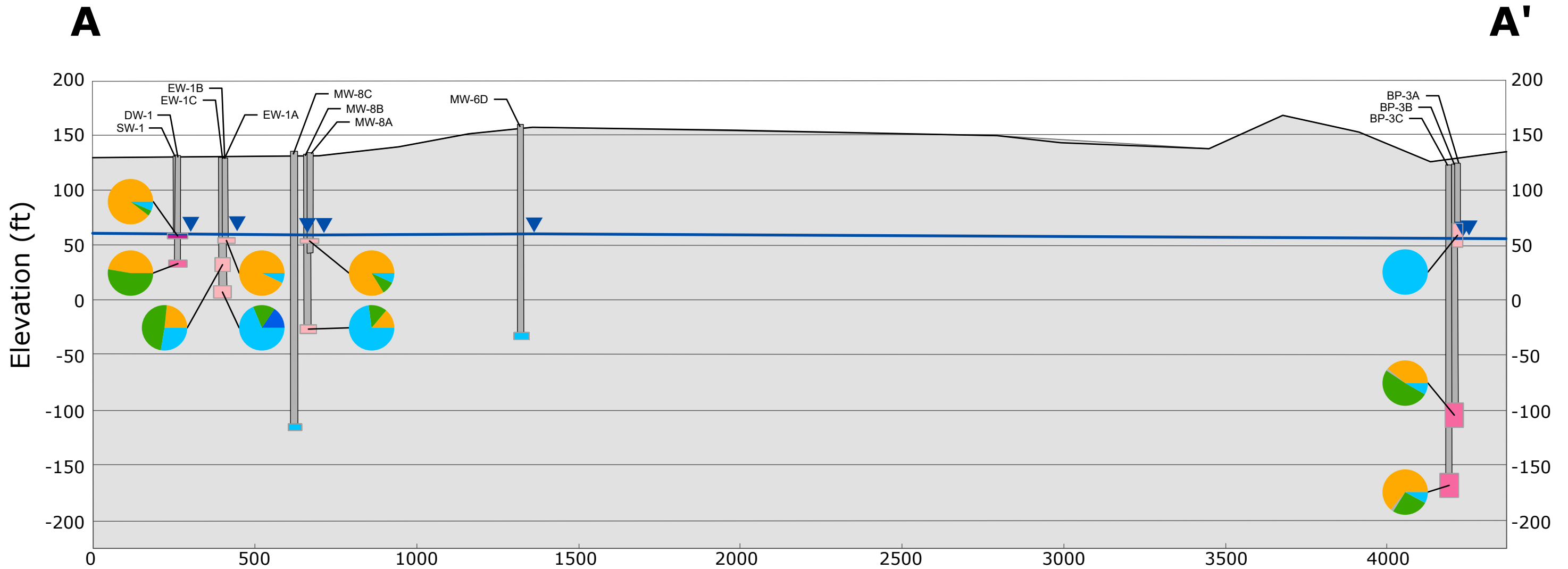
CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

FIGURE 36

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY



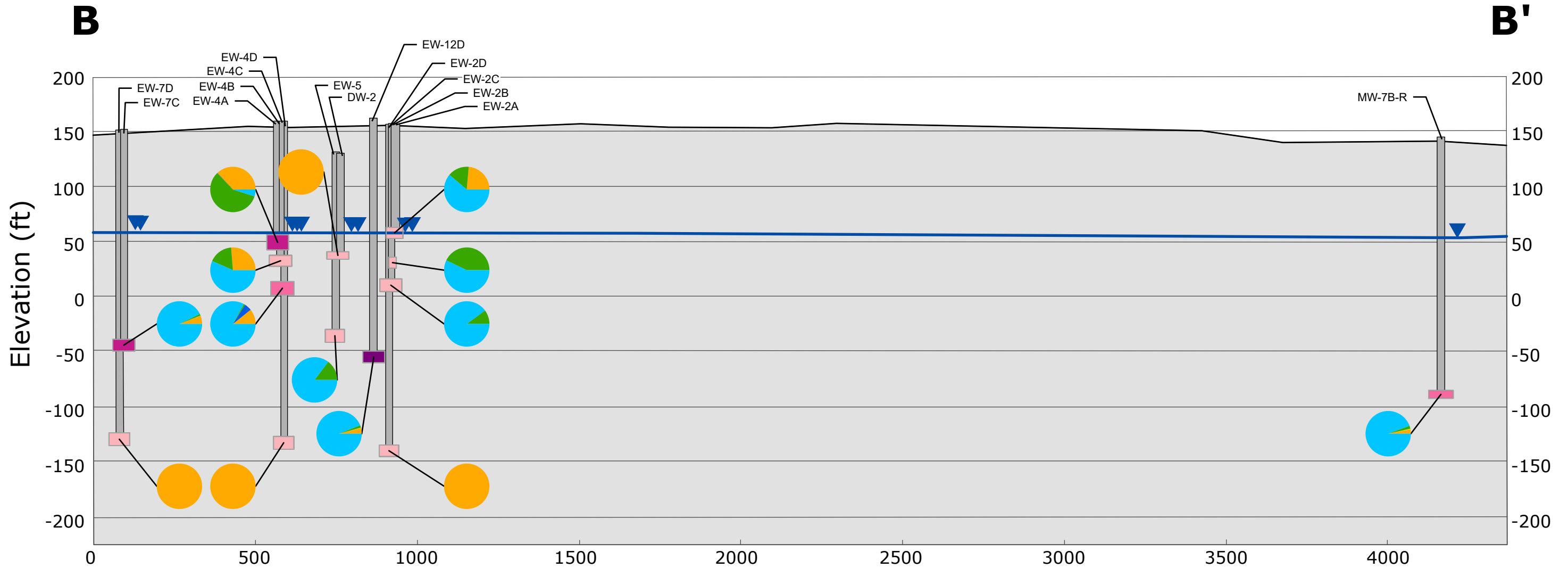




CROSS SECTION TRANSECT A

FIGURE 37





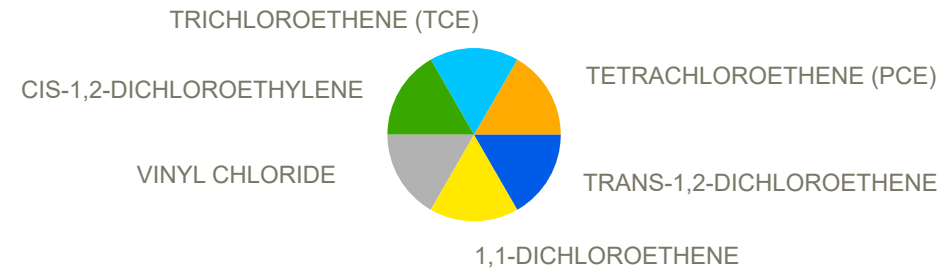
■ Casing  
■ Screen Interval  
▼ Groundwater Elevation (ft amsl)

**Sum of CVOCs (ug/L)**

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

**Notes**

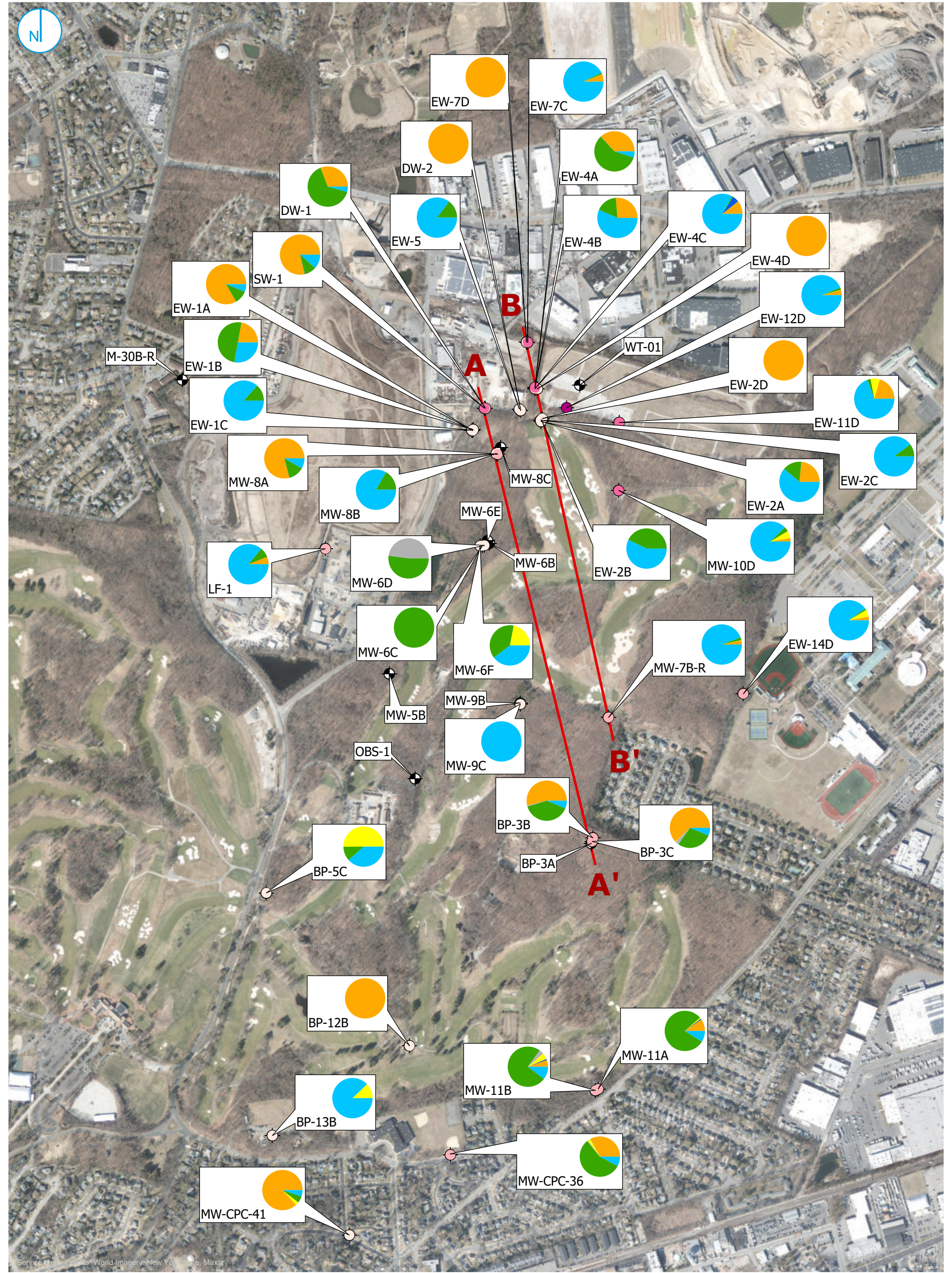
- Samples collected during Q4 2022.
- Capture distance to transect line is 250 ft.
- Pie charts shown are for samples with results from the selected constituents that were above the detection limit.
- Wells without a pie chart did not have reported results above the detection limit for the selected constituents.



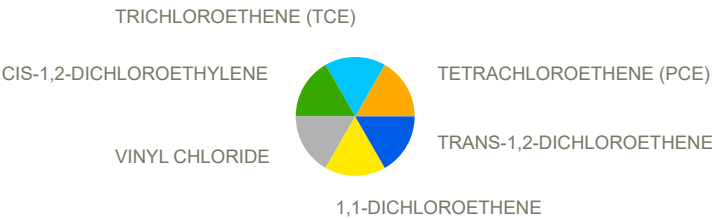
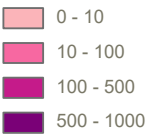
**CROSS SECTION TRANSECT B**

**FIGURE 38**





Sum of CVOCs (ug/L)



DETECTED CHLORINATED  
BREAKDOWN PRODUCTS

**Notes**  
- Samples collected during Q4 2022.  
- 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.

CLAREMONT POLYCHEMICAL CORPORATION  
505 WINDING ROAD  
OLD BETHPAGE, NEW YORK

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY



FIGURE 39



## **ATTACHMENT A**

### **SYNOPTIC WATER LEVEL DATA**

**ATTACHMENT A**  
**CLAREMONT POLYCHEMICAL CORPORATION SITE**  
**WATER LEVEL MEASUREMENTS**  
**DECEMBER 13, 2022**

Recording Date:			12/13/2022	Recorded by:		SH, LB, MF
Well	3Q 2022 Depth to Water Reading (ft)	Time	Measuring Point Elevation (ft AMSL)	Depth to Water Reading (ft)	Water Elevation (ft AMSL)	Comments
BP-1A	48.53	1219	109.77	49.30	<b>60.47</b>	
BP-1B	48.34	1217	109.53	48.97	<b>60.56</b>	
BP-1C	48.04	1215	109.37	48.66	<b>60.71</b>	
BP-2A	88.40	1035	151	89.15	<b>61.85</b>	
BP-2B*	88.58	1032	151.13	89.33	<b>61.80</b>	
BP-3A	63.74	0732	124.16	65.14	<b>59.02</b>	
BP-3B	66.63	0738	123.19	67.30	<b>55.89</b>	
BP-3C	66.79	0737	123.91	67.49	<b>56.42</b>	
BP-4A	34.48	1110	92.69	35.22	<b>57.47</b>	
BP-4B*	33.83	1109	91.92	34.51	<b>57.41</b>	
BP-4C*	34.33	1105	91.68	34.70	<b>56.98</b>	
BP-4I	33.97	1107	92.1	34.68	<b>57.42</b>	
BP-5A	37.98	1051	96.34	38.62	<b>57.72</b>	
BP-5B	38.27	1054	96.48	38.90	<b>57.58</b>	
BP-5C	38.42	1052	96.28	38.82	<b>57.46</b>	
BP-6A	41.87	1000	102.55	42.60	<b>59.95</b>	
BP-6B	42.47	1005	102.58	43.02	<b>59.56</b>	
BP-6C	42.18	1002	102.35	42.62	<b>59.73</b>	
BP-7A	84.85	1016	147.54	85.37	<b>62.17</b>	
BP-7B	86.21	1014	148.76	86.65	<b>62.11</b>	
BP-7C	86.02	1011	148.4	86.34	<b>62.06</b>	
BP-8A	29.55	1209	89.88	30.25	<b>59.63</b>	
BP-8B	29.31	1207	89.82	29.97	<b>59.85</b>	
BP-8C	30.02	1205	89.53	30.46	<b>59.07</b>	
BP-9B*	28.79	1250	85.09	29.43	<b>55.66</b>	
BP-9C*	29.97	1245	84.88	30.10	<b>54.78</b>	
BP-9I	28.79	1248	85.18	29.50	<b>55.68</b>	
BP-10B*	26.46	1139	81.21	27.07	<b>54.14</b>	
BP-10C*	28.20	1141	80.94	28.20	<b>52.74</b>	
BP-11	-	-	81.76	-	-	
BP-12A*	22.55	0854	78.33	23.06	<b>55.27</b>	
BP-12B	22.55	0854	78.24	22.99	<b>55.25</b>	
BP-12C	23.96	0853	78.56	24.05	<b>54.51</b>	
BP-13B	79.65	1023	133.37	79.44	<b>53.93</b>	
BP-13C	80.80	1022	133.67	80.29	<b>53.38</b>	
BP-14B*	25.18	1119	81.5	25.60	<b>55.90</b>	
BP-14C*	25.91	1117	81.48	26.03	<b>55.45</b>	
BP-15B	41.33	1132	98.38	42.00	<b>56.38</b>	
BP-15C	41.31	1130	98.45	41.99	<b>56.46</b>	
DW-1	67.15	1217	130.13	67.98	<b>62.15</b>	
DW-2	72.91	1222	135.52	73.75	<b>61.77</b>	
EW-1A	66.75	1206	128.75	66.81	<b>61.94</b>	
EW-1B	66.33	1203	129.31	67.39	<b>61.92</b>	
EW-1C	66.65	1205	129.16	67.32	<b>61.84</b>	
EW-2A	93.86	0820	156.09	94.77	<b>61.32</b>	
EW-2B	94.18	0816	156.5	95.10	<b>61.4</b>	
EW-2C	94.20	0818	156.5	95.05	<b>61.45</b>	
EW-2D	95.11	0815	157.12	95.74	<b>61.38</b>	
EW-3A	97.96	0758	157.88	98.62	<b>59.26</b>	

**ATTACHMENT A**  
**CLAREMONT POLYCHEMICAL CORPORATION SITE**  
**WATER LEVEL MEASUREMENTS**  
**DECEMBER 13, 2022**

Recording Date:			12/13/2022	Recorded by:		SH, LB, MF
Well	3Q 2022 Depth to Water Reading (ft)	Time	Measuring Point Elevation (ft AMSL)	Depth to Water Reading (ft)	Water Elevation (ft AMSL)	Comments
EW-3B	97.88	0755	157.99	98.76	<b>59.23</b>	
EW-3C	97.77	0754	157.87	98.64	<b>59.23</b>	
EW-4A	97.84	1144	160.58	98.69	<b>61.89</b>	
EW-4B	97.87	1143	160.59	98.71	<b>61.88</b>	
EW-4C	97.65	1142	160.33	98.49	<b>61.84</b>	
EW-4D	98.17	1140	160.62	98.88	<b>61.74</b>	
EW-5	72.64	1223	135.05	73.25	<b>61.8</b>	
EW-6A	68.29	1248	128.92	66.17	<b>62.75</b>	
EW-6C	68.81	1247	129.02	66.51	<b>62.51</b>	
EW-7C	89.38	1234	152.45	90.12	<b>62.33</b>	
EW-7D	89.32	1235	152.35	90.05	<b>62.3</b>	
EW-8D	67.22	1241	130.21	67.87	<b>62.34</b>	
EW-9D	73.17	1230	136.2	73.89	<b>62.31</b>	
EW-10C	96.73	1148	159.8	97.55	<b>62.25</b>	
EW-11D	102.58	1133	164.17	103.29	<b>60.88</b>	
EW-12D	101.28	1136	163.34	101.83	<b>61.51</b>	
EW-13D	101.41	1151	163.61	102.00	<b>61.61</b>	
EW-14D	43.00	1120	100.58	43.73	<b>56.85</b>	
LF-1	47.53	1255	109.83	47.97	<b>61.86</b>	
LF-2	54.74	1323	117.18	55.37	<b>61.81</b>	
M-30BR	88.64	1314	153.07	89.24	<b>63.83</b>	
MW-5B	75.40	0834	136.99	76.11	<b>60.88</b>	
MW-6A	95.72	0939	158.83	98.23	<b>60.6</b>	
MW-6B	98.29	0943	159.02	98.40	<b>60.62</b>	
MW-6C	97.68	0949	158.65	97.80	<b>60.85</b>	
MW-6D	98.33	0946	159.01	98.43	<b>60.58</b>	
MW-6E	98.90	0944	159.54	98.96	<b>60.58</b>	
MW-6F	98.49	0951	158.71	98.42	<b>60.29</b>	
MW-7BR	89.03	0726	146.27	89.79	<b>56.48</b>	
MW-8A	71.42	0933	133.52	72.16	<b>61.36</b>	
MW-8B	71.79	0934	132.84	71.51	<b>61.33</b>	
MW-8C	72.98	0930	134.27	73.03	<b>61.24</b>	
MW-9B	92.95	0719	151.78	93.76	<b>58.02</b>	
MW-9C	93.72	0720	151.97	94.42	<b>57.55</b>	
MW-10B	98.93	0806	159.9	99.81	<b>60.09</b>	
MW-10C	98.62	1010	158.89	98.85	<b>60.04</b>	
MW-10D	99.37	1007	159.67	99.78	<b>59.89</b>	
MW-11A	23.35	1034	78.71	26.00	<b>52.71</b>	
MW-11B	25.15	1035	78.43	25.81	<b>52.62</b>	
MW-CPC-36	23.24	1050	75.93	23.57	<b>52.36</b>	
MW-CPC-37	27.91	1103	77.87	27.98	<b>49.89</b>	
MW-CPC-38	28.67	1108	78.91	28.85	<b>50.06</b>	
MW-CPC-39	26.02	1430	75.25	25.86	<b>49.39</b>	
MW-CPC-40	58.69	1043	110	58.31	<b>51.69</b>	
MW-CPC-41	21.30	1055	72.6	21.39	<b>51.21</b>	
OBS-1	50.57	0840	109.03	51.28	<b>57.75</b>	
OBV-1B	90.20	0927	157.26	90.76	<b>66.50</b>	
OBV-1C	90.74	0929	156.69	90.47	<b>66.22</b>	
ORW-1 <sup>a</sup>	-	-	147.68	-	-	Vault door jammed

**ATTACHMENT A**  
**CLAREMONT POLYCHEMICAL CORPORATION SITE**  
**WATER LEVEL MEASUREMENTS**  
**DECEMBER 13, 2022**

Recording Date:			12/13/2022	Recorded by:		SH, LB, MF
Well	3Q 2022 Depth to Water Reading (ft)	Time	Measuring Point Elevation (ft AMSL)	Depth to Water Reading (ft)	Water Elevation (ft AMSL)	Comments
ORW-2 <sup>a</sup>	39.30	1250	97.88	39.93	<b>57.95</b>	
ORW-3 <sup>a</sup>	33.44	1256	91.39	34.11	<b>57.28</b>	
ORW-4 <sup>a</sup>	32.04	1301	88.88	32.69	<b>56.19</b>	
ORW-5A <sup>a</sup>	44.43	1100	100.38	44.94	<b>55.44</b>	
ORW-6 <sup>a</sup>	27.19	1313	83.42	27.85	<b>55.57</b>	
ORW-7 <sup>a</sup>	21.22	1309	76.14	21.79	<b>54.35</b>	
RB-1	68.83	0950	135.02	69.55	<b>65.47</b>	
SW-1	67.30	1218	130.24	68.18	<b>62.06</b>	
UM-1	52.86	-	115.64	-	-	Missed during gauging
U-6A	82.95	0940	153.94	81.65	<b>72.29</b>	
W-7A	41.57	1232	104.44	42.03	<b>62.41</b>	
W-7B	42.45	1230	104.55	43.00	<b>61.55</b>	
W-7C	42.70	1234	104.68	43.20	<b>61.48</b>	
W-7D	43.10	1228	104.58	43.60	<b>60.98</b>	
WT-01	100.79	1155	163.28	101.68	<b>61.6</b>	

Notes:

\*- Dedicated pump in well

a - no pumping at time of gauging

AMSL - above mean sea level

ft - feet

## **ATTACHMENT B**

### **SUMMARY OF ANALYTICAL RESULTS**

Attachment B  
Summary of Analytical Results  
December 2022 (4Q2022) Sampling Event  
Claremont Polychemical Superfund Site OUS  
Old Bethpage, NY

			71-55-6	79-34-5	76-13-1	79-00-5	75-34-3	75-35-4	87-61-6	120-82-1	96-12-8	106-93-4	95-50-1	107-06-2	78-87-5	541-73-1	106-46-7	123-91-1	591-78-6	67-64-1	71-43-2	74-97-5
			ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
			5	5	5	1	5	5	5	5	0.04	0.0006	3	0.6	1	3	3		50	50	1	5
Sample Description	Date Collected	Sample Type	1,1,1-TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1,1,2-TRICHLOROETHANE	1,1-DICHLOROETHANE	1,1-DICHLOROETHENE	1,2,3-TRICHLOROBENZENE	1,2,4-TRICHLOROBENZENE	1,2-DIBROMO-3-CHLOROPROPANE	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1,2-DICHLOROBENZENE	1,2-DICHLOROETHANE	1,2-DICHLOROPROPANE	1,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE	1,4-DIOXANE (P-DIOXANE)	2-HEXANONE	ACETONE	BENZENE	BROMOCHLOROMETHANE
BP-12B	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	41 J	0.21 J	< 0.31 U
BP-12C	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	51	< 0.2 U	< 0.31 U
BP-13B	12/20/2022	N	0.19 J	< 0.13 U	< 0.23 U	< 0.18 U	0.76 J	0.18 J	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	39 J	< 0.2 U	< 0.31 U
BP-13C	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	56	< 0.2 U	< 0.31 U
BP-3A	12/19/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	190	< 0.2 U	< 0.31 U
BP-3B	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	2.5	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	360	< 0.2 U	< 0.31 U
BP-3C	12/20/2022	N	< 0.17 U	< 0.13 U	0.25 J	< 0.18 U	3.3	0.18 J	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	0.20 J	< 0.21 U	< 1.1 U	61	0.78 J	< 0.31 U
BP-5B	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	96	< 0.2 U	< 0.31 U
BP-5C	12/20/2022	N	1.4	< 0.13 U	< 0.23 U	< 0.18 U	5.2	1.7	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	160	< 0.2 U	< 0.31 U
DW-1	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	160	< 0.2 U	< 0.31 U
DW-2	12/20/2022	FD	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	140	< 0.2 U	< 0.31 U
DW-2	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	140	< 0.2 U	< 0.31 U
EW-11D	12/20/2022	N	15 D	< 0.51 U	< 0.91 U	< 0.73 U	3.7 JD	28 D	< 1.2 U	< 0.99 U	< 3.2 U	< 0.68 U	< 0.49 U	< 1.2 U	< 0.72 U	< 0.47 U	< 0.52 U	< 82 U	< 4.5 U	310 D	< 0.8 U	< 1.2 U
EW-12D	12/20/2022	N	< 0.68 U	< 0.51 U	< 0.91 U	< 0.73 U	< 0.57 U	0.96 JD	< 1.2 U	< 0.99 U	< 3.2 U	< 0.68 U	< 0.49 U	< 1.2 U	< 0.72 U	< 0.47 U	< 0.52 U	< 82 U	< 4.5 U	260 D	< 0.8 U	< 1.2 U
EW-14D	12/20/2022	N	1.2	< 0.13 U	0.28 J	< 0.18 U	< 0.14 U	1.8	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	170	< 0.2 U	< 0.31 U
EW-1A	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	320	< 0.2 U	< 0.31 U
EW-1B	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	370	< 0.2 U	< 0.31 U
EW-1C	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	69	< 0.2 U	< 0.31 U
EW-2A	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	100	< 0.2 U	< 0.31 U
EW-2B	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	29 J	< 0.2 U	< 0.31 U
EW-2C	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	31 J	< 0.2 U	< 0.31 U
EW-2D	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	59	< 0.2 U	< 0.31 U
EW-4A	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	81	< 0.2 U	< 0.31 U
EW-4B	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	83	< 0.2 U	< 0.31 U
EW-4C	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	260	< 0.2 U	< 0.31 U
EW-4D	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	270	< 0.2 U	< 0.31 U
EW-5	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	89	< 0.2 U	< 0.31 U
EW-7C	12/20/2022	N	< 0.68 U	< 0.51 U	< 0.91 U	< 0.73 U	< 0.57 U	< 0.57 U	< 1.2 U	< 0.99 U	< 3.2 U	< 0.68 U	< 0.49 U	< 1.2 U	< 0.72 U	< 0.47 U	< 0.52 U	< 82 U	< 4.5 U	280 D	< 0.8 U	< 1.2 U
EW-7D	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	640	< 0.2 U	< 0.31 U
LF-1	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	0.22 J	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	840	< 0.2 U	< 0.31 U
M-30B-R	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	510	< 0.2 U	< 0.31 U
MW-10D	12/20/2022	N	4.2 D	< 0.25 U	< 0.45 U	< 0.37 U	2.5 D	11 D	< 0.61 U	< 0.5 U	< 1.6 U	< 0.34 U	< 0.24 U	0.86 JD	< 0.36 U	< 0.24 U	< 0.26 U	< 41 U	< 2.2 U	180 D	< 0.4 U	< 0.61 U
MW-11A	12/20/2022	N	0.39 J	< 0.13 U	< 0.23 U	< 0.18 U	4.5	0.53 J	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	83	< 0.2 U	< 0.31 U
MW-11B	12/20/2022	N	4.1	< 0.13 U	1.5	0.41 J	23	3.2	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	1.3	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	32 J	1.1	< 0.31 U
MW-5B	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.12 U	< 0.31 U	< 0.18 U	< 0.12 U	< 0.13 U	< 0.21 U	< 1.1 U	380	< 0.2 U	< 0.31 U
MW-6B	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	0.59 J	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	0.52 J	< 0.31 U	< 0.18 U	< 0.12 U	1.8	< 0.21 U	< 1.1 U	210	0.54 J	< 0.31 U
MW-6C	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	0.25 J	< 0.31 U	< 0.18 U	< 0.12 U	0.82 J	< 0.21 U	< 1.1 U	89	0.49 J	< 0.31 U
MW-6D	12/20/2022	FD	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	0.72 J	< 0.31 U	< 0.18 U	< 0.12 U	1.6	< 0.21 U	< 1.1 U	59	0.71 J	< 0.31 U
MW-6D	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	< 0.14 U	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	0.64 J	< 0.31 U	< 0.18 U	< 0.12 U	1.5	< 0.21 U	< 1.1 U	55	0.72 J	< 0.31 U
MW-6E	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	0.59 J	< 0.14 U	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	0.50 J	< 0.31 U	< 0.18 U	< 0.12 U	1.9	< 0.21 U	< 1.1 U	110	< 0.2 U	< 0.31 U
MW-6F	12/20/2022	N	< 0.17 U	< 0.13 U	< 0.23 U	< 0.18 U	0.78 J	0.20 J	< 0.3 U	< 0.25 U	< 0.8 U	< 0.17 U	< 0.1									



Attachment B  
Summary of Analytical Results  
December 2022 (4Q2022) Sampling Event  
Claremont Polychemical Superfund Site OUS  
Old Bethpage, NY

			75-27-4	75-25-2	74-83-9	75-15-0	56-23-5	108-90-7	75-00-3	67-66-3	74-87-3	156-59-2	10061-01-5	110-82-7	124-48-1	75-71-8	100-41-4	98-82-8	79-20-9	78-93-3	108-10-1	108-87-2
			ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
			50	50	5	60	5	5	5	7	5	5	0.4		50	5	5	5		50		
Sample Description	Date Collected	Sample Type	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	Cis-1,2-Dichloroethylene	CIS-1,3-DICHLOROPROPENE	CYCLOHEXANE	DIBROMOCHLOROMETHANE	DICHLORODIFLUOROMETHANE	ETHYLBENZENE	Isopropylbenzene (Cumene)	METHYL ACETATE	METHYL ETHYL KETONE (2-BUTANONE)	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	METHYLCYCLOHEXANE
BP-12B	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
BP-12C	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	<b>0.22 J</b>	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
BP-13B	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
BP-13C	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
BP-3A	12/19/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	<b>0.81 J</b>	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
BP-3B	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	<b>0.21 J</b>	< 0.52 U	<b>9.4</b>	< 0.16 U	< 1.8 U	< 0.22 U	<b>0.58 J</b>	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
BP-3C	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	<b>0.26 J</b>	< 0.32 U	<b>0.25 J</b>	< 0.52 U	<b>16</b>	< 0.16 U	< 1.8 U	< 0.22 U	<b>1.2 J</b>	< 0.21 U	<b>0.18 J</b>	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
BP-5B	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
BP-5C	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	<b>0.17 J</b>	< 0.11 U	< 0.32 U	<b>0.36 J</b>	< 0.52 U	<b>0.39 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
DW-1	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>18</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
DW-2	12/20/2022	FD	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
DW-2	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-11D	12/20/2022	N	< 0.72 U	< 1.5 U	< 6.2 U	< 5.8 U	< 0.66 U	< 0.42 U	< 1.3 U	< 0.67 U	< 2.1 U	<b>9.6 D</b>	< 0.63 U	< 7 U	< 0.89 U	< 0.77 U	< 0.86 U	< 0.43 U	< 1.8 U	<b>29 JD</b>	< 5.1 U	< 0.98 U
EW-12D	12/20/2022	N	< 0.72 U	< 1.5 U	< 6.2 U	< 5.8 U	< 0.66 U	< 0.42 U	< 1.3 U	< 0.67 U	< 2.1 U	<b>8.9 D</b>	< 0.63 U	< 7 U	< 0.89 U	< 0.77 U	< 0.86 U	< 0.43 U	< 1.8 U	< 6.5 U	< 5.1 U	< 0.98 U
EW-14D	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>0.45 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-1A	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	<b>0.31 J</b>	< 0.52 U	<b>0.43 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-1B	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>2.7</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-1C	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>0.20 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-2A	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	<b>0.42 J</b>	< 0.52 U	<b>0.22 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-2B	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>0.18 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-2C	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>0.53 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-2D	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-4A	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>75</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-4B	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>1.3</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-4C	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>0.34 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-4D	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-5	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>0.24 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
EW-7C	12/20/2022	N	< 0.72 U	< 1.5 U	< 6.2 U	< 5.8 U	< 0.66 U	< 0.42 U	< 1.3 U	< 0.67 U	< 2.1 U	<b>5.0 D</b>	< 0.63 U	< 7 U	< 0.89 U	< 0.77 U	< 0.86 U	< 0.43 U	< 1.8 U	<b>31 JD</b>	< 5.1 U	< 0.98 U
EW-7D	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
LF-1	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	<b>0.83 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	<b>2.4 J</b>	< 1.3 U	< 0.24 U
M-30B-R	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
MW-10D	12/20/2022	N	< 0.36 U	< 0.77 U	< 3.1 U	< 2.9 U	< 0.33 U	< 0.21 U	< 0.64 U	< 0.34 U	< 1 U	<b>6.9 D</b>	< 0.32 U	< 3.5 U	< 0.44 U	< 0.38 U	< 0.43 U	< 0.22 U	< 0.91 U	< 3.2 U	< 2.6 U	< 0.49 U
MW-11A	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	<b>0.22 J</b>	< 0.52 U	<b>42</b>	< 0.16 U	< 1.8 U	< 0.22 U	<b>1.8 J</b>	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
MW-11B	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	<b>0.35 J</b>	< 0.52 U	<b>47</b>	< 0.16 U	< 1.8 U	< 0.22 U	<b>5.0</b>	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
MW-5B	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	< 0.11 U	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	< 0.11 U	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
MW-6B	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	<b>8.1</b>	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	<b>0.31 J</b>	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
MW-6C	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	<b>1.8</b>	< 0.32 U	< 0.17 U	< 0.52 U	<b>0.30 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	<b>1.0</b>	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
MW-6D	12/20/2022	FD	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	<b>1.6</b>	< 0.32 U	< 0.17 U	< 0.52 U	<b>0.24 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	<b>2.7</b>	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
MW-6D	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	<b>1.6</b>	< 0.32 U	< 0.17 U	< 0.52 U	<b>0.25 J</b>	< 0.16 U	< 1.8 U	< 0.22 U	< 0.19 U	< 0.21 U	<b>2.7</b>	< 0.45 U	< 1.6 U	< 1.3 U	< 0.24 U
MW-6E	12/20/2022	N	< 0.18 U	< 0.38 U	< 1.5 U	< 1.4 U	< 0.16 U	<b>8.7</b>	< 0.32 U	< 0.17 U	< 0.52 U	< 0.15 U										

Attachment B  
Summary of Analytical Results  
December 2022 (4Q2022) Sampling Event  
Claremont Polychemical Superfund Site OUS  
Old Bethpage, NY

			75-09-2	100-42-5	75-65-0	1634-04-4	127-18-4	108-88-3	156-60-5	10061-02-6	110-57-6	79-01-6	75-69-4	75-01-4	1330-20-7	
			ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
			5	5		10	5	5	5	0.4	5	5	5	2	5	
Sample Description	Date Collected	Sample Type		METHYLENE CHLORIDE	STYRENE	T-BUTYL ALCOHOL	TERT-BUTYL METHYL ETHER	TETRACHLOROETHYLENE(PCE)	TOLUENE	TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE	TRANS-1,4-DICHLOROBUTENE	TRICHLOROETHYLENE (TCE)	TRICHLOROFLUOROMETHANE	VINYL CHLORIDE	Xylenes (total)
BP-12B	12/20/2022	N	< 0.23 U	< 0.11 U	5.1 J	< 0.17 U	0.28 J	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
BP-12C	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
BP-13B	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	1.3	< 0.18 U	< 0.21 U	< 1 U	
BP-13C	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
BP-3A	12/19/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
BP-3B	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	13	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	1.5	< 0.18 U	0.21 J	< 1 U	
BP-3C	12/20/2022	N	0.53 J	< 0.11 U	< 4.7 U	< 0.17 U	35	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	3.5	< 0.18 U	1.6 J	< 1 U	
BP-5B	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
BP-5C	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	1.3	< 0.18 U	< 0.21 U	< 1 U	
DW-1	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	8.6	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	1.2	< 0.18 U	< 0.21 U	< 1 U	
DW-2	12/20/2022	FD	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	3.5	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
DW-2	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	3.4	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
EW-11D	12/20/2022	N	< 0.94 U	< 0.42 U	< 19 U	< 0.69 U	77 D	< 0.9 U	< 0.67 U	< 0.67 U	< 6.5 U	260 D	< 0.7 U	< 0.83 U	< 4 U	
EW-12D	12/20/2022	N	< 0.94 U	< 0.42 U	< 19 U	1.4 JD	21 D	< 0.9 U	< 0.67 U	< 0.67 U	< 6.5 U	480 D	< 0.7 U	< 0.83 U	< 4 U	
EW-14D	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	0.96 J	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	29	< 0.18 U	< 0.21 U	< 1 U	
EW-1A	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	3.4	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	0.25 J	< 0.18 U	< 0.21 U	< 1 U	
EW-1B	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	1.2	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	1.5	< 0.18 U	< 0.21 U	< 1 U	
EW-1C	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	1.3	< 0.18 U	< 0.21 U	< 1 U	
EW-2A	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	0.34 J	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	0.88 J	< 0.18 U	< 0.21 U	< 1 U	
EW-2B	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	0.24 J	< 0.18 U	< 0.21 U	< 1 U	
EW-2C	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	4.7	< 0.18 U	< 0.21 U	< 1 U	
EW-2D	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	0.92 J	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
EW-4A	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	48	< 0.22 U	0.33 J	< 0.17 U	< 1.6 U	6.4	< 0.18 U	< 0.21 U	< 1 U	
EW-4B	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	2.0	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	4.3	< 0.18 U	< 0.21 U	< 1 U	
EW-4C	12/20/2022	N	< 0.23 U	< 0.11 U	4.7 J	< 0.17 U	3.5	< 0.22 U	1.7	< 0.17 U	< 1.6 U	27	< 0.18 U	< 0.21 U	< 1 U	
EW-4D	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	1.7	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
EW-5	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	1.4	< 0.18 U	< 0.21 U	< 1 U	
EW-7C	12/20/2022	N	< 0.94 U	< 0.42 U	< 19 U	0.76 JD	24 D	1.9 JD	< 0.67 U	< 0.67 U	< 6.5 U	380 D	< 0.7 U	< 0.83 U	< 4 U	
EW-7D	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	1.5	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
LF-1	12/20/2022	N	< 0.23 U	< 0.11 U	11 J	< 0.17 U	0.62 J	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	8.9	< 0.18 U	< 0.21 U	< 1 U	
M-30B-R	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
MW-10D	12/20/2022	N	< 0.47 U	< 0.21 U	< 9.4 U	< 0.34 U	4.9 D	< 0.45 U	< 0.34 U	< 0.34 U	< 3.2 U	160 D	< 0.35 U	< 0.42 U	< 2 U	
MW-11A	12/20/2022	N	< 0.23 U	< 0.11 U	7.8 J	< 0.17 U	5.1	< 0.22 U	0.41 J	< 0.17 U	< 1.6 U	4.7	0.96 J	< 0.21 U	< 1 U	
MW-11B	12/20/2022	N	3.2 J	< 0.11 U	< 4.7 U	< 0.17 U	3.4	< 0.22 U	0.57 J	< 0.17 U	< 1.6 U	6.6	1.2 J	2.4	< 1 U	
MW-5B	12/20/2022	N	< 0.23 U	< 0.11 U	5.4 J	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
MW-6B	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
MW-6C	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	0.78 J	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
MW-6D	12/20/2022	FD	< 0.23 U	< 0.11 U	< 4.7 U	0.30 J	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	0.23 J	< 1 U	
MW-6D	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	0.29 J	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	0.21 J	< 1 U	
MW-6E	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
MW-6F	12/20/2022	N	< 0.23 U	< 0.11 U	6.2 J	0.26 J	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	0.36 J	< 0.18 U	< 0.21 U	< 1 U	
MW-7B-R	12/19/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	2.4	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	71	< 0.18 U	< 0.21 U	< 1 U	
MW-8A	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	8.8	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	0.92 J	< 0.18 U	< 0.21 U	< 1 U	
MW-8B	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	1.0	< 0.18 U	< 0.21 U	< 1 U	
MW-8C	12/20/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
MW-9B	12/19/2022	N	< 0.23 U	< 0.11 U	6.0 J	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
MW-9C	12/19/2022	N	< 0.23 U	< 0.11 U	4.8 J	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	0.43 J	< 0.18 U	< 0.21 U	< 1 U	
MW-CPC-36	12/15/2022	FD	< 0.23 U	< 0.11 U	8.1 J	0.28 J	28	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	6.7	< 0.18 U	0.68 J	< 1 U	
MW-CPC-36	12/15/2022	N	< 0.23 U	< 0.11 U	7.8 J	0.27 J	29	< 0.22 U	0.22 J	< 0.17 U	< 1.6 U	6.9	< 0.18 U	0.72 J	< 1 U	
MW-CPC-37	12/15/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	0.51 J	< 1 U	
MW-CPC-38	12/14/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
MW-CPC-39	12/14/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	< 0.19 U	< 0.18 U	< 0.21 U	< 1 U	
MW-CPC-40	12/14/2022	N	< 0.23 U	< 0.11 U	< 4.7 U	< 0.17 U	< 0.19 U	< 0.22 U	< 0.17 U	< 0.17 U	< 1.6 U	2.4	< 0.18 U	< 0.21 U	< 1 U	
MW-CPC-41	12/15															

Notes:

U - not detected

D - sample was diluted

NC - no criteria

**Bold** indicates compound detected

Values in yellow cells exceed criteria

N/A - indicates reported value not provided by analyzing laboratory

Values in shaded cells exceed TOGS 1.1.1 Class GA standard or guidance value.

ug/L - micrograms per liter

V-05 - Continuing calibration verification (CCV) did not meet

## **ATTACHMENT B1**

### **SUMMARY OF EMERGING CONTAMINANT SAMPLES**



**Attachment B1**  
**Summary of Analytical Results**  
**December 2022 (4Q2022) Sampling Event**  
**Claremont Polychemical Superfund Site OU5**  
**Old Bethpage, NY**

CAS RN:			763051-92-9	39108-34-4	27619-97-2	13252-13-6	756426-58-1	919005-14-4	D5-NETFOSAA	D3-NMEFOSAA	151772-58-6	113507-82-7	30334-69-1	41997-13-1	377-73-1
Unit:			ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l
Criteria:			NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Sample Description:															
Sample Description	Date Collected	Sample Type	11Cl-PF3OUdS	8:2 Fluorotelomer sulfonate (8:2 FTS)	6:2 Fluorotelomer sulfonate (6:2 FTS)	2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid	9Cl-PF3ONS	ADONA	N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid	N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid	Nonafluoro-3,6-dioxahheptanoic acid	Perfluoro(2-ethoxyethane)sulfonic acid	Perfluoro-1-butanefulfonamide (FBSA)	Perfluoro-1-hexanesulfonamide (FHxSA)	Perfluoro-3-methoxypropanoic acid
MW-CPC-36	12/15/2022	FD	< 1.9 U	<b>16</b>	<b>44</b>	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	<b>3.5</b>	<b>3.9</b>	< 1.9 U
MW-CPC-36	12/15/2022	N	< 1.9 U	<b>14</b>	<b>43</b>	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	<b>3.2</b>	<b>4.4</b>	< 1.9 U
MW-CPC-37	12/15/2022	N	< 2 U	< 2 U	<b>300 D</b>	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
MW-CPC-38	12/14/2022	N	< 1.9 U	< 1.9 U	<b>30</b>	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
MW-CPC-39	12/14/2022	N	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
MW-CPC-40	12/14/2022	N	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
MW-CPC-41	12/15/2022	N	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U

Notes:

U - not detected

NC - no criteria

NA - not analyzed

**Bold** indicates compound detected

Values in yellow cells exceed criteria

(b) NYSDOH Drinking Water Program PFOA and PFOS MCL (August 26, 2020)

(c) NYSDOH Drinking Water Program 1,4-Dioxane MCL (August 26, 2020)

ng/L - nanograms per liter

ug/L - micrograms per liter

PF-22 - Qualifier ion ratio >150% of associated calibration. Detection is suspect.

B - Analyte is found in the associated laboratory blank as well as in the sample.

B-07 - Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.

**Attachment B1**  
**Summary of Analytical Results**  
**December 2022 (4Q2022) Sampling Event**  
**Claremont Polychemical Superfund Site OU5**  
**Old Bethpage, NY**

CAS RN:			863090-89-5	375-73-5	375-22-4	335-77-3	335-76-2	307-55-1	375-92-8	375-85-9	355-46-4	307-24-4	68259-12-1	375-95-1	754-91-6
Unit:			ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l
Criteria:			NC	100	NC	NC	NC	NC	NC	NC	100	100	NC	100	NC
Sample Description:															
Sample Description	Date Collected	Sample Type	Perfluoro-4-methoxybutanoic acid	Perfluorobutanesulfonic acid (PFBS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanesulfonic acid (PFDS)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanesulfonic acid (PFHpS)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorohexanoic acid (PFHxA)	Perfluorononanesulfonic Acid (PFNS)	Perfluorononanoic acid (PFNA)	Perfluorooctanesulfonamide (FOSA)
MW-CPC-36	12/15/2022	FD	< 1.9 U	<b>5.6</b>	<b>33</b>	< 1.9 U	<b>8.7</b>	< 1.9 U	<b>5.1</b>	<b>22</b>	<b>41</b>	<b>52</b>	< 1.9 U	<b>330 D</b>	< 1.9 U
MW-CPC-36	12/15/2022	N	< 1.9 U	<b>5.2</b>	<b>31</b>	< 1.9 U	<b>9.2</b>	< 1.9 U	<b>3.1</b>	<b>18</b>	<b>36</b>	<b>47</b>	< 1.9 U	<b>390 D</b>	< 1.9 U
MW-CPC-37	12/15/2022	N	< 2 U	< 2 U	<b>11</b>	< 2 U	<b>2.6</b>	< 2 U	< 2 U	<b>4.1</b>	<b>3</b>	<b>17</b>	< 2 U	<b>2.3</b>	< 2 U
MW-CPC-38	12/14/2022	N	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
MW-CPC-39	12/14/2022	N	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
MW-CPC-40	12/14/2022	N	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
MW-CPC-41	12/15/2022	N	< 4.1 U	< 4.1 U	<b>16</b>	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	<b>10</b>	<b>8.1</b>	<b>24</b>	< 4.1 U	<b>96</b>	< 4.1 U

Notes:

U - not detected

NC - no criteria

NA - not analyzed

**Bold** indicates compound detected

Values in yellow cells exceed criteria

(b) NYSDOH Drinking Water Program PFOA and PFOS MCL (August 26, 2020)

(c) NYSDOH Drinking Water Program 1,4-Dioxane MCL (August 26, 2020)

ng/L - nanograms per liter

ug/L - micrograms per liter

PF-22 - Qualifier ion ratio >150% of associated calibration. Detection is suspect.

B - Analyte is found in the associated laboratory blank as well as in the sample.

B-07 - Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.

**Attachment B1**  
**Summary of Analytical Results**  
**December 2022 (4Q2022) Sampling Event**  
**Claremont Polychemical Superfund Site OU5**  
**Old Bethpage, NY**

CAS RN:			1763-23-1	335-67-1	2706-91-4	2706-90-3	72629-94-8	72629-94-8	2058-94-8	757124-72-4			123-91-1
Unit:			ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l	ug/l
Criteria:			10	10	NC	100	NC	NC	NC	100	70	NC	1
Sample Description:			(c.)	(c.)							(b.)		(c.)
Sample Description	Date Collected	Sample Type	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)	Perfluoropentanesulfonic Acid (PFPeS)	PERFLUOROPENTANOIC ACID (PFPeA)	PERFLUOROTRIDECAHOIC ACID (PFTriA)	Perfluorotetradecanoic acid (PFTA/PFTeDA)	Perfluorotridecanoic acid (PFTriA/PFTrDA)	Perfluoroundecanoic acid (PFUA/PFUDA)	Total PFOA & PFOS	Total PFAS	1,4-DIOXANE (P-DIOXANE)
MW-CPC-36	12/15/2022	FD	<b>160</b>	<b>120</b>	<b>5.7</b>	<b>58</b>	< 1.9 U	< 1.9 U	<b>11</b>	< 1.9 U	<b>280</b>	<b>597.2</b>	<b>8.3</b>
MW-CPC-36	12/15/2022	N	<b>140</b>	<b>120</b>	<b>5.3</b>	<b>54</b>	< 1.9 U	< 1.9 U	<b>10</b>	< 1.9 U	<b>260</b>	<b>543.4</b>	<b>8.1</b>
MW-CPC-37	12/15/2022	N	<b>8.2</b>	<b>27</b>	< 2 U	<b>5.1</b>	< 2 U	< 2 U	< 2 U	< 2 U	<1.8	<b>80.3</b>	<b>10</b>
MW-CPC-38	12/14/2022	N	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	<4.2	<4.2	<b>0.48</b>
MW-CPC-39	12/14/2022	N	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	<1.9	<1.9	< 0.21 U
MW-CPC-40	12/14/2022	N	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	<1.8	<1.8	<b>3.5</b>
MW-CPC-41	12/15/2022	N	<b>18</b>	<b>28</b>	< 4.1 U	<b>36</b>	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	<b>46</b>	<b>236.1</b>	<b>3.0</b>

Notes:

U - not detected

NC - no criteria

NA - not analyzed

**Bold** indicates compound detected

Values in yellow cells exceed criteria

(b) NYSDOH Drinking Water Program PFOA and PFOS MCL (August 26, 2020)

(c) NYSDOH Drinking Water Program 1,4-Dioxane MCL (August 26, 2020)

ng/L - nanograms per liter

ug/L - micrograms per liter

PF-22 - Qualifier ion ratio >150% of associated calibration. Detection is suspect.

B - Analyte is found in the associated laboratory blank as well as in the sample.

B-07 - Data is not affected by elevated level in laboratory blank since sample result is >10x level found in the blank.



**ATTACHMENT C**  
**LABORATORY DATA DELIVERABLES (NOT ATTACHED)**

## **ATTACHMENT D**

### **FIELD DOCUMENTATION**

### PFAS Pre-Sampling Checklist

Site Name: \_\_\_\_\_ Task: \_\_\_\_\_

Weather (temp/precip): \_\_\_\_\_ Date: \_\_\_\_\_

#### Pre-Mobilization:

- ☐ The QAPP or other site-specific field guidance has been consulted for sample locations, QC sampling requirements, and sample nomenclature

#### Field Clothing and PPE:

- ☐ Using white Tyvek®; not using yellow Tyvek®
- ☐ Clothing has not been most recently washed with fabric softeners or other treatments
- ☐ Clothing has not been permanently chemically treated for insect resistance or UV protection
- ☐ Clothing has not been treated with materials or formulations potentially containing PTFE or other PFAS products listed named in this checklist
- ☐ Any personal care products, if used, have been applied outside sampling zone, hands have been washed, and new nitrile gloves are being used
- ☐ Any use of sunscreens or insect repellants is consistent with the commercial products named in this checklist

#### Field Equipment:

- ☐ Subcontractor (e.g., driller) materials and equipment conform to the requirements of this checklist (as applicable)
- ☐ Sampling equipment is free of PTFE and other potentially PFAS-containing components listed in this checklist
- ☐ Sampling equipment is made from stainless steel, HDPE, acetate, silicon, HDPE, or nylon
- ☐ Waterproof field books, waterproof paper, and Post-It Notes® are not used
- ☐ Markers (e.g., Sharpies®) are used only in the staging area or are not used

#### Sample Containers:

- ☐ Water ice is in use only, not chemical (blue) ice packs
- ☐ Sample containers have been received and are made of HDPE or polypropylene
- ☐ Bottleneck for non-drinking water samples do not contain preservative
- ☐ Caps are unlined and made of HDPE or polypropylene

#### Wet Weather (as applicable):

- ☐ Wet weather gear made of polyurethane and PVC only, or is being worn under white Tyvek® covering

#### Equipment Decontamination (as applicable):

- ☐ On-site or off-site public or private water, if to be used for equipment decontamination, has been analyzed and is "PFAS-free" (water that does not contain any site-specific target PFAS analytes above laboratory detection limits).
- ☐ Alconox®, Liquinox®, or Citranox® are being used as decontamination cleaning agents; Decon 90® is not being used

#### Food Considerations:

- ☐ Any pre-wrapped food or snacks, carry-out food, fast food, or other food items will remain in the staging area
- ☐ Any food items, will be consumed outside the sampling zone, hands will be washed, and new PPE and nitrile gloves will be used

#### Work Area and Vehicle Considerations:

- ☐ Work areas, including vehicle interiors if used for sample handling, are covered with HDPE or LDPE plastic to prevent contact with potentially PFAS-containing materials and surfaces

If any applicable boxes cannot be checked, describe deviations below and work with field personnel to address issues prior to commencement of that day's work. Materials present and identified as potentially containing PFAS through use of this checklist should be relocated to the support area or other area of the site away from the sampling locations and noted below.

\_\_\_\_\_  
Field Team Leader Name and Signature

\_\_\_\_\_  
Time



Field clothing and PPE to be **avoided** include:

- Clothing that has recently been washed with fabric softener.
- Coated (i.e., yellow) Tyvek®.
- Clothing chemically treated for insect resistance and ultraviolet protection.
- Clothing that has been treated with water and/or stain resistant coatings such as:
  - Any Teflon® fabric protectors (e.g., Gore Tex)
  - Any Scotchgard™ fabric protectors
  - Bionic Finish®
  - GreenShield®
  - High-Performance Release Teflon®
  - Lurotex Protector RL ECO®
  - Resists Spills™ and Releases Stains™
  - RUCO®
  - RUCO-COAT®
  - RUCO-GUARD®
  - RUCO-PROTECT®
  - RUCOSTAR®
  - NK Guard S series
  - Oleophobol CP®
  - Repel Teflon® fabric protector
  - Repellan KFC®
  - Rucostar® EEE6
  - RUCOTEC®
  - Ultra Release Teflon®
  - Unidyne™

If required, sun and biological protection products **preferred for use** (however, care should be taken to use these exact products because similar products from the same brand may contain PFAS) include:

- Alba Organics Natural Sunscreen
- Aubrey Organics
- Avon Skin So Soft Bug Guard-SPF 30
- Baby Ganics
- Banana Boat for Men Triple Defense Continuous Spray Sunscreen SPF 30
- Banana Boat Sport Performance Coolzone Broad Spectrum SPF 30
- Banana Boat Sport Performance Sunscreen Lotion Broad Spectrum SPF 30
- Banana Boat Sport Performance Sunscreen Stick SPF 50
- California Baby Natural Bug Spray

- Coppertone Sport High-Performance AccuSpray Sunscreen SPF 30
- Coppertone Sunscreen Lotion Ultra Guard Broad Spectrum SPF 50
- Coppertone Sunscreen Stick Kids SPF 55
- Herbal Armor
- Jason Natural Quit Bugging Me
- Jason Natural Sun Block
- Kiss My Face
- L'Oréal Silky Sheer Face Lotion 50+
- Meijer Clear Zinc Sunscreen Lotion Broad Spectrum SPF 15, 30 and 50
- Meijer Wet Skin Kids Sunscreen Continuous Spray Broad Spectrum SPF 70
- Neutrogena Beach Defense Water + Sun Barrier Lotion SPF 70
- Neutrogena Beach Defense Water + Sun Barrier Spray Broad Spectrum SPF 30
- Neutrogena Pure & Free Baby Sunscreen Broad Spectrum SPF 60+
- Neutrogena Ultra-Sheer Dry-Touch Sunscreen Broad Spectrum SPF 30
- Repel Lemon Eucalyptus
- Sawyer Permethrin
- Yes To Cucumbers

Sampling equipment and materials to be **avoided**, which include:

- Polytetrafluoroethylene (PTFE), including the trademarks Teflon® and Hostaflon®.
- Fluorinated ethylene propylene (FEP), including the trademarks Teflon® FEP, Hostaflon® FEP, and Neoflon®.
- Polyvinylidene fluoride (PVDF), including the trademark Kynar®.
- Polychlorotrifluoroethylene (PCTFE), including the trademark Neoflon®.
- Ethylene-tetrafluoroethylene (ETFE), including the trademark Tefzel®.
- Trademarks Viton®, Gore-Tex® and Decon 90® products with the term “fluoro” in the product name.
- Waterproof field notebooks.
- New clothing, as it may have fabric treatment applied.
- Post-It® notes or similar.
- Decon 90®.



## PFAS Pre-Sampling Checklist

Site Name: \_\_\_\_\_ Task: \_\_\_\_\_

Weather (temp/precip): \_\_\_\_\_ Date: \_\_\_\_\_

**Pre-Mobilization:**

- ☐ The QAPP or other site-specific field guidance has been consulted for sample locations, QC sampling requirements, and sample nomenclature

**Field Clothing and PPE:**

- ☐ Using white Tyvek®; not using yellow Tyvek®
- ☐ Clothing has not been most recently washed with fabric softeners or other treatments
- ☐ Clothing has not been permanently chemically treated for insect resistance or UV protection
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- ☐ Any use of sunscreens or insect repellants is consistent with the commercial products named in this checklist

**Field Equipment:**

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- ☐ Sampling equipment is free of PTFE and other potentially PFAS-containing components listed in this checklist
- ☐ Sampling equipment is made from stainless steel, HDPE, acetate, silicon, HDPE, or nylon
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- ☐ Markers (e.g., Sharpies®) are used only in the staging area or are not used

**Sample Containers:**

- ☐ Water ice is in use only, not chemical (blue) ice packs
- ☐ Sample containers have been received and are made of HDPE or polypropylene
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- ☐ Caps are unlined and made of HDPE or polypropylene

**Wet Weather (as applicable):**

- ☐ Wet weather gear made of polyurethane and PVC only, or is being worn under white Tyvek® covering

**Equipment Decontamination (as applicable):**

- ☐ On-site or off-site public or private water, if to be used for equipment decontamination, has been analyzed and is "PFAS-free" (water that does not contain any site-specific target PFAS analytes above laboratory detection limits).
- ☐ Alconox®, Liquinox®, or Citranox® are being used as decontamination cleaning agents; Decon 90® is not being used


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Field Team Leader Name and Signature

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- Clothing that has been treated with water and/or stain resistant coatings such as:
  - Any Teflon® fabric protectors (e.g., Gore Tex)
  - Any Scotchgard™ fabric protectors
  - Bionic Finish®
  - GreenShield®
  - High-Performance Release Teflon®
  - Lurotex Protector RL ECO®
  - Resists Spills™ and Releases Stains™
  - RUCO®
  - RUCO-COAT®
  - RUCO-GUARD®
  - RUCO-PROTECT®
  - RUCOSTAR®
  - NK Guard S series
  - Oleophobol CP®
  - Repel Teflon® fabric protector
  - Repellan KFC®
  - Rucostar® EEE6
  - RUCOTEC®
  - Ultra Release Teflon®
  - Unidyne™

If required, sun and biological protection products **preferred for use** (however, care should be taken to use these exact products because similar products from the same brand may contain PFAS) include:

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- Banana Boat Sport Performance Coolzone Broad Spectrum SPF 30
- Banana Boat Sport Performance Sunscreen Lotion Broad Spectrum SPF 30
- Banana Boat Sport Performance Sunscreen Stick SPF 50
- California Baby Natural Bug Spray



- Coppertone Sport High-Performance AccuSpray Sunscreen SPF 30
- Coppertone Sunscreen Lotion Ultra Guard Broad Spectrum SPF 50
- Coppertone Sunscreen Stick Kids SPF 55
- Herbal Armor
- Jason Natural Quit Bugging Me
- Jason Natural Sun Block
- Kiss My Face
- L'Oréal Silky Sheer Face Lotion 50+
- Meijer Clear Zinc Sunscreen Lotion Broad Spectrum SPF 15, 30 and 50
- Meijer Wet Skin Kids Sunscreen Continuous Spray Broad Spectrum SPF 70
- Neutrogena Beach Defense Water + Sun Barrier Lotion SPF 70
- Neutrogena Beach Defense Water + Sun Barrier Spray Broad Spectrum SPF 30
- Neutrogena Pure & Free Baby Sunscreen Broad Spectrum SPF 60+
- Neutrogena Ultra-Sheer Dry-Touch Sunscreen Broad Spectrum SPF 30
- Repel Lemon Eucalyptus
- Sawyer Permethrin
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- Fluorinated ethylene propylene (FEP), including the trademarks Teflon® FEP, Hostaflon® FEP, and Neoflon®.
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- Polychlorotrifluoroethylene (PCTFE), including the trademark Neoflon®.
- Ethylene-tetrafluoroethylene (ETFE), including the trademark Tefzel®.
- Trademarks Viton®, Gore-Tex® and Decon 90® products with the term “fluoro” in the product name.
- Waterproof field notebooks.
- New clothing, as it may have fabric treatment applied.
- Post-It® notes or similar.
- Decon 90®.







22L2995

RAMBOLL		Chain of Custody / Analysis Report															Page 2 of 4	
Sampler(s): Sara Hahne (Signature)		Hahne Blake SL4															Laboratory Use Only	
Contact: Michael Grifasi Address: 333 West Washington Street Syracuse, New York 13221-4873 Phone: (315) 956-6100 E-mail: michael.grifasi@ramboll.com Project: NYSDEC Claremont Polychemical Site Q4 Sampling Location: Old Bethpage, New York		Laboratory: Pace Analytical Services 39 Spruce St., East Longmeadow, MA 01028 Attn: RJ McCarthy Phone: 413-525-2332		Holding Time:		Package Requirement: Level 2 and Level 3 EDD Format: EQuIS 4-file		Analysis Required		Preservatives: (see key at bottom)		Project Number:		Job Number:		Laboratory ID:		
Sample Identification		Date		Time		Sample Type (See Key)		Sample Matrix (See Key)		Number of Containers		Grab (G) or Composite (C)		Field Filtered? (Y / N)		Lab Sample ID:		
Unique Field Sample ID (sys_sample_code)		Sample Location																
1 DW2-CP-00-122022		DW-2		12/20/2022		13:45		N		WG		2		G		N		
2 DW2-CP-01-122022		DW-2		12/20/2022		---		FD		WG		2		G		N		
3 EW1A-CP-00-122022		EW-1A		12/20/2022		13:30		N		WG		2		G		N		
4 EW1B-CP-00-122022		EW-1B		12/20/2022		13:20		N		WG		2		G		N		
5 EW1C-CP-00-122022		EW-1C		12/20/2022		13:25		N		WG		2		G		N		
6 EW2A-CP-00-122022		EW-2A		12/20/2022		9:05		N		WG		2		G		N		
7 EW2B-CP-00-122022		EW-2B		12/20/2022		9:10		N		WG		2		G		N		
8 EW2C-CP-00-122022		EW-2C		12/20/2022		9:00		N		WG		2		G		N		
9 EW2D-CP-00-122022		EW-2D		12/20/2022		8:55		N		WG		2		G		N		
10 EW4A-CP-00-122022		EW-4A		12/20/2022		13:00		N		WG		2		G		N		
11 EW4B-CP-00-122022		EW-4B		12/20/2022		12:55		N		WG		2		G		N		
12 EW4C-CP-00-122022		EW-4C		12/20/2022		12:50		N		WG		2		G		N		
13 EW4D-CP-00-122022		EW-4D		12/20/2022		12:45		N		WG		2		G		N		
14 EW5-CP-00-122022		EW-5		12/20/2022		13:50		N		WG		2		G		N		
Special Instructions:																		
Use the top boxes if the samples are to be shipped via courier (e.g., Fed Ex)																		
Relinquished by: Sara Hahne (Signature)		Date: 12/20/2022		Received By: [Signature]		Date: 12/20/2022		Condition:		Other comments or notes regarding condition of samples as received:								
Of: Ramboll		Time: 15:40		Of: Pace Analytical		Time: 15:45												
Relinquished by:		Date:		Courier Name:		Date:		Custody Seals Intact? (If so, indicate the #, date, and time of the seal)										
Of:		Time:		Tracking #:		Time:												
Courier Name: FedEx		Date:		Received By:		Date:		Cooler Temperature:										
Tracking #:		Time:		Of:		Time:												
<p>Sample Type: N = Normal env. sample, FD = field duplicate, EB = Equipment Blank, TB = Trip Blank, MS = Lab Matrix Spike, Other (Specify): FRB = Field Reagent Blank</p> <p>Sample Matrix: SE = Sediment, SO = Soil, WG = Groundwater, WQ = Water Quality, WS = Surface Water, WW = Waste Water, WP = Potable Water, AA = Ambient Air, Other (Specify):</p> <p>Preservative Code: 0 = none, 1 = HCL, 2 = HNO<sub>3</sub>, 3 = H<sub>2</sub>SO<sub>4</sub>, 4 = NaOH, 5 = Zn Acetate, 6 = MeOH, 7 = NaHSO<sub>4</sub>, 8 = Na<sub>2</sub>PO<sub>4</sub>, 9 = BenzalkoniumCl, 10 = other</p>																		



22L2995

RAMBOLL		Chain of Custody / Analysis Report															Page 3 of 4														
Sampler(s): (Signature) <i>Sara Hahne</i>		Sara Hahne															Laboratory Use Only														
Contact: Michael Grifasi		Laboratory: Pace Analytical Services 39 Spruce St., East Longmeadow, MA 01028		Holding Time:		Package Requirement: Level 2 and Level 3		EDD Format: EQutS 4-file		Analysis Required										Project Number:											
Address: 333 West Washington Street Syracuse, New York 13221-4873		Attn: RJ McCarthy		Phone: 413-525-2332		Preservatives: (see key at bottom)												Job Number:													
Phone: (315) 956-6100		E-mail: michael.grifasi@ramboll.com		Project: NYSDEC Claremont Polychemical Site Q4 Sampling		Location: Old Bethpage, New York		Number of Containers		Grab [G] or Composite [C]		Field Filtered? (Y / N)		VOCs by 8220C										Laboratory ID:							
Sample Identification		Unique Field Sample ID (sys_sample_code)		Sample Location		Date		Time		Sample Type (See Key)		Sample Matrix (See Key)		Number of Containers		Grab [G] or Composite [C]		Field Filtered? (Y / N)		VOCs by 8220C										Lab Sample ID:	
1		EW7C-CP-00-122022		EW-7C		12/20/2022		14:20		N		WG		2		G		N		X										29	
2		EW7D-CP-00-122022		EW-7D		12/20/2022		14:25		N		WG		2		G		N		X										30	
3		EW11D-CP-00-122022		EW-11D		12/20/2022		12:30		N		WG		2		G		N		X										31	
4		EW12D-CP-00-122022		EW-12D		12/20/2022		12:40		N		WG		2		G		N		X										32	
5		EW14D-CP-00-122022		EW-14D		12/20/2022		12:10		N		WG		2		G		N		X										33	
6		LF1-CP-00-122022		LF-1		12/20/2022		11:00		N		WG		2		G		N		X										34	
7		M30BR-CP-00-122022		M-30BR		12/20/2022		14:10		N		WG		2		G		N		X										35	
8		MW5B-CP-00-122022		MW-5B		12/20/2022		9:35		N		WG		2		G		N		X										36	
9		MW6B-CP-00-122022		MW-6B		12/20/2022		8:35		N		WG		2		G		N		X										37	
10		MW6C-CP-00-122022		MW-6C		12/20/2022		8:15		N		WG		2		G		N		X										38	
11		MW6D-CP-00-122022		MW-6D		12/20/2022		8:20		N		WG		2		G		N		X										39	
12		MW6D-CP-01-122022		MW-6D		12/20/2022		---		FD		WG		2		G		N		X										40	
13		MW6E-CP-00-122022		MW-6E		12/20/2022		8:30		N		WG		2		G		N		X										41	
14		MW6F-CP-00-122022		MW-6F		12/20/2022		8:25		N		WG		2		G		N		X										42	
Special Instructions:																															
Use the top boxes if the samples are to be shipped via courier (e.g., Fed Ex)																															
Relinquished by:		Sara Hahne		Date:		12/20/2022		Received By:		<i>[Signature]</i>		Date:		12/20/22		Condition:								Other comments or notes regarding condition of samples as received:							
Of:		Ramboll		Time:		15:40		Of:		Pace Analytical		Time:		15:45		Custody Seals Intact? (if so, indicate the #, date, and time of the seal)															
Relinquished by:				Date:				Courier Name:				Date:				Cooler Temperature:															
Of:				Time:				Tracking #:				Time:																			
Courier Name:		FedEx		Date:				Received By:				Date:																			
Tracking #:				Time:				Of:				Time:																			
Sample Type: N = Normal env. sample, FD = field duplicate, EB = Equipment Blank, TB = Trip Blank, MS = Lab Matrix Spike, Other (Specify): FRB = Field Reagent Blank																															
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Preservative Code: 0 = none, 1 = HCL, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Zn Acetate, 6 = MeOH, 7 = NaHSO4, 8 = Na3PO4, 9 = BenzalkoniumCl, 10 = other																															

22L2995

RAMBOLL		Chain of Custody / Analysis Report										Page 4 of 4	
Sampler(s): Sara Hahne (Signature) <i>[Signature]</i>		Liam Blake <i>[Signature]</i>										Laboratory Use Only	
Contact: Michael Grifasi		Laboratory: Pace Analytical Services 39 Spruce St., East Longmeadow, MA 01028		Holding Time:		Package Requirement: Level 2 and Level 3		EDD Format: EQUIS 4-file		Analysis Required		Project Number:	
Address: 333 West Washington Street Syracuse, New York 13221-4873		Attn: RJ McCarthy		Phone: 413-525-2332		Number of Containers		Grab (G) or Composite (C)		Field Filtered? (Y / N)		Job Number:	
Phone: (315) 956-6100		E-mail: michael.grifasi@ramboll.com		Project: NYSDEC Claremont Polychemical Site Q4 Sampling		Location: Old Bethpage, New York		Preservatives: (see key at bottom)		1		Laboratory ID:	
Sample Identification		Unique Field Sample ID (sys_sample_code)		Sample Location		Date		Time		Sample Type (See Key)		Sample Matrix (See Key)	
1		MW8A-CP-00-122022		MW-8A		12/20/2022		8:05		N		WG	
2		MW8B-CP-00-122022		MW-8B		12/20/2022		8:10		N		WG	
3		MW8C-CP-00-122022		MW-8C		12/20/2022		8:00		N		WG	
4		MW10D-CP-00-122022		MW-10D		12/20/2022		9:20		N		WG	
5		MW11A-CP-00-122022		MW-11A		12/20/2022		11:45		N		WG	
6		MW11B-CP-00-122022		MW-11B		12/20/2022		11:50		N		WG	
7		SW1-CP-00-122022		SW-1		12/20/2022		13:40		N		WG	
8		WT01-CP-00-122022		WT-01		12/20/2022		13:10		N		WG	
9		TB-CP-QC-122022		----		12/20/2022		----		TB		WQ	
10													
11													
12													
13													
14													
Special Instructions:													
Use the top boxes if the samples are to be shipped via courier (e.g., Fed Ex)													
Relinquished by: Sara Hahne <i>[Signature]</i>		Date: 12/20/2022		Received By: <i>[Signature]</i>		Date: 12/20/22		Condition:		Other comments or notes regarding condition of samples as received:			
Of: Ramboll		Time: 15:40		Of: Pace Analytical		Time: 15:45		Custody Seals Intact? (if so, indicate the #, date, and time of the seal)					
Relinquished by:		Date:		Courier Name:		Date:		Cooler Temperature:					
Of:		Time:		Tracking #:		Time:							
Courier Name: FedEx		Date:		Received By: <i>[Signature]</i>		Date: 12/20/22							
Tracking #:		Time:		Of: <i>[Signature]</i>		Time: 10:47							
Sample Type: N = Normal env. sample, FD = field duplicate, EB = Equipment Blank, TB = Trip Blank, MS = Lab Matrix Spike, Other (Specify): FRB = Field Reagent Blank													
Sample Matrix: SE = Sediment, SO = Soil, WG = Groundwater, WQ = Water Quality, WS = Surface Water, WW = Waste Water, WP = Potable Water, AA = Ambient Air, Other (Specify):													
Preservative Code: 0 = none, 1 = HCL, 2 = HNO <sub>3</sub> , 3 = H <sub>2</sub> SO <sub>4</sub> , 4 = NaOH, 5 = Zn Acetate, 6 = MeOH, 7 = NaHSO <sub>4</sub> , 8 = Na <sub>2</sub> PO <sub>4</sub> , 9 = BenzalkoniumCl, 10 = other													



Site Name: Claremont Poly Sampling Method: Submersible Pump Field Personnel: SLH, LFB  
 Site Location: Old Bethpage, NY Equipment Used: GeoPump Bladder Date: 12/15/2022  
 Project #: 1940101703 Pump/Controller ID#: 7715/7698/7849 Weather: 33°F, Overcast

## Well information:

Installed Depth of Well\*: 255.7 ft. bmp. 1 in. = 0.041 gal/ft Measurement Point\*: Top of Well Casing  
 Measured Depth of Well\*: 255.7 ft. bmp. X 2 in. = 0.163 gal/ft If other:   
 Depth to Water\*: 23.68 ft. bmp. 4 in. = 0.653 gal/ft  
 Water Column Length (LWC): 232.02 ft. 6 in. = 1.469 gal/ft Well Volume: 37.8 gallons  
 Well Diameter: 2.0 in. 8 in. = 2.611 gal/ft Pump Intake Depth\*: 251.0 ft. bmp.

## Well Volume Multipliers:

## Start Purge Time:

7:50  
 Initial: Color Clear Odor None Sheen/Free Product None

Select Units from Dropdown Menus

Elapsed Time Minutes	Depth to Water ft bmp	Temperature Celsius	pH SU	Specific Conductivity mS/cm	ORP mV	Dissolved Oxygen mg/L	Turbidity NTU	Flow Rate ml/min	Other
0:00	23.68	10.6	8.53	0.628	88.4	4.04	9.41	200	
5	23.7	12.9	7.30	0.594	92.8	2.82	2.10	200	
10	23.7	12.9	7.26	0.710	39.5	9.38	2.38	200	
15	23.7	12.9	7.56	0.770	20.1	9.19	3.03	200	
20	23.7	12.8	7.54	0.770	4.2	8.76	3.33	200	
25	23.7	12.8	7.54	0.780	2.7	8.92	6.34	200	
30	23.7	12.8	7.56	0.770	6.1	8.08	5.83	200	
35									
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60									
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70									
75									
80									
85									
90									

Stabilization  $\Delta \leq 0.3'$   $\pm 3\%$   $\pm 0.1$   $\pm 3\%$   $\pm 10$  mV  $\pm 10\%$   $\pm 10\%$   $200 \leq X \leq 500$

End Purge Time: 8:20 DO Titration: NA mg/L  
 Total volume of groundwater purged: 1.5 gal.  
 Final: Color Clear Odor Slight Unknown Chemical Sheen/Free Product None

Analytical Sample ID: N-CPC-36-15-251-20221215-0 (-1, Date: 12/15/2022 Time: 8:30

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory
250 ml	Polyethylene	2	No	None	Pace Analytical
250 ml	Amber Glass	2	No	None	Pace Analytical
60 ml	Clear VOA	2	No	HCl	Pace Analytical

Notes:   
  
  
  
  
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## Low Flow Groundwater Sampling Log

**Well ID:** MW-CPC-37

**Northing:** \_\_\_\_\_

Easting:

Site Name:	Claremont Poly	Sampling Method:	Submersible Pump	Field Personnel:	SLH, LFB
Site Location:	Old Bethpage, NY	Equipment Used:	GeoPump Bladder	Date:	12/15/2022
Project #:	1940101703	p/Controller/Intake ID#:	7715/7698/7849	Weather:	37°F, Overcast

**Well information:**

Installed Depth of Well*:	450	ft. bmp.	1 in. = 0.041 gal/ft	Measurement Point*:	Top of Well Casing
Measured Depth of Well*:	450	ft. bmp.	X 2 in. = 0.163 gal/ft	If other:	
Depth to Water*:	27.54	ft. bmp.	4 in. = 0.653 gal/ft		
Water Column Length (LWC):	422.46	ft.	6 in. = 1.469 gal/ft	Well Volume:	68.9 gallons
Well Diameter:	2.0	in.	8 in. = 2.611 gal/ft	Pump Intake Depth*:	445.0 ft. bmp

### Well Volume Multipliers:

<b>Start Purge Time:</b>		10:05	
<b>Initial:</b>	<i>Color</i>	Clear	<i>Odor</i>
			None
	<i>Sheen/Free Product</i>		None

### Select Units from Dropdown Menus

Elapsed Time <i>Minutes</i>	Depth to Water <i>ft bmp</i>	Temperature <i>Celsius</i>	pH <i>SU</i>	Specific Conductivity <i>mS/cm</i>	ORP <i>mV</i>	Dissolved Oxygen <i>mg/L</i>	Turbidity <i>NTU</i>	Flow Rate <i>ml/min</i>	Other
0:00	27.54	11.4	6.46	0.392	43.9	3.32	4.89	200	
5	27.54	12.3	6.12	0.376	49.6	3.48	4.90	200	
10	27.6	12.2	6.28	0.370	52.0	8.21	2.70	200	
15	27.6	12.4	6.34	0.373	59.5	7.06	3.91	200	
20	27.6	12.2	6.34	0.374	63.4	6.84	3.10	200	
25	27.6	12.4	6.37	0.382	64.6	6.24	2.20	200	
30	27.6	12.3	6.37	0.385	61.1	6.29	2.04	200	
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Stabilization	$\Delta \leq 0.3'$	$\pm 3\%$	$\pm 0.1$	$\pm 3\%$	$\pm 10 \text{ mV}$	$\pm 10\%$	$\pm 10\%$	$200 \leq X \leq 500$	
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**End Purge Time:** 10:30 **DO Titration:** NA mg/L

Total volume of groundwater purged: 1.5 gal.

Final:	Color	Clear	Odor	Other	Sheen/Free Product	None
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<b>Analytical Sample ID:</b> MW-CPC-37-15-445-20221215-0	<b>Date:</b> 12/15/2022	<b>Time:</b> 10:50
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Notes: \_\_\_\_\_

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Well ID: MW-CPC-38  
 Northing:   
 Easting:

Site Name:	Claremont Poly	Sampling Method:	Submersible Pump	Field Personnel:	SLH, LFB
Site Location:	Old Bethpage, NY	Equipment Used:	GeoPump Bladder	Date:	12/14/2022
Project #:	1940101703	Pump/Controller ID#:	7715/7698/7849	Weather:	38°F, Sun

**Well Volume Multipliers:**

Installed Depth of Well*:	395	ft. bmp.	1 in. = 0.041 gal/ft	Measurement Point*:	Top of Well Casing
Measured Depth of Well*:	395	ft. bmp.	X 2 in. = 0.163 gal/ft	If other:	
Depth to Water*:	28.38	ft. bmp.	4 in. = 0.653 gal/ft		
Water Column Length (LWC):	366.62	ft.	6 in. = 1.469 gal/ft	Well Volume:	59.8 gallons
Well Diameter:	2.0	in.	8 in. = 2.611 gal/ft	Pump Intake Depth*:	391.0 ft. bmp.

**Initial:** *Color* Clear *Odor* Sulfur-like *Sheen/Free Product* None

[illegible]

Stabilization	$\Delta \leq 0.3'$	$\pm 3\%$	$\pm 0.1$	$\pm 3\%$	$\pm 10 \text{ mV}$	$\pm 10\%$	$\pm 10\%$	$200 \leq X \leq 500$
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DO Titration: NA mg/L

<b>Final:</b>	<i>Color</i>	Clear	<i>Odor</i>	None	<i>Sheen/Free Product</i>	None
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Notes: \_\_\_\_\_

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**Northing:** \_\_\_\_\_

Easting: \_\_\_\_\_

Site Name:	<u>Claremont Poly</u>	Sampling Method:	<u>Submersible Pump</u>	Field Personnel:	<u>SLH, LFB</u>
Site Location:	<u>Old Bethpage, NY</u>	Equipment Used:	<u>GeoPump Bladder</u>	Date:	<u>12/14/2022</u>
Project #:	1940101703	Pump/Controller ID#:	7715/7698/7849	Weather:	29°F, Sun

**Well information:**

Installed Depth of Well*:	390	ft. bmp.	1 in. = 0.041 gal/ft	Measurement Point*:	Top of Well Casing
Measured Depth of Well*:	390	ft. bmp.	X 2 in. = 0.163 gal/ft	If other:	
Depth to Water*:	25.76	ft. bmp.	4 in. = 0.653 gal/ft		
Water Column Length (LWC):	364.24	ft.	6 in. = 1.469 gal/ft	Well Volume:	59.4 gallons
Well Diameter:	2.0	in.	8 in. = 2.611 gal/ft	Pump Intake Depth*:	374.0 ft. bmp.

**Well Volume Multipliers:**

1 in. = 0.041 gal/ft	Measurement Point*: <u>Top of Well Casing</u>
<u>X</u> 2 in. = 0.163 gal/ft	If other: _____
4 in. = 0.653 gal/ft	
6 in. = 1.469 gal/ft	Well Volume: <u>59.4</u> gallons
8 in. = 2.611 gal/ft	Pump Intake Depth*: <u>374.0</u> ft. bmp.

Start Purge Time:	8:25
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<b>Initial:</b>	<i>Color</i>	Clear	<i>Odor</i>	None	<i>Sheen/Free Product</i>	None
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### Select Units from Dropdown Menus

[illegible]

Stabilization	$\Delta \leq 0.3'$	$\pm 3\%$	$\pm 0.1$	$\pm 3\%$	$\pm 10 \text{ mV}$	$\pm 10\%$	$\pm 10\%$	$200 \leq X \leq 500$
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**End Purge Time:** 9:15

DO Titration: NA mg/L

Total volume of groundwater purged: 2 gal.

Final:	Color	Clear	Odor	Sulfur-like	Sheen/Free Product	None
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<b>Analytical Sample ID:</b> MW-CPC-39-15-374-20221214-0	<b>Date:</b> 12/14/2022	<b>Time:</b> 9:35
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Notes: \_\_\_\_\_

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Page 1 of 1

Site Name: Claremont Poly Sampling Method: Submersible Pump Field Personnel: SLH, LFB  
 Site Location: Old Bethpage, NY Equipment Used: GeoPump Bladder Date: 12/14/2022  
 Project #: 1940101703 Pump/Controller ID#: 7715/7698/7849 Weather: 34°F, Sun

**Well information:** Installed Depth of Well\*: 317 ft. bmp. 1 in. = 0.041 gal/ft Measurement Point\*: Top of Well Casing  
 Measured Depth of Well\*: 317 ft. bmp. X 2 in. = 0.163 gal/ft If other:   
 Depth to Water\*: 58.7 ft. bmp. 4 in. = 0.653 gal/ft  
 Water Column Length (LWC): 258.30 ft. 6 in. = 1.469 gal/ft Well Volume: 42.1 gallons  
 Well Diameter: 2.0 in. 8 in. = 2.611 gal/ft Pump Intake Depth\*: 312.0 ft. bmp.

**Start Purge Time:** 12:35  
 Initial: Color Opaque Lt. Gray Odor Sulfur-like Sheen/Free Product None  
 Select Units from Dropdown Menus

Elapsed Time Minutes	Depth to Water ft bmp	Temperature Celsius	pH SU	Specific Conductivity mS/cm	ORP mV	Dissolved Oxygen mg/L	Turbidity NTU	Flow Rate ml/min	Other
0:00	58.7	5.2	4.90	0.085	209.5	11.20	Overrange	125	
5	58.7	8.2	4.80	0.212	191.9	4.25	Overrange	125	
10	58.7	9.5	4.81	0.170	112.2	4.88	Overrange	125	
15	58.7	11.1	4.85	0.224	132.7	3.67	Overrange	125	
20	58.7	10.8	4.81	0.228	123.4	3.31	Overrange	125	
25	58.7	11	4.69	0.230	137.5	3.23	Overrange	125	
30	58.7	11.2	4.66	0.231	131.0	3.23	Overrange	125	
35	58.7	10.9	4.66	0.234	122.7	3.37	Overrange	125	
40	58.7	11	4.68	0.236	126.1	3.50	Overrange	125	
45									
50									
55									
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70									
75									
80									
85									
90									

Stabilization  $\Delta \leq 0.3'$   $\pm 3\%$   $\pm 0.1$   $\pm 3\%$   $\pm 10$  mV  $\pm 10\%$   $\pm 10\%$   $200 \leq X \leq 500$

**End Purge Time:** 13:15 DO Titration: NA mg/L  
 Total volume of groundwater purged: 3 gal.  
 Final: Color Opaque Lt. Gray Odor None Sheen/Free Product None

**Analytical Sample ID:** MW-CPC-40-15-312-20221214-0 **Date:** 12/14/2022 **Time:** 13:20

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory
250 ml	Polyethylene	2	No	None	Pace Analytical
250 ml	Amber Glass	2	No	None	Pace Analytical
60 ml	Clear VOA	2	No	HCl	Pace Analytical

Notes:   
  
  
  
  
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**Northing:** \_\_\_\_\_

Easting: \_\_\_\_\_

Site Name:	Claremont Poly	Sampling Method:	Submersible Pump	Field Personnel:	SLH, LFB
Site Location:	Old Bethpage, NY	Equipment Used:	GeoPump Bladder	Date:	12/15/2022
Project #:	1940101703	Pump/Controller ID#:	7715/7698/7849	Weather:	40°F, Overcast

**Well information:**

Installed Depth of Well*:	263	ft. bmp.	1 in. = 0.041 gal/ft	Measurement Point*:	Top of Well Casing
Measured Depth of Well*:	263	ft. bmp.	X 2 in. = 0.163 gal/ft	If other:	
Depth to Water*:	21.65	ft. bmp.	4 in. = 0.653 gal/ft		
Water Column Length (LWC):	241.35	ft.	6 in. = 1.469 gal/ft	Well Volume:	39.3 gallons
Well Diameter:	2.0	in.	8 in. = 2.611 gal/ft	Pump Intake Depth*:	258.0 ft. bmp.

**Well Volume Multipliers:**

<u>        </u>	1 in. = 0.041 gal/ft	Measurement Point*: <u>Top of Well Casing</u>
<u>  X  </u>	2 in. = 0.163 gal/ft	If other: <u>                                </u>
<u>        </u>	4 in. = 0.653 gal/ft	<u>                                </u>
<u>        </u>	6 in. = 1.469 gal/ft	Well Volume: <u>39.3</u> gallons
<u>        </u>	8 in. = 2.611 gal/ft	Pump Intake Depth*: <u>258.0</u> ft. bmp.

Start Purge Time:	12:50
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Initial:	<u>Color</u>	Clear	Odor	Sulfur-like	Sheen/Free Product	None
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### Select Units from Dropdown Menus

<b>Elapsed Time</b>	<b>Depth to Water</b>	<b>Temperature</b>	<b>pH</b>	<b>Specific Conductivity</b>	<b>ORP</b>	<b>Dissolved Oxygen</b>	<b>Turbidity</b>	<b>Flow Rate</b>	<b>Other</b>
<i>Minutes</i>	<i>ft bmp</i>	<i>Celsius</i>	<i>SU</i>	<i>mS/cm</i>	<i>mV</i>	<i>mg/L</i>	<i>NTU</i>	<i>ml/min</i>	
0:00	21.73	13.8	5.52	0.253	-8.5	6.03	10.49	350	
5	21.7	12.9	5.19	0.260	1.8	8.18	2.88	250	
10	21.7	12.2	4.89	0.260	14.4	5.51	3.22	250	
15	21.7	12.3	4.83	0.260	21.7	5.29	2.39	250	
20	21.7	12.5	4.67	0.265	52.9	5.15	3.94	250	
25	21.7	12.3	4.52	0.275	79.2	4.68	8.77	250	
30	21.7	12.5	4.28	0.307	108.2	4.03	43.70	250	
35	21.7	12.6	4.15	0.332	122.2	3.71	62.50	250	
40	21.7	12.8	4.11	0.344	127.3	3.52	65.70	250	
45	21.7	12.8	4.10	0.351	130.7	3.31	61.80	250	
<b>Stabilization</b>	$\Delta \leq 0.3'$	$\pm 3\%$	$\pm 0.1$	$\pm 3\%$	$\pm 10 \text{ mV}$	$\pm 10\%$	$\pm 10\%$	$200 \leq X \leq 500$	

**End Purge Time:** 13:35

DO Titration: NA mg/L

Total volume of groundwater purged: 1.5 gal.

<b>Final:</b>	<i>Color</i>	Clear	<i>Odor</i>	None	<i>Sheen/Free Product</i>	None
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<b>Analytical Sample ID:</b> MW-CPC-41-15-258-20221215-0	<b>Date:</b> 12/15/2022	<b>Time:</b> 13:50
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Notes: FD Collected