2013 Fourth Quarter Groundwater Monitoring Report
October - December 2013
Claremont Polychemical Corporation Site
505 Winding Road
Old Bethpage, Nassau County, NY 11804
Site Code: 130015
WA# D006130-19

Prepared for:

New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233

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Submitted: January 15, 2014

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Report Submittal Date: January 15, 2014
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Project Address: Claremont Polychemical, 505 Winding Rd, Old Bethpage, NY

CERTIFICATION

I, Nancy Garry, certify that I am currently a NYS Registered Professional Engineer as defined in 6 Part NYCRR Part 375 and that this report, 2013 Fourth Quarter Groundwater Monitoring Report, was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER -10) and that all activities were preformed in full accordance with the DER-approved workplan and any DER-approved modifications.

Environmental Contractor: HRP Engineering, P.C.

By:

Nancy Garry, PE

2013 Fourth Quarter Groundwater Monitoring Report
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Claremont Polychemical Corporation Site
Old Bethpage, New York 11804

1.0 INTRODUCTION

HRP Engineering, P.C. (HRP) is pleased to submit this report containing groundwater quality data, discussions and data deliverables related to the third quarter 2013 (July – September 2013) groundwater monitoring event conducted at the Claremont Polychemical Corporation Site (hereinafter referred to as the “Site”) (Figure 1). The groundwater monitoring event and the preparation of this deliverable are part of the routine groundwater monitoring program being conducted at the Site. This report has been prepared for submittal to the New York State Department of Environmental Conservation (NYSDEC) and includes the following:

- Brief overview of historical site activities;
- Discussion of the on-site groundwater treatment system;
- Brief description of the scope of the field activities;
- Groundwater elevation contours;
- Tetrachloroethylene (PCE) and trichloroethylene (TCE) contaminant concentration profiles in groundwater;
- Groundwater PCE and TCE contaminant concentrations discussion;
- Brief discussion of the groundwater quality data;
- Comparison of data from this monitoring period to data from previous periods; and
- Recommendations and Conclusions.

2.0 SITE BACKGROUND

2.1 Site Overview

The Claremont Polychemical Corporation (Claremont), a former manufacturer of pigments for plastics and inks, coated metal flakes, and vinyl stabilizers, operated on-site from 1966 to 1980. The Site was proposed for inclusion on the Environmental Protection Agency (EPA) National Priorities List (NPL) in October 1984 and was listed as a superfund site in June 1986. A Comprehensive Remedial Investigation/ Feasibility Study (RI/FS) for the Site was initiated in March 1988 by the EPA. Under this RI/FS, EPA sampled the surface and subsurface soil, the groundwater, underground storage tanks, and the building. The EPA RI/FS reports were released to the public in August 1990. The EPA RI/FS findings indicated that on-site soils contaminated with PCE, located in the former "spill area", constituted a potential threat to groundwater resources. A comprehensive remedy for the Site was completed and documented in several EPA Records of Decisions (RODs) issued in 1989-1990. The Site was divided into six operable units (OU), each with a specific remedial activities. Operable Unit No.4 (OU IV) is designated “Remedial Program” and involves the treatment of the on-site volatile organic compounds (VOC) that have contaminated groundwater.

A groundwater treatment system was installed on-site by the EPA and Army Corp of Engineers (ACOE) to control OU IV. Full-scale operation of the groundwater remedial system began in February 2000, reportedly pumping and treating 470 gpd (gallons per day). SAIC Inc. operated and maintained the treatment system from 2000 to May 2011. During that period SAIC monitored the treatment system operation on a regular basis by collecting system discharge and quarterly groundwater samples. In May 2011, the operation, maintenance, and sampling of the remediation system was relinquished from the ACOE/EPA to the NYSDEC, who subsequently retained HRP to operate, maintain and sample the remediation system.

During the work responsibility transition from the EPA to the NYSDEC, the NYSDEC requested copies of reports and analytical results generated during the EPA’s operations of the remediation system, including but not limited to quarterly groundwater sampling data from SAIC, EPA Region 2 and the ACOE. Previous groundwater monitoring reports were not available for HRP’s review. Therefore, the historical groundwater data was not reviewed by HRP and incorporated into this report.

2.2 Location

The site is located on a 9.5-acre parcel located in an industrial section of Old Bethpage, Nassau County, New York (see Figure 1 for location). The property has one two-story building, covering approximately 35,000 square feet (the former processing plant) and a water treatment building, covering approximately 5,200 square feet. The site lies approximately 800 feet east of the border between Nassau and Suffolk County and is accessed via Winding Road on the property's western border. Adjacent properties include:

South and Southeast - Bethpage State Park and a golf course;
East - State University of New York-Farmingdale Campus;
West - Oyster Bay Solid Waste Disposal Complex; and
North - Commercial and light industrial.

The Oyster Bay Solid Waste Disposal Complex is a NYSDEC Superfund Site with the Town of Oyster Bay as the responsible party. The Nassau County Fireman's Training Center, which has also contributed to soil and groundwater contamination in the area, is located approximately 500 feet south of the Oyster Bay Solid Waste Disposal Complex. The Oyster Bay Solid Waste Disposal Complex and Fireman's Training Center have groundwater extraction and treatment systems in operation. In addition, the golf course has a number of pump/irrigation wells, which are used for watering their fairways. The closest residences are approximately one-half mile from the site immediately west of the Old Bethpage Landfill Superfund site. The nearest public supply well is located 3,500 feet northwest of the site and nearly 47,000 people are drawing water from private-use wells located within three miles of the site.

2.3 Site History

According to the "Five - Year Review Report for Claremont Polychemical Corporation" prepared by EPA Region 2, dated September 2008, the Claremont Polychemical Corporation manufactured pigments for plastics and inks, coated metal flakes, and vinyl stabilizers operated from 1966 to 1980. During its operation, Claremont disposed of liquid waste in three leaching basins and deposited solid wastes and treatment sludges in drums or in old, aboveground metal tanks. The principal wastes generated were organic solvents, resins and wash wastes (mineral spirits). Located inside the process building were a solvent recovery system (steam distillation), two pigment dust collectors and a sump. To the west of the building, there were five concrete treatment basins, each with a capacity of 5,000 gallons, which contained sediments and water. Six aboveground tanks, three of which contained wastes, were located east of the process building. Other features included an underground tank farm, construction and demolition debris, dry wells and a water supply well.

2.4 Site Geological Setting

The "Claremont Polychemical Superfund Site Long-term Groundwater Monitoring Old Bethpage, New York" report (dated December 2001) prepared by SAIC reported that site-specific subsurface investigations from a variety of soil borings and monitoring/injection/extraction well installations to a maximum depth of 250 feet below ground surface (bgs) identified "well-stratified fine to medium sand with silt lenses, abundant peat laminae, and discontinuous sand layers" (Ebasco, 1990). Borings in the northern portion of the site also encountered numerous interbedded silt and clay horizons. A comparison of Site

> logs with municipal supply well logs to the north suggest that the Site is located within a transitional area between the predominately sandy southern portion of the Magothy Formation and an interbedded clayey-sand portion to the north (Ebasco, 1990).
>
> The 2001 report also indicated that groundwater flow was generally to the south-southeast with historical gradients ranging from 0.001-0.002 ft/ft and horizontal flow velocities of 0.43 ft/day or 157 ft/yr (Ebasco, 1990). Groundwater elevations are depressed in the areas of the extraction wells while the system is in operation. Hydraulic permeability (slug) tests performed during the EPA RI calculated hydraulic conductivities ranging between 200 and 400 gdp/ft^2 which is significantly lower than historical data from actual pump tests. The vertical component of flow was historically less than 0.5 ft/ft and lacked any consistency or pattern. It was thus determined to be insignificant with respect to contaminant movement (Ebasco, 1990).

The 2001 report also stated that the direction of groundwater flow from the western portion of the site is to the east, south and southeast and reverses on the eastern and southeastern portions of the site. The gradient was reported to be approximately 0.024 ft/ft as measured between monitoring wells SW-1 and SW-2 over a distance of approximately 500 ft. The semi-radial component of flow and steep gradient are indicative of the groundwater extraction system's capture zone. However, groundwater levels were recorded from five sets of clustered monitoring wells, or 13 data points, in and around the source area. Hence, the report concluded that the capture zone is not realistically defined as it tends to center around monitoring well cluster SW-2/DW-2 instead of the three extraction wells slightly to the southeast.

3.0 GROUNDWATER TREATMENT SYSTEM

A description of the groundwater treatment system and a review of its effectiveness of contamination recovery and hydraulic control are provided below.

3.1 Groundwater Treatment System Description

The groundwater treatment system is designed to treat metals, organic contaminants, and provide final pH adjustment. The system consists of an extraction system, above-ground treatment, and a reinjection system. Each of the system components is discussed below.

Groundwater Treatment System Extraction Wells

The groundwater collection system consists of three extraction wells (EXT-1, EXT-2, and EXT-3) installed approximately 150 feet apart south of the site oriented in a southwest-northeast line. EXT-1, EXT-2, and EXT-3 are screened from approximately 75, 95, and 94 feet mean sea level (MSL) (just below the water table) to approximately 175, 190, and 194 feet MSL, respectively, and are outfitted with 10 horsepower pumps. In May 2013, fixed end packers (packers) were installed in EX-1 and EX-2, effectively blocking the clean, bottom portion of each extraction well, at 115 feet MSL and 125 feet MSL, respectively.

Each extraction well pump is capable of pumping up to 200 gpm. However, historically, EXT-1, EXT-2, and EXT-3 extract 190 gpm, 188 gpm, and 175 gpm for a total of approximately 553 gpm, respectively. Based on the step-down test completed in June 2013, the pumping rate of EX-1 and EX-2 were reduced to 110 gpm and 120 gpm, a 10% reduction in the pumping rates. The average flow rate over the course of a month is approximately 350 to 390 gpm. This average pumping rate translates to approximately 500,000 to 560,000 per day which meets the on-site remedy goal of treating 500,000 gallons per day.

It is important to note that in April/May 2011, SAIC replaced the Equalization tank level controllers, which formerly controlled the extraction well pumps, with level transducers located in the extraction wells. The level transducers allow the extraction pumps to maintain a static water level in the extraction wells and a more consistent capture zone. Each well pump is controlled by a well transducer that maintains a groundwater elevation of 38.3 to 46.7 feet MSL.

Based on discussions with the NYSDEC and HRP regarding the 2012 Remedial System Optimization (2012 RSO), the extraction wells were temporarily suspended on December 5, 2012 to allow for groundwater sampling and analysis to evaluate contaminant profiles across the screened intervals. Based on this evaluation, extraction wells EXT-1 and EXT-2 were retrofitted with packers to focus groundwater removal to shallow groundwater, found to be the majority of the remaining contaminated intervals from the site. Following completion of the retrofitted packers, pumps were reinstalled and the treatment system was re-activated. A step-test was conducted on each well to ensure that capture is being achieved. The results of this test were evaluated and indicate that a 10% percentage reduction in order to reduce overall influent clean groundwater and limit capture from the up-gradient plume/source while maintaining the capture from contamination originating on-site from EX-1 and EX-2.

Groundwater Treatment System Path of Remediation

Groundwater pumped from the extraction wells enters a 60,000-gallon equalization tank situated adjacent to the treatment building. Water from the equalization tank flows through two parallel metals-removal trains that are each rated for 250 gpm. Each train includes a reaction tank, a flocculation tank, a clarifier, and a filter and is followed by air-stripper feed tanks. The feed tanks divert the water through a single packed tower air stripper rated at an average rate of 500 gpm and then through parallel liquid phase carbon units each rated at 250 gpm. The air emission from the air stripper is treated with vapor phase carbon. The treated water is then stored in two 42,000-gallon vessels prior to reinjection to the subsurface via four butterfly valve injection wells and/or two infiltration galleries located on the adjacent SUNY Farmingdale campus. The extraction wells are equipped with high-level alarms and are regularly gauged. However, the infiltration galleries are not equipped with level sensors or alarms.

In 2001, after the first nine months of operation, the addition of oxidizing chemicals (potassium permanganate) to the metals removal system was discontinued as the influent metals analytical concentration to the plant met EPA discharge standards for metals. Water continues to flow through the metals portion of the treatment system.

The remediation system is manned by two operators working 40-hour weeks, and an autodialer (telemetry unit) is installed to contact the operators in case of plant alarms. The operators typically respond to alarms within 30 minutes.

Groundwater Treatment System Operating Permits

Water Permit

The plant was issued a water discharge permit dated January 1, 1998. According to Brian Baker, NYSDEC Section Chief, Western Section, Bureau of Water Permits the permit was extended to the end of calendar year 2013. A permit renewal application was submitted to the NYSDEC Bureau of Water permits to review the application and complete a permit reauthorization. It is important to note that the NYSDEC Bureau of Water does not have regulatory authority over a discharge from a State, PRP, or Federal Superfund Site. Therefore, Effluent Limitations and Monitoring Requirements outlined in the permit must be submitted to the NYSDEC Division of Environmental Remediation, Remedial Bureau E.

Air Permit

An air permit is not required for the remediation system operation. In particular, NYSDEC regulation 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". Based on a review of the information pertaining to the remediation system, volatile organic compounds (VOCs) air emissions from the remediation system historically have been negligible.

2.2 Groundwater Treatment System Performance Evaluation

2.2.1 Flow Rate

The volume of treated water discharged by the treatment plant to the injection well field is determined daily from readings of the magnetic flow meter on the plant effluent line. Since startup, the system has treated more than 1.92 billion gallons of groundwater. During the fourth quarter of 2013 (October - December), the treatment system processed 45 million gallons of water.

Flow to infiltration galleries IG-1 and IG-3 is restricted so that flow to IW-1 and IW-3 is maximized. The plant's effluent discharge is limited by injection pump system capacity.

2.2.2 Groundwater Treatment System Contaminant Removal

To evaluate the treatment system's contaminate removal rate, HRP reviewed available treatment system inlet (Charts 1, 1a, 1b, 1c and 2) and effluent analytical results from monthly operation and mainatence (O&M) sampling when the system is operational. Approximately 890 kilograms of chlorinated solvents have been removed since 2002. A plot of historic mass removal rates and cumulative PCE and TCE mass removal is presented as Chart 5. In addition, HRP prepares and submits monthly Groundwater Treatment System O&M Activities reports which discusses monthly O&M activities, technical support, remediation system sample results and project goals meet.

2.2.3 Groundwater Treatment System Discharge Monitoring

When the system is operational, effluent data for select VOC compounds (PCE, TCE, and 1,1-DEC) and metals (Iron and Manganese) are analyzed to evaluate compliance with established effluent discharge limits. Chart 3 shows that the past and current effluent concentrations remained below permissible discharge limit levels. Chart 4 shows that the concentrations of iron were over during the first quarter 2012 sampling results, but has since been within permissible discharge levels. Refer to the monthly O&M and the Significant Events reports for additional information on remediation system performance and daily operations.

3.0 GROUNDWATER MONITORING PROGRAM

On December 16 and 17, 2013 HRP sampled a total of 41 on-site and off-site monitoring wells. On-site monitoring wells included DW-1, DW-2, EW-5, EW-7C, EW-7D, EW-8D, EW-9D, and SW-1. Off-site wells included BP-3A, BP-3B, BP-3C, EW-1A, EW-1B, EW-1C, EW-2A, EW-2B, EW-2C, EW-2D, EW-3A, EW-3B, EW-3C, EW-4A, EW-4B, EW-4C, EW-4D, EW-6A, EW-6C, EW-10C, EW-11D, EW-12D, EW-13D, EW-14D, LF-02, MW-6D, MW-8A, MW-8B, MW-8C, MW-10B, MW-10C, MW-10D, and WT-01. In addition, the three extraction wells were sampled by isolating each recovery well pumps production water. The monitoring well locations are depicted in Figure 2a. A description of the groundwater sampling event is provided below.

3.1 Hydrological Data

At the time prior to sample collection, static groundwater levels were measured at all 41 locations on December 16, 2013. Depths to groundwater in September 20, 2013 when the PDBs were installed ranged from 42.75 ft (EW-14D) to 100.68 ft (MW-13D) below ground surface (bgs). Depths to groundwater in December 2013 when the PDB were retrieved ranged from 43.99 ft (EW-14D) to 101.58 ft (EW-12D) bgs. The inferred groundwater flow direction is to south-southeast. Overall, groundwater elevations (Table 1) and inferred groundwater flow direction based on groundwater elevation contours (Figure 2b) were generally consistent with previous data.

3.2 Groundwater Sample Collection

The groundwater samples from the fourth quarter 2013 monitoring event were collected utilizing passive diffusion bags (PDBs), inserted into the monitoring wells. PDBs were first utilized for sample collection during the May 2012 sample event. PDBs were placed at predetermined, fixed depths (Appendix A) on September 20, 2013 following the third quarter 2013 sampling event. On, December 16 and 17, 2013 HRP collected and sampled the PDBs. At the time of sample collection, the PDB bag is retrieved, pierced with a decontaminated item, and the water inside is collected in VOA vials with septum caps, preserved with HCl. The VOA vials are labeled, recorded on a chain of custody, and placed in a cooler with ice.

The samples were submitted to Test America Laboratory, of Edison, New Jersey, an NYSDOH ELAP approved laboratory, to be analyzed for VOCs via EPA Method 8260. A list of wells sampled and analytical results are presented in Table 2. Based on the historic analytical results of metals, groundwater sampling for metals was discontinued by the NYSDEC following the July 2011 sampling event.

3.3 Groundwater Analytical Results

To assess the status of groundwater quality at the Site and adjacent area which has monitoring wells, HRP compared collected analytical data from the December 2013 sampling event to historical conditions and to applicable

NYSDEC water quality criteria. Compounds detected above criteria during the December 2013 sampling event include tetrachloroethylene, trichloroethylene, cis-1,2-dichloroethylene, 1,1-dichloroethylene, vinyl chloride, 1,1,1-trichloroethane, 1,1-dichloroethane, benzene, dichlorofluoromethane, tetrachloroethylene, and isopropylbenzene. Of note, acetone in the samples is not attributed to contamination on the site, rather is a product of cross contamination in the PDB's which occurred prior to the PDB arriving at the site. A letter of explanation as to how the contamination got into the PBD and the QA/QC paperwork that accompanied the PDBs shipment is attached in Appendix B. See Table 2 for complete results. The measured VOC concentrations during this event are generally consistent with results from the previous sampling event results and from the step-draw down test evaluation, during which the extraction wells were shut off for a portion of the PDB contact time.

3.3.1 Comparison to Historical Groundwater Quality

The attached charts (Chart 6a through Chart-6c) illustrate the historical concentration trends for PCE and/or TCE in three wells (EW-1a, EW-4c, SW-1). These wells were selected due to consistent elevated VOC analytical results and the presence of sufficient historical data. In all cases, the results continue to indicate a general downward trend in VOC concentrations.

3.3.2 Plume Evaluation

An assessment of groundwater contamination distribution was conducted by creating contaminant isopleth charts depicting PCE and TCE concentrations versus time (Charts 6a through 6c). In addition, cross sections and plume footprint maps (Figures 3a and 3b) were generated for this sampling event. In general, a decreasing level of contamination was observed. Monitoring wells not associated with the Claremont Site monitoring program, but with the Former American Louvre site is represented on the map as these sites are located hydraulically upgradient and the Old Bethpage Landfill site is represented on the map as these sites are located hydraulically side gradient with an upgradient aspect from the Claremont Site.

<u>PCE Contamination (Figure 3a)</u>

PCE has historically been present above groundwater criteria in two zones of the sampling area for the site. Cross section A-A' east of the site shows an on-site migrating PCE plume with maximum observed concentrations of 21 ug/l at EW-7c. A separate plume appears to originate on-site, with maximum concentrations of 58 ug/l in SW-1 (Cross section C-C'). These plumes seem to be separate (Figure 3A, Cross Section Location cutout). Additional exceedances were noted in the southern portion of the study area, centered on wells BP-3b and BP-3c (180 ug/l).

TCE Contamination (Figure 3b)

TCE contamination is predominant to the east of the site building (Cross section A-A'), and is at its highest concentration (440 ug/l) in well EW-7c, upgradient of the site, and in the furthest downgradient monitoring well to the southeast towards EW-14d (280 ug/l). This plume appears to be separate from an onsite generated plume (Cross section B-B'). The on-site generated plume has maximum observed concentrations of 8.2 ug/l in SW-1 (Cross section C-C'). As with PCE contamination, additional exceedances were noted in the southern portion of the study area, centered on well BP-3c.

4.0 EXTRACTION WELL CONTAMINANT PROFILE AND MODIFICATION

On December 5, 2012, the recovery pumps were removed from the extraction wells and a series of PDBs were deployed in each extraction well at several predetermined depths described below to evaluate the contributing zones of contamination in each extraction well. Previous to this sample event, the extraction wells had not been sampled utilizing PDBs, they were sampled in a single stream through the use of the extraction system utilizing the pumps. Prior to this data was used to optimize recovery pump placements and install packers to limit groundwater flow from clean screened intervals in the extraction wells.

Contaminated groundwater was observed in EXT-1 and EXT-2 in the shallowest samples, and throughout EXT-3. Packers were installed in EXT-1 and EXT-2 to concentrate groundwater removal to the impacted depths. Following installation of the packers, all three pumps were replaced, and system operation resumed. Step-draw down pumping tests were conducted on June 27, 2013 in each recovery well to optimize flow rates and ensure contaminant capture. The step-draw down test data recommended a 10% percentage reduction in order to reduce overall influent clean groundwater and limit capture from the up-gradient plume/source while maintaining the capture from contamination originating on-site from EX-1 and EX-2.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

HRP completed a groundwater monitoring event in December 2013 at the Claremont Polychemical Corporation site, in which groundwater samples from 44 wells were collected. Analysis of the data has resulted in the following conclusions:

- A groundwater plume of VOCs, primarily PCE originates from the south of the main site building.
- Based on the contamination noted in the upgradient monitoring wells, additional co-mingled plumes (potentially former American Louvre site, Old Bethpage Landfill, Trilite Site, and/or the Fireman’s Training Center) migrate into the study area, and are marked by TCE predominance. The upgradient wells and southeastern wells are out of the operable unit VI and the radius of influence of the remediation system;
- Some or all of the TCE plume originating northeast of the site is not being captured by the current treatment system;
- Two plumes identified southeast of the site may be related to the northernmost plume, although based on the current monitoring network, data gaps between the plumes exist;

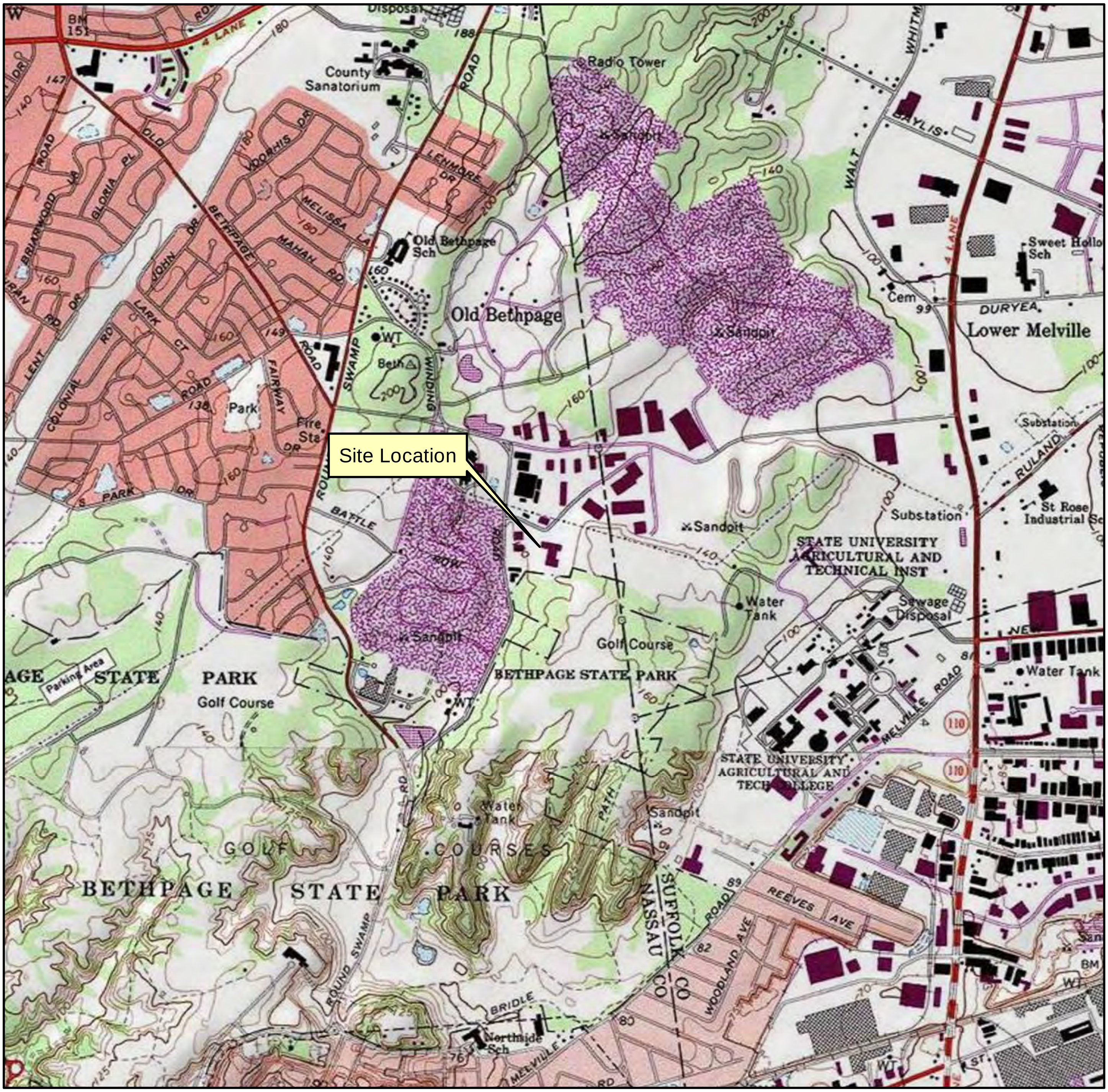
- Since the reduction in the flow rate to EXT-1 and EXT-2 and retrofit of the packers, the rate of contamination has been consistent with past sampling rounds, and has slightly increased from historic removal rates as shown on Chart 5;
- The results from the fourth quarter 2013 groundwater sampling event showed compounds detected above criteria during the September 2013 sampling event include tetrachloroethylene, trichloroethylene, cis-1,2-dichloroethylene, 1,1-dichloroethylene, vinyl chloride, 1,1,1-trichloroethane, 1,2-dichloroethane, benzene, dichlorofluoromethane, and isopropylbenzene; and
- Additional subsurface data information is needed to evaluate potential source areas in the south of the former site building and their contributions to shallow groundwater contamination observed in EXT-2 and EXT-3.

5.2 Recommendations

Based on analysis of data collected during this and historical events, HRP has the following recommendations for the Claremont Polychemical Corporation site:

- Resample the groundwater in the three extraction wells in December 2013 to observe any contamination concentrations changes due to remediation system adjustments or plume migration as compared to the past analytical results;
- Continued quarterly VOC monitoring of 41 observation wells using PDBs;
- Investigation of soils in the southern and eastern portions of the site to evaluate shallow groundwater impact observed in EXT-2 and EXT-3, and
- Additional investigation to identify the source and connectivity of the plumes or elevated concentrations identified in the MW-10 well cluster, the BP-3 well cluster and specifically at EW-14D (Figure 3d).

FIGURES



USGS Quadrangle Information
Quad ID: 40073-G4
Name: Huntington, New York
Date Rev: 1977
Date Pub: 1979

0 1,000 2,000 4,000 6,000 8,000 Feet

1 inch = 2,000 feet

N

Figure 1
Site Location
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM
Site Code 130015
Scale 1" = 2,000'

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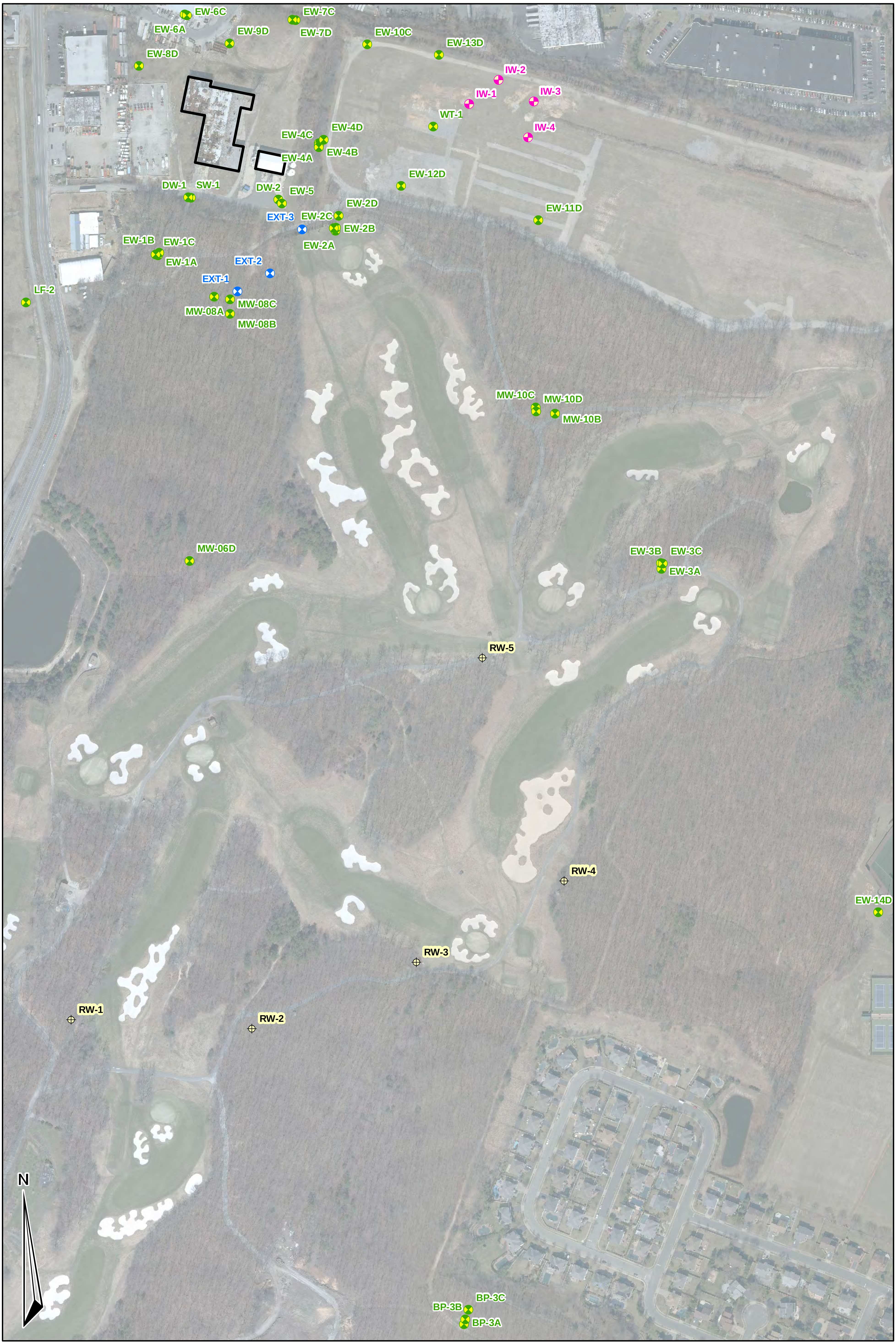

Figure 2a- GWTS Well Network
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM Site Code 130015
Scale 1" = 300'

Legend

- ● Monitoring Well
- ⊗ Extraction Well
- ◐ Injection Well
- ⊕ Oyster Bay Extraction Well
- ▭ Site Buildings

300 150 0 300
Feet

1 inch = 300 feet

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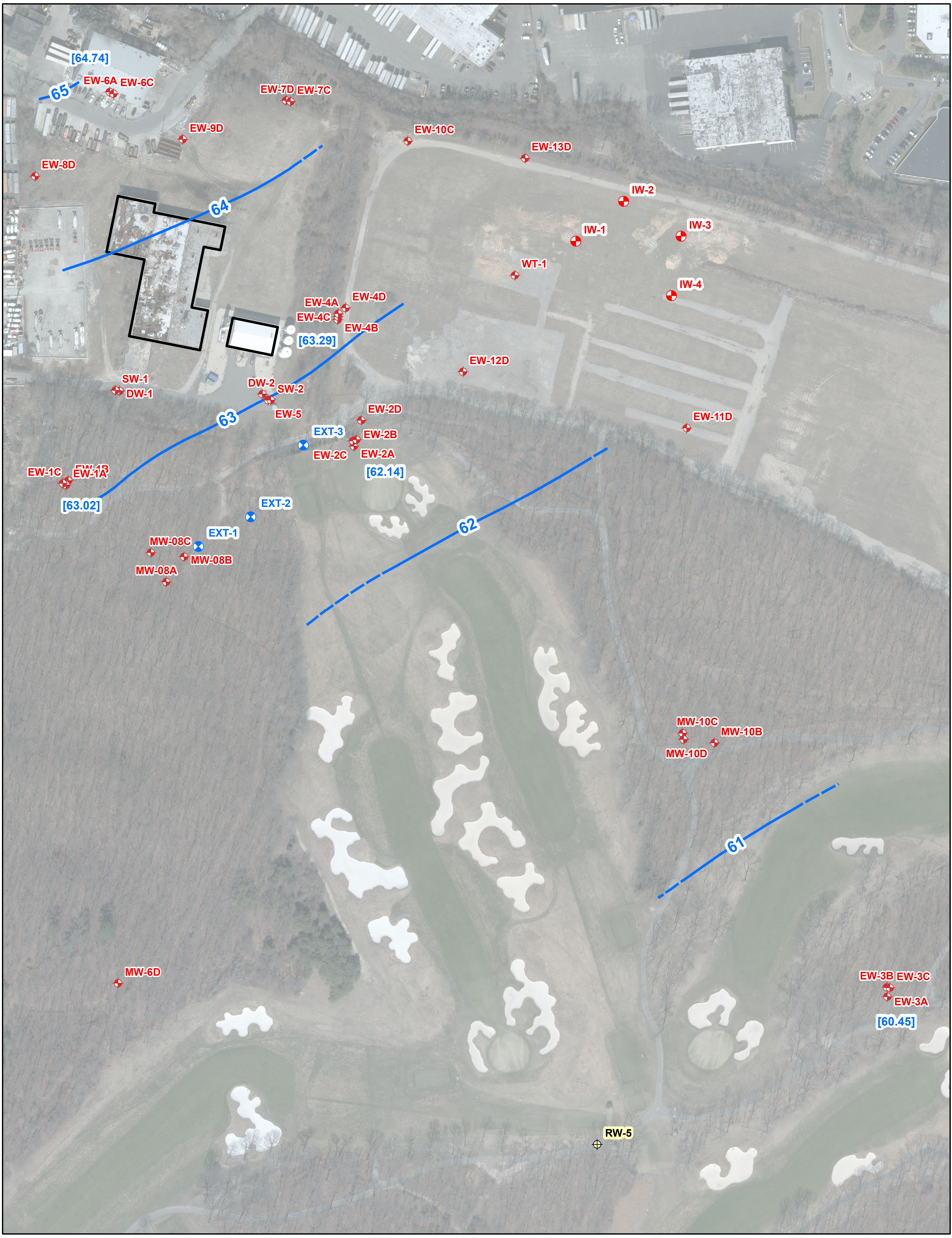

N

Figure 2b
Shallow Groundwater Elevation Contours
December 2013
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM
Site Code 130015
Scale 1" = 200'

200 100 0 200 400
Feet

1 inch = 200 feet

Legend

- ● Monitoring Well
- ● Extraction Well
- ● Injection Well
- ⊕ Oyster Bay Extraction Well
- — December 2013 Groundwater

Note: Contours dashed where inferred.

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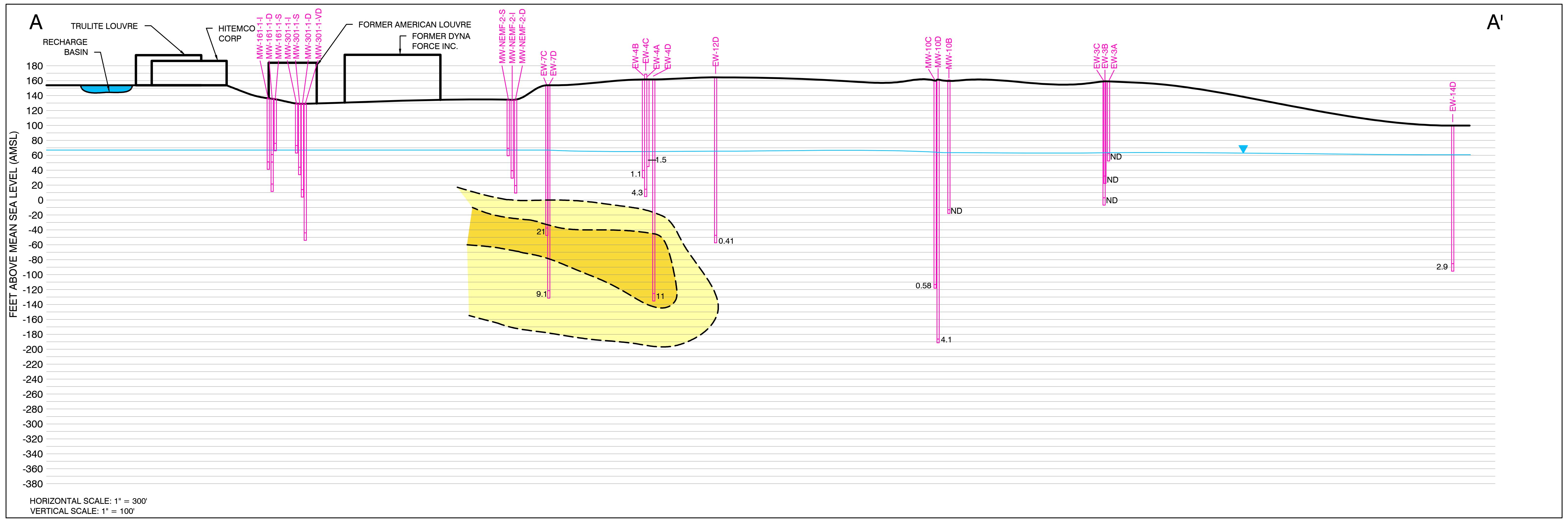
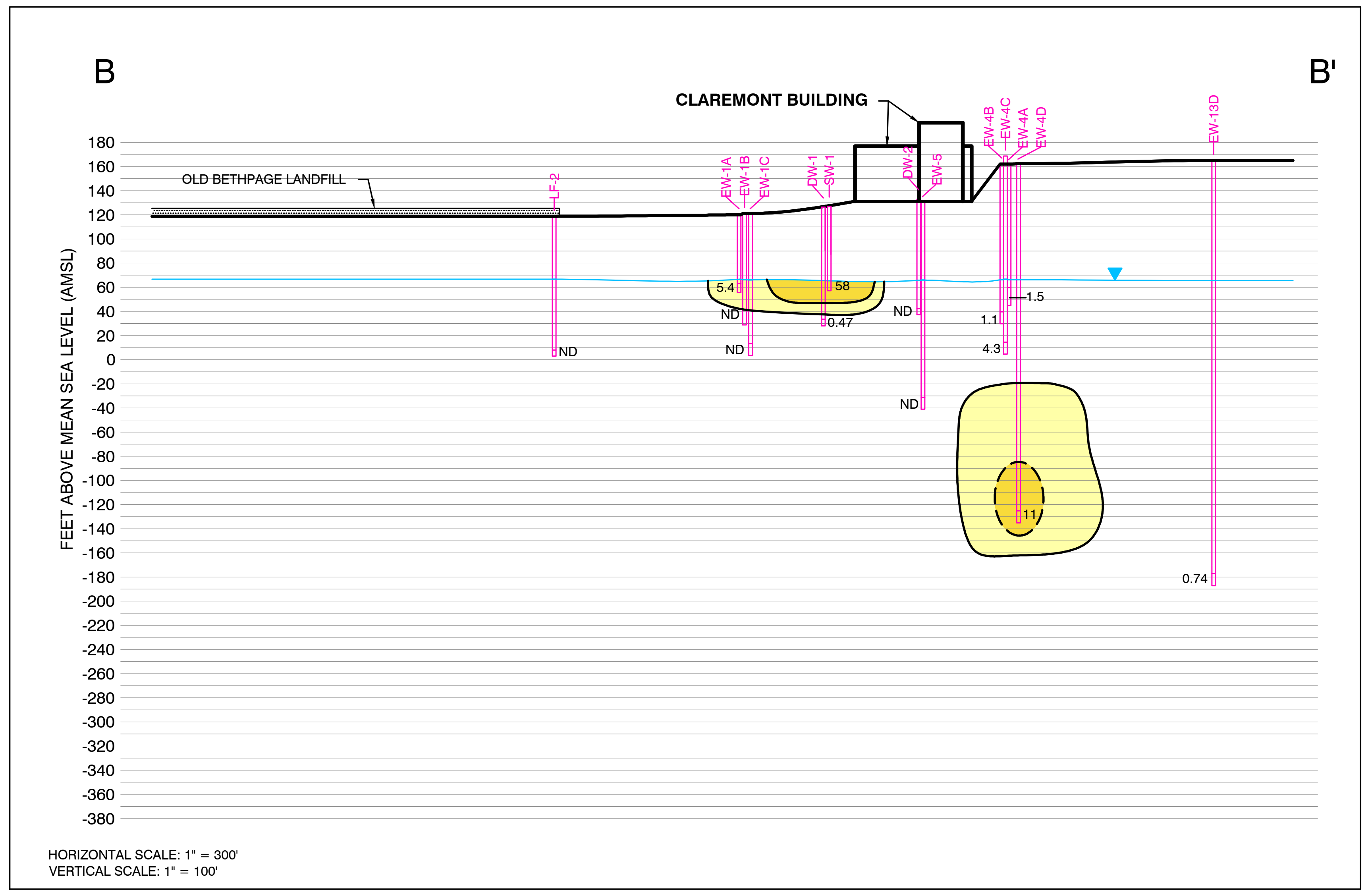


HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 100'



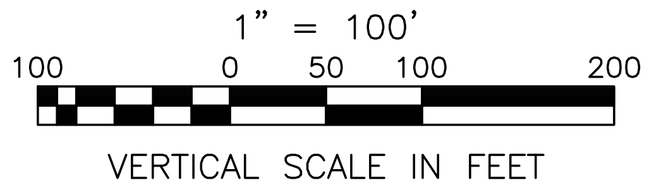
HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 100'

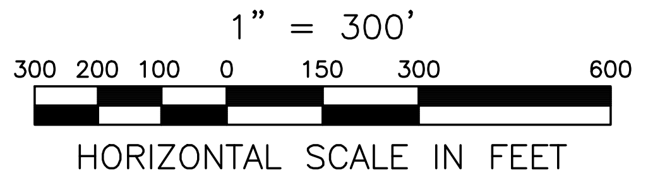
LEGEND

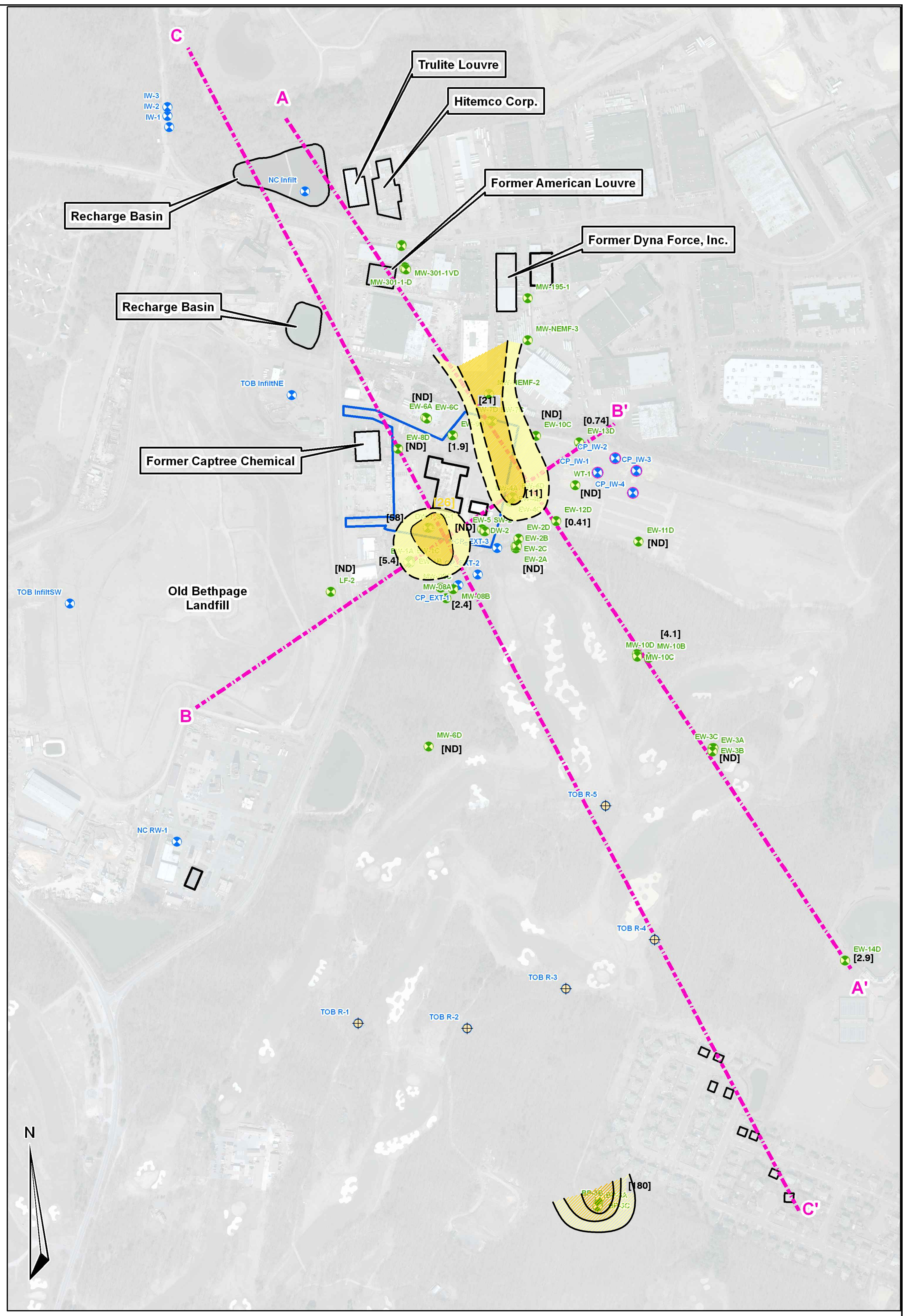
-WATER TABLE

PCE CONCENTRATION ISOPLETHS

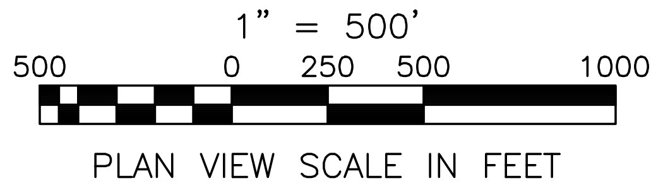
🟨	-5 ug/l - 10 ug/l
🟨	-10 ug/l - 100 ug/l
🟧	->100 ug/l
3.1	-PCE CONCENTRATION IN ug/l
▯	-MONITOR WELL
▯	-SCREENED INTERVAL

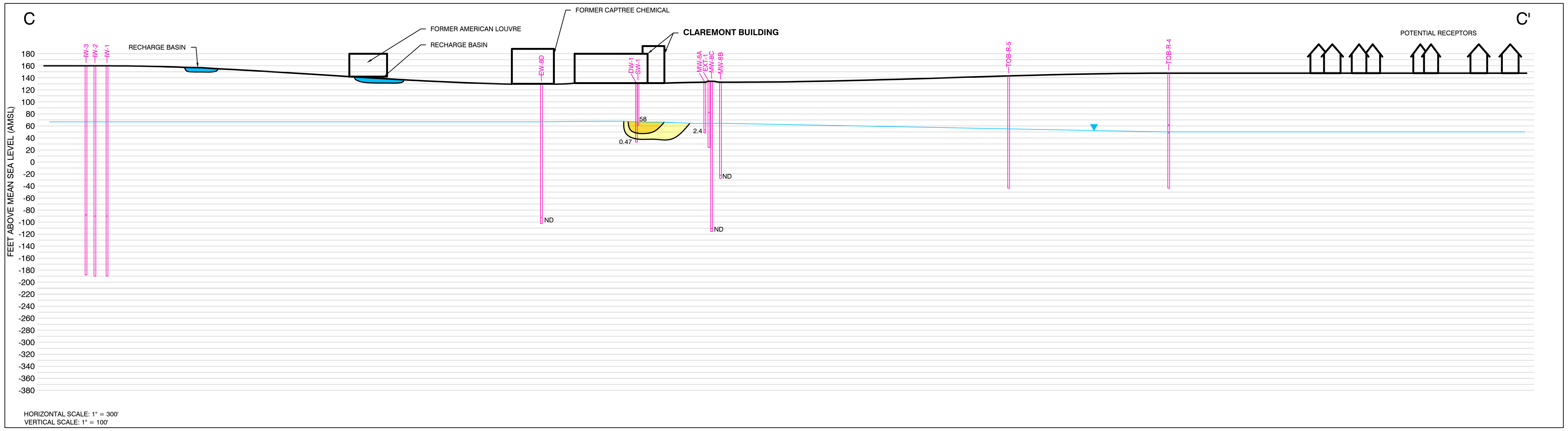






CROSS SECTION LOCATIONS
SCALE 1" = 500'





HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 100'

NO.	DATE	DESCRIPTION

PCE CONTAMINATION - DECEMBER 2013

CLAREMONT POLYCHEMICAL CORP.
OLD BETHPAGE, NEW YORK

HRP Associates, Inc.
dba HRP Engineering P.C.
Environmental/Civil Engineering & Hydrogeology
Creating the Right Solutions Together
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www.hrpassociates.com

JMP DESIGNED	BPW APPROVED	AS NOTED SCALE
DML DRAWN	1/15/2014 DATE	FIG. 3A SHEET NO.
GTS CHECKED	NEW9625.OM PROJECT NO.	

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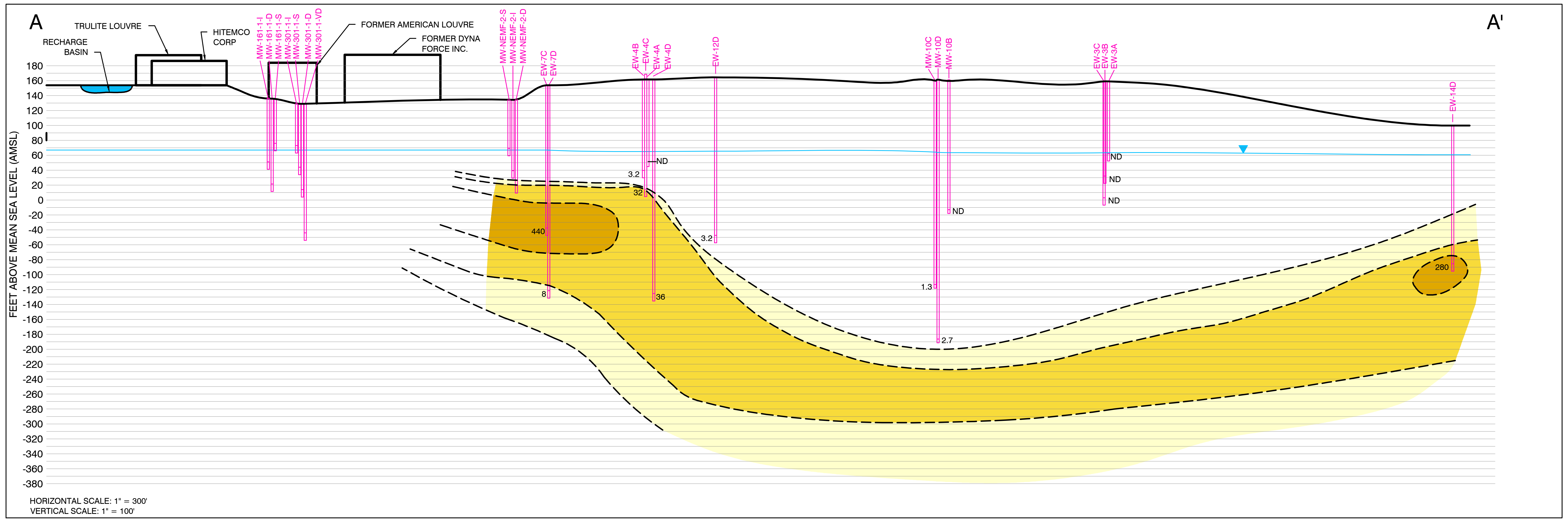
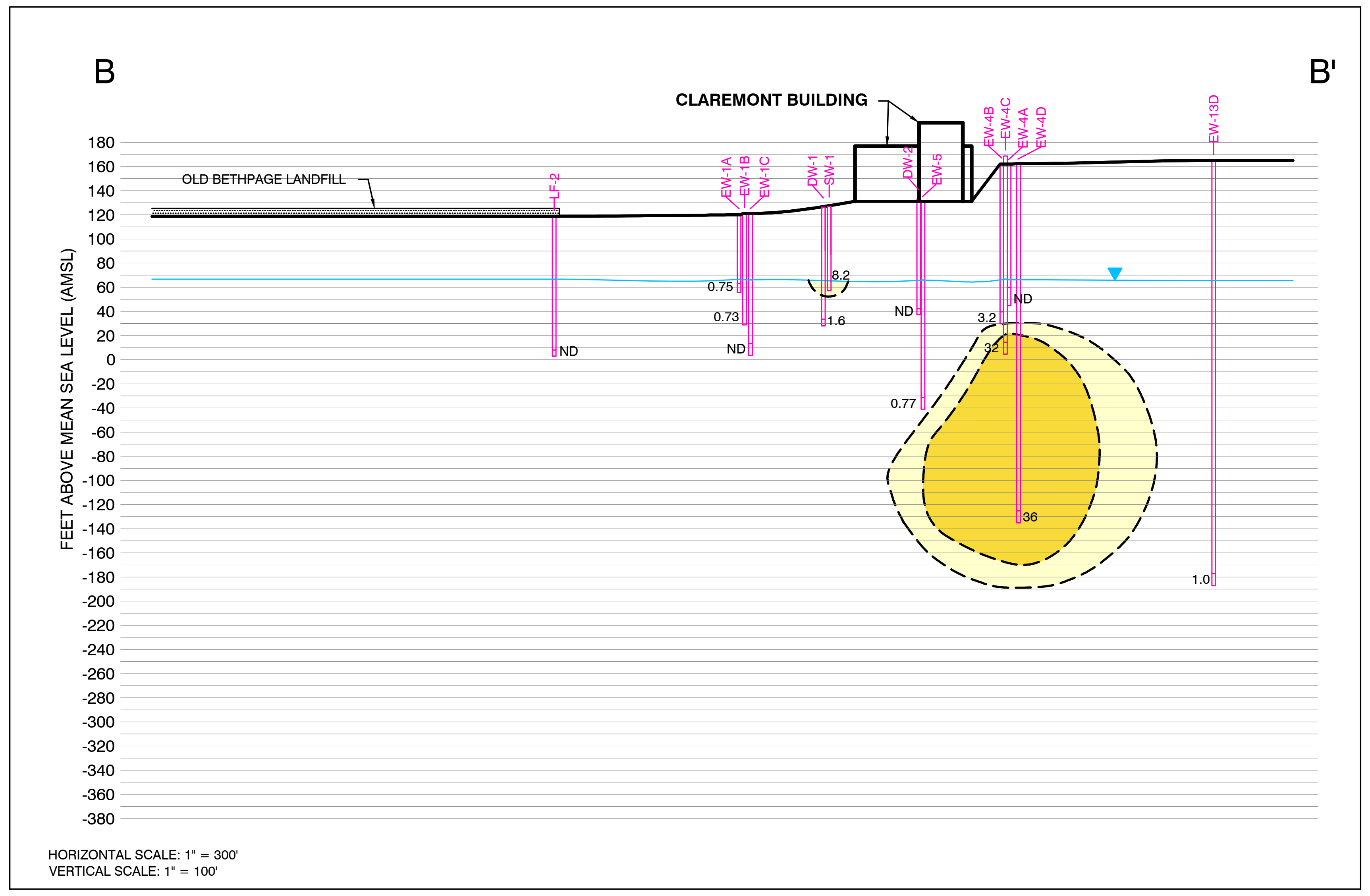


HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 100'



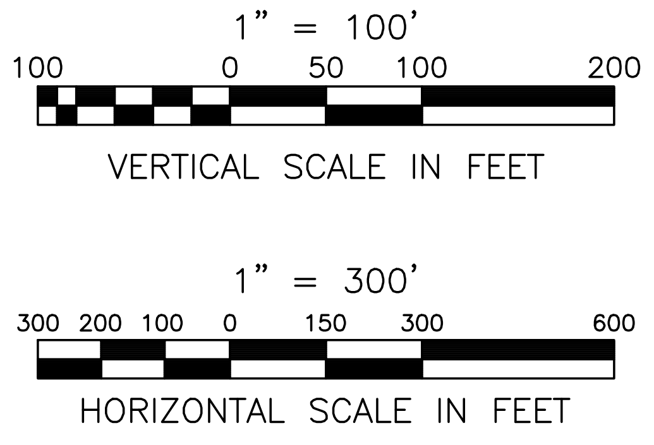
HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 100'

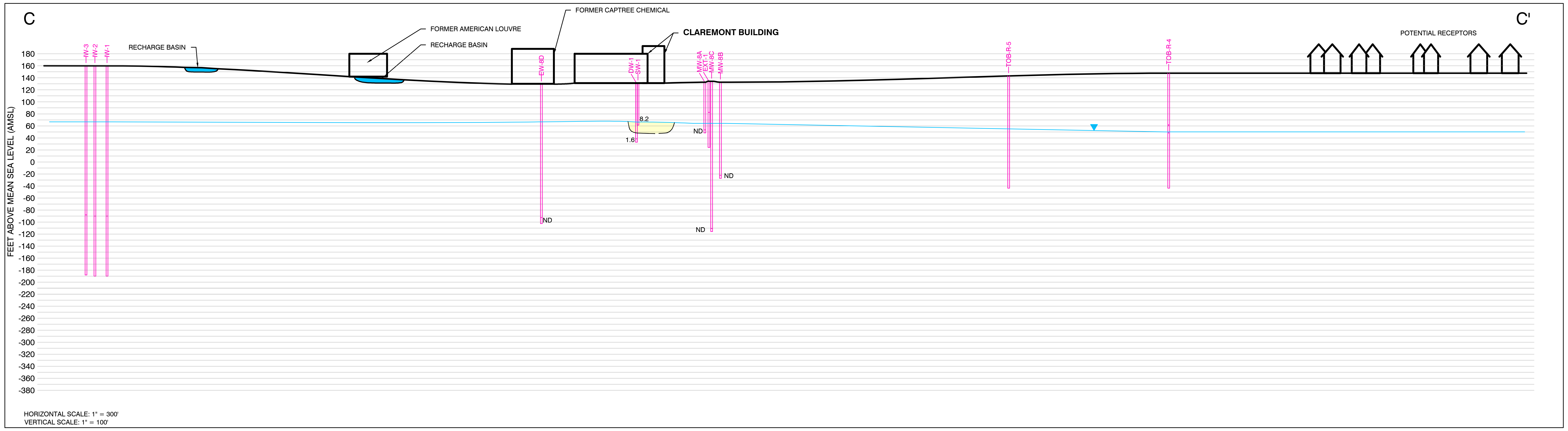
LEGEND

▼ -WATER TABLE

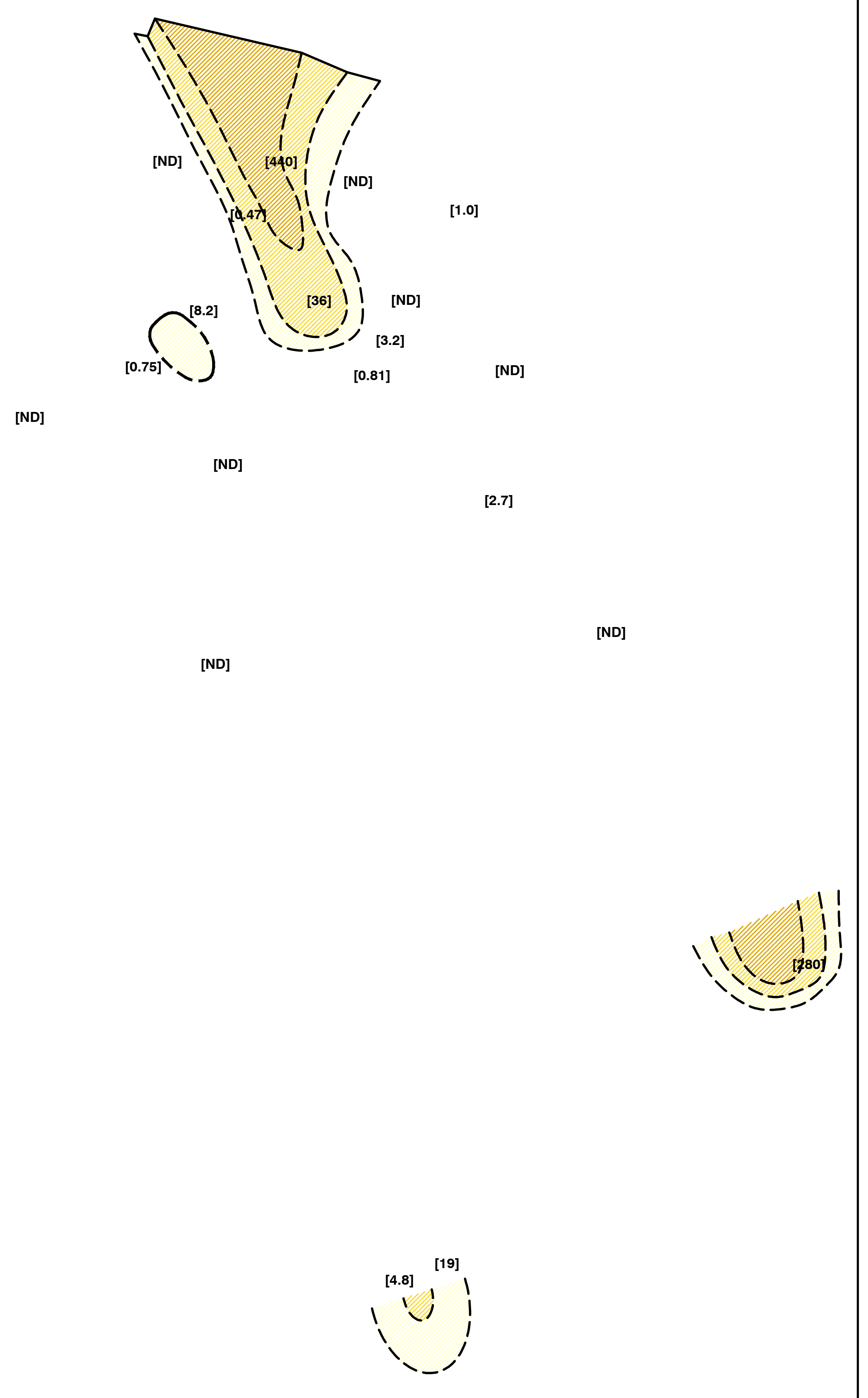
TCE CONCENTRATION ISOPLETHS

- 5 ug/l - 10 ug/l
- 10 ug/l - 100 ug/l
->100 ug/l
0.53 -TCE CONCENTRATION IN ug/l
— — — — -DASHED WHERE INFERRED

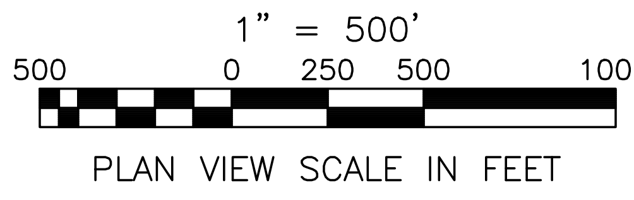




HORIZONTAL SCALE: 1" = 300'
VERTICAL SCALE: 1" = 100'



CROSS SECTION LOCATIONS
SCALE 1" = 500'



NO.	DATE	DESCRIPTION

TCE CONTAMINATION - DECEMBER 2013

CLAREMONT POLYCHEMICAL CORP.
OLD BETHPAGE, NEW YORK

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www.hrpassociates.com

JMP DESIGNED	BPW APPROVED	AS NOTED SCALE
DML DRAWN	1/15/2014 DATE	FIG. 3B SHEET NO.
GTS CHECKED	NEW9625.OM PROJECT NO.	

J:\N\NEWEN - NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION\CLAREMONT POLYCHEMICAL CORP, OLD BETHPAGE, NY\NEW9625OM\CAD\DECEMBER 2013 - TCE CONTAMINATION XSECTION.dwg
Figure 3B, 1/15/2014 4:17:55 PM, DWG To PDF.pc3

TABLES

Table 1: Groundwater Elevations
March 2014 (1Q14) Samplign Event
Claremont Polychemical Superfund Site
Old Bethpage, New York
Site Code; 130015 WA# D006130-19

Well ID	Sample Date	Depth to Water Below Ref El[b] (ft)	Water Elevation (ft AMSL)
EW-1A	16-Dec-13	66.70	63.30
EW-1B	16-Dec-13	67.22	63.31
EW-1C	16-Dec-13	67.30	63.14
EW-2A	16-Dec-13	95.43	61.93
EW-2B	16-Dec-13	95.49	62.24
EW-2C	16-Dec-13	95.42	62.24
EW-2D	16-Dec-13	95.30	62.94
EW-3A	16-Dec-13	99.59	59.36
EW-3B	16-Dec-13	99.60	59.49
EW-3C	16-Dec-13	98.85	60.10
EW-4A	16-Dec-13	98.50	63.28
EW-4B	16-Dec-13	98.55	63.25
EW-4C	16-Dec-13	98.34	63.20
EW-4D	16-Dec-13	98.36	63.41
EW-5	16-Dec-13	73.20	63.78
EW-6A	16-Dec-13	64.80	65.52
EW-6B	abandoned		
EW-6C	16-Dec-13	65.30	65.10
EW-7C	16-Dec-13	88.90	64.89
EW-7D	16-Dec-13	89.10	64.61
EW-8D	16-Dec-13	66.50	65.04
EW-9D	16-Dec-13	72.99	64.54
EW-10C	16-Dec-13	96.48	64.46
EW-11D	16-Dec-13	102.74	62.59
EW-12D	16-Dec-13	101.54	62.88
EW-13D	16-Dec-13	101.05	63.68
EW-14D	16-Dec-13	44.00	58.13
SW-2	dry		
DW-2	16-Dec-13	73.93	62.49
SW-1	16-Dec-13	68.42	63.07
DW-1	16-Dec-13	68.30	63.08
LF-02	16-Dec-13	59.00	59.70
PPW-1	Permanently closed Oct. 2008		
WT-01	16-Dec-13	98.10	66.47
MW-6D	16-Dec-13	98.43	61.96
MW-8A	16-Dec-13	72.30	60.88
MW-8B	16-Dec-13	71.80	62.44
MW-8C	16-Dec-13	73.00	62.72
MW-10B	16-Dec-13	99.72	61.40
MW-10C	16-Dec-13	99.65	60.62
MW-10D	16-Dec-13	99.45	61.72
BP-3A	16-Dec-13	67.42	57.12
BP-3B	16-Dec-13	67.42	56.15
BP-3C	16-Dec-13	67.50	56.18
RW-01	abandoned		

Table 2: Summary of Analytical Results
December 2013 (4Q13) Samplign Event
Claremont Polychemical Superfund Site
Old Bethpage, New York
Groundwater Samples - Analyzed for VOCs 8260 C
Site Code; 130015 WA# D006130-19

Monitoring Well	BP-3A	BP-3B	BP-3C	DW-1	DW-2	EW-01A	EW-01B	EW-01C	EW-02A	EW-02B	EW-02C	EW-02D	EW-03A	EW-03B	EW-03C	EW-04A	EW-04B	EW-04C	EW-04D	EW-05	NYSDEC Class GA Criteria
Date Collected	12/16/13	12/16/13	12/16/13	12/17/13	12/16/13	12/17/13	12/17/13	12/17/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	
WATER-8260B (ug/L)																					
1,1,1-Trichloroethane	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	1.3	2.7	<2 U	<1 U	5
1,1,2-Trichloroethane	<1 U	<1 U	(<4) U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	(<2) U	(<2) U	<1 U	1
1,1,2-Trichlorotrifluoroethane (freon 113)	<1 U	0.42 J	3.4 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
1,1-Dichloroethane	<1 U	2.9	9	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
1,1-Dichloroethylene	<1 U	<1 U	1.2 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	0.6 J	1.8 J	<2 U	<1 U	5
1,2,4-Trichlorobenzene	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
1,2-Dichlorobenzene	<1 U	<1 U	(<4) U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	3.0
1,2-Dichloroethane	(<1) U	(<1) U	(<4) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<2) U	(<2) U	(<1) U	0.6
1,4-Dichlorobenzene	<1 U	<1 U	(<4) U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	3
2-Butanone (MEK)	8.1 J *	8.4 J *	<40 U *	8.8 J *	7.1 J *	8.5 J *	11 *	8.7 J *	7.8 J *	7.7 J *	6 J *	5.9 J *	<10 U *	6.7 J *	7 J *	8.6 J *	8.4 J *	<20 U *	<20 U *	<10 U *	50
Acetone	650 E	600 E	700	690 E	850 E	610 E	620 E	620 E	620 E	640 E	690 E	610 E	670 E	760 E	660 E	640 E	760 E	820	840	8.1 J	50
Benzene	<1 U	<1 U	(<4) U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	(<2) U	(<2) U	<1 U	1
Bromodichloromethane	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	50
Bromoform	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	50
Carbon disulfide	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	0.2 J	60
Carbon tetrachloride	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
Chlorobenzene	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
Chloroethane	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
Chloroform	1.1	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	0.54 J	0.43 J	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	7
Chloromethane	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
cis-1,2-Dichloroethylene	<1 U	32	160	<1 U	<1 U	0.96 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
Cyclohexane	<1 U	<1 U	<4 U	<1 U	0.38 J	<1 U	<1 U	<1 U	0.26 J	0.26 J	<1 U	<1 U	<1 U	<1 U	0.35 J	<1 U	<1 U	<2 U	<2 U	<1 U	NE
Dibromochloromethane	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	50
Dichlorodifluoromethane	<1 U	1.8	15	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
Isopropylbenzene	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
m/p-Xylenes	<2 U	<2 U	<8 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<4 U	<4 U	<2 U	
Methylene chloride (Dichloromethane)	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	5
Methyltertbutyl ether	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	0.33 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	10
Tetrachloroethylene	<1 U	43	180	0.47 J	<1 U	5.4	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	1.5	1.1	4.3	11	<1 U	5
trans-1,2-Dichloroethylene	<1 U	<1 U	<4 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	2.2	<2 U	<1 U	5
Trichloroethylene	<1 U	4.8	19	1.6	0.77 J	0.75 J	0.73 J	<1 U	<1 U	<1 U	0.46 J	0.81 J	<1 U	<1 U	<1 U	<1 U	3.2	32	36	<1 U	5
Vinyl chloride	<1 U	<1 U	7.5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<2 U	<2 U	<1 U	2

Monitoring Well	EW-06A	EW-06C	EW-07C	EW-07D	EW-08D	EW-09D	EW-10C	EW-11D	EW-12D	EW-13D	EW-14D	LF-02	MW-06D	MW-08A	MW-08B	MW-08C	MW-10B	MW-10C	MW-10D		NYSDEC Class GA Criteria
Date Collected	12/17/13	12/17/13	12/17/13	12/17/13	12/16/13	12/17/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	12/17/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13	12/16/13		
WATER-8260B (ug/L)																					
1,1,1-Trichloroethane	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	35	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
1,1,2-Trichloroethane	(<2) U	(<2) U	(<8) U	(<2) U	(<2) U	<1 U	<1 U	<1 U	<1 U	<1 U	0.69 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		1
1,1,2-Trichlorotrifluoroethane (freon 113)	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	0.83 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
1,1-Dichloroethane	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	0.73 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
1,1-Dichloroethylene	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	0.57 J	0.31 J	31	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
1,2,4-Trichlorobenzene	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
1,2-Dichlorobenzene	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	1.2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		3.0
1,2-Dichloroethane	(<2) U	(<2) U	(<8) U	(<2) U	(<2) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	7.6	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	(<1) U	0.7 J		0.6
1,4-Dichlorobenzene	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	2.9	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		3
2-Butanone (MEK)	<20 U *	7.9 J *	(<80) U *	<20 U *	<20 U *	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	4.7 J *	<10 U *	<10 U *	<10 U *	<10 U *	<10 U *		50
Acetone	640	670	690	640	710	650 E	630 E	660 E	630 E	650 E	610 E	670 E	640 E	810 E	750 E	660 E	670 E	660 E	730 E		50
Benzene	(<2) U	(<2) U	(<8) U	(<2) U	(<2) U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	3.2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		1
Bromodichloromethane	<2 U	<2 U	<8 U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		50
Bromoform	<2 U	<2 U	<8 U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		50
Carbon disulfide	<2 U	<2 U	<8 U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		60
Carbon tetrachloride	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
Chlorobenzene	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	3.3	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
Chloroethane	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
Chloroform	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	1.3	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		7
Chloromethane	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
cis-1,2-Dichloroethylene	<2 U	<2 U	8.6	<2 U	<2 U	<1 U	<1 U	<1 U	1.1	<1 U	1.9	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
Cyclohexane	<2 U	<2 U	<8 U	<2 U	<2 U	<1 U	<1 U	<1 U	0.33 J	<1 U	<1 U	0.45 J	<1 U	<1 U	<1 U	0.25 J	<1 U	<1 U	0.28 J		NE
Dibromochloromethane	<2 U	<2 U	<8 U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		50
Dichlorodifluoromethane	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
Isopropylbenzene	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	5.5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
m/p-Xylenes	<4 U	<4 U	<16 U	<4 U	<4 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	1.3 J	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U		
Methylene chloride (Dichloromethane)	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
Methyltertbutyl ether	<2 U	<2 U	1.8 J	<2 U	<2 U	<1 U	0.49 J	<1 U	<1 U	<1 U	<1 U	<1 U	2.2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		10
Tetrachloroethylene	<2 U	<2 U	21	9.1	<2 U	1.9	<1 U	<1 U	0.41 J	0.74 J	2.9	<1 U	<1 U	2.4	<1 U	<1 U	<1 U	0.58 J	4.1		5
trans-1,2-Dichloroethylene	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		5
Trichloroethylene	<2 U	<2 U	440	8	<2 U	0.47 J	<1 U	<1 U	3.2	0.97 J	280 E	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	1.2	2.6		5
Vinyl chloride	<2 U	<2 U	(<8) U	<2 U	<2 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U		2

NYSDEC class GA criteria are from NYSDEC Technical and Operational Guidance Series (TOGS 1.1.1), Ambient water quality, class GA standards/guidance values from Table 1.

Bold and Shaded	**-** Sample Exceeds NYSDEC Class GA Criteria
Bold	**-** Sample is above Non-Detect Value but Below NYSDEC Class GA Criteria
( )	- Indicates the stated minimum detectable level exceeds a criteria.
MW	- Monitor Well
ug/l	-micrograms per liter
VOCs	-Volatile Organic Compounds
J	- an estimated concentration

CHARTS

Chart 1: Groundwater Influent Concentration (PCE, TCE, and 1,1-DCE) vs. Time

December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

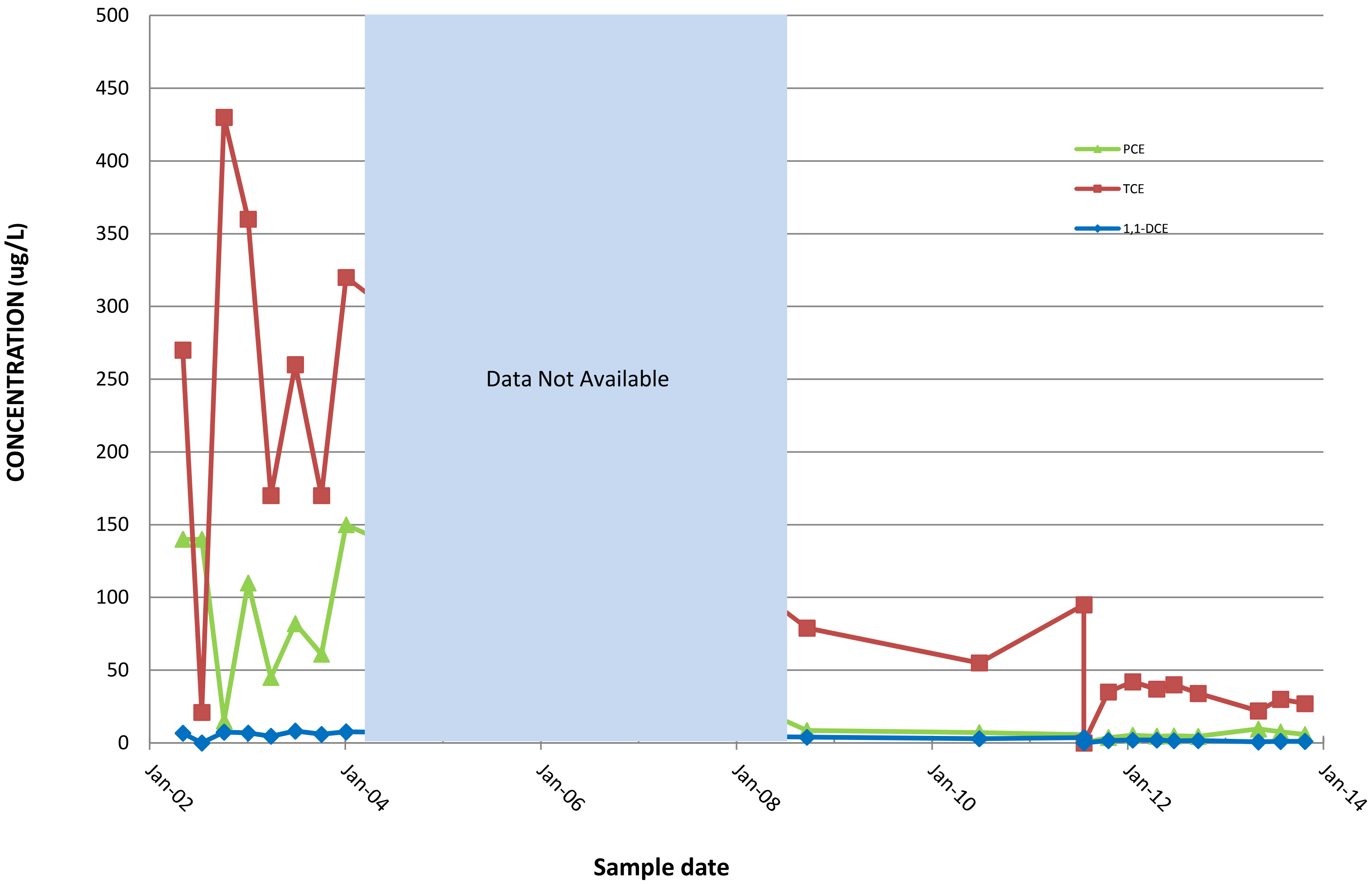
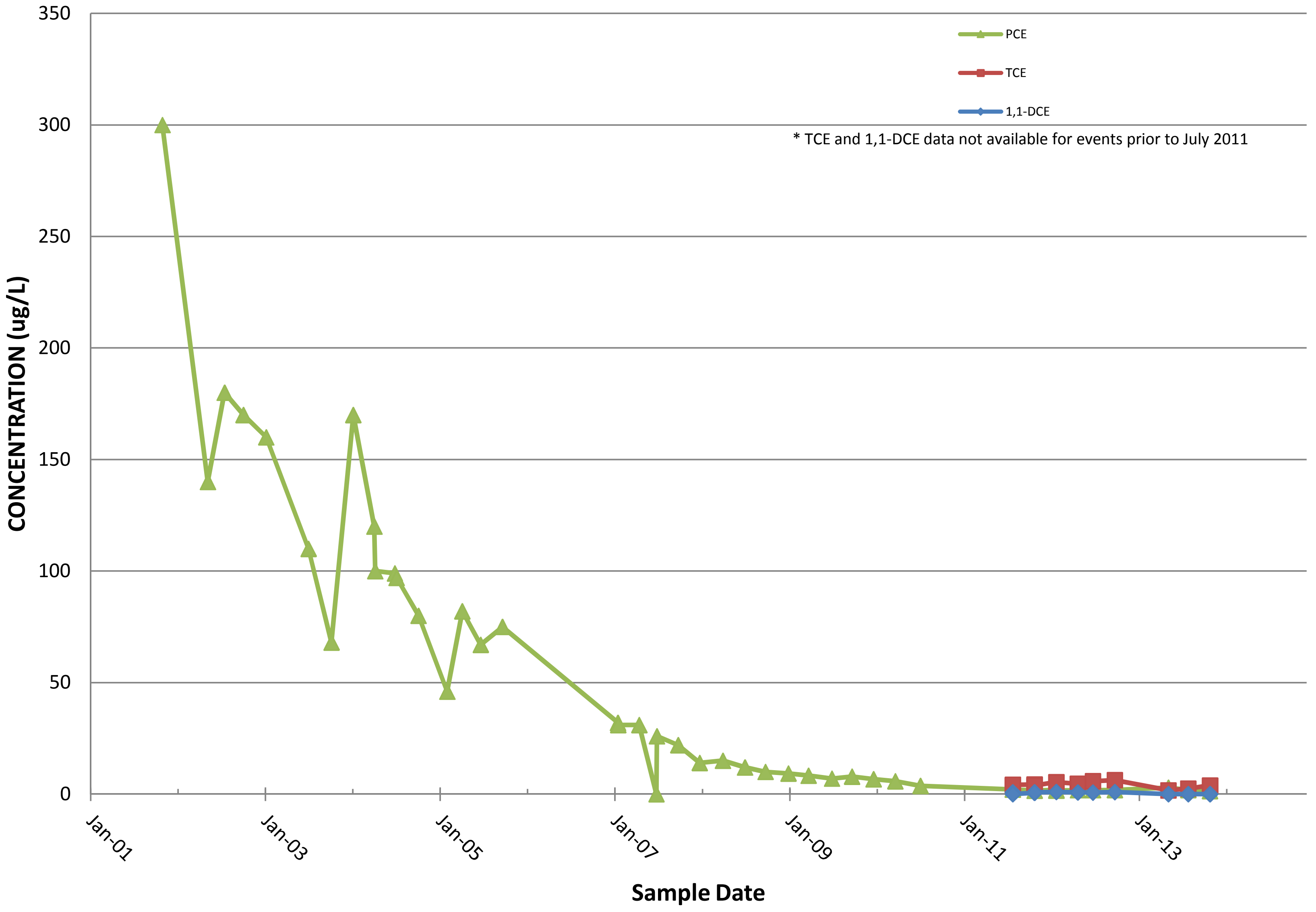


Chart 1a: EXT-1 Concentration (PCE, TCE, 1,1-DCE) vs Time

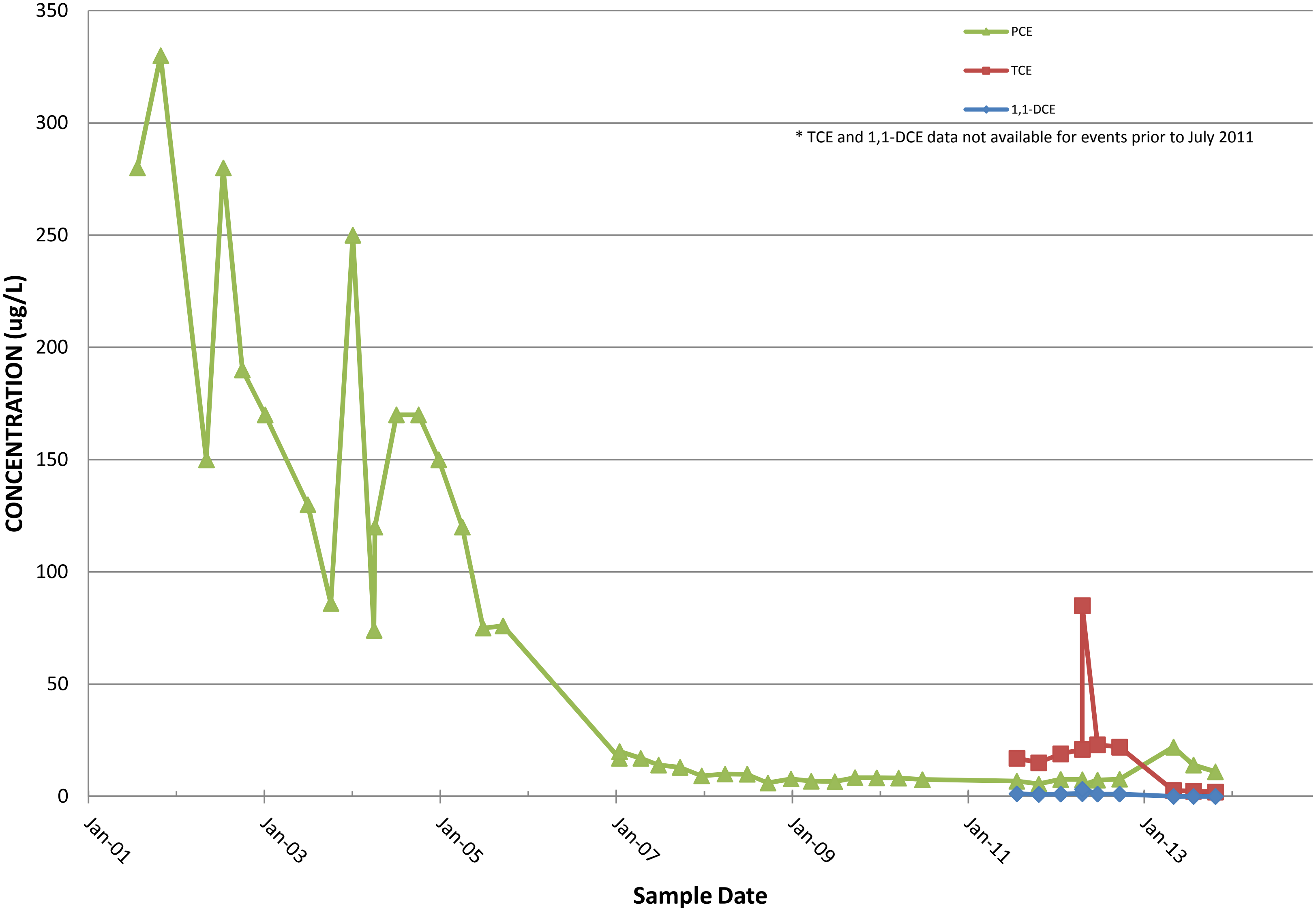
December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19



* TCE and 1,1-DCE data not available for events prior to July 2011

Chart 1b: EXT-2 Concentration (PCE, TCE, 1,1-DCE) vs Time

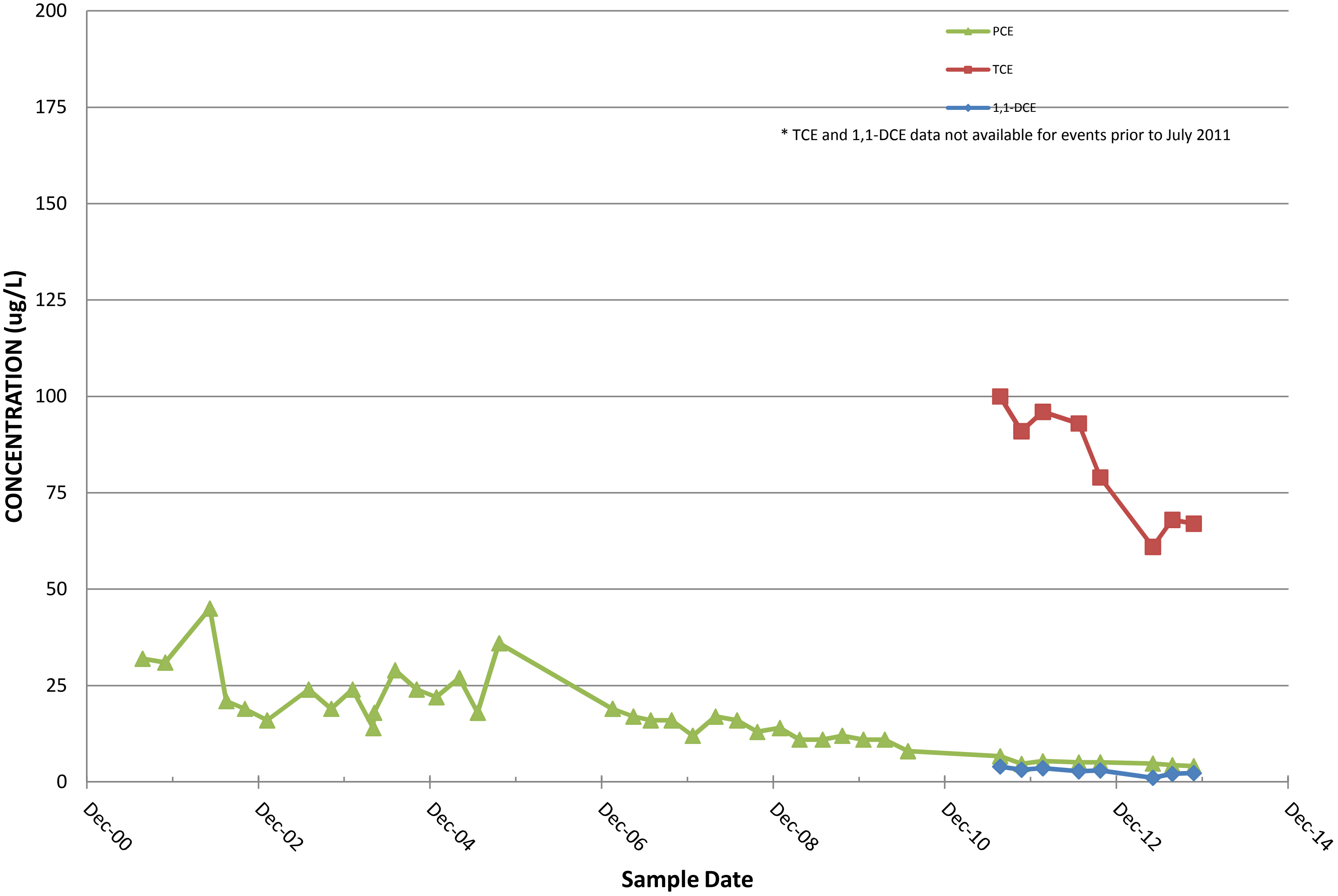
December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19



* TCE and 1,1-DCE data not available for events prior to July 2011

Chart 1c: EXT-3 Concentration (PCE, TCE, 1,1-DCE) vs Time

December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19



* TCE and 1,1-DCE data not available for events prior to July 2011

Chart 2: Groundwater Influent Concentration (Iron and Manganese) vs. Time

December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

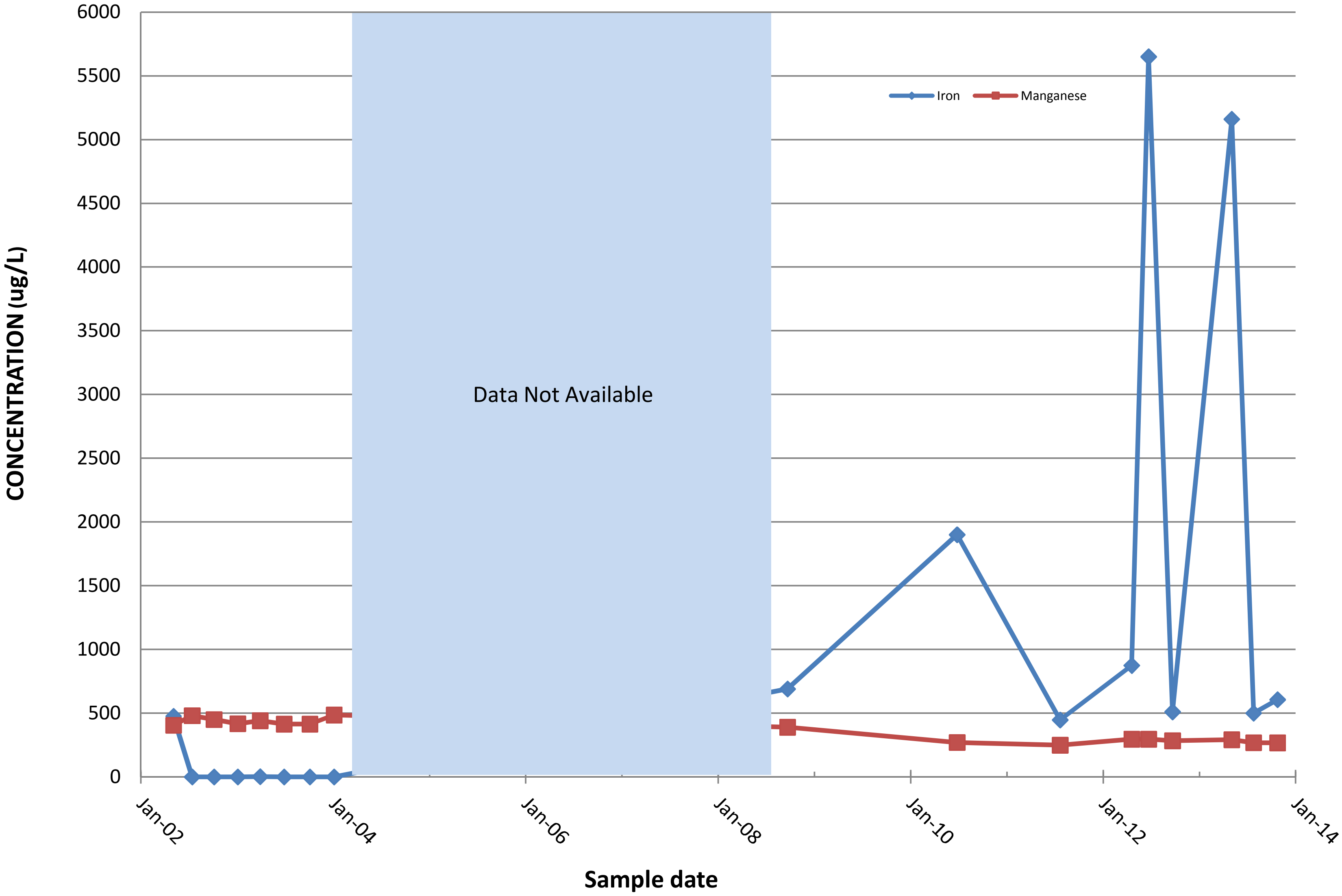


Chart 3: Treated Effluent Concentration (PCE, TCE, 1,1-DCE) vs Time

December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

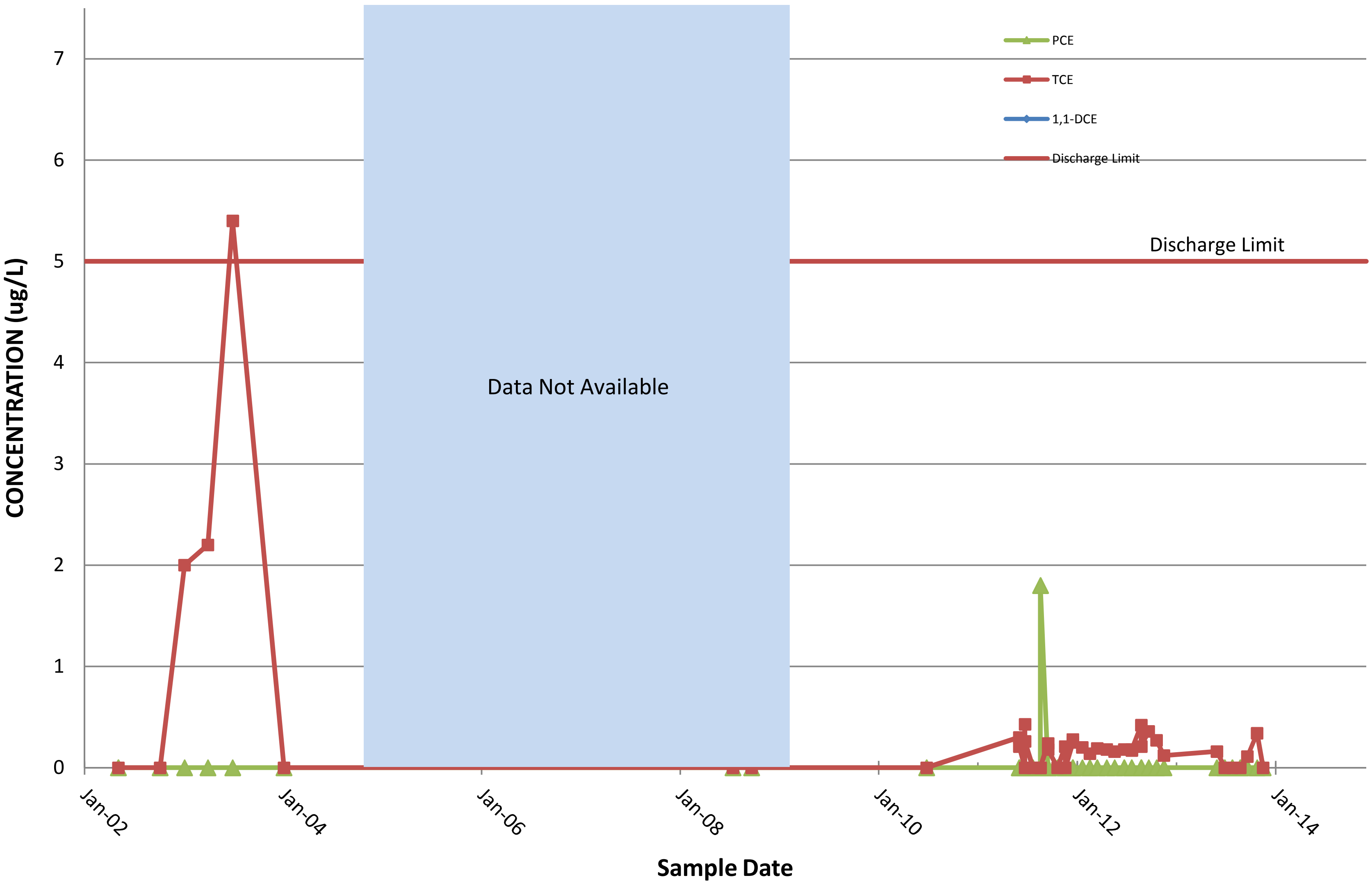


Chart 4: Treated System Effluent Concentration (Iron and Manganese) vs Time

December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

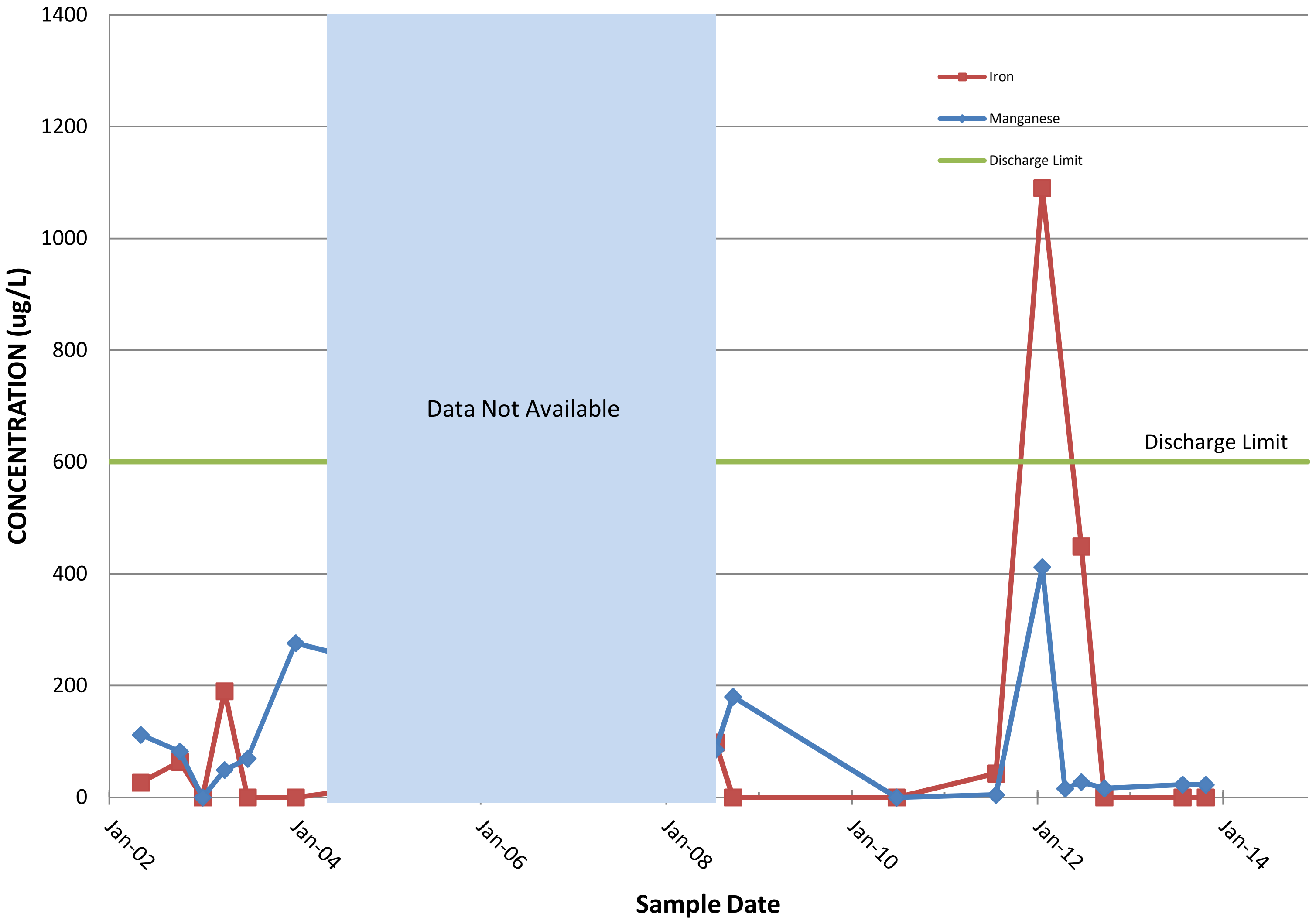


Chart 5: VOC Removal vs Time (PCE, TCE)

December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

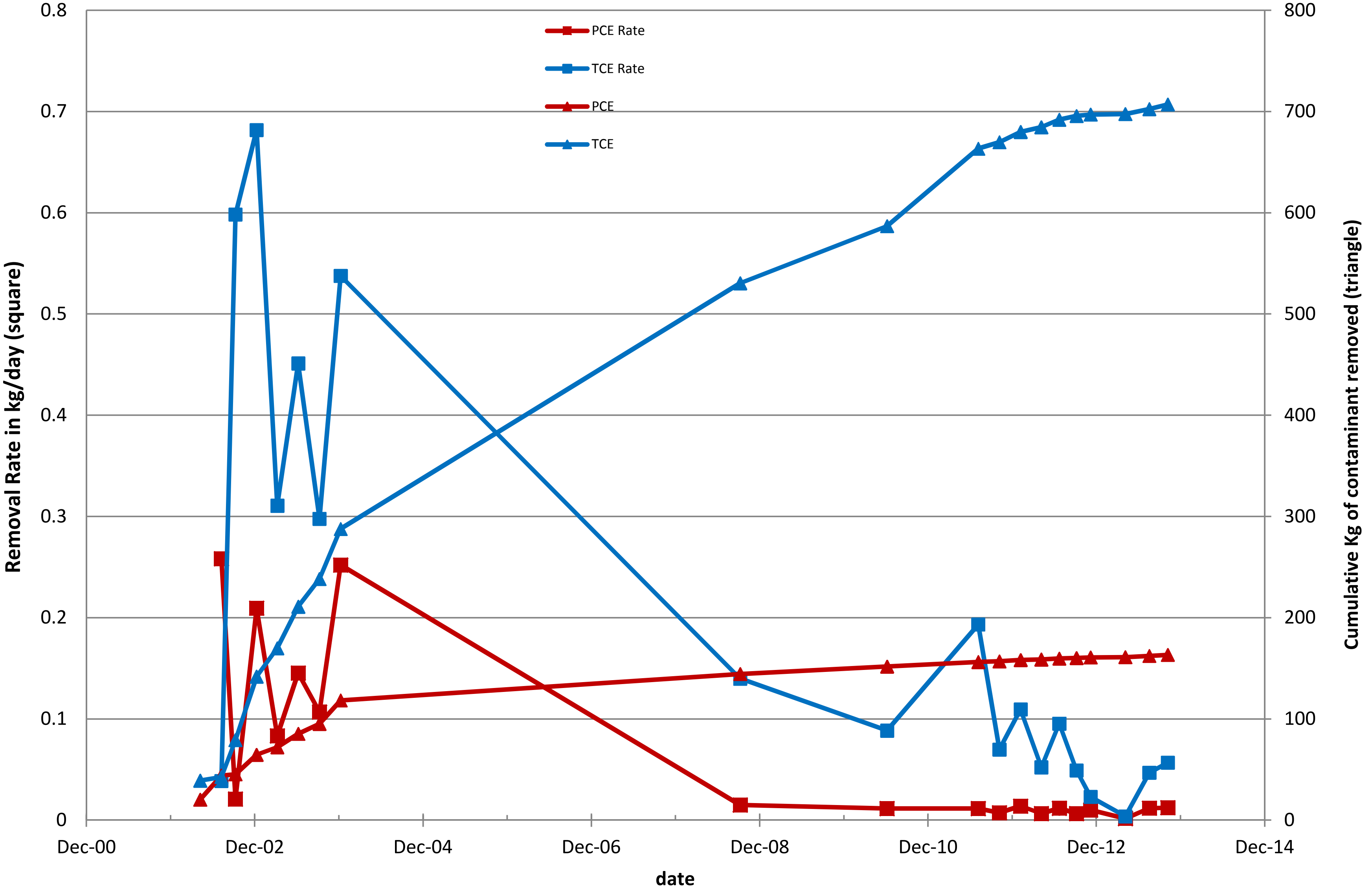


Chart 6a - PCE and TCE Concentrations In EW-1a

December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

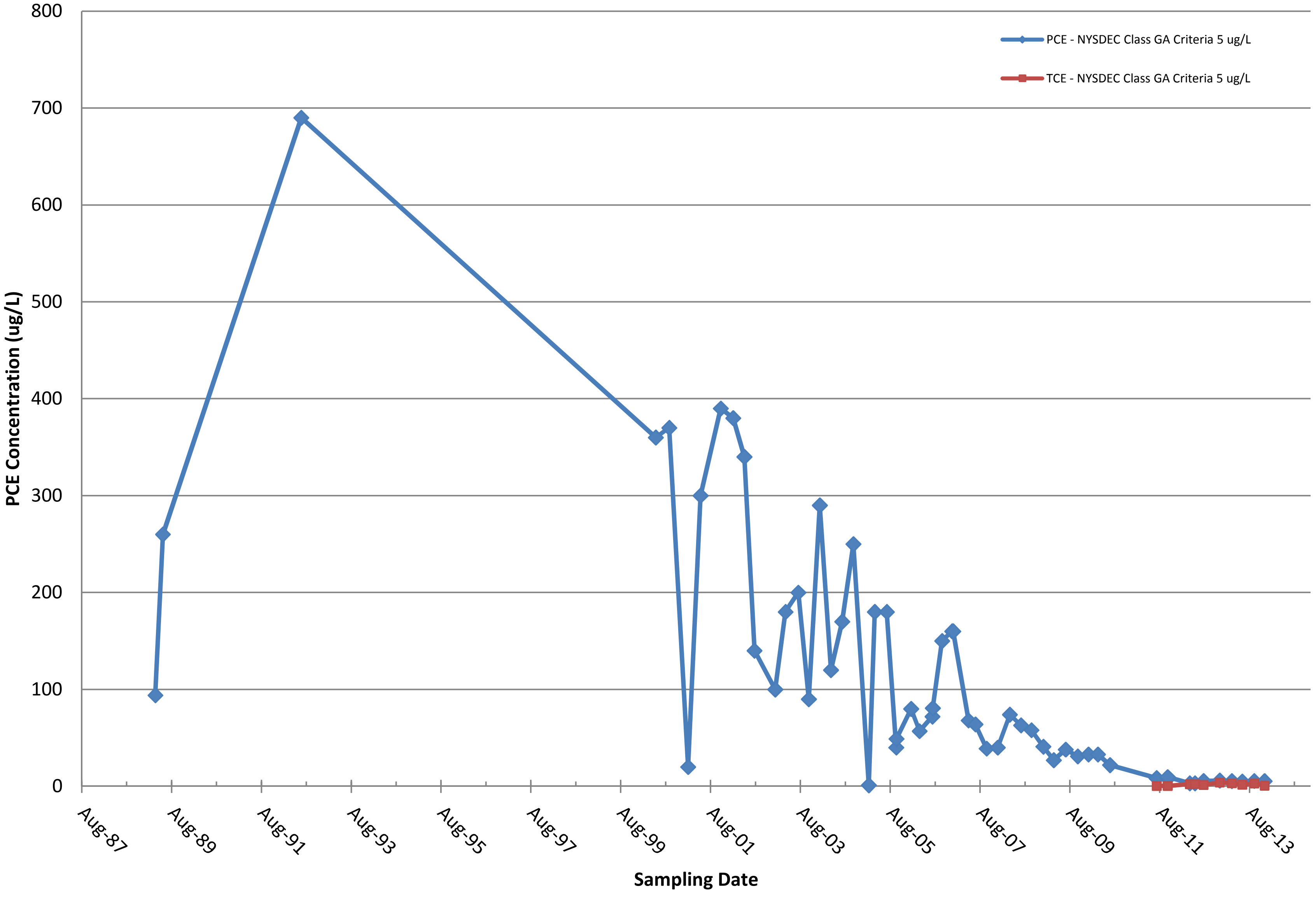


Chart 6b - PCE and TCE Concentrations in EW-4c

December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

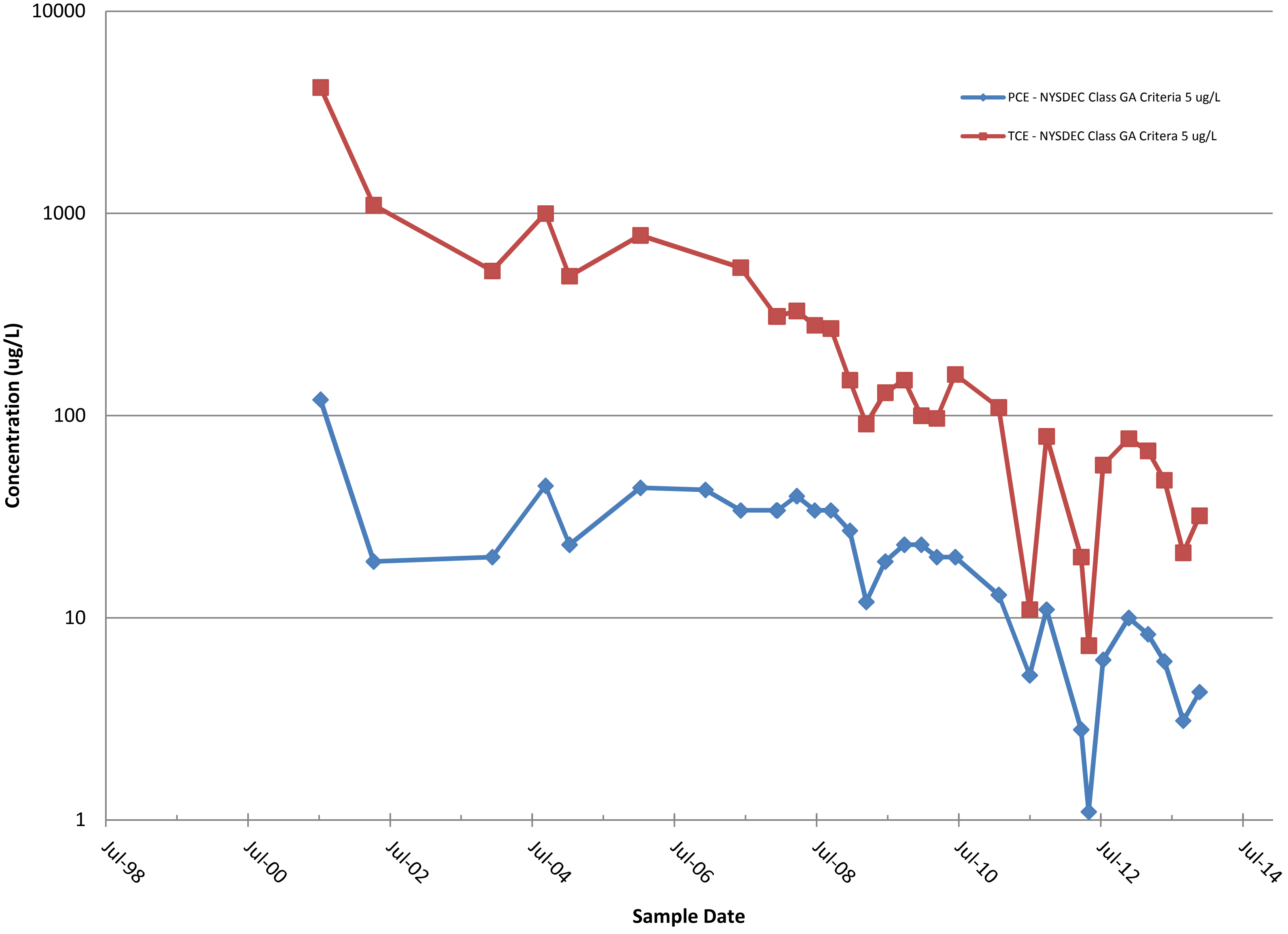
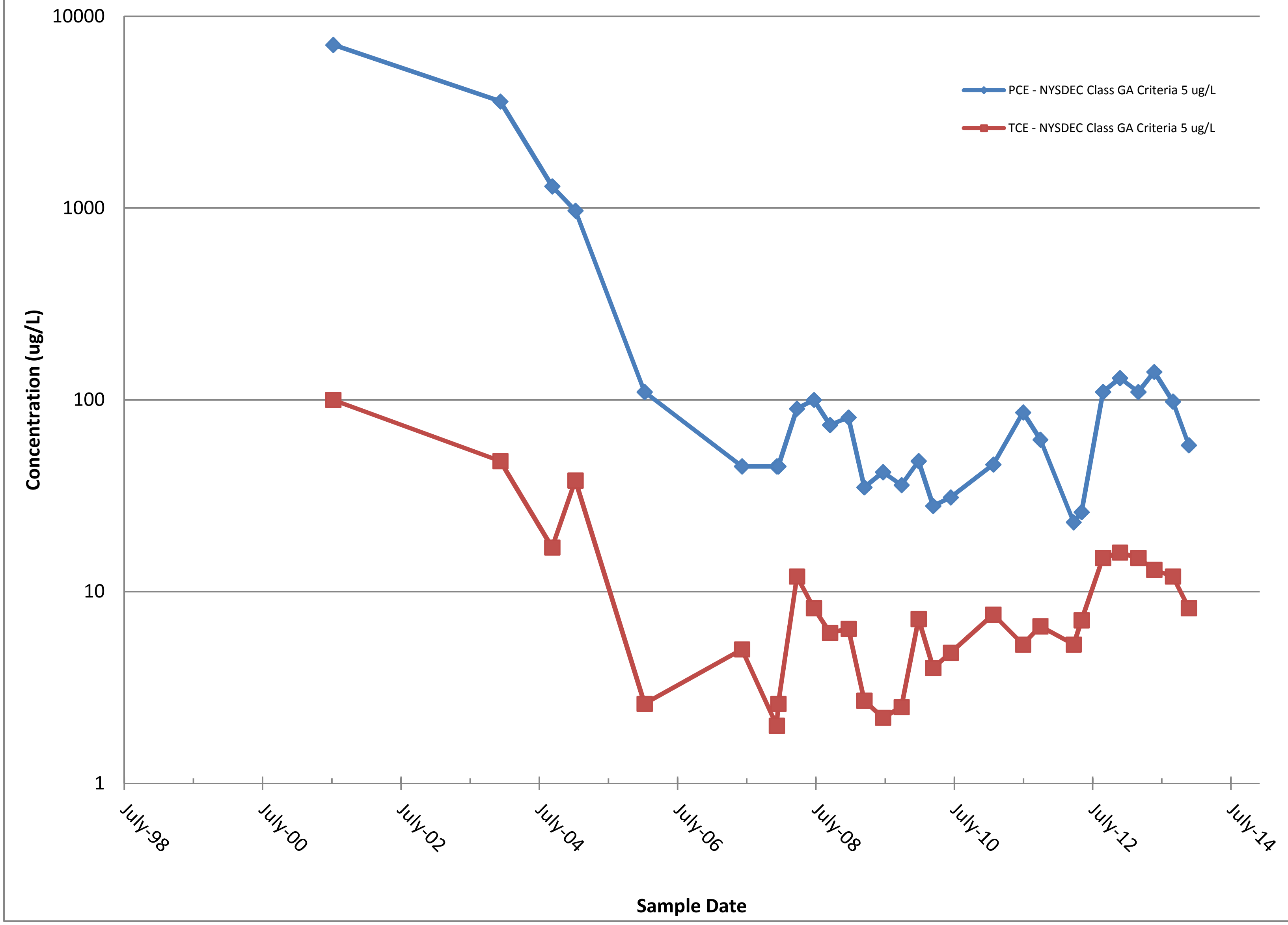


Chart 6c - PCE and TCE Concentrations in SW-1

December 2013 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19



EON
PRODUCTS INC.

January 15, 2014

Tom Sicilia
197 Scott Swamp Road
Farmington, CT

Dear Tom,

We just received the results of laboratory testing of the ASTM Type 1 deionized water we purchase from Reagents, Inc. for prefilling passive diffusion samplers. We had this testing performed on Lot# 7306319 because we received several reports of acetone hits in the range of 400 to 600 ug/L in water from the samplers analyzed after recovery from monitoring wells and from the water "blanks" we supply for QA purposes.

The samples we sent to the lab were analyzed using EPA Method 8260 and reported acetone at 620 ug/L which is consistent with the concentrations reported from the field. This means that our clients whose results indicated acetone now can conclusively show that the acetone DID NOT result from the groundwater and was introduced to the samplers from the deionized fill water. Since acetone is highly water soluble and does not readily diffuse through the polyethylene membrane, the acetone would have remained in the sampler during deployment and shown in the lab results at quantities similar to our lab results for the prefill water.

We are currently exploring the source of the acetone with Reagents, the producer of the water. Their chemist assures me that acetone is not produced, used, or stored in the same facility where the deionized water is manufactured, and that their product meets ASTM Type 1 requirements "as produced". They did run into a container shortage during the summer when the container manufacturer's factory burned down and Reagents received the water containers manufactured by another producer. While this seems a likely source we are continuing to investigate until we have a more conclusive answer.

As a result, EON will send a sample from each Lot # of fill water received from Reagents to an independent lab for testing. EON will set aside any water with significant acetone content or which does not meet the ASTM Type I standards. Once the investigation is completed we will review the Quality Assurance standards with the supplier to reduce the likelihood of future issues.

It is very important that suppliers, customers and customers' clients understand that the presence of low levels of acetone in the pdb fill water does not indicate acetone in the well and does not compromise the passive sampling technique or results. The most effective way to identify and eliminate this concern is to order water blanks with pre-filled samplers and to sample the water in the blank at the time the diffusion samplers are deployed.

Sincerely,
Bradley P Varhol
President

EON
PRODUCTS INC.

TECHNICAL NOTE: Occurrence of Acetone in PDB Results

On rare occasion we have a customer who mentions that acetone has appeared in the analytical results from a sample taken using a deionized water filled, polyethylene based passive diffusion bag sampler (PDBs). Users of PDBs should be aware that PDBs are not to be used for analysis of acetone and several other volatile compounds, and that the presence of these compounds in analytical results does not necessarily mean the compounds are in the groundwater.

Acetone, MEK and several related VOCs exhibit very poor diffusion in water across the polyethylene membrane which makes the Polyethylene PDBs unsuitable for measuring these compounds. Because of the low diffusion rate, trace amounts of these compounds that may occur in the deionized fill water will not diffuse or will diffuse very slowly through the membrane. Therefore if these compounds were present in the water from the beginning it is possible they will show up when the lab work is done.

Acetone is commonly used in laboratories and therefore is a fairly common contaminant in trace amounts in deionized water. The contaminant may enter the water by direct contact in the lab through liquid or equipment or airborne acetone may diffuse into the water through air/water contact. There is also some speculation that airborne acetone may permeate a filled polyethylene membrane more readily that water borne acetone.

Because of the possibility of acetone contamination in the water used to fill the samplers we always advise that the user take water "blanks" and / or equipment rinsate "blanks" prior to the deployment of the PDB into the well so that the fill water can be tested to show what the water contained prior to installation. **We suggest** ***A fill-water blank should also be sent to the lab on the same day that the sample is recovered in case there was acetone in the air when the sampler-water was transferred to VOA vials or in the air in the lab when they were analyzed. Based on our observations we strongly suspect that for cases of acetone “hits” either the fill water had acetone in it or there was acetone in the air when the samples were transferred or analyzed.***

As part of our quality assurance program we have had the Equilibrator Passive Diffusion Samplers tested by an independent lab using rinsate blanks to demonstrate that the EON PDBs are not a source of acetone. The results came back negative for the presence of these compounds. We are certain that the PDBs are not introducing the acetone into the analysis. The absence of acetone in these tests is consistent with the absence of acetone in the manufacture of the materials and in the storage and handling of the samplers. Acetone has a lower boiling point than the materials used to construct the samplers which means that even trace amounts that could have come in contact with the raw materials would have vaporized during the manufacturing process. The materials used are all “virgin”, having no previous use or contact with suspect chemicals.