

**2012 Second Quarter Groundwater Monitoring Report
April- June 2012
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

Prepared by:

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Submitted: July 11, 2012

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Claremont Polychemical Corporation Site
Old Bethpage, New York 11804**

Report Submittal Date: July 11, 2012
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CERTIFICATION

I, Adam Fox, certify that I am currently a Qualified Environmental Professional as defined in 6 Part NYCRR Part 375 and that this report, 2012 First 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).

Environmental Contractor: HRP Engineering, P.C.

By:

Adam Fox, P.E.

**2012 Second Quarter Groundwater Monitoring Report
April-June 2012
Claremont Polychemical Corporation Site
Old Bethpage, New York 11804**

1.0 INTRODUCTION

HRP Engineering, P.C. is pleased to submit this report containing groundwater quality data, discussions and data deliverables related to the Second Quarter 2012 (April – June 2012) groundwater monitoring event conducted at the Claremont Polychemical Corporation Site (hereinafter referred to as the “Site”). 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 represents the second quarterly monitoring period for 2012. 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 On-site treatment System;
- Brief description of the scope of the field activities;
- Groundwater Contours;
- tetrachloroethylene (PCE) and trichloroethylene (TCE) contaminant concentration profiles in groundwater;
- Maximum groundwater PCE and TCE contaminant concentrations;
- Brief discussion of the groundwater quality data;
- Comparison of data from this monitoring period to data from previous periods; and
- Groundwater Well Sampling Forms.

2.0 SITE BACKGROUND

2.1 Site Overview

The Claremont Polychemical Corporation, 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 in October 1984 and was listed in June 1986. A comprehensive Remedial Investigation/ Feasibility Study (RI/FS) for the entire 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 tetrachloroethylene (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 (ROD) issued in 1989-1990. The Site was divided into six operable units (OU). Each OU had specific remedial activities pursuant to that OU that needed to be completed. 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 the groundwater via a pump and treat system with air stripping/carbon absorption.

A groundwater collection, treatment and injection 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 470 gallons per day. SAIC Inc. operated and maintained the treatment facility 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 of the system was relinquished from the ACOE/EPA to the NYSDEC and subsequently the NYSDEC retained HRP Engineering to operate the system.

During the turnover of operations from the EPA to the NYSDEC, the NYSDEC requested copies of reports generated during the EPA's operations of the treatment system including quarterly groundwater sampling data from SAIC, EPA Region 2 and the ACOE. Based upon data that was received during the transfer of operators, it was determined that SAIC collected quarterly groundwater sampling data. Previous groundwater monitoring reports were not available for HRP's review. Therefore the historical groundwater data was 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 large two-story building, covering approximately 35,000 square feet (the former processing plant) and a smaller water treatment building. The site lies approximately 800 feet east of the border between Nassau and Suffolk County

and the site 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 prepared by SAIC and dated December 2001 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).

Further the report indicated that historically groundwater flow is 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. Hydraulic permeability (slug) tests performed during the EPA RI calculated hydraulic conductivities ranging between 200 and 400 gdp/ft² 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 report also indicated 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. HRP agrees that additional definition is warranted to better define Claremont's contribution to regional groundwater contamination and to refine our understanding of the capture zone of the onsite system.

3.0 GROUNDWATER TREATMENT SYSTEM

The EPA's construction of the Claremont Polychemical Corp. Site pump-and-treat system began in 1997 and the system went into full-scale operation in February 2000. A description of the groundwater treatment system and a review of its effectiveness are provided below.

3.1 Groundwater Treatment System Description

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

Extraction System

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. The wells are screened from approximately 60 feet mean sea level (MSL) (just below the water table) to -30 feet MSL and are outfitted with 10 horsepower pumps. Each well is capable of pumping up to 200 gpm individually. However, when they are all on, EXT-1, EXT-2, and EXT-3 respectively extract 190 gpm, 188 gpm, and 175 gpm for a total of approximately 553 gpm. The average flow rate over the course of a month is approximately 350 to 390 gpm. This average flow rate translates to approximately 500,000 to 560,000 per day which meets the onsite 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.

Treatment System

Water from the extraction system 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. These feed tanks send 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 emissions from the air stripper are treated with vapor phase carbon. The treated water is then stored in two 42,000-gallon vessels before reinjection to the subsurface via four injection wells and/or two infiltration galleries. Flow to the injection wells and galleries, located on the adjacent SUNY Farmingdale campus, is controlled by a butterfly valve. The wells are equipped with high-level alarms and are regularly gauged, however the infiltration galleries are not equipped with level sensors or alarms.

After the first nine months of operation the addition of oxidizing chemicals (potassium permanganate) to the metals removal system was discontinued as the influent to the plant already met discharge standards for metals. Water continues to flow through the metals portion of the treatment system.

The plant is manned by two operators working 40- to 50-hour weeks, and an autodialer is installed to contact the operators in case of plant alarms. The operators typically respond to alarms within 30 minutes.

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, therefore a permit renewal application needs to be submitted to the NYSDEC Bureau of Water permits by July 1, 2013 in order 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

No air permit is required for the system operation, in particular, 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 treatment system, VOC air emissions from the treatment system should be negligible, therefore substantive requirements of an air permit would be achieved and no air permit would be required.

3.2 System Evaluation Performance

3.2.1 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 1.78 billion gallons of groundwater. During this quarter (April 2012 - June 2012), 49.9 million gallons of groundwater were extracted, treated, and re-injected:

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

3.2.2 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 quarterly O&M sampling. A plot of mass removal rate and cumulative PCE and TCE mass removed is presented as Chart 5.

3.2.3 System Discharge Monitoring

Effluent data for select VOC compounds (PCE, TCE, and 1,1-DEC) and metals (Iron and Manganese) were analyzed to evaluate compliance with established effluent discharge limits. Charts 3 and 4 show that the effluent concentrations remain below permissible levels.

4.0 GROUNDWATER MONITORING PROGRAM

From May 7 to May 29, 2012 HRP sampled a total of 44 monitoring wells and extraction wells (41 monitoring wells and 3 extraction wells) located both on- and off-site. 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, WT-01, EXT-1, EXT-2, and EXT-3 (EXTs are extraction wells). The monitoring well and extraction well locations are depicted in Figure 2a. A description of the groundwater sampling event is provided below.

4.1 Hydrological Data

Following sample collection, static groundwater levels were measured at all 44 locations on May 7, 8, and 9, 2012. Depths to groundwater ranged from 41.35 ft (EW-14D) to 99.56 ft (EW-11D) below ground surface (bgs). Overall, groundwater elevations (Table 1) and flow directions (Figure 3) were consistent with previous data.

4.2 Groundwater Sample Collection

The Second Quarter of 2012 monitoring event included samples collected using passive diffusion bags (PDBs). PDBs were placed at fixed depths (Appendix A) on May 7, 8, and 9, at least two weeks prior to the sampling events (May 25 and May 29). At the time of sample collection, the bag is retrieved and transported to the site building in a cooler. The PDB is then pierced and the water inside is collected in VOA vials and preserved with HCl. The vials are labeled 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 and analytical results are presented in Table 2. Groundwater sampling for metals was discontinued following the July 2011 sampling event.

4.3 Groundwater Test Results

To assess the status of groundwater quality at the site and surrounding area, HRP compared collected analytical data from the May 2012 sampling event to historical conditions and to applicable NYSDEC water quality criteria. Compounds detected above criteria during the May 2012 sampling event include tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, and benzene. See Table 2 for complete results. The measured VOC concentrations during this event are generally consistent with historical results.

Comparisons to historical groundwater monitoring data enabled assessment of the general effectiveness of the treatment system. Comparisons to applicable criteria facilitated evaluation compliance with water quality standards (Table 2).

4.3.1 Comparison to Historical Groundwater Quality

The attached charts (Chart 5a through Chart-5c) 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 indicate a general downward trend in VOC concentrations (Charts 6a through 6c).

4.3.2 VOC Plume Evaluation

An assessment of groundwater contamination distribution was conducted by creating contaminant isopleths maps for PCE and TCE (Figures 3a and 3b). Historically, isopleths were generated for three distinct horizons, based on the screen elevations of site wells. These horizons are comparable to those identified in a 2001 SAIC groundwater report for the site. However, to provide a more complete understanding of the plume behaviors, cross sections and plume footprint maps were generated for this sampling event (Figures 3a and 3b).

PCE Contamination (Figure 3a)

PCE is present above groundwater criteria in two zones of the monitored area. Cross section A-A' east of the site shows an on-site migrating PCE plume with maximum observed concentrations of 11 ug/l at EW-7c. A separate plume appears to originate on-site, with maximum concentrations of 26 ug/l in SW-1 (cross section C-C'). These plumes seem to be separate (Cross section B-B').

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 (260 ug/l) in well EW-7c, upgradient of the site. This plume appears to be separate from an onsite generated plume (Cross section B-B'), and may extend to the southeast towards EW-14d (5.4 ug/l). The on-site generated plume has maximum observed concentrations of 7.1 ug/l in SW-1 (Cross section C-C').

5.0 **CONCLUSIONS AND RECOMMENDATIONS**

5.1 **Conclusions**

HRP completed a groundwater monitoring event in May 2012 at the Claremont Polychemical Corporation site, in which 44 groundwater samples were collected. Analysis of the data has resulted in the following conclusions,

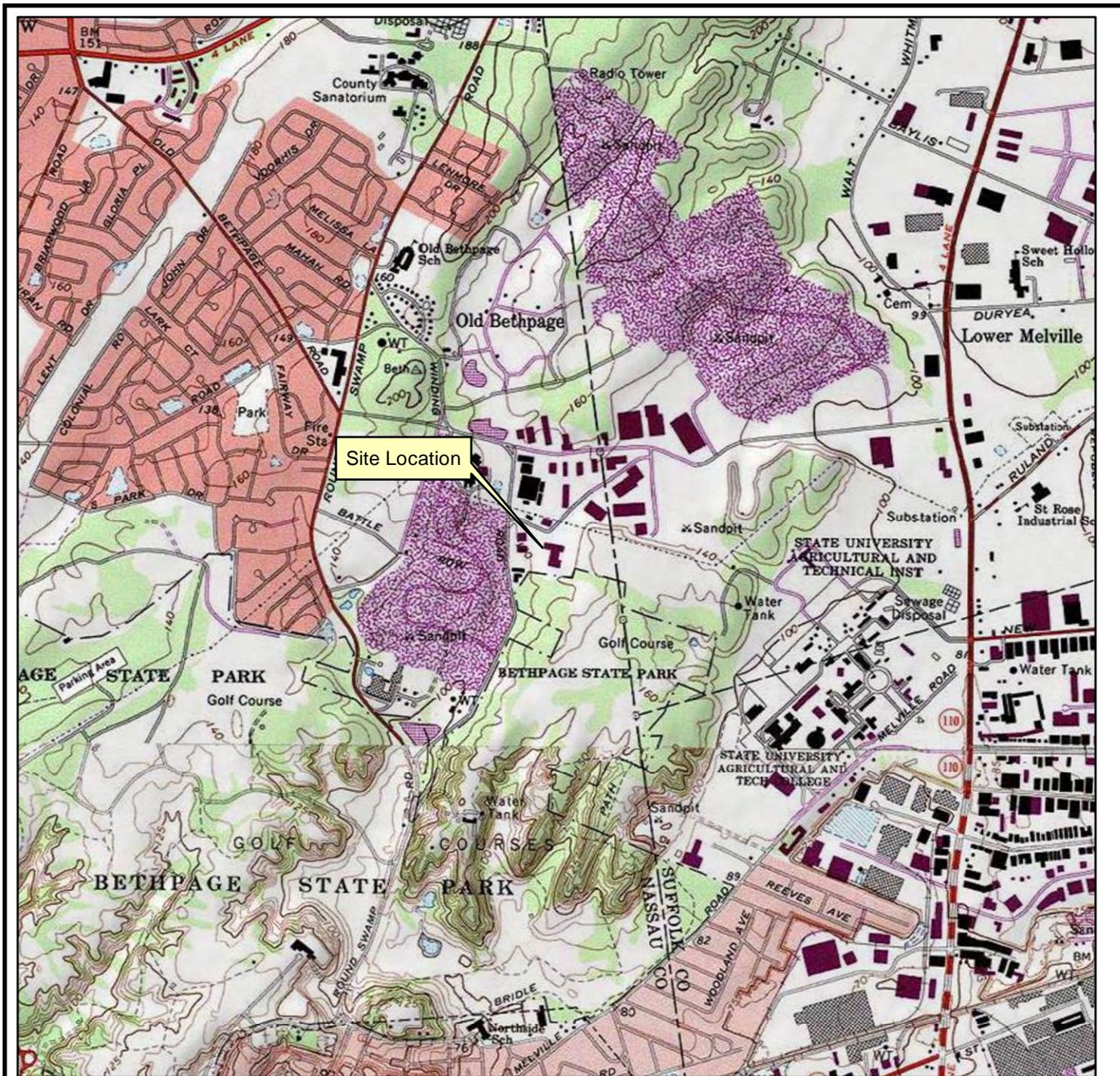
- A groundwater plume of VOCs, primarily PCE originates from the south of the main site building;
- Up to three other plumes migrate into the study area, and are marked by TCE predominance;
- The current groundwater treatment system is providing sufficient control of the plume generated onsite;
- Some or all of the TCE plume originating northeast of the site is not being captured by the current treatment system; and
- Two plumes identified southeast of the site may be related to the northernmost plume, although data gaps between the plumes exist based on the current monitoring network.
- The VOC data collected through PDB sampling is generally consistent with historically observed concentrations in samples collected via low flow sampling protocols.

5.2 **Recommendations**

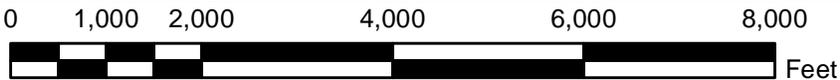
Based on analysis of data collected during this and historical events, HRP has the following recommendations for the Claremont Polychemical Corporation site:

- Continued operation of the site system to control migration of the VOC plume generated from an on-site source and quarterly VOC sampling to verify that the plume is controlled;
- Evaluation of possible system expansion to the east to capture the plume migrating onsite from the area north of the EW-7 cluster (Figure 3d); and
- Investigation to identify the source and connectivity of the plumes or elevated concentrations identified in the MW-10 cluster and at EW-14d (Figure 3d).

FIGURES



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



1 inch = 2,000 feet



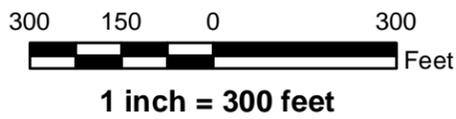
Figure 1
Site Location
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM
Site Code 130015
Scale 1" = 2,000'

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**Figure 2A - Monitoring 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



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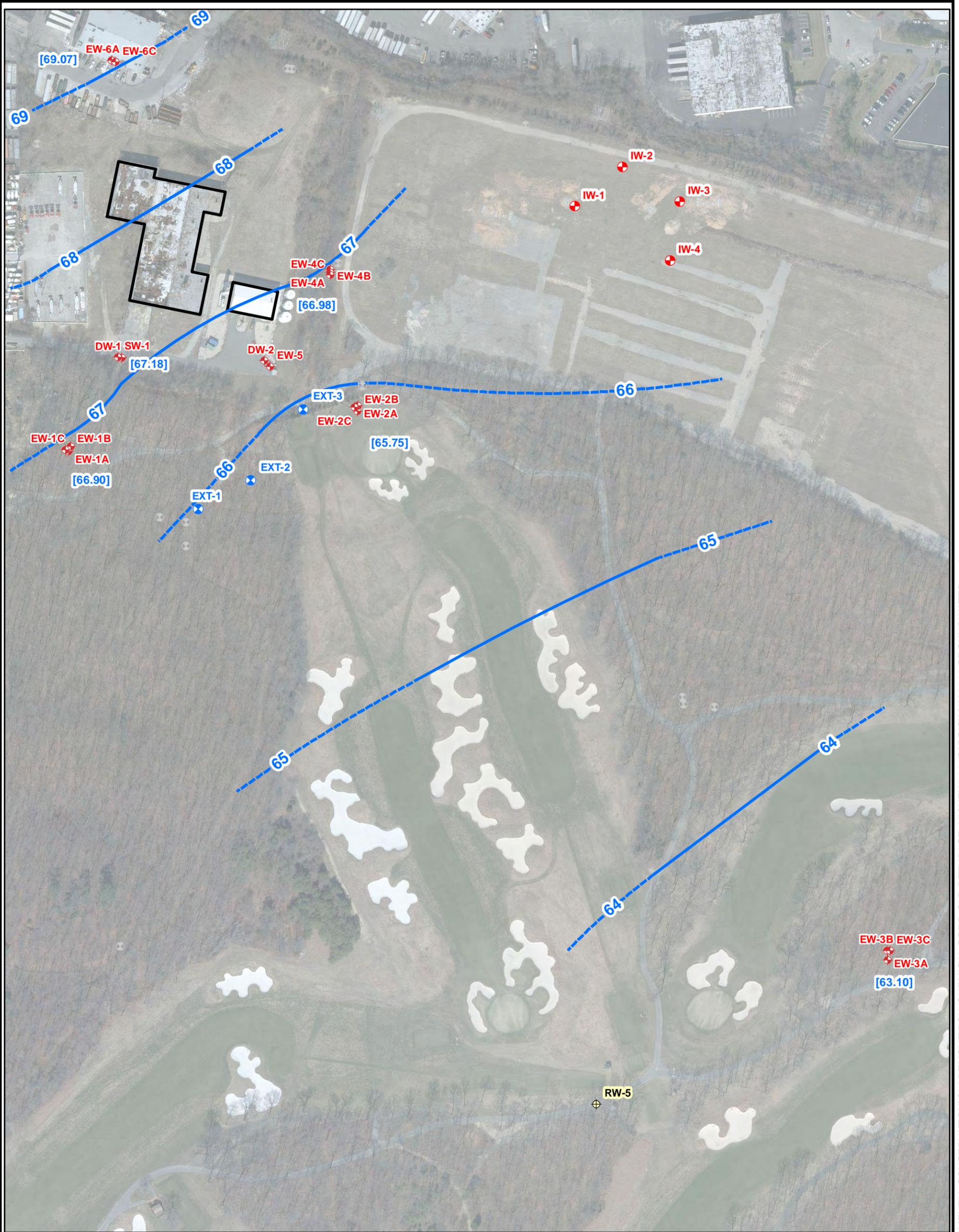


Figure 3
Shallow Groundwater
Elevation Contours
May 2012
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM
Site Code 130015
Scale 1" = 200'

Legend

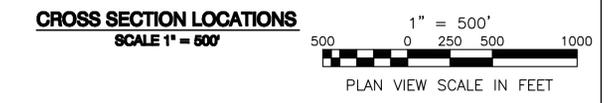
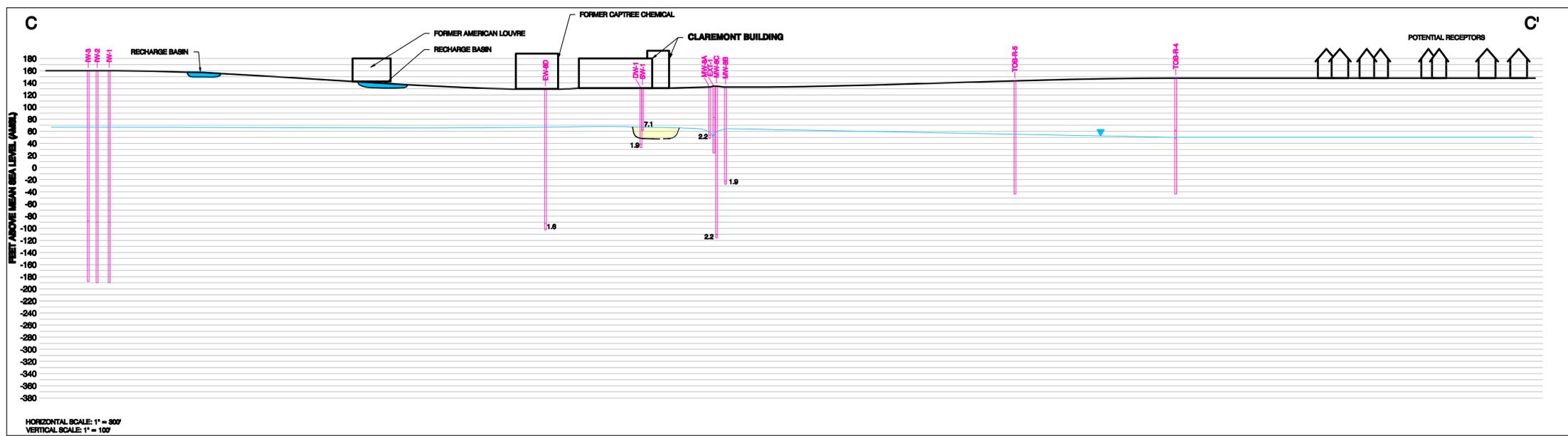
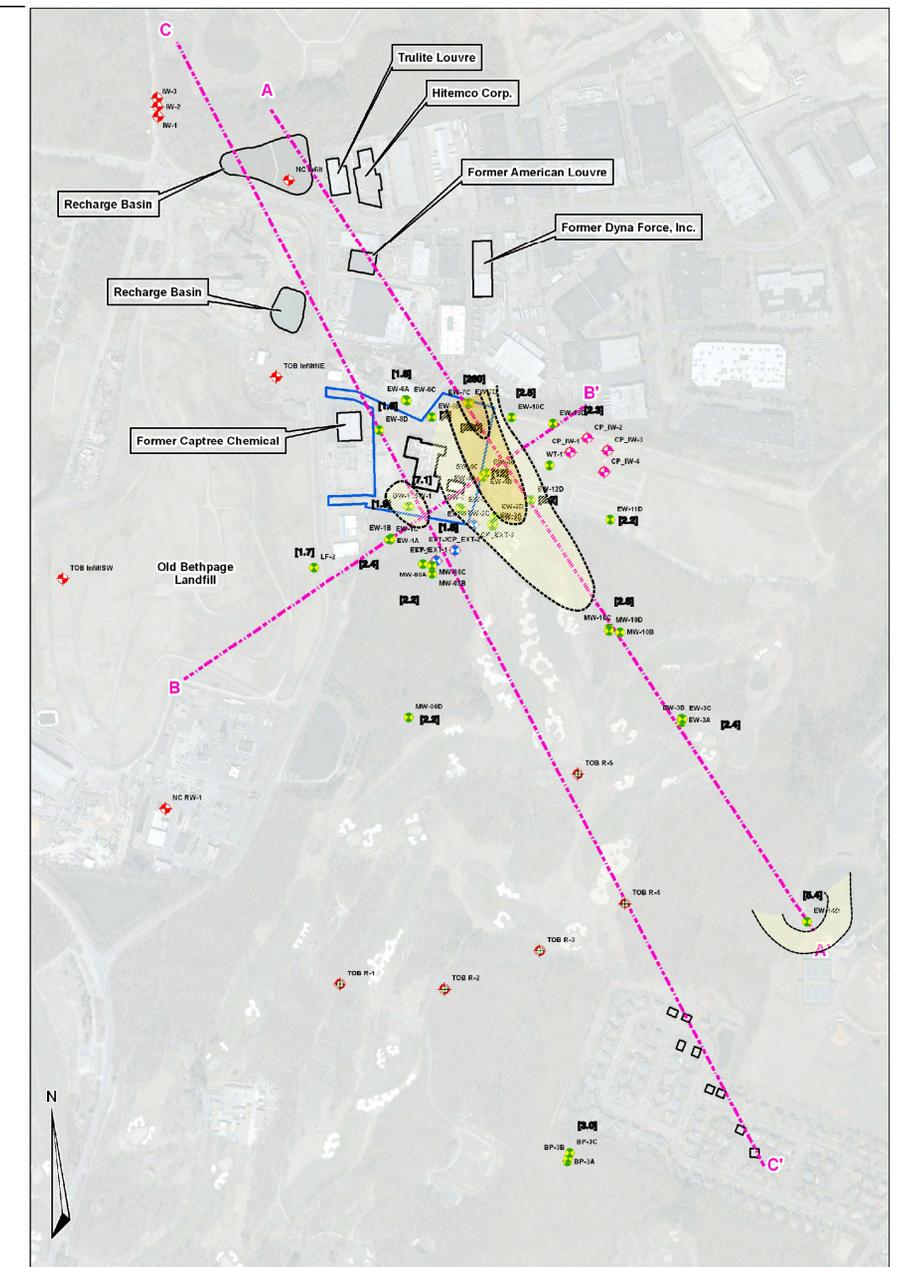
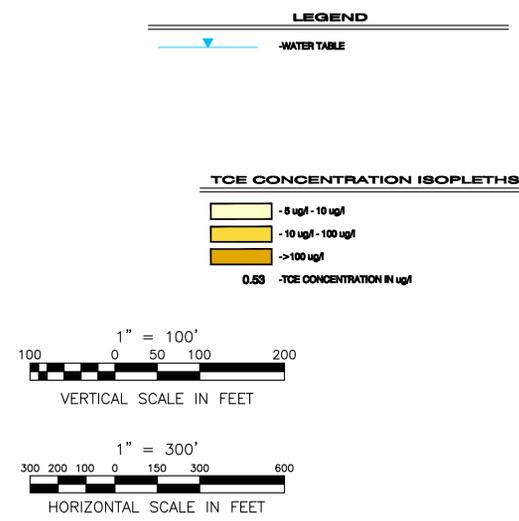
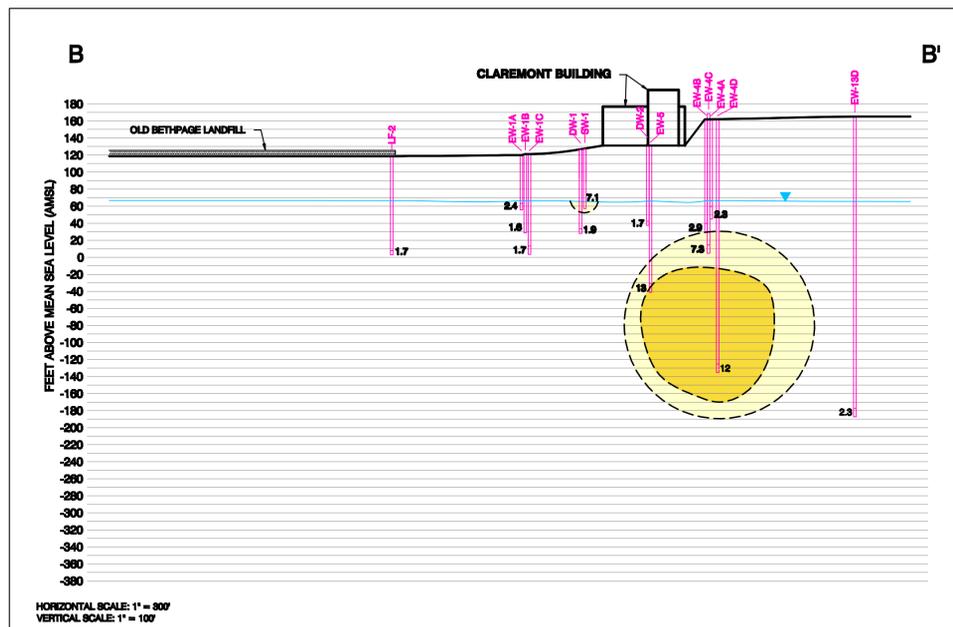
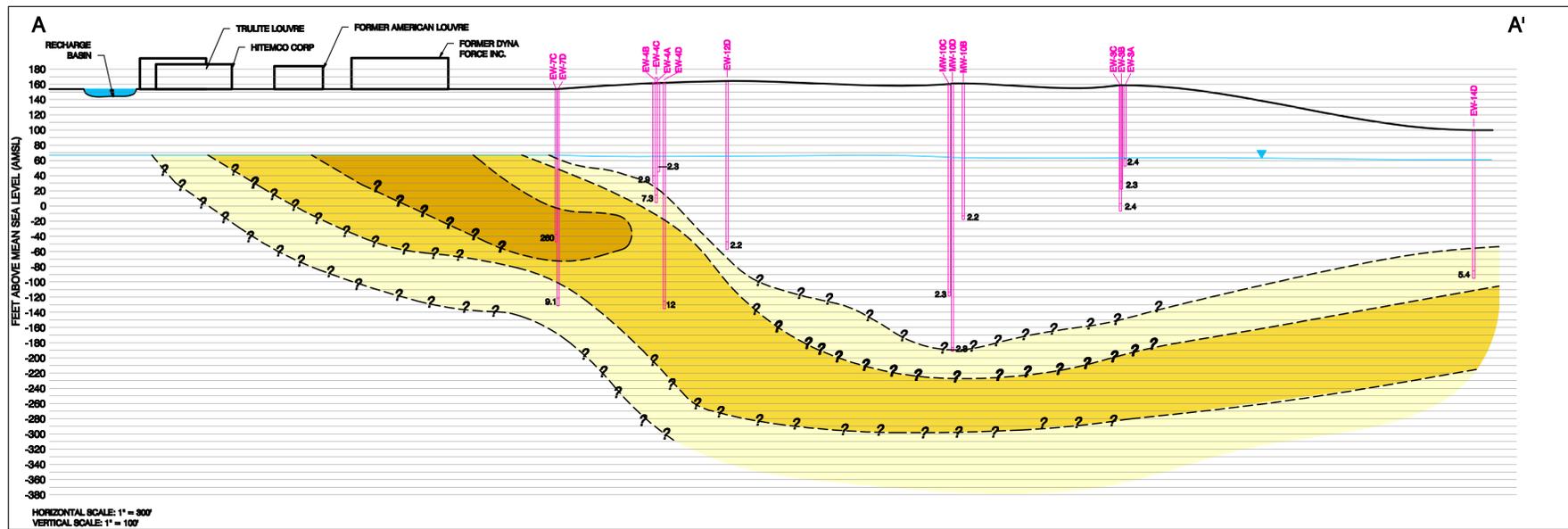
- ⊕ Monitoring Well
- ⊕ Extraction Well
- ⊕ Injection Well
- ⊕ Oyster Bay Extraction Well
- MAY 2012 Shallow GW Contour

Note: Contours dashed where inferred.



1 inch = 200 feet

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 dba HRP Engineering P.C.
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NO.	DATE	DESCRIPTION

TCE CONTAMINATION - MAY 2012

CLAREMONT POLYCHEMICAL CORP.
OLD BETHPAGE, NEW YORK

HRP Associates, Inc. <small>Environmental Engineering & Hydrogeology Creating the Right Solutions Together Offices in CT, SC, NY, FL, MA and TX 197 Scott Swamp Road Farmington, Connecticut 06032 Ph: (860)674-9870 Fax: (860)674-9824 www.hrpsociates.com</small>	JMP DESIGNED	BPW APPROVED	AS NOTED SCALE
	DML DRAWN	MAY 2012 DATE	GTS CHECKED

FIG. 3B
SHEET NO.

MAY 2012 BY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION/CLAREMONT POLYCHEMICAL CORP. OLD BETHPAGE, NY/NEW9625.OM/MAY 2012 - TCE CONTAMINATION CROSS SECTION.dwg
 7/2/2012 10:58:11 AM, PLOT: 10, 10/24/12

TABLES

Table 1: Groundwater Elevations
 Claremont Polychemical Superfund Site
 May 2012 (2Q12) Groundwater Sampling Event
 Old Bethpage, NY
 HRP#NEW9625.OM
 Site Code: 130015
 WA# D006130-19

Well ID	Elev.of Screened Interval (ft AMSL)	Elevation (NGVD29) to Top of Casing (ft AMSL)	May-12		
			Sample Date	Depth to Water Below Ref El ^b (ft)	Water Elevation (ft AMSL)
Monitoring Wells					
EW-1A	53.34 to 63.17	130.02	8-May-12	63.10	66.90
EW-1B	28.75 to 38.58	130.56	8-May-12	63.69	66.84
EW-1C	3.43 to 13.26	130.47	8-May-12	63.83	66.61
EW-2A	65.19 to 55.36	157.14	8-May-12	91.61	65.75
EW-2B	28.74 to 38.57	157.61	8-May-12	91.88	65.85
EW-2C	7.60 to 17.43	157.54	8-May-12	92.11	65.55
EW-2D	-132.55 to -142.55	NA	8-May-12	92.30	65.94
EW-3A	52.28 to 62.11	158.92	8-May-12	95.85	63.10
EW-3B	22.32 to 32.15	159.06	8-May-12	95.98	63.11
EW-3C	2.99 to -6.84	158.92	8-May-12	95.90	63.05
EW-4A	44.86 to 59.69	161.89	8-May-12	94.80	66.98
EW-4B	29.8 to 39.63	161.67	8-May-12	94.32	67.48
EW-4C	4.59 to 14.42	161.41	8-May-12	94.50	67.04
EW-4D	-125.26 to -135.26	NA	8-May-12	94.76	67.01
EW-5	-31.16 to -40.99	135.55	9-May-12	69.68	67.30
EW-6A	57.66 to 67.49	130.32	9-May-12	61.25	69.07
EW-6B	10.79 to 20.62	130.61	abandoned		
EW-6C	-29.60 to -39.43	130.40	8-May-12	61.85	68.55
EW-7C	-37.47 to -47.47	NA	8-May-12	85.75	68.04
EW-7D	-121.47 to -131.47	NA	8-May-12	85.75	67.96
EW-8D	-102.49 to -112.49	NA	8-May-12	63.40	68.14
EW-9D	-108.6 to -118.6	NA	8-May-12	69.55	67.98
EW-10C	19.11 to 9.11	NA	8-May-12	92.80	68.14
EW-11D	-106.75 to -116.75	NA	8-May-12	99.56	65.77
EW-12D	-47.33 to -57.33	NA	8-May-12	97.90	66.52
EW-13D	-177.28 to -187.28	NA	8-May-12	98.03	66.70
EW-14D	-85.27 to -95.27	NA	7-May-12	41.35	60.78
SW-2	65.10 to 75.10	136.93	dry		
DW-2	37.35 to 42.35	137.61	9-May-12	70.42	66.00
SW-1	61.50 to 66.50	131.31	9-May-12	64.31	67.18
DW-1	32.89 to 38.39	131.19	9-May-12	64.20	67.18
LF-02	3 to 8	118.70	9-May-12	51.15	67.55
PPW-1	-166.15 to -196.15	136.74	Permanently closed Oct. 2008		
WT-01	56.98 to 66.98	164.57	8-May-12	96.25	68.32
MW-6D	-26.1 to -31.1	160.39	8-May-12	94.70	65.69
MW-8A	48.5 to 53.5	133.18	8-May-12	69.05	64.13
MW-8B	-22.2 to -27.2	134.24	8-May-12	68.70	65.54
MW-8C	-110.7 to -115.7	135.72	8-May-12	69.25	66.47
MW-10B	-13 to -18	161.12	8-May-12	96.52	64.60
MW-10C	-113.1 to -118.1	160.27	8-May-12	95.65	64.62
MW-10D	-186.2 to -191.2	161.17	8-May-12	96.58	64.59
BP-3A	51 to 71	124.54	7-May-12	63.00	61.54
BP-3B	-91 to -111	123.57	7-May-12	64.85	58.72
BP-3C	-156 to -176	123.68	7-May-12	65.00	58.68
RW-01	Abandoned	Abandoned	abandoned		

Key:

ft bgs - feet below ground surface
 ft AMSL - feet above mean sea level
 Ref El - reference elevation
 NM - not measured
 NA - not applicable

Table 2: Summary of Analytical Results

May 2012 (2Q12) Sampling Event
 Claremont Polychemical Superfund Site
 Old Bethpage, NY
 HRP#NEW9625.OM
 Site Code: 130015
 WA# D006130-19

Sample Description	Date Collected	Tetrachloroethylene	Trichloroethylene	cis-1,2-Dichloroethylene	trans-1,2-Dichloroethylene	1,1-Dichloroethylene	Vinyl chloride	1,1,1-Trichloroethane	1,1,2-Trichlorotrifluoroethane (freon 113)	1,1-Dichloroethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,4-Dichlorobenzene	2-Butanone (MEK)	Acetone	Benzene	Chlorobenzene	Chloroform	Cyclohexane	Dichlorodifluoromethane	Isopropylbenzene	m/p-Xylenes	Methylterbutyl ether	o-Xylene	Toluene	Trichlorofluoromethane
BP-3a	5/25/12	0.73 J	2.7	0.21 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.3 J	10	0.1 J	<1	0.43 J	<1	<1	<1	<2	<1	<1	0.4 J	<1
Bp-3b	5/25/12	0.97 J	3	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	11	<1	<1	0.25 J	<1	<1	<1	<2	<1	<1	0.41 J	<1
bp-3c	5/25/12	1.2	2.9	3.8	<1	0.26 J	0.68 J	0.89 J	1	3.1	<1	<1	<1	4.4 J	10	0.16 J	<1	0.3 J	<1	4.2	<1	<2	<1	<1	0.42 J	0.49 J
dw-1	5/29/12	0.99 J	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3 J	11	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1
dw-2	5/29/12	0.89 J	1.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3.5 J	15	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.16 J	<1
ew-10c	5/25/12	0.64 J	2.5	<1	<1	<1	<1	0.11 J	<1	<1	<1	<1	<1	2.6 J	26	<1	<1	0.11 J	<1	<1	<1	<2	<1	<1	0.36 J	<1
EW-11d	5/25/12	0.71 J	2.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.4 J	26	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.37 J	<1
EW-12d	5/25/12	0.63 J	2.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	11	0.086 J	<1	<1	<1	<1	<1	<2	<1	<1	0.36 J	<1
EW-13d	5/25/12	0.71 J	2.3	0.26 J	<1	0.22 J	<1	0.75 J	<1	0.51 J	<1	<1	<1	<5	14	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.36 J	<1
ew-14d	5/25/12	0.75 J	5.4	0.66 J	<1	1.2	<1	8.4	<1	0.23 J	<1	1.3	<1	2.7 J	8.9	0.082 J	<1	0.45 J	<1	<1	<1	<2	<1	<1	0.34 J	<1
ew-1a	5/29/12	3.2	2.4	7.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	6	27	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1
ew-1a dup	5/29/12	3.1	2.3	6.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	5.9	26	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1
ew-1b	5/29/12	0.5 J	1.6	0.42 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.1 J	19	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1
ew-1c	5/29/12	0.43 J	1.7	0.32 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	12	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.17 J	<1
ew-2a	5/25/12	0.69 J	2.3	0.22 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	12	0.084 J	<1	<1	<1	<1	<1	<2	<1	<1	0.41 J	<1
ew-2b	5/25/12	0.73 J	2.4	0.26 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.4 J	11	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.44 J	<1
ew-2c	5/25/12	0.6 J	2.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	11	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.41 J	<1
ew-2d	5/25/12	0.8 J	2.9	<1	<1	<1	<1	0.19 J	<1	<1	<1	<1	<1	<5	9.7	<1	<1	0.46 J	<1	<1	<1	<2	<1	<1	0.37 J	<1
ew-3a	5/25/12	0.75 J	2.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.6 J	9.2	0.084 J	<1	0.18 J	<1	<1	<1	<2	<1	<1	0.39 J	<1
ew-3b	5/25/12	0.68 J	2.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	11	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.37 J	<1
ew-3c	5/25/12	0.7 J	2.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3.2 J	15	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.41 J	<1
ew-4a	5/25/12	0.77 J	2.3	0.24 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	10	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.39 J	<1
ew-4b	5/25/12	0.84 J	2.9	0.23 J	<1	<1	<1	1.6	<1	<1	<1	<1	<1	6.1	32	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.36 J	<1
ew-4c	5/25/12	1.1	7.3	1.1	0.17 J	1.2	<1	4.3	<1	0.74 J	<1	<1	<1	5.3	28	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.41 J	<1
ew-4d	5/25/12	2.4	12	0.35 J	<1	0.25 J	<1	0.77 J	<1	<1	<1	<1	<1	5.9	31	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.4 J	<1
ew-5	5/29/12	0.63 J	13	2.1	<1	<1	<1	0.14 J	<1	0.22 J	<1	0.42 J	<1	<5	8.5	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.18 J	<1
ew-6a	5/29/12	0.52 J	1.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	11	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.16 J	<1
ew-6c	5/29/12	0.47 J	1.8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5.2	25	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.2 J	<1
ew-7c	5/29/12	11	260	9.1	<1	0.71 J	<1	1.7	<1	0.23 J	<1	<1	<1	3.8 J	15	<1	<1	0.17 J	<1	<1	<1	<2	0.64 J	<1	0.17 J	<1
ew-7d	5/29/12	5.7	9.1	<1	<1	<1	<1	0.2 J	<1	<1	<1	<1	<1	3.6 J	18	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1
ew-8d	5/29/12	0.49 J	1.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5.1	22	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.16 J	<1
ew-9d	5/29/12	1.1	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.8 J	22	<1	<1	0.36 J	<1	<1	<1	<2	<1	<1	<1	<1
lf-2	5/29/12	0.54 J	1.7	<1	<1	<1	0.25 J	<1	<1	<1	0.46 J	<1	0.69 J	3.4 J	14	2.4	1.7	<1	0.21 J	<1	1.6	1.1 J	<1	0.43 J	0.37 J	<1
mw-10b	5/25/12	0.75 J	2.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	10	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.35 J	<1
mw-10c	5/25/12	0.81 J	2.3	<1	<1	<1	<1	0.1 J	<1	<1	<1	<1	<1	<5	11	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.38 J	<1
mw-10d	5/25/12	0.75 J	2.8	0.81 J	<1	0.29 J	<1	0.77 J	<1	1.4	<1	0.24 J	<1	3.7 J	16	<1	<1	0.35 J	<1	<1	<1	<2	<1	<1	0.39 J	<1
MW-6d	5/25/12	0.76 J	2.2	0.25 J	<1	<1	<1	<1	<1	0.26 J	<1	<1	<1	4 J	20	0.12 J	<1	<1	<1	<1	<1	<2	0.83 J	<1	0.39 J	<1
mw-8a	5/25/12	1.1	2.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	6.6	28	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.36 J	<1
mw-8b	5/25/12	0.56 J	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.7 J	20	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.36 J	<1
mw-8c	5/25/12	0.6 J	2.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.1 J	15	0.081 J	<1	<1	<1	<1	<1	<2	<1	<1	0.39 J	<1
sw-1	5/29/12	26	7.1	6.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.5 J	9	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.15 J	<1
WT-1	5/25/12	0.71 J	2.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	11	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.33 J	<1
WT-1	5/25/12	0.73 J	2.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	11	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.34 J	<1

CHARTS

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

May 2012 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

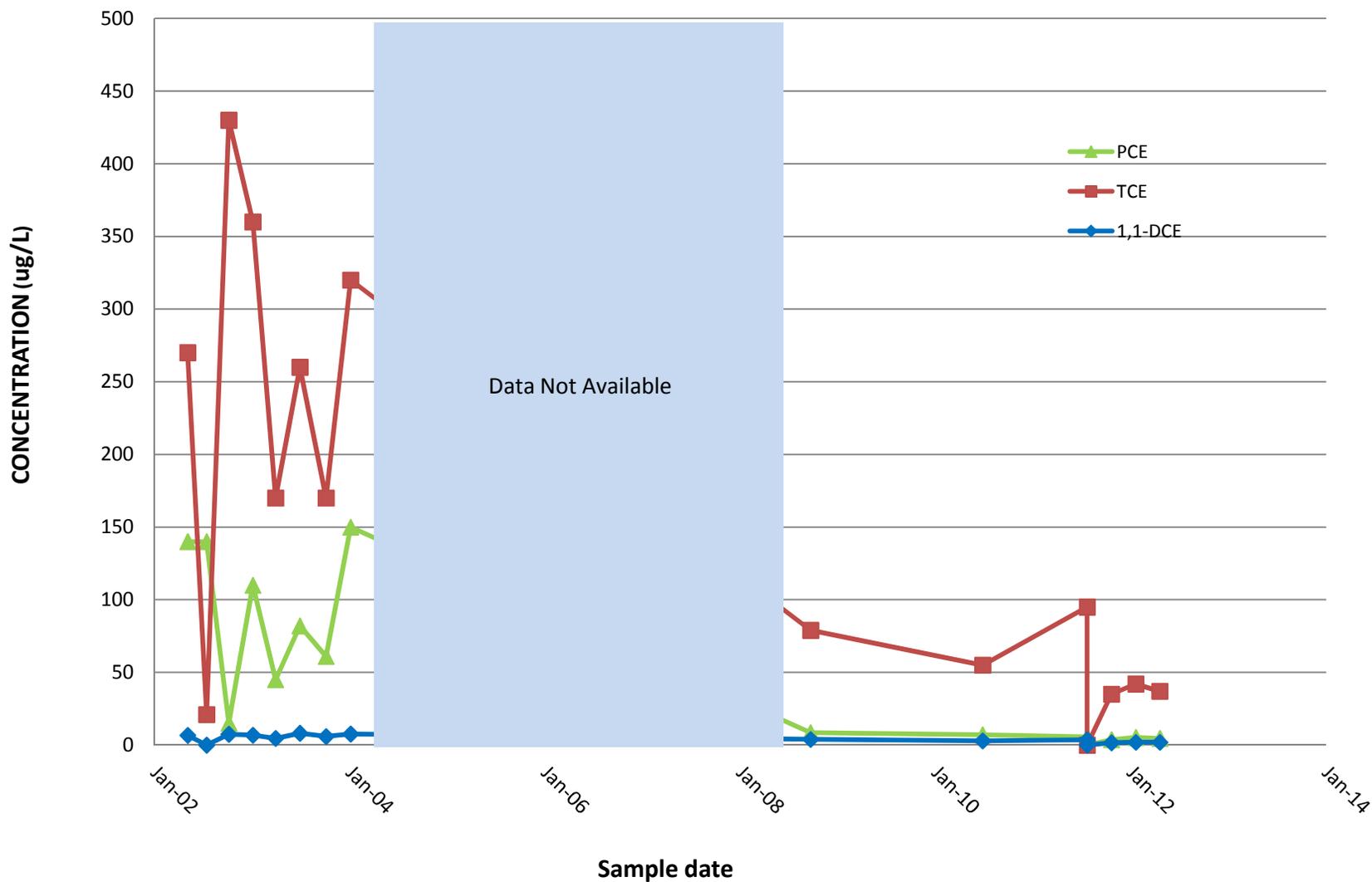


Chart 1a: EXT-1 Concentration (PCE, TCE, 1,1-DCE) vs Time

May 2012 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

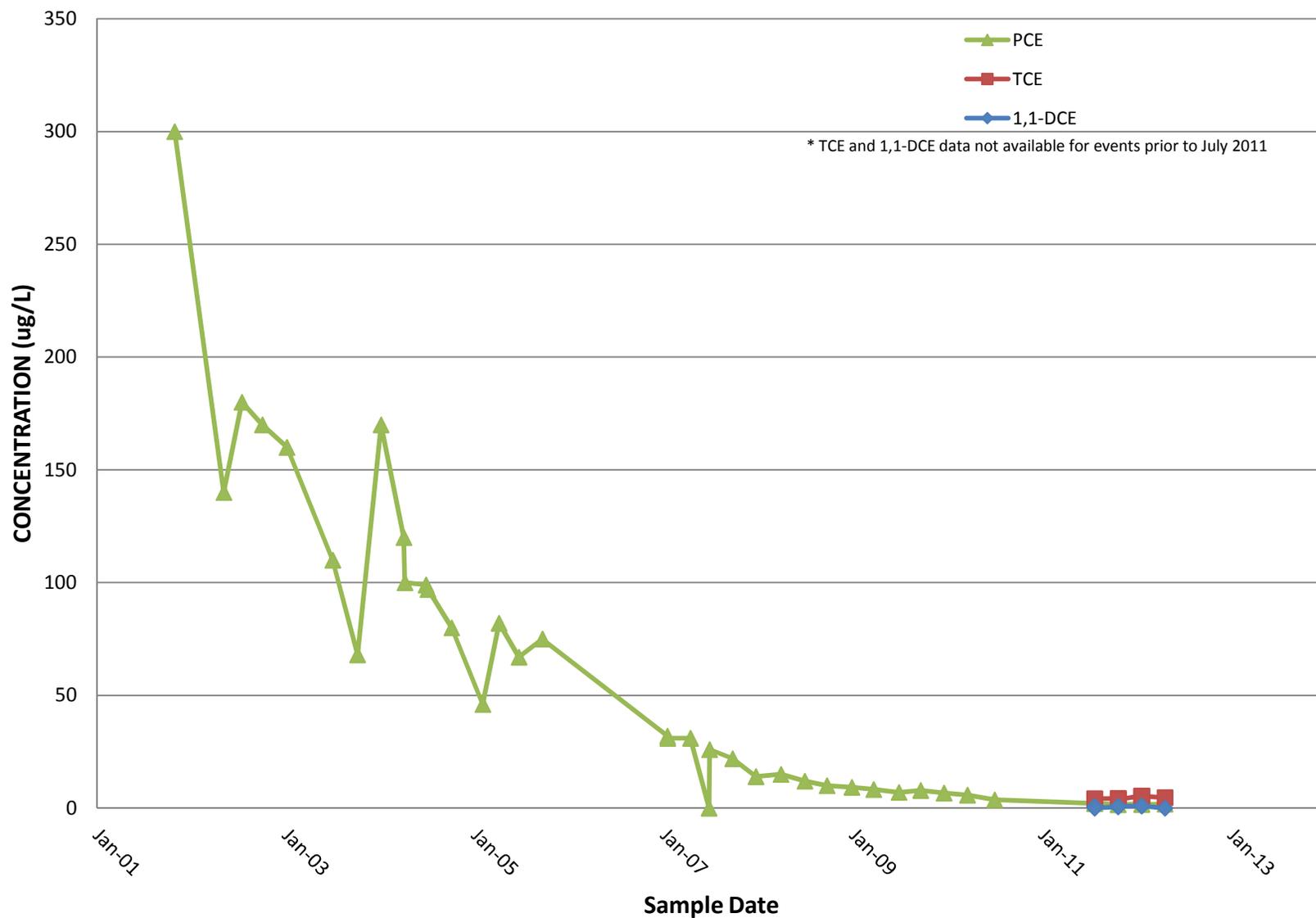
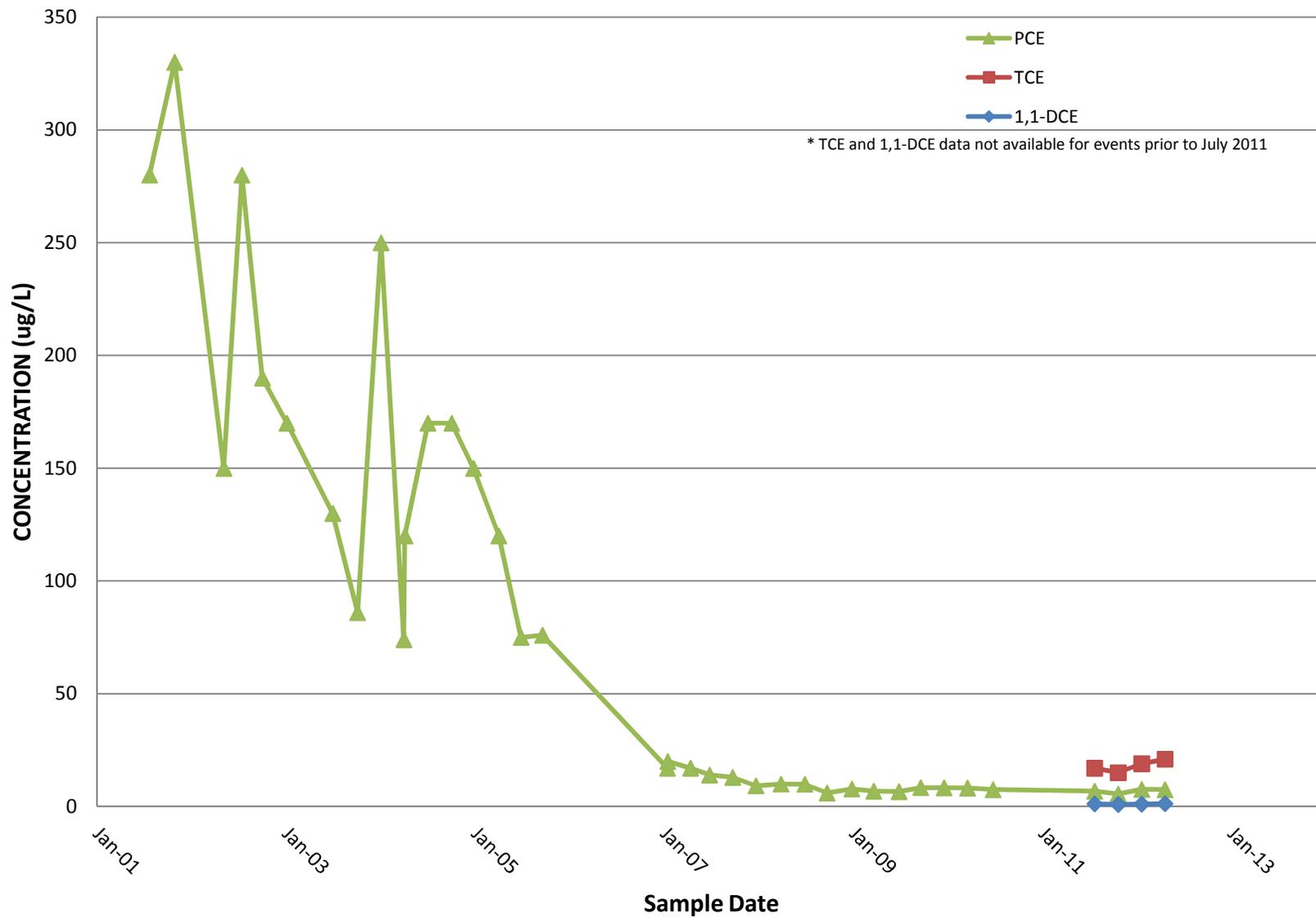


Chart 1b: EXT-2 Concentration (PCE, TCE, 1,1-DCE) vs Time

May 2012 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

May 2012 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

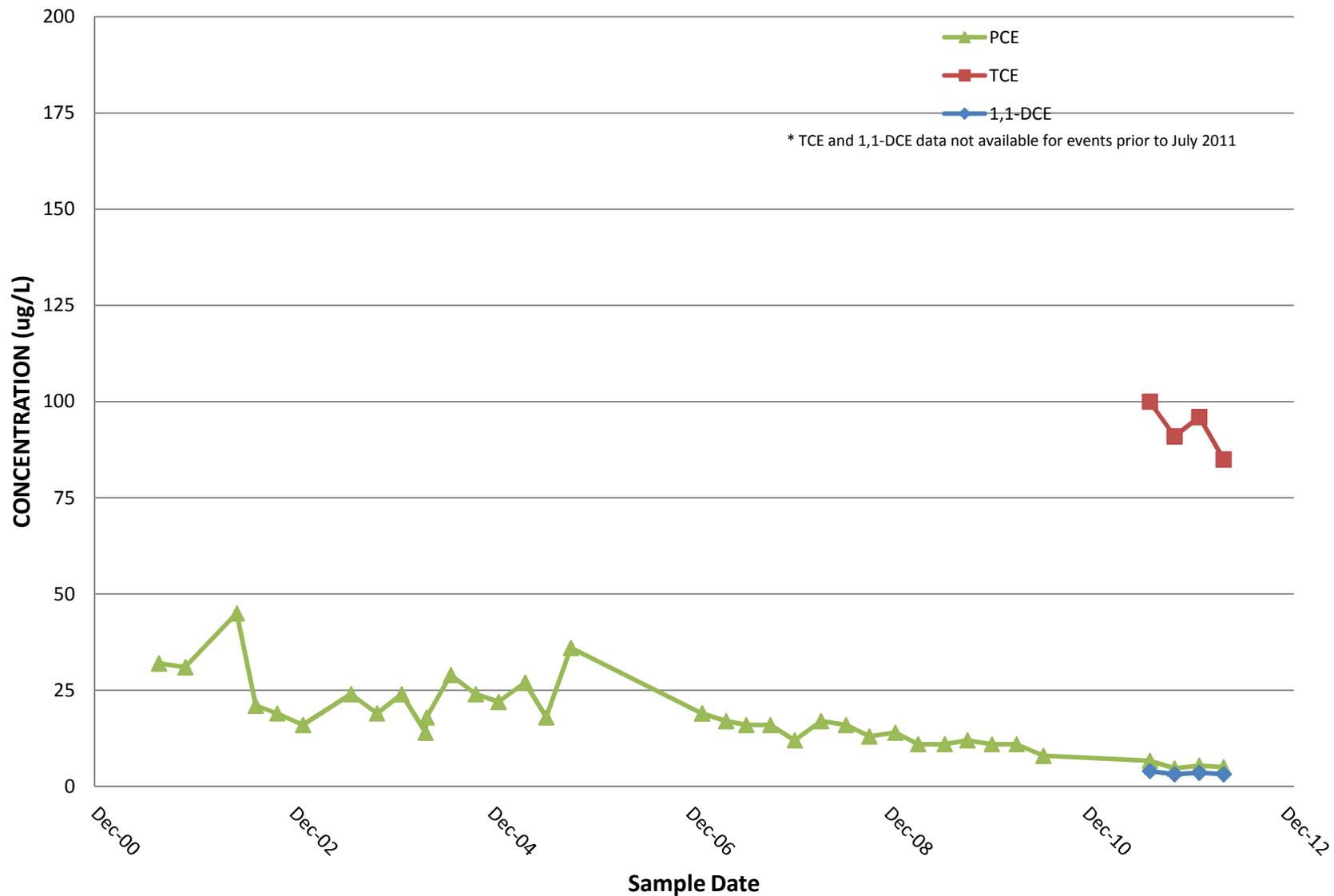


Chart 2: Groundwater Influent Concentration (Iron and Manganese) vs. Time

May 2012 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

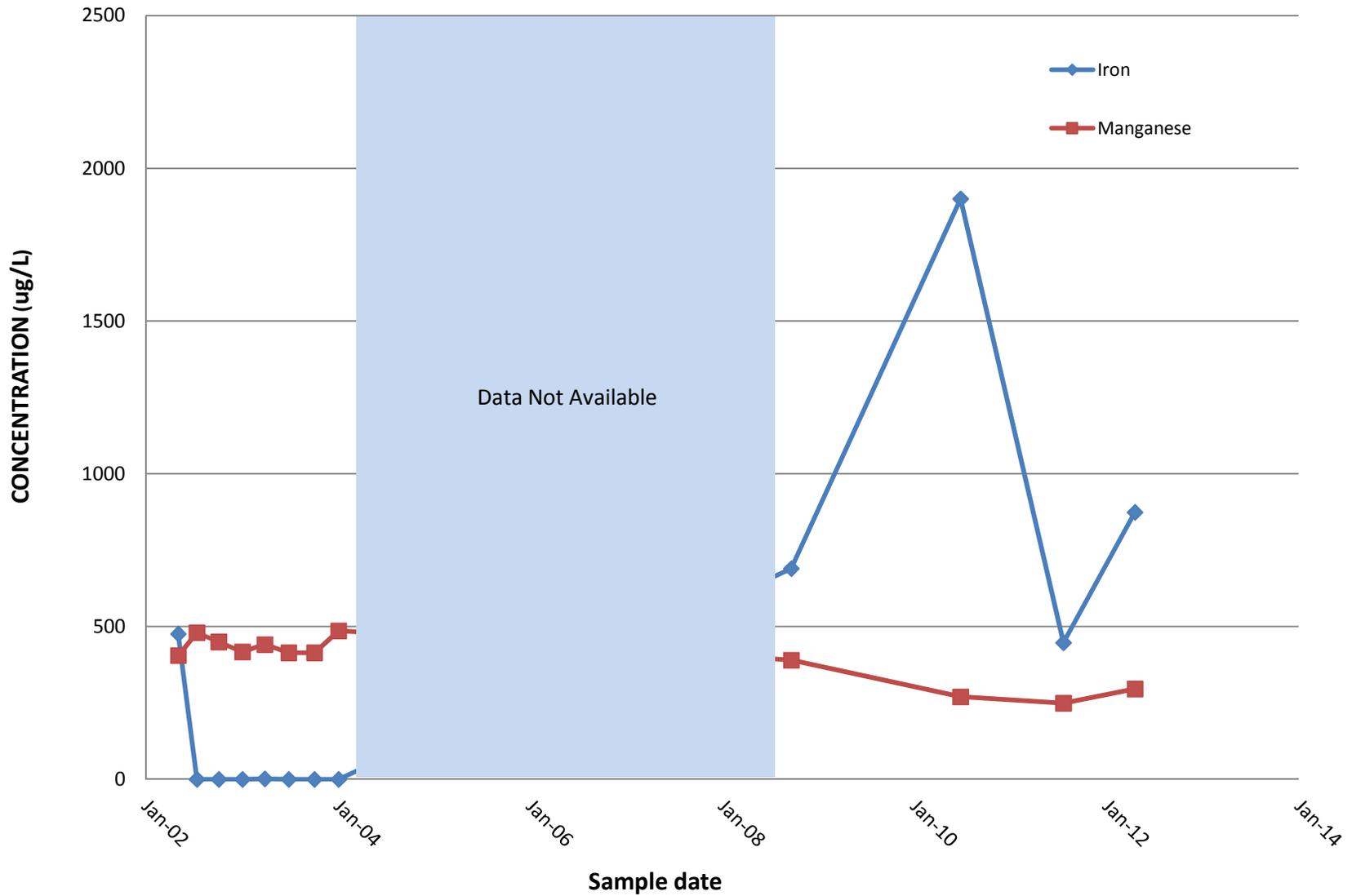


Chart 3: Treated Effluent Concentration (PCE, TCE, 1,1-DCE) vs Time

May 2012 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

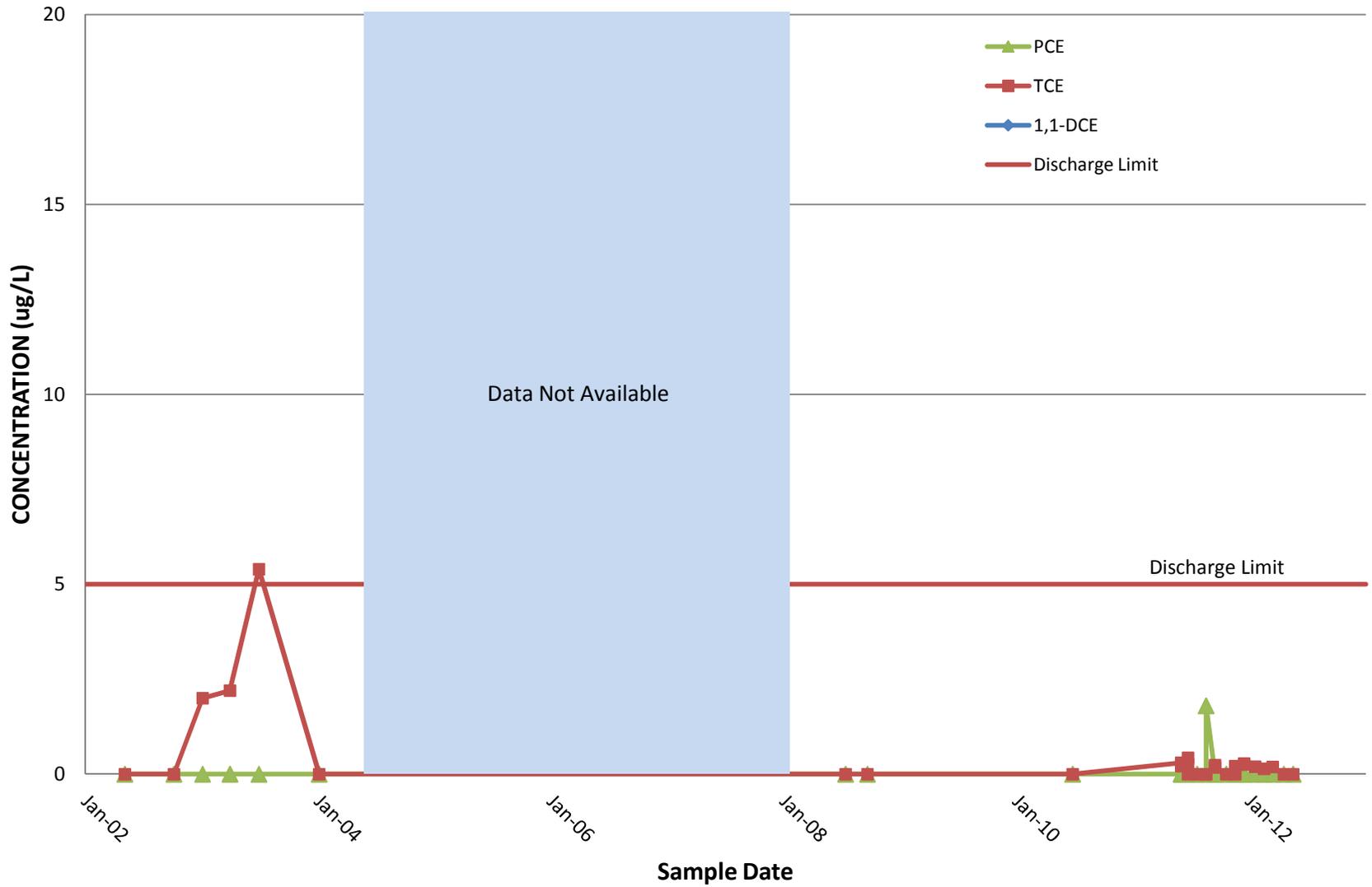


Chart 5: VOC Removal vs Time (PCE, TCE)

May 2012 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

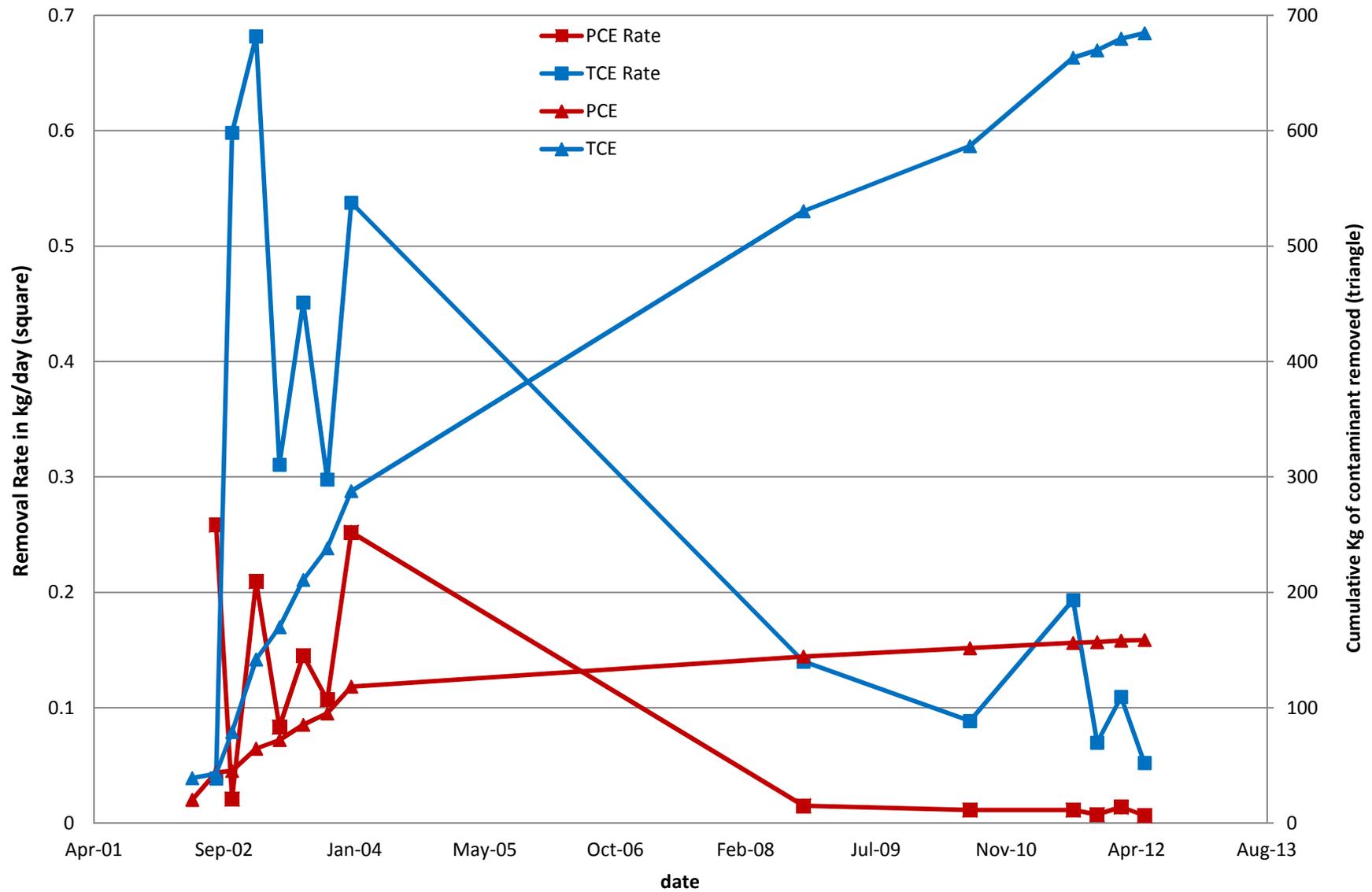


Chart 6a - PCE Concentrations In EW-1a

May 2012 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

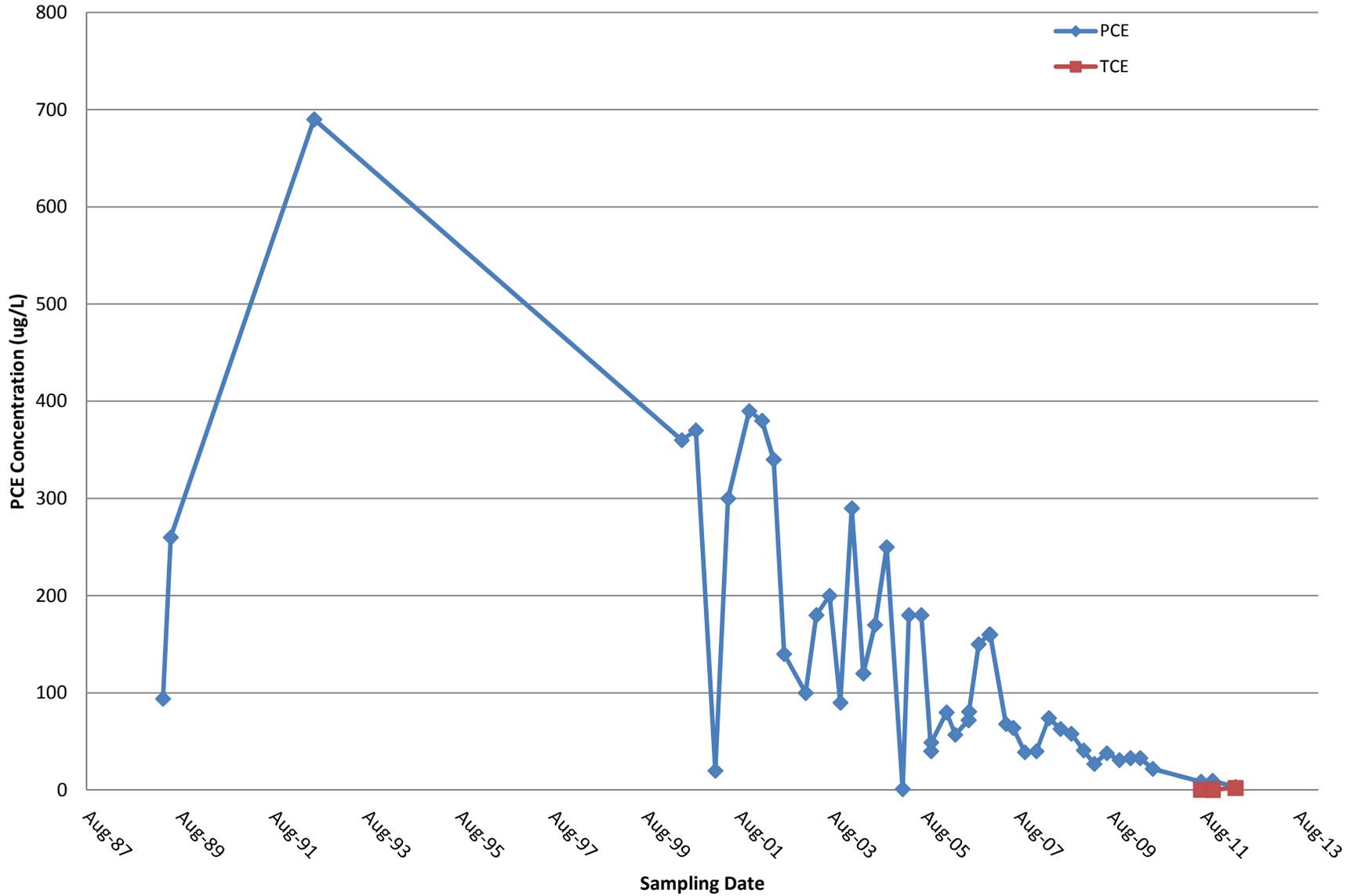


Chart 6b - PCE and TCE Concentrations in EW-4c

May 2012 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

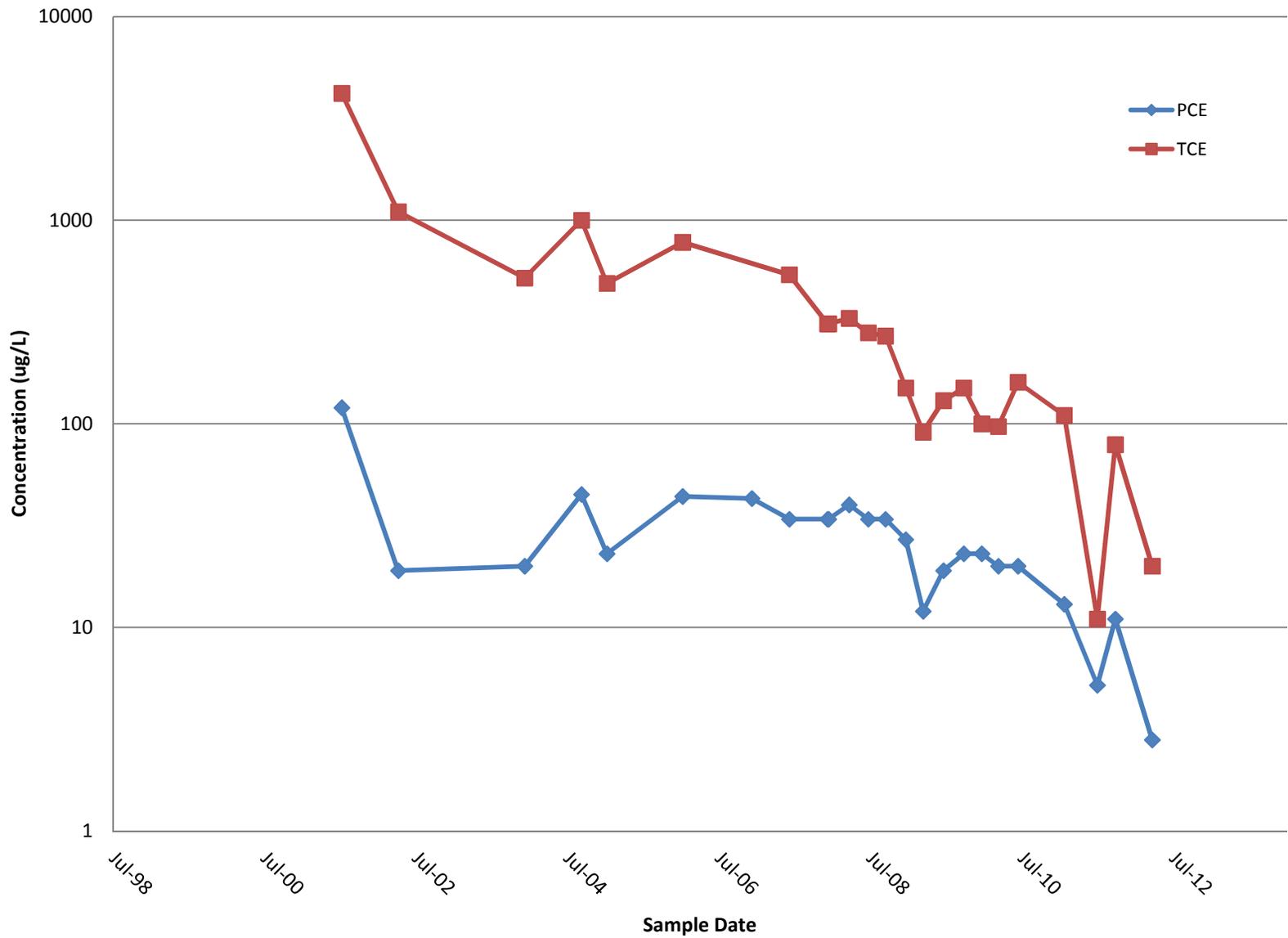
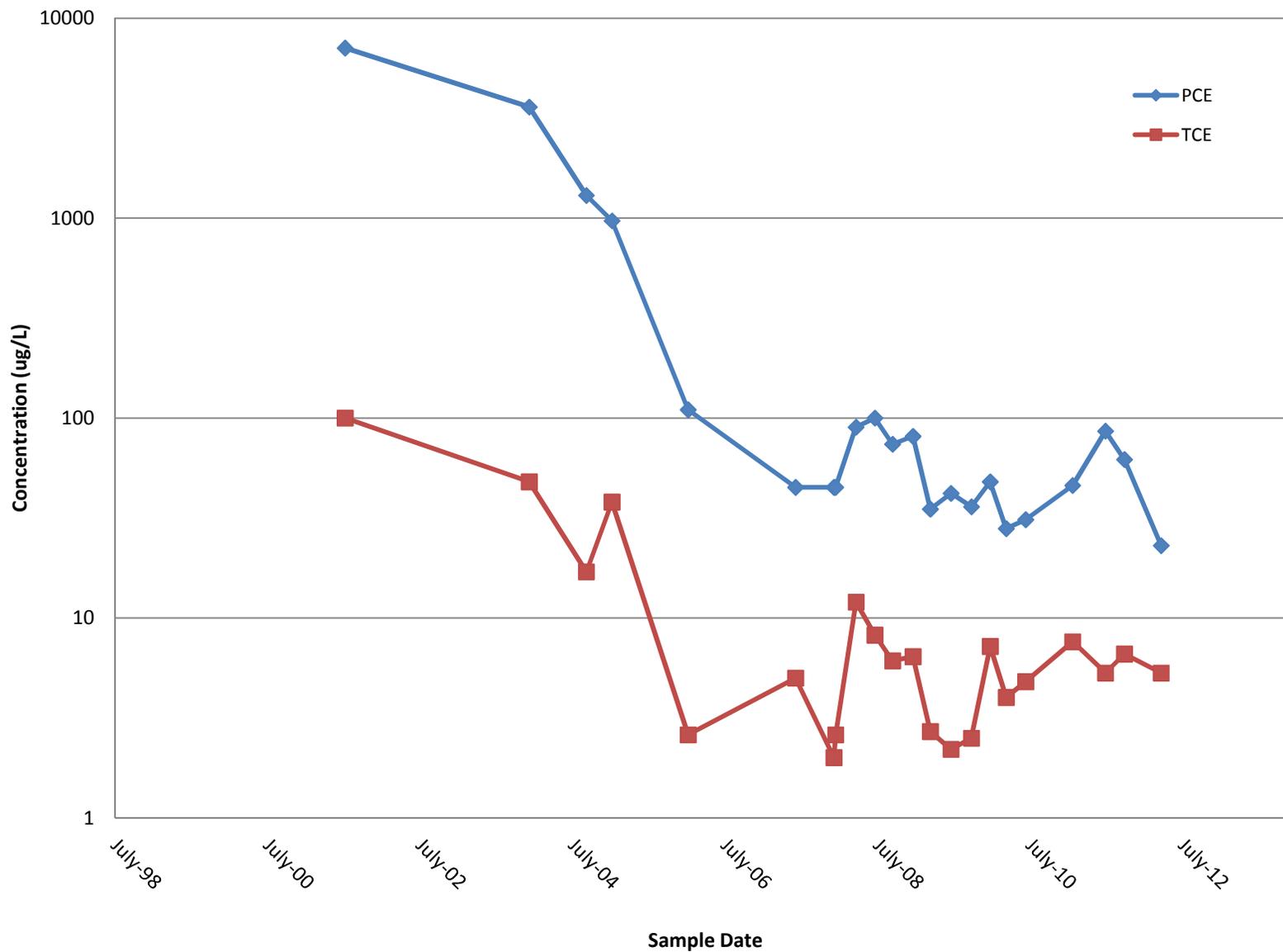


Chart 6c - PCE and TCE Concentrations in SW-1

May 2012 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19



APPENDIX A
Groundwater Sample Log

Ground Water PDB Field Notes

PDB Installation Notes

Claremont Polychemical Site
Old Bethpage, NY

WELL	Reel	Date Bag Installed	Sample Date*	Sample Time	Tech	DTW	TOB Split	pH	ORP (mv)	Temp (°C)	Cond. (uS/cm)	DO (ug/L)	Turbidity (ntu)	Notes:
BP3A	O	7-May	25-May	1009	J	63.25	2VOA	5.18	383	13.0	8.1	12.87	72.1	samples refrigerated prior to processing PDBs
BP3B	W	7-May	25-May	1032	J	64.91	2VOA	5.15	385	12.5	1.4	12.55	87.6	
BP3C	W	7-May	25-May	1022	J	65.10	2VOA	5.18	397	14.0	1.3	11.88	90.6	
DW1	O	9-May	29-May	748	J	64.55		5.52	372	9.5	0.7	12.24	113.7	
DW2	O	9-May	29-May	717	J	71.05		5.06	409	13.7	1.4	10.86	120.0	
EW01A	O	8-May	29-May	940	J/P	63.32	2VOA	5.21	392	9.5	1.5	13.02	139.0	
EW01B	O	8-May	29-May	935	j/p	64.09	a	5.47	383	10.6	1.1	11.04	155.0	
EW01C	O	8-May	29-May	942	j/p	63.03	2VOA	5.22	396	11.2	0.5	10.32	149.0	
EW02A	O	8-May	25-May	655	j	91.82	2VOA	5.23	202	9.1	0.8	13.57	142.0	
EW02B	O	8-May	25-May	710	j	92.10	2VOA	5.41	297	10.0	0.3	12.49	146.0	
EW02C	O	8-May	25-May	715	j	91.95	2VOA	5.24	344	11.0	0.5	12.32	133.0	
EW02D	Blk	8-May	25-May	720	j	92.15		5.14	372	12.6	0.7	11.81	110.0	
EW03A	O	8-May	25-May	748	j	96.00	2VOA	5.46	400	12.0	0.7	12.14	137.0	
EW03B	O	8-May	25-May	755	j	96.25	2VOA	5.39	4.07	11.9	0.6	11.96	128.0	
EW03C	O	8-May	25-May	810	j	96.02	2VOA	5.41	406	13.0	0.5	11.36	118.0	
EW04A	O	8-May	25-May	1042	j/p	95.21		5.16	409	11.2	0.9	12.32	135.0	
EW04B	O	8-May	25-May	1047	j/p	95.12		5.15	4.15	10.8	0.9	12.41	138.0	
EW04C	O	8-May	25-May	1051	j/p	94.90		5.17	4.15	11.6	0.9	11.93	128.0	
EW04D	Blk	8-May	25-May	1050	j/p	95.20		5.40	3.86	13.9	0.9	11.19	123.0	
EW05	O	9-May	29-May	950	j/p	70.50		5.29	426	12.7	1.0	10.22	129.0	
EW06A	O	9-May	29-May	915	j/p	61.70		5.19	434	12.8	1.1	10.72	118.0	
EW06C	W	9-May	29-May	910	j/p	62.65		5.20	71	13.5	0.9	9.13	102.0	
EW07C	W	8-May	29-May	842	j/p	86.00		5.11	254	13.6	1.1	10.38	100.0	
EW07D	W	8-May	29-May	847	j/p	85.98		5.10	319	14.4	1.1	10.11	97.0	
EW08D	W	8-May	29-May	925	j/p	63.63		5.19	347	12.4	1.2	11.12	119.0	
EW09D	W	8-May	29-May	900	j/p	69.73		5.19	359	12.4	1.0	10.87	116.0	
EW10C	O	8-May	25-May	1101	j/p	93.03		5.26	368	11.3	0.5	11.96	123.0	
EW11D	W	8-May	25-May	1236	j/p	99.71		5.23	364	15.0	0.5	10.93	129.0	
EW12D	W	8-May	25-May	1220	j/p	98.25		5.23	360	16.0	0.5	9.99	66.0	
EW13D	LO	8-May	25-May	1110	j/p	98.20		5.20	372	14.4	0.8	10.87	109.0	

