### 2012 Third Quarter Groundwater Monitoring Report July- September 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
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Submitted: October 23, 2012

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# 2012 Third Quarter Groundwater Monitoring Report July-September 2012 Claremont Polychemical Corporation Site Old Bethpage, New York 11804

Report Submittal Date: October 10, 2012 Prepared by: Adam Fox, Tom Sicilia

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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.

Adam Fox, P.E.

# 2012 Third Quarter Groundwater Monitoring Report July-September 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 Third Quarter 2012 (July – September 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 third 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 1.83 billion gallons of groundwater. During this quarter (July 2012 - September 2012), 45.9 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.

During the Quarter, the plant discharge flow averaged 338 gpm which is down from the yearly average of 355 gpm. These flows have been trending down since June as the flow to IW-2 was restricted due to the well's overflow condition. After a plant shutdown due to electrical work in the area, on September 24<sup>th</sup>, the water level in IW-2 dropped and has remained at an acceptable level. The plant discharge has since been increased to 350 gpm.

#### 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 August 6 to August 8, 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 August 6, 7, and 8, 2012. Depths to groundwater ranged from 41.60 ft (EW-14D) to 100.50 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 Third Quarter of 2012 monitoring event samples were collected using passive diffusion bags (PDBs). PDBs were placed at fixed depths (Appendix A) from May 25 through June 1, at least two weeks prior to the sampling events (August 6, 7, and 8)). At the time of sample collection, the bag was retrieved and transported to the site building in a cooler. The PDB was 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.

During the August 2012 sampling event, the designated tethers for wells SW-1 and DW-1 were inadvertently switched. These wells were resampled after the two week PDB equilibration timeframe. The analytical results from the second event confirm that the samples were originally switched.

#### 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 August 2012 sampling event to historical conditions and to applicable NYSDEC water quality criteria. Compounds detected above criteria during the August 2012 sampling event

include tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, benzene, isopropyl benzene and m/p xylenes. 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). It was brought to HRP's attention that the Town of Oyster Bay's (ToB) recovery wells downgradient of the site were not fully operational in the period from 8/19/2102 to 9/10/2012.

#### PCE Contamination (Figure 3a)

PCE has historically been 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 20 ug/l at EW-7c. A separate plume appears to originate on-site, with maximum concentrations of 110 ug/l in SW-1 (cross section C-C'). These plumes seem to be separate (Cross section B-B'). Additional exceedances were noted in the southern portion of the study area, centered on well BP-3c (130 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 (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'). with PCE contamination, additional exceedances were noted in southern portion of the study area, centered on well BP-3c (18 ug/l).	As the

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Conclusions

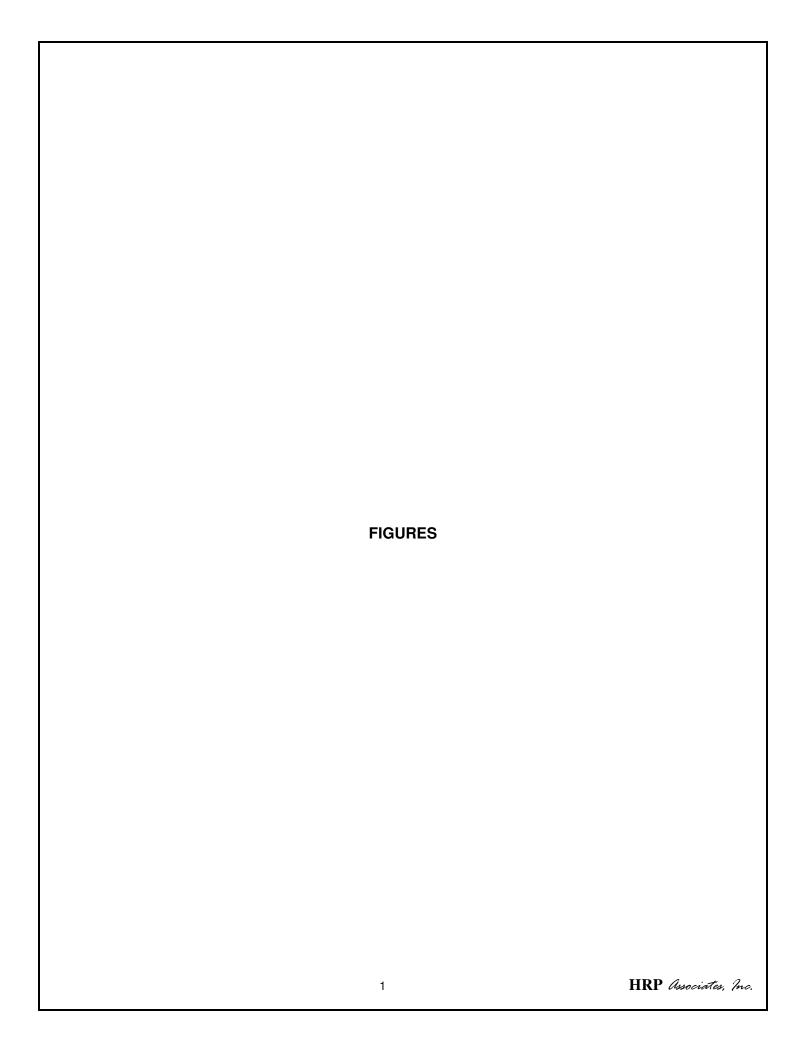
HRP completed a groundwater monitoring event in August 2012 at the Claremont Polychemical Corporation site, in which 44 groundwater samples were collected, and two wells (SW-1, DW-1) were resampled. Analysis of the data has resulted in the following conclusions,

- 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;
- Investigation to identify the source and connectivity of the plumes or elevated concentrations identified in the MW-10 cluster, the BP-3 cluster and at EW-14d (Figure 3d).



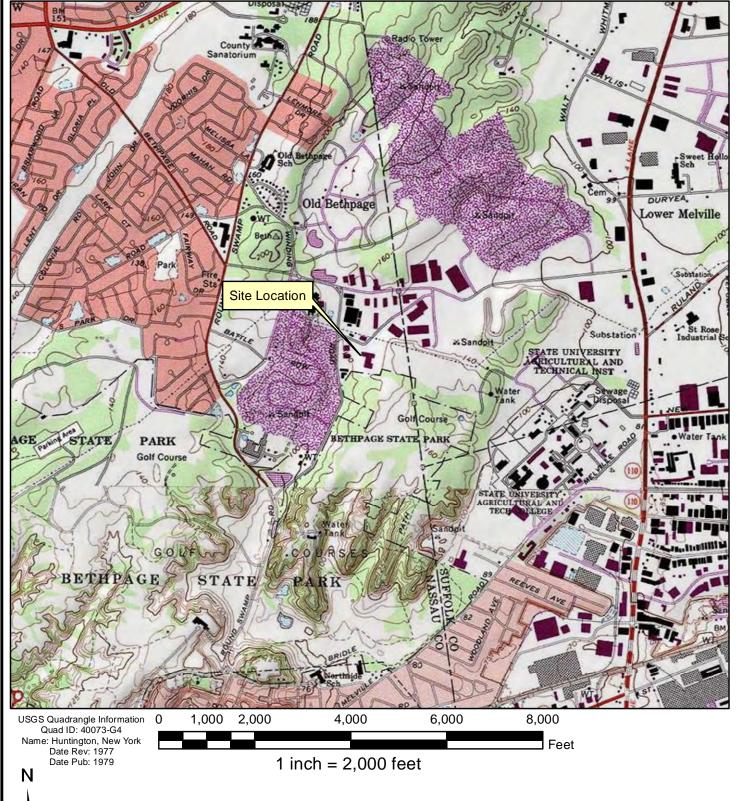


Figure 1
Site Location
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM
Site Code 130015
Scale 1" = 2,000'

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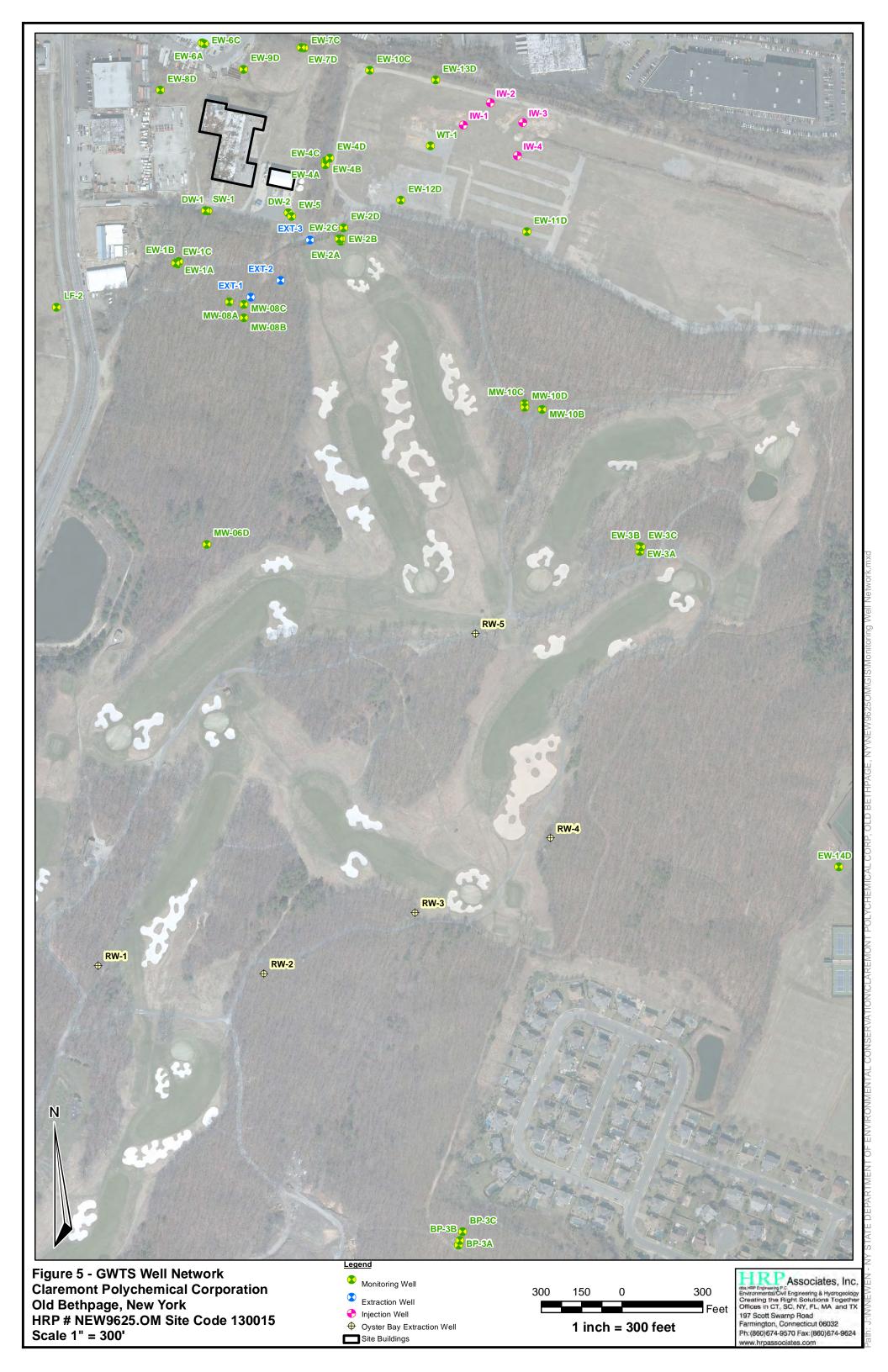


Figure 2b **Shallow Groundwater Elevation Contours** August 2012 **Claremont Polychemical Corporation** Old Bethpage, New York **HRP # NEW9625.OM Site Code 130015** Scale 1" = 200'

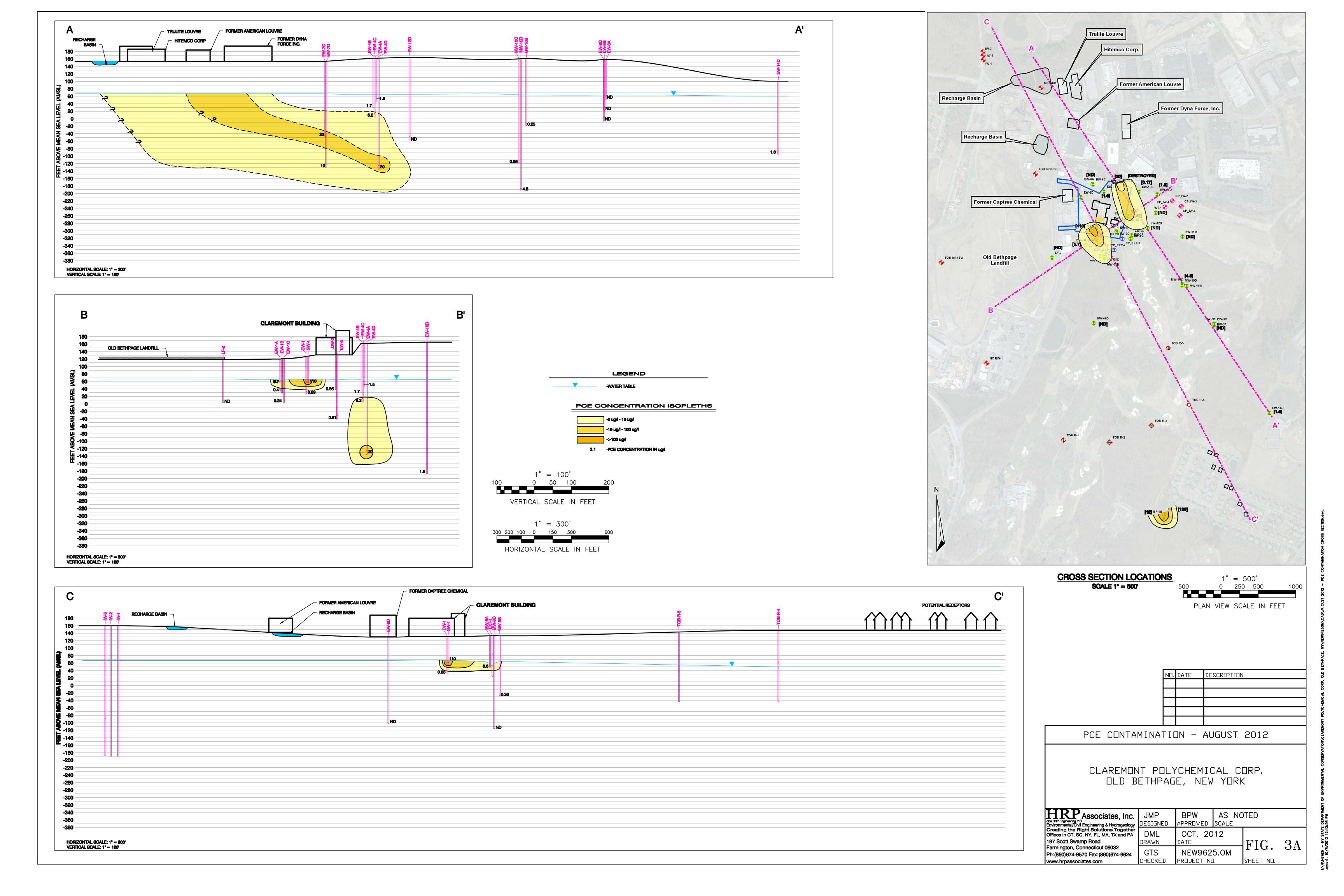
### Legend

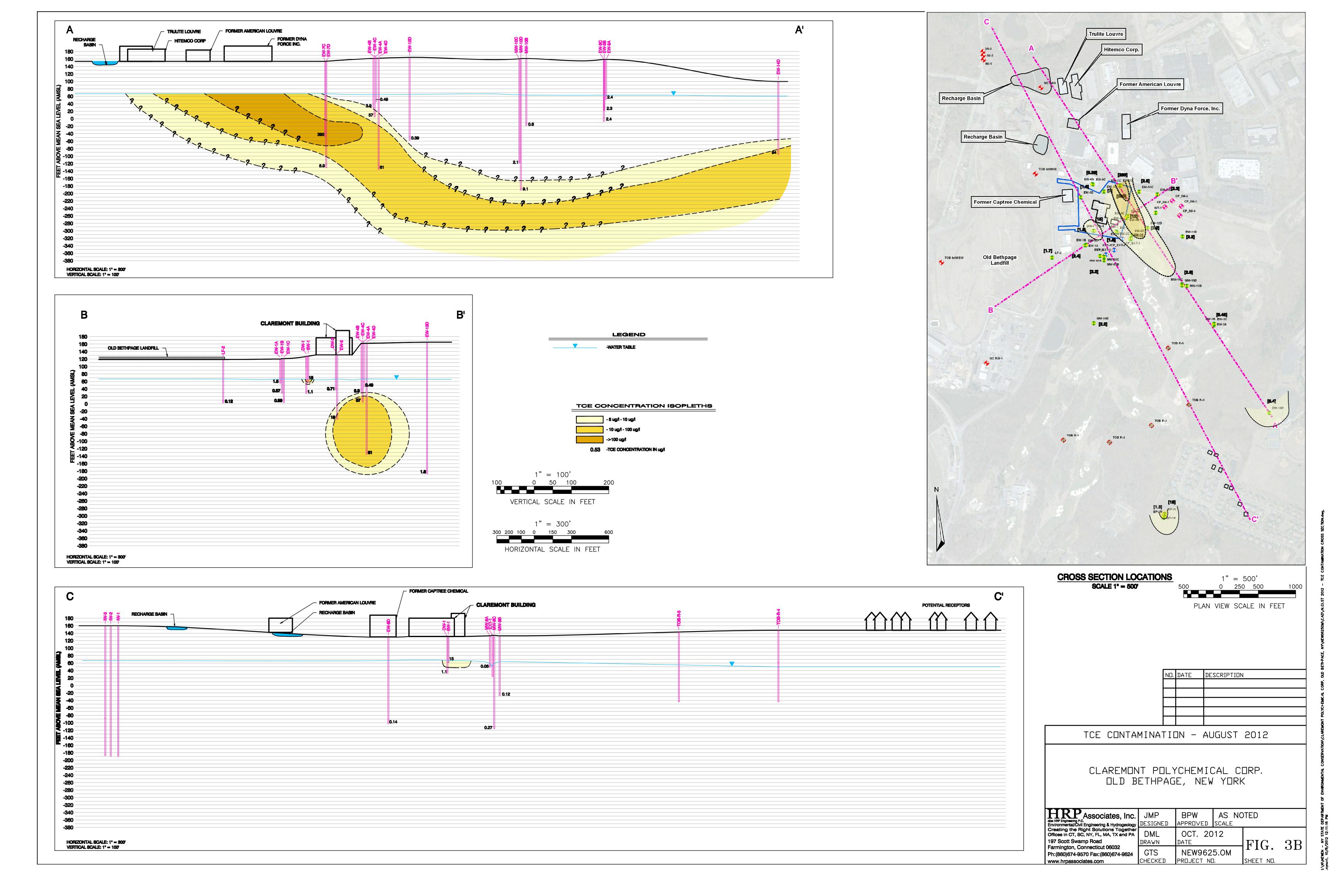
- Monitoring Well
- **Extraction Well**
- Injection Well
- Oyster Bay Extraction Well

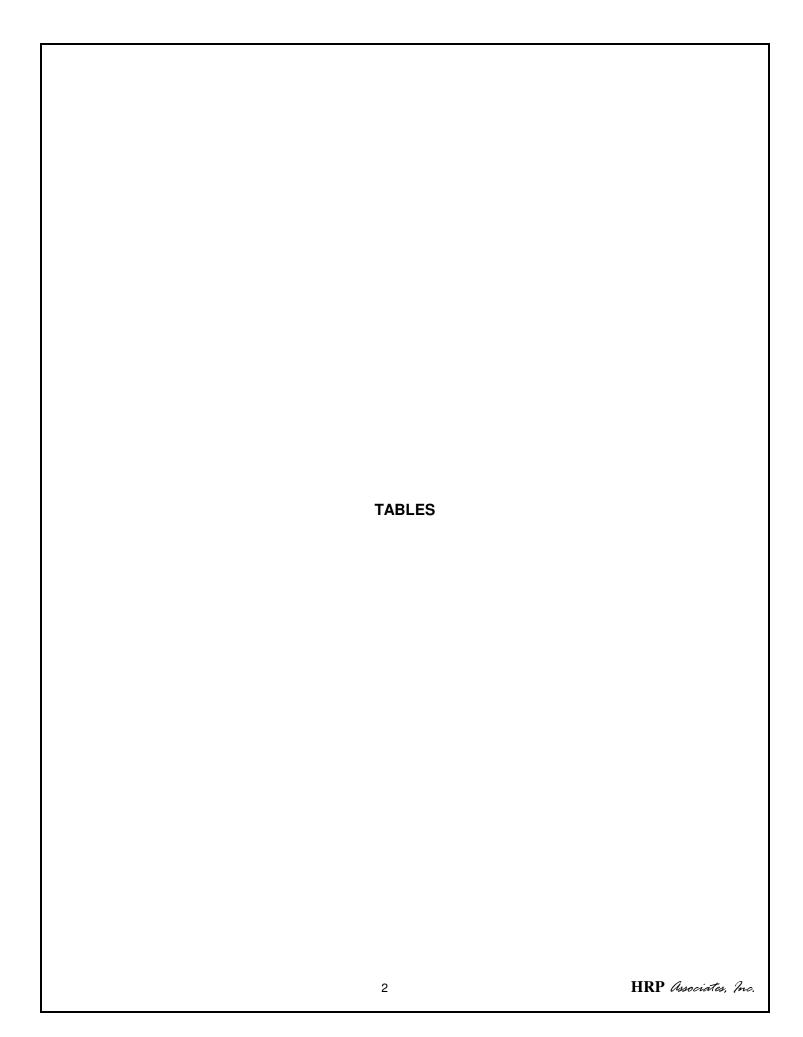
Note: Contours dashed where inferred.

August 2012 Groundwater Contours

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## Table 1: Groundwater Elevations Claremont Polychemical Superfund Site August 2012 (3Q12) Groundwater Sampling Event Old Bethpage, NY

HRP#NEW9625.OM Site Code: 130015 WA# D006130-19

			Aug-12	
	Elev.of Screened Interval	Sample	Depth to Water Below Ref	Water Elevation
Well ID	(ft AMSL) Monitoring Wells	Date	El <sup>b</sup> (ft)	(ft AMSL)
EW-1A	53.34 to 63.17	7-Aug-12	64.31	65.69
EW-1B	28.75 to 38.58	7-Aug-12	64.95	65.58
EW-1C	3.43 to 13.26	7-Aug-12	65.04	65.40
EW-2A	65.19 to 55.36	6-Aug-12	91.61	65.75
EW-2B	28.74 to 38.57	6-Aug-12	91.88	65.85
EW-2C	7.60 to 17.43	6-Aug-12	92.11	65.55
EW-2D	-132.55 to -142.55	6-Aug-12	92.30	65.94
EW-3A	52.28 to 62.11	6-Aug-12	95.85	63.10
EW-3B	22.32 to 32.15	6-Aug-12	95.98	63.11
EW-3C	2.99 to -6.84	6-Aug-12	95.90	63.05
EW-4A	44.86 to 59.69	7-Aug-12	94.80	66.98
EW-4B	29.8 to 39.63	7-Aug-12	94.32	67.48
EW-4C	4.59 to 14.42	7-Aug-12	94.50	67.04
EW-4D	-125.26 to -135.26	7-Aug-12	94.76	67.01
EW-5	-31.16 to -40.99	7-Aug-12	69.68	67.30
EW-6A	57.66 to 67.49	6-Aug-12	61.25	69.07
EW-6B	10.79 to 20.62	0 Aug 12	abandoned	
EW-6C	-29.60 to -39.43	6-Aug-12	62.70	67.70
EW-7C	-37.47 to -47.47	6-Aug-12	86.40	67.39
EW-7D	-121.47 to -131.47	6-Aug-12	86.45	67.26
EW-8D	-102.49 to -112.49	7-Aug-12	64.60	66.94
EW-9D	-108.6 to -118.6	6-Aug-12	70.25	67.28
EW-10C	19.11 to 9.11	8-Aug-12	93.90	67.04
EW-11D	-106.75 to -116.75	8-Aug-12	100.50	64.83
EW-12D	-47.33 to -57.33	8-Aug-12	99.04	65.38
EW-13D	-177.28 to -187.28	8-Aug-12	99.03	65.70
EW-14D	-85.27 to -95.27	6-Aug-12	41.60	60.53
SW-2	65.10 to 75.10	- 0 7 to g	dry	
DW-2	37.35 to 42.35	7-Aug-12	71.80	64.62
SW-1	61.50 to 66.50	7-Aug-12	65.65	65.84
DW-1	32.89 to 38.39	7-Aug-12	65.48	65.90
LF-02	3 to 8	7-Aug-12	52.50	66.20
PPW-1	-166.15 to -196.15	Permane	ntly closed	Oct. 2008
WT-01	56.98 to 66.98	8-Aug-12	97.35	67.22
MW-6D	-26.1 to -31.1	7-Aug-12	96.20	64.19
MW-8A	48.5 to 53.5	7-Aug-12	70.30	62.88
MW-8B	-22.2 to -27.2	7-Aug-12	69.90	64.34
MW-8C	-110.7 to -115.7	7-Aug-12	70.47	65.25
MW-10B	-13 to -18	6-Aug-12	97.80	63.32
MW-10C	-113.1 to -118.1	6-Aug-12	96.70	63.57
MW-10D	-186.2 to -191.2	6-Aug-12	97.00	64.17
BP-3A	51 to 71	6-Aug-12	63.00	61.54
BP-3B	-91 to -111	6-Aug-12	65.20	58.37
BP-3C	-156 to -176	6-Aug-12	65.60	58.08
RW-01	Abandoned	<u> </u>	abandoned	

#### Key:

ft bgs - feet below ground surface ft AMSL - feet above mean sea level

Ref El - reference elevation NM - not measured

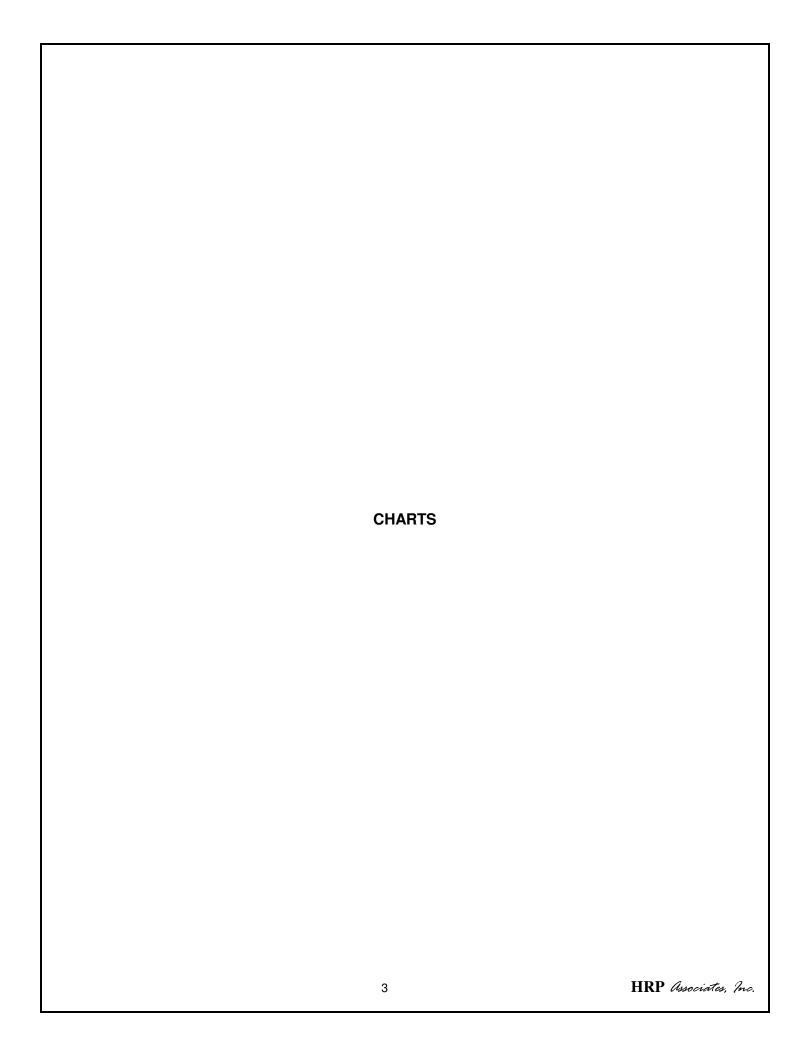
NA - not applicable

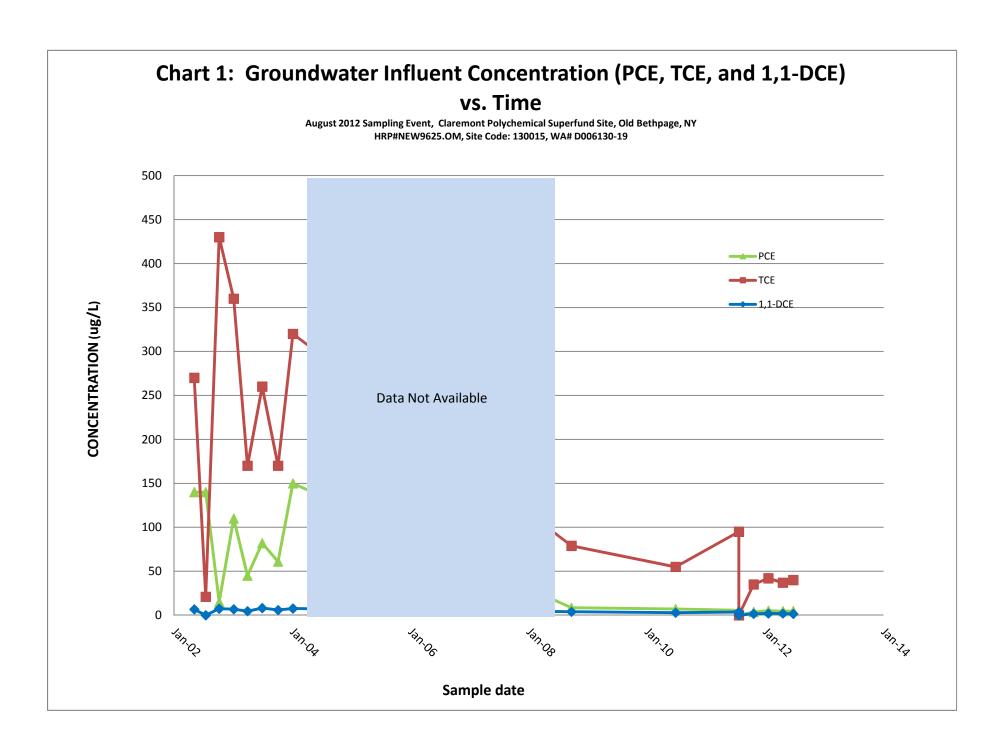
Table 2: Summary of Analytical Results
August 2012 (3Q12) Sampling Event
Claremont Polychemical Superfund Site
Old Bethpage, NY
HRP#NEW9625.OM
Site Code: 130015
WA# D006130-19

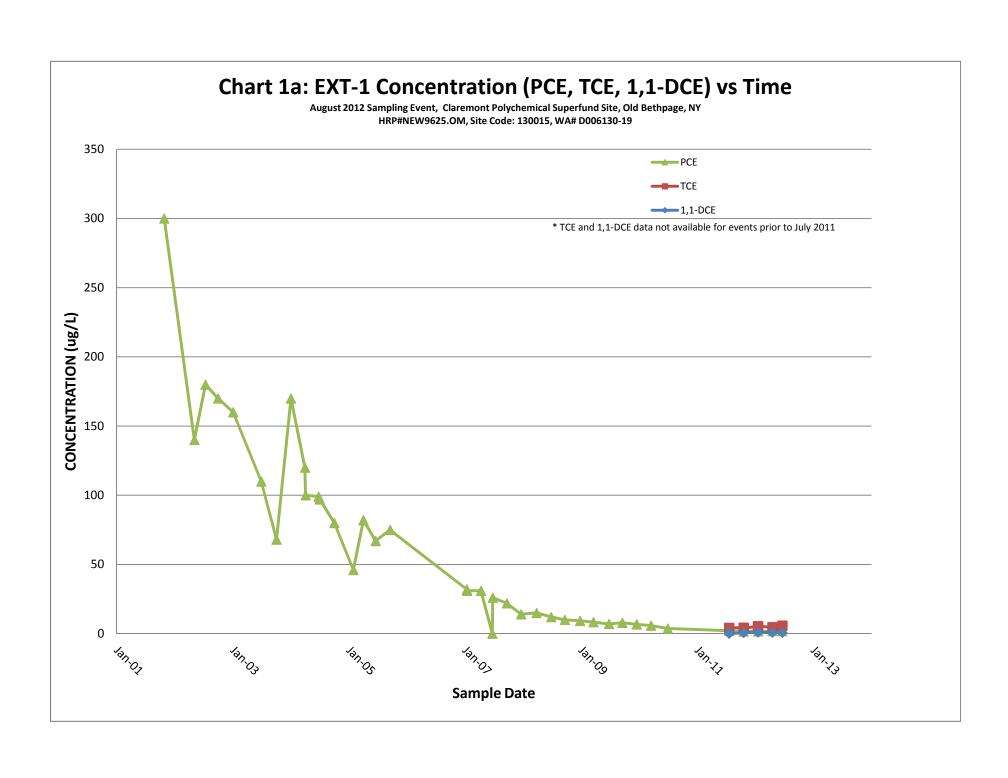
		7	Т			T	П	T	1	1	T	T	T	
Note	italiaa aua	127-18-4	79-01-6	156-59-2	156-60-5	75-35-4	75-01-4	71-55-6	76-13-1	75-34-3	95-50-1	107-06-2	541-73-1	106-46-7
values in blue "J" flagged	e italics are	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Values in sha	ded cells	ug/i	ug/i	ug/i	ug/i	ug/i	ug/i	ug/i	ug/i	ug/i	ug/1	ug/i	ug/i	ug/1
exceed criteri		5	5	5	5	5	2			5	3	5	5	5 5
Description	Date Collected	etrachloroethylene	Trichloroethylene	cis-1,2- Dichloroethylene	trans-1,2- Dichloroethylene	1,1-Dichloroethylene	e e	1,1,1-Trichloroethane	1,1,2- Trichlorotrifluoroethan e (freon 113)	1,1-Dichloroethane	,2-Dichlorobenzene	1,2-Dichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene
2	ect	ith	Ρ̈́	2- hyle	,2- hyle	eth	Vinyl chloride	roe	1,1,2- Ilorotrifluoroe e (freon 113)	oetl	ber	oetl	ber	ber
es	ē	roe	oet	cis-1,2	s-1 oetl	ō	chlc	hlo	1,1,2- otrifluc reon 1	loro	0.0	lorc	o.c	0.0
9	6 C	) H	lo	cis lor	ran Ior	l G	<u>&gt;</u>	Ϊ̈́̈́	1, otr	ij	Ü	ich	l G	당
귵	at	rac	흔	ich	t ich	ڄَ	Ν	[-]	olor e (	2	Ξ̈́	٥-١	Ξ	Ϊ́
Sample		Tet	Ē	Δ	Ω	1,1		1, 1,	Frick	1,1	1,2	1,2	1,3	1,4
BP-3a	8/6/12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
BP-3b	8/6/12	12	1.3	4.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
BP-3c DW-2	8/6/12 8/7/12	0.85	0.71	0.25	<b>0.58</b>	1.1	<b>0.28</b>	1.5	1.5	3.3	<1	<1 <1	<1 <1	<1
EW-1a	8/7/12	5.6	1.5	6.8		<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-1a dup	8/7/12	5.7	1.6	7.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-1b	8/7/12	0.41	0.57	0.45	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-1c	8/7/12	<1	0.99	0.48	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-2a	8/6/12	0.24	0.29	0.22	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-2b	8/6/12	0.21	0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-2c EW-2d	8/6/12 8/6/12	<1 1.5	<b>0.5</b> 3.8		<1 <1	<1 <1	<1 <1	<1 <b>0.2</b>	<1 <1	<1	<1 <1	<1 <1	<1 <1	<1 <1
EW-3a	8/6/12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-3b	8/6/12	<1	0.095	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-3c	8/6/12	<1	0.45	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-4a	8/7/12	1.5	0.49		<1	<1	<1	0.099		<1	<1	<1	<1	<1
EW-4b	8/7/12	1.7	3.9		<1	0.96	<1	2.4	<1	0.25		<1	<1	<1
EW-4c	8/7/12	6.2	57	2.5	1.2	6.5		8.9			<1	<1	<1	<1
EW-4d EW-5	8/7/12 8/7/12	0.81	61 16	<b>0.36</b> 2.2	<1 <b>0.35</b>	0.42	<1 <1	<1	<1 <1	<1 <1	<1	<1 <1	<1 <1	<1 <1
EW-6a	8/6/12	<1	0.79	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-6c	8/6/12	<1	0.78	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-7c	8/6/12	20	390	8.9		0.87	<1	1.7	<1	0.25	<1	<1	<1	<1
Ew-7d	8/6/12	10	8.9		<1	<1	<1	0.22	<1	<1	<1	<1	<1	<1
EW-8d	8/7/12	<1	0.14		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW09d	8/6/12	1.6	1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-10c EW-11d	8/8/12 8/8/12	<b>0.17</b>	<b>0.57</b>	<1 <1	<1 <1	<1 <1	<1 <1	<b>0.24</b>	<1 <1	<1	<1	<1	<1 <1	<1
EW-11d EW-12d	8/8/12	<1	0.39	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-13d	8/8/12	1.5	1.8	0.23	<1	1.1		1.3		0.66		<1	<1	<1
EW-14d	8/6/12	1.6	94	1.3	<1	12		16		0.36		2.4		<1
LF-2	8/7/12	<1	0.12	0.45	<1	<1	<1	<1	<1	<1		<1	0.15	
MW-6d	8/7/12	<1	0.19	0.32	<1	<1	<1	<1	<1	0.33	0.33		<1	0.54
MW-8a	8/7/12	6.6	0.6		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-8b MW-8c	8/7/12 8/7/12	0.36	0.12 0.27	<1 <1	<1 <1	<1 <1	<1 <1	<1 <b>0.17</b>	<1 <1	<1 <1	<1	<1	<1 <1	<1
MW-10b	8/7/12	<1 <b>0.25</b>	0.27	<1	<1	<1	<1	0.093	<1	<1	<1	<1	<1	<1
MW-10c	8/6/12	0.96	2.1		<1	0.17	<1	0.14	<1	<1	<1	<1	<1	<1
MW-10d	8/6/12	4.8	9.1		<1	1.3	<1	1.3		1.6		0.39	<1	<1
RB-1	8/8/12	<1	0.54		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
RB-2	8/8/12	<1	0.61	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
WT-1	8/8/12	<1	0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
WT-1 dup	8/8/12	<1	0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

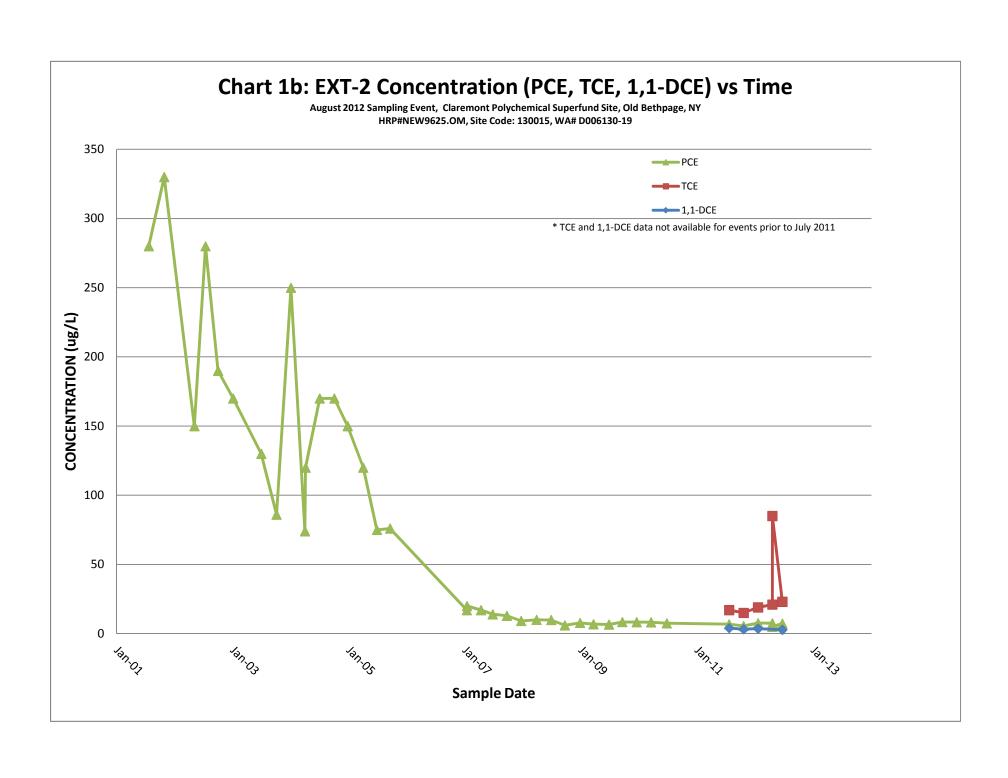
Table 2: Summary of Analytical Results
August 2012 (3Q12) Sampling Event
Claremont Polychemical Superfund Site
Old Bethpage, NY
HRP#NEW9625.OM
Site Code: 130015
WA# D006130-19

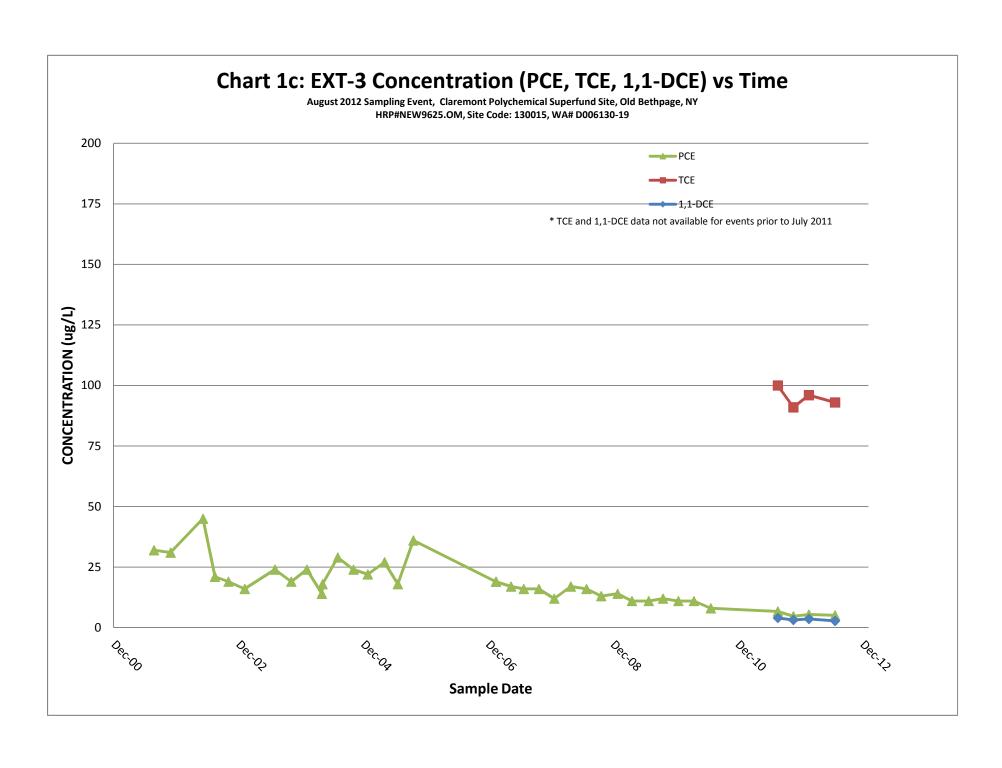
		_														
Note		78-93-3	67-64-1	71-43-2	75-15-0	56-23-5	108-90-7	67-66-3	74-87-3	110-82-7	100-41-4	98-82-8	179601-23-	1634-04-4	95-47-6	108-88-3
values in blue	e italics are															
"J" flagged		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Values in sha		50	50	_		-	_	_	NG	NG	_	_	_	4.0	_	_
exceed criter	1a	50	50	1	60	5	5	/	NS	NS	5	5	5	10	5	5
Description	<b>D</b>	(MEK)			ge Ge	tetrachloride	Ð		e e		a)	aue		ether		
Ë	Collected	Σ	a)	Φ	Carbon disulfide	hlc	Chlorobenzene	٤	Chloromethane	Cyclohexane	Ethylbenzene	Isopropylbenzene	m/p-Xylenes	<u>~</u>	a	a)
esc	_ ≝	ne	Acetone	Benzene	dist	rac	en	Chloroform	het	e X	zus	lbe	Χle	Methyltertbutyl	o-Xylene	Toluene
		Butanone	cet	enz	n (	tet	do do	lor	0,0		a a	þď	×	l H	×	nlo
<u>e</u>	亨	uta	۸	В	rbc	uo	اور	5	10	Š	) E	pro	d/u	\ \ \	ò	-
Sample	Dai	2-B			Ca	Carbon	Ö		Ö		ш	los	_	it.		
Sa		7				Ö								Ψ		
BP-3a	8/6/12	<5	10	<1	<1	<1	<1	0.77	<1	<1	<1	<1	<2	<1	<1	<1
BP-3b	8/6/12	<5		<1	<1	<1	<1	0.31	<1	<1	<1	<1	<2	<1	<1	<1
BP-3c	8/6/12	<5	14		<1	<1	<1	0.36		<1	<1	<1	<2	<1	<1	<1
DW-2	8/7/12	2.9	35		<1	<1	<1	<1	<1	<1	<1	<1	<2	0.23		<1
EW-1a	8/7/12	<5	15		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
EW-1a dup EW-1b	8/7/12 8/7/12	<b>2.5</b>	15 13		<1 <1	<1 <1	<1 <1	<1 <1	<1 <1	<1 <b>0.18</b>	<1 <1	<1	<2	<1 <1	<1 <1	<1 <b>0.15</b>
EW-10	8/7/12	<5	13		<1	<1	0.11	<1	<1	<1	<1	<1	<2	<1	<1	<1
EW-2a	8/6/12	2.6		<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
EW-2b	8/6/12	2.4			<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
EW-2c	8/6/12	<5	9.3		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
EW-2d	8/6/12	2.4	11	<1	<1	<1	<1	0.79	<1	<1	<1	<1	<2	<1	<1	<1
EW-3a	8/6/12	<5	17		<1	<1	<1	0.21	<1	<1	<1	<1	<2	<1	<1	<1
EW-3b	8/6/12	2.7	14			<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
EW-3c	8/6/12	<5		<1	<1	<1	<1	<1	<1	0.17		<1	<2	<1	<1	<1
EW-4a	8/7/12	2.4	12		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.52
EW-4b	8/7/12	2.6	15		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.41
EW-4c EW-4d	8/7/12 8/7/12	<5 <5	11 11		<1 <1	<1 <1	<1 <1	0.085 0.099	<1 <1	<1 <1	<1	<1	<2 <2	<1 <1	<1 <1	0.42
EW-40	8/7/12	2.3	17		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
EW-6a	8/6/12	2.9	37		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.33
EW-6c	8/6/12	<5	16		<1	<1	<1	<1	<1	0.17		<1	<2	<1	<1	1.9
EW-7c	8/6/12	3.3	41		0.18		<1	0.17	<1	<1	<1	<1	<2	1.6		0.36
Ew-7d	8/6/12	3.5	39		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	0.26
EW-8d	8/7/12	<5	16		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
EW09d	8/6/12	2.3	29		<1	<1	<1	0.44	<1	<1	<1	<1	<2	<1	<1	0.27
EW-10c	8/8/12	<5	16		<1	<1	<1	<1	0.5		<1	<1	<2	0.25		<1
EW-11d EW-12d	8/8/12 8/8/12	<5 <5	12 9.6		<1 <1	<1 <1	<1 <1	<1 <1	<1 <b>0.7</b>	<1 <b>77</b> <1	<1 <1	<1	<2 <2	<1 <1	<1 <1	<1 <1
EW-12d	8/8/12	<5	9.6		<1	<1	<1	<1	<1	<1	<1	<1	<2	0.36		<1
EW-14d	8/6/12	<5	13		<1	<1	<1	0.68		<1	<1	<1	<2	<1	<1	0.2
LF-2	8/7/12	<5	36	3.7	0.14			<1	<1	0.3	0.11	5.4		0.19	2.2	
MW-6d	8/7/12	2.5	20			<1	0.51		<1	0.33			<2		<1	<1
MW-8a	8/7/12	<5	12		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
MW-8b	8/7/12	5.1	33		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
MW-8c	8/7/12	2.4	14		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
MW-10b	8/6/12	<5	<5	<1		<1	<1	0.13	<1	<1	<1	<1	<2	<1	<1	<1
MW-10c MW-10d	8/6/12 8/6/12	<b>4.3</b>	21 11		<1 <1	<1 <b>0.28</b>	<1 <1	<1 <b>0.36</b>	<1 <1	0.18 0.18		<1	<2	<1 <1	<1 <1	<1 <1
RB-1	8/6/12	<5 <b>2.9</b>	8.9		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
RB-2	8/8/12	3	8.6		<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
WT-1	8/8/12	3		<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
WT-1 dup	8/8/12	3.2		<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1
	-, -,					1			•	•	•		•		•	

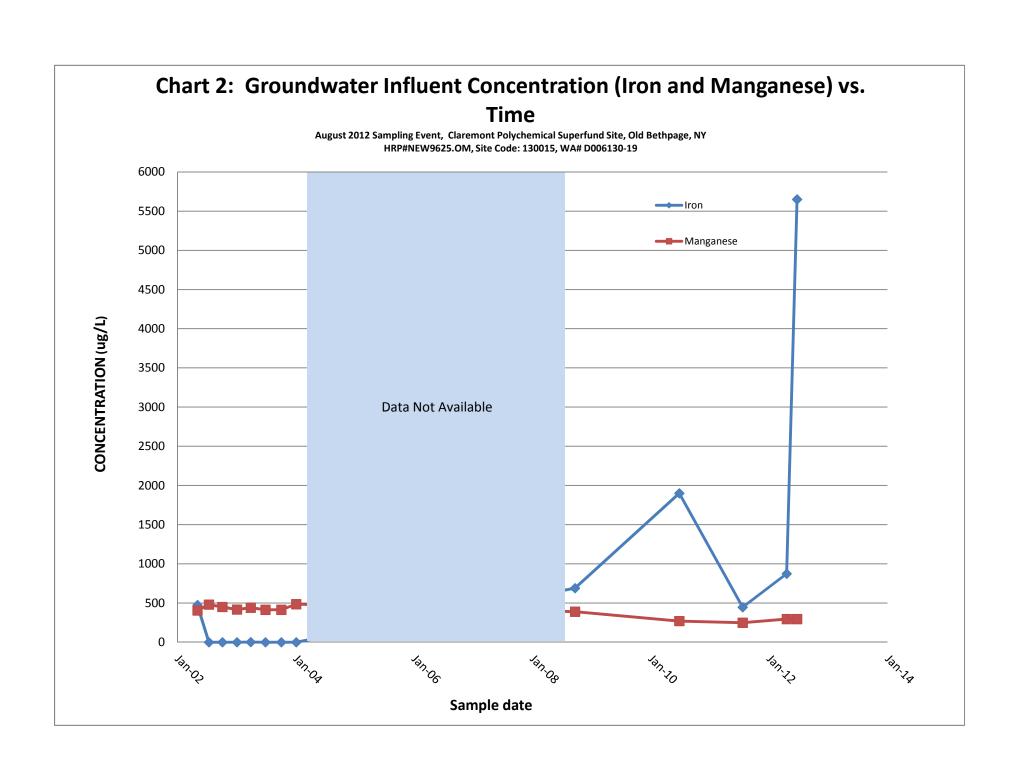


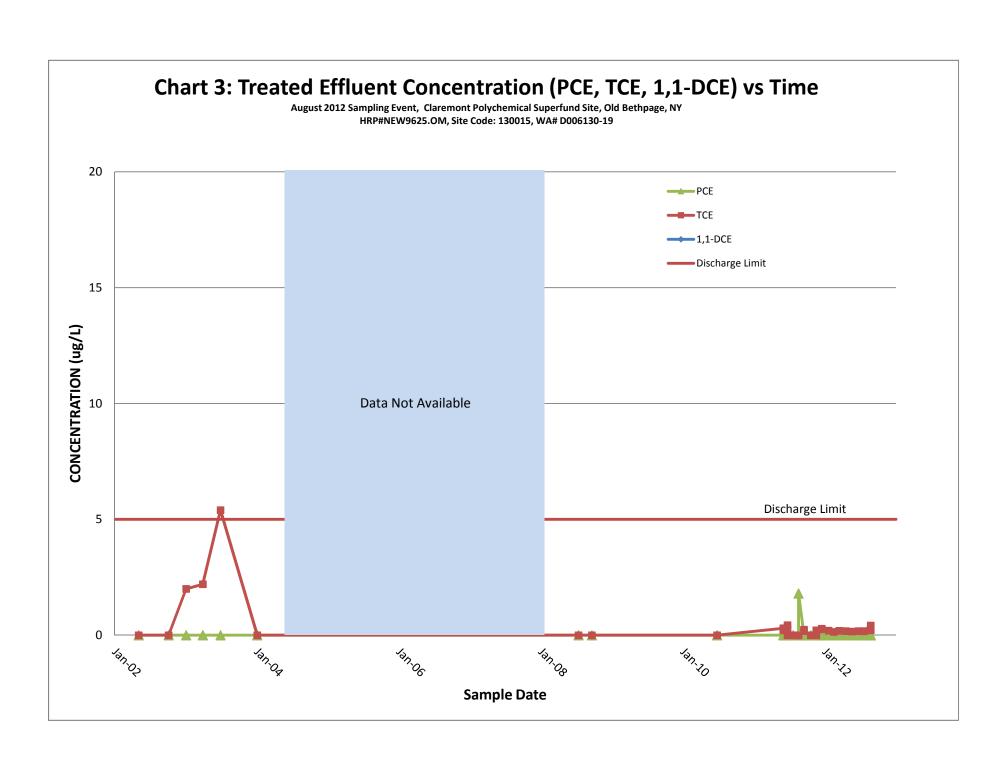


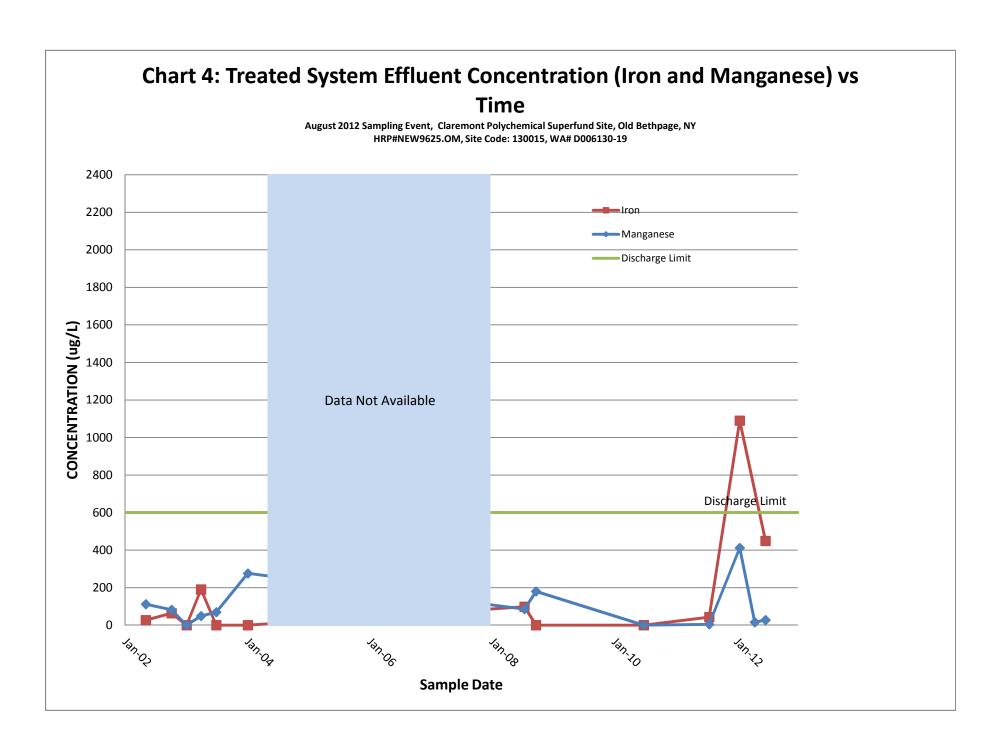


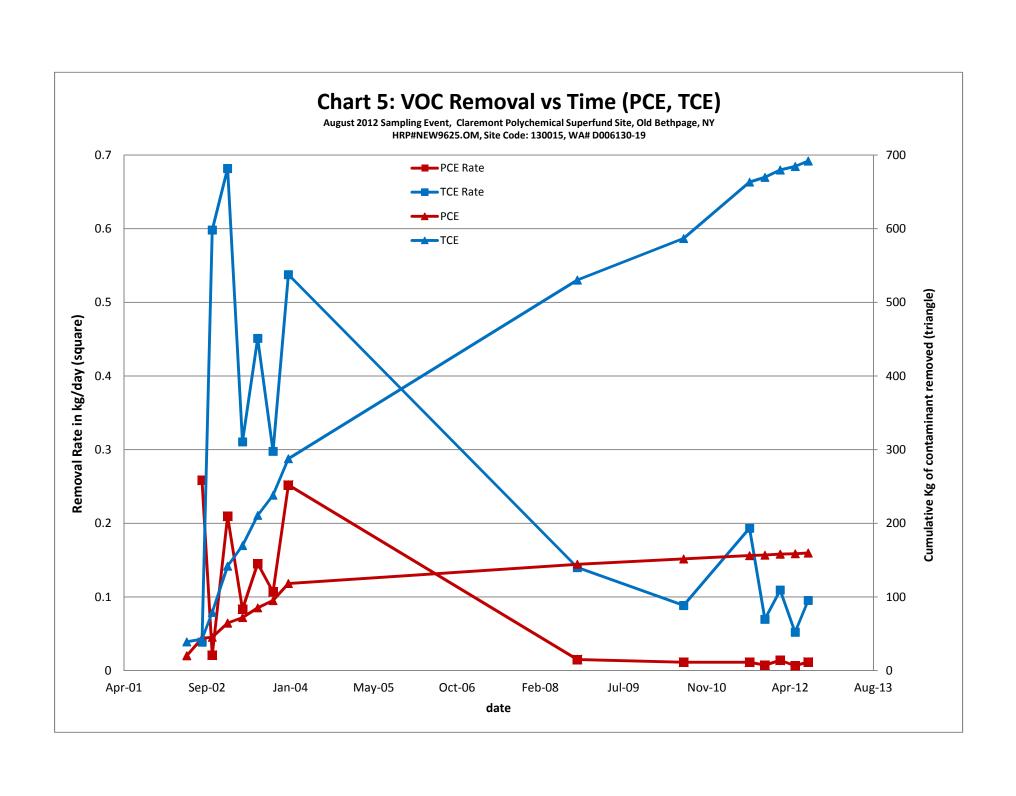


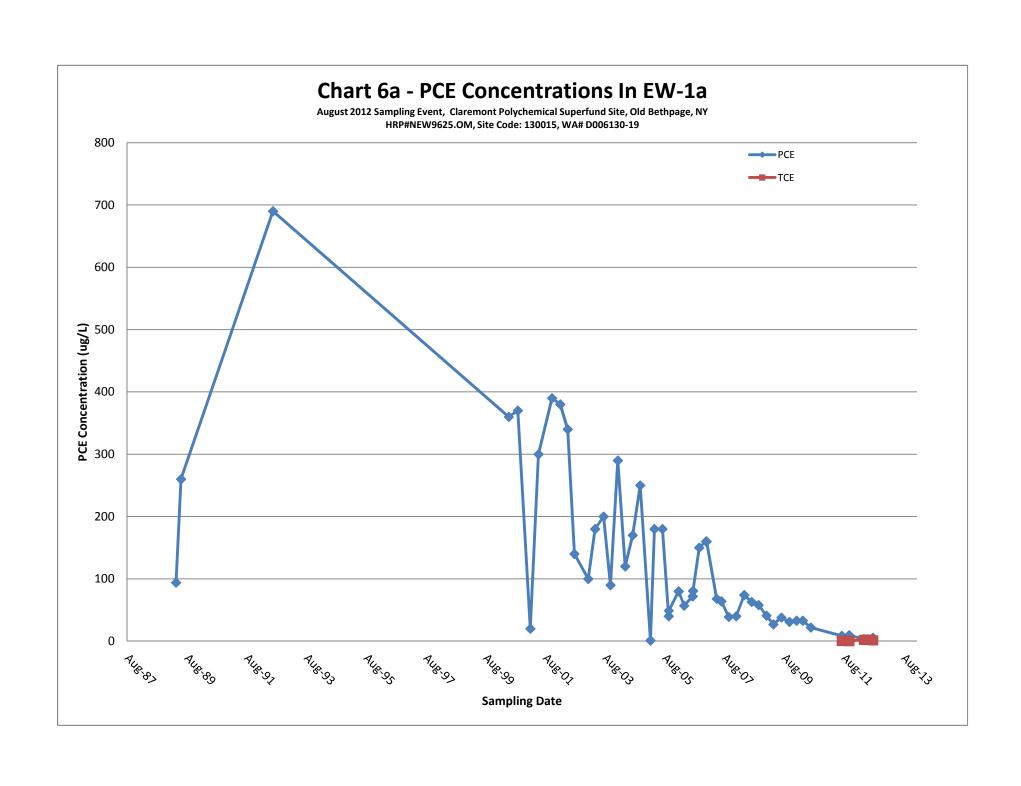


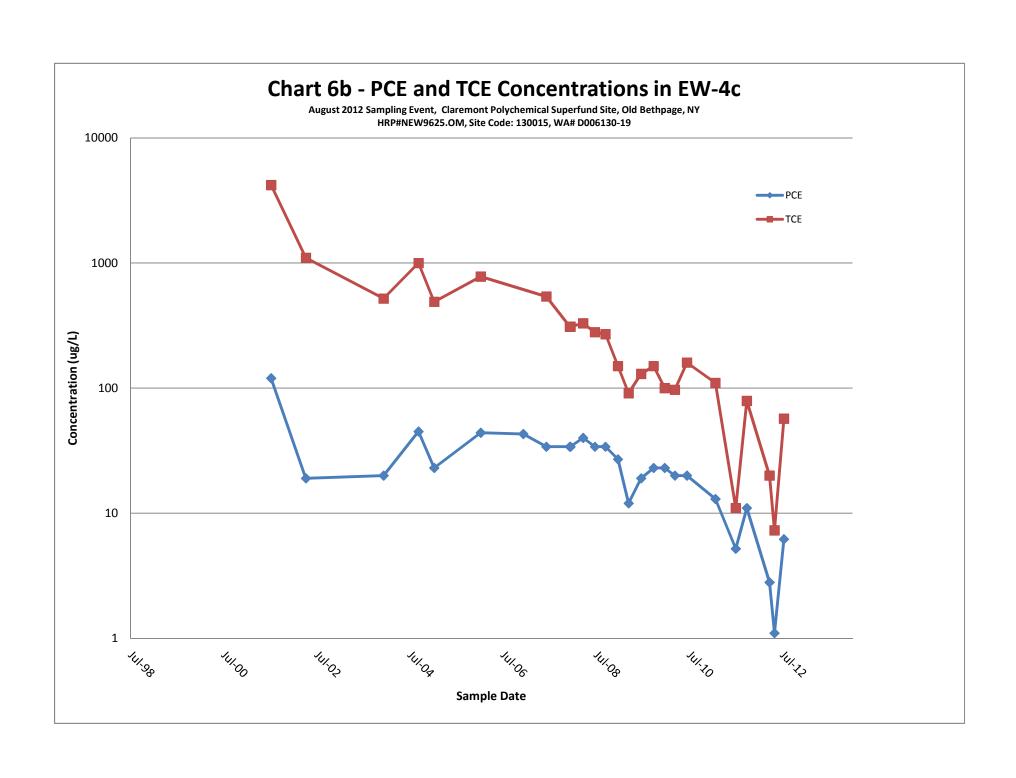


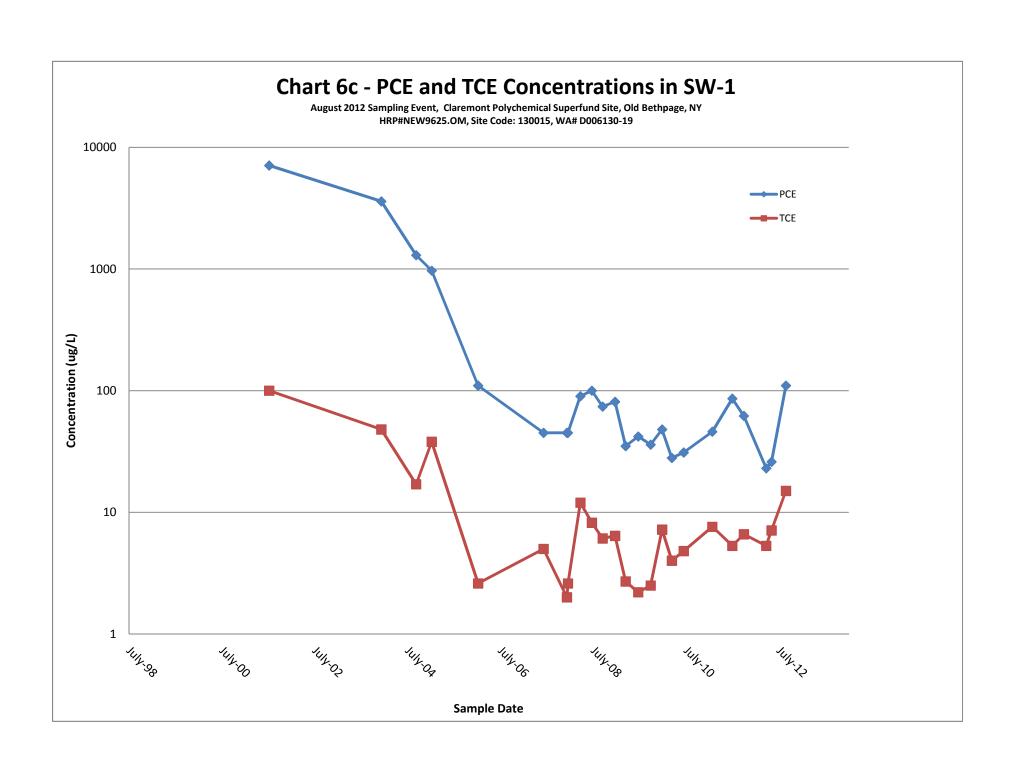


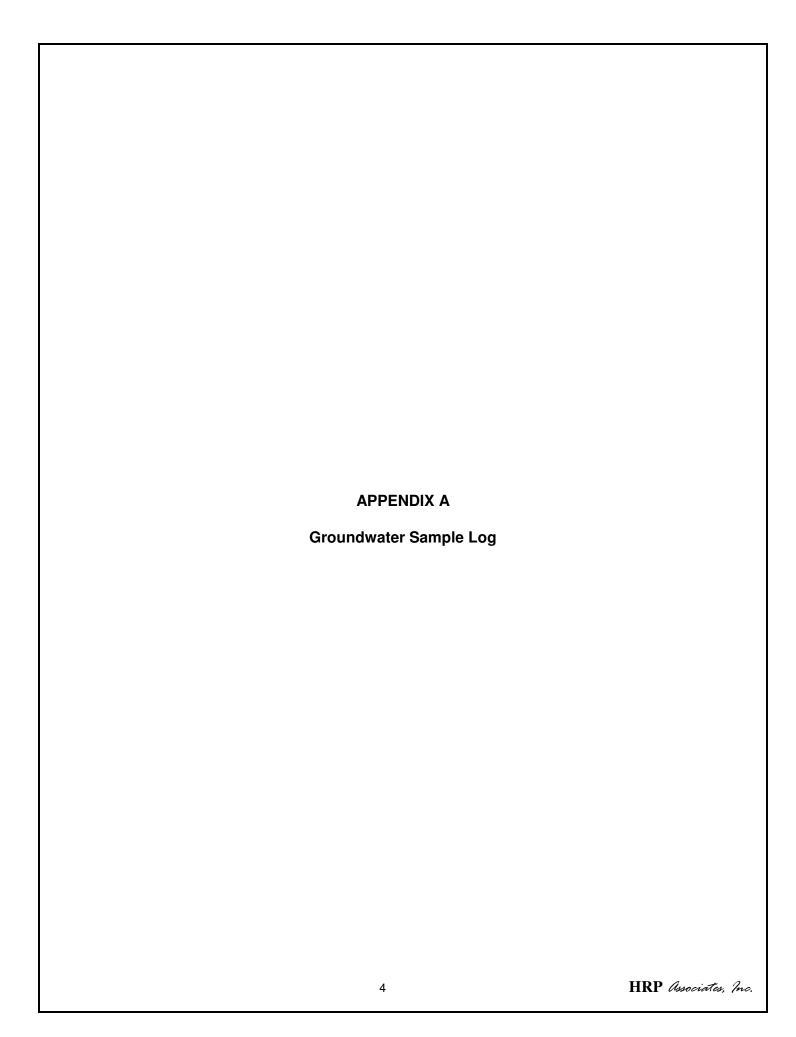












	TOC-	Date Bag	DTW at	Sample	Sample	DTW at	ТОВ	
WELL	PDB	Installed	Install	Date	Time	sample	Split	Notes:
ВР3А	65	1-Jun	63.25	6-Aug	9:40	63.00	2VOA	
ВР3В	225	1-Jun	64.91	6-Aug	9:25	65.20	2VOA	
врзс	390	1-Jun	65.10	6-Aug	9:30	65.60	2VOA	
DW1	94	29-May	64.55	7-Aug	9:25	65.48		
DW2	100	29-May	71.05	7-Aug	9:40	71.80		
EW01A	72	29-May	63.32	7-Aug	9:08	64.31	2VOA	
EW01B	96	29-May	64.09	7-Aug	9:05	64.95	2VOA	
EW01C	122	29-May	64.03	7-Aug	9:00	65.04	2VOA	
EW02A	95	1-Jun	91.82	6-Aug	8:45	92.45	2VOA	
EW02B	124	1-Jun	92.10	6-Aug	8:48	92.90	2VOA	
EW02C	143	1-Jun	91.95	6-Aug	8:54	92.75	2VOA	
EW02D	295	1-Jun	92.15	6-Aug	8:52	92.63		
EW03A	100	1-Jun	96.00	6-Aug	8:20	96.75	2VOA	
EW03B	130	1-Jun	96.25	6-Aug	8:26	96.90	2VOA	
EW03C	159	1-Jun	96.02	6-Aug	8:28	96.27	2VOA	
EW04A	108	25-May	95.21	7-Aug	14:39	95.70		
EW04B	126	25-May	95.12	7-Aug	14:30	96.20		
EW04C	151	25-May	94.90	7-Aug	14:21	95.45		
EW04D	291	25-May	95.20	7-Aug	14:12	95.95		
EW05	170	29-May	70.50	7-Aug	9:43	71.04		
EW06A	66	29-May	61.70	6-Aug	12:35	62.20		
EW06C	165	29-May	62.65	6-Aug	12:25	62.70		
EW07C	198	29-May	86.00	6-Aug	12:05	86.40		
EW07D	279	29-May	85.98	6-Aug	11:55	86.45		
EW08D	239	29-May	63.63	7-Aug	9:15	64.60		
EW09D	251	29-May	69.73	6-Aug	12:15	70.25		
EW10C	146	25-May	93.03	8-Aug	8:15	93.90		
EW11D	277	25-May	99.71	8-Aug	7:44	100.50		
EW12D	216	25-May	98.25	8-Aug	7:58	99.04		
EW13D	346	25-May	98.30	8-Aug	7:30	99.03		
EW14D	191	1-Jun	41.55	6-Aug	11:23	41.60		
LF02	112	29-May	51.45	7-Aug	7:28	52.50	2VOA	
MW06D	187	1-Jun	95.90	7-Aug	8:30	96.20	2VOA	
A80WM	87	25-May	69.30	7-Aug	8:40	70.30	2VOA	
MW08B	157	25-May	68.94	7-Aug	8:45	69.90	2VOA	
MW08C	248	25-May	69.55	7-Aug	8:50	70.47	2VOA	
MW10B	175	1-Jun	96.70	6-Aug	8:35	97.80	2VOA	
MW10C	273	1-Jun	95.85	6-Aug	10:05	96.70	2VOA	
MW10D	347	1-Jun	96.75	6-Aug	10:10	97.00	2VOA	
SW1	68	29-May	64.62	7-Aug	9:30	65.65		
WT01	102	25-May	96.40	8-Aug	8.53	97.35		