2011 Fourth Quarter Final Groundwater Monitoring Report
October- December 2011
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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Project Geologist

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Submitted: March 28, 2012

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Report Submittal Date: March 28, 2012
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Project Address: Claremont Polychemical, 505 Winding Rd, Old Bethpage, NY

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, 2011 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).

Environmental Contractor: HRP Engineering, P.C.

By: 

Adam Fox, P.E.

2011 Fourth Quarter Final Groundwater Monitoring Report
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1.0 INTRODUCTION

HRP Engineering, P.C. is pleased to submit this report containing groundwater quality data, discussions and data deliverables related to the Fourth Quarter 2011 (October – December 2011) 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 fourth quarterly monitoring period for 2011. 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;
- Shallow, intermediate, and deep groundwater tetrachloroethylene (PCE) and trichloroethylene (TCE) contaminant concentrations;
- 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 June 2011. During that period SAIC monitored the treatment system operation on a regular basis by collecting system discharge and quarterly groundwater samples. In June 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/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 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. In addition to removing metals and VOCs from the extracted water, the treatment system also raises the pH of the extracted water from pH 5, which is the background pH for groundwater in the area, to between pH 6.5 and 8.5. 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 outline 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. The total volume of treated water discharged each month is provided below:

Time and Date	Total Flow Month/ Percent of Monthly Target Flow	Ave Daily Flow/ Ave Flow per Minute	Total Water Treated Operating Year (Starting 6/1/11)
October – 0600 hrs 10/1/11 to 0600 hrs 11/1/11	16,527,016 / 110	551,520 / 383	77,382,252
November - 0600 hrs 11/1/11 to 0600 hrs12/1/11	16,237,065 / 112	541,236 / 376	93,619,317
December - 0600 hrs 12/1/11 to 0600 hrs 1/1/12	16,413,979 /109	529,483 / 368	110,033,296

The flow to the injection system during the monitoring period was as follows.

Month	Injection Well System	Flow Average (gpm)	Volume Discharged (gallons)
October 2011	IW-1	93	4,138,941
	IW-2	96	4,299,171
	IW-3	112	5,004,141
	IW-4	78	3,463,710
	System	379	16,905,963
November 2011	IW-1	95	4,121,480
	IW-2	95	4,122,250
	IW-3	116	5,032,250
	IW-4	77	3,333,880
	System	384	16,609,860
December 2011	IW-1	92	4,121,880
	IW-2	84	3,764,210
	IW-3	111.5	4,979,260
	IW-4	76	3,384,910
	System	364	16,250,260

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. In summary, no analyzed contaminants were detected above the laboratory detection limit within the two groundwater samples collected at the

equalization tank inlet during the review period, therefore a removal rate was not calculated.

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 3a, 3b, 3c, and 4 show that the effluent concentrations remain below permissible levels.

4.0 GROUNDWATER MONITORING PROGRAM

From October 20 to October 27, 2011 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

Prior to sampling, static groundwater levels were measured at all 44 locations on October 19, 2011. Four wells were not sounded due to wasps nests in the well caps. Depths to groundwater ranged from 40.6 ft (EW-14D) to 99.3 ft (EW-11D) below ground surface (bgs). Overall, groundwater elevations and flow directions (Figure 2b) were consistent with previous data.

4.2 Groundwater Sample Collection

To collect representative groundwater samples, the wells were purged using standard EPA low flow sampling equipment and procedures. Purging required removing water from the well at a rate of at least 250 milliliters per minute, but not greater than 1 liter per minute for a sufficient length of time for water quality parameters to stabilize (i.e. pH, Specific Conductivity, Temperature, Dissolved Oxygen, Oxidation/Reduction Potential, and Turbidity) within a parameter specific control range. Drawdown did not exceed ten percent of the standing water column. Sampling commenced immediately after purging, without adjusting the flow rate or water intake depth. Provided below is a description of the procedures utilized to collect groundwater samples:

- All field instruments were calibrated at the beginning of each work day.
- Monitoring well covers were unlocked and carefully removed to avoid any foreign material enter the well.
- The water level was measured below the top of casing using an electronic water level indicator. With knowledge of the total depth of the well, the volume of water in the well was calculated. The tape and probe of the water level indicator was cleaned with an Alconox and water soaked paper towel while reeling in.
- Dedicated Teflon lined polyethylene tubing and pump was installed into the well and the end of the pump was set to approximately the midpoint of the screen interval inside the well.
- Each well has a dedicated bladder pump at monitoring well locations and dedicated Grundfos pump at extraction well locations. All wells except

BP-3A, EW-6A, EW-6C, LF-2, MW-6D, MW-8A, MW-8B, MW-8C, MW-10B, MW-10C, MW-10D, and WT-01 have dedicated pumps.

- The tubing was attached to a flow-through cell water quality monitor (YSI 600xl).
- The pump was turned on and set to a relatively low discharge rate (less than 1-liter per minute) and drawdown rate was monitored using a water level indicator.
- The wells were purged while collecting water quality measurements (pH, Specific Conductivity, Temperature, Dissolved Oxygen, Oxidation/Reduction Potential, and Turbidity) and water level measurements were collected every 3 to 5-minutes.
- After water quality conditions stabilized and well purging was completed, a groundwater sample was collected into the appropriate containers.
- The VOC sample containers were filled first. The discharge tubing was directed toward the inside wall of the sample container to minimize volatilization. VOC sample containers were filled so that no headspace (air bubbles) was present.
- Each sample bottle was labeled in the field and placed in a cooler with ice.
- All non-disposable equipment was decontaminated with Alconox and water, and then rinsed with deionized water prior to and after each use.
- Monitoring well sampling data was recorded in a groundwater well sampling form (provided in Appendix A).

The samples were submitted to Test America Laboratory, of Edison, New Jersey, an NYSDOH ELAP approved laboratory, to be analyzed for VOA (21). 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 October 2011 sampling event to historical conditions and to applicable NYSDEC water quality criteria. HRP compared collected analytical data from the October 2011 sampling event to historical conditions and to applicable NYSDEC water quality criteria. The groundwater analytical results of the fourth quarter sampling event, conducted in October 2011, detected tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane, 1,1-dichloroethylene, cis-1,2-dichloroethylene, and benzene. See table 2 for complete 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 5a through 5c).

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 through 3d). 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. An additional isopleth map demonstrating the plume footprint (Figure 3d) was created using the maximum concentration observed in each well cluster.

Shallow Contamination

The shallow groundwater horizon (Figure 3a) includes wells screened from 44.86-75.10 feet above mean sea level (ft AMSL) and is comprised of wells EW-1a, EW-2a, EW-3a, EW-4a, EW-6a, and SW-1. There is an isolated area of groundwater impact where TCE is above the NYSDEC class GA water quality standard (5 µg/l) to the southwest of the site building, near SW-1. PCE impacts also are near SW-1, and are more prevalent, extending to the northeast to EW-4a and south to EW-1a. Wells in the EW-3 cluster are not shown on the figure, but were included in plume evaluation. Neither PCE nor TCE was detected in the EW-3 cluster.

Intermediate Contamination

The intermediate groundwater horizon (Figure 3b) includes wells screened from 22.32 to 53.5 ft AMSL and is comprised of wells EW-1b, EW-2b, EW-3b, EW-4b, MW-8a, DW-1, and DW-2. An isolated area of PCE impact above NYSDEC class GA criteria is centered on MW-8a. A secondary area of PCE and TCE impact above NYSDEC class GA criteria is centered on EW-4b. Wells in the EW-3 cluster are not shown on the figure, but were included in plume evaluation. Neither PCE nor TCE was detected in the EW-3 cluster.

Deep Contamination

The deep groundwater horizon (Figure 3c) includes wells screened from -6.84 to 19.11 ft AMSL and is comprised of wells EW-1c, EW-2c, EW-3c, EW-4c, and EW-10c. Groundwater concentrations of PCE and TCE in

this horizon were above NYSDEC class GA criteria to the northeast of the site buildings, and the predominant compound appears to be TCE. No groundwater impacts of PCE or TCE were observed above the water quality standards to the south of the site buildings. Wells in the EW-3 cluster are not shown on the figure, but were included in plume evaluation. Neither PCE nor TCE was detected in the EW-3 cluster.

Plume Footprint

PCE is present in groundwater in two comingled plumes. The highest concentrations of PCE were observed in the shallow horizon at SW-1 (62 µg/l) located southwest of the Site building. Additional PCE contamination appears to be migrating on-site from the northeast, evidenced by concentrations in the EW-7 (31 µg/l) and EW-4 (11 µg/l) clusters. PCE concentrations were also observed at target concentrations (5 µg/l) in the MW-10 cluster (6.6 µg/l), southeast of the site buildings.

TCE contamination appears to be primarily migrating on-site from the northeast [well clusters EW-7 (710 µg/l) and EW-4 (79 µg/l)]. A minor TCE concentration in groundwater at SW-1 (6.6 µg/l) may indicate co-mingled plumes, although observed concentrations are orders of magnitude lower than those migrating on-site. Similar isolated detections were observed at the MW-10 cluster (15 µg/l) and concentrations of TCE in EW-14d (340 µg/l) indicate that a third plume of an unknown source may be present (Figure 3d).

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

HRP completed a groundwater monitoring event in October 2011 at the Claremont Polychemical Corporation site, in which 44 groundwater samples were collected. Analysis of the data has resulted in the following conclusions,

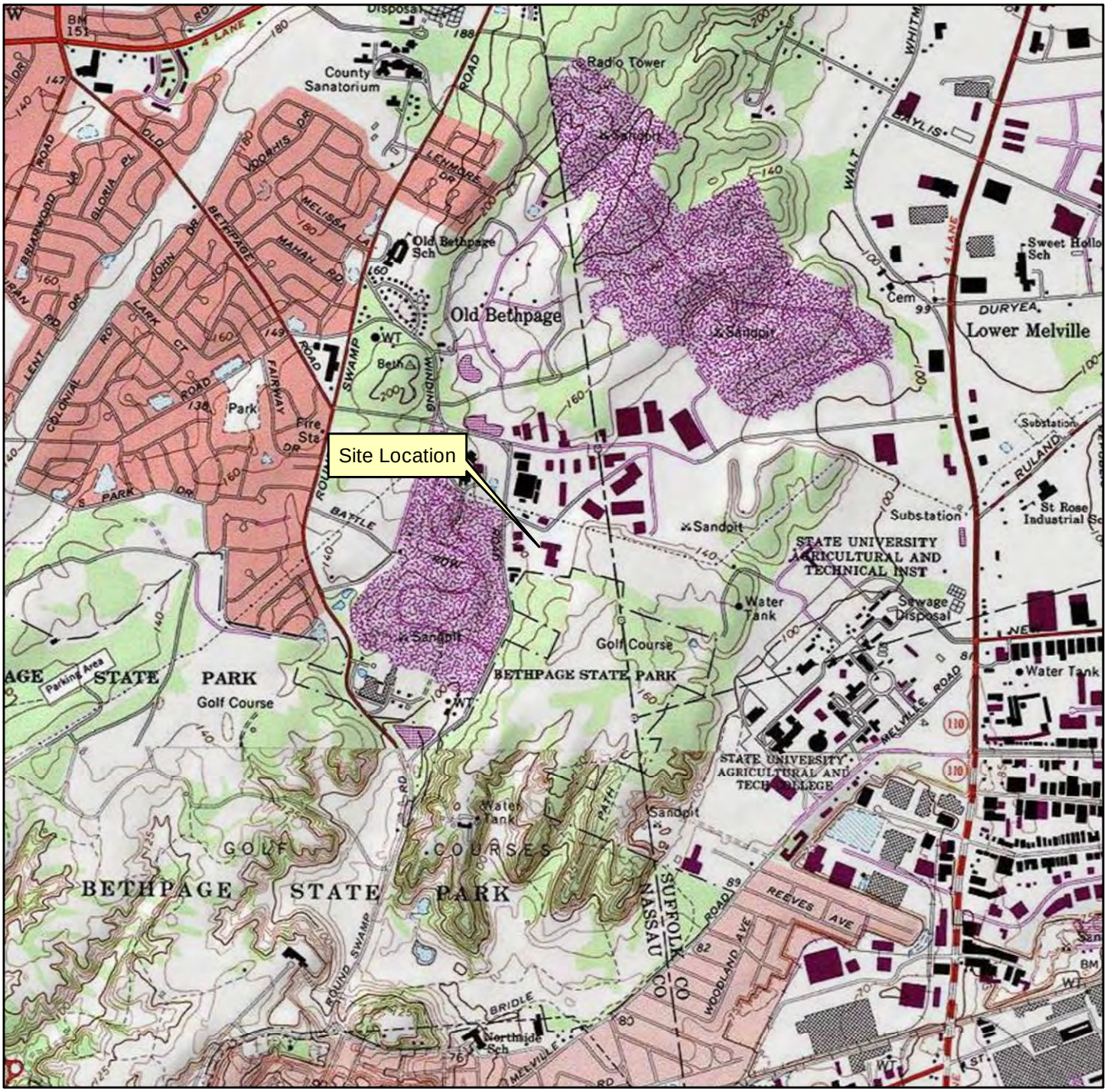
- A groundwater plume of VOCs, primarily PCE originates from the south of the main site building;
- Up to three other plumes migrate into the study area, and are marked by TCE predominance;
- The current groundwater treatment system is providing sufficient capture of the plume generated onsite;
- Some 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.

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 capture 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);
- 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); and
- Given the stable nature of the VOC plume and goals of plume monitoring, HRP recommends evaluation of passive diffusion sampling using passive diffusion bags (PDBs) for VOCs as an alternative to low flow sampling methods.

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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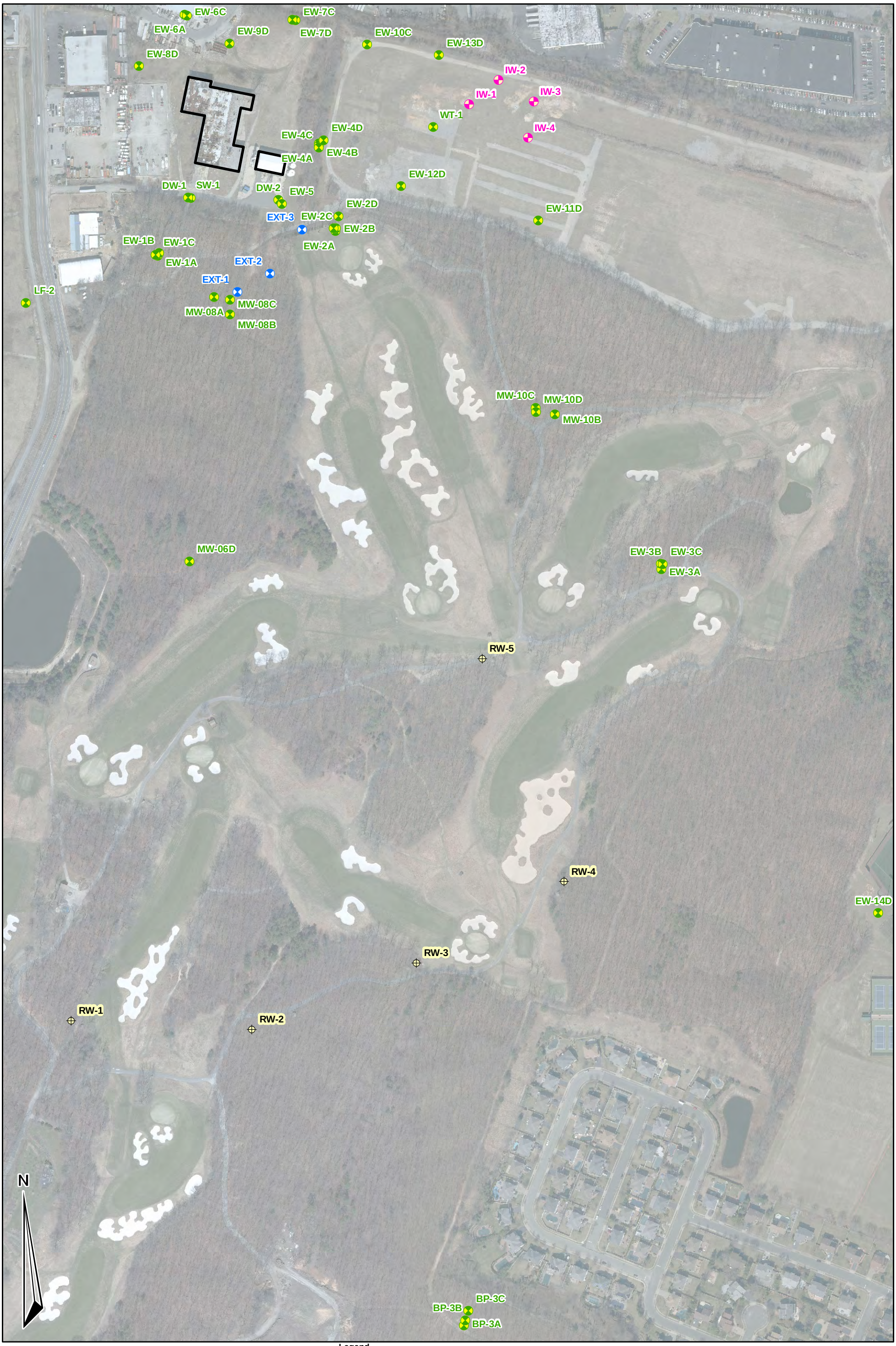

Figure 2A - Monitoring Well Network
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM Site Code 130015
Scale 1" = 300'

Legend

- Monitoring Well
- Extraction Well
- Injection Well
- Oyster Bay Extraction Well
- Site Buildings

300 150 0 300
Feet

1 inch = 300 feet

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EW-6A EW-6C
[68.92]
68
68
67
67
EW-4C
EW-4A EW-4B
[66.76]
IW-2
IW-1
IW-3
IW-4
66
DW-1 SW-1
[66.88]
DW-2 EW-5
EXT-3
EW-2C
EW-2B
[59.05]
EW-2A
[65.71]
EW-1A EW-1C
EW-1B
[66.58]
EXT-2
[59.05]
EXT-1
[59.05]
65
65
64
64
EW-3B EW-3C
EW-3A
[63.80]
RW-5

200 100 0 200 400
Feet

1 inch = 200 feet

N

Figure 2B
Shallow Groundwater
Elevation Contours
October 2011
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
- October 2011 GW Elevation Contour

Note: Contours dashed where inferred.

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[0.2]
[ND<1] EW-6A

5

[ND<1]
EW-4A
[5.7]

[6.6]
[62] SW-1

5

EXT-3

[0.71]
[ND<1] EW-2A

[0.58]
EW-1A
[9.7]

10

EXT-2

EXT-1

5

N

100 50 0 100 200
Feet

1 inch = 100 feet

Figure 3a
Shallow Groundwater PCE and TCE Contaminant Isopleths
(Screened Interval: 44.68-75.10' AMSL)
October 2011
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM
Site Code 130015
Scale 1" = 100'

Legend

- Monitoring Well
- Extraction Well
- PCE Isopleths (ug/l)
- TCE Isopleths (ug/l)
- ND<# Not Detected above reporting limit

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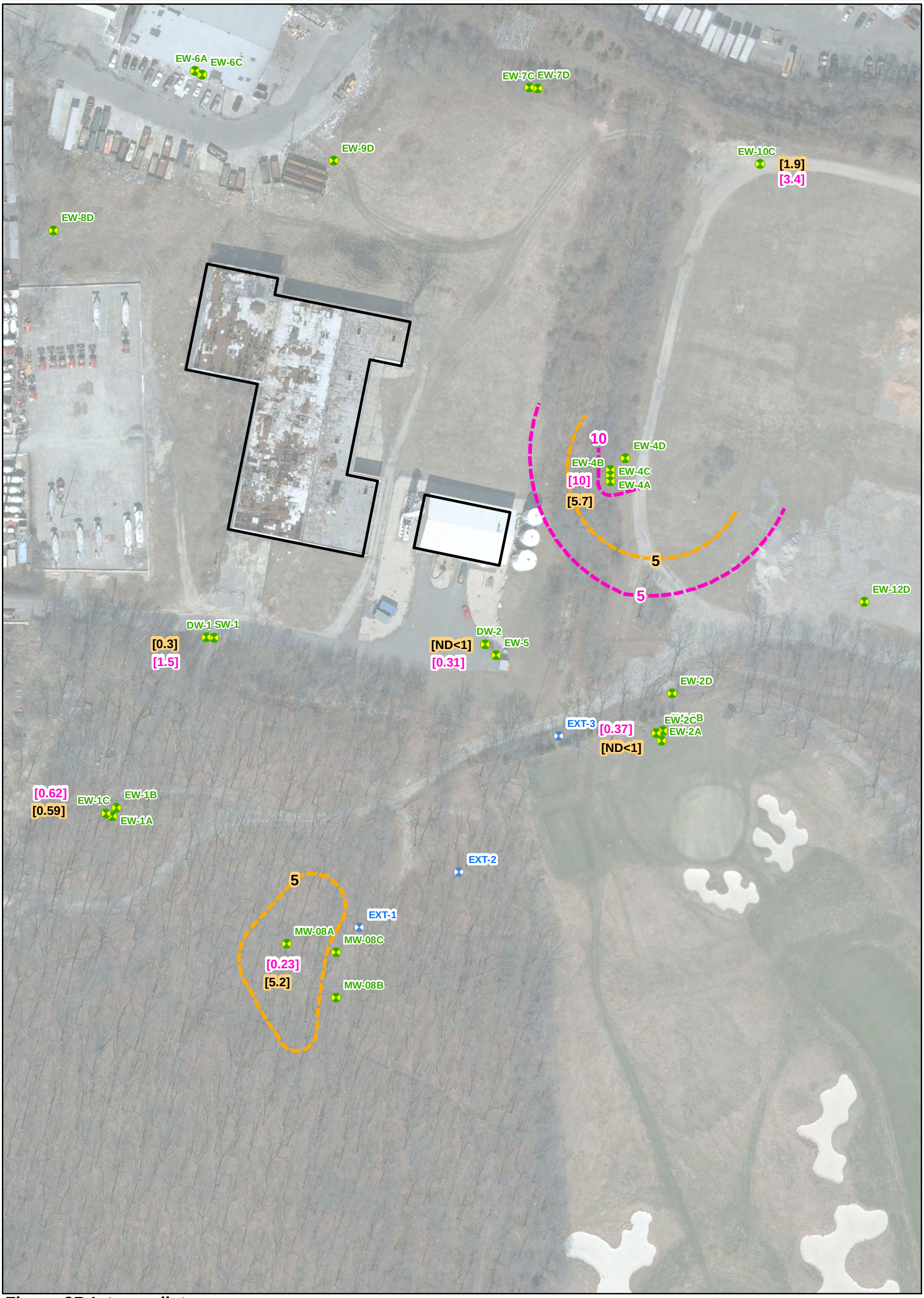

Figure 3B Intermediate Groundwater PCE and TCE Contaminant Isopleths (Screened Interval: 22.32-53.5' AMSL)
October 2011
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM Site Code 130015
Scale 1" = 100'

N

Legend

- Monitoring Well
- Extraction Well
- PCE Isopleth (ug/l)
- TCE Isopleth (ug/l)

100 50 0 100 Feet

1 inch = 100 feet

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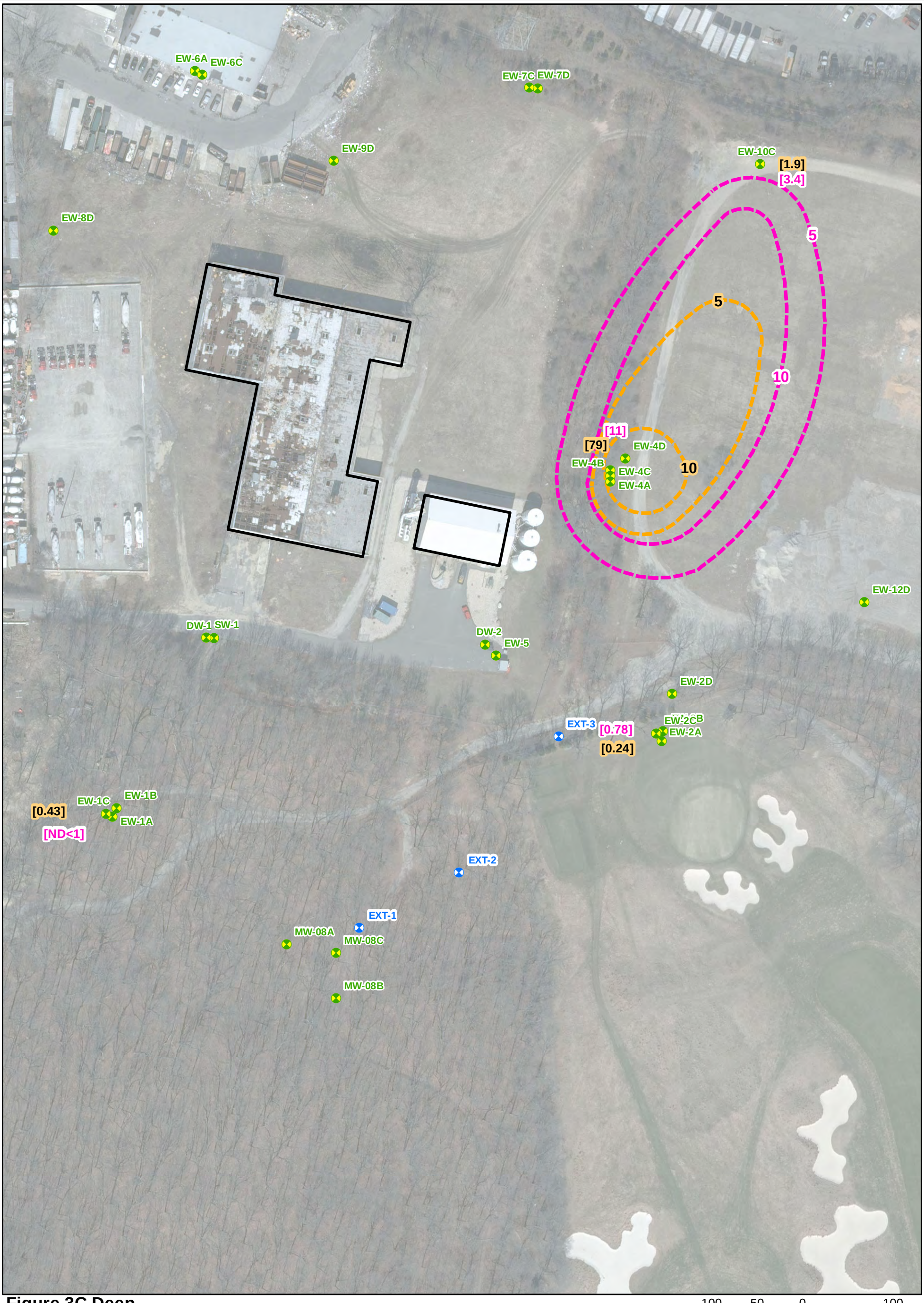

Figure 3C Deep Groundwater PCE and TCE Contaminant Isopleths (Screened Interval: 6.84-19.11' AMSL) October 2011
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM Site Code 130015
Scale 1" = 100'

N

Legend

- Monitoring Well
- Extraction Well
- PCE Isopleth (ug/l)
- TCE Isopleth (ug/l)

100 50 0 100 Feet

1 inch = 100 feet

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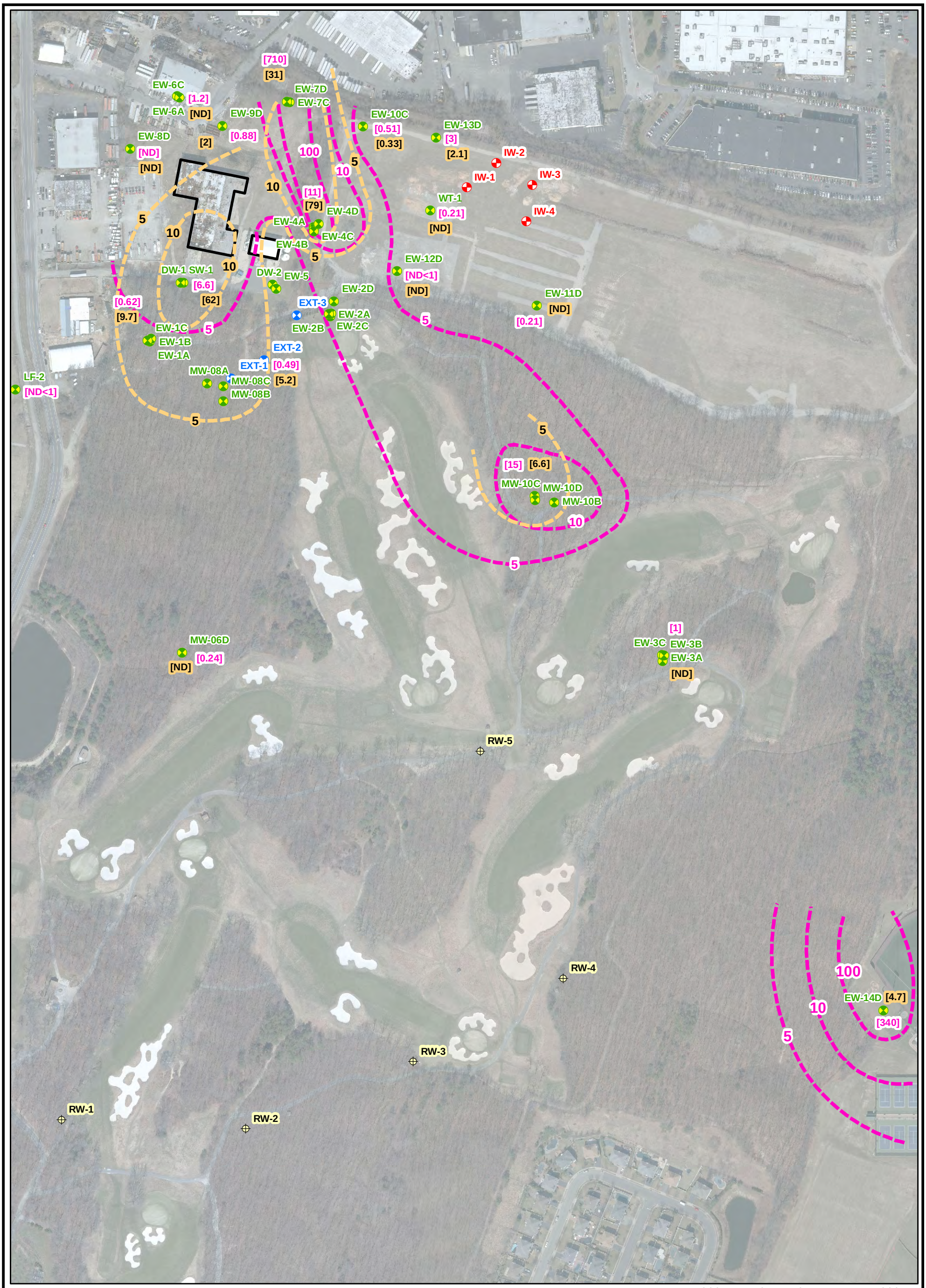

Figure 3D Maximum Groundwater PCE and TCE Contaminant Isopleths
October 2011
Claremont Polychemical Corporation
Old Bethpage, New York
HRP # NEW9625.OM Site Code 130015
Scale 1" = 300'

N

Legend

- Monitoring Well
- Extraction Well
- Injection Well
- Oyster Bay Extraction Well
- PCE Isopleth (ug/l)
- TCE Isopleth (ug/l)

300 150 0 300 Feet

1 inch = 300 feet

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TABLES

Table 1: Groundwater Elevations
Claremont Polychemical Superfund Site
4th Quarter 2011 Groundwater Sampling Event
Old Bethpage, NY
HRP#NEW9625.OM
Site Code: 130015
WA# D006130-19

			Oct-11		
Well ID	Elev.of Screened Interval (ft AMSL)	Elevation (NGVD29) to Top of PVC Casing (ft AMSL)	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	19-Oct-11	63.42	66.58
EW-1B	28.75 to 38.58	130.56	19-Oct-11	63.94	66.59
EW-1C	3.43 to 13.26	130.47	19-Oct-11	63.57	66.87
EW-2A	65.19 to 55.36	157.14	19-Oct-11	91.65	65.71
EW-2B	28.74 to 38.57	157.61	19-Oct-11	91.90	65.83
EW-2C	7.60 to 17.43	157.54	19-Oct-11	91.56	66.10
EW-2D	-132.55 to -142.55	NA	19-Oct-11	91.70	66.54
EW-3A	52.28 to 62.11	158.92	19-Oct-11	95.15	63.80
EW-3B	22.32 to 32.15	159.06	19-Oct-11	95.34	63.75
EW-3C	2.99 to -6.84	158.92	19-Oct-11	95.21	63.74
EW-4A	44.86 to 59.69	161.89	19-Oct-11	94.82	66.96
EW-4B	29.8 to 39.63	161.67	19-Oct-11	94.94	66.86
EW-4C	4.59 to 14.42	161.41	19-Oct-11	94.73	66.81
EW-4D	-125.26 to -135.26	NA	19-Oct-11	94.79	66.98
EW-5	-31.16 to -40.99	135.55	19-Oct-11	70.12	66.86
EW-6A	57.66 to 67.49	130.32	19-Oct-11	61.40	68.92
EW-6B	10.79 to 20.62	130.61	abandoned		
EW-6C	-29.60 to -39.43	130.40	19-Oct-11	61.70	68.70
EW-7C	-37.47 to -47.47	NA	19-Oct-11	85.95	67.84
EW-7D	-121.47 to -131.47	NA	19-Oct-11	85.83	67.88
EW-8D	-102.49 to -112.49	NA	19-Oct-11	63.80	67.74
EW-9D	-108.6 to -118.6	NA	19-Oct-11	69.70	67.83
EW-10C	19.11 to 9.11	NA	19-Oct-11	92.66	68.28
EW-11D	-106.75 to -116.75	NA	19-Oct-11	99.30	66.03
EW-12D	-47.33 to -57.33	NA	19-Oct-11	96.79	67.63
EW-13D	-177.28 to -187.28	NA	19-Oct-11	97.64	67.09
EW-14D	-85.27 to -95.27	NA	19-Oct-11	40.60	61.53
SW-2	65.10 to 75.10	136.93	dry		
DW-2	37.35 to 42.35	137.61	19-Oct-11	71.02	65.40
SW-1	61.50 to 66.50	131.31	19-Oct-11	64.61	66.88
DW-1	32.89 to 38.39	131.19	19-Oct-11	64.50	66.88
LF-02	3 to 8	118.70	19-Oct-11	51.60	67.10
PPW-1	-166.15 to -196.15	136.74	Permanently closed Oct. 2008		
WT-01	56.98 to 66.98	164.57	19-Oct-11	96.35	68.22
MW-6D	-26.1 to -31.1	160.39	19-Oct-11	95.21	65.18
MW-8A	48.5 to 53.5	133.18	19-Oct-11	69.90	63.28
MW-8B	-22.2 to -27.2	134.24	19-Oct-11	68.90	65.34
MW-8C	-110.7 to -115.7	135.72	19-Oct-11	69.52	66.20
MW-10B	-13 to -18	161.12	19-Oct-11	68.90	92.22
MW-10C	-113.1 to -118.1	160.27	19-Oct-11	69.52	90.75
MW-10D	-186.2 to -191.2	161.17	19-Oct-11	96.10	65.07
BP-3A	51 to 71	124.54	19-Oct-11	62.18	62.36
BP-3B	-91 to -111	123.57	19-Oct-11	64.14	59.43
BP-3C	-156 to -176	123.68	19-Oct-11	63.42	60.26
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

4th Quarter 2011 Sampling Event
Claremont Polychemical Superfund Site
Old Bethpage, NY
HRP#NEW9625.OM
Site Code: 130015
WA# D006130-19

Unit		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NYSDEC Class GA Criteria		5	1	5	5	5	0.04	3	5	0.4	0.4	5	NS	50	50	1	5
Sample Description	**Sampling Event**	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1,2-Trichlorotrifluoroethane (freon 113)	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Dibromo-3-chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,3-Dichloropropene (cis)	1,3-Dichloropropene (trans)	1,4-Dichlorobenzene	1,4-Dioxane	2-Butanone (MEK)	Acetone	Benzene	Bromochloromethane
EW-1a	10/20/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-1a	10/20/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-1b	10/20/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-1c	10/20/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-3a	10/20/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-3b	10/20/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-3c	10/20/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-4a	10/21/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-4b	10/21/11	3.7	<1	<1	0.51	1.8	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-4c	10/21/11	5	<1	<1	0.79	2.7	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-2a	10/24/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-2b	10/24/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	2	<10	<1	<1
EW-4d	10/24/11	3.3	<1	<1	0.38	1.8	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-10c	10/24/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-2c	10/24/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-13d	10/24/11	2.1	<1	<1	1.4	1.6	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-11d	10/24/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-5	10/24/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
SW-1	10/24/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-12d	10/24/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
DW-1	10/25/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	23	<10	<10	<1	<1
EW-2d	10/25/11	0.35	<1	<1	0.24	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
BP-3a	10/25/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
MW-10d	10/25/11	1.8	<1	<1	3.3	1.8	(<1)	<1	0.62	(<1)	(<1)	<1	<50	<10	<10	<1	<1
MW-10c	10/25/11	<1	<1	<1	<1	0.34	(<1)	<1	<1	(<1)	(<1)	<1	15	<10	<10	<1	<1
MW-10b	10/25/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	13	<10	<10	<1	<1
EW-14d	10/25/11	**37**	0.58	1.1	0.73	**37**	(<1)	<1	**5.2**	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-6c	10/26/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1

Table 2: Summary of Analytical Results

4th Quarter 2011 Sampling Event
Claremont Polychemical Superfund Site
Old Bethpage, NY
HRP#NEW9625.OM
Site Code: 130015
WA# D006130-19

Unit		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NYSDEC Class GA Criteria		60	5	5	7	5	5	5	5	10	5	5	5	5	5	5	2
Sample Description	Sampling Event	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroform	cis-1,2-Dichloroethylene	Dichlorodifluoromethane	Isopropylbenzene	Methylene chloride	Methyltertbutyl ether	Styrene	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	Trichloroethylene	Trichlorofluoromethane	Vinyl chloride
EW-1a	10/20/11	<1	<1	<1	<1	2.5	<1	<1	<1	<1	<1	**7.9**	<1	<1	0.58	<1	<1
EW-1a	10/20/11	<1	<1	<1	<1	2.5	<1	<1	<1	<1	<1	**9.7**	<1	<1	0.43	<1	<1
EW-1b	10/20/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.59	<1	<1	0.62	<1	<1
EW-1c	10/20/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.43	<1	<1	<1	<1	<1
EW-3a	10/20/11	<1	<1	<1	0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-3b	10/20/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-3c	10/20/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1
EW-4a	10/21/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**5.7**	<1	<1	<1	<1	<1
EW-4b	10/21/11	<1	<1	<1	<1	<1	<1	<1	<1	0.35	<1	**5.9**	<1	<1	**10**	0.32	<1
EW-4c	10/21/11	<1	<1	<1	<1	3	<1	<1	<1	3	<1	**11**	<1	2.7	**79**	<1	<1
EW-2a	10/24/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.9	<1	0.71	<1	<1
EW-2b	10/24/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.17	<1	0.37	<1	<1
EW-4d	10/24/11	<1	<1	<1	0.28	1.2	<1	<1	<1	<1	<1	**34**	<1	<1	**260**	<1	<1
EW-10c	10/24/11	<1	<1	<1	<1	<1	<1	<1	<1	2.1	<1	0.33	<1	<1	0.51	<1	<1
EW-2c	10/24/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.24	<1	<1	0.78	<1	<1
EW-13d	10/24/11	<1	<1	<1	<1	<1	<1	<1	<1	2.3	<1	2.1	<1	<1	3	<1	<1
EW-11d	10/24/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.21	<1	<1
EW-5	10/24/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.67	<1	0.3	1.9	<1	<1
SW-1	10/24/11	<1	<1	<1	<1	**6**	<1	<1	<1	<1	<1	**62**	<1	<1	**6.6**	<1	<1
EW-12d	10/24/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
DW-1	10/25/11	<1	<1	<1	<1	0.95	<1	<1	<1	0.22	<1	0.3	<1	<1	1.5	<1	<1
EW-2d	10/25/11	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	2.3	<1	<1	**7.5**	<1	<1
BP-3a	10/25/11	<1	<1	<1	0.78	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-10d	10/25/11	<1	0.55	<1	1	2.7	<1	<1	<1	<1	<1	**6.6**	<1	<1	**15**	<1	<1
MW-10c	10/25/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.9	<1	<1	3.4	<1	<1
MW-10b	10/25/11	<1	<1	<1	0.24	<1	<1	<1	<1	<1	<1	0.41	<1	<1	0.53	<1	<1
EW-14d	10/25/11	<1	<1	<1	1.7	2.7	<1	<1	0.26	<1	<1	4.9	<1	<1	**340**	<1	<1
EW-6c	10/26/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.2	<1	<1

Table 2: Summary of Analytical Results

4th Quarter 2011 Sampling Event
Claremont Polychemical Superfund Site
Old Bethpage, NY
HRP#NEW9625.OM
Site Code: 130015
WA# D006130-19

Unit		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NYSDEC Class GA Criteria		5	1	5	5	5	0.04	3	5	0.4	0.4	5	NS	50	50	1	5
Sample Description	**Sampling Event**	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1,2-Trichlorotrifluoroethane (freon 113)	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Dibromo-3-chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,3-Dichloropropene (cis)	1,3-Dichloropropene (trans)	1,4-Dichlorobenzene	1,4-Dioxane	2-Butanone (MEK)	Acetone	Benzene	Bromochloromethane
LF-2	10/26/11	<1	<1	<1	<1	<1	(<1)	0.34	<1	(<1)	(<1)	0.83	67	<10	8.3	**1.2**	<1
EW-6a	10/26/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
WT-1	10/26/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	3.5	<1	<1
WT-1	10/26/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-9d	10/26/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-7d	10/26/11	0.4	<1	<1	<1	0.28	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-7c	10/26/11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EW-7c	10/26/11	2.2	<1	<1	0.3	1.7	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
EW-8d	10/26/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
BP-3b	10/26/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
BP-3c	10/26/11	1.4	0.24	2.1	3.1	1.3	(<1)	<1	0.24	(<1)	(<1)	<1	<50	<10	<10	<1	<1
MW-6d	10/26/11	<1	<1	<1	0.32	<1	(<1)	0.62	<1	(<1)	(<1)	1.4	29	<10	<10	0.22	<1
MW-8c	10/27/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
DW-2	10/27/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
MW-8a	10/27/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	<10	<1	<1
MW-8b	10/27/11	<1	<1	<1	<1	<1	(<1)	<1	<1	(<1)	(<1)	<1	<50	<10	6	<1	<1

Table 2: Summary of Analytical Results

4th Quarter 2011 Sampling Event
Claremont Polychemical Superfund Site
Old Bethpage, NY
HRP#NEW9625.OM
Site Code: 130015
WA# D006130-19

Unit		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NYSDEC Class GA Criteria		60	5	5	7	5	5	5	5	10	5	5	5	5	5	5	2
Sample Description	**Sampling Event**	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroform	cis-1,2-Dichloroethylene	Dichlorodifluoromethane	Isopropylbenzene	Methylene chloride	Methyltertbutyl ether	Styrene	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	Trichloroethylene	Trichlorofluoromethane	Vinyl chloride
LF-2	10/26/11	<1	<1	1.4	<1	<1	<1	1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EW-6a	10/26/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.2	<1	<1
WT-1	10/26/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.21	<1	<1
WT-1	10/26/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.2	<1	<1
EW-9d	10/26/11	<1	<1	<1	0.45	<1	<1	<1	<1	<1	<1	2	<1	<1	0.88	<1	<1
EW-7d	10/26/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**19**	<1	<1	**26**	<1	<1
EW-7c	10/26/11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**540**	NA	NA
EW-7c	10/26/11	<1	<1	<1	0.17	**11**	<1	<1	<1	5.2	<1	**31**	<1	<1	**710**	<1	<1
EW-8d	10/26/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
BP-3b	10/26/11	<1	<1	<1	0.5	3.6	<1	<1	<1	<1	<1	**10**	<1	<1	1	<1	<1
BP-3c	10/26/11	<1	<1	<1	0.33	**91**	**5.6**	<1	0.4	<1	<1	**81**	<1	0.37	**11**	0.84	0.78
MW-6d	10/26/11	<1	<1	0.7	<1	0.32	<1	<1	<1	7.2	<1	<1	<1	<1	0.24	<1	<1
MW-8c	10/27/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.49	<1	<1
DW-2	10/27/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.31	<1	<1	<1	<1	<1
MW-8a	10/27/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**5.2**	<1	<1	0.23	<1	<1
MW-8b	10/27/11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.42	<1	<1	0.22	<1	<1

CHARTS

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

October 2011 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

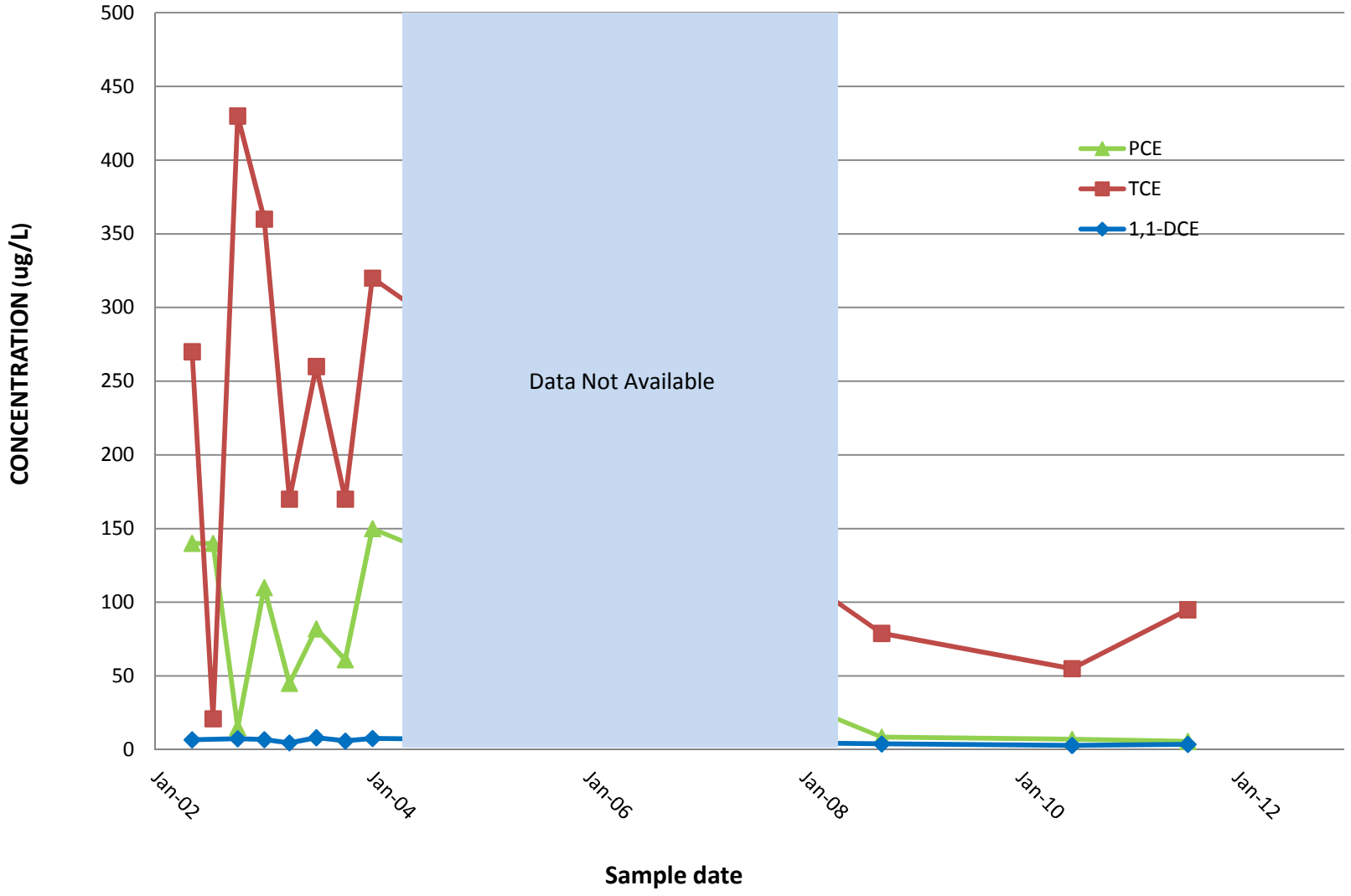


Chart 1a: EXT-1 Concentration (PCE, TCE, 1,1-DCE) vs Time

October 2011 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

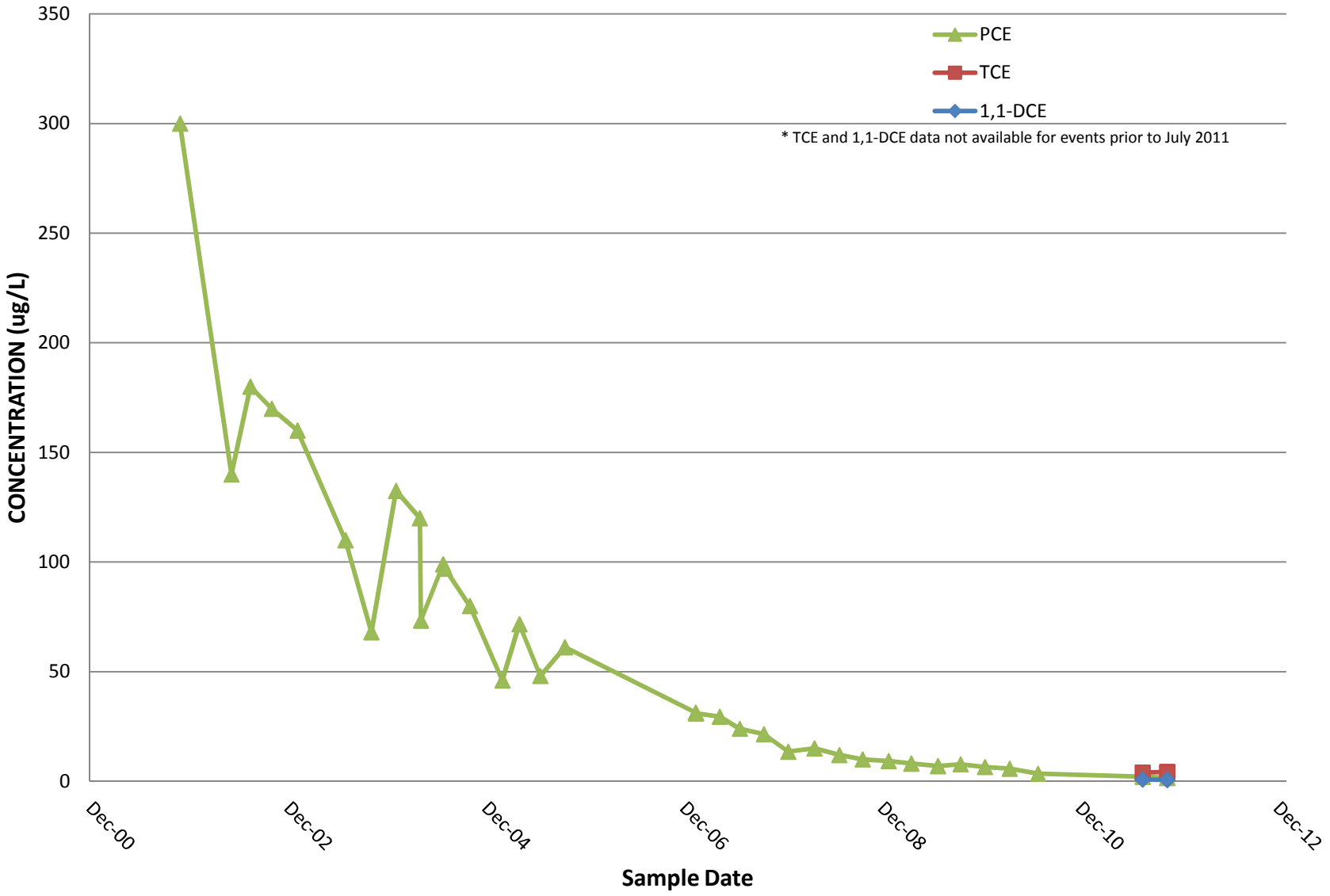


Chart 1b: EXT-2 Concentration (PCE, TCE, 1,1-DCE) vs Time

October 2011 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

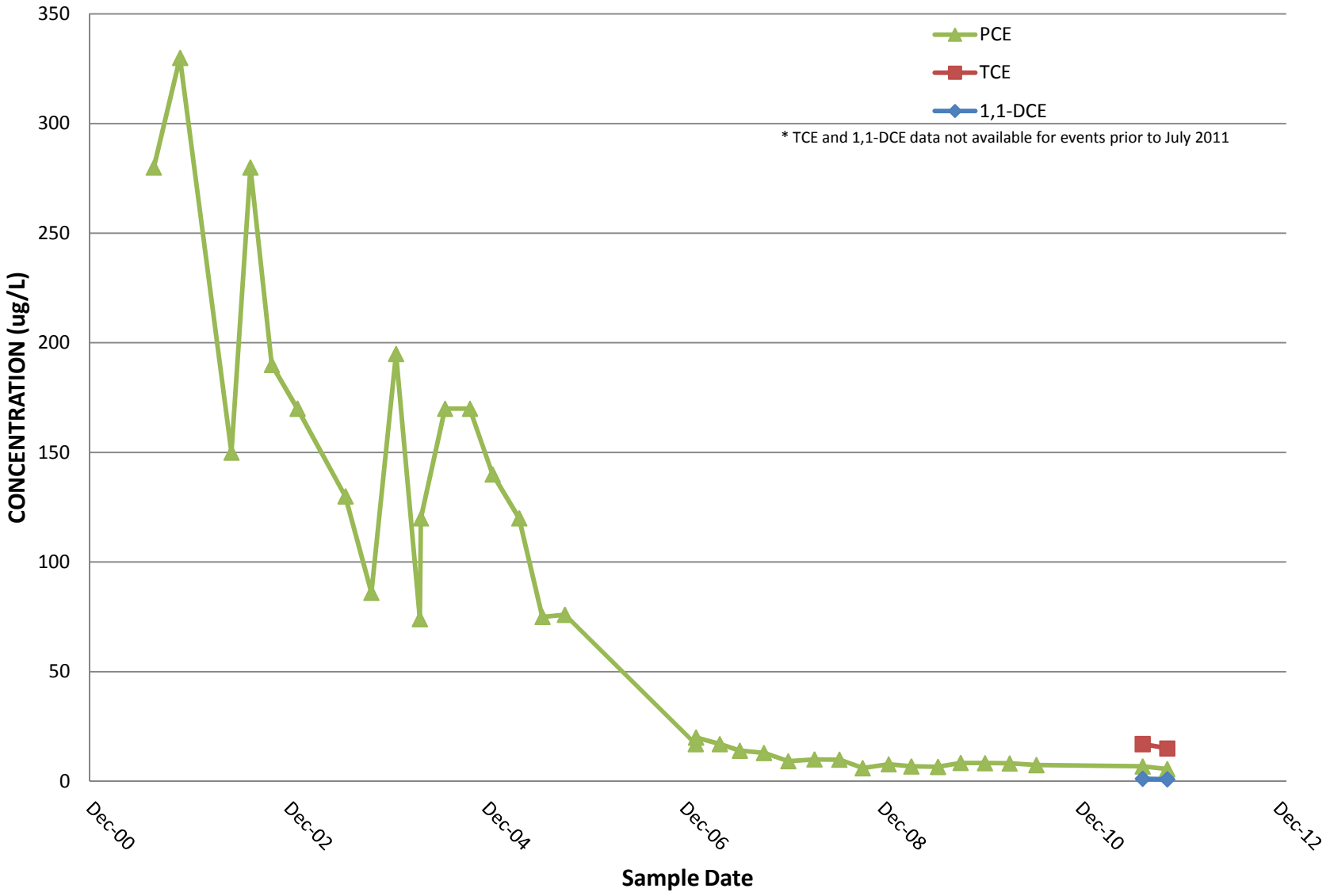


Chart 1c: EXT-3 Concentration (PCE, TCE, 1,1-DCE) vs Time

October 2011 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

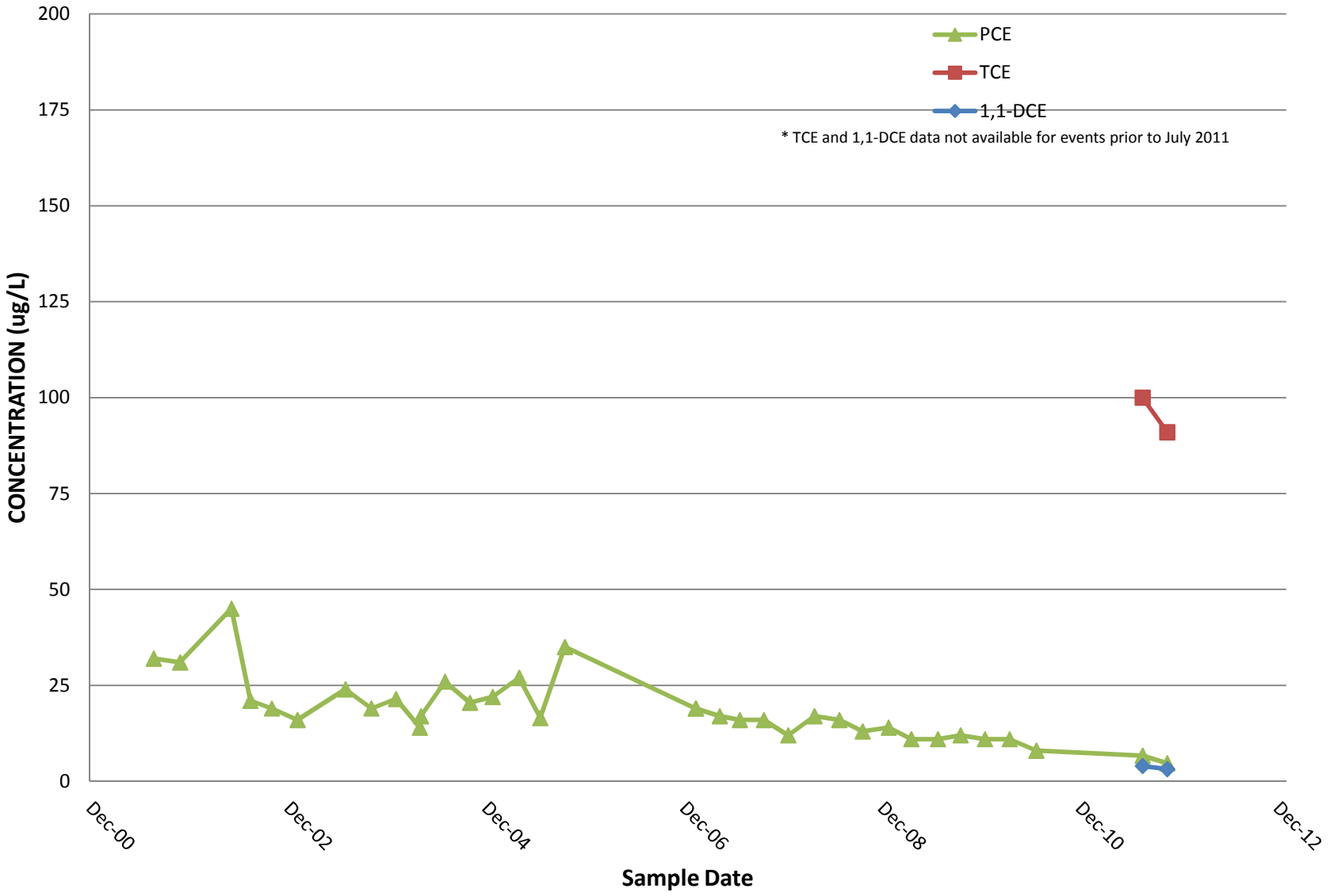


Chart 2: Groundwater Influent Concentration (Iron and Manganese) vs. Time

October 2011 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

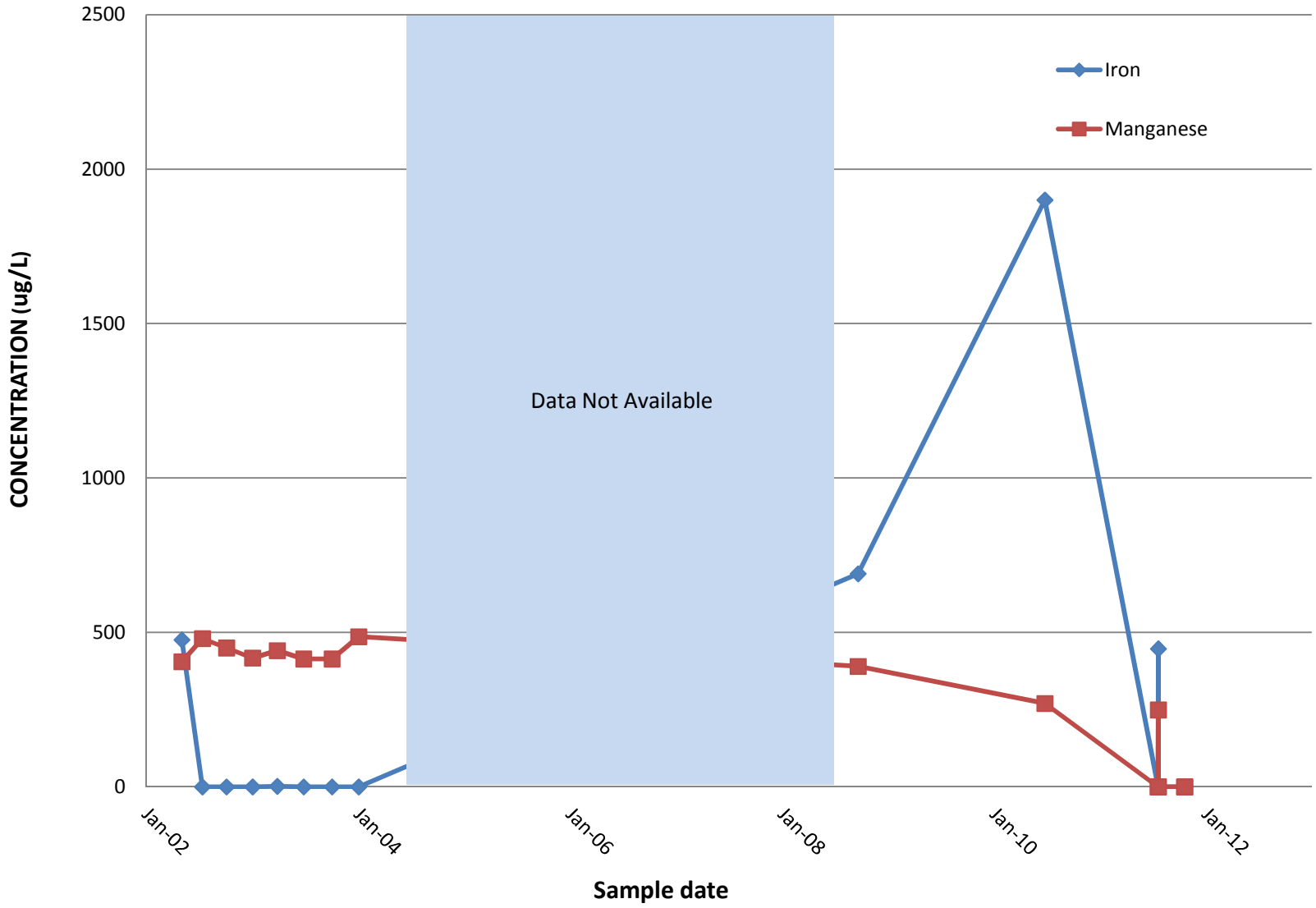


Chart 3: Treated Effluent Concentration (PCE, TCE, 1,1-DCE) vs Time

October 2011 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

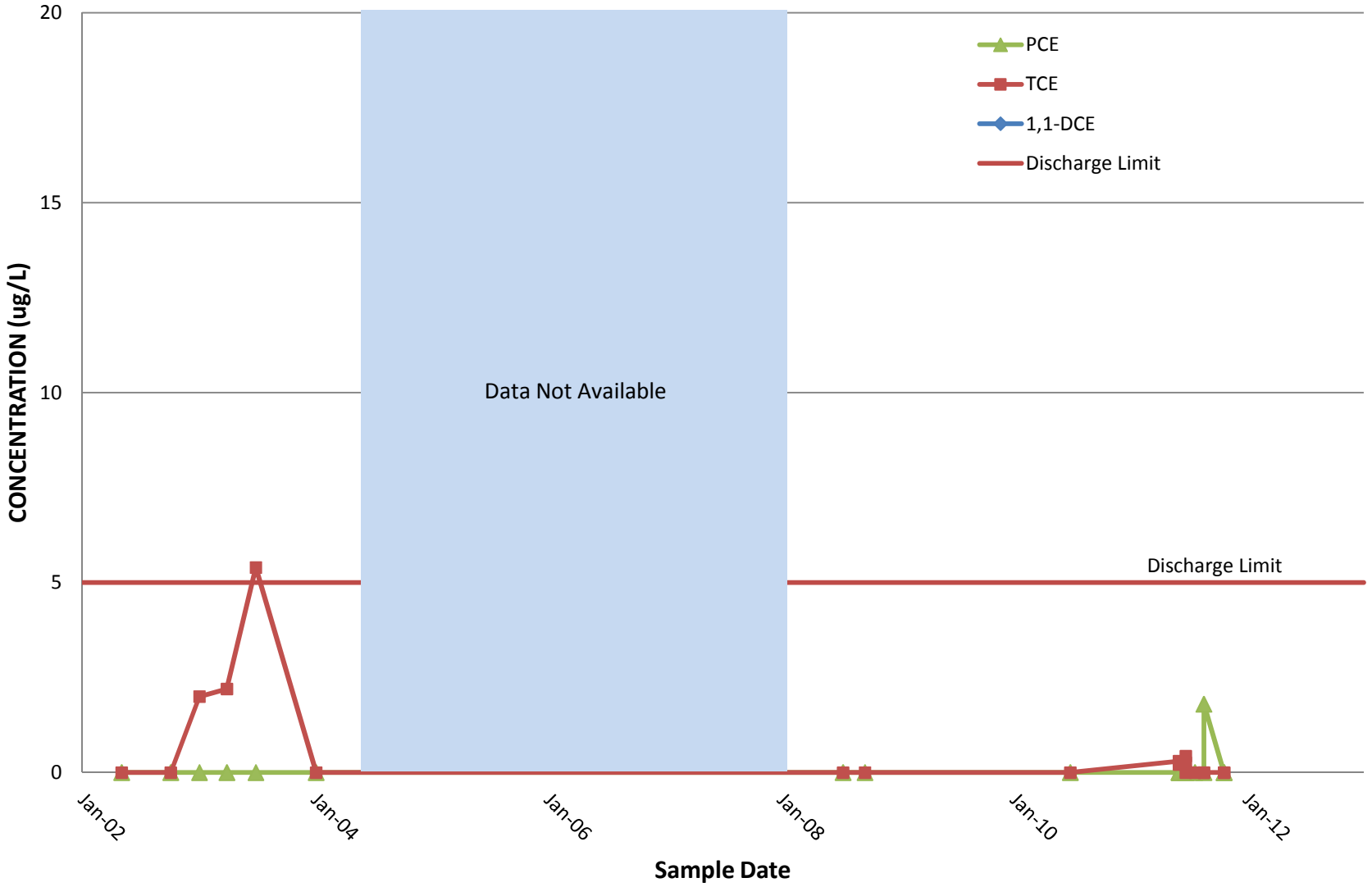


Chart 4: Treated System Effluent Concentration (Iron and Manganese) vs Time

October 2011 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

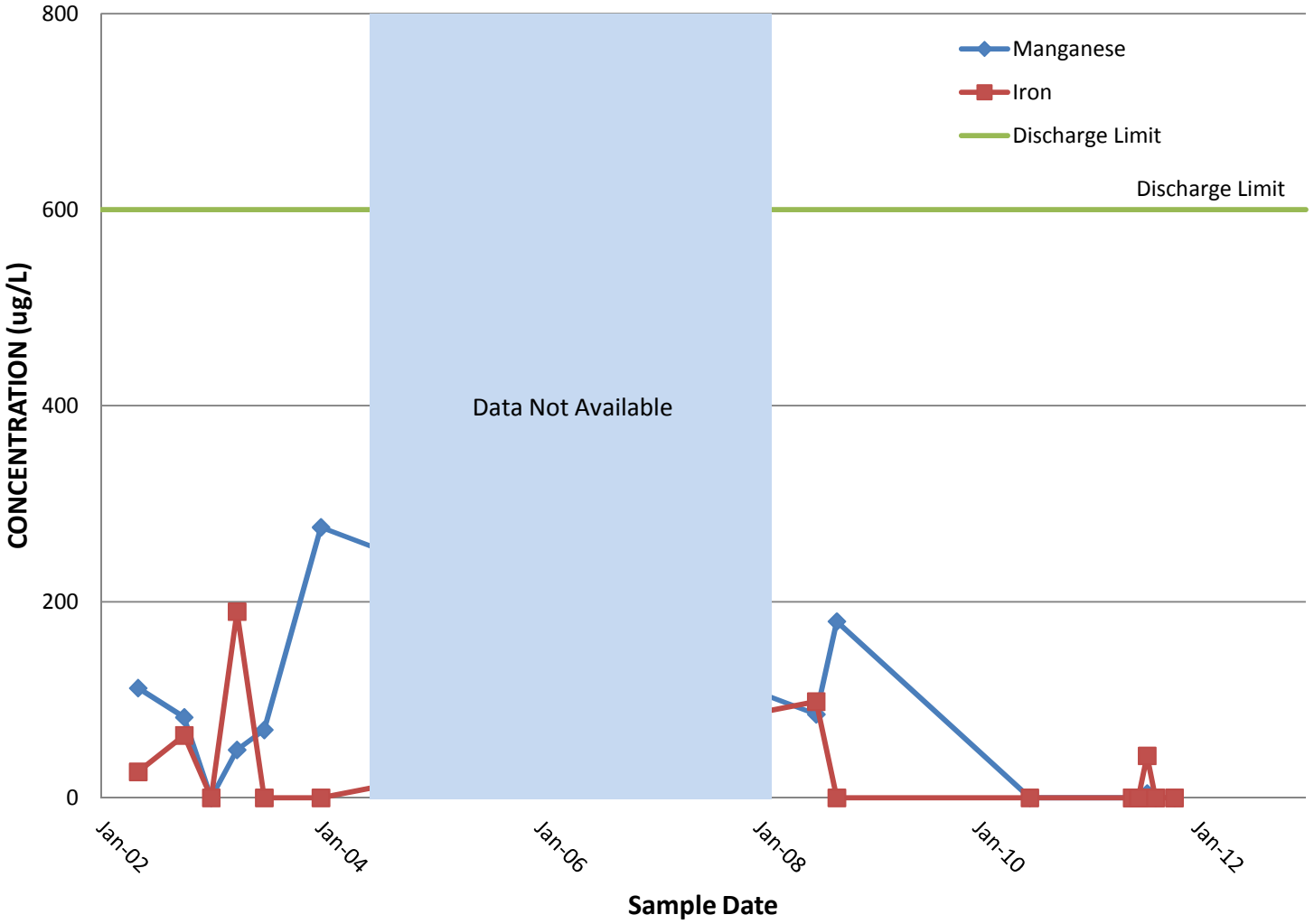


Chart 5a - PCE Concentrations In EW-1a

4th Quarter 2011 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

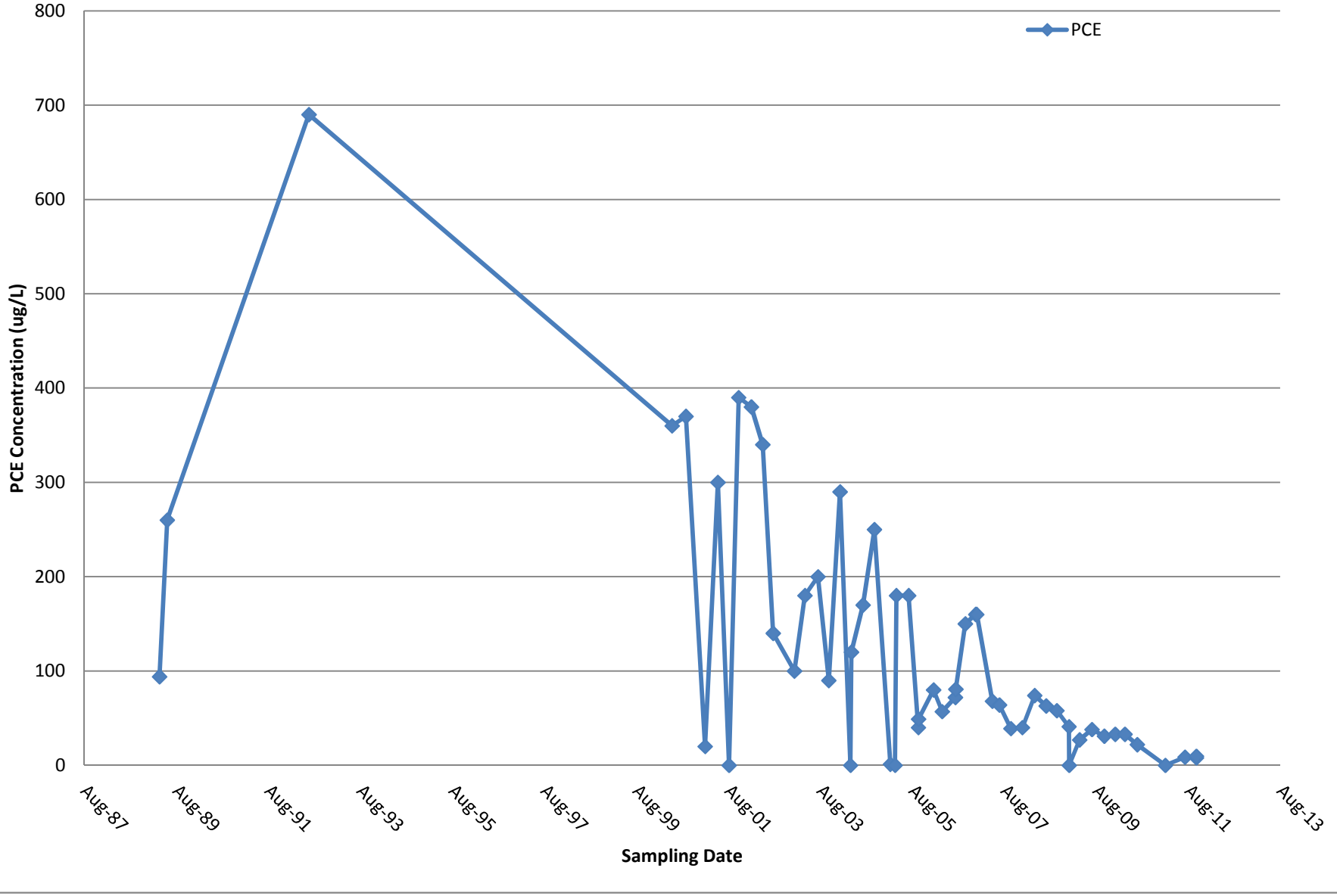


Chart 5b - PCE and TCE Concentrations in EW-4c

4th Quarter 2011 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19

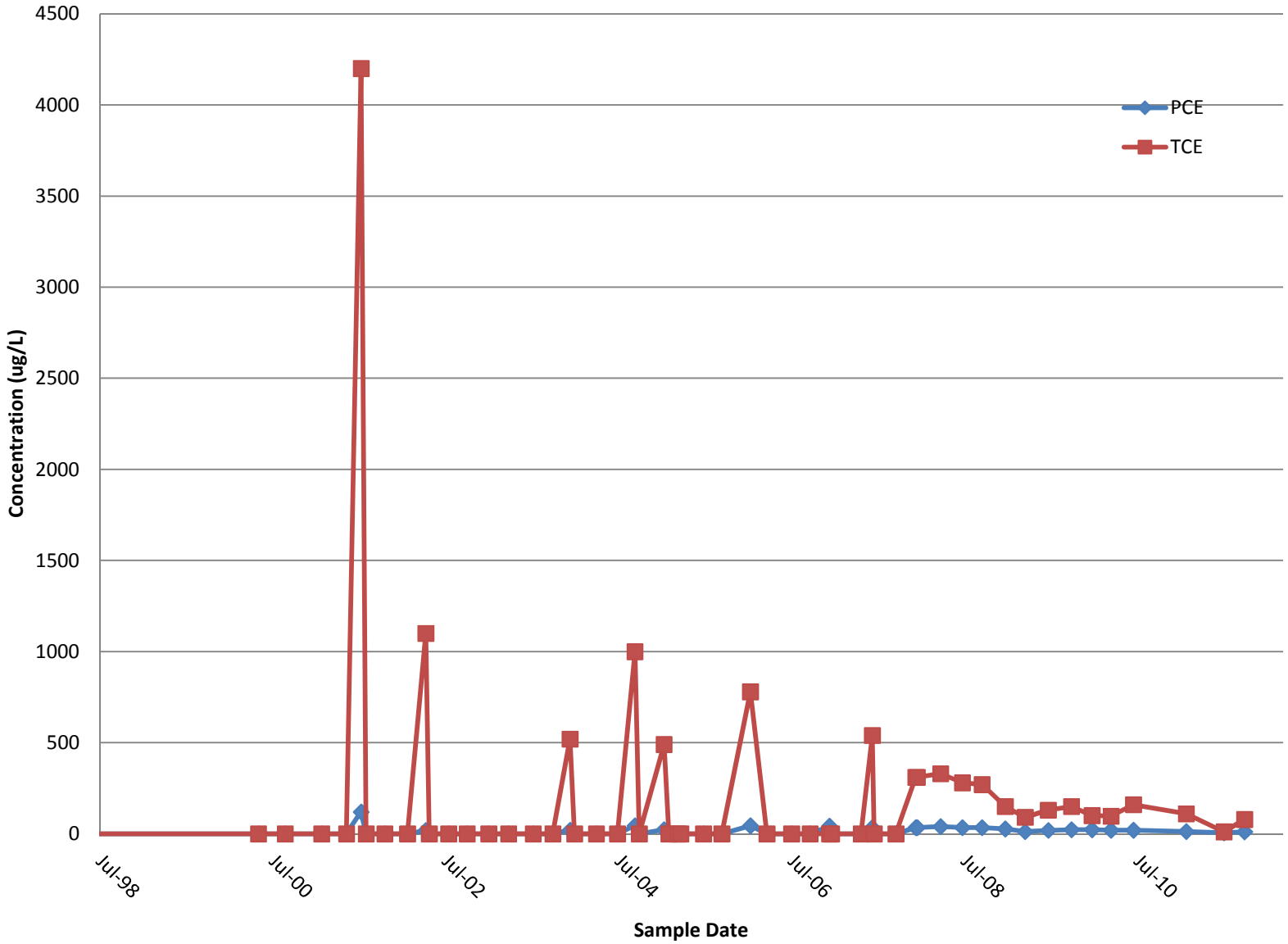
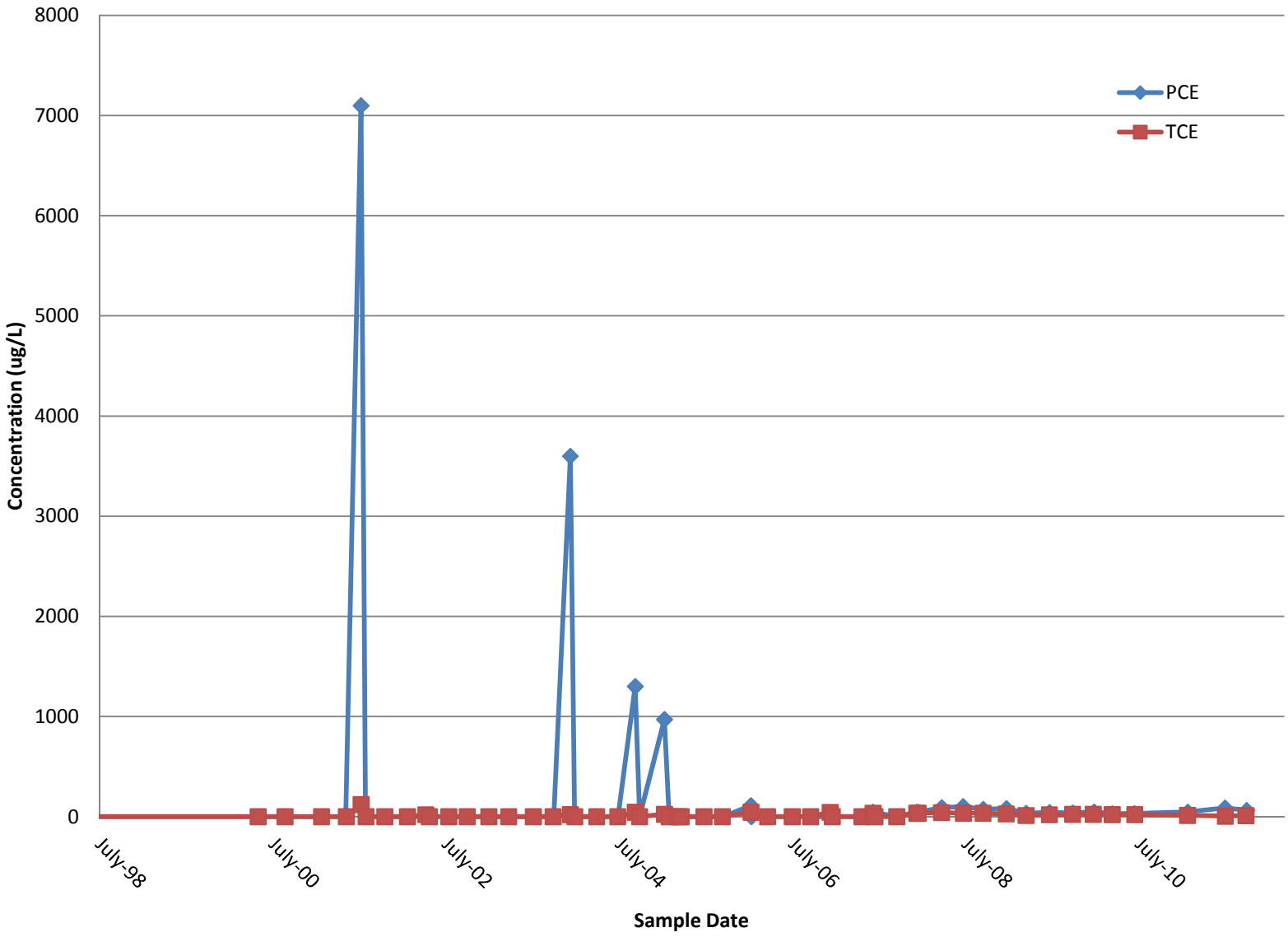


Chart 5c - PCE and TCE Concentrations in SW-1

4th Quarter 2011 Sampling Event, Claremont Polychemical Superfund Site, Old Bethpage, NY
HRP#NEW9625.OM, Site Code: 130015, WA# D006130-19



APPENDIX A

Groundwater Well Sampling Forms

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EXT-1	Weather: Temp 62° and cloudy
Sounding Method: Water Tape	Gauge Date: 11-15-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: -	Well Diameter (in): 10"

Purge Date:	11/15/2011	Purge Time:	07:50
Purge Method:	Submergable	Field Technician:	

1) Well Depth (ft): 175'	4) Well Diameter (in): 10"	7) Five Well Volumes (gal):
2) Depth to Water (ft): 54.4'	5) Well Volume / Foot (gal) (d^2x.0408):	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft):	6) Total Well Volume (gal) (3x5):	Pump Type: Grab

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
07:20	54.4	0.50	-	5.07	184	12.9	79.5	7.78	26.0
07:25	54.4	0.50	-	5.08	182	13.0	79.4	6.90	22.0
07:30	54.4	0.50	-	5.11	183	13.0	79.5	6.77	24.9
07:35	54.4	0.75	-	5.13	182	13.1	79.4	6.69	28.9
07:40	54.4	0.75	-	5.15	180	13.1	79.4	6.64	32.4

Total Quantity of Water Removed (gal):	3 gal	Sampling Time:	0.750
Samplers:		Split Sample With:	none
Sampling Date:	11/15/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	SAMPLES COLLECTED: A metal\ 6 VOAs\ 2 TSS Water at the beginning was very brown

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EXT-2	Weather: Nice, Temp 62° cloudy
Sounding Method: Water Tape	Gauge Date: 11-15-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 0905	Well Diameter (in): 10"

Purge Date:	11/15/2011	Purge Time:	0.905
Purge Method:	Submergable	Field Technician:	

1) Well Depth (ft): 190'	4) Well Diameter (in): 10"	7) Five Well Volumes (gal):
2) Depth to Water (ft): 57.7"	5) Well Volume / Foot (gal) (d^2x.0408):	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft):	6) Total Well Volume (gal) (3x5):	Pump Type: 10 hp pump

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
08:35	57.7	0.50	-	5.01	219	13.2	56.9	9.18	17.6
08:40	57.7	0.50	-	4.95	225	13.3	56.3	8.42	25.9
08:45	57.7	0.50	-	4.93	229	13.2	56.1	8.33	37.2
08:50	57.7	0.25	-	4.9	235	13.3	55.9	8.26	24.5
08:55	57.7	0.25	-	4.9	236	13.3	55.9	8.23	25.9

Total Quantity of Water Removed (gal):	2 gals	Sampling Time:	09:05
Samplers:		Split Sample With:	-
Sampling Date:	11/15/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	SAMPLES COLLECTED: 1 Metal\ 3 VOAs\ 1 TSS No problem at well. Pumped fine, was a slow start.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EXT-3	Weather: Temp 62° and cloudy
Sounding Method: Water Tape	Gauge Date: 11-15-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 10:00	Well Diameter (in): 10"

Purge Date:	11/15/2011	Purge Time:	10:00
Purge Method:	Submergable Pump	Field Technician:	

1) Well Depth (ft): 194'	4) Well Diameter (in): 10"	7) Five Well Volumes (gal):
2) Depth to Water (ft): 53.3	5) Well Volume / Foot (gal) (d^2x.0408):	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft):	6) Total Well Volume (gal) (3x5):	Pump Type: Submergable

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
09:35	53.3	0.25	-	4.67	2.98	14.1	50.1	10.60	14.8
09:40	53.3	0.25	-	4.70	2.97	13.9	50.2	9.63	26.0
09:45	53.3	0.25	-	4.73	2.94	13.9	50.3	9.50	25.4
09:50	53.3	0.25	-	4.75	2.91	14.0	50.3	9.43	13.0

Total Quantity of Water Removed (gal):	1 gal	Sampling Time:	10:00
Samplers:		Split Sample With:	-
Sampling Date:	11/15/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	SAMPLES COLLECTED: 1 Metal\ 3 VOAs\ 1 TSS No problems at well, pump quickly, no brown water

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: BP-3A	Weather: 52° and sunny
Sounding Method: Water Tape	Gauge Date: 10-25-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time:	Well Diameter (in): 4"

Purge Date:	10/25/2011	Purge Time:	46.0/14.0
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 74	4) Well Diameter (in): 4	7) Five Well Volumes (gal): 39
2) Depth to Water (ft): 62.18	5) Well Volume / Foot (gal) (d^2x.0408): .6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 71.82	6) Total Well Volume (gal) (3x5): 7.7	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
09:00	62.18	0.50	230	3.83	338	11.9	6.0	13.53	7.0
09:05	62.18	0.50	230	8.64	354	11.9	6.0	11.83	13.0
09:10	62.18	0.50	230	3.62	355	11.9	5.9	11.99	11.3
09:15	62.18	0.50	230	3.60	358	11.9	6.0	11.91	11.6

Total Quantity of Water Removed (gal):	2 gals	Sampling Time:	09:20
Samplers:		Split Sample With:	TOB
Sampling Date:	10/25/2011	Sample Type:	Grab VOC

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: BP-3B	Weather: Cloudy, getting cooler
Sounding Method: Water Tape	Gauge Date: 10-26-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time:	Well Diameter (in): 4"

Purge Date: 10/26/2011	Purge Time:
Purge Method: Submergable Pump	Field Technician:

1) Well Depth (ft): 235.0'	4) Well Diameter (in): 4'	7) Five Well Volumes (gal):
2) Depth to Water (ft): 64.14	5) Well Volume / Foot (gal) (d^2x.0408):	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft):	6) Total Well Volume (gal) (3x5):	Pump Type: 1/2 hp Grund fos

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
11:38	64.14			4.94	3.18	12.3	6.8	11.85	14.9
12:12	64.14			4.59	3.21	12.2	6.8	11.85	10.0
12:45	64.14			4.76	5.13	12.2	6.4	11.87	13.0

Total Quantity of Water Removed (gal):		Sampling Time:	12:50
Samplers:		Split Sample With:	TOB NC
Sampling Date:	10/26/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: BP-3C	Weather: cloudy, chance of rain
Sounding Method: Water Tape	Gauge Date:	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time:	Well Diameter (in): 4"

Purge Date: 10/26/2011	Purge Time:
Purge Method: Submergable Pump	Field Technician:

1) Well Depth (ft): 300.0'	4) Well Diameter (in):	7) Five Well Volumes (gal):
2) Depth to Water (ft): 63.42	5) Well Volume / Foot (gal) (d^2x.0408):	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft):	6) Total Well Volume (gal) (3x5):	Pump Type:

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
11:33	63.42			4.69	346	12.6	31.8	10.00	31.5
12:38	63.42			4.05	344	12.4	28.6	9.33	14.5
1:25	63.42			4.06	359	12.5	28.0	9.63	13.2
1:30	63.42			4.06	341	11.9	28.2	8.63	6.1

Total Quantity of Water Removed (gal):		Sampling Time:	1:35
Samplers:		Split Sample With:	TOB
Sampling Date:	10/26/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: DW-1	Weather:
Sounding Method: Water Tape	Gauge Date: 10-25-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time:	Well Diameter (in): 4"

Purge Date:	10/25/2011	Purge Time:	
Purge Method:	Low Plow	Field Technician:	

1) Well Depth (ft): 99.10'	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 113
2) Depth to Water (ft): 64.50	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 34.6	6) Total Well Volume (gal) (3x5): 22.6	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
07:20	64.50		250	4.17	268	13.4	50.6	7.88	3.5
07:25	64.50		250	4.29	265	13.3	50.7	5.62	5.2
07:30	64.50		250	4.31	265	13.4	50.9	5.28	7.8
07:35	64.50		250	4.35	265	13.4	50.8	5.18	20.0

Total Quantity of Water Removed (gal):	2 gal	Sampling Time:	7:40
Samplers:		Split Sample With:	-
Sampling Date:	10/25/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	No problem with well- pumping well Starting mileage: 49429

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: DW-2	Weather: Rainy- light at this time, 57°
Sounding Method: Water Tape	Gauge Date: 10-27-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 08:30	Well Diameter (in): 4"

Purge Date:	10/27/2011	Purge Time:	48.0/12.0
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 100.79	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 97
2) Depth to Water (ft): 70.93	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 29.86	6) Total Well Volume (gal) (3x5): 19.5	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
08:00	70.93	0.50	250	3.39	370	14.1	41.9	11.00	57.1
08:05	70.95	0.50	250	3.37	374	14.1	19.2	10.15	56.7
08:10	70.95	1.00	250	3.38	377	14.1	51.4	9.66	59.9
08:15	70.95	1.00	250	3.38	378	14.1	51.5	9.63	69.0
08:20	70.95	1.00	250	3.40	380	14.1	52.2	9.37	78.9

Total Quantity of Water Removed (gal):	4 gal	Sampling Time:	08:30
Samplers:		Split Sample With:	None
Sampling Date:	10/27/2011	Sample Type:	Grab VOC

COMMENTS AND OBSERVATIONS:	Problems at well- bladder was collapsed. Replace with a different pump- worked fine. Samples taken- 3 VOAs

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-1A	Weather: Cloudy
Sounding Method: Water Tape	Gauge Date: 10-20-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 50 PSI	Well Diameter (in): 4"

Purge Date:	10/20/2011	Purge Time:	07:55/08:00
Purge Method:	Slow Flow	Field Technician:	

1) Well Depth (ft):	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 147
2) Depth to Water (ft): 63.43	5) Well Volume / Foot (gal) (d^2x.0408): .6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 45.07	6) Total Well Volume (gal) (3x5): 29.42	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (gallons)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
07:25	63.43	0.50	250	3.82	407	13.9	16.1	10.90	4.6
07:30	63.43	0.50	250	3.85	425	13.7	44.0	10.22	4.3
07:35	63.43	0.50	250	3.88	433	13.8	44.1	10.02	4.4
07:40	63.43	0.50	250	3.91	442	13.8	44.0	9.85	4.7
07:45	63.43	0.50	250	3.91	444	13.7	43.9	9.77	4.7
07:50	63.43	0.50	250	3.92	446	13.7	43.9	9.74	4.8

Total Quantity of Water Removed (gal):	3 gal	Sampling Time:	07:55
Samplers:		Split Sample With:	TOB
Sampling Date:	10/20/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-1B	Weather: Slightly cloudy
Sounding Method: Water Tape	Gauge Date: 10-20-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time:08:50	Well Diameter (in): 4"

Purge Date:	10/20/2011	Purge Time:	08:50
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 102.40"	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 132
2) Depth to Water (ft): 62.00	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 40.4	6) Total Well Volume (gal) (3x5): 26.37	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (gallons)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
08:15	62.00	0.50	200	4.85	412	13.9	20.3	8.34	5.7
08:20	62.10	0.50	200	5.07	406	14.0	39.2	7.28	8.1
08:25	62.10	0.50	200	5.13	403	14.0	57.9	6.83	8.9
08:30	62.10	0.50	200	5.17	400	14.0	65.2	6.58	10.0
08:35	62.10	0.50	200	5.20	397	14.0	68.3	6.40	7.0
08:40	62.10	0.50	200	5.23	394	14.0	69.2	6.20	5.5
08:45	62.10	0.50	200	5.25	392	14.0	69.4	6.11	5.1

Total Quantity of Water Removed (gal):	3 gals	Sampling Time:	8:50
Samplers:		Split Sample With:	TOB
Sampling Date:	10/20/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	Gauge Time: 46.0\ 14.0

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-1C	Weather: Sun is showing through
Sounding Method: Water Tape	Gauge Date: 10-20-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 46.0\14.0	Well Diameter (in): 4"

Purge Date:	10/20/2011	Purge Time:	10:30
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 127'	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 206
2) Depth to Water (ft): 64.0'	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 63	6) Total Well Volume (gal) (3x5): 41.1	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
10:10	64.0	0.50	210	4.55	445	13.7	33.0	8.19	8.9
10:15	64.0	0.50	210	3.89	424	13.7	0.183	5.83	6.6
10:20	64.0	0.50	210	3.84	416	13.7	0.195	5.52	5.5
10:25	64.0	0.50	210	3.85	407	13.6	0.201	5.28	5.8

Total Quantity of Water Removed (gal):	2 gals	Sampling Time:	10:30
Samplers:		Split Sample With:	TOB
Sampling Date:	10/20/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-2A	Weather: Cool Temp @ 52°
Sounding Method: Water Tape	Gauge Date: 10-24-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 50.0\ 10.0	Well Diameter (in): 4"

Purge Date:	10/24/2011	Purge Time:	07:55
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 108.50	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 59
2) Depth to Water (ft): 92.10	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 16.4	6) Total Well Volume (gal) (3x5): 10.7	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
07:25	92.10	0.25	90	4.83	143	13.8	11.1	7.67	10.2
07:30	92.10	0.10	90	4.95	38	13.8	12.2	5.96	10.5
07:35	92.10	0.10	90	5.03	0	13.8	12.7	5.13	9.9
07:40	92.10	0.10	90	5.05	-10	13.8	13.1	4.69	9.0
07:45	92.10	0.10	90	5.08	-20	13.8	13.2	4.44	9.3
07:50	92.10	0.35	90	5.07	-25	13.8	13.1	4.31	9.0

Total Quantity of Water Removed (gal):	1 gal	Sampling Time:	07:55
Samplers:		Split Sample With:	TOB
Sampling Date:	10/24/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	Getting a error 3 with horiba

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-2B	Weather: Still cool- temp @ 52°
Sounding Method: Water Tape	Gauge Date: 10-24-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 08:50	Well Diameter (in): 4"

Purge Date:	10/24/2011	Purge Time:	08:50
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 129.5'	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 122
2) Depth to Water (ft): 92.05	5) Well Volume / Foot (gal) (d^2x.0408):	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 37.45	6) Total Well Volume (gal) (3x5): 24.44	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
08:15	92.05	0.25	120	5.97	40	13.7	19.2	7.41	6.3
08:20	92.30	0.25	120	6.84	78	13.8	29.3	4.96	10.1
08:25	92.50	0.25	120	7.27	77	13.8	32.8	4.50	14.9
08:30	92.50	0.25	120	7.46	78	13.8	34.7	4.28	15.7
08:35	92.50	0.25	120	7.50	82	14.3	36.1	4.22	14.3
08:40	92.50	0.25	120	7.52	83	14.3	36.1	4.20	14.1
08:45	92.50	0.50	120	7.55	85	14.3	36.3	4.24	14.1

Total Quantity of Water Removed (gal):	2 gals	Sampling Time:	08:50
Samplers:		Split Sample With:	TOB
Sampling Date:	10/24/2011	Sample Type:	Grab VOC

COMMENTS AND OBSERVATIONS:	Experiencing an error 3 problem. New 9 volt battery installed.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-2C	Weather: Sun is out
Sounding Method: Water Tape	Gauge Date: 10-24-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 10:00	Well Diameter (in): 4"

Purge Date:	10/24/2011	Purge Time:	10:00
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 149.50	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 187
2) Depth to Water (ft): 92.30	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 57.2	6) Total Well Volume (gal) (3x5): 37.34	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
09:25	92.30	0.25	100	5.79	263	15.2	59.3	9.81	6.0
09:30	92.30	0.25	100	4.80	290	14.8	57.7	9.20	3.5
09:35	92.30	0.25	100	4.61	304	14.7	57.7	9.20	4.3
09:40	92.30	0.25	100	4.50	313	14.7	57.6	9.09	4.7
09:45	92.30	0.25	100	4.44	320	14.8	57.5	9.05	5.4
09:50	92.30	0.25	100	4.41	324	14.7	57.6	9.06	6.6
09:55	92.30	0.25	100	4.38	327	14.8	57.7	9.06	6.5

Total Quantity of Water Removed (gal):	2 gals	Sampling Time:	10:00
Samplers:		Split Sample With:	TOB VOC
Sampling Date:	10/24/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	No problem at well.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-2D	Weather: Sunrise 55°
Sounding Method: Water Tape	Gauge Date: 10-25-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 7:04	Well Diameter (in): 4"

Purge Date:	10/25/2011	Purge Time:	7:07
Purge Method:	Bladder (dedicated)	Field Technician:	

1) Well Depth (ft): 301.40	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 683.09
2) Depth to Water (ft): 92.12	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 209.78	6) Total Well Volume (gal) (3x5): 136.62	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (cm)	DO (ug/L)	Turbidity (ntu)
7:10	92.15		240	5.10	282	13.43	0.114	7.93	1.1
7:15	92.16		240	4.13	323	13.22	0.113	2.47	2.7
7:20	92.17		240	4.25	289	13.25	0.115	4.49	135.0*
7:25	92.17		240	4.11	298	13.27	0.106	7.16	120.0
7:30	92.17		240	4.08	309	13.27	0.104	8.33	73.8
7:35	92.17		240	4.15	312	13.27	0.104	8.62	41.5
7:40	92.17		240	4.28	310	13.27	0.103	8.74	27.6
7:45	92.17		240	4.44	306	13.24	0.102	8.82	25.8
7:50	92.17		240	4.58	300	13.33	0.102	8.81	27.7
7:55	92.17		240	4.68	296	13.27	0.102	8.78	32.4
8:00	92.17		240	4.75	294	13.27	0.102	8.80	41.6

Total Quantity of Water Removed (mL):	15,360	Sampling Time:	8:11
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/25/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	160=psi 6.5= intake 8.5= discharge *Turb very clear, meter malfunction. New meter being delivered today. Turb appears to be < 10 ntu. Numbers keep jumping around. Same problem yesterday.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-3A	Weather: Getting warmer
Sounding Method: Water Tape	Gauge Date: 10-20-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time:40.0\ 20.0	Well Diameter (in): 4"

Purge Date:	10/20/2011	Purge Time:	10:55
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 106.0'	4) Well Diameter (in): 4'	7) Five Well Volumes (gal): 35.25
2) Depth to Water (ft): 95.20	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 10.8	6) Total Well Volume (gal) (3x5): 7.05	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (gallons)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
10:35	95.20	0.50	110	5.09	288	13.6	5.4	12.09	16.7
10:40	95.20	0.50	110	5.00	335	13.5	4.9	11.25	9.1
10:45	95.20	0.50	110	4.98	341	13.3	4.8	11.22	9.2
10:50	95.20	0.50	110	4.98	353	13.3	4.8	11.03	8.9

Total Quantity of Water Removed (gal):	3 gals	Sampling Time:	10:55
Samplers:		Split Sample With:	TOB
Sampling Date:	10/20/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-3B	Weather: Cloudy again
Sounding Method: Water Tape	Gauge Date: 10-20-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 40.0\20.0	Well Diameter (in): 4"

Purge Date:	10/20/2011	Purge Time:	11:30
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 136.86	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 135.5
2) Depth to Water (ft): 95.35	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 41.51	6) Total Well Volume (gal) (3x5): 27.09	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (gallons)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
11:10	95.35	0.25	110	446	425	14.2	7.6	10.90	7.3
11:15	95.35	0.25	110	431	425	14.0	7.5	9.30	7.4
11:20	95.35	0.50	110	427	425	14.0	7.6	9.70	7.1
11:25	95.35	0.50	110	429	425	14.0	7.4	9.83	7.3

Total Quantity of Water Removed (gal):	1.50 gals	Sampling Time:	11:30
Samplers:		Split Sample With:	TOB
Sampling Date:	10/20/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-3C	Weather: Windy
Sounding Method: Water Tape	Gauge Date: 10-20-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 40.0\20.0	Well Diameter (in): 4"

Purge Date:	10/20/2011	Purge Time:	12:15
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 165.85	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 231
2) Depth to Water (ft): 95.20	5) Well Volume / Foot (gal) (d^2x.0408): .086528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 70.65	6) Total Well Volume (gal) (3x5): 46.1	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (gallons)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
0.489583	95.20	0.50	180	4.64	4.25	13.4	62.3	10.56	9.5
0.493056	95.20	0.50	180	4.63	4.25	13.3	61.0	10.41	9.0
0.496528	95.23	0.50	180	4.61	4.23	13.3	5.78	10.20	8.1
0.5	95.23	0.50	180	4.47	4.27	13.2	5.73	9.97	7.3
0.503472	95.23	0.50	180	4.37	4.32	13.1	8.86	9.93	7.5
0.506944	95.23	0.50	180	4.31	4.33	13.2	6.05	9.97	7.7

Total Quantity of Water Removed (gal):	13 gals	Sampling Time:	12:15
Samplers:		Split Sample With:	TOB
Sampling Date:	10/20/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-4A	Weather: Clear skies, windy and cool
Sounding Method: Water Tape	Gauge Date:	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 40.0\20.0	Well Diameter (in): 4"

Purge Date:	10/21/2011	Purge Time:	07:55
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 116.80'	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 70
2) Depth to Water (ft): 95.25	5) Well Volume / Foot (gal) (d^2x.0408): .6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 21.55	6) Total Well Volume (gal) (3x5): 14.06	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
07:30	95.25	0.25	130	3.99	408	13.1	15.9	10.65	5.0
07:35	95.25	0.50	130	3.99	416	13.1	14.9	10.01	5.9
07:40	95.25	0.50	130	3.99	426	13.2	14.7	9.88	5.7
07:45	95.25	0.75	130	3.99	435	13.2	14.0	9.75	5.7
07:50	95.25	1.00	130	3.99	439	13.2	14.0	9.63	5.5

Total Quantity of Water Removed (gal):	3 gals	Sampling Time:	07:55
Samplers:		Split Sample With:	-
Sampling Date:	10/21/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-4B	Weather: Clear sunny skies
Sounding Method: Water Tape	Gauge Date: 10-21-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 40.0\20.0	Well Diameter (in): 4"

Purge Date:	10/21/2011	Purge Time:	08:50
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 131.72	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 119
2) Depth to Water (ft): 95.16	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 36.50	6) Total Well Volume (gal) (3x5): 23.87	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
08:10	95.16	0.50	220	4.14	454	13.3	22.3	9.17	8.2
08:15	95.76	0.50	220	4.05	455	13.3	23.3	8.00	4.5
08:20	95.86	0.50	220	4.07	454	13.4	23.6	7.99	4.4
08:25	96.10	0.50	220	4.09	453	13.4	23.6	7.90	4.4

Total Quantity of Water Removed (gal):	2 gals	Sampling Time:	08:30
Samplers:		Split Sample With:	-
Sampling Date:	10/21/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-4C	Weather: Cool, windy
Sounding Method: Water Tape	Gauge Date: 10-21-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 40.0\20.0	Well Diameter (in): 4"

Purge Date:	10/21/2011	Purge Time:	09:15
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 157.00	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 203
2) Depth to Water (ft): 94.70	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 62.30	6) Total Well Volume (gal) (3x5): 40.7	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
08:40	94.70	0.25	100	4.09	457	13.6	52.6	8.10	4.1
08:45	94.80	0.25	100	4.37	437	13.6	50.1	7.88	4.3
08:50	94.80	0.25	100	4.57	4.25	13.6	47.8	7.66	4.4
08:55	94.80	0.25	100	4.63	4.21	13.6	45.6	7.56	4.4
09:00	94.80	0.25	100	4.65	4.19	13.6	45.2	7.53	4.4
09:05	94.80	0.25	100	4.68	4.15	13.8	44.7	7.73	4.2
09:10	94.80	0.50	100	4.69	4.14	13.9	45.0	7.49	4.2

Total Quantity of Water Removed (gal):	2 gals	Sampling Time:	09:15
Samplers:		Split Sample With:	-
Sampling Date:	10/21/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	No problem at well- began to dump quickly

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: EW-4D	Weather: Partly Sunny 50°
Sounding Method: Water Tape	Gauge Date: 10-24-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 8:40	Well Diameter (in): 4"

Purge Date:	10/24/2011	Purge Time:	8:58
Purge Method:	Bladder (dedicated)	Field Technician:	

1) Well Depth (ft): 295'	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 652.45
2) Depth to Water (ft): 95.10	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 199.90	6) Total Well Volume (gal) (3x5): 130.49	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
9:01	95.23		260	5.29	221	13.11	0.229	8.05	2.6
9:06	95.23		260	2.18	218	13.32	0.219	5.17	3.8
9:11	95.23		260	4.98	217	13.42	0.220	6.42	1.4
9:16	95.23		260	5.00	215	13.45	0.227	6.71	0.6
9:21	95.23		260	4.99	215	13.50	0.227	6.76	1.9

Total Quantity of Water Removed (mL):	6240	Sampling Time:	9:22
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/24/2011	Sample Type:	Vocs

COMMENTS AND OBSERVATIONS:	16.5=psi	8.5=intake	6.5=discharge

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-5	Weather: Sun is out
Sounding Method: Water Tape	Gauge Date: 10-24-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 11:35	Well Diameter (in): 4"

Purge Date:	10/24/2011	Purge Time:	11:35
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 178.87	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 350
2) Depth to Water (ft): 71.50	5) Well Volume / Foot (gal) (d^2x.0408): .6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 107.37	6) Total Well Volume (gal) (3x5): 70.1	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
11:00	70.50	0.50	210	5.54	210	16.3	17.5	8.42	1.2
11:05	70.50	0.50	210	5.57	222	15.9	16.3	6.30	2.4
11:10	71.00	0.50	210	5.51	226	15.9	11.4	6.17	2.4
11:15	71.00	0.50	210	5.45	228	16.1	8.9	6.09	2.3
11:20	71.00	0.50	210	5.43	226	16.2	7.8	6.02	2.8
11:25	71.00	0.25	210	5.41	227	16.3	7.3	5.97	2.8
11:30	71.00	0.25	210	5.38	226	16.3	7.3	5.95	2.5

Total Quantity of Water Removed (gal):	3 gals	Sampling Time:	11:35
Samplers:		Split Sample With:	-
Sampling Date:	10/24/2011	Sample Type:	Grab VOC

COMMENTS AND OBSERVATIONS:	No problem at well, pumped very quickly.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-6A	Weather: Overcast 55°
Sounding Method: Water Tape	Gauge Date: 10-26-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 8:31	Well Diameter (in):4"

Purge Date:	10/26/2011	Purge Time:	8:48
Purge Method:	Bladder (PVC-2)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 71.0'	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 29.99
2) Depth to Water (ft): 61.81	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 9.19	6) Total Well Volume (gal) (3x5): 5.99	Pump Type: Bladder (PVC-2)

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
9:08	61.82		300	6.07	181	14.57	0.361	0.00	39.6
9:13	61.83		300	6.12	181	14.66	0.353	0.00	31.7
9:18	61.83		300	6.08	181	14.67	0.363	0.00	14.0
9:23	61.83		300	6.09	180	14.70	0.370	0.00	14.6

Total Quantity of Water Removed (mL):	10,800	Sampling Time:	9:24
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/26/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	45 psi 10.0=intake 5.0=discharge DU semms suspicious- will check motor after sampling. Needs repair- handway ripped off. Also, suspect hole in air or water line but could not locate.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: EW-6C	Weather: Partly sunny 50°
Sounding Method: Water Tape	Gauge Date: 10-26-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 7:29	Well Diameter (in): 4"

Purge Date:	10/26/2011	Purge Time:	7:33
Purge Method:	Bladder (PVC-2)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 169	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 348.20
2) Depth to Water (ft): 62.32	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 106.68	6) Total Well Volume (gal) (3x5): 69.64	Pump Type: Bladder (PVC-2)

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
7:40	62.24		100	6.49	-23	14.86	0.260	6.63	32.9
7:45	62.31		100	6.28	4	15.25	0.325	4.19	33.4
7:50	62.48		100	6.27	22	15.46	0.364	3.14	31.5
7:55	62.63		100	6.32	47	15.56	0.396	2.03	32.7
8:00	62.72		100	6.38	61	15.65	0.398	1.80	31.7
8:05	62.80		100	6.43	68	15.80	0.409	1.30	32.8
8:10	62.86		100	6.47	73	15.80	0.417	0.92	34.7
8:15	62.89		100	6.49	78	15.90	0.419	0.63	36.3
8:20	62.91		100	6.51	81	16.02	0.420	0.60	39.3
8:25	62.93		100	6.51	83	15.95	0.421	0.55	40.4

Total Quantity of Water Removed (mL):	5,300	Sampling Time:	8:26
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/26/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	70= psi 9.5=intake 5.5=discharge Needs new handway. Handway cover ripped off

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: EW-7C	Weather: Overcast 55-60°
Sounding Method: Water Tape	Gauge Date: 10-26-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 11:09	Well Diameter (in): 4"

Purge Date:	10/26/2011	Purge Time:	11:15
Purge Method:	Bladder (dedicated)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 199.50	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 370.33
2) Depth to Water (ft): 86.04	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 113.46	6) Total Well Volume (gal) (3x5): 74.07	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
11:18	86.11		240	5.00	284	14.43	1.16	5.71	0.0
11:23	86.11		240	4.76	298	14.46	1.35	2.29	0.0
11:28	86.10		240	4.63	307	14.56	1.58	5.30	0.0
11:33	86.10		240	4.63	310	14.60	1.69	5.97	0.0
11:38	86.10		240	4.63	312	14.66	1.75	6.16	0.0
11:43	86.10		240	4.64	314	14.69	1.77	6.23	0.0
11:48	86.10		240	4.64	317	14.68	1.77	6.22	0.0

Total Quantity of Water Removed (mL):	8,160	Sampling Time:	11:49
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/26/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	105=psi	8.0=intake	7.0=discharge

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: EW-7D	Weather: Overcast 55°
Sounding Method: Water Tape	Gauge Date: 10-26-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 10:32	Well Diameter (in): 4"

Purge Date:	10/26/2011	Purge Time:	10:36
Purge Method:	Bladder (dedicated)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 283.5	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 645.13
2) Depth to Water (ft): 85.85	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 197.65	6) Total Well Volume (gal) (3x5): 129.03	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
10:40	85.91		260	5.32	255	14.01	0.276	2.08	0.0
10:45	85.93		260	5.21	258	14.25	0.276	0.71	0.0
10:50	85.94		260	5.02	268	14.39	0.269	1.97	0.0
10:55	85.95		260	5.01	271	14.44	0.268	2.48	0.0
11:00	85.96		260	5.03	272	14.48	0.269	2.60	0.1
11:05	85.97		260	5.03	274	14.51	0.270	2.63	0.7

Total Quantity of Water Removed (mL):	7,800	Sampling Time:	11:06
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/26/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	80=psi	8.0=intake	7.0=discharge

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: EW-8D	Weather: Overcast 60°
Sounding Method: Water Tape	Gauge Date: 10-26-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 11:59	Well Diameter (in): 4"

Purge Date:	10/26/2011	Purge Time:	12:03
Purge Method:	Bladder (dedicated)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 242	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 581.94
2) Depth to Water (ft): 63.71	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 178.29	6) Total Well Volume (gal) (3x5): 116.39	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
12:03	63.76		240	5.05	279	13.75	0.139	0.01	16.1
12:13	63.76		240	4.85	289	13.72	0.144	4.27	6.8
12:18	63.76		240	4.80	294	13.67	0.146	6.26	2.4
12:23	63.76		240	4.81	298	13.67	0.146	6.68	7.3
12:28	63.76		240	4.82	300	13.63	0.146	6.80	14.7

Total Quantity of Water Removed (mL):	6,240	Sampling Time:	12:29
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/26/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	131= psi	8.0=intake	7.0=discharge

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: EW-9D	Weather: Overcast 55°
Sounding Method: Water Tape	Gauge Date: 10-26-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 9:47	Well Diameter (in): 4"

Purge Date:	10/26/2011	Purge Time:	9:48
Purge Method:	Bladder (dedicated)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 254'	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 601.19
2) Depth to Water (ft): 69.81	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 184.19	6) Total Well Volume (gal) (3x5): 120.24	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
9:54	69.94		280	5.24	249	13.95	0.162	1.45	0.0
9:59	69.94		280	5.11	256	14.02	0.140	5.06	0.0
10:04	69.94		280	5.12	261	14.05	0.135	6.01	0.0
10:09	69.94		280	5.12	263	14.08	0.135	6.23	0.0
10:14	69.94		280	5.12	265	14.09	0.134	6.31	0.6

Total Quantity of Water Removed (mLl):	7,560	Sampling Time:	10:15
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/26/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	142= psi	7.5=intake	7.5=discharge

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: EW-10C	Weather: Mainly sunny 50°
Sounding Method: Water Tape	Gauge Date: 10-24-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 9:24	Well Diameter (in): 4"

Purge Date:	10/24/2011	Purge Time:	9:28
Purge Method:	Bladder (dedicated)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 150'	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 185.8
2) Depth to Water (ft): 93.08	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 56.92	6) Total Well Volume (gal) (3x5): 37.16	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
9:37	93.06		200	4.83	226	14.19	0.246	9.22	1.4
9:42	93.06		200	4.81	230	14.10	0.242	9.04	0.0
9:47	93.06		200	4.78	232	13.95	0.245	8.94	0.0

Total Quantity of Water Removed (mL):	4,000	Sampling Time:	9:48
Samplers:	Keth Gandarillas	Split Sample With:	
Sampling Date:	10/24/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	85=psi	9.5=intake	5.5=discharge

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: EW-11D	Weather: Partly Sunny 50-55°
Sounding Method: Water Tape	Gauge Date: 10-24-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 10:56	Well Diameter (in): 4"

Purge Date:	10/24/2011	Purge Time:	10:59
Purge Method:	Bladder (dedicated)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 280	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 589.41
2) Depth to Water (ft): 99.42	5) Well Volume / Foot (gal) (d^2x.0408): .06528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 180.58	6) Total Well Volume (gal) (3x5): 117.83	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
11:03	99.52		240	5.39	261	13.58	0.601	9.89	0.0
11:08	99.53		240	5.15	269	13.43	0.598	9.56	0.0
11:13	99.53		240	4.94	273	13.53	0.597	10.07	0.1
11:18	99.53		240	4.89	273	13.59	0.594	10.52	26.6
11:23	99.53		240	4.94	272	13.64	0.613	10.30	35.0

Total Quantity of Water Removed (mL):	6,000	Sampling Time:	11:24
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/24/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	155= psi 6.5=intake 8.5=discharge Turb jumps. Possible problem with Turb probe- will check after well is done. Turb still fluctuating. Tried to recalibrate but did not work. Turb still jumping around. Call Pine Environmental to troubleshoot. Sending new meter out.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: EW-12D	Weather: Mainly Cloudy 60°
Sounding Method: Water Tape	Gauge Date: 10-24-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 1:00	Well Diameter (in): 4"

Purge Date:	10/24/2011	Purge Time:	1:04
Purge Method:	Bladder (dedicated)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 220	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 398.18
2) Depth to Water (ft): 98.01	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 121.99	6) Total Well Volume (gal) (3x5): 79.63	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
1:11	98.18		220	4.66	299	13.99	0.656	10.12	0.0
1:16	98.21		220	4.47	310	13.88	0.655	10.92	0.0
1:21	98.22		220	4.44	314	13.83	0.654	11.12	0.0
1:26	98.23		220	4.47	315	13.85	0.653	11.08	0.0

Total Quantity of Water Removed (gal):	5,060 mL	Sampling Time:	1:27
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/24/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	132=psi 9.0=intake 6.0=discharge DU seems off. New meter getting delivered later today.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: EW-13D	Weather: Mainly sunny 55°
Sounding Method: Water Tape	Gauge Date: 10-24-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 9:56	Well Diameter (in): 4"

Purge Date:	10/24/2011	Purge Time:	10:00
Purge Method:	Bladder (dedicated)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 350	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 822.85
2) Depth to Water (ft): 97.90	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 252.10	6) Total Well Volume (gal) (3x5): 164.57	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
10:05	97.96		220	4.71	242	13.91	0.234	8.74	254.0*
10:17	97.96		220	4.48	265	14.33	0.268	7.43	10.4
10:22	97.96		220	4.48	274	14.05	0.251	7.32	10.2
10:27	97.98		220	4.45	282	13.96	0.246	7.39	9.6
10:32	98.00		220	4.46	290	14.02	0.243	7.43	6.4
10:37	98.01		220	4.50	294	14.14	0.241	7.43	10.5
10:42	98.02		220	4.53	296	14.43	0.239	7.51	10.3

Total Quantity of Water Removed (mL):	9,460 mL	Sampling Time:	10:43
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/24/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	175=psi 5.0=intake 10.0=discharge Turb readings very high, water appears very clear. Checked calibration. Reading 0.0 ntu 10:08. Checked out good.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: EW-14D	Weather: Mostly sunny breezy 60°
Sounding Method: Water Tape	Gauge Date: 10-25-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 1:44	Well Diameter (in): 4"

Purge Date:	10/25/2011	Purge Time:	1:51
Purge Method:	Bladder (dedicated)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 195'	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 503.96
2) Depth to Water (ft): 40.60	5) Well Volume / Foot (gal) (d^2x.0408): 0.6578	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 154.40	6) Total Well Volume (gal) (3x5): 100.79	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
1:55	40.64		190	5.04	221	12.73	0.116	6.17	1.8
2:00	40.64		190	4.82	239	12.47	0.117	5.70	2.0
2:05	40.64		190	4.80	246	12.29	0.119	5.45	0.9
2:10	40.64		190	4.84	250	12.30	0.119	5.34	1.1
2:15	40.64		190	4.87	253	12.31	0.121	5.31	1.0

Total Quantity of Water Removed (mL):	4,750	Sampling Time:	2:16
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/25/2011	Sample Type:	VOCs

COMMENTS AND OBSERVATIONS:	105=psi	8.5=intake	6.5=discharge

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: LF-02	Weather: Temp @ 52° and cloudy
Sounding Method: Water Tape	Gauge Date: 10-27-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time:	Well Diameter (in): 6"

Purge Date: 10/27/2011	Purge Time:
Purge Method: Low Flow	Field Technician:

1) Well Depth (ft): 102'	4) Well Diameter (in): 6"	7) Five Well Volumes (gal):
2) Depth to Water (ft): 51.60	5) Well Volume / Foot (gal) (d^2x.0408):	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft):	6) Total Well Volume (gal) (3x5):	Pump Type: Bladder used at well

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
7:35	51.60		230	6.40	221	16.8	0.388	5.76	87.5
7:40	51.60		230	6.41	215	16.7	0.390	5.29	99.9
7:45	51.60		230	6.43	206	16.8	0.392	5.08	180.0
7:50	51.60		230	6.44	199	17.1	0.390	4.92	366.0
7:55	51.60		230	6.44	197	17.0	0.390	4.89	213.0
8:00	51.60		230	6.45	103	17.1	0.389	4.84	245.0
				CLEANED CELL					
8:20									25.2
8:23									24.9
8:26									37.4

Total Quantity of Water Removed (gal):	3 gals	Sampling Time:	8:30
Samplers:		Split Sample With:	-
Sampling Date:	10/26/2011	Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	Water has a yellow tint to it. But not to the point where turbidity should be that high. Key #2246

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: MW-6D	Weather: Overcast 60°
Sounding Method: Water Tape	Gauge Date: 10-26-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 12:57	Well Diameter (in): 4"

Purge Date:	10/26/2011	Purge Time:	1:06
Purge Method:	Bladder (PVC-2)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 190	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 305.39
2) Depth to Water (ft): 95.21	5) Well Volume / Foot (gal) (d^2x.0408): 0.6578	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 94.79	6) Total Well Volume (gal) (3x5): 61.88	Pump Type: Bladder (PVC-2)

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
1:10	95.40		280	6.06	62	15.73	2.03	3.55	15.2
1:15	95.40		280	6.17	31	15.66	2.61	1.54	18.4
1:20	95.40		280	6.18	19	15.68	2.73	0.81	26.8
1:25	95.40		280	6.18	13	15.70	2.76	0.59	34.9
1:30	95.40		280	6.18	9	15.77	2.77	1.14	67.2
1:35	95.40		280	6.18	9	15.72	2.78	1.44	79.7
1:40	95.40		280	6.17	4	15.73	2.80	1.69	92.8
1:45	95.40		280	6.16	-1	15.73	2.91	2.11	95.1
1:50	95.40		280	6.16	-4	15.74	2.96	2.39	117.0
1:55	95.41		280	6.15	-11	15.75	3.03	2.68	121.0
2:00	95.41		280	6.16	-27	15.76	3.07	2.76	133.0

Total Quantity of Water Removed (mL):	21,000	Sampling Time:	2:21
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/26/2011	Sample Type:	VOCs and TOB

COMMENTS AND OBSERVATIONS:	8.1=psi 8.0=intake 7.0=discharge Turb does not appear to be that high. Possible motor problem. Will check past sampling. Will use stabilization parameter of 10 ntu for turbidity.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: MW-8A	Weather: Raining, cloudy
Sounding Method: Water Tape	Gauge Date:	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time:	Well Diameter (in): 4"

Purge Date:	10/27/2011	Purge Time:	
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 90.0	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 68
2) Depth to Water (ft): 69.33	5) Well Volume / Foot (gal) (d^2x.0408):	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 20.67	6) Total Well Volume (gal) (3x5): 13.60	Pump Type: PVC Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
11:20	69.33		220	4.15	273	12.1	19.9	11.92	426.0
11:25	69.33		220	4.06	290	12.2	15.9	11.33	288.0
11:30	69.33		220	4.04	311	12.2	11.5	11.45	214.0
11:35	69.33		220	4.01	325	12.2	8.9	11.48	199.0
11:40	69.33		220	4.00	333	12.2	8.3	11.46	191.0
11:45	69.33		220	3.98	342	12.2	9.8	11.50	179.0

Total Quantity of Water Removed (gal):	2 gals	Sampling Time:	11:50
Samplers:		Split Sample With:	TOB
Sampling Date:	10/27/2011	Sample Type:	Grab VOC

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: MW-8B	Weather:
Sounding Method: Water Tape	Gauge Date:	Measurement Ref:
Stick Up/Down (ft): n/a	Gauge Time:	Well Diameter (in): 4"

Purge Date:	10/27/2011	Purge Time:	
Purge Method:	Slow Flow	Field Technician:	

1) Well Depth (ft): 160'	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 299
2) Depth to Water (ft): 68.46	5) Well Volume / Foot (gal) (d^2x.0408):	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 91.54	6) Total Well Volume (gal) (3x5): 59.75	Pump Type: PVC Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
12:40	68.45		210	4.26	365	11.6	6.9	11.25	56.9
12:45	69.49		210	4.75	355	12.8	41.6	6.93	46.2
12:50	69.52		210	4.78	353	12.8	41.6	6.38	52.3
12:55	69.52		210	4.8	351	12.8	41.6	6.20	45.8
13:00	69.52		210	4.82	350	12.9	41.6	6.17	60.0
				CLEANED CELL					
13:03									1.2*
13:06									2.4
13:09									2.6

Total Quantity of Water Removed (gal):		Sampling Time:	13:14
Samplers:		Split Sample With:	TOB
Sampling Date:	10/27/2011	Sample Type:	Grab VOC

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: MW-8C	Weather: Rain 50°
Sounding Method: Water Tape	Gauge Date: 10-27-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 7:30	Well Diameter (in): 4"

Purge Date:	10/27/2011	Purge Time:	7:43
Purge Method:	Bladder (PVC-2)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 250	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 589.12
2) Depth to Water (ft): 69.51	5) Well Volume / Foot (gal) (d^2x.0408): 0.6578	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 180.49	6) Total Well Volume (gal) (3x5): 117.82	Pump Type: Bladder (PVC-2)

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
7:48	69.73		220	5.43	62	13.30	0.151	3.08	5.9
7:53	69.73		220	5.22	115	13.15	0.140	0.87	5.8
7:58	69.74		220	5.30	128	13.13	0.136	0.22	2.9
8:03	69.74		220	5.39	135	13.12	0.134	0.00	4.3
8:08	69.74		220	5.43	139	13.13	0.132	0.00	3.9
8:13	69.74		220	5.49	140	13.12	0.132	0.00	3.3

Total Quantity of Water Removed (mL):	6,820	Sampling Time:	8:14
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/27/2011	Sample Type:	VOCs and TOB

COMMENTS AND OBSERVATIONS:	80=psi	8.5=intake	6.5=discharge

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: MW-10B	Weather: Mostly sunny breezy 55-60°
Sounding Method: Water Tape	Gauge Date: 10-25-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 11:18	Well Diameter (in): 4"

Purge Date:	10/25/2011	Purge Time:	11:28
Purge Method:	Bladder (PVC-4)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 178	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 286.24
2) Depth to Water (ft): 96.43	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 81.57	6) Total Well Volume (gal) (3x5): 53.25	Pump Type: Bladder (PVC-4)

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
11:30	96.38		220	5.24	245	13.10	0.437	4.75	0.3
11:35	96.73		220	5.21	253	13.05	0.437	1.56	0.0
11:40	97.01		160	5.19	255	13.12	0.437	0.87	0.1
11:45	97.19		160	5.18	256	13.13	0.437	0.71	0.5
11:50	97.34		160	5.18	257	13.11	0.437	0.60	0.1
11:55	97.39		160	5.19	258	13.23	0.438	0.67	0.0
12:00	97.51		160	5.18	258	13.12	0.436	0.69	0.0

Total Quantity of Water Removed (mL):	5,700	Sampling Time:	12:01
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/25/2011	Sample Type:	VOCs and TOB

COMMENTS AND OBSERVATIONS:	95=psi 8.5=intake 6.5=discharge Unable to maintain 0.3' drawdown criteria.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: MW-10C	Weather: Sunny, breezy 55°
Sounding Method: Water Tape	Gauge Date: 10-25-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 10:20	Well Diameter (in): 4"

Purge Date:	10/25/2011	Purge Time:	10:30
Purge Method:	Bladder (PVC-2)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 278	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 595.42
2) Depth to Water (ft): 95.58	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 182.42	6) Total Well Volume (gal) (3x5): 119.08	Pump Type: Bladder (PVC-2)

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
10:34	95.62		280	4.87	241	12.86	0.476	12.67	74.3*
10:39	95.62		280	4.86	253	12.88	0.503	11.91	117.0
10:44	95.62		280	4.86	261	12.89	0.501	10.73	154.0
10:49	95.62		280	4.86	266	12.90	0.496	12.28	212.0
10:54	95.62		280	4.87	272	12.93	0.501	12.87	34.6
10:59	95.62		280	4.88	275	12.94	0.500	12.86	40.9
11:04	95.62		280	4.88	278	12.96	0.509	12.93	27.2

Total Quantity of Water Removed (mL):	9,800	Sampling Time:	11:05
Samplers:	Keith Ganderillas	Split Sample With:	
Sampling Date:	10/25/2011	Sample Type:	VOCs and TOB

COMMENTS AND OBSERVATIONS:	126=psi 9.0=intake 6.0=discharge New meter just calibrated. Turb seems elevated still, water very clear <10 ntu. Another problematic meter will use 10% as stabilization parameter since indicating another >50 ntu.

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel: Keith Gandarillas
Location: Old Bethpage, NY	Well ID.: MW-10D	Weather: Sunny 50-55°
Sounding Method: Water Tape	Gauge Date: 10-25-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 8:43	Well Diameter (in): 4"

Purge Date:	10/25/2011	Purge Time:	8:53
Purge Method:	Bladder (PVC-2)	Field Technician:	Keith Gandarillas

1) Well Depth (ft): 351	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 498.73
2) Depth to Water (ft): 96.34	5) Well Volume / Foot (gal) (d^2x.0408): 0.6525	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 254.66	6) Total Well Volume (gal) (3x5): 166.24	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
8:58	96.38		220	5.72	288	12.40	0.251	8.24	7.8
9:03	96.38		220	5.22	241	12.52	0.271	4.34	56.4*
9:08	96.38		220	5.03	261	12.56	0.271	4.69	708.0
9:13	96.38		220	4.86	277	12.58	0.274	5.19	728.0
9:18	96.38		220	4.77	288	12.58	0.279	5.66	358.0
9:23	96.38		220	4.73	297	12.62	0.281	5.95	38.8
9:28	96.38		220	4.68	203	12.61	0.283	6.14	38.2
9:33	96.38		220	4.67	307	12.62	0.284	6.16	34.8

Total Quantity of Water Removed (mL):	9,020	Sampling Time:	9:34
Samplers:	Keith Gandarillas	Split Sample With:	
Sampling Date:	10/25/2011	Sample Type:	VOCs and TOB

COMMENTS AND OBSERVATIONS:	145=psi 8.5=intake 6.5=discharge Turb probe malfunctioning. Turb appears <10 ntu. Getting new meter delivered today.

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Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: SW-1	Weather: Cloudy, slightly cooler
Sounding Method: Water Tape	Gauge Date: 10-24-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 12:30	Well Diameter (in): 4"

Purge Date:	10/24/2011	Purge Time:	12:30
Purge Method:	Low Flow	Field Technician:	

1) Well Depth (ft): 70.99	4) Well Diameter (in): 4"	7) Five Well Volumes (gal): 15.8
2) Depth to Water (ft): 66.13	5) Well Volume / Foot (gal) (d^2x.0408): 0.6528	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft): 4.86	6) Total Well Volume (gal) (3x5): 3.17	Pump Type: Bladder

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
12:00	66.13	0.50	230	4.83	302	13.6	25.6	8.64	4.6
12:05	66.13	0.50	230	4.83	305	13.7	24.4	7.64	5.2
12:10	66.13	0.50	230	4.83	305	13.8	24.4	7.58	5.1
12:15	66.13	0.50	230	4.81	307	13.8	23.7	6.96	6.8
12:20	66.13	0.50	230	4.80	308	13.7	23.3	6.79	7.4
12:25	66.13	0.50	230	4.80	308	13.8	23.1	6.69	7.9

Total Quantity of Water Removed (gal):	3 gals	Sampling Time:	12:30
Samplers:		Split Sample With:	-
Sampling Date:	10/24/2011	Sample Type:	Grab VOC

COMMENTS AND OBSERVATIONS:	

HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 (518) 877-7101	GROUNDWATER WELL SAMPLING FORM	

Project: Clarmont Quartely GW	WAS #: n/a	Field Personnel:
Location: Old Bethpage, NY	Well ID.: WT-01	Weather: Cloudy and cool at 52°
Sounding Method: Water Tape	Gauge Date: 10-26-11	Measurement Ref: Top of Column (TOC)
Stick Up/Down (ft): n/a	Gauge Time: 10:05	Well Diameter (in): 4"

Purge Date:	10/26/2011	Purge Time:	40.0\20.0
Purge Method:	Low Floor	Field Technician:	

1) Well Depth (ft): 107.0"	4) Well Diameter (in): 4"	7) Five Well Volumes (gal):
2) Depth to Water (ft): 96.50	5) Well Volume / Foot (gal) (d^2x.0408):	Depth/Height of Top of PVC:
3) Height of H_2O Column (1-2) (ft):	6) Total Well Volume (gal) (3x5):	Pump Type: Grab

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (mL/m)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity: (uS/cm)	DO (ug/L)	Turbidity (ntu)
9:25	96.50	0.50	200	5.81	285	13.7	61.2	11.16	9.7
9:30	96.50	0.50	200	5.19	318	14.01	59.9	10.48	9.6
9:35	96.50	0.50	200	5.00	331	14.01	59.6	10.55	11.6
9:40	96.50	0.50	200	4.91	341	14.01	59.4	10.53	12.0
9:45	96.50	0.50	200	4.85	345	14.01	59.2	10.55	14.1
9:50	96.50	0.50	200	4.75	355	14.01	59.2	10.46	16.5
9:55	96.50	0.50	200	4.77	356	14.1	59.2	10.53	17.6
10:00	96.50	0.50	200	4.74	361	14.1	59.2	10.46	20.4

Total Quantity of Water Removed (gal):	4 gals	Sampling Time:	10:05
Samplers:		Split Sample With:	-
Sampling Date:		Sample Type:	Grab

COMMENTS AND OBSERVATIONS:	No problem at well.