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2010 Annual Groundwater Sampling, NAPL Monitoring/ Recovery, and Groundwater Treatment Performance Report for the Hempstead Intersection Street Former Manufactured Gas Plant Site

Villages of Hempstead & Garden City
Nassau County, New York

Prepared for:

National Grid
175 East Old Country Road
Hicksville, New York 11801

Prepared by:

URS Corporation - New York
77 Goodell Street
Buffalo, New York 14203

URS

May 2011

2010 ANNUAL GROUNDWATER SAMPLING, NAPL MONITORING/RECOVERY, AND GROUDWATER TREATMENT PERFORMANCE REPORT

HEMPSTEAD INTERSECTION STREET
FORMER MANUFACTURED GAS PLANT SITE
VILLAGES OF HEMPSTEAD AND GARDEN CITY
NASSAU COUNTY, NEW YORK

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ACRONYMS AND ABBREVIATIONS

amsl	above mean sea level
BTEX	benzene, toluene, ethylbenzene, xylenes
DNAPL	dense non-aqueous phase liquid
DO	dissolved oxygen
DUSR	data usability summary report
ft	foot (feet)
LNAPL	light non-aqueous phase liquid
NAPL	non-aqueous phase liquid
ND	not detected
MGP	manufactured gas plant
NM	not measured
NYSDEC	New York State Department of Environmental Conservation
ORP	oxidation-reduction potential
PAHs	polycyclic aromatic hydrocarbons
QC	quality control
RI	remedial investigation
Sh	sheen
TOR	top of riser
URS	URS Corporation
USEPA	United States Environmental Protection Agency
µg/L	micrograms per liter

EXECUTIVE SUMMARY

This annual report provides a summary of field activities, analytical results, and data interpretations associated with groundwater sampling and recovery of non-aqueous phase liquid (NAPL) at the Hempstead Intersection Street Former Manufactured Gas Plant (MGP) site in 2010.

Groundwater monitoring and sampling was conducted on January 5-26, April 13-26, July 19-29, and October 21-28, 2010. This included measuring the depth to groundwater and NAPL thickness in up to 85 wells. Groundwater samples were collected from 21 wells and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs). NAPL monitoring and recovery was conducted during 23 events between January to December 2010.

The following results were obtained from the groundwater sampling and NAPL monitoring/recovery events:

- The general direction of groundwater flow in shallow, intermediate, and deep water-bearing zones was south at an average gradient that ranged from approximately 0.002-0.003 feet per feet (ft/ft) in 2010.
- The dissolved-phase plume extended up to approximately 3,600 ft south of the site boundary in 2010.
- Dense non-aqueous phase liquid (DNAPL) was detected in 32 wells during the fourth quarter, 30 wells during the third quarter, 29 wells during the second quarter, and 28 wells during the first quarter of 2010. The wells were located on site or within a parking lot immediately south of the site.
- Approximately 719 gallons of NAPL have been recovered since April 2007. The volume of NAPL recovered from the site wells in 2010 varied from approximately 5 to 23 gallons per event. The approximate volumes of NAPL recovered were 86 gallons during the fourth quarter, 80 gallons during the third quarter, 54 gallons during the second quarter, and 69 gallons during the first quarter.

- Based on a comparison between the 2010 data and the previous data the concentrations of total BTEX and total PAHs remained stable in the site monitoring wells.
- The first of two oxygen injection systems was brought on line in October 2010 and has successfully promoted increased aerobic conditions in the aquifer near the system.

1.0 INTRODUCTION

This annual report summarizes potentiometric head measurements, NAPL thickness measurement and recovery activities, and groundwater quality sampling performed during the first, second, third, and fourth quarters of 2010 at the Hempstead Intersection Street Former MGP Site (refer to Figures 1 and 2). The results of Soil Vapor sample analyses and Groundwater Treatment Performance measurements collected throughout 2010 are also presented. Figure 2A shows the location of existing and proposed soil remediation and groundwater treatment activities.

Quarterly groundwater monitoring and bimonthly recovery of NAPL was initiated in April 2007. Separate reports have been issued for first, second, and third quarter activities performed in 2010 (URS 2010b, 2010c, 2010d). Results of the fourth quarter activities have not been presented in a separate quarterly report; instead, they are included in this annual report. Separate reports were issued for the first, second, and third quarter activities performed in 2009, and an annual report was issued that encompassed all four quarters of 2009 (URS 2009c, 2009d, 2009e, 2010a). Additionally, separate reports were also issued for the first, second, and third quarter activities performed in 2008, and an annual report was issued that encompassed all four quarters of 2008 (URS 2008b, 2008c, 2009a, 2009b). Separate reports were also issued for second and third quarter activities performed in 2007 and an annual report was issued that encompassed all three quarters of 2007 (URS 2007, 2008a).

URS Corporation (URS) performed the following activities in 2010:

- Measured the depth to groundwater and NAPL thickness in all accessible monitoring wells (January 5-26, April 13-14, July 19-22, and October 20-21, 2010).
- Collected groundwater samples from a select group of monitoring wells for laboratory analysis (January 5-26, April 13-26, July 19-29, and October 21-28, 2010).
- Recovered NAPL from accessible monitoring wells and piezometers (January 10, January 26, February 8, February 20, March 7, March 20, April 11, April 26, May 23, June 9, June 25, July 7, July 22, August 2, August 19, September 2, September 17,

September 29, October 11, October 27, November 17, November 30, and December 14, 2010).

2.0 FIELD ACTIVITIES

The field activities performed by URS are summarized below.

- Measurement of the depth to groundwater and NAPL thickness in 85 monitoring wells.
- Collection of groundwater samples from 21 monitoring wells.
- Recovery of NAPL from accessible monitoring wells that contained measurable NAPL.

Monitoring wells and piezometers used for these activities are listed in Table 1.

2.1 Groundwater Depth and NAPL Thickness Measurements

Depths to groundwater and NAPL thickness measurements for 2010 are listed in Table 2. An electronic water level indicator was used to measure the depth to groundwater. NAPL thickness was measured using an oil/water interface probe and a weighted cotton string coated with oil indicator paste.

2.2 NAPL Recovery

Recovery of NAPL was conducted using the appropriate personal protective equipment. First, all accessible wells included in the recovery program were gauged using an oil/water interface probe to determine the depth to water, depth and thickness to any possible light non-aqueous phase liquid (LNAPL) at the top of the water column, and depth and thickness to possible DNAPL at the bottom of the water column. Wells with DNAPL were also gauged with a weighted cotton string to confirm the DNAPL thickness. The DNAPL was recovered using either a Waterra inertial lift pump, or a dedicated bailer if the DNAPL was particularly viscous, and was stored on an onsite storage tank or 55-gallon steel drums for subsequent offsite disposal.

The quantity of the recovered DNAPL was estimated as the volume of NAPL contained inside the well prior to pumping, based on the cross sectional area of the well screen multiplied by the measured NAPL thickness.

NAPL was recovered during 5 events from October to December 2010 (Table 3).

2.3 Ground Water Sampling

Low-flow groundwater sampling methods were used, which consisted of purging groundwater at a rate of between 100 and 250 milliliters per minute. The water was pumped through a flow-through cell and monitored for pH, conductivity, turbidity, dissolved oxygen (DO), temperature, and oxidation-reduction potential (ORP). Purging was continued until stable conditions were achieved (defined as three consecutive stable readings [i.e. $\pm$ 10 percent] over a 15 minute period). Groundwater samples were collected afterwards and shipped under chain-of-custody procedures to H2M laboratories, Inc. for analysis of BTEX (United States Environmental Protection Agency [USEPA] Method 8260B) and PAHs (USEPA Method 8270C). Purge water is stored in an onsite storage tank for subsequent offsite disposal.

2.4 Soil Vapor Sampling

Soil vapor sampling was conducted by GEI Consultants in the second quarter of 2010. Sampling occurred at three vapor points (HIVP-16, HIVP-17, and HIVP-18) within the community on June 11, 2010 (see Figure 2 for soil vapor point locations).

2.5 Groundwater Treatment System Operation

National Grid has completed the construction of one oxygen injection system and is nearing completion of a second system to treat groundwater in the downgradient plume. The completed system, designated "System No. 2", extends from Mirschel Park in the east to Kensington Ct. in the west. The system under construction, designated "System No. 1", is located along Smith St. a portion of the Long Island Railroad Right of Way, and a portion of Hilton Ave. See Figure 3 for the locations of the two systems. The performance of System No. 2 was monitored through measurement of oxygen levels in the groundwater approximately twice per month. The data is included in Appendix C and shows the system is effective in increasing the dissolved oxygen levels to augment biodegradation of dissolved phase MGP compounds in groundwater.

3.0 RESULTS

3.1 Dissolved-Phase Plume

The extent of the dissolved-phase groundwater plume boundary for the fourth quarter of 2010 is shown in Figure 3. The downgradient boundary of the plume, which is defined by total BTEX or PAH concentrations greater than 100 µg/L, extends approximately 3,600 feet south of the site boundary. Based on comparison with previous quarterly groundwater monitoring data, the concentrations of total BTEX or PAHs in groundwater have remained stable.

In October 2010, the concentrations of total BTEX or total PAHs in the furthest downgradient well pair (HIMW-15I/D) ranged from "not detected" (deep well, HIMW-15D) to 30 µg/L (intermediate well, HIMW-15I). The concentrations of total BTEX or total PAHs in wells located between the site and the HIMW-15 cluster varied from "not detected" to 3,152 µg/L.

3.2 Potentiometric Heads and NAPL Thickness

Potentiometric heads and NAPL thickness measurements for 2010 are presented in Table 2. Potentiometric surface maps for shallow, intermediate and deep groundwater zones for the fourth quarter (Figures 4, 5, and 6) were developed using this data. Potentiometric surface maps for the first quarter, second quarter, and third quarter are provided in the previous quarterly reports (URS 2010g, 2010h, 2010i).

The data for 2010 indicates that the direction of groundwater flow was south at an average gradient that ranged from approximately 0.002-0.003 ft/ft.

DNAPL was detected in 32 wells during the fourth quarter, 30 wells in the third quarter, 29 wells in the second quarter, and 28 wells in the first quarter 2010 (Table 3). Figures 7 through 10 illustrate the thickness of DNAPL that was measured for the fourth, third, second, and first quarters of 2010.

Figures 11A through 11AJ provide cumulative NAPL recovery and NAPL thickness plots for the period of December 2003 to December 2010. All of the wells where DNAPL was identified are either on the site or within a parking lot that is immediately south of the site.

3.3 Groundwater Analytical Results

Groundwater analytical results for the fourth, third, second, and first quarters of 2010 are summarized in Table 4 and illustrated on Figures 7-10.

Quarterly Data Usability Summary Reports (DUSRs) were prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B - Guidance for the Development of Data Usability Summary Reports, May 2010. An electronic copy of the DUSR for the fourth quarter monitoring event is included as Appendix A. Electronic copies of the DUSRs for the first, second, and third quarter monitoring events are provided in the quarterly reports. The reviews included a review of holding times; completeness of all required deliverables; quality control (QC) results (blanks, instrument tunes, calibration standards, matrix spike recoveries, duplicate analyses, and laboratory control sample recoveries) to determine if the data is within the protocol-required QC limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers. All sample analyses were found to be compliant with the method and validation criteria and the data is useable as reported.

3.4 NAPL Recovery Volumes

Approximately 86 gallons of NAPL were recovered from 26 wells during the fourth quarter, approximately 80 gallons of NAPL recovered from 28 wells in the third quarter, approximately 54 gallons of NAPL from 22 wells in the second quarter, and approximately 69 gallons of NAPL from 22 wells in the first quarter of 2009 (Table 3). The volume of NAPL recovered during each event varied from approximately 5 to 23 gallons per event. Approximately 719 gallons of NAPL have been recovered since April 2007.

3.5 Soil Vapor Analytical Results

Soil vapor analytical results from the second quarter of 2010 can be found in Appendix B. Analytical results are compared to the NYSDOH Upper Fence Outdoor Air Concentrations.

3.6 Groundwater Treatment System Performance

The Groundwater treatment system started operation on October 11, 2010. Monitoring includes measurement of water depth, dissolved oxygen concentration, and headspace vapors by photoionization detector monitoring. A summary of the data collected is presented on Table 5.

The oxygen concentrations were initially reported in percent. However, since the aim of the project was to oxygenate the groundwater to levels much higher than 100% equilibrium with ambient air, measurement was switched to concentration in milligram per liter (mg/L) on the third monitoring event.

Through injecting ~90% oxygen into the aquifer, maximum dissolved oxygen concentrations in the range of 40 - 50 mg/L are possible. Concentrations in this range were noticed in the wells located most towards the center of the System #2 line of injection wells (monitoring points MP-2-3S and MP-2-3D), with lower concentrations observed at either end of the system.

Starting in mid-December, the system was operated to bias flow towards several wells in the western portion of the line because dissolved oxygen concentrations were lowest in MP-2-1 and MP-2-2. The target flow rate for wells in the western portion of the site was increased from 30 standard cubic feet per hour (scfh) to 50 scfh.

The performance of System No. 2 has been effective in raising the oxygen level sufficiently to support aerobic bacterial growth and attendant hydrocarbon degradation. Throughout all monitoring points, the dissolved oxygen level is above 5 mg/L, providing an aerobic environment. Measurement of dissolved oxygen levels below the 40 - 50 mg/L possible with ~90% oxygen gas at locations such as MP-2-2 suggests that bacterial activity is especially active; rapid consumption of the oxygen corresponds to rapid degradation of hydrocarbons, presumed to be primary carbon source for the bacteria.

4.0 SUMMARY

Following is a summary of the 2010 annual groundwater sampling and NAPL monitoring/recovery data presented in this report.

- The general direction of groundwater flow in shallow, intermediate, and deep water-bearing zones was south at an average gradient that ranged from approximately 0.002-0.003 ft/ft in 2010.
- The dissolved-phase plume extended up to approximately 3,600 feet south of the site boundary in 2010.
- DNAPL was detected in 32 wells during the fourth quarter, 30 wells during the third quarter, 29 wells during the second quarter, and 28 wells during the first quarter of 2010. The wells were located on site or within a parking lot immediately south of the site.
- Approximately 719 gallons of NAPL have been recovered since April 2007. The volume of NAPL recovered from the site wells in 2010 varied from approximately 5 to 23 gallons per event. The approximate volumes of NAPL recovered were 86 gallons during the fourth quarter, 80 gallons during the third quarter, 54 gallons during the second quarter, and 69 gallons during the first quarter.
- Based on a comparison between the 2010 data and the previous data, the concentrations of total BTEX and total PAHs remained stable in the site monitoring wells.
- Analytical results for soil vapor sampling conducted in the second quarter of 2010 are presented in Appendix B.
- The first of two oxygen injection systems was brought on line in October 2010 and has successfully promoted increased aerobic conditions in the aquifer near the system.

REFERENCES

URS, 2007. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the Second and Third Quarters of 2007 (April 2007 and July-August 2007) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* November.

URS, 2008a. *2007 Annual Groundwater Sampling and NAPL Monitoring/Recovery Report for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* February.

URS, 2008b. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the First Quarter of 2008 (January – March 2008) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* June.

URS, 2008c. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the Second Quarter of 2008 (April - June 2008) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* October.

URS, 2009a. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the Third Quarter of 2008 (July - September 2008) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* January.

URS, 2009b. *2008 Annual Groundwater Sampling and NAPL Monitoring/Recovery Report for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* March.

URS, 2009c. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the First Quarter of 2009 (January - March 2009) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* June.

URS, 2009d. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the Second Quarter of 2009 (April - June 2009) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* September.

URS, 2009e. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the Third Quarter of 2009 (July - September 2009) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* November.

URS, 2010a. *2009 Annual Groundwater Sampling and NAPL Monitoring/Recovery Report for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* February.

URS, 2010b. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the First Quarter of 2010 (January - March 2010) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* April.

URS, 2010c. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the Second Quarter of 2010 (April - June 2010) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* September.

URS, 2010d. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the Third Quarter of 2010 (July - September 2010) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* December.

TABLES

Table 1
Summary of 2009 Field Activities [(1), (2)]
Water Level Measurements, NAPL Thickness Measurements, and Water Quality Sampling
Hempstead Intersection Street Former MGP Site

Well ID	Fourth Quarter (Oct-Dec 2010)			Third Quarter (Jul-Aug 2010)			Second Quarter (Apr-May 2010)			First Quarter (Jan-Mar 2010)		
	Water Level	NAPL Thickness	Water Quality	Water Level	NAPL Thickness	Water Quality	Water Level	NAPL Thickness	Water Quality	Water Level	NAPL Thickness	Water Quality
HIMW-001S	X	X		X	X			X		X	X	
HIMW-001I	X	X		X	X		X	X		X	X	
HIMW-001D												
HIMW-002S	X			X			X					
HIMW-002I	X			X			X					
HIMW-002D	X			X			X					
HIMW-003S	X		X	X			X		X			
HIMW-003I	X		X	X			X		X			
HIMW-003D	X		X	X			X		X			
HIMW-004S	X						X			X	X	
HIMW-004I	X			X			X					
HIMW-004D	X			X			X					
HIMW-005S	X		X	X		X	X		X	X	X	X
HIMW-005I	X		X	X		X	X		X	X	X	X
HIMW-005D	X		X	X		X	X		X			X
HIMW-006S	X	X		X	X		X	X		X	X	
HIMW-006I	X	X		X	X		X	X		X	X	
HIMW-006D	X			X	X			X				
HIMW-007S	X	X		X	X		X	X		X	X	
HIMW-007I	X	X		X	X		X	X		X	X	
HIMW-007D	X	X		X	X		X	X		X	X	
HIMW-008S	X		X	X		X	X		X	X	X	X
HIMW-008I	X		X	X		X	X		X	X	X	X
HIMW-008D	X		X	X		X	X		X			X
HIMW-009S	X			X			X					
HIMW-009I	X			X			X					
HIMW-009D	X			X			X					
HIMW-010S	X			X			X					
HIMW-010I	X			X			X					
HIMW-010D	X			X			X					
HIMW-011S	X	X		X	X		X	X		X	X	
HIMW-011I	X	X		X	X		X	X		X	X	
HIMW-011D	X						X	X				
HIMW-012S	X		X	X		X	X		X	X	X	X
HIMW-012I	X		X	X		X	X		X	X	X	X
HIMW-012D	X		X	X		X	X		X	X	X	X
HIMW-013S	X		X				X		X			
HIMW-013I	X		X	X		X	X		X	X	X	X
HIMW-013D	X		X	X		X	X		X	X	X	X
HIMW-014I	X		X	X		X	X		X	X	X	X
HIMW-014D	X		X				X		X			
HIMW-015I	X		X	X		X	X		X	X	X	X
HIMW-015D	X		X	X		X	X		X	X	X	X
HIMW-016S	X	X		X	X			X		X	X	
HIMW-016I	X	X		X	X			X		X	X	
HIMW-017S	X	X		X	X			X		X	X	
HIMW-018S	X	X		X	X		X	X		X	X	
HIMW-018I	X	X		X	X		X	X		X	X	
HIMW-019S	X	X		X	X		X	X		X	X	
HIMW-019I	X	X		X	X		X	X		X	X	
HIMW-020S	X		X	X		X	X		X	X	X	X
HIMW-020I	X		X	X		X	X		X	X	X	X
HIMW-21	X	X		X	X			X		X	X	
PZ-02												
PZ-03												
PZ-08		X		X	X		X	X		X	X	
IPR-01	X	X		X	X		X	X		X	X	
IPR-02	X	X		X	X		X	X		X	X	
IPR-03	X	X		X	X		X	X		X	X	
IPR-04	X	X		X	X		X	X		X	X	
IPR-05	X	X		X	X		X	X		X	X	
IPR-06	X	X		X	X			X		X	X	
IPR-07	X	X		X	X			X		X	X	
IPR-08	X	X		X	X		X	X		X	X	
IPR-09	X	X		X	X		X	X		X	X	
IPR-10	X	X		X	X		X	X		X	X	
IPR-11	X	X		X	X		X	X		X	X	

Table 1
Summary of 2009 Field Activities [(1), (2)]
Water Level Measurements, NAPL Thickness Measurements, and Water Quality Sampling
Hempstead Intersection Street Former MGP Site

Well ID	Fourth Quarter (Oct-Dec 2010)			Third Quarter (Jul-Aug 2010)			Second Quarter (Apr-May 2010)			First Quarter (Jan-Mar 2010)		
	Water Level	NAPL Thickness	Water Quality	Water Level	NAPL Thickness	Water Quality	Water Level	NAPL Thickness	Water Quality	Water Level	NAPL Thickness	Water Quality
IPR-12A	X	X		X	X		X	X		X	X	
IPR-12B	X	X		X	X		X	X		X	X	
IPR-13	X	X		X	X		X	X		X	X	
IPR-14	X	X		X	X			X		X	X	
IPR-15	X	X		X	X			X		X	X	
IPR-16	X	X		X	X			X		X	X	
IPR-17	X	X		X	X			X		X	X	
IPR-18	X	X		X	X			X		X	X	
IPR-19S												
IPR-19D	X	X		X	X			X		X	X	
IPR-20	X	X		X	X			X		X	X	
IPR-21	X	X		X	X			X		X	X	
IPR-22	X	X		X	X			X		X	X	
IPR-23	X	X		X	X			X		X	X	
IPR-24	X	X		X	X			X		X	X	
IPR-25		X					X	X		X	X	
IPR-26	X	X		X	X		X	X		X	X	
IPR-27	X	X		X	X		X	X		X	X	
IPR-28	X	X		X	X		X	X		X	X	
IPR-29	X	X		X	X			X		X	X	
IPR-30	X	X		X	X			X		X	X	
IPR-31												
OSMW-01	X	X		X	X		X	X		X	X	
OSMW-02	X	X		X	X		X	X		X	X	
OSMW-03	X	X		X	X		X	X		X	X	

Notes:

1 Field marked with "X" indicates that the activity was performed.

2 Blank field indicates that the activity was not performed.

Table 1
Summary of 2010 Field Activities [1], [2], [3]
NAPL Product Recovery
Hempstead Intersection Street Former MGP Site

Well ID	Fourth Quarter 2010					Third Quarter 2010							Second Quarter 2010					First Quarter 2010					
	Dec. 14, 2010	Nov. 30, 2010	Nov. 17, 2010	Oct. 27, 2010	Oct. 11, 2010	Sept. 29, 2010	Sept. 17, 2010	Sept. 2, 2010	Aug. 19, 2010	Aug. 2, 2010	July 22, 2010	July 7, 2010	June 25, 2010	June 9, 2010	May 23, 2010	Apr. 26, 2010	Apr. 11, 2010	Mar. 20, 2010	Mar. 7, 2010	Feb. 20, 2010	Feb. 8, 2010	Jan. 26, 2010	Jan. 10, 2010
HIMW-001S	X	X	X		X	X	X		X		X		X	X	X	X				O		X	
HIMW-001I	X		X		X	X	X	X	X	X	X	X	X	X	X	X		X		O	X	X	X
HIMW-001D																							
HIMW-002S																							
HIMW-002I																							
HIMW-002D																							
HIMW-003S																							
HIMW-003I																							
HIMW-003D																							
HIMW-004S																							
HIMW-004I																							
HIMW-004D																							
HIMW-005S																							
HIMW-005I																							
HIMW-005D																							
HIMW-006S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	X	X	X
HIMW-006I	X		X		X	X	X		X		X		X		X	X				O		X	
HIMW-006D											X					X							
HIMW-007S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	X	X	X
HIMW-007I	X		X		X		X		X		X		X		X	X				X		X	
HIMW-007D	X		X		X		X		X		X		X		X	X				X		X	
HIMW-008S																							
HIMW-008I																							
HIMW-008D																							
HIMW-009S																							
HIMW-009I																							
HIMW-009D																							
HIMW-010S																							
HIMW-010I																							
HIMW-010D																							
HIMW-011S	X		X		X		X		X		X		X		X	X						X	
HIMW-011I	X		X		X		X				X		X		X	X						X	
HIMW-011D									X							X							
HIMW-012S																							
HIMW-012I																							
HIMW-012D																							
HIMW-013S																							
HIMW-013I																							
HIMW-013D																							
HIMW-014I																							
HIMW-014D																							
HIMW-015I																							
HIMW-015D																							
HIMW-016S	X		X		X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X
HIMW-016I	X		X		X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X
HIMW-017S	X	X	X		X		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
HIMW-018S	X		X		X	X	X		X	X	X		X	X	X	X				O	X	X	
HIMW-018I	X		X		X		X		X		X		X		X	X				X		X	
HIMW-019S	X		X		X		X		X		X		X	X	X	X				X	X	X	
HIMW-019I	X		X		X		X		X		X		X		X	X				X		X	
HIMW-020S																							
HIMW-020I																							
HIMW-21	X	X	X	X	X	X	X		X		X		X	X	X	X	X		X		X	X	
PZ-02																							
PZ-03																							
PZ-08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	X	X	X

Table 1
Summary of 2010 Field Activities [(1), (2), (3)]
NAPL Product Recovery
Hempstead Intersection Street Former MGP Site

Well ID	Fourth Quarter 2010					Third Quarter 2010							Second Quarter 2010					First Quarter 2010					
	Dec. 14, 2010	Nov. 30, 2010	Nov. 17, 2010	Oct. 27, 2010	Oct. 11, 2010	Sept. 29, 2010	Sept. 17, 2010	Sept. 2, 2010	Aug. 19, 2010	Aug. 2, 2010	July 22, 2010	July 7, 2010	June 25, 2010	June 9, 2010	May 23, 2010	Apr. 26, 2010	Apr. 11, 2010	Mar. 20, 2010	Mar. 7, 2010	Feb. 20, 2010	Feb. 8, 2010	Jan. 26, 2010	Jan. 10, 2010
IPR-01	X		X		X		X		X		X					X							
IPR-02	X	X	X		X	X	X	X	X		X	X	X		X	X		X		O		X	X
IPR-03	X		X		X		X		X		X					X							
IPR-04	X		X		X		X		X		X					X							
IPR-05	X		X		X				X		X		X			X				O		X	
IPR-06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	X	X	X
IPR-07	X		X		X		X		X		X					X							
IPR-08	X		X		X		X		X		X					X							
IPR-09	X		X		X		X		X		X		X			X				X		X	
IPR-10	X		X		X		X		X		X					X							
IPR-11	X		X		X		X		X		X					X							
IPR-12A	X		X		X		X		X		X		X			X				X		X	
IPR-12B	X		X		X		X		X		X					X							
IPR-13	X		X		X		X		X		X					X							
IPR-14	X		X		X		X		X		X		X		X	X		X				X	
IPR-15	X		X		X		X		X		X		X		X	X		X		X		X	
IPR-16	X		X	X	X	X	X		X		X		X		X	X		X		X	X	X	
IPR-17			X		X		X		X		X		X		X	X		X		X		X	
IPR-18	X		X		X		X		X		X		X		X	X		X		X		X	
IPR-19S																							
IPR-19D	X		X		X		X		X		X		X		X	X		X		X		X	
IPR-20	X	X	X		X	X	X		X		X		X		X	X		X	X	X	X	X	
IPR-21	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X
IPR-22	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IPR-23	X	X	X		X		X		X		X		X		X	X		X					
IPR-24	X	X	X	X	X		X		X		X		X		X	X	X	X		X	X	X	
IPR-25	X	X	X	X	X	X						X	X	X	X	X	X	X	X	O	X	X	X
IPR-26			X	X	X		X	X	X	X	X	X	X	X	X	X						X	
IPR-27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						X	
IPR-28	X		X		X		X		X		X					X							
IPR-29	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
IPR-30	X	X	X		X		X		X		X					X							
OSMW-01	X		X		X		X		X		X					X							
OSMW-02	X		X		X		X		X		X					X							
OSMW-03	X		X		X		X		X		X					X							

Notes:

1 Field marked with "X" indicates that the activity was performed.
2 Field marked with "O" indicates that only NAPL monitoring was performed (no product recovery due to snow).
3 Blank field indicates that the activity was not performed.

Table 2
Groundwater and NAPL Measurements
Fourth Quarter 2010
Hempstead Intersection Street Former MGP Site

Well ID	Date	Elevation of TOR	Depth to LNAPL	Depth to Water	Depth to DNAPL	Well Depth	Thickness of LNAPL	Thickness of DNAPL (2)	Corrected Potentiometric Head (1)
		[ft amsl]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft amsl]
HIMW-01S	10/20/2010	71.61	ND	24.93	ND	40.9	0	0	46.68
HIMW-01I	10/20/2010	71.68	ND	25.06	85.55	85.9	0	0.3	46.62
HIMW-01D	NM	71.95	ND	NM	NM	129.1	0	NM	NM
HIMW-02S	10/20/2010	73.82	ND	27.04	ND	42.4	0	ND	46.78
HIMW-02I	10/20/2010	78.87	ND	27.11	ND	92.9	0	ND	51.76
HIMW-02D	10/20/2010	74.13	ND	27.34	ND	119.0	0	ND	46.79
HIMW-03S	10/20/2010	65.00	ND	18.44	ND	34.8	0	ND	46.56
HIMW-03I	10/20/2010	64.94	ND	18.66	ND	87.1	0	ND	46.28
HIMW-03D	10/20/2010	65.26	ND	19.22	ND	145.5	0	ND	46.04
HIMW-04S	10/20/2010	72.74	ND	26.86	ND	41.7	0	ND	45.88
HIMW-04I	10/20/2010	72.78	ND	26.96	ND	90.6	0	ND	45.82
HIMW-04D	10/20/2010	72.65	ND	27.48	ND	180.5	0	ND	45.17
HIMW-05S	10/20/2010	67.19	ND	21.18	ND	39.1	0	ND	46.01
HIMW-05I	10/20/2010	67.22	ND	20.92	ND	92.3	0	ND	46.30
HIMW-05D	10/20/2010	67.22	ND	21.87	ND	139.0	0	ND	45.35
HIMW-06S	10/20/2010	68.25	ND	22.09	35.00	36.9	0	1.9	46.16
HIMW-06I	10/20/2010	67.88	ND	21.73	82.17	82.2	0	0.01	46.15
HIMW-06D	10/20/2010	67.77	ND	21.51	ND	120.0	0	ND	46.26
HIMW-07S	10/20/2010	70.47	ND	24.18	39.84	40.7	0	0.90	46.29
HIMW-07I	10/20/2010	70.10	ND	24.18	ND	90.6	0	0	45.92
HIMW-07D	10/20/2010	70.40	ND	24.09	ND	117.7	0	0	46.31
HIMW-08S	10/20/2010	65.04	ND	19.52	ND	37.1	0	ND	45.52
HIMW-08I	10/20/2010	65.14	ND	19.68	ND	75.1	0	ND	45.46
HIMW-08D	10/20/2010	64.93	ND	19.48	ND	114.8	0	ND	45.45
HIMW-09S	10/20/2010	70.03	ND	24.03	ND	39.6	0	ND	46.00
HIMW-09I	10/20/2010	69.93	ND	23.99	ND	80.5	0	ND	45.94
HIMW-09D	10/20/2010	69.96	ND	24.08	ND	NM	0	ND	45.88
HIMW-10S	10/20/2010	71.60	ND	25.28	ND	40.3	0	ND	46.32
HIMW-10I	10/20/2010	71.47	ND	25.08	ND	91.8	0	ND	46.39
HIMW-10D	10/20/2010	71.44	ND	25.03	ND	136.0	0	ND	46.41
HIMW-11S	10/20/2010	71.62	ND	25.02	ND	41.6	0	0	46.60
HIMW-11I	10/20/2010	71.43	ND	24.85	ND	94.5	0	0	46.58
HIMW-11D	10/20/2010	71.39	ND	24.87	ND	123.6	0	ND	46.52
HIMW-12S	10/20/2010	61.58	ND	17.32	ND	33.5	0	ND	44.26
HIMW-12I	10/20/2010	61.59	ND	17.19	ND	75.0	0	ND	44.40
HIMW-12D	10/20/2010	61.82	ND	19.08	ND	128.5	0	ND	42.74
HIMW-13S	10/20/2010	72.83	ND	30.53	ND	49.2	0	ND	42.30
HIMW-13I	10/20/2010	72.60	ND	30.92	ND	82.6	0	ND	41.68
HIMW-13D	10/20/2010	72.53	ND	30.27	ND	122.5	0	ND	42.26
HIMW-14I	10/20/2010	71.71	ND	29.45	ND	96.9	0	ND	42.26
HIMW-14D	10/20/2010	71.59	ND	31.49	ND	152.0	0	ND	40.10
HIMW-15I	10/20/2010	64.18	ND	24.93	ND	93.1	0	ND	39.25
HIMW-15D	10/20/2010	63.96	ND	26.56	ND	155.0	0	ND	37.40
HIMW-16S	10/20/2010	67.45	ND	21.32	29.61	34.4	0	4.8	46.13
HIMW-16I	10/20/2010	67.50	ND	21.40	77.46	82.7	0	5.2	46.10
HIMW-17S	10/20/2010	65.96	ND	20.10	34.50	36.7	0	2.2	45.86
HIMW-18S	10/20/2010	69.76	ND	23.29	42.02	42.1	0	0.1	46.47
HIMW-18I	10/20/2010	69.70	ND	23.20	71.22	71.2	0	0	46.50
HIMW-19S	10/20/2010	70.95	ND	24.12	39.38	39.4	0	0	46.83
HIMW-19I	10/20/2010	71.27	ND	24.32	68.92	68.9	0	0	46.95
HIMW-20S	10/20/2010	70.43	ND	25.46	ND	35.0	0	ND	44.97
HIMW-20I	10/20/2010	70.30	ND	25.31	ND	73.0	0	ND	44.99

Table 2
Groundwater and NAPL Measurements
Fourth Quarter 2010
Hempstead Intersection Street Former MGP Site

Well ID	Date	Elevation of TOR	Depth to LNAPL	Depth to Water	Depth to DNAPL	Well Depth	Thickness of LNAPL	Thickness of DNAPL (2)	Corrected Potentiometric Head (1)
		[ft amsl]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft amsl]
HIMW-21	10/20/2010	72.96	ND	19.73	34.75	35.3	0	0.5	53.23
PZ-02	NM	64.58	ND	NM	NM	29.5	0	ND	NM
PZ-03	NM	70.51	ND	NM	NM	35.5	0	ND	NM
PZ-08	10/11/2010	70.30	ND	23.88	41.14	41.9	0	0.8	46.42
IPR-01	10/21/2010	68.84	ND	23.42	ND	70.3	0	ND	45.42
IPR-02	10/20/2010	69.16	ND	22.11	44.62	44.7	0	0.05	47.05
IPR-03	10/20/2010	69.23	ND	22.51	ND	84.4	0	ND	46.72
IPR-04	10/20/2010	70.39	ND	22.62	ND	52.1	0	ND	47.77
IPR-05	10/20/2010	70.79	ND	24.80	55.30	55.4	0	0.1	45.99
IPR-06	10/20/2010	69.73	ND	24.26	37.62	38.0	0	0.4	45.47
IPR-07	10/20/2010	70.51	ND	23.71	ND	40.3	0	ND	46.80
IPR-08	10/20/2010	70.00	ND	24.13	ND	45.0	0	ND	45.87
IPR-09	10/20/2010	70.80	ND	23.61	ND	44.8	0	ND	47.19
IPR-10	10/20/2010	68.29	ND	24.32	44.62	44.6	0	0	43.97
IPR-11	10/20/2010	70.14	ND	21.99	38.10	38.1	0	0	48.15
IPR-12A	10/20/2010	69.56	ND	23.81	45.18	45.2	0	0	45.75
IPR-12B	10/20/2010	70.77	ND	23.24	44.41	44.4	0	0	47.53
IPR-13	10/20/2010	66.93	ND	24.38	44.42	44.4	0	0	42.55
IPR-14	10/21/2010	67.93	ND	20.66	44.40	44.4	0	0	47.27
IPR-15	10/21/2010	69.49	ND	21.41	49.05	49.1	0	0	48.08
IPR-16	10/21/2010	70.60	ND	23.14	53.71	54.1	0	0.4	47.46
IPR-17	10/21/2010	66.87	ND	24.19	49.95	50.0	0	0	42.68
IPR-18	10/21/2010	67.68	ND	20.73	45.12	45.1	0	0	46.95
IPR-19S	NM	67.96	ND	NM	NM	89.9	0	ND	NM
IPR-19D	10/21/2010	66.70	ND	21.78	45.40	45.4	0	0	44.92
IPR-20	10/21/2010	67.67	ND	20.64	44.06	45.0	0	0.9	47.03
IPR-21	10/21/2010	66.33	ND	21.58	44.20	45.4	0	1.2	44.75
IPR-22	10/21/2010	66.67	ND	20.41	43.20	45.4	0	2.2	46.26
IPR-23	10/21/2010	65.88	ND	20.70	44.35	44.4	0	0	45.18
IPR-24	10/20/2010	70.56	ND	20.08	43.90	44.5	0	0.6	50.48
IPR-25	NM	NM	ND	NM	NM	NM	0	1.5	NM
IPR-26	10/20/2010	NM	ND	23.48	ND	NM	0	0.01	NM
IPR-27	10/20/2010	NM	ND	24.21	ND	NM	0	0.5	NM
IPR-28	10/20/2010	NM	ND	21.71	ND	NM	0	0.01	NM
IPR-29	10/21/2010	NM	ND	20.03	ND	NM	0	1.1	NM
IPR-30	10/21/2010	NM	ND	21.01	ND	NM	0	0.8	NM
OSMW-01	10/20/2010	71.12	ND	24.41	ND	42.2	0	ND	46.71
OSMW-02	10/20/2010	71.59	ND	25.10	ND	45.2	0	ND	46.49
OSMW-03	10/20/2010	71.39	ND	24.99	ND	44.7	0	ND	46.40

Notes:

(1) Potentiometric heads in wells containing LNAPL are corrected using a specific gravity = 0.96

(2) DNAPL thicknesses measured on 10/11/2010.

sheen Sheen = assumed thickness of 0.01 ft
NM not measured
LNAPL light non-aqueous phase liquid
DNAPL dense non-aqueous phase liquid
TOR top of riser
amsl above mean sea level
ND NAPL not detected

Table 3
NAPL Recovery
Fourth Quarter of 2010
Hempstead Intersection Street Former MGP Site

Well ID	December 14, 2010			November 30, 2010			November 17, 2010			October 27, 2010			October 11, 2010		
	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)
	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]
HIMW-01S	0	0.40	0.07	0	0.60	0.10	0	trace	0.00	NI	NI	0.00	0	0.00	0.00
HIMW-01I	0	trace	0.00	NI	NI	0.00	0	0.50	0.08	NI	NI	0.00	0	0.30	0.05
HIMW-06S	0	1.00	0.16	0	2.80	0.46	0	0.65	0.11	0	0.50	0.08	0	1.90	0.31
HIMW-06I	0	0.00	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	trace	0.00
HIMW-07S	0	0.85	0.14	0	1.30	0.21	0	1.00	0.16	0	0.40	0.07	0	0.90	0.15
HIMW-07I	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00
HIMW-07D	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00
HIMW-11S	0	0.00	0.00	NI	NI	0.00	sheen	0.00	0.00	NI	NI	0.00	0	0.00	0.00
HIMW-11I	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00
HIMW-16S	0	4.95	0.81	NI	NI	0.00	0	6.00	0.98	NI	NI	0.00	0	4.80	0.78
HIMW-16I	0	4.40	0.72	NI	NI	0.00	0	4.00	0.65	NI	NI	0.00	0	5.20	0.85
HIMW-17S	0	0.30	0.05	0	0.60	0.10	0	4.40	0.72	NI	NI	0.00	0	2.20	0.36
HIMW-18S	0	0.00	0.00	NI	NI	0.00	0	0.10	0.02	NI	NI	0.00	0	0.10	0.02
HIMW-18I	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00
HIMW-19S	0	0.20	0.03	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00
HIMW-19I	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00
HIMW-21	0	1.20	1.76	0	1.00	1.47	0	0.90	1.32	0	1.20	1.76	0	0.50	0.73
PZ-08	0	1.00	0.16	0	1.50	0.24	0	1.10	0.18	0	1.00	0.16	0	0.80	0.13
IPR-02	0	trace	0.00	0	0.10	0.15	0	0.50	0.73	NI	NI	0.00	0	0.05	0.07
IPR-05	0	0.60	0.02	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	0.10	0.00
IPR-06	0	0.80	1.18	0	0.95	1.40	0	0.60	0.88	0	2.00	2.94	0	0.40	0.59
IPR-07	0	trace	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00
IPR-09	0	trace	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	NI	0.00
IPR-12A	0	0.00	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	0.00	0.00
IPR-14	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00
IPR-15	0	trace	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00
IPR-16	0	1.00	1.35	NI	NI	0.00	0	trace	0.00	0	1.00	1.35	0	0.40	0.54
IPR-17	NI	NI	0.00	NI	NI	0.00	0	0.10	0.13	NI	NI	0.00	0	0.00	0.00
IPR-18	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00
IPR-19D	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00
IPR-20	0	0.30	0.44	0	trace	0.00	0	0.50	0.73	NI	NI	0.00	0	0.90	1.32
IPR-21	0	1.00	1.47	0	1.25	1.84	0	1.90	2.79	0	0.80	0.00	0	1.20	1.76
IPR-22	0	0.00	0.00	0	1.55	2.28	0	2.10	3.08	0	0.90	1.32	0	2.20	3.23
IPR-23	0	0.60	0.88	0	trace	0.00	0	trace	0.00	NI	NI	0.00	0	0.00	0.00
IPR-24	0	0.90	1.32	0	0.60	0.88	0	0.50	0.73	0	0.80	1.18	0	0.60	0.88
IPR-25	0	1.60	2.35	0	1.05	1.54	0	1.50	2.20	0	1.50	2.20	0	1.50	2.20
IPR-26	NI	NI	0.00	NI	NI	0.00	0	trace	0.00	0	trace	0.00	0	trace	0.00
IPR-27	0	0.80	1.18	0	0.60	0.88	0	0.40	0.59	0	trace	0.00	0	0.50	0.73
IPR-28	0	trace	0.00	NI	NI	0.00	0	0.55	0.81	NI	NI	0.00	0	trace	0.00
IPR-29	0	0.60	0.88	0	0.90	1.32	0	1.00	1.47	0	1.00	1.47	0	1.10	1.62
IPR-30	0	5.50	8.08	0	0.60	0.88	0	0.70	1.03	NI	NI	0.00	0	0.80	1.18
	Volume Removed		**23.05**	Volume Removed		**13.74**	Volume Removed		**19.41**	Volume Removed		**12.53**	Volume Removed		**17.51**

Total volume recovered during the fourth quarter 2010: **86.24 gal**
Total volume of NAPL recovered since April 2007: **719.3 gal**

No product recovery due to pump malfunction

Notes:
NI - well not included in the product recovery program during this round
NA - No Access
LNAPL - light non-aqueous phase liquid
DNAPL - dense non-aqueous phase liquid
(1) - Volume of product recovered estimated by multiplying the cross sectional area of well screen by the thickness of product layer measured prior to pumping.

All HIMW (unless noted) and PZ monitoring wells are 2-inch diameter:	Vol =	0.163 gal / lft of well screen.
All IPR monitoring wells (unless noted) and HIMW-21are 6-inch diameter:	Vol =	1.469 gal / lft of well screen.
Monitoring wells IPR-16 and IPR-17 are 5.75-inch diameter:	Vol =	1.349 gal / lft of well screen.
Monitoring wells IPR-05, IPR-07, and IPR-12A are 1-inch diameter:	Vol =	0.041 gal / lft of well screen.

Table 3
NAPL Recovery
Third Quarter of 2010
Hempstead Intersection Street Former MGP Site

Well ID	September 29, 2010			September 17, 2010			September 2, 2010			August 19, 2010			August 2, 2010			July 22, 2010			July 7, 2010		
	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)
	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]
HIMW-01S	0	0.01	0.00	0	0.50	0.08	NI	NI	0.00	0	0.01	0.00	NI	NI	0.00	0	0.05	0.01	NI	NI	0.00
HIMW-01I	0	0.40	0.07	0	1.40	0.23	0	0.20	0.03	0	0.40	0.07	0	0.85	0.14	0	0.10	0.02	0	0.01	0.00
HIMW-06S	0	2.90	0.47	0	2.90	0.47	0	5.00	0.82	0	3.00	0.49	0	6.00	0.98	0	4.30	0.70	0	2.11	0.34
HIMW-06I	0	0.00	0.00	0	0.50	0.08	NI	NI	0.00	0	0.02	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
HIMW-07S	0	1.20	0.20	0	1.80	0.29	0	0.35	0.06	0	1.20	0.20	0	1.40	0.23	0	0.70	0.11	0	0.90	0.15
HIMW-07I	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-07D	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-11S	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-11I	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-16S	0	2.40	0.39	0	5.10	0.83	NI	NI	0.00	0	4.30	0.70	NI	NI	0.00	0	3.40	0.55	0	3.00	0.49
HIMW-16I	0	5.00	0.82	0	4.80	0.78	NI	NI	0.00	0	3.80	0.62	NI	NI	0.00	0	3.80	0.62	0	3.40	0.55
HIMW-17S	NI	NI	0.00	0	1.10	0.18	0	2.00	0.33	0	1.50	0.24	NI	NI	0.00	0	1.20	0.20	0	0.90	0.15
HIMW-18S	0	0.80	0.13	0	0.60	0.10	NI	NI	0.00	0	0.40	0.07	0	0.10	0.02	0	trace	0.00	NI	NI	0.00
HIMW-18I	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-19S	NI	NI	0.00	0	0.10	0.02	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-19I	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-21	0	0.40	0.59	0	1.10	1.62	NI	NI	0.00	0	1.20	1.76	NI	NI	0.00	0	0.40	0.59	NI	NI	0.00
PZ-08	0	0.10	0.02	0	0.10	0.02	0	trace	0.00	0	0.80	0.13	0	1.10	0.18	0	0.95	0.16	0	0.70	0.11
IPR-02	0	0.50	0.73	0	0.30	0.44	0	trace	0.00	0	0.80	1.18	NI	NI	0.00	0	0.80	1.18	0	0.01	0.00
IPR-05	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	0	1.20	0.05	NI	NI	0.00	0	1.70	0.07	NI	NI	0.00
IPR-06	0	0.60	0.88	0	0.90	1.32	0	0.70	1.03	0	0.80	1.18	0	1.00	1.47	0	1.00	1.47	0	5.00	7.34
IPR-09	NI	NI	0.00	0	0.10	0.15	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
IPR-12A	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
IPR-14	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-15	NI	NI	0.00	0	0.10	0.15	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	0.05	0.07	NI	NI	0.00
IPR-16	0	0.25	0.34	0	0.60	0.81	NI	NI	0.00	0	0.60	0.81	NI	NI	0.00	0	0.20	0.27	NI	NI	0.00
IPR-17	NI	NI	0.00	0	0.05	0.07	NI	NI	0.00	0	0.10	0.13	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
IPR-18	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-19D	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
IPR-20	0	0.05	0.07	0	0.20	0.29	NI	NI	0.00	0	0.50	0.73	NI	NI	0.00	0	0.14	0.21	NI	NI	0.00
IPR-21	0	1.30	1.91	0	0.90	1.32	NI	NI	0.00	0	0.90	1.32	NI	NI	0.00	0	0.80	1.18	0	0.40	0.59
IPR-22	NI	NI	0.00	0	1.15	1.69	0	1.20	1.76	0	2.40	3.53	0	1.10	1.62	0	1.10	1.62	0	0.85	1.25
IPR-23	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-24	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.10	0.15	NI	NI	0.00	0	0.34	0.50	NI	NI	0.00
IPR-25	0	1.90	2.79	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	0	1.10	1.62
IPR-26	NI	NI	0.00	0	0.00	0.00	0	trace	0.00	0	0.30	0.44	0	0.15	0.22	0	trace	0.00	0	0.20	0.29
IPR-27	0	0.50	0.73	0	1.30	1.91	0	0.50	0.73	0	0.80	1.18	0	0.15	0.22	0	0.30	0.44	0	0.90	1.32
IPR-29	NI	NI	0.00	0	1.20	1.76	0	0.75	1.10	0	0.60	0.88	NI	NI	0.00	0	0.90	1.32	0	0.90	1.32
IPR-30	NI	NI	0.00	0	0.50	0.73	NI	NI	0.00	0	0.30	0.44	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00
	Volume Removed		**10.14**	Volume Removed		**15.35**	Volume Removed		**5.86**	Volume Removed		**16.29**	Volume Removed		**5.07**	Volume Removed		**11.27**	Volume Removed		**15.53**

Total volume recovered during the third quarter 2010: **79.51 gal**
Total volume of NAPL recovered since April 2007: **633.1 gal**

Notes:
NI - well not included in the product recovery program during this round
NA - No Access
LNAPL - light non-aqueous phase liquid
DNAPL - dense non-aqueous phase liquid
(1) - Volume of product recovered estimated by multiplying the cross sectional area of well screen by the thickness of product layer measured prior to pumping.
All HIMW (unless noted) and PZ monitoring wells are 2-inch diameter: Vol = 0.163 gal / lft of well screen.
All IPR monitoring wells (unless noted) and HIMW-21are 6-inch diameter: Vol = 1.469 gal / lft of well screen.
Monitoring wells IPR-16 and IPR-17 are 5.75-inch diameter: Vol = 1.349 gal / lft of well screen.
Monitoring well IPR-05 and IPR-12A are 1-inch diameter: Vol = 0.041 gal / lft of well screen.

Table 3
NAPL Recovery
Second Quarter of 2010
Hempstead Intersection Street Former MGP Site

Well ID	June 25, 2010			June 9, 2010			May 23, 2010			April 26, 2010			April 11, 2010		
	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)
	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]
HIMW-01S	0	trace	0.00	0	trace	0.00	0	0.10	0.02	0	0.10	0.02	NI	NI	0.00
HIMW-01I	0	0.40	0.07	0	trace	0.00	0	0.50	0.08	0	0.50	0.08	NI	NI	0.00
HIMW-06S	0	1.30	0.21	0	2.10	0.34	0	3.30	0.54	0	3.20	0.52	0	5.30	0.87
HIMW-06I	0	0.80	0.13	NI	NI	0.00	0	trace	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-07S	0	0.80	0.13	0	1.50	0.24	0	1.05	0.17	0	0.70	0.11	0	2.50	0.41
HIMW-07I	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-07D	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-11S	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-11I	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-16S	0	3.80	0.62	0	3.00	0.49	0	1.70	0.28	0	3.50	0.57	0	4.98	0.81
HIMW-16I	0	2.37	0.39	0	3.30	0.54	0	3.00	0.49	0	5.50	0.90	0	5.90	0.96
HIMW-17S	0	1.35	0.22	0	2.60	0.42	0	1.25	0.20	0	2.00	0.33	0	0.80	0.13
HIMW-18S	0	trace	0.00	0	trace	0.00	0	0.00	0.00	0	1.40	0.23	NI	NI	0.00
HIMW-18I	0	0.40	0.07	NI	NI	0.00	0	0.00	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-19S	0	trace	0.00	0	trace	0.00	0	0.00	0.00	0	0.35	0.06	NI	NI	0.00
HIMW-19I	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-21	0	trace	0.00	0	0.40	0.59	0	0.15	0.22	0	0.10	0.15	0	0.55	0.81
PZ-08	0	1.88	0.31	0	1.00	0.16	0	1.05	0.17	0	1.10	0.18	0	1.30	0.21
IPR-02	0	trace	0.00	NI	NI	0.00	0	trace	0.00	0	trace	0.00	NI	NI	0.00
IPR-05	0	trace	0.00	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-06	0	2.55	3.75	0	1.00	1.47	0	1.25	1.84	0	0.70	1.03	0	0.45	0.66
IPR-09	0	0.00	0.00	NI	NI	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
IPR-12A	0	0.00	0.00	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-14	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	0	0.00	0.00	NI	NI	0.00
IPR-15	0	trace	0.00	NI	NI	0.00	0	trace	0.00	0	trace	0.00	NI	NI	0.00
IPR-16	0	0.33	0.45	NI	NI	0.00	0	trace	0.00	0	trace	0.00	NI	NI	0.00
IPR-17	0	trace	0.00	NI	NI	0.00	0	trace	0.00	0	0.00	0.00	NI	NI	0.00
IPR-18	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	0	0.00	0.00	NI	NI	0.00
IPR-19D	0	0.00	0.00	NI	NI	0.00	0	trace	0.00	0	trace	0.00	NI	NI	0.00
IPR-20	0	trace	0.00	NI	NI	0.00	0	trace	0.00	0	trace	0.00	NI	NI	0.00
IPR-21	0	1.13	1.66	0	0.75	1.10	0	0.90	1.32	0	0.10	0.15	0	0.95	1.40
IPR-22	0	0.00	0.00	0	1.00	1.47	0	0.15	0.22	0	0.55	0.81	0	1.05	1.54
IPR-23	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	0	0.00	0.00	NI	NI	0.00
IPR-24	0	trace	0.00	NI	NI	0.00	0	trace	0.00	0	trace	0.00	0	0.05	0.07
IPR-25	0	1.80	2.64	0	1.50	2.20	0	1.70	2.50	0	1.30	1.91	0	1.40	2.06
IPR-26	0	trace	0.00	0	0.75	1.10	0	0.30	0.44	0	0.10	0.15	NI	NI	0.00
IPR-27	0	0.40	0.59	0	0.60	0.88	0	0.20	0.29	0	trace	0.00	NI	NI	0.00
IPR-29	0	2.00	2.94	0	0.50	0.73	0	0.75	1.10	0	trace	0.00	0	1.00	1.47
	Volume Removed		**14.16**	Volume Removed		**11.75**	Volume Removed		**9.88**	Volume Removed		**7.18**	Volume Removed		**11.40**

Total volume recovered during the second quarter 2010: 54.37 gal
Total volume of NAPL recovered since April 2007: 553.6 gal

Notes:

NI - well not included in the product recovery program during this round
NA - No Access
LNAPL - light non-aqueous phase liquid
DNAPL - dense non-aqueous phase liquid
(1) - Volume of product recovered estimated by multiplying the cross sectional area of well screen by the thickness of product layer measured prior to pumping.

All HIMW (unless noted) and PZ monitoring wells are 2-inch diameter:	Vol =	0.163 gal / lft of well screen.
All IPR monitoring wells (unless noted) and HIMW-21are 6-inch diameter:	Vol =	1.469 gal / lft of well screen.
Monitoring wells IPR-16 and IPR-17 are 5.75-inch diameter:	Vol =	1.349 gal / lft of well screen.
Monitoring well IPR-05 and IPR-12A are 1-inch diameter:	Vol =	0.041 gal / lft of well screen.

Table 3
NAPL Recovery
First Quarter of 2010
Hempstead Intersection Street Former MGP Site

Well ID	March 20, 2010			March 7, 2010			February 20, 2010			February 8, 2010			January 26, 2010			January 10, 2010		
	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)
	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]
HIMW-01S	NI	NI	0.00	NI	NI	0.00	0	0.40	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
HIMW-01I	0	0.40	0.07	NI	NI	0.00	0	0.30	0.00	0	0.35	0.06	0	0.40	0.07	0	0.63	0.10
HIMW-06S	0	0.90	0.15	0	6.20	1.01	0	1.10	0.00	0	5.20	0.85	0	4.55	0.74	0	4.05	0.66
HIMW-06I	NI	NI	0.00	NI	NI	0.00	0	0.35	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
HIMW-07S	0	0.60	0.10	0	2.05	0.33	0	1.55	0.00	0	1.05	0.17	0	1.20	0.20	0	0.70	0.11
HIMW-07I	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-07D	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-11S	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-11I	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-16S	0	6.00	0.98	0	6.19	1.01	0	5.10	0.83	0	6.00	0.98	0	5.30	0.87	0	6.10	1.00
HIMW-16I	0	8.00	1.31	0	6.61	1.08	0	2.80	0.46	0	5.50	0.90	0	5.70	0.93	0	5.20	0.85
HIMW-17S	0	0.60	0.10	0	3.20	0.52	0	1.65	0.27	0	1.85	0.30	0	3.15	0.51	0	2.70	0.44
HIMW-18S	NI	NI	0.00	NI	NI	0.00	0	0.45	0.00	0	0.60	0.10	0	0.70	0.11	NI	NI	0.00
HIMW-18I	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-19S	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	0	trace	0.00	0	0.80	0.13	NI	NI	0.00
HIMW-19I	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
HIMW-21	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	0.35	0.51	0	1.20	1.76	NI	NI	0.00
PZ-08	0	0.40	0.07	0	1.30	0.21	0	1.30	0.00	0	1.65	0.27	0	1.20	0.20	0	1.30	0.21
IPR-02	0	0.20	0.29	NI	NI	0.00	0	0.35	0.00	NI	NI	0.00	0	0.10	0.15	0	0.40	0.59
IPR-05	NI	NI	0.00	NI	NI	0.00	0	1.75	0.00	NI	NI	0.00	0	1.40	0.06	NI	NI	0.00
IPR-06	0	0.40	0.59	0	0.90	1.32	0	0.50	0.00	0	0.55	0.81	0	1.15	1.69	0	1.90	2.79
IPR-09	NI	NI	0.00	NI	NI	0.00	0	1.10	1.62	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-12A	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-14	0	0.00	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-15	0	0.00	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
IPR-16	0	trace	0.00	NI	NI	0.00	0	0.05	0.07	0	0.40	0.54	0	0.95	1.28	NI	NI	0.00
IPR-17	0	0.40	0.54	NI	NI	0.00	0	trace	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
IPR-18	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-19D	0	trace	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-20	0	trace	0.00	0	trace	0.00	0	0.75	1.10	0	0.30	0.44	0	0.60	0.88	NI	NI	0.00
IPR-21	0	0.50	0.73	0	0.60	0.88	0	0.80	1.18	0	0.85	1.25	0	0.80	1.18	0	1.95	2.86
IPR-22	0	0.30	0.44	0	1.00	1.47	0	1.30	1.91	0	0.90	1.32	0	1.25	1.84	0	2.30	3.38
IPR-23	0	trace	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00
IPR-24	0	trace	0.00	NI	NI	0.00	0	trace	0.00	0	0.55	0.81	0	0.60	0.88	NI	NI	0.00
IPR-25	0	0.60	0.88	0	2.20	3.23	0	0.70	0.00	0	0.55	0.81	0	0.80	1.18	0	0.80	1.18
IPR-26	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	0	trace	0.00	NI	NI	0.00
IPR-27	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	0	0.00	0.00	NI	NI	0.00
IPR-29	0	0.50	0.73	0	trace	0.00	0	0.55	0.81	0	0.30	0.44	0	2.15	3.16	NI	NI	0.00
	Volume Removed		**6.97**	Volume Removed		**11.07**	Volume Removed		**8.24**	Volume Removed		**10.55**	Volume Removed		**17.80**	Volume Removed		**14.17**

Total volume recovered during the first quarter 2010: **68.80 gal**

Total volume of NAPL recovered since April 2007: **499.2 gal**

No product recovery due to excessive snow cover

Notes:

NI - well not included in the product recovery program during this round

NA - No Access

LNAPL - light non-aqueous phase liquid

DNAPL - dense non-aqueous phase liquid

(1) - Volume of product recovered estimated by multiplying the cross sectional area of well screen by the thickness of product layer measured prior to pumping.

All HIMW (unless noted) and PZ monitoring wells are 2-inch diameter: Vol = 0.163 gal / lft of well screen.

All IPR monitoring wells (unless noted) and HIMW-21are 6-inch diameter: Vol = 1.469 gal / lft of well screen.

Monitoring wells IPR-16 and IPR-17 are 5.75-inch diameter: Vol = 1.349 gal / lft of well screen.

Monitoring well IPR-05 and IPR-12A are 1-inch diameter: Vol = 0.041 gal / lft of well screen.

Table 4

Dissolved-Phase Concentrations of Total BTEX and Total PAH Compounds
Data Collected in 2010
Hempstead Intersection Street Former MGP Site

Well ID	Fourth Quarter 2010 October 21-28, 2010		Third Quarter 2010 July 22-29, 2010		Second Quarter 2010 April 13-20, 2010		First Quarter 2010 January 5-17, 2010	
	BTEX [ug/L]	PAH [ug/L]	BTEX [ug/L]	PAH [ug/L]	BTEX [ug/L]	PAH [ug/L]	BTEX [ug/L]	PAH [ug/L]
HIMW-001D								
HIMW-001I								
HIMW-001S								
HIMW-002D								
HIMW-002I								
HIMW-002S								
HIMW-003D	ND	ND			ND	ND		
HIMW-003I	ND	ND			ND	ND		
HIMW-003S	ND	ND			ND	ND		
HIMW-004D								
HIMW-004I								
HIMW-004S								
HIMW-005D	216	1,728	359	2,344	228	1,309	108	1,722
HIMW-005I	154	3,152	186	2,949	149	2,421	166	3,047
HIMW-005S	ND	ND	ND	ND	ND	ND	ND	ND
HIMW-006D								
HIMW-006I								
HIMW-006S								
HIMW-007D								
HIMW-007I								
HIMW-007S								
HIMW-008D	ND	ND	ND	ND	ND	ND	ND	ND
HIMW-008I	ND	ND	ND	ND	ND	ND	ND	ND
HIMW-008S	ND	1	ND	3	ND	2	ND	14
HIMW-009D								
HIMW-009I								
HIMW-009S								
HIMW-010D								
HIMW-010I								
HIMW-010S								
HIMW-011D								
HIMW-011I								
HIMW-011S								
HIMW-012D	ND	ND	ND	ND	ND	ND	ND	ND
HIMW-012I	52	118	54	125	54.1	133	40	124
HIMW-012S	6	ND	ND	ND	7.5	ND	ND	ND
HIMW-013D	6	19	4	17	5.9	21	5	18
HIMW-013I	103	133	313	104	305	133	206	85
HIMW-013S	ND	ND			ND	ND		
HIMW-014D	ND	ND			ND	ND		
HIMW-014I	24	51	41	32	43.6	37	41	26
HIMW-015D	ND	ND	ND	ND	ND	ND	ND	ND
HIMW-015I	24	30	20	29	18	24	9	11
HIMW-016I								
HIMW-016S								
HIMW-017S								
HIMW-018I								
HIMW-018S								
HIMW-019I								
HIMW-019S								
HIMW-020I	182	438	132	230	192.6	209	176	221
HIMW-020S	ND	ND	ND	ND	ND	ND	ND	ND
PZ-02								
PZ-03								
PZ-08								

Notes:

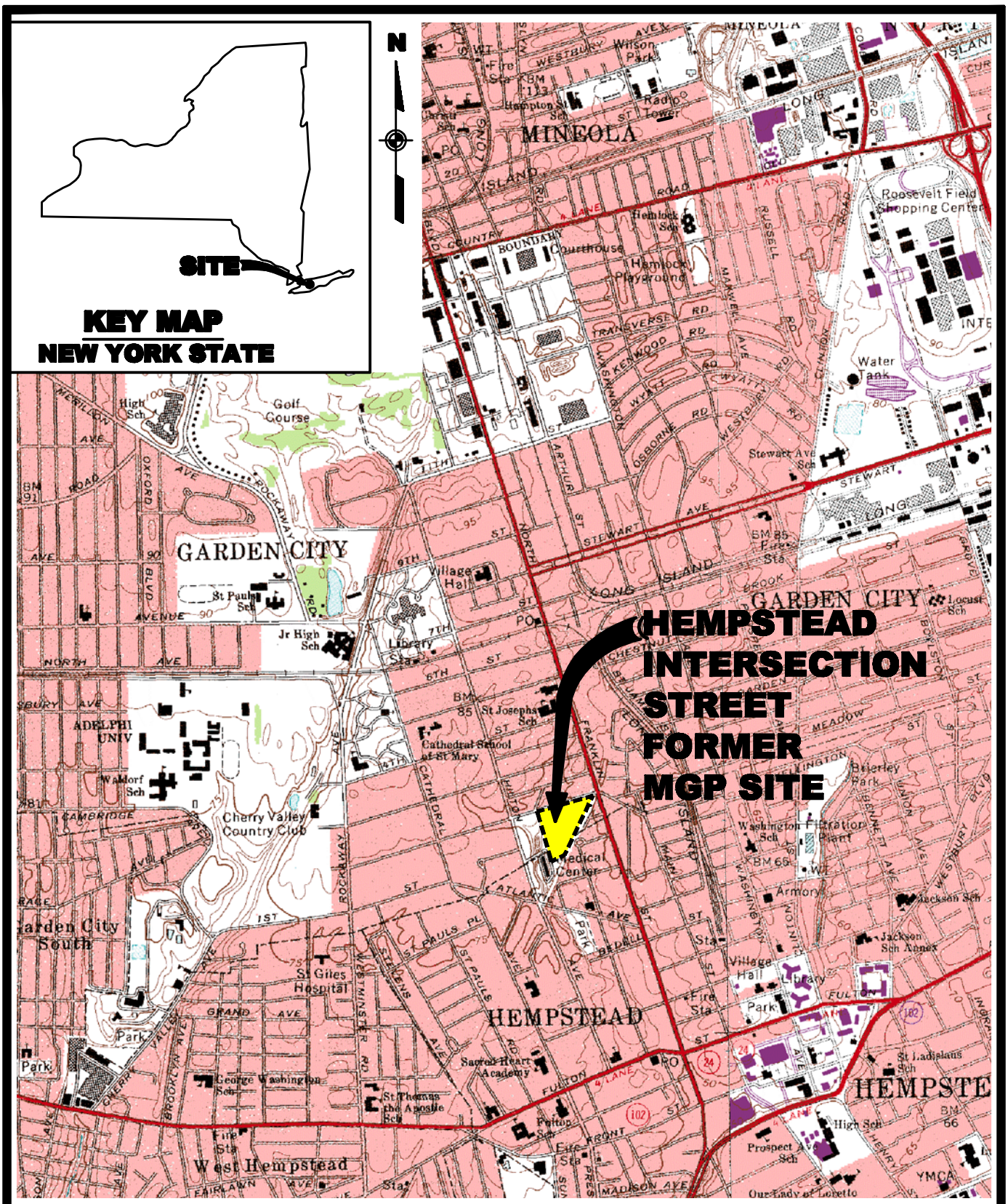
	A blank field is "Not Sampled".
	NAPL is periodically identified in this well.
ND	Not Detected.
ug/L	micrograms per liter

Table 5
Groundwater Treatment Performance Monitoring
Fourth Quarter 2010
Hempstead Intersection Street Former MGP Site

	10/11/2010			10/14/2010			10/20/2010			11/3/2010			11/17/2010			12/2/2010			12/16/2010		
ID	**DTW (ft)**	**DO (%)**	**PID (ppm)**	**DTW (ft)**	**DO (%)**	**PID (ppm)**	**DTW (ft)**	**DO (mg/L)**	**PID (ppm)**	**DTW (ft)**	**DO (mg/L)**	**PID (ppm)**	**DTW (ft)**	**DO (mg/L)**	**PID (ppm)**	**DTW (ft)**	**DO (mg/L)**	**PID (ppm)**	**DTW (ft)**	**DO (mg/L)**	**PID (ppm)**
MP-2-1	29.95	60.5	0	29.92	90.3	0.1	29.86	5.95	0	30.09	6.67	0	30.12	11.77	0.1	30.36	9.77	0.1	30.40	15.14	0
MP-2-2	29.99	34.2	0	30.97	20.8	0.1	30.91	2.02	0.3	21.15	2.18	0.2	31.22	5.2	0.2	31.44	45.78	0.1	31.47	27.15	0.1
MP-2-3S	31.11	2.9	0.1	31.09	40.4	0	31.02	44.25	0.1	31.28	40.05	0.1	31.32	47.24	0.3	31.54	48.52	0.1	31.60	41.54	0.1
MP-2-3D	31.32	2.4	0.3	31.32	45.9	1.3	31.25	42.24	4.9	31.56	44.65	1	31.53	45.87	2.3	31.75	45.67	0.2	31.77	47.14	0.1
MP-2-4	19.86	1.7	0.4	19.84	13.2	0.3	19.76	1.65	0	19.63	14.6	0.3	20.05	46.29	1.1	20.28	45.37	0.6	20.31	44.41	0.1
MP-2-5	18.07	61.4	0	18.07	25.8	0	17.98	15.48	0.1	18.21	24.5	0	18.26	24.35	0.5	18.50	24.78	0.3	18.54	5.70	0

DTW: Depth to water (feet)
DO: Dissolved Oxygen concentration (percent or milligrams per liter)
PID: Photoionization Detector measurement of well headspace (parts per million)

FIGURES



NATIONAL GRID
HEMPSTEAD INTERSECTION STREET FORMER MGP SITE
HEMPSTEAD/GARDEN CITY, NY

SOURCE:
USGS 7.5 MINUTE SERIES
TOPOGRAPHICAL QUANDRANGLES:
FREEPORT, NY (1969)
LYNBROOK, NY (1969)

URS Corporation

LOCATION MAP

FIGURE 1

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\GROUNDWATER MONITORING\FIGURE-1.dwg 3/13/09 - 1 RAL

J:\11175065.00000\DB\GIS\ARCMAP\SITE MAP.mxd 8/18/2010 MDL

N

Second Street
Washington
Franklin
Union
Main
Atlantic
Hilton
Bedell
Cathedral
Jackson
Fulton
Front

IPR-1
HIMW-019S,I
HIVP-16
IPR-2
IPR-3
IPR-4
HIMW-001S,I,D
HIMW-003S,I,D
IPR-7
IPR-9
IPR-11
HIMW-006S,I,D
HIMW-004S,I,D
HIMW-005S,I,D
IPR-14
IPR-28
IPR-18
HIMW-016S,I
IPR-30
IPR-20
IPR-29
IPR-22
HIMW-21
HIMW-008S,I,D
HIMW-020S,I
PZ-02
HIMW-018S,I
PZ-03
IPR-8
IPR-5
IPR-25
IPR-26
PZ-08
IPR-27
IPR-6
HIMW-002S,I,D
OSMW-1
HIMW-011S,I,D
OSMW-2
OSMW-3
HIMW-010S,I,D
IPR-10
IPR-13
HIMW-007S,I,D
IPR-17
HIMW-009S,I,D
IPR-16
IPR-12A,B
IPR-15
IPR-19S,D
IPR-21
IPR-23
IPR-24
HIMW-017S
HIVP-17
HIMW-012S,I,D
HIMW-013S,I,D
HIVP-18
HIMW-014I,D
HIMW-015I,D

Legend

- Piezometer
- Monitoring Well
- Product Recovery Well
- Soil Vapor Point
- Former MGP Site Boundary

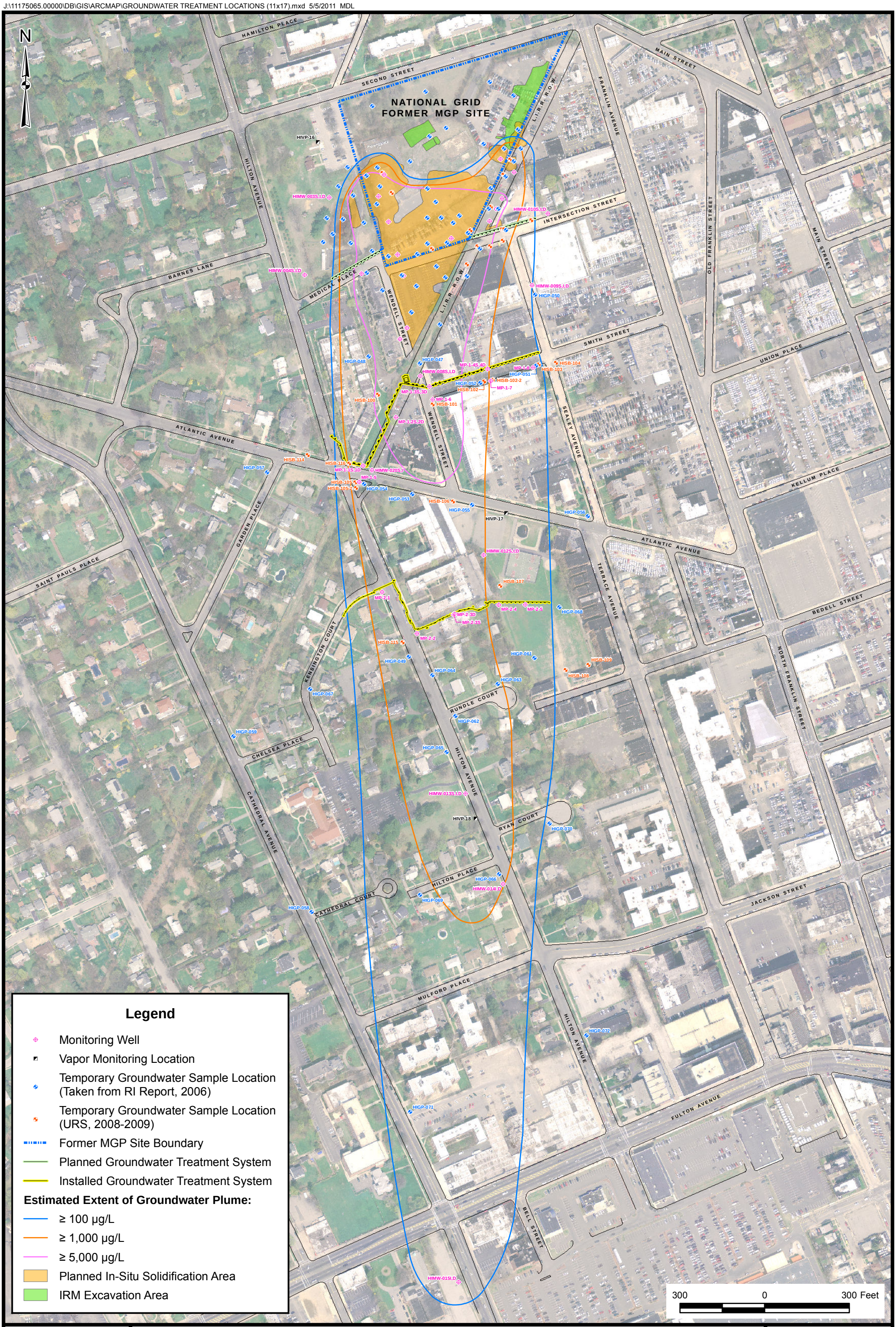
400 0 400 Feet

URS

HEMPSTEAD/GARDEN CITY, NY
SITE MAP

FIGURE 2

J:\11175065.00000\DB\GIS\ARCMAP\GROUNDWATER TREATMENT LOCATIONS (11x17).mxd 5/5/2011 MDL



Legend

- Monitoring Well
- Vapor Monitoring Location
- Temporary Groundwater Sample Location (Taken from RI Report, 2006)
- Temporary Groundwater Sample Location (URS, 2008-2009)
- Former MGP Site Boundary
- Planned Groundwater Treatment System
- Installed Groundwater Treatment System

Estimated Extent of Groundwater Plume:

- ≥ 100 µg/L
- ≥ 1,000 µg/L
- ≥ 5,000 µg/L
- Planned In-Situ Solidification Area
- IRM Excavation Area

URS

NATIONAL GRID HEMPSTEAD INTERSECTION STREET FORMER MGP SITE
HEMPSTEAD/GARDEN CITY, NEW YORK
SOIL REMEDIATION AND GROUNDWATER TREATMENT LOCATIONS

FIGURE 2A

DGP-209 (11/11/08)		
DEPTH	TOT. BTEX	TOT. PAHs
34–38	1,709	1,066
40–44	4,980	645
50–54	3,859	1,297
70–74	2	3

HIGP-40 (8/7/00)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	4,166	9,815
56–60	4	112

HIGP-49 (10/16/00)		
DEPTH	TOT. BTEX	TOT. PAHs
36–40	ND	ND
60–64	7	63
90–94	ND	16

HIGP-55 (9/7/00)		
DEPTH	TOT. BTEX	TOT. PAHs
23–27	31	244
60–64	69	532
80–84	2	ND

HIGP-61 (11/8/00)		
DEPTH	TOT. BTEX	TOT. PAHs
26–30	ND	ND
60–64	30	39
90–94	2	2

HIGP-66 (12/14/00)		
DEPTH	TOT. BTEX	TOT. PAHs
40–44	ND	1
56–60	8	60
72–76	398	787
90–94	12,970	259

HIGP-71 (11/6/01)		
DEPTH	TOT. BTEX	TOT. PAHs
46–50	ND	ND
54–58	ND	ND
62–66	1	7
72–76	29	84
81–85	126	95

HIMW-09S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
28–38	ND–16	ND–8
70–80	ND–2	ND
113–123	ND–16	ND–10

HIMW-15 I,D		
DEPTH	TOT. BTEX	TOT. PAHs
80–90	5–111 (25)	ND–273 (27)
141.5–151.5	ND–94 (ND)	ND–1 (ND)

HISB-102(2) (1/8/09)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	423	859
40–44	464	274
50–54	349	652
60–64	68	453
70–74	5	5
80–84	ND	1

HISB-106 (12/4/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	418	602
40–44	1,162	383
50–54	1,800	2,513
60–64	815	572
70–74	68	51
80–84	38	30
90–94	124	98

HISB-114 (12/23/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
40–44	ND	ND
50–54	ND	ND
60–64	ND	ND
70–74	ND	ND
80–84	ND	ND
90–94	ND	ND

HITW-01 (9/21/01)		
DEPTH	TOT. BTEX	TOT. PAHs
40–44	2	ND
54–58	3	6
70–74	95	278
82–86	293	274
90–94	45	44
109–113	210	1

HIGP-01 (8/7/00)		
DEPTH	TOT. BTEX	TOT. PAHs
25–29	ND	ND
56–60	1	1

HIGP-41 (8/11/00)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	2,241	3,258
58–62	1	17

HIGP-50 (9/8/00)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	8
60–64	ND	ND

HIGP-56 (10/9/00)		
DEPTH	TOT. BTEX	TOT. PAHs
24–28	ND	2
60–64	ND	ND

HIGP-62 (11/8/00)		
DEPTH	TOT. BTEX	TOT. PAHs
37–41	8	4
54–58	771	152
84–89	45	89

HIGP-67 (12/20/00)		
DEPTH	TOT. BTEX	TOT. PAHs
37–41	ND	ND
54–58	ND	ND
72–76	ND	ND
90–94	ND	ND

HIGP-72 (11/6/01)		
DEPTH	TOT. BTEX	TOT. PAHs
52–56	ND	ND
62–66	ND	ND
72–76	ND	ND
82–86	ND	ND
92–96	ND	ND

HIMW-10S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
28–38	ND–33	1–150
80.5–90.5	ND–13	ND
112.5–132.5	ND–16	ND

HIMW-20S,I		
DEPTH	TOT. BTEX	TOT. PAHs
25–35	ND–1.7 (1.7)	ND (ND)
63–73	132–224 (186)	96–1,114 (1,114)

HISB-103 (12/1/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
40–44	4	6
50–54	84	171
60–64	ND	ND
70–74	ND	ND
80–84	5	9

HISB-107 (12/8/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
40–44	217	47
50–54	551	258
60–64	29	68
70–74	ND	ND
80–84	ND	ND
90–94	24	8

HISB-115 (1/14/09)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	15
40–44	9	14
50–54	288	265
60–64	125	133
70–74	1,411	1,153
80–84	123	99
90–94	56	67

HITW-02 (10/31/01)		
DEPTH	TOT. BTEX	TOT. PAHs
55–60	2	ND
65–70	5	9
75–80	9	40
85–90	29	52
115–120	42	ND
148–153	9	0

HIGP-02 (8/8/00)		
DEPTH	TOT. BTEX	TOT. PAHs
31–35	ND	ND
56–60	ND	ND

HIGP-44 (8/10/00)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	469	244
57–61	3	47

HIGP-51 (8/31/00)		
DEPTH	TOT. BTEX	TOT. PAHs
28–32	ND	ND
58–60	ND	ND

HIGP-57 (9/21/00)		
DEPTH	TOT. BTEX	TOT. PAHs
36–40	ND	ND
64–68	ND	ND

HIGP-63 (12/15/00)		
DEPTH	TOT. BTEX	TOT. PAHs
37–41	2	3
54–58	18	22
72–76	3,979	2,769
90–94	773	63

HIGP-68 (12/20/00)		
DEPTH	TOT. BTEX	TOT. PAHs
37–41	3	5
54–58	163	300
72–76	ND	ND
90–94	ND	ND

HIMW-03S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
23–33	ND–36	ND
80.5–90.5	ND–13	ND
133–143	ND–8.2	ND–30

HIMW-12S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
22–32	ND–339 (339)	ND–1,391 (1,391)
63–73	29.2–256 (54)	65–527 (104)
117–127	ND–6 (ND)	ND–2 (ND)

HISB-100 (11/19/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
40–44	12,000	1,576
50–54	441	332
60–64	1,470	599
70–74	747	1,809
80–84	22	21

HISB-104 (9/24/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
45–49	ND	ND
55–59	ND	ND

HISB-108 (12/9/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
40–44	ND	ND
50–54	ND	ND
60–64	ND	ND
70–74	12	1
80–84	20	1
90–94	26	2

HISB-116 (6/23/09)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
40–44	ND	ND
50–54	1.3	ND
60–64	100	192
70–74	6	37
80–84	91	330
90–94	100	451
100–104	292	604

HIGP-03 (7/28/00)		
DEPTH	TOT. BTEX	TOT. PAHs
33–37	ND	ND
56–60	ND	ND

HIGP-45 (10/17/00)		
DEPTH	TOT. BTEX	TOT. PAHs
32–38	1,229	1,254
60–64	ND	ND

HIGP-52 (9/11/00)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	1,031	2,629
58–60	ND	ND

HIGP-58 (10/18/00)		
DEPTH	TOT. BTEX	TOT. PAHs
36–40	ND	ND
60–64	ND	ND
90–94	ND	ND

HIGP-64 (12/18/00)		
DEPTH	TOT. BTEX	TOT. PAHs
37–41	27	17
54–58	4,031	1,574
72–76	401	239
90–94	14	48

HIGP-69 (9/24/01)		
DEPTH	TOT. BTEX	TOT. PAHs
54–58	ND	ND
70–74	28	28
82–86	126	76
90–94	12	19
104–108	5	ND

HIMW-04S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
30–40	ND–4	ND–1
80–90	ND–13	ND
167–177	ND–4	ND–1

HIMW-13S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
38–48	ND–11	ND
70–80	ND–313 (205)	58–156 (128)
110–120	2.8–30 (8.1)	ND–21 (15)

HISB-101 (11/19/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	122	190
40–44	14,100	4,356
50–54	4,040	3,244
60–64	1,995	2,074
70–74	4	4
80–84	1	2

HISB-105 (12/4/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
40–44	ND	518
50–54	469	ND
60–64	1,043	3,058
70–74	60	59
80–84	279	576
90–94	48	99

HISB-109 (12/10/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
40–44	ND	ND
50–54	8	ND
60–64	19	ND
70–74	28	ND
80–84	31	2
90–94	ND	ND

HISB-117 (4/22/10)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
40–44	ND	ND
50–54	ND	ND
60–64	ND	ND
70–74	ND	2
80–84	2	32
90–94	ND	2
100–104	ND	ND

HIGP-04 (7/24/00)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	ND
56–60	ND	2

HIGP-47 (8/22/00)		
DEPTH	TOT. BTEX	TOT. PAHs
31–35	6,670	18,715
60–64	500	369

HIGP-53 (9/1/00)		
DEPTH	TOT. BTEX	TOT. PAHs
27–31	76	317
60–64	15	35
90–94	1	ND

HIGP-59 (10/17/00)		
DEPTH	TOT. BTEX	TOT. PAHs
34–38	1	ND
60–64	ND	2
90–94	27	4

HIGP-65 (12/19/00)		
DEPTH	TOT. BTEX	TOT. PAHs
37–41	2	ND
54–58	376	125
72–76	775	190
90–94	36	59

HIGP-70 (9/20/01)		
DEPTH	TOT. BTEX	TOT. PAHs
54–58	ND	0
70–74	21	20
82–86	29	38
92–96	15	18
110–114	3	6
140–144	3	ND

HIMW-05S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
27–37	ND–232 (ND)	ND–765 (ND)
80–90	137–439 (137)	1,494–5,337 (2,880)
130–140	ND–359 (145)	ND–2,344 (1,178)

HIMW-14 I,D		
DEPTH	TOT. BTEX	TOT. PAHs
85–95	37–273 (37)	26–288 (38)
140–150	ND–15	ND

HISB-102 (12/1/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	1,800	2,706
40–44	835	1,119
50–54	225	2,735
60–64	ND	10
70–74	1	4
80–84	76	130

HISB-105(2) (12/18/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	15	19
40–44	14	35
50–54	247	912
60–64	560	2,941
70–74	59	34
80–84	14	69
90–94	24	221
100–104	1	ND

HISB-119 (4/14/10)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	2
40–44	ND	1
50–54	ND	2
60–64	ND	ND
70–74	ND	4
80–84	ND	16
90–94	ND	4

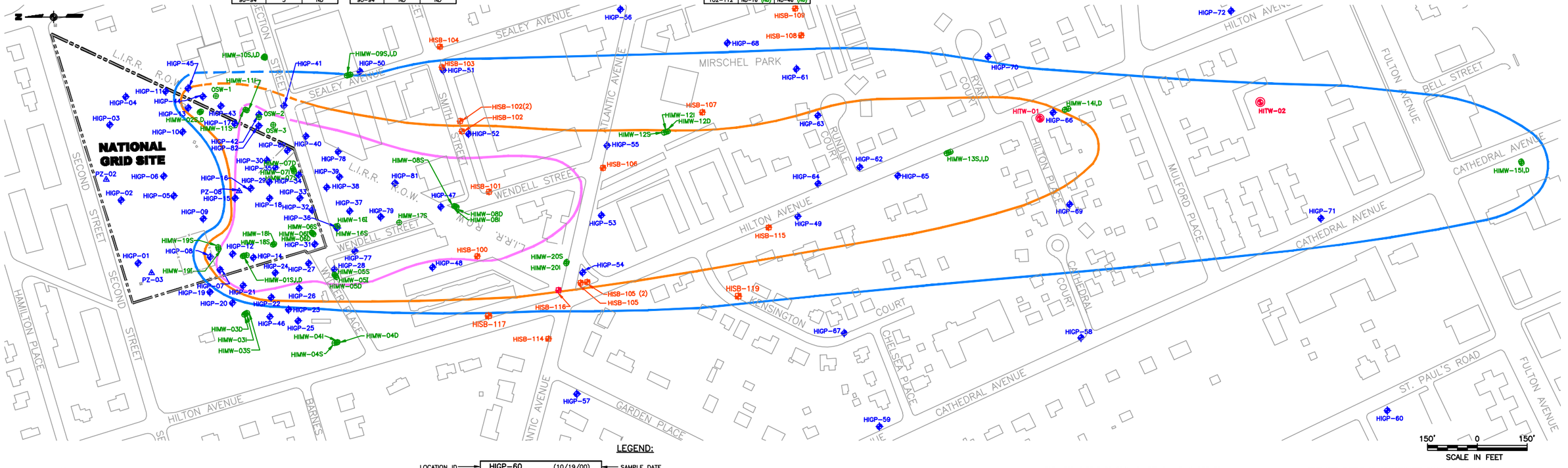
HIGP-28 (8/4/00)		
DEPTH	TOT. BTEX	TOT. PAHs
29–33	17	22
58–62	2,640	5,933

HIGP-48 (8/25/00)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	2
60–64	766	926

HIGP-54 (9/5/00)		
DEPTH	TOT. BTEX	TOT. PAHs
33–37	ND	1
60–64	373	338
90–94	3	ND

HIGP-60 (10/19/00)		
DEPTH	TOT. BTEX	TOT. PAHs
33–37	ND	ND
60–64	ND	ND
90–94	ND	ND

HIMW-08S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
25–35	ND–8,240 (ND)	ND–3,069 (ND)
63–73	ND–8.6 (ND)	ND–251 (ND)
102–112	ND–16 (ND)	ND–46 (ND)



LEGEND:

HITW-02 TEMPORARY GROUNDWATER MONITORING WELL (TAKEN FROM RI REPORT, 2006)

HIGP-53 TEMPORARY GROUNDWATER SAMPLE LOCATION (TAKEN FROM RI REPORT, 2006)

HIMW-13 MONITORING WELL

PZ-02 PIEZOMETER

HISB-114 TEMPORARY GROUNDWATER SAMPLE LOCATION (URS, 2008–2009)

ND NOT DETECTED

LOCATION ID → HIGP–60 (10/19/00) ← SAMPLE DATE

DEPTH (ft bgs)	TOT. BTEX	TOT. PAHs
33–37	ND	ND
60–64	ND	ND
90–94	ND	ND

← CONCENTRATION UNITS ARE ug/L (JANUARY–FEBRUARY 2011 CONCENTRATION)

* SOME LOCATIONS ON SITE AND ADJACENT TO SITE ARE NOT SHOWN FOR FIGURE CLARITY.

EXISTING HOUSE OR BUILDING

NATIONAL GRID PROPERTY BOUNDARY

ESTIMATED EXTENT OF GROUNDWATER PLUME AS DEFINED BY TOTAL BTEX OR TOTAL PAH CONCENTRATIONS EQUAL TO OR GREATER THAN 5,000 ug/L

ESTIMATED EXTENT OF GROUNDWATER PLUME AS DEFINED BY TOTAL BTEX OR TOTAL PAH CONCENTRATIONS EQUAL TO OR GREATER THAN 1,000 ug/L

ESTIMATED EXTENT OF GROUNDWATER PLUME AS DEFINED BY TOTAL BTEX OR TOTAL PAH CONCENTRATIONS EQUAL TO OR GREATER THAN 100 ug/L

ESTIMATED EXTENT OF GROUNDWATER PLUME AS DEFINED BY TOTAL BTEX OR TOTAL PAH CONCENTRATIONS. DASHED LINES REPRESENT CONTAMINATION CONCENTRATIONS THAT ARE LIKELY INFLUENCED BY THIRD PARTY SOURCES.

URS Corporation

NATIONAL GRID
HEMPSTEAD INTERSECTION STREET
FORMER MGP SITE
HEMPSTEAD/GARDEN CITY, NY

EXTENT OF DISSOLVED-PHASE PLUME AND GROUNDWATER ANALYTICAL RESULTS

FIGURE 3

J:\11175085.00000\CAD\DRAFT\TASK2\HEMPSTEAD\GROUNDWATER MONITORING\FIRST QUARTER 2011\FIGURE 3.dwg 5/5/11 - 5 RAL

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\OCTOBER 2010\FIGURE 4.dwg 1/11/11 - 4 RAL

N

NATIONAL GRID
FORMER MGP SITE

HIMW-19S, 46.83
HIMW-01S, 46.68
IPR-8, 45.87
IPR-9, 47.19
HIMW-03S, 46.56
HIMW-18S, 46.47
IPR-7, 46.80
IPR-12A, 45.75
IPR-11, 48.15
HIMW-06S, 46.16
IPR-14, 47.27
HIMW-04S, 45.88
HIMW-05S, 46.01
HIMW-016S, 46.13
IPR-20, 47.03
IPR-1, 45.42
IPR-3, 46.72
IPR-25, NM
IPR-10, 43.97
IPR-22, 46.26
IPR-24, 50.48
HIMW-17S, 45.86
HIMW-8S, 45.52
HIMW-02S, 46.78
OSMW-1, 46.71
PZ-08, 46.42
HIMW-11S, 46.60
HIMW-10S, 46.32
OSMW-2, 46.49
OSMW-3, 46.4
IPR-13, 42.55
HIMW-07S, 46.29
IPR-12B, 47.53
HIMW-09S, 46.0
IPR-21, 44.75
IPR-23, 45.18
HIMW-20S, 44.97
HIMW-12S, 44.26
HIMW-13S, 42.3

46.5
46
45.5
45
44.5
44
43.5
43
42.5

SECOND STREET
HILTON AVENUE
BARNES LANE
WATER PLACE
FENNELL STREET
L.I.R.R. R.O.W.
WENDELL STREET
SEALEY AVENUE
FRANKLIN AVENUE
MAIN STREET
MEADOW PLACE
STOWE PLACE
SAMMIS PLACE
OLD FRANKLIN STREET
MILLER PLACE
UNION PLACE
SMITH STREET
ATLANTIC AVENUE
GARDEN PLACE
KELLUM PLACE
KENSINGTON COURT
MIRSCHEL PARK
TERRACE AVENUE
MARGARET COURT
BEDELL STREET
NORTH FRANKLIN STREET
WEST COLUMBIA
CHELSEA PLACE
RUNDLE COURT
RYAN COURT
CATHEDRAL AVENUE
CATHEDRAL COURT
HILTON PLACE
MULFORD PLACE
JACKSON STREET
FULTON AVENUE
BELL STREET
ST. PAUL'S

LEGEND:

- MONITORING WELL
- IPR WELL
- PIEZOMETER
- GROUNDWATER FLOW DIRECTION
- 44 — POTENTIOMETRIC SURFACE CONTOUR
- FORMER MGP SITE BOUNDARY
- HIMW-8S, 48.33 — LOCATION ID AND GROUNDWATER ELEV. (FT. AMSL)

300' 0 300'
SCALE IN FEET

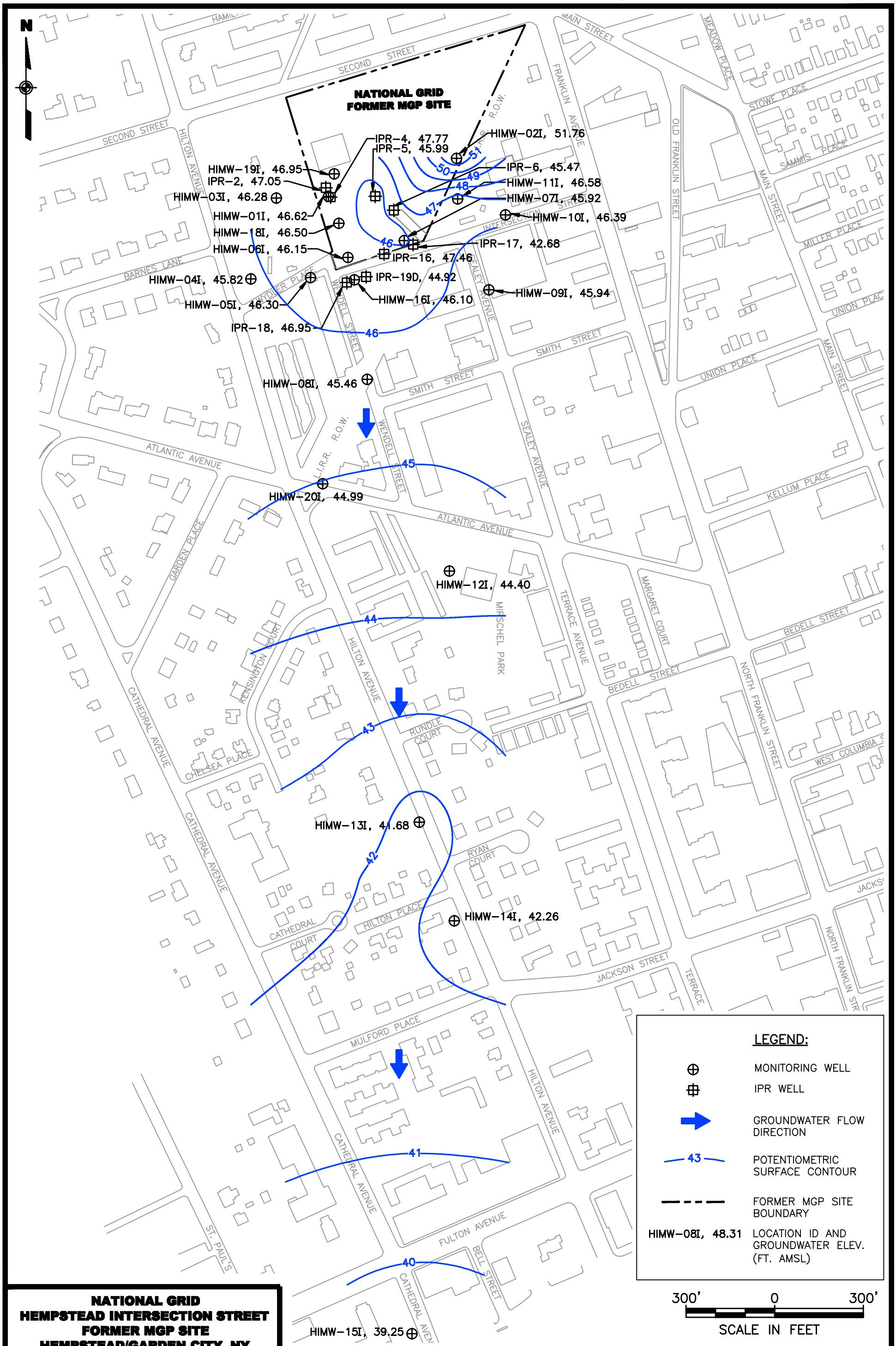
NATIONAL GRID
HEMPSTEAD INTERSECTION STREET
FORMER MGP SITE
HEMPSTEAD/GARDEN CITY, NY

URS Corporation

HEMPSTEAD/GARDEN CITY, NY
POTENTIOMETRIC SURFACE MAP FOR SHALLOW GROUNDWATER
OCTOBER 20-21, 2010

FIGURE 4

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\OCTOBER 2010\FIGURE 5.dwg 2/16/11 - 3 RAL



NATIONAL GRID
HEMPSTEAD INTERSECTION STREET
FORMER MGP SITE
HEMPSTEAD/GARDEN CITY, NY

URS Corporation

HEMPSTEAD/GARDEN CITY, NY
POTENTIOMETRIC SURFACE MAP FOR INTERMEDIATE GROUNDWATER
OCTOBER 20-21, 2010

FIGURE 5

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\OCTOBER 2010\FIGURE 6.dwg 2/16/11 - 4 RAL

N

NATIONAL GRID
FORMER MGP SITE

HIMW-02D, 46.79
HIMW-01D, NM
HIMW-11D, 46.52
HIMW-03D, 46.04
HIMW-10D, 46.41
HIMW-05D, 45.35
HIMW-07D, 46.31
HIMW-06D, 46.26
HIMW-04D, 45.17
HIMW-09D, 45.88
HIMW-8D, 45.45
HIMW-12D, 42.74
HIMW-13D, 42.26
HIMW-14D, 40.10
HIMW-15D, 37.40

46
45
44
43
42
41
40
39
38

SECOND STREET
HILTON AVENUE
BARNES LANE
WYDLER PLACE
WENDELL STREET
L.I.R.R. R.O.W.
FRANKLIN AVENUE
INTERSECTION STREET
SEALEY AVENUE
SMITH STREET
MAIN STREET
MEADOW PLACE
STOWE PLACE
SAMMS PLACE
OLD FRANKLIN STREET
MILLER PLACE
UNION PLACE
ATLANTIC AVENUE
GARDEN PLACE
KENSINGTON COURT
CATHEDRAL AVENUE
CHELSEA PLACE
MIRSCHEL PARK
TERRACE AVENUE
MARGARET COURT
KELLUM PLACE
BEDELL STREET
NORTH FRANKLIN STREET
WEST COLUMBIA
RUNDLE COURT
RYAN COURT
CATHEDRAL COURT
HILTON PLACE
JACKSON STREET
MULFORD PLACE
FULTON AVENUE
BELL STREET
ST. PAUL'S

LEGEND:

- ⊕ MONITORING WELL
- GROUNDWATER FLOW DIRECTION
- 43 POTENTIOMETRIC SURFACE CONTOUR
- FORMER MGP SITE BOUNDARY
- HIMW-12D, 45.70 LOCATION ID AND GROUNDWATER ELEV. (FT. AMSL)

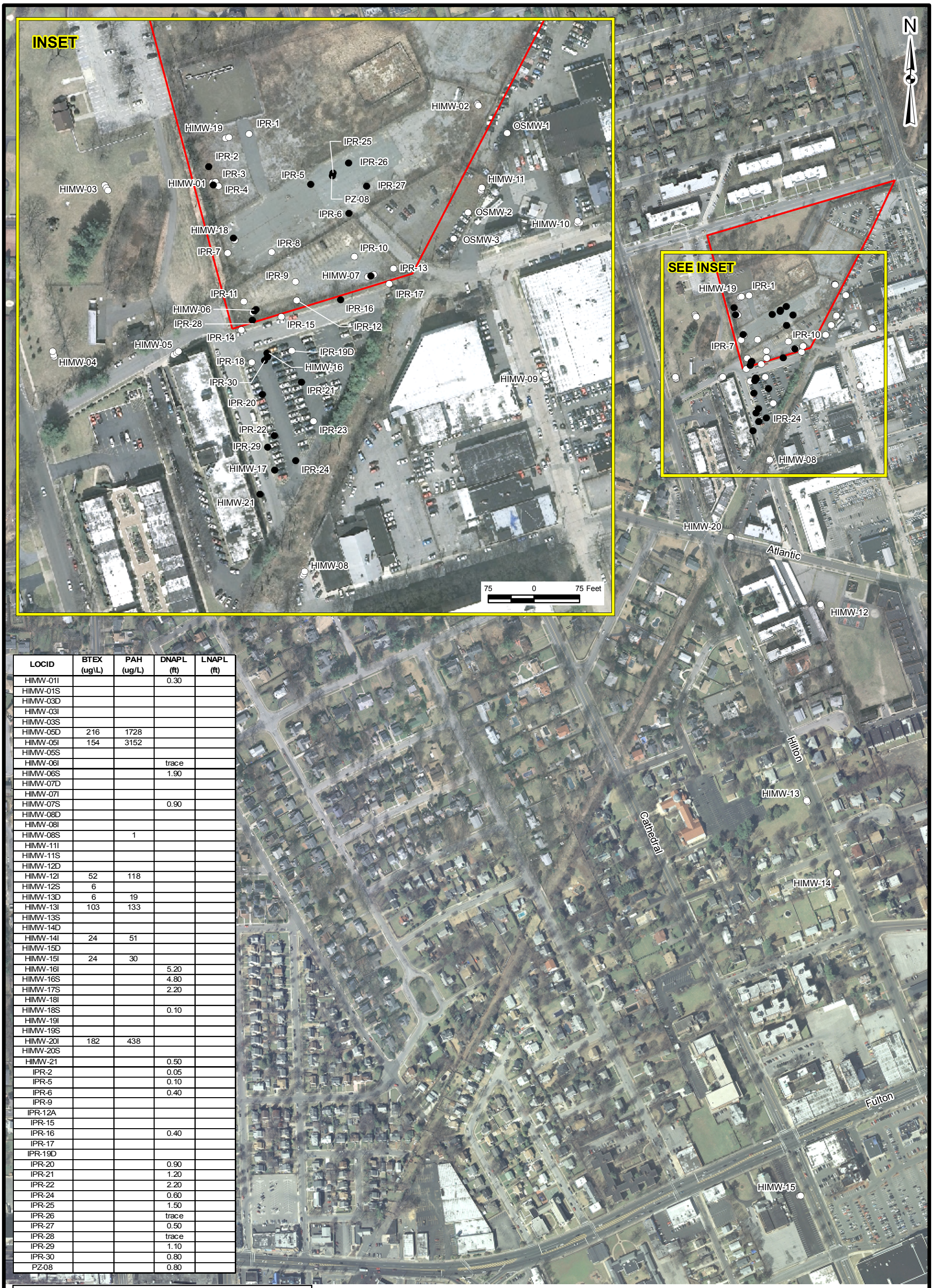
300' 0 300'
SCALE IN FEET

NATIONAL GRID
HEMPSTEAD INTERSECTION STREET
FORMER MGP SITE
HEMPSTEAD/GARDEN CITY, NY

URS Corporation

HEMPSTEAD/GARDEN CITY, NY
POTENTIOMETRIC SURFACE MAP FOR DEEP GROUNDWATER
OCTOBER 20-21, 2010

FIGURE 6



LOCID	BTEX (ug\L)	PAH (ug/L)	DNAPL (ft)	LNAPL (ft)
HIMW-01I			0.30	
HIMW-01S				
HIMW-03D				
HIMW-03I				
HIMW-03S				
HIMW-05D	216	1728		
HIMW-05I	154	3152		
HIMW-05S				
HIMW-06I			trace	
HIMW-06S			1.90	
HIMW-07D				
HIMW-07I				
HIMW-07S			0.90	
HIMW-08D				
HIMW-08I				
HIMW-08S		1		
HIMW-11I				
HIMW-11S				
HIMW-12D				
HIMW-12I	52	118		
HIMW-12S	6			
HIMW-13D	6	19		
HIMW-13I	103	133		
HIMW-13S				
HIMW-14D				
HIMW-14I	24	51		
HIMW-15D				
HIMW-15I	24	30		
HIMW-16I			5.20	
HIMW-16S			4.80	
HIMW-17S			2.20	
HIMW-18I				
HIMW-18S			0.10	
HIMW-19I				
HIMW-19S				
HIMW-20I	182	438		
HIMW-20S				
HIMW-21			0.50	
IPR-2			0.05	
IPR-5			0.10	
IPR-6			0.40	
IPR-9				
IPR-12A				
IPR-15				
IPR-16			0.40	
IPR-17				
IPR-19D				
IPR-20			0.90	
IPR-21			1.20	
IPR-22			2.20	
IPR-24			0.60	
IPR-25			1.50	
IPR-26			trace	
IPR-27			0.50	
IPR-28			trace	
IPR-29			1.10	
IPR-30			0.80	
PZ-08			0.80	

Legend

- Monitoring Well - Product Detected
- Monitoring Well - Product Not Detected
- Former MGP Site Boundary

Notes:
BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes
PAH - Polynuclear Aromatic Hydrocarbons
DNAPL - Dense Non-Aqueous Phase Liquid
LNAPL - Light Non-Aqueous Phase Liquid
ug/L - Micrograms per Liter
ft - Feet of Product Thickness
Product thickness for all wells measured 10/11/10
BTEX/PAH sampling occurred on 10/21/10 - 10/28/10

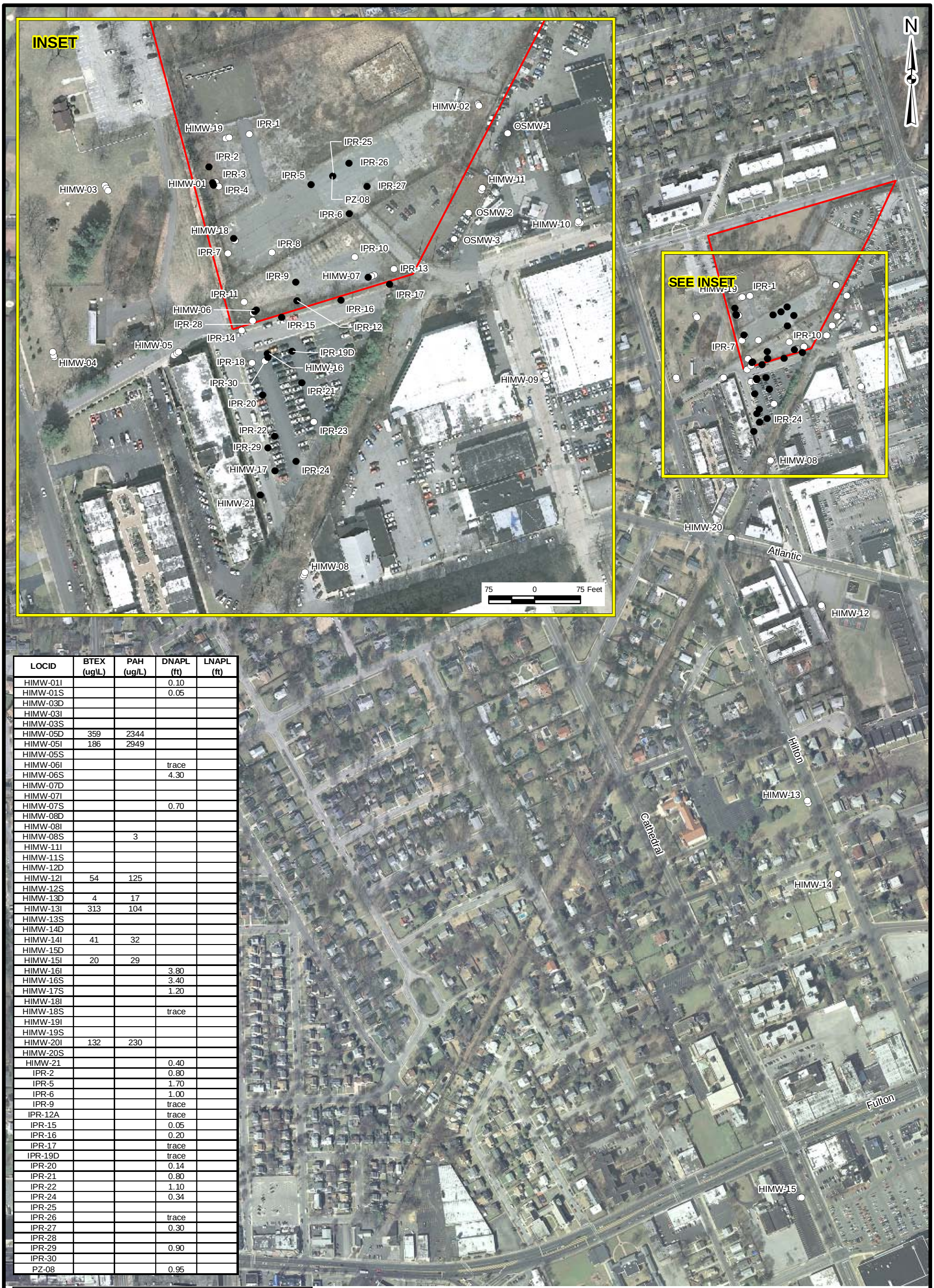
400 0 400 Feet

URS

HEMPSTEAD/GARDEN CITY, NY
TOTAL DISSOLVED-PHASE BTEX/PAH CONCENTRATIONS AND FREE PRODUCT THICKNESS
FOURTH QUARTER 2010

FIGURE 7

J:\11175065.00000\DBG\S\ARCMAP\1010 BTEXPAH-NAPL.mxd 1/12/2011



LOCID	BTEX (ug\L)	PAH (ug/L)	DNAPL (ft)	LNAPL (ft)
HIMW-01I			0.10	
HIMW-01S			0.05	
HIMW-03D				
HIMW-03I				
HIMW-03S				
HIMW-05D	359	2344		
HIMW-05I	186	2949		
HIMW-05S				
HIMW-06I			trace	
HIMW-06S			4.30	
HIMW-07D				
HIMW-07I				
HIMW-07S			0.70	
HIMW-08D				
HIMW-08I				
HIMW-08S		3		
HIMW-11I				
HIMW-11S				
HIMW-12D				
HIMW-12I	54	125		
HIMW-12S				
HIMW-13D	4	17		
HIMW-13I	313	104		
HIMW-13S				
HIMW-14D				
HIMW-14I	41	32		
HIMW-15D				
HIMW-15I	20	29		
HIMW-16I			3.80	
HIMW-16S			3.40	
HIMW-17S			1.20	
HIMW-18I				
HIMW-18S			trace	
HIMW-19I				
HIMW-19S				
HIMW-20I	132	230		
HIMW-20S				
HIMW-21			0.40	
IPR-2			0.80	
IPR-5			1.70	
IPR-6			1.00	
IPR-9			trace	
IPR-12A			trace	
IPR-15			0.05	
IPR-16			0.20	
IPR-17			trace	
IPR-19D			trace	
IPR-20			0.14	
IPR-21			0.80	
IPR-22			1.10	
IPR-24			0.34	
IPR-25				
IPR-26			trace	
IPR-27			0.30	
IPR-28				
IPR-29			0.90	
IPR-30				
PZ-08			0.95	

Legend

- Monitoring Well - Product Detected
- Monitoring Well - Product Not Detected
- Former MGP Site Boundary

Notes:
BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes
PAH - Polynuclear Aromatic Hydrocarbons
DNAPL - Dense Non-Aqueous Phase Liquid
LNAPL - Light Non-Aqueous Phase Liquid
ug/L - Micrograms per Liter
ft - Feet of Product Thickness
Product thickness for all wells measured 7/21/10 - 7/22/10
BTEX/PAH sampling occurred on 7/22/10 - 7/29/10

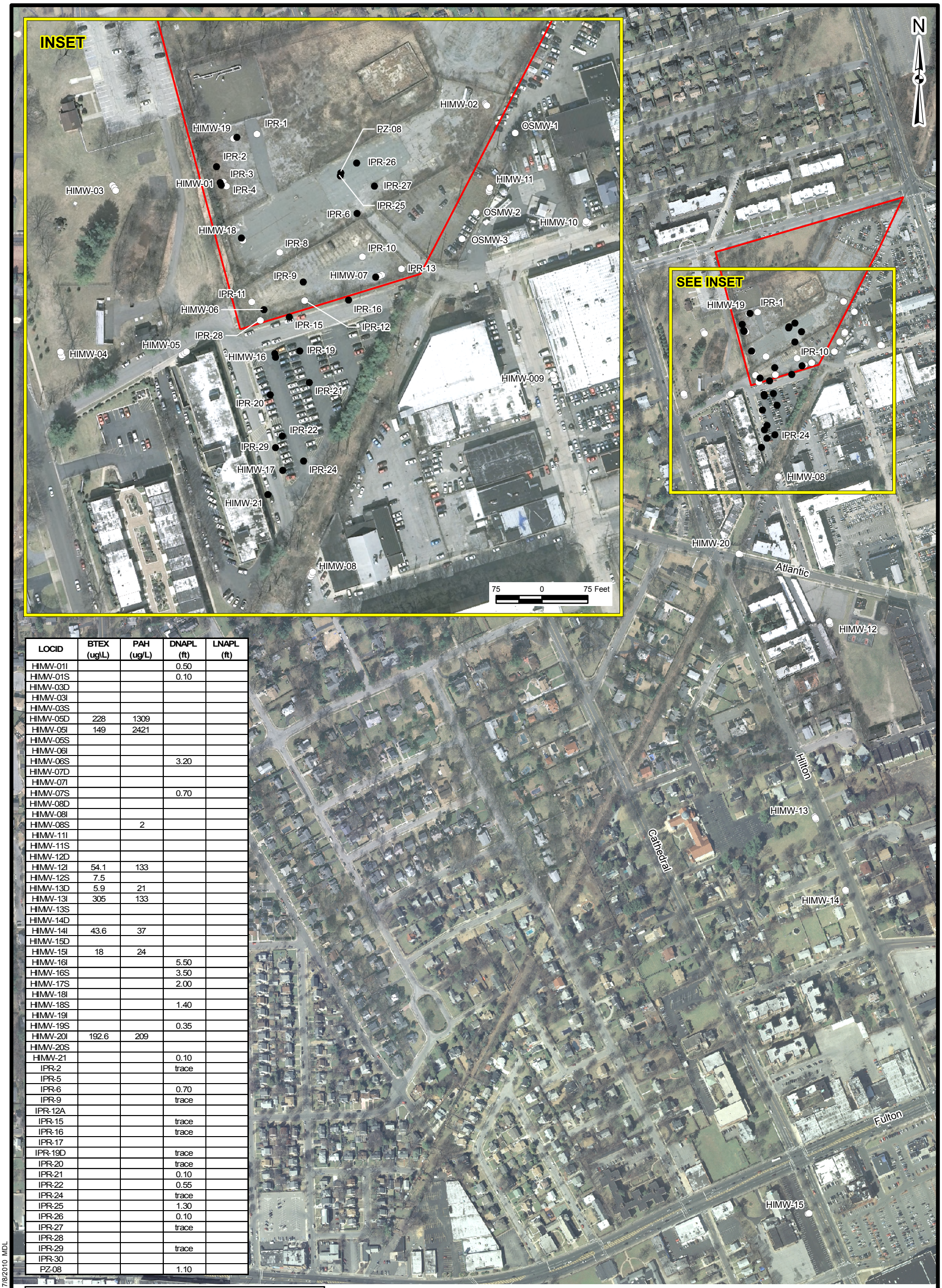
400 0 400 Feet

URS

HEMPSTEAD/GARDEN CITY, NY
TOTAL DISSOLVED-PHASE BTEX/PAH CONCENTRATIONS
AND FREE PRODUCT THICKNESS
THIRD QUARTER 2010

FIGURE 8

J:\11175065.00000\DBG\SVARCMAP\0710 BTEXPAH-NAPL.mxd 10/4/2010 MDL



LOCID	BTEX (ug\L)	PAH (ug/L)	DNAPL (ft)	LNAPL (ft)
HIMW-01I			0.50	
HIMW-01S			0.10	
HIMW-03D				
HIMW-03I				
HIMW-03S				
HIMW-05D	228	1309		
HIMW-05I	149	2421		
HIMW-05S				
HIMW-06I				
HIMW-06S			3.20	
HIMW-07D				
HIMW-07I				
HIMW-07S			0.70	
HIMW-08D				
HIMW-08I				
HIMW-08S		2		
HIMW-11I				
HIMW-11S				
HIMW-12D				
HIMW-12I	54.1	133		
HIMW-12S	7.5			
HIMW-13D	5.9	21		
HIMW-13I	305	133		
HIMW-13S				
HIMW-14D				
HIMW-14I	43.6	37		
HIMW-15D				
HIMW-15I	18	24		
HIMW-16I			5.50	
HIMW-16S			3.50	
HIMW-17S			2.00	
HIMW-18I				
HIMW-18S			1.40	
HIMW-19I				
HIMW-19S			0.35	
HIMW-20I	192.6	209		
HIMW-20S				
HIMW-21			0.10	
IPR-2			trace	
IPR-5				
IPR-6			0.70	
IPR-9			trace	
IPR-12A				
IPR-15			trace	
IPR-16			trace	
IPR-17				
IPR-19D			trace	
IPR-20			trace	
IPR-21			0.10	
IPR-22			0.55	
IPR-24			trace	
IPR-25			1.30	
IPR-26			0.10	
IPR-27			trace	
IPR-28				
IPR-29			trace	
IPR-30				
PZ-08			1.10	

Legend

- Monitoring Well - Product Detected
- Monitoring Well - Product Not Detected
- Former MGP Site Boundary

Notes:
BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes
PAH - Polynuclear Aromatic Hydrocarbons
DNAPL - Dense Non-Aqueous Phase Liquid
LNAPL - Light Non-Aqueous Phase Liquid
ug/L - Micrograms per Liter
ft - Feet of Product Thickness
Product thickness for all wells measured on 4/26/2010
BTEX/PAH sampling occurred on 4/13/2010 - 4/20/2010

400 0 400 Feet

URS

HEMPSTEAD/GARDEN CITY, NY
TOTAL DISSOLVED-PHASE BTEX/PAH CONCENTRATIONS
AND FREE PRODUCT THICKNESS
SECOND QUARTER 2010

FIGURE 9

J:\11175065.00000\DB\GIS\ARCMAP\0410 BTEXPAH-NAPL.mxd 7/8/2010 MDL

LOCID	BTEX (ug\L)	PAH (ug/L)	DNAPL (ft)	LNAPL (ft)
HIMW-01I			0.40	
HIMW-01S			trace	
HIMW-03D				
HIMW-03I				
HIMW-03S				
HIMW-05D	108	1722		
HIMW-05I	166	3047		
HIMW-05S				
HIMW-06I			trace	
HIMW-06S			4.55	
HIMW-07D				
HIMW-07I				
HIMW-07S			1.20	
HIMW-08D				
HIMW-08I				
HIMW-08S		14		
HIMW-11I				
HIMW-11S				
HIMW-12D				
HIMW-12I	40	124		
HIMW-12S				
HIMW-13D	5	18		
HIMW-13I	206	85		
HIMW-13S				
HIMW-14D				
HIMW-14I	41	26		
HIMW-15D				
HIMW-15I	9	11		
HIMW-16I			5.70	
HIMW-16S			5.30	
HIMW-17S			3.15	
HIMW-18I				
HIMW-18S			0.70	
HIMW-19I				
HIMW-19S			0.80	
HIMW-20I	176	221		
HIMW-20S				
HIMW-21			1.20	
IPR-2			0.10	
IPR-5			1.40	
IPR-6			1.15	
IPR-12A				
IPR-15			trace	
IPR-16			0.95	
IPR-17			trace	
IPR-20			0.60	
IPR-21			0.80	
IPR-22			1.25	
IPR-24			0.60	
IPR-25			0.80	
IPR-26			trace	
IPR-27				
IPR-28				
IPR-29			2.15	
IPR-30				
PZ-08			1.20	

Legend

- Monitoring Well - Product Detected
- Monitoring Well - Product Not Detected
- Former MGP Site Boundary

Notes:
BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes
PAH - Polynuclear Aromatic Hydrocarbons
DNAPL - Dense Non-Aqueous Phase Liquid
LNAPL - Light Non-Aqueous Phase Liquid
ug/L - Micrograms per Liter
ft - Feet of Product Thickness

400 0 400 Feet

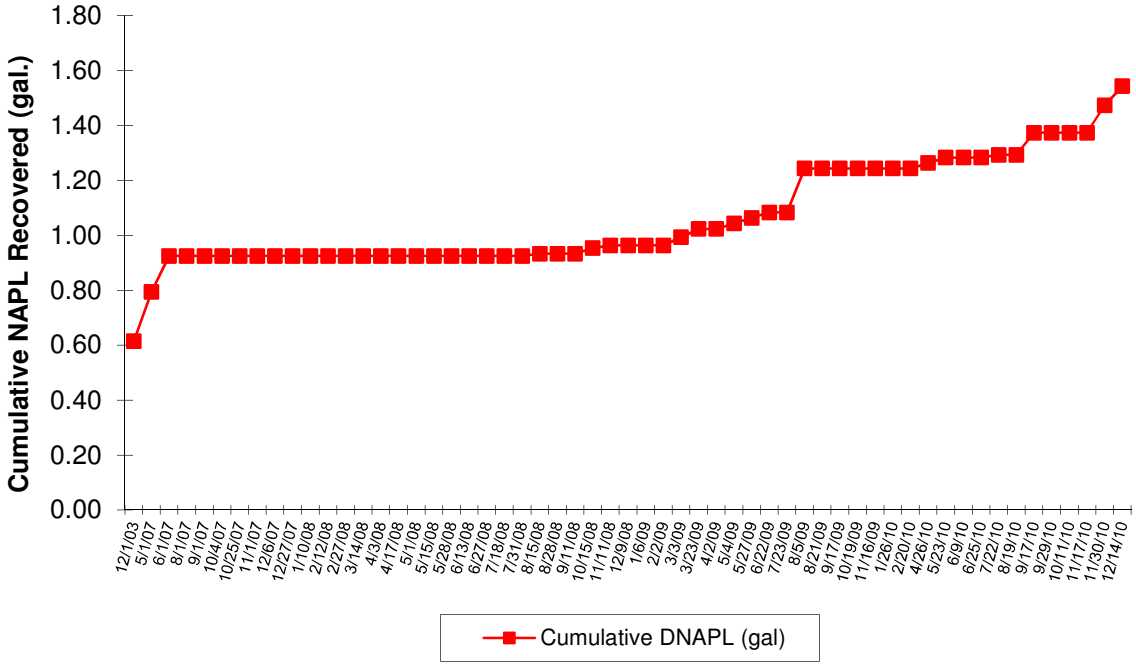
URS

HEMPSTEAD/GARDEN CITY, NY
TOTAL DISSOLVED-PHASE BTEX/PAH CONCENTRATIONS AND FREE PRODUCT THICKNESS
FIRST QUARTER 2010

FIGURE 10

J:\11175065.00000\DB\GIS\ARCMAP\0110 BTEXPAH-NAPL.mxd 4/2/2010 MDL

FIGURE 11A
Well HIMW-01S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



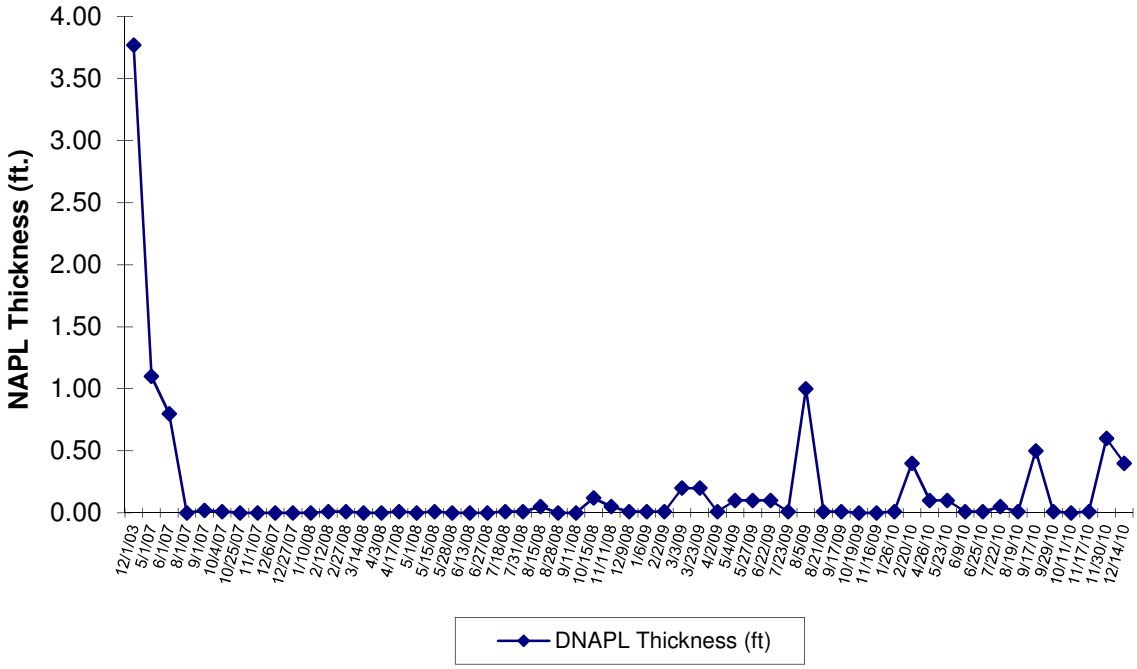
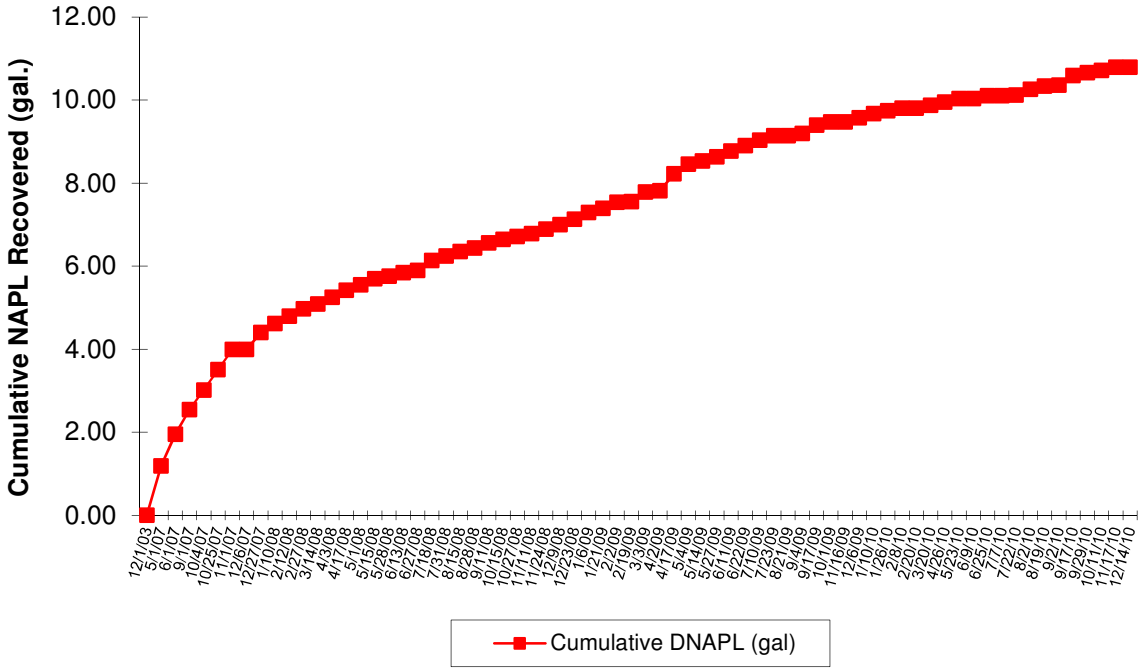


FIGURE 11B
Well HIMW-01I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



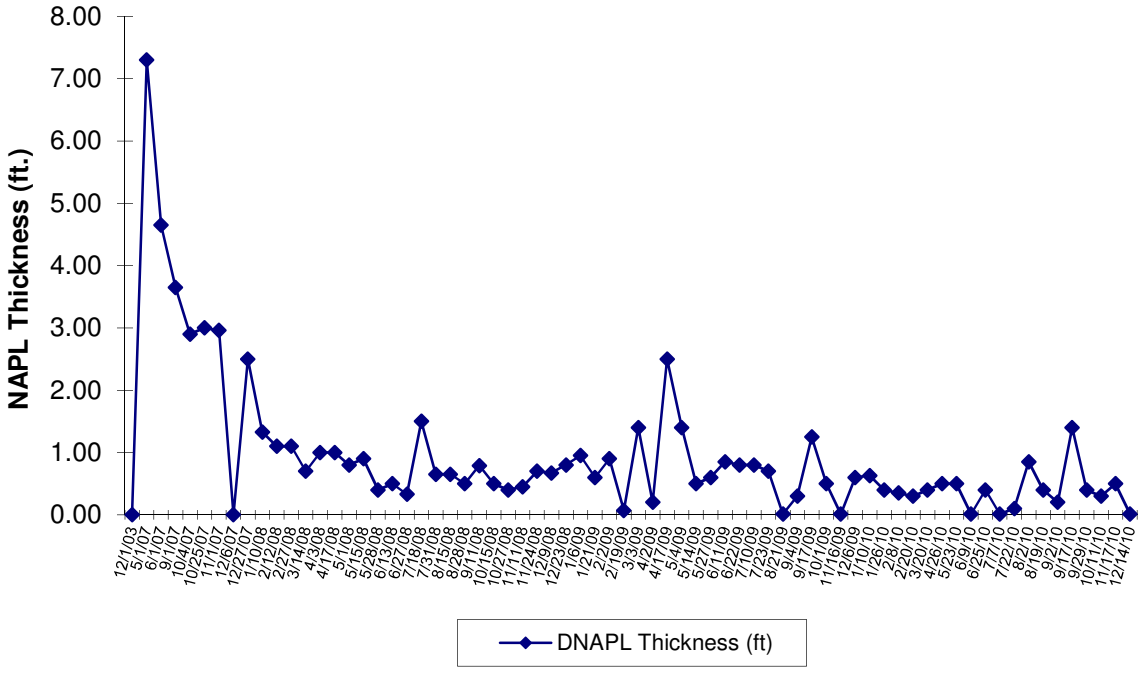
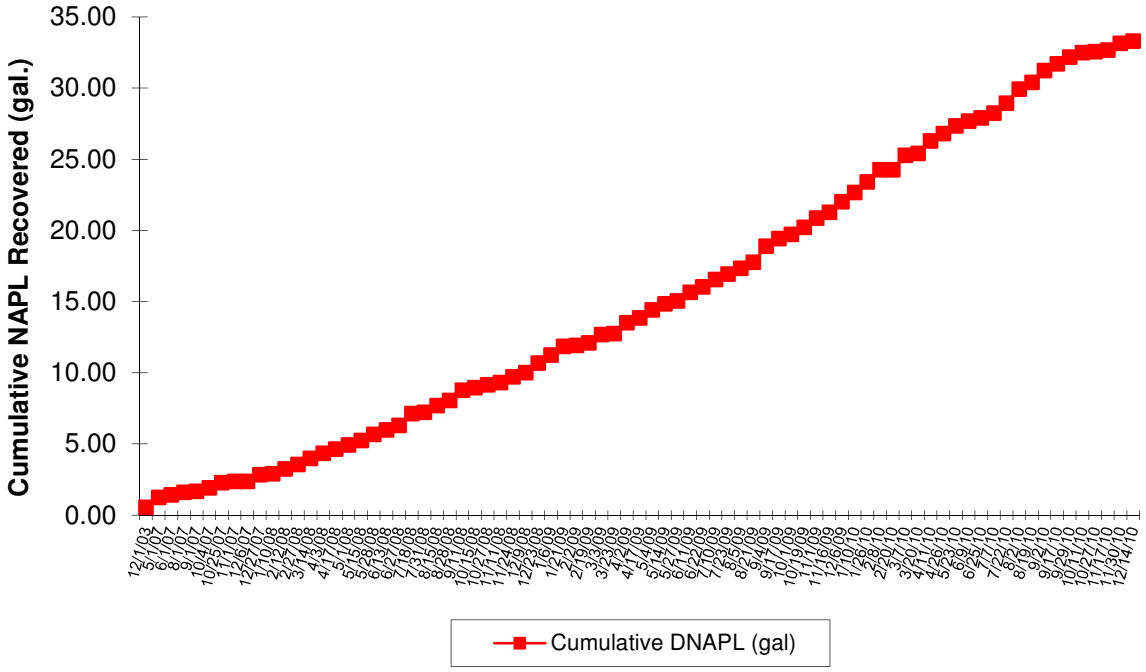


FIGURE 11C
Well HIMW-06S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



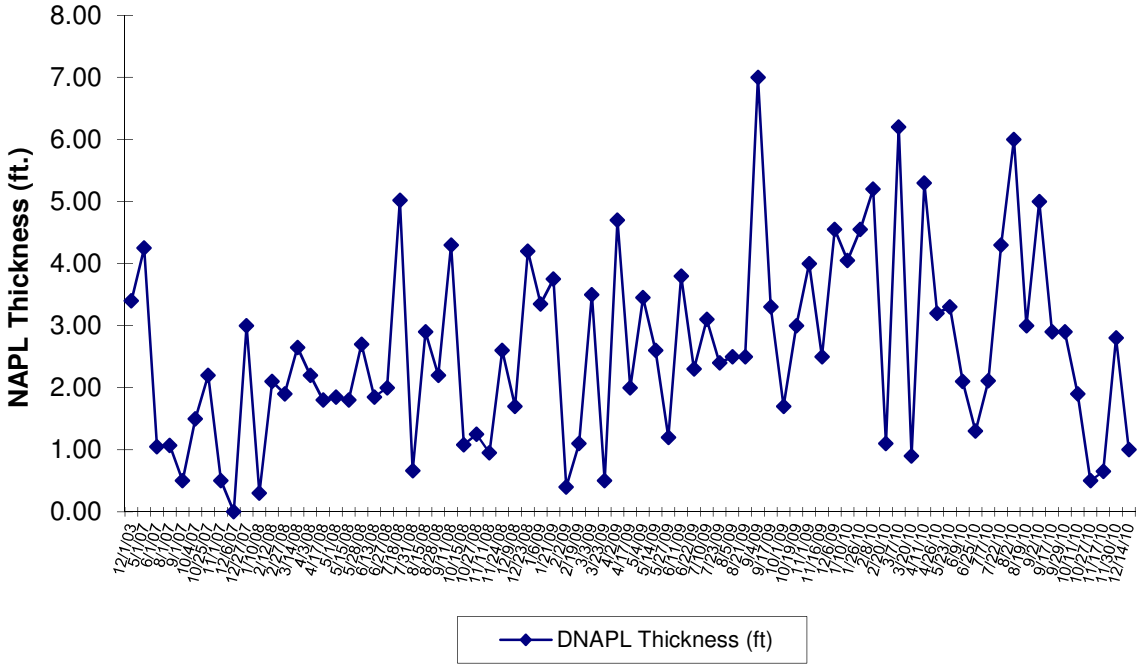
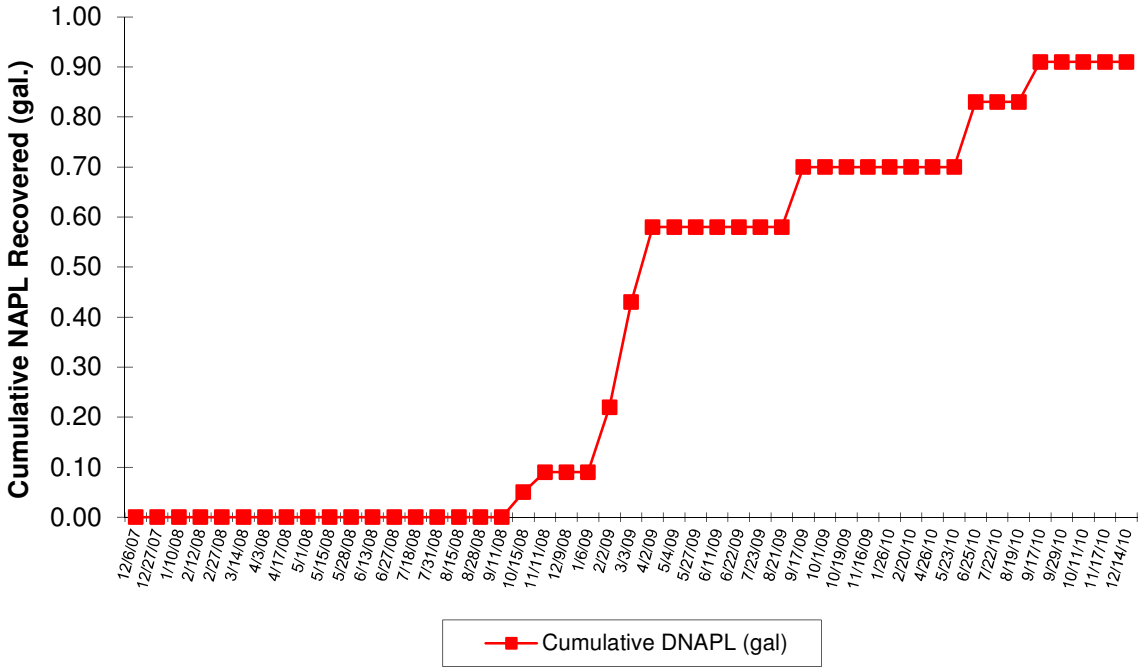


FIGURE 11D
Well HIMW-06I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



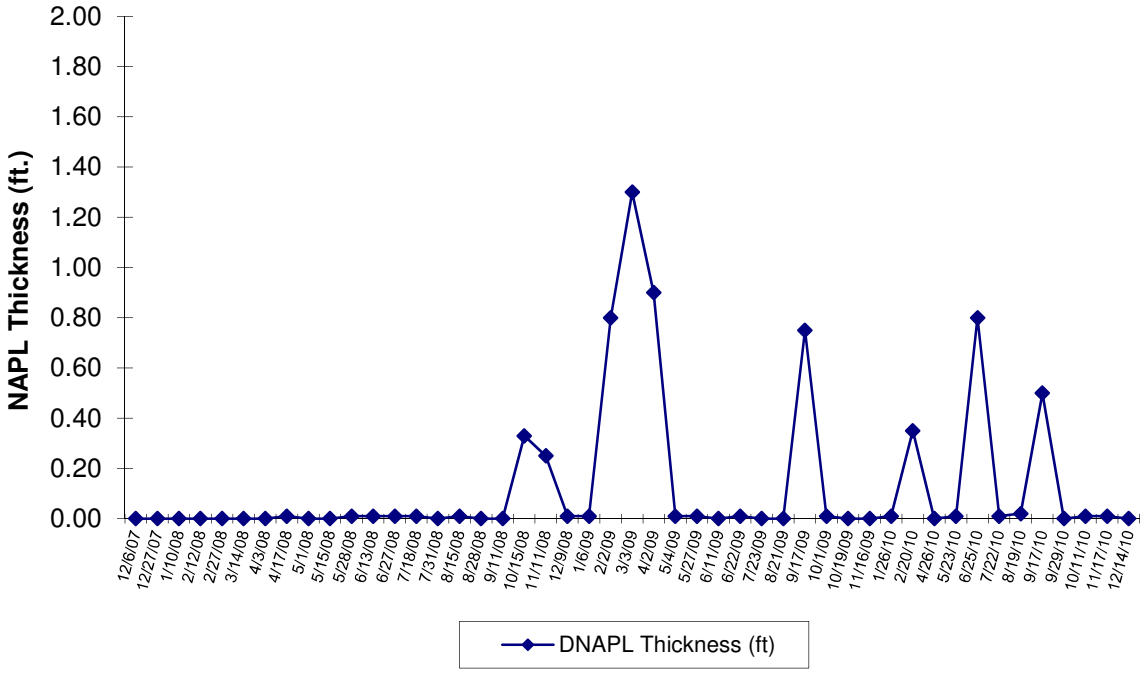
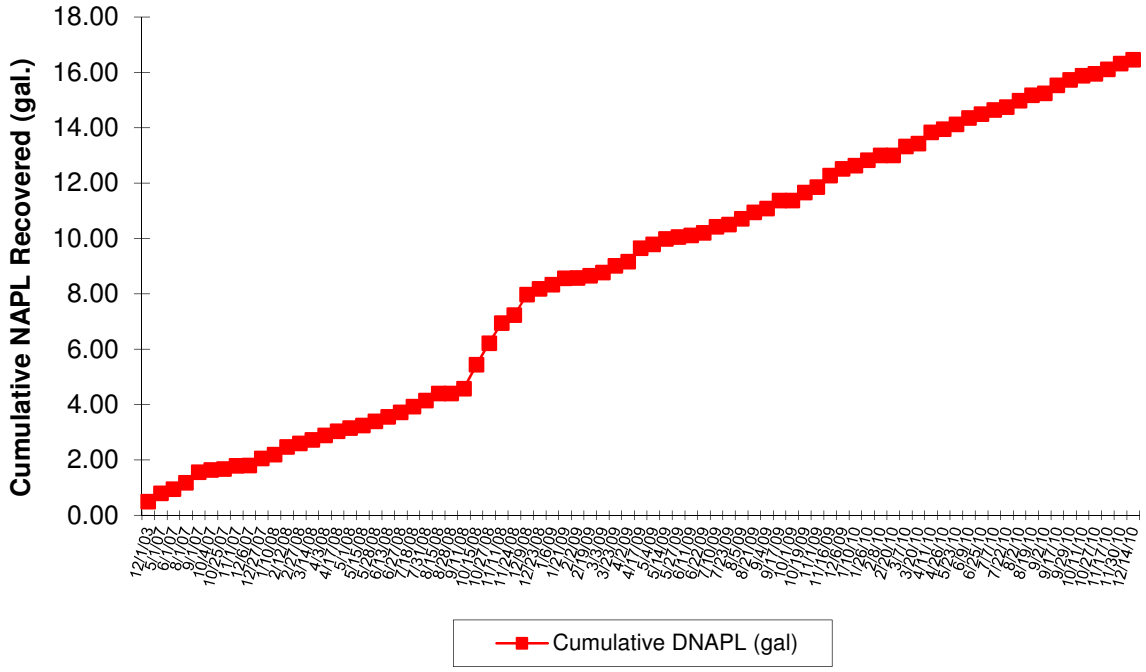


FIGURE 11E
Well HIMW-07S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



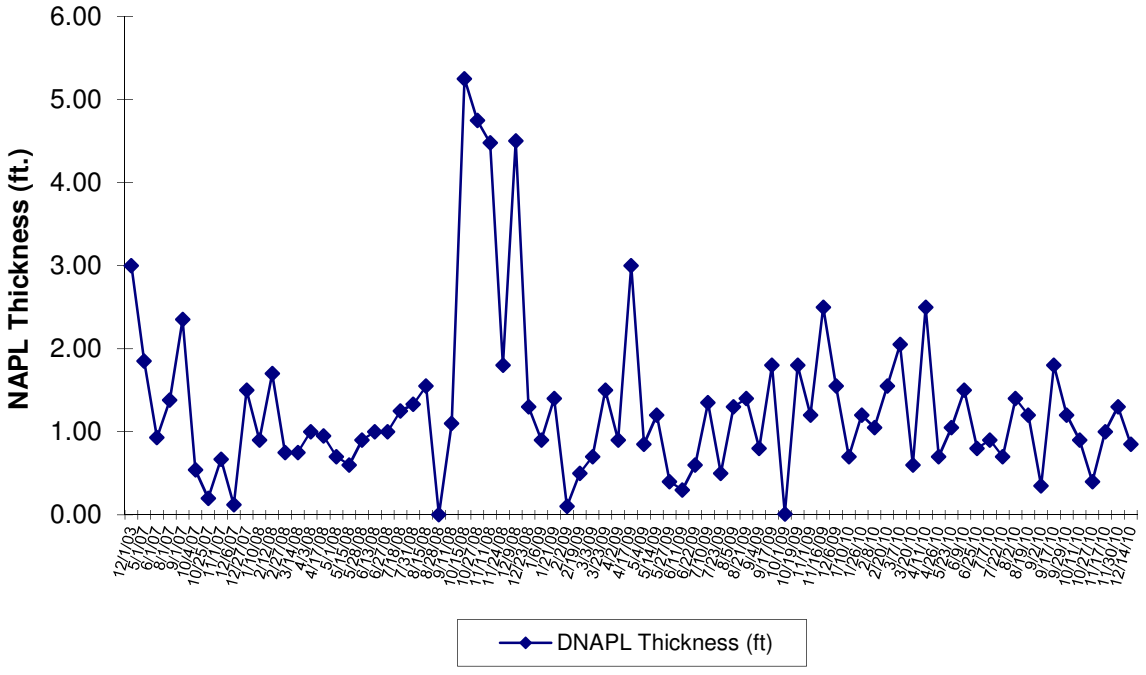
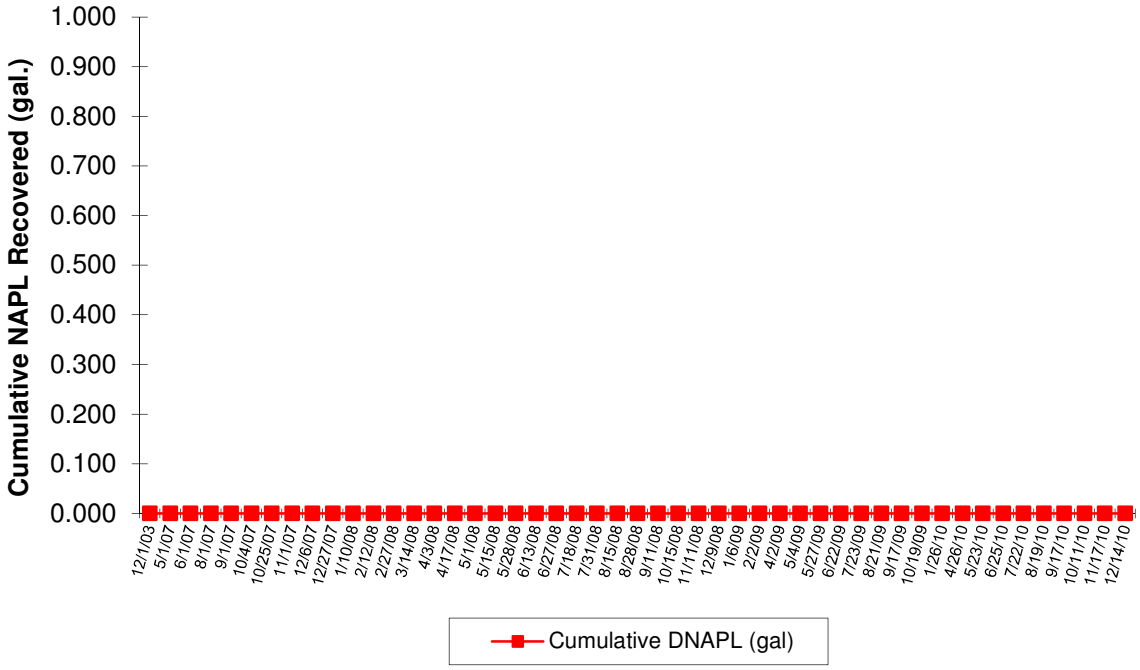


FIGURE 11F
Well HIMW-11S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



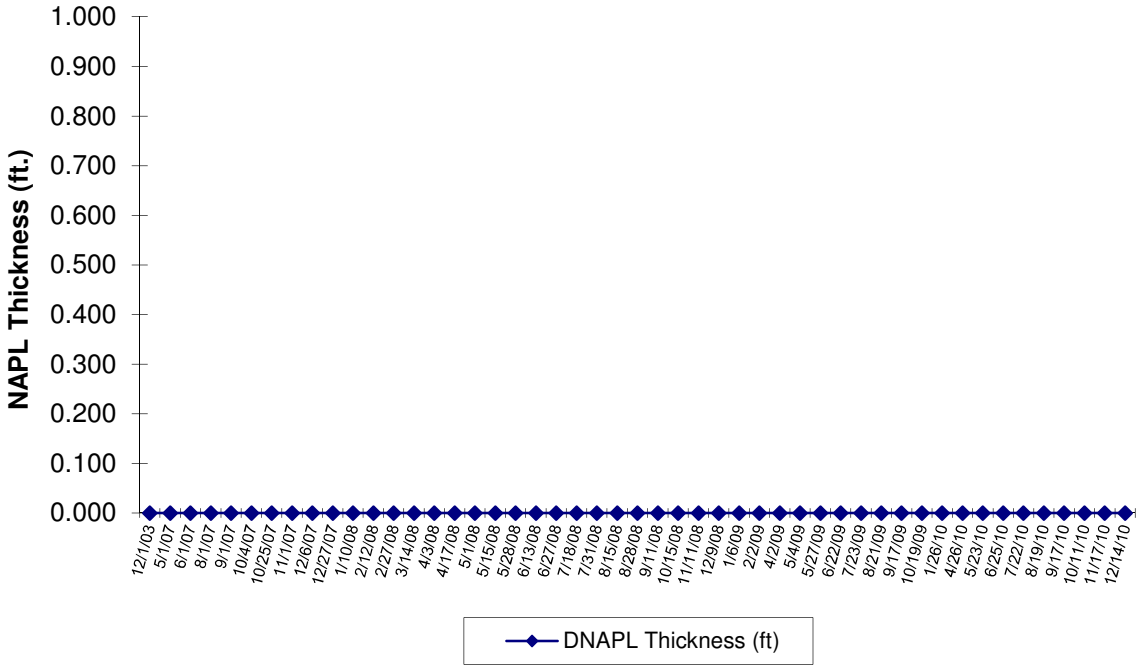
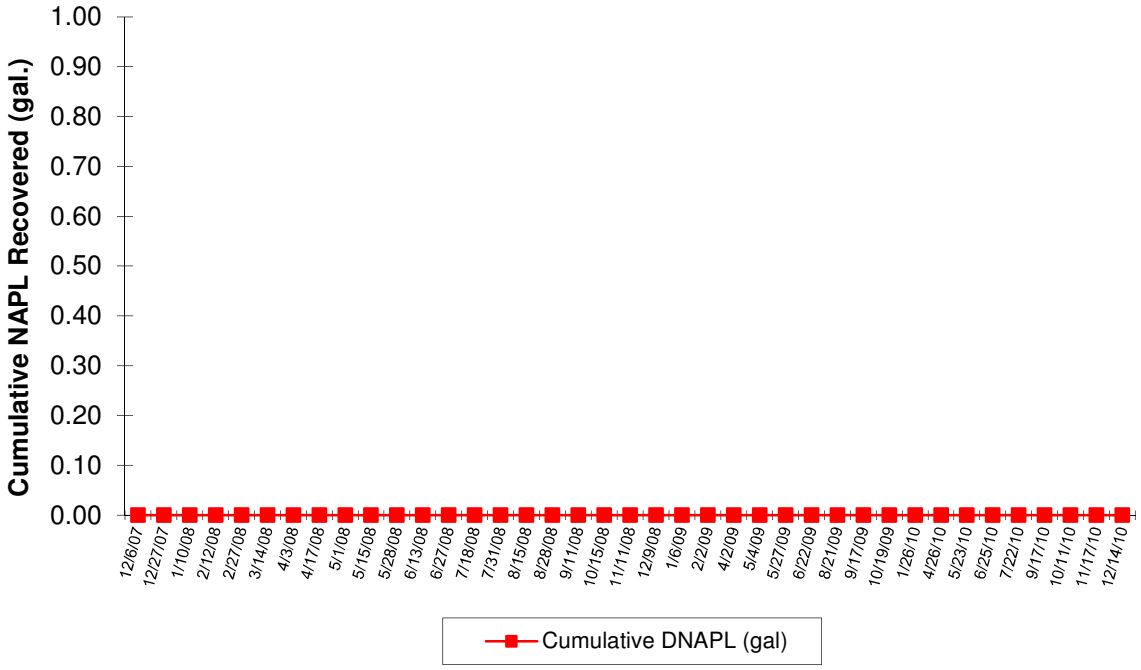


FIGURE 11G
Well HIMW-11I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



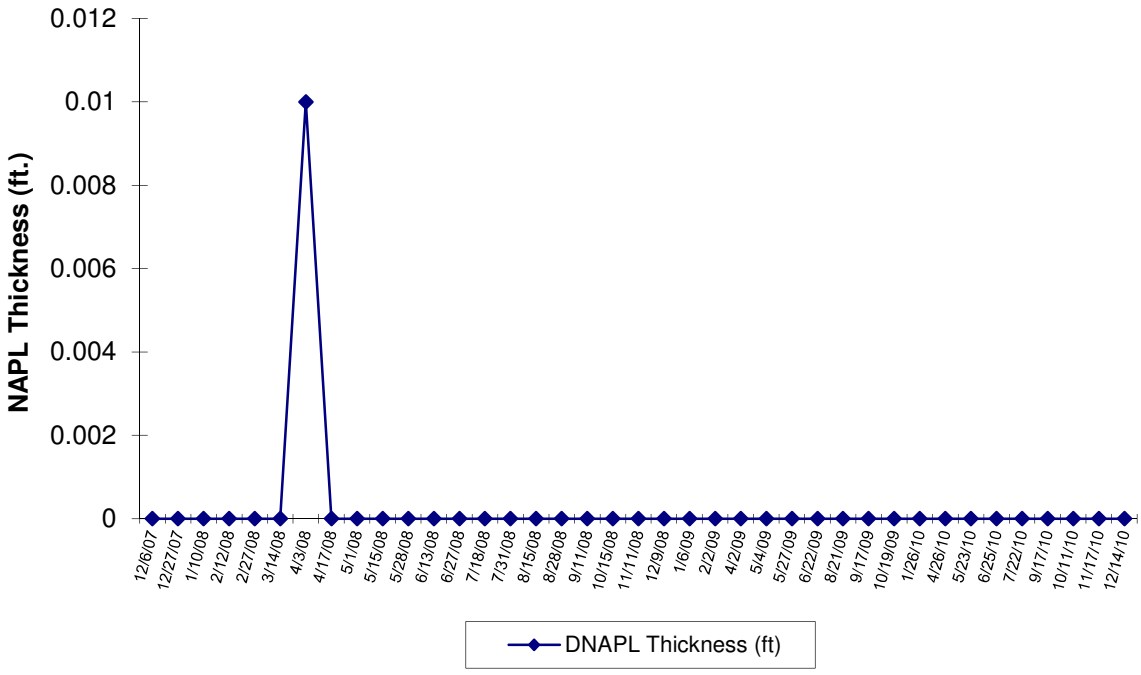
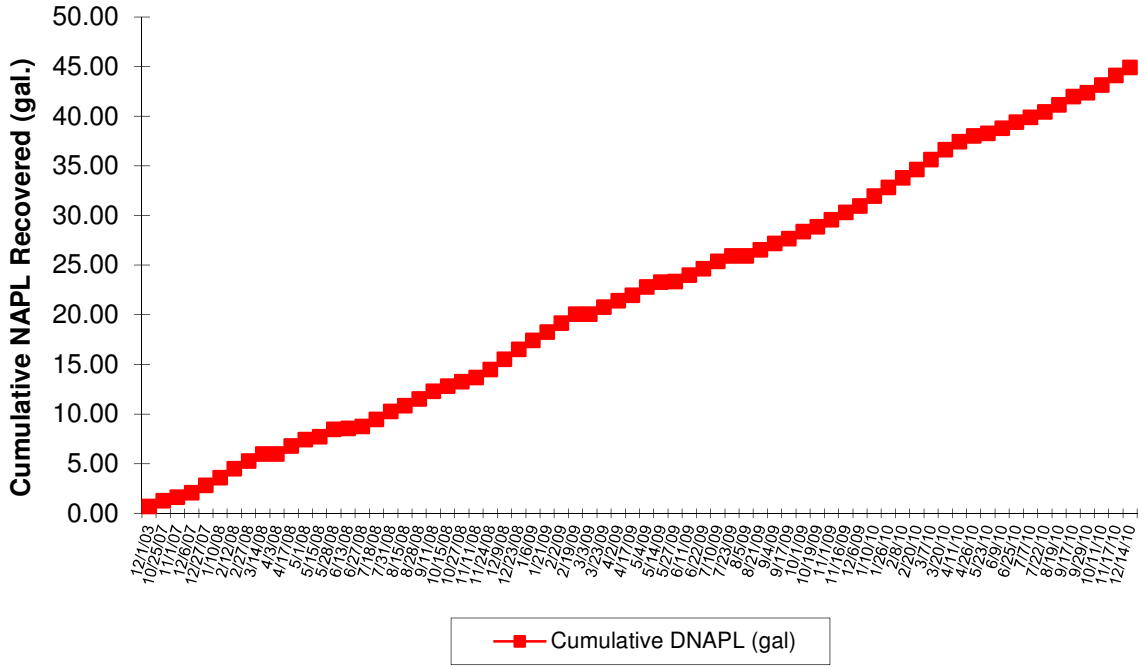


FIGURE 11H
Well HIMW-16S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



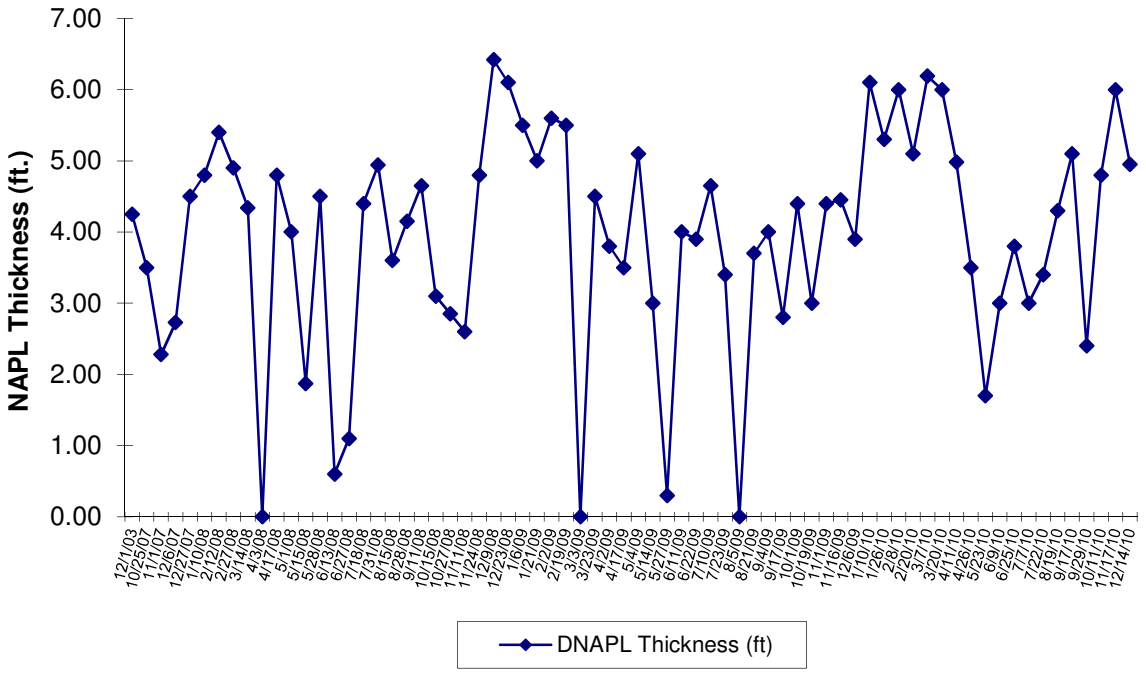
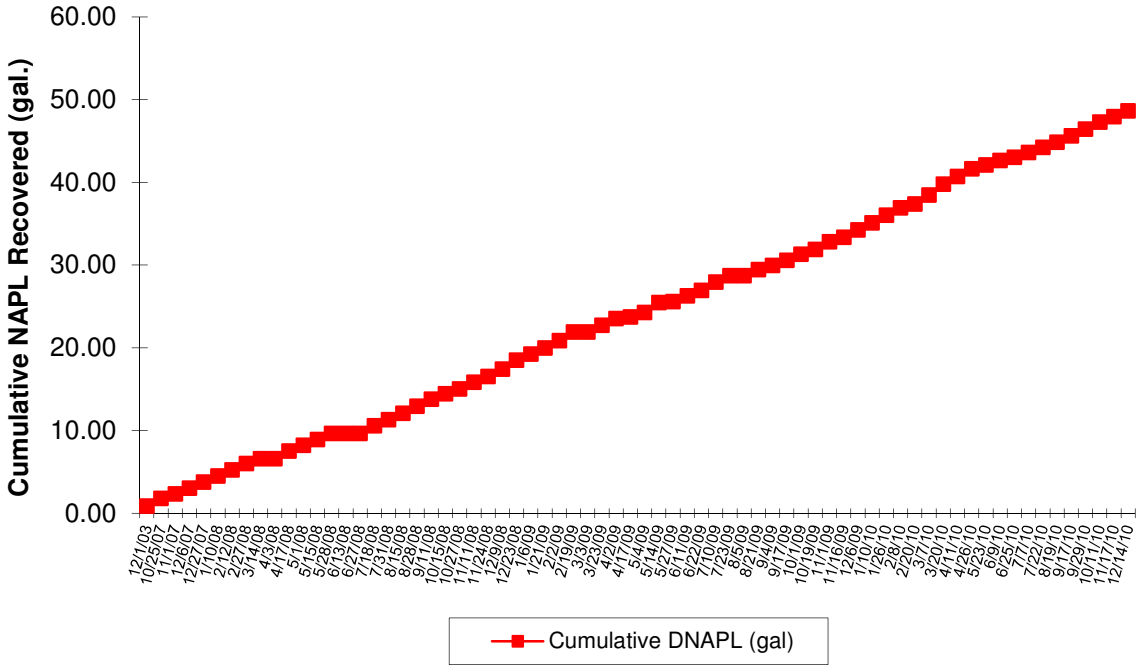


FIGURE 11I
Well HIMW-16I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



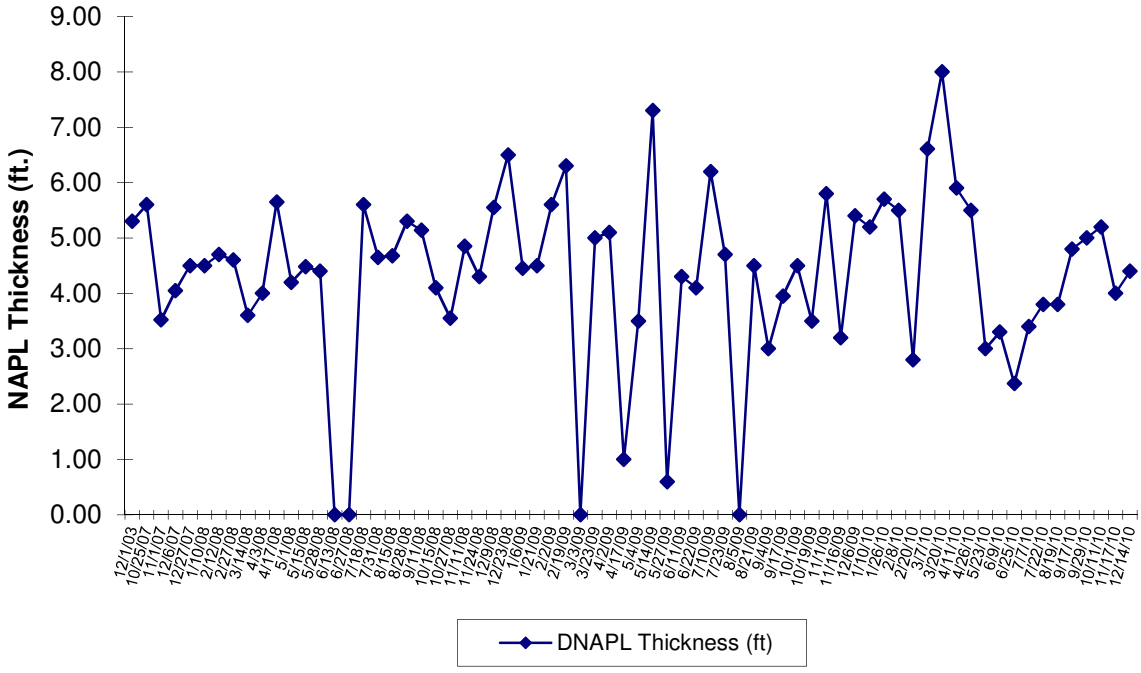
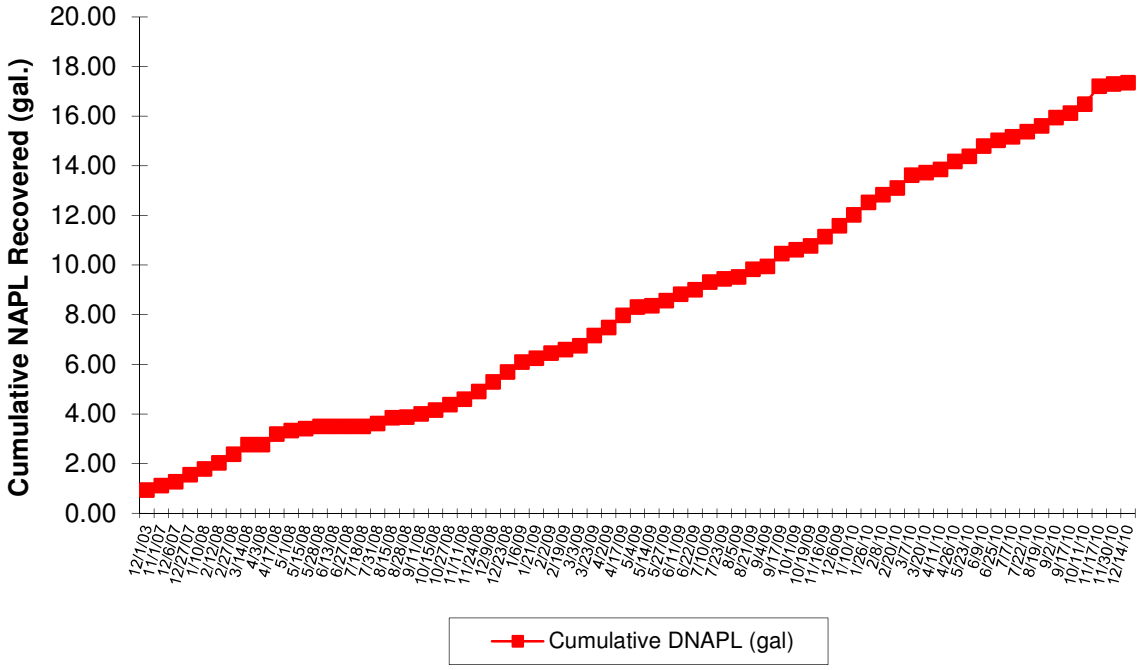


FIGURE 11J
Well HIMW-17S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



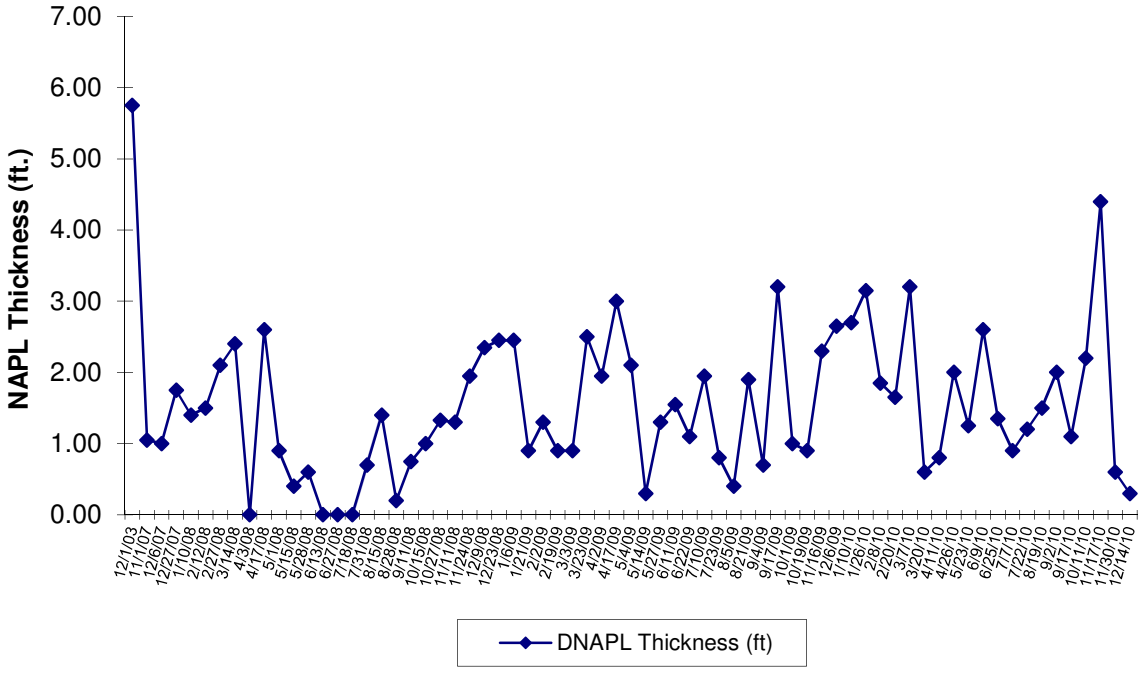
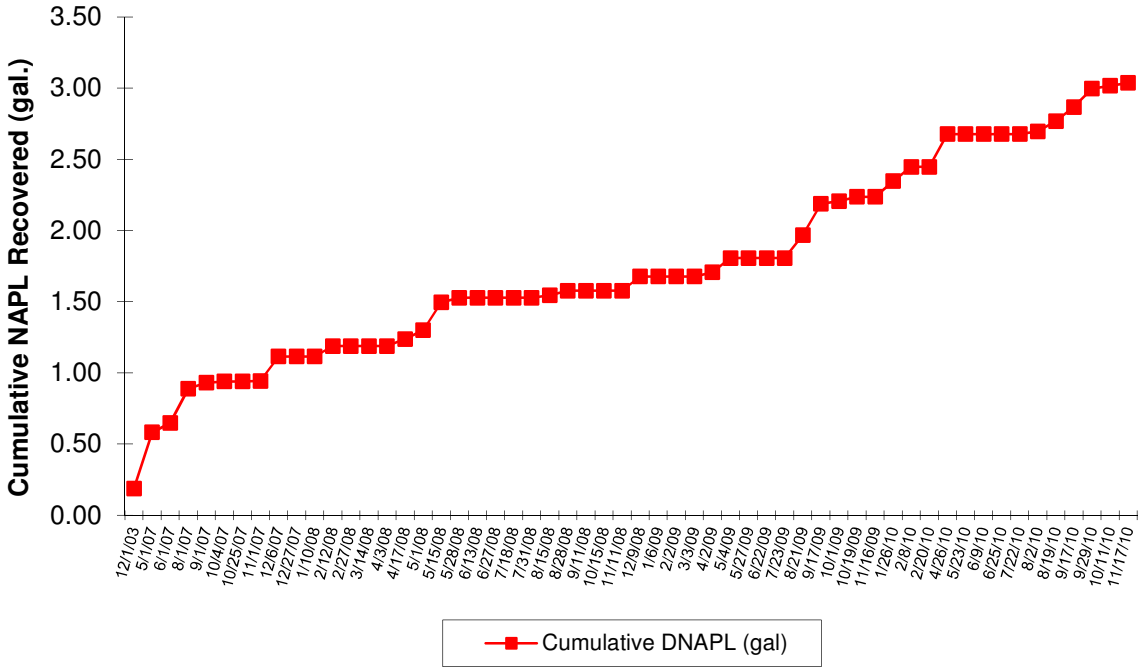


FIGURE 11K
Well HIMW-18S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



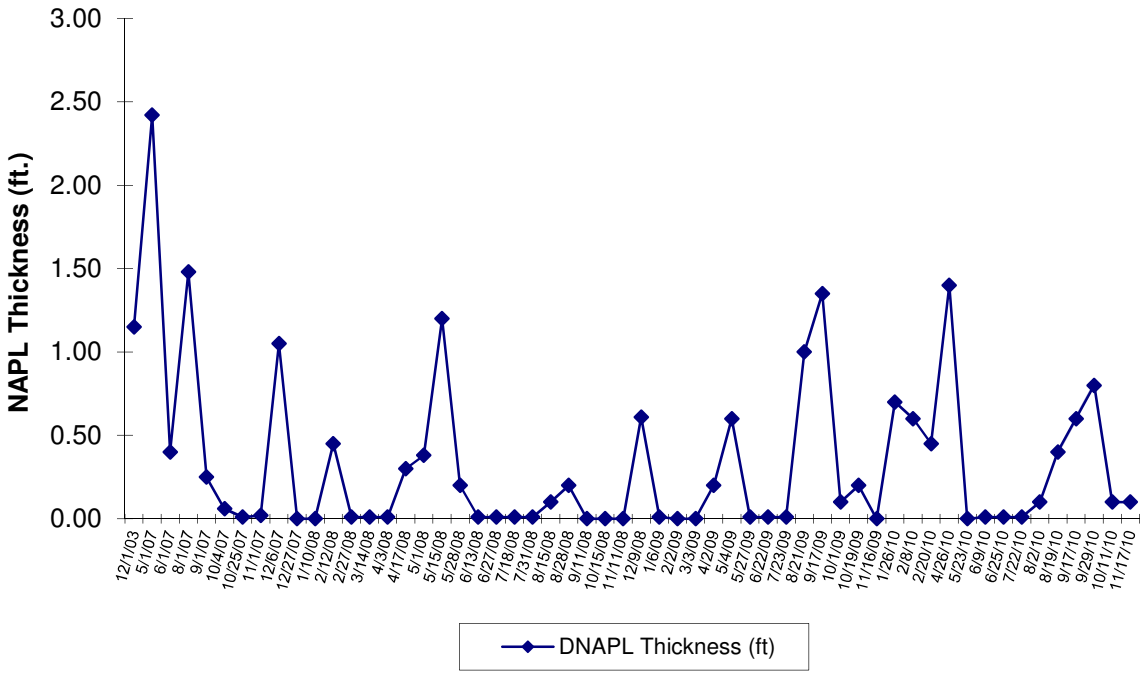
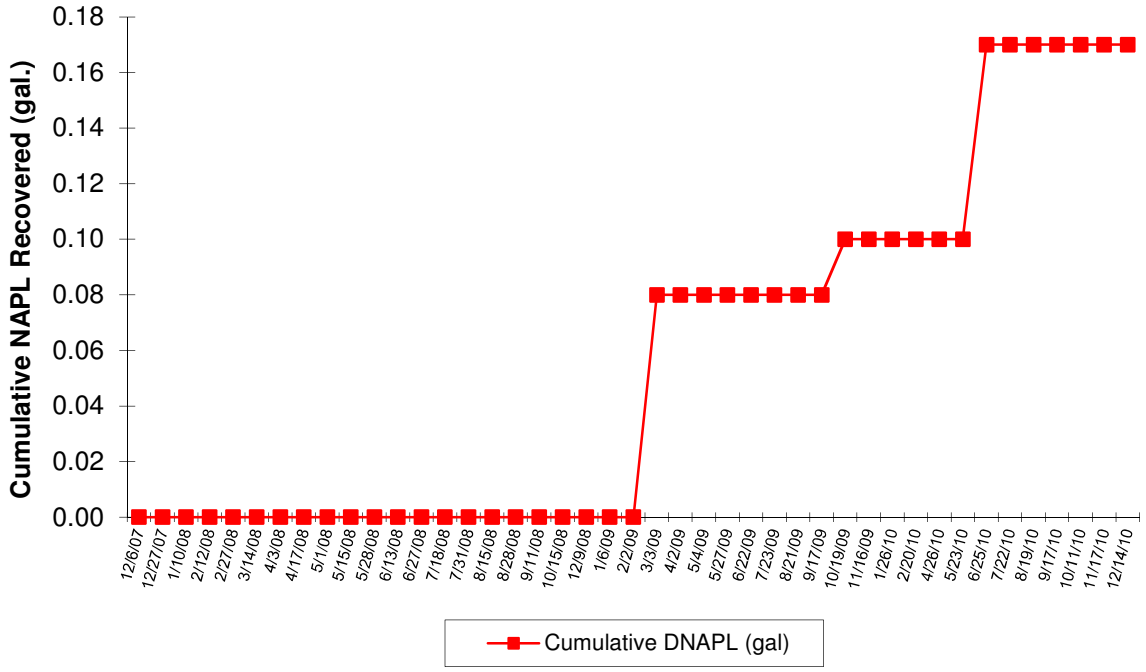


FIGURE 11L
Well HIMW-18I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



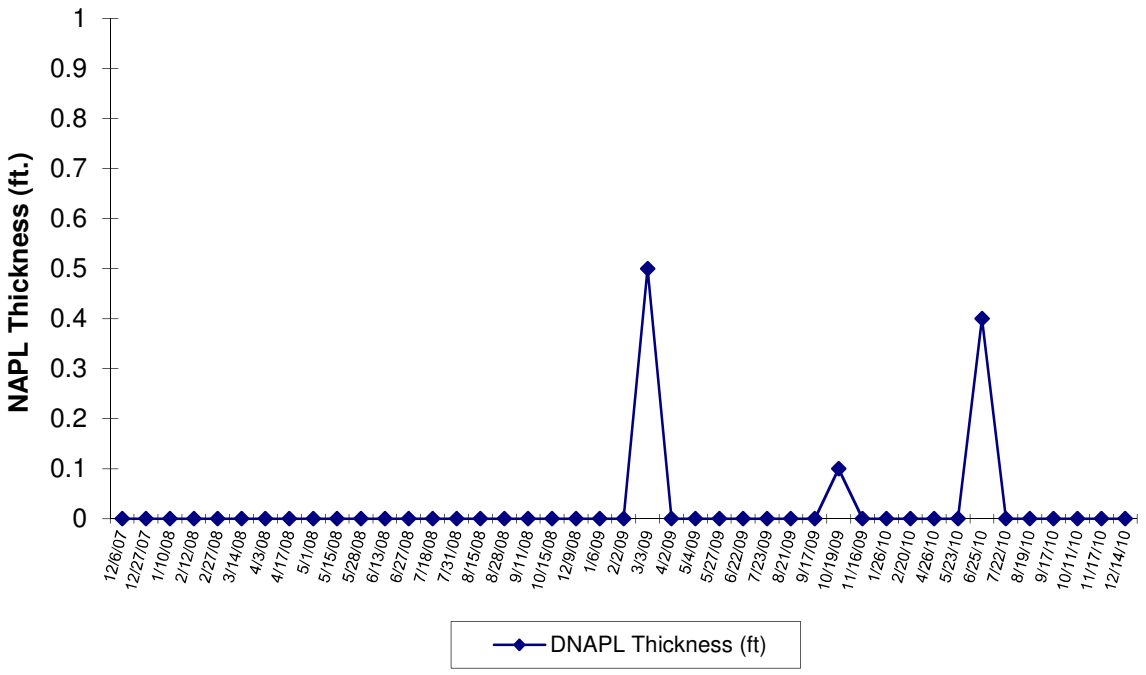
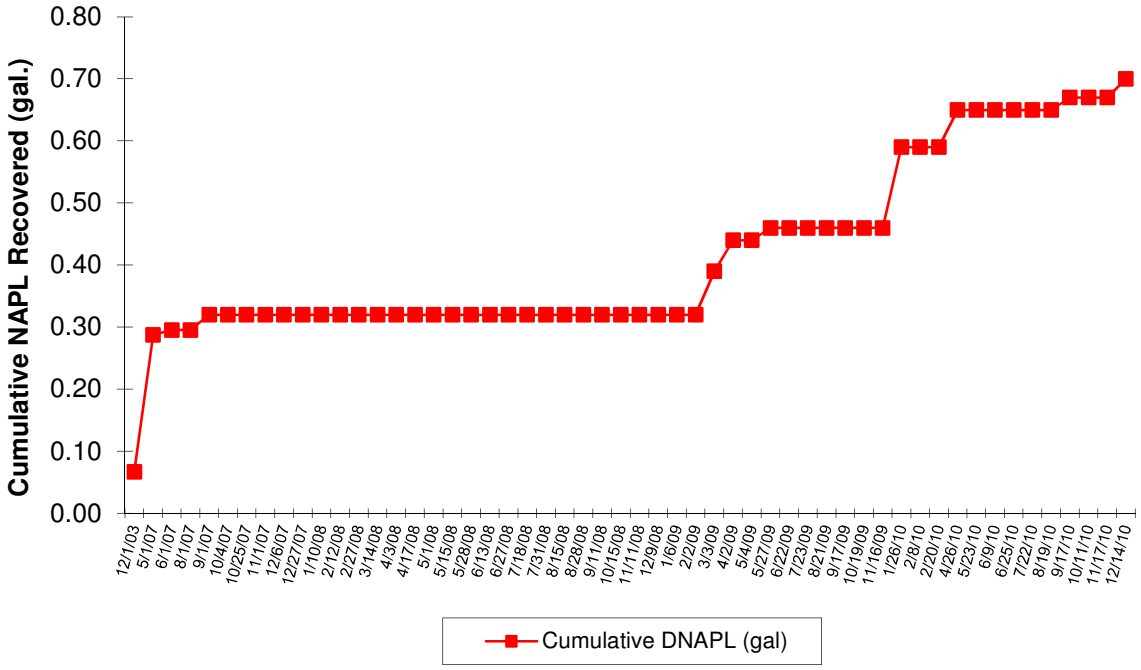


FIGURE 11M
Well HIMW-19S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



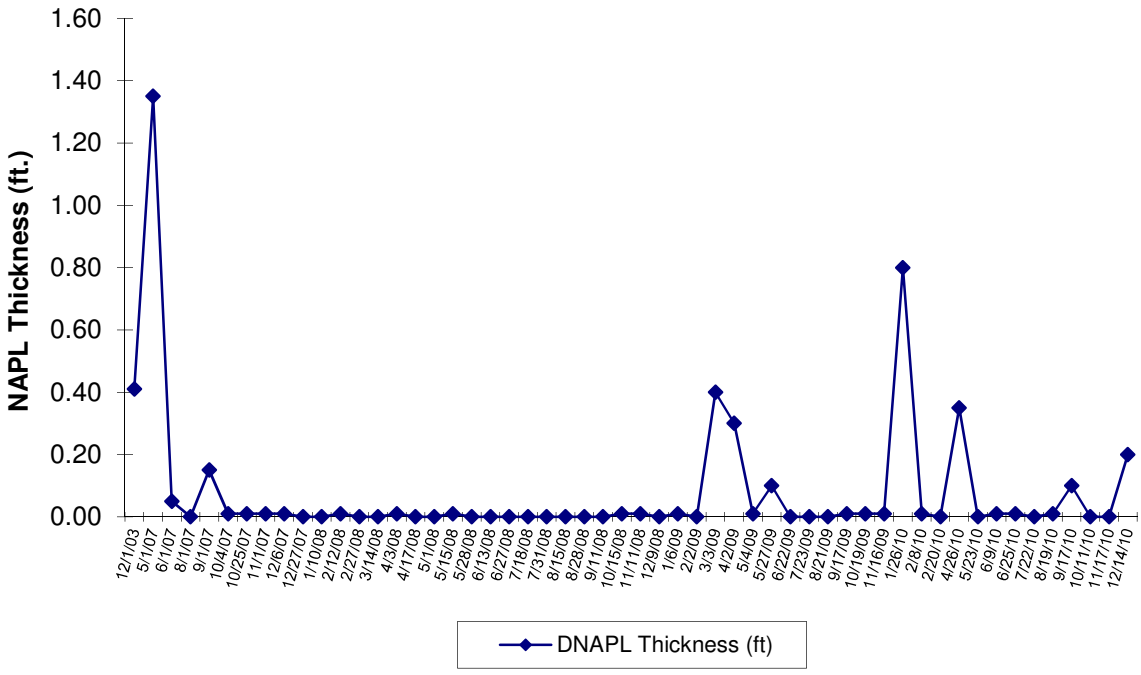
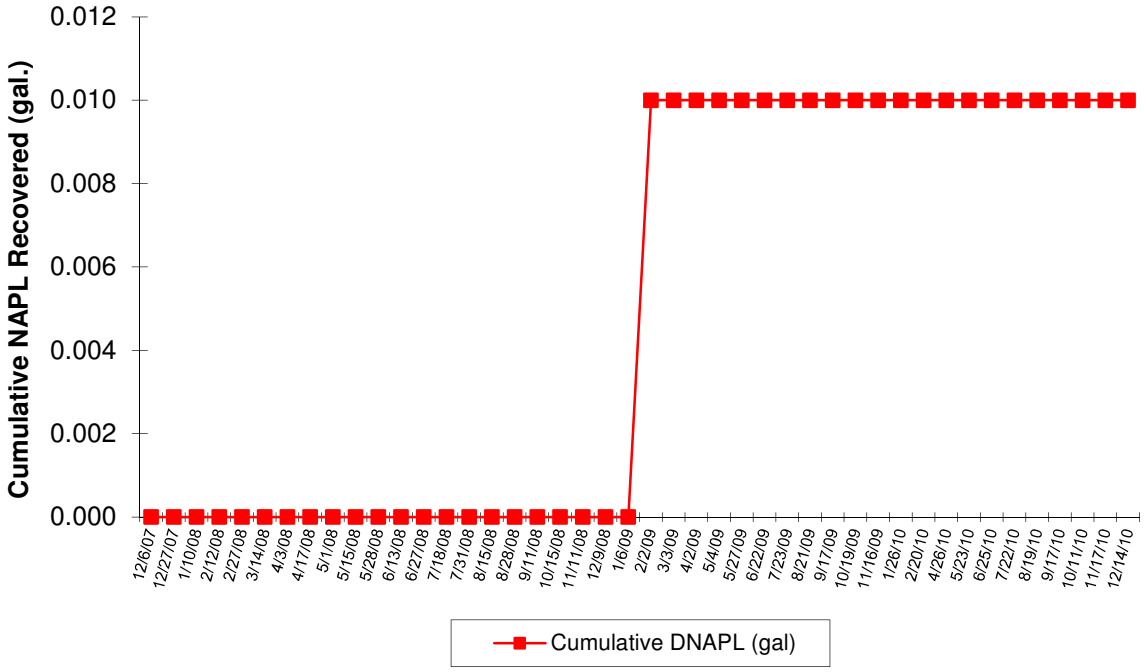


FIGURE 11N
Well HIMW-19I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



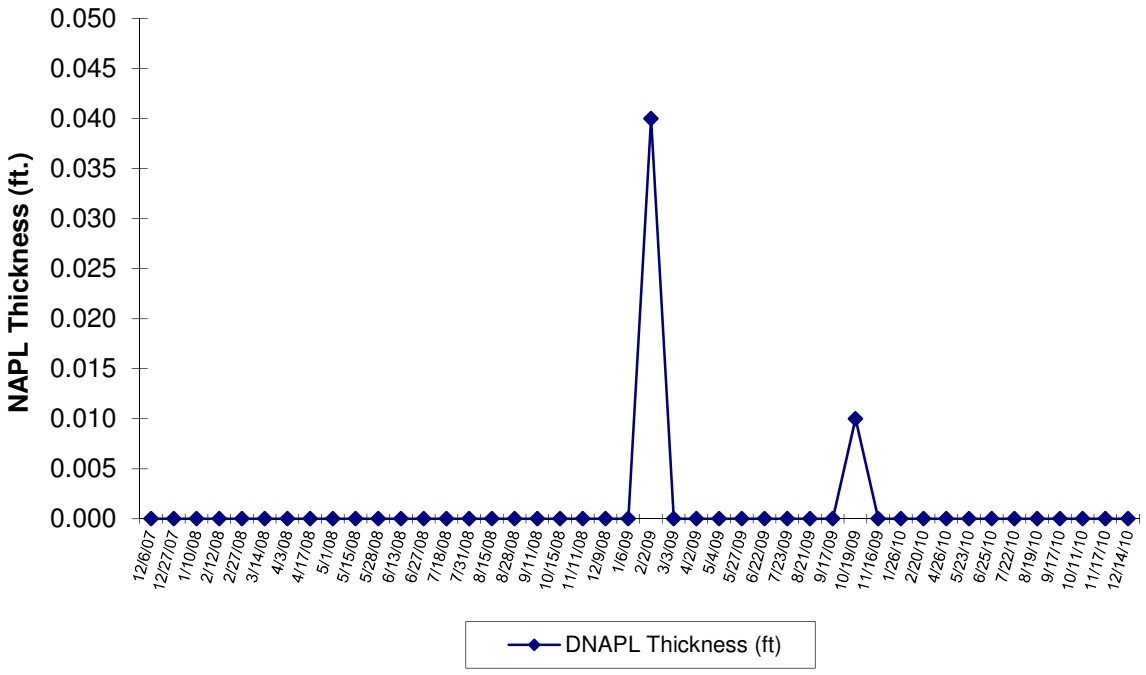
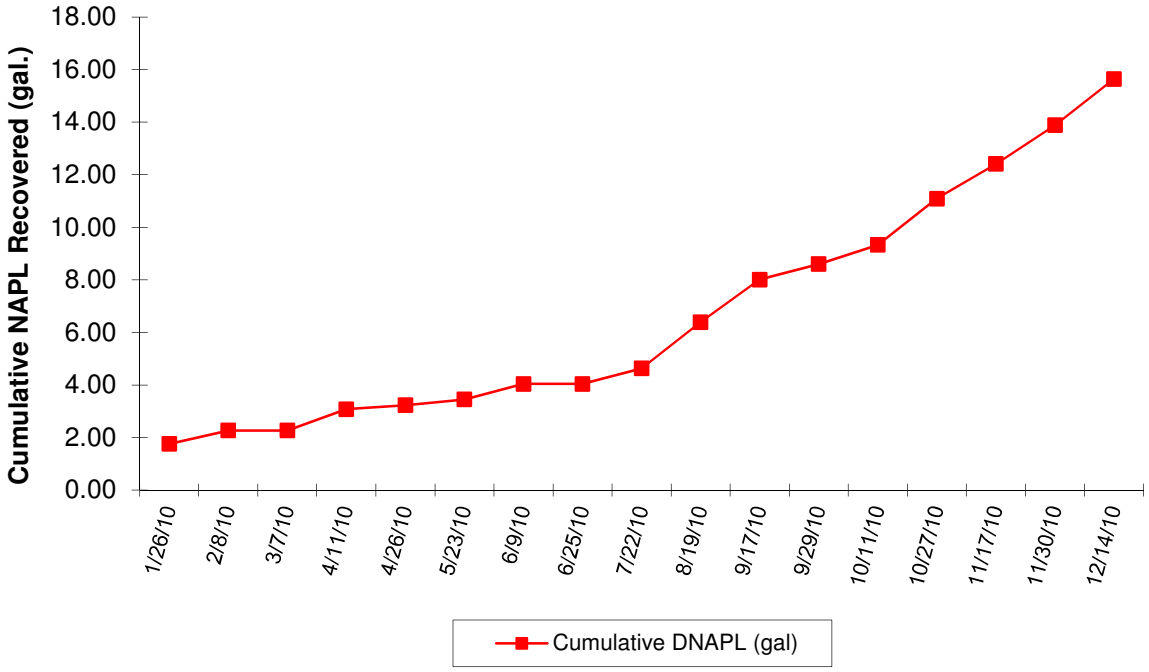


FIGURE 11O
Well HIMW-21 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



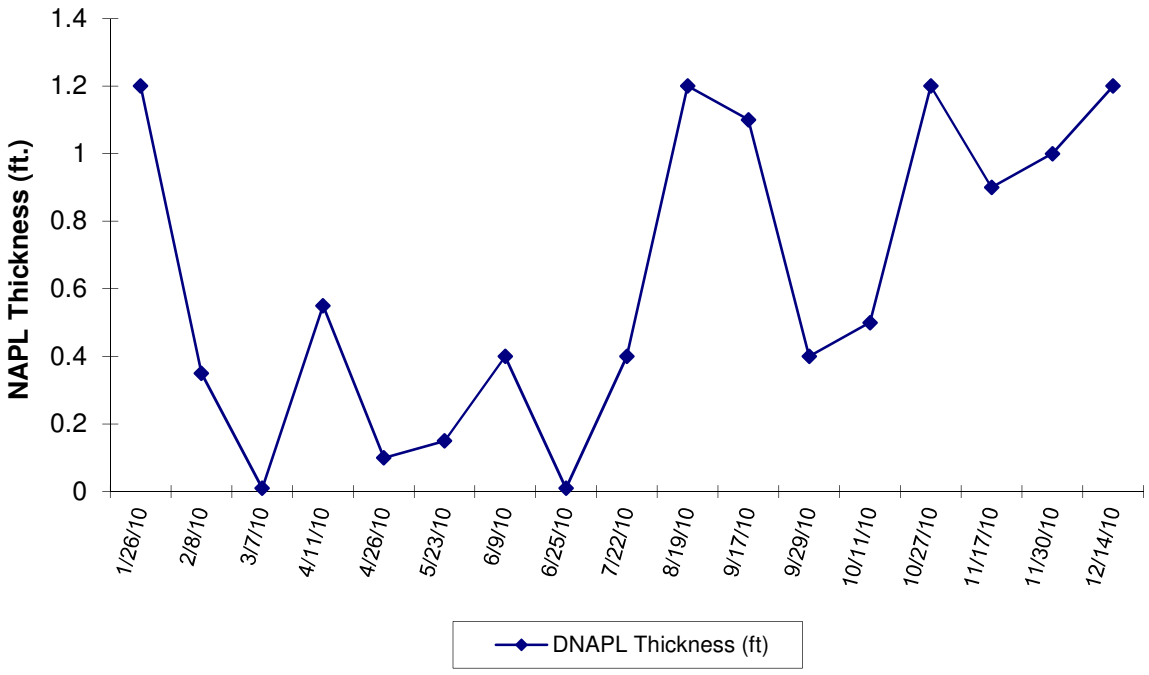
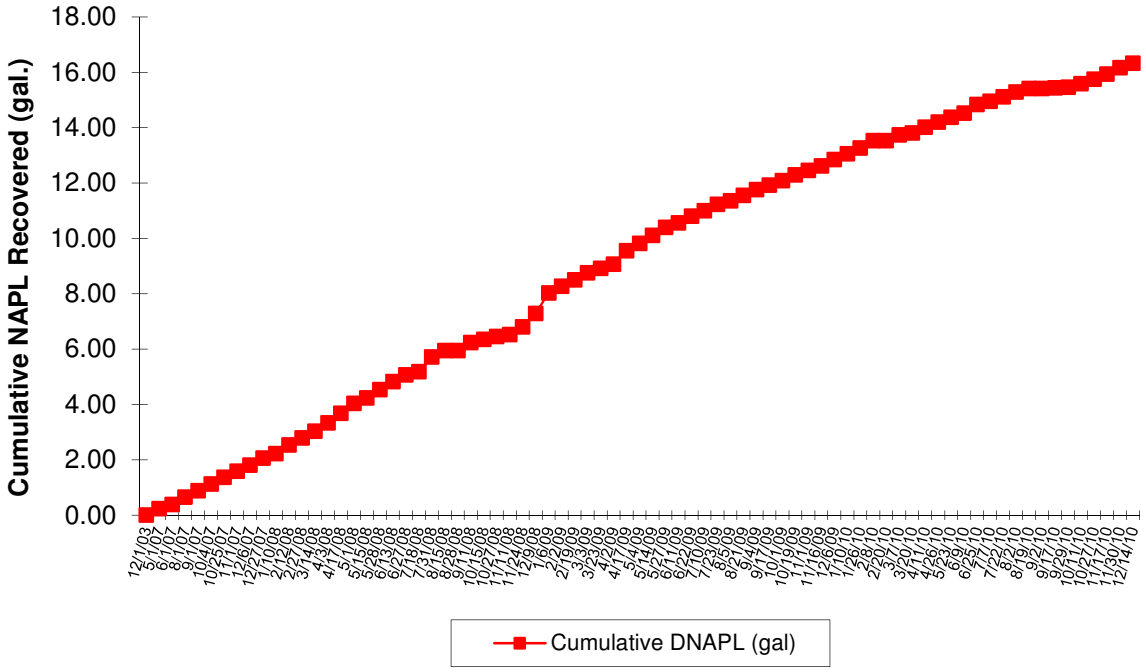


FIGURE 11P
Well PZ-08 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



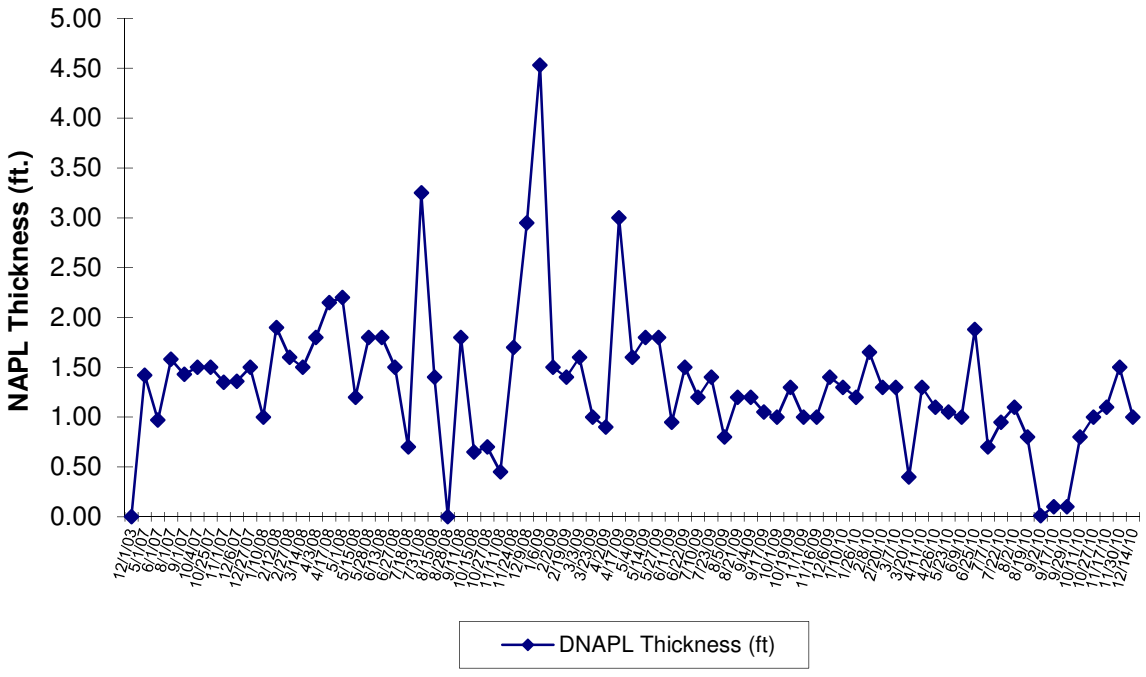
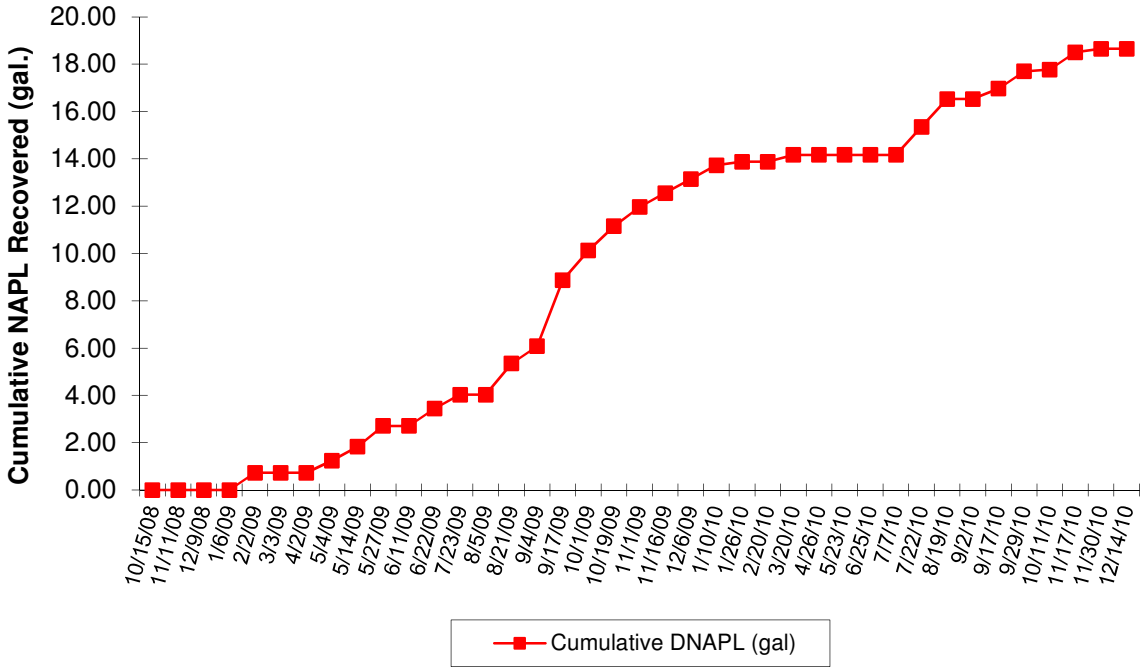


FIGURE 11Q
Well IPR-02 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



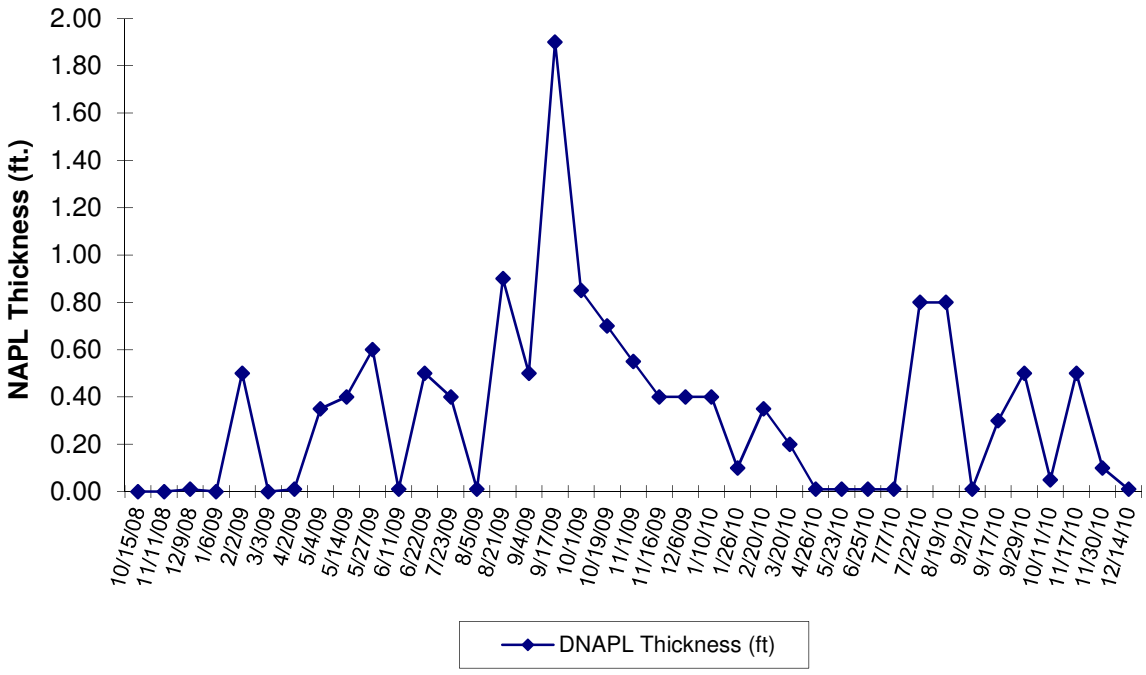
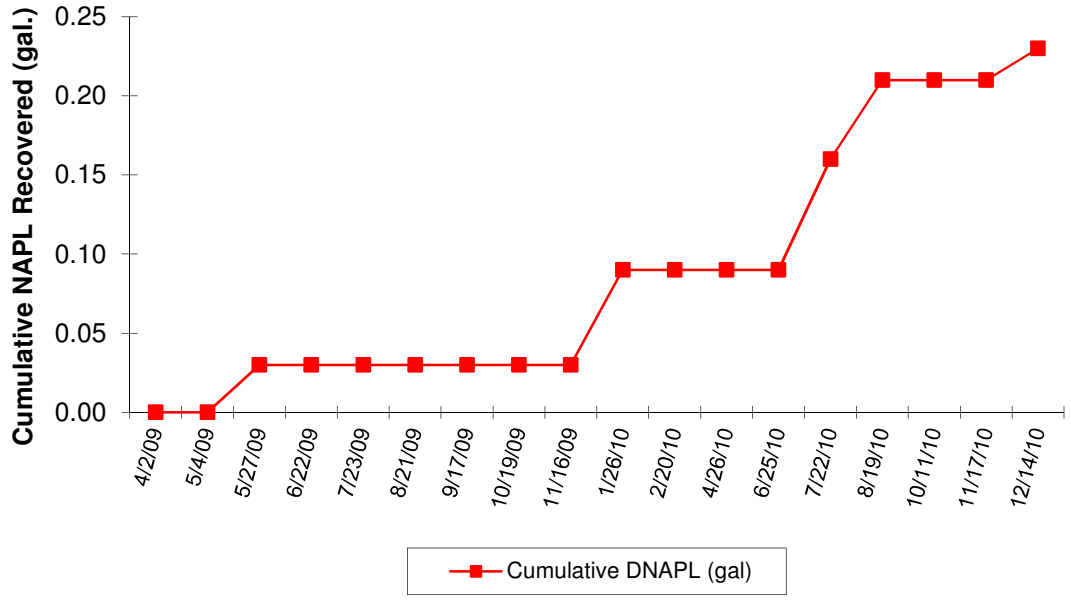


FIGURE 11R
Well IPR-05 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



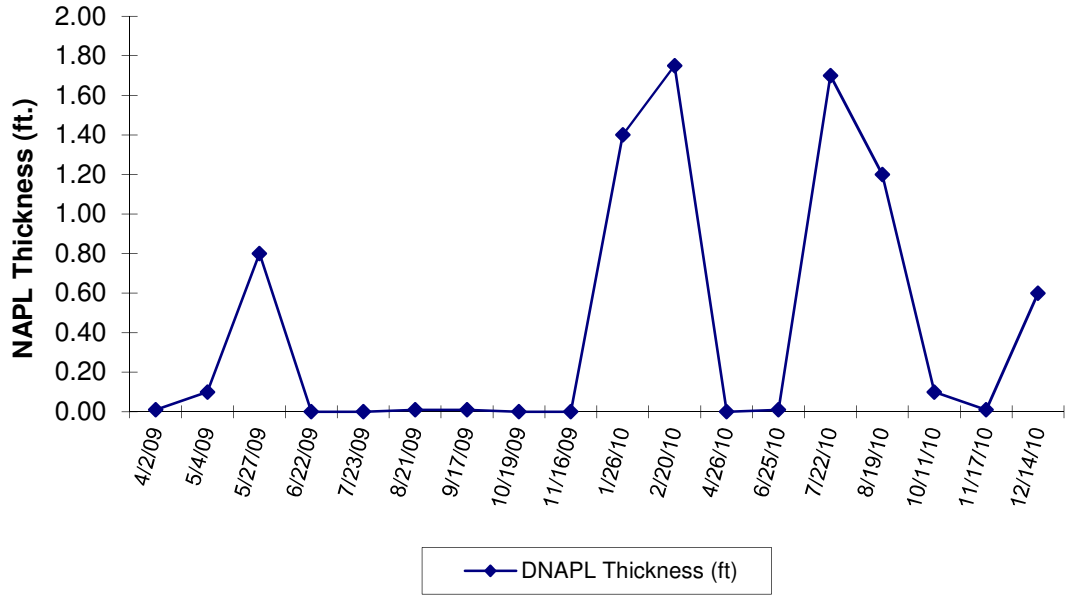
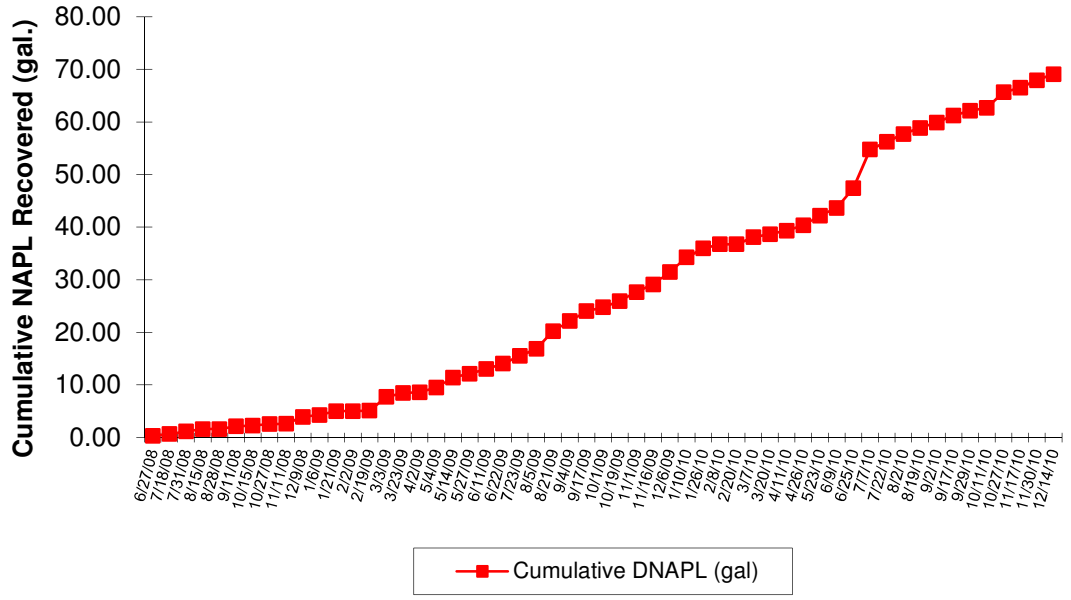


FIGURE 11S
Well IPR-06 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



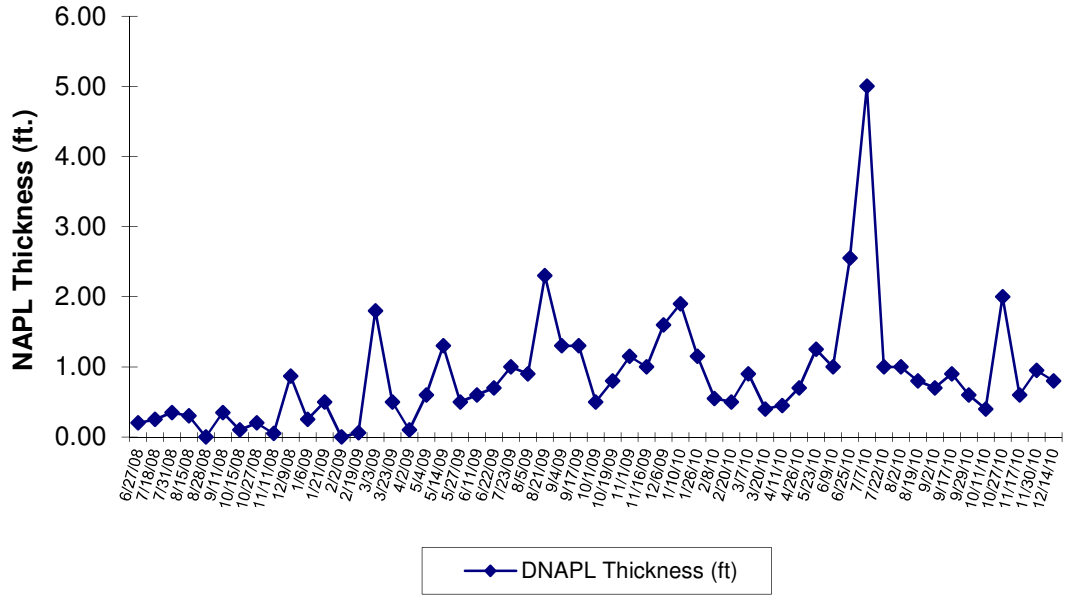
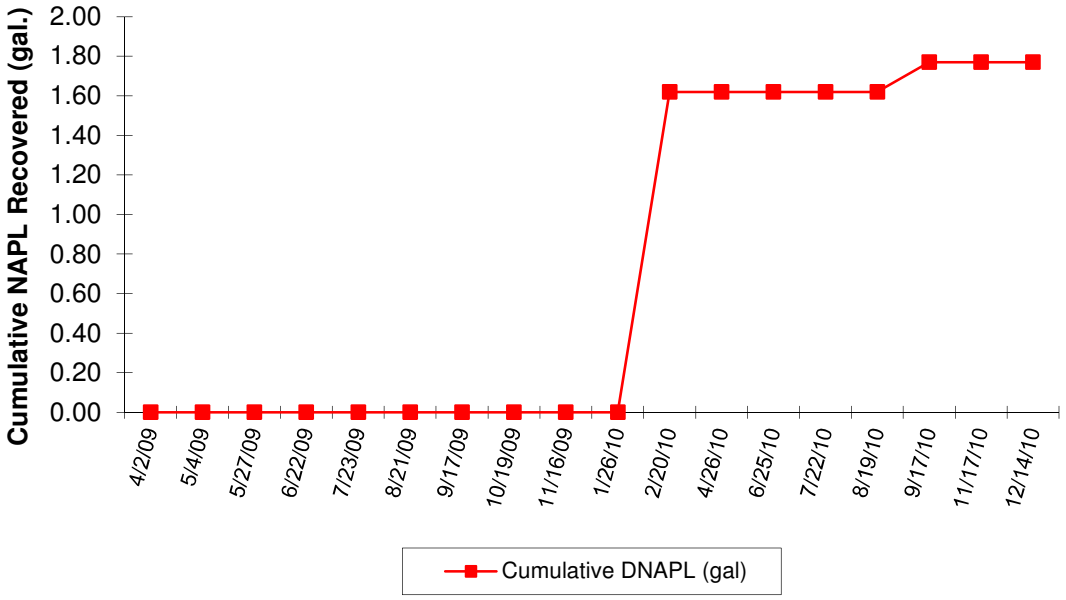


FIGURE 11T
Well IPR-09 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



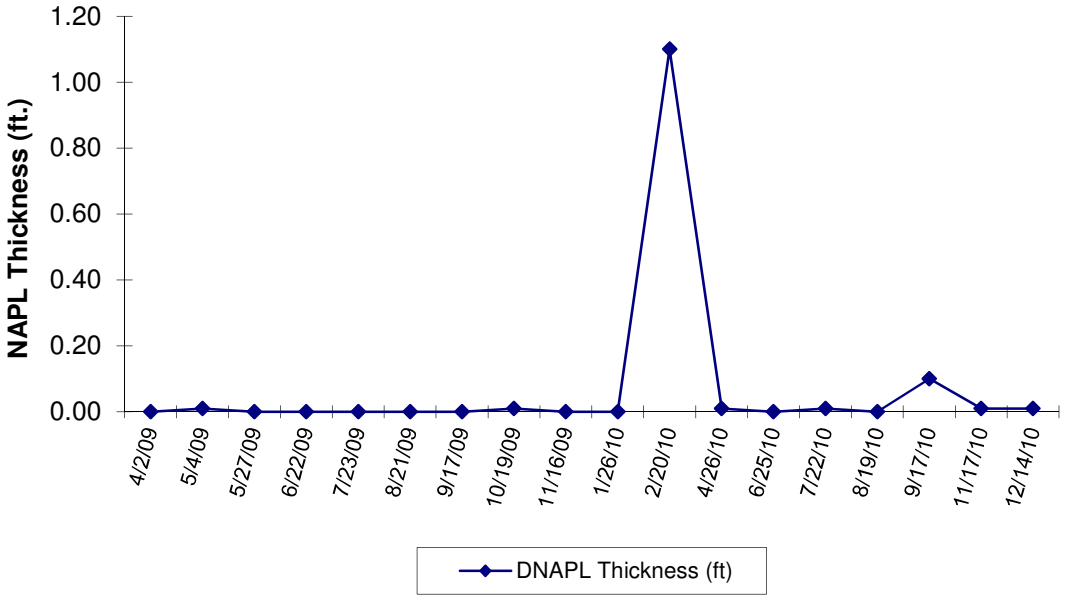
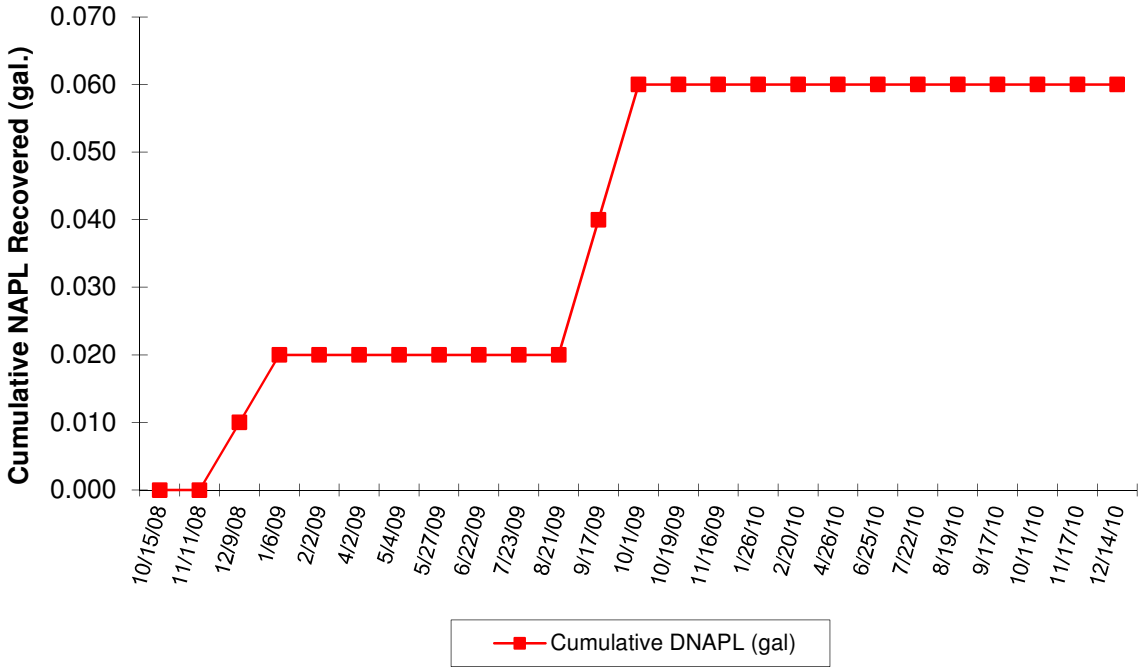


FIGURE 11U
Well IPR-12A NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



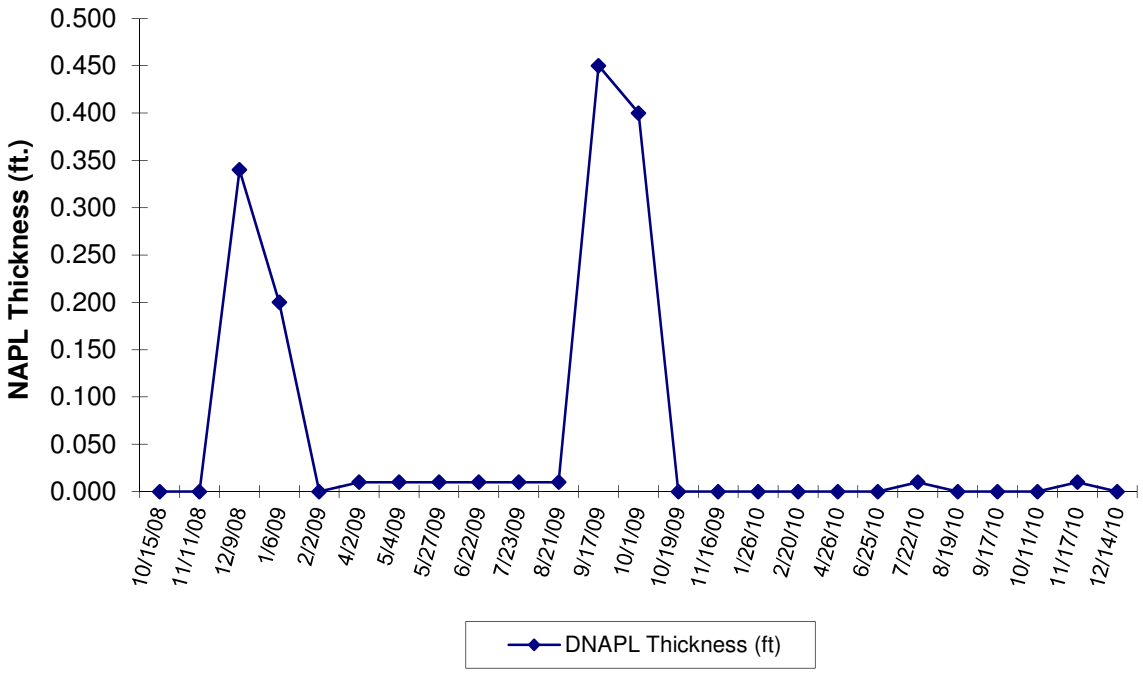
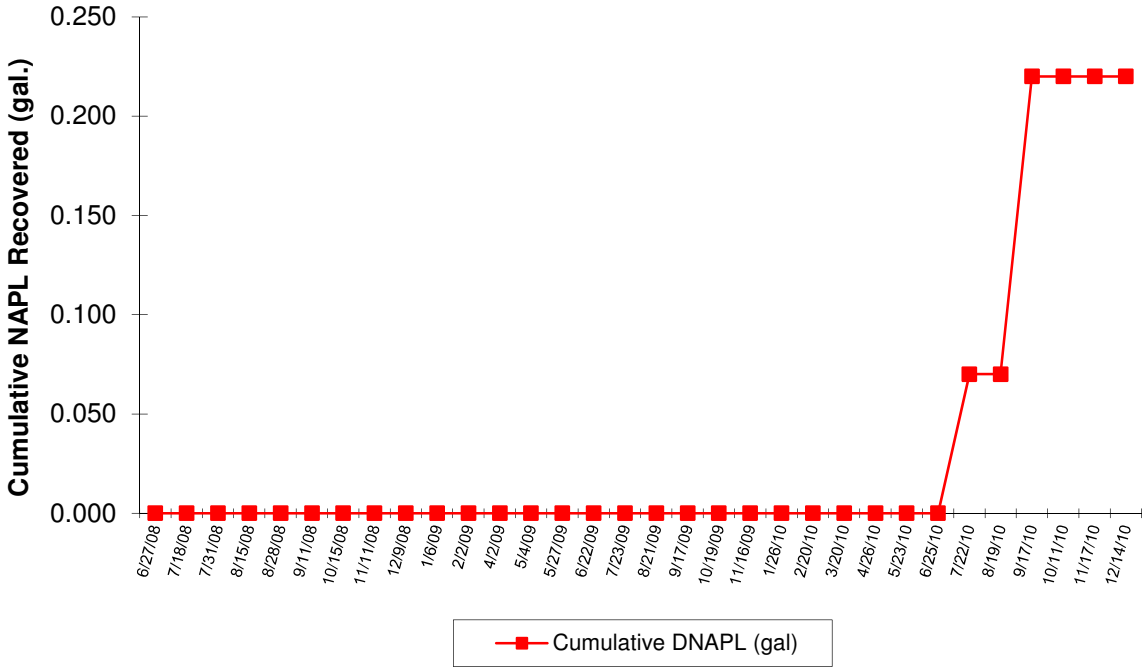


FIGURE 11V
Well IPR-15 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



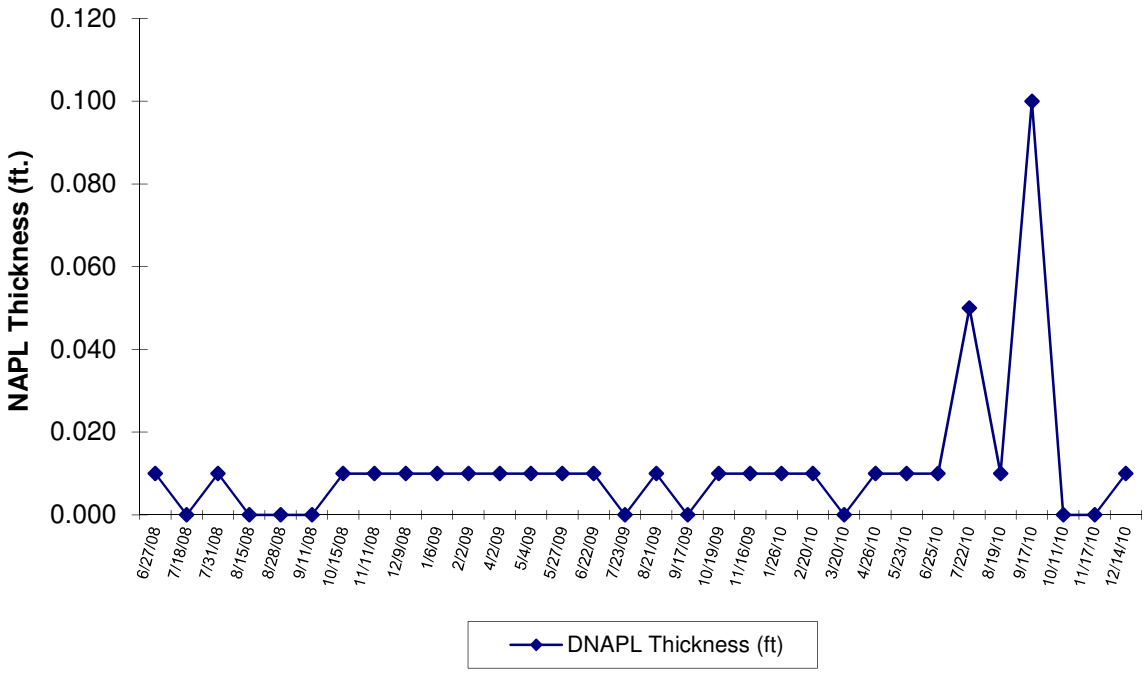
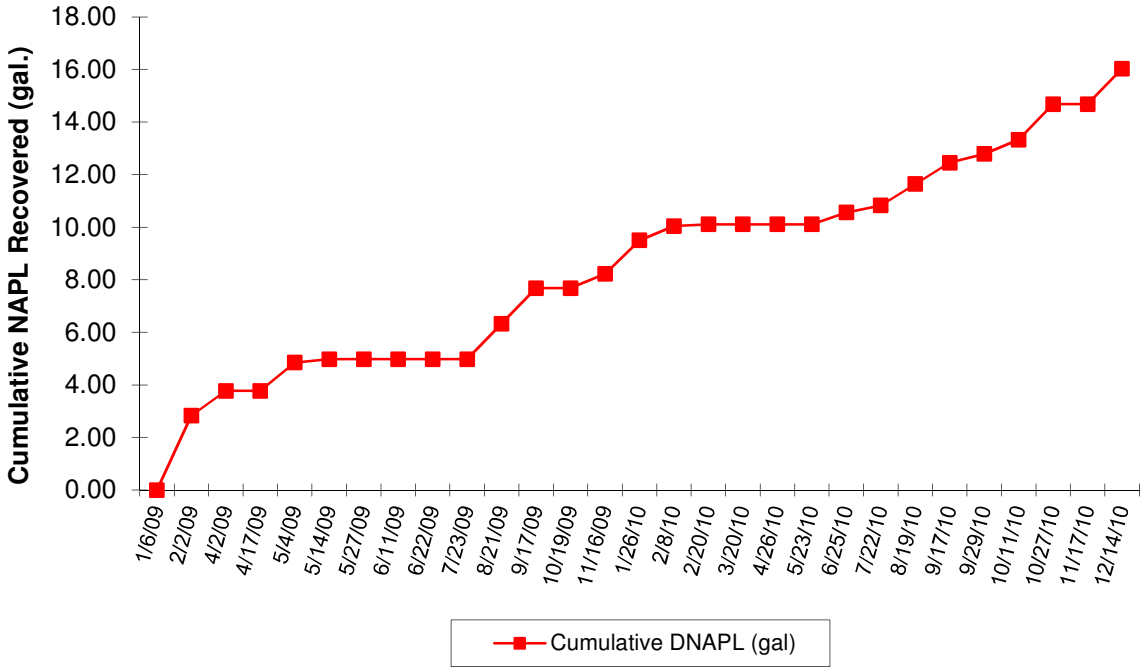


FIGURE 11W
Well IPR-16 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



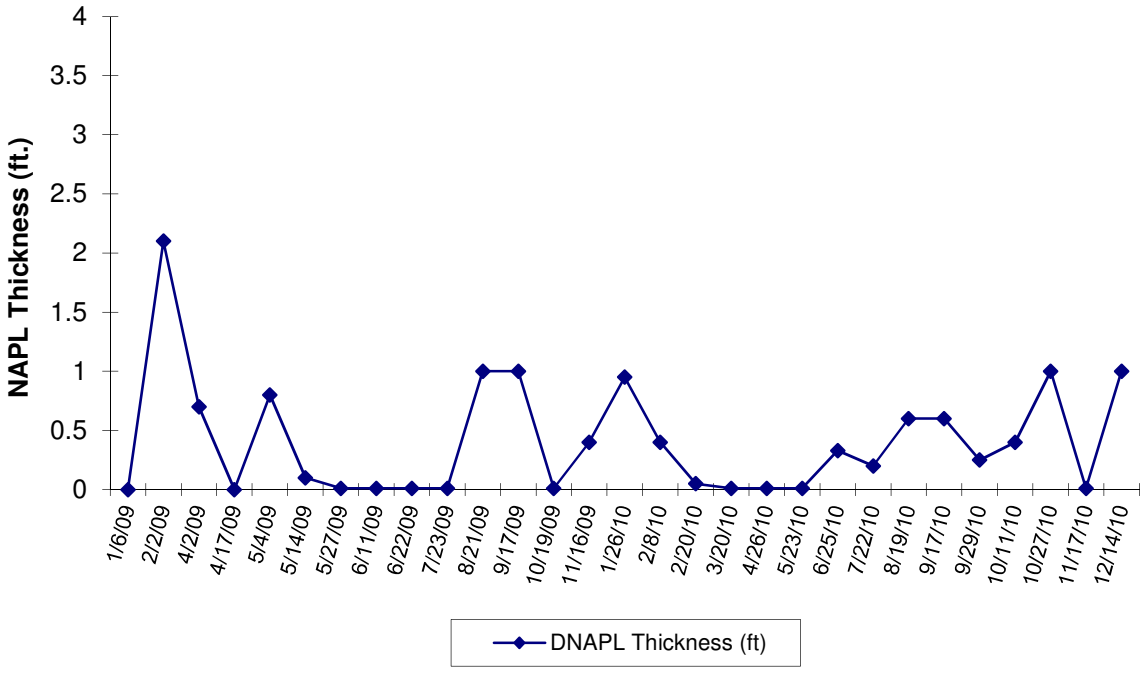
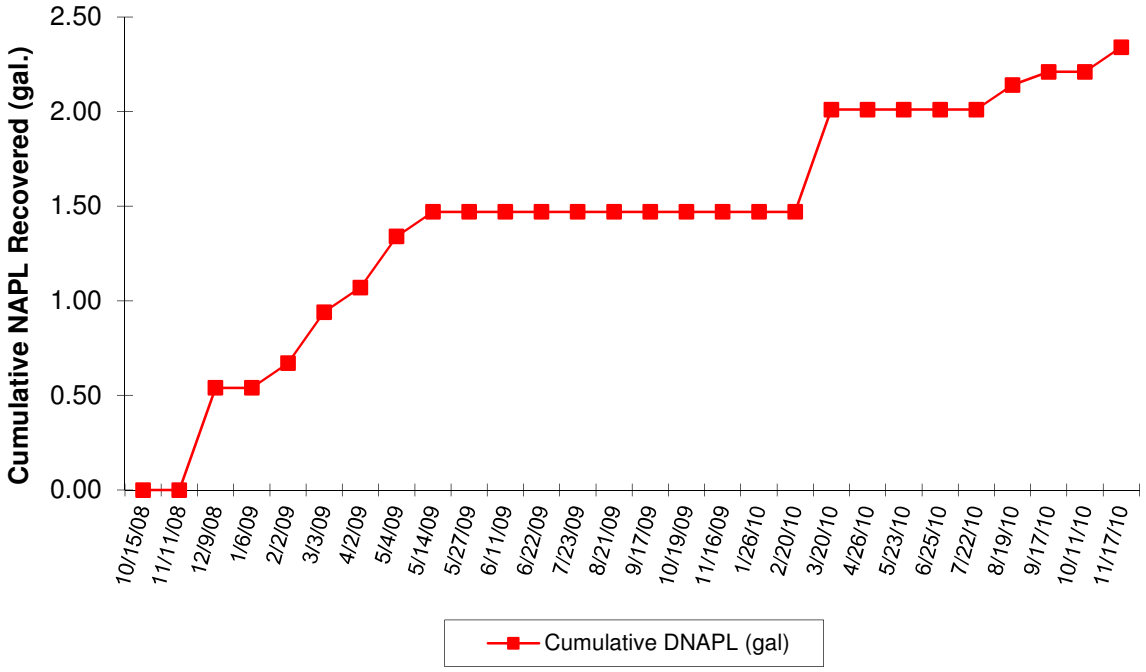


FIGURE 11X
Well IPR-17 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



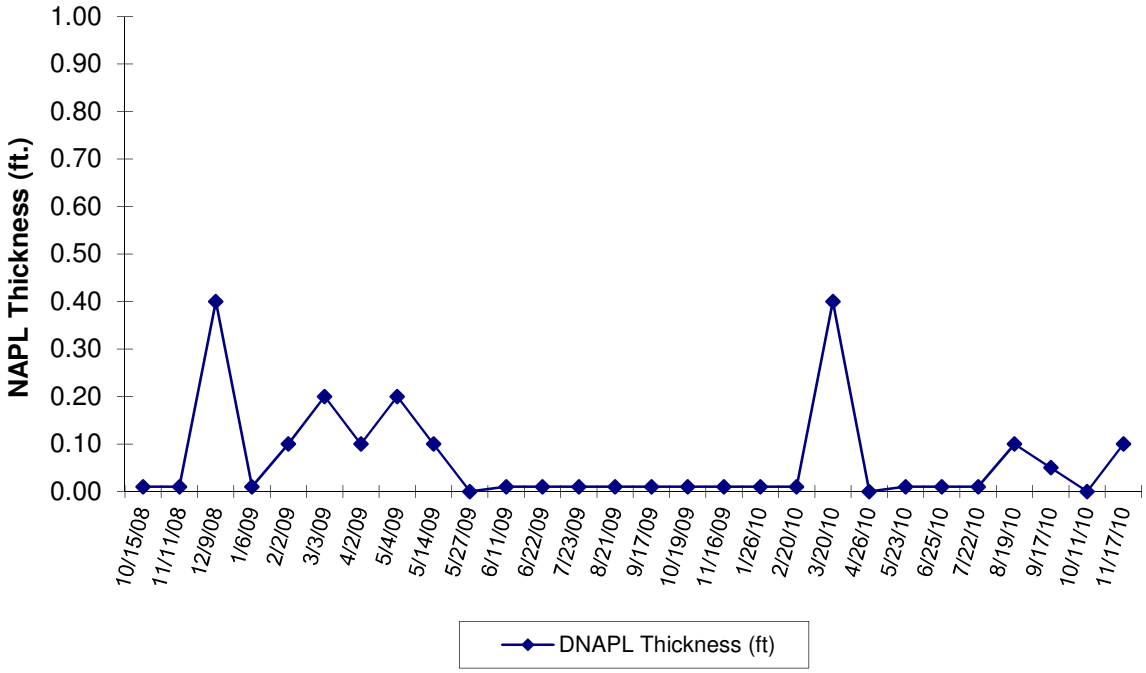
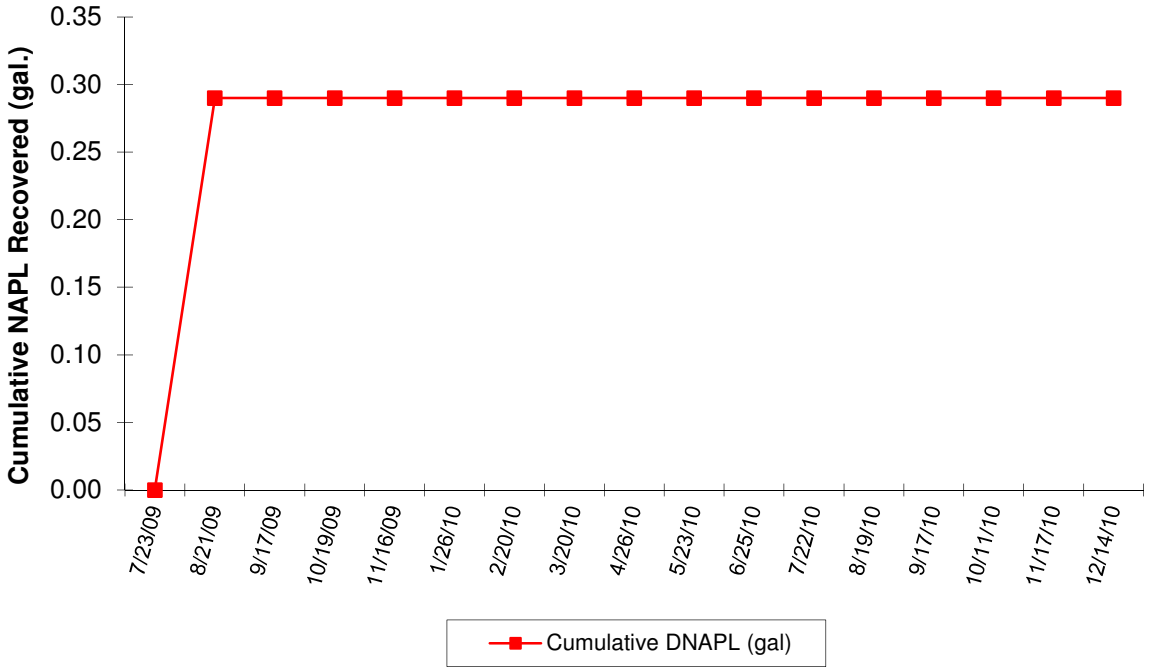


FIGURE 11Y
Well IPR-18 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



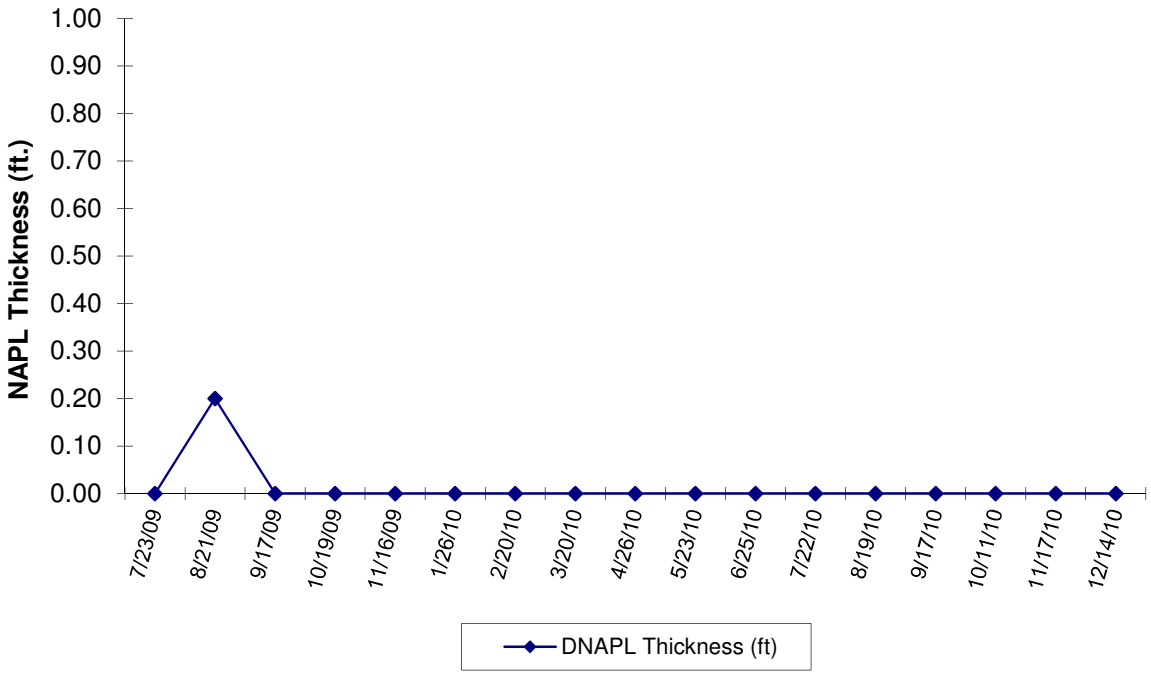
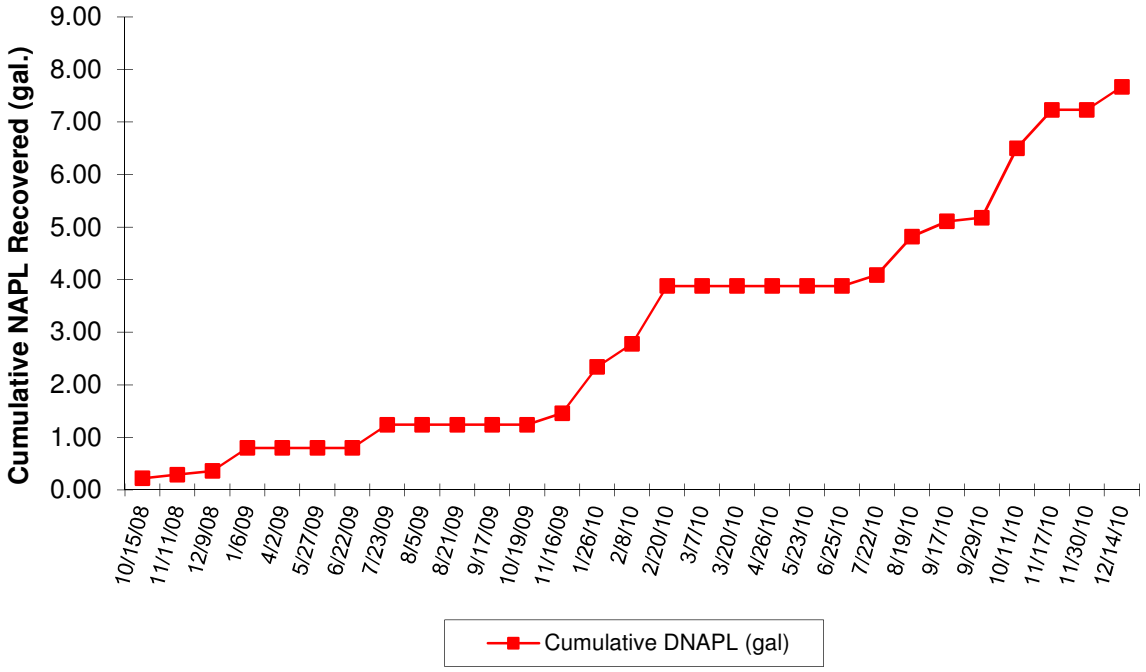


FIGURE 11Z
Well IPR-20 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



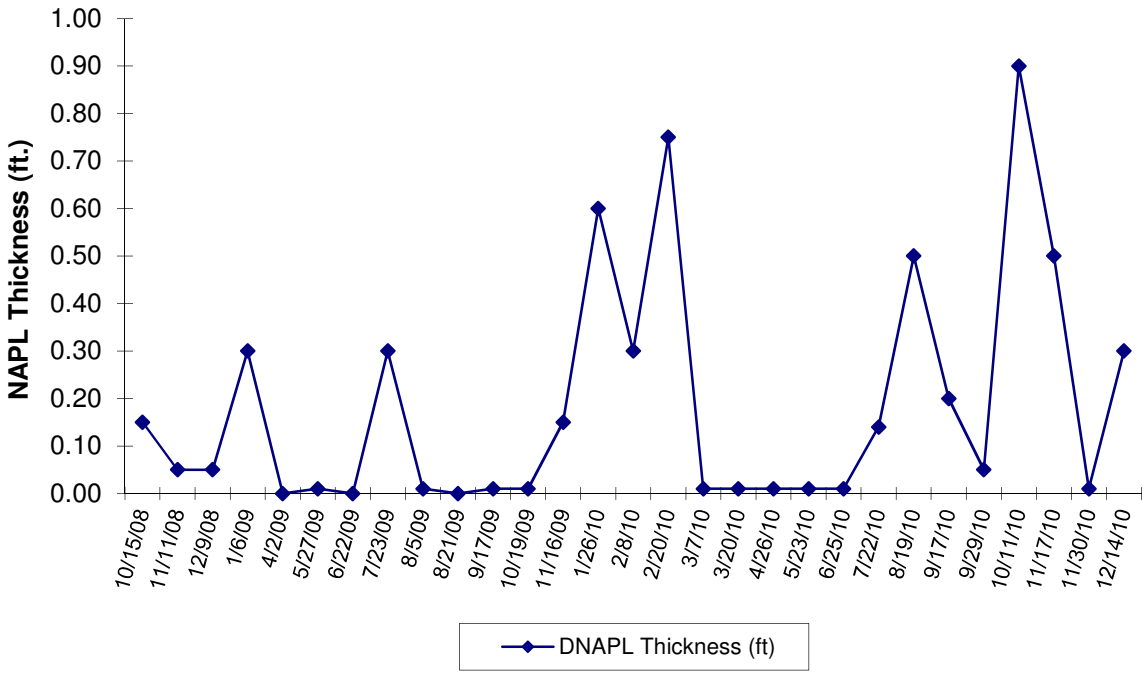
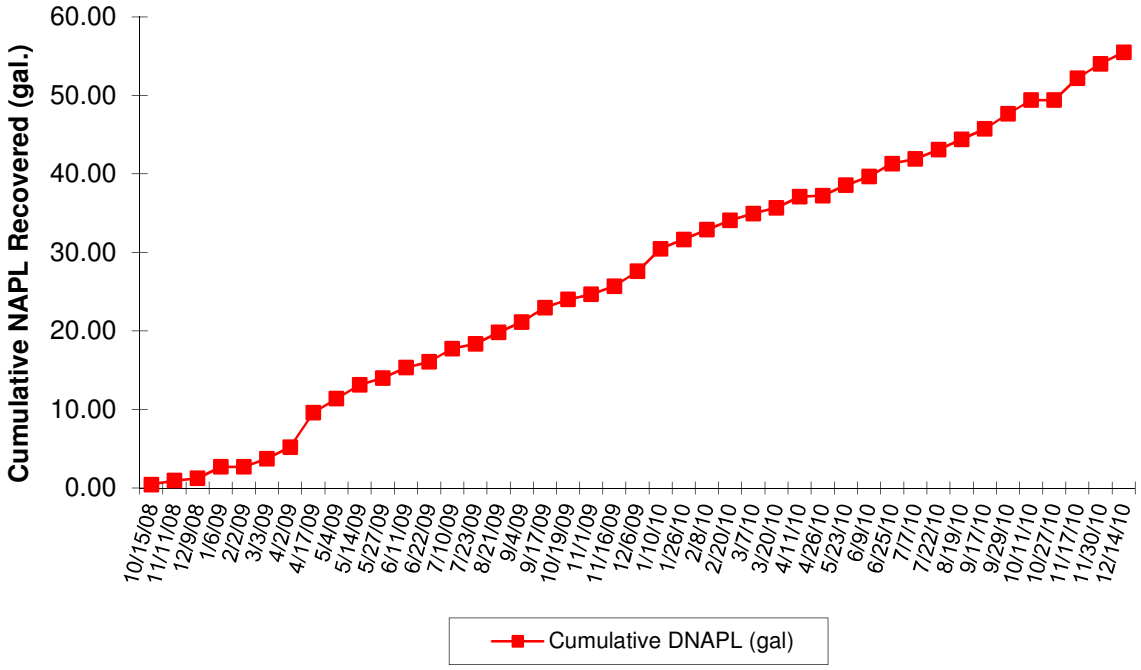


FIGURE 11AA
Well IPR-21 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



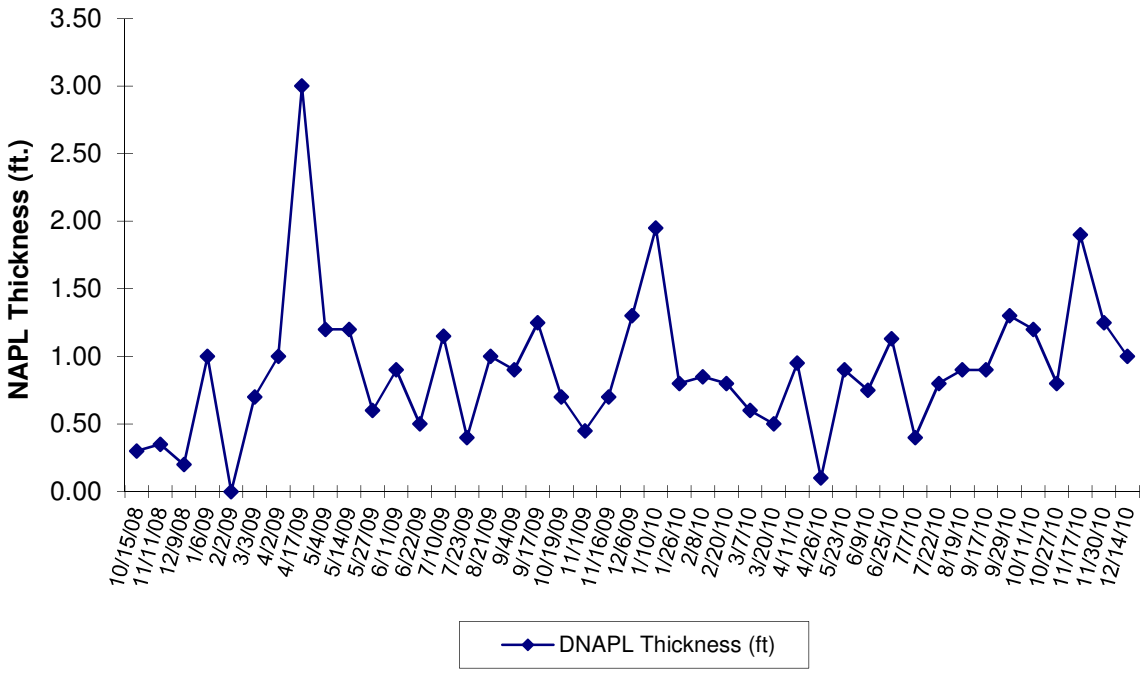
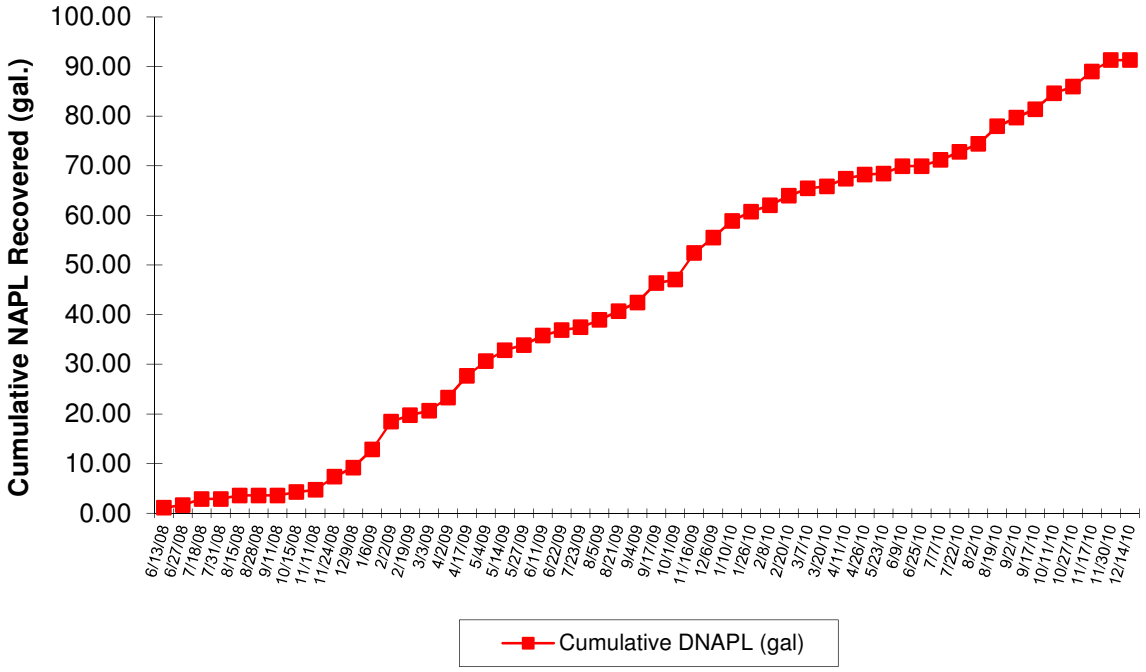


FIGURE 11AB
Well IPR-22 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



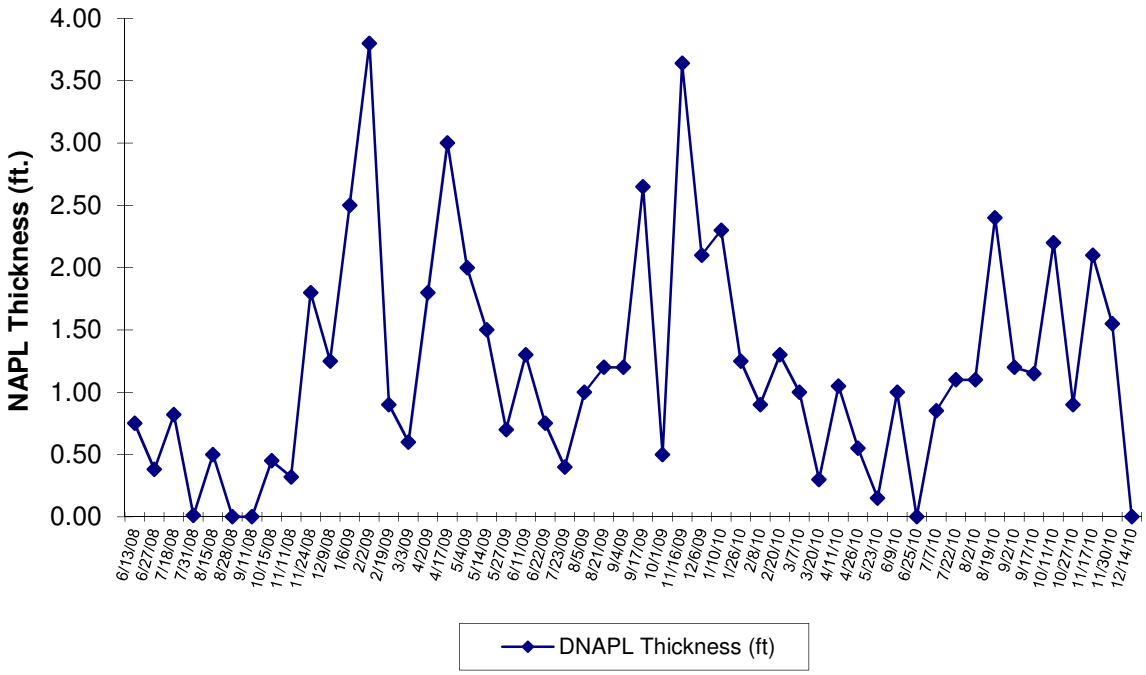
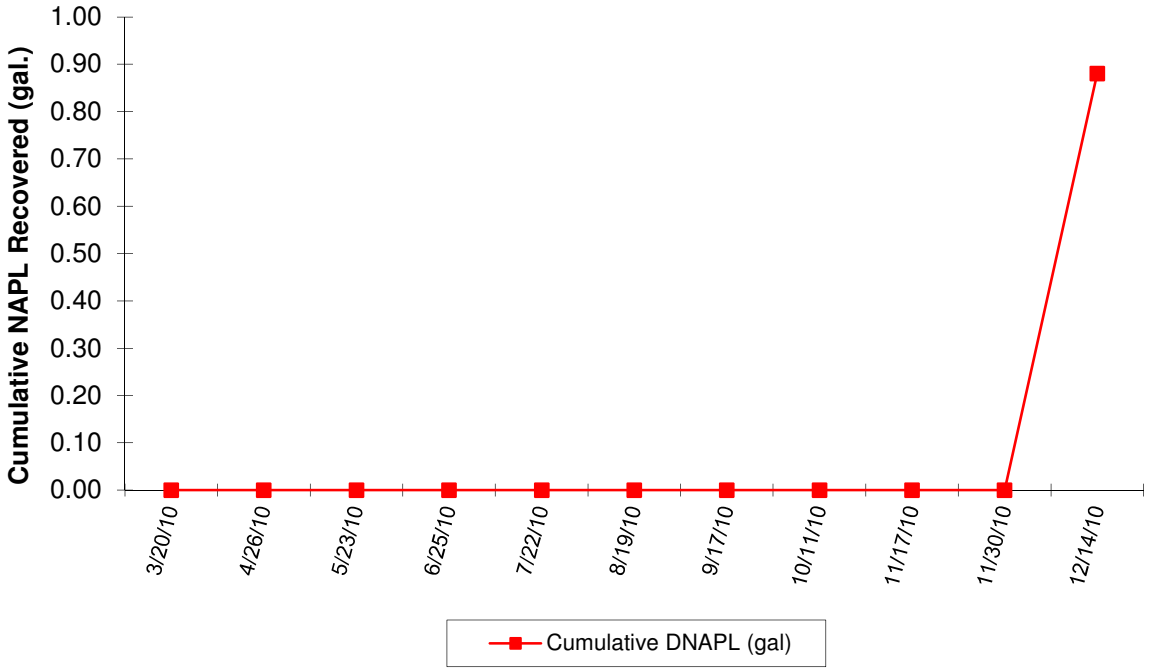


FIGURE 11AC
Well IPR- 23 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



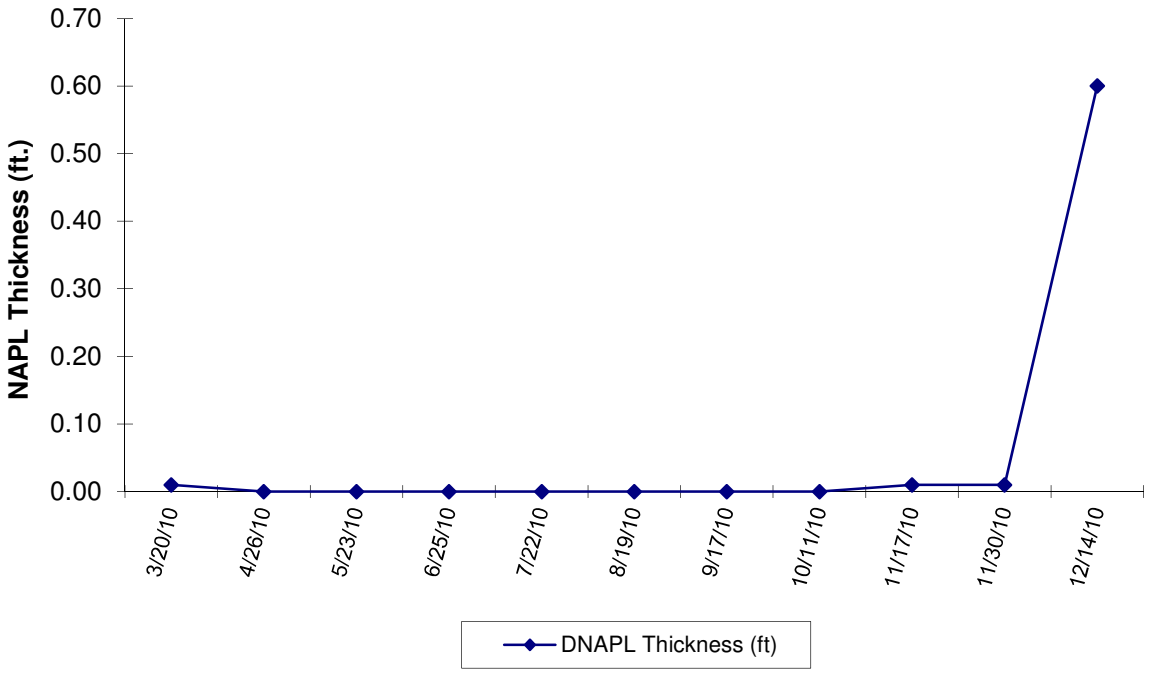
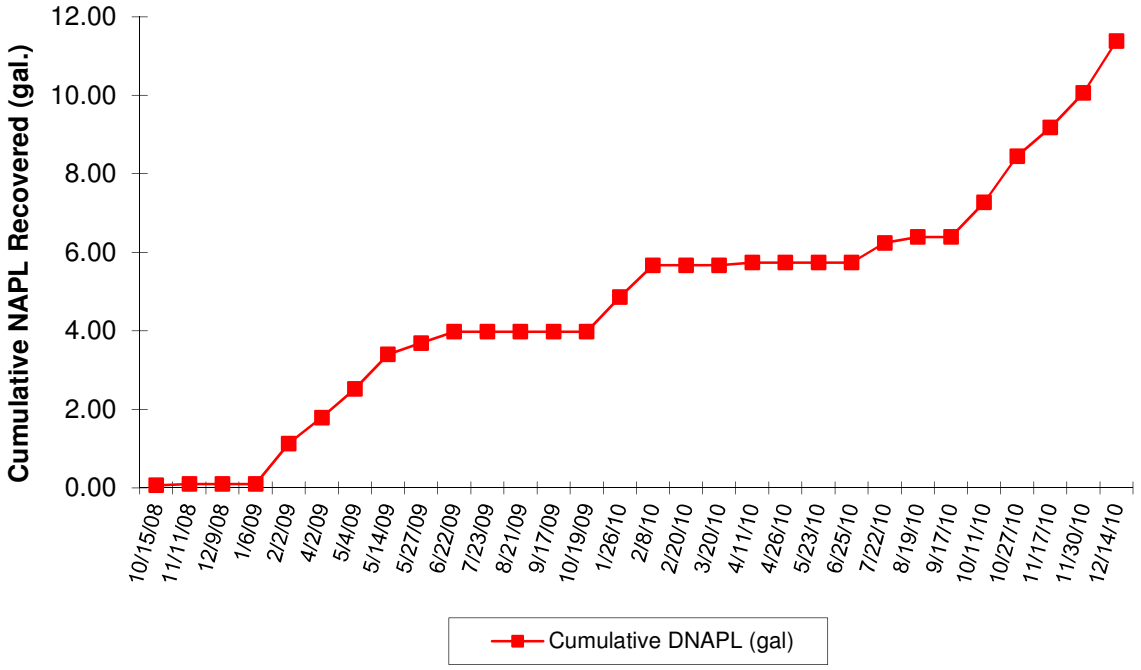


FIGURE 11AD
Well IPR-24 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



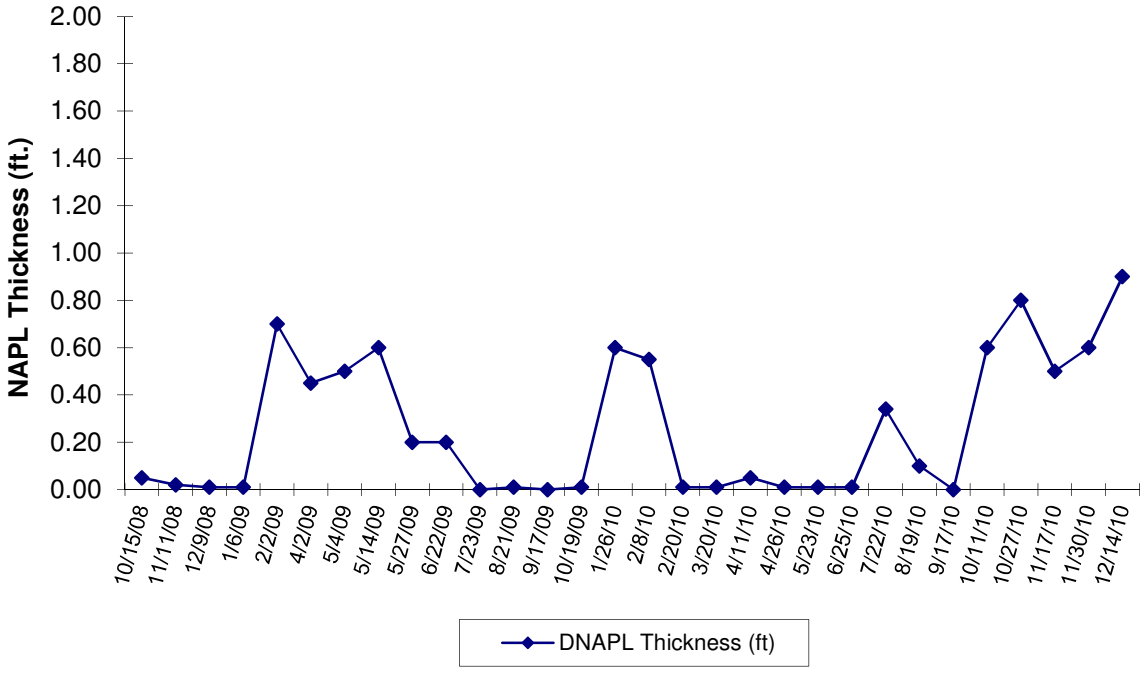
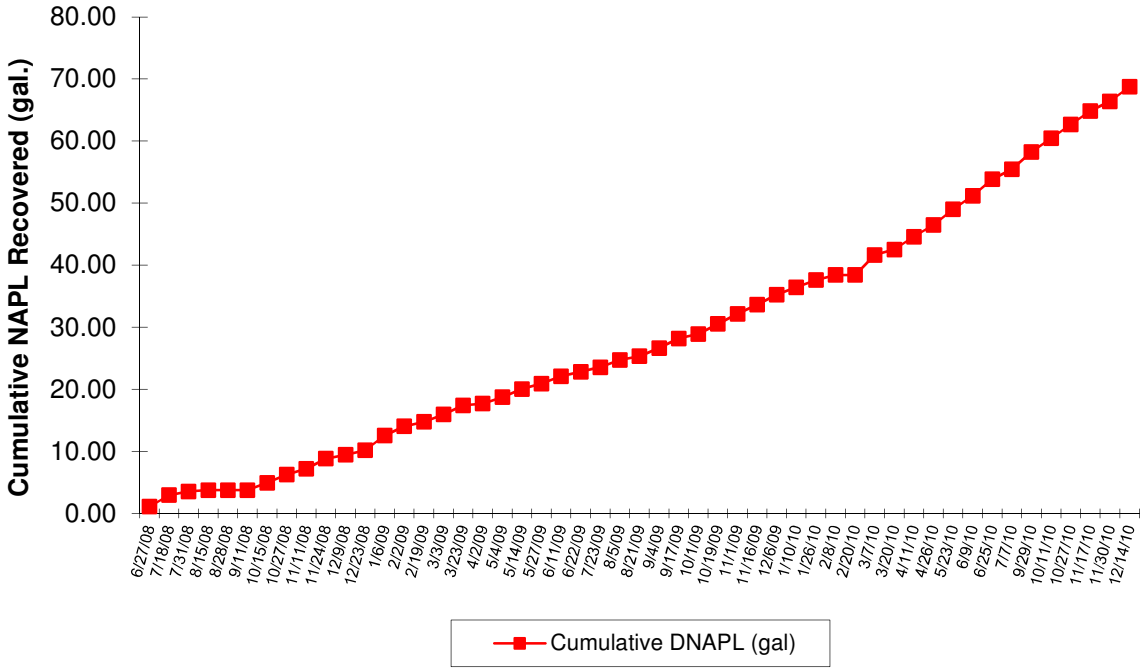


FIGURE 11AE
Well IPR-25 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



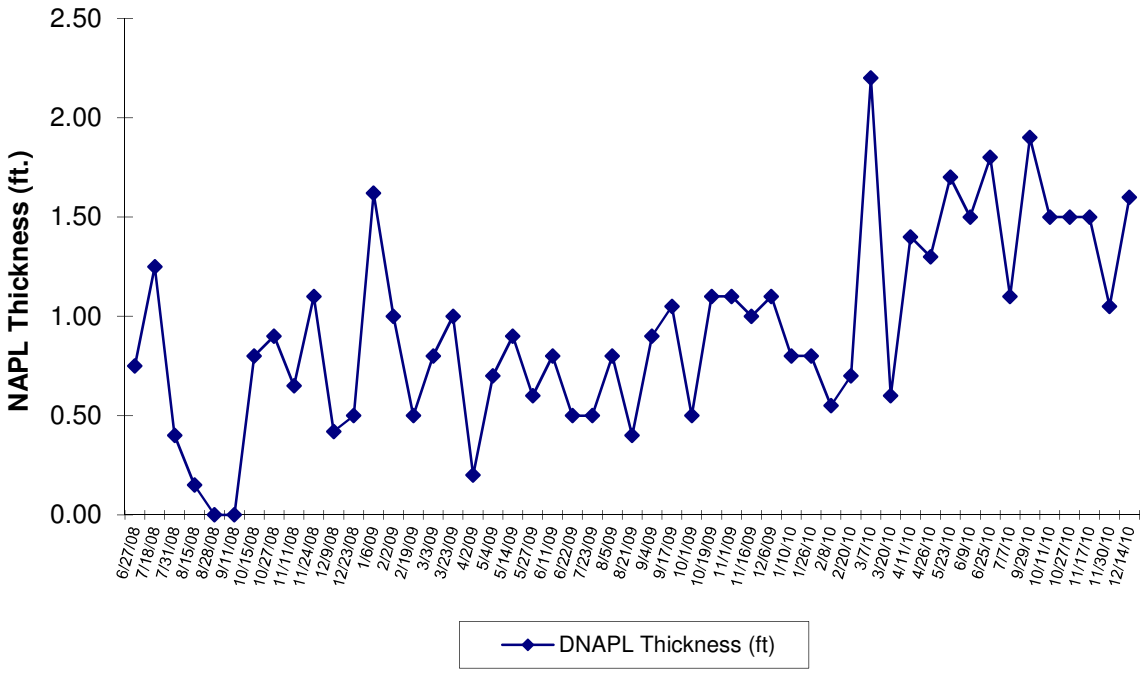
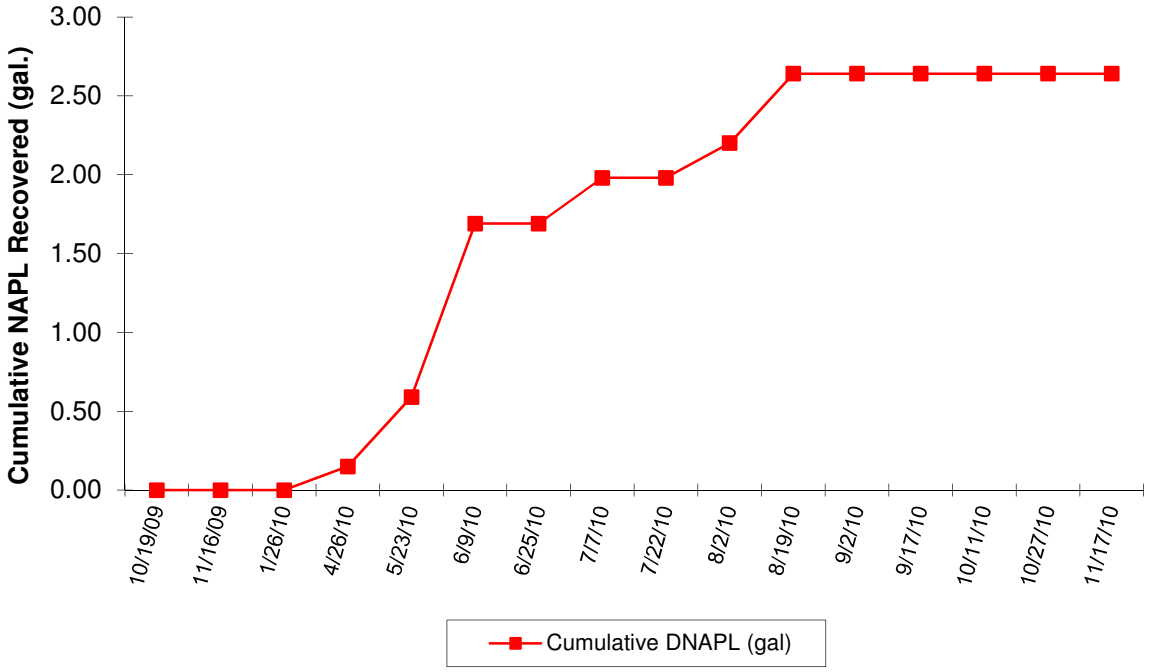


FIGURE 11AF
Well IPR-26 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



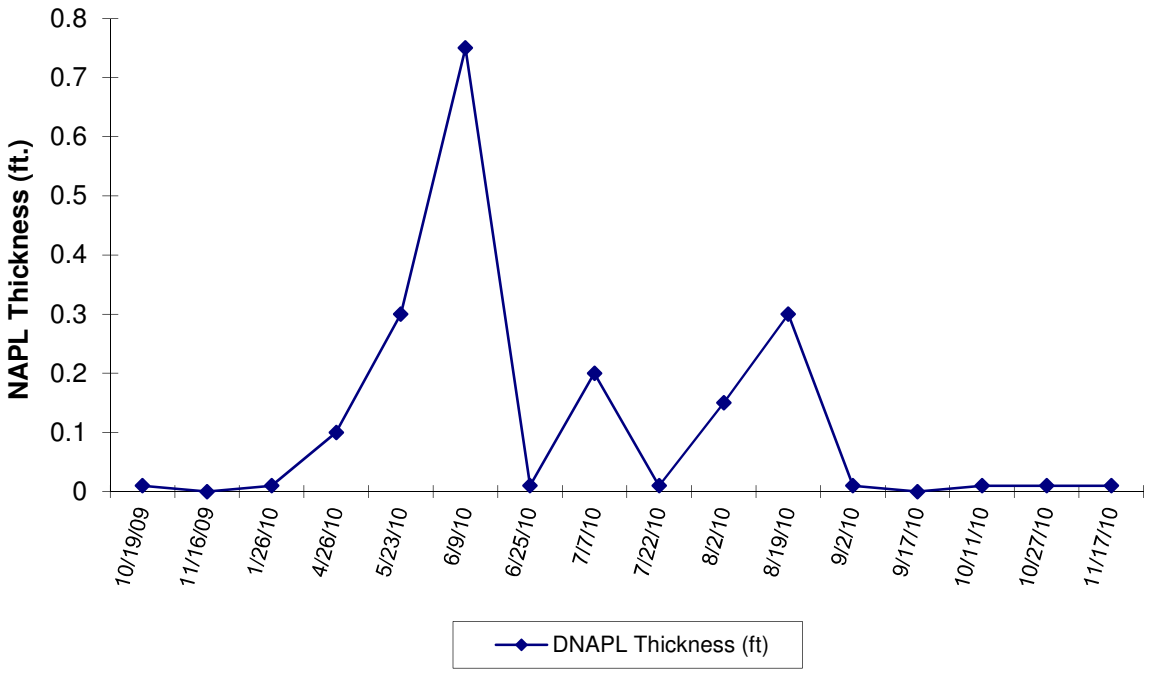
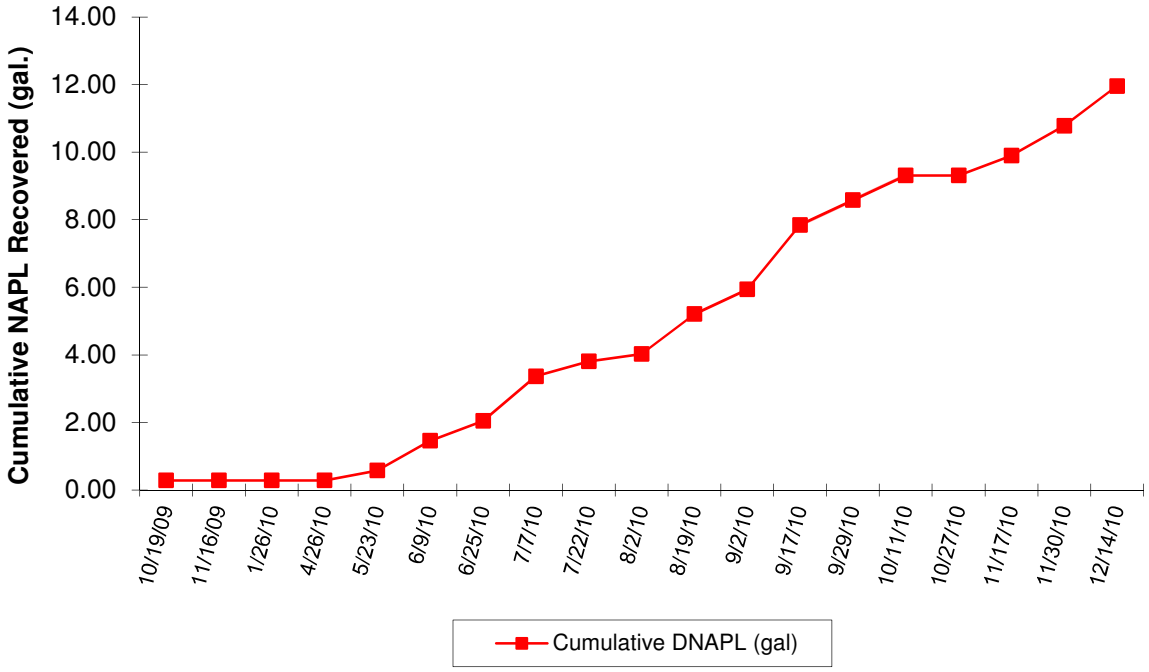


FIGURE 11AG
Well IPR-27 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



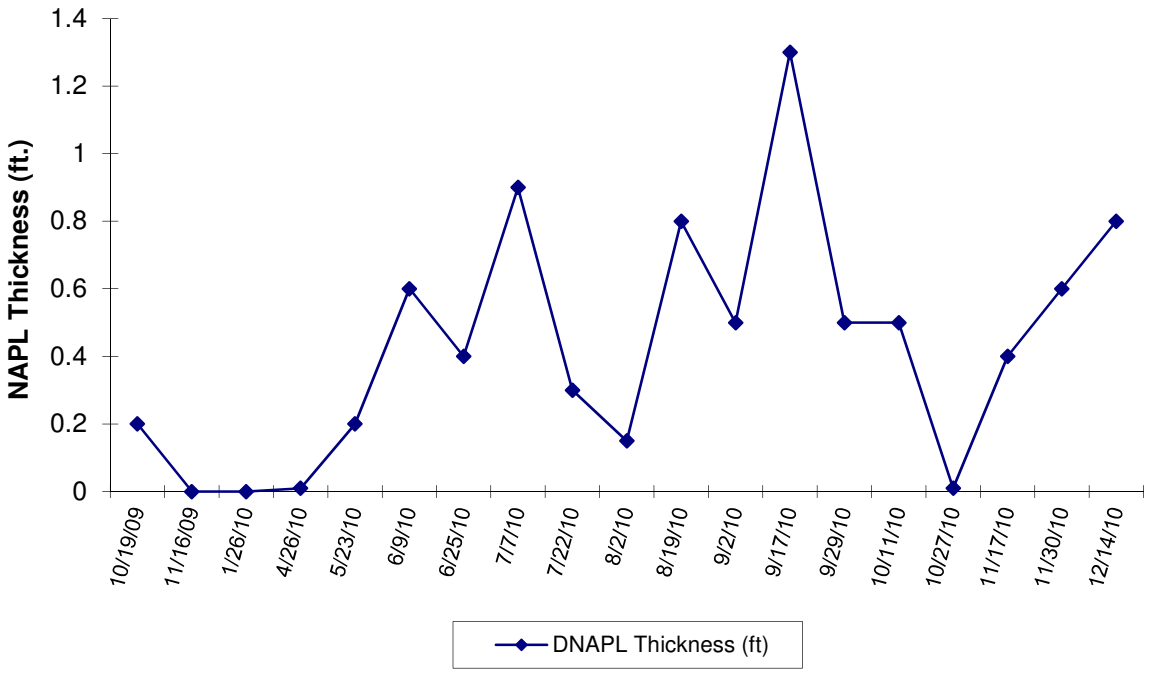
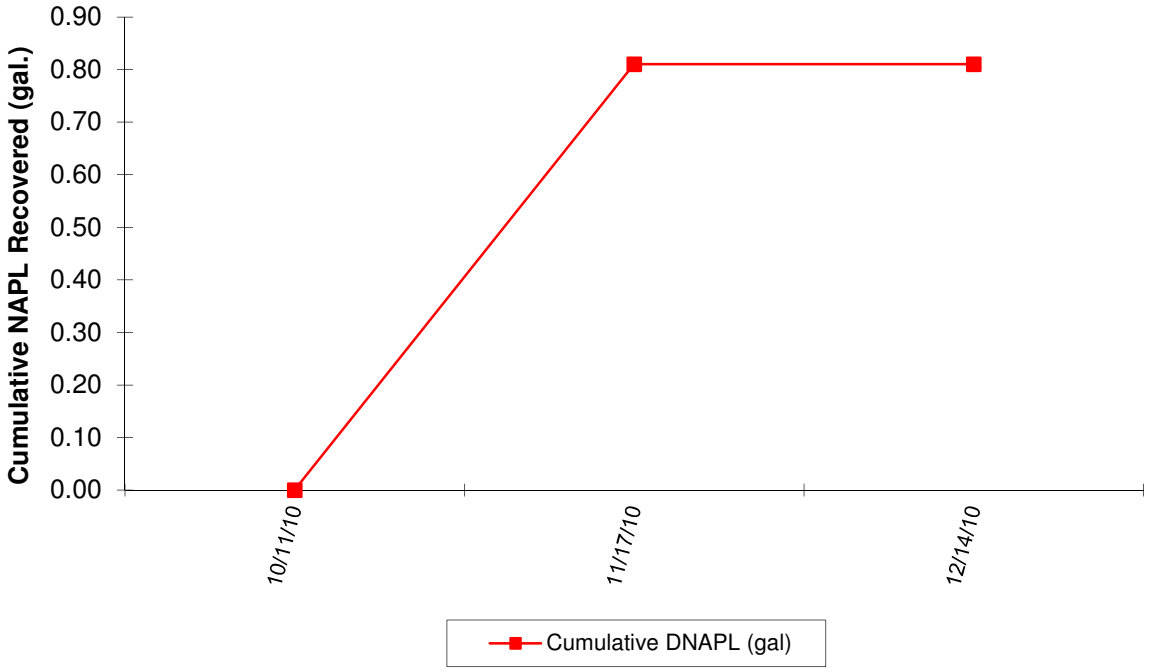


FIGURE 11AH
Well IPR-28 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



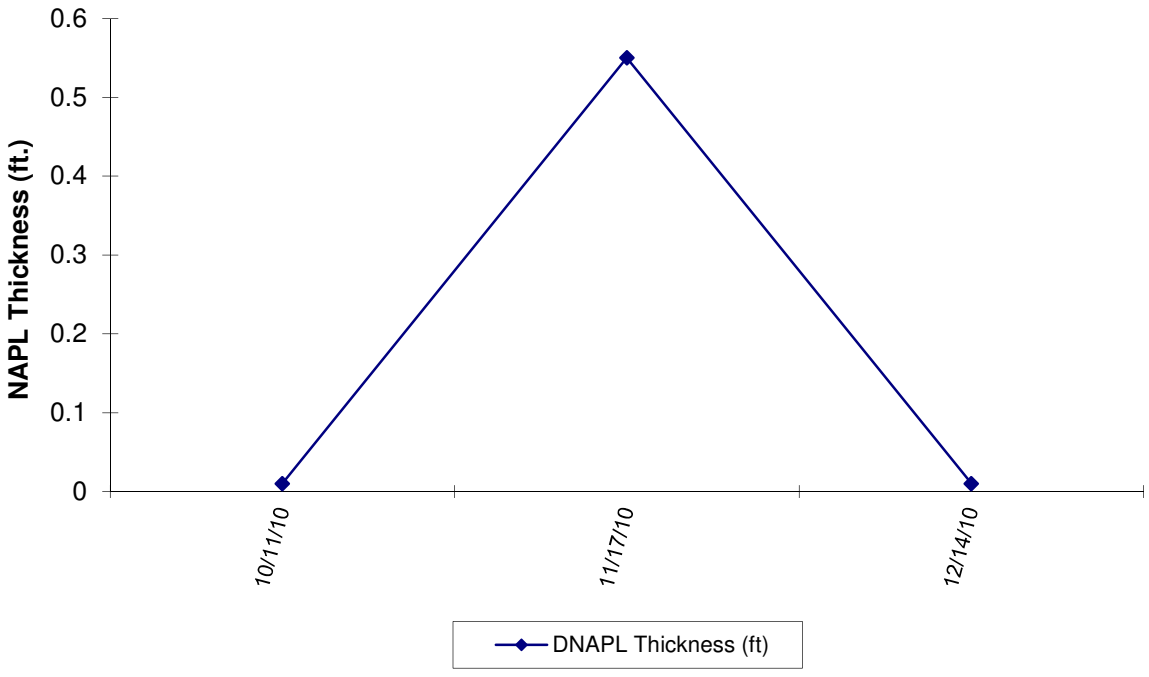
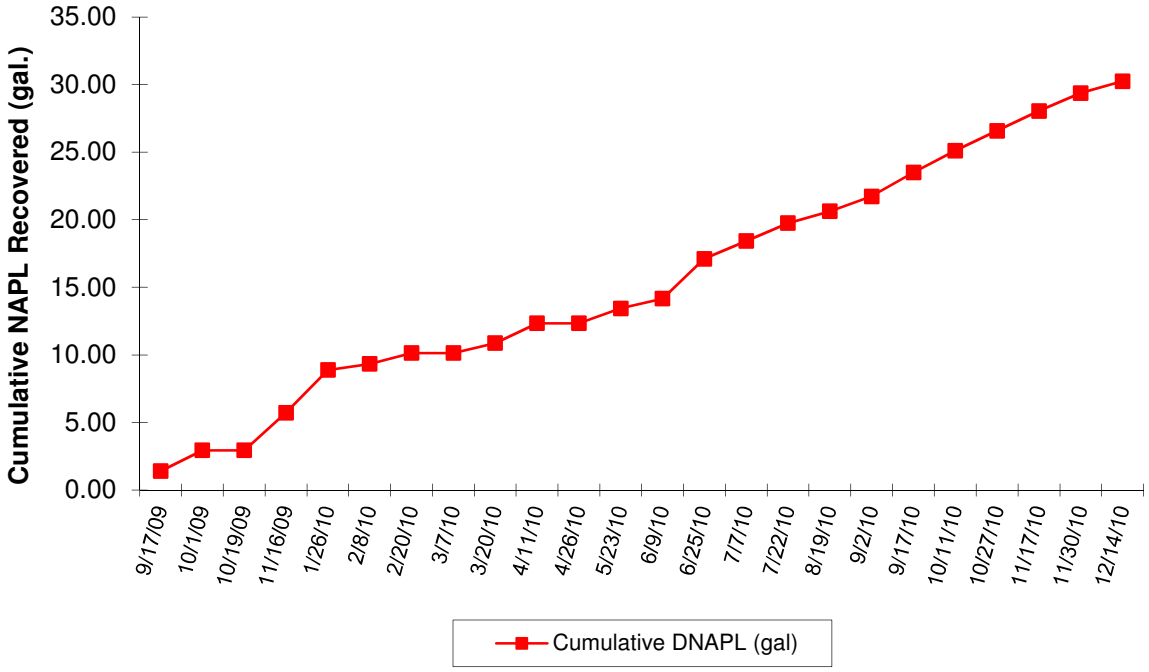


FIGURE 11AI
Well IPR-29 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



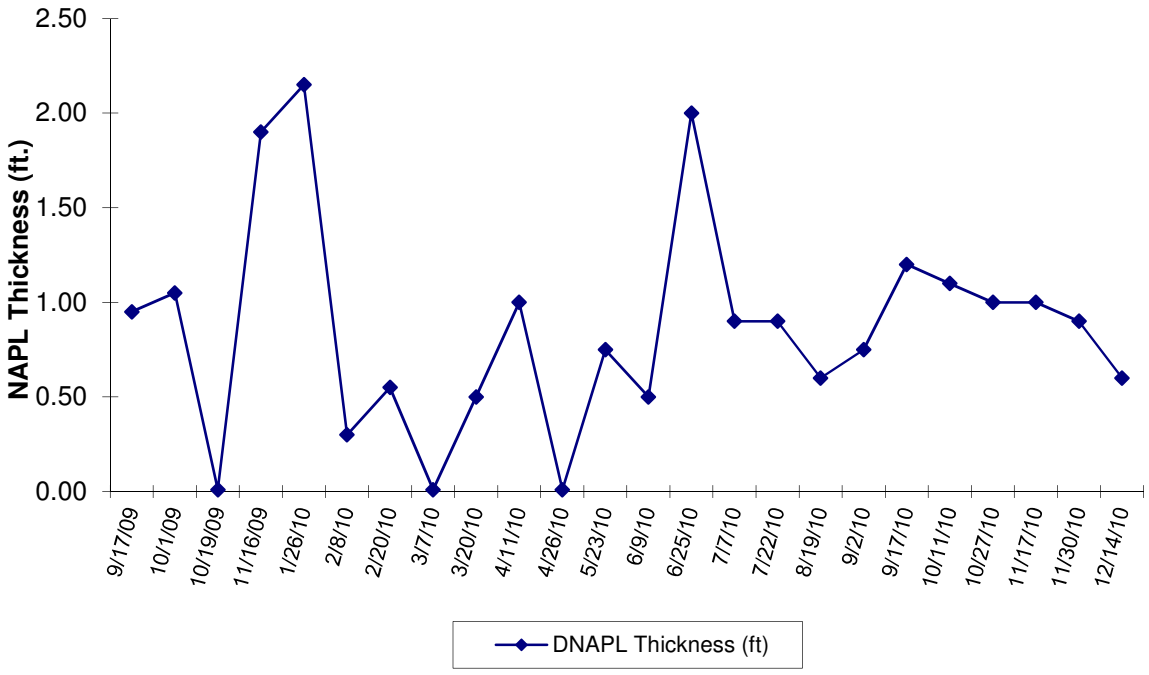
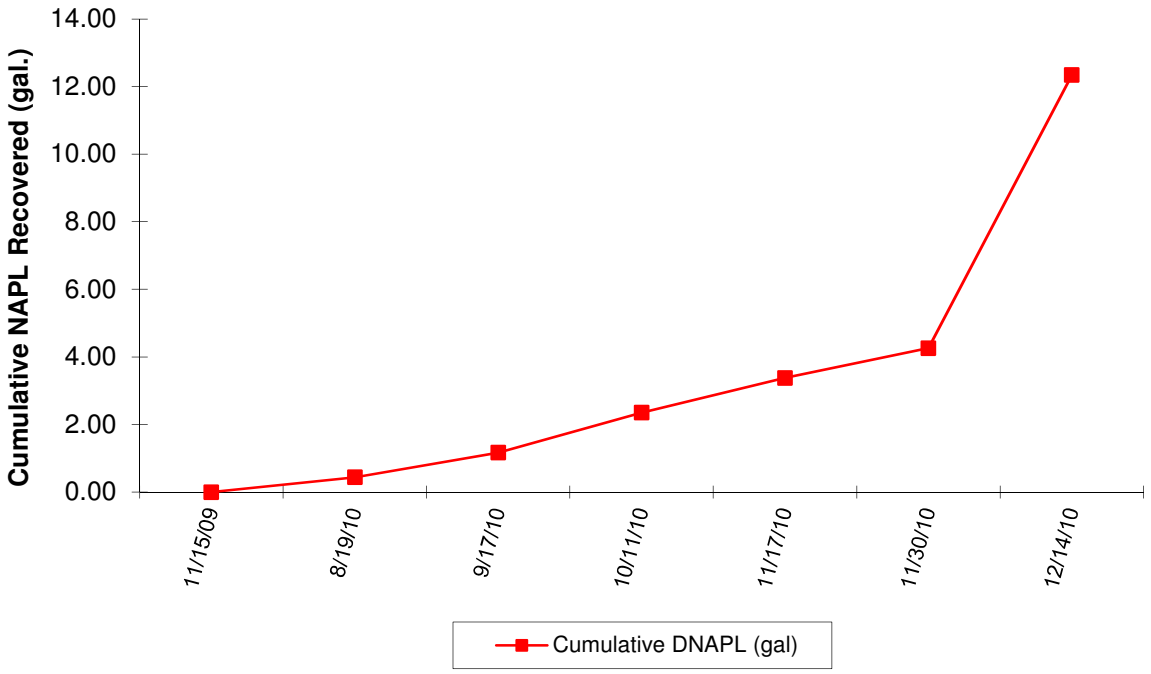
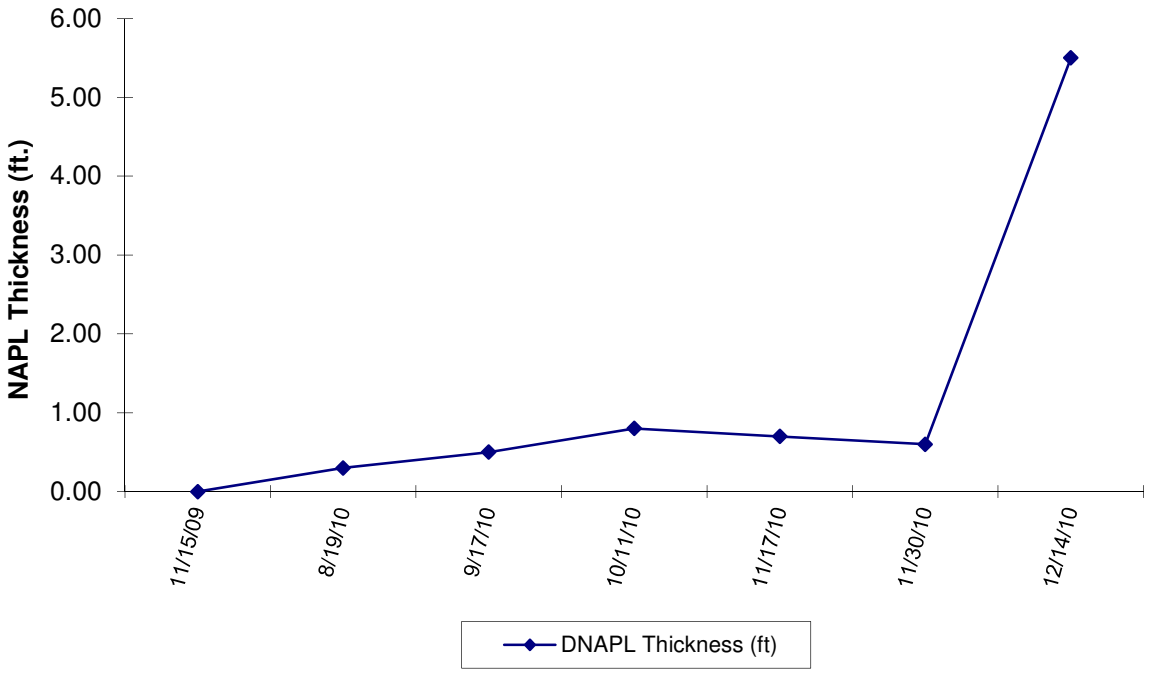


FIGURE 11AJ
Well IPR-30 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site





APPENDIX A

DATA USABILITY SUMMARY REPORT

(Provided in Electronic Format Only)

APPENDIX B

SOIL VAPOR SAMPLING DATA

Validated

Table X
Analytical Soil Gas Results
Hempstead Site
Hempstead, New York

Sample Name: / Sample Date:	NYSDOH Background Upper Fence Outdoor Air Concentrations	HIVP-16 6/11/2010	HIVP-17 6/11/2010	HIVP-18 6/11/2010
BTEX (ug/m3)				
Benzene	4.8	1.3 U	1.3 U	1.3 U
Toluene	5.1	**0.84 J**	**3.7**	**2.0**
Ethylbenzene	1	1.7 U	1.7 U	1.7 U
Xylene, m,p-	1	3.5 U	3.5 U	**1.0 J**
Xylene, o-	1.2	1.7 U	1.7 U	1.7 U
Other VOCs (ug/m3)				
Acetaldehyde	NE	**3.0 J**	**3.6 J**	**3.1 J**
Acetone	30	**1.6 J**	**3.8 J**	**1.9 J**
Acrolein (propenal)	NE	2.3 U	2.3 U	2.3 U
Allyl chloride	NE	1.2 U	1.2 U	1.2 U
Benzothiophene	NE	5.5 U	5.5 U	5.5 U
Bromodichloromethane	NE	2.7 U	2.7 U	2.7 U
Bromoform	NE	4.1 U	4.1 U	4.1 U
Bromomethane	0.5	1.6 U	1.6 U	1.6 U
Butadiene, 1,3-	NE	0.88 U	0.88 U	0.88 U
Butane	NE	0.95 U	0.95 U	0.95 U
Butanone,2-	5.3	1.2 U	1.2 U	1.2 U
Carbon disulfide	NE	1.2 U	1.2 U	1.2 U
Carbon tetrachloride	1.2	2.5 U	2.5 U	2.5 U
Chlorobenzene	0.25	1.8 U	1.8 U	1.8 U
Chloroethane	0.4	1.0 U	1.0 U	1.0 U
Chloroform	0.5	2.0 U	2.0 U	2.0 U
Chloromethane	4.3	**0.23 J**	0.83 U	0.83 U
Chlorotoluene,2-	NE	2.1 U	2.1 U	2.1 U
Cryofluorane	0.5	2.8 U	2.8 U	2.8 U
Cyclohexane	0.9	1.4 U	1.4 U	1.4 U
Decane, n-	4.7	2.3 U	2.3 U	2.3 U
Dibromochloromethane	NE	3.4 U	3.4 U	3.4 U
Dibromoethane,1,2-	0.4	3.1 U	3.1 U	3.1 U
Dichlorobenzene,1,2-	0.4	2.4 U	2.4 U	2.4 U
Dichlorobenzene,1,3-	0.4	2.4 U	2.4 U	2.4 U
Dichlorobenzene,1,4-	0.5	2.4 U	2.4 U	2.4 U
Dichlorodifluoromethane	10	**2.8**	**2.8**	**2.6**
Dichloroethane,1,1-	0.25	1.6 UJ	1.6 UJ	1.6 UJ
Dichloroethane,1,2-	0.4	1.6 U	1.6 U	1.6 U
Dichloroethene, cis-1,2-	0.4	1.6 U	1.6 U	1.6 U
Dichloroethene,1,1-	0.4	1.6 U	1.6 U	1.6 U
Dichloropropane,1,2-	0.4	1.8 U	1.8 U	1.8 U
Dichloropropene, cis-1,3	0.4	1.8 U	1.8 U	1.8 U
Dichloropropene, trans-1,3	0.25	1.8 U	1.8 U	1.8 U
Dioxane,1,4-	NE	1.4 U	1.4 U	1.4 U
Dodecane, n-	4.5	**1.2 J**	**0.79 J**	2.8 U
Ethanol	34	**1.3 J**	**1.8 J**	**1.7 J**
Ethylthiophene, 2-	NE	1.8 U	1.8 U	1.8 U
Ethyltoluene, p-	NE	2.0 U	2.0 U	2.0 U
Heptane, n-	2.2	1.6 U	1.6 U	1.6 U

Table X
Analytical Soil Gas Results
Hempstead Site
Hempstead, New York

Hexachlorobutadiene	0.5	4.3 U	4.3 U	4.3 U
Hexane, n-	2	1.4 U	1.4 U	1.4 U
Hexanone,2-	NE	1.6 U	1.6 U	1.6 U
Indan	NE	1.9 U	1.9 U	1.9 U
Indene	NE	**0.59 J**	**0.86 J**	**1.6 J**
Methyl tert-butyl ether	1.9	1.4 U	1.4 U	1.4 U
Methyl-2-pentanone,4-	0.5	1.6 U	1.6 U	1.6 U
Methylene chloride	1.6	**1.4 J**	**1.1 J**	**1.5 J**
Methylnaphthalene,1-	NE	5.8 U	5.8 U	5.8 U
Methylnaphthalene,2-	NE	5.8 U	5.8 U	5.8 U
Methylthiophene, 2-	NE	1.6 U	1.6 U	1.6 U
Methylthiophene, 3-	NE	1.6 U	1.6 U	1.6 U
Naphthalene	NE	**0.62 J**	**0.84 J**	**1.4 J**
Nonane	0.7	2.1 U	2.1 U	2.1 U
Octane, n-	1.5	1.9 U	1.9 U	1.9 U
Pentane	NE	1.2 U	**0.60 J**	1.2 U
Propanol,2-	NE	2.5 U	2.5 U	2.5 U
Styrene	0.5	1.7 U	1.7 U	1.7 U
t-Butyl alcohol	NE	1.2 U	1.2 U	1.2 U
Tetrachloroethane,1,1,2,2-	0.4	2.7 U	2.7 U	2.7 U
Tetrachloroethene	0.7	**3.7**	**4.4**	**1.1 J**
Tetramethylbenzene, 1,2,4,5-	NE	2.2 U	2.2 U	2.2 U
Thiophene	NE	1.4 U	1.4 U	1.4 U
Trans-1,2-dichloroethene	NE	1.6 U	1.6 U	1.6 U
Trichloro-1,2,2-trifluoroethane, 1,1,2-	2.5	3.1 U	3.1 U	3.1 U
Trichlorobenzene,1,2,4-	0.4	3.0 U	3.0 U	3.0 U
Trichloroethane,1,1,1-	0.6	2.2 U	2.2 U	2.2 U
Trichloroethane,1,1,2-	0.3	2.2 U	2.2 U	2.2 U
Trichloroethene	0.4	2.2 U	2.2 U	2.2 U
Trichlorofluoromethane	5.1	**1.7 J**	**2.0 J**	**1.4 J**
Trimethylbenzene,1,2,3-	0.5	2.0 U	2.0 U	2.0 U
Trimethylbenzene,1,2,4-	1.9	2.0 U	**0.60 J**	**0.76 J**
Trimethylbenzene,1,3,5-	0.7	2.0 U	2.0 U	2.0 U
Trimethylpentane, 2,2,4-	0.7	1.9 U	1.9 U	1.9 U
Undecane, n-	1.5	**0.66 J**	**0.95 J**	**0.72 J**
Vinyl bromide	NE	1.8 U	1.8 U	1.8 U
Vinyl chloride	0.4	1.0 U	1.0 U	1.0 U
Other (%)				
Helium	NE	0.0167 U	0.0174 U	0.0187 U

Table X
Analytical Soil Gas Results
Hempstead Site
Hempstead, New York

Notes:

ug/m^3 - micrograms per cubic meter
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds

' Source: NYSDOH, October 2006. Summary of Indoor and Outdoor Levels of Volatile Organic Compounds from Fuel Oil Heated Homes reported in various locations within sampled homes in NYS, 1997-2003. Background values for naphthalene are from the NYSDOH 1997 Control Home Database presented in Table C3 of the NYSDOH 2006 Guidance.

NE - not established

Bolding indicates a detected result concentration
Shading and bolding indicates that the detected concentration is above the NYSDOH guidance it was compared to

Validation Qualifiers:

J - estimated value
U - indicates not detected to the reporting limit for organic analysis and the method detection limit for inorganic analysis
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated

APPENDIX C

OXYGEN SYSTEM OPERATION & MAINTENANCE MEASUREMENTS

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	10/20/2010
Time:	1245
Weather:	Mostly Cloudy
Outdoor Temperature:	~60° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	227	
Feed Air Pressure *	75	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	36	(psi)
Oxygen Purity	91.8	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	80	(psi)
(readings below are made from control panel)		
Delivery Air	73	(psi)
Element Outlet Temperature	169	(^{o}F)
Running Hours	3,784	(hours)
Loading Hours	226	(hours)

* maximum reading during loading cycle

O_2 Injection System #2

Injection Bank A				Injection Bank B				Injection Bank C			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-2-2	90.2'	54	15	OW-2-9S	75'	38	19	OW-2-10D	97.2'	29	43
OW-2-3	94.3'	51	15.5	OW-2-10S	75'	40	31	OW-2-11D	100.8'	29	31
OW-2-4	94.7'	48	25	OW-2-11S	76.5'	37	20	OW-2-12	94'	33	18
OW-2-5	95.3'	27	29	OW-2-13S	75'	32	17	OW-2-13D	97'	33	27
OW-2-6	95.7'	26	29	OW-2-15S	75'	50	15	OW-2-14	96.4'	46	30.5
OW-2-7	96'	30	28	OW-2-16S	75.5'	38	18	OW-2-15D	94.6'	44	29.5
OW-2-8	96.3'	30	29	OW-2-18S	74.5'	32	18	OW-2-16D	94.1'	40	26
OW-2-9D	96.7'	32	29	OW-2-20S	79'	37	22	OW-2-17	95'	44	29

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 10/20/2010

O_2 Injection System #2

Injection Bank D				Injection Bank E				Injection Bank F			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-2-18D	95.5'	22	23	OW-2-22S	76'	58	19	OW-2-26D	95'	27	26
OW-2-19	96.1'	24	29	OW-2-24S	77.8'	21	22	OW-2-27	93.5'	14	27
OW-2-20D	96.6'	24	30	OW-2-26S	74'	18	17	OW-2-28D	92.1'	16	26
OW-2-21	96.6'	22	28	OW-2-28S	76'	13	20	OW-2-29	92.2'	19	27
OW-2-22D	96.3'	23	27	OW-2-30S	67.8'	16	15	OW-2-30D	88'	14	25
OW-2-23	97.2'	17	30.5	OW-2-34	71'	95	19	OW-2-31	86'	17	30
OW-2-24D	97'	22	28	OW-2-35	69.2'	0	24	OW-2-32	84'	16	32
OW-2-25	96'	17	27	OW-2-36	64.8'	0	20	OW-2-33	82'	10	34

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

O_2 Injection System #2

Injection Bank G				Injection Bank H				Monitoring Points Log			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	DO (mg/L)	PID (ppm)
OW-2-37	62.8'	40	20	OW-2-45	61.1'	31	23	MP-2-1	29.86	5.95	0
OW-2-38	62.1'	32	19	OW-2-46	61'	42	20	MP-2-2	30.91	2.02	0.3
OW-2-39	60'	53	16	OW-2-47	60.5'	40	19	MP-2-3S	31.02	44.25	0.1
OW-2-40	61.7'	40	20					MP-2-3D	31.25	42.24	4.9
OW-2-41	61.7'	44	19					MP-2-4	19.76	1.65	0
OW-2-42	61.6'	46	19					MP-2-5	17.98	15.48	0.1
OW-2-43	61.4'	46	20								
OW-2-44R	60.6'	38	19								

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 10/20/2010

OPERATIONAL NOTES

GA5 Air Compressor

1) Oil Level Checked with system unloaded* Yes X No
   * Unload system, wait until Delivery Air Pressure is less than 9 psi
2) Oil Level with system unloaded
   Low (red) Normal (green) X High (orange)
3) Oil added Yes No X
4) Oil changed Yes No X
5) Oil filter changed Yes No X
6) Air filter Changed Yes No X
7) Oil separator changed Yes No X
8) Terminal strips checked Yes No X

AS-80 O_2 Generator

1) Prefilter changed Yes No X
2) Coalescing changed Yes No X

GENERAL SYSTEM NOTES

Trailer

1) Performed general housekeeping (i.e. sweep, collect trash inside and out, etc.)
   Yes X No
2) Abnormal conditions observed (e.g. vandalism) None
3) Other major activities completed
4) Supplies needed
5) Visitors

Record routine activities such as any alarm/shutdowns, sampling, maintenance, material transported off-site, oil/filter/gasket and/or any other abnormal operating conditions:

Action Items

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	11/3/2010
Time:	1045
Weather:	Sunny
Outdoor Temperature:	~42° F
Inside Trailer Temperature:	~72° F
Performed By:	Jason Falquecee

O_2 Generator (AirSep)

Hours	554	
Feed Air Pressure *	37	(psi)
Cycle Pressure *	59	(psi)
Oxygen Receiver Pressure *	4	(psi)
Oxygen Purity	92.4	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	65	(psi)
(readings below are made from control panel)		
Delivery Air	78	(psi)
Element Outlet Temperature	171	(^{o}F)
Running Hours	554	(hours)
Loading Hours	553	(hours)

* maximum reading during loading cycle

O_2 Injection System #2

Injection Bank A				Injection Bank B				Injection Bank C			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-2-2	90.2'	44	23	OW-2-9S	75'	36	19	OW-2-10D	97.2'	0	52
OW-2-3	94.3'	44	12	OW-2-10S	75'	33	30	OW-2-11D	100.8'	29	31
OW-2-4	94.7'	48	33	OW-2-11S	76.5'	36	20	OW-2-12	94'	33	18
OW-2-5	95.3'	35	30	OW-2-13S	75'	32	19	OW-2-13D	97'	32	27
OW-2-6	95.7'	34	30	OW-2-15S	75'	44	14	OW-2-14	96.4'	38	28
OW-2-7	96'	35	29	OW-2-16S	75.5'	37	19	OW-2-15D	94.6'	38	29
OW-2-8	96.3'	35	30	OW-2-18S	74.5'	36	18	OW-2-16D	94.1'	36	25
OW-2-9D	96.7'	35	29	OW-2-20S	79'	37	22	OW-2-17	95'	38	29

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 11/3/2010

O_2 Injection System #2

Injection Bank D				Injection Bank E				Injection Bank F			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-2-18D	95.5'	33	35	OW-2-22S	76'	77	19	OW-2-26D	95'	45	39
OW-2-19	96.1'	43	29	OW-2-24S	77.8'	25	11	OW-2-27	93.5'	44	28
OW-2-20D	96.6'	40	30	OW-2-26S	74'	22	10	OW-2-28D	92.1'	37	26
OW-2-21	96.6'	39	29	OW-2-28S	76'	16	20	OW-2-29	92.2'	38	32
OW-2-22D	96.3'	41	27	OW-2-30S	67.8'	18	15	OW-2-30D	88'	44	25
OW-2-23	97.2'	44	31	OW-2-34	71'	>100	19	OW-2-31	86'	26	32
OW-2-24D	97'	43	29	OW-2-35	69.2'	0	11	OW-2-32	84'	28	32
OW-2-25	96'	40	27	OW-2-36	64.8'	13	21	OW-2-33	82'	13	35

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

O_2 Injection System #2

Injection Bank G				Injection Bank H				Monitoring Points Log			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	DO (mg/L)	PID (ppm)
OW-2-37	62.8'	46	20	OW-2-45	61.1'	29	20	MP-2-1	30.09	6.67	0
OW-2-38	62.1'	30	19	OW-2-46	61'	32	19	MP-2-2	21.15	2.18	0.2
OW-2-39	60'	30	14	OW-2-47	60.5'	29	19	MP-2-3S	31.28	40.05	0.1
OW-2-40	61.7'	32	19					MP-2-3D	31.56	44.65	1
OW-2-41	61.7'	34	19					MP-2-4	19.63	14.6	0.3
OW-2-42	61.6'	36	19					MP-2-5	18.21	24.5	0
OW-2-43	61.4'	36	19								
OW-2-44R	60.6'	38	18								

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 11/3/2010

OPERATIONAL NOTES

GA5 Air Compressor

1) Oil Level Checked with system unloaded* Yes X No
   * Unload system, wait until Delivery Air Pressure is less than 9 psi
2) Oil Level with system unloaded
   Low (red) Normal (green) X High (orange)
3) Oil added Yes No X
4) Oil changed Yes No X
5) Oil filter changed Yes No X
6) Air filter Changed Yes No X
7) Oil separator changed Yes No X
8) Terminal strips checked Yes No X

AS-80 O_2 Generator

1) Prefilter changed Yes No X
2) Coalescing changed Yes No X

GENERAL SYSTEM NOTES

Trailer

1) Performed general housekeeping (i.e. sweep, collect trash inside and out, etc.)
   Yes X No
2) Abnormal conditions observed (e.g. vandalism) None
3) Other major activities completed
4) Supplies needed
5) Visitors

Record routine activities such as any alarm/shutdowns, sampling, maintenance, material transported off-site, oil/filter/gasket and/or any other abnormal operating conditions:

The alarm condition observed on 10-24-10 was caused by an unknown power failure at approximately 3:45 AM, The system is designed to restart automatically when power is restored. As such, we utilized the remote access system to check the status of the system at approximatley noon on 10-24 and the system was fully operational. There is no wayy to determine exactly when the power was restored to the system, however based on the information received from the remote access system the alarm resulted in minimal downtime.

Action Items

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	11/17/2010
Time:	1331
Weather:	Sunny
Outdoor Temperature:	~65° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	887	
Feed Air Pressure *	65	(psi)
Cycle Pressure *	68	(psi)
Oxygen Receiver Pressure *	18	(psi)
Oxygen Purity	91.5	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	74	(psi)
(readings below are made from control panel)		
Delivery Air	109	(psi)
Element Outlet Temperature	169	(^{o}F)
Running Hours	890	(hours)
Loading Hours	887	(hours)

* maximum reading during loading cycle

O_2 Injection System #2

Injection Bank A				Injection Bank B				Injection Bank C			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-2-2	90.2'	42	24	OW-2-9S	75'	22	19	OW-2-10D	97.2'	35	42
OW-2-3	94.3'	38	29	OW-2-10S	75'	28	29	OW-2-11D	100.8'	48	31
OW-2-4	94.7'	41	26	OW-2-11S	76.5'	24	21	OW-2-12	94'	38	19
OW-2-5	95.3'	24	28	OW-2-13S	75'	28	18	OW-2-13D	97'	23	27
OW-2-6	95.7'	25	28	OW-2-15S	75'	35	26	OW-2-14	96.4'	55	28
OW-2-7	96'	25	27	OW-2-16S	75.5'	25	18	OW-2-15D	94.6'	58	28
OW-2-8	96.3'	25	27	OW-2-18S	74.5'	23	18	OW-2-16D	94.1'	45	26
OW-2-9D	96.7'	25	28	OW-2-20S	79'	26	23	OW-2-17	95'	52	27

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 11/17/2010

O_2 Injection System #2

Injection Bank D				Injection Bank E				Injection Bank F			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-2-18D	95.5'	43	31	OW-2-22S	76'	30	19	OW-2-26D	95'	68	39
OW-2-19	96.1'	23	28	OW-2-24S	77.8'	32	18	OW-2-27	93.5'	38	28
OW-2-20D	96.6'	27	29	OW-2-26S	74'	32	17	OW-2-28D	92.1'	23	27
OW-2-21	96.6'	30	28	OW-2-28S	76'	30	21	OW-2-29	92.2'	42	27
OW-2-22D	96.3'	30	28	OW-2-30S	67.8'	25	16	OW-2-30D	88'	22	27
OW-2-23	97.2'	44	28	OW-2-34	71'	28	19	OW-2-31	86'	35	30
OW-2-24D	97'	30	27	OW-2-35	69.2'	23	26	OW-2-32	84'	30	32
OW-2-25	96'	40	32	OW-2-36	64.8'	28	21	OW-2-33	82'	25	34

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

O_2 Injection System #2

Injection Bank G				Injection Bank H				Monitoring Points Log			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	DO (mg/L)	PID (ppm)
OW-2-37	62.8'	40	19	OW-2-45	61.1'	25	20	MP-2-1	30.12	11.77	0.1
OW-2-38	62.1'	32	18	OW-2-46	61'	21	19	MP-2-2	31.22	5.2	0.2
OW-2-39	60'	38	18	OW-2-47	60.5'	22	19	MP-2-3S	31.32	47.24	0.3
OW-2-40	61.7'	24	19					MP-2-3D	31.53	45.87	2.3
OW-2-41	61.7'	27	18					MP-2-4	20.05	46.29	1.1
OW-2-42	61.6'	26	19					MP-2-5	18.26	24.35	0.5
OW-2-43	61.4'	25	19								
OW-2-44R	60.6'	21	18								

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 11/17/2010

OPERATIONAL NOTES

GA5 Air Compressor

1) Oil Level Checked with system unloaded* Yes X No
   * Unload system, wait until Delivery Air Pressure is less than 9 psi
2) Oil Level with system unloaded
   Low (red) X Normal (green) High (orange)
3) Oil added Yes X No
4) Oil changed Yes No X
5) Oil filter changed Yes No X
6) Air filter Changed Yes No X
7) Oil separator changed Yes No X
8) Terminal strips checked Yes X No

AS-80 O_2 Generator

1) Prefilter changed Yes No X
2) Coalescing changed Yes No X

GENERAL SYSTEM NOTES

Trailer

1) Performed general housekeeping (i.e. sweep, collect trash inside and out, etc.)
   Yes X No
2) Abnormal conditions observed (e.g. vandalism) Low Oil
3) Other major activities completed Small Oxygen leak at Injection Bank C.
4) Supplies needed
5) Visitors

Record routine activities such as any alarm/shutdowns, sampling, maintenance, material transported off-site, oil/filter/gasket and/or any other abnormal operating conditions:

Found oil level low in air compressor. Shut down system, took apart unit and tightened sight glass and oil feed line. Added oil to unit and restarted system. Found a small oxygen leak on injection bank C, tightened fitting and will continue to monitor.

Action Items

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	12/2/2010
Time:	1241
Weather:	Sunny
Outdoor Temperature:	~45° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,243	
Feed Air Pressure *	70	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	110	(psi)
Oxygen Purity	90.2	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	80	(psi)
(readings below are made from control panel)		
Delivery Air	91	(psi)
Element Outlet Temperature	169	(^{o}F)
Running Hours	1,245	(hours)
Loading Hours	1,242	(hours)

* maximum reading during loading cycle

O_2 Injection System #2

Injection Bank A				Injection Bank B				Injection Bank C			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-2-2	90.2'	44	19	OW-2-9S	75'	36	19	OW-2-10D	97.2'	66	46
OW-2-3	94.3'	65	21	OW-2-10S	75'	35	29	OW-2-11D	100.8'	38	30
OW-2-4	94.7'	45	24	OW-2-11S	76.5'	35	19	OW-2-12	94'	42	19
OW-2-5	95.3'	30	29	OW-2-13S	75'	30	18	OW-2-13D	97'	15	26
OW-2-6	95.7'	32	29	OW-2-15S	75'	49	18	OW-2-14	96.4'	32	27
OW-2-7	96'	32	28	OW-2-16S	75.5'	38	18	OW-2-15D	94.6'	32	29
OW-2-8	96.3'	35	29	OW-2-18S	74.5'	38	18	OW-2-16D	94.1'	32	26
OW-2-9D	96.7'	30	29	OW-2-20S	79'	39	22	OW-2-17	95'	30	28

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 12/2/2010

O_2 Injection System #2

Injection Bank D				Injection Bank E				Injection Bank F			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-2-18D	95.5'	58	30	OW-2-22S	76'	38	18	OW-2-26D	95'	40	30
OW-2-19	96.1'	38	29	OW-2-24S	77.8'	54	19	OW-2-27	93.5'	40	28
OW-2-20D	96.6'	35	30	OW-2-26S	74'	45	17	OW-2-28D	92.1'	40	28
OW-2-21	96.6'	36	28	OW-2-28S	76'	31	20	OW-2-29	92.2'	62	27
OW-2-22D	96.3'	35	27	OW-2-30S	67.8'	33	16	OW-2-30D	88'	44	27
OW-2-23	97.2'	43	31	OW-2-34	71'	40	18	OW-2-31	86'	64	40
OW-2-24D	97'	40	28	OW-2-35	69.2'	40	32	OW-2-32	84'	52	44
OW-2-25	96'	50	33	OW-2-36	64.8'	32	20	OW-2-33	82'	41	37

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

O_2 Injection System #2

Injection Bank G				Injection Bank H				Monitoring Points Log			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	DO (mg/L)	PID (ppm)
OW-2-37	62.8'	42	19	OW-2-45	61.1'	40	20	MP-2-1	30.36	9.77	0.1
OW-2-38	62.1'	40	18	OW-2-46	61'	47	19	MP-2-2	31.44	45.78	0.1
OW-2-39	60'	54	17	OW-2-47	60.5'	50	19	MP-2-3S	31.54	48.52	0.1
OW-2-40	61.7'	42	19					MP-2-3D	31.75	45.67	0.2
OW-2-41	61.7'	50	19					MP-2-4	20.28	45.37	0.6
OW-2-42	61.6'	40	19					MP-2-5	18.50	24.78	0.3
OW-2-43	61.4'	45	19								
OW-2-44R	60.6'	42	18								

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 12/2/2010

OPERATIONAL NOTES

GA5 Air Compressor

1) Oil Level Checked with system unloaded* Yes X No
   * Unload system, wait until Delivery Air Pressure is less than 9 psi
2) Oil Level with system unloaded
   Low (red) Normal (green) X High (orange)
3) Oil added Yes No X
4) Oil changed Yes No X
5) Oil filter changed Yes No X
6) Air filter Changed Yes No X
7) Oil separator changed Yes No X
8) Terminal strips checked Yes X No

AS-80 O_2 Generator

1) Prefilter changed Yes No X
2) Coalescing changed Yes No X

GENERAL SYSTEM NOTES

Trailer

1) Performed general housekeeping (i.e. sweep, collect trash inside and out, etc.)
   Yes X No
2) Abnormal conditions observed (e.g. vandalism)
3) Other major activities completed
4) Supplies needed
5) Visitors

Record routine activities such as any alarm/shutdowns, sampling, maintenance, material transported off-site, oil/filter/gasket and/or any other abnormal operating conditions:

Cleaned up leaves within fence area.

Action Items

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	12/16/2010
Time:	1218
Weather:	Sunny
Outdoor Temperature:	~36° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,578	
Feed Air Pressure *	50	(psi)
Cycle Pressure *	70	(psi)
Oxygen Receiver Pressure *	95	(psi)
Oxygen Purity	91.1	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	70	(psi)
(readings below are made from control panel)		
Delivery Air	125	(psi)
Element Outlet Temperature	171	(^{o}F)
Running Hours	1,577	(hours)
Loading Hours	1,580	(hours)

* maximum reading during loading cycle

O_2 Injection System #2

Injection Bank A				Injection Bank B				Injection Bank C			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-2-2	90.2'	42	19	OW-2-9S	75'	38	19	OW-2-10D	97.2'	40	36
OW-2-3	94.3'	58	22	OW-2-10S	75'	35	29	OW-2-11D	100.8'	40	31
OW-2-4	94.7'	42	23	OW-2-11S	76.5'	40	21	OW-2-12	94'	50	19
OW-2-5	95.3'	40	28	OW-2-13S	75'	32	18	OW-2-13D	97'	20	26
OW-2-6	95.7'	40	29	OW-2-15S	75'	52	18	OW-2-14	96.4'	35	27
OW-2-7	96'	42	29	OW-2-16S	75.5'	35	19	OW-2-15D	94.6'	35	28
OW-2-8	96.3'	40	29	OW-2-18S	74.5'	35	18	OW-2-16D	94.1'	40	25
OW-2-9D	96.7'	40	29	OW-2-20S	79'	40	24	OW-2-17	95'	32	28

Comments: All injection point flows were adjusted to ~30 scfh at Injection Bank B and to ~50 scfh at Injection Banks A & C after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 12/16/2010

O_2 Injection System #2

Injection Bank D				Injection Bank E				Injection Bank F			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-2-18D	95.5'	60	34	OW-2-22S	76'	40	18	OW-2-26D	95'	38	29
OW-2-19	96.1'	35	28	OW-2-24S	77.8'	45	18	OW-2-27	93.5'	35	28
OW-2-20D	96.6'	32	29	OW-2-26S	74'	40	17	OW-2-28D	92.1'	32	27
OW-2-21	96.6'	38	28	OW-2-28S	76'	35	20	OW-2-29	92.2'	47	24
OW-2-22D	96.3'	32	27	OW-2-30S	67.8'	32	16	OW-2-30D	88'	47	27
OW-2-23	97.2'	50	27	OW-2-34	71'	40	18	OW-2-31	86'	60	38
OW-2-24D	97'	35	28	OW-2-35	69.2'	40	33	OW-2-32	84'	62	43
OW-2-25	96'	52	28	OW-2-36	64.8'	35	21	OW-2-33	82'	50	35

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

O_2 Injection System #2

Injection Bank G				Injection Bank H				Monitoring Points Log			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	DO (mg/L)	PID (ppm)
OW-2-37	62.8'	35	19	OW-2-45	61.1'	40	18	MP-2-1	30.40	15.14	0
OW-2-38	62.1'	32	18	OW-2-46	61'	40	18	MP-2-2	31.47	27.15	0.1
OW-2-39	60'	38	17	OW-2-47	60.5'	42	18	MP-2-3S	31.60	41.54	0.1
OW-2-40	61.7'	33	18					MP-2-3D	31.77	47.14	0.1
OW-2-41	61.7'	35	18					MP-2-4	20.31	44.41	0.1
OW-2-42	61.6'	40	18					MP-2-5	18.54	5.70	0
OW-2-43	61.4'	40	18								
OW-2-44R	60.6'	35	18								

Comments: All injection point flows were adjusted to ~30 scfh after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 12/16/2010

OPERATIONAL NOTES

GA5 Air Compressor

1) Oil Level Checked with system unloaded* Yes X No
   * Unload system, wait until Delivery Air Pressure is less than 9 psi
2) Oil Level with system unloaded
   Low (red) X Normal (green) High (orange)
3) Oil added Yes X No
4) Oil changed Yes No X
5) Oil filter changed Yes No X
6) Air filter Changed Yes No X
7) Oil separator changed Yes No X
8) Terminal strips checked Yes X No

AS-80 O_2 Generator

1) Prefilter changed Yes No X
2) Coalescing changed Yes No X

GENERAL SYSTEM NOTES

Trailer

1) Performed general housekeeping (i.e. sweep, collect trash inside and out, etc.)
   Yes X No
2) Abnormal conditions observed (e.g. vandalism)
3) Other major activities completed
4) Supplies needed
5) Visitors

Record routine activities such as any alarm/shutdowns, sampling, maintenance, material transported off-site, oil/filter/gasket and/or any other abnormal operating conditions:

Added small amount of oil to air compressor. Emptied waste cannister of oil & water from auto drain valves.

Action Items