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Groundwater Sampling, NAPL Monitoring/Recovery and Groundwater Treatment Performance Report for the First Quarter of 2011 (January - April 2011) 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

July 2011

GROUNDWATER SAMPLING, NAPL MONITORING/RECOVERY, AND GROUNDWATER TREATMENT PERFORMANCE REPORT FOR THE FIRST QUARTER OF 2011 (JANUARY – APRIL)

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

Prepared for:

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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
PID	photoionization detector
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 report provides a summary of field activities, analytical results, and data interpretations associated with groundwater treatment and sampling and recovery of non-aqueous phase liquid (NAPL) at the Hempstead Intersection Street Former Manufactured Gas Plant (MGP) site during the first quarter (January, February, and March) of 2011.

Groundwater monitoring and sampling was conducted on January 26- February 8, 2011. This included measuring the depth to groundwater and NAPL thickness in up to 74 wells. Groundwater samples were collected from 16 wells and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs).

NAPL monitoring and recovery was conducted on January 4, January 20-21, February 10, February 22-23, March 15, and March 28-29 for a total of 6 events in the first quarter of 2011.

Dissolved oxygen measurements were taken on January 7th, January 21st, February 9th, March 2nd, and March 18th for a total of 5 events during the first quarter of 2011.

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 in the range of 0.002-0.003 feet per feet (ft/ft).
- The dissolved-phase plume extended up to approximately 3,600 ft south of the site boundary.
- Dense non-aqueous phase liquid (DNAPL) was detected in 26 wells during the first quarter of 2011. The wells were located on site or within a parking lot immediately south of the site.
- The volume of NAPL recovered from the site wells varied from approximately 6 to 11 gallons per event. Approximately 50.0 gallons of NAPL were recovered during the first quarter of 2011. Approximately 657 gallons of NAPL have been recovered since April 2007.

- Based on a comparison between the first quarter 2011 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 delivery systems was brought on line in October 2010 and has successfully promoted increased aerobic conditions in the aquifer near the system during the first quarter of 2011.

1.0 INTRODUCTION

This groundwater sampling, NAPL monitoring/recovery, and groundwater treatment performance report describes field activites and presents field measurements, NAPL thickness measurements and recovery volumes, groundwater sampling analytical data, and oxygen measurement data associated with the Hempstead Instersection Street Former MGP site (refer to Figures 1 and 2). Interpretations of the data are also provided.

URS Corporation (URS) performed the following activities during the first quarter of 2011:

- Measured the depth to groundwater and NAPL thickness in accessible on site and off site monitoring wells (January 26 and 28, 2011).
- Collected groundwater samples from 16 monitoring wells for laboratory analysis (January 26- February 8, 2011).
- Recovered NAPL from accessible monitoring wells and piezometers (January 4, January 20-21, February 10, February 22-23, March 15, and March 28-29, 2011).

Fenely & Nicol Environmental, Inc. (F&N) performed water level measurement, well headspace monitoring with a photoionization detector (PID), and dissolved oxygen measrements on January 7th, January 21st, February 9th, March 2nd, and March 18th to monitor the performance of the groundwater treatment system.

Quarterly groundwater monitoring and bimonthly recovery of NAPL was initiated in April 2007. Separate reports were issued for quarterly activities performed in 2007, 2008, 2009, and 2010, and annual reports were produced that encompassed work conducted in the four quarters of 2008, 2009, and 2010, with the annual report for 2007 summarizing the last three quarters.

2.0 FIELD ACTIVITIES

The field activities performed by URS are summarized below.

- Measurement of the depth to groundwater and NAPL thickness in 74 monitoring wells.
- Collection of groundwater samples from 16 monitoring wells.
- Recovery of NAPL from accessible monitoring wells that contained measurable NAPL.

F&N performed water level measurement, well headspace monitoring with a photoionization detector (PID), and dissolved oxygen measrements on January 7th, January 21st, February 9th, March 2nd, and March 18th to monitor the performance of the groundwater treatment system. 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 are listed in Table 2. An electronic water level indicator was used to measure the depth to groundwater. NAPL thickness was measured using a weighted cotton string that absorbs oil.

2.2 NAPL Recovery

NAPL was recovered from 26 wells during six events from January to April 2011 (Table 3). All measured NAPL consisted of dense non-aqueous phase liquid (DNAPL) located at the bottom of the wells. 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 and the depth and thickness to any possible light non-aqueous phase liquid (LNAPL) at the top of the water column. Wells were gauged with a weighted cotton string to measure the DNAPL thickness. The DNAPL was recovered using either a Waterra inertial lift pump, or a dedicated bailer if the DNAPL was particularly viscous. Water and product that were recovered were stored in 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.

2.3 Groundwater 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 under a non-hazardous waste manifest.

2.4 Groundwater Treatment System Operation

National Grid completed the construction of Oxygen System #2 and will complete Oxygen System #1 in May of 2011 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. 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, see Table 5. Due to heavy snow cover, wells in Mirschel Park could not be located in January and February and thus were not monitored. The full system 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 is shown in Figure 4. 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 February 2011, 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 27 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 2,090 μg/L (intermediate well, HIMW-5I).

3.2 Potentiometric Heads and NAPL Thickness

Potentiometric heads and NAPL thickness measurements are presented in Table 2. Potentiometric surface maps for shallow, intermediate and deep groundwater zones were developed using this data and are shown in Figures 4, 5, and 6, respectively. The data indicates that the direction of groundwater flow within the well field was south at an average gradient in the range of 0.002-0.003 ft/ft.

DNAPL was detected in 26 wells during the first quarter of 2011 (Table 3). Figure 8 illustrates the thickness of DNAPL that was measured on January 20, 2011. Figures 9A through 9AK provide cumulative NAPL recovery amounts and NAPL thickness plots for the period of December 2003 through March 2011. 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 are summarized in Table 4 and illustrated on Figures 4 & 8.

A Data Usability Summary Report (DUSR) was 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 is included as Appendix A. The review 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 are 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 50 gallons of NAPL were recovered from 26 wells (Table 3). The volume of NAPL recovered during each event varied from approximately 6 to 11 gallons per event. Approximately 657 gallons of NAPL have been recovered since April 2007.

3.5 Groundwater Treatment System Performance

The groundwater treatment System No. 2 started operation on October 11, 2010. Twice monthly monitoring includes measurement of water depth, dissolved oxygen concentration, and headspace vapors by photoionization detector monitoring. A summary of the data collected from the monitoring points is presented on Table 5.

By injecting a gas of approximately 90% oxygen into the aquifer, maximum dissolved oxygen concentrations in the range of 40 - 50 mg/L can be achieved at saturation. Concentrations in this range were observed in the wells located more towards the center of the System No. 2 line of oxygen delivery wells (monitoring points MP-2-3S and MP-2-3D), with lower concentrations typically observed near the ends of the system.

The performance of System No. 2 has been effective in raising the oxygen level sufficiently to support aerobic bacterial growth and associated hydrocarbon degradation.

Throughout all monitoring points, the dissolved oxygen level was above 11 mg/L, providing an aerobic environment. Measurement of dissolved oxygen levels below the saturated range of 40 - 50 mg/L at locations such as MP-2-2 and MP-2-4 suggests that bacterial activity is especially active in these locations; consumption of the oxygen in these locations would correspond to degradation of hydrocarbons, presumed to be the primary carbon source for the bacteria.

PID measurements of headspace gas were consistently low (0.0 to 0.1 parts per million).

4.0 SUMMARY

Following is a summary of the first quarter 2011 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 in the range of 0.002-0.003 ft/ft.
- The dissolved-phase plume extended up to approximately 3,600 feet south of the site boundary.
- DNAPL was detected in 26 wells during the first quarter of 2011. The wells were located on site or within a parking lot immediately south of the site.
- The volume of NAPL recovered from the site wells varied from approximately 6 to 11 gallons per event. Approximately 50 gallons of NAPL were recovered during the first quarter of 2011. Approximately 657 gallons of NAPL have been recovered since April 2007.
- Based on a comparison between the fourth quarter 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 delivery systems continued operation throughout the quarter 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.

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

TABLES

Table 1

Summary of Field Activities for the First Quarter 2011 [(1), (2), (3)]
Hempstead Intersection Street Former MGP Site

Well ID	Quarterly Monitoring & Sampling Event (January 26-28)			NAPL Monitoring and DNAPL Recovery Events					
	Water Level	NAPL Thickness	Water Quality	Jan 4, 2011	Jan 21, 2011	Feb 10, 2011	Feb 23, 2011	Mar 15, 2011	Mar 29, 2011
HIMW-001S	X	X			X		X		X
HIMW-001I	X	X		X	X		X		X
HIMW-001D*									
HIMW-002S	X	X							
HIMW-002I	X	X							
HIMW-002D	X	X							
HIMW-003S	X	X							
HIMW-003I	X	X							
HIMW-003D	X	X							
HIMW-004S	X	X							
HIMW-004I	X	X							
HIMW-004D	X	X							
HIMW-005S	X	X	X						
HIMW-005I	X	X	X						
HIMW-005D	X	X	X						
HIMW-006S	X	X			X	X	X	X	X
HIMW-006I	X	X			X		X		X
HIMW-006D	X	X							
HIMW-007S	X	X		X	X	X	X	X	X
HIMW-007I	X	X			X		X		X
HIMW-007D	X	X			X		X		X
HIMW-008S	X	X	X						
HIMW-008I	X	X	X						
HIMW-008D	X	X	X						
HIMW-009S	X	X							
HIMW-009I	X	X							
HIMW-009D	X	X							
HIMW-010S	I	I							
HIMW-010I	X	X							
HIMW-010D	I	I							
HIMW-011S	I	I			I		I		X
HIMW-011I	I	I			I		I		X
HIMW-011D	I	I							
HIMW-012S	X	X	X						
HIMW-012I	X	X	X						
HIMW-012D	X	X	X						
HIMW-013S	X	X							
HIMW-013I	X	X	X						
HIMW-013D	X	X	X						
HIMW-014I	X	X	X						
HIMW-014D	X	X							
HIMW-015I	X	X	X						
HIMW-015D	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
HIMW-018S	X	X			X		X		X
HIMW-018I	X	X			X		X		X
HIMW-019S	X	X			X		X		X
HIMW-019I	X	X			X		X		X
HIMW-20S	X	X	X						
HIMW-20I	X	X	X						
HIMW-21	X	X			X	X	X		X
PZ-02									
PZ-03									
PZ-08	I	I		X	X		X	X	X

Table 1

Summary of Field Activities for the First Quarter 2011 [(1), (2), (3)]
Hempstead Intersection Street Former MGP Site

Well ID	Quarterly Monitoring & Sampling Event (January 26-28)			NAPL Monitoring and DNAPL Recovery Events					
	Water Level	NAPL Thickness	Water Quality	Jan 4, 2011	Jan 21, 2011	Feb 10, 2011	Feb 23, 2011	Mar 15, 2011	Mar 29, 2011
IPR-01	X	X			X		X		X
IPR-02	X	X			X		I		X
IPR-03	X	X			X		X		X
IPR-04	X	X			X		X		X
IPR-05	I	I			X		I		I
IPR-06	X	X		X	X		X	X	X
IPR-07	X	X			X		I		X
IPR-08	X	X			X		X		X
IPR-09	X	X			X		X		X
IPR-10	X	X			X		X		X
IPR-11	X	X			X		X		X
IPR-12A	X	X			X		X		X
IPR-12B	I	I			I		I		X
IPR-13	X	X			X		X		X
IPR-14	X	X			X		X		X
IPR-15	X	X			X		X		X
IPR-16	X	X			X		X	X	X
IPR-17	X	X			X		X		X
IPR-18	X	X			I		X		X
IPR-19S*									
IPR-19D	X	X			I		X		X
IPR-20	X	X			X		X		X
IPR-21	X	X		X	X		X		X
IPR-22	X	X			X	X	X	X	X
IPR-23	X	X			I		X		X
IPR-24	X	X			I		X		X
IPR-25	I	I		X	X		X	X	X
IPR-26	I	I			I		I		X
IPR-27	X	X		X	X	X	X		X
IPR-28	X	X			X		X		X
IPR-29	X	X			X	X	X	X	X
IPR-30	X	X		X	I		X		X
OSMW-01	I	I			I		I		X
OSMW-02	I	I			I		I		X
OSMW-03	I	I			I		I		

Notes:

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

2 Blank field indicates that the activity was not performed.

3 Field marked with "I" indicates that monitoring was attempted, but the well was temporarily inaccessible due to snow or on-site soil stockpile.

* IPR-19S is covered with cold patch and is inaccessible. HIMW-001D riser is damaged and is unusable.

Table 2
Groundwater and NAPL Measurements
First Quarter 2011
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	1/26/2011	71.61	ND	25.69	ND	40.9	0	0.00	45.92
HIMW-01I	1/26/2011	71.68	ND	25.82	85.80	85.9	0	0.10	45.86
HIMW-01D	NM	71.95	NM	p	NM	129.1	NM	NM	#VALUE!
HIMW-02S	1/26/2011	73.82	ND	27.75	ND	42.4	0	0.00	46.07
HIMW-02I	1/26/2011	78.87	ND	27.81	ND	92.9	0	0.00	51.06
HIMW-02D	1/26/2011	74.13	ND	28.50	ND	119.0	0	0.00	45.63
HIMW-03S	1/26/2011	65.00	ND	19.18	ND	34.8	0	0.00	45.82
HIMW-03I	1/26/2011	64.94	ND	19.27	ND	87.1	0	0.00	45.67
HIMW-03D	1/26/2011	65.26	ND	19.97	ND	145.5	0	0.00	45.29
HIMW-04S	1/26/2011	72.74	ND	27.61	ND	41.7	0	0.00	45.13
HIMW-04I	1/26/2011	72.78	ND	27.66	ND	90.6	0	0.00	45.12
HIMW-04D	1/26/2011	72.65	ND	27.98	ND	180.5	0	0.00	44.67
HIMW-05S	1/28/2011	67.19	ND	21.98	ND	39.1	0	0.00	45.21
HIMW-05I	1/28/2011	67.22	ND	22.09	ND	92.3	0	0.00	45.13
HIMW-05D	1/28/2011	67.22	ND	22.60	ND	139.0	0	0.00	44.62
HIMW-06S	1/26/2011	68.25	ND	22.42	35.90	36.9	0	1.00	45.83
HIMW-06I	1/26/2011	67.88	ND	22.48	81.80	82.2	0	0.40	45.40
HIMW-06D	1/26/2011	67.77	ND	22.34	ND	120.0	0	0.00	45.43
HIMW-07S	1/26/2011	70.47	ND	24.98	39.70	40.7	0	1.00	45.49
HIMW-07I	1/26/2011	70.10	ND	24.92	ND	90.6	0	0.00	45.18
HIMW-07D	1/26/2011	70.40	ND	24.85	ND	117.7	0	0.00	45.55
HIMW-08S	1/28/2011	65.04	ND	19.52	ND	37.1	0	0.00	45.52
HIMW-08I	1/28/2011	65.14	ND	20.36	ND	75.1	0	0.00	44.78
HIMW-08D	1/28/2011	64.93	ND	20.17	ND	114.8	0	0.00	44.76
HIMW-09S	1/28/2011	70.03	ND	24.73	ND	39.6	0	0.00	45.30
HIMW-09I	1/28/2011	69.93	ND	24.71	ND	80.5	0	0.00	45.22
HIMW-09D	1/28/2011	69.96	ND	24.82	ND	NM	0	0.00	45.14
HIMW-10S	NM	71.60	NM	NM	NM	40.3	NM	NM	NM
HIMW-10I	1/28/2011	71.47	ND	25.78	ND	91.8	0	0.00	45.69
HIMW-10D	NM	71.44	NM	NM	NM	136.0	NM	NM	NM
HIMW-11S	NM	71.62	NM	NM	NM	41.6	NM	NM	NM
HIMW-11I	NM	71.43	NM	NM	NM	94.5	NM	NM	NM
HIMW-11D	NM	71.39	NM	NM	NM	123.6	NM	NM	NM
HIMW-12S	1/28/2011	61.58	ND	18.03	ND	33.5	0	0.00	43.55
HIMW-12I	1/28/2011	61.59	ND	17.92	ND	75.0	0	0.00	43.67
HIMW-12D	1/28/2011	61.82	ND	19.58	ND	128.5	0	0.00	42.24
HIMW-13S	1/26/2011	72.83	ND	31.26	ND	49.2	0	0.00	41.57
HIMW-13I	1/26/2011	72.60	ND	31.05	ND	82.6	0	0.00	41.55
HIMW-13D	1/26/2011	72.53	ND	31.02	ND	122.5	0	0.00	41.51
HIMW-14I	1/26/2011	71.71	ND	30.18	ND	96.9	0	0.00	41.53
HIMW-14D	1/26/2011	71.59	ND	31.75	ND	152.0	0	0.00	39.84
HIMW-15I	1/26/2011	64.18	ND	25.48	ND	93.1	0	0.00	38.70
HIMW-15D	1/26/2011	63.96	ND	26.59	ND	155.0	0	0.00	37.37
HIMW-16S	1/28/2011	67.45	ND	22.07	29.30	34.4	0	5.10	45.38
HIMW-16I	1/28/2011	67.50	ND	22.23	78.00	82.7	0	4.70	45.27
HIMW-17S	1/28/2011	65.96	ND	20.88	35.50	36.7	0	1.20	45.08
HIMW-18S	1/26/2011	69.76	ND	24.04	41.80	42.1	0	0.30	45.72
HIMW-18I	1/26/2011	69.70	ND	23.98	ND	71.2	0	0.00	45.72
HIMW-19S	1/26/2011	70.95	ND	24.91	39.30	39.4	0	0.10	46.04
HIMW-19I	1/26/2011	71.27	ND	25.08	ND	68.9	0	0.00	46.19
HIMW-20S	1/26/2011	70.43	ND	26.17	ND	35.0	0	0.00	44.26
HIMW-20I	1/26/2011	70.30	ND	20.03	ND	73.0	0	0.00	50.27

Table 2
Groundwater and NAPL Measurements
First Quarter 2011
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	1/28/2011	NM	ND	20.52	43.80	45.3	0	1.50	NM
PZ-02	NM	72.96	NM	NM	NM	35.3	NM	NM	NM
PZ-03	NM	64.58	NM	NM	NM	29.5	NM	NM	NM
PZ-08	1/20/2011	70.51	ND	23.72	35.4	35.5	0	0.10	46.79
IPR-01	1/26/2011	70.30	ND	24.27	ND	41.9	0	0.00	46.03
IPR-02	1/26/2011	68.84	ND	22.58	70.20	70.3	0	0.10	46.26
IPR-03	1/26/2011	69.16	ND	23.25	ND	44.7	0	0.00	45.91
IPR-04	1/26/2011	69.23	ND	23.37	ND	84.4	0	0.00	45.86
IPR-05	1/20/2011	70.39	ND	24.48	51.3	52.1	0	0.80	45.91
IPR-06	1/26/2011	70.79	ND	25.02	54.40	55.4	0	1.00	45.77
IPR-07	1/26/2011	69.73	ND	23.97	ND	38.0	0	0.00	45.76
IPR-08	1/26/2011	70.51	ND	24.88	ND	40.3	0	0.00	45.63
IPR-09	1/26/2011	70.00	ND	24.35	ND	45.0	0	0.00	45.65
IPR-10	1/26/2011	70.80	ND	25.07	ND	44.8	0	0.00	45.73
IPR-11	1/26/2011	68.29	ND	22.73	ND	44.6	0	0.00	45.56
IPR-12A	1/26/2011	70.14	ND	23.96	ND	38.1	0	0.00	46.18
IPR-12B	NM	69.56	NM	NM	NM	45.2	NM	0.00	NM
IPR-13	1/26/2011	70.77	ND	25.08	ND	44.4	0	0.00	45.69
IPR-14	1/28/2011	66.93	ND	21.46	ND	44.4	0	0.00	45.47
IPR-15	1/28/2011	67.93	ND	22.43	44.39	44.4	0	0.01	45.50
IPR-16	1/28/2011	69.49	ND	23.95	48.40	49.1	0	0.70	45.54
IPR-17	1/28/2011	70.60	ND	24.98	54.09	54.1	0	0.01	45.62
IPR-18	1/28/2011	66.87	ND	21.54	ND	50.0	0	0.00	45.33
IPR-19S	NM	67.68	NM	NM	NM	45.1	NM	0.00	NM
IPR-19D	1/28/2011	67.96	ND	22.61	ND	89.9	0	0.00	45.35
IPR-20	1/28/2011	66.70	ND	21.48	45.10	45.4	0	0.30	45.22
IPR-21	1/28/2011	67.67	ND	22.38	44.45	45.0	0	0.55	45.29
IPR-22	1/28/2011	66.33	ND	21.12	43.10	45.4	0	2.30	45.21
IPR-23	1/28/2011	66.67	ND	21.51	ND	45.4	0	0.00	45.16
IPR-24	1/28/2011	65.88	ND	20.85	NM	44.4	0	NM	45.03
IPR-25	1/20/2011	70.56	ND	24.51	43.1	44.5	0	1.40	46.05
IPR-26	NM	NM	NM	NM	NM	NM	NM	NM	NM
IPR-27	1/26/2011	NM	ND	24.98	ND	NM	0	0.70	NM
IPR-28	1/26/2011	NM	ND	22.47	ND	NM	0	0.40	NM
IPR-29	1/28/2011	NM	ND	20.82	48.80	49.7	0	0.90	NM
IPR-30	1/28/2011	NM	ND	21.81	ND	NM	0	0.00	NM
IPR-31	NM	NM	NM	NM	NM	NM	NM	NM	NM
OSMW-01	NM	71.12	NM	NM	NM	42.2	NM	NM	NM
OSMW-02	NM	71.59	NM	NM	NM	45.2	NM	NM	NM
OSMW-03	NM	71.39	NM	NM	NM	44.7	NM	NM	NM

Notes:

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

(2) DNAPL thicknesses measured on 1/20/2011

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
First Quarter of 2011
Hempstead Intersection Street Former MGP Site

Well ID	January 4, 2011			January 21, 2011			February 10, 2011			February 23, 2011			March 15, 2011			March 29, 2011		
	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	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-01I	ND	0.80	0.75	ND	0.1	0.00	NI	NI	0.00	ND	1.00	0.00	NI	NI	0.00	ND	1.40	0.24
HIMW-06S	NI	NI	0.00	ND	1.00	0.17	ND	1.50	0.25	NI	4.00	0.68	ND	3.50	0.60	ND	4.70	0.80
HIMW-06I	NI	NI	0.00	ND	0.40	0.07	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
HIMW-07S	ND	1.20	0.20	ND	1.00	0.17	ND	1.70	0.30	ND	2.60	0.44	ND	0.50	0.09	ND	0.50	0.09
HIMW-07I	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-07D	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-11S	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-11I	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-16S	ND	4.70	0.79	ND	5.1	0.00	ND	6.75	1.10	ND	5.50	0.94	NI	NI	0.00	ND	6.90	1.17
HIMW-16I	ND	4.70	0.79	ND	4.7	0.00	ND	6.05	1.00	ND	5.70	0.97	NI	NI	0.00	ND	6.00	1.02
HIMW-17S	NI	NI	0.00	ND	1.2	0.00	NI	NI	0.00	ND	0.60	0.10	NI	NI	0.00	ND	1.70	0.00
HIMW-18S	NI	NI	0.00	ND	0.30	0.05	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
HIMW-18I	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-19S	NI	NI	0.00	ND	0.1	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.95	0.00
HIMW-19I	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-21	NI	NI	0.00	ND	1.50	2.25	ND	0.65	1.00	ND	0.4	0.33	NI	NI	0.00	ND	1.65	0.00
PZ-08	ND	1.20	0.20	ND	0.1	0.00	NI	NI	0.00	ND	1.10	0.19	ND	1.50	0.00	ND	0.01	0.00
IPR-02	NI	NI	0.00	ND	0.1	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	1.10	0.00
IPR-03	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
IPR-05	NI	NI	0.00	ND	0.8	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	0.00	0.00
IPR-06	ND	1.10	1.65	ND	1.00	1.5	NI	NI	0.00	ND	1.60	0.33	ND	1.50	2.25	ND	1.60	2.40
IPR-09	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.75	1.13
IPR-12A	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
IPR-14	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
IPR-15	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
IPR-16	NI	NI	0.00	ND	0.7	0.00	NI	NI	0.00	ND	0.30	0.00	ND	1.00	1.50	ND	1.15	0.00
IPR-17	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	1.10	0.00
IPR-18	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
IPR-19D	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
IPR-20	NI	NI	0.00	ND	0.3	0.00	NI	NI	0.00	ND	0.10	0.00	NI	NI	0.00	ND	0.70	0.00
IPR-21	ND	0.90	1.35	ND	0.55	0.00	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00	ND	2.70	0.00
IPR-22	NI	NI	0.00	ND	2.30	3.45	ND	2.1	1.50	ND	1.25	1.80	ND	0.90	1.40	ND	1.30	0.00
IPR-23	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
IPR-24	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	0.40	0.00	NI	NI	0.00	ND	0.01	0.00
IPR-25	ND	1.90	2.85	ND	1.40	0.00	NI	NI	0.00	ND	2.00	0.25	ND	0.75	0.00	ND	2.10	0.00
IPR-26	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	1.30	1.95
IPR-27	ND	1.20	1.80	ND	0.70	1.10	ND	1.10	0.75	ND	1.50	0.50	NI	NI	0.00	ND	1.60	0.50
IPR-28	NI	NI	0.00	ND	0.40	0.60	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
IPR-29	NI	NI	0.00	ND	0.90	0.00	ND	1.25	0.30	ND	1.40	0.25	ND	0.85	1.30	ND	1.40	0.00
IPR-30	ND	0.50	0.75	NI	NI	0.00	NI	NI	0.00	ND	0.60	0.00	NI	NI	0.00	ND	0.85	0.00
	Volume Removed		**11.13**	Volume Removed		**9.36**	Volume Removed		**6.20**	Volume Removed		**6.78**	Volume Removed		**7.14**	Volume Removed		**9.30**

Total volume recovered during the first quarter 2010: **49.91 gal**
Total volume of NAPL recovered since April 2007: **656.8 gal**

Well temporarily inaccessible at time of monitoring event due to snow or on- site soil stockpile

Notes:

NI - well not included in the product recovery event
ND - non-detect
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 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.
All HIMW (unless noted) and PZ monitoring wells are 2-inch diameter:	Vol =	0.163 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 for the First Quarter of 2011 Hempstead Intersection Street Former MGP Site

Well ID	First Quarter 2011 January 26- February 8, 2011	
	BTEX [ug/L]	PAH [ug/L]
HIMW-001D		
HIMW-001I		
HIMW-001S		
HIMW-002D		
HIMW-002I		
HIMW-002S		
HIMW-003D		
HIMW-003I		
HIMW-003S		
HIMW-004D		
HIMW-004I		
HIMW-004S		
HIMW-005D	145.3	1, 178
HIMW-005I	136.9	2,090
HIMW-005S	ND	ND
HIMW-006D		
HIMW-006I		
HIMW-006S		
HIMW-007D		
HIMW-007I		
HIMW-007S		
HIMW-008D	ND	ND
HIMW-008I	ND	ND
HIMW-008S	ND	ND
HIMW-009D		
HIMW-009I		
HIMW-009S		
HIMW-010D		
HIMW-010I		
HIMW-010S		
HIMW-011D		
HIMW-011I		
HIMW-011S		
HIMW-012D	ND	ND
HIMW-012I	54.4	104
HIMW-012S	338.8	1,391
HIMW-013D	8.1	15
HIMW-013I	205.4	128
HIMW-013S		
HIMW-014D		
HIMW-014I	37	39
HIMW-015D	ND	ND
HIMW-015I	24.7	27
HIMW-016I		
HIMW-016S		
HIMW-017S		
HIMW-018I		
HIMW-018S		
HIMW-019I		
HIMW-019S		
HIMW-020I	186	1,144
HIMW-020S	1.7	ND
PZ-02		
PZ-03		
PZ-08		

Notes:

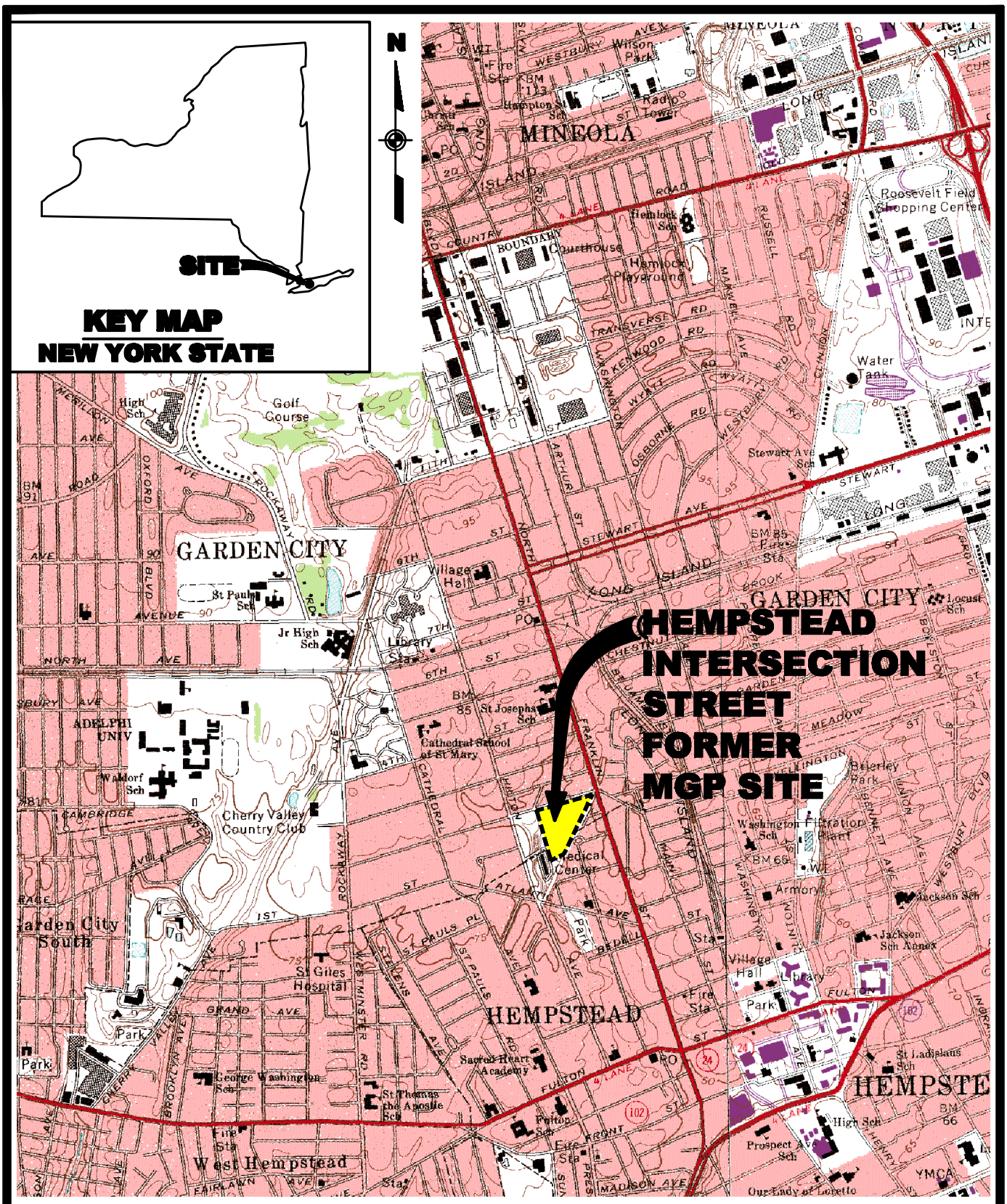
	A blank field is "Not Sampled".
	NAPL is periodically identified in this well.
ND	Not Detected.
ug/L	micrograms per liter

Table 5
Groundwater Treatment Performance Monitoring
First Quarter 2011
Hempstead Intersection Street Former MGP Site

	1/7/2011			1/21/2011			2/9/2011			3/2/2011			3/18/2011		
ID	**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	30.57	14.57	0	30.56	11.05	0	30.51	13.12	0	30.09	11.10	0	29.43	19.60	0
MP-2-2	31.66	29.54	0	31.62	21.30	0	31.57	40.48	0	31.13	23.57	0	30.47	39.21	0
MP-2-3S	31.76	46.97	0.1	31.68	48.62	0	31.66	41.81	0.1	31.21	48.95	0.1	30.58	48.05	0
MP-2-3D	31.98	47.12	0.1	31.92	48.45	0	31.91	49.01	0.1	29.25	48.50	0	30.80	49.00	0
MP-2-4	20.50	33.35	0	CNL	CNL	CNL	20.38	32.31	0	19.95	30.60	0	19.31	35.64	0.1
MP-2-5	CNL	CNL	CNL	CNL	CNL	CNL	CNL	CNL	CNL	18.14	17.05	0	17.53	12.35	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)
CNL: Could Not Locate, due to snow accumulation

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)

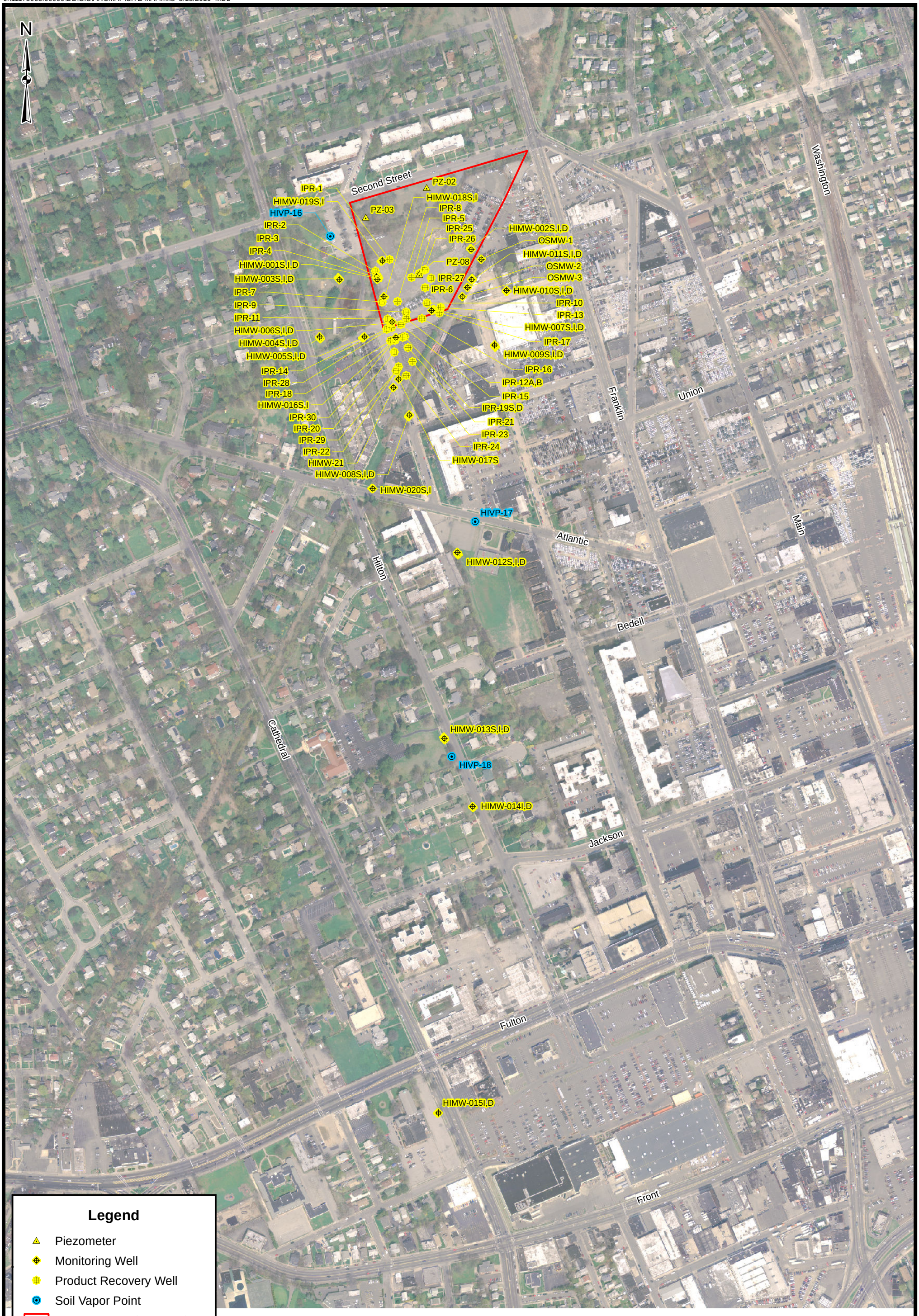
URS Corporation

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

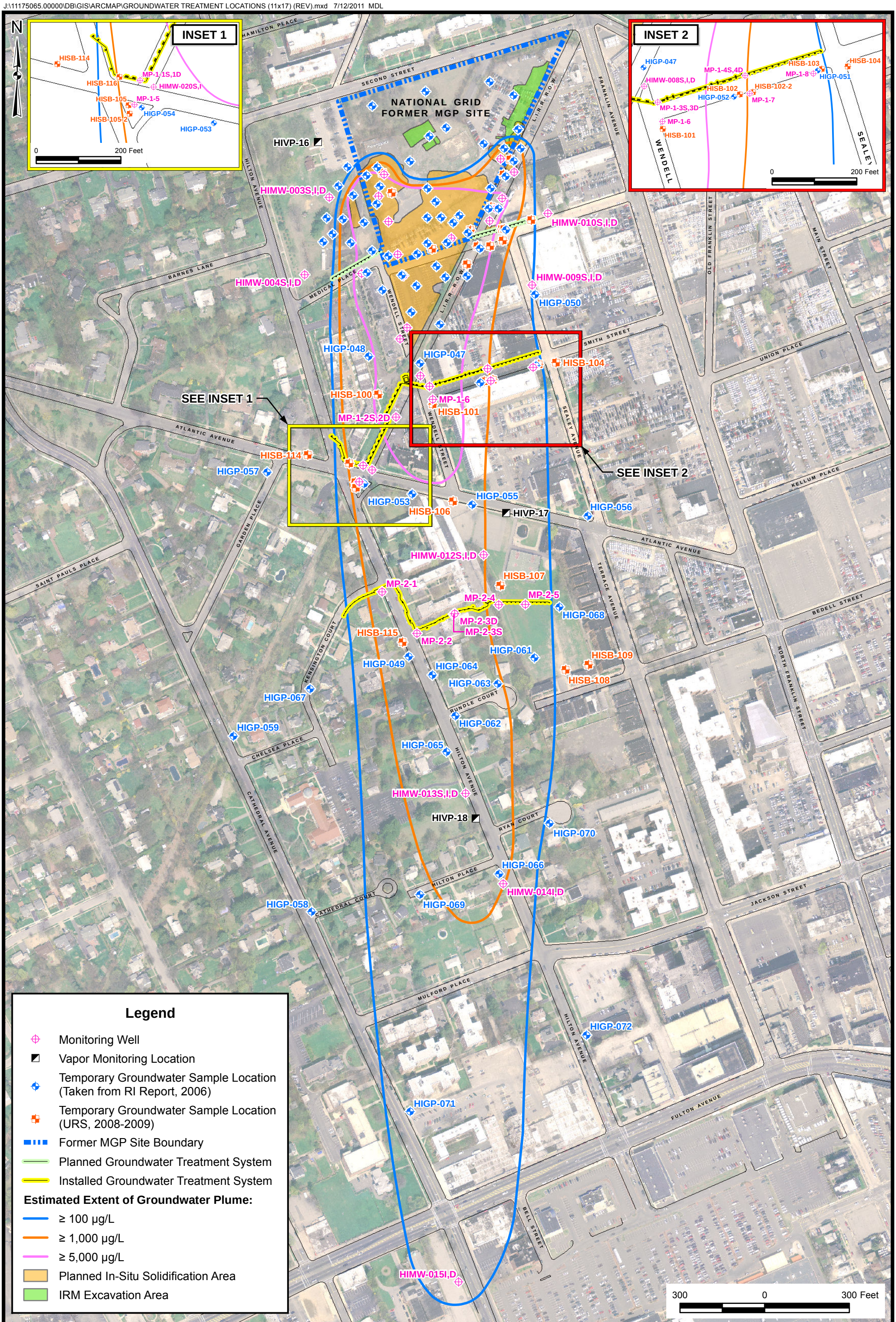


URS

HEMPSTEAD/GARDEN CITY, NY
SITE MAP

FIGURE 2

J:\11175065.00000\DB\GIS\ARCMAP\GROUNDWATER TREATMENT LOCATIONS (11x17) (REV).mxd 7/12/2011 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 3

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	27
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 (5,080)
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

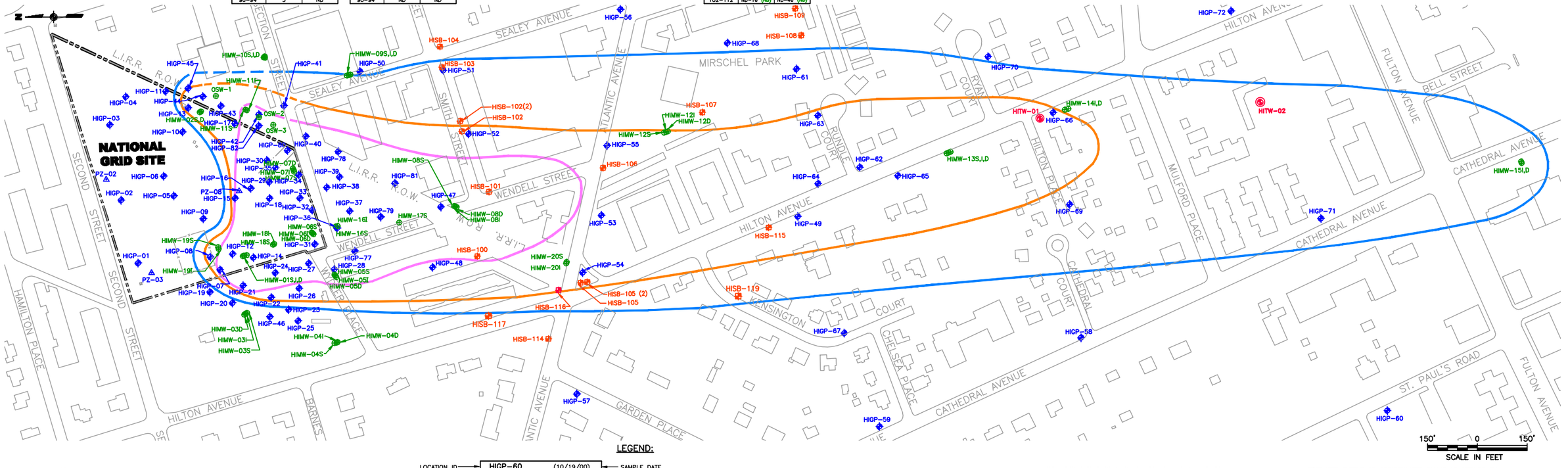
HIGP-28 (8/4/00)		
DEPTH	TOT. BTEX	TOT. PAHs
29–33	17	22
58–62	2,640	5,933

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 4

J:\11175085.00000\CAD\DRAFT\TASK2\HEMPSTEAD\GROUNDWATER MONITORING\FIRST QUARTER 2011\FIGURE 4.dwg 6/7/11 - 5 RAL

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\JAN 2011\FIGURE 5.dwg 6/7/11 - 4 RAL

N

NATIONAL GRID
FORMER MGP SITE

HIMW-19S, 46.04
HIMW-01S, 45.94
IPR-8, 45.63
IPR-9, 45.65
HIMW-03S, 45.82
HIMW-18S, 45.72
IPR-7, 45.76
IPR-12A, 46.18
IPR-11, 45.56
HIMW-06S, 45.83
IPR-14, 45.47
HIMW-04S, 45.13
HIMW-05S, 45.21
HIMW-016S, 45.38
IPR-20, 45.22
IPR-1, 46.03
IPR-3, 45.91
IPR-25, NM
IPR-10, 45.73
IPR-12B, NM
IPR-21, 45.29
IPR-22, 45.21
IPR-23, 45.16
IPR-24, 45.03
HIMW-17S, 45.08
HIMW-8S, 45.52
HIMW-20S, 44.26
HIMW-12S, 43.55
HIMW-13S, 41.57
HIMW-02S, 46.07
OSMW-1, NM
PZ-08, NM
HIMW-11S, NM
HIMW-10S, NM
OSMW-2, NM
OSMW-3, NM
IPR-13, 45.69
HIMW-07S, 45.49
HIMW-09S, 45.3

46
45.5
45
44.5
44
43.5
43
42.5
42

SECOND STREET
HILTON AVENUE
BARNES LANE
WATER PLACE
WENDELL STREET
L.I.R.R. R.O.W.
SEALEY AVENUE
SMITH STREET
ATLANTIC AVENUE
GARDEN PLACE
KENSINGTON COURT
CATHEDRAL AVENUE
CHELSEA PLACE
MIRSCHEL PARK
RUNDLE COURT
RYAN COURT
CATHEDRAL COURT
HILTON PLACE
MULFORD PLACE
MAIN STREET
FRANKLIN AVENUE
OLD FRANKLIN STREET
MEADOW PLACE
STOWE PLACE
SAMMIS PLACE
MILLER PLACE
UNION PLACE
KELLUM PLACE
TERRACE AVENUE
MARGARET COURT
BEDELL STREET
NORTH FRANKLIN STREET
WEST COLUMBIA
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)
- NM — NOT MEASURED DURING THIS SAMPLING EVENT

300' 0 300'
SCALE IN FEET

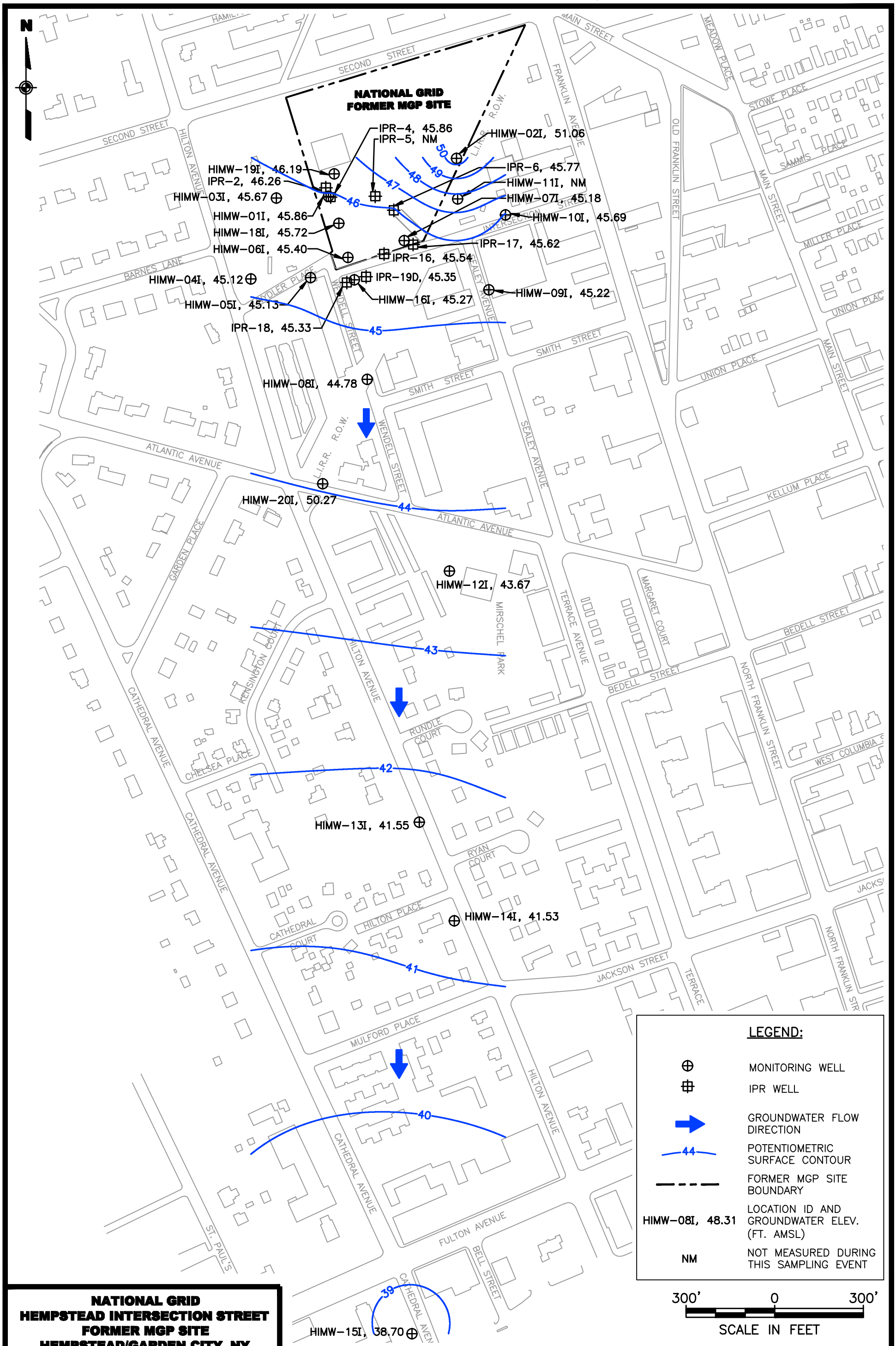
NATIONAL GRID
HEMPSTEAD INTERSECTION STREET
FORMER MGP SITE
HEMPSTEAD/GARDEN CITY, NY

URS Corporation

HEMPSTEAD/GARDEN CITY, NY
POTENTIOMETRIC SURFACE MAP FOR SHALLOW GROUNDWATER
JANUARY 26-28, 2011

FIGURE 5

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\JAN 2011\FIGURE 6.dwg 6/7/11 - 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
JANUARY 26-28, 2011

FIGURE 6

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\JAN 2011\FIGURE 7.dwg 6/7/11 - 4 RAL

N

NATIONAL GRID
FORMER MGP SITE

HIMW-02D, 45.63
HIMW-11D, NM
HIMW-10D, NM
HIMW-03D, 45.29
HIMW-05D, 44.62
HIMW-07D, 45.55
HIMW-06D, 45.43
HIMW-04D, 44.67
HIMW-09D, 45.14
HIMW-8D, 44.76
HIMW-12D, 42.24
HIMW-13D, 41.51
HIMW-14D, 39.84
HIMW-15D, 37.37

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.
INTERSECTION STREET
SEALEY AVENUE
FRANKLIN AVENUE
MAIN STREET
MEADOW PLACE
STOWE PLACE
SAMMS PLACE
OLD FRANKLIN STREET
MILLER PLACE
UNION PLACE
SMITH STREET
ATLANTIC AVENUE
GARDEN PLACE
KENSINGTON COURT
CATHEDRAL AVENUE
CHELSEA PLACE
KELLUM PLACE
MIRSCHEL PARK
TERRACE AVENUE
MARGARET COURT
BEDELL STREET
RUNDLE COURT
NORTH FRANKLIN STREET
WEST COLUMBIA
RYAN COURT
JACKSON STREET
CATHEDRAL COURT
HILTON PLACE
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)
NM	NOT MEASURED DURING THIS SAMPLING EVENT

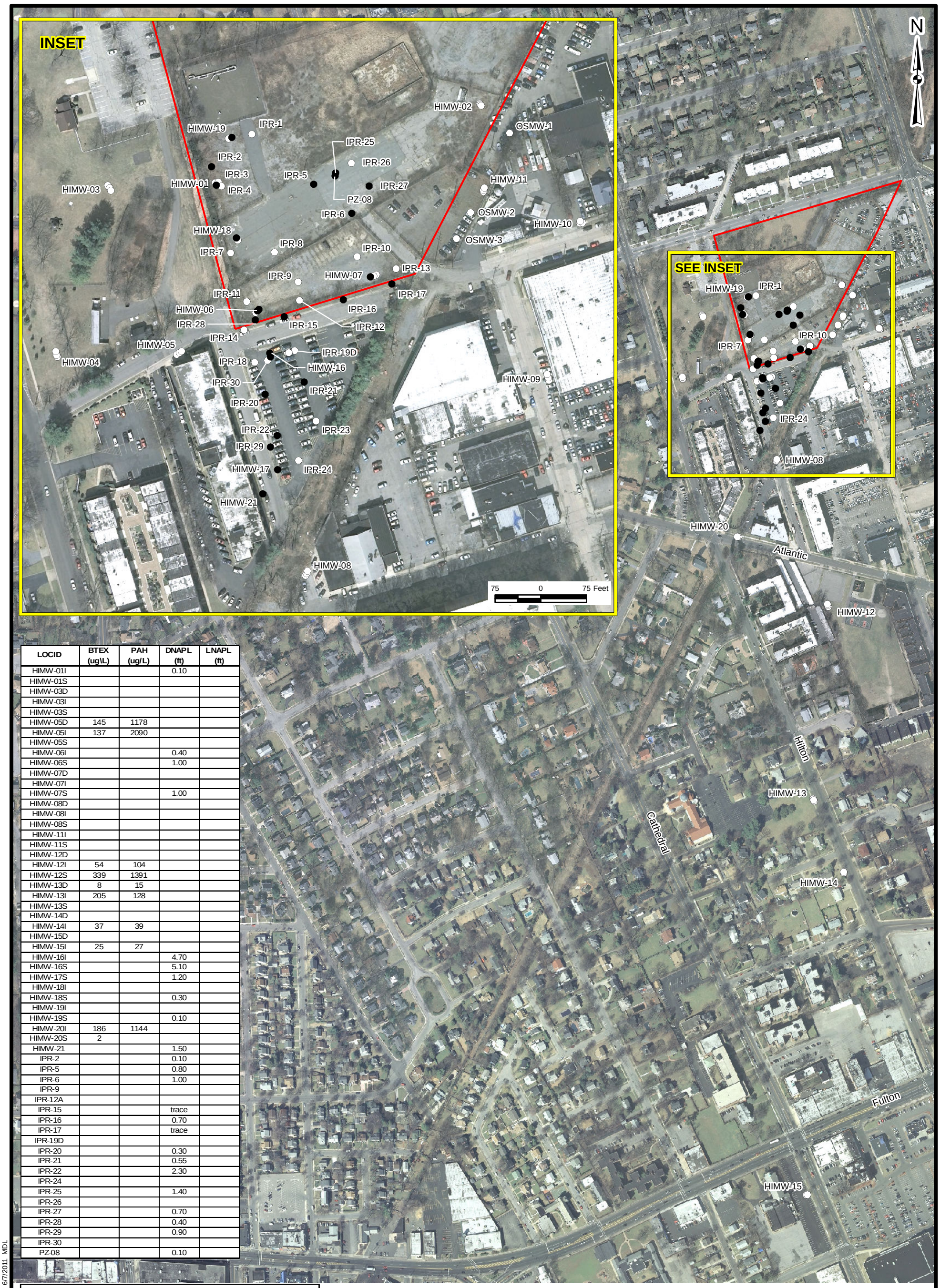
300' 0 300'
SCALE IN FEET

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

URS Corporation

HEMPSTEAD/GARDEN CITY, NY
POTENTIOMETRIC SURFACE MAP FOR DEEP GROUNDWATER
JANUARY 26-28, 2011

FIGURE 7



LOCID	BTEX (ug\L)	PAH (ug/L)	DNAPL (ft)	LNAPL (ft)
HIMW-01I			0.10	
HIMW-01S				
HIMW-03D				
HIMW-03I				
HIMW-03S				
HIMW-05D	145	1178		
HIMW-05I	137	2090		
HIMW-05S				
HIMW-06I			0.40	
HIMW-06S			1.00	
HIMW-07D				
HIMW-07I				
HIMW-07S			1.00	
HIMW-08D				
HIMW-08I				
HIMW-08S				
HIMW-11I				
HIMW-11S				
HIMW-12D				
HIMW-12I	54	104		
HIMW-12S	339	1391		
HIMW-13D	8	15		
HIMW-13I	205	128		
HIMW-13S				
HIMW-14D				
HIMW-14I	37	39		
HIMW-15D				
HIMW-15I	25	27		
HIMW-16I			4.70	
HIMW-16S			5.10	
HIMW-17S			1.20	
HIMW-18I				
HIMW-18S			0.30	
HIMW-19I				
HIMW-19S			0.10	
HIMW-20I	186	1144		
HIMW-20S	2			
HIMW-21			1.50	
IPR-2			0.10	
IPR-5			0.80	
IPR-6			1.00	
IPR-9				
IPR-12A				
IPR-15			trace	
IPR-16			0.70	
IPR-17			trace	
IPR-19D				
IPR-20			0.30	
IPR-21			0.55	
IPR-22			2.30	
IPR-24				
IPR-25			1.40	
IPR-26				
IPR-27			0.70	
IPR-28			0.40	
IPR-29			0.90	
IPR-30				
PZ-08			0.10	

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
NAPL thickness for all wells measured on 01/20/11
BTEX/PAH sampling occurred on 02/01/11 - 02/08/11

400 0 400 Feet

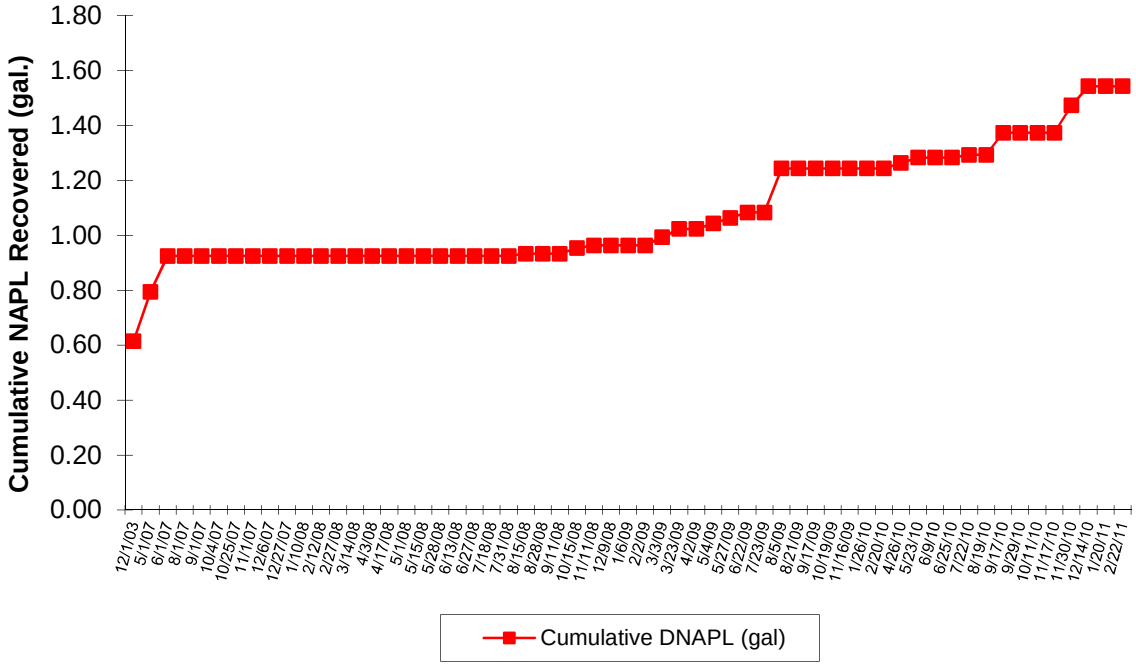
URS

HEMPSTEAD/GARDEN CITY, NY
TOTAL DISSOLVED-PHASE BTEX/PAH CONCENTRATIONS
AND FREE PRODUCT THICKNESS
FIRST QUARTER 2011

FIGURE 8

J:\11175065.00000\DB\GIS\ARCMAP\0111 BTEXPAH-NAPL.mxd 6/7/2011 MDL

FIGURE 9A
Well HIMW-01S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



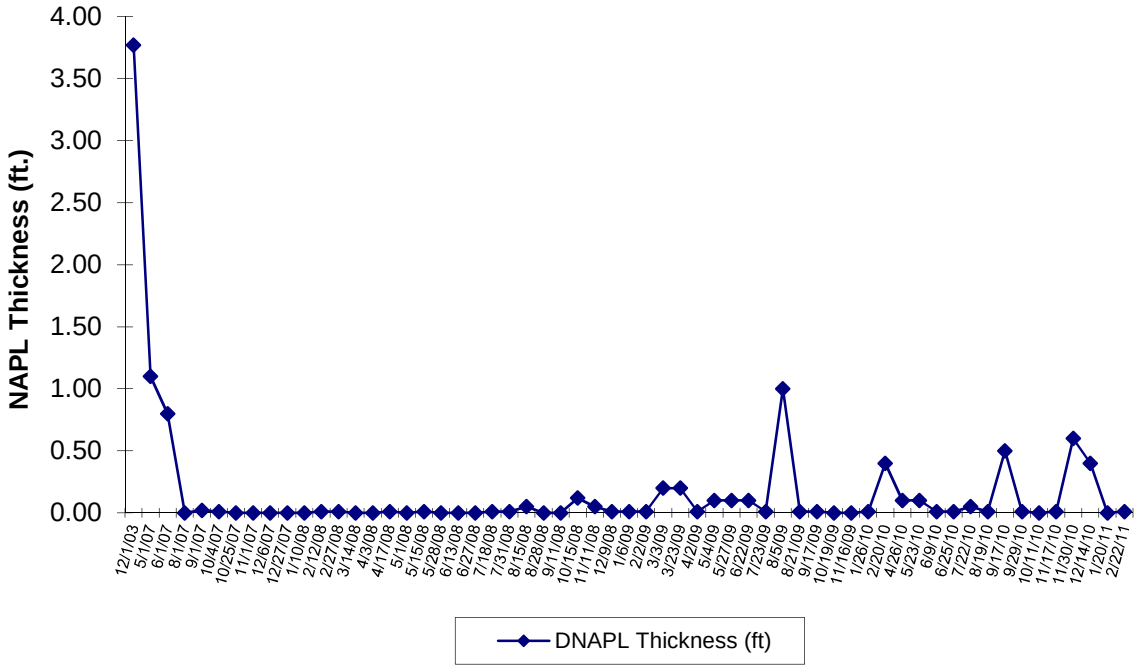
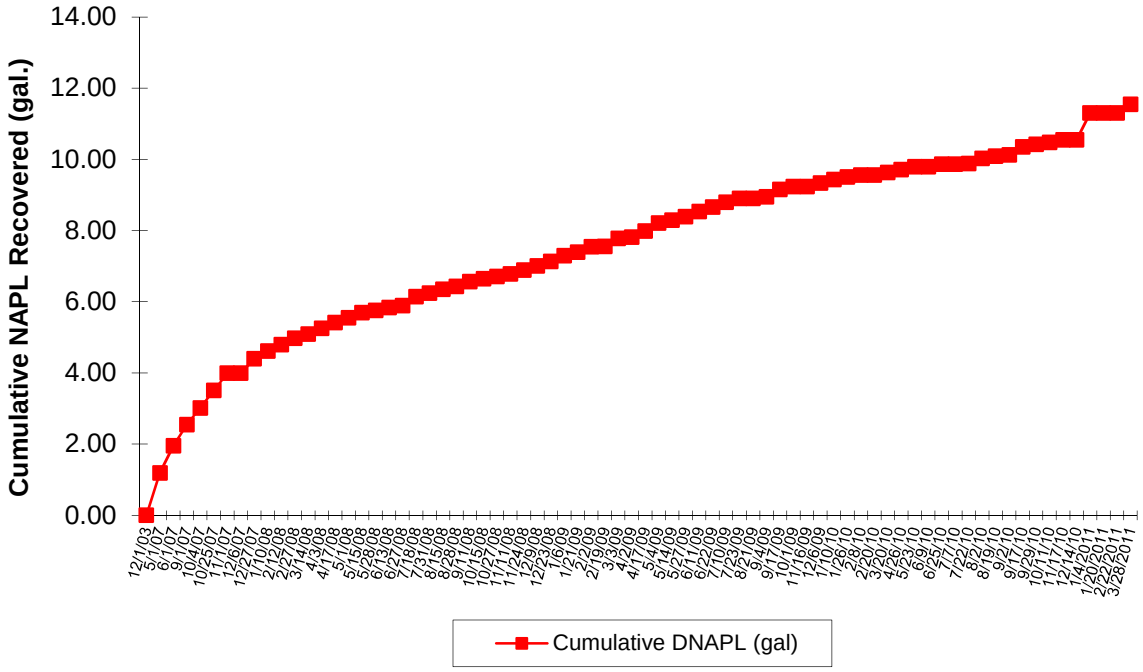


FIGURE 9B
Well HIMW-01I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



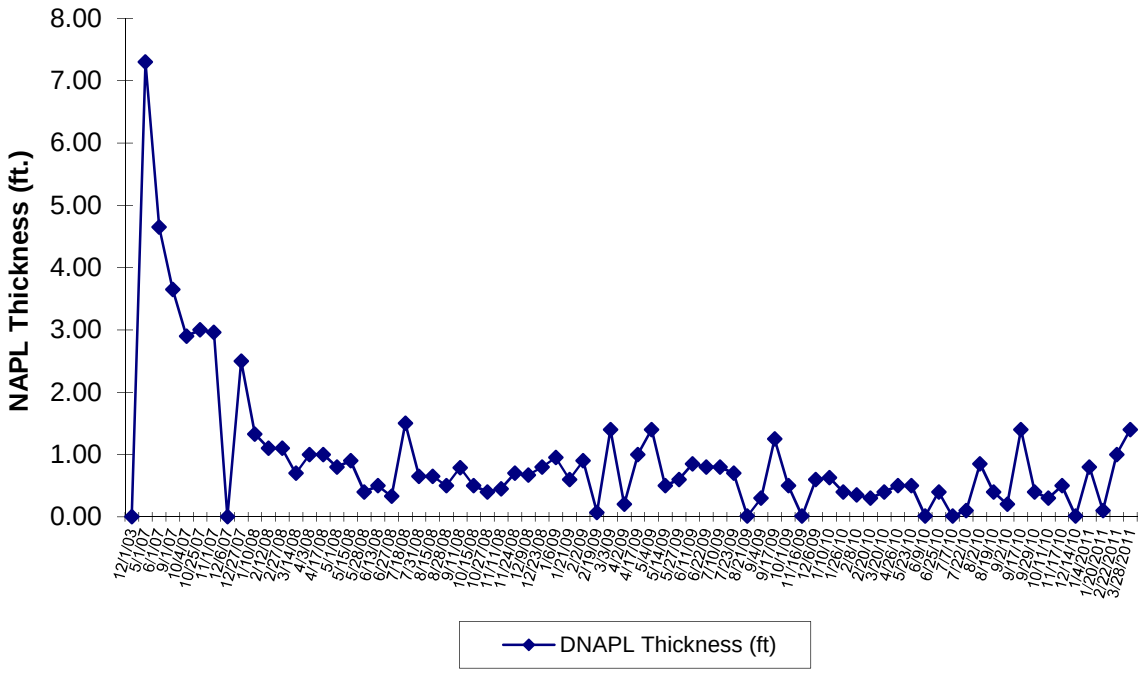
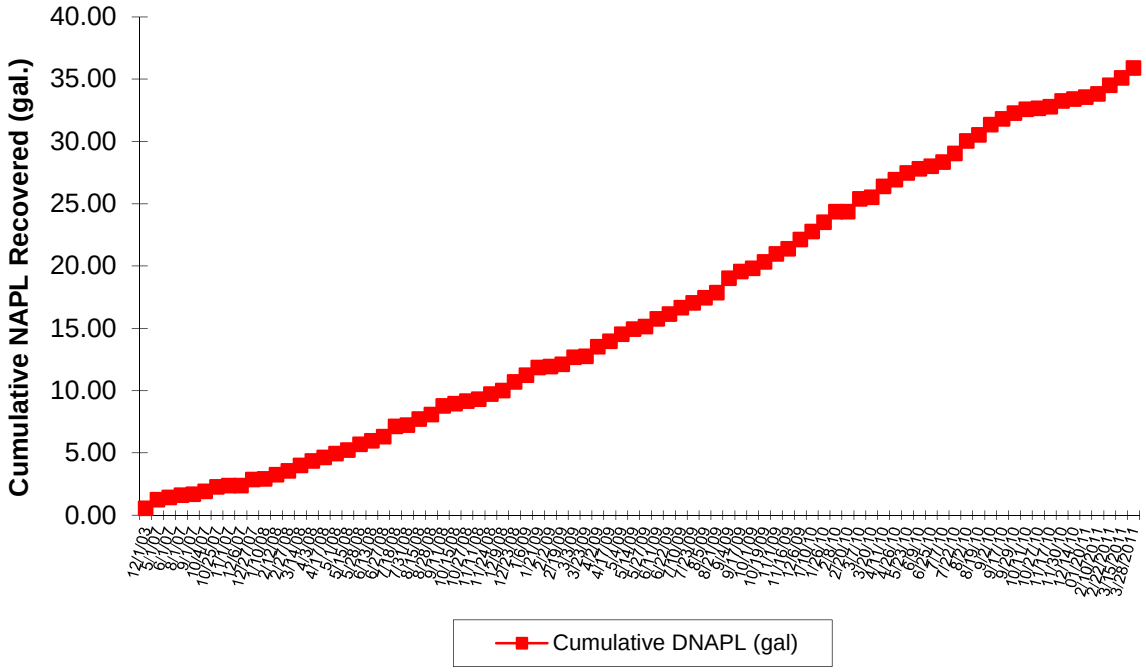


FIGURE 9C
Well HIMW-06S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



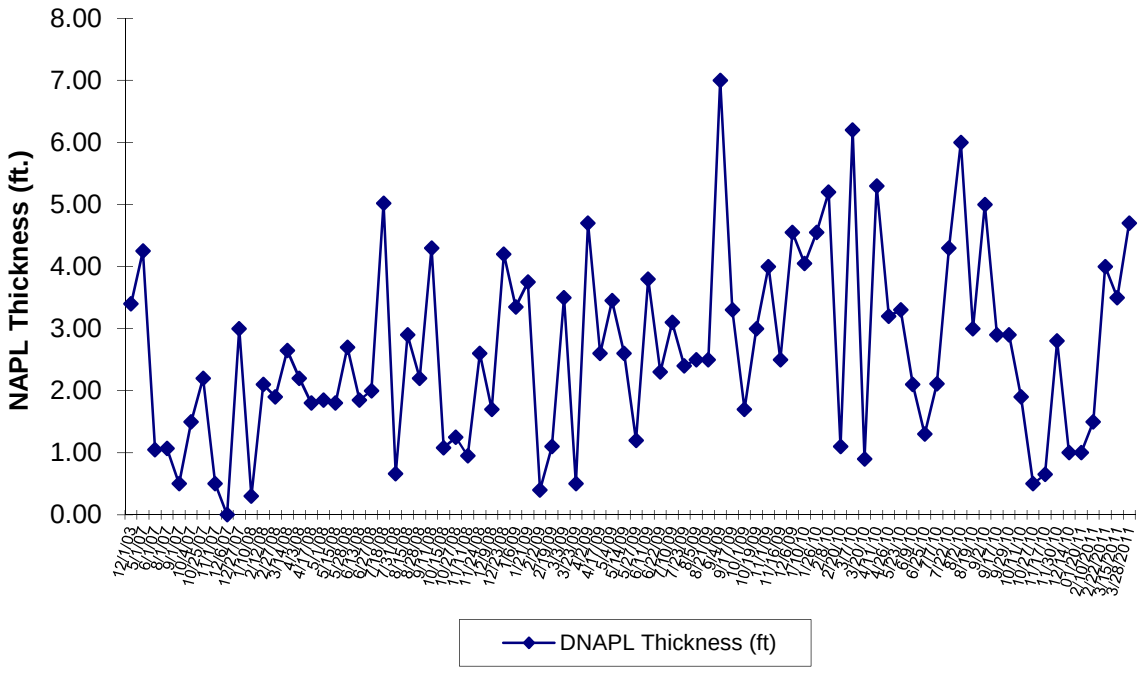
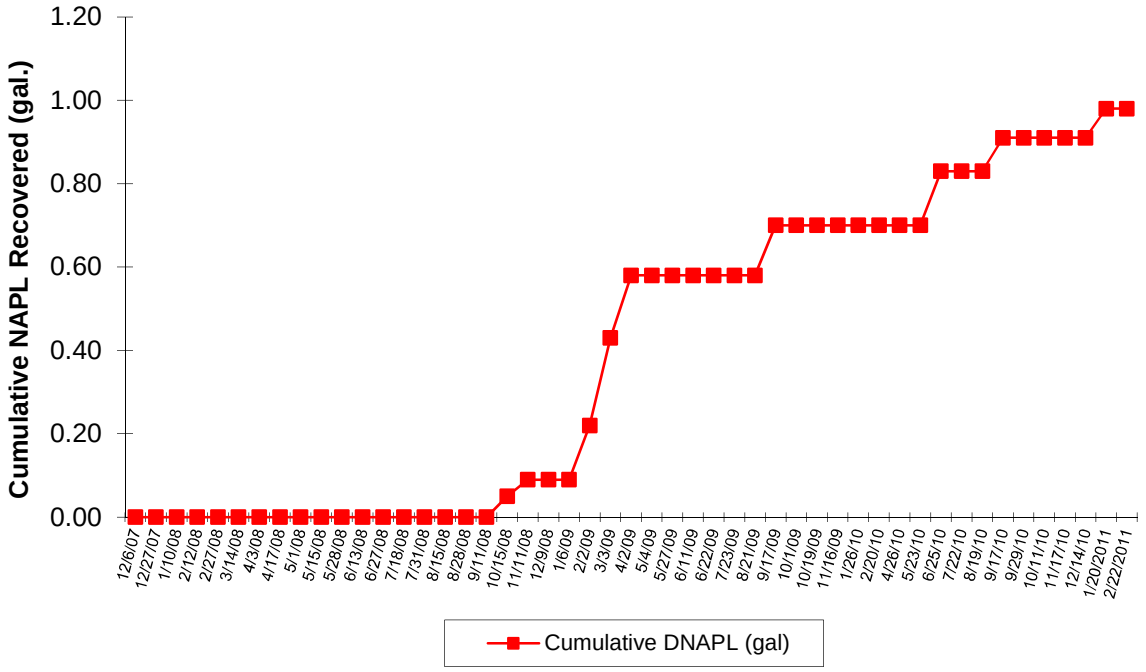


FIGURE 9D
Well HIMW-06I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



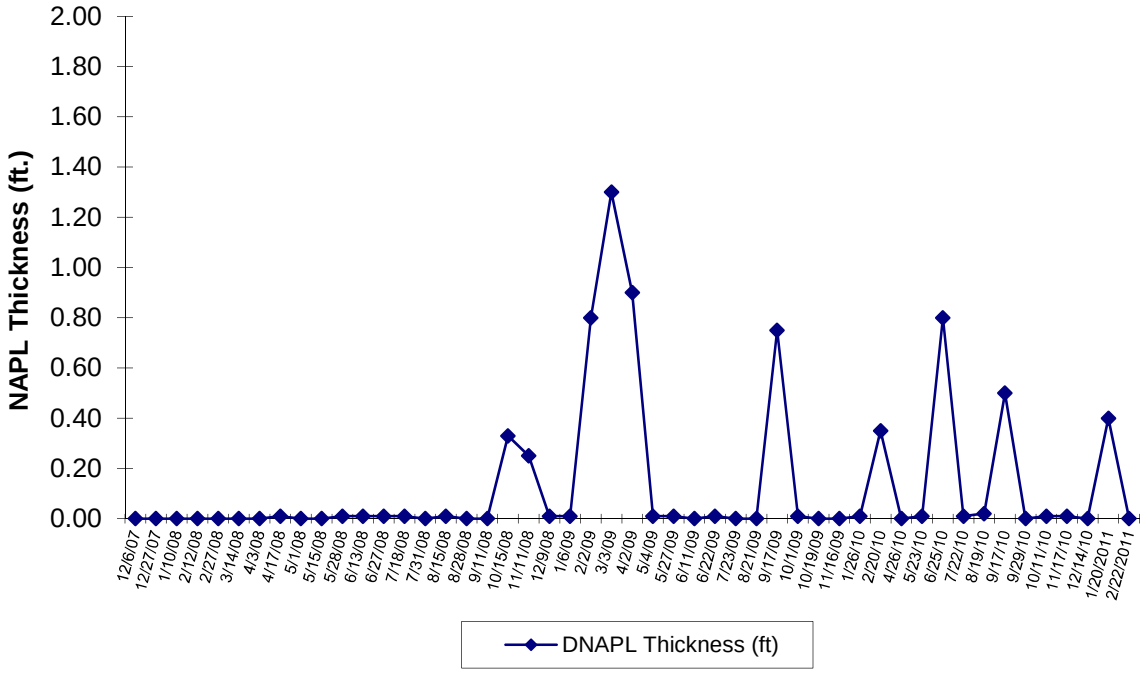
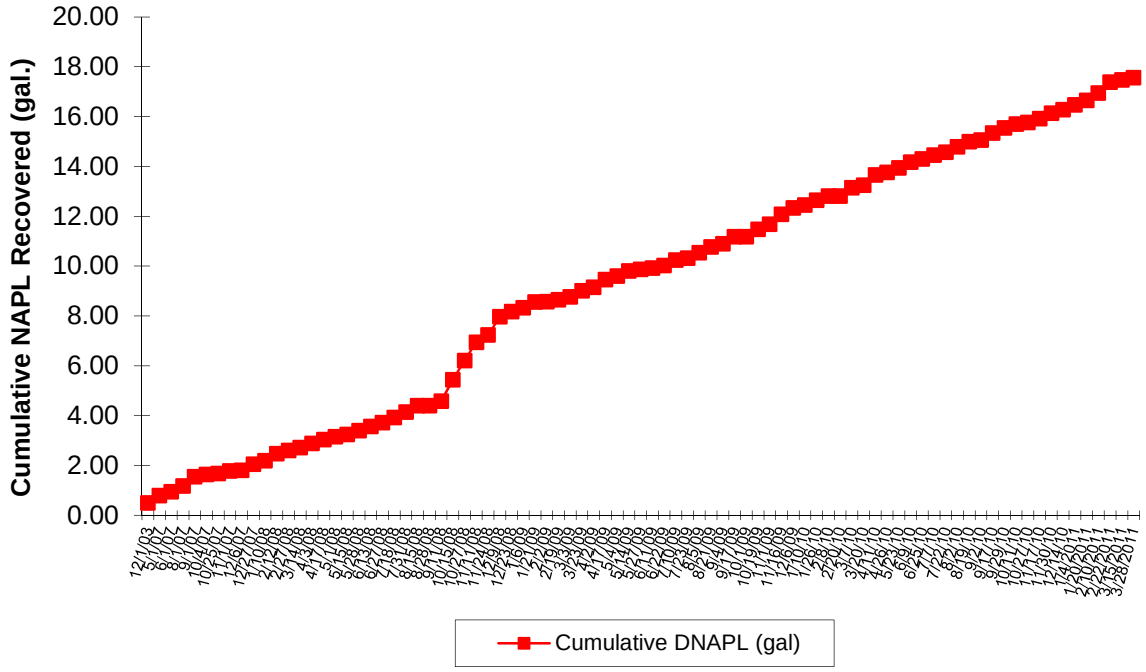


FIGURE 9E
Well HIMW-07S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



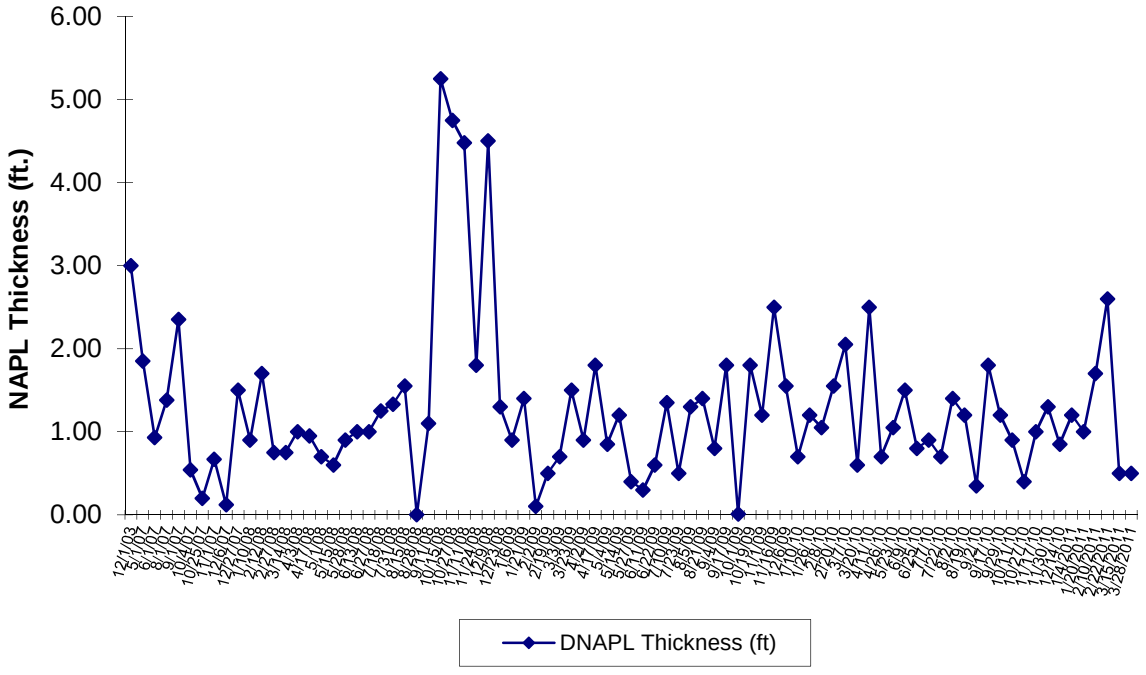
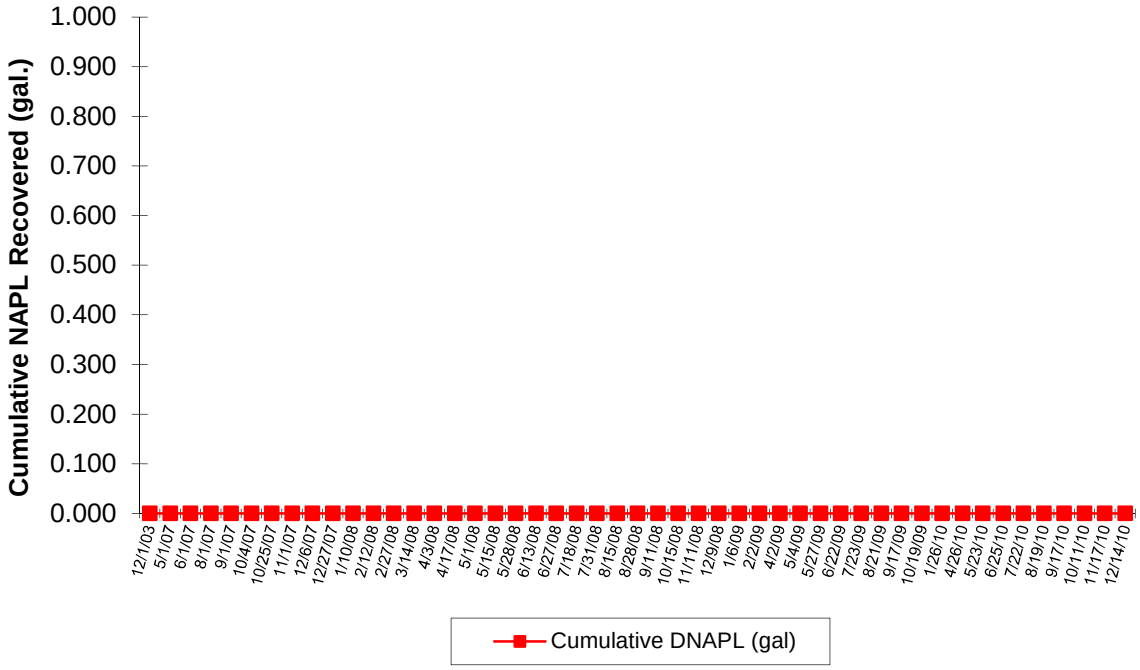


FIGURE 9F
Well HIMW-11S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



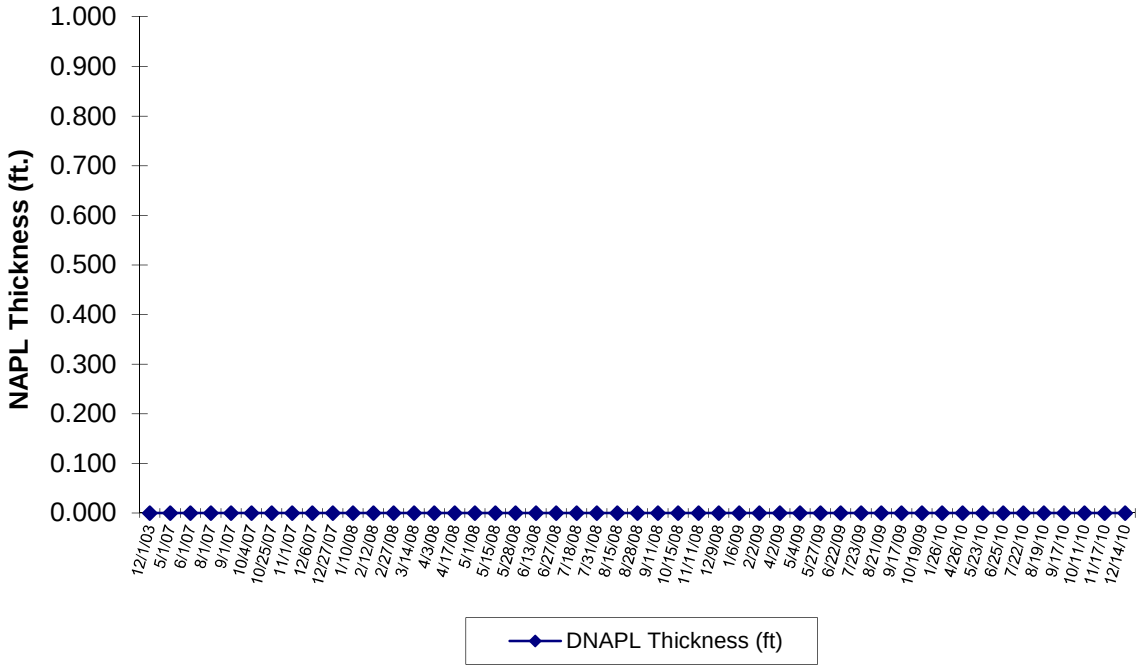
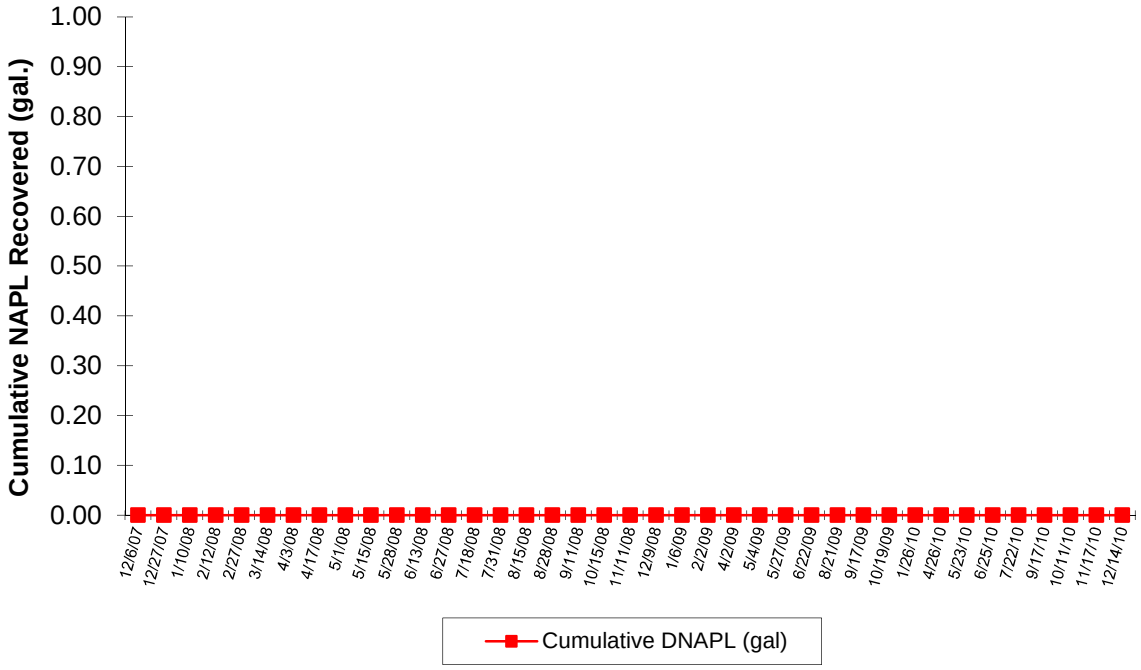


FIGURE 9G
Well HIMW-11I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



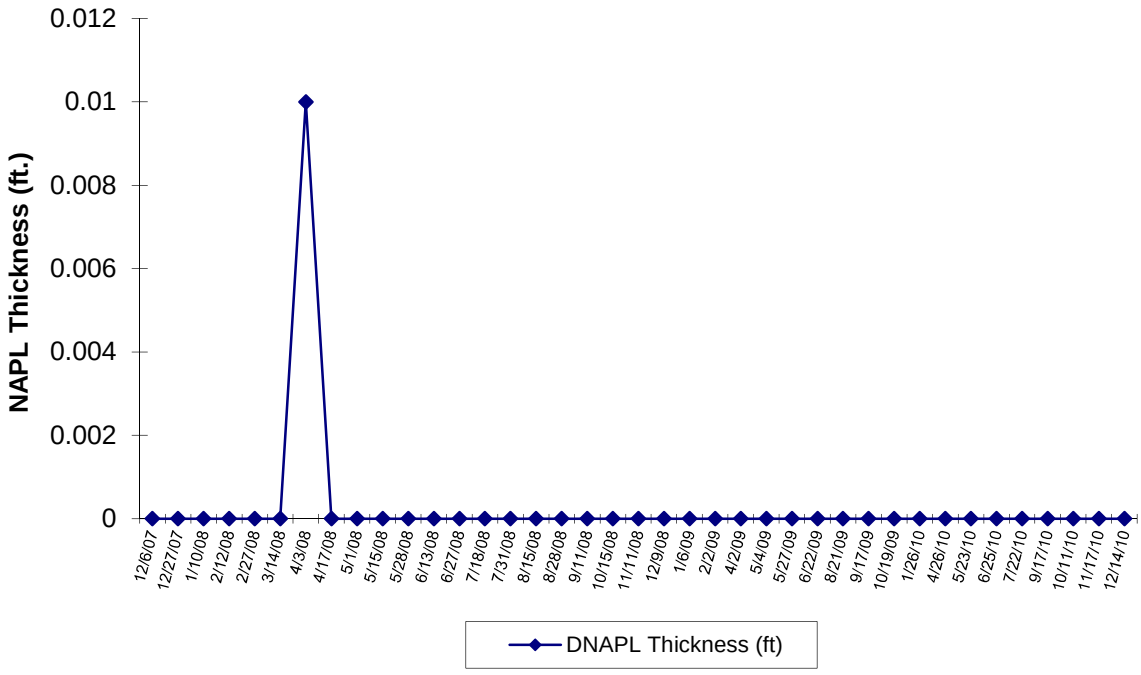
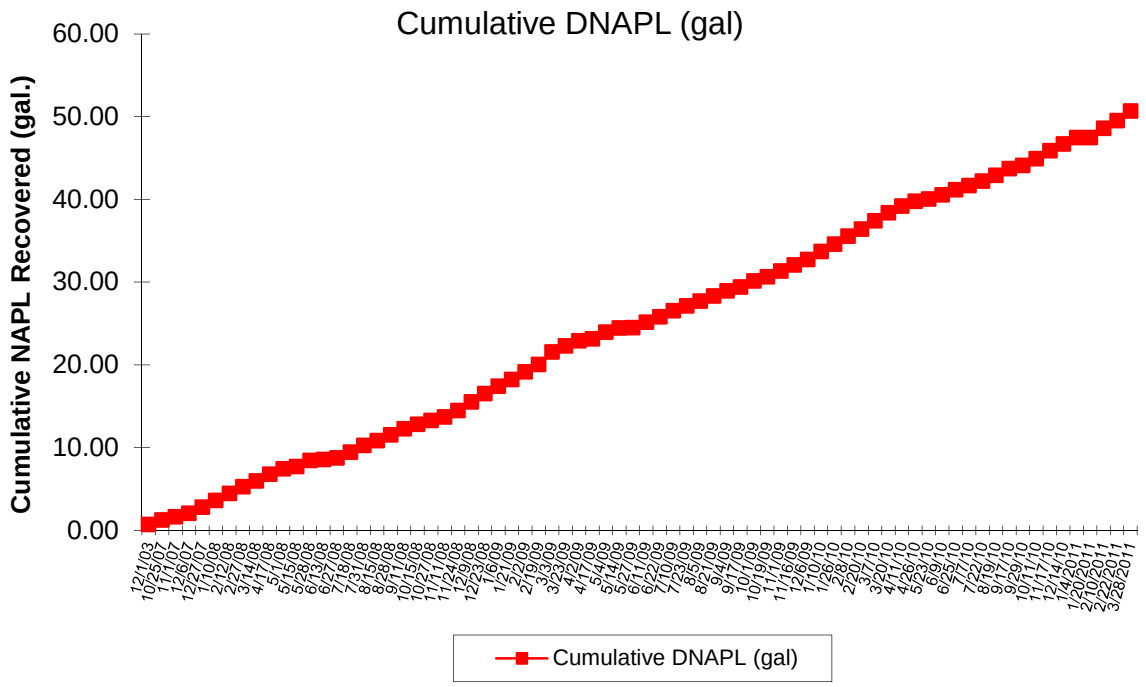


FIGURE 9H
Well HIMW-16S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



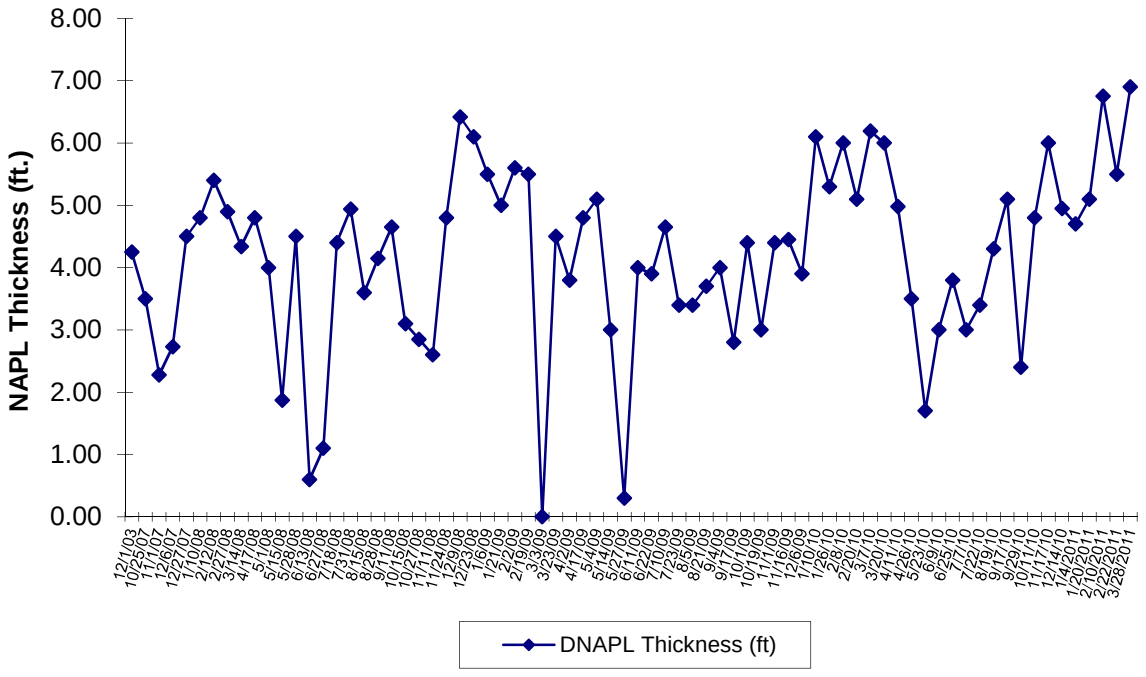
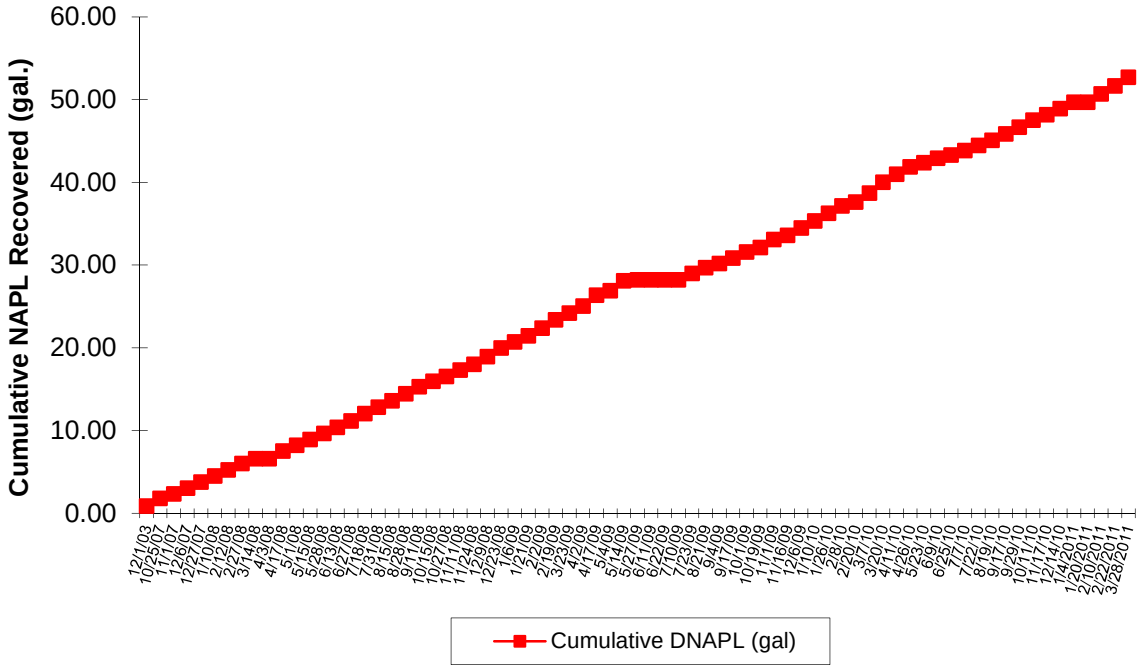


FIGURE 9I
Well HIMW-16I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



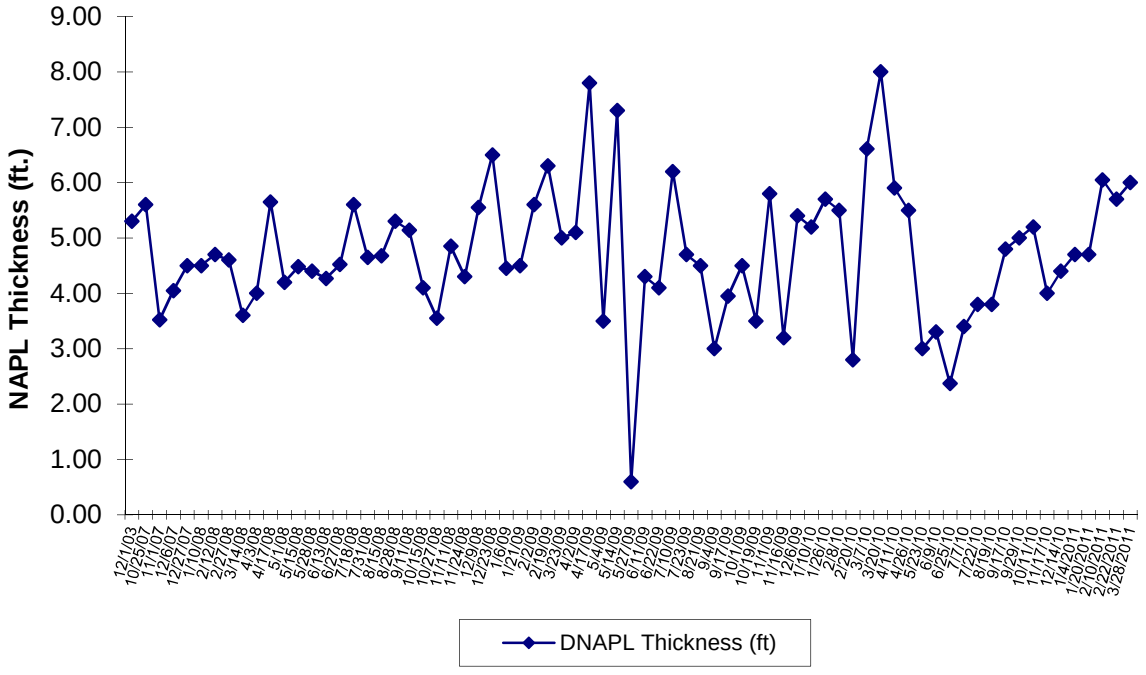
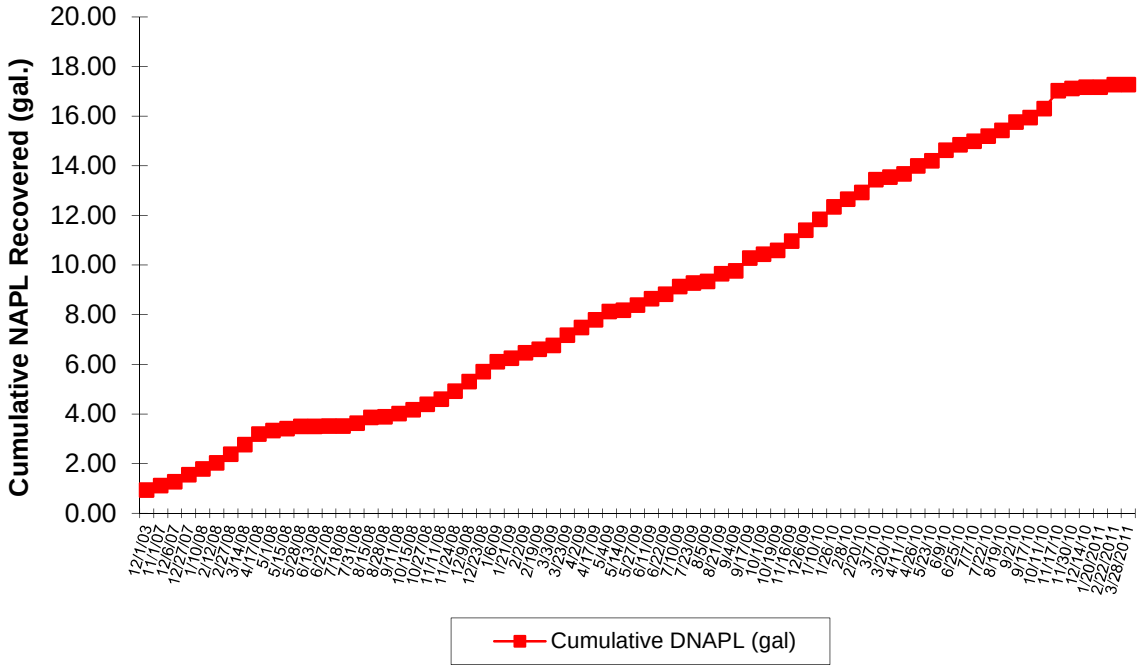


FIGURE 9J
Well HIMW-17S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



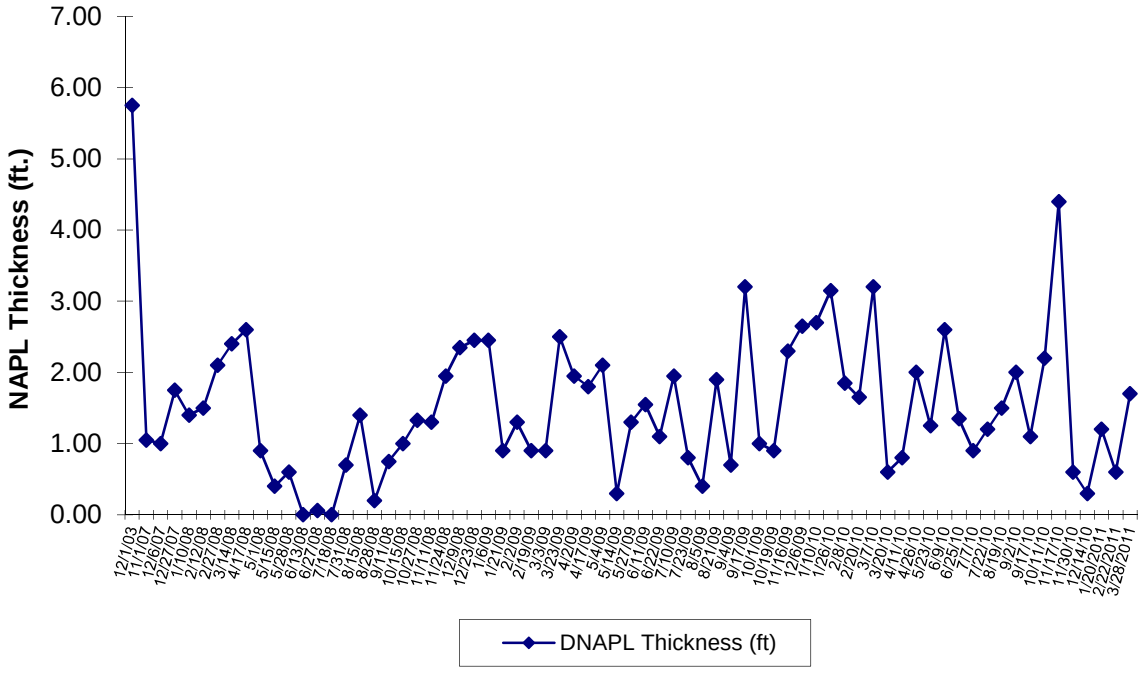
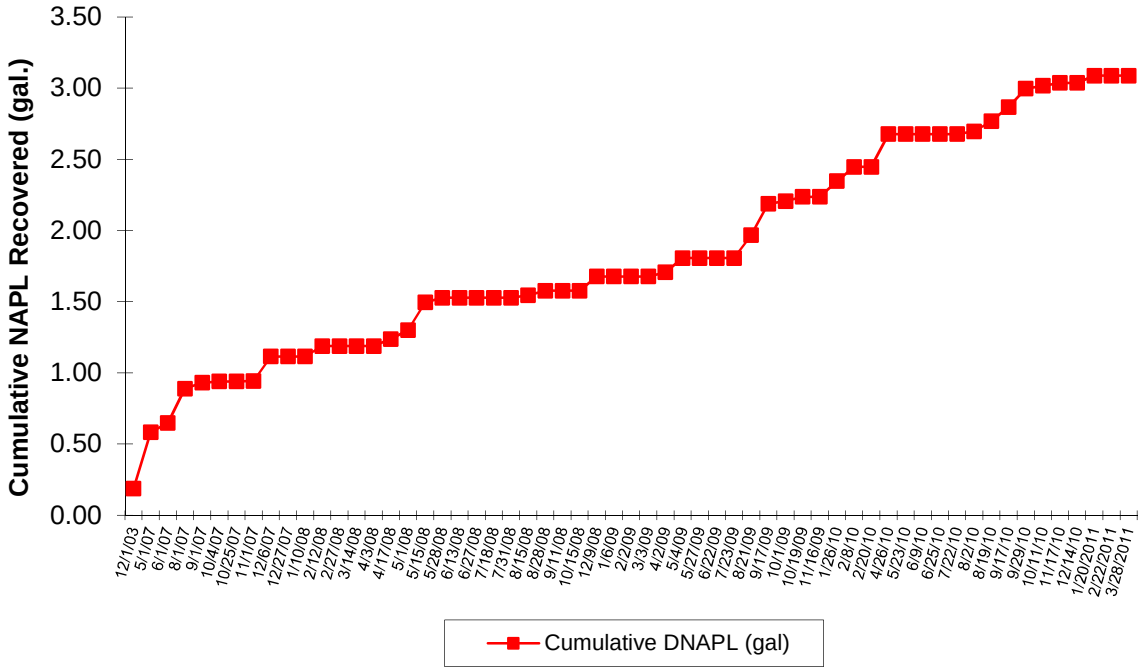


FIGURE 9K
Well HIMW-18S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



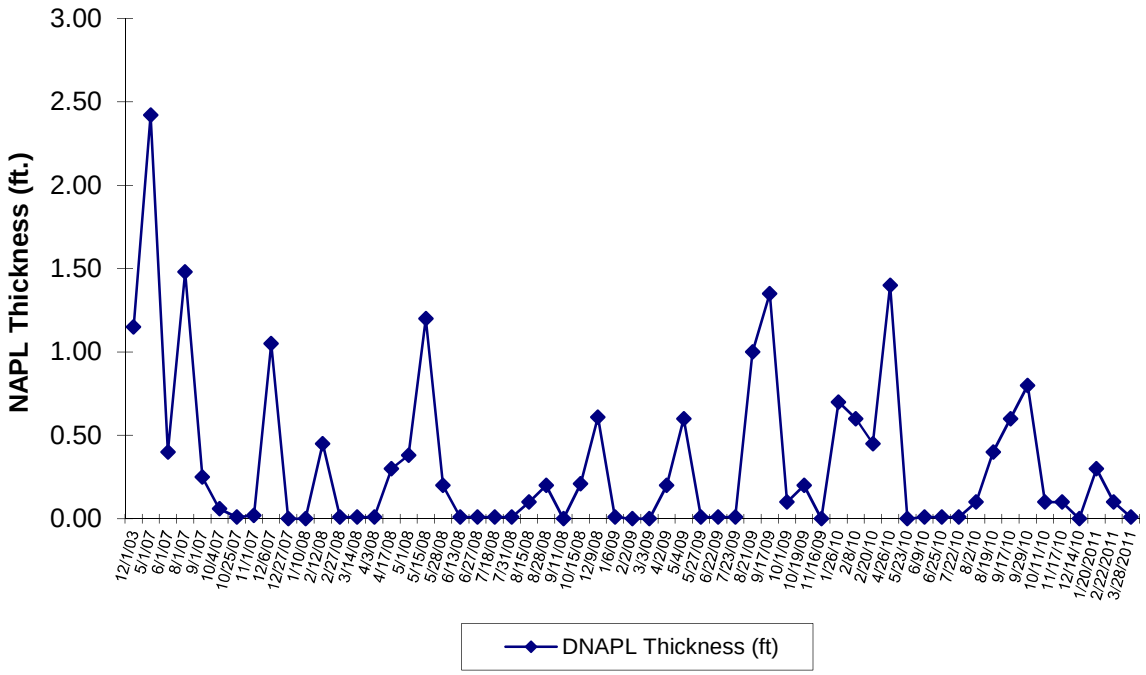
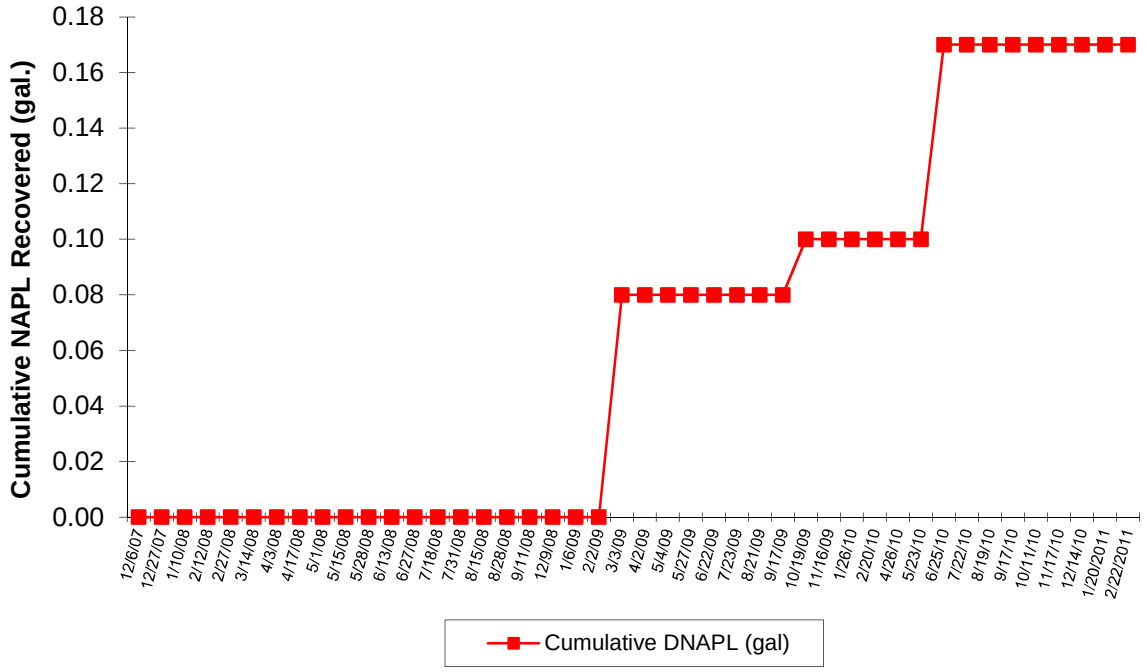


FIGURE 9L
Well HIMW-18I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



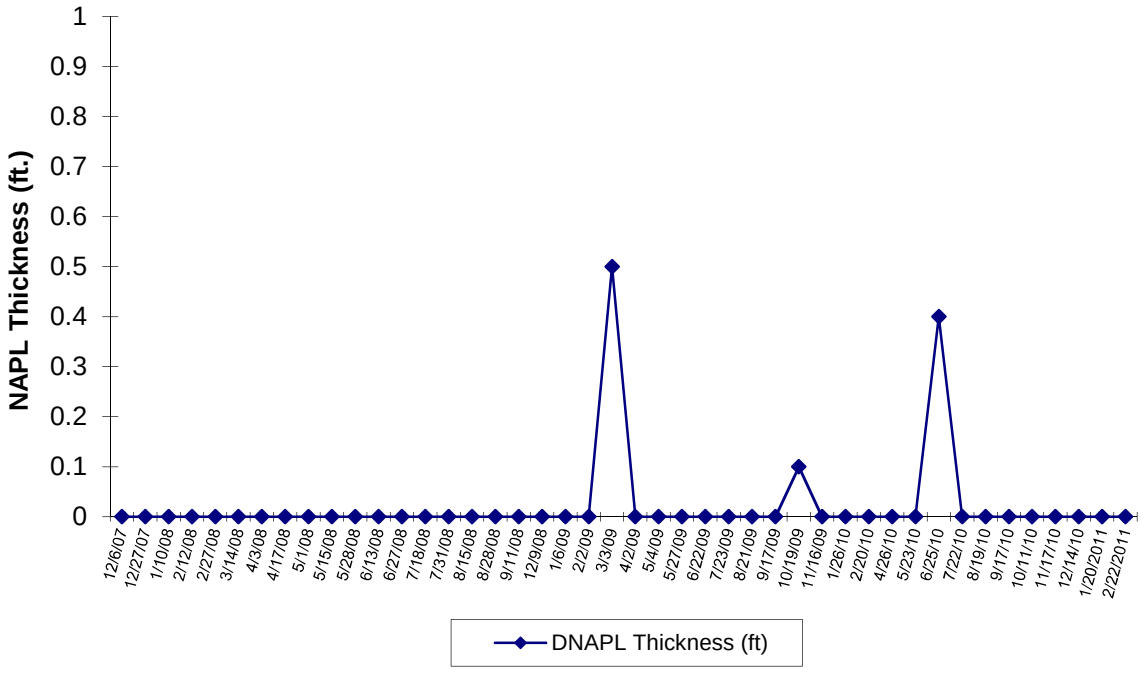
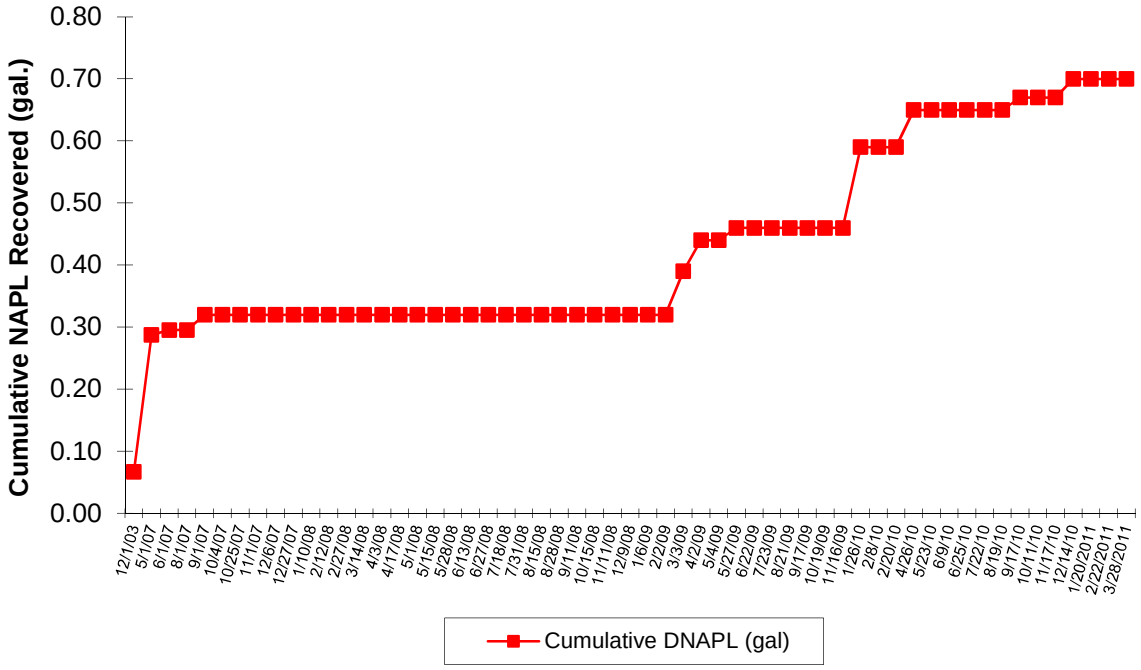


FIGURE 9M
Well HIMW-19S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



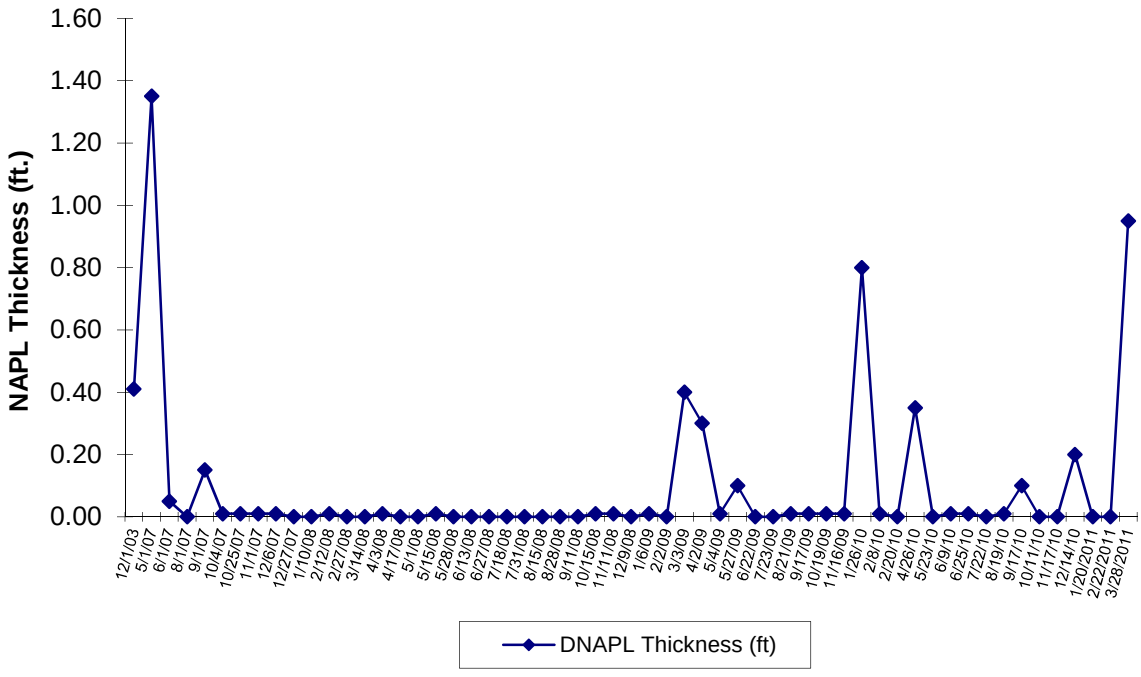
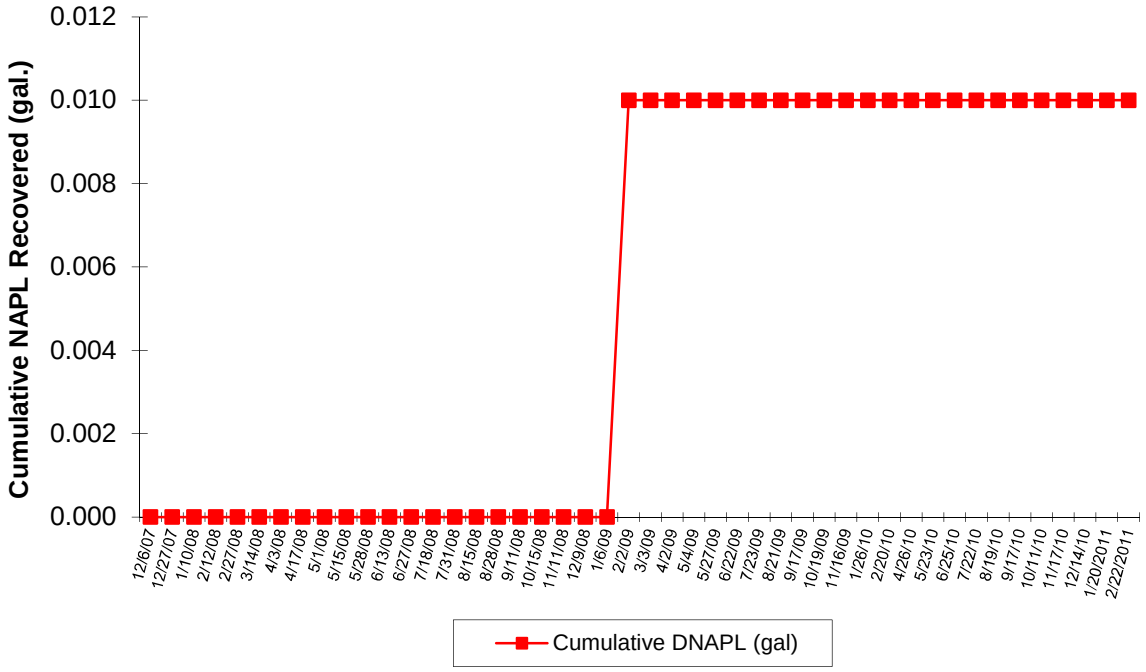


FIGURE 9N
Well HIMW-19I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



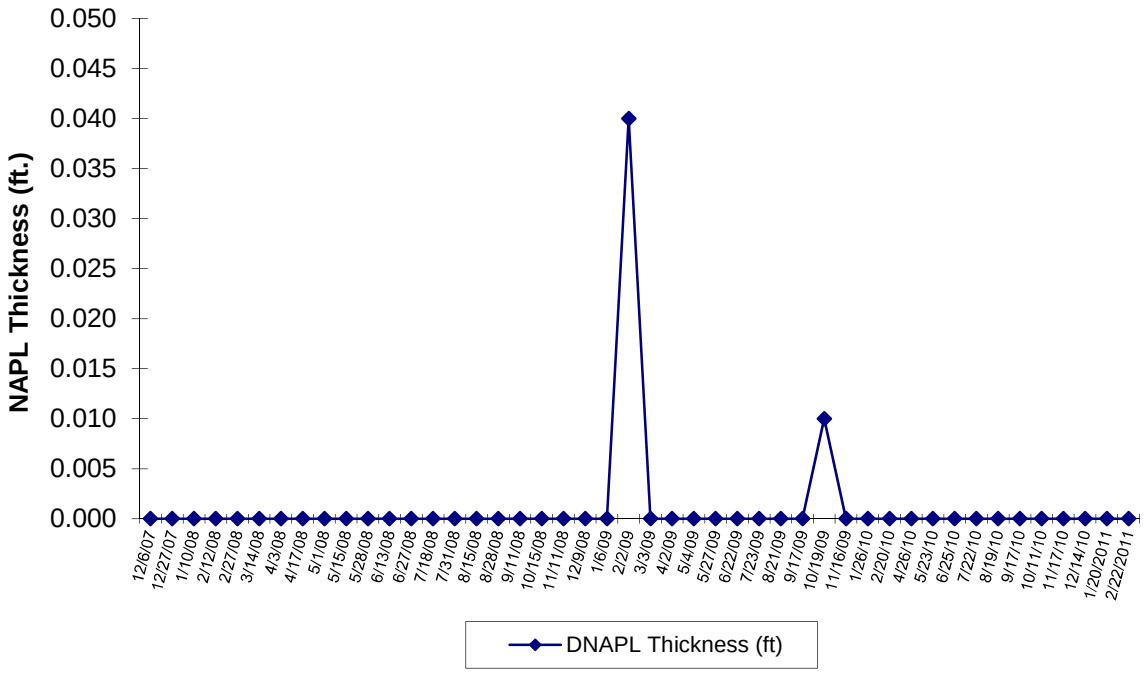
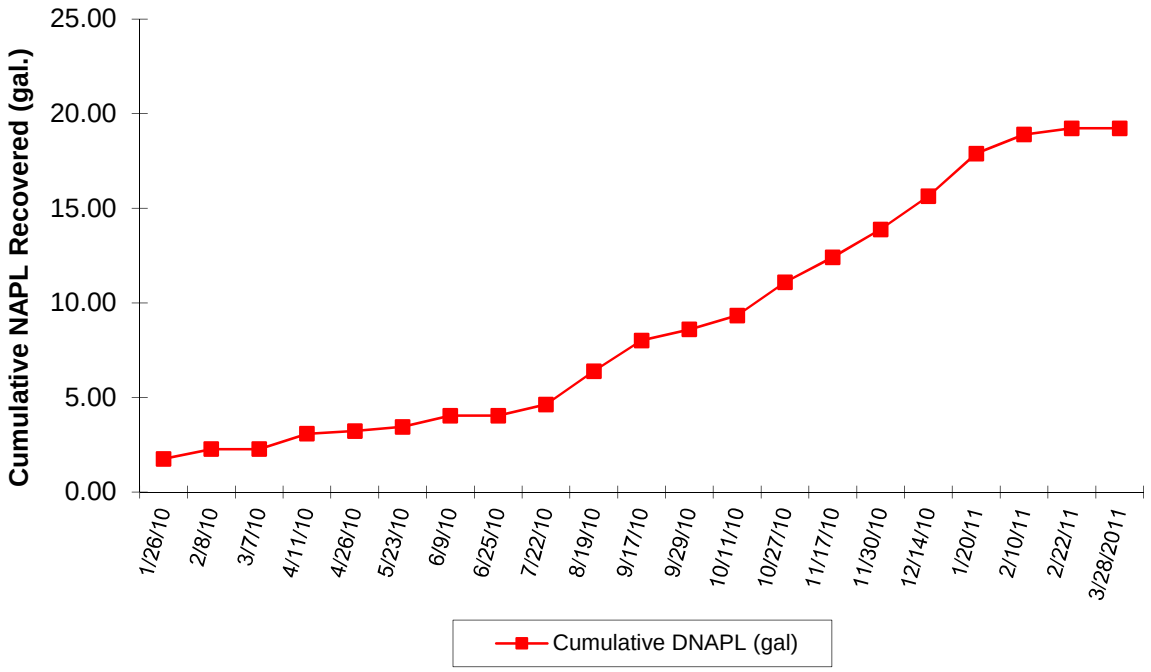


FIGURE 9O
Well HIMW-21 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



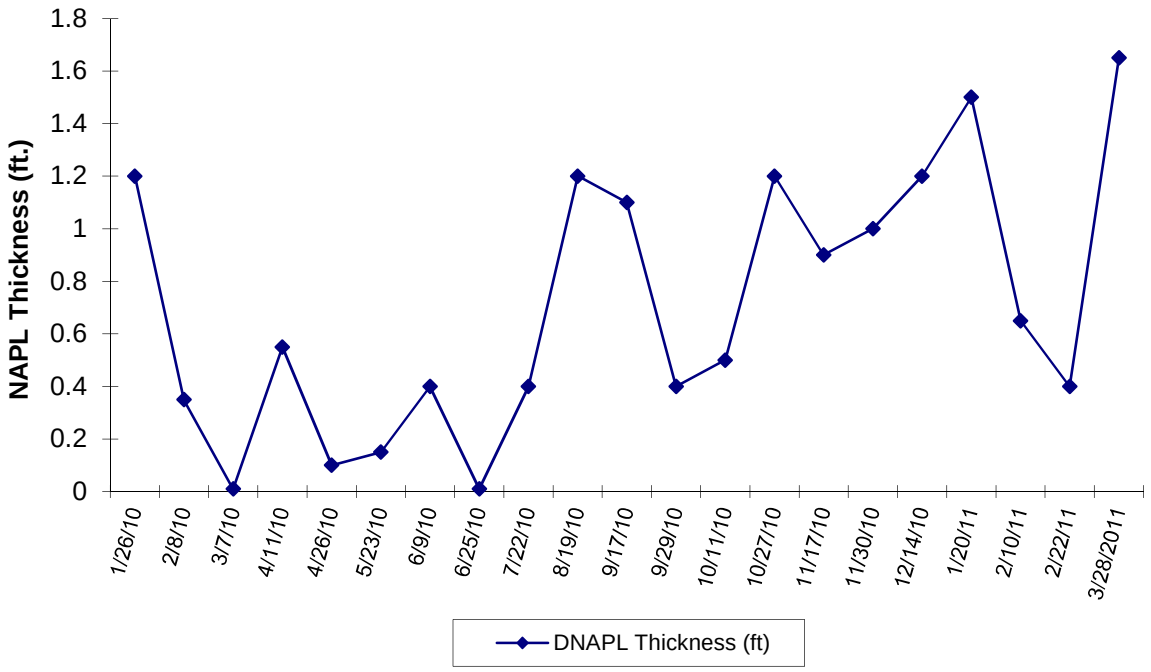
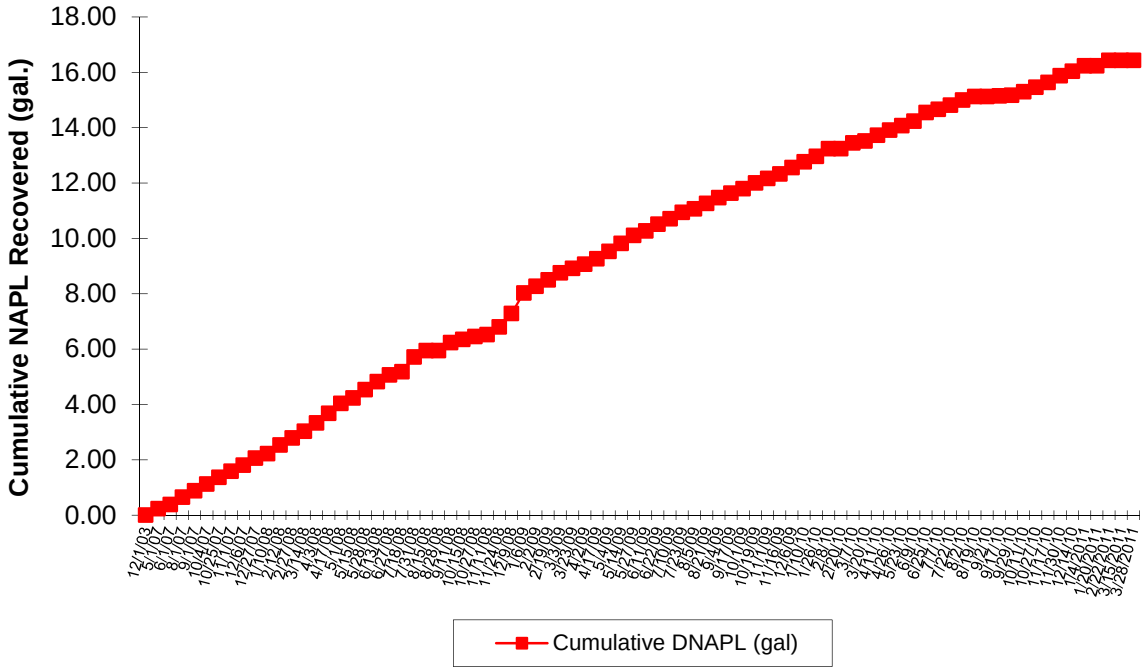


FIGURE 9P
Well PZ-08 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



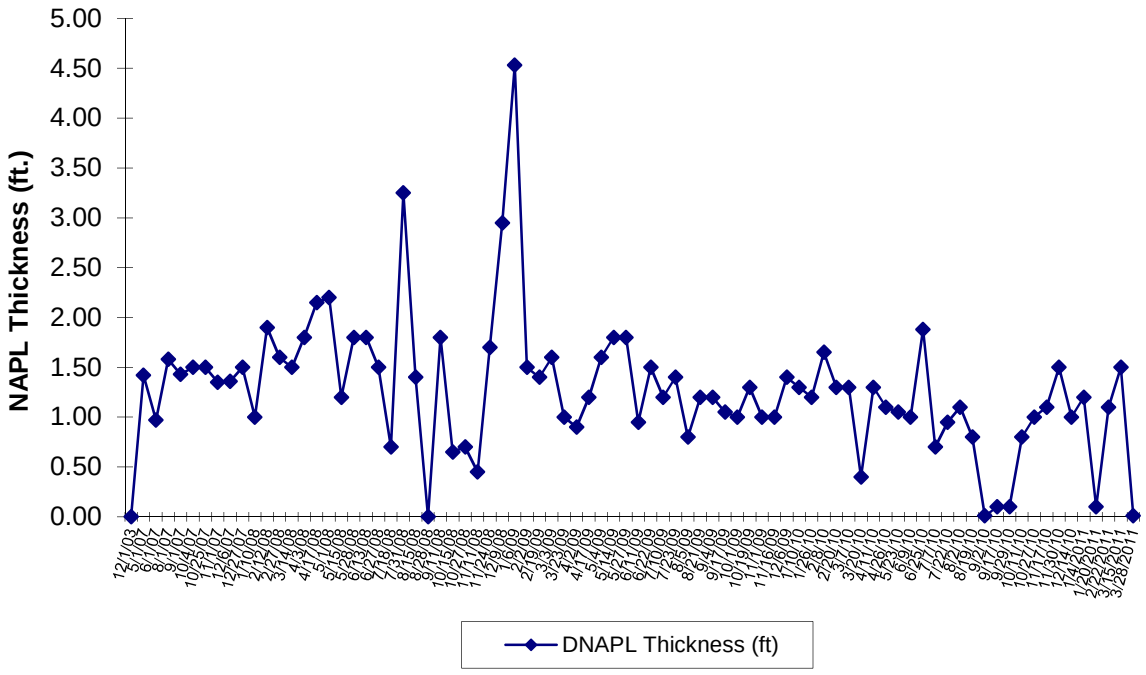
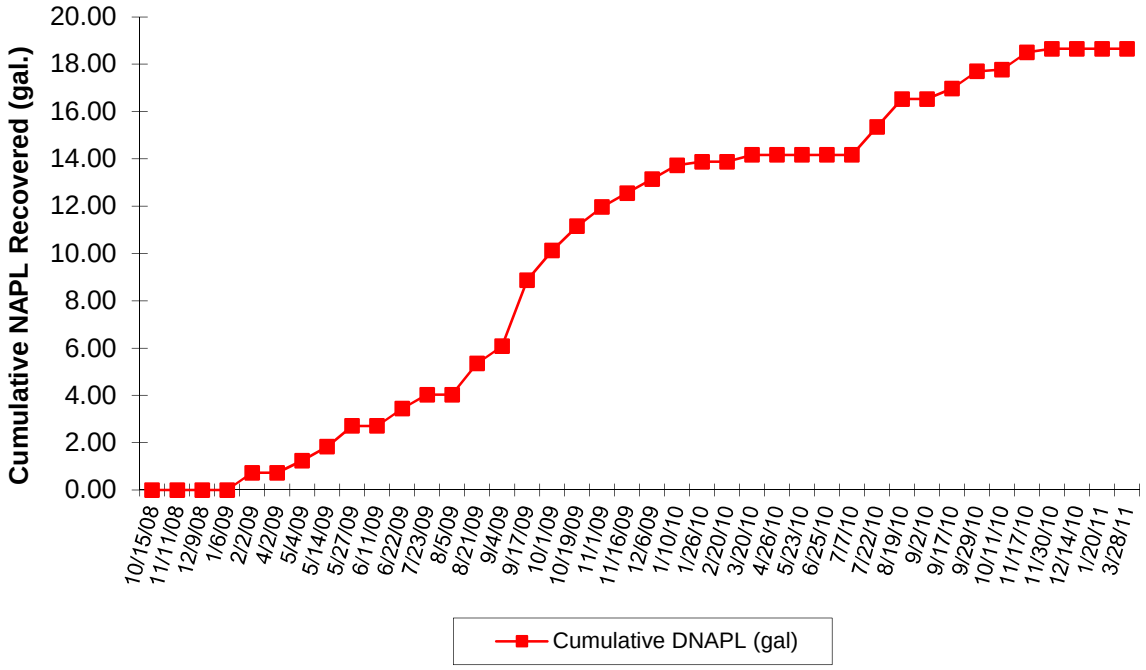


FIGURE 9Q
Well IPR-02 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



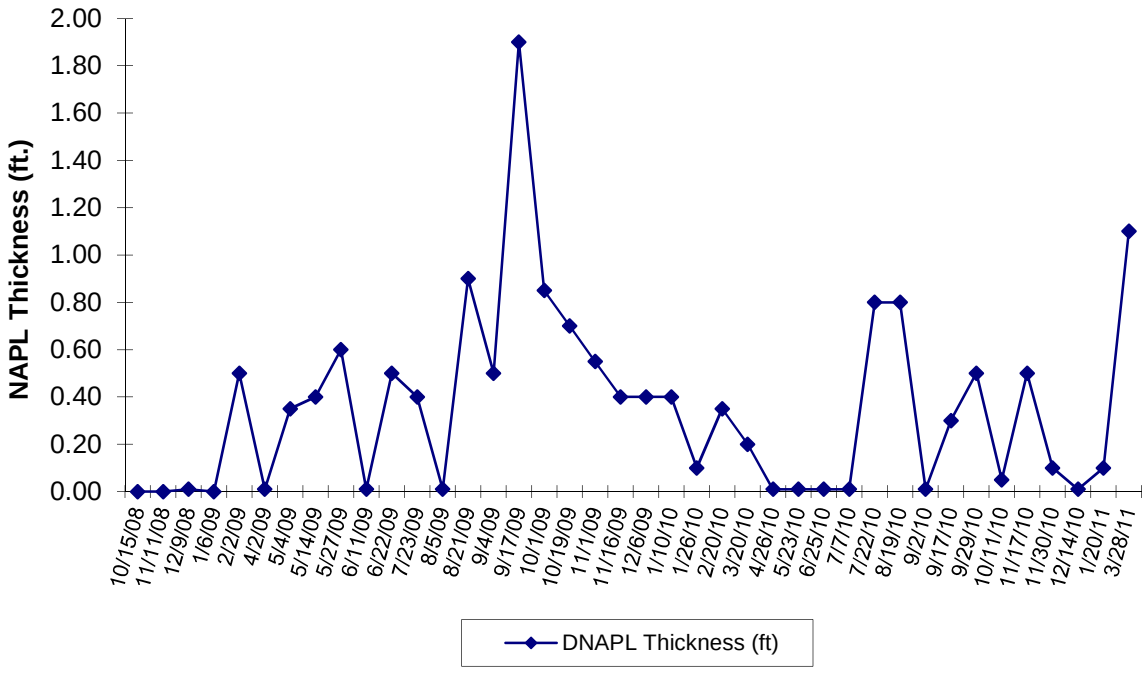
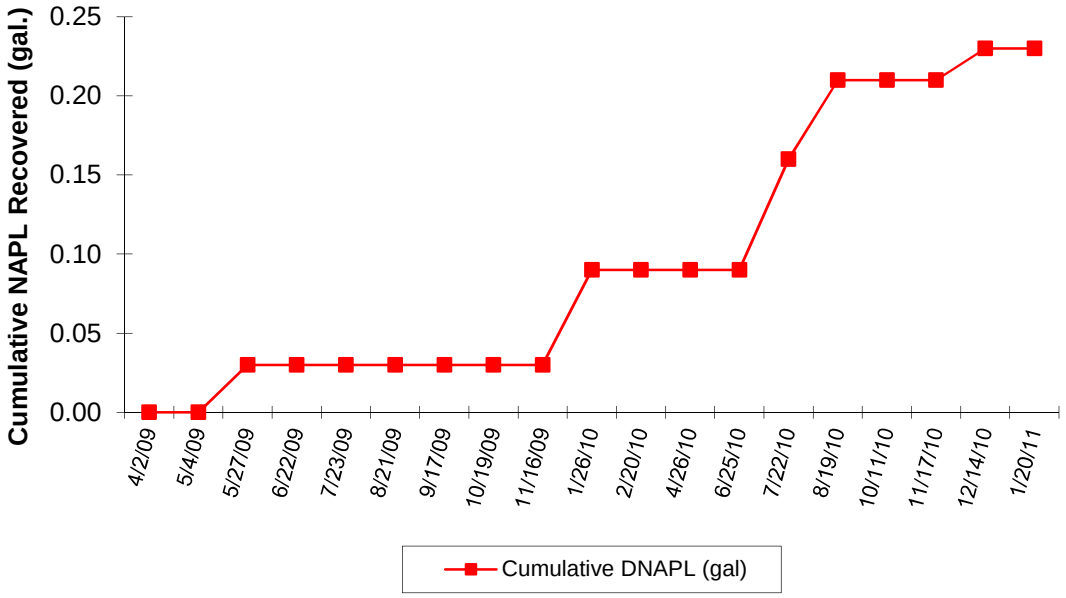


FIGURE 9R
Well IPR-05 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



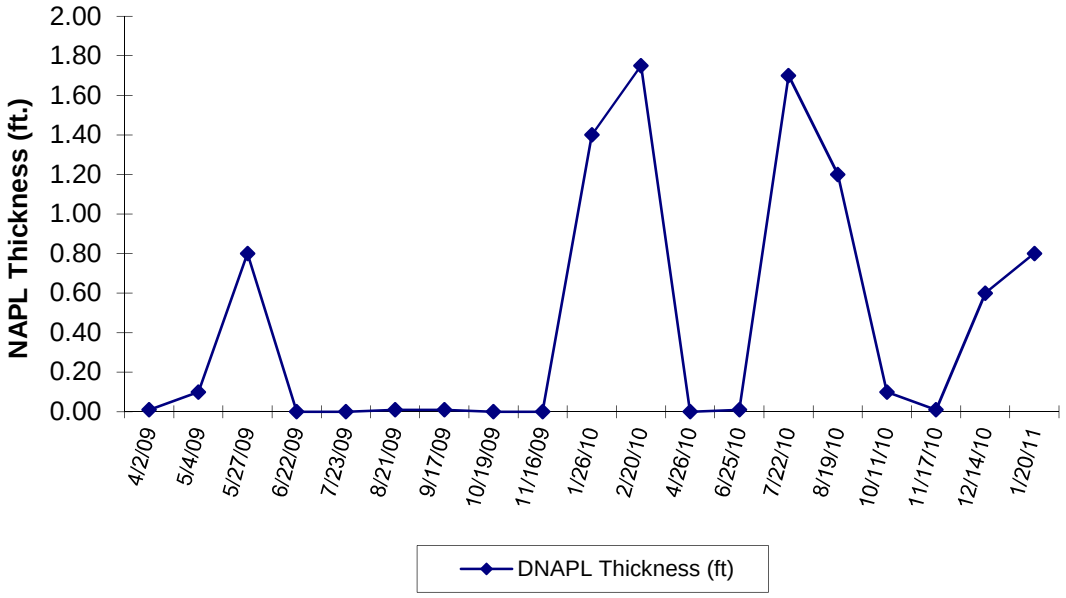
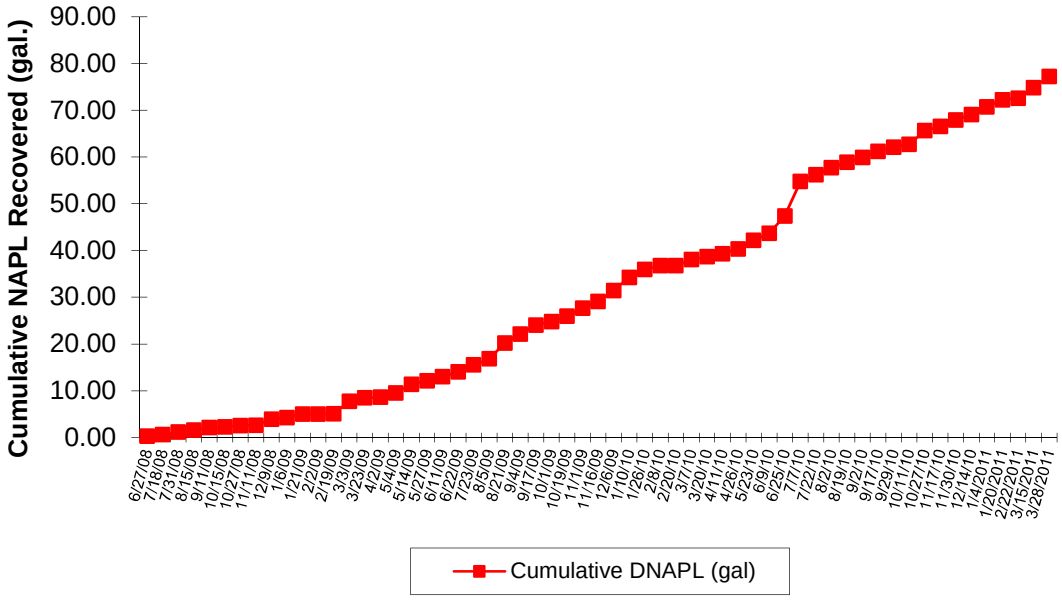


FIGURE 9S
Well IPR-06 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



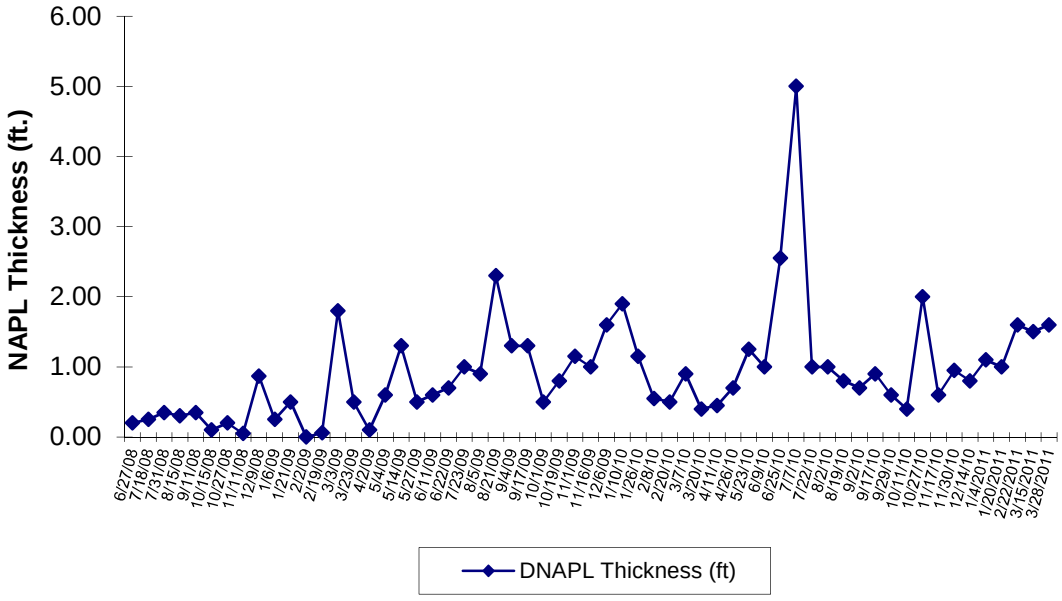
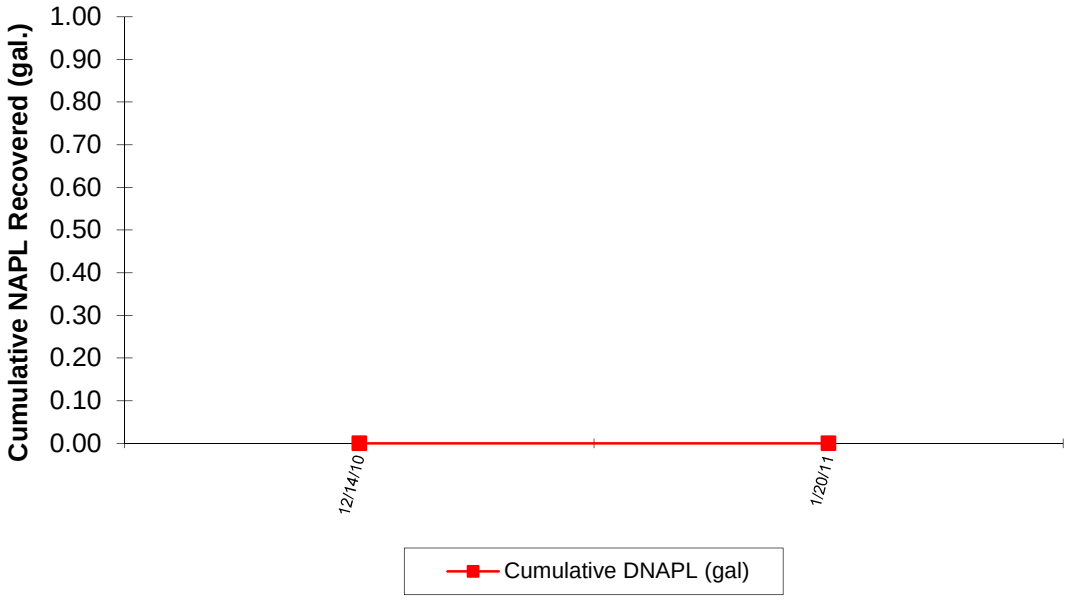


FIGURE 9T
Well IPR-07 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



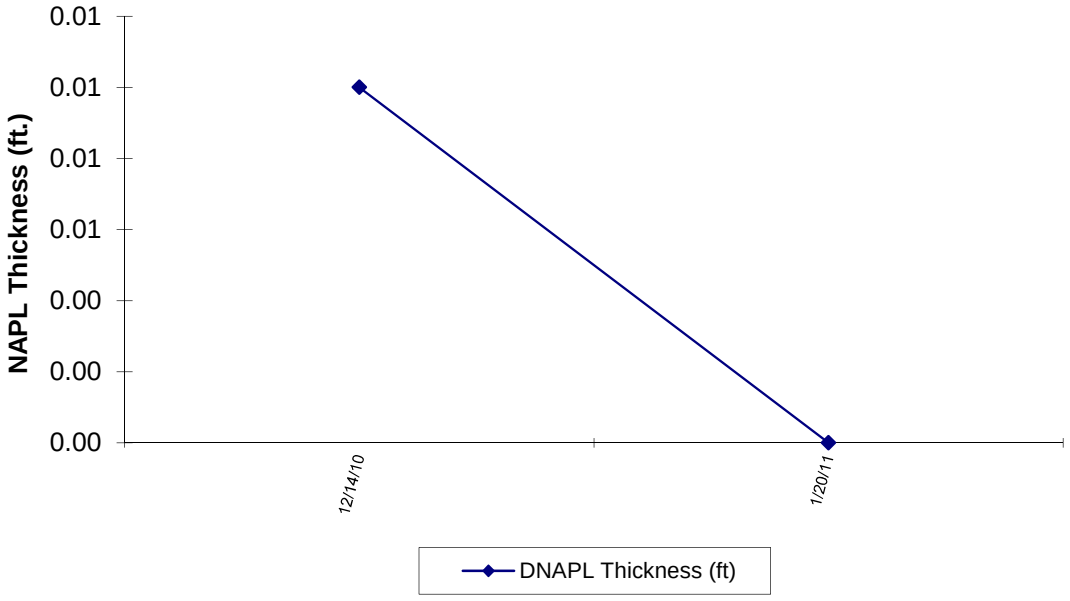
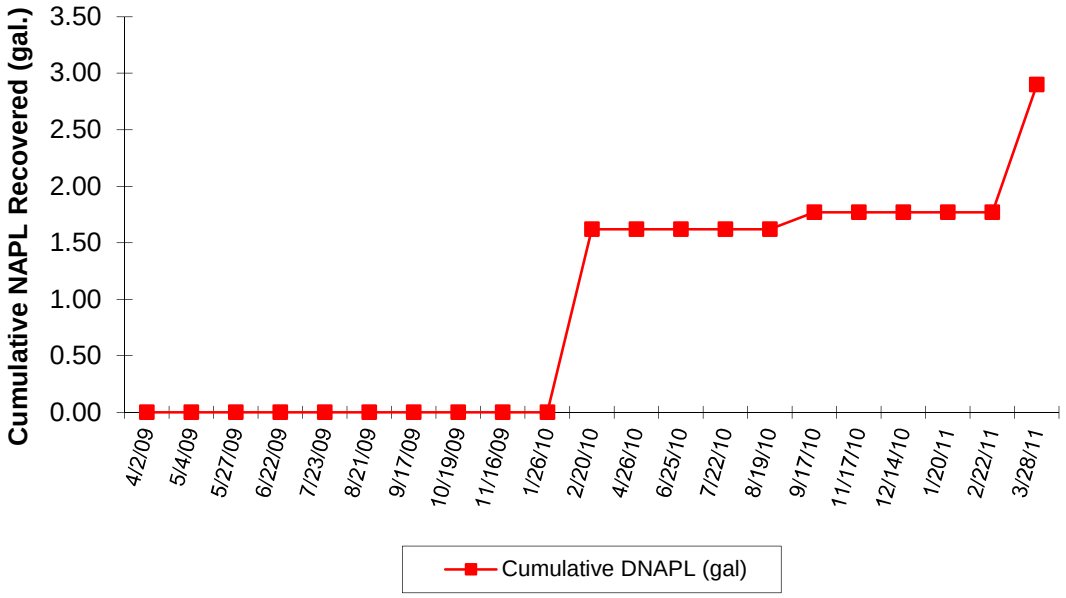


FIGURE 9U
Well IPR-09 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



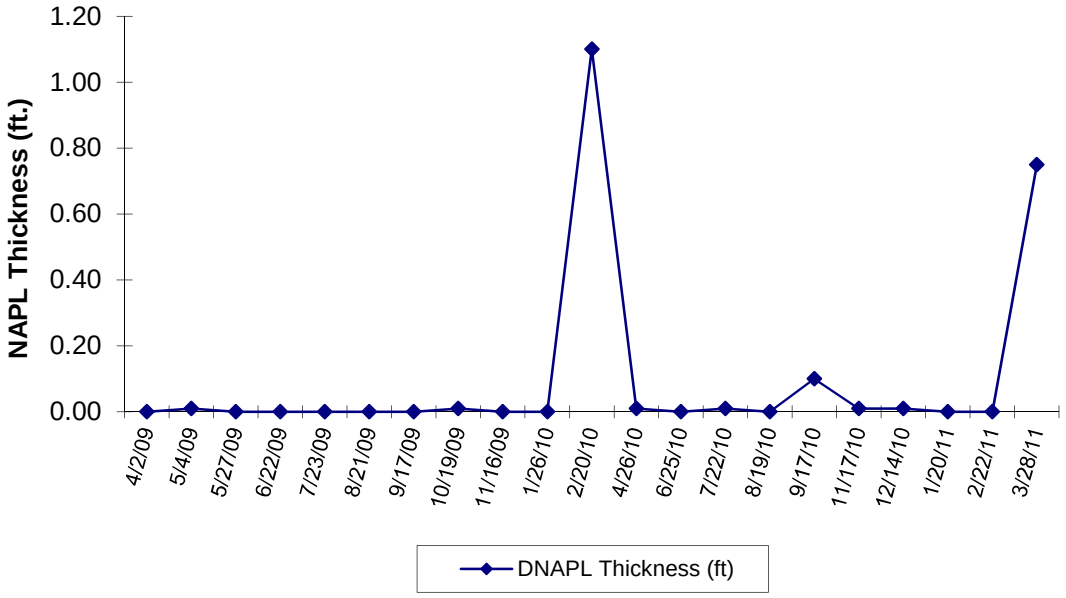
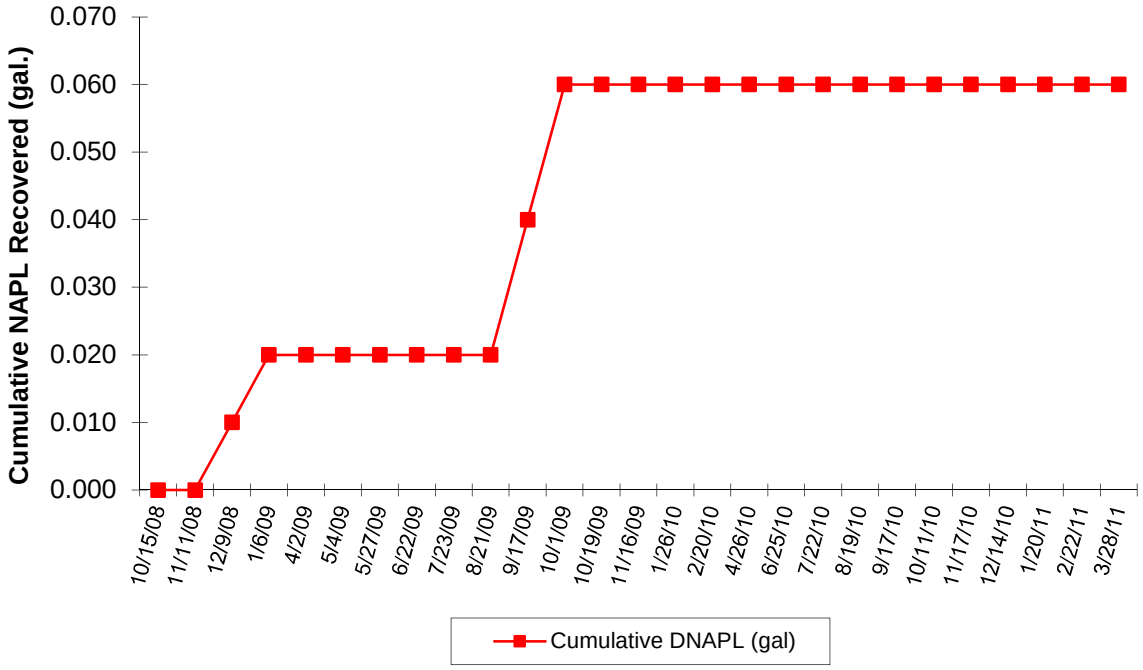


FIGURE 9V
Well IPR-12A NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



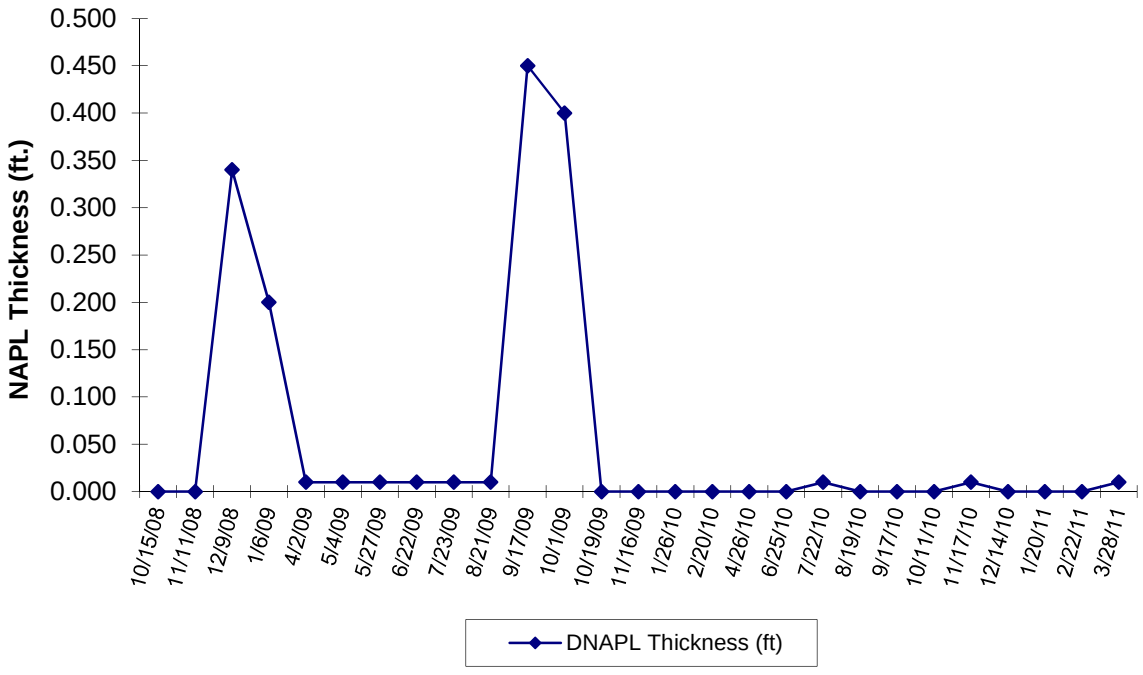
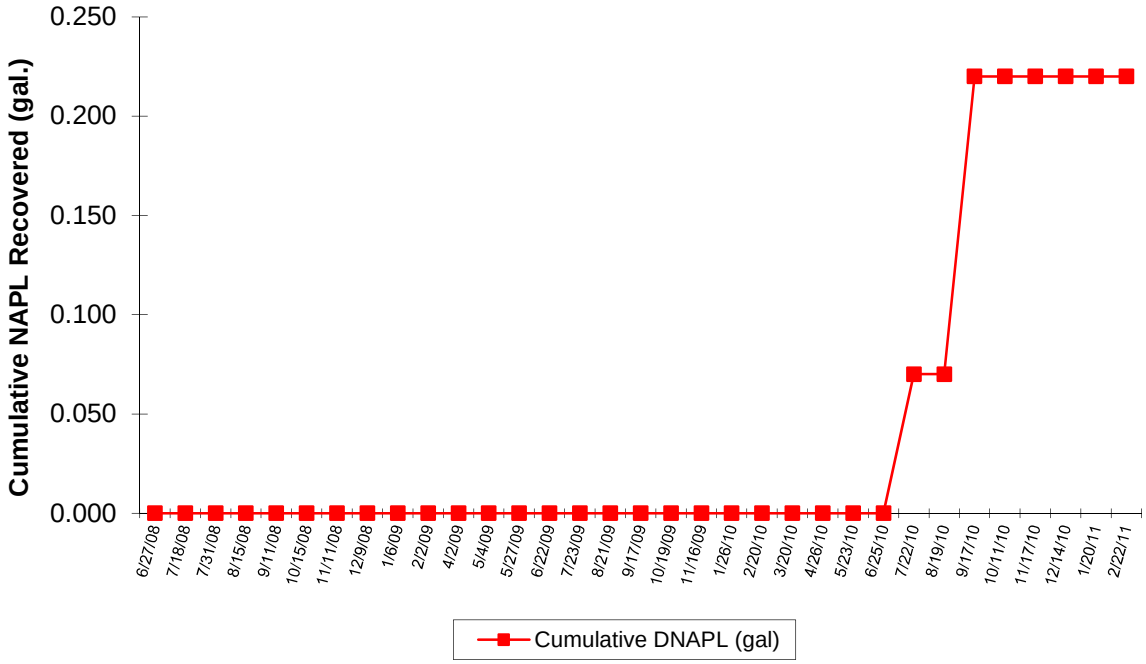


FIGURE 9W
Well IPR-15 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



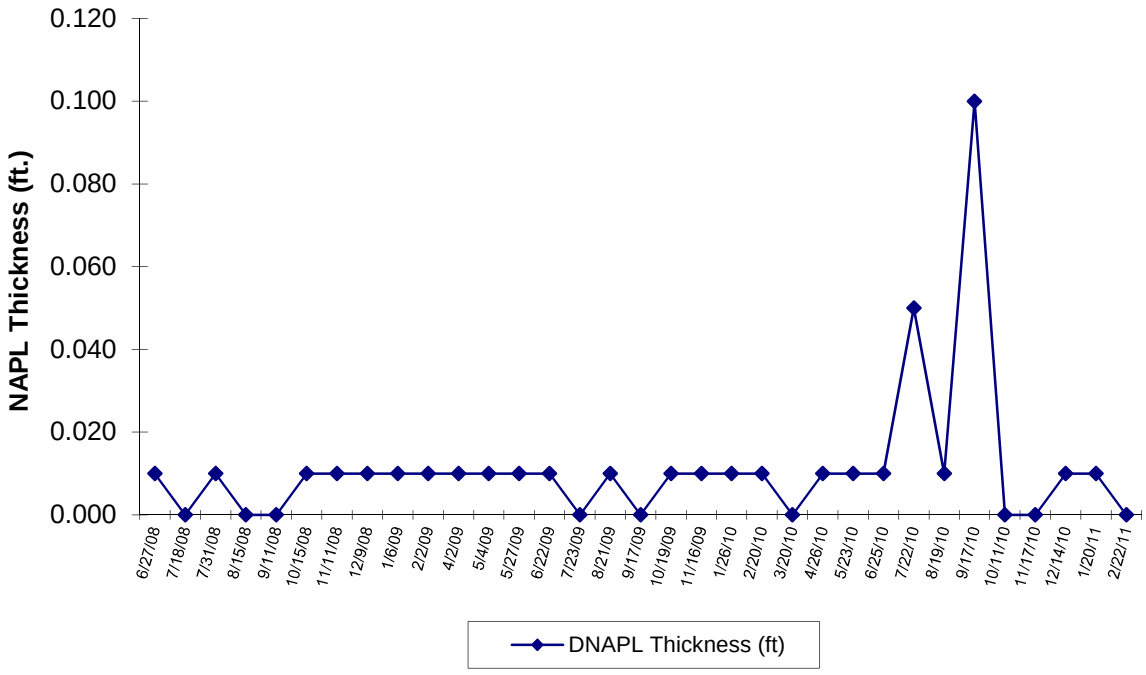
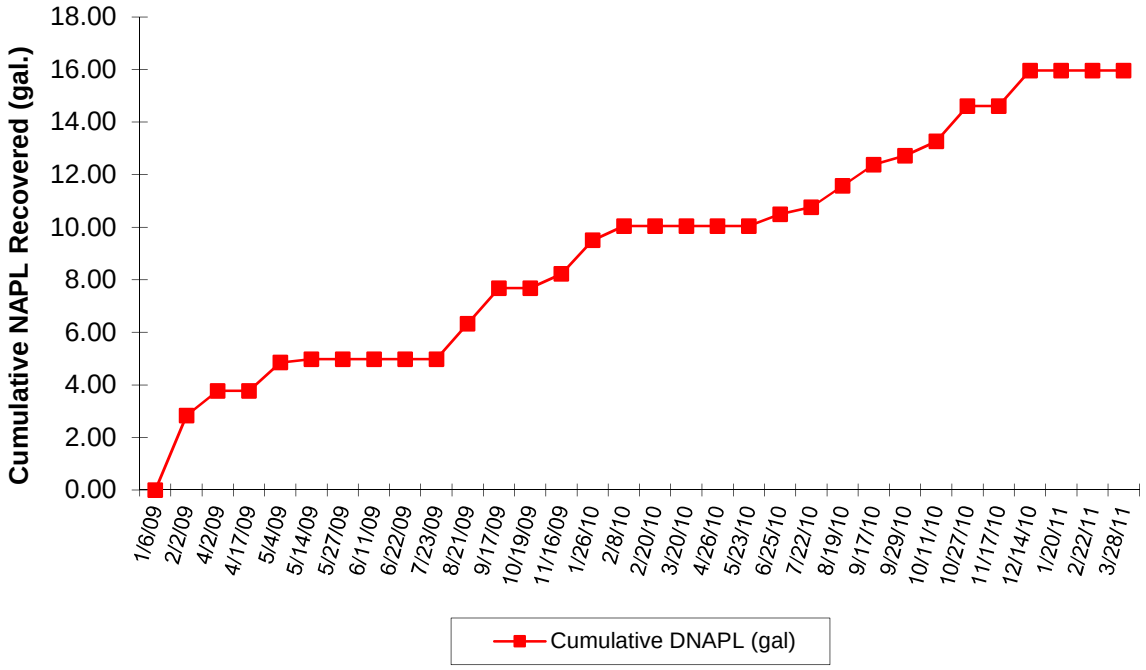


FIGURE 9X
Well IPR-16 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



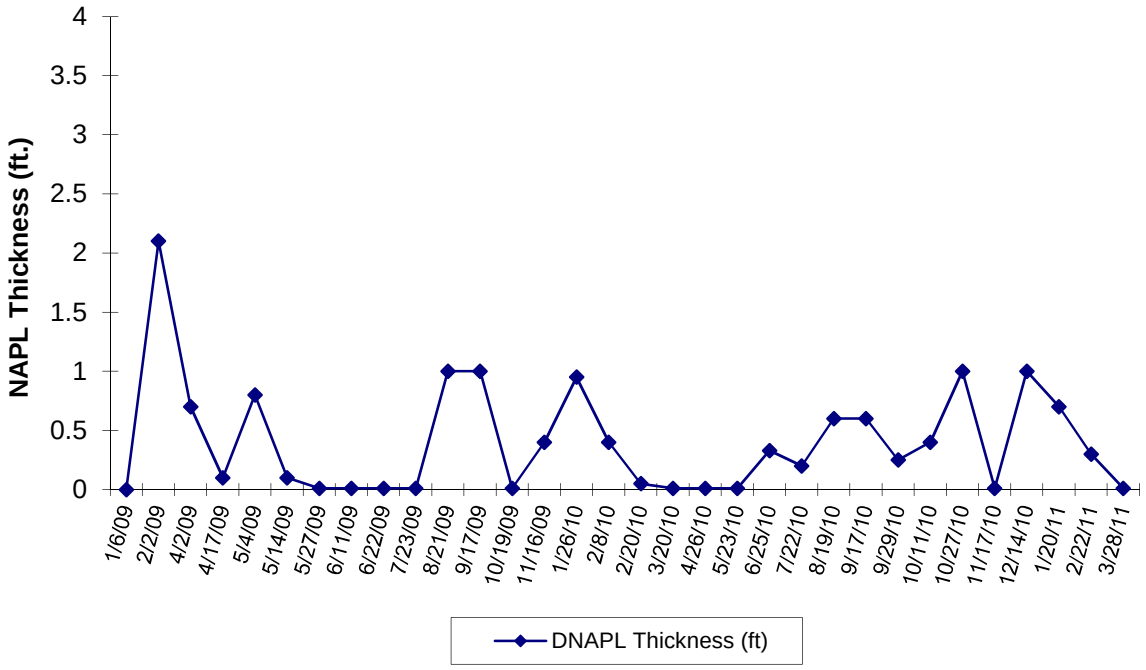
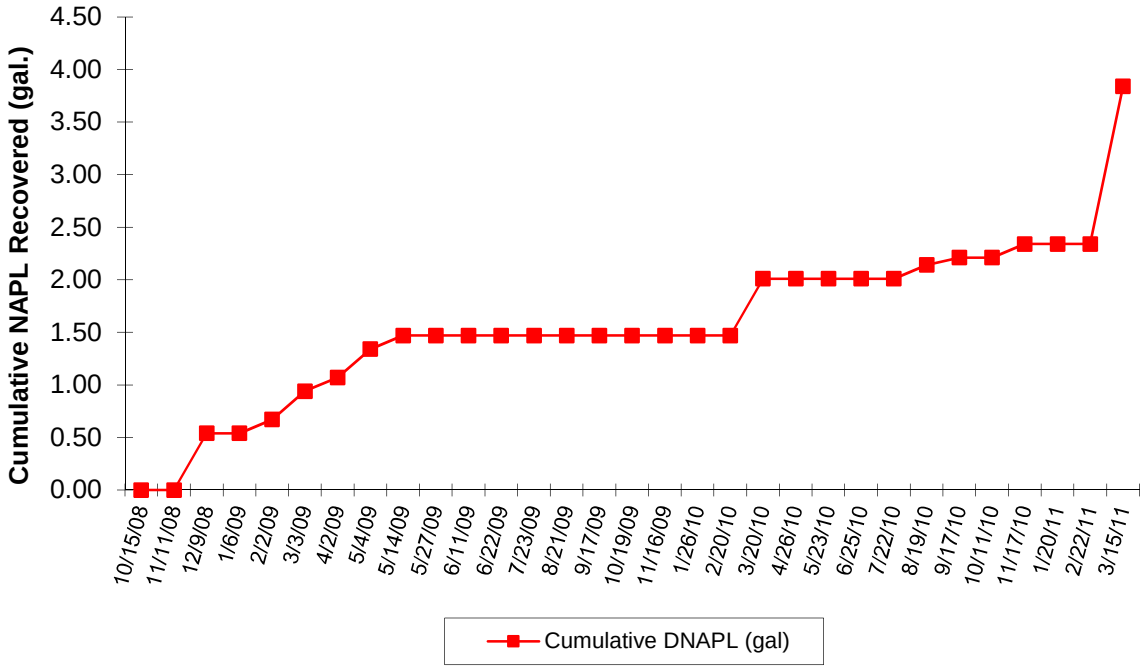


FIGURE 9Y
Well IPR-17 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



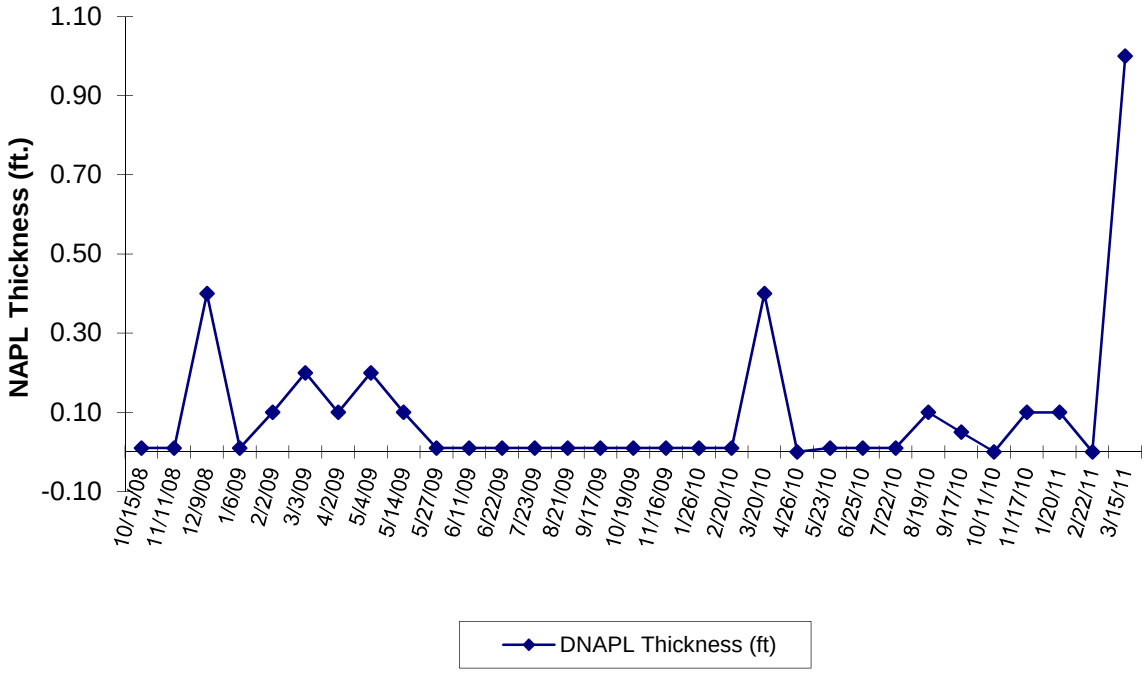
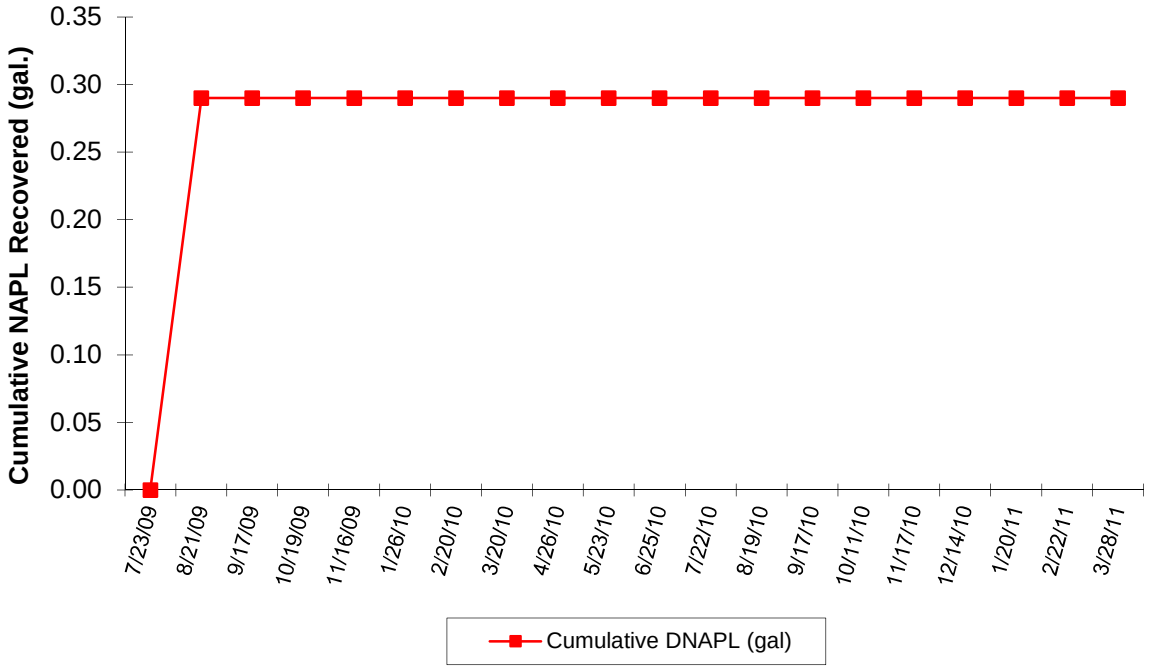


FIGURE 9Z
Well IPR-18 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



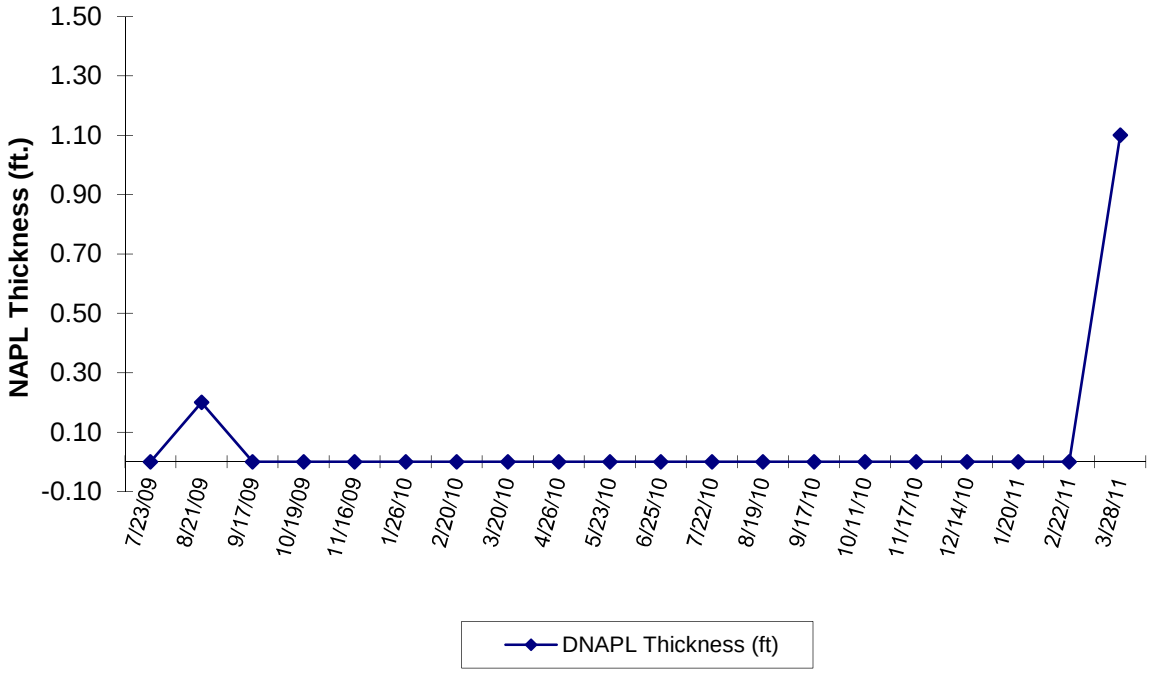
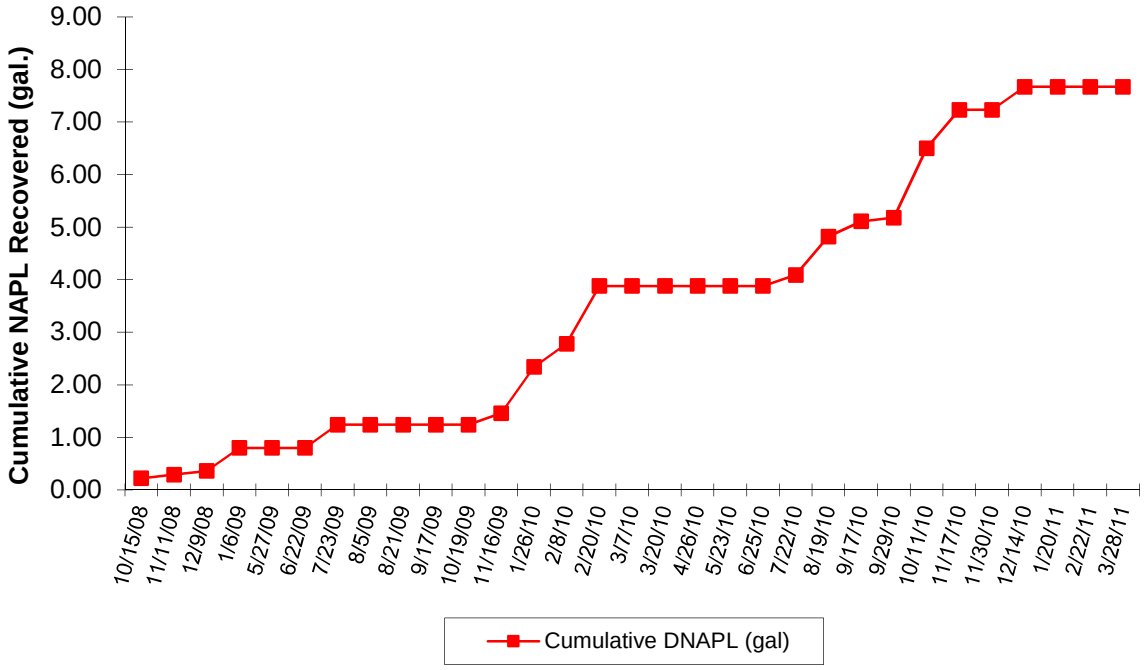


FIGURE 9AA
Well IPR-20 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



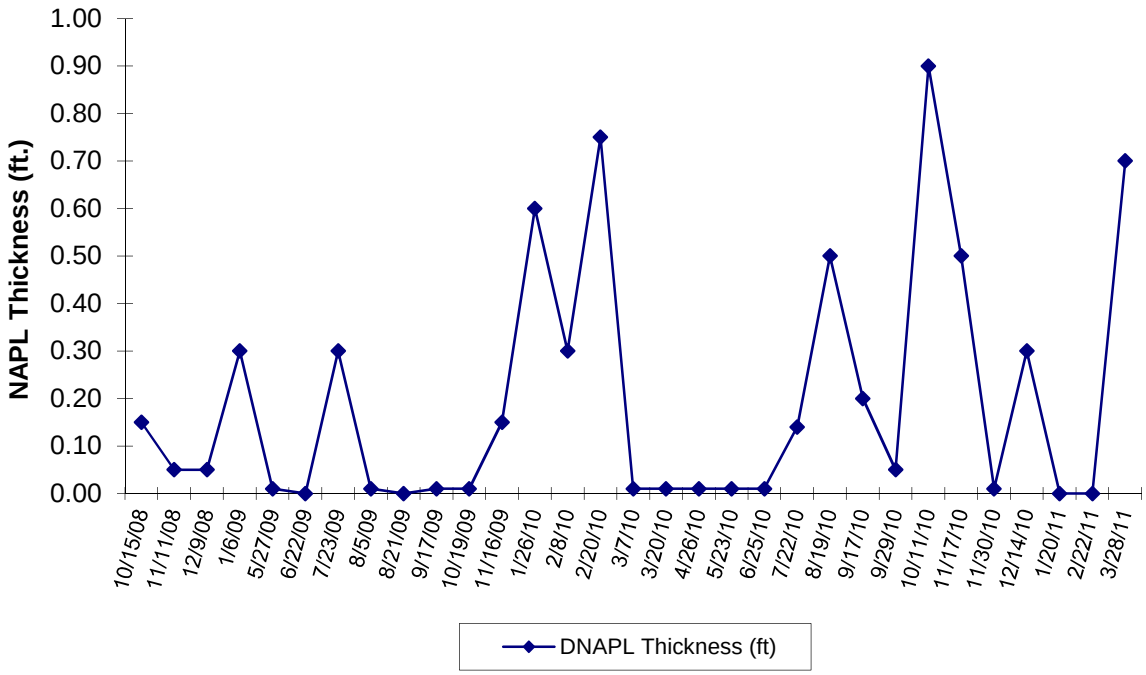
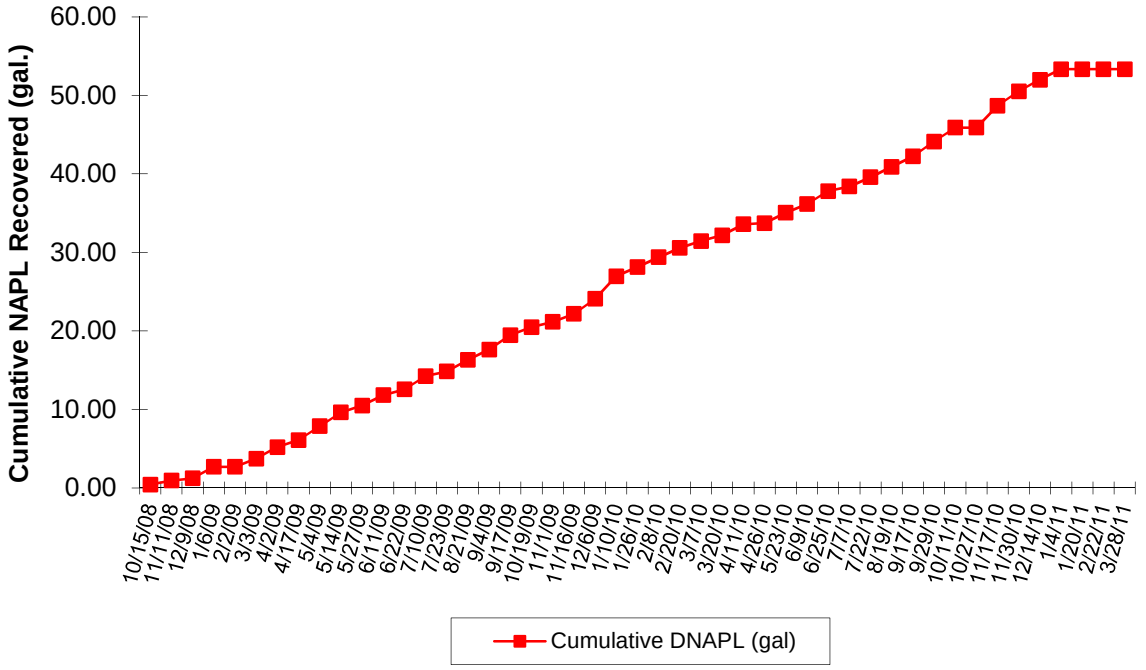


FIGURE 9AB
Well IPR-21 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



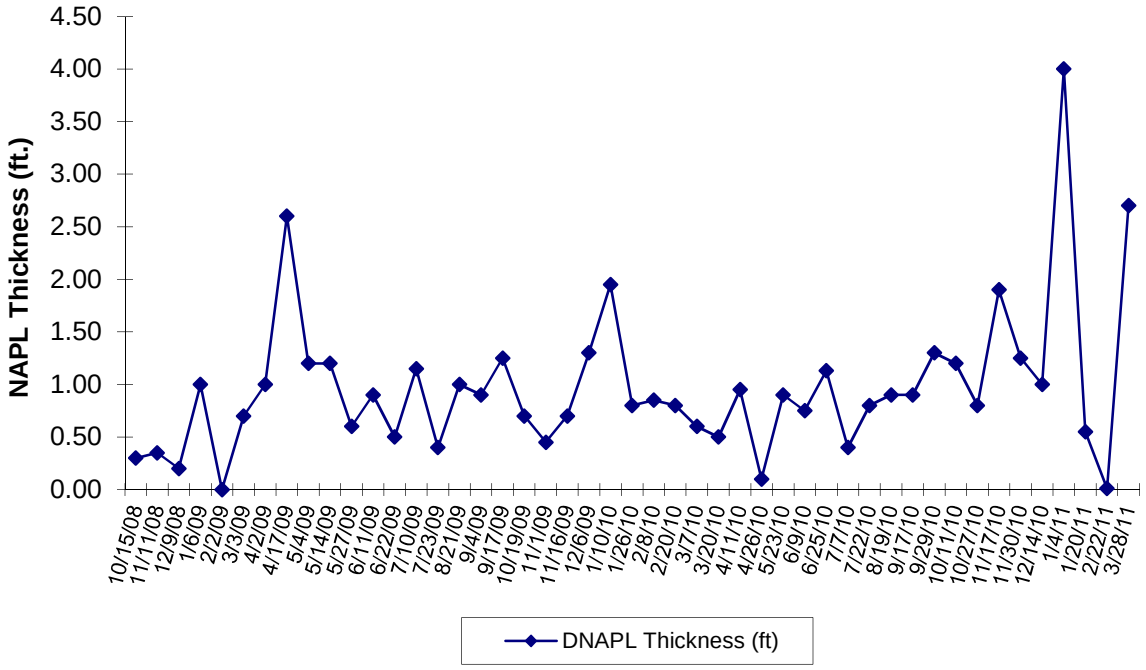
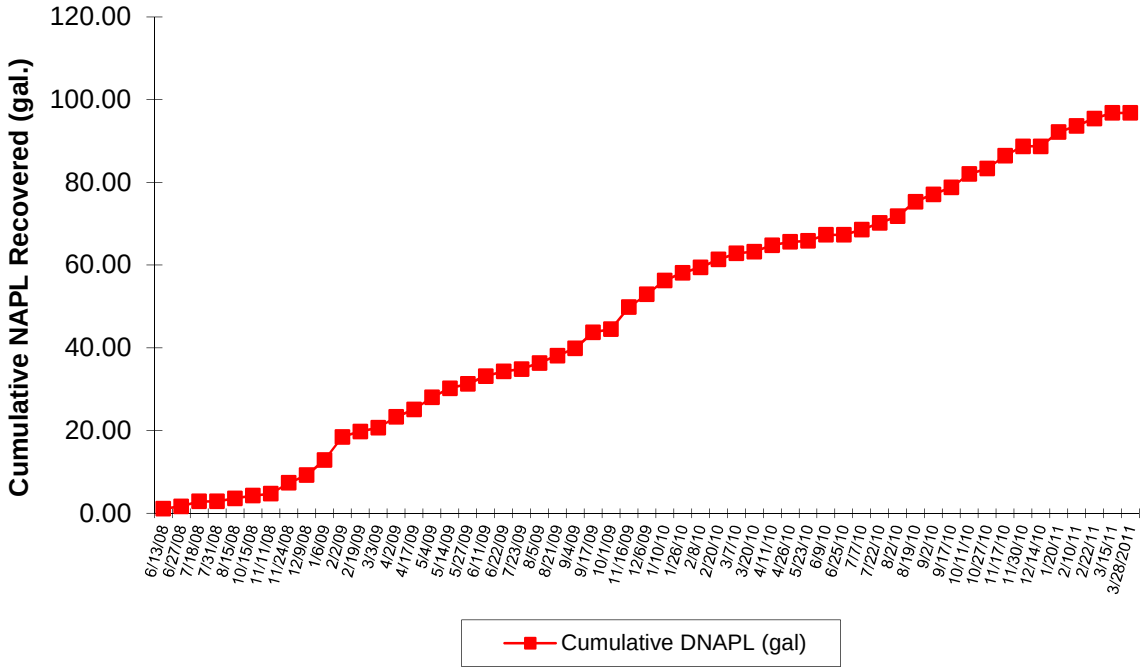


FIGURE 9AC
Well IPR-22 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



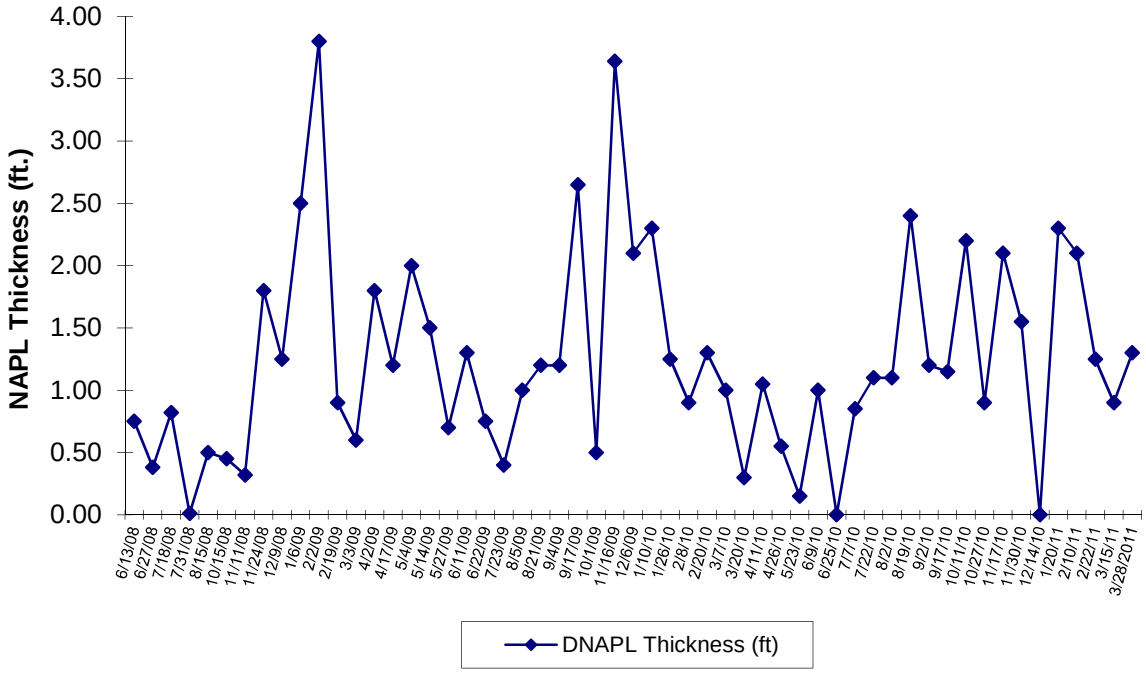
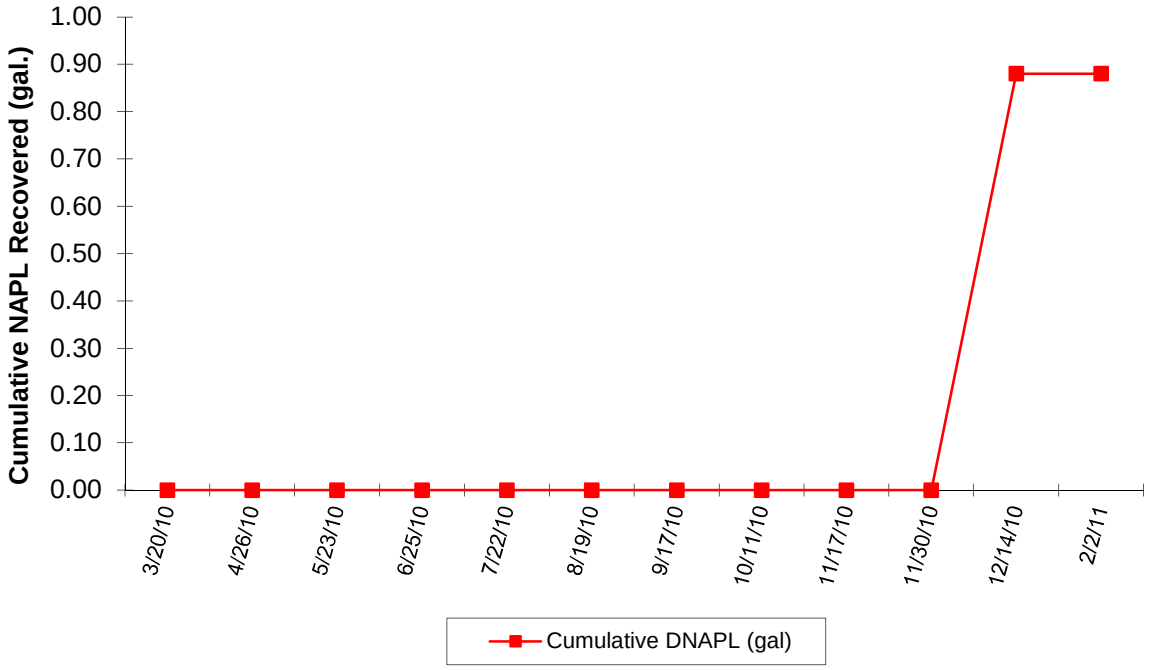


FIGURE 9AD
Well IPR- 23 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



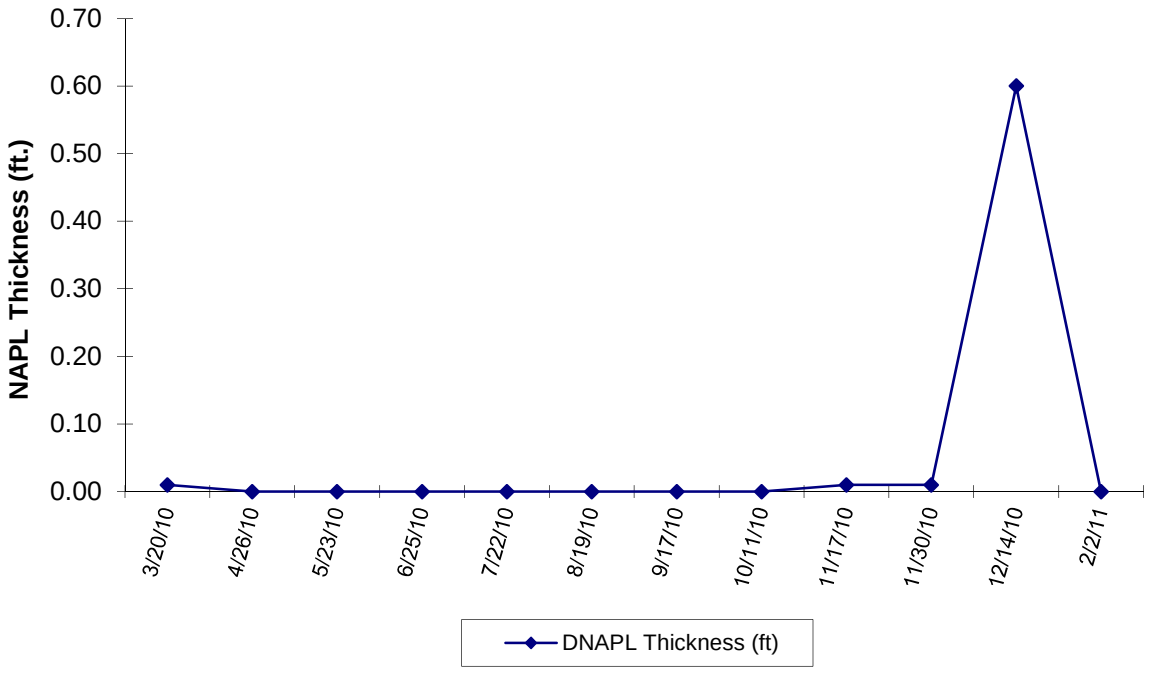
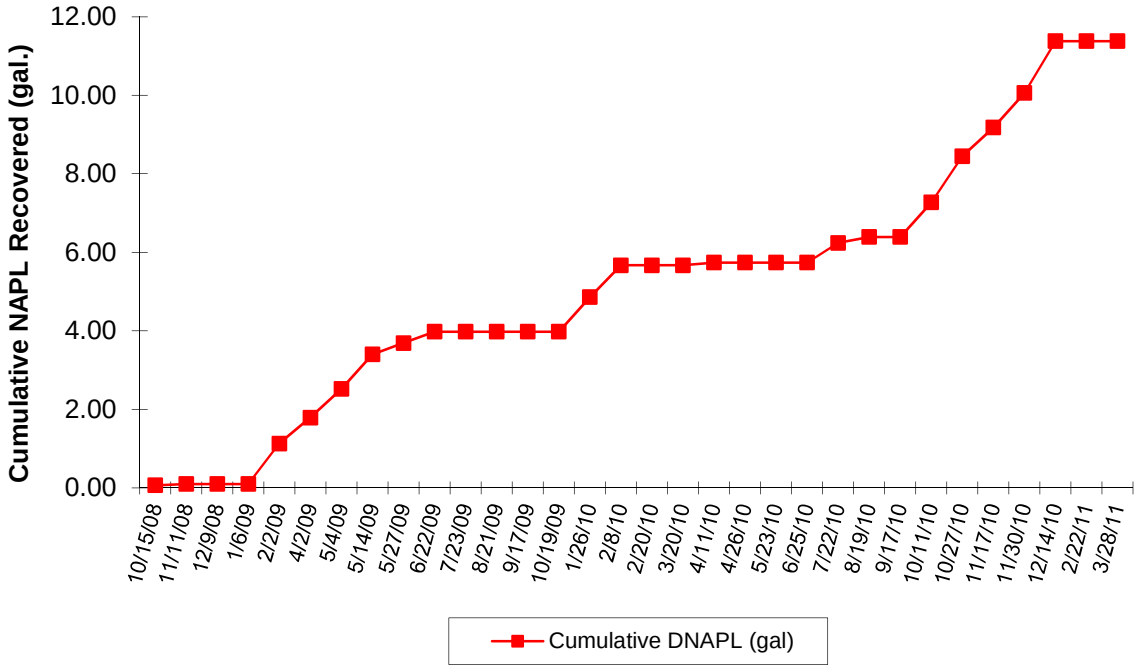


FIGURE 9AE
Well IPR-24 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



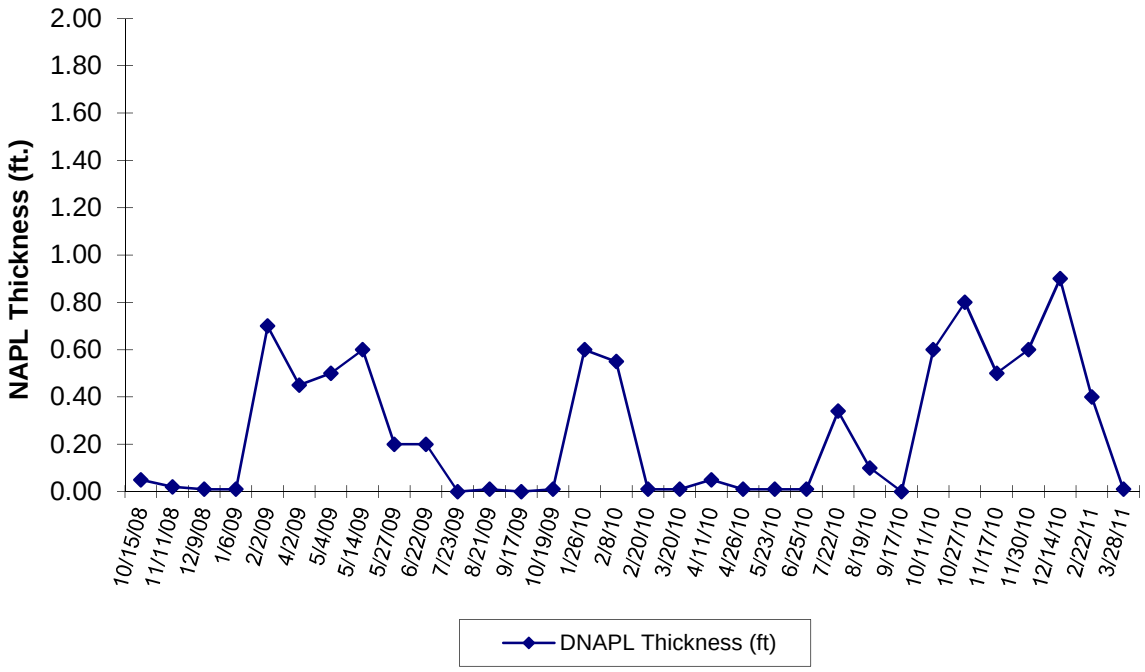
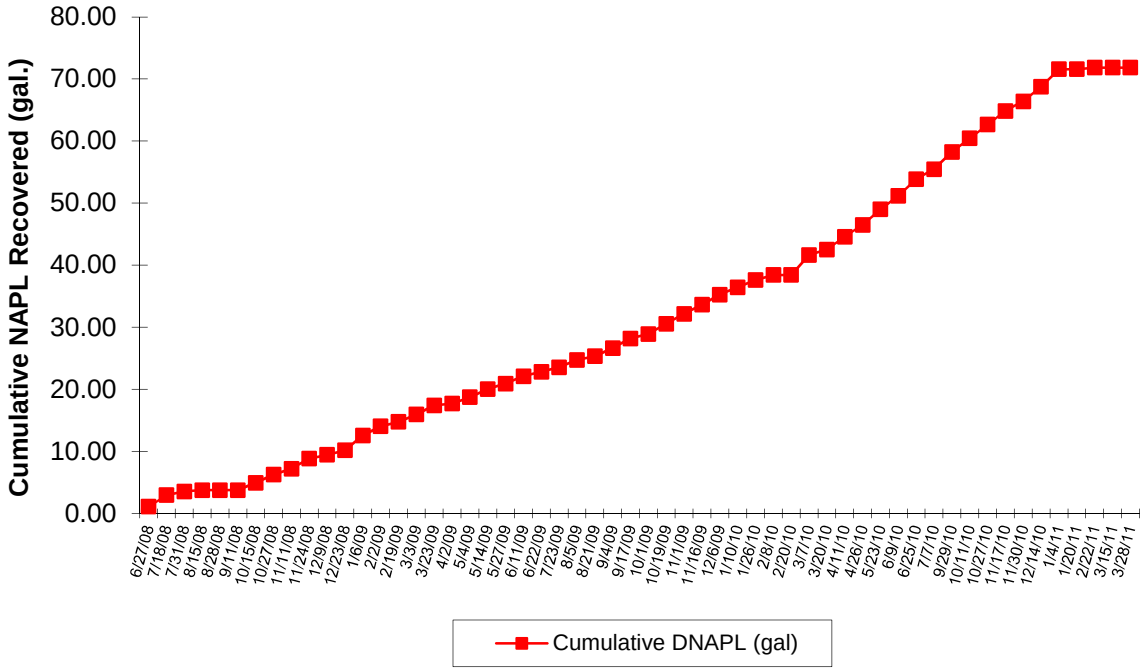


FIGURE 9AF
Well IPR-25 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



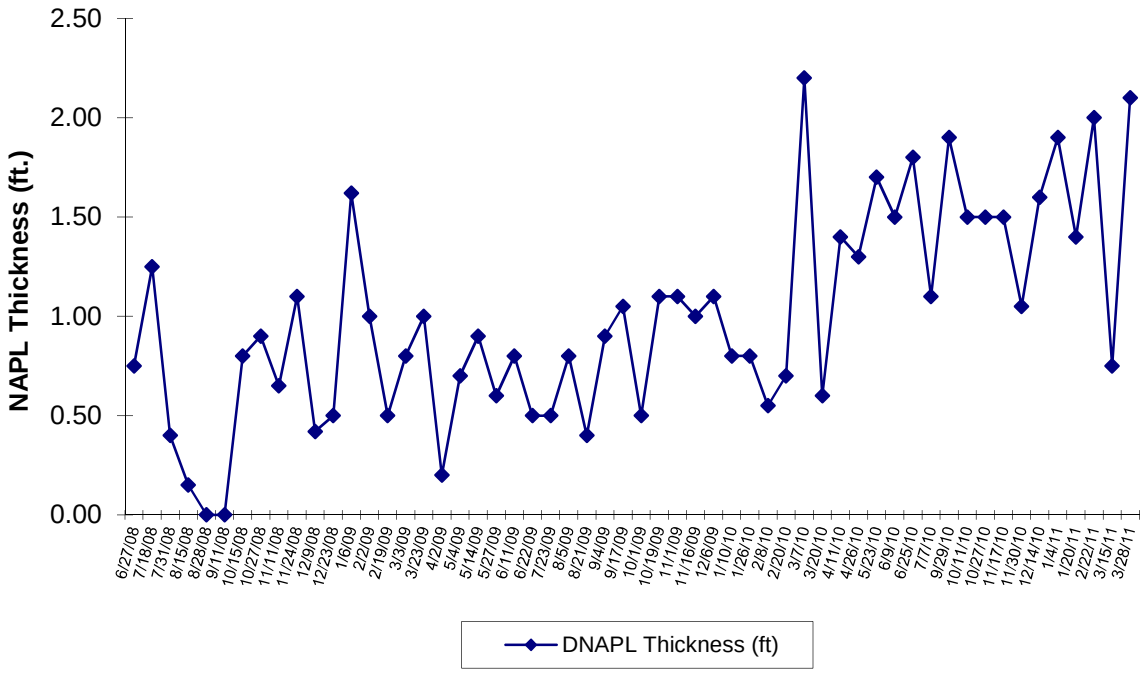
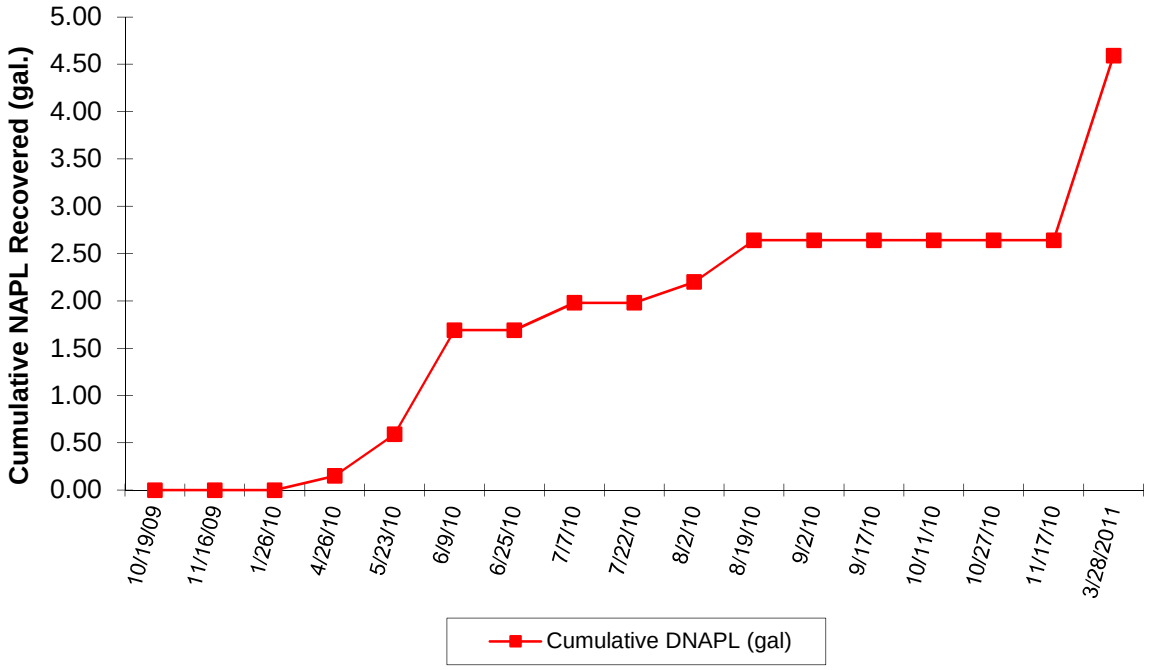


FIGURE 9AG
Well IPR-26 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



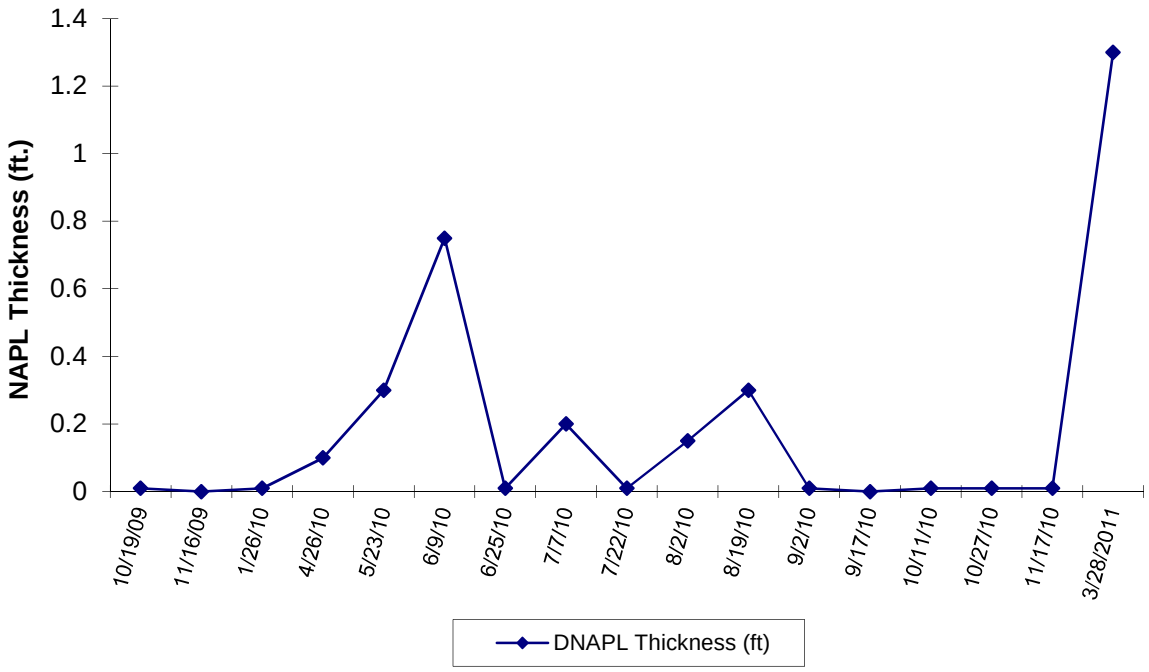
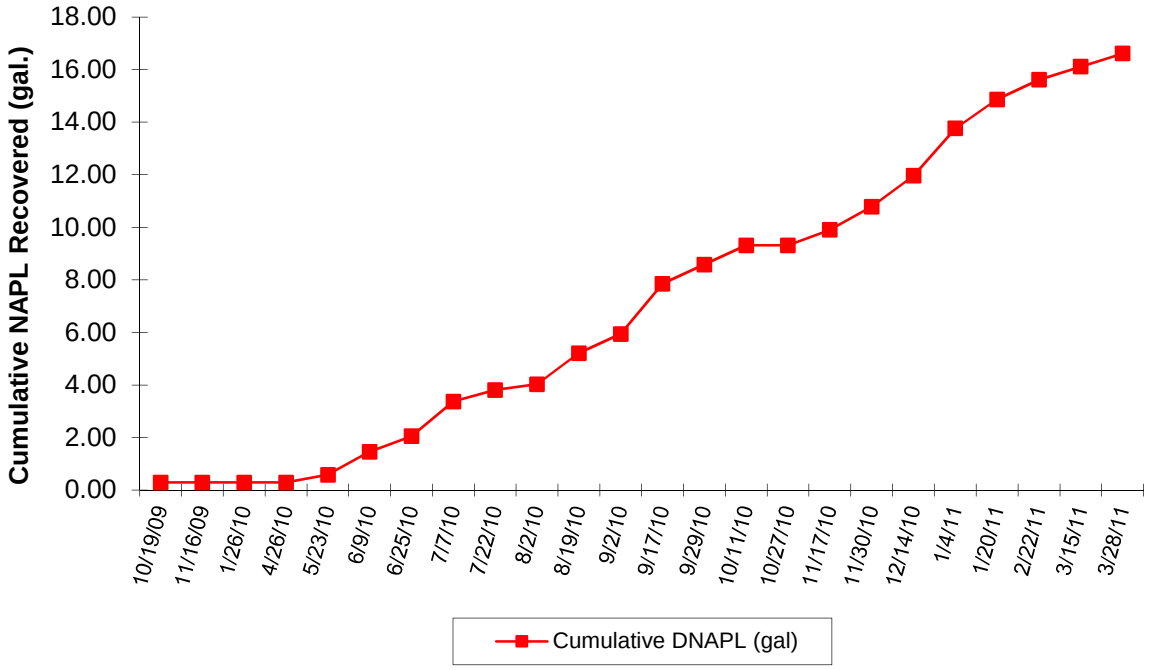


FIGURE 9AH
Well IPR-27 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



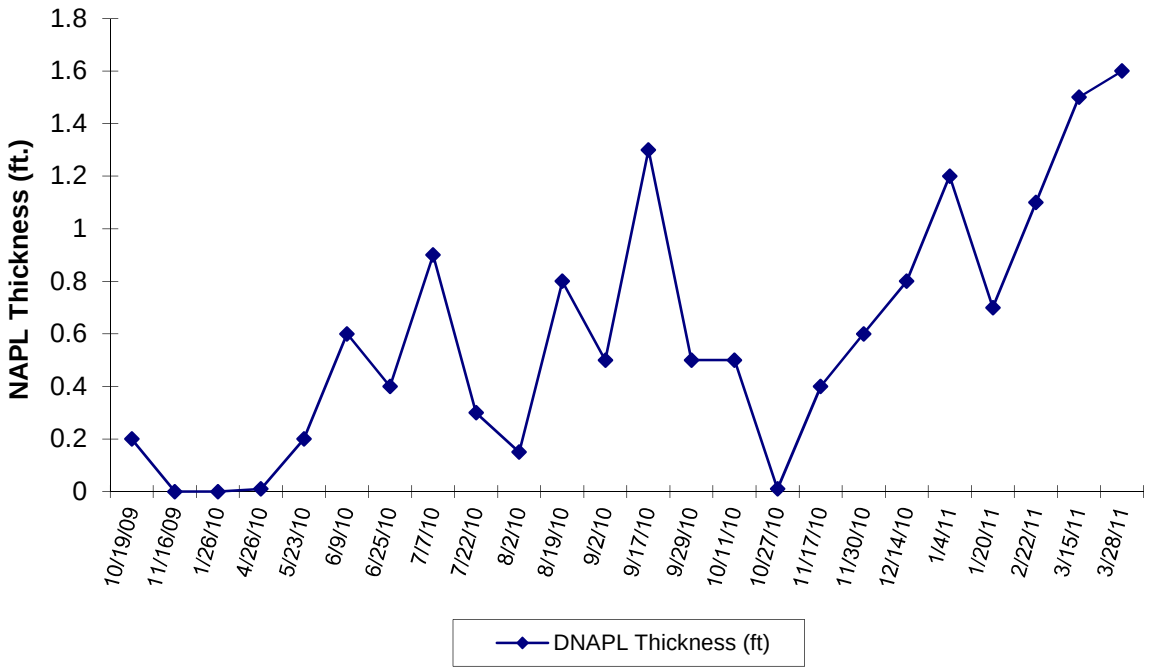
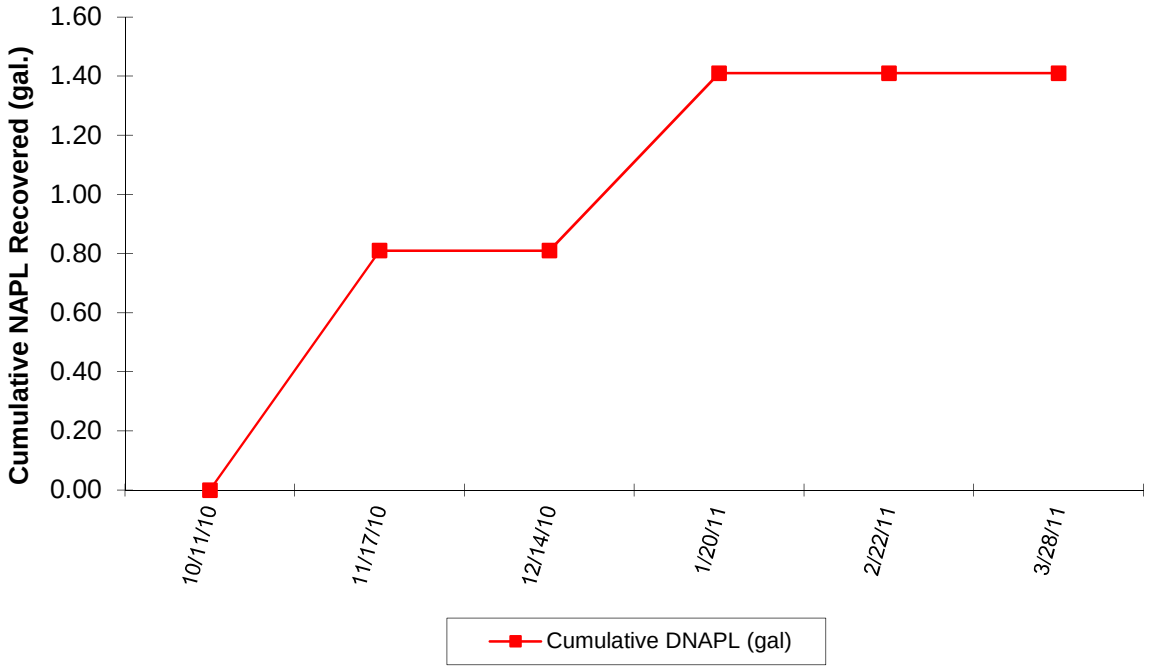


FIGURE 9AI
Well IPR-28 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



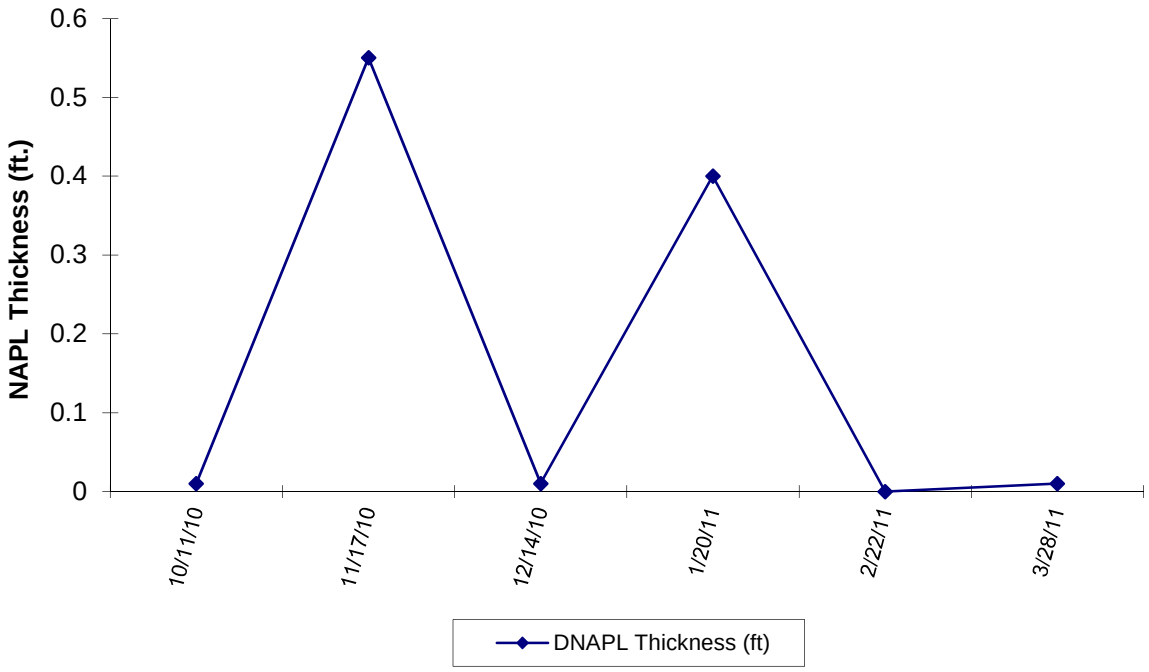
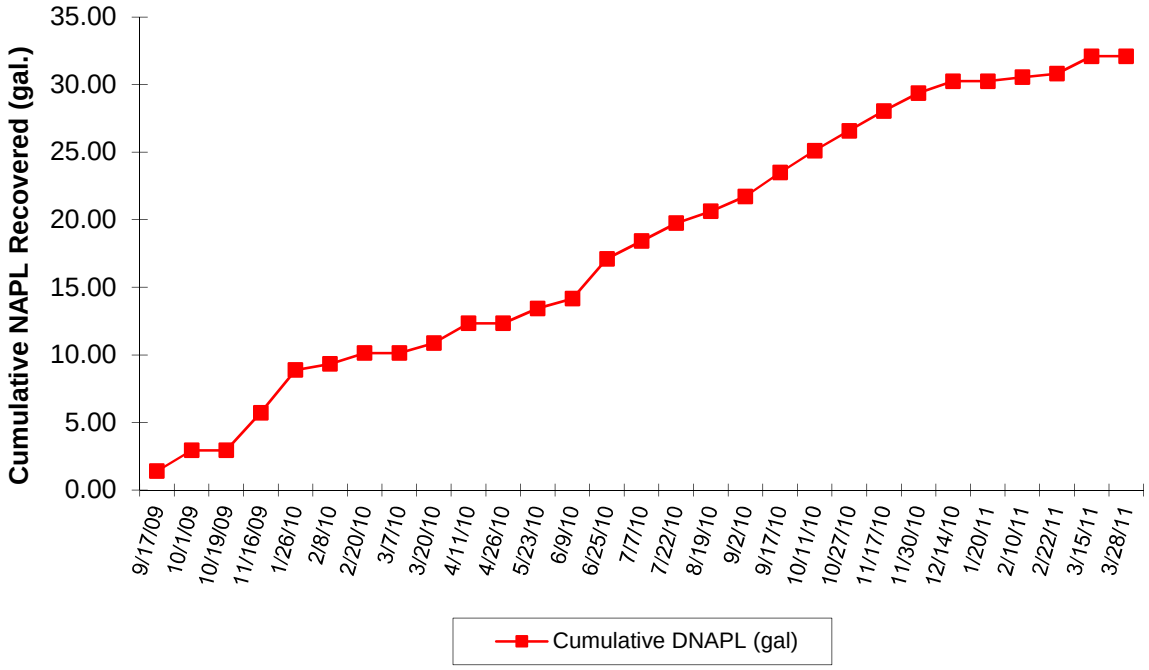


FIGURE 9AJ
Well IPR-29 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



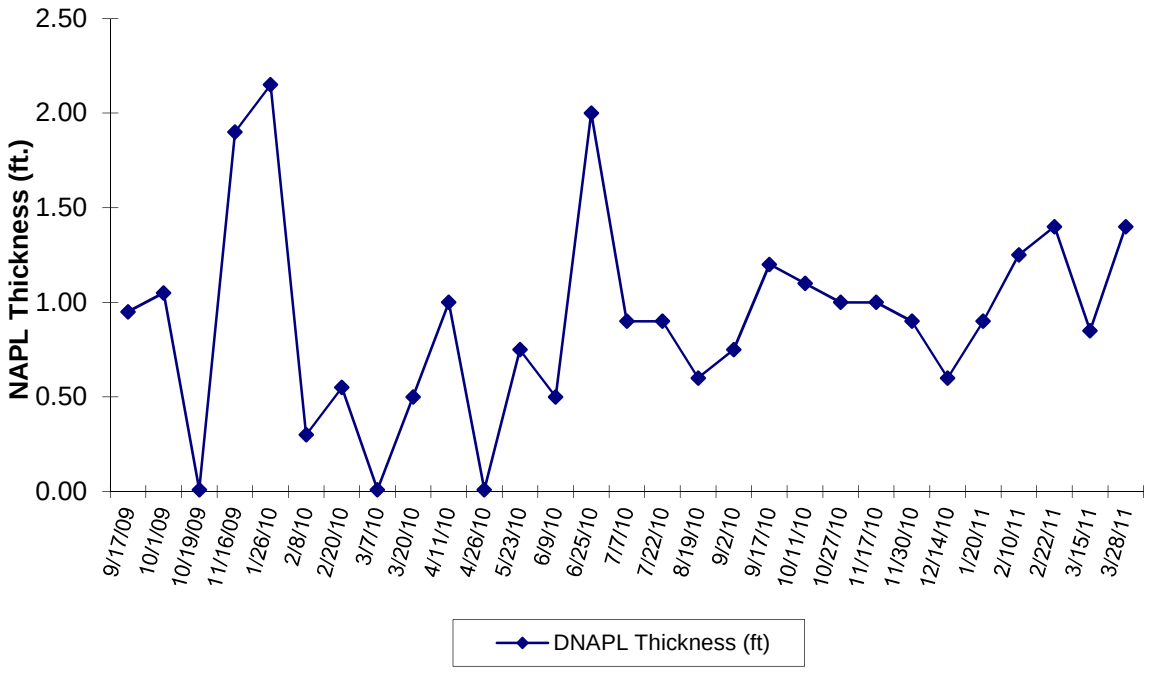
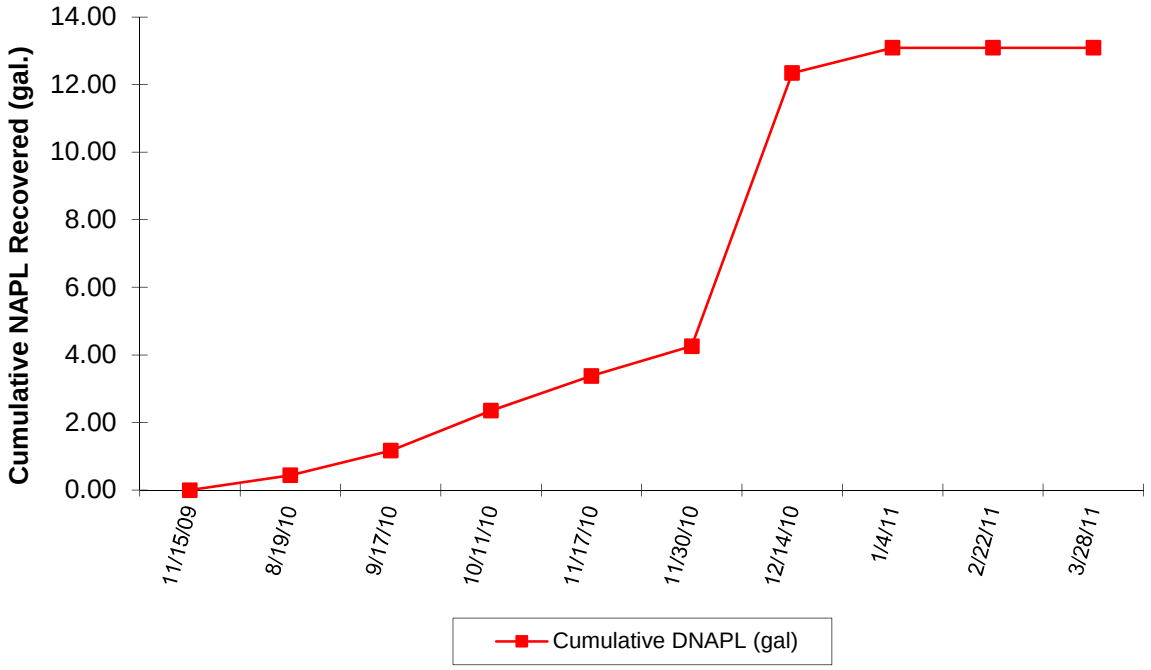
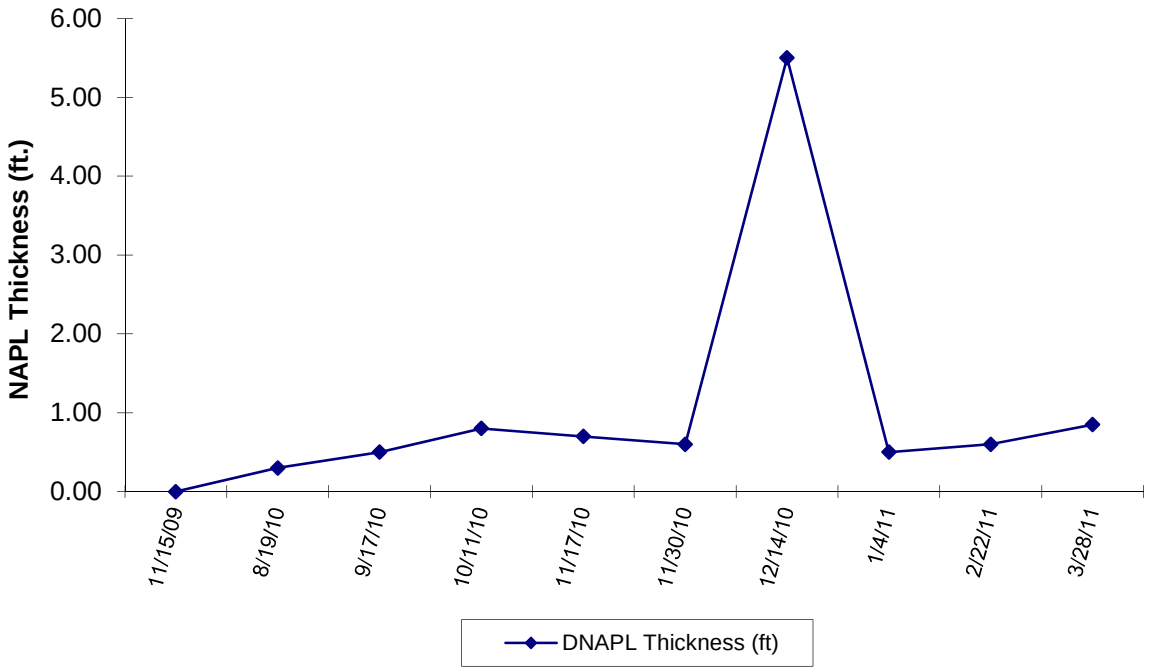


FIGURE 9AK
Well IPR-30 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site





APPENDIX A

DATA USABILITY SUMMARY REPORT

APPENDIX A
DATA USABILITY SUMMARY REPORT
FIRST QUARTER 2011

HEMPSTEAD INTERSECTION STREET FORMER MGP SITE
VILLAGES OF GARDEN CITY AND HEMPSTEAD
LONG ISLAND, NEW YORK

Analyses Performed by:
H2M LABORATORIES, INC.

Prepared For:

NATIONAL GRID
175 EAST OLD COUNTRY RD.
HICKSVILLE, NY 11801

Prepared by:

URS CORPORATION
77 GOODELL STREET
BUFFALO, NY 14203

MARCH 2011

TABLE OF CONTENTS

I. INTRODUCTION

This Data Usability Summary Report (DUSR) has been 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 Data Deliverables and Development of Data Usability Summary Reports*, May 2010.

Analytical data for sixteen (16) groundwater samples, one (1) field duplicate, one (1) matrix spike/matrix spike duplicate (MS/MSD) pair, and three (3) trip blanks collected by URS personnel from January 31 to February 8, 2011 are discussed in this DUSR. The samples were collected as part of the 2011 first quarter groundwater monitoring event at the Hempstead Intersection Street Former MGP Site.

II. ANALYTICAL METHODOLOGIES AND DATA VALIDATION

The samples were analyzed by H2M Laboratories, Inc. (Melville, NY) for the following parameters:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) – USEPA Method SW8260B, and
- Polynuclear aromatic hydrocarbons (PAHs) – USEPA Method SW8270C.

A limited data validation was performed on the samples in accordance with the guidelines presented in the following USEPA Region II documents:

- *Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B, SOP HW-24, Rev. 2,* August 2008; and

- *Validating Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8270D, SOP HW-22, Rev. 4,* August 2008.

The limited data validation included a review of completeness of all required deliverables; holding times; quality control (QC) results (instrument tunes, calibration standards, blanks, matrix spike recoveries, field duplicate analyses, laboratory control sample recoveries, and surrogate/internal standard recoveries) to determine if the data are 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.

Qualifications applied to the data during the data validation process include "J" (estimated) and 'UJ' (estimated quantitation limit). The validated analytical results are presented in Tables A-1 and A-2. Copies of the validated laboratory results (i.e., Form 1's) are presented in Attachment A. Copies of the chain-of-custodies, case narratives, and documentation supporting the qualification of data are presented in Attachment B. Only problems affecting data usability are discussed in this report.

III. DATA DELIVERABLE COMPLETENESS

Full deliverable data packages (i.e., NYSDEC ASP Category B or equivalent) were provided by the laboratory, and included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

IV. SAMPLE RECEIPT/HOLDING TIMES

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC), except for the following instances, where no qualification of the data was necessary.

- Sample HIMW-014D was inadvertently collected during this sampling event. Since this sample is only required to be collected during 2nd and 4th quarter events, the current analyses for this sample were cancelled.
- For samples collected on February 7-8, 2011, the time the samples were relinquished by the field technician to the laboratory courier was not documented on the COC.

All samples were analyzed within the required holding times.

V. NON-CONFORMANCES

The BTEX laboratory control samples associated with the following samples exhibited low-biased recoveries for xylene: HIMW-05D, -05I, -05S, -08D, -08I, -08S, -12D, -12I, -12S, -13D, -13I, -20I, -20S, and TB-02042011. The xylene results for these samples were qualified 'J' or 'UJ'.

For PAH analyses, the percent difference (%D) between the initial calibration (ICAL) average relative response factor (RRF) and the RRF in the continuing calibration (CCAL) standard was greater than 20.0% for benzo(k)fluoranthene. The benzo(k)fluoranthene results for samples HIMW-12D, -12I, and -12S were qualified 'UJ'.

Documentation supporting the qualification of data (i.e., Forms 3, 5, and 7) is presented in Attachment B.

VI. SAMPLE RESULTS AND REPORTING

All sample results were reported in accordance with method requirements and were adjusted for sample size and dilution factors. BTEX and PAH results detected below the quantitation limits were qualified 'J' by the laboratory. The results reported from secondary dilution analyses were qualified 'D' by the laboratory.

A field duplicate was collected from monitoring well location HIMW-15D, which exhibited good field and analytical precision.

VII. SUMMARY

All sample analyses were found to be compliant with the method and validation criteria, and the data are usable as reported, except for those results qualified 'J' or 'UJ', which should be considered conditionally usable. URS does not recommend the re-collection of any samples at this time.

Prepared By: _____ **Date:** 3/31/11

Peter R. Fairbanks, Senior Chemist

Reviewed By: _____ **Date:** 3/31/11

George E. Kisluk, Senior Chemist

DEFINITIONS OF USEPA REGION II DATA QUALIFIERS

U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

D – The sample results are reported from a separate secondary dilution analysis.

NJ – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

TABLE A-1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
NATIONAL GRID - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE

Location ID			HIMW-005D	HIMW-005I	HIMW-005S	HIMW-008D	HIMW-008I
Sample ID			HIMW-05D	HIMW-05I	HIMW-05S	HIMW-08D	HIMW-08I
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			02/04/11	02/08/11	02/08/11	02/04/11	02/04/11
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Benzene	UG/L	-	1.8	4.0	1 U	1 U	1 U
Ethylbenzene	UG/L	-	1 U	1.6	1 U	1 U	1 U
Toluene	UG/L	-	3.5	1.3	1 U	1 U	1 U
Xylene (total)	UG/L	-	140 J	130 J	1 UJ	1 UJ	1 UJ
Total BTEX	UG/L	100	145.3	136.9	ND	ND	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	160 DJ	270 DJ	10 U	10 U	10 U
Acenaphthene	UG/L	-	2 J	10	10 U	10 U	10 U
Acenaphthylene	UG/L	-	34	170 DJ	10 U	10 U	10 U
Anthracene	UG/L	-	10 U	2 J	10 U	10 U	10 U
Benzo(a)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	-	2 J	24	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	-	980 D	1,600 D	10 U	10 U	10 U
Phenanthrene	UG/L	-	10 U	14	10 U	10 U	10 U
Pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	1,178	2,090	ND	ND	ND

*Criteria- Goundwater Plume Delineation/Design Criteria, Pre-Design Investigation Work Plan for In-Situ Solidification for the Hempstead Intersection Street Former MGP Site, Appendix E, Final, URS 2008.

Flags assigned during chemistry validation are shown.

(oval) Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. J - The reported concentration is an estimated value.

UJ - Not detected. The reported quantitation limit is an estimated value. D - Result reported from a secondary dilution analysis.

ND - Not detected.

Made By_PRF 03/14/11_; Checked By_ 3/14/11

Detection Limits shown are PQL

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WHERE [SDG] = 'KEY-URS113' AND [MATRIX] = 'WG';

TABLE A-1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
NATIONAL GRID - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE

Location ID			HIMW-008S	HIMW-012D	HIMW-012I	HIMW-012S	HIMW-013D
Sample ID			HIMW-08S	HIMW-12D	HIMW-12I	HIMW-12S	HIMW-13D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			02/03/11	02/07/11	02/07/11	02/07/11	02/02/11
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Benzene	UG/L	-	1 U	1 U	50	8.9	4.9
Ethylbenzene	UG/L	-	1 U	1 U	1 U	4.2	1 U
Toluene	UG/L	-	1 U	1 U	1 U	5.7	1 U
Xylene (total)	UG/L	-	1 UJ	1 UJ	4.4 J	320 J	3.2 J
Total BTEX	UG/L	100	ND	ND	54.4	338.8	8.1
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	150 DJ	10 U
Acenaphthene	UG/L	-	10 U	10 U	38	27	4 J
Acenaphthylene	UG/L	-	10 U	10 U	36	11	11
Anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	-	10 U	10 UJ	10 UJ	10 UJ	10 U
Chrysene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	-	10 U	10 U	21	3 J	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	-	10 U	10 U	2 J	1,200 D	10 U
Phenanthrene	UG/L	-	10 U	10 U	7 J	10 U	10 U
Pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	ND	ND	104	1,391	15

*Criteria- Goundwater Plume Delineation/Design Criteria, Pre-Design Investigation Work Plan for In-Situ Solidification for the Hempstead Intersection Street Former MGP Site, Appendix E, Final, URS 2008.

Flags assigned during chemistry validation are shown.

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ND - Not detected.

Made By_PRF 03/14/11_; Checked By JMS 3/14/11

Detection Limits shown are PQL

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TABLE A-1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
NATIONAL GRID - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE

Location ID			HIMW-013I	HIMW-014I	HIMW-015D	HIMW-015D	HIMW-015I
Sample ID			HIMW-13I	HIMW-14I	DUP 02012011	HIMW-15D	HIMW-15I
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			02/02/11	02/01/11	02/01/11	02/01/11	02/01/11
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Volatile Organic Compounds							
Benzene	UG/L	-	150	28	1 U	1 U	23
Ethylbenzene	UG/L	-	40	5.1	1 U	1 U	1 U
Toluene	UG/L	-	1.4	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	-	14 J	3.9	1 U	1 U	1.7
Total BTEX	UG/L	100	205.4	37	ND	ND	24.7
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	-	10	13	10 U	10 U	4 J
Acenaphthylene	UG/L	-	94 D	16	10 U	10 U	21
Anthracene	UG/L	-	1 J	10 U	10 U	10 U	10 U
Benzo(a)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	-	10	6 J	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	-	2 J	10 U	10 U	10 U	10 U
Phenanthrene	UG/L	-	11	4 J	10 U	10 U	2 J
Pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	128	39	ND	ND	27

*Criteria- Goundwater Plume Delineation/Design Criteria, Pre-Design Investigation Work Plan for In-Situ Solidification for the Hempstead Intersection Street Former MGP Site, Appendix E, Final, URS 2008.

Flags assigned during chemistry validation are shown.

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ND - Not detected.

Made By_PRF 03/14/11_; Checked By_ 3/14/11

Detection Limits shown are PQL

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TABLE A-1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
NATIONAL GRID - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE

Location ID			HIMW-020I	HIMW-020S
Sample ID			HIMW-20I	HIMW-20S
Matrix			Groundwater	Groundwater
Depth Interval (ft)			-	-
Date Sampled			02/03/11	02/03/11
Parameter	**Units**	**Criteria***		
Volatile Organic Compounds				
Benzene	UG/L	-	12	1 U
Ethylbenzene	UG/L	-	7.4	1 U
Toluene	UG/L	-	6.6	1 U
Xylene (total)	UG/L	-	160 J	1.7 J
Total BTEX	UG/L	100	186	1.7
Semivolatile Organic Compounds				
2-Methylnaphthalene	UG/L	-	150 DJ	10 U
Acenaphthene	UG/L	-	13	10 U
Acenaphthylene	UG/L	-	250 D	10 U
Anthracene	UG/L	-	3 J	10 U
Benzo(a)anthracene	UG/L	-	10 U	10 U
Benzo(a)pyrene	UG/L	-	10 U	10 U
Benzo(b)fluoranthene	UG/L	-	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U
Benzo(k)fluoranthene	UG/L	-	10 U	10 U
Chrysene	UG/L	-	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U
Fluoranthene	UG/L	-	10 U	10 U
Fluorene	UG/L	-	21	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U
Naphthalene	UG/L	-	680 D	10 U
Phenanthrene	UG/L	-	27	10 U
Pyrene	UG/L	-	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	1,144	ND

*Criteria- Goundwater Plume Delineation/Design Criteria, Pre-Design Investigation Work Plan for In-Situ Solidification for the Hempstead Intersection Street Former MGP Site, Appendix E, Final, URS 2008.

Flags assigned during chemistry validation are shown.

(oval) Concentration Exceeds Criteria

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UJ - Not detected. The reported quantitation limit is an estimated value. D - Result reported from a secondary dilution analysis.

ND - Not detected.

Made By_PRF 03/14/11_: Checked By_ 3/14/11

Detection Limits shown are PQL

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Printed: 3/14/2011 10:10:39 AM
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TABLE A-2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
NATIONAL GRID - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE

Location ID			FIELDQC	FIELDQC	FIELDQC
Sample ID			TB 02012011	TB 02042011	TB 02082011
Matrix			Water Quality	Water Quality	Water Quality
Depth Interval (ft)			-	-	-
Date Sampled			02/01/11	02/04/11	02/08/11
Parameter	Units	Criteria*	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds					
Benzene	UG/L	-	1 U	1 U	1 U
Ethylbenzene	UG/L	-	1 U	1 U	1 U
Toluene	UG/L	-	1 U	1 U	1 U
Xylene (total)	UG/L	-	1 U	1 UJ	1 U
Total BTEX	UG/L	100	ND	ND	ND

*Criteria- Goundwater Plume Delineation/Design Criteria, Pre-Design Investigation Work Plan for In-Situ Solidification for the Hempstead Intersection Street Former MGP Site, Appendix E, Final, URS 2008.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

UJ - Not detected. The reported quantitation limit is an estimated value.

ND - Not detected.

Made By_PRF 03/14/11_; Checked By_ 3/14/11

Detection Limits shown are PQL

J:\11175065.00000\DB\Program\EDMS.mde
Printed: 3/14/2011 10:12:44 AM
[SDG] = 'KEY-URS113' AND [MATRIX] = 'WQ'

ATTACHMENT A

VALIDATED FORM 1'S

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102062-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71663.D

Level: (low/med) LOW Date Received: 02/01/11

% Moisture: not dec. Date Analyzed: 02/03/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	28	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	5.1	
1330-20-7	Xylene (total)	3.9	

KEY-URS113 S31

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102062-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71664.D

Level: (low/med) LOW Date Received: 02/01/11

% Moisture: not dec. Date Analyzed: 02/03/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U

KEY-URS113 S32

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102062-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71665.D

Level: (low/med) LOW Date Received: 02/01/11

% Moisture: not dec. Date Analyzed: 02/03/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	23	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1.7	

KEY-URS113 S33

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP 02012011

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102062-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71666.D

Level: (low/med) LOW Date Received: 02/01/11

% Moisture: not dec. Date Analyzed: 02/03/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U

KEY-URS113 S34

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB 02012011

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102062-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71661.D

Level: (low/med) LOW Date Received: 02/01/11

% Moisture: not dec. Date Analyzed: 02/03/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U

KEY-URS113 S35

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71681.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: not dec. Date Analyzed: 02/04/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1.8	
108-88-3	Toluene	3.5	
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	140	J

3/10/11

KEY-URS113 S36

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-08D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71711.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: not dec. Date Analyzed: 02/11/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U J

3/10/11

KEY-URS113 S37

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-08I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71682.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: not dec. Date Analyzed: 02/04/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	UJ

3/10/11

KEY-URS113 S38

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-08S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71683.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: not dec. Date Analyzed: 02/04/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	UJ

3/10/11

KEY-URS113 S39

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71684.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: not dec. Date Analyzed: 02/04/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	4.9	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	3.2	J

3/10/11

KEY-URS113 S40

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71685.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: not dec. Date Analyzed: 02/04/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	150	
108-88-3	Toluene	1.4	
100-41-4	Ethylbenzene	40	
1330-20-7	Xylene (total)	14	J

3/10/11

KEY-URS113 S41

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-20I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-007A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71686.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: not dec. Date Analyzed: 02/05/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	12	
108-88-3	Toluene	6.6	
100-41-4	Ethylbenzene	7.4	
1330-20-7	Xylene (total)	160	J

3/10/11

KEY-URS113 S42

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-20S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-008A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71687.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: not dec. Date Analyzed: 02/05/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1.7	J

3/10/11

KEY-URS113 S43

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB 02042011

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-009A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71680.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: not dec. Date Analyzed: 02/04/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	UJ

3/10/11

KEY-URS113 S44

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-05I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71712.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: not dec. Date Analyzed: 02/11/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	4.0	
108-88-3	Toluene	1.3	
100-41-4	Ethylbenzene	1.6	
1330-20-7	Xylene (total)	130	J

3/10/11

KEY-URS113 S45

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71713.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: not dec. Date Analyzed: 02/11/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U J

3/10/11
2

KEY-URS113 S46

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71714.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: not dec. Date Analyzed: 02/11/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	UJ

3/10/11

KEY-URS113 S47

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71715.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: not dec. Date Analyzed: 02/11/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	50	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	4.4	J

3/10/11
2

KEY-URS113 S48

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71716.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: not dec. Date Analyzed: 02/11/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	8.9	
108-88-3	Toluene	5.7	
100-41-4	Ethylbenzene	4.2	
1330-20-7	Xylene (total)	320	J

3/10/11

KEY-URS113 S49

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB 02082011

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A71740.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: not dec. Date Analyzed: 02/15/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U

KEY-URS113 S50

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-14I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102062-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58016.D

Level: (low/med) LOW Date Received: 02/01/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/03/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/04/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	16	
83-32-9	Acenaphthene	13	
86-73-7	Fluorene	6	J
85-01-8	Phenanthrene	4	J
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102062-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58017.D

Level: (low/med) LOW Date Received: 02/01/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/03/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/04/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-15I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102062-004B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58018.D

Level: (low/med) LOW Date Received: 02/01/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/03/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/04/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	21	
83-32-9	Acenaphthene	4	J
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	2	J
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

EPA SAMPLE NO.

DUP 02012011

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102062-005B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58019.D

Level: (low/med) LOW Date Received: 02/01/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/03/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/04/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

KEY-URS113 S55

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58046.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/09/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	980 ~~780~~	~~B~~ D
91-57-6	2-Methylnaphthalene	160 ~~140~~	~~B~~ DJ
208-96-8	Acenaphthylene	34	
83-32-9	Acenaphthene	2	J
86-73-7	Fluorene	2	J
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

3/14/11

KEY-URS113 S56

1C

EPA SAMPLE NO.

HIMW-05DDL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-001EDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C58084.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/11/11

Injection Volume: 2 (µL) Dilution Factor: 20.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

CAS NO.	COMPOUND		Q
91-20-3	Naphthalene	980	D
91-57-6	2-Methylnaphthalene	160	DJ
208-96-8	Acenaphthylene	40	DJ
83-32-9	Acenaphthene	200	U
86-73-7	Fluorene	200	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U

(1) Cannot be separated from Diphenylamine

3/14/11

KEY-URS113 S57

1C

EPA SAMPLE NO.

HIMW-08D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58047.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/09/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

EPA SAMPLE NO.

HIMW-08I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58050.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/09/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

EPA SAMPLE NO.

HIMW-08S

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-004B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58051.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/09/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-005B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58052.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/10/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	11	
83-32-9	Acenaphthene	4	J
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

EPA SAMPLE NO.

HIMW-13I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-006B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58053.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/10/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	2	J
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	~~100~~ 94	E D
83-32-9	Acenaphthene	10	
86-73-7	Fluorene	10	
85-01-8	Phenanthrene	11	
120-12-7	Anthracene	1	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

3/14/11

KEY-URS113 S62

1C

EPA SAMPLE NO.

HIMW-13IDL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-006BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C58085.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/11/11

Injection Volume: 2 (µL) Dilution Factor: 4.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	40	U
91-57-6	2-Methylnaphthalene	40	U
208-96-8	Acenaphthylene	94	D
83-32-9	Acenaphthene	12	DJ
86-73-7	Fluorene	12	DJ
85-01-8	Phenanthrene	12	DJ
120-12-7	Anthracene	40	U
206-44-0	Fluoranthene	40	U
129-00-0	Pyrene	40	U
56-55-3	Benzo(a)anthracene	40	U
218-01-9	Chrysene	40	U
205-99-2	Benzo(b)fluoranthene	40	U
207-08-9	Benzo(k)fluoranthene	40	U
50-32-8	Benzo(a)pyrene	40	U
193-39-5	Indeno(1,2,3-cd)pyrene	40	U
53-70-3	Dibenzo(a,h)anthracene	40	U
191-24-2	Benzo(g,h,i)perylene	40	U

(1) Cannot be separated from Diphenylamine

3/14/11

1C

EPA SAMPLE NO.

HIMW-20I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-007B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58054.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/10/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	~~540~~ 680	~~B~~ D
91-57-6	2-Methylnaphthalene	~~140~~ 150	~~B~~ D J
208-96-8	Acenaphthylene	~~230~~ 250	~~B~~ D
83-32-9	Acenaphthene	13	
86-73-7	Fluorene	21	
85-01-8	Phenanthrene	27	
120-12-7	Anthracene	3	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

3/14/11

KEY-URS113 S64

1C

EPA SAMPLE NO.

HIMW-20IDL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-007BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C58086.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/11/11

Injection Volume: 2 (µL) Dilution Factor: 20.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	680	D
91-57-6	2-Methylnaphthalene	150	DJ
208-96-8	Acenaphthylene	250	D
83-32-9	Acenaphthene	200	U
86-73-7	Fluorene	30	DJ
85-01-8	Phenanthrene	30	DJ
120-12-7	Anthracene	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U

(1) Cannot be separated from Diphenylamine

3/14/11

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-20S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102160-008B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58055.D

Level: (low/med) LOW Date Received: 02/04/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/10/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58056.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/10/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	~~1200~~ 1600	~~E~~ D
91-57-6	2-Methylnaphthalene	~~350~~ 270	~~E~~ DJ
208-96-8	Acenaphthylene	~~180~~ 170	~~E~~ DJ
83-32-9	Acenaphthene	10	
86-73-7	Fluorene	24	
85-01-8	Phenanthrene	14	
120-12-7	Anthracene	2	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

3/14/4

KEY-URS113 S67

1C

EPA SAMPLE NO.

HIMW-05IDL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-001BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C58083.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/11/11

Injection Volume: 2 (µL) Dilution Factor: 50.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	1600	D
91-57-6	2-Methylnaphthalene	270	DJ
208-96-8	Acenaphthylene	170	DJ
83-32-9	Acenaphthene	500	U
86-73-7	Fluorene	500	U
85-01-8	Phenanthrene	500	U
120-12-7	Anthracene	500	U
206-44-0	Fluoranthene	500	U
129-00-0	Pyrene	500	U
56-55-3	Benzo(a)anthracene	500	U
218-01-9	Chrysene	500	U
205-99-2	Benzo(b)fluoranthene	500	U
207-08-9	Benzo(k)fluoranthene	500	U
50-32-8	Benzo(a)pyrene	500	U
193-39-5	Indeno(1,2,3-cd)pyrene	500	U
53-70-3	Dibenzo(a,h)anthracene	500	U
191-24-2	Benzo(g,h,i)perylene	500	U

(1) Cannot be separated from Diphenylamine

3/14/11

1C

EPA SAMPLE NO.

HIMW-05S

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58057.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/10/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

EPA SAMPLE NO.

HIMW-12D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58080.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/11/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U 5
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

3/11/11

KEY-URS113 S70

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-004B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58081.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/11/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	2	J
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	36	
83-32-9	Acenaphthene	38	
86-73-7	Fluorene	21	
85-01-8	Phenanthrene	7	J
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U J
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

3/11/11

KEY-URS113 S71

1C

EPA SAMPLE NO.

HIMW-12S

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-005B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: A\C58082.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/11/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	~~670~~ 120	~~B~~ D
91-57-6	2-Methylnaphthalene	~~120~~ 15J	~~B~~ D J
208-96-8	Acenaphthylene	11	
83-32-9	Acenaphthene	27	
86-73-7	Fluorene	3	J
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U J
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

3/11/11

KEY-URS113 S72

1C

EPA SAMPLE NO.

HIMW-12SDL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Matrix: (soil/water) WATER Lab Sample ID: 1102223-005BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C58105.D

Level: (low/med) LOW Date Received: 02/08/11

% Moisture: Decanted: (Y/N) N Date Extracted: 02/08/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/14/11

Injection Volume: 2 (µL) Dilution Factor: 50.00

GPC Cleanup: (Y/N) N pH: ____ Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	1200	D
91-57-6	2-Methylnaphthalene	150	DJ
208-96-8	Acenaphthylene	500	U
83-32-9	Acenaphthene	500	U
86-73-7	Fluorene	500	U
85-01-8	Phenanthrene	500	U
120-12-7	Anthracene	500	U
206-44-0	Fluoranthene	500	U
129-00-0	Pyrene	500	U
56-55-3	Benzo(a)anthracene	500	U
218-01-9	Chrysene	500	U
205-99-2	Benzo(b)fluoranthene	500	U
207-08-9	Benzo(k)fluoranthene	500	U
50-32-8	Benzo(a)pyrene	500	U
193-39-5	Indeno(1,2,3-cd)pyrene	500	U
53-70-3	Dibenzo(a,h)anthracene	500	U
191-24-2	Benzo(g,h,i)perylene	500	U

(1) Cannot be separated from Diphenylamine

3/14/11 2

KEY-URS113 S73

ATTACHMENT B

SUPPORT DOCUMENTATION

H2M LABS, INC.

33055

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

CLIENT: URS Corp. | **H2M SDG NO:** KEY-URS113

PROJECT NAME/NUMBER: National Grid, 17 Intersection St, Hempstead, NY 11550, Job # 11176098

SAMPLERS: (signature)/Client: John Crespo / URS

DELIVERABLES:

TURNAROUND TIME: Standard

NOTES:

Project Contact: Kevin Connare

Phone Number: (716) 923-1165

PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ANALYSIS REQUESTED: ORGANIC VOA (Sample Container Description: BTEX 8260B)	ORGANIC BNA (Sample Container Description: PAH 8270C)	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
1/31/11	1315	GW	HIMW-14D	4	X	X				1102062 -001	
2/1/11	1000	GW	HIMW-14I	4	X	X				-002	
2/1/11	1150	GW	HIMW-15I	4	X	X				-004	
2/1/11	1425	GW	HIMW-15D	4	X	X				-003	
2/1/11	1200	GW	DUP02012011	4	X	X				-005	
2/1/11	1500	W	TB02012011	2	X					-006	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Megan Deard	2/1/11	1576	S. Wall	2-1-11	15.16
S. Wall	2.1.11	1634	[signature]	2-1-11	16:34

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N

Explain:

Samples were:
1. Shipped ___ or Hand Delivered ___ Airbill# ___
2. Ambient or (chilled) Temp 2.3 on ICE
3. Received in good condition: (Y) or N
4. Properly preserved: (Y) or N

COC Tape was:
1. Present on outer package: Y or (N)
2. Unbroken on outer package: Y or (N)
3. COC record present & complete upon sample receipt: (Y) or N

WHITE COPY - ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

KEY-URS113 33

H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

55054

EXTERNAL CHAIN OF CUSTODY

CLIENT: KEY-URS | **H2M SDG NO:** KEY-URS113

PROJECT NAME/NUMBER: NATIONAL GRID 1ST QUARTER 2011 GW SAMPLING 11176098

SAMPLERS: (signature)/Client: JOHN CRESPO, DAVE SWAIN / URS

DELIVERABLES:

TURNAROUND TIME: STANDARD

NOTES:

Project Contact:

Phone Number:

PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ORGANIC: VOA	ORGANIC: BNA	ORGANIC: Pest/PCB	INORG.: Metal	INORG.: CN	LAB I.D. NO.	REMARKS:
2/4/11	0805	GW	HIMW-05D	4	X	X				1102160-001	
2/4/11	1100	GW	HIMW-08I	4	X	X				003	
2/4/11	1315	GW	HIMW-08D	4	X	X				1102160-002	
2/4/11	1315	GW	HIMW-08D MS	4	X	X					
2/4/11	1315	GW	HIMW-08D MSD	4	X	X					
2/4/11		GW	TRIP BLANK	2	X					1102160-009	

Sample Container Description: BTEX 8260B; PAH 8270C

ANALYSIS REQUESTED: ORGANIC (VOA, BNA, Pest/PCB); INORG. (Metal, CN)

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
URS	2/4/11	1400		2/4/11	1400
	2/4/11	1600		2-4-11	16:10

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N

Explain:

Samples were:
1. Shipped ___ or Hand Delivered X Airbill# _____
2. Ambient or chilled, Temp 5.6 & 6.6
3. Received in good condition: Y or N
4. Properly preserved: Y or N

COC Tape was:
1. Present on outer package: Y or N Hand Delivered
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

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H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

31306

EXTERNAL CHAIN OF CUSTODY

CLIENT: KEY-URS **H2M SDG NO:** KEY-URS113

PROJECT NAME/NUMBER: NATIONAL GRID 1ST QUARTER 2011 GW SAMPLING 11176098

SAMPLERS: (signature)/Client: JOHN CERBO, DAVE SWAIN / URS

DELIVERABLES:

TURNAROUND TIME: STANDARD

NOTES:

Project Contact:

Phone Number:

PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
2/3/11	10:20	GW	HIMW-20S	4	X	X				110260 -08	
2/3/11	12:25	GW	HIMW-20I	4	X	X				-07	
2/3/11	14:00	GW	HIMW-08S	4	X	X				-04	

Sample Container Description: Btex 8260 B; RAH 8270 C

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
URS	2/4/11	1400		2/4/11	1400
	2/4/11	1600		2/4/11	16:00

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N

Explain:

Samples were:
1. Shipped ___ or Hand Delivered X Airbill# _____
2. Ambient or chilled, Temp 5.0 & 6.6
3. Received in good condition: (Y) or N
4. Properly preserved: (Y) or N

COC Tape was:
1. Present on outer package: Y or N Hand Delivered
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: (Y) or N

WHITE COPY - ORIGINAL YELLOW COPY - CLIENT PINK COPY - LABORATORY

KEY-URS113 STT

H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

30033

EXTERNAL CHAIN OF CUSTODY

CLIENT: URS Corp. KEY-URS | **H2M SDG NO:** KEY-URS113

PROJECT NAME/NUMBER
National Grid
1st Quarter 2011 GW sampling
11176098

SAMPLERS: (signature)/Client
John Crespo / URS

DELIVERABLES:

TURNAROUND TIME: standard

NOTES:

Project Contact: Kevin Connare
Phone Number: 716 923-1165
PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ANALYSIS REQUESTED: ORGANIC VOA (Sample Container Description: 8260B)	ORGANIC BNA (8270C)	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
2/2/11	1230	GW	H1MW-13I	4	X	X				1102160-008 (T TLR 2/4/11)	
2/2/11	1540	GW	H1MW-13D	4	X	X				↓ -005	
		W	TB								

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
URS	2/4/11	1400		2/4/11	1400
	2/4/11	600		2-4-11	16:00

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped ___ or Hand Delivered X Airbill# _____
2. Ambient or chilled, Temp 5.1 / 6.1
3. Received in good condition: Y or N
4. Properly preserved: Y or N

COC Tape was:
1. Present on outer package: Y or N Hand Delivered
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: (Y) or N

WHITE COPY - ORIGINAL
KEY-URS113 S12

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

H2M LABS, INC.

33053

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

CLIENT: URS Corp

H2M SDG NO: KEY-URS113

PROJECT NAME/NUMBER
National Grid
47 Intersection St, Hempstead, NY
11176098.00004

SAMPLERS: (signature)/Client
Megan Dascoli / URS + John Crespo / URS + David Swain / URS

DELIVERABLES:

TURNAROUND TIME:

NOTES:

Project Contact: Kevin Canare

Phone Number: 716 923 1165

PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ANALYSIS REQUESTED: ORGANIC VOA (BTEX 8260B)	ORGANIC BNA (PAH 8270C)	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
2/7/11	1335	GW	HIMW-12S	4	X	X				1102223-005	
2/7/11	1050	GW	HIMW-12I	4	X	X				-004	
2/7/11	1230	GW	HIMW-12D	4	X	X				-003	
2/8/11	740	GW	HIMW-5I	4	X	X				-001	
2/8/11	845	GW	HIMW-5S	4	X	X				-002	
2/6/11	845	W	TB020811	2	X					-006	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	2/8/11		[signature]	2/8/11	11:25
[signature]	2/8/11	11:52	[signature]	2-8-11	11:52

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped ___ or Hand Delivered ✓ Airbill# ___
2. Ambient or Chilled, Temp 4.4°C on ice
3. Received in good condition: (Y) or N
4. Properly preserved: (Y) or N

COC Tape was:
1. Present on outer package: Y or (N)
2. Unbroken on outer package: Y or (N)
3. COC record present & complete upon sample receipt: (Y) or N

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H2M LABS, INC.

SDG NARRATIVE FOR VOLATILE ORGANICS
SAMPLES RECEIVED: 2/1/11, 2/4/11 & 2/8/11
SDG #: KEY-URS113

For Sample(s):

HIMW-14I	HIMW-05D	HIMW-13I	HIMW-05S
HIMW-15D	HIMW-08D	HIMW-20I	HIMW-12D
HIMW-15I	HIMW-08I	HIMW-20S	HIMW-12I
DUP 02012011	HIMW-08S	TB 02042011	HIMW-12S
TB 02012011	HIMW-13D	HIMW-05I	TB 02082011

The above water sample(s) was/were analyzed for a select list of volatile organic analytes (BTEX) by EPA method 8260B.

All QC data and calibrations met the requirements of the method, unless discussed below, and no problems were encountered with sample analysis. The following should be noted:

Sample HIMW-08S was analyzed as the matrix spike/matrix spike duplicate. The matrix spike sample had high percent recoveries and all RPD's were therefore outside QC limits.

Lab fortified blanks were analyzed. Xylene had a slightly low recovery in LFB's 2/4/11 and 2/11/11 at 67% recovery and 64% recovery respectively.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: February 28, 2011

****
* *
* *
****
Joann M. Slavin
Senior Vice President

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: H2M LABS INC Contract:

Lab Code: H2M Case No.: KEY-UR SAS No.: SDG No.: KEY-URS113

Sample ID LFB020411 Level: (low/med) LOW

Column ID Rtx-624 Column Diam .18

Inst. ID HP5971

Analysis Date: 02/04/11 18:32

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	SPIKE CONCENTRATION (µg/L)	SPIKE % REC #	QC. LIMITS REC.
Benzene	50	0	41	83	50-127
Toluene	50	0	41	81	70-125
Ethylbenzene	50	0	37	73	68-128
Xylene (total)	150	0	100	67*	70-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 4 outside limits

COMMENTS:

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: H2M LABS INC Contract:

Lab Code: H2M Case No.: KEY-UR SAS No.: SDG No.: KEY-URS113

Sample ID LFB021111 Level: (low/med) LOW

Column ID Rtx-624 Column Diam .18

Inst. ID HP5971

Analysis Date: 02/11/11 18:38

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	SPIKE CONCENTRATION (µg/L)	SPIKE % REC #	QC. LIMITS REC.
Benzene	50	0	40	80	50-127
Toluene	50	0	39	78	70-125
Ethylbenzene	50	0	36	72	68-128
Xylene (total)	150	0	96	64*	70-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 1 out of 4 outside limits

COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Lab File ID: A\A71670.D BFB Injection Date: 02/04/11

Instrument ID: HP5971 BFB Injection Time: 15:16

GC Column: Rtx-624 ID: .18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.6
75	30.0 - 60.0% of mass 95	48.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	78.1
175	5.0 - 9.0% of mass 174	6.0 (7.6)1
176	95.0 - 101.0% of mass 174	75.3 (96.5)1
177	5.0 - 9.0% of mass 176	4.9 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	A\A71672A.	02/04/11	16:16
02	VBLK020411	VBLK020411	A\A71673A.	02/04/11	18:01
03	LFB020411	LFB020411	A\A71674A.	02/04/11	18:32
04	TB 02042011	1102160-009A	A\A71680.D	02/04/11	21:30
05	HIMW-05D	1102160-001A	A\A71681.D	02/04/11	21:59
06	HIMW-08I	1102160-003A	A\A71682.D	02/04/11	22:29
07	HIMW-08S	1102160-004A	A\A71683.D	02/04/11	22:59
08	HIMW-13D	1102160-005A	A\A71684.D	02/04/11	23:29
09	HIMW-13I	1102160-006A	A\A71685.D	02/04/11	23:58
10	HIMW-20I	1102160-007A	A\A71686.D	02/05/11	0:28
11	HIMW-20S	1102160-008A	A\A71687.D	02/05/11	0:57
12	HIMW-08DMS	1102160-002AMS	A\A71688.D	02/05/11	1:27
13	HIMW-08DMSD	1102160-002AMSD	A\A71689.D	02/05/11	1:57

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Lab File ID: A\A71707.D BFB Injection Date: 02/11/11

Instrument ID: HP5971 BFB Injection Time: 16:09

GC Column: Rtx-624 ID: .18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.1
75	30.0 - 60.0% of mass 95	45.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	Greater than 50.0% of mass 95	76.4
175	5.0 - 9.0% of mass 174	5.3 (7.0)1
176	95.0 - 101.0% of mass 174	72.9 (95.3)1
177	5.0 - 9.0% of mass 176	5.1 (7.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	A\A71708.D	02/11/11	16:27
02	VBLK021111	VBLK021111	A\A71709.D	02/11/11	18:08
03	LFB021111	LFB021111	A\A71710.D	02/11/11	18:38
04	HIMW-08D	1102160-002A	A\A71711.D	02/11/11	19:08
05	HIMW-05I	1102223-001A	A\A71712.D	02/11/11	19:38
06	HIMW-05S	1102223-002A	A\A71713.D	02/11/11	20:08
07	HIMW-12D	1102223-003A	A\A71714.D	02/11/11	20:38
08	HIMW-12I	1102223-004A	A\A71715.D	02/11/11	21:08
09	HIMW-12S	1102223-005A	A\A71716.D	02/11/11	21:38

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Instrument ID: HP5971 Calibration Date: 02/04/11 Time: 16:16

Lab File ID: A\A71672A. Init. Calib. Date(s): 01/06/11 01/06/11

EPA Sample No.(VSTD050##): VSTD050 Init. Calib. Times: 19:43 23:12

Heated Purge: (Y/N) N

GC Column: Rtx-624 ID: .18 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Benzene	1.316	1.256		-4.6	
Toluene	1.431	1.327		-7.3	20.0
Ethylbenzene	0.589	0.488		-17.2	20.0
Xylene (total)	0.792	0.626		-20.9	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Instrument ID: HP5971 Calibration Date: 02/11/11 Time: 16:27

Lab File ID: A\A71708.D Init. Calib. Date(s): 01/06/11 01/06/11

EPA Sample No.(VSTD050##): VSTD050 Init. Calib. Times: 19:43 23:12

Heated Purge: (Y/N) N

GC Column: Rtx-624 ID: .18 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Benzene	1.316	1.242		-5.6	
Toluene	1.431	1.319		-7.8	20.0
Ethylbenzene	0.589	0.495		-16.0	20.0
Xylene (total)	0.792	0.612		-22.7	

All other compounds must meet a minimum RRF of 0.010.

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILE ORGANICS
SAMPLES RECEIVED: 2/1/11, 2/4/11 & 2/8/11
SDG #: KEY-URS113

For Sample(s):

HIMW-14I	HIMW-08I	HIMW-05I
HIMW-15D	HIMW-08S	HIMW-05S
HIMW-15I	HIMW-13D	HIMW-12D
DUP 02012011	HIMW-13I	HIMW-12I
HIMW-05D	HIMW-20I	HIMW-12S
HIMW-08D	HIMW-20S	

The above sample(s) was/were analyzed for a select list of semivolatile organic analytes (polynuclear aromatics) by EPA method 8270C.

All QC data and calibrations met the requirements of the method unless discussed below, and no problems were encountered with sample analysis. The following should be noted:

Sample HIMW-08D was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries and RPD's were met. Lab fortified blanks were analyzed and indicate good method efficiency.

Samples HIMW-05D, HIMW-13I, HIMW-20I, HIMW-05I and HIMW-12S were reanalyzed at a dilution due to concentration levels of analytes above the calibration range. Both sets of data are submitted.

Surrogate recoveries were diluted out in the dilutions of samples HIMW-05I and HIMW-12S.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: February 18, 2011

****
* *
* *
****
JoAnn M. Slavin
Senior Vice President

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Lab File ID: A\C58072.D DFTPP Injection Date: 02/11/11

Instrument ID: HP5972 DFTPP Injection Time: 15:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.2
68	Less than 2% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	59.5
70	Less than 2% of mass 69	0.3 (0.5)1
127	40.0 - 60.0% of mass 198	45.7
197	Less than 1% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	20.1
365	Greater than 1% of mass 198	2.1
441	Present, but less than mass 443	11.2
442	40.0 - 110.0% of mass 198	68.7
443	17.0 - 23.0% of mass 442	13.3 (19.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD025	SSTD025	A\C58073.D	02/11/11	15:15
02	HIMW-12D	1102223-003B	A\C58080.D	02/11/11	18:43
03	HIMW-12I	1102223-004B	A\C58081.D	02/11/11	19:13
04	HIMW-12S	1102223-005B	A\C58082.D	02/11/11	19:43
05	HIMW-05IDL	1102223-001BDL	A\C58083.D	02/11/11	20:12
06	HIMW-05DDL	1102160-001BDL	A\C58084.D	02/11/11	20:42
07	HIMW-13IDL	1102160-006BDL	A\C58085.D	02/11/11	21:12
08	HIMW-20IDL	1102160-007BDL	A\C58086.D	02/11/11	21:41

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS113

Instrument ID: HP5972 Calibration Date: 2/11/2011 Time: 15:15

Lab File ID: A\C58073.D Init. Calib. Date(s): 01/04/11 01/04/11

EPA Sample No.(SSTD050##): SSTD025 Init. Calib. Times: 11:46 14:26

GC Column: R-5SILMS ID: .25 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Naphthalene	1.229	1.274		3.7	
2-Methylnaphthalene	0.742	0.859		15.8	
Acenaphthylene	2.158	2.175		0.8	
Acenaphthene	1.289	1.285		-0.3	20.0
Fluorene	1.425	1.537		7.9	
Phenanthrene	1.219	1.170		-4.0	
Anthracene	1.361	1.226		-9.9	
Fluoranthene	1.490	1.410		-5.4	20.0
Pyrene	1.245	1.077		-13.5	
Benzo(a)anthracene	1.238	1.196		-3.4	
Chrysene	1.103	1.087		-1.5	
Benzo(b)fluoranthene	1.706	1.950		14.3	
Benzo(k)fluoranthene	1.123	0.846		-24.7	
Benzo(a)pyrene	1.301	1.283		-1.3	20.0
Indeno(1,2,3-cd)pyrene	1.453	1.416		-2.5	
Dibenzo(a,h)anthracene	1.239	1.217		-1.8	
Benzo(g,h,i)perylene	1.189	1.133		-4.7	

All other compounds must meet a minimum RRF of 0.010.

APPENDIX B

OXYGEN SYSTEM OPERATION & MAINTENANCE MEASUREMENTS

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	1/7/2011
Time:	1214
Weather:	Light Snow
Outdoor Temperature:	~30° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	2,106	
Feed Air Pressure *	80	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	120	(psi)
Oxygen Purity	86.1	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	72	(psi)
(readings below are made from control panel)		
Delivery Air	85	(psi)
Element Outlet Temperature	69	(°F)
Running Hours	2,108	(hours)
Loading Hours	2,105	(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'	35	28	OW-2-9S	75'	32	19	OW-2-10D	97.2'	45	27
OW-2-3	94.3'	40	29	OW-2-10S	75'	30	29	OW-2-11D	100.8'	40	30
OW-2-4	94.7'	30	38	OW-2-11S	76.5'	35	19	OW-2-12	94'	45	19
OW-2-5	95.3'	45	29	OW-2-13S	75'	32	18	OW-2-13D	97'	40	25
OW-2-6	95.7'	45	29	OW-2-15S	75'	35	18	OW-2-14	96.4'	38	28
OW-2-7	96'	45	28	OW-2-16S	75.5'	32	18	OW-2-15D	94.6'	38	29
OW-2-8	96.3'	42	29	OW-2-18S	74.5'	32	18	OW-2-16D	94.1'	38	26
OW-2-9D	96.7'	42	29	OW-2-20S	79'	32	23	OW-2-17	95'	42	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: 1/7/2011

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'	50	33	OW-2-22S	76'	30	18	OW-2-26D	95'	30	31
OW-2-19	96.1'	23	28	OW-2-24S	77.8'	30	18	OW-2-27	93.5'	30	28
OW-2-20D	96.6'	30	29	OW-2-26S	74'	29	17	OW-2-28D	92.1'	25	27
OW-2-21	96.6'	34	28	OW-2-28S	76'	29	20	OW-2-29	92.2'	30	26
OW-2-22D	96.3'	28	27	OW-2-30S	67.8'	28	16	OW-2-30D	88'	28	25
OW-2-23	97.2'	35	26	OW-2-34	71'	28	18	OW-2-31	86'	28	26
OW-2-24D	97'	30	32	OW-2-35	69.2'	29	28	OW-2-32	84'	30	36
OW-2-25	96'	40	28	OW-2-36	64.8'	30	19	OW-2-33	82'	35	33

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'	30	18	OW-2-45	61.1'	32	21	MP-2-1	30.57	14.57	0
OW-2-38	62.1'	30	18	OW-2-46	61'	33	19	MP-2-2	31.66	29.54	0
OW-2-39	60'	30	16	OW-2-47	60.5'	32	19	MP-2-3S	31.76	46.97	0.1
OW-2-40	61.7'	29	18					MP-2-3D	31.98	47.12	0.1
OW-2-41	61.7'	30	18					MP-2-4	20.5	33.35	0
OW-2-42	61.6'	30	18					MP-2-5	CNL	CNL	CNL
OW-2-43	61.4'	30	18								
OW-2-44R	60.6'	30	17								

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Comments:	All injection point flows were adjusted to ~30 scfh after collecting readings. CNL = Could Not Locate.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 1/7/2011

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) Snow has been plowed up into new chain-link fence, pushing in fence posts from #160 parking lot.
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:

Removed large piles of snow from all gates and door around system. Cleaned up garbage thrown over fence from park.

Action Items

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	1/21/2011
Time:	1345
Weather:	Cold & Snowy
Outdoor Temperature:	~25° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	2,397	
Feed Air Pressure *	78	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	120	(psi)
Oxygen Purity	93.4	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	65	(psi)
(readings below are made from control panel)		
Delivery Air	87	(psi)
Element Outlet Temperature	71	(°F)
Running Hours	2,401	(hours)
Loading Hours	2,397	(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'	82	32	OW-2-9S	75'	30	19	OW-2-10D	97.2'	58	28
OW-2-3	94.3'	91	29	OW-2-10S	75'	35	28	OW-2-11D	100.8'	60	31
OW-2-4	94.7'	96	33	OW-2-11S	76.5'	40	19	OW-2-12	94'	60	19
OW-2-5	95.3'	50	29	OW-2-13S	75'	40	18	OW-2-13D	97'	65	35
OW-2-6	95.7'	55	30	OW-2-15S	75'	30	18	OW-2-14	96.4'	70	28
OW-2-7	96'	60	29	OW-2-16S	75.5'	35	19	OW-2-15D	94.6'	73	28
OW-2-8	96.3'	65	29	OW-2-18S	74.5'	38	19	OW-2-16D	94.1'	58	27
OW-2-9D	96.7'	50	29	OW-2-20S	79'	40	21	OW-2-17	95'	40	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: 1/21/2011

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	32	OW-2-22S	76'	25	18	OW-2-26D	95'	30	30
OW-2-19	96.1'	25	28	OW-2-24S	77.8'	35	18	OW-2-27	93.5'	35	28
OW-2-20D	96.6'	30	30	OW-2-26S	74'	40	18	OW-2-28D	92.1'	30	27
OW-2-21	96.6'	45	28	OW-2-28S	76'	30	19	OW-2-29	92.2'	40	26
OW-2-22D	96.3'	25	27	OW-2-30S	67.8'	30	17	OW-2-30D	88'	40	25
OW-2-23	97.2'	40	27	OW-2-34	71'	25	19	OW-2-31	86'	50	25
OW-2-24D	97'	40	32	OW-2-35	69.2'	25	27	OW-2-32	84'	40	36
OW-2-25	96'	45	28	OW-2-36	64.8'	30	19	OW-2-33	82'	30	33

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'	25	19	OW-2-45	61.1'	30	21	MP-2-1	30.56	11.05	0
OW-2-38	62.1'	30	18	OW-2-46	61'	25	19	MP-2-2	31.62	21.3	0
OW-2-39	60'	35	17	OW-2-47	60.5'	30	19	MP-2-3S	31.68	48.62	0
OW-2-40	61.7'	25	18					MP-2-3D	31.92	48.45	0
OW-2-41	61.7'	30	18					MP-2-4	CNL	CNL	CNL
OW-2-42	61.6'	30	18					MP-2-5	CNL	CNL	CNL
OW-2-43	61.4'	30	18								
OW-2-44R	60.6'	25	17								

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Comments:	All injection point flows were adjusted to ~30 scfh after collecting readings. CNL = Could not locate due to snow and ice.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 1/21/2011

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)
   Snow has been plowed up into new chain-link fence, pushing in fence posts from #160 parking lot.
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:

Cleared path thru snow from street to shed area. During last O&M site vist tried to set marking flags on monitoring points in Mirschel Park. Flags have been removed and we were unable to find monitoring points under snow and ice.

Action Items

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	2/9/2011
Time:	1410
Weather:	Sunny
Outdoor Temperature:	~24° F
Inside Trailer Temperature:	~75° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	2,543	
Feed Air Pressure *	70	(psi)
Cycle Pressure *	75	(psi)
Oxygen Receiver Pressure *	100	(psi)
Oxygen Purity	97.7	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	80	(psi)
(readings below are made from control panel)		
Delivery Air	90	(psi)
Element Outlet Temperature	72	(°F)
Running Hours	2,560	(hours)
Loading Hours	2,545	(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'	56	33	OW-2-9S	75'	35	19	OW-2-10D	97.2'	40	30
OW-2-3	94.3'	40	29	OW-2-10S	75'	39	27	OW-2-11D	100.8'	30	32
OW-2-4	94.7'	35	37	OW-2-11S	76.5'	40	20	OW-2-12	94'	40	19
OW-2-5	95.3'	45	29	OW-2-13S	75'	30	18	OW-2-13D	97'	60	34
OW-2-6	95.7'	38	30	OW-2-15S	75'	30	18	OW-2-14	96.4'	45	28
OW-2-7	96'	38	29	OW-2-16S	75.5'	34	19	OW-2-15D	94.6'	30	29
OW-2-8	96.3'	35	29	OW-2-18S	74.5'	30	18	OW-2-16D	94.1'	55	37
OW-2-9D	96.7'	40	29	OW-2-20S	79'	45	21	OW-2-17	95'	30	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: 2/9/2011

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'	30	36	OW-2-22S	76'	35	18	OW-2-26D	95'	30	38
OW-2-19	96.1'	30	29	OW-2-24S	77.8'	45	21	OW-2-27	93.5'	35	29
OW-2-20D	96.6'	35	30	OW-2-26S	74'	40	18	OW-2-28D	92.1'	25	28
OW-2-21	96.6'	35	29	OW-2-28S	76'	30	19	OW-2-29	92.2'	35	28
OW-2-22D	96.3'	30	27	OW-2-30S	67.8'	25	17	OW-2-30D	88'	25	25
OW-2-23	97.2'	25	33	OW-2-34	71'	35	18	OW-2-31	86'	30	35
OW-2-24D	97'	25	29	OW-2-35	69.2'	30	22	OW-2-32	84'	40	40
OW-2-25	96'	40	28	OW-2-36	64.8'	40	19	OW-2-33	82'	38	32

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'	30	19	OW-2-45	61.1'	35	21	MP-2-1	30.51	13.12	0
OW-2-38	62.1'	32	18	OW-2-46	61'	40	19	MP-2-2	31.57	40.48	0
OW-2-39	60'	30	17	OW-2-47	60.5'	29	21	MP-2-3S	31.66	41.81	0.1
OW-2-40	61.7'	35	19					MP-2-3D	31.91	49.01	0.1
OW-2-41	61.7'	40	18					MP-2-4	20.38	32.31	0
OW-2-42	61.6'	30	18					MP-2-5	CNL	CNL	CNL
OW-2-43	61.4'	30	19								
OW-2-44R	60.6'	34	18								

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Comments:	All injection point flows were adjusted to ~30 scfh after collecting readings. CNL = Could not locate due to snow and ice.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 2/9/2011

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 Megan Dascoli - URS Corporation

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

Alarm condition on January 23, 2011 at 5:34 AM occurred due to system freezing from extreme cold. During subsequent vists on January 24th and January 25th, F&N discovered that the regulator valve on the oxygen reciever tank had failed and was leaking. A replacement part was installed on February 2nd and the system was restarted. Total system down time for mechanical failure was 11 days.

Action Items

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	3/2/2011
Time:	1250
Weather:	Sunny
Outdoor Temperature:	~55° F
Inside Trailer Temperature:	~75° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	2,913	
Feed Air Pressure *	110	(psi)
Cycle Pressure *	70	(psi)
Oxygen Receiver Pressure *	110	(psi)
Oxygen Purity	93.7	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	110	(psi)
(readings below are made from control panel)		
Delivery Air	104	(psi)
Element Outlet Temperature	171	(°F)
Running Hours	2,939	(hours)
Loading Hours	2,917	(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'	80	32	OW-2-9S	75'	30	19	OW-2-10D	97.2'	28	28
OW-2-3	94.3'	90	30	OW-2-10S	75'	30	28	OW-2-11D	100.8'	40	31
OW-2-4	94.7'	85	35	OW-2-11S	76.5'	30	20	OW-2-12	94'	40	20
OW-2-5	95.3'	50	29	OW-2-13S	75'	35	19	OW-2-13D	97'	40	38
OW-2-6	95.7'	50	30	OW-2-15S	75'	32	18	OW-2-14	96.4'	25	28
OW-2-7	96'	50	29	OW-2-16S	75.5'	20	19	OW-2-15D	94.6'	25	29
OW-2-8	96.3'	50	29	OW-2-18S	74.5'	30	19	OW-2-16D	94.1'	40	29
OW-2-9D	96.7'	50	30	OW-2-20S	79'	20	21	OW-2-17	95'	25	29

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: 3/2/2011

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'	50	34	OW-2-22S	76'	40	19	OW-2-26D	95'	50	31
OW-2-19	96.1'	28	29	OW-2-24S	77.8'	35	27	OW-2-27	93.5'	40	27
OW-2-20D	96.6'	30	31	OW-2-26S	74'	30	19	OW-2-28D	92.1'	28	28
OW-2-21	96.6'	30	29	OW-2-28S	76'	28	20	OW-2-29	92.2'	40	25
OW-2-22D	96.3'	28	27	OW-2-30S	67.8'	20	17	OW-2-30D	88'	25	25
OW-2-23	97.2'	35	35	OW-2-34	71'	25	19	OW-2-31	86'	50	33
OW-2-24D	97'	30	28	OW-2-35	69.2'	25	26	OW-2-32	84'	50	38
OW-2-25	96'	45	28	OW-2-36	64.8'	20	19	OW-2-33	82'	35	36

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'	25	18	OW-2-45	61.1'	25	21	MP-2-1	30.09	11.1	0
OW-2-38	62.1'	30	17	OW-2-46	61'	30	19	MP-2-2	31.13	23.57	0
OW-2-39	60'	18	18	OW-2-47	60.5'	25	19	MP-2-3S	31.21	48.95	0.1
OW-2-40	61.7'	20	19					MP-2-3D	29.25	48/50	0
OW-2-41	61.7'	20	18					MP-2-4	19.95	30/60	0
OW-2-42	61.6'	25	19					MP-2-5	18.14	17.05	0
OW-2-43	61.4'	30	19								
OW-2-44R	60.6'	30	18								

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Comments:	All injection point flows were adjusted to ~30 scfh after collecting readings. CNL = Could not locate due to snow and ice.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 3/2/2011

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 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)
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:	3/18/2011
Time:	915
Weather:	Sunny
Outdoor Temperature:	~70° F
Inside Trailer Temperature:	~75° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	3,217	
Feed Air Pressure *	75	(psi)
Cycle Pressure *	75	(psi)
Oxygen Receiver Pressure *	65	(psi)
Oxygen Purity	100.3	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	75	(psi)
(readings below are made from control panel)		
Delivery Air	104	(psi)
Element Outlet Temperature	169	(°F)
Running Hours	3,245	(hours)
Loading Hours	3,218	(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'	55	27	OW-2-9S	75'	25	19	OW-2-10D	97.2'	80	28
OW-2-3	94.3'	80	19	OW-2-10S	75'	25	28	OW-2-11D	100.8'	40	33
OW-2-4	94.7'	50	37	OW-2-11S	76.5'	20	20	OW-2-12	94'	40	19
OW-2-5	95.3'	45	36	OW-2-13S	75'	25	19	OW-2-13D	97'	75	25
OW-2-6	95.7'	50	30	OW-2-15S	75'	35	18	OW-2-14	96.4'	45	28
OW-2-7	96'	50	30	OW-2-16S	75.5'	20	19	OW-2-15D	94.6'	35	36
OW-2-8	96.3'	50	30	OW-2-18S	74.5'	25	19	OW-2-16D	94.1'	50	27
OW-2-9D	96.7'	50	30	OW-2-20S	79'	20	21	OW-2-17	95'	35	29

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: 3/18/2011

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'	50	36	OW-2-22S	76'	45	19	OW-2-26D	95'	24	45
OW-2-19	96.1'	20	30	OW-2-24S	77.8'	40	24	OW-2-27	93.5'	22	28
OW-2-20D	96.6'	30	30	OW-2-26S	74'	35	18	OW-2-28D	92.1'	20	27
OW-2-21	96.6'	40	29	OW-2-28S	76'	30	19	OW-2-29	92.2'	24	28
OW-2-22D	96.3'	30	28	OW-2-30S	67.8'	20	17	OW-2-30D	88'	22	26
OW-2-23	97.2'	45	33	OW-2-34	71'	25	19	OW-2-31	86'	24	27
OW-2-24D	97'	35	29	OW-2-35	69.2'	40	24	OW-2-32	84'	22	33
OW-2-25	96'	40	28	OW-2-36	64.8'	30	18	OW-2-33	82'	25	30

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'	25	19	OW-2-45	61.1'	25	19	MP-2-1	29.43	19.60	0
OW-2-38	62.1'	35	18	OW-2-46	61'	15	19	MP-2-2	30.47	39.21	0
OW-2-39	60'	45	17	OW-2-47	60.5'	15	18	MP-2-3S	30.58	48.05	0
OW-2-40	61.7'	40	19					MP-2-3D	30.80	49.00	0
OW-2-41	61.7'	30	19					MP-2-4	19.31	35.64	0.1
OW-2-42	61.6'	30	19					MP-2-5	17.53	12.35	0
OW-2-43	61.4'	35	19								
OW-2-44R	60.6'	40	18								

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Comments:	All injection point flows were adjusted to ~30 scfh after collecting readings. CNL = Could not locate due to snow and ice.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 3/18/2011

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 Kirk White w/URS Corporation

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