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Groundwater Sampling, NAPL Monitoring/Recovery and Groundwater Treatment Performance Report for the Third Quarter of 2011 (July - September 2011) for the Hempstead Intersection Street Former Manufactured Gas Plant Site

Villages of Hempstead & Garden City
Nassau County, New York

Prepared for:

National Grid

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Hicksville, New York 11801

Prepared by:

URS Corporation - New York

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Buffalo, New York 14203

URS

December 2011

GROUNDWATER SAMPLING, NAPL MONITORING/RECOVERY, AND GROUNDWATER TREATMENT PERFORMANCE REPORT FOR THE THIRD QUARTER OF 2011 (JULY-SEPTEMBER)

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)
HIMW	Hempstead Intersection (Street) monitoring well
IPR	Intersection (Street) product recovery
LNAPL	light non-aqueous phase liquid
MGP	manufactured gas plant
MP	monitoring points
NAPL	non-aqueous phase liquid
ND	not detected
NI	not included
NM	not measured
NYSDEC	New York State Department of Environmental Conservation
ORP	oxidation-reduction potential
PAHs	polycyclic aromatic hydrocarbons
PZ	piezometer
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 sampling and recovery of non-aqueous phase liquid (NAPL) at the Hempstead Intersection Street Former Manufactured Gas Plant (MGP) site during the third quarter (July, August, September) of 2011.

Groundwater monitoring and sampling was conducted on September 20 thru September 29, 2011. This included measuring the depth to groundwater and NAPL thickness in 82 wells. Groundwater samples were collected from 22 wells and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs).

NAPL monitoring and recovery was conducted on July 7-8, and July 26, and the NAPL monitoring and recovery program will be terminated with the contractor mobilizing for the In-Situ Solidification project. NAPL recovery wells will be abandoned, and/or removed in accordance with the well abandonment plan approved by NYSDEC.

Dissolved oxygen measurements were taken during the third quarter of 2011 for System No. 1 on July 12, July 27, August 21, September 14, and September 30, a total of 5 events and were taken for System No. 2 on July 11, July 26, August 20, September 13, and September 29 for a total of 6 events.

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

- The general direction of groundwater flow in shallow, intermediate, and deep water-bearing zones was south at an average gradient that ranged from approximately 0.002-0.003 feet per feet (ft/ft).
- 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 24 wells during the third 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 11 to 12.5 gallons per event. Approximately 24 gallons of NAPL were recovered during the third quarter of 2011. Approximately 745 gallons of NAPL have been recovered since April 2007.
- Based on a comparison between the third quarter 2011 data and the previous data, the concentrations of total BTEX and total PAHs remained stable in most site monitoring wells.
- The first of two oxygen injection systems was brought on line in October 2010 and has successfully promoted increased aerobic conditions in the aquifer near the system during the third quarter of 2011.
- The second of two oxygen injection systems was brought on line in April 2011 and has successfully promoted increased aerobic conditions in the aquifer near the system during the third quarter of 2011.
- A pressure build-up condition was observed in several monitoring points for both oxygenation systems, and has been addressed by reducing the duration of oxygen delivery to specific wells or banks and/or temporarily deactivating certain well banks while still maintaining dissolved oxygen concentrations suitable for aerobic biodegradation.

1.0 INTRODUCTION

This groundwater sampling and NAPL monitoring/ recovery report describes field activities and presents field measurements, NAPL thickness measurements and recovery volumes, and groundwater sampling analytical data associated with the Hempstead Intersection 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 third quarter of 2011:

- Measured the depth to groundwater and NAPL thickness in accessible on site and off site monitoring wells (July 7-8, July 26, and September 20, 2011).
- Collected groundwater samples from 22 monitoring wells for laboratory analysis (September 20- September 29, 2011).
- Recovered NAPL from accessible monitoring wells and piezometers (July 7-8, and July 26, 2011).

Fenley & Nicol Environmental, Inc. (F&N) performed water level measurement, well headspace monitoring with a photoionization detector (PID), and dissolved oxygen measurements to monitor the performance of the groundwater treatment systems for System No. 1 and System No. 2. System No. 1 monitoring was conducted on July 12, July 27, August 21, September 14, and September 30. System No. 2 monitoring was conducted on July 11, July 26, August 20, September 13, and September 29.

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, 2010, and the first two quarters of 2011. 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 82 monitoring wells.
- Collection of groundwater samples from 22 monitoring wells.
- Recovery of NAPL from accessible monitoring wells that contained measurable NAPL.

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

F&N performed water level measurement, well headspace monitoring with a photo-ionization detector (PID), and dissolved oxygen measurements to monitor the performance of the groundwater treatment Systems No. 1 and No. 2.

2.1 Groundwater Depth and NAPL Thickness Measurements

Depths to groundwater and NAPL thickness measurements are listed in Table 2. An electronic oil/water interface probe was used to measure the depth to groundwater and check for the presence of LNAPL. DNAPL thickness was measured using a weighted cotton string that absorbs oil.

2.2 NAPL Recovery

NAPL was recovered from 24 wells during two events in July 2011 (Table 3). The 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 then 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 the second of two oxygen injection systems in May 2011 to treat groundwater in the downgradient plume. The first system to be completed, designated "System No. 2", extends from Mirschel Park in the east to Kensington Court in the west. The second system to be completed, designated "System No. 1", is located along Smith Street, a portion of the Long Island Railroad Right of Way, and a portion of Hilton Avenue. See Figure 3 for the locations of the two systems. The performance of System No. 1 and System No. 2 was monitored through measurement of oxygen levels in the groundwater approximately twice per month, see Table 5. The full system data is included in Appendix B and shows the systems are 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 September 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 31 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 2,499 µg/L (intermediate well, HIMW-5I). Three monitoring wells (HIMW-05D, HIMW-20I, and HIMW-025) showed significant changes in concentrations of total BTEX or total PAHs. Total PAHs in HIMW-05D varied from 166 µg/L in second quarter 2011 to 1,400 µg/L in third quarter 2011. Concentrations of total BTEX and total PAHs in two monitoring wells (HIMW-20I and HIMW-025) dropped significantly between the second quarter 2011 and third quarter 2011. Total BTEX in both HIMW-20I and HIMW-025 ranged from 198 µg/L and 552 µg/L in second quarter 2011 to 10 µg/L and 109 µg/L in third quarter 2011 respectively. Total PAHs in both HIMW-20I and HIMW-025 ranged from 530 µg/L and 573 µg/L in second quarter 2011 to 2 µg/L and 10 µg/L in third quarter 2011 respectively. Concentrations for all site wells monitored in the third quarter 2011 are listed in Table 4.

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 5, 6, and 7, respectively. The data indicates that the direction of groundwater flow within the well field was south at an average gradient that ranged from approximately 0.002-0.003 ft/ft.

DNAPL was detected in 24 wells during the third quarter 2011 (Table 3). Figure 8 illustrates the thickness of DNAPL that was measured on September 20, 2011. Figures 9A through 9AK provide cumulative NAPL recovery amounts and NAPL thickness plots for the period of December 2003 through September 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 and 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 24 gallons of NAPL were recovered from 24 wells (Table 3). The volume of NAPL recovered during each event varied from approximately 11 to 12.5 gallons per event. Approximately 745 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. Bimonthly 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 delivering approximately 90% oxygen gas 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, MP-2-3D, and MP-2-4, and once in MP-2-5) Lower concentrations, in the targeted range of 10 - 30 mg/L were observed in the remainder of the wells.

During this quarter, a pressure build up condition was observed in some of the MP wells in System #2. This was first observed during the July 26, 2011 maintenance visit. Following confirmation of this condition in August, the flow rates for each delivery line were adjusted such that the delivery pressure would not exceed by more than 1 psi the hydrostatic pressure at each delivery well screen depth. However, pressure build up was still observed in late August. URS recommended to reduce the delivery duration from 13 minutes per cycle to 6 minutes per cycle to banks D & E, which serve the center of the System # 2 delivery line. When pressures were still observed in MP-2-3D, these two banks were temporarily deactivated. These banks will remain shut down for as long as oxygen concentrations remain above 10 mg/L and thus suitable for promotion of aerobic degradation.

To further monitor the presence of pressure in some of the MP wells, URS collected supplementary headspace data throughout this time period. A summary of the data collected is presented in Table 6. This table shows that the adjustments made to the system operation have lowered the oxygen concentration in the MP well headspace, but some pressure build up was also observed even towards the end of the quarter in MP-2-3D.

The performance of System No. 2 has been effective in raising the oxygen level sufficiently to support aerobic bacterial growth and attendant hydrocarbon degradation. Throughout all monitoring points, the dissolved oxygen level is above 9.9 mg/L, providing an aerobic environment, even following the temporary deactivation of Banks D and E for System No. 2. This demonstrates that the system continues to provide the aerobic environment necessary to promote biodegradation of dissolved hydrocarbons. The two new groundwater wells installed

downgradient of this system to evaluate its performance (HIMW-22 and HIMW-23) were measured at between ND and 2 µg/L BTEX and total PAH concentrations, showing reductions in concentration of the dissolved hydrocarbons in this area.

System No. 1

The groundwater treatment System No. 1 started operation on April 27, 2011. Bimonthly 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.

Dissolved phase oxygen concentrations in the monitoring point (MP) wells installed adjacent to the injection line (MP-1-1S through MP-1-4D) were all above 10 mg/L (showing sufficient oxygen concentrations to support bacterial growth), and ranged up to the oxygen solubility saturation limits near 50 mg/L in some cases. The MP wells located downgradient of the plume (MP-1-5 through MP-1-8) also showed excellent oxygenation, but at levels below their corresponding upgradient MP wells, as is expected with the biological process proceeding while groundwater flows downgradient.

During this quarter, a pressure build up condition was also observed in the MP wells for System No. 1, primarily in the deep MP wells. To address this, the oxygen delivery duration was reduced from 13 minutes per cycle to 3 minutes per cycle in banks 1, 3, and 5 (serving the deep wells in the western portion of the system), and to 1 minute per cycle in bank 11 serving the deep wells in the eastern portion of the system. Additionally, the banks supplying deep wells OW-1-13D through OW-1-20D, located along the LIRR ROW, were temporarily deactivated. These banks and wells will remain deactivated for as long as oxygen concentrations remain above 10 mg/L and thus suitable for promotion of aerobic degradation.

To further monitor the pressure in the MP wells, URS collected supplementary headspace data throughout this time period. A summary of the data collected is presented in Table 7. This table shows that the adjustments made to the system operation have lowered the headspace oxygen concentration in the MP wells, with the exception of the western MP locations (MP-1-1S, MP-1-1D, MP-1-2S, and MP-1-2D). The location of monitoring points was selected based on the available areas outside of the travelled roadways, and based on drill rig accessibility.

Accordingly, some monitoring points, such as MP-1-2S and MP-1-2D are located directly along the line of delivery wells and in some cases less than six feet from the nearest delivery well. Therefore, the headspace pressure condition observed in these wells may be related to the close proximity to the oxygenation delivery wells.

The performance of System No. 1 has been effective in raising the oxygen level sufficiently to support aerobic bacterial growth and associated hydrocarbon degradation. For all the MP wells along the delivery line (MP-1-1S through MP-1-4D) the dissolved oxygen level is in the range of 10 - 30 mg/L, providing an aerobic environment, despite the reductions in oxygen delivery rates to reduce pressures in the MP wells. The downgradient MP wells also show aerobic conditions. Two new groundwater wells have been installed downgradient of this system to evaluate its performance. HIMW-25 which is closest to the system, shows significant reduction in total BTEX and total PAHs. BTEX and PAH concentrations have not decreased at the further downgradient HIMW-24 (located about halfway between System #1 and System #2). This indicates that the zone of oxygenated water has not yet reached well HIMW-24 which is located approximately 400 feet downgradient of the oxygen delivery line.

4.0 SUMMARY

Following is a summary of the third 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 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 24 wells during the second 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 11 to 12.5 gallons per event. Approximately 24 gallons of NAPL were recovered during the third quarter of 2011. Approximately 745 gallons of NAPL have been recovered since April 2007.
- Based on a comparison between the third quarter 2011 data and previous quarterly monitoring data, the concentrations of total BTEX and total PAHs remained stable in most site monitoring wells.
- The first of two oxygen injection systems, brought on line in October 2010, has successfully promoted increased aerobic conditions in the aquifer near the system.
- The second of two oxygen injection systems, brought on line in April 2011, has successfully promoted increased aerobic conditions in the aquifer near the system.
- A pressure build-up condition was observed in several monitoring wells for both oxygenation systems. This condition has been monitored regularly by URS, and has been addressed in a step wise fashion by a combination of system operating changes such as reducing the duration of oxygen delivery to specific wells or banks and/or temporarily deactivating some well banks to help establish the appropriate delivery rates, and reduce the potential for pressure build up in monitoring wells while maintaining dissolved oxygen concentrations suitable for aerobic degradation. The

data will continue to be evaluated in order to optimize system operation, and to determine the reason for the observed pressure build-up condition.

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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.

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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.

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URS, 2011a. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the First Quarter of 2011 (January - March 2011) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* July.

URS, 2011b. *Groundwater Sampling and NAPL Monitoring/Recovery Report for the Second Quarter of 2011 (April - June 2011) for the Hempstead Intersection Street Former Manufactured Gas Plant Site.* September.

TABLES

Table 1

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

Well ID	Quarterly Monitoring & Sampling Event (September 20 - September 29, 2011)			NAPL Monitoring and DNAPL Recovery Events	
	Water Level	NAPL Thickness	Water Quality	July 7-8 2011	July 26 2011
HIMW-001S	X	X		X	
HIMW-001I	X	X		X	X
HIMW-001D*					
HIMW-002S	X	X			
HIMW-002I	X	X			
HIMW-002D	X	X			
HIMW-003S	X	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
HIMW-006I	X	X		X	
HIMW-006D	X	X			
HIMW-007S	X	X		X	X
HIMW-007I	X	X		X	
HIMW-007D	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	X	X			
HIMW-010I	X	X			
HIMW-010D	X	X			
HIMW-011S	X	X		X	
HIMW-011I	X	X		X	
HIMW-011D	X	X			
HIMW-012S	X	X	X		
HIMW-012I	X	X	X		
HIMW-012D	X	X	X		
HIMW-013S	X	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
HIMW-016I	X	X		X	X
HIMW-017S	X	X			X
HIMW-018S	X	X		X	X
HIMW-018I	X	X		X	
HIMW-019S	X	X		X	X
HIMW-019I	X	X		X	
HIMW-20S	X	X	X		
HIMW-20I	X	X	X		

Table 1

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

Well ID	Quarterly Monitoring & Sampling Event (September 20 - September 29, 2011)			NAPL Monitoring and DNAPL Recovery Events	
	Water Level	NAPL Thickness	Water Quality	July 7-8 2011	July 26 2011
HIMW-21				X	X
HIMW-22	X	X	X		
HIMW-23	X	X	X		
HIMW-24	X	X	X		
HIMW-25	X	X	X		
PZ-02					
PZ-03					
PZ-08	X	X		X	X
IPR-01	X	X		X	
IPR-02	X	X		X	
IPR-03	X	X		X	
IPR-04	X	X		X	
IPR-05	X	X		X	
IPR-06	X	X		X	X
IPR-07	X	X		X	
IPR-08	X	X		X	
IPR-09	X	X		X	
IPR-10	X	X		X	
IPR-11	X	X		X	
IPR-12A	X	X		X	
IPR-12B	X	X		X	
IPR-13	X	X		X	
IPR-14	X	X		X	
IPR-15	X	X		X	
IPR-16	X	X		X	
IPR-17	X	X		X	
IPR-18	X	X		X	
IPR-19S*					
IPR-19D	X	X		X	
IPR-20	X	X		X	X
IPR-21	X	X		X	X
IPR-22	X	X		X	X
IPR-23	X	X		X	
IPR-24	X	X		X	X
IPR-25	X	X		X	X
IPR-26	X	X		X	
IPR-27	X	X		X	X
IPR-28	X	X		X	
IPR-29	X	X			X
IPR-30	X	X		X	X
OSMW-01	X	X		X	
OSMW-02	X	X		X	
OSMW-03	X	X		X	

Notes:

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

2 Blank field indicates that the activity was not performed.

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

Table 2
Groundwater and NAPL Measurements
Third 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	Corrected Potentiometric Head (1)
		[ft amsl]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft amsl]
HIMW-01S	9/20/2011	71.61	ND	21.78	ND	40.9	0	0.00	49.83
HIMW-01I	9/20/2011	71.68	ND	21.91	84.45	85.9	0	1.40	49.77
HIMW-01D	NM	71.95	NM	NM	NM	129.1	NM	NM	NM
HIMW-02S	9/20/2011	73.82	ND	23.79	ND	41.6	0	0.00	50.03
HIMW-02I	9/20/2011	78.87	ND	23.88	ND	91.5	0	0.00	54.99
HIMW-02D	9/20/2011	74.13	ND	24.15	ND	117.3	0	0.00	49.98
HIMW-03S	9/20/2011	65.00	ND	15.28	ND	34.7	0	0.00	49.72
HIMW-03I	9/20/2011	64.94	ND	15.57	ND	86.9	0	0.00	49.37
HIMW-03D	9/20/2011	65.26	ND	16.21	ND	145.3	0	0.00	49.05
HIMW-04S	9/20/2011	72.74	ND	23.67	ND	41.6	0	0.00	49.07
HIMW-04I	9/20/2011	72.78	ND	23.82	ND	90.5	0	0.00	48.96
HIMW-04D	9/20/2011	72.65	ND	24.48	ND	180.5	0	0.00	48.17
HIMW-05S	9/20/2011	67.19	ND	18.16	ND	39.1	0	0.00	49.03
HIMW-05I	9/20/2011	67.22	ND	18.27	ND	92.3	0	0.00	48.95
HIMW-05D	9/20/2011	67.22	ND	19.02	ND	139.0	0	0.00	48.20
HIMW-06S	9/20/2011	68.25	ND	18.85	31.4	36.9	0	5.50	49.40
HIMW-06I	9/20/2011	67.88	ND	18.58	81.18	82.2	0	1.00	49.30
HIMW-06D	9/20/2011	67.77	ND	18.47	ND	120.0	0	0.00	49.30
HIMW-07S	9/20/2011	70.47	ND	20.97	40.24	40.7	0	0.50	49.50
HIMW-07I	9/20/2011	70.10	ND	20.98	ND	90.6	0	0.00	49.12
HIMW-07D	9/20/2011	70.40	ND	20.93	ND	117.7	0	0.00	49.47
HIMW-08S	9/20/2011	65.04	ND	19.30	ND	37.1	0	0.00	45.74
HIMW-08I	9/20/2011	65.14	ND	16.52	ND	75.1	0	0.00	48.62
HIMW-08D	9/20/2011	64.93	ND	16.31	ND	114.8	0	0.00	48.62
HIMW-09S	9/20/2011	70.03	ND	20.75	ND	39.6	0	0.00	49.28
HIMW-09I	9/20/2011	69.93	ND	20.72	ND	80.5	0	0.00	49.21
HIMW-09D	9/20/2011	69.96	ND	20.87	ND	122.8	0	0.00	49.09
HIMW-10S	9/20/2011	71.60	ND	21.40	ND	39.1	0	0.00	50.20
HIMW-10I	9/20/2011	71.47	ND	21.13	ND	91.4	0	0.00	50.34
HIMW-10D	NM	71.44	ND	NM	ND	136.0	0	0.00	NM
HIMW-11S	9/20/2011	71.62	ND	21.77	ND	41.6	0	0.00	49.85
HIMW-11I	9/20/2011	71.43	ND	21.71	ND	94.5	0	0.00	49.72
HIMW-11D	9/20/2011	71.39	ND	21.62	ND	123.6	0	0.00	49.77
HIMW-12S	9/20/2011	61.58	ND	14.12	ND	33.5	0	0.00	47.46
HIMW-12I	9/20/2011	61.59	ND	13.98	ND	75.0	0	0.00	47.61
HIMW-12D	9/20/2011	61.82	ND	16.36	ND	128.5	0	0.00	45.46
HIMW-13S	9/20/2011	72.83	ND	27.28	ND	48.9	0	0.00	45.55
HIMW-13I	9/20/2011	72.60	ND	27.16	ND	82.6	0	0.00	45.44
HIMW-13D	9/20/2011	72.53	ND	27.20	ND	122.5	0	0.00	45.33
HIMW-14I	9/20/2011	71.71	ND	26.42	ND	96.9	0	0.00	45.29
HIMW-14D	9/20/2011	71.59	ND	29.16	ND	152.6	0	0.00	42.43
HIMW-15I	9/20/2011	64.18	ND	22.31	ND	93.1	0	0.00	41.87
HIMW-15D	9/20/2011	63.96	ND	24.27	ND	155.0	0	0.00	39.69
HIMW-16S	9/20/2011	67.45	ND	18.37	30.11	34.4	0	4.30	49.08
HIMW-16I	9/20/2011	67.50	ND	18.25	76.91	82.7	0	5.75	49.25
HIMW-17S	9/20/2011	65.96	ND	16.95	34.85	36.7	0	1.85	49.01
HIMW-18S	9/20/2011	69.76	ND	20.93	41.47	42.1	0	0.65	48.83
HIMW-18I	9/20/2011	69.70	ND	20.05	ND	71.2	0	0.00	49.65
HIMW-19S	9/20/2011	70.95	ND	21.00	39.37	39.4	0	0.01	49.95
HIMW-19I	9/20/2011	71.27	ND	21.16	ND	68.9	0	0.00	50.11
HIMW-20S	9/20/2011	70.43	ND	22.19	ND	35.0	0	0.00	48.24
HIMW-20I	9/20/2011	70.30	ND	22.05	ND	73.0	0	0.00	48.25

Table 2
Groundwater and NAPL Measurements
Third 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	Corrected Potentiometric Head (1)
		[ft amsl]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft amsl]
HIMW-21	9/20/2011		ND	16.58	ND	45.3	0	0.00	NM
HIMW-22			NM	NM	ND	65.0	0	0.00	
HIMW-23			NM	NM	ND	77.0	0	0.00	
HIMW-24			NM	NM	ND	56.0	0	0.00	
HIMW-25			NM	NM	ND	53.0	0	0.00	
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	9/20/2011	70.51	ND	20.80	33.2	35.5	0	2.30	49.71
IPR-01	9/20/2011	70.30	ND	20.31	ND	41.9	0	0.00	49.99
IPR-02	9/20/2011	68.84	ND	18.97	70.1	70.3	0	0.15	49.87
IPR-03	9/20/2011	69.16	ND	19.35	ND	44.7	0	0.00	49.81
IPR-04	9/20/2011	69.23	ND	19.45	ND	84.4	0	0.00	49.78
IPR-05	9/20/2011	70.39	ND	20.62	51.4	52.1	0	0.70	49.77
IPR-06	9/20/2011	70.79	ND	21.05	54.1	55.4	0	1.35	49.74
IPR-07	9/20/2011	69.73	ND	20.18	ND	38.0	0	0.00	49.55
IPR-08	9/20/2011	70.51	ND	20.95	ND	40.3	0	0.00	49.56
IPR-09	9/20/2011	70.00	ND	20.45	ND	45.0	0	0.00	49.55
IPR-10	9/20/2011	70.80	ND	21.13	ND	44.8	0	0.00	49.67
IPR-11	9/20/2011	68.29	ND	18.84	44.32	44.6	0	0.30	49.45
IPR-12A	9/20/2011	70.14	ND	20.62	ND	38.1	0	0.00	49.52
IPR-12B	9/20/2011	69.56	ND	20.07	ND	45.2	0	0.00	49.49
IPR-13	9/20/2011	70.77	ND	21.13	ND	44.4	0	0.00	49.64
IPR-14	9/20/2011	66.93	ND	17.53	ND	44.4	0	0.00	49.40
IPR-15	9/20/2011	67.93	ND	18.50	ND	44.4	0	0.00	49.43
IPR-16	9/20/2011	69.49	ND	20.00	48.85	49.1	0	0.20	49.49
IPR-17	9/20/2011	70.60	ND	21.05	ND	54.1	0	0.00	49.55
IPR-18	9/20/2011	66.87	ND	17.58	ND	50.0	0	0.00	49.29
IPR-19S	NM	67.68	NM	NM	NM	45.1	NM	NM	NM
IPR-19D	9/20/2011	67.96	ND	18.62	ND	89.9	0	0.00	49.34
IPR-20	9/20/2011	66.70	NM	17.52	44.35	45.4	0	1.05	49.18
IPR-21	9/20/2011	67.67	ND	18.43	44.20	45.0	0	1.60	49.24
IPR-22	9/20/2011	66.33	ND	17.25	42.80	45.4	0	2.60	49.08
IPR-23	9/20/2011	66.67	ND	17.57	ND	45.4	0	0.00	49.10
IPR-24	9/20/2011	65.88	ND	16.91	43.75	44.4	0	0.60	48.97
IPR-25	9/20/2011	70.56	ND	20.68	43.0	44.5	0	1.55	49.88
IPR-26	9/20/2011	NM	ND	20.29	ND	NM	0	0.35	NM
IPR-27	9/20/2011	NM	ND	21.03	ND	NM	0	1.35	NM
IPR-28	9/20/2011	NM	ND	18.55	NM	NM	0	0.35	NM
IPR-29	9/20/2011	NM	ND	16.84	49.2	49.7	0	0.50	NM
IPR-30	9/20/2011	NM	ND	17.87	NM	NM	0	0.80	NM
IPR-31		NM	NM	NM	NM	NM	NM	NM	NM
OSMW-01	9/20/2011	71.12	ND	21.14	ND	42.2	0	0.00	49.98
OSMW-02	9/20/2011	71.59	ND	21.84	ND	45.2	0	0.00	49.75
OSMW-03	9/20/2011	71.39	ND	21.75	ND	44.7	0	0.00	49.64

Notes:

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

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 for Second Quarter of 2011
Hempstead Intersection Street Former MGP Site

Well ID	July 7-8, 2011			July 26, 2011		
	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)
	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]
HIMW-01S	ND	0.1	0.00	NI	NI	0.00
HIMW-01I	ND	1.75	0.30	ND	0.01	0.00
HIMW-06S	ND	ND	0.00	ND	2.10	0.36
HIMW-06I	ND	ND	0.00	NI	NI	0.00
HIMW-07S	ND	1.20	0.20	ND	0.50	0.09
HIMW-07I	ND	NI	0.00	NI	NI	0.00
HIMW-07D	ND	NI	0.00	NI	NI	0.00
HIMW-11S	ND	ND	0.00	NI	NI	0.00
HIMW-11I	ND	ND	0.00	NI	NI	0.00
HIMW-16S	ND	3.20	0.54	NI	NI	0.00
HIMW-16I	ND	3.50	0.60	NI	NI	0.00
HIMW-17S	NI	NI	0.00	ND	0.50	0.09
HIMW-18S	ND	0.8	0.14	ND	0.30	0.05
HIMW-18I	ND	ND	0.00	NI	NI	0.00
HIMW-19S	ND	0.3	0.05	ND	0.01	0.00
HIMW-19I	ND	ND	0.00	NI	NI	0.00
HIMW-21	ND	0.01	0.00	ND	0.65	0.98
PZ-08	ND	0.15	0.03	NI	NI	0.00
IPR-02	ND	0.01	0.00	NI	NI	0.00
IPR-03	ND	ND	0.00	NI	NI	0.00
IPR-05	ND	ND	0.00	NI	NI	0.00
IPR-06	ND	0.90	1.35	ND	0.70	1.05
IPR-09	ND	0.01	0.00	NI	NI	0.00
IPR-12A	ND	ND	0.00	NI	NI	0.00
IPR-14	ND	ND	0.00	NI	NI	0.00
IPR-15	ND	ND	0.00	NI	NI	0.00
IPR-16	ND	ND	0.00	NI	NI	0.00
IPR-17	ND	ND	0.00	NI	NI	0.00
IPR-18	ND	NI	0.00	NI	NI	0.00
IPR-19D	ND	NI	0.00	NI	NI	0.00
IPR-20	ND	0.05	0.08	NI	NI	0.00
IPR-21	ND	0.40	0.60	ND	1.00	1.50
IPR-22	ND	1.1	1.65	ND	1.00	1.50
IPR-23	ND	ND	0.00	NI	NI	0.00
IPR-24	ND	0.2	0.30	NI	NI	0.00
IPR-25	ND	2.00	3.00	ND	1.35	2.03
IPR-26	ND	0.01	0.00	NI	NI	0.00
IPR-27	ND	1.50	2.25	ND	1.30	1.95
IPR-28	ND	0.01	0.00	NI	NI	0.00
IPR-29	NI	NI	0.00	ND	0.40	0.60
IPR-30	ND	0.30	0.45	NI	NI	2.00
	Volume Removed		**11.53**	Volume Removed		**12.18**

Total volume recovered during the third quarter 2011: 23.71
Total volume of NAPL recovered since April 2007: 745.4

Notes:

NI - well not included in the product recovery event (1) -
ND - non-detect
LNAPL - light non-aqueous phase liquid
DNAPL - dense non-aqueous phase liquid

Table 4

Dissolved-Phase Concentrations of Total BTEX and Total PAH Compounds for the Third Quarter of 2011 Hempstead Intersection Street Former MGP Site

Well ID	Third Quarter 2011 September 20 - September 29, 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	ND	ND
HIMW-004D		
HIMW-004I		
HIMW-004S		
HIMW-005D	174	1,400
HIMW-005I	159	2,499
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	3	9
HIMW-009D		
HIMW-009I		
HIMW-009S		
HIMW-010D		
HIMW-010I		
HIMW-010S		
HIMW-011D		
HIMW-011I		
HIMW-011S		
HIMW-012D	ND	ND
HIMW-012I	89	136
HIMW-012S	ND	ND
HIMW-013D	6	19
HIMW-013I	96	75
HIMW-013S	ND	ND
HIMW-014D		
HIMW-014I	28	61
HIMW-015D	ND	ND
HIMW-015I	27	31
HIMW-016I		
HIMW-016S		
HIMW-017S		
HIMW-018I		
HIMW-018S		
HIMW-019I		
HIMW-019S		
HIMW-020I	10	2
HIMW-020S	ND	ND
HIMW-022	2	ND
HIMW-023	2	2
HIMW-024	900	897
HIMW-025	109	573
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
Third Quarter 2011
Hempstead Intersection Street Former MGP Site

		7/12/2011			7/27/2011			8/10/2011			8/21/2011			9/14/2011			9/30/2011		
	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)	DTW (ft)	DO (mg/L)	PID (ppm)
System # 1	MP-1-1S	25.74	26.71	11.5	26.22	36.75	7.5	26.20	51.45	102.5	25.31	47.77	2.4	23.52	39.13	33.3	23.49	31.62	6.7
	MP-1-1D	25.87	31.7	0.0	26.32	24.14	13.4	26.39	27.34	13.3	25.40	35.14	0.0	23.66	19.45	29.3	23.66	27.24	0.0
	MP-1-2S	20.13	27.74	0.0	20.5	13.3	0.0	20.45	48.93	0.0	19.3	36.14	0.0	17.68	42.13	6.1	17.69	31.28	0.0
	MP-1-2D	20.39	12.92	0.0	20.89	12.94	0.0	20.78	43.30	0.0	19.51	49.38	0.0	18.08	27.17	8.1	19.8	30.24	0.0
	MP-1-3S	18.11	36.6	8.7	18.60	36.96	6.9	18.58	32.21	11.7	17.62	38.14	62.2	15.86	19.18	17.8	15.81	17.36	41.3
	MP-1-3D	18.08	18.6	0.0	18.58	17.76	15.7	18.61	19.66	21.7	17.6	13.23	85.1	15.87	15.2	9.9	15.86	11.81	12.5
	MP-1-4S	20.82	17.47	12.3	21.34	31.77	4.8	21.3	31.1	765.0	20.28	37.86	42.8	18.57	14.2	22.6	18.57	15.14	3.8
	MP-1-4D	20.63	14.41	1491.0	21.12	18.66	980.7	21.1	29.81	951.0	20.11	18.14	157.2	18.38	12.12	102.0	18.36	10.51	1.7
	MP-1-5	25.37	19.01	13.5	25.85	12.11	66.9	25.87	10.69	391.0	25.91	16.27	0.0	23.16	17.40	35.1	23.13	19.67	0.0
	MP-1-6	17.87	10.24	13.6	18.33	20.11	112.9	18.35	9.13	4.8	17.36	19.11	4.2	15.62	8.15	9.1	15.60	9.57	4.3
	MP-1-7	21.15	8.10	1.3	21.65	3.18	0.5	21.63	7.90	58.6	20.62	4.79	0.0	18.91	6.53	0.0	18.91	9.56	0.0
	MP-1-8	22.17	8.70	5.4	22.70	22.19	4.6	22.66	17.18	267.0	21.61	9.54	0.0	19.95	12.20	7.3	18.95	17.73	10.7

		7/11/2011			7/26/2011			8/9/2011			8/20/2011			9/13/2011			9/29/2011		
	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)	DTW (ft)	DO (mg/L)	PID (ppm)
System # 2	MP-2-1	28.85	26.60	9.2	29.28	22.76	49.5	29.34	20.14	0.6	28.32	24.34	15.9	26.62	14.91	13.6	26.60	21.42	101.5
	MP-2-2	29.93	29.90	0.0	30.33	28.67	0.0	30.43	29.30	0.0	29.39	20.17	0.0	27.70	21.80	0.0	27.69	22.35	85.3
	MP-2-3S	29.95	38.31	0.0	30.47	44.14	0.2	30.53	13.02	0.0	29.47	37.97	0.0	27.80	27.50	0.0	27.81	23.08	24.3
	MP-2-3D	30.26	49.41	0.0	30.79	45.88	0.0	30.75	12.21	0.0	29.70	27.25	0.0	28.07	42.14	0.0	27.98	21.04	15.9
	MP-2-4	18.79	47.67	84.2	19.25	46.04	20.9	19.29	20.92	3.1	19.21	28.52	134.0	16.57	9.91	7.3	16.59	13.15	4.2
	MP-2-5	17.04	12.63	80.7	17.46	26.11	89.9	17.50	21.22	11.9	17.37	51.03	560.0	14.75	18.61	7.7	14.80	23.40	3.7

DTW: Depth to water (feet)
DO: Dissolved Oxygen concentration (percent or milligrams per liter)
PID: Photoionization Detector measurement of well headspace (parts per million)
NA: Not Accessible

Table 6
Groundwater Treatment Headspace Monitoring, System #2
Third Quarter 2011
Hempstead Intersection Street Former MGP Site

Date: 8/16/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.0	0.6	7.0	24.0	No	No
MP-2-2	0.0	0.0	0.0	20.9	No	No
MP-2-3S	0.0	0.0	0.0	20.9	No	No
MP-2-3D	0.0	0.0	0.0	36.6	No	No
MP-2-4	0.0	0.6	0.0	25.9	Slight	No
MP-2-5	0.0	0.2	0.0	20.9	No	No

Date: 9/1/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.0	0.0	0.0	21.6	No	No
MP-2-2	0.0	1.6	0.0	20.0	No	No
MP-2-3S	0.0	0.0	0.0	22.1	No	No
MP-2-3D	0.1	0.4	0.0	38.1	Moderate	No
MP-2-4	0.0	0.2	0.0	21.6	No	No
MP-2-5	0.2	1.0	1.0	35.1	Slight	No

Date: 9/9/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.0	0.8	0.0	23.5	No	No
MP-2-2	0.0	1.4	0.0	19.6	No	No
MP-2-3S	0.0	1.8	0.0	33.1	No	No
MP-2-3D	0.0	1.8	0.0	>40	No	No
MP-2-4	0.0	0.6	0.0	27.7	No	No
MP-2-5	0.0	0.1	0.0	21.6	No	No

Date: 9/16/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.0	0.4	0.0	21.7	No	No
MP-2-2	0.0	0.2	0.0	20.9	No	No
MP-2-3S	0.0	0.4	0.0	23.7	No	No
MP-2-3D	0.0	0.6	0.0	33.1	Cap Off	No
MP-2-4	0.0	0.2	0.0	22.5	Slight	No
MP-2-5	0.0	0.4	0.0	22.1	Slight	No

Date: 9/23/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.0	0.4	0.0	22.4	No	No
MP-2-2	0.0	0.4	0.0	20.9	No	No
MP-2-3S	0.0	0.0	0.0	20.9	No	No
MP-2-3D	0.0	0.0	0.0	20.9	Cap Off	No
MP-2-4	0.0	0.2	0.0	24.1	No	No
MP-2-5	0.0	0.2	0.0	24.1	No	No

Table 7
Groundwater Treatment Headspace Monitoring, System #1
Third Quarter 2011
Hempstead Intersection Street Former MGP Site

Date: 8/16-17/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.0	1.8	0.0	>40	No	No
MP-1-1D	2.3	0.6	0.0	>40	High Pressure	No
MP-1-2S	0.0	1.4	0.0	>40	No	No
MP-1-2D	0.0	0.8	0.0	38.0	High Pressure	No
MP-1-3S	0.0	2.3	0.0	27.1	No	No
MP-1-3D	0.0	0.6	0.0	22.6	No	No
MP-1-4S	0.0	0.5	1.0	21.2	No	No
MP-1-4D	0.3	0.8	1.0	28.3	Slight	No
MP-1-5	0.0	0.2	0.0	20.9	No	No
MP-1-6	0.0	0.6	0.0	21.6	No	No
MP-1-7	0.0	1.0	0.0	26.5	No	No
MP-1-8	0.0	0.0	1.0	20.9	No	No

Date: 9/9/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.0	0.4	0.0	29.9	No	No
MP-1-1D	5.8	1.8	0.0	>40	Moderate	No
MP-1-2S	0.0	0.6	0.0	25.3	No	No
MP-1-2D	0.0	0.8	0.0	19.4	Cap Off	No
MP-1-3S	0.0	1.4	0.0	23.2	Slight	No
MP-1-3D	0.0	1.1	0.0	23.2	Slight	No
MP-1-4S	0.5	0.4	0.0	20.9	No	No
MP-1-4D	0.1	3.4	0.0	>40	Slight	No
MP-1-5	0.0	1.4	0.0	20.9	No	No
MP-1-6	0.0	0.4	0.0	20.9	No	No
MP-1-7	0.0	0.6	0.0	20.9	No	No
MP-1-8	0.0	0.0	1.0	20.9	No	No

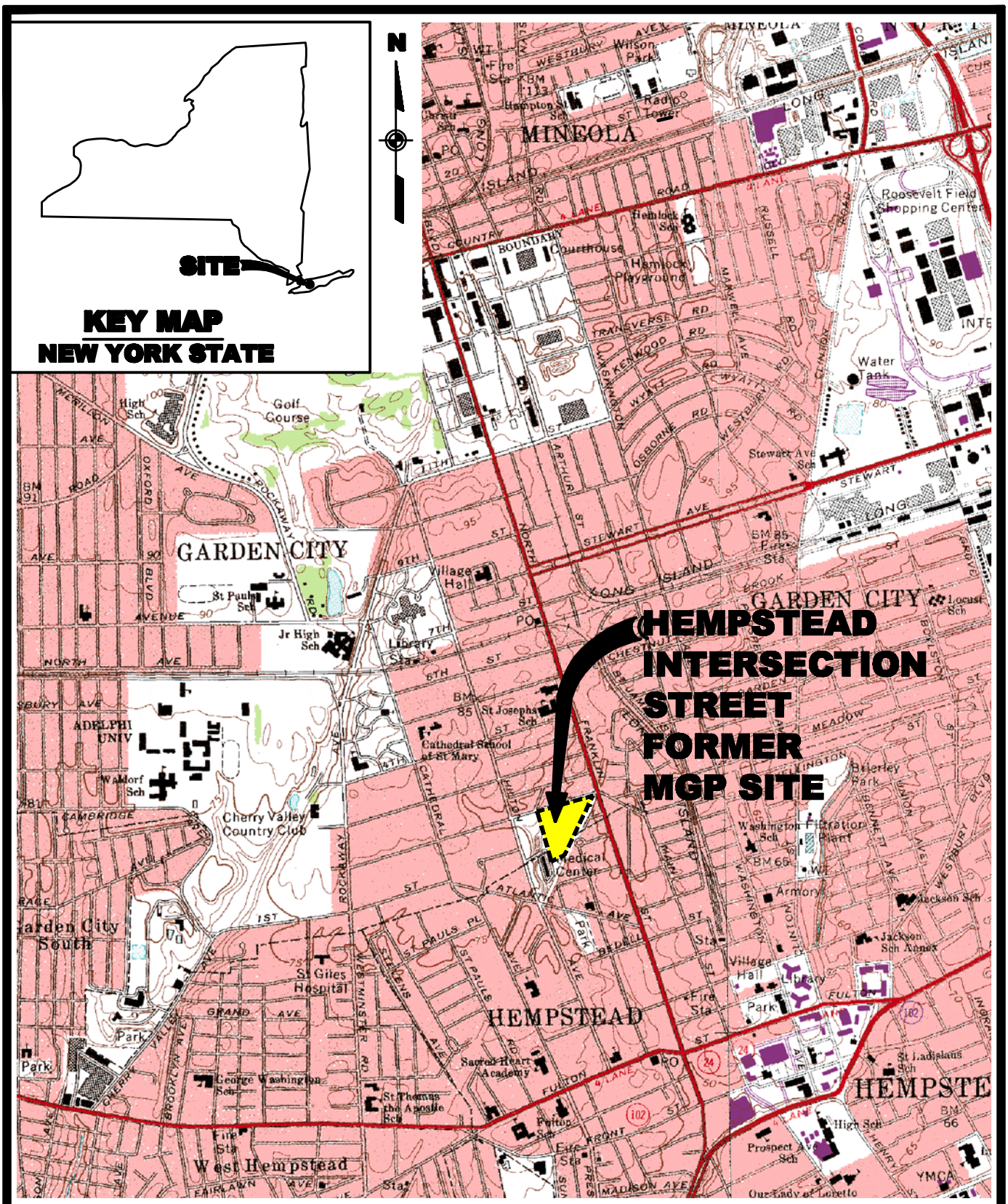
Date: 9/16/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.0	1.0	0.0	39.9	No	No
MP-1-1D	0.0	0.2	0.0	22.6	No	No
MP-1-2S	1.6	0.6	0.0	23.3	No	No
MP-1-2D	0.0	0.4	0.0	21.3	Cap Off	No
MP-1-3S	0.0	1.8	0.0	24.8	Slight	No
MP-1-3D	0.0	0.0	0.0	21.0	No	No
MP-1-4S	0.7	0.2	0.0	22.0	No	No
MP-1-4D	0.3	0.0	0.0	22.3	No	No
MP-1-5	0.0	0.4	0.0	20.9	No	No
MP-1-6	0.0	0.8	0.0	20.9	No	No
MP-1-7	0.0	1.2	0.0	20.9	No	No
MP-1-8	0.3	0.4	0.0	20.9	slight pressure	No

Date: 9/23/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.0	0.9	0.0	40.0	No	No
MP-1-1D	8.9	2.3	0.0	40.0	Moderate	No
MP-1-2S	0.0	2.8	0.0	40.0	No	No
MP-1-2D	0.0	0.0	0.0	36.1	High	No
MP-1-3S	1.1	1.9	0.0	22.4	Some	No
MP-1-3D	0.0	0.0	0.0	20.9	No	No
MP-1-4S	0.0	0.6	0.0	22.3	No	No
MP-1-4D	2.7	0.9	0.0	28.2	No	No
MP-1-5	0.0	1.2	0.0	20.9	No	No
MP-1-6	0.0	0.0	0.0	20.9	No	No
MP-1-7	2.0	2.8	0.0	19.4	No	No
MP-1-8	0.0	0.3	0.0	20.9	No	No

FIGURES



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

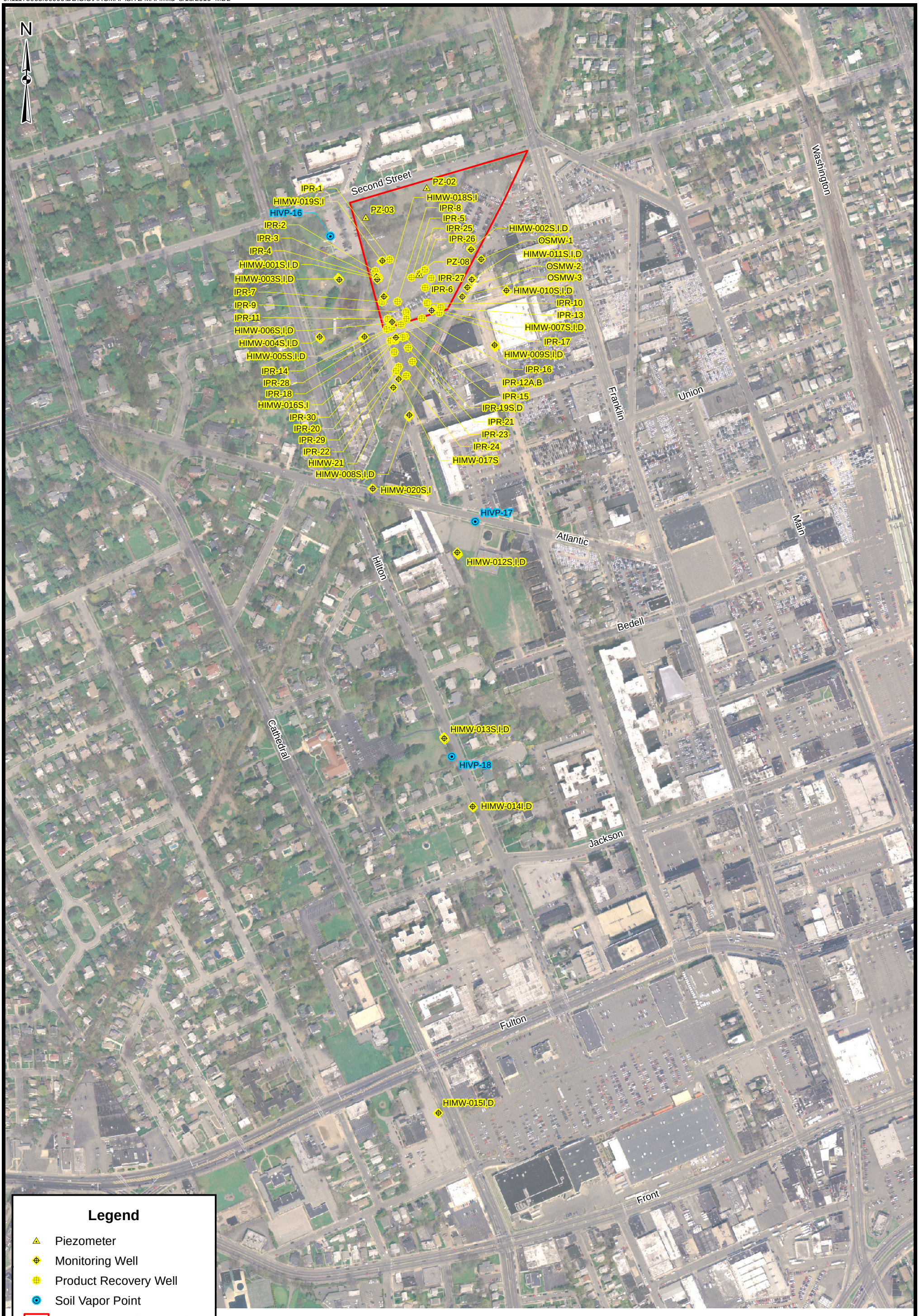
URS Corporation

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

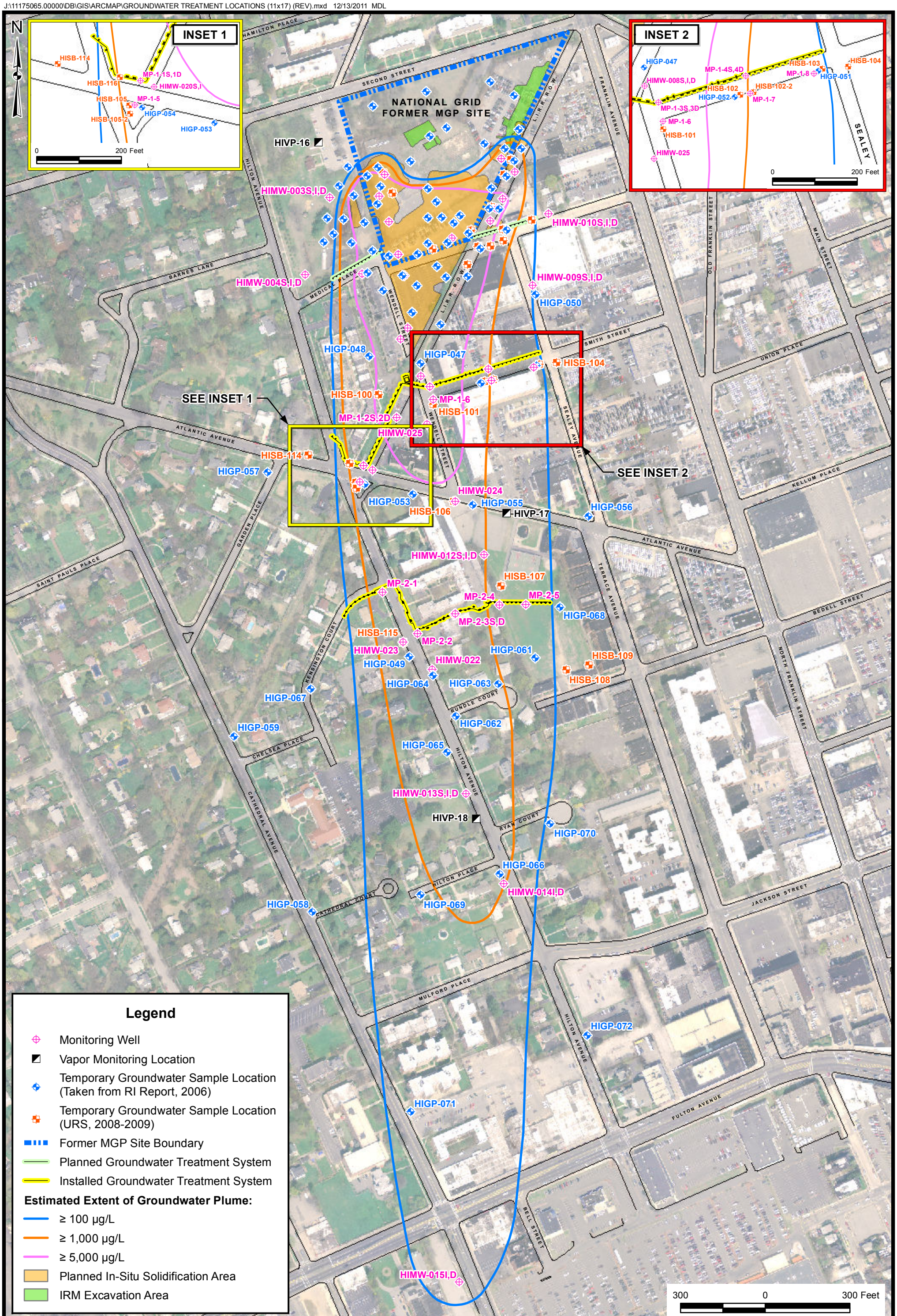


URS

HEMPSTEAD/GARDEN CITY, NY
SITE MAP

FIGURE 2

J:\11175065.00000\DB\GIS\ARCMAP\GROUNDWATER TREATMENT LOCATIONS (11x17) (REV).mxd 12/13/2011 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

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

FIGURE 3

HIGP-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 (27)	ND–273 (31)
141.5–151.5	ND–94 (ND)	ND–1 (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-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 (ND)	ND (ND)
63–73	10–224 (10)	2–1,144 (2)

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

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)	ND (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–338.8 (ND)	ND–1,391 (ND)
63–73	29.2–256 (88)	65–527 (36)
117–127	ND–6 (6)	ND–2 (19)

HIMW-022		
DEPTH	TOT. BTEX	TOT. PAHs
54–64	ND–2 (2)	ND (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-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

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-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)	ND (ND)
70–80	ND–313 (96)	58–156 (75)
110–120	2–30 (6)	ND–21 (19)

HIMW-023		
DEPTH	TOT. BTEX	TOT. PAHs
66–76	2–43 (2)	2–11 (2)

HISB-102(2) (1/8/09)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	423	859
40–44	484	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	35	30
90–94	124	98

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-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-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	146–439 (159)	1,494–5,337 (2,600)
130–140	ND–359 (174)	ND–2,344 (1,400)

HIMW-14 I,D		
DEPTH	TOT. BTEX	TOT. PAHs
85–95	24–273 (28)	28–288 (61)
140–150	ND–15	ND

HIMW-024		
44.6–54.6	870–900 (900)	897–1,020 (897)

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

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

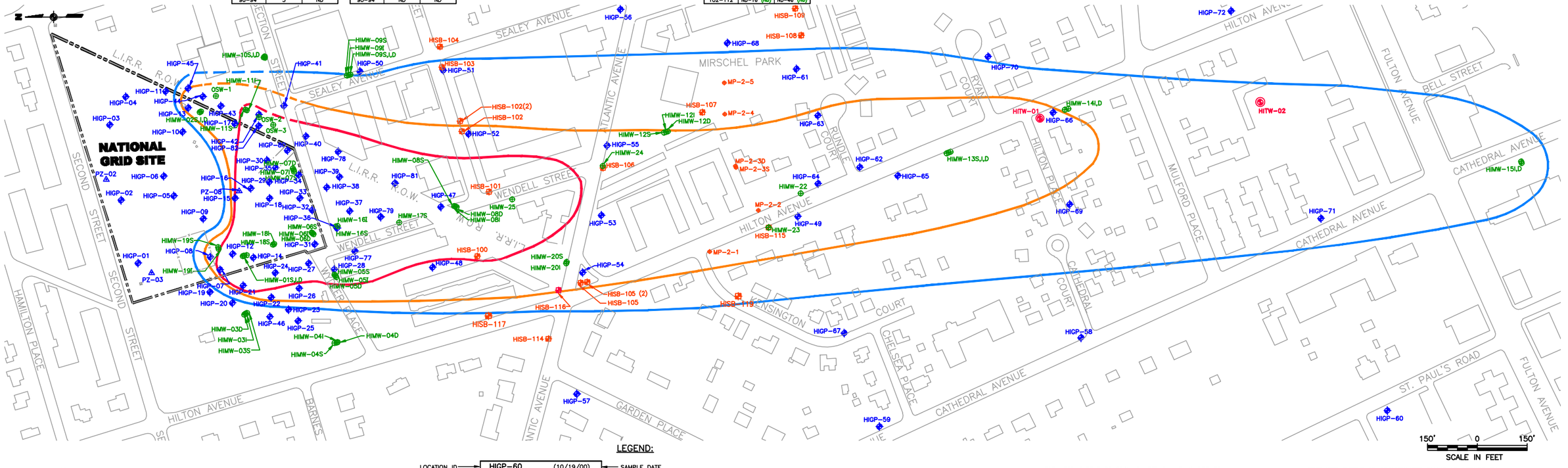
HIGP-48 (8/25/00)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	2
60–64	766	926

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 (3)	ND–3,069 (9)
63–73	ND–8.6 (ND)	ND–251 (ND)
102–112	ND–16 (ND)	ND–46 (ND)

HIMW-025		
DEPTH	TOT. BTEX	TOT. PAHs
42–52	109–552 (109)	10–573 (10)



LEGEND:

- HITW-02 TEMPORARY GROUNDWATER MONITORING WELL (TAKEN FROM RI REPORT, 2006)
- HIGP-53 TEMPORARY GROUNDWATER SAMPLE LOCATION (TAKEN FROM RI REPORT, 2006)
- MP-2-1 MONITORING WELL
- 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 (SEPT. 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\THIRD QUARTER 2011\FIGURE 4.dwg 11/2/11 – 5 RAL

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\SEPT 2011\FIGURE 5.dwg 11/14/11 - 4 RAL

N

NATIONAL GRID
FORMER MGP SITE

PZ-02, NM
PZ-03, NM
HIMW-19S, 49.95
HIMW-01S, 49.83
IPR-8, 49.56
IPR-9, 49.55
HIMW-03S, 49.72
HIMW-18S, 49.83
IPR-7, 49.55
IPR-12A, 49.52
IPR-11, 49.45
HIMW-06S, 49.40
IPR-14, 49.40
HIMW-04S, 49.07
HIMW-05S, 49.03
HIMW-016S, 49.08
IPR-20, 49.18
IPR-22, 49.08
HIMW-17S, 49.01
HIMW-8S, 45.74
HIMW-20S, 48.24
IPR-1, 49.99
IPR-3, 49.81
IPR-25, 49.88
IPR-10, 49.67
HIMW-02S, 50.03
OSMW-1, 49.98
PZ-08, 49.71
HIMW-11S, 49.85
HIMW-10S, 50.20
OSMW-2, 49.75
OSMW-3, 49.64
IPR-13, 49.64
HIMW-07S, 49.50
IPR-12B, 49.49
IPR-15, 49.43
IPR-19S, NM
IPR-21, 49.24
IPR-23, 49.10
IPR-24, 48.97
HIMW-09S, 49.28
HIMW-12S, 47.46
HIMW-13S, 45.55
50
49
48
47
46
SECOND STREET
HILTON AVENUE
BARNES LANE
MAIN STREET
FRANKLIN AVENUE
OLD FRANKLIN STREET
MEADOW PLACE
STOWE PLACE
SAMMIS PLACE
MILLER PLACE
UNION PLACE
SMITH STREET
WENDELL STREET
SEALEY AVENUE
L.I.R.R. R.O.W.
ATLANTIC AVENUE
GARDEN PLACE
KELLUM PLACE
KENSINGTON COURT
CHELSEA PLACE
CATHEDRAL AVENUE
MIRSCHEL PARK
TERRACE AVENUE
MARGARET COURT
BEDELL STREET
NORTH FRANKLIN STREET
WEST COLUMBIA
RUNDLE COURT
RYAN COURT
CATHEDRAL COURT
HILTON PLACE
JACKSON STREET
MULFORD PLACE
FULTON AVENUE
BELL STREET
ST. PAUL'S

LEGEND:

⊕	MONITORING WELL
⊞	IPR WELL
△	PIEZOMETER
→	GROUNDWATER FLOW DIRECTION
44	POTENTIOMETRIC SURFACE CONTOUR
- - -	FORMER MGP SITE BOUNDARY
HIMW-8S, 45.74	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
SEPTEMBER 20, 2011

FIGURE 5

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\SEPT 2011\FIGURE 6.dwg 11/14/11 - 3 RAL

N

NATIONAL GRID
FORMER MGP SITE

IPR-4, 49.78
IPR-5, 49.77
HIMW-19I, 50.11
HIMW-02I, 54.99
IPR-6, 49.74
HIMW-11I, 49.72
HIMW-07I, 49.12
HIMW-10I, 50.34
IPR-2, 49.87
HIMW-03I, 49.37
HIMW-01I, 49.77
HIMW-18I, 49.65
HIMW-06I, 49.30
IPR-17, 49.55
IPR-16, 49.49
HIMW-04I, 48.96
IPR-19D, 49.34
HIMW-09I, 49.21
HIMW-05I, 48.95
HIMW-16I, 49.25
IPR-18, 49.29
HIMW-08I, 48.62
HIMW-25, NM
HIMW-20I, 48.25
HIMW-24, NM
HIMW-12I, 47.61
HIMW-23, NM
HIMW-22, NM
HIMW-13I, 45.44
HIMW-14I, 45.29
HIMW-15I, 41.87

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

LEGEND:

⊕	MONITORING WELL
⌗	IPR WELL
→	GROUNDWATER FLOW DIRECTION
44	POTENTIOMETRIC SURFACE CONTOUR
- - -	FORMER MGP SITE BOUNDARY
HIMW-08I, 48.31	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 INTERMEDIATE GROUNDWATER
SEPTEMBER 20, 2011

FIGURE 6

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\SEPT 2011\FIGURE 7.dwg 11/14/11 - 4 RAL

N

NATIONAL GRID
FORMER MGP SITE

HIMW-02D, 49.98
HIMW-01D, NM
HIMW-11D, 49.77
HIMW-03D, 49.05
HIMW-07D, 49.47
HIMW-10D, NM
HIMW-05D, 48.20
HIMW-04D, 48.17
HIMW-06D, 49.30
HIMW-09D, 49.09
HIMW-8D, 48.62
HIMW-12D, 45.46
HIMW-13D, 45.33
HIMW-14D, 42.43
HIMW-15D, 39.69

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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
SAMMIS 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
RYAN COURT
NORTH FRANKLIN STREET
WEST COLUMBIA
CATHEDRAL COURT
HILTON PLACE
JACKSON STREET
MULFORD PLACE
FULTON AVENUE
BELL STREET
ST. PAUL'S

LEGEND:

⊕	MONITORING WELL
→	GROUNDWATER FLOW DIRECTION
43	POTENTIOMETRIC SURFACE CONTOUR
— - - —	FORMER MGP SITE BOUNDARY
HIMW-12D, 45.46	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
SEPTEMBER 20, 2011

FIGURE 7

J:\11175065.00000\DB\GIS\ARCMAP\0911 BTEXPAH-NAPL.mxd 11/15/2011 MDL

LOCID	BTEX (µg\L)	PAH (µg/L)	DNAPL (ft)
HIMW-01I			1.40
HIMW-03D			
HIMW-03I			
HIMW-03S			
HIMW-05D	174	1400	
HIMW-05I	159	2499	
HIMW-05S			
HIMW-06I			1.00
HIMW-06S			5.50
HIMW-07S			0.50
HIMW-08D			
HIMW-08I			
HIMW-08S	3	9	
HIMW-12D			
HIMW-12I	89	136	
HIMW-12S			
HIMW-13D	6	19	
HIMW-13I	96	75	
HIMW-13S			
HIMW-14D			
HIMW-14I	28	61	
HIMW-15D			
HIMW-15I	27	31	
HIMW-16I			5.75
HIMW-16S			4.30
HIMW-17S			1.85
HIMW-18S			0.65
HIMW-19S			0.01
HIMW-20I	10	2	
HIMW-20S			
HIMW-22	2		
HIMW-23	2	2	
HIMW-24	900	897	
HIMW-25	109	10	
IPR-2			0.15
IPR-5			0.70
IPR-6			1.35
IPR-11			0.30
IPR-16			0.20
IPR-17			
IPR-20			1.05
IPR-21			1.60
IPR-22			2.60
IPR-24			0.60
IPR-25			1.55
IPR-26			0.35
IPR-27			1.35
IPR-28			0.35
IPR-29			0.50
IPR-30			0.80
PZ-08			2.30

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
µg/L - Micrograms per Liter
ft - Feet of Product Thickness

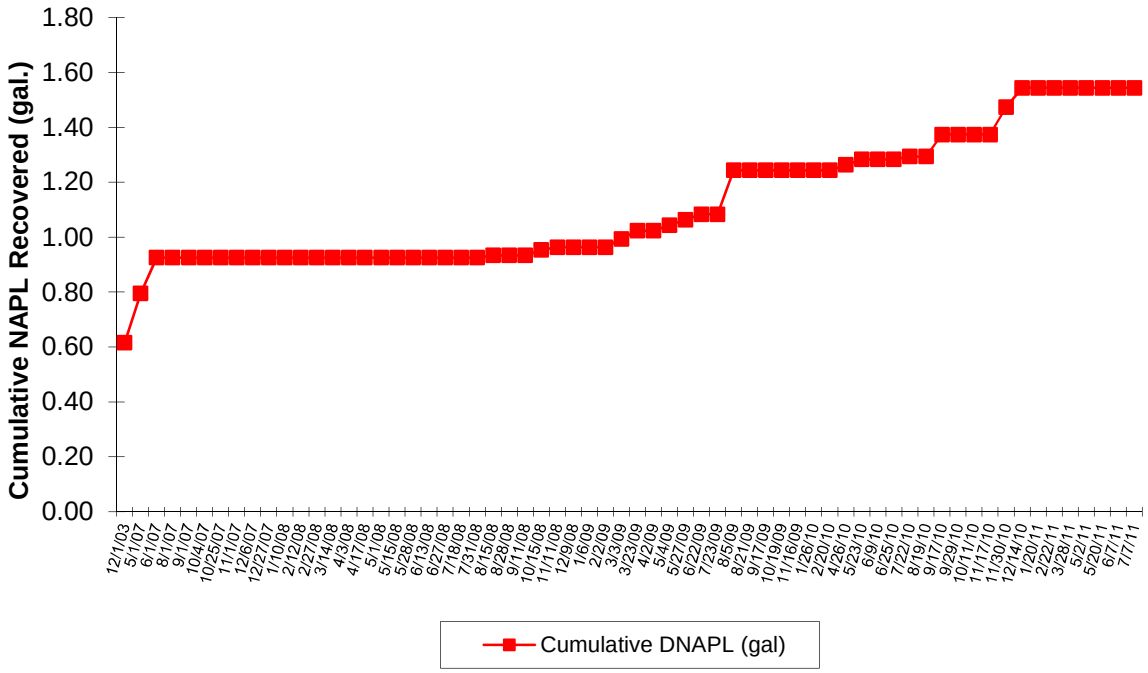
400 0 400 Feet

URS

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

FIGURE 8

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



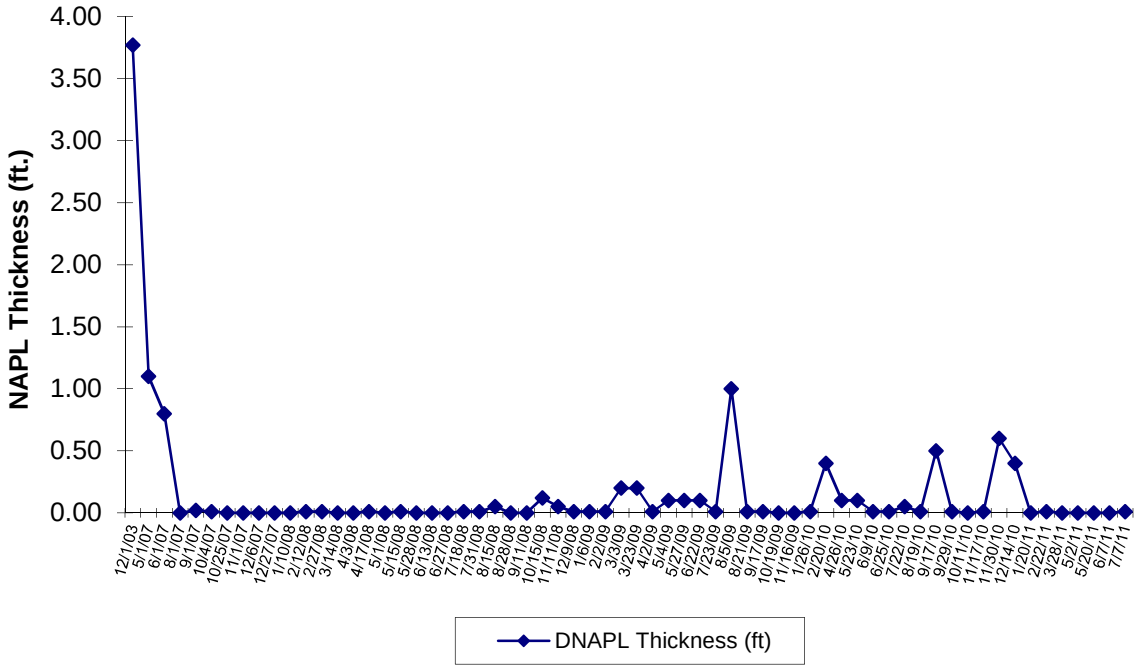
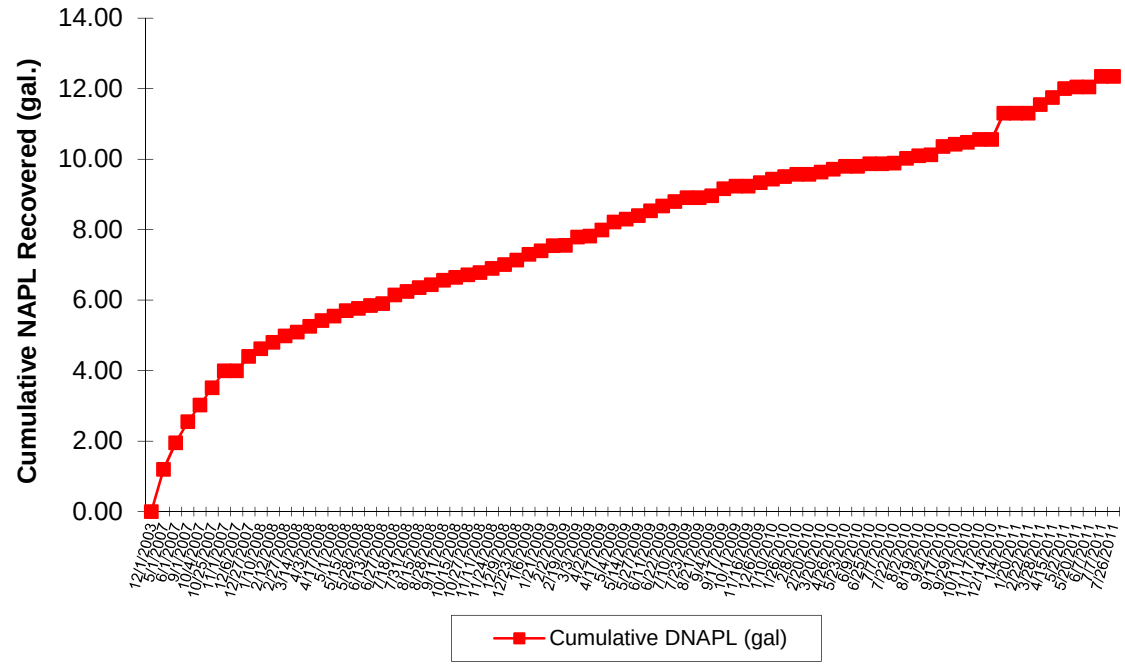


FIGURE 9B
Well HIMW-01I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



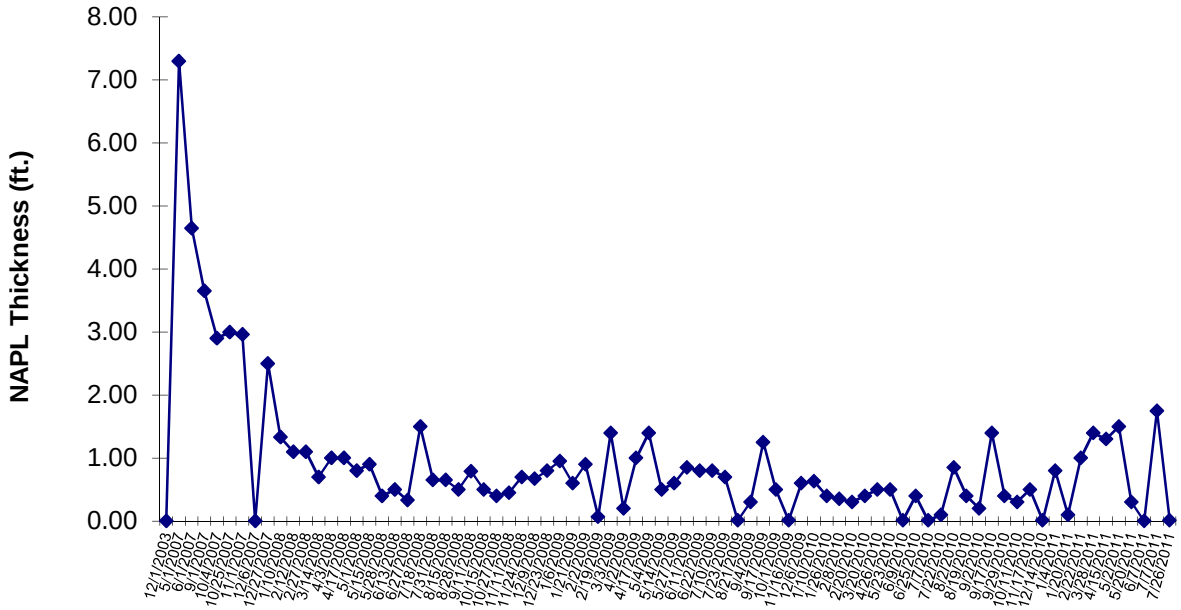
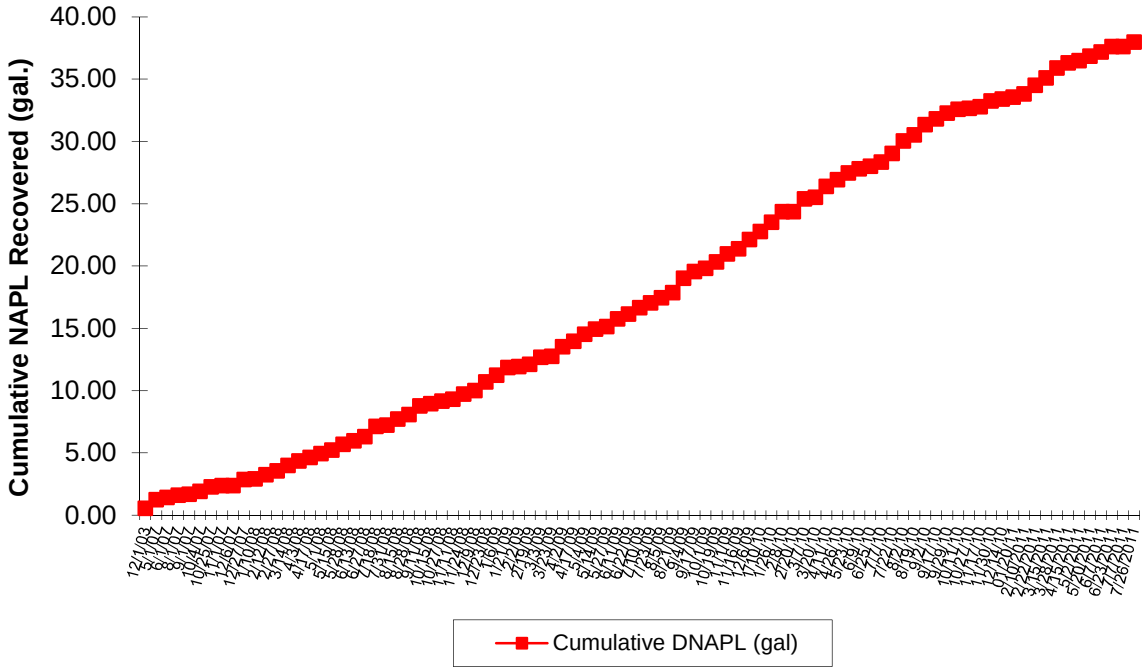


FIGURE 9C
Well HIMW-06S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



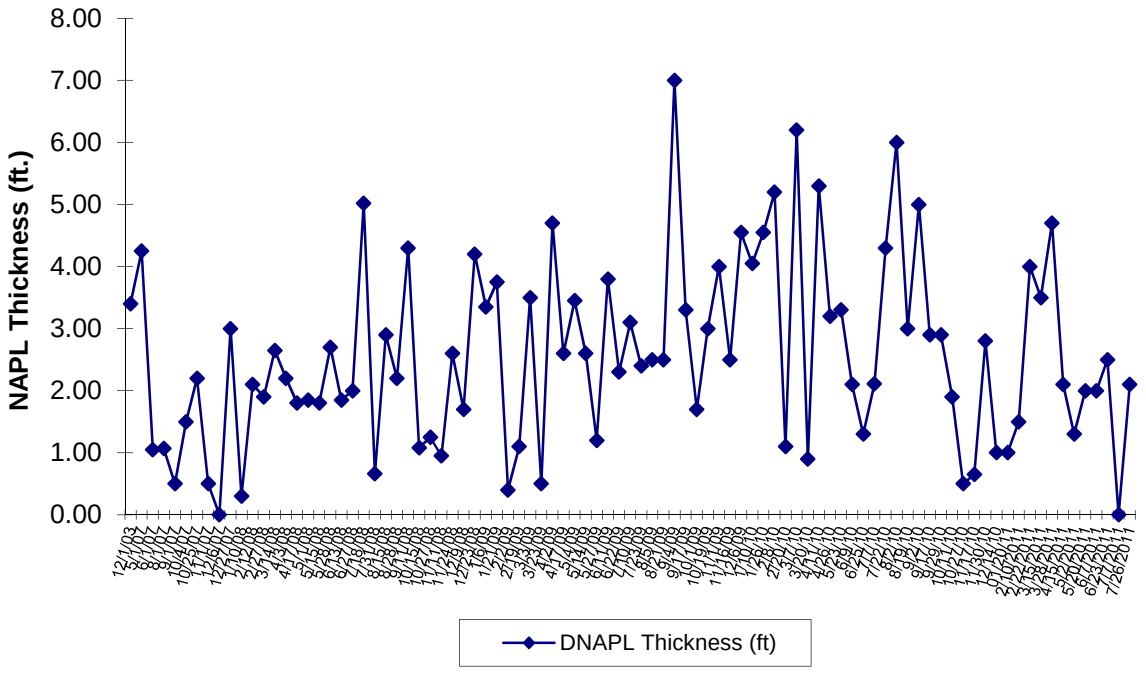
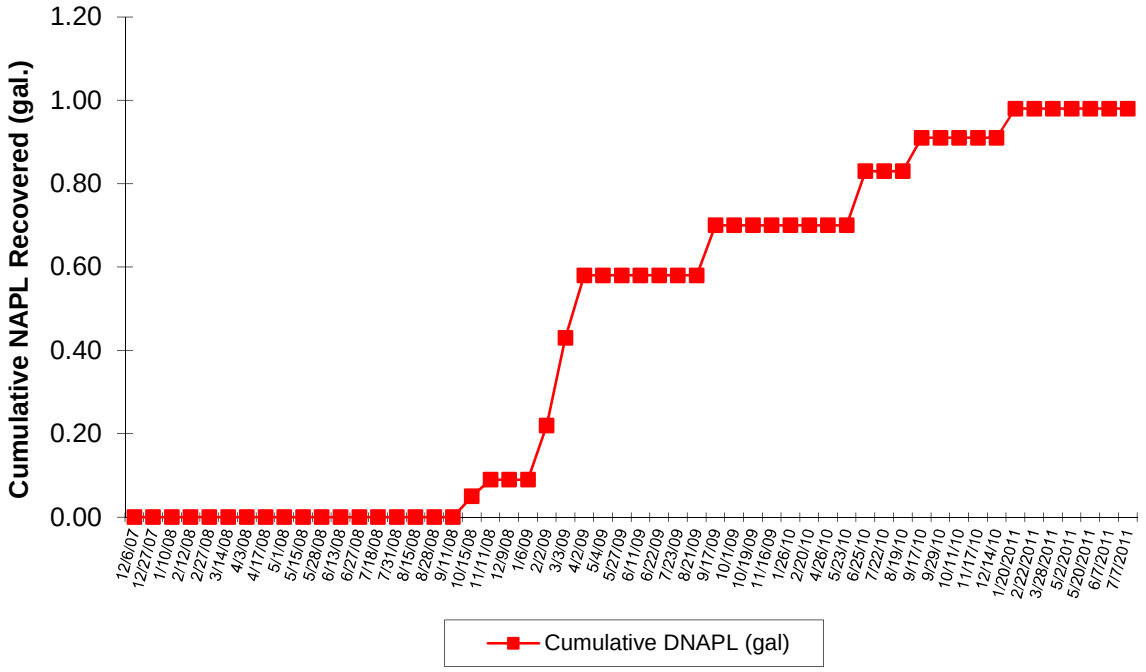


FIGURE 9D
Well HIMW-06I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



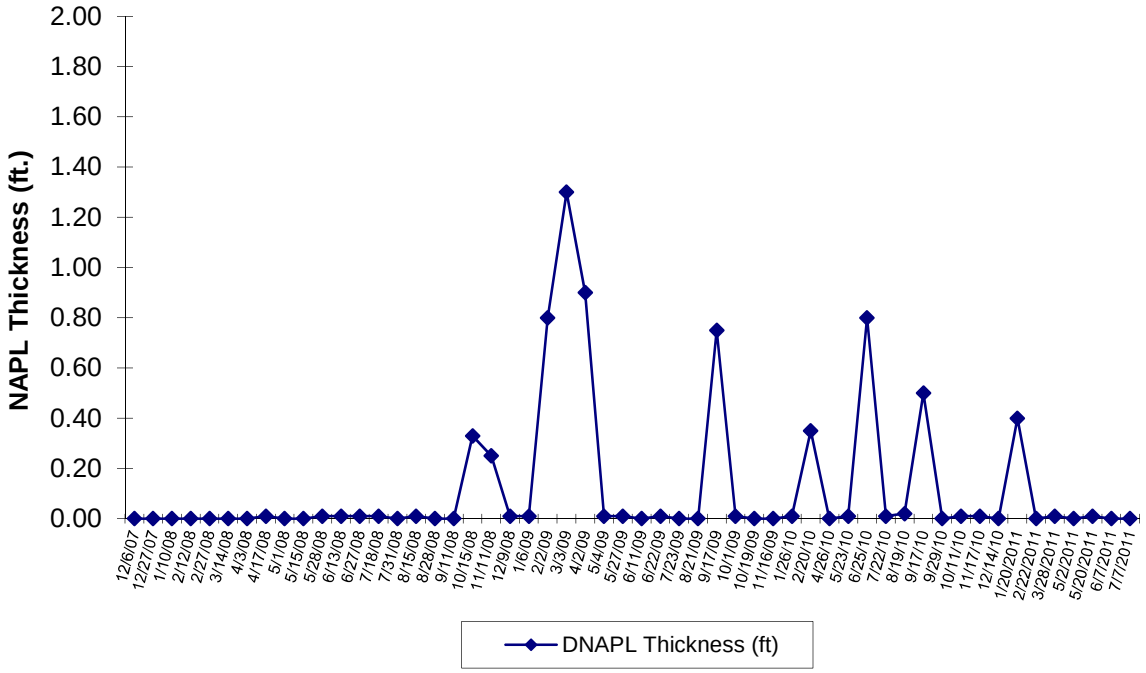
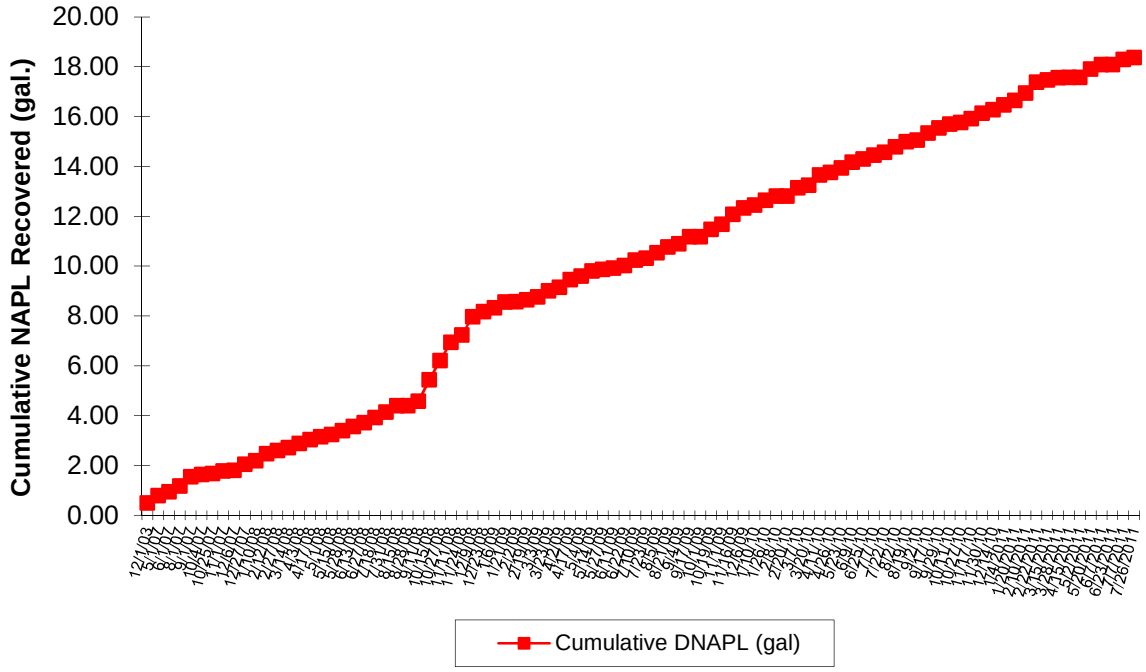


FIGURE 9E
Well HIMW-07S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



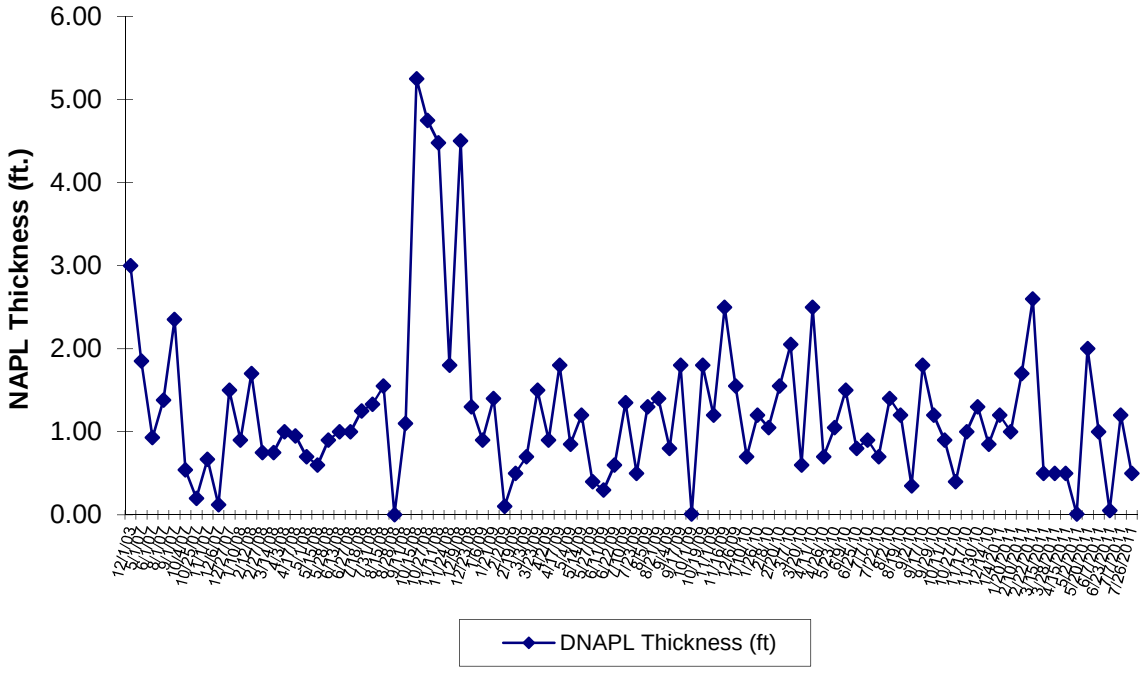
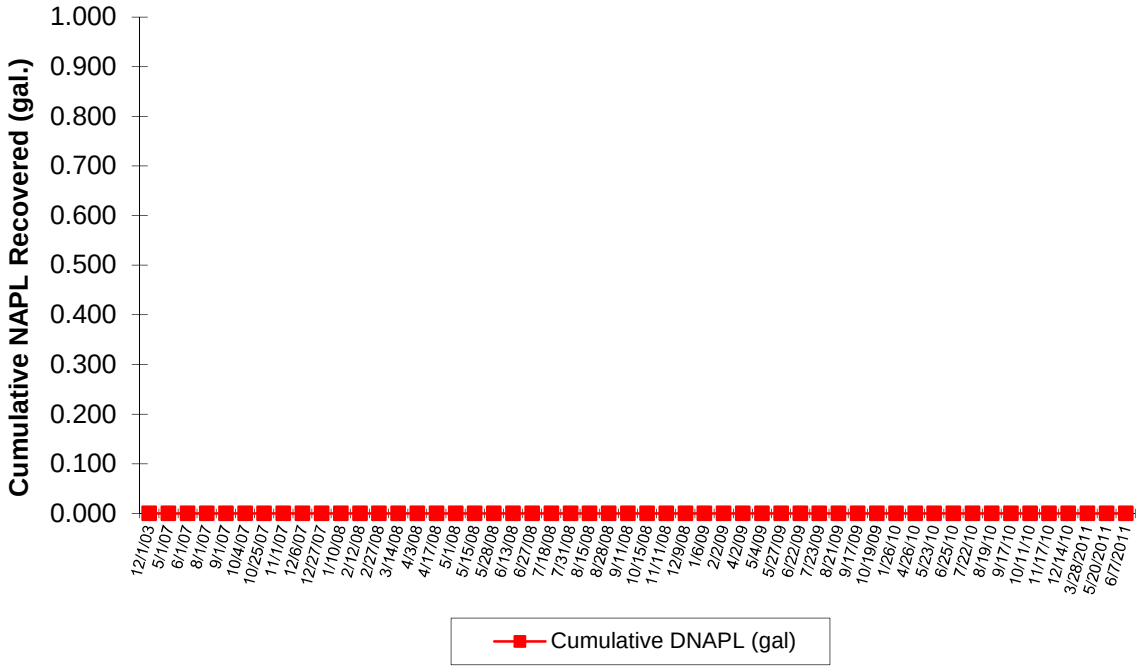


FIGURE 9F
Well HIMW-11S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



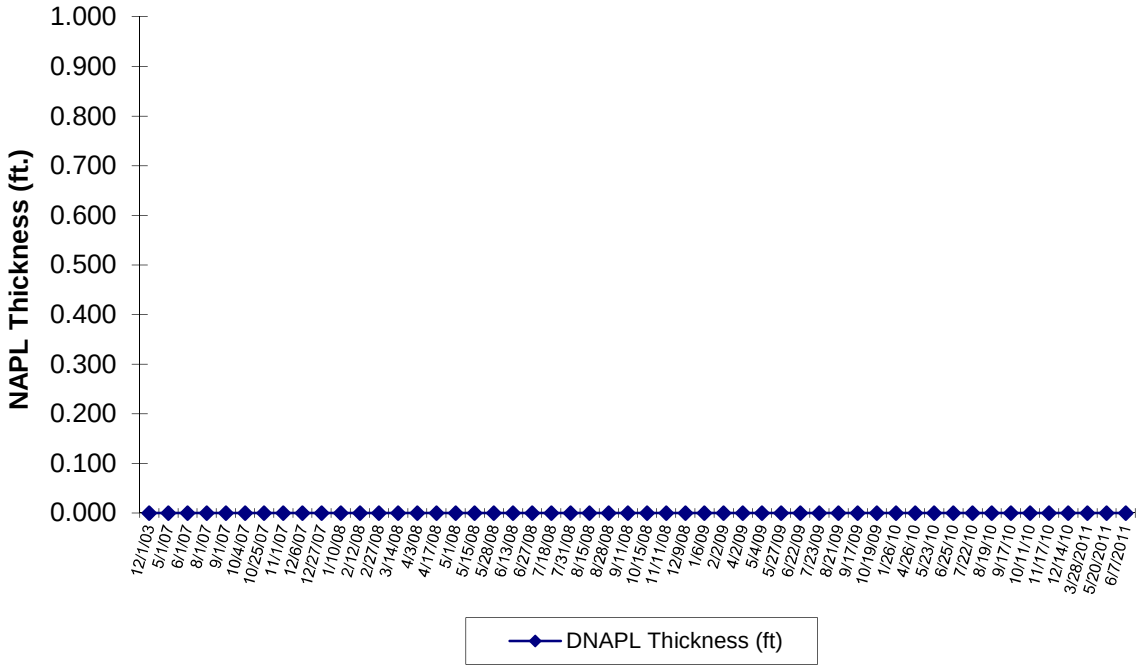
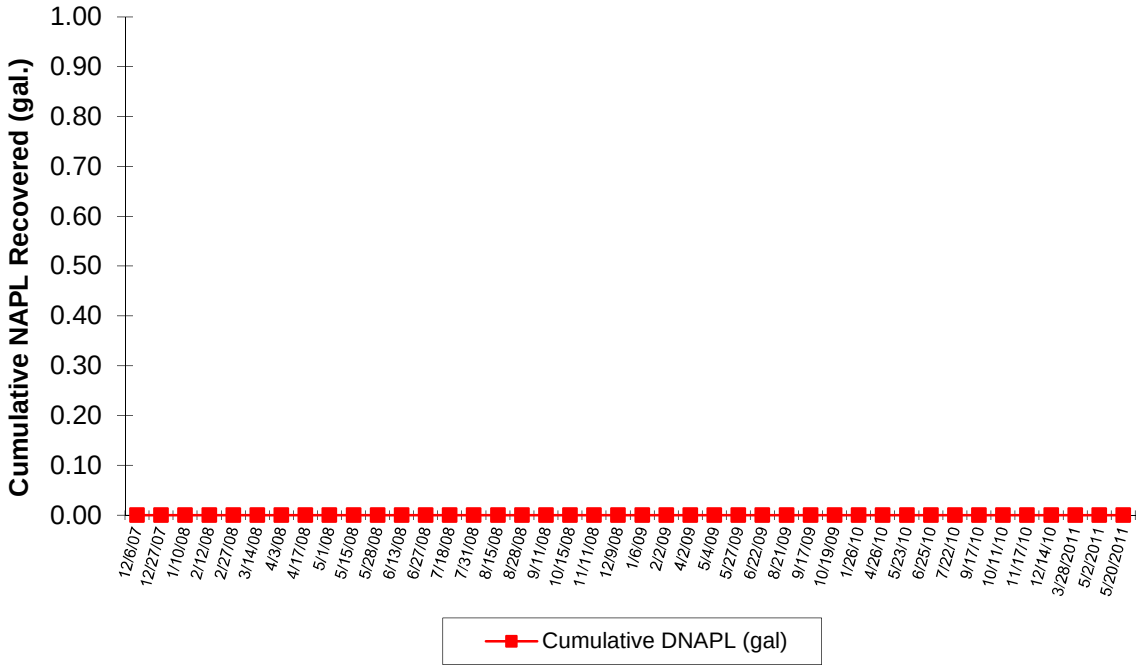


FIGURE 9G
Well HIMW-11I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



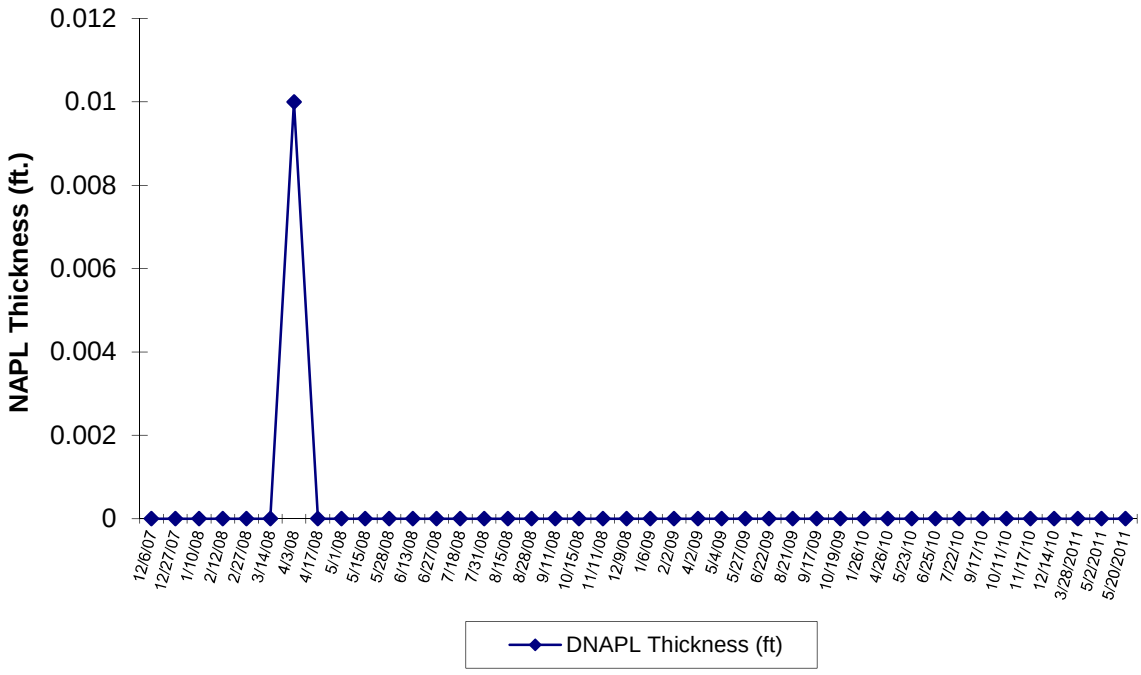
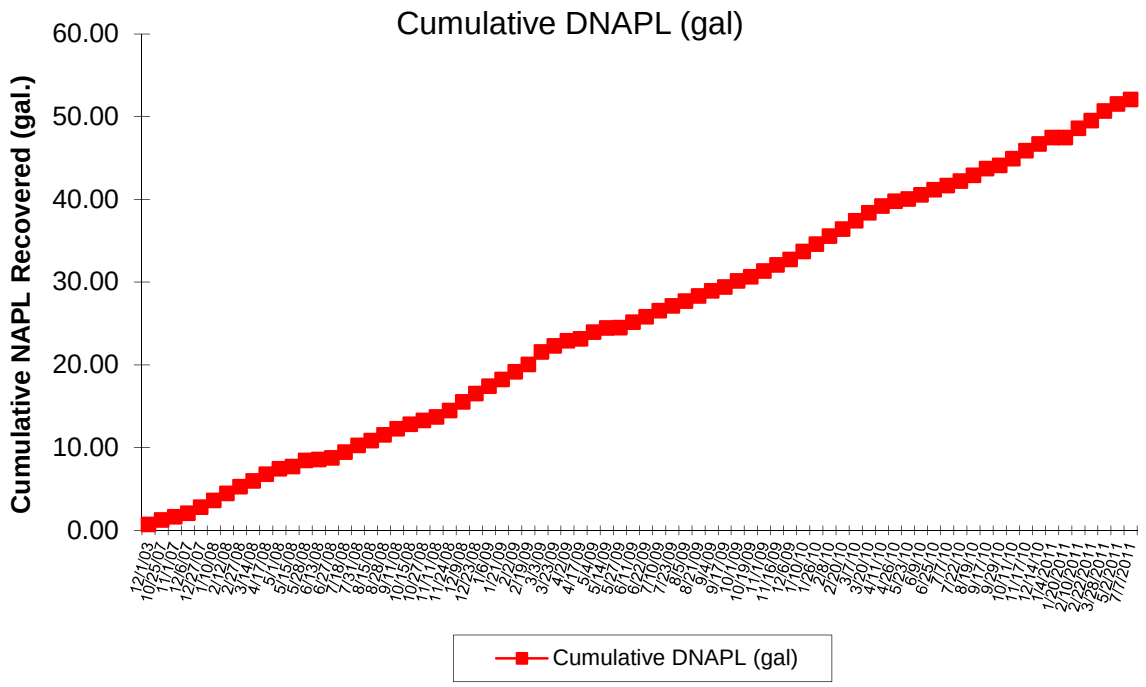


FIGURE 9H
Well HIMW-16S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



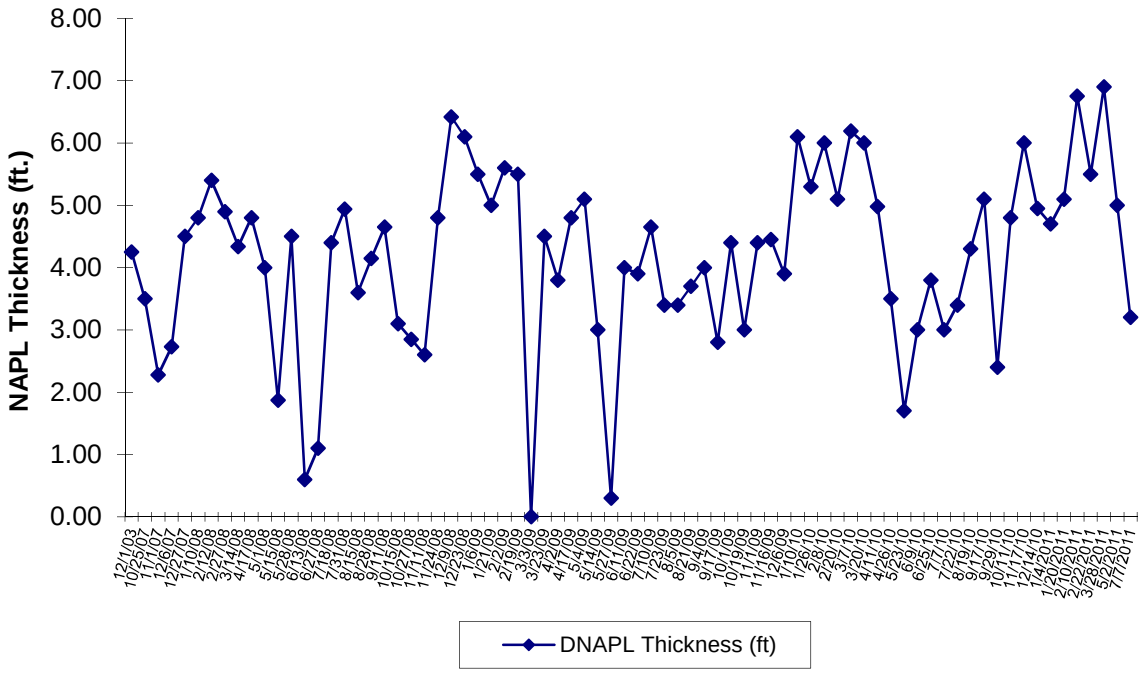
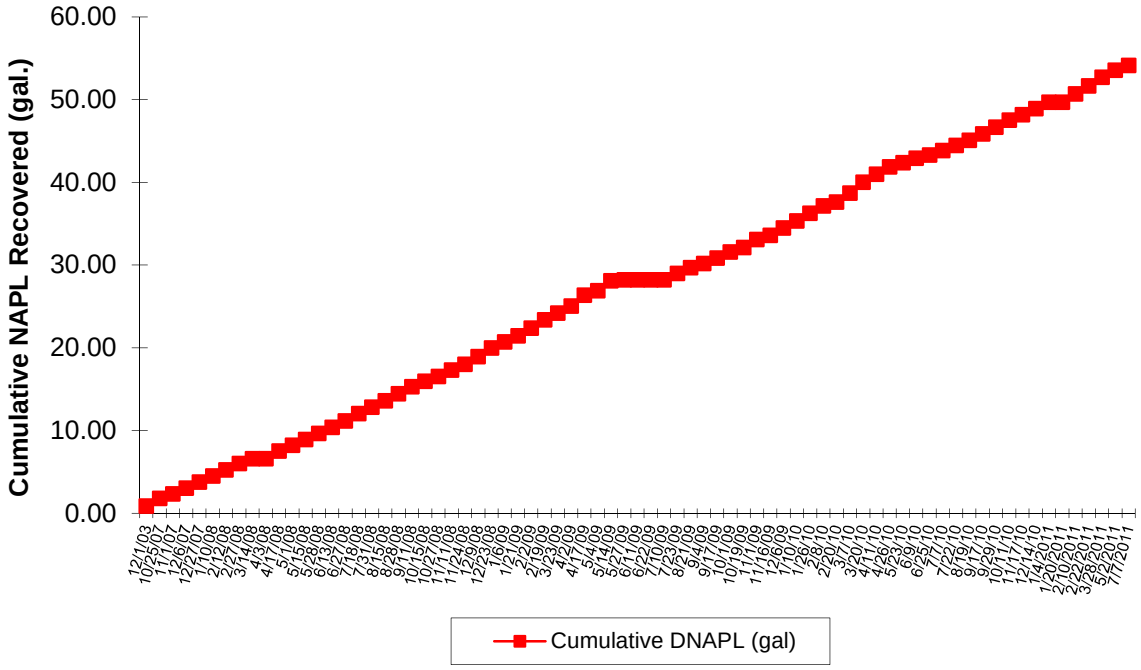


FIGURE 9I
Well HIMW-16I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



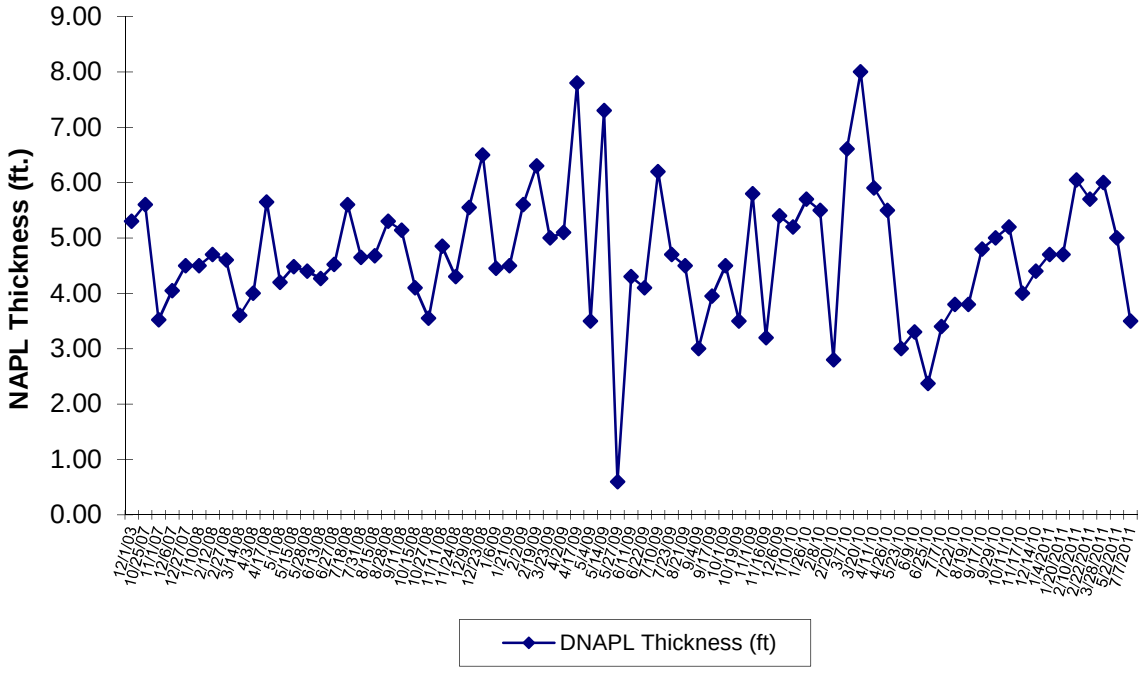
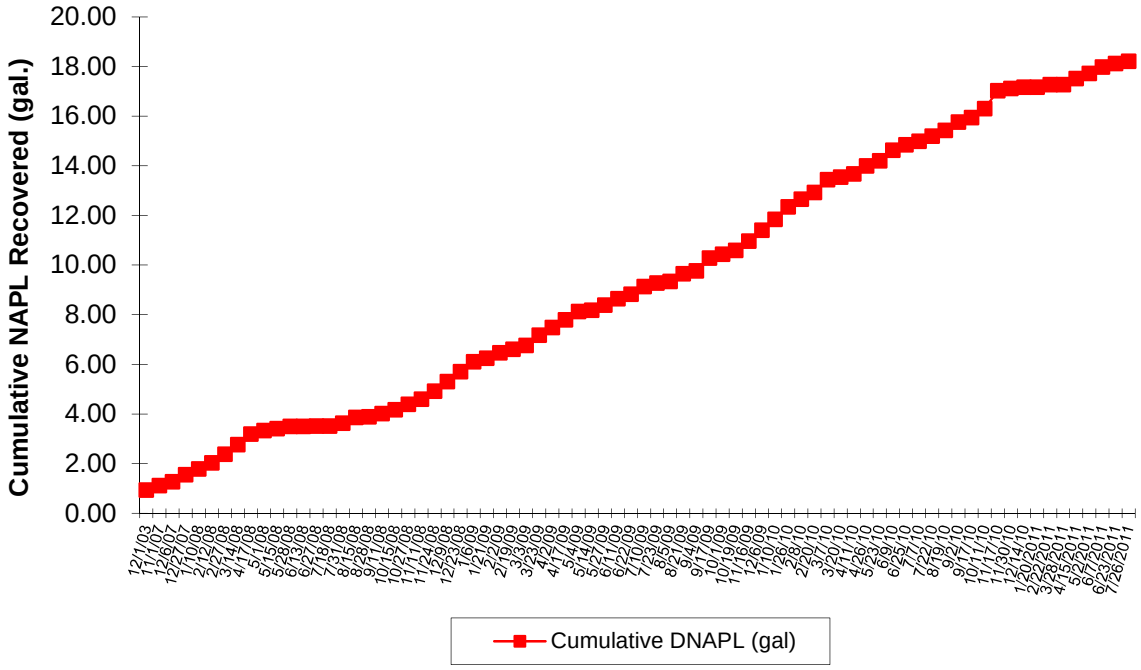


FIGURE 9J
Well HIMW-17S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



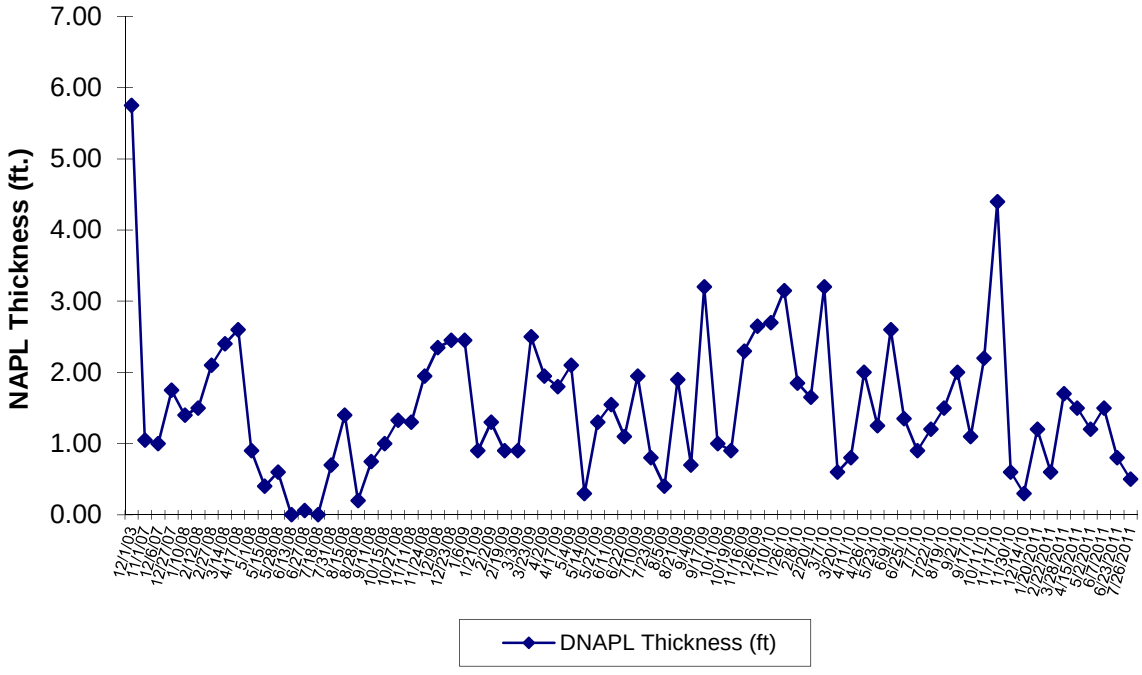
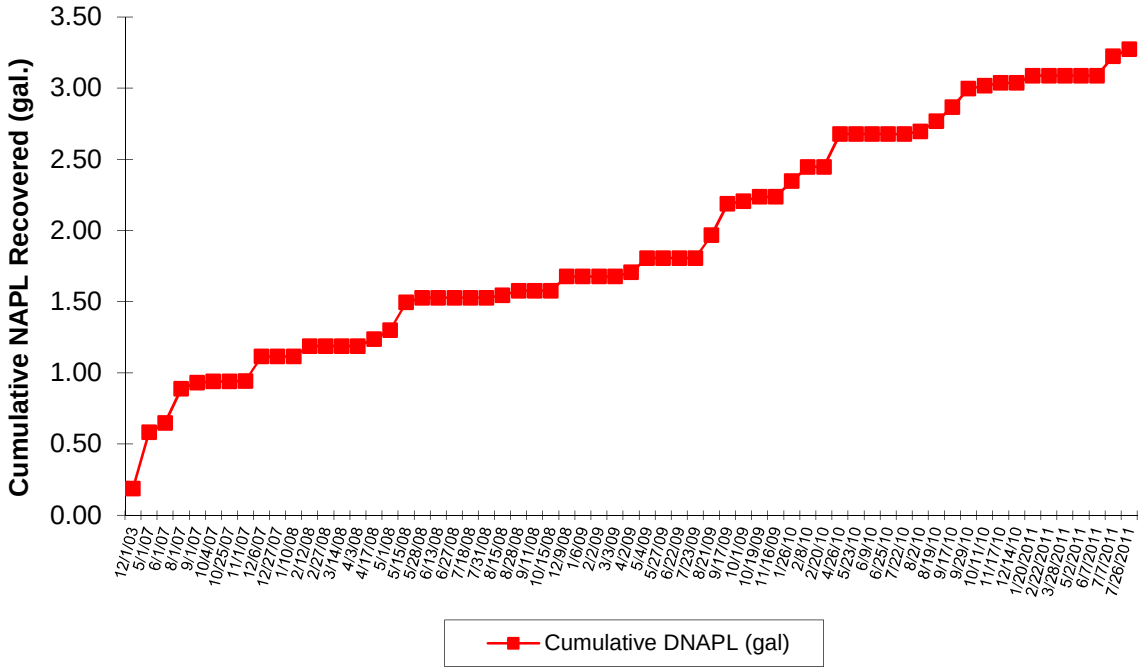


FIGURE 9K
Well HIMW-18S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



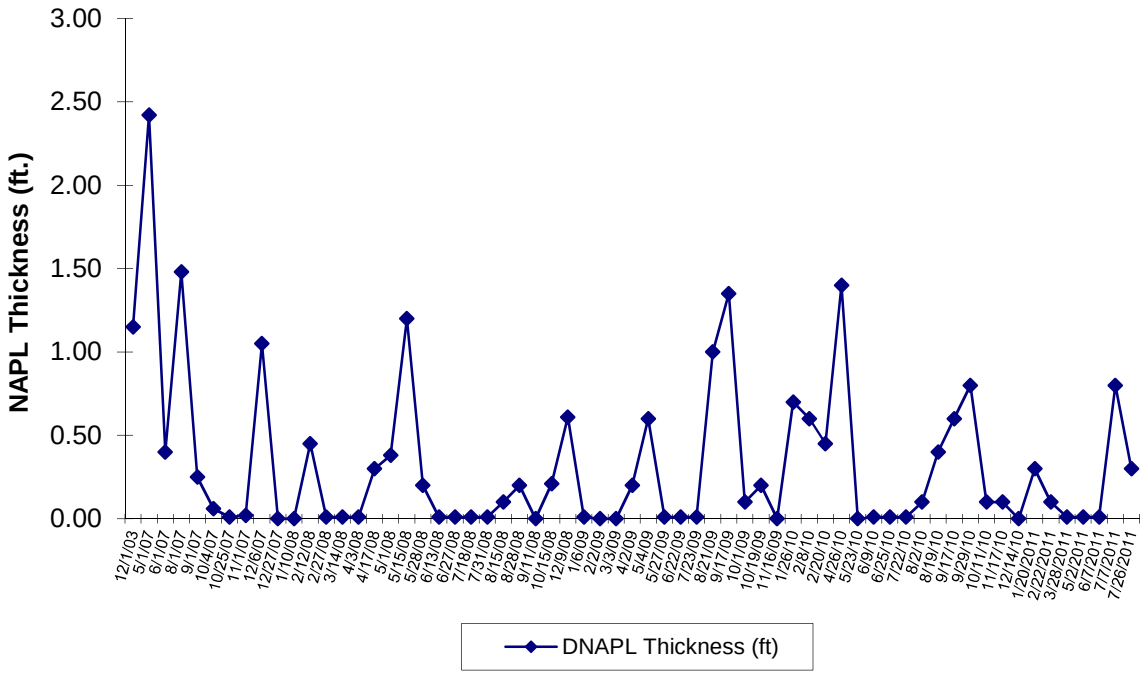
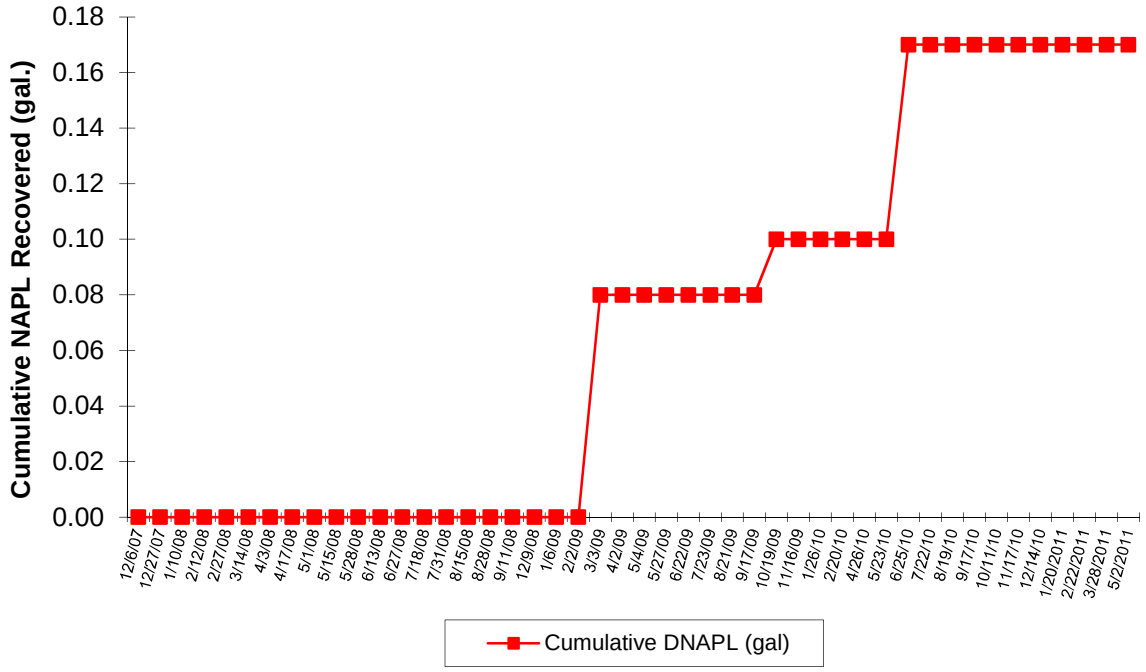


FIGURE 9L
Well HIMW-18I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



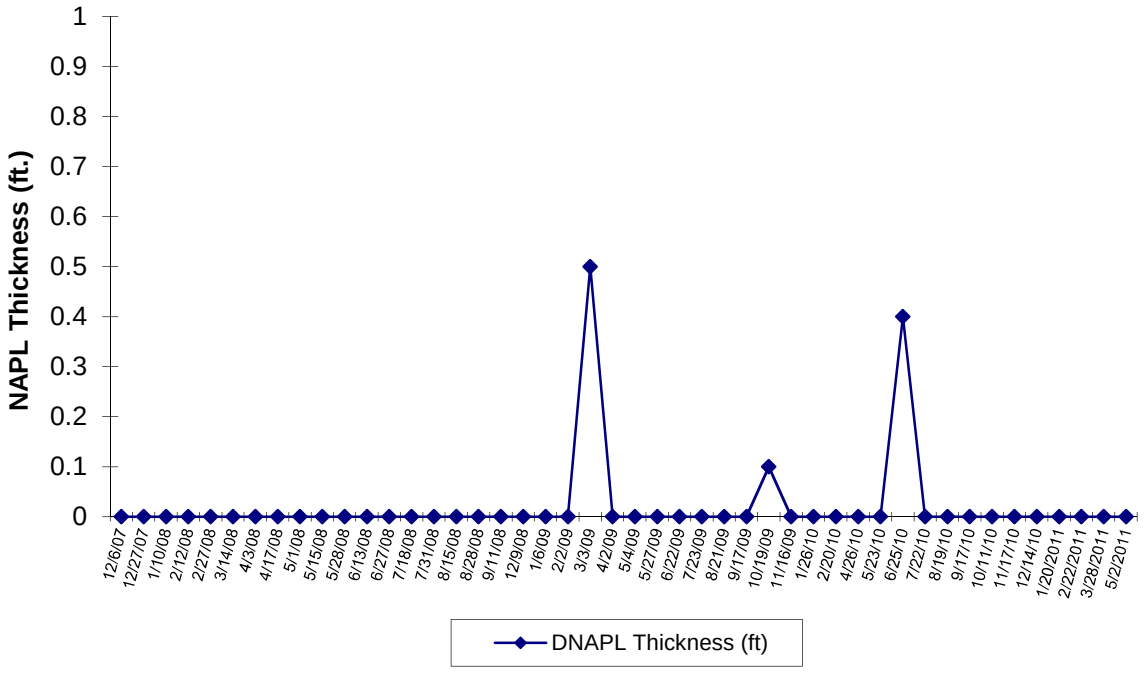
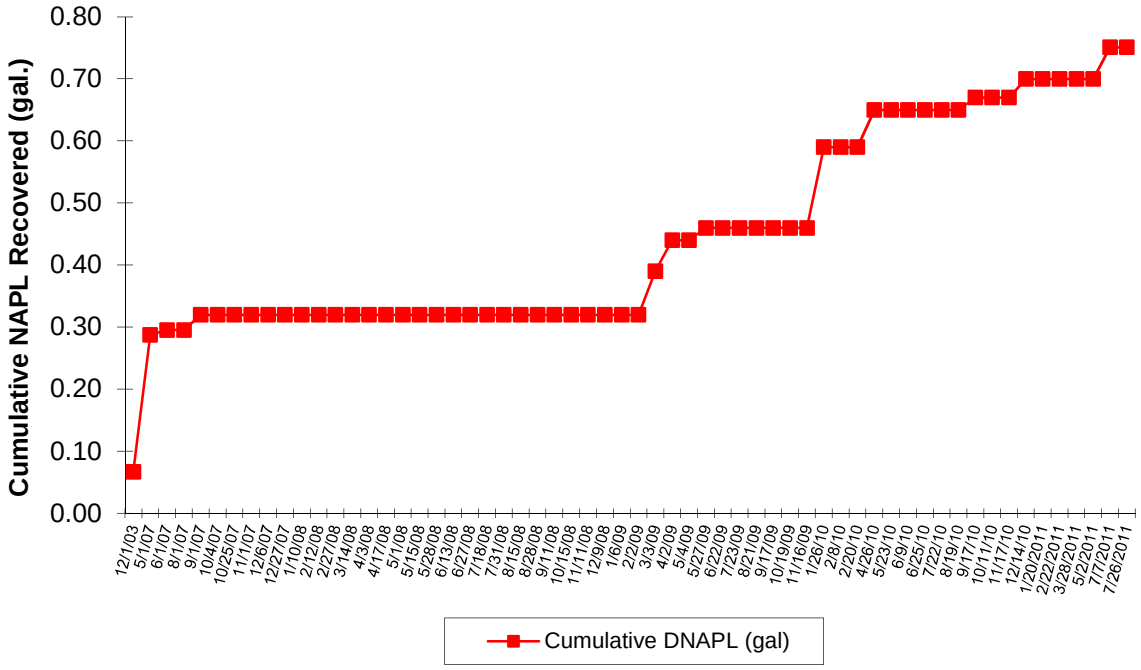


FIGURE 9M
Well HIMW-19S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



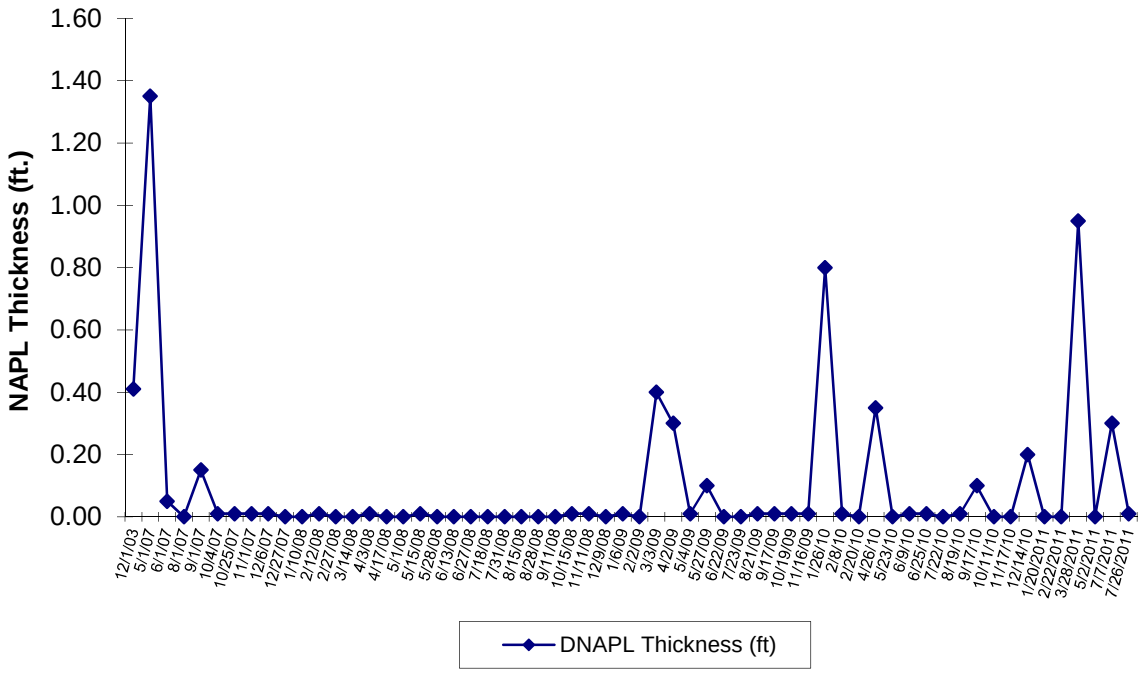
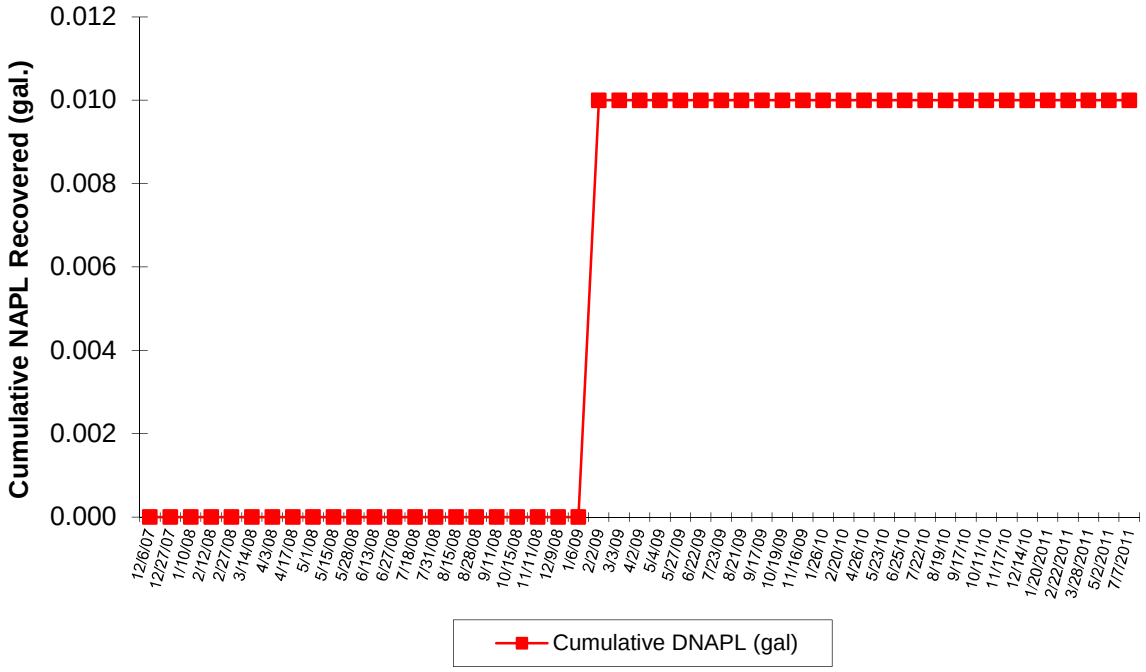


FIGURE 9N
Well HIMW-19I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



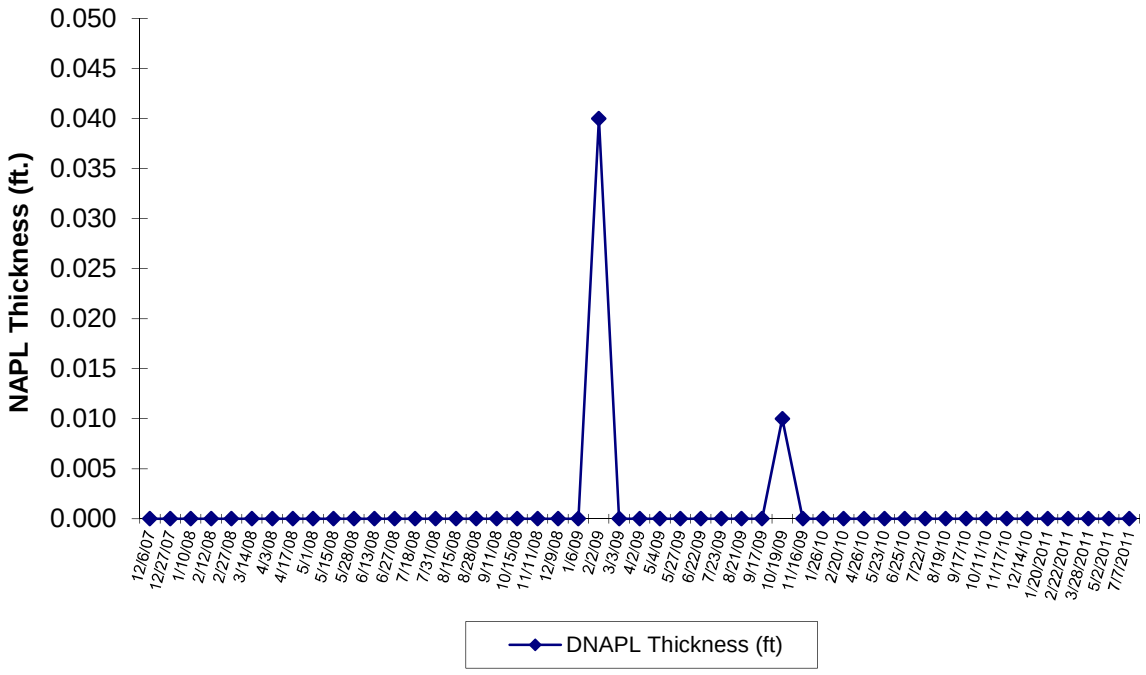
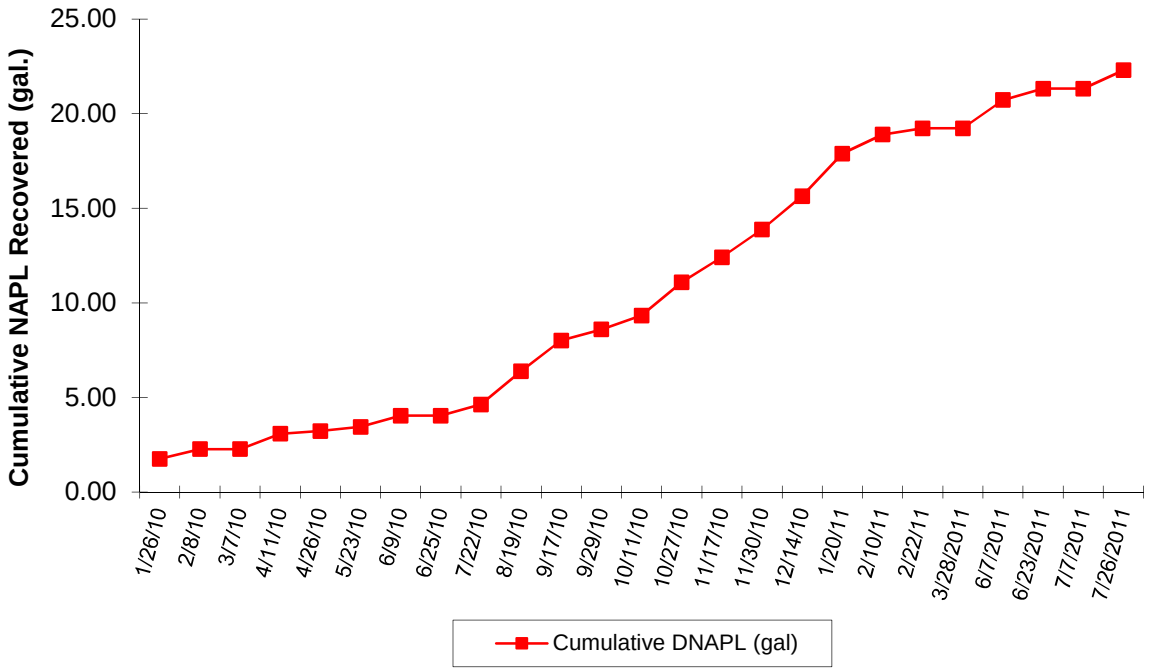


FIGURE 9O
Well HIMW-21 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



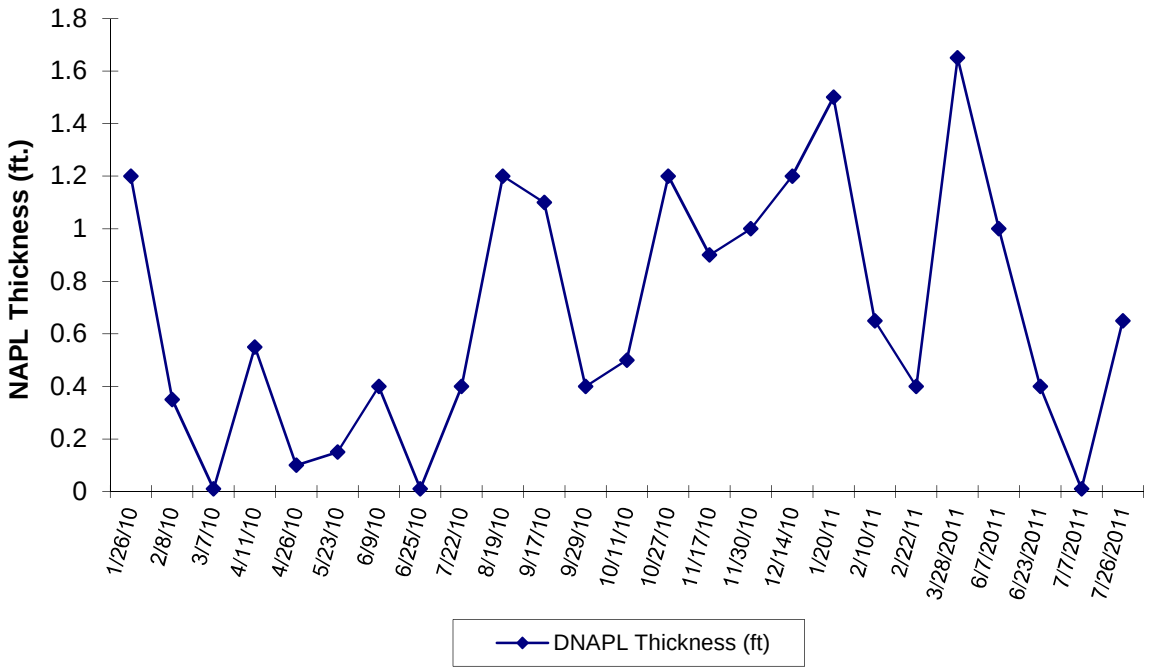
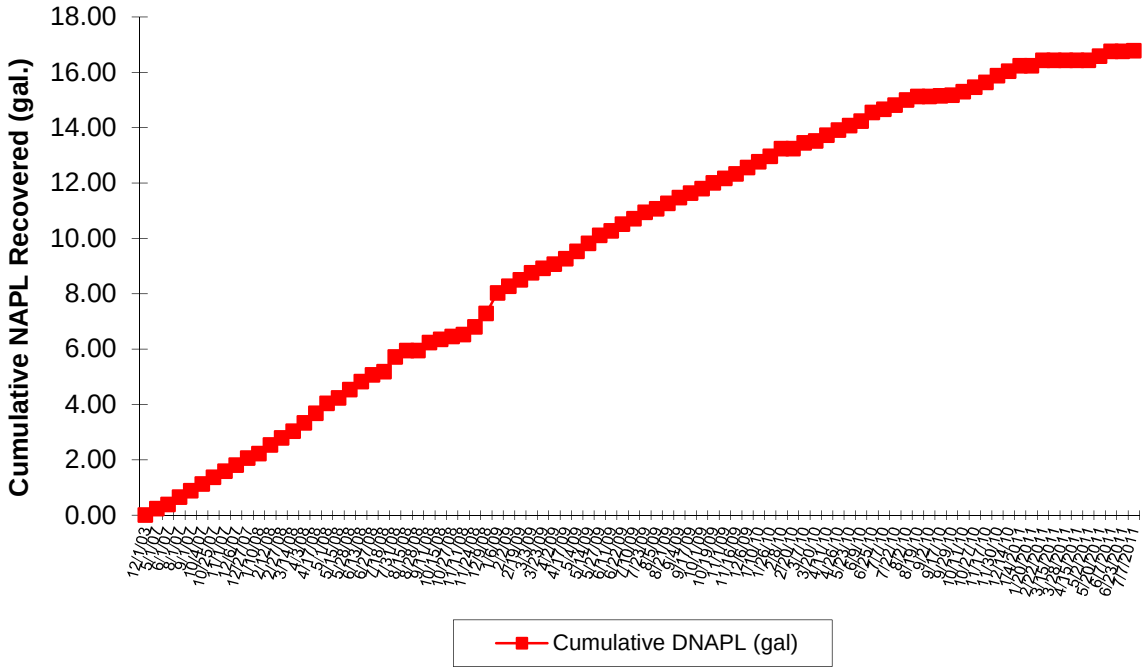


FIGURE 9P
Well PZ-08 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



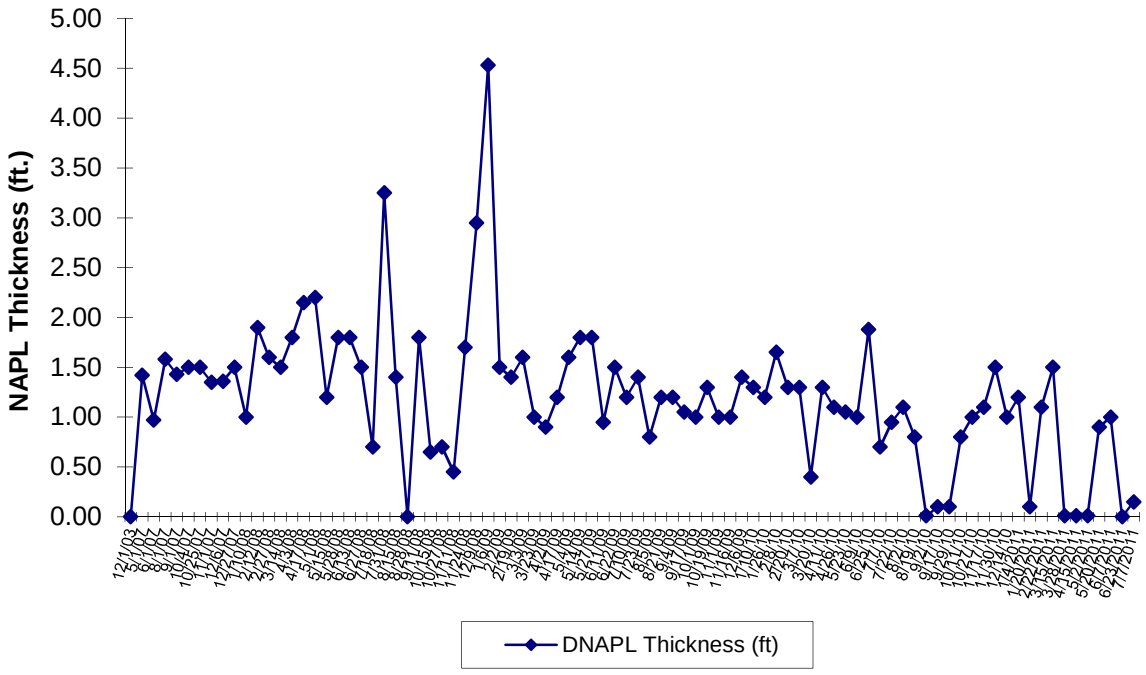
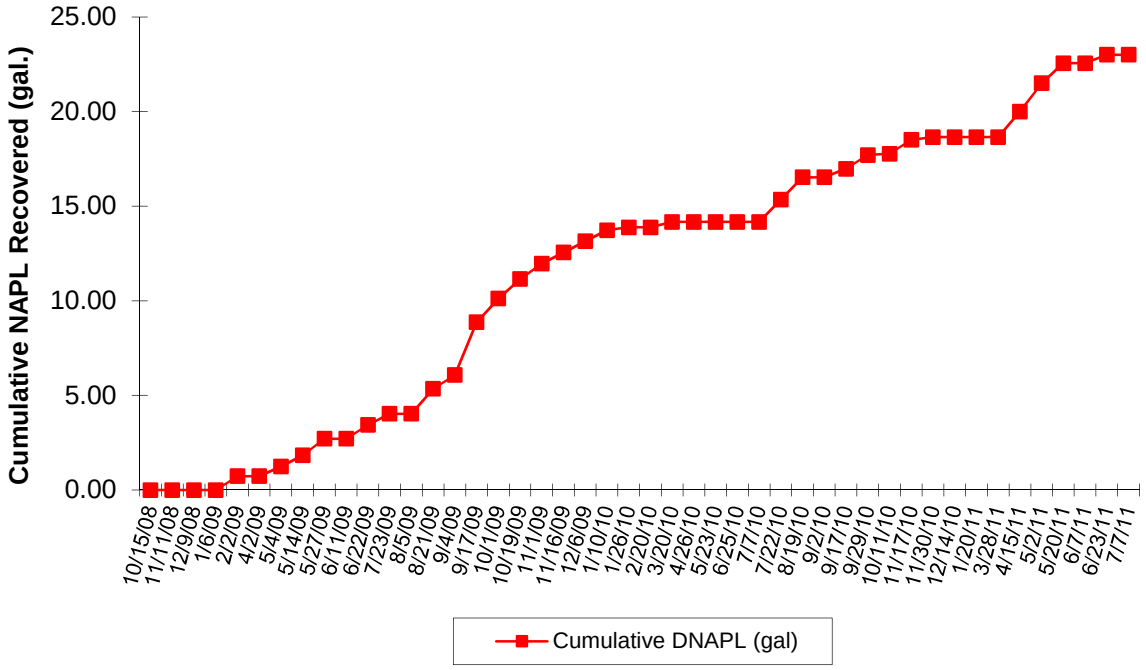


FIGURE 9Q
Well IPR-02 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



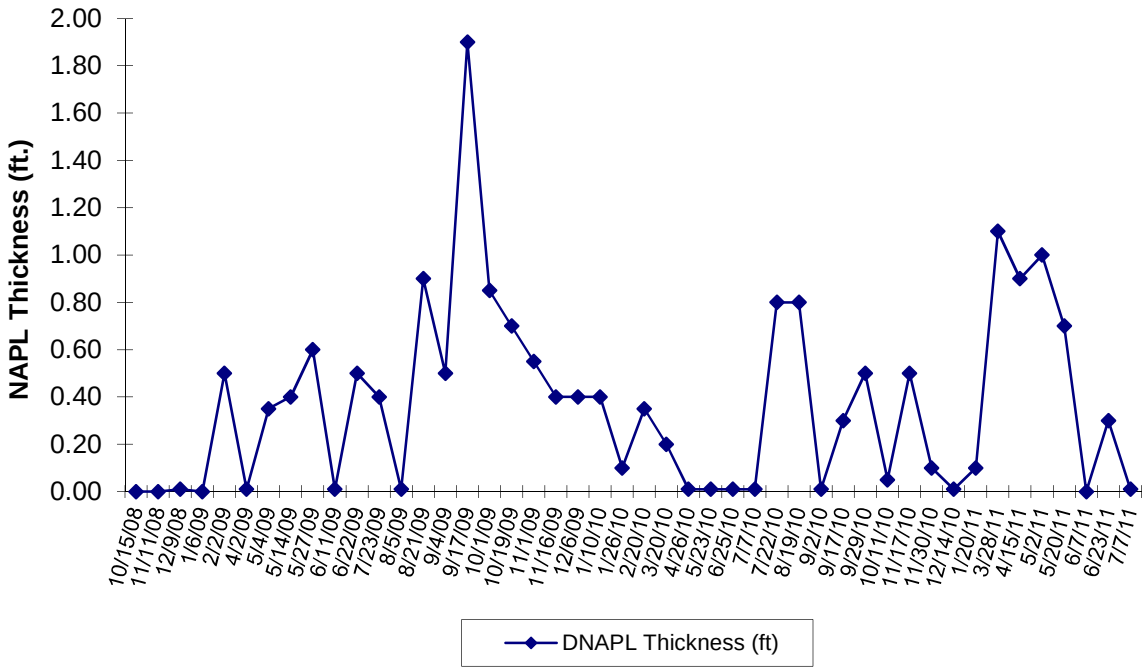


FIGURE 9R
Well IPR-05 NAPL Thickness and Cumulative Recovery Plot
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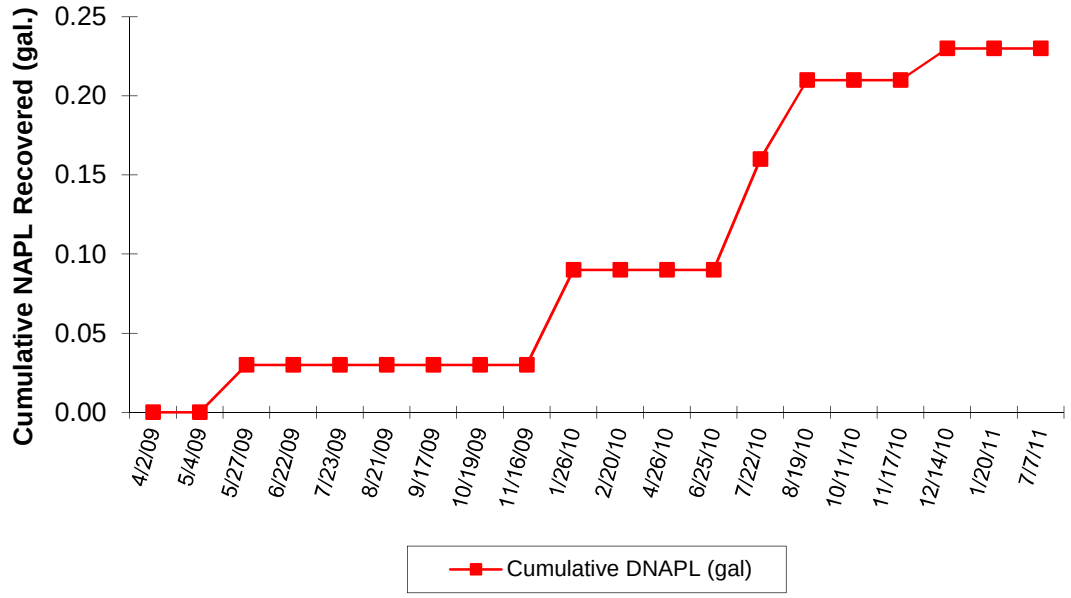


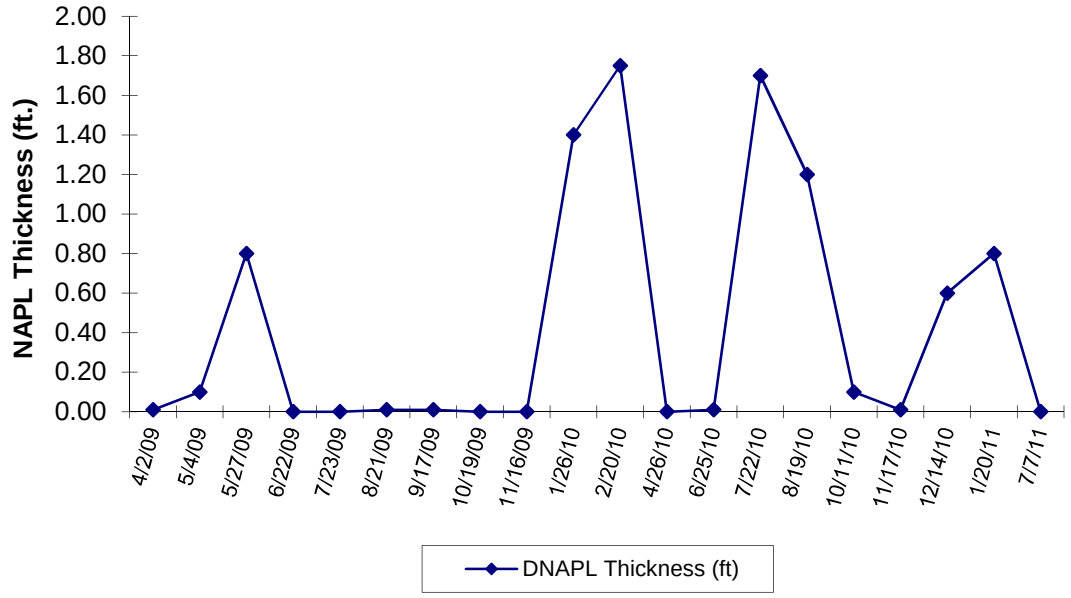
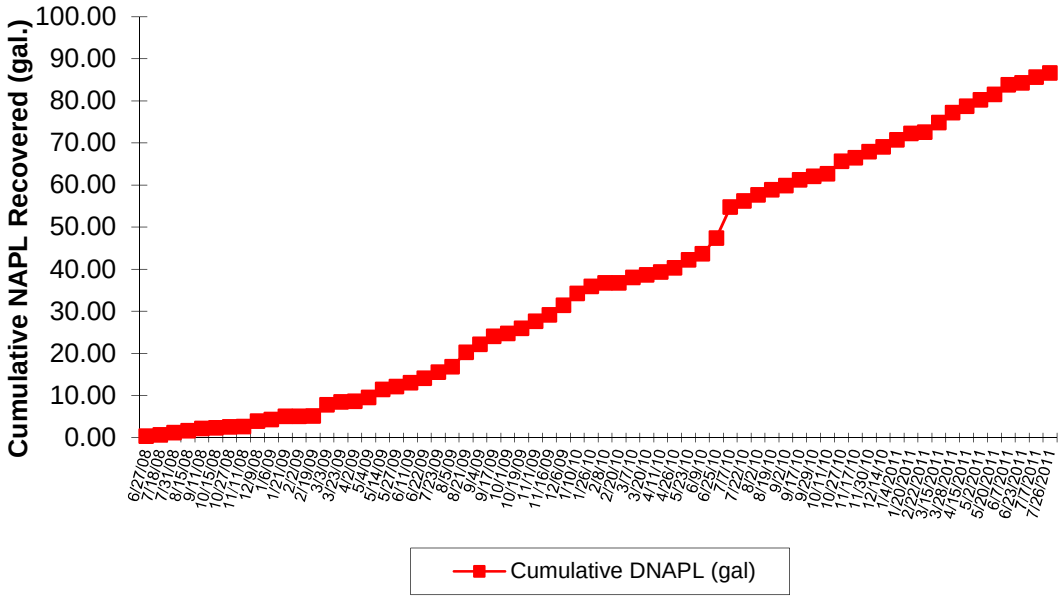


FIGURE 9S
Well IPR-06 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



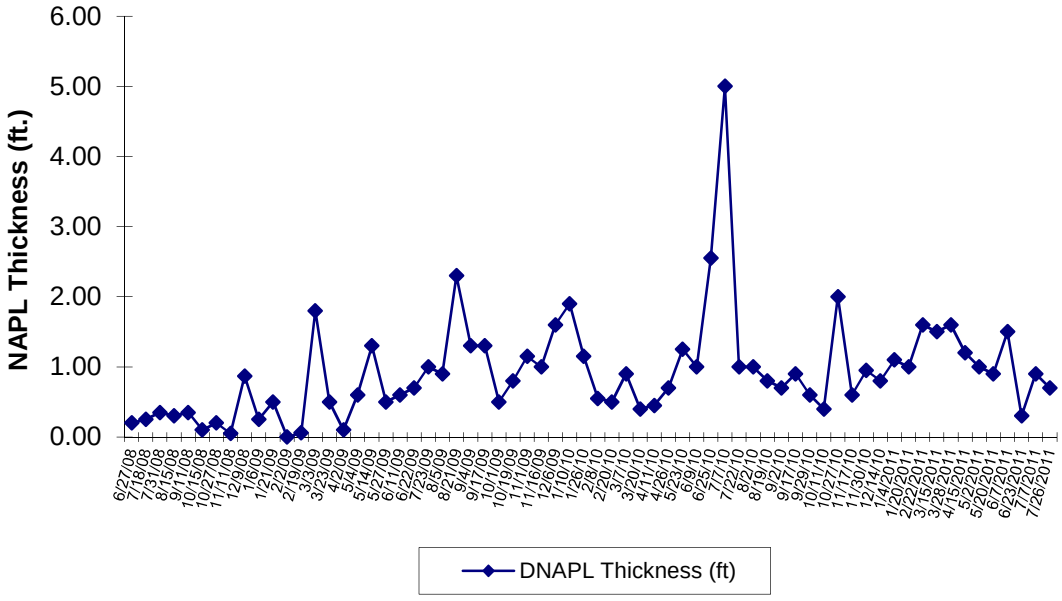
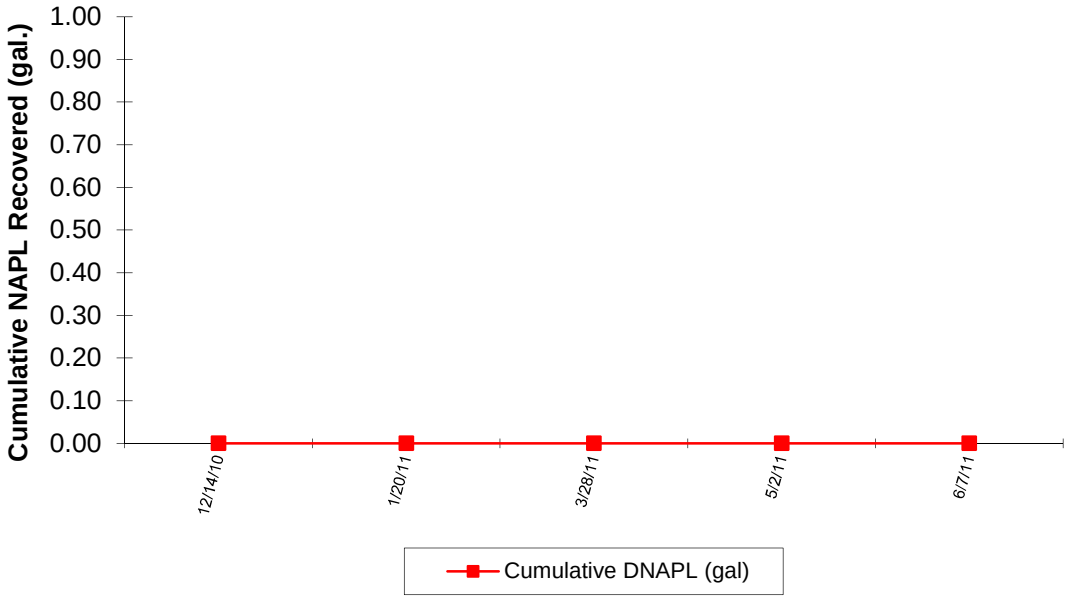


FIGURE 9T
Well IPR-07 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



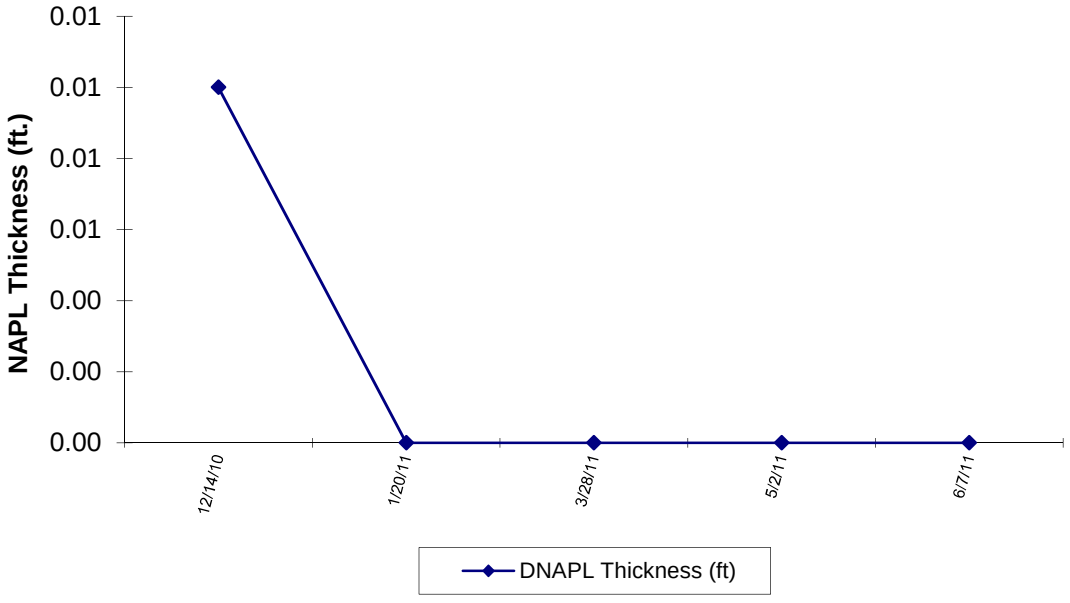
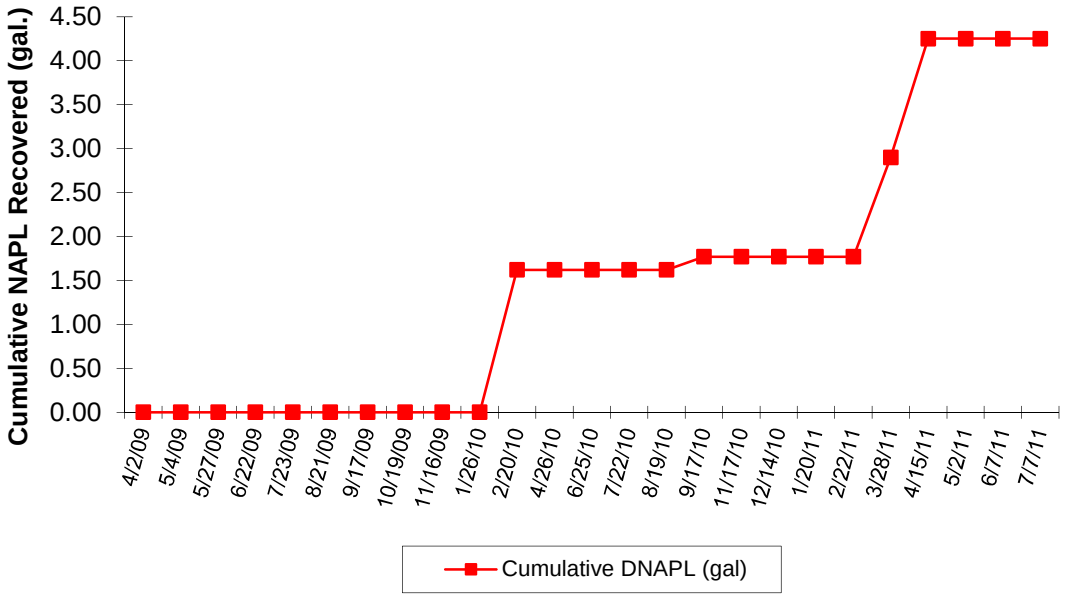


FIGURE 9U
Well IPR-09 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



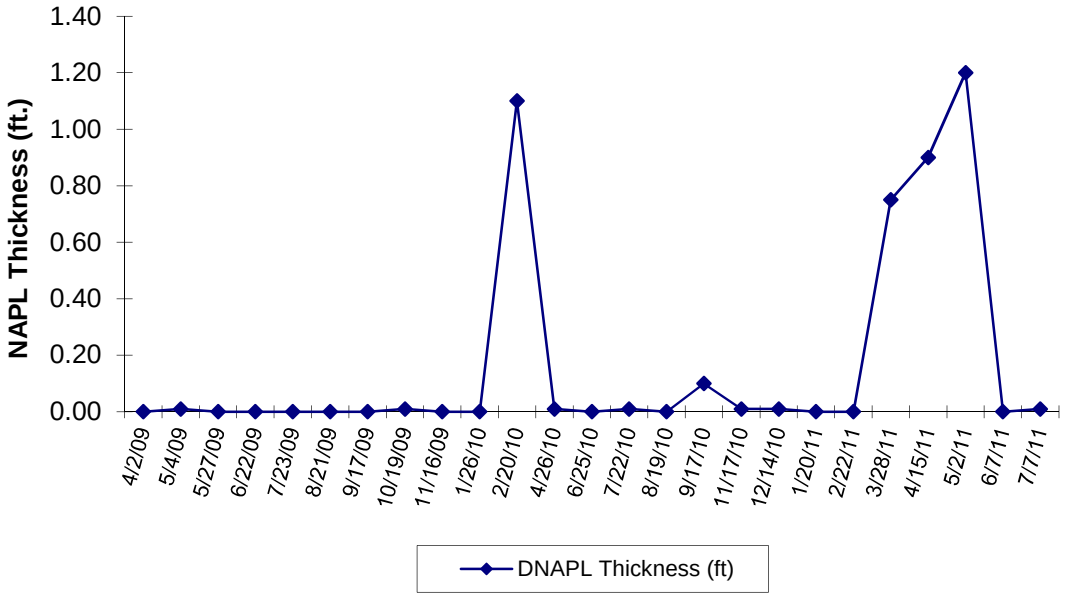
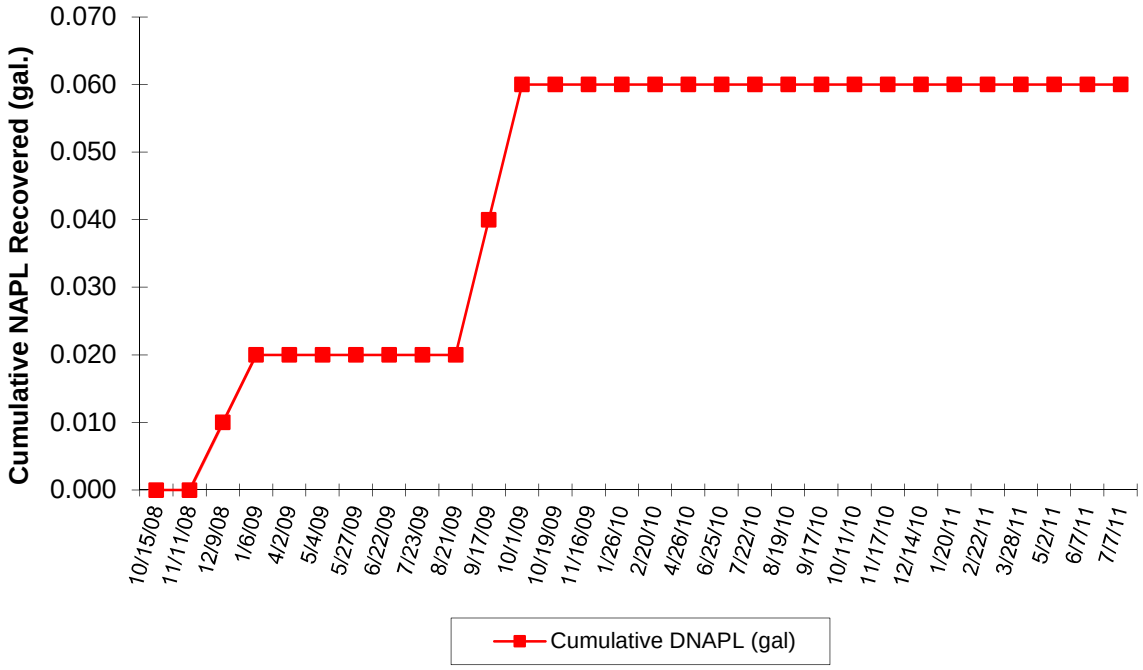


FIGURE 9V
Well IPR-12A NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



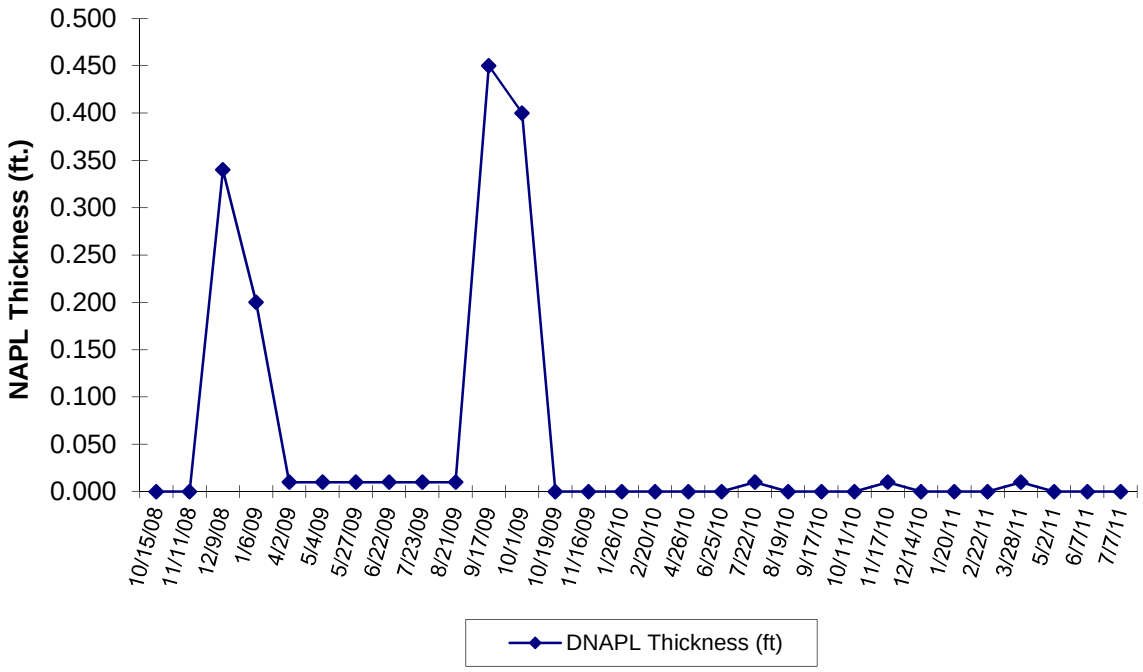
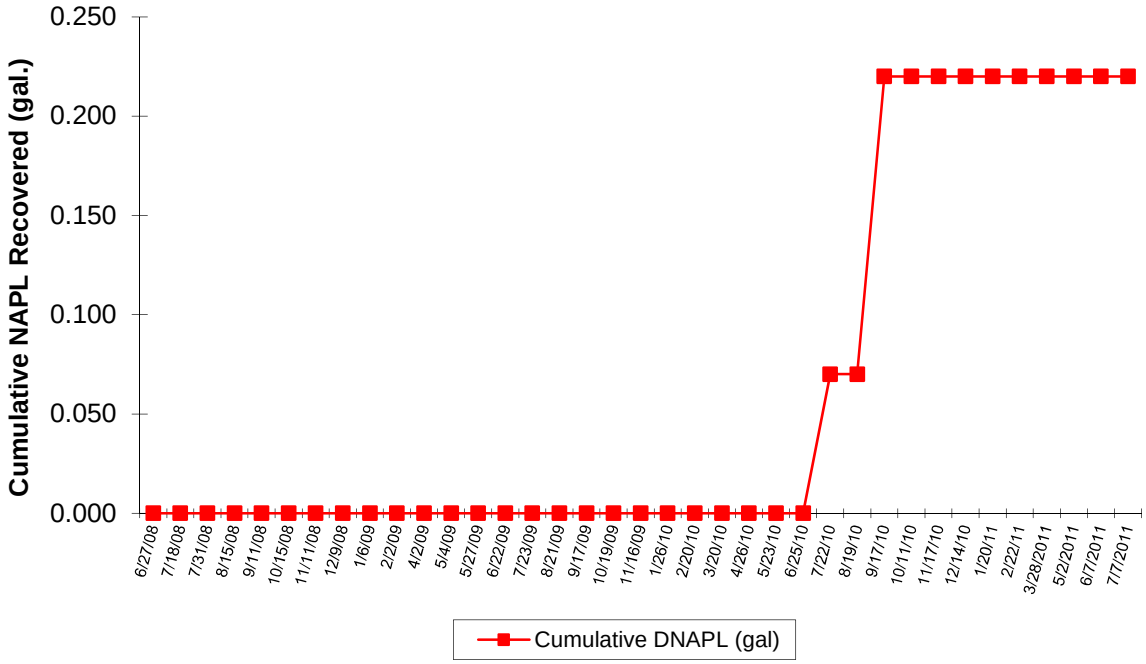


FIGURE 9W
Well IPR-15 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



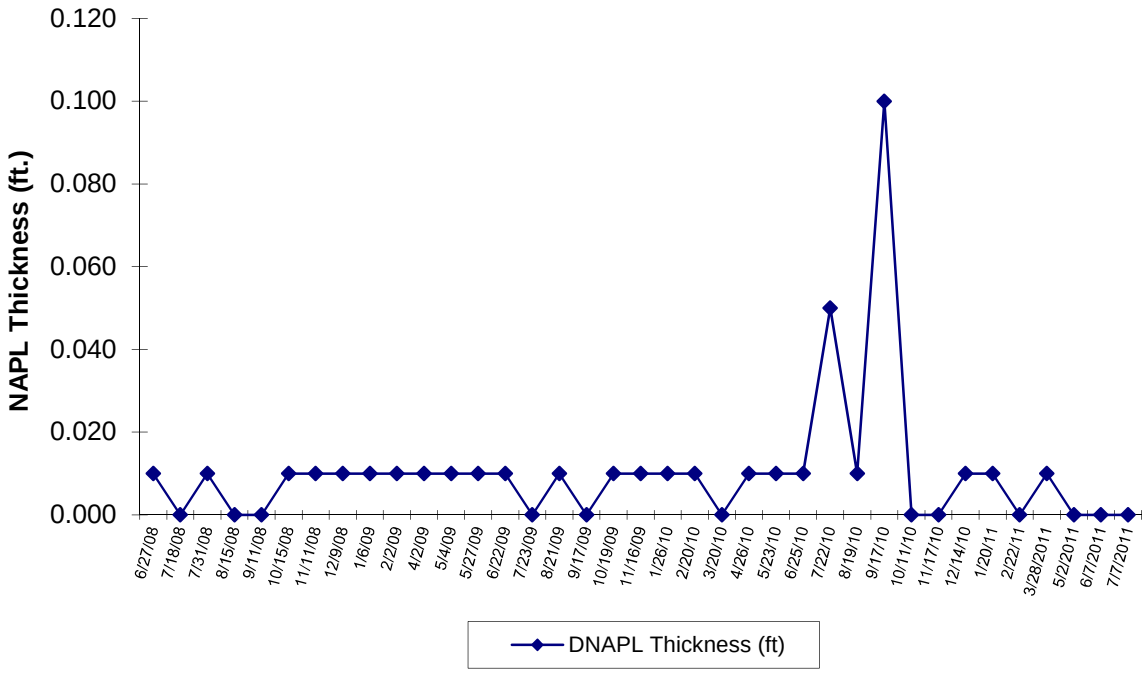
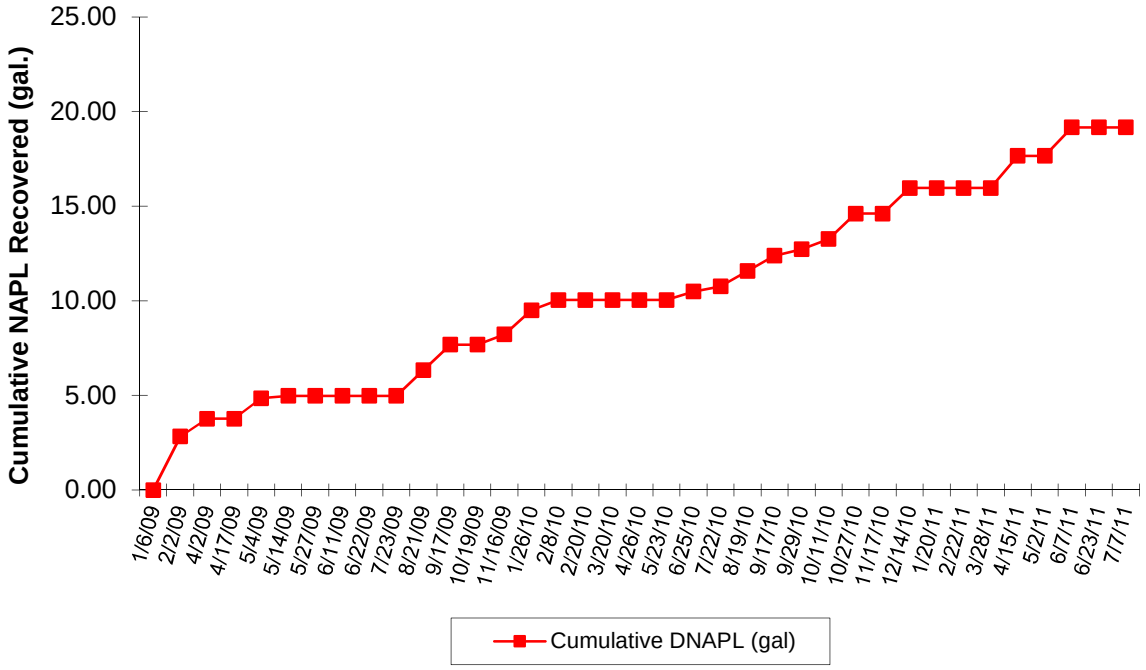


FIGURE 9X
Well IPR-16 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



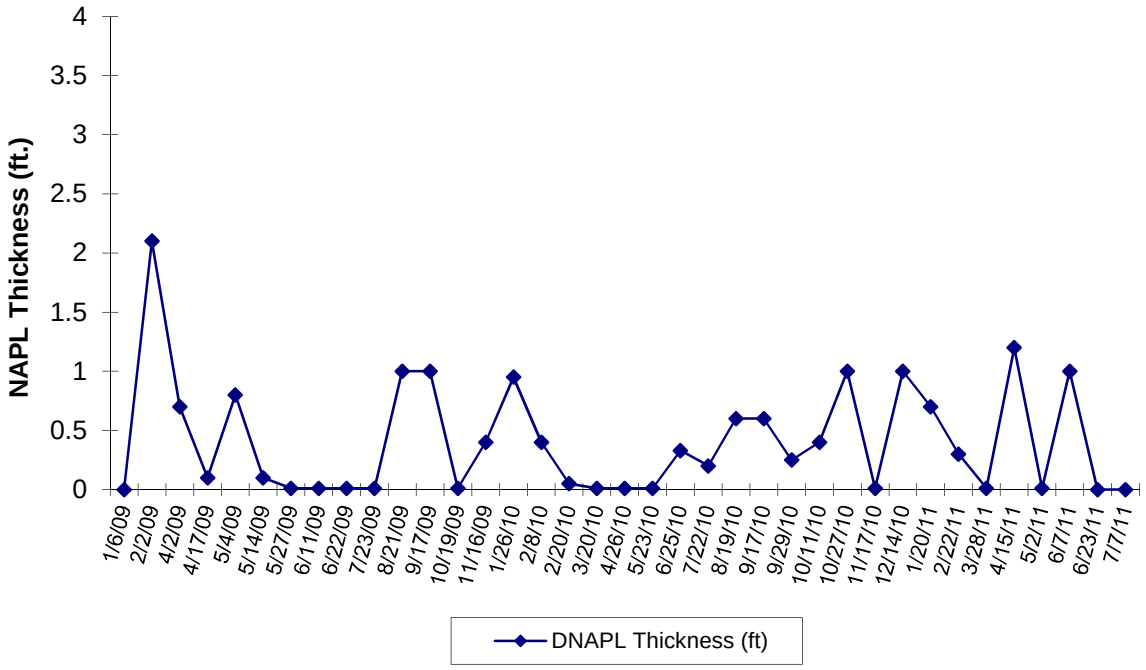
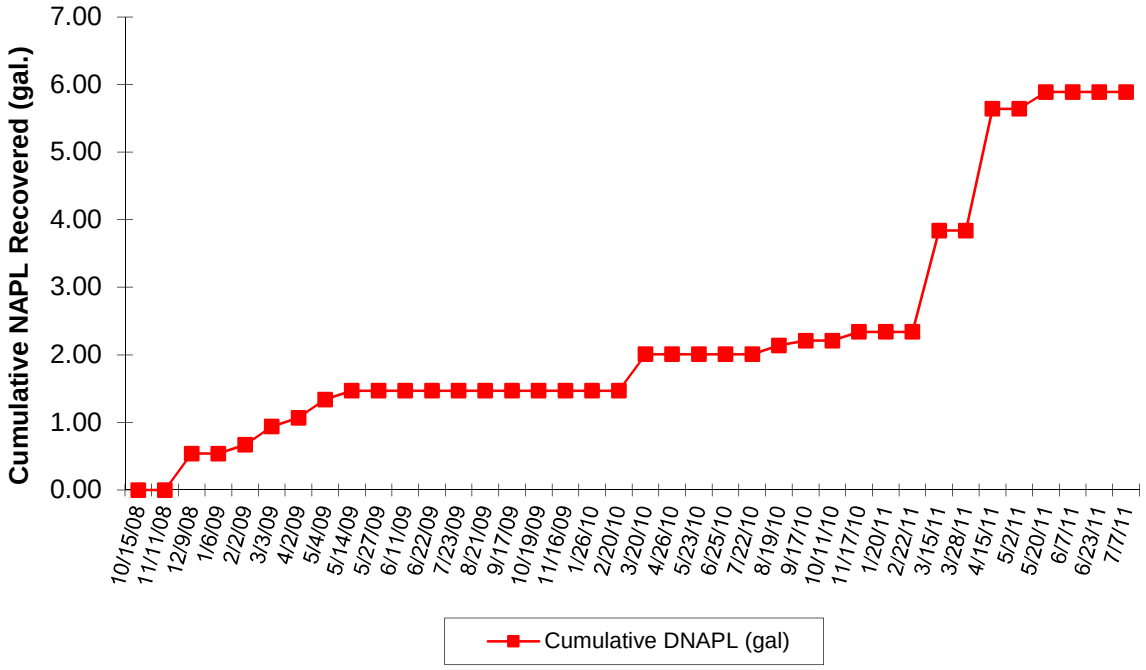


FIGURE 9Y
Well IPR-17 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



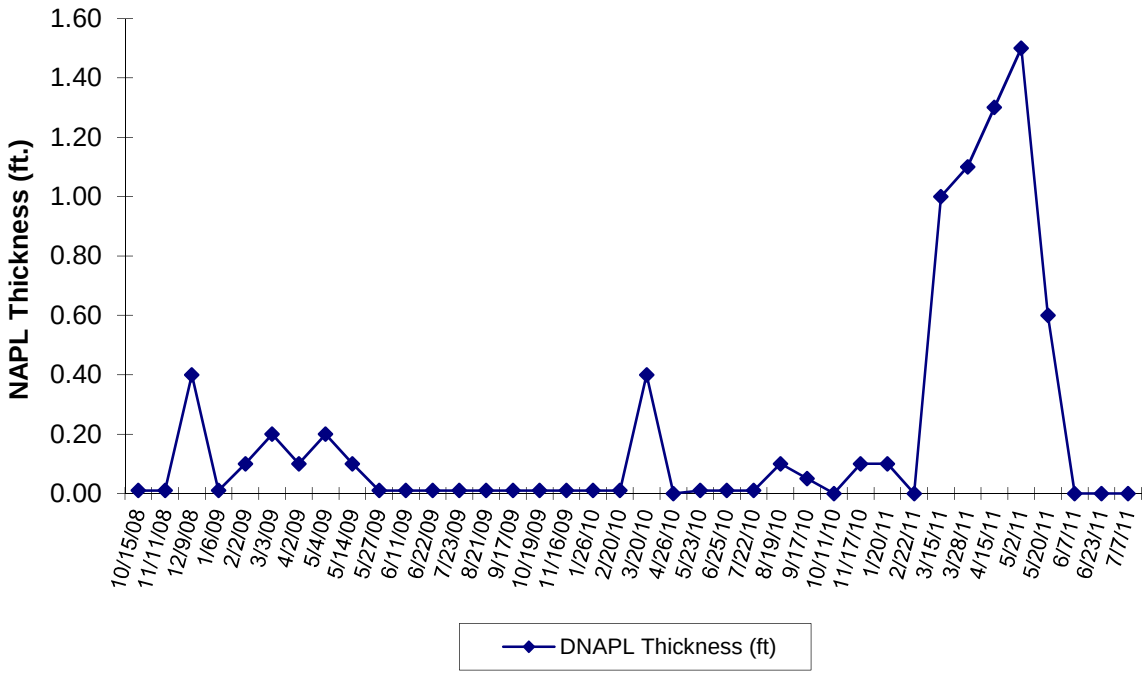
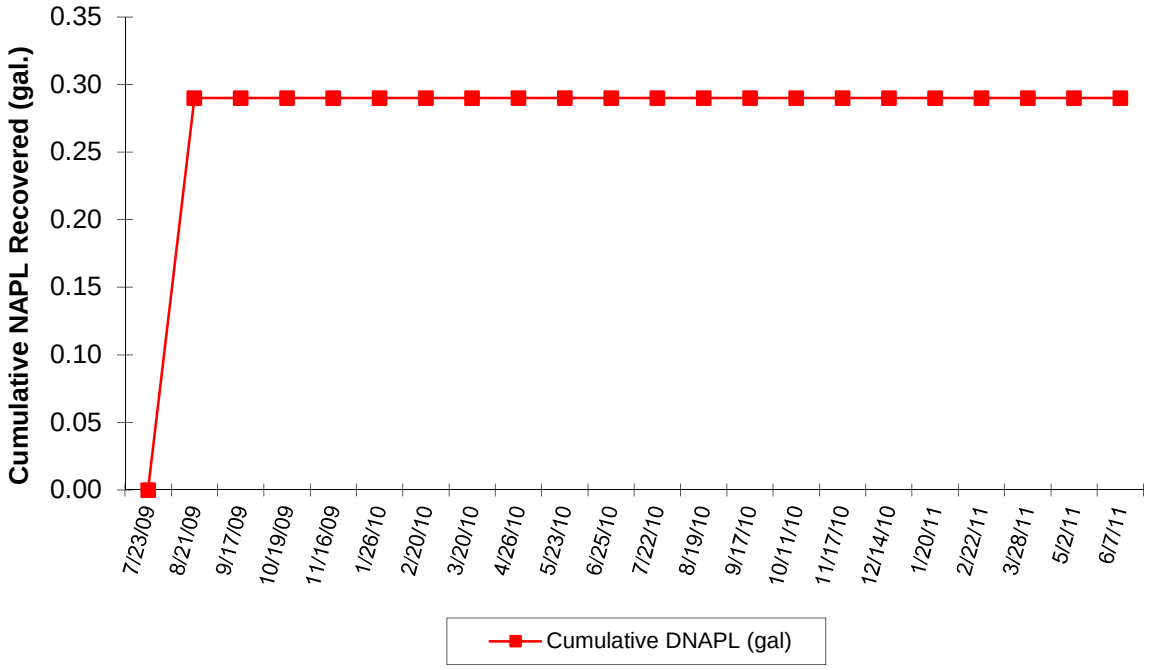


FIGURE 9Z
Well IPR-18 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



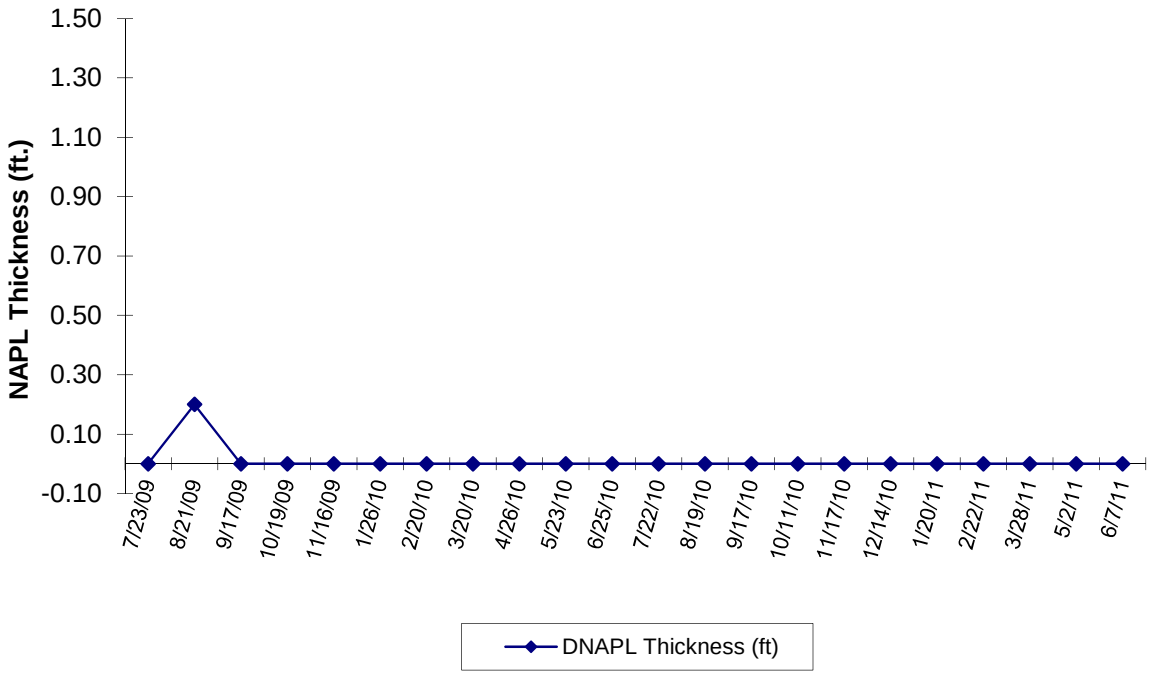
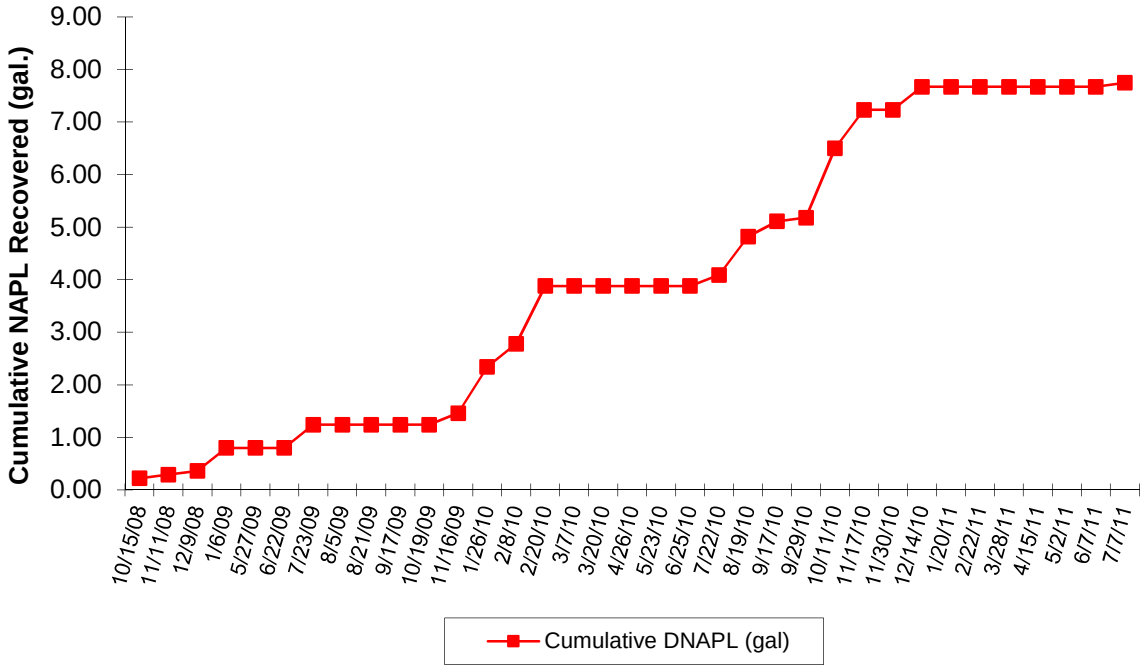


FIGURE 9AA
Well IPR-20 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



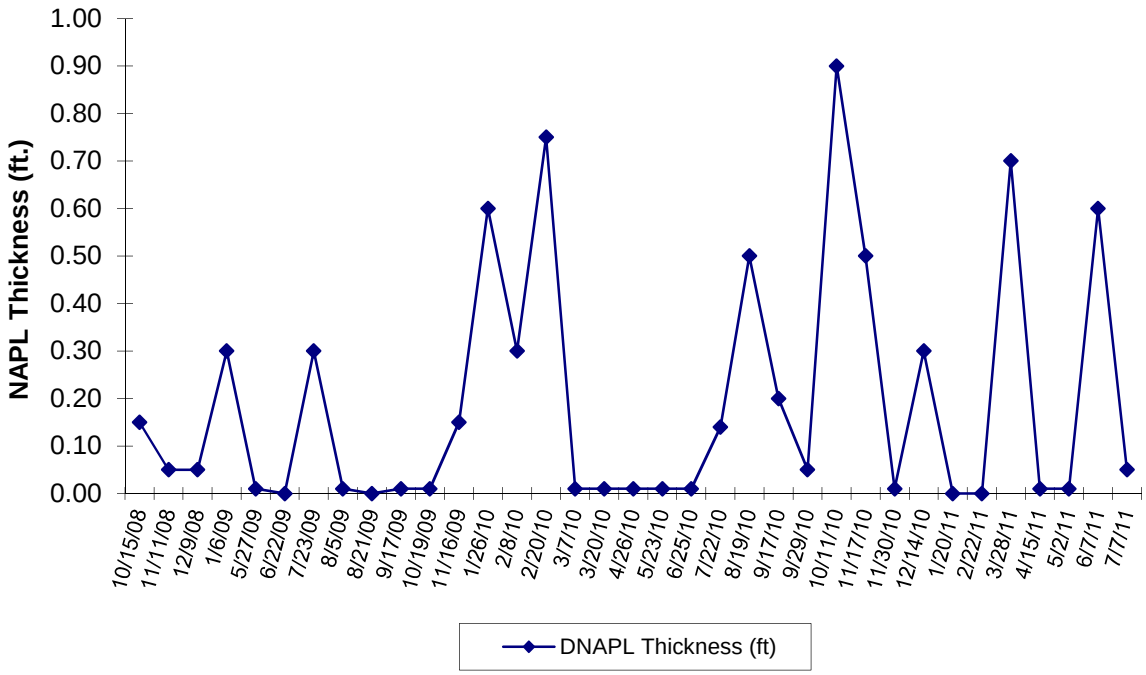
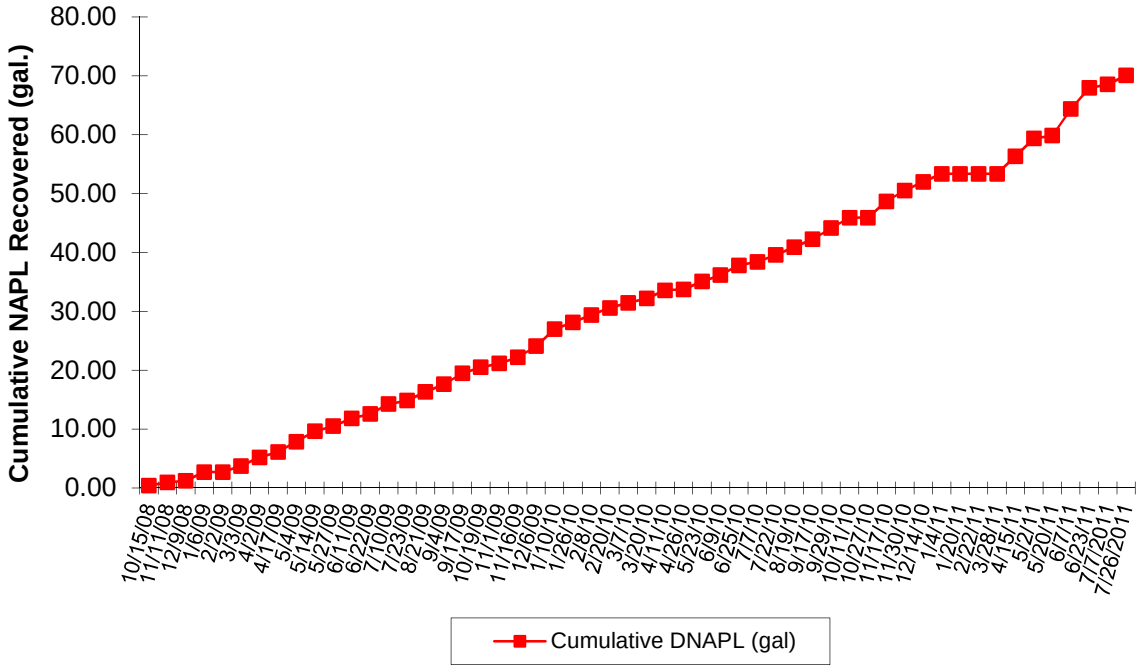


FIGURE 9AB
Well IPR-21 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



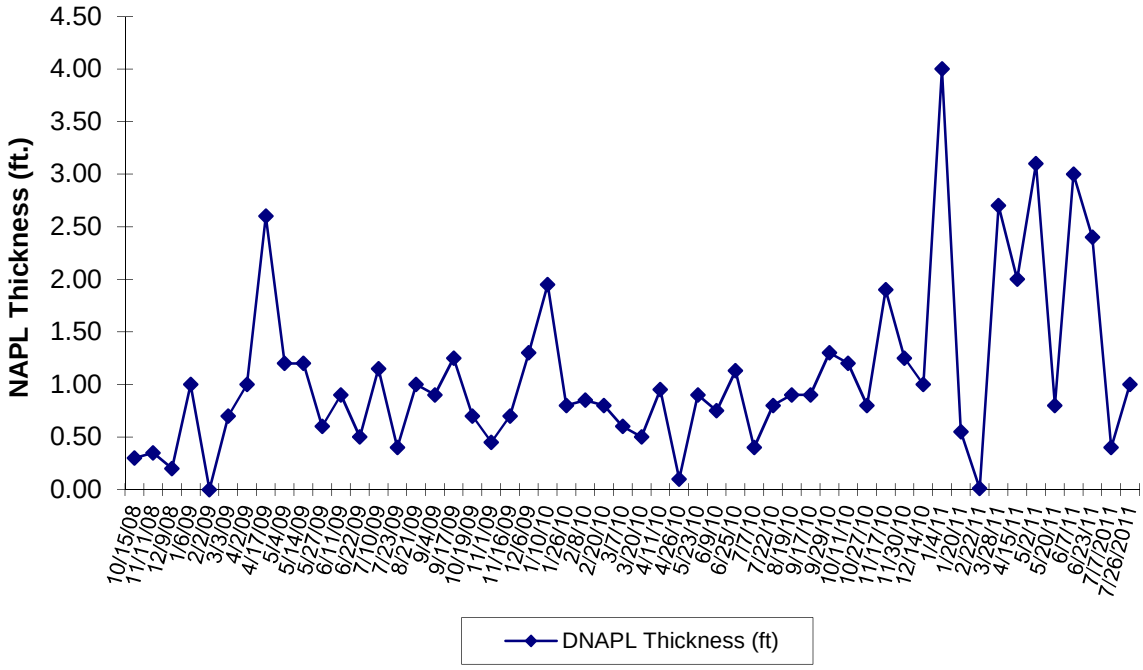
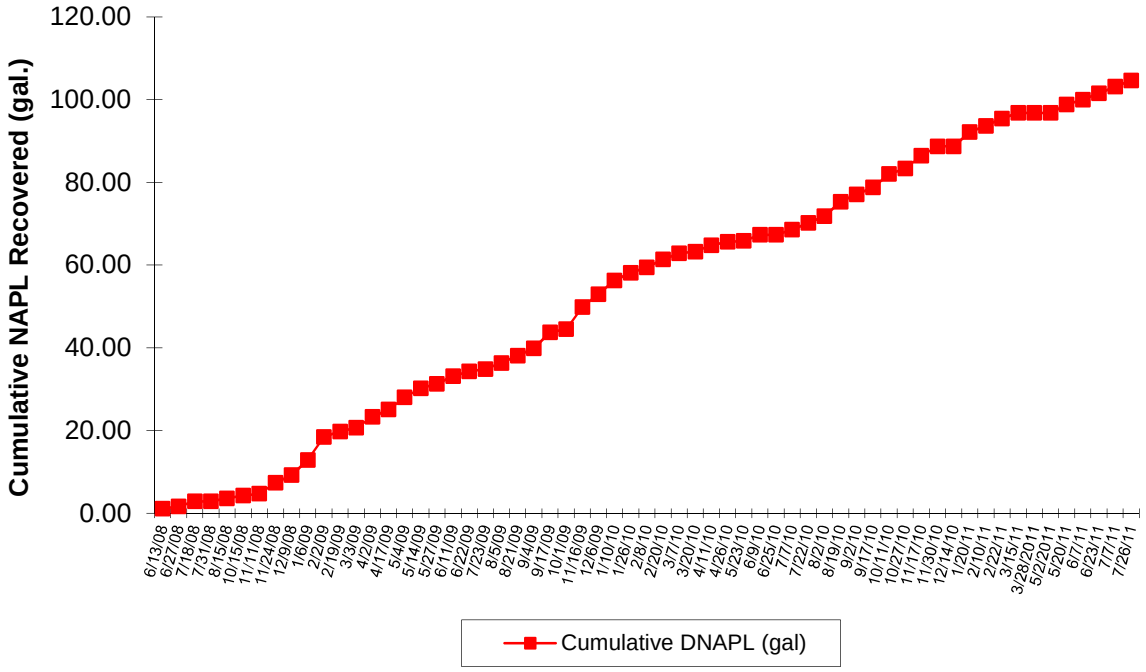


FIGURE 9AC
Well IPR-22 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



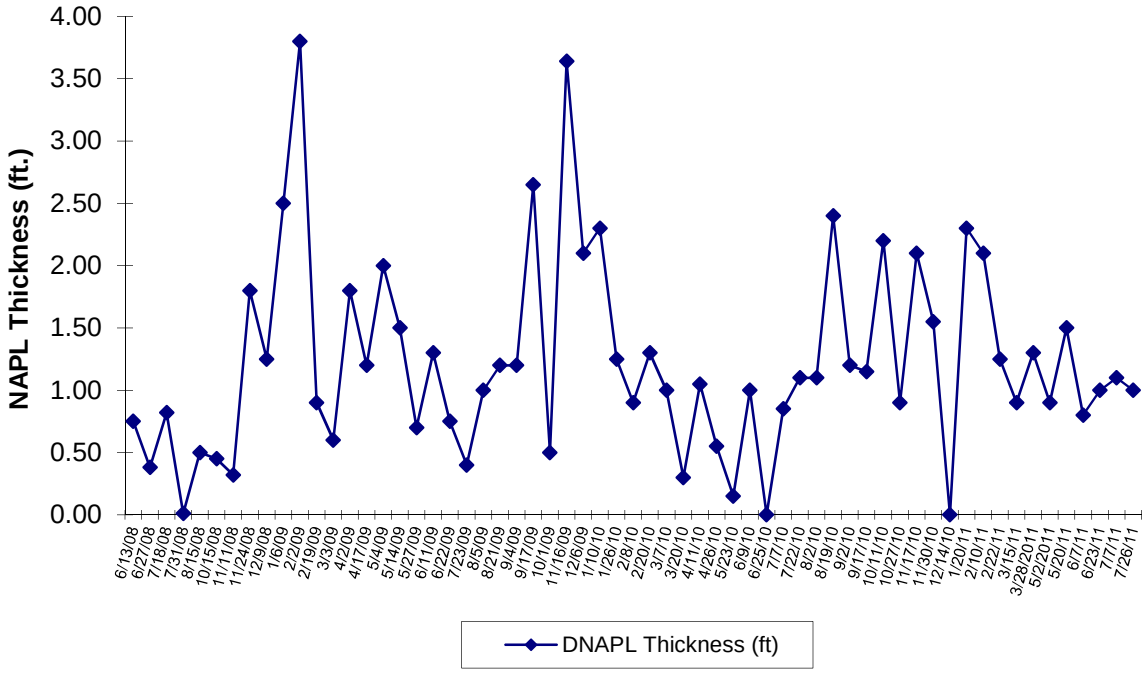
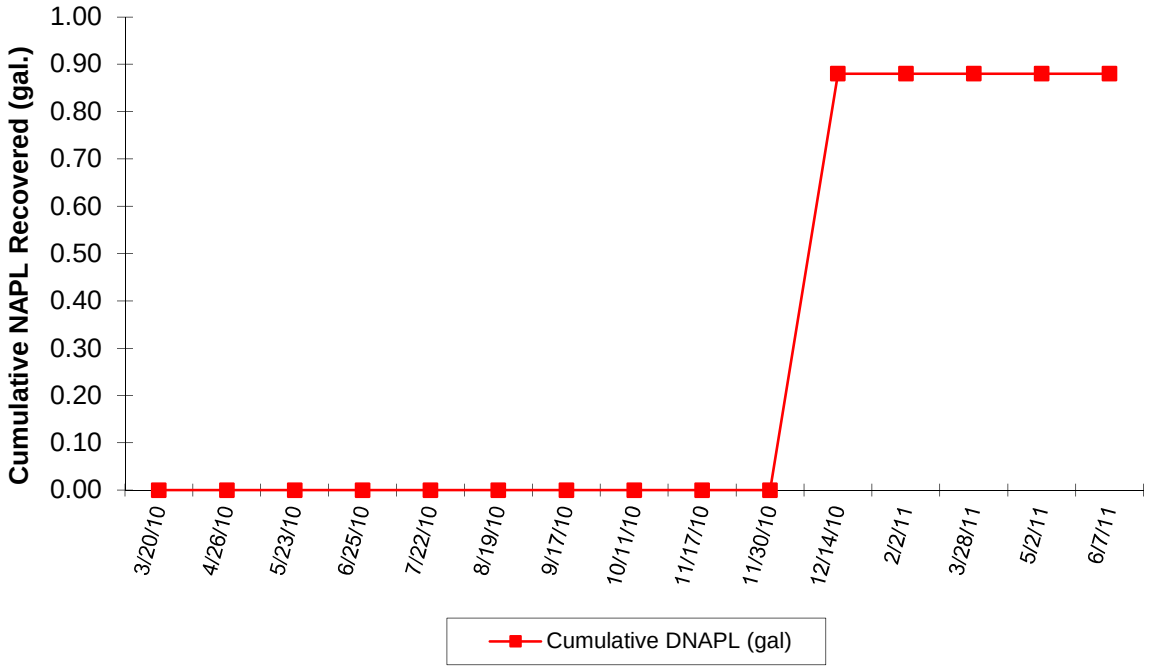


FIGURE 9AD
Well IPR- 23 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



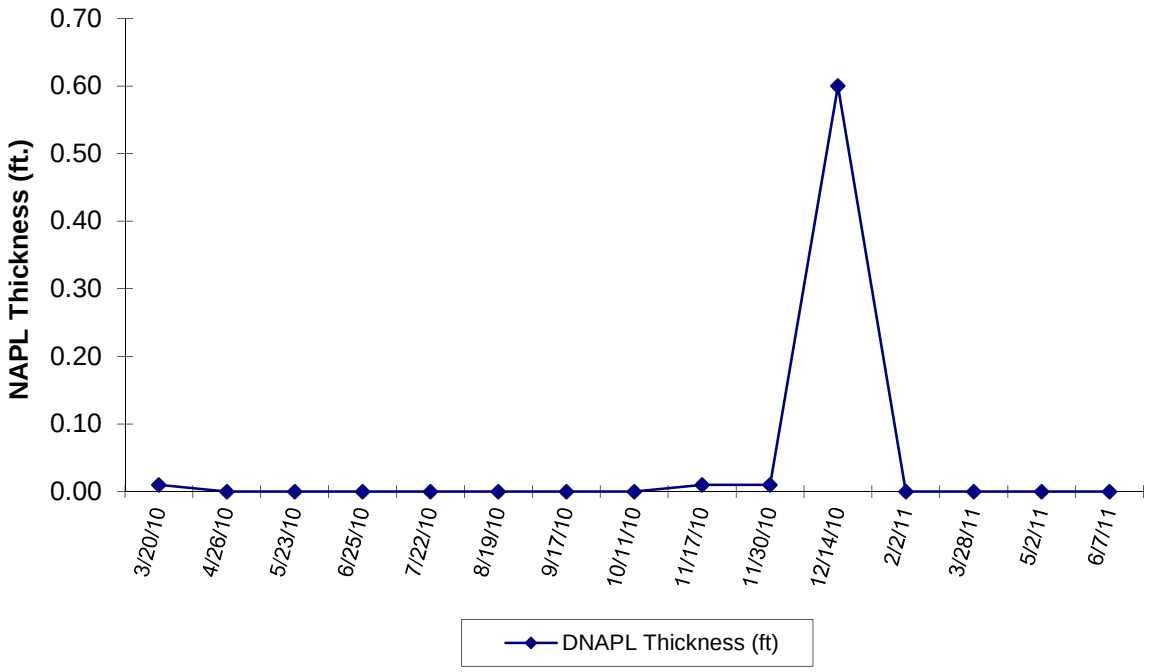
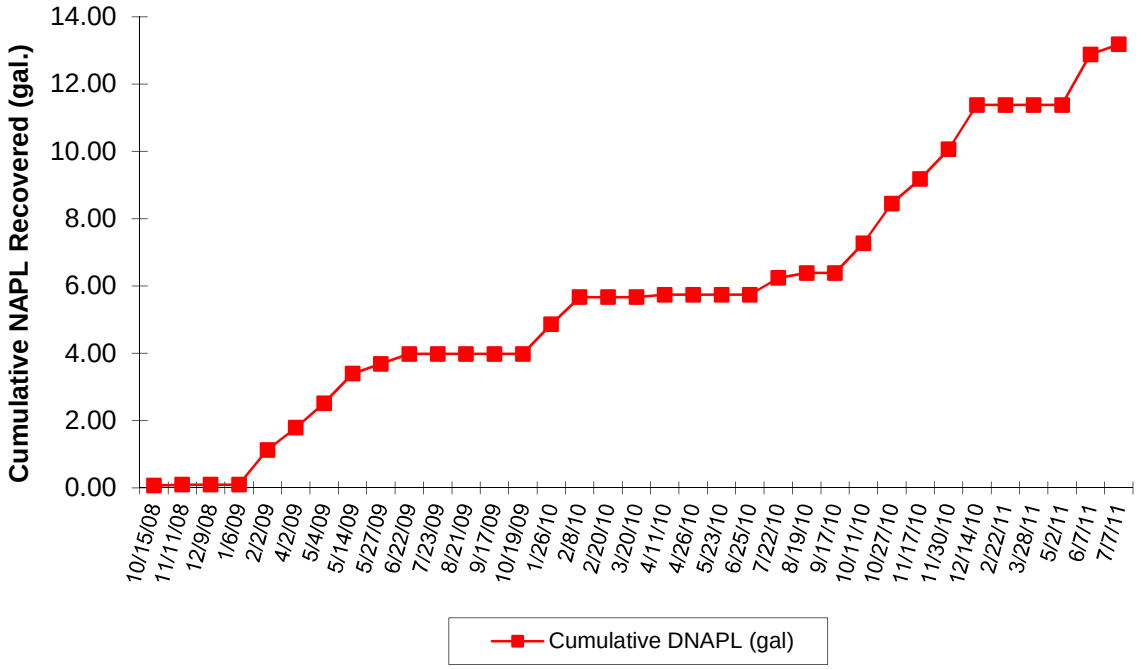


FIGURE 9AE
Well IPR-24 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



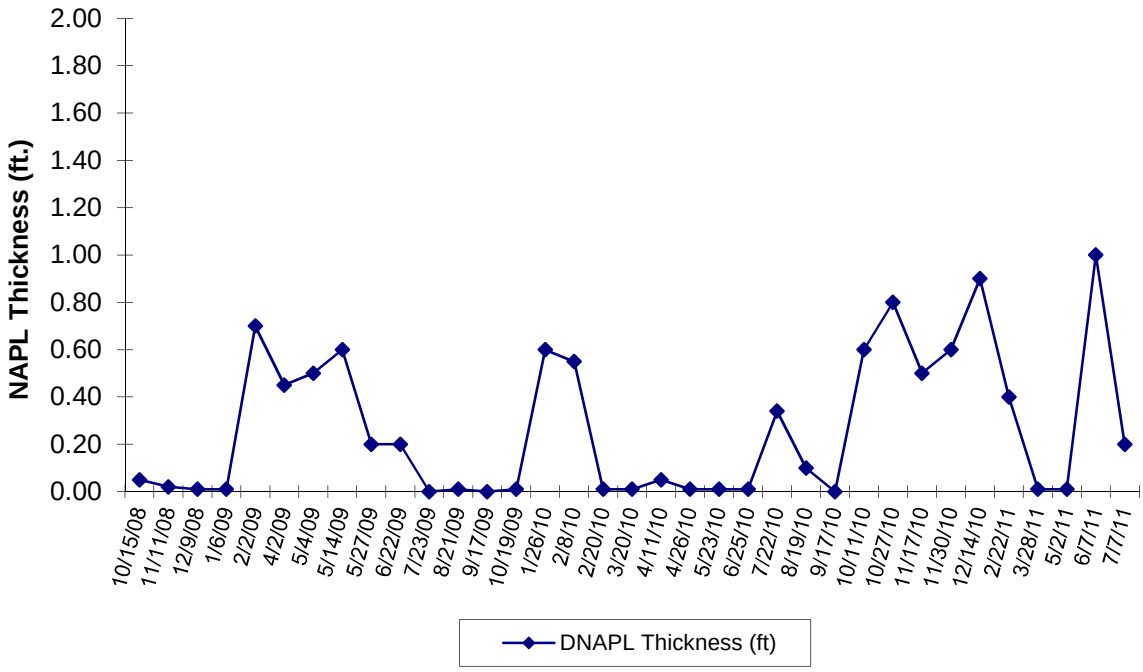
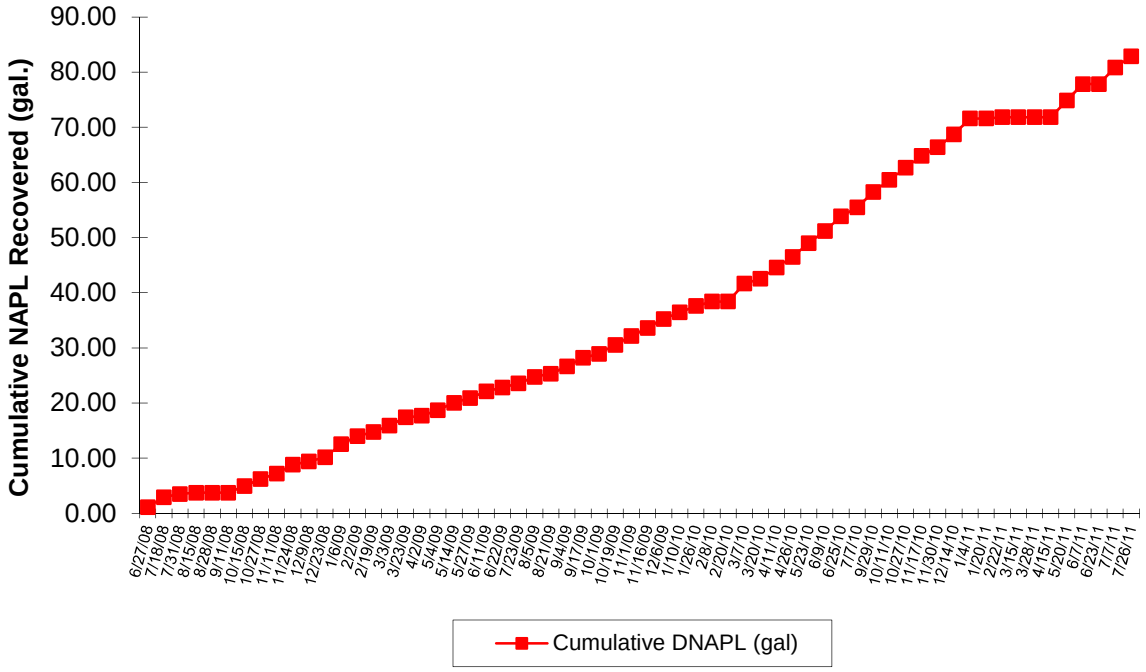


FIGURE 9AF
Well IPR-25 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



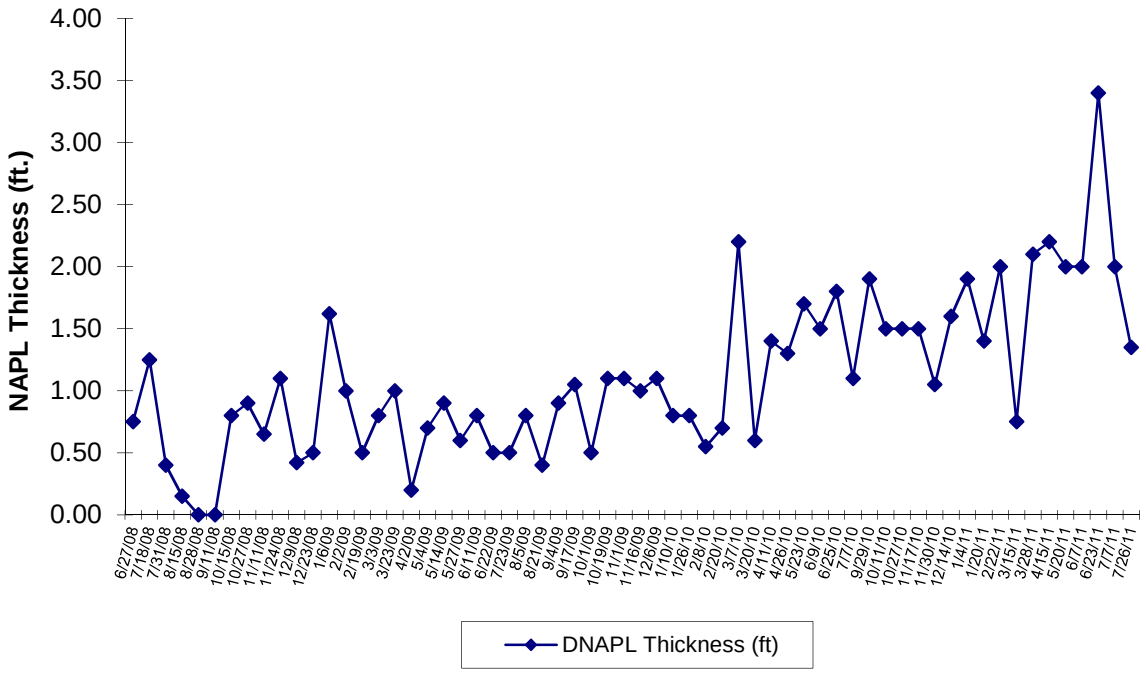
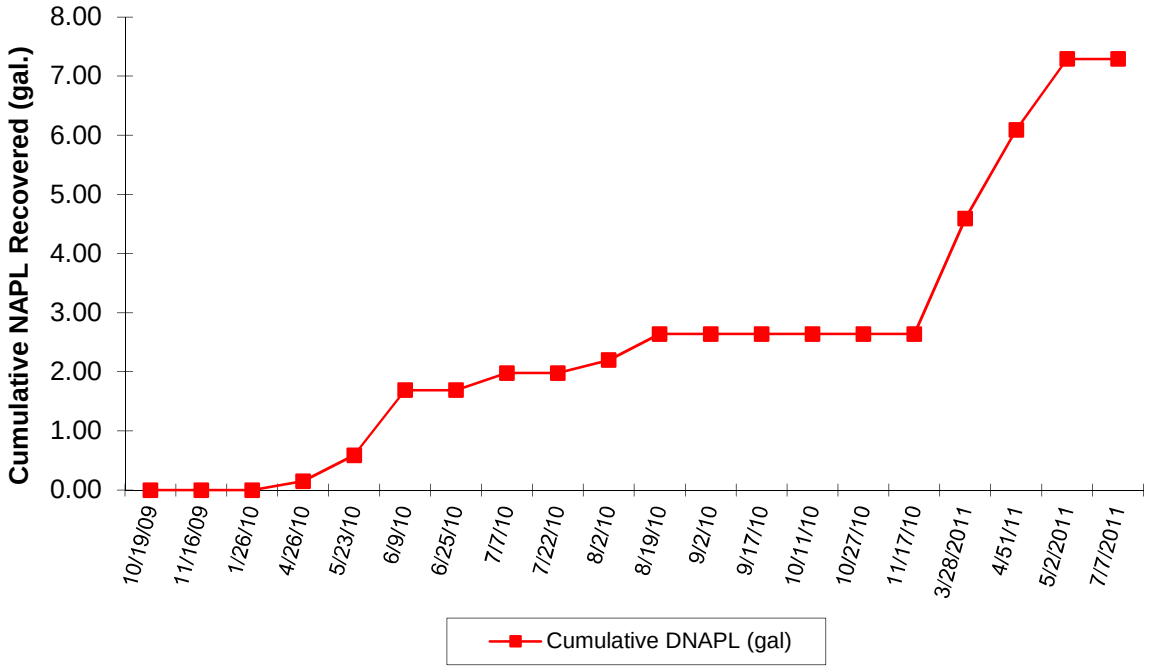


FIGURE 9AG
Well IPR-26 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



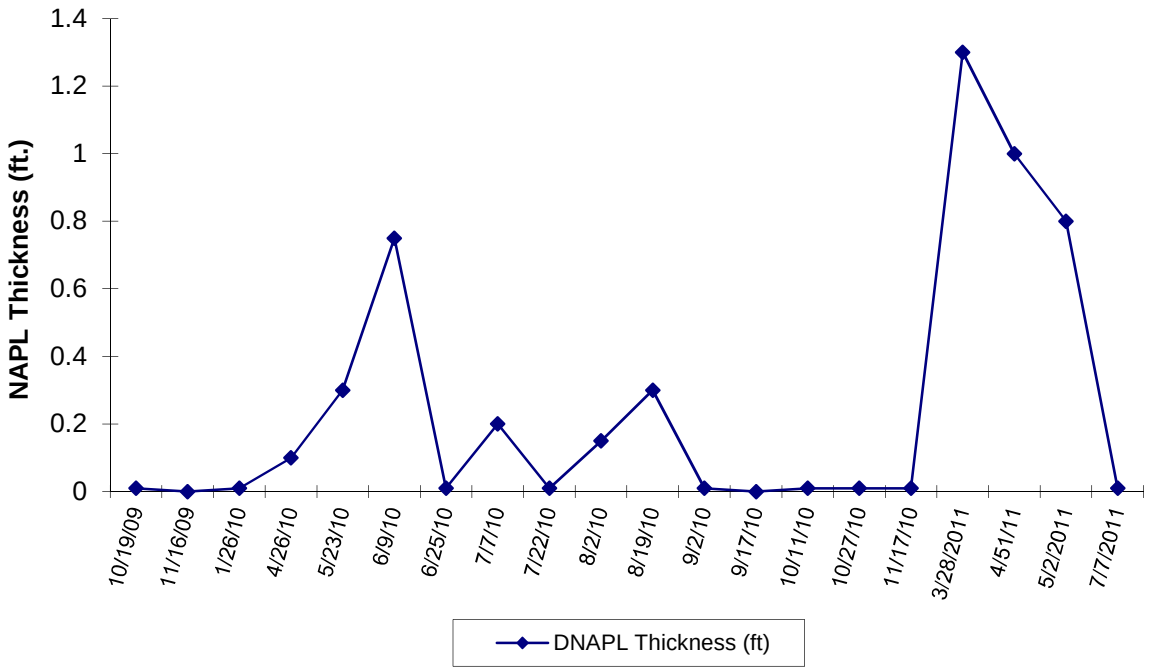
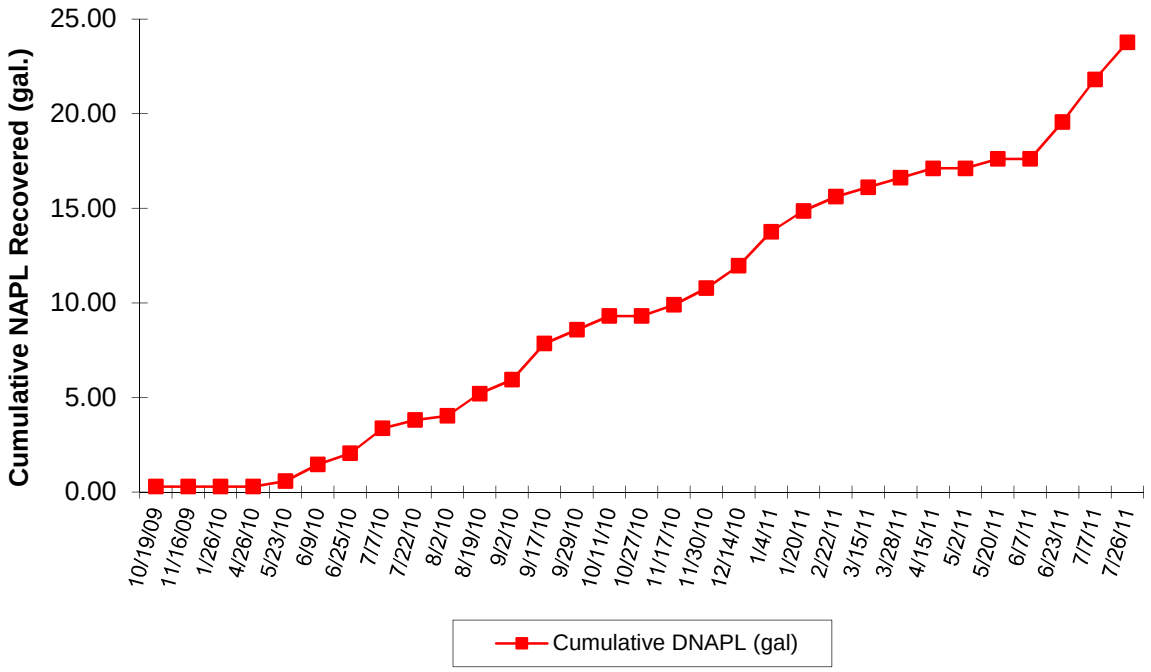


FIGURE 9AH
Well IPR-27 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



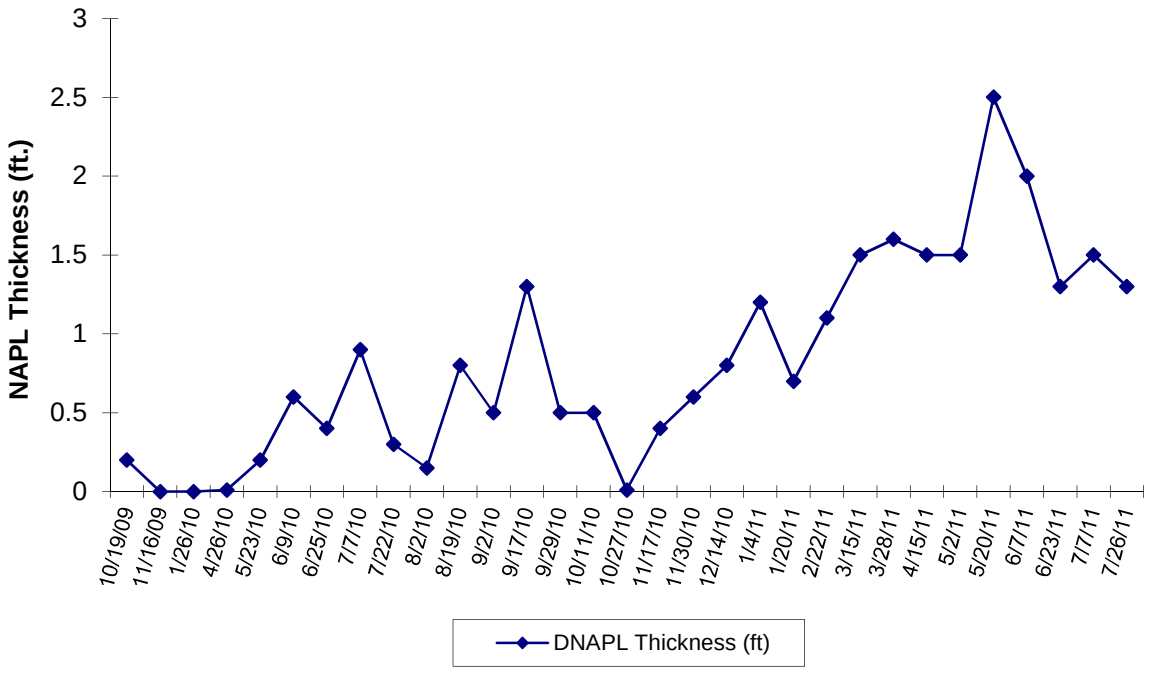
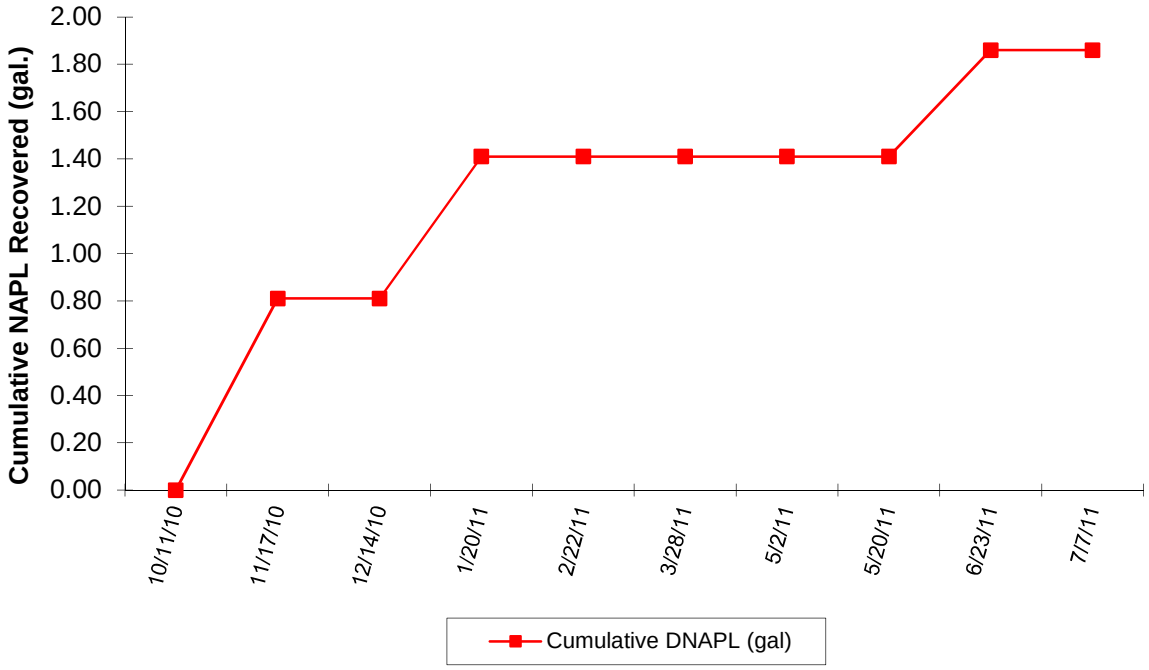


FIGURE 9AI
Well IPR-28 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



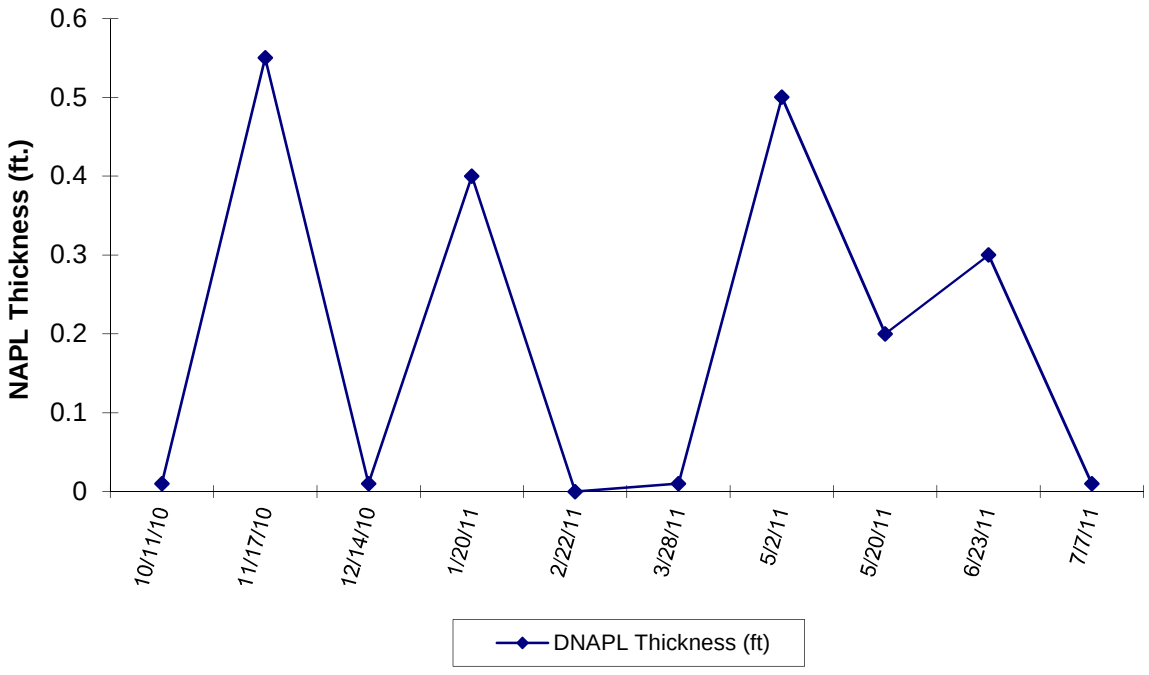
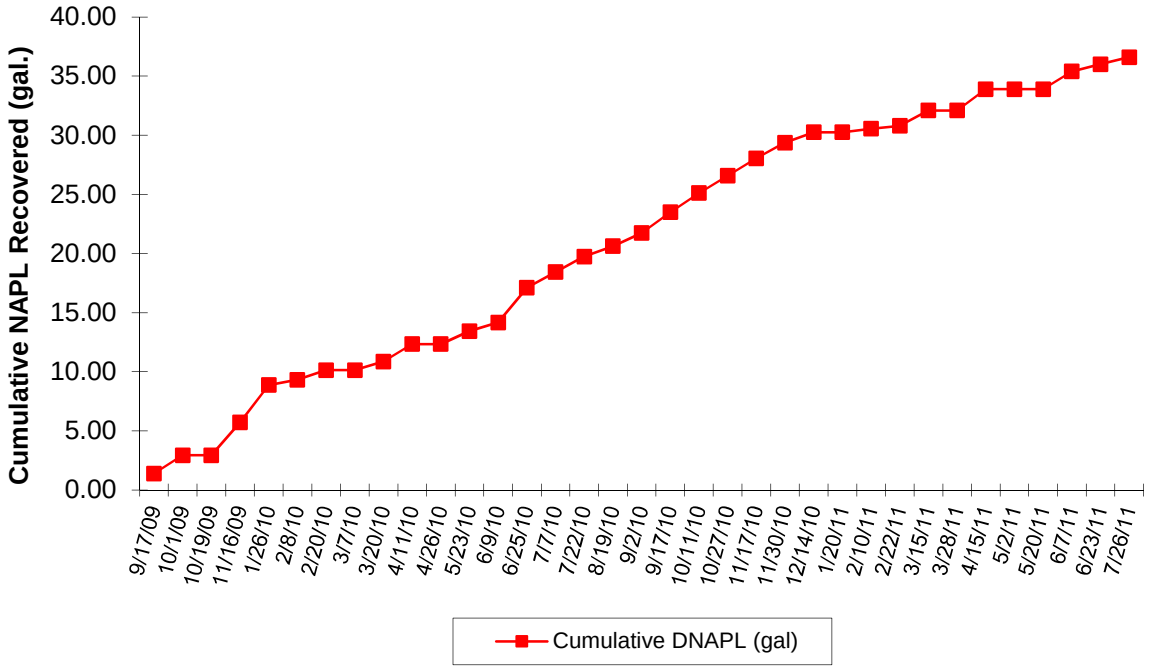


FIGURE 9AJ
Well IPR-29 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



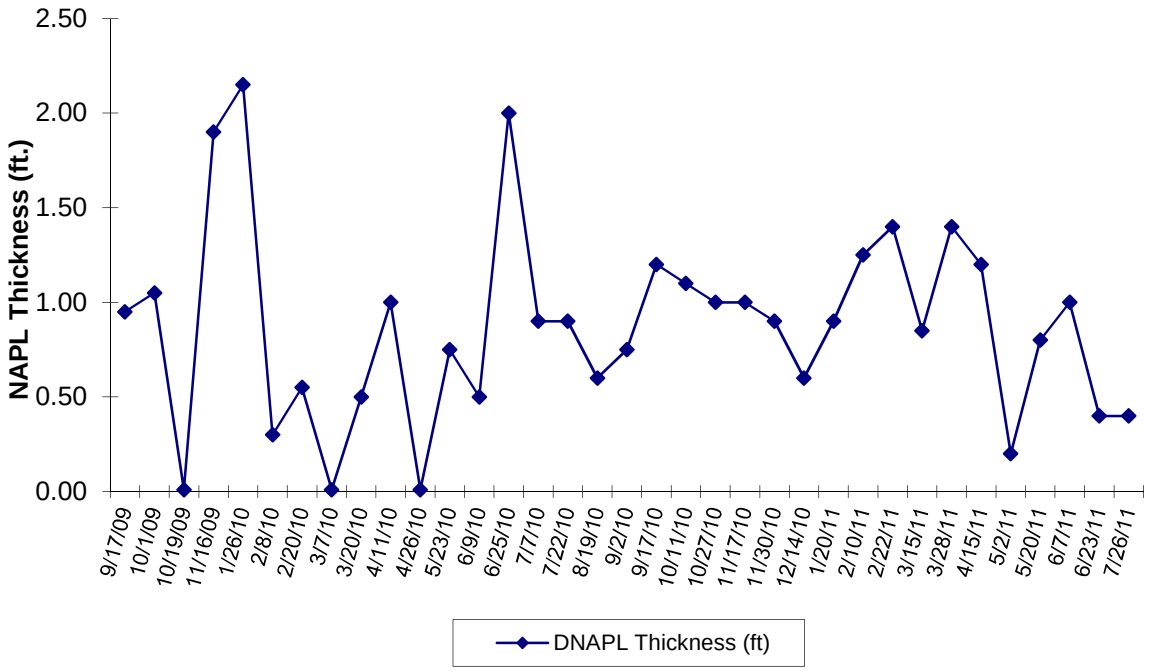
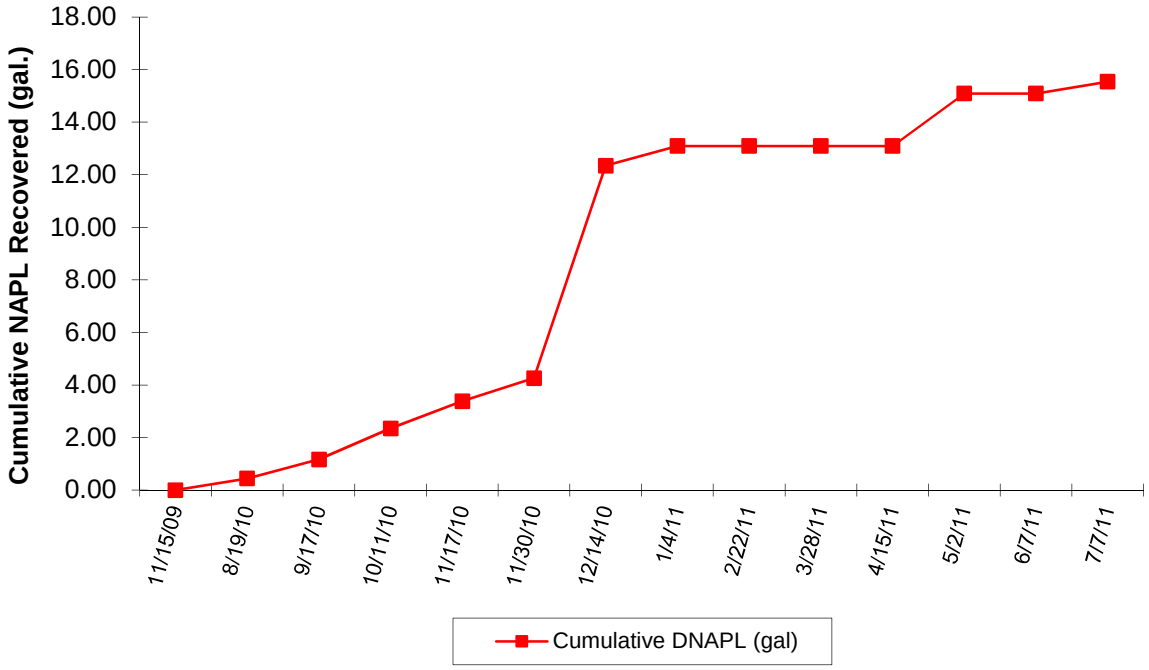
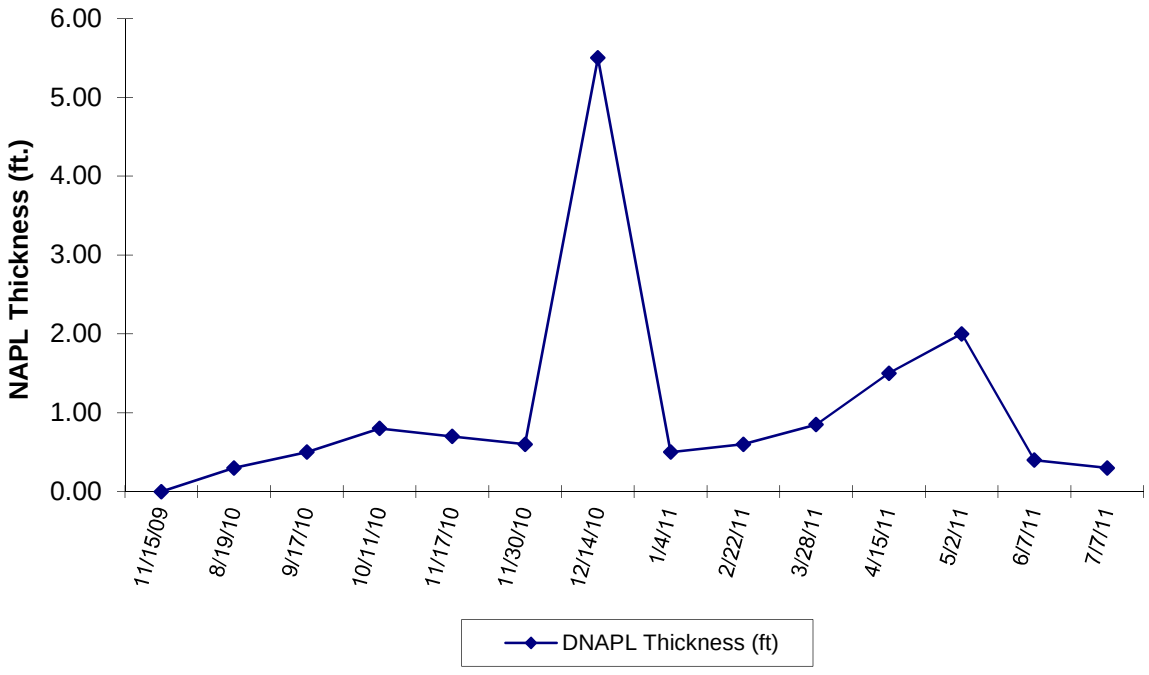


FIGURE 9AK
Well IPR-30 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site





APPENDIX A

DATA USABILITY SUMMARY REPORT

(Provided in Electronic Format Only)

APPENDIX A

DATA USABILITY SUMMARY REPORT

THIRD 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

NOVEMBER 2011

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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 twenty-two (22) groundwater samples, two (2) field duplicates, one (1) matrix spike/matrix spike duplicate (MS/MSD) pair, and three (3) trip blanks collected by URS personnel from September 21-28, 2011 are discussed in this DUSR. The samples were collected as part of the 2011 third 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 (i.e., 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 qualification of the data was not necessary.

- The cooler temperatures associated with several of the groundwater samples were above 10°C, because there was insufficient time for the affected samples to cool down during transit to the laboratory. The lab noted that ice was present in the coolers. The samples arrived at the laboratory within 1 hour of being relinquished by the field technician to the lab courier.

- No trip blanks were collected on 09/21-22/11. Since trip blanks have not historically exhibited BTEX contamination, this non-conformance does not adversely affect the usability of the data.
- Field duplicate DUP092611 was not documented on the COC. However, the lab did receive appropriately labeled sample containers and proceeded with the analyses accordingly.
- For sample HIMW-013I, the sample ID was not documented on one of the VOC vials.
- For field duplicate DUP092811, the collection time on the COC was documented incorrectly (i.e., 17:00). It should have been documented at a time chronologically before 15:56 (time samples were relinquished by the field technician to the lab courier), or at 00:00.

All samples were analyzed within the required holding times.

V. NON-CONFORMANCES

There were no non-conformances that affected the usability of the data.

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.

Field duplicates were collected from monitoring well locations HIMW-13S (DUP092811) and HIMW-022 (DUP092611), 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. URS does not recommend the re-collection of any samples at this time.

Prepared By: Peter R. Fairbanks **Date:** 11/3/11

Peter R. Fairbanks, Senior Chemist

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

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-003S	HIMW-005D	HIMW-005I	HIMW-005S	HIMW-008D
Sample ID			HIMW-03S	HIMW-5D	HIMW-5I	HIMW-5S	HIMW-8D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/28/11	09/27/11	09/27/11	09/27/11	09/29/11
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Benzene	UG/L	-	1 U	2	4	1 U	1 U
Ethylbenzene	UG/L	-	1 U	1 U	3	1 U	1 U
Toluene	UG/L	-	1 U	2	2	1 U	1 U
Xylene (total)	UG/L	-	1 U	170	150	1 U	1 U
Total BTEX	UG/L	100	ND	174	159	ND	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	140 DJ	370 DJ	10 U	10 U
Acenaphthene	UG/L	-	10 U	3 J	11	10 U	10 U
Acenaphthylene	UG/L	-	10 U	52	180 DJ	10 U	10 U
Anthracene	UG/L	-	10 U	10 U	2 J	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 U	5 J	22	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	-	10 U	1,200 D	1,900 D	10 U	10 U
Phenanthrene	UG/L	-	10 U	10 U	14	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	1,400	2,499	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.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Made By_PRF 10/21/11_; Checked By_GEK 11/03/11_

Detection Limits shown are PQL

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[LOGDATE] >= #9/21/2011# AND [MATRIX] = 'WG'

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

Location ID			HIMW-008I	HIMW-008S	HIMW-012D	HIMW-012I	HIMW-012S
Sample ID			HIMW-8I	HIMW-8S	HIMW-12D	HIMW-12I	HIMW-12S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/27/11	09/28/11	09/29/11	09/21/11	09/21/11
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Benzene	UG/L	-	1 U	1	1 U	60	1 U
Ethylbenzene	UG/L	-	1 U	1 U	1 U	8	1 U
Toluene	UG/L	-	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	-	1 U	2	1 U	21	1 U
Total BTEX	UG/L	100	ND	3	ND	89	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	-	10 U	10 U	10 U	45	10 U
Acenaphthylene	UG/L	-	10 U	4 J	10 U	48	10 U
Anthracene	UG/L	-	10 U	1 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	1 J	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	2 J	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 U	10 U	10 U	25	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	1 J	10 U	10 U	10 U
Naphthalene	UG/L	-	10 U	10 U	10 U	9 J	10 U
Phenanthrene	UG/L	-	10 U	10 U	10 U	9 J	10 U
Pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	ND	9	ND	136	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.

D - Result reported from a secondary dilution analysis.

Made By_PRF 10/21/11_; Checked By_GEK 11/03/11_

Detection Limits shown are PQL

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[LOGDATE] >= #9/21/2011# AND [MATRIX] = 'WG'

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

Location ID			HIMW-013D	HIMW-013I	HIMW-013S	HIMW-013S	HIMW-014I
Sample ID			HIMW-13D	HIMW-13I	DUP092811	HIMW-13S	HIMW-14I
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/26/11	09/26/11	09/28/11	09/28/11	09/22/11
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Volatile Organic Compounds							
Benzene	UG/L	-	4	86	1 U	1 U	22
Ethylbenzene	UG/L	-	1 U	2	1 U	1 U	2
Toluene	UG/L	-	1 U	1	1 U	1 U	1 U
Xylene (total)	UG/L	-	2	7	1 U	1 U	4
Total BTEX	UG/L	100	6	96	ND	ND	28
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	-	6 J	6 J	10 U	10 U	18
Acenaphthylene	UG/L	-	13	48	10 U	10 U	22
Anthracene	UG/L	-	10 U	1 J	10 U	10 U	2 J
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 U	7 J	10 U	10 U	9 J
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	10 U	10 U	10 U
Phenanthrene	UG/L	-	10 U	13	10 U	10 U	10
Pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	19	75	ND	ND	61

*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.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Made By_PRF 10/21/11_; Checked By_GEK 11/03/11_

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-015D	HIMW-015I	HIMW-020I	HIMW-020S	HIMW-022
Sample ID			HIMW-15D	HIMW-15I	HIMW-20I	HIMW-20S	DUP092611
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/22/11	09/21/11	09/26/11	09/29/11	09/26/11
Parameter	Units	Criteria*					Field Duplicate (1-1)
Volatile Organic Compounds							
Benzene	UG/L	-	1 U	25	6	1 U	2
Ethylbenzene	UG/L	-	1 U	1 U	1 U	1 U	1 U
Toluene	UG/L	-	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	-	1 U	2	4	1 U	1 U
Total BTEX	UG/L	100	ND	27	10	ND	2
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	-	10 U	6 J	10 U	10 U	10 U
Acenaphthylene	UG/L	-	10 U	22	2 J	10 U	10 U
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 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 U	10 U	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	-	10 U	10 U	10 U	10 U	10 U
Phenanthrene	UG/L	-	10 U	3 J	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	ND	31	2	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.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Made By_PRF 10/21/11_; Checked By_GEK 11/03/11_

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-022	HIMW-023	HIMW-024	HIMW-025
Sample ID			HIMW-22	HIMW-23	HIMW-24	HIMW-25
Matrix			Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-
Date Sampled			09/26/11	09/22/11	09/28/11	09/28/11
Parameter	**Units**	**Criteria***				
Volatile Organic Compounds						
Benzene	UG/L	-	2	2	430 D	10
Ethylbenzene	UG/L	-	1 U	1 U	110	14
Toluene	UG/L	-	1 U	1 U	40	47
Xylene (total)	UG/L	-	1 U	1 U	320	38
Total BTEX	UG/L	100	2	2	900	109
Semivolatile Organic Compounds						
2-Methylnaphthalene	UG/L	-	10 U	10 U	48	10 U
Acenaphthene	UG/L	-	10 U	10 U	37	10 U
Acenaphthylene	UG/L	-	10 U	2 J	76	1 J
Anthracene	UG/L	-	10 U	10 U	2 J	10 U
Benzo(a)anthracene	UG/L	-	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	-	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	-	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	-	10 U	10 U	10 U	10 U
Chrysene	UG/L	-	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	-	10 U	10 U	10 U	10 U
Fluorene	UG/L	-	10 U	10 U	7 J	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U	10 U	10 U
Naphthalene	UG/L	-	10 U	10 U	710 D	9 J
Phenanthrene	UG/L	-	10 U	10 U	17	10 U
Pyrene	UG/L	-	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	ND	2	897	10

*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.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Made By_PRF 10/21/11_; Checked By_GEK 11/03/11_

Detection Limits shown are PQL

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TABLE A-2
VALIDATED FIELD QC ANALYTICAL RESULTS
NATIONAL GRID - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE

Location ID			FIELDQC	FIELDQC	FIELDQC
Sample ID			TB 092711	TB092811	TB-092911
Matrix			Water Quality	Water Quality	Water Quality
Depth Interval (ft)			-	-	-
Date Sampled			09/27/11	09/28/11	09/29/11
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 U	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.

Made By_PRF 10/21/11_; Checked By_GEK 11/03/11_

Detection Limits shown are PQL

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[LOGDATE] >= #9/21/2011# AND [MATRIX] = 'WO'

ATTACHMENT A

VALIDATED FORM 1'S

1B

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-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109930-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73883.D

Level: (low/med) LOW Date Received: 09/21/11

% Moisture: not dec. Date Analyzed: 09/28/11

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	60	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	8	
1330-20-7	Xylene (total)	21	

KEY-URS139 S31

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-12S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109930-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73884.D

Level: (low/med) LOW Date Received: 09/21/11

% Moisture: not dec. Date Analyzed: 09/28/11

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-URS139 S32

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-15I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109930-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73885.D

Level: (low/med) LOW Date Received: 09/21/11

% Moisture: not dec. Date Analyzed: 09/28/11

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	25	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	2	

KEY-URS139 S33

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-14I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109967-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73886.D

Level: (low/med) LOW Date Received: 09/22/11

% Moisture: not dec. Date Analyzed: 09/28/11

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	22	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene (total)	4	

KEY-URS139 S34

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-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109967-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73887.D

Level: (low/med) LOW Date Received: 09/22/11

% Moisture: not dec. Date Analyzed: 09/28/11

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-URS139 S35

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-23

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109967-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73888.D

Level: (low/med) LOW Date Received: 09/22/11

% Moisture: not dec. Date Analyzed: 09/28/11

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	2	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U

KEY-URS139 S36

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-8D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109C53-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73906.D

Level: (low/med) LOW Date Received: 09/29/11

% Moisture: not dec. Date Analyzed: 09/29/11

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-URS139 S37

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-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109C53-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73907.D

Level: (low/med) LOW Date Received: 09/29/11

% Moisture: not dec. Date Analyzed: 09/29/11

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-URS139 S38

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-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109C53-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73908.D

Level: (low/med) LOW Date Received: 09/29/11

% Moisture: not dec. Date Analyzed: 09/29/11

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-URS139 S39

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-092911

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109C53-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73909.D

Level: (low/med) LOW Date Received: 09/29/11

% Moisture: not dec. Date Analyzed: 09/29/11

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-URS139 S40

1C

EPA SAMPLE NO.

HIMW-12I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109930-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6597.D

Level: (low/med) LOW Date Received: 09/21/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/23/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/24/11

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	9	J
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	48	
83-32-9	Acenaphthene	45	
86-73-7	Fluorene	25	
85-01-8	Phenanthrene	9	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.

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-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109930-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6598.D

Level: (low/med) LOW Date Received: 09/21/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/23/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/24/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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	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-15I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109930-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6599.D

Level: (low/med) LOW Date Received: 09/21/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/23/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/24/11

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	22	
83-32-9	Acenaphthene	6	J
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	3	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.

HIMW-14I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109967-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6600.D

Level: (low/med) LOW Date Received: 09/22/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/23/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/24/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	22	
83-32-9	Acenaphthene	18	
86-73-7	Fluorene	9	J
85-01-8	Phenanthrene	10	
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

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-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109967-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6601.D

Level: (low/med) LOW Date Received: 09/22/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/23/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/24/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-23

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109967-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6602.D

Level: (low/med) LOW Date Received: 09/22/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/23/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/24/11

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	2	J
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-8D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109C53-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6744.D

Level: (low/med) LOW Date Received: 09/29/11

% Moisture: Decanted: (Y/N) N Date Extracted: 10/03/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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	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-12D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109C53-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6745.D

Level: (low/med) LOW Date Received: 09/29/11

% Moisture: Decanted: (Y/N) N Date Extracted: 10/03/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

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-20S

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS139

Matrix: (soil/water) WATER Lab Sample ID: 1109C53-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6746.D

Level: (low/med) LOW Date Received: 09/29/11

% Moisture: Decanted: (Y/N) N Date Extracted: 10/03/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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	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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-5D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73896.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: not dec. Date Analyzed: 09/29/11

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	2	
108-88-3	Toluene	2	
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	170	

KEY-URS140 S24

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-5I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73898.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: not dec. Date Analyzed: 09/29/11

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	
108-88-3	Toluene	2	
100-41-4	Ethylbenzene	3	
1330-20-7	Xylene (total)	150	

KEY-URS140 S25

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-5S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73901.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: not dec. Date Analyzed: 09/29/11

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-URS140 S26

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-8I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73902.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: not dec. Date Analyzed: 09/29/11

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-URS140 S27

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-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73903.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: not dec. Date Analyzed: 09/29/11

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	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	2	

KEY-URS140 S28

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-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73897.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: not dec. Date Analyzed: 09/29/11

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	86	
108-88-3	Toluene	1	
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene (total)	7	

KEY-URS140 S29

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-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-007A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73904.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: not dec. Date Analyzed: 09/29/11

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	6	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	4	

KEY-URS140 S30

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-22

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-008A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73895.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: not dec. Date Analyzed: 09/29/11

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	2	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U

KEY-URS140 S31

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB 092711

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-009A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73905.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: not dec. Date Analyzed: 09/29/11

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-URS140 S32

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP092611

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-010A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73894.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: not dec. Date Analyzed: 09/29/11

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	2	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U

KEY-URS140 S33

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-03S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73923.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: not dec. Date Analyzed: 10/03/11

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-URS140 S34

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-8S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73924.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: not dec. Date Analyzed: 10/03/11

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	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	2	

KEY-URS140 S35

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73925.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: not dec. Date Analyzed: 10/03/11

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-URS140 S36

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-24

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73926.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: not dec. Date Analyzed: 10/03/11

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	430 ~~400~~	~~E~~ D
108-88-3	Toluene	40	
100-41-4	Ethylbenzene	110	
1330-20-7	Xylene (total)	320	

10/24/11 AP

KEY-URS140 S37

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-24DL

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-004ADL

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73965.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: not dec. Date Analyzed: 10/06/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 5.00

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	430	D
108-88-3	Toluene	43	D
100-41-4	Ethylbenzene	110	D
1330-20-7	Xylene (total)	300	D

10/24/11

KEY-URS140 S38

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-25

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73927.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: not dec. Date Analyzed: 10/03/11

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	10	
108-88-3	Toluene	47	
100-41-4	Ethylbenzene	14	
1330-20-7	Xylene (total)	38	

KEY-URS140 S39

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP092811

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73928.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: not dec. Date Analyzed: 10/03/11

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-URS140 S40

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB092811

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-007A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A73929.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: not dec. Date Analyzed: 10/03/11

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-URS140 S41

1C

EPA SAMPLE NO.

HIMW-5D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6711.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/30/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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	1200 ~~720~~ E D
91-57-6	2-Methylnaphthalene	140 ~~150~~ E DJ
208-96-8	Acenaphthylene	52
83-32-9	Acenaphthene	3 J
86-73-7	Fluorene	5 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

10/24/11

KEY-URS140 S43

1C

EPA SAMPLE NO.

HIMW-5DDL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-001BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 11\R6739.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

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	1200	D
91-57-6	2-Methylnaphthalene	140	DJ
208-96-8	Acenaphthylene	56	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

10/24/11

1C

EPA SAMPLE NO.

HIMW-5I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6712.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/30/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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	1900 ~~1200~~	E D
91-57-6	2-Methylnaphthalene	370	E DJ
208-96-8	Acenaphthylene	180 ~~160~~	E DJ
83-32-9	Acenaphthene	11	
86-73-7	Fluorene	22	
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

10/24/11

KEY-URS140 S45

1C

EPA SAMPLE NO.

HIMW-5IDL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-002BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 11\R6740.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

Injection Volume: 2 (µL) Dilution Factor: 40.00

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	1900 D
91-57-6	2-Methylnaphthalene	370 DJ
208-96-8	Acenaphthylene	180 DJ
83-32-9	Acenaphthene	400 U
86-73-7	Fluorene	400 U
85-01-8	Phenanthrene	400 U
120-12-7	Anthracene	400 U
206-44-0	Fluoranthene	400 U
129-00-0	Pyrene	400 U
56-55-3	Benzo(a)anthracene	400 U
218-01-9	Chrysene	400 U
205-99-2	Benzo(b)fluoranthene	400 U
207-08-9	Benzo(k)fluoranthene	400 U
50-32-8	Benzo(a)pyrene	400 U
193-39-5	Indeno(1,2,3-cd)pyrene	400 U
53-70-3	Dibenzo(a,h)anthracene	400 U
191-24-2	Benzo(g,h,i)perylene	400 U

(1) Cannot be separated from Diphenylamine

10/24/11

KEY-URS140 S46

1C

EPA SAMPLE NO.

HIMW-5S

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6715.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/30/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-8I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-004B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6716.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/30/11

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-13D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-005B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6717.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/30/11

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	13	
83-32-9	Acenaphthene	6	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-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-006B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6718.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/30/11

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	48	
83-32-9	Acenaphthene	6	J
86-73-7	Fluorene	7	J
85-01-8	Phenanthrene	13	
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

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-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-007B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6719.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/30/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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	2	J
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-22

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-008B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6720.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/30/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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.

DUP092611

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B38-010B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6721.D

Level: (low/med) LOW Date Received: 09/27/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 09/30/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-03S

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6733.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-8S

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6734.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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	10 U
91-57-6	2-Methylnaphthalene	10 U
208-96-8	Acenaphthylene	4 J
83-32-9	Acenaphthene	10 U
86-73-7	Fluorene	10 U
85-01-8	Phenanthrene	10 U
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	1 J
193-39-5	Indeno(1,2,3-cd)pyrene	1 J
53-70-3	Dibenzo(a,h)anthracene	10 U
191-24-2	Benzo(g,h,i)perylene	2 J

(1) Cannot be separated from Diphenylamine

1C

EPA SAMPLE NO.

HIMW-13S

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6735.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-24

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-004B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6736.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

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	710 ~~530~~	~~E~~ D
91-57-6	2-Methylnaphthalene	48	
208-96-8	Acenaphthylene	76	
83-32-9	Acenaphthene	37	
86-73-7	Fluorene	7	J
85-01-8	Phenanthrene	17	
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

10/24/11

1C

EPA SAMPLE NO.

HIMW-24DL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-004BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 11\R6741.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

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	710	D
91-57-6	2-Methylnaphthalene	46	DJ
208-96-8	Acenaphthylene	72	DJ
83-32-9	Acenaphthene	38	DJ
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

10/24/11

1C

EPA SAMPLE NO.

HIMW-25

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-005B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6737.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

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	9	J
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	1	J
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.

DUP092811

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS140

Matrix: (soil/water) WATER Lab Sample ID: 1109B90-006B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 11\R6738.D

Level: (low/med) LOW Date Received: 09/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 09/29/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/03/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-URS140 S60

ATTACHMENT B

SUPPORT DOCUMENTATION

H2M LABS, INC.

35473

EXTERNAL CHAIN OF CUSTODY

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

CLIENT: KEY-URS

H2M SDG NO:

PROJECT NAME/NUMBER: Hempstead Quarterly GW

SAMPLERS: (signature)/Client: S. Libert, J. Crespo / URS Corp.

DELIVERABLES: RT-70D

TURNAROUND TIME: 21 Days

Project Contact:

Phone Number:

PIS/Quote #: 003-KEY-URS 08

NOTES: *DUP092611 RECEIVED 9/26/11 @ 10:30

Sample Container Description: 40ml Vial-HCl | 1 liter Amber Glass

ANALYSIS REQUESTED

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ORGANIC: BTEX VOA	ORGANIC: PAH BNA	ORGANIC: Pest/PCB				INORG.: Metal	INORG.: CN	LAB I.D. NO.	REMARKS
9/26	1000	GW	HIMW-22	5	2	2							1109038-008	
↓	1230	↓	HIMW-13I	4	2	2							-006	
↓	1440	↓	HIMW-13D	4	2	2							-005	
↓	1630	↓	HIMW-20I	4	2	2							-007	
9/27	900	↓	HIMW-5S	4	2	2							-003	
↓	1015	↓	HIMW-5I	4	2	2							-002	
↓	1020	↓	MSMD-HIMW-05I	8	4	4							-002	
↓	1300	↓	HIMW-5D	4	2	2							-001	
↓	1440	↓	HIMW-8I										-004	
↓	14:40	↓	TB 092711										-009	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature] URS (SC)	9/27/11	15:00	S. W.	9-27-11	15:00
S. W.	9-27-11	15:47	[signature]	9/27/11	15:47

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 ___
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

KEY-URS140-S10

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

Key-URS 140

H2M labs

H2M LABS INC
575 Broad Hollow Road
Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436
Website: www.h2mlabs.com

Sample Receipt Checklist

Client Name KEY-URS

Date and Time Receive 9/27/2011 3:47:00 PM

Work Order Numbe 1109B38 RcptNo: 1

Received by Tamika Ricks

Completed by [signature]
Completed Date: 9/27/11

Reviewed by: [signature]
Reviewed Date: 9/28/11

Carrier name H2M Pickup

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	Not Presen ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	
Response when temperature is outside of range:			
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	3.8 To 12.8 °
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	No Water ☐
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: KEY-URS140 SAS:

Adjusted? ______________ Checked b

Any No and/or NA (not applicable) response must be detailed in the comments section be

KEY-URS140 S11

H2M labs

H2M LABS INC
575 Broad Hollow Road
Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436
Website: www.h2mlabs.com

Sample Receipt Checklist

Client Contacted? ☑ Yes ☐ No ☐ NA Person Contacted: Peter Fairbanks

Contact Mode: ☐ Phone: ☐ Fax: ☑ Email: ☐ In Person:

Client Instructions:

Date Contacted: 9/29/2011 Contacted By: Jennifer Aracri

Regarding:

CorrectiveAction:

Comments:
Samples on ice.
1109B38-002 on the bottle and the chain reads HIMW-05I and HIMW-5i for the same sample which is the MS/MSD. Two different time of collections written for the sample as well.
1109B38-006A the sample id wasn't written on both vials.
DUP092611(1109B38-010) not written on chain.

KEY-URS140 S12

H2M LABS, INC.

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

35477

EXTERNAL CHAIN OF CUSTODY

CLIENT: KEY - URS

H2M SDG NO: KEY-URS 140

PROJECT NAME/NUMBER: Hempstead Quarterly GW

SAMPLERS: (signature)/Client: S. Libert, J. Crespo / URS Corp

DELIVERABLES: RT-70D

TURNAROUND TIME: 21 Days

NOTES:

Project Contact: Mike Akerbergs

Phone Number: 973 785 0700

PIS/Quote #: 003.KEY-URS08

Sample Container Description: 40mL vial - HCl (VOA); 1 liter Amber Glass (BNA)

ANALYSIS REQUESTED

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ORGANIC: BTEX VOA	P/AH BNA	Pest PCB					INORG.: Metal	CN	LAB I.D. NO.	REMARKS:
9/28/11	900	GW	HIMW-8S	4	2	2								1109B90.002	
↓	1040	↓	HIMW-13S	4	2	2								-003	
↓	1230	↓	HIMW-24	4	2	2								-004	
↓	1330	↓	HIMW-25	4	2	2								-005	
↓	~~1400~~ 14:40	↓	DUP092811	4	2	2								-006	
↓	~~15:00~~ 14:40	↓	HIMW-03S	4	2	2								-001	
↓	~~7:40~~ 14:55	BL	TB092811	2	2									-007	

JSA 9/29/11

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	9/28/11	1500	[signature] S. Wat	9.28.11	15.01
S. Wat	9.28.11	15.56	[signature]	9/28/11	15:56

LABORATORY USE ONLY

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

Samples were:
1. Shipped ___ or Hand Delivered Y Airbill# ___
2. Ambient or (chilled) Temp 10.3°C
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-URS 140

H2M labs

H2M LABS INC
575 Broad Hollow Road
Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436
Website: www.h2mlabs.com

Sample Receipt Checklist

Client Name **KEY-URS** Date and Time Receive **9/28/2011 3:56:00 PM**

Work Order Numbe **1109B90** RcptNo: **1** Received by **Tamika Ricks**

Completed by: J. Ku
Completed Date: 9/28/11

Reviewed by: JBA
Reviewed Date: 9/29/11

Carrier name H2M Pickup

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Presen ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	
Response when temperature is outside of range:	Samples were collected the same day and chilled.		
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 10.3 °
Water - Were bubbles absent in VOC vials?	Yes ☑	No ☐	No Vials ☐
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	No Water ☐
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: KEY-URS140 SAS:

Adjusted? _____ Checked b

Any No and/or NA (not applicable) response must be detailed in the comments section be

KEY-URS140 S4

H 2 M labs

H2M LABS INC
575 Broad Hollow Road
Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436
Website: www.h2mlabs.com

Sample Receipt Checklist

Client Contacted? ☑ Yes ☐ No ☐ NA Person Contacted: John Crespo

Contact Mode: ☑ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions: Client provided correct times of collection

Date Contacted: 9/29/2011 Contacted By: Jennifer Aracri

Regarding:

Comments:
1109B90-006 the time of collection on the chain is 17:00. The samples were picked up from client at 15:56, it's impossible for the sample to be collected at 17:00.

CorrectiveAction:
COC has been updated with the correct times of collection as per the client.

KEY-URS140 S5

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILE ORGANICS
SAMPLES RECEIVED: 9/27/11 & 9/28/11
SDG #: KEY-URS140

For Sample(s):

DUP092611	HIMW-20I	HIMW-5S
DUP092811	HIMW-22	HIMW-8I
HIMW-03S	HIMW-24	HIMW-8S
HIMW-13D	HIMW-25	TB 092711
HIMW-13I	HIMW-5D	TB092811
HIMW-13S	HIMW-5I	

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

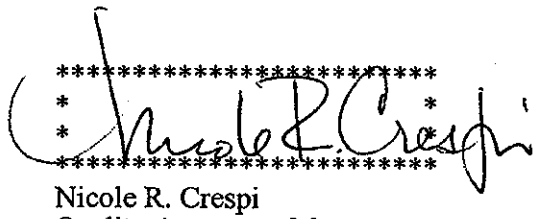
All QC data and calibrations met the requirements of the method, unless discussed below, and no problems were encountered with sample analysis. The following should be noted:

Sample HIMW-5I was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries and RPDs were met. Lab fortified blanks were analyzed and indicate good method efficiency. All compounds recovered within Q.C. limits.

Sample HIMW-24 was reanalyzed at a dilution due to concentration levels of analytes above the calibration range. Both sets of data are submitted.

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: October 18, 2011



Nicole R. Crespi
Quality Assurance Manager

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILE ORGANICS
SAMPLES RECEIVED: 9/27/11 & 9/28/11
SDG #: KEY-URS140

For Sample(s):

DUP092611	HIMW-13S	HIMW-5D
DUP092811	HIMW-20I	HIMW-5I
HIMW-03S	HIMW-22	HIMW-5S
HIMW-13D	HIMW-24	HIMW-8I
HIMW-13I	HIMW-25	HIMW-8S

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-5I was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries and RPDs were met. A lab fortified blank was analyzed and indicates good method efficiency. All compounds recovered within Q.C. limits.

Samples HIMW-5D, HIMW-5I and HIMW-24 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 dilution of sample HIMW-5I.

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: October 18, 2011

Nicole R. Crespi
Quality Assurance Manager

H2M LABS, INC.

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

00474

EXTERNAL CHAIN OF CUSTODY

CLIENT: KEY - URS

H2M SDG NO: KEY-URS 139

PROJECT NAME/NUMBER: National Grid Hempstead MGP 11176098

SAMPLERS: (signature)/Client: John Crespo, Steve Libert / URS Corp.

DELIVERABLES: RT-70D

TURNAROUND TIME: 21 Days

NOTES:

Project Contact: Mike Akerbergs

Phone Number: 973 785 0700

PIS/Quote #: 003. KEY-URS 08

Sample Container Description: 40mL vial - HCl; 1 liter Amber Glass

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	BTEX VOA	PAH BNA	Pest PCB	~~BTEX~~	~~PAH~~		Metal	CN	LAB I.D. NO.	REMARKS
9/21/11	1045	GW	H1MW-15I	5	3	2		~~3~~	~~2~~				1109930-003	
↓	1350	↓	H1MW-12S	5	3	2		~~3~~	~~2~~				↓ -002	
↓	1500	↓	H1MW-12I	5	3	2		~~3~~ JC	~~2~~ JC				↓ ~~-003~~ 001	
			~~H1MW-15~~										(initials) 9/22/11	

ANALYSIS REQUESTED: ORGANIC / INORG.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	9/21/11	1545	[signature]	9/21/11	1555
[signature]	9/21/11	~~1555~~ 1730	[signature]	9/21/11	1730
[signature]	9-22-11	10:15	[signature]	9/22/11	1015

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain: (initials) 9/22/11

Samples were:
1. Shipped ___ or Hand Delivered ✓ Airbill# ___
2. Ambient or (chilled) Temp 6°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

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

H2M LABS, INC.

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

35475

EXTERNAL CHAIN OF CUSTODY

CLIENT: KEY - URS | **H2M SDG NO:** KEY-URS139

PROJECT NAME/NUMBER: Hempstead Quarterly GW

SAMPLERS: (signature)/Client: John Cooper / URS CORP.

DELIVERABLES: RT - 70D

TURNAROUND TIME: 21 Days

NOTES:

Project Contact: MIKE ARCARO

Phone Number: 973-785-0700

PIS/Quote #: 003-Key-URS 08

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: 40mL Vial - HCl	Sample Container Description: 1 Liter Amber Glass	ANALYSIS REQUESTED: ORGANIC: BTEX VOA	ORGANIC: PAH BNA	ORGANIC: Pest/PCB	INORG.: Metal	INORG.: CN	LAB I.D. NO.	REMARKS:
9/21/11	1100	GW	HIMW - 15D	5	2	2						1109967-002	
	1300		HIMW - 14I	5	2	2						-001	
↓	1430	↓	HIMW - 23	5	2	2						↓ -003	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	9/22/11	1500		9/22/11	1500
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	9/22/11	1530		9-22-11	1530
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

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 18°C 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-URS 139

H2M labs

H2M LABS INC
575 Broad Hollow Road
Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436
Website: www.h2mlabs.com

Sample Receipt Checklist

Client Name KEY-URS | Date and Time Receive 9/22/2011 3:30:00 PM

Work Order Numbe 1109967 | RcptNo: 1 | Received by MelissaWatson

Completed by: [signature] | Reviewed by: BB

Completed Date: 9-22-11 | Reviewed Date: 9/26/11

Carrier name H2M Pickup

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Presen ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container labies complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	
Response when temperature is outside of range:	Samples were collected the same day and chilled.		
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 18 °
Water - Were bubbles absent in VOC vials?	Yes ☑	No ☐	No Vials ☐
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	No Water ☐
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: | SDG: KEY-URS139 | SAS:

Adjusted? _____ Checked b

Any No and/or NA (not applicable) response must be detailed in the comments section be

KEY-URS139 S11

H2M LABS, INC.

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

55410

EXTERNAL CHAIN OF CUSTODY

CLIENT: KEY-URS | **H2M SDG NO:** KEY-URS139

PROJECT NAME/NUMBER: Hempstead Quarterly GW

SAMPLERS: (signature)/Client: S. Libert / J. Crespo - URS Corp

DELIVERABLES: RT-70D

TURNAROUND TIME: 21 Days

NOTES:

Project Contact: Mike Akerbergs

Phone Number: 973 785 0700

PIS/Quote #: 003-KEY-URS08

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ANALYSIS REQUESTED: ORGANIC BTEX VOA	ORGANIC PAH BNA	ORGANIC Pest PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
9/29/11	830	GW	HIMW-20S	4	2	2				1109C53 -003	
	1200	GW	HIMW-8D	4	2	2				-001	
	1400	GW	HIMW-12D	4	2	2				-002	
↓	1415	TB	TB092911	2	2					-004	

Sample Container Description: 40mL vial - HCl; 1 liter Amber Glass

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
S. Libert	9/29/11	1430		9/29/11	14:30
	9/29/11	15:20		9-29-11	15:20
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

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 6.9°C onice
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-URS 139

H 2 M labs

H2M LABS INC
575 Broad Hollow Road
Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436
Website: www.h2mlabs.com

Sample Receipt Checklist

Client Name **KEY-URS** Date and Time Receive **9/29/2011 3:20:00 PM**

Work Order Numbe **1109C53** RcptNo: **1** Received by **MelissaWatson**

Completed by: MWM
Completed Date: 9-29-11

Reviewed by: JBA
Reviewed Date: 9/30/11

Carrier name H2M Pickup

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Presen ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	
Response when temperature is outside of range:	Samples were collected the same day and chilled.		
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 6.9 °
Water - Were bubbles absent in VOC vials?	Yes ☑	No ☐	No Vials ☐
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	No Water ☐
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: KEY-URS139 SAS:

Adjusted? _____ Checked b

Any No and/or NA (not applicable) response must be detailed in the comments section be

KEY-URS139 S18

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILE ORGANICS
SAMPLES RECEIVED: 9/21/11, 9/22/11 & 9/29/11
SDG #: KEY-URS139

For Sample(s):

HIMW-12D	HIMW-15I
HIMW-12I	HIMW-20S
HIMW-12S	HIMW-23
HIMW-14I	HIMW-8D
HIMW-15D	TB-092911

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:

No matrix spike/matrix spiked duplicate was submitted. Lab fortified blanks were analyzed and indicate good method efficiency. All compounds recovered within Q.C. limits.

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: October 18, 2011

Nicole R. Crespi
Quality Assurance Manager

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILE ORGANICS
SAMPLES RECEIVED: 9/21/11, 9/22/11 & 9/29/11
SDG #: KEY-URS139

For Sample(s):

HIMW-12D	HIMW-15I
HIMW-12I	HIMW-20S
HIMW-12S	HIMW-23
HIMW-14I	HIMW-8D
HIMW-15D	

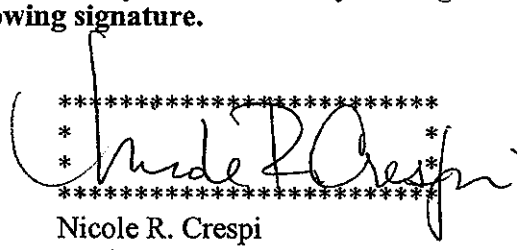
The above sample(s) was/were analyzed for a select list of semivolatile organic analytes (polynuclear aromatics) by EPA method 8270C.

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:

No matrix spike/matrix spiked duplicate was submitted. Lab fortified blanks were analyzed and indicate good method efficiency. All compounds recovered within Q.C. limits.

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: October 18, 2011



Nicole R. Crespi
Quality Assurance Manager

APPENDIX B

OXYGEN SYSTEM OPERATION & MAINTENANCE MEASUREMENTS

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	7/12/2011
Time:	1059
Weather:	Sunny
Outdoor Temperature:	~88°F
Inside Trailer Temperature:	~74°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	924.6	
Feed Air Pressure *	100	(psi)
Cycle Pressure *	70	(psi)
Oxygen Receiver Pressure *	90	(psi)
Oxygen Purity	98.7	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	100	(psi)
(readings below are made from control panel)		
Delivery Air	109	(psi)
Element Outlet Temperature	151	(^{o}F)
Running Hours	1000	(hours)
Loading Hours	703	(hours)

* maximum reading during loading cycle

O_2 Injection System #1

Injection Bank 1				Injection Bank 2				Injection Bank 3			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	25	31	OW-1-5S	67.3	30	17	OW-1-9D	88.5	40	28
OW-1-2	96.5	25	31	OW-1-6S	67.0	40	18	OW-1-10D	87.2	45	28
OW-1-3	96.3	25	29	OW-1-7S	66.9	50	18	OW-1-11D	86.1	50	29
OW-1-4	95.0	20	31	OW-1-8S	66.7	50	18	OW-1-12D	85.3	35	29
OW-1-5D	93.9	30	30	OW-1-9S	66.0	55	18	OW-1-13D	84.7	35	28
OW-1-6D	92.4	40	29	OW-1-10S	54.6	60	13	OW-1-14D	84.1	30	29
OW-1-7D	91.1	30	29	OW-1-11S	54.1	30	14	OW-1-15D	83.3	20	29
OW-1-8D	89.6	35	28	OW-1-12S	53.6	35	15	OW-1-16D	82.5	30	12

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

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 7/12/2011

O_2 Injection System #1

Injection Bank 4				Injection Bank 5				Injection Bank 6			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-13S	53.1	40	13	OW-1-17D	79.5	35	13	OW-1-21S	49.3	70	11
OW-1-14S	52.7	30	14	OW-1-18D	78.3	30	27	OW-1-22S	49.3	30	11
OW-1-15S	52.2	30	13	OW-1-19D	78.9	30	27	OW-1-23S	48.8	25	11
OW-1-16SR	51.8	30	26	OW-1-20D	79.5	30	28	OW-1-24S	48.4	30	12
OW-1-17S	50.7	35	25	OW-1-21D	79.5	30	27	OW-1-25S	48.8	25	12
OW-1-18S	50.2	40	13	OW-1-22D	79.5	35	27	OW-1-26SR	48.3	25	12
OW-1-19S	49.7	30	12	OW-1-23D	78.7	30	27	OW-1-27S	48.3	25	13
OW-1-20S	49.3	35	12	OW-1-24D	78.2	25	27	OW-1-28S	48.3	25	13

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

O_2 Injection System #1

Injection Bank 7				Injection Bank 8				Injection Bank 9			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-25D	78.1	30	27	OW-1-29S	48.5	23	12	OW-1-33D	83.2	40	30
OW-1-26D	78.1	33	30	OW-1-30S	48.8	35	12	OW-1-34D	84.5	35	30
OW-1-27D	77.9	30	30	OW-1-31S	49.3	30	12	OW-1-35D	85.0	50	29
OW-1-28D	78.0	25	28	OW-1-32S	49.3	30	12	OW-1-36D	85.0	28	29
OW-1-29D	78.4	20	27	OW-1-33S	49.7	28	12	OW-1-37D	84.0	30	28
OW-1-30D	79.0	45	34	OW-1-34S	50.1	30	12	OW-1-38D	82.0	50	40
OW-1-31D	80.5	20	22	OW-1-35S	50.3	30	13	OW-1-39D	78.0	30	27
OW-1-32D	81.6	30	28	OW-1-36S	50.3	20	13	OW-1-40D	76.0	45	27

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

Date: 7/12/2011

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

O_2 Injection System #1

Injection Bank 10				Injection Bank 11				Injection Bank 12			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-37S	50.5	30	11	OW-1-41D	73.6	30	22	OW-1-43	67.4	30	18
OW-1-38S	50.6	25	12	OW-1-42D	71.0	40	21	OW-1-44	66.6	35	18
OW-1-39S	50.7	30	10	OW-1-45	65.7	30	20	OW-1-51R	60.6	30	16
OW-1-40S	51.1	25	12	OW-1-46	64.3	35	18	OW-1-52	59.3	30	17
OW-1-41S	51.5	25	11	OW-1-47	63.4	30	18	OW-1-53	60.0	30	17
OW-1-42S	51.3	40	12	OW-1-48	62.5	30	18	OW-1-54	60.0	30	18
				OW-1-49	61.5	25	17				
				OW-1-50	61.0	30	18				

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

O_2 Injection System #2

Monitoring Points Log				Monitoring Points Log							
ID	DTW	DO (mg/L)	PID (ppm)	ID	DTW	DO (mg/L)	PID (ppm)				
MP-1-1D	25.74	26.71	11.5	MP-1-5	25.37	19.01	13.5				
MP-1-1S	25.87	31.70	0.0	MP-1-6	17.87	10.24	13.6				
MP-1-2D	20.13	27.74	0.0	MP-1-7	21.15	8.10	1.3				
MP-1-2S	20.39	12.92	0.0	MP-1-8	22.17	8.70	5.4				
MP-1-3D	18.11	36.60	8.7								
MP-1-3S	18.08	18.60	0.0								
MP-1-4D	20.82	17.47	12.3								
MP-1-4S	20.63	14.41	1,491								

Comments: DO readings were collected at the following depths: MP-1-1S (96 feet), MP-1-1D (66 feet), MP-1-2S (81 feet), MP-1-2D (46 feet), MP-1-3S (79 feet), MP-1-3D (49 feet), MP-1-4S (83 feet), MP-1-4D (53 feet), MP-1-5 (78 feet), MP-1-6 (61 feet), MP-1-7 (64 feet) and MP-1-8 (58 feet).

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 7/12/2011

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 X No ____

AS-80 O_2 Generator

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

GENERAL SYSTEM NOTES

Trailer

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

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

Repaired site glass on air compressor found to have a slight leak. Rerouted 2nd auto drain line through floor of shed to drain.

Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	7/27/2011
Time:	1144
Weather:	Sunny
Outdoor Temperature:	~88°F
Inside Trailer Temperature:	~71°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,142	
Feed Air Pressure *	100	(psi)
Cycle Pressure *	70	(psi)
Oxygen Receiver Pressure *	110	(psi)
Oxygen Purity	98.7	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	110	(psi)
(readings below are made from control panel)		
Delivery Air	114	(psi)
Element Outlet Temperature	176	(^{o}F)
Running Hours	1,242	(hours)
Loading Hours	865	(hours)

* maximum reading during loading cycle

O_2 Injection System #1

Injection Bank 1				Injection Bank 2				Injection Bank 3			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	30	31	OW-1-5S	67.3	35	18	OW-1-9D	88.5	35	28
OW-1-2	96.5	30	31	OW-1-6S	67.0	40	18	OW-1-10D	87.2	35	28
OW-1-3	96.3	30	30	OW-1-7S	66.9	30	18	OW-1-11D	86.1	40	29
OW-1-4	95.0	40	30	OW-1-8S	66.7	35	18	OW-1-12D	85.3	30	29
OW-1-5D	93.9	35	29	OW-1-9S	66.0	55	19	OW-1-13D	84.7	25	28
OW-1-6D	92.4	30	29	OW-1-10S	54.6	30	16	OW-1-14D	84.1	30	29
OW-1-7D	91.1	30	28	OW-1-11S	54.1	30	17	OW-1-15D	83.3	35	29
OW-1-8D	89.6	40	28	OW-1-12S	53.6	30	17	OW-1-16D	82.5	40	17

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

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 7/27/2011

O_2 Injection System #1

Injection Bank 4				Injection Bank 5				Injection Bank 6			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-13S	53.1	35	13	OW-1-17D	79.5	30	14	OW-1-21S	49.3	30	12
OW-1-14S	52.7	35	14	OW-1-18D	78.3	35	25	OW-1-22S	49.3	40	12
OW-1-15S	52.2	40	13	OW-1-19D	78.9	35	26	OW-1-23S	48.8	40	12
OW-1-16SR	51.8	40	25	OW-1-20D	79.5	35	28	OW-1-24S	48.4	30	13
OW-1-17S	50.7	35	22	OW-1-21D	79.5	40	27	OW-1-25S	48.8	30	13
OW-1-18S	50.2	30	13	OW-1-22D	79.5	40	25	OW-1-26SR	48.3	30	13
OW-1-19S	49.7	40	12	OW-1-23D	78.7	40	26	OW-1-27S	48.3	30	13
OW-1-20S	49.3	40	13	OW-1-24D	78.2	40	27	OW-1-28S	48.3	30	13

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

O_2 Injection System #1

Injection Bank 7				Injection Bank 8				Injection Bank 9			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-25D	78.1	30	27	OW-1-29S	48.5	25	13	OW-1-33D	83.2	30	29
OW-1-26D	78.1	40	33	OW-1-30S	48.8	30	13	OW-1-34D	84.5	30	31
OW-1-27D	77.9	50	34	OW-1-31S	49.3	30	13	OW-1-35D	85.0	30	30
OW-1-28D	78.0	30	27	OW-1-32S	49.3	30	12	OW-1-36D	85.0	40	29
OW-1-29D	78.4	40	27	OW-1-33S	49.7	25	12	OW-1-37D	84.0	45	28
OW-1-30D	79.0	80	38	OW-1-34S	50.1	30	12	OW-1-38D	82.0	35	34
OW-1-31D	80.5	50	29	OW-1-35S	50.3	35	12	OW-1-39D	78.0	40	27
OW-1-32D	81.6	30	28	OW-1-36S	50.3	30	12	OW-1-40D	76.0	30	27

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

Date: 7/27/2011

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

O_2 Injection System #1

Injection Bank 10				Injection Bank 11				Injection Bank 12			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-37S	50.5	25	12	OW-1-41D	73.6	30	22	OW-1-43	67.4	25	19
OW-1-38S	50.6	25	12	OW-1-42D	71.0	35	21	OW-1-44	66.6	30	18
OW-1-39S	50.7	30	13	OW-1-45	65.7	30	19	OW-1-51R	60.6	30	17
OW-1-40S	51.1	30	13	OW-1-46	64.3	40	18	OW-1-52	59.3	50	15
OW-1-41S	51.5	30	13	OW-1-47	63.4	30	17	OW-1-53	60.0	20	16
OW-1-42S	51.3	30	12	OW-1-48	62.5	25	18	OW-1-54	60.0	25	16
				OW-1-49	61.5	20	17				
				OW-1-50	61.0	30	17				

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

O_2 Injection System #2

Monitoring Points Log				Monitoring Points Log							
ID	DTW	DO (mg/L)	PID (ppm)	ID	DTW	DO (mg/L)	PID (ppm)				
MP-1-1D	26.22	36.75	7.5	MP-1-5	25.85	12.11	66.9				
MP-1-1S	26.32	24.14	13.4	MP-1-6	18.33	20.11	112.9				
MP-1-2D	20.50	13.30	0.0	MP-1-7	21.65	3.18	0.5				
MP-1-2S	20.89	12.94	0.0	MP-1-8	22.70	22.19	4.6				
MP-1-3D	18.60	36.96	6.9								
MP-1-3S	18.58	17.76	15.7								
MP-1-4D	21.34	31.77	4.8								
MP-1-4S	21.12	18.66	981								

Comments: DO readings were collected at the following depths: MP-1-1S (96 feet), MP-1-1D (66 feet), MP-1-2S (81 feet), MP-1-2D (46 feet), MP-1-3S (79 feet), MP-1-3D (49 feet), MP-1-4S (83 feet), MP-1-4D (53 feet), MP-1-5 (78 feet), MP-1-6 (61 feet), MP-1-7 (64 feet) and MP-1-8 (58 feet).

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 7/27/2011

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 X No

AS-80 O_2 Generator

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

GENERAL SYSTEM NOTES

Trailer

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

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

Changed and cleaned all fresh air filters on shed. Repaired small leak in manifold on Bank C.

Observed that pressure being generated by the system is causing the j-plug to blow off the top of the monitoring points MP-1-1D, MP-1-2D and MP-1-4D. Reinstalled j-plugs and tightned as much as possible.

Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	8/10/2011
Time:	1335
Weather:	Sunny
Outdoor Temperature:	~88°F
Inside Trailer Temperature:	~72°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,196.9	
Feed Air Pressure *	110	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	115	(psi)
Oxygen Purity	95.4	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	110	(psi)
(readings below are made from control panel)		
Delivery Air	113	(psi)
Element Outlet Temperature	178	(^{o}F)
Running Hours	1,302	(hours)
Loading Hours	904	(hours)

* maximum reading during loading cycle

O_2 Injection System #1

Injection Bank 1				Injection Bank 2				Injection Bank 3			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	30	30	OW-1-5S	67.3	25	17	OW-1-9D	88.5	30	27
OW-1-2	96.5	30	31	OW-1-6S	67.0	30	18	OW-1-10D	87.2	35	28
OW-1-3	96.3	35	31	OW-1-7S	66.9	35	18	OW-1-11D	86.1	30	28
OW-1-4	95.0	30	30	OW-1-8S	66.7	40	18	OW-1-12D	85.3	26	29
OW-1-5D	93.9	30	29	OW-1-9S	66.0	40	18	OW-1-13D	84.7	30	28
OW-1-6D	92.4	40	29	OW-1-10S	54.6	40	13	OW-1-14D	84.1	30	29
OW-1-7D	91.1	30	29	OW-1-11S	54.1	40	13	OW-1-15D	83.3	30	28
OW-1-8D	89.6	30	28	OW-1-12S	53.6	30	15	OW-1-16D	82.5	30	17

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

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 8/10/2011

O_2 Injection System #1

Injection Bank 4				Injection Bank 5				Injection Bank 6			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-13S	53.1	30	13	OW-1-17D	79.5	20	15	OW-1-21S	49.3	25	11
OW-1-14S	52.7	30	14	OW-1-18D	78.3	30	25	OW-1-22S	49.3	35	11
OW-1-15S	52.2	30	13	OW-1-19D	78.9	25	26	OW-1-23S	48.8	30	11
OW-1-16SR	51.8	25	26	OW-1-20D	79.5	30	28	OW-1-24S	48.4	20	11
OW-1-17S	50.7	30	24	OW-1-21D	79.5	35	27	OW-1-25S	48.8	20	12
OW-1-18S	50.2	25	13	OW-1-22D	79.5	30	27	OW-1-26SR	48.3	20	12
OW-1-19S	49.7	25	13	OW-1-23D	78.7	30	27	OW-1-27S	48.3	30	12
OW-1-20S	49.3	30	13	OW-1-24D	78.2	30	27	OW-1-28S	48.3	20	13

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

O_2 Injection System #1

Injection Bank 7				Injection Bank 8				Injection Bank 9			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-25D	78.1	25	27	OW-1-29S	48.5	30	12	OW-1-33D	83.2	30	29
OW-1-26D	78.1	50	30	OW-1-30S	48.8	30	12	OW-1-34D	84.5	30	30
OW-1-27D	77.9	50	33	OW-1-31S	49.3	30	12	OW-1-35D	85.0	50	31
OW-1-28D	78.0	25	27	OW-1-32S	49.3	25	11	OW-1-36D	85.0	30	29
OW-1-29D	78.4	35	27	OW-1-33S	49.7	30	12	OW-1-37D	84.0	30	28
OW-1-30D	79.0	40	39	OW-1-34S	50.1	20	12	OW-1-38D	82.0	40	36
OW-1-31D	80.5	50	28	OW-1-35S	50.3	30	12	OW-1-39D	78.0	30	28
OW-1-32D	81.6	25	28	OW-1-36S	50.3	30	12	OW-1-40D	76.0	50	28

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

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 8/10/2011

O_2 Injection System #1

Injection Bank 10				Injection Bank 11				Injection Bank 12			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-37S	50.5	25	11	OW-1-41D	73.6	40	22	OW-1-43	67.4	30	19
OW-1-38S	50.6	30	12	OW-1-42D	71.0	30	21	OW-1-44	66.6	25	18
OW-1-39S	50.7	40	12	OW-1-45	65.7	30	19	OW-1-51R	60.6	30	17
OW-1-40S	51.1	30	13	OW-1-46	64.3	25	18	OW-1-52	59.3	40	15
OW-1-41S	51.5	50	13	OW-1-47	63.4	25	18	OW-1-53	60.0	20	16
OW-1-42S	51.3	25	12	OW-1-48	62.5	20	18	OW-1-54	60.0	20	15
				OW-1-49	61.5	30	17				
				OW-1-50	61.0	25	17				

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

O_2 Injection System #2

Monitoring Points Log				Monitoring Points Log							
ID	DTW	DO (mg/L)	PID (ppm)	ID	DTW	DO (mg/L)	PID (ppm)				
MP-1-1D	26.20	51.45	102.5	MP-1-5	25.87	10.69	391				
MP-1-1S	26.39	27.34	13.3	MP-1-6	18.35	9.13	4.8				
MP-1-2D	20.45	48.93	0.0	MP-1-7	21.63	7.90	58.6				
MP-1-2S	20.78	43.30	0.0	MP-1-8	22.66	17.18	267				
MP-1-3D	18.58	32.21	11.7								
MP-1-3S	18.61	19.66	21.7								
MP-1-4D	21.30	31.10	765								
MP-1-4S	21.10	29.81	951								

Comments: DO readings were collected at the following depths: MP-1-1S (96 feet), MP-1-1D (66 feet), MP-1-2S (81 feet), MP-1-2D (46 feet), MP-1-3S (79 feet), MP-1-3D (49 feet), MP-1-4S (83 feet), MP-1-4D (53 feet), MP-1-5 (78 feet), MP-1-6 (61 feet), MP-1-7 (64 feet) and MP-1-8 (58 feet).

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 8/10/2011

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 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) Oil leak inside motor on air compressor.
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:
Changed and cleaned all fresh air filters on shed. Found oil leak within air compressor. Cleaned up oil within the unit housing and found a bad o-ring pn top flange of oil canister. Changed o-ring and filled oil canister to proper level. Adjusted pressure relief valve on the high pressure oxygen tank as unit was blowing off at the completion of each cycle.

Observed high pressure at monitoring points MP-1-2D and MP-1-4D.
Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	8/21/2011
Time:	1240
Weather:	Sunny
Outdoor Temperature:	~79°F
Inside Trailer Temperature:	~72°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,353.7	
Feed Air Pressure *	105	(psi)
Cycle Pressure *	62	(psi)
Oxygen Receiver Pressure *	90	(psi)
Oxygen Purity	98.1	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	105	(psi)
(readings below are made from control panel)		
Delivery Air	100	(psi)
Element Outlet Temperature	178	(^{o}F)
Running Hours	1,475	(hours)
Loading Hours	1,019	(hours)

* maximum reading during loading cycle

O_2 Injection System #1

Injection Bank 1				Injection Bank 2				Injection Bank 3			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	35	31	OW-1-5S	67.3	35	18	OW-1-9D	88.5	40	28
OW-1-2	96.5	30	30	OW-1-6S	67.0	40	18	OW-1-10D	87.2	40	28
OW-1-3	96.3	40	32	OW-1-7S	66.9	40	18	OW-1-11D	86.1	40	30
OW-1-4	95.0	40	30	OW-1-8S	66.7	30	18	OW-1-12D	85.3	40	29
OW-1-5D	93.9	40	30	OW-1-9S	66.0	30	19	OW-1-13D	84.7	35	28
OW-1-6D	92.4	40	30	OW-1-10S	54.6	30	13	OW-1-14D	84.1	40	30
OW-1-7D	91.1	35	29	OW-1-11S	54.1	40	13	OW-1-15D	83.3	35	29
OW-1-8D	89.6	35	29	OW-1-12S	53.6	40	14	OW-1-16D	82.5	40	16

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

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 8/21/2011

O_2 Injection System #1

Injection Bank 4				Injection Bank 5				Injection Bank 6			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-13S	53.1	30	14	OW-1-17D	79.5	80	13	OW-1-21S	49.3	30	11
OW-1-14S	52.7	40	14	OW-1-18D	78.3	40	26	OW-1-22S	49.3	40	11
OW-1-15S	52.2	45	13	OW-1-19D	78.9	30	27	OW-1-23S	48.8	35	11
OW-1-16SR	51.8	40	27	OW-1-20D	79.5	30	28	OW-1-24S	48.4	40	12
OW-1-17S	50.7	40	25	OW-1-21D	79.5	35	27	OW-1-25S	48.8	40	12
OW-1-18S	50.2	40	13	OW-1-22D	79.5	35	27	OW-1-26SR	48.3	40	12
OW-1-19S	49.7	50	12	OW-1-23D	78.7	35	27	OW-1-27S	48.3	35	12
OW-1-20S	49.3	60	13	OW-1-24D	78.2	30	27	OW-1-28S	48.3	30	13

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

O_2 Injection System #1

Injection Bank 7				Injection Bank 8				Injection Bank 9			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-25D	78.1	30	27	OW-1-29S	48.5	30	13	OW-1-33D	83.2	30	30
OW-1-26D	78.1	40	32	OW-1-30S	48.8	30	13	OW-1-34D	84.5	40	32
OW-1-27D	77.9	60	32	OW-1-31S	49.3	30	13	OW-1-35D	85.0	80	32
OW-1-28D	78.0	30	28	OW-1-32S	49.3	40	13	OW-1-36D	85.0	30	29
OW-1-29D	78.4	40	27	OW-1-33S	49.7	30	13	OW-1-37D	84.0	35	29
OW-1-30D	79.0	70	38	OW-1-34S	50.1	30	12	OW-1-38D	82.0	50	35
OW-1-31D	80.5	40	27	OW-1-35S	50.3	25	13	OW-1-39D	78.0	30	27
OW-1-32D	81.6	30	28	OW-1-36S	50.3	30	13	OW-1-40D	76.0	60	28

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

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 8/21/2011

O_2 Injection System #1

Injection Bank 10				Injection Bank 11				Injection Bank 12			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-37S	50.5	25	13	OW-1-41D	73.6	30	23	OW-1-43	67.4	30	20
OW-1-38S	50.6	30	13	OW-1-42D	71.0	25	21	OW-1-44	66.6	30	18
OW-1-39S	50.7	45	13	OW-1-45	65.7	30	19	OW-1-51R	60.6	30	17
OW-1-40S	51.1	30	13	OW-1-46	64.3	30	18	OW-1-52	59.3	45	17
OW-1-41S	51.5	40	12	OW-1-47	63.4	30	18	OW-1-53	60.0	25	17
OW-1-42S	51.3	30	12	OW-1-48	62.5	30	18	OW-1-54	60.0	30	17
				OW-1-49	61.5	30	17				
				OW-1-50	61.0	40	17				

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

O_2 Injection System #2

Monitoring Points Log				Monitoring Points Log							
ID	DTW	DO (mg/L)	PID (ppm)	ID	DTW	DO (mg/L)	PID (ppm)				
MP-1-1D	25.31	47.77	2.4	MP-1-5	25.91	16.27	0.0				
MP-1-1S	25.40	35.14	0.0	MP-1-6	17.36	19.11	4.2				
MP-1-2D	19.30	36.14	0.0	MP-1-7	20.62	4.79	0.0				
MP-1-2S	19.51	49.38	0.0	MP-1-8	21.61	9.54	0.0				
MP-1-3D	17.62	38.14	62.2								
MP-1-3S	17.60	13.23	85.1								
MP-1-4D	20.28	37.86	43								
MP-1-4S	20.11	18.14	157								

Comments: DO readings were collected at the following depths: MP-1-1S (96 feet), MP-1-1D (66 feet), MP-1-2S (81 feet), MP-1-2D (46 feet), MP-1-3S (79 feet), MP-1-3D (49 feet), MP-1-4S (83 feet), MP-1-4D (53 feet), MP-1-5 (78 feet), MP-1-6 (61 feet), MP-1-7 (64 feet) and MP-1-8 (58 feet).

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 8/21/2011

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) ____
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:

Found water in air holding tank due to clogged auto drain. Took apart auto drain and cleaned. Tightened belts on booster pump and tightened union on injection manifold where small leak was detected.

Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	9/14/2011
Time:	1249
Weather:	Sunny
Outdoor Temperature:	~80°F
Inside Trailer Temperature:	~72°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,381.9	
Feed Air Pressure *	110	(psi)
Cycle Pressure *	65	(psi)
Oxygen Receiver Pressure *	95	(psi)
Oxygen Purity	97.9	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	110	(psi)
(readings below are made from control panel)		
Delivery Air	105	(psi)
Element Outlet Temperature	126	(^{o}F)
Running Hours	1,511	(hours)
Loading Hours	1,040	(hours)

* maximum reading during loading cycle

O_2 Injection System #1

Injection Bank 1				Injection Bank 2				Injection Bank 3			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	27	32	OW-1-5S	67.3	10	18	OW-1-9D	88.5	28	29
OW-1-2	96.5	15	29	OW-1-6S	67.0	20	18	OW-1-10D	87.2	25	28
OW-1-3	96.3	28	32	OW-1-7S	66.9	12	18	OW-1-11D	86.1	10	30
OW-1-4	95.0	30	31	OW-1-8S	66.7	12	18	OW-1-12D	85.3	25	30
OW-1-5D	93.9	30	30	OW-1-9S	66.0	10	19	OW-1-13D	84.7	20	29
OW-1-6D	92.4	30	30	OW-1-10S	54.6	10	13	OW-1-14D	84.1	22	30
OW-1-7D	91.1	25	30	OW-1-11S	54.1	9	14	OW-1-15D	83.3	18	29
OW-1-8D	89.6	20	29	OW-1-12S	53.6	11	14	OW-1-16D	82.5	19	18

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 9/14/2011

O_2 Injection System #1

Injection Bank 4				Injection Bank 5				Injection Bank 6			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-13S	53.1	12	14	OW-1-17D	79.5	20	15	OW-1-21S	49.3	12	11
OW-1-14S	52.7	15	15	OW-1-18D	78.3	18	25	OW-1-22S	49.3	13	11
OW-1-15S	52.2	10	13	OW-1-19D	78.9	15	26	OW-1-23S	48.8	10	12
OW-1-16SR	51.8	12	27	OW-1-20D	79.5	20	27	OW-1-24S	48.4	10	12
OW-1-17S	50.7	12	25	OW-1-21D	79.5	20	27	OW-1-25S	48.8	10	13
OW-1-18S	50.2	14	13	OW-1-22D	79.5	17	27	OW-1-26SR	48.3	10	13
OW-1-19S	49.7	12	12	OW-1-23D	78.7	20	27	OW-1-27S	48.3	10	13
OW-1-20S	49.3	10	12	OW-1-24D	78.2	18	27	OW-1-28S	48.3	10	13

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.

O_2 Injection System #1

Injection Bank 7				Injection Bank 8				Injection Bank 9			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-25D	78.1	18	27	OW-1-29S	48.5	20	13	OW-1-33D	83.2	22	30
OW-1-26D	78.1	20	31	OW-1-30S	48.8	11	13	OW-1-34D	84.5	12	31
OW-1-27D	77.9	18	33	OW-1-31S	49.3	12	13	OW-1-35D	85.0	27	31
OW-1-28D	78.0	15	27	OW-1-32S	49.3	15	12	OW-1-36D	85.0	20	30
OW-1-29D	78.4	16	27	OW-1-33S	49.7	14	13	OW-1-37D	84.0	15	30
OW-1-30D	79.0	35	36	OW-1-34S	50.1	15	13	OW-1-38D	82.0	18	36
OW-1-31D	80.5	10	27	OW-1-35S	50.3	20	13	OW-1-39D	78.0	15	27
OW-1-32D	81.6	12	28	OW-1-36S	50.3	9	13	OW-1-40D	76.0	20	27

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.

Date: 9/14/2011

O_2 Injection System #1

Injection Bank 10				Injection Bank 11				Injection Bank 12			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

OW-1-37S	50.5	10	12	OW-1-41D	73.6	20	25	OW-1-43	67.4	20	20
OW-1-38S	50.6	12	13	OW-1-42D	71.0	19	24	OW-1-44	66.6	18	19
OW-1-39S	50.7	5	13	OW-1-45	65.7	19	21	OW-1-51R	60.6	10	18
OW-1-40S	51.1	11	13	OW-1-46	64.3	10	19	OW-1-52	59.3	10	18
OW-1-41S	51.5	15	13	OW-1-47	63.4	15	18	OW-1-53	60.0	10	17
OW-1-42S	51.3	14	13	OW-1-48	62.5	18	18	OW-1-54	60.0	12	18
				OW-1-49	61.5	10	17				
				OW-1-50	61.0	19	18				

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.

O_2 Injection System #2

Monitoring Points Log				Monitoring Points Log							
ID	**DTW**	**DO (mg/L)**	**PID (ppm)**	**ID**	**DTW**	**DO (mg/L)**	**PID (ppm)**				
MP-1-1D	23.52	39.13	33.3	MP-1-5	23.16	17.40	35.1				
MP-1-1S	23.66	19.45	29.3	MP-1-6	15.62	8.15	9.1				
MP-1-2D	17.68	42.13	6.1	MP-1-7	18.91	6.53	0.0				
MP-1-2S	18.08	27.17	8.1	MP-1-8	19.95	12.20	7.3				
MP-1-3D	15.86	19.18	17.8								
MP-1-3S	15.87	15.20	9.9								
MP-1-4D	18.57	14.20	23								
MP-1-4S	18.38	12.12	102								

Comments: DO readings were collected at the following depths: MP-1-1S (66 feet), MP-1-1D (96 feet), MP-1-2S (46 feet), MP-1-2D (81 feet), MP-1-3S (49 feet), MP-1-3D (79 feet), MP-1-4S (53 feet), MP-1-4D (83 feet), MP-1-5 (78 feet), MP-1-6 (61 feet), MP-1-7 (64 feet) and MP-1-8 (58 feet).

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 9/14/2011

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

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

System went down on August 28, 2011 due to a compressor alarm. F&N inspected the site on August 30th and determined that the fault was due to an electric phase being out after the storm. The LIPA outage hotline was notified of the outage on August 30th. On September 13, 2011, LIPA was at the site to repair the damaged wires feeding the remediation system. During the repair it was determined by LIPA that the pole transformers need to be upgraded to handle the remediation system and the commercial properties tied into the utility pole. The system was restarted on September 13th after LIPA completed the repairs. Total system downtime was 17 days.

Cleaned up all garbage, weeds & tree branches from around fence areas after the storm. High pressure was observed at monitoring point MP-1-1D and MP-1-2D.

Changed air filters for fresh air intake on compressor and air dryer. Cleaned fresh air vents on shed doors and air conditioner.

Adjusted auto drain flow rate on dryer unit and repaired small leak in auto drain bowl.

Electric Meter # 96-934-323 tied into Pole #4

Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	9/30/2011
Time:	1158
Weather:	Sunny
Outdoor Temperature:	~80°F
Inside Trailer Temperature:	~72°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,511.1	
Feed Air Pressure *	110	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	105	(psi)
Oxygen Purity	98.1	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	110	(psi)
(readings below are made from control panel)		
Delivery Air	108	(psi)
Element Outlet Temperature	142	(^{o}F)
Running Hours	1,659	(hours)
Loading Hours	1,132	(hours)

* maximum reading during loading cycle

O_2 Injection System #1

Injection Bank 1				Injection Bank 2				Injection Bank 3			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	32	32	OW-1-5S	67.3	25	19	OW-1-9D	88.5	35	28
OW-1-2	96.5	30	28	OW-1-6S	67.0	30	19	OW-1-10D	87.2	40	29
OW-1-3	96.3	30	32	OW-1-7S	66.9	25	18	OW-1-11D	86.1	35	30
OW-1-4	95.0	32	31	OW-1-8S	66.7	25	19	OW-1-12D	85.3	38	30
OW-1-5D	93.9	30	30	OW-1-9S	66.0	25	20	OW-1-13D	84.7	OFF	OFF
OW-1-6D	92.4	30	30	OW-1-10S	54.6	25	16	OW-1-14D	84.1	OFF	OFF
OW-1-7D	91.1	32	30	OW-1-11S	54.1	20	16	OW-1-15D	83.3	OFF	OFF
OW-1-8D	89.6	35	30	OW-1-12S	53.6	30	17	OW-1-16D	82.5	OFF	OFF

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings. Injection times at Bank #1 and Bank #3 were set at 3 minutes.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 9/30/2011

O_2 Injection System #1

Injection Bank 4				Injection Bank 5				Injection Bank 6			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-13S	53.1	20	16	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	22	12
OW-1-14S	52.7	20	16	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	22	12
OW-1-15S	52.2	22	15	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	22	12
OW-1-16SR	51.8	22	27	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	30	13
OW-1-17S	50.7	40	26	OW-1-21D	79.5	30	28	OW-1-25S	48.8	30	13
OW-1-18S	50.2	25	15	OW-1-22D	79.5	32	27	OW-1-26SR	48.3	28	13
OW-1-19S	49.7	35	15	OW-1-23D	78.7	40	28	OW-1-27S	48.3	30	13
OW-1-20S	49.3	25	16	OW-1-24D	78.2	30	29	OW-1-28S	48.3	25	14

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings. Injection times at Bank #5 were set at 3 minutes.

O_2 Injection System #1

Injection Bank 7				Injection Bank 8				Injection Bank 9			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-25D	78.1	30	28	OW-1-29S	48.5	25	13	OW-1-33D	83.2	30	30
OW-1-26D	78.1	40	35	OW-1-30S	48.8	30	13	OW-1-34D	84.5	40	32
OW-1-27D	77.9	35	33	OW-1-31S	49.3	28	13	OW-1-35D	85.0	70	29
OW-1-28D	78.0	30	27	OW-1-32S	49.3	33	12	OW-1-36D	85.0	30	30
OW-1-29D	78.4	35	27	OW-1-33S	49.7	24	13	OW-1-37D	84.0	30	30
OW-1-30D	79.0	50	33	OW-1-34S	50.1	25	13	OW-1-38D	82.0	40	32
OW-1-31D	80.5	45	27	OW-1-35S	50.3	35	13	OW-1-39D	78.0	30	28
OW-1-32D	81.6	30	29	OW-1-36S	50.3	25	13	OW-1-40D	76.0	50	30

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.

Date: 9/30/2011

O_2 Injection System #1

Injection Bank 10				Injection Bank 11				Injection Bank 12			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

OW-1-37S	50.5	55	13	OW-1-41D	73.6	20	24	OW-1-43	67.4	25	21
OW-1-38S	50.6	30	13	OW-1-42D	71.0	20	22	OW-1-44	66.6	30	19
OW-1-39S	50.7	32	13	OW-1-45	65.7	25	20	OW-1-51R	60.6	30	18
OW-1-40S	51.1	20	14	OW-1-46	64.3	25	19	OW-1-52	59.3	30	17
OW-1-41S	51.5	20	12	OW-1-47	63.4	18	18	OW-1-53	60.0	15	18
OW-1-42S	51.3	25	13	OW-1-48	62.5	18	18	OW-1-54	60.0	20	17
				OW-1-49	61.5	15	17				
				OW-1-50	61.0	20	18				

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings. Injection time at Bank #11 was set at 6 minutes.

O_2 Injection System #2

Monitoring Points Log				Monitoring Points Log							
ID	**DTW**	**DO (mg/L)**	**PID (ppm)**	**ID**	**DTW**	**DO (mg/L)**	**PID (ppm)**				
MP-1-1D	23.49	31.62	6.7	MP-1-5	23.13	19.67	0.0				
MP-1-1S	23.66	27.24	0.0	MP-1-6	15.60	9.57	4.3				
MP-1-2D	17.69	31.28	0.0	MP-1-7	18.91	9.56	0.0				
MP-1-2S	19.80	30.24	0.0	MP-1-8	18.95	17.73	10.7				
MP-1-3D	15.81	17.36	41.3								
MP-1-3S	15.86	11.81	12.5								
MP-1-4D	18.57	15.14	3.8								
MP-1-4S	18.36	10.51	1.7								

Comments: DO readings were collected at the following depths: MP-1-1S (66 feet), MP-1-1D (96 feet), MP-1-2S (46 feet), MP-1-2D (81 feet), MP-1-3S (49 feet), MP-1-3D (79 feet), MP-1-4S (53 feet), MP-1-4D (83 feet), MP-1-5 (78 feet), MP-1-6 (61 feet), MP-1-7 (64 feet) and MP-1-8 (58 feet).

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 9/30/2011

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 ____

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

Found auto drain not working on dryer unit. Took apart and clean out silt buildup in unit and put back together. Drained all water from holding tanks. Repaired small leaks on piping in manifolds. Cleaned out cooling coils on booster pump. Replaced 60 watt bulb in shed.

Cleaned up all garbage, weeds & tree branches from around fence areas. High pressure was observed at monitoring point MP-1-2D.

Electric Meter # 96-934-323 tied into Pole #4

Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	7/11/2011
Time:	1054
Weather:	Sunny
Outdoor Temperature:	~90° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	5,423	
Feed Air Pressure *	65	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	90	(psi)
Oxygen Purity	95.7	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	80	(psi)
(readings below are made from control panel)		
Delivery Air	82	(psi)
Element Outlet Temperature	172	(^{o}F)
Running Hours	5,481	(hours)
Loading Hours	5,437	(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'	60	28	OW-2-9S	75'	20	20	OW-2-10D	97.2'	40	28
OW-2-3	94.3'	60	26	OW-2-10S	75'	30	27	OW-2-11D	100.8'	40	33
OW-2-4	94.7'	50	35	OW-2-11S	76.5'	20	20	OW-2-12	94'	40	22
OW-2-5	95.3'	40	30	OW-2-13S	75'	30	19	OW-2-13D	97'	55	29
OW-2-6	95.7'	50	30	OW-2-15S	75'	40	18	OW-2-14	96.4'	45	29
OW-2-7	96'	50	30	OW-2-16S	75.5'	25	19	OW-2-15D	94.6'	45	31
OW-2-8	96.3'	45	30	OW-2-18S	74.5'	20	18	OW-2-16D	94.1'	60	28
OW-2-9D	96.7'	45	30	OW-2-20S	79'	20	23	OW-2-17	95'	40	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: 7/11/2011

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'	40	32	OW-2-22S	76'	20	19	OW-2-26D	95'	40	29
OW-2-19	96.1'	40	30	OW-2-24S	77.8'	20	26	OW-2-27	93.5'	35	29
OW-2-20D	96.6'	35	31	OW-2-26S	74'	25	19	OW-2-28D	92.1'	30	28
OW-2-21	96.6'	30	28	OW-2-28S	76'	20	20	OW-2-29	92.2'	30	28
OW-2-22D	96.3'	30	28	OW-2-30S	67.8'	15	17	OW-2-30D	88'	30	27
OW-2-23	97.2'	80	35	OW-2-34	71'	20	20	OW-2-31	86'	40	30
OW-2-24D	97'	30	29	OW-2-35	69.2'	35	33	OW-2-32	84'	50	37
OW-2-25	96'	50	32	OW-2-36	64.8'	30	21	OW-2-33	82'	40	38

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	20	OW-2-45	61.1'	30	20	MP-2-1	28.85	26.60	9.2
OW-2-38	62.1'	30	18	OW-2-46	61'	25	20	MP-2-2	29.93	29.90	0
OW-2-39	60'	30	17	OW-2-47	60.5'	20	19	MP-2-3S	29.95	38.31	0
OW-2-40	61.7'	20	19					MP-2-3D	30.26	49.41	0
OW-2-41	61.7'	15	19					MP-2-4	18.79	47.67	84.2
OW-2-42	61.6'	25	19					MP-2-5	17.04	12.63	80.7
OW-2-43	61.4'	25	19								
OW-2-44R	60.6'	20	19								

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: 7/11/2011

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

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

Cleaned up all garbage, rock, sticks & overgrown brush from areas around shed.

Met with James Christman to review issue reported by the home owner at 158 Hilton Avenue. Determined that pressure being generated by the system is causing the j-plug to blow off the top of the well and water is pushing into the manhole.

Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	7/26/2011
Time:	1149
Weather:	Sunny
Outdoor Temperature:	~85° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	5,750	
Feed Air Pressure *	75	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	110	(psi)
Oxygen Purity	95.5	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	85	(psi)
(readings below are made from control panel)		
Delivery Air	110	(psi)
Element Outlet Temperature	172	(^{o}F)
Running Hours	5,810	(hours)
Loading Hours	5,765	(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'	60	29	OW-2-9S	75'	35	20	OW-2-10D	97.2'	50	28
OW-2-3	94.3'	70	18	OW-2-10S	75'	35	27	OW-2-11D	100.8'	60	32
OW-2-4	94.7'	40	33	OW-2-11S	76.5'	30	21	OW-2-12	94'	50	19
OW-2-5	95.3'	35	30	OW-2-13S	75'	40	17	OW-2-13D	97'	40	27
OW-2-6	95.7'	35	30	OW-2-15S	75'	45	18	OW-2-14	96.4'	45	28
OW-2-7	96'	40	29	OW-2-16S	75.5'	30	19	OW-2-15D	94.6'	40	30
OW-2-8	96.3'	50	30	OW-2-18S	74.5'	35	19	OW-2-16D	94.1'	60	33
OW-2-9D	96.7'	55	30	OW-2-20S	79'	30	22	OW-2-17	95'	40	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: 7/26/2011

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	35	OW-2-22S	76'	40	19	OW-2-26D	95'	40	39
OW-2-19	96.1'	30	30	OW-2-24S	77.8'	45	30	OW-2-27	93.5'	30	28
OW-2-20D	96.6'	35	31	OW-2-26S	74'	40	19	OW-2-28D	92.1'	30	27
OW-2-21	96.6'	30	29	OW-2-28S	76'	30	20	OW-2-29	92.2'	30	28
OW-2-22D	96.3'	40	28	OW-2-30S	67.8'	35	18	OW-2-30D	88'	40	27
OW-2-23	97.2'	45	34	OW-2-34	71'	40	19	OW-2-31	86'	45	32
OW-2-24D	97'	35	28	OW-2-35	69.2'	50	27	OW-2-32	84'	50	38
OW-2-25	96'	50	29	OW-2-36	64.8'	40	19	OW-2-33	82'	30	35

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

O_2 Injection System #2

Injection Bank G				Injection Bank H				Monitoring Points Log			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	DO (mg/L)	PID (ppm)
OW-2-37	62.8'	45	20	OW-2-45	61.1'	35	21	MP-2-1	29.28	22.76	49.5
OW-2-38	62.1'	45	19	OW-2-46	61'	40	19	MP-2-2	30.33	28.67	0
OW-2-39	60'	50	19	OW-2-47	60.5'	35	20	MP-2-3S	30.47	44.14	0.2
OW-2-40	61.7'	40	19					MP-2-3D	30.79	45.88	0
OW-2-41	61.7'	30	19					MP-2-4	19.25	46.04	20.9
OW-2-42	61.6'	35	20					MP-2-5	17.46	26.11	89.9
OW-2-43	61.4'	30	20								
OW-2-44R	60.6'	30	19								

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: 7/26/2011

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

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

Changed all fresh air filters in shed.

Cleaned up all garbage, rock, sticks & overgrown brush from areas around shed that appear to be being thrown at AC unit.

Observed that pressure being generated by the system is causing the j-plug to blow off the top of the monitoring points MP-2-3S and MP-2-3D and water is pushing into the manhole. Reinstalled j-plugs and tightned as much as possible.

Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	8/9/2011
Time:	1235
Weather:	Sunny
Outdoor Temperature:	~85° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	5,833	
Feed Air Pressure *	90	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	100	(psi)
Oxygen Purity	96.9	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	80	(psi)
(readings below are made from control panel)		
Delivery Air	110	(psi)
Element Outlet Temperature	172	(^oF)
Running Hours	5,901	(hours)
Loading Hours	5,851	(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'	70	30	OW-2-9S	75'	20	19	OW-2-10D	97.2'	40	28
OW-2-3	94.3'	70	34	OW-2-10S	75'	30	27	OW-2-11D	100.8'	50	31
OW-2-4	94.7'	70	37	OW-2-11S	76.5'	30	21	OW-2-12	94'	45	21
OW-2-5	95.3'	60	31	OW-2-13S	75'	30	20	OW-2-13D	97'	50	31
OW-2-6	95.7'	60	30	OW-2-15S	75'	40	20	OW-2-14	96.4'	50	28
OW-2-7	96'	70	29	OW-2-16S	75.5'	40	19	OW-2-15D	94.6'	50	30
OW-2-8	96.3'	60	30	OW-2-18S	74.5'	35	19	OW-2-16D	94.1'	70	30
OW-2-9D	96.7'	70	30	OW-2-20S	79'	30	22	OW-2-17	95'	50	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: 8/9/2011

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

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'	30	20	MP-2-1	29.34	20.14	0.6
OW-2-38	62.1'	30	21	OW-2-46	61'	20	19	MP-2-2	30.43	29.30	0
OW-2-39	60'	40	18	OW-2-47	60.5'	20	19	MP-2-3S	30.53	13.02	0
OW-2-40	61.7'	30	20					MP-2-3D	30.75	12.21	0
OW-2-41	61.7'	30	19					MP-2-4	19.29	20.92	3.1
OW-2-42	61.6'	40	21					MP-2-5	17.50	21.22	11.9
OW-2-43	61.4'	30	20								
OW-2-44R	60.6'	30	19								

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: 8/9/2011

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

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

Injection Banks D(#4) and E(#5) are set to skip.

Cleaned up all garbage, rocks, sticks & overgrown brush from areas around shed that appear to be being thrown at AC unit.

Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	8/20/2011
Time:	1240
Weather:	Sunny
Outdoor Temperature:	~87° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	6,077	
Feed Air Pressure *	79	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	100	(psi)
Oxygen Purity	95.8	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	79	(psi)
(readings below are made from control panel)		
Delivery Air	85	(psi)
Element Outlet Temperature	172	(^{o}F)
Running Hours	6,146	(hours)
Loading Hours	6,095	(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'	50	38	OW-2-9S	75'	40	22	OW-2-10D	97.2'	50	28
OW-2-3	94.3'	70	32	OW-2-10S	75'	30	29	OW-2-11D	100.8'	50	32
OW-2-4	94.7'	40	34	OW-2-11S	76.5'	40	24	OW-2-12	94'	50	20
OW-2-5	95.3'	45	31	OW-2-13S	75'	40	19	OW-2-13D	97'	60	37
OW-2-6	95.7'	45	31	OW-2-15S	75'	45	18	OW-2-14	96.4'	50	29
OW-2-7	96'	40	30	OW-2-16S	75.5'	30	19	OW-2-15D	94.6'	40	31
OW-2-8	96.3'	40	30	OW-2-18S	74.5'	30	19	OW-2-16D	94.1'	50	34
OW-2-9D	96.7'	45	30	OW-2-20S	79'	30	22	OW-2-17	95'	30	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: 8/20/2011

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'	OFF	OFF	OW-2-22S	76'	OFF	OFF	OW-2-26D	95'	50	37
OW-2-19	96.1'	OFF	OFF	OW-2-24S	77.8'	OFF	OFF	OW-2-27	93.5'	40	29
OW-2-20D	96.6'	OFF	OFF	OW-2-26S	74'	OFF	OFF	OW-2-28D	92.1'	30	28
OW-2-21	96.6'	OFF	OFF	OW-2-28S	76'	OFF	OFF	OW-2-29	92.2'	30	28
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	30	27
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	50	40
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	40	44
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	40	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'	30	20	OW-2-45	61.1'	40	22	MP-2-1	28.32	24.34	15.9
OW-2-38	62.1'	40	20	OW-2-46	61'	50	21	MP-2-2	29.39	20.17	0
OW-2-39	60'	50	18	OW-2-47	60.5'	40	19	MP-2-3S	29.47	37.97	0
OW-2-40	61.7'	30	20					MP-2-3D	29.70	27.25	0
OW-2-41	61.7'	30	20					MP-2-4	19.21	28.52	134
OW-2-42	61.6'	40	20					MP-2-5	17.37	51.03	560
OW-2-43	61.4'	30	21								
OW-2-44R	60.6'	30	19								

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: 8/20/2011

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

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

Injection Banks D(#4) and E(#5) are set to skip.

Cleaned up all garbage, rocks & sticks from areas around shed that appear to be being thrown at AC unit. Repaired back grill on AC unit pushed in from rocks being thrown from park. Replaced vent filters on fresh air vents due to heavy dust build up from park. Cleaned all filters on air compressor and electrical fans. Cleaned up oil buildup within oil/water separator and used hose clamps to secure hoses into separator as high pressure was blowing the lines out of the unit.

Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	9/13/2011
Time:	1253
Weather:	Sunny
Outdoor Temperature:	~79° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	6,573	
Feed Air Pressure *	80	(psi)
Cycle Pressure *	70	(psi)
Oxygen Receiver Pressure *	100	(psi)
Oxygen Purity	96.7	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	110	(psi)
(readings below are made from control panel)		
Delivery Air	106	(psi)
Element Outlet Temperature	144	(^{o}F)
Running Hours	6,650	(hours)
Loading Hours	6,594	(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'	29	27	OW-2-9S	75'	20	22	OW-2-10D	97.2'	30	28
OW-2-3	94.3'	35	28	OW-2-10S	75'	20	30	OW-2-11D	100.8'	40	32
OW-2-4	94.7'	27	33	OW-2-11S	76.5'	18	22	OW-2-12	94'	27	21
OW-2-5	95.3'	23	30	OW-2-13S	75'	20	21	OW-2-13D	97'	34	27
OW-2-6	95.7'	28	31	OW-2-15S	75'	23	19	OW-2-14	96.4'	29	29
OW-2-7	96'	25	30	OW-2-16S	75.5'	18	20	OW-2-15D	94.6'	32	31
OW-2-8	96.3'	27	30	OW-2-18S	74.5'	15	20	OW-2-16D	94.1'	40	33
OW-2-9D	96.7'	27	30	OW-2-20S	79'	20	22	OW-2-17	95'	25	29

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 9/13/2011

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'	37	32	OW-2-22S	76'	30	20	OW-2-26D	95'	23	33
OW-2-19	96.1'	35	31	OW-2-24S	77.8'	35	29	OW-2-27	93.5'	27	29
OW-2-20D	96.6'	30	32	OW-2-26S	74'	25	20	OW-2-28D	92.1'	28	28
OW-2-21	96.6'	27	30	OW-2-28S	76'	27	21	OW-2-29	92.2'	28	28
OW-2-22D	96.3'	30	29	OW-2-30S	67.8'	30	18	OW-2-30D	88'	27	27
OW-2-23	97.2'	38	35	OW-2-34	71'	30	20	OW-2-31	86'	19	27
OW-2-24D	97'	32	30	OW-2-35	69.2'	29	27	OW-2-32	84'	19	30
OW-2-25	96'	40	29	OW-2-36	64.8'	29	20	OW-2-33	82'	23	29

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings. Injection banks D & E are running at 6 minute injection intervals.

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'	21	20	OW-2-45	61.1'	23	22	MP-2-1	26.62	14.91	13.6
OW-2-38	62.1'	21	19	OW-2-46	61'	24	20	MP-2-2	27.7	21.80	0
OW-2-39	60'	19	19	OW-2-47	60.5'	26	20	MP-2-3S	27.80	27.5	0
OW-2-40	61.7'	20	20					MP-2-3D	28.07	42.14	0
OW-2-41	61.7'	20	20					MP-2-4	16.57	9.91	7.3
OW-2-42	61.6'	18	22					MP-2-5	14.75	18.61	7.7
OW-2-43	61.4'	12	21								
OW-2-44R	60.6'	14	20								

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 9/13/2011

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

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

Cleaned up all garbage, rocks & sticks from areas around shed that appear to be being thrown at AC unit. Cleaned up all tree branches and brush blown into fence and on roof of shed from storm. High pressure was observed at monitoring point MP-3-3D.

Repaired two valves on leaking flowmeters.

Electric Meter # 96-929-544 tied into Pole #3

Action Items:

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	9/29/2011
Time:	1247
Weather:	Cloudy
Outdoor Temperature:	~67° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	6,903	
Feed Air Pressure *	70	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	125	(psi)
Oxygen Purity	96.6	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	110	(psi)
(readings below are made from control panel)		
Delivery Air	75	(psi)
Element Outlet Temperature	171	(^oF)
Running Hours	6,984	(hours)
Loading Hours	6,925	(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	28	OW-2-9S	75'	40	21	OW-2-10D	97.2'	30	29
OW-2-3	94.3'	60	30	OW-2-10S	75'	70	31	OW-2-11D	100.8'	35	32
OW-2-4	94.7'	40	34	OW-2-11S	76.5'	40	22	OW-2-12	94'	30	22
OW-2-5	95.3'	40	31	OW-2-13S	75'	30	18	OW-2-13D	97'	45	29
OW-2-6	95.7'	40	31	OW-2-15S	75'	40	17	OW-2-14	96.4'	40	27
OW-2-7	96'	40	30	OW-2-16S	75.5'	25	20	OW-2-15D	94.6'	40	31
OW-2-8	96.3'	38	30	OW-2-18S	74.5'	25	20	OW-2-16D	94.1'	65	31
OW-2-9D	96.7'	35	31	OW-2-20S	79'	25	22	OW-2-17	95'	30	30

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 9/29/2011

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

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings. Injection banks D & E are turned off.

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	20	OW-2-45	61.1'	27	21	MP-2-1	26.60	21.42	101.5
OW-2-38	62.1'	20	20	OW-2-46	61'	30	19	MP-2-2	27.69	22.35	85.3
OW-2-39	60'	30	19	OW-2-47	60.5'	25	19	MP-2-3S	27.81	23.08	24.3
OW-2-40	61.7'	20	20					MP-2-3D	27.98	21.04	15.9
OW-2-41	61.7'	20	20					MP-2-4	16.59	13.15	4.2
OW-2-42	61.6'	30	20					MP-2-5	14.80	23.40	3.7
OW-2-43	61.4'	20	21								
OW-2-44R	60.6'	20	20								

Comments: All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 9/29/2011

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

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

Replaced air compressor belt as existing belt was shreading. Cleaned out all filters as needed. Repaired leak in oxygen regulator on high pressure tank.

Electric Meter # 96-929-544 tied into Pole #3

Action Items: