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2011 Annual Groundwater Sampling and NAPL Monitoring/Recovery Report 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:

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77 Goodell Street
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URS

May 2012

2011 ANNUAL GROUNDWATER SAMPLING AND NAPL MONITORING/RECOVERY REPORT

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

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ACRONYMS AND ABBREVIATIONS

amsl	above mean sea level
BTEX	benzene, toluene, ethylbenzene, xylenes
DNAPL	dense non-aqueous phase liquid
DO	dissolved oxygen
DUSR	data usability summary report
ft	foot (feet)
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 annual report provides a summary of field activities, analytical results, and data interpretations associated with groundwater sampling and recovery of non-aqueous phase liquid (NAPL) at the Hempstead Intersection Street Former Manufactured Gas Plant (MGP) site in 2011.

Groundwater monitoring and sampling was conducted on January 26 – February 8, May 23 – June 3, September 20 – 29 and December 14 – 28, 2011. This included measuring the depth to groundwater and NAPL thickness in 59 wells. Groundwater samples were collected from 25 wells and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs).

NAPL monitoring and recovery was conducted during 13 events between January to July. The NAPL recovery program was concluded after the monitoring and recovery event on July 26, 2011, because of the site wide In-Situ Solidification program. Thirty-one (31) NAPL recovery wells were abandoned within the Intersection Street site property boundaries on November 10-11, 2011 in accordance with the well abandonment plan approved by NYSDEC.

Dissolved oxygen measurements were taken by Fenley & Nicol Environmental during the fourth quarter of 2011 for System No. 1 on October 14, October 27, November 10, November 22, December 9, and December 23, a total of 6 events and were taken for System No. 2 on October 13, October 26, November 9, November 23, December 8, and December 22, 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 approximately 3,600 ft south of the site boundary.

- Dense non-aqueous phase liquid (DNAPL) was detected in 26 wells during the first quarter, 25 wells during the second quarter, 24 wells during the third quarter, and 14 existing wells during the fourth quarter of 2011, . The well locations were within the site and a parking lot immediately south of the site.
- Approximately 745 gallons of NAPL was recovered between April 2007 and July 2011. The volume of NAPL recovered from the on- site and off-site wells in 2011 ranged from 24 to 50 gallons. NAPL was not recovered from the site wells during the fourth quarter of 2011 because the In Situ Solidification (ISS) construction phase was starting. NAPL recovery wells on the main former MGP site were decommissioned in November 2012 for the ISS treatment program. Approximately50 gallons were recovered during the first quarter, 65 gallons were recovered during the second quarter, and 24 gallons of NAPL were recovered during the third quarter.
- 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, although there is evidence of decreased concentrationsin certain monitoring wells that are located directly downgradient of oxygen delivery Systems No. 1 and No. 2.
- The first of two oxygen delivery systems (System No. 2) was brought on line in October 2010 and has successfully promoted increased aerobic conditions in the aquifer near the system during the fourth quarter of 2011.
- The second of two oxygen delivery systems (System No. 1) was brought on line in April 2011 and has successfully promoted increased aerobic conditions in the aquifer near the system during the fourth 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.

- Bimonthly headspace and water quality parameters were collected from the monitoring points for Systems No. 1 and No. 2 by Fenley & Nicol. During the fourth quarter, Fenley & Nicol monitored System No. 1 and No. 2 during six events. During the third quarter, Fenley & Nicol monitored System No. 1 and No. 2 during five events. During the second quarter, Fenley & Nicol monitored System No. 1 three times, after it was brought on-line, and System No. 2 six times. During the first quarter, Fenley & Nicol monitored System No. 2 during five events.
- Starting in the third quarter, URS measured weekly headspace and water quality parameters for the monitoring points for Systems No. 1 and No. 2 to provide additional data to assess the observed pressure in monitoring wells. During the third quarter, URS monitored System No. 1 four times and System No. 2 five times. During the fourth quarter, URS monitored System No. 1 twelve times and System No. 2 eleven times.

1.0 INTRODUCTION

This annual report summarizes potentiometric head measurements, NAPL thickness measurements, and groundwater quality sampling performed during the first, second, third, and fourth quarters of 2011 at the Hempstead Intersection Street Former MGP Site (refer to Figures 1 and 2). The results of NAPL recovery activities conducted throughout 2011 are also presented.

Quarterly groundwater monitoring and bimonthly recovery of NAPL was initiated in April 2007. Separate reports have been issued for first, second, and third quarter activities performed in 2011 (URS 2011a, 2011b, 2011c). Results of the fourth quarter activities have not been presented in a separate quarterly report; instead, they are included in this annual report. Separate reports were issued for the first, second, and third quarter activities performed in 2010, and an annual report was issued that encompassed all four quarters of 2010 (URS 2010b, 2010c, 2010d, 2010e). Additionally, separate reports were issued for the first, second, and third quarter activities performed in 2009, and an annual report was issued that encompassed all four quarters of 2009 (URS 2009c, 2009d, 2009e, 2010a). Separate reports were also issued for the first, second, and third quarter activities performed in 2008, and an annual report was issued that encompassed all four quarters of 2008 (URS 2008b, 2008c, 2009a, 2009b). Also, a report was issued for second and third quarter activities performed in 2007 and an annual report was issued that encompassed all three quarters of 2007 (URS 2007, 2008a).

URS Corporation (URS) performed the following activities in 2011:

- Measured the depth to groundwater and NAPL thickness in all accessible on site and off site monitoring wells (on January 26 & 28, May 20, September 20, and December 13, 2011).

- Collected groundwater samples from monitoring wells for laboratory analysis. There were 16 wells sampled on January 26 – February 8; 25 wells sampled on May 23 – June 3; 22 wells sampled on September 20 – 29; and 25 wells sampled on December 14 – 28, 2011).

- Recovered NAPL from accessible monitoring wells and piezometers for a total of 13 events in 2011 (January 4, January 20-21, February 10, February 22-23, March 15, March 28-29, April 15, May 2-3, May 20, June 7-8, June 23, July 7-8, and July 26).

- Monitored groundwater treatment System No. 1 and System No. 2 on a weekly basiss starting in the third quarter. Measured groundwater levels with an interface probe and headspace gases with a photoionization detector (PID) and a multi-gas portable monitor for VOCs, oxygen, carbon dioxide, and methane. Groundwater quality parameters were also measured with a multi-parameter water quality meter for pH, conductivity, dissolved oxygen, ORP, and temperature.

- Directed the closure of 31 product recovery wells within the Intersection Street property boundary by filling the well with sand. The abandoned wells were located in the footprint of the planned in-situ solidification area.

Fenley & Nicol Environmental, Inc. (F&N) also performed water level measurements, well headspace monitoring with a photoionization detector (PID), and dissolved oxygen measurements with a dissolved oxygen meter to monitor the performance of the groundwater treatment systems for System No. 1 and System No. 2. Dissolved oxygen measurements were taken during the fourth quarter of 2011 for System No. 1 on October 14, October 27, November 10, November 22, December 9, and December 23, a total of 6 events; and were taken for System No. 2 on October 13, October 26, November 9, November 23, December 8, and December 22, for a total of 6 events.

GEI Consultants performed soil gas sampling on on September 28, 2011.

2.0 FIELD ACTIVITIES

The field activities performed by URS during the fourth quarter of 2011 are summarized below.

- Measurement of the depth to groundwater and NAPL thickness in 59 monitoring wells.
- Collection of groundwater samples from 25 monitoring wells.
- NAPL recovery was not performed during the fourth quarter.
- Groundwater monitoring for treatment Systems No. 1 and No. 2 by measuring water levels, headspace gases with a photo- ionization detector (PID) and a multi-gas meter, and groundwater quality parameters with a YSI water quality meter.

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

Fenley & Nicol performed water level measurement, well headspace monitoring with a PID, and dissolved oxygen measurements with a dissolved oxygen meter to monitor the performance of the groundwater treatment Systems No. 1 and No. 2 twice monthly.

2.1 Groundwater Depth and NAPL Thickness Measurements

Depths to groundwater and NAPL thickness measurements for 2011 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 recovery ended in the third quarter of 2011 after the July 26, 2011 event. The NAPL is a dense non-aqueous phase liquid (DNAPL) located at the bottom of the wells. NAPL recovery 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 to and thickness of 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.

NAPL was recovered during 13 events from January to July 2011 (Table 3).

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). Non-hazardous purge water is stored in an onsite storage tank for subsequent offsite disposa.

There were 25 monitoring wells sampled during the December 14 - 28 groundwater sampling event.

2.4 Soil Vapor Sampling

Soil vapor sampling was conducted by GEI consultants in the third quarter of 2011. Sampling occurred at six vapor points (HIVP-16, HIVP-17, HIVP-18, HIVP-19, HIVP-20, and HIVP-21) within the community on September 28, 2011 (see Figure 2 for soil vapor point locations).

2.5 Groundwater Treatment System Operation

National Grid installed two oxygen delivery systems to treat groundwater in the downgradient plume. The first system that was completed, designated "System No. 2", extends from Mirschel Park in the east to Kensington Court in the west and began operation in October 2010. The second system that was 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 and started operating in April 2011. Figure 3 shows the locations of the two systems.

The performance of System No. 1 and System No. 2 was monitored through the measurement of water levels, headspace gas, and water quality parameters in the groundwater approximately twice per month by Fenley & Nicol (see Table 5) and weekly starting in the third quarter by URS (see Tables 6 and 7). Groundwater levels were measured by URS with an interface probe and headspace with a photoionization detector (PID) and a multi-gas portable monitor for VOCs, oxygen, carbon dioxide, and methane. Groundwater quality parameters were measured with a multi-parameter water quality meter for pH, conductivity, dissolved oxygen, ORP, and temperature. Fenley & Nicol also performed water level measurement, well headspace monitoring with a photoionization detector (PID), and dissolved oxygen measurements with a dissolved oxygen meter.

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, although there is evidence of decreased concentrations in certain monitoring wells that are located directly

downgradient of oxygen delivery Systems No. 1 and No. 2, specifically HIMW-13I, HIMW-20I, and HIMW-25 and to a lesser extent, HIMW-23 and HIMW-24.

For HIMW-13I, BTEX readings decreased from 205 µg/L in the first quarter, 142 µg/L in the second quarter, 96 µg/L in the third quarter, to 27 µg/L in the fourth quarter. PAH results were 128 µg/L in the first quarter and decreasing to 67 µg/L in the second quarter and staying steady at 75 and 62 µg/L in the third and fourth quarter, respectively. This well is approximately 610 feet downgradient from System No. 2.

Groundwater sampling results for HIMW-20I showed BTEX readings of 186 and 198 µg/L during the first and second quarters decreasing to 10 and 1 µg/L for the third and fourth quarters, respectively. PAH results demonstrated a similar decrease from 1,144 µg/L in the first quarter to 530 µg/L in the second quarter, to 2 µg/L in the third quarter and finally not detected in the fourth quarter. This monitoring well location is approximately 30 feet downgradient from System No. 1.

Monitoring well HIMW-25 was installed in the first quarter and was first sampled in the second, third, and fourth quarters. This sampling showed BTEX results of 552 µg/L, followed by 109 µg/L in the third quarter, and 10 µg/L in the fourth quarter. PAH analysis returned a result of 573 µg/L in the second quarter, 109 µg/L in the third quarter, and not detected in the fourth quarter. This monitoring well location is approximately 125 feet downgradient from System No. 1.

Monitoring wells HIMW-23 and HIMW-24 were also installed in the first quarter and have shown decreases in BTEX and PAH concentrations. For HIMW-23, BTEX concentrations were 43 µg/L in the second quarter and were 1 µg/L in the fourth quarter while the PAH concentrations decreased from 11 µg/L to not detected in the same period. This location is approximately 70 feet downgradient from System No. 2. Likewise for HIMW-24, BTEX concentrations were 870 µg/L in the second quarter and were 671 µg/L in the fourth quarter while the PAH concentrations decreased from 1,020 µg/L to 792 µg/L in the same period. This location is approximately 380 feet downgradient from System No. 1.

In December 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 34 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 2,648 µg/L (intermediate well, HIMW-5I).

3.2 Potentiometric Heads and NAPL Thickness

Potentiometric heads and NAPL thickness measurements for 2011 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. Potentiometric surface maps for the first quarter, second quarter, and third quarter are provided in the previous quarterly reports (URS 2011a, 2011b, 2011c).

DNAPL was detected in 26 existing wells in the first quarter, 25 wells in the second quarter, 24 wells in the third quarter, and 14 of the wells during the fourth quarter 2011 (Table 3). Figures 8 through 11 illustrate the thickness of DNAPL that was measured for the fourth, third, second, and first quarters of 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.

Figures 12A through 12AK provide cumulative NAPL recovery and NAPL thickness plots for the period of December 2003 to July 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.

NAPL recovery activities were suspended after the July 26, 2011 event due to the planned start of the ISS remediation.

URS provided oversight for Fenley & Nicol to abandon 31 product recovery wells at the Hempstead site on November 10-11, 2011 (Table 1A). These wells will therefore be removed from future monitoring activities.

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 745 gallons of NAPL was recovered between April 2007 and July 2011. The volume of NAPL recovered from the on- site and off-site wells in 2011 ranged from 24 to 50 gallons. Approximately 50 gallons were recovered during the first quarter, 65 gallons were recovered during the second quarter, and 24 gallons of NAPL were recovered during the third quarter. NAPL recovery was not performed at the site during the fourth quarter of 2011.

3.5 Groundwater Treatment System Performance

System No. 1

The groundwater treatment System No. 1 started operation on April 27, 2011. Fenley & Nicol conduct bimonthly monitoring including 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 delivery line (MP-1-1S through MP-1-4D) were all above 5 mg/L (showing sufficient oxygen concentrations to support bacterial growth), and ranged up to 44 mg/L in some cases, near the oxygen solubility saturation limits of 50 mg/L. The exception was MP-1-4S which showed oxygen saturation levels of between 0.78 and 5.6 mg/L related to reductions in oxygen flow in adjacent delivery wells, as discussed below. The MP wells located downgradient of the plume (MP-1-5 through MP-1-8) also showed sufficient oxygenation in the 5 mg/L to 27 mg/L range. There are lower oxygen levels in MP-1-7 which is downgradient of MP-1-4S and MP-1-4D. These levels are lower than their corresponding upgradient MP wells, as is expected with the biological process proceeding while groundwater flows downgradient.

During the third quarter, a pressure build up condition was also observed in the MP wells for System No. 1, primarily in the deep MP wells. To monitor the pressure in the MP wells, URS collected supplementary headspace data. A summary of the data collected during the fourth quarter is presented in Table 6.

The accumulation of oxygen in the headspace is likely due to reduction in oxygen demand (as a result of contaminant level reduction) and/or short circuiting in cases where oxygen delivery wells are located very close to monitoring points (e.g. MP-1-2S and MP-1-2D) because of access constraints. To address this, the oxygen delivery duration was reduced during the third quarter 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 deep wells OW-1-13D through OW-1-20D, located along the LIRR ROW, were temporarily deactivated. Because high headspace oxygen still was monitored in the western monitoring points (MP-1-1S, MP-1-1D, MP-1-2S, and MP-1-2D), banks 3 and 5 were shutdown completely on November 28, 2011. Additionally, due to elevated headspace oxygen in MP-1-4S and MP-1-4D, delivery wells OW-1-41S, OW-1-41D, OW-1-42S, OW-1-42D, OW-1-43, and OW-1-44, all located near the MP-1-4 monitoring point pair, were temporarily deactivated.

Table 6 shows that the adjustments made to the system operation have lowered the headspace oxygen concentration in the MP wells, except for 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. Due to the reductions in oxygen delivery discussed above to address headspace oxygen concentrations, the dissolved oxygen concentration during the forthr quarter were somewhat lower than earlier measurements. But for all the MP wells along the delivery line except for MP-1-4S and MP-1-4D the dissolved oxygen level was greater than 5 mg/L, providing a sufficiently aerobic environment. Oxygen concentrations for MP-1-4S and MP-1-4D decreased during this period, especially after delivery reduction instituted on November 28, 2011, but they were still aerobic. Delivery rate changes near these two wells will be adjusted during the first quarter of 2012 to increase dissolved oxygen concentrations in this area.

The downgradient MP wells (MP-1-5 through MP-1-8) also show aerobic conditions although the MP-1-7, downgradient of MP-1-4S and MP-1-4D is less aerobic than the other three as expected. 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 No. 1 and System No. 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.

System No. 2

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

During the third quarter, to address elevated headspace oxygen concentrations and (in some cases) greater than atmospheric pressures in monitoring point headspaces, 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 and the delivery duration to banks D & E (which serve the center of the System No. 2 delivery line) was reduced from 13 minutes per cycle to 6 minutes per cycle.

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 7. This table shows that the adjustments made to the system operation have lowered the oxygen concentration in the MP well headspace, but there was some pressure build up observed towards the end of the quarter in MP-2-4.

The performance of System No. 2 has been effective in raising the oxygen level sufficiently to support aerobic bacterial growth and attendant hydrocarbon degradation. Dissolved oxygen levels during the fourth quarter were lower than observed in earlier quarters, possibly due to the reductions in oxygen delivery rate. However, dissovlved oxygen concentration remain in the range of 7 to 30 mg/L, demonstrating 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 1 µg/L BTEX and total PAH concentrations, showing in the system is effective in reducing concentrations of dissolved hydrocarbons in this area.

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 to approximately 3,600 feet south of the site boundary.
- 31 product recovery wells were closed in place within the Intersection Street property boundary by filling the well with sand. The abandoned wells were located in the footprint of the in-situ solidification of the delineated MGP free product plume.
- Dense non-aqueous phase liquid (DNAPL) was detected in 26 wells during the first quarter, 25 wells during the second quarter, 24 wells during the third quarter, and 14 existing wells during the fourth quarter of 2011. The wells were located on site or within a parking lot immediately south of the site.
- Approximately 745 gallons of NAPL was recovered between April 2007 and July 2011. The volume of NAPL recovered from the on- site and off-site wells in 2011 ranged from 24 to 50 gallons. Approximately 50 gallons were recovered during the first quarter, 65 gallons were recovered during the second quarter, and 24 gallons of NAPL were recovered during the third quarter. NAPL was not recovered from the site wells during the fourth quarter of 2011.
- 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, although there is evidence of decreased concentrations in certain monitoring wells that are located directly downgradient of oxygen delivery Systems No. 1 and No. 2.
- The first of two oxygen delivery systems (System No. 2), brought on line in October 2010, has successfully promoted increased aerobic conditions in the aquifer near the system.

- The second of two oxygen delivery systems (System No. 1), 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.
- Bimonthly headspace and water quality parameters were collected from the monitoring points for Systems No. 1 and No. 2 by Fenley & Nicol. During the first quarter, Fenley & Nicol monitored System No. 2 during five events. During the second quarter, Fenley & Nicol monitored System No. 1 three times, after it was brought on-line, and System No. 2 six times. During the third quarter, Fenley & Nicol monitored System No. 1 and No. 2 during five events. During the fourth quarter, Fenley & Nicol monitored System No. 1 and No. 2 during six events.
- Starting in the third quarter, URS measured weekly headspace and water quality parameters for the monitoring points for Systems No. 1 and No. 2 to provide additional data to assess the observed pressure in monitoring wells. During the third quarter, URS monitored System No. 1 four times and System No. 2 five times. During the fourth quarter, URS monitored System No. 1 twelve times and System No. 2 eleven times.

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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.

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

TABLES

Table 1A
Summary of 2011 Field Activities [1], [2]
Water Level Measurements, NAPL Thickness Measurements, and Water Quality Sampling
Hempstead Intersection Street Former MGP Site

Well ID	Fourth Quarter (Oct-Dec 2011)[4]			Third Quarter (Jul-Aug 2011)			Second Quarter (Apr-May 2011)			First Quarter (Jan-Mar 2011)[3]		
	Water Level	NAPL Thickness	Water Quality	Water Level	NAPL Thickness	Water Quality	Water Level	NAPL Thickness	Water Quality	Water Level	NAPL Thickness	Water Quality
HIMW-001S	Abandoned			X	X		X	X		X	X	
HIMW-001I	Abandoned			X	X		X	X		X	X	
HIMW-001D	Abandoned											
HIMW-002S	X			X	X		X	X		X	X	
HIMW-002I	X			X	X		X	X		X	X	
HIMW-002D	X			X	X		X	X		X	X	
HIMW-003S	X		X	X	X	X	X	X	X	X	X	
HIMW-003I	X		X	X	X		X	X	X	X	X	
HIMW-003D	X		X	X	X		X	X	X	X	X	
HIMW-004S	X			X	X		X	X		X	X	
HIMW-004I	X			X	X		X	X		X	X	
HIMW-004D	X			X	X		X	X		X	X	
HIMW-005S	X		X	X	X	X	X	X	X	X	X	X
HIMW-005I	X		X	X	X	X	X	X	X	X	X	X
HIMW-005D	X		X	X	X	X	X	X	X	X	X	X
HIMW-006S	Abandoned			X	X		X	X		X	X	
HIMW-006I	Abandoned			X	X		X	X		X	X	
HIMW-006D	Abandoned			X	X		X	X		X	X	
HIMW-007S	Abandoned			X	X		X	X		X	X	
HIMW-007I	Abandoned			X	X		X	X		X	X	
HIMW-007D	Abandoned			X	X		X	X		X	X	
HIMW-008S	X		X	X	X	X	X	X	X	X	X	X
HIMW-008I	X		X	X	X	X	X	X	X	X	X	X
HIMW-008D	X		X	X	X	X	X	X	X	X	X	X
HIMW-009S	X			X	X		X	X		X	X	
HIMW-009I	X			X	X		X	X		X	X	
HIMW-009D	X			X	X		X	X		X	X	
HIMW-010S	X			X	X		X	X		I	I	
HIMW-010I	X			X	X		X	X		X	X	
HIMW-010D				X	X		X	X		I	I	
HIMW-011S	X	X		X	X		X	X		I	I	
HIMW-011I	X	X		X	X		X	X		I	I	
HIMW-011D	X	X		X	X		X	X		I	I	
HIMW-012S	X		X	X	X	X	X	X	X	X	X	X
HIMW-012I	X		X	X	X	X	X	X	X	X	X	X
HIMW-012D	X		X	X	X	X	X	X	X	X	X	X
HIMW-013S	X		X	X	X	X	X	X	X	X	X	
HIMW-013I	X		X	X	X	X	X	X	X	X	X	X
HIMW-013D	X		X	X	X	X	X	X	X	X	X	X
HIMW-014I	X		X	X	X	X	X	X	X	X	X	X
HIMW-014D	X		X	X	X		X	X	X	X	X	
HIMW-015I	X		X	X	X	X	X	X	X	X	X	X
HIMW-015D	X		X	X	X	X	X	X	X	X	X	X
HIMW-016S	X	X		X	X					X	X	
HIMW-016I	X	X		X	X					X	X	
HIMW-017S	X	X		X	X					X	X	
HIMW-018S	Abandoned			X	X		X	X		X	X	
HIMW-018I	Abandoned			X	X		X	X		X	X	
HIMW-019S	Abandoned			X	X		X	X		X	X	
HIMW-019I	Abandoned			X	X		X	X		X	X	
HIMW-020S	X		X	X	X	X	X	X	X	X	X	X
HIMW-020I	X		X	X	X	X	X	X	X	X	X	X
HIMW-21	X	X								X	X	
HIMW-22	X		X	X	X	X	X	X	X			
HIMW-23	X		X	X	X	X	X	X	X			
HIMW-24	X		X	X	X	X	X	X	X			
HIMW-25	X		X	X	X	X	X	X	X			
PZ-02												
PZ-03												
PZ-08	Abandoned			X	X		X	X		I	I	
IPR-01	Abandoned			X	X		X	X		X	X	
IPR-02	Abandoned			X	X		X	X		X	X	
IPR-03	Abandoned			X	X		X	X		X	X	
IPR-04	Abandoned			X	X		X	X		X	X	
IPR-05	Abandoned			X	X		X	X		I	I	
IPR-06	Abandoned			X	X		X	X		X	X	
IPR-07	Abandoned			X	X		X	X		X	X	
IPR-08	Abandoned			X	X		X	X		X	X	
IPR-09	Abandoned			X	X		X	X		X	X	
IPR-10	Abandoned			X	X		X	X		X	X	
IPR-11	Abandoned			X	X		X	X		X	X	
IPR-12A	Abandoned			X	X		X	X		X	X	
IPR-12B	Abandoned			X	X		X	X		I	I	
IPR-13	Abandoned			X	X		X	X		X	X	
IPR-14	X	X		X	X		X	X		X	X	
IPR-15	X	X		X	X		X	X		X	X	
IPR-16	X	X		X	X		X	X		X	X	
IPR-17	X	X		X	X		X	X		X	X	
IPR-18	X	X		X	X		X	X		X	X	
IPR-19S*												
IPR-19D	X	X		X	X		X	X		X	X	
IPR-20	X	X		X	X					X	X	
IPR-21	X	X		X	X		X	X		X	X	
IPR-22	X	X		X	X		X	X		X	X	
IPR-23	X	X		X	X		X	X		X	X	
IPR-24	X	X		X	X		X	X		X	X	
IPR-25	Abandoned			X	X		X	X		I	I	
IPR-26	Abandoned			X	X					I	I	
IPR-27	Abandoned			X	X		X	X		X	X	
IPR-28	Abandoned			X	X		X	X		X	X	
IPR-29	X	X		X	X		X	X		X	X	
IPR-30	X	X		X	X		X	X		X	X	
IPR-31												
OSMW-01	X	X		X	X		X	X		I	I	
OSMW-02	X	X		X	X		X	X		I	I	
OSMW-03	X	X		X	X		X	X		I	I	

Notes:

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

2 Blank field indicates that the activity was not performed.

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

4 Wells were Abandoned on November 10-11, 2011.

* IPR-19S is covered with cold patch and is inaccessible.

Table 1B
Summary of 2011 Field Activities [1], [2]
NAPL Product Recovery
Hempstead Intersection Street Former MGP Site

Well ID	Third Quarter 2011		Second Quarter 2011					First Quarter 2011[3]					
	July 26, 2011	July 7-8, 2011	June 23, 2011	June 7-8, 2011	May 20, 2011	May 2-3, 2011	Apr 15, 2011	Mar 29, 2011	Mar 15, 2011	Feb 23, 2011	Feb 10, 2011	Jan 21, 2011	Jan 4, 2011
HIMW-001S		X		X	X	X		X		X		X	
HIMW-001I	X	X		X	X	X	X	X		X		X	X
HIMW-001D													
HIMW-002S													
HIMW-002I													
HIMW-002D													
HIMW-003S													
HIMW-003I													
HIMW-003D													
HIMW-004S													
HIMW-004I													
HIMW-004D													
HIMW-005S													
HIMW-005I													
HIMW-005D													
HIMW-006S	X	X	X	X	X	X	X	X	X	X	X	X	
HIMW-006I		X		X	X	X		X		X		X	
HIMW-006D				X									
HIMW-007S	X	X	X	X	X	X	X	X	X	X	X	X	X
HIMW-007I		X		X		X		X		X		X	
HIMW-007D		X		X		X		X		X		X	
HIMW-008S													
HIMW-008I													
HIMW-008D													
HIMW-009S													
HIMW-009I													
HIMW-009D													
HIMW-010S													
HIMW-010I													
HIMW-010D													
HIMW-011S		X		X				X		I		I	
HIMW-011I		X				X		X		I		I	
HIMW-011D													
HIMW-012S													
HIMW-012I													
HIMW-012D													
HIMW-013S													
HIMW-013I													
HIMW-013D													
HIMW-014I													
HIMW-014D													
HIMW-015I													
HIMW-015D													
HIMW-016S	X	X				X		X		X	X	X	X
HIMW-016I	X	X				X		X		X	X	X	X
HIMW-017S	X		X	X		X	X	X		X		X	
HIMW-018S	X	X		X		X		X		X		X	
HIMW-018I		X		X		X		X		X		X	
HIMW-019S	X	X		X		X		X		X		X	
HIMW-019I		X		X		X		X		X		X	
HIMW-020S													
HIMW-020I													
HIMW-21	X	X	X	X				X		X	X	X	
HIMW-22													
HIMW-23													
HIMW-24													
HIMW-25													
PZ-02													
PZ-03													
PZ-08	X	X	X	X	X	X	X	X	X	X		X	X
IPR-01		X		X		X		X		X		X	
IPR-02		X	X	X	X	X	X	X		I		X	
IPR-03		X		X		X		X		X		X	
IPR-04		X		X		X		X		X		X	
IPR-05		X						I		I		X	
IPR-06	X	X	X	X	X	X	X	X	X	X		X	X
IPR-07		X		X		X		X		I		X	
IPR-08		X		X		X		X		X		X	
IPR-09		X		X		X	X	X		X		X	
IPR-08		X		X		X		X		X		X	
IPR-09		X		X		X	X	X		X		X	
IPR-10		X		X		X		X		X		X	
IPR-11		X		X		X		X		X		X	
IPR-12A		X		X		X		X		X		X	
IPR-12B		X		X		X		X		I		I	
IPR-13		X		X		X		X		X		X	
IPR-14		X		X		X		X		X		X	
IPR-15		X		X		X		X		X		X	
IPR-16		X	X	X		X	X	X	X	X		X	
IPR-17		X	X	X	X	X	X	X		X		X	
IPR-18		X		X		X		X		X		I	
IPR-19S													
IPR-19D		X		X		X		X		X		I	
IPR-20	X	X		X		X	X	X		X		X	
IPR-21	X	X	X	X	X	X	X	X		X		X	X
IPR-22	X	X	X	X	X	X		X	X	X	X	X	
IPR-23		X		X		X		X		X		I	
IPR-24	X	X		X		X		X		X		I	
IPR-25	X	X	X	X	X		X	X	X	X		X	X
IPR-26		X				X	X	X		I		I	
IPR-27	X	X	X	X	X	X	X	X		X	X	X	X
IPR-28		X	X		X	X		X		X		X	
IPR-29	X		X	X	X	X	X	X	X	X	X	X	
IPR-30	X	X		X		X	X	X		X		I	X
OSMW-01		X						X		I		I	
OSMW-02		X		X				X		I		I	
OSMW-03		X		X						I		I	

Notes:

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

2 Blank field indicates that the activity was not performed.

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

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

Table 2
Groundwater and NAPL Measurements
Fourth 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[2]	NM	71.61	NM	NM	NM	CIP	NM	NM	NM
HIMW-01I[2]	NM	71.68	NM	NM	NM	CIP	NM	NM	NM
HIMW-01D[2]	NM	71.95	NM	NM	NM	CIP	NM	NM	NM
HIMW-02S	12/13/2011	73.82	ND	23.88	ND	41.6	0	0	49.94
HIMW-02I	12/13/2011	78.87	ND	23.94	ND	91.5	0	0	54.93
HIMW-02D	12/13/2011	74.13	ND	24.12	ND	117.3	0	0	50.01
HIMW-03S	12/13/2011	65.00	ND	15.28	ND	34.7	0	0	49.72
HIMW-03I	12/13/2011	64.94	ND	15.38	ND	86.9	0	0	49.56
HIMW-03D	12/13/2011	65.26	ND	16.09	ND	145.3	0	0	49.17
HIMW-04S	12/13/2011	72.74	ND	23.76	ND	41.6	0	0	48.98
HIMW-04I	12/13/2011	72.78	ND	23.86	ND	90.5	0	0	48.92
HIMW-04D	12/13/2011	72.65	ND	24.28	ND	180.5	0	0	48.37
HIMW-05S	12/13/2011	67.19	ND	18.09	ND	39.1	0	0	49.10
HIMW-05I	12/13/2011	67.22	ND	18.04	ND	92.3	0	0	49.18
HIMW-05D	12/13/2011	67.22	ND	18.31	ND	139.0	0	0	48.91
HIMW-06S[2]	NM	68.25	NM	NM	NM	CIP	NM	NM	NM
HIMW-06I[2]	NM	67.88	NM	NM	NM	CIP	NM	NM	NM
HIMW-06D[2]	NM	67.77	NM	NM	NM	CIP	NM	NM	NM
HIMW-07S[2]	NM	70.47	NM	NM	NM	CIP	NM	NM	NM
HIMW-07I[2]	NM	70.10	NM	NM	NM	CIP	NM	NM	NM
HIMW-07D[2]	NM	70.40	NM	NM	NM	CIP	NM	NM	NM
HIMW-08S	12/13/2011	65.04	ND	16.46	ND	37.1	0	0	48.58
HIMW-08I	12/13/2011	65.14	ND	16.62	ND	75.1	0	0	48.52
HIMW-08D	12/13/2011	64.93	ND	16.42	ND	114.8	0	0	48.51
HIMW-09S	12/13/2011	70.03	ND	20.88	ND	39.6	0	0	49.15
HIMW-09I	12/13/2011	69.93	ND	20.82	ND	80.5	0	0	49.11
HIMW-09D	12/13/2011	69.96	ND	20.93	ND	122.8	0	0	49.03
HIMW-10S	12/13/2011	71.60	ND	21.42	ND	39.1	0	0	50.18
HIMW-10I	12/13/2011	71.47	ND	21.09	ND	91.4	0	0	50.38
HIMW-10D[3]	NM	71.44	NM	NM	NM	136.0	NM	NM	NM
HIMW-11S	12/13/2011	71.62	ND	21.80	ND	41.6	0	0	49.82
HIMW-11I	12/13/2011	71.43	ND	21.71	ND	94.5	0	0	49.72
HIMW-11D	12/13/2011	71.39	ND	21.69	ND	123.6	0	0	49.70
HIMW-12S	12/13/2011	61.58	ND	14.23	ND	33.5	0	0	47.35
HIMW-12I	12/13/2011	61.59	ND	14.21	ND	75.0	0	0	47.38
HIMW-12D	12/13/2011	61.82	ND	15.75	ND	128.5	0	0	46.07
HIMW-13S	12/13/2011	72.83	ND	27.73	ND	48.9	0	0	45.10
HIMW-13I	12/13/2011	72.60	ND	27.51	ND	82.6	0	0	45.09
HIMW-13D	12/13/2011	72.53	ND	27.51	ND	122.5	0	0	45.02
HIMW-14I	12/13/2011	71.71	ND	26.75	ND	96.9	0	0	44.96
HIMW-14D	12/13/2011	71.59	ND	28.69	ND	152.6	0	0	42.90
HIMW-15I	12/13/2011	64.18	ND	22.58	ND	93.1	0	0	41.60
HIMW-15D	12/13/2011	63.96	ND	23.85	ND	155.0	0	0	40.11
HIMW-16S	12/13/2011	67.45	ND	17.78	28.91	34.4	0	5.50	49.67
HIMW-16I	12/13/2011	67.50	ND	17.33	77.16	82.7	0	5.50	50.17
HIMW-17S	12/13/2011	65.96	ND	17.06	35.00	36.7	0	1.70	48.90
HIMW-18S[2]	NM	69.76	NM	NM	NM	CIP	NM	NM	NM
HIMW-18I[2]	NM	69.70	NM	NM	NM	CIP	NM	NM	NM
HIMW-19S	NM	70.95	NM	NM	NM	CIP	NM	NM	NM
HIMW-19I[2]	NM	71.27	NM	NM	NM	CIP	NM	NM	NM
HIMW-20S	12/13/2011	70.43	ND	22.42	ND	35.0	0	0	48.01
HIMW-20I	12/13/2011	70.30	ND	22.28	ND	73.0	0	0	48.02

Table 2
Groundwater and NAPL Measurements
Fourth 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	12/13/2011	NM	ND	16.72	45.30	45.3	0	2.0	NM
HIMW-22	12/13/2011	NM	NM	27.53	ND	65.0	0	0	NM
HIMW-23	12/13/2011	NM	NM	27.66	ND	77.0	0	0	NM
HIMW-24	12/13/2011	NM	NM	12.03	ND	56.0	0	0	NM
HIMW-25	12/13/2011	NM	NM	14.37	ND	53.0	0	0	NM
PZ-02	NM	72.96	NM	NM	NM	35.3	NM	NM	NM
PZ-03	NM	64.58	NM	NM	NM	29.5	NM	NM	NM
PZ-08[2]	NM	70.51	NM	NM	NM	CIP	NM	NM	NM
IPR-01[2]	NM	70.30	NM	NM	NM	CIP	NM	NM	NM
IPR-02[2]	NM	68.84	NM	NM	NM	CIP	NM	NM	NM
IPR-03[2]	NM	69.16	NM	NM	NM	CIP	NM	NM	NM
IPR-04[2]	NM	69.23	NM	NM	NM	CIP	NM	NM	NM
IPR-05[2]	NM	70.39	NM	NM	NM	CIP	NM	NM	NM
IPR-06[2]	NM	70.79	NM	NM	NM	CIP	NM	NM	NM
IPR-07[2]	NM	69.73	NM	NM	NM	CIP	NM	NM	NM
IPR-08[2]	NM	70.51	NM	NM	NM	CIP	NM	NM	NM
IPR-09[2]	NM	70.00	NM	NM	NM	CIP	NM	NM	NM
IPR-10[2]	NM	70.80	NM	NM	NM	CIP	NM	NM	NM
IPR-11[2]	NM	68.29	NM	NM	NM	CIP	NM	NM	NM
IPR-12A[2]	NM	70.14	NM	NM	NM	CIP	NM	NM	NM
IPR-12B[2]	NM	69.56	NM	NM	NM	CIP	NM	NM	NM
IPR-13[2]	NM	70.77	NM	NM	NM	CIP	NM	NM	NM
IPR-14	12/13/2011	66.93	ND	17.61	ND	44.4	0	0	49.32
IPR-15	12/13/2011	67.93	ND	18.56	ND	44.4	0	0	49.37
IPR-16	12/13/2011	69.49	ND	20.04	47.5	49.1	0	1.55	49.45
IPR-17	12/13/2011	70.60	ND	21.08	52.8	54.1	0	1.32	49.52
IPR-18	12/13/2011	66.87	ND	17.68	49.9	50.0	0	0.1	49.19
IPR-19S	NM	67.68	NM	NM	NM	45.1	NM	NM	NM
IPR-19D	12/13/2011	67.96	ND	18.71	89.82	89.9	0	0.1	49.25
IPR-20	12/13/2011	66.70	NM	17.62	44.05	45.4	0	1.35	49.08
IPR-21	12/13/2011	67.67	ND	18.48	42.71	45.0	0	2.25	49.19
IPR-22	12/13/2011	66.33	ND	17.36	40.20	45.4	0	5.2	48.97
IPR-23	12/13/2011	66.67	ND	17.66	ND	45.4	0	0	49.01
IPR-24	12/13/2011	65.88	ND	17.01	43.05	44.4	0	1.3	48.87
IPR-25[2]	NM	70.56	NM	NM	NM	CIP	NM	NM	NM
IPR-26[2]	NM	NM	NM	NM	NM	CIP	NM	NM	NM
IPR-27[2]	NM	NM	NM	NM	NM	CIP	NM	NM	NM
IPR-28	NM	NM	NM	NM	NM	CIP	NM	NM	NM
IPR-29[2]	12/13/2011	NM	ND	16.98	47.80	50.0	0	2.2	NM
IPR-30	12/13/2011	NM	ND	17.97	48.40	50.0	0	1.6	NM
IPR-31	NM	NM	NM	NM	NM	NM	NM	NM	NM
OSMW-01	12/13/2011	71.12	ND	21.23	ND	42.2	0	0	49.89
OSMW-02	12/13/2011	71.59	ND	21.95	ND	45.2	0	0	49.64
OSMW-03	12/13/2011	71.39	ND	21.83	ND	44.7	0	0	49.56

Notes:

(1) Potentiometric heads in wells containing LNAPL are corrected using a specific gravity = 0.96
(2) Well Closed In Place (CIP) on November 10-11, 2011 at the start of the In-Situ Solidification
(3) Well apparently destroyed by Town of Hempstead sidewalk construction.
sheen Sheen = assumed thickness of 0.01 ft
NM not measured
LNAPL light non-aqueous phase liquid
DNAPL dense non-aqueous phase liquid
TOR top of riser
amsl above mean sea level
ND NAPL not detected

Table 3
NAPL Recovery First Quarter of 2011
Hempstead Intersection Street Former MGP Site

Well ID	January 4, 2011			January 21, 2011			February 10, 2011			February 23, 2011			March 15, 2011			March 29, 2011		
	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)
	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]
HIMW-01S	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-01I	ND	0.80	0.75	ND	0.1	0.00	NI	NI	0.00	ND	1.00	0.00	NI	NI	0.00	ND	1.40	0.24
HIMW-06S	NI	NI	0.00	ND	1.00	0.17	ND	1.50	0.25	NI	4.00	0.68	ND	3.50	0.60	ND	4.70	0.80
HIMW-06I	NI	NI	0.00	ND	0.40	0.07	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
HIMW-07S	ND	1.20	0.20	ND	1.00	0.17	ND	1.70	0.30	ND	2.60	0.44	ND	0.50	0.09	ND	0.50	0.09
HIMW-07I	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-07D	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-11S	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-11I	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-16S	ND	4.70	0.79	ND	5.1	0.00	ND	6.75	1.10	ND	5.50	0.94	NI	NI	0.00	ND	6.90	1.17
HIMW-16I	ND	4.70	0.79	ND	4.7	0.00	ND	6.05	1.00	ND	5.70	0.97	NI	NI	0.00	ND	6.00	1.02
HIMW-17S	NI	NI	0.00	ND	1.2	0.00	NI	NI	0.00	ND	0.60	0.10	NI	NI	0.00	ND	1.70	0.00
HIMW-18S	NI	NI	0.00	ND	0.30	0.05	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
HIMW-18I	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-19S	NI	NI	0.00	ND	0.1	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.95	0.00
HIMW-19I	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
HIMW-21	NI	NI	0.00	ND	1.50	2.25	ND	0.65	1.00	ND	0.4	0.33	NI	NI	0.00	ND	1.65	0.00
PZ-08	ND	1.20	0.20	ND	0.1	0.00	NI	NI	0.00	ND	1.10	0.19	ND	1.50	0.00	ND	0.01	0.00
IPR-02	NI	NI	0.00	ND	0.1	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	1.10	0.00
IPR-03	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
IPR-05	NI	NI	0.00	ND	0.8	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	0.00	0.00
IPR-06	ND	1.10	1.65	ND	1.00	1.5	NI	NI	0.00	ND	1.60	0.33	ND	1.50	2.25	ND	1.60	2.40
IPR-09	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.75	1.13
IPR-12A	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
IPR-14	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
IPR-15	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
IPR-16	NI	NI	0.00	ND	0.7	0.00	NI	NI	0.00	ND	0.30	0.00	ND	1.00	1.50	ND	1.15	0.00
IPR-17	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	1.10	0.00
IPR-18	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
IPR-19D	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
IPR-20	NI	NI	0.00	ND	0.3	0.00	NI	NI	0.00	ND	0.10	0.00	NI	NI	0.00	ND	0.70	0.00
IPR-21	ND	0.90	1.35	ND	0.55	0.00	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00	ND	2.70	0.00
IPR-22	NI	NI	0.00	ND	2.30	3.45	ND	2.1	1.50	ND	1.25	1.80	ND	0.90	1.40	ND	1.30	0.00
IPR-23	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.00	0.00
IPR-24	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	0.40	0.00	NI	NI	0.00	ND	0.01	0.00
IPR-25	ND	1.90	2.85	ND	1.40	0.00	NI	NI	0.00	ND	2.00	0.25	ND	0.75	0.00	ND	2.10	0.00
IPR-26	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	1.30	1.95
IPR-27	ND	1.20	1.80	ND	0.70	1.10	ND	1.10	0.75	ND	1.50	0.50	NI	NI	0.00	ND	1.60	0.50
IPR-28	NI	NI	0.00	ND	0.40	0.60	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	0.01	0.00
IPR-29	NI	NI	0.00	ND	0.90	0.00	ND	1.25	0.30	ND	1.40	0.25	ND	0.85	1.30	ND	1.40	0.00
IPR-30	ND	0.50	0.75	NI	NI	0.00	NI	NI	0.00	ND	0.60	0.00	NI	NI	0.00	ND	0.85	0.00
	Volume Removed		**11.13**	Volume Removed		**9.36**	Volume Removed		**6.20**	Volume Removed		**6.78**	Volume Removed		**7.14**	Volume Removed		**9.30**

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

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

Notes:

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

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

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

Table 3
NAPL Recovery for Second Quarter of 2011
Hempstead Intersection Street Former MGP Site

Well ID	April 15, 2011			May 2-3, 2011			May 20, 2011			June 7-8, 2011			June 23, 2011		
	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)
	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]
HIMW-01S	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
HIMW-01I	ND	1.30	0.20	ND	1.50	0.26	ND	0.30	0.05	ND	ND	0.00	NI	NI	0.00
HIMW-06S	ND	2.10	0.40	ND	1.30	0.22	ND	2.00	0.34	ND	2.00	0.34	ND	2.50	0.43
HIMW-06I	NI	NI	0.00	ND	ND	0.00	ND	0.01	0.00	ND	ND	0.00	NI	NI	0.00
HIMW-07S	ND	0.50	0.01	ND	0.01	0.00	ND	2.00	0.34	ND	1.00	0.17	ND	0.05	0.00
HIMW-07I	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
HIMW-07D	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
HIMW-11S	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
HIMW-11I	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00
HIMW-16S	NI	NI	0.00	ND	5.00	0.85	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00
HIMW-16I	NI	NI	0.00	ND	5.00	0.85	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00
HIMW-17S	ND	1.50	0.25	ND	1.20	0.20	NI	NI	0.00	ND	1.50	0.26	ND	0.80	0.14
HIMW-18S	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00
HIMW-18I	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
HIMW-19S	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
HIMW-19I	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
HIMW-21	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	ND	1.00	1.50	ND	0.40	0.60
PZ-08	ND	0.01	0.00	ND	0.01	0.00	ND	0.90	0.15	ND	1.00	0.17	ND	ND	0.00
IPR-02	ND	0.90	1.35	ND	1.00	1.50	ND	0.70	1.05	ND	ND	0.00	ND	0.30	0.45
IPR-03	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
IPR-05	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00
IPR-06	ND	1.20	1.50	ND	1.00	1.50	ND	0.90	1.35	ND	1.50	2.25	ND	0.30	0.45
IPR-09	ND	0.90	1.35	ND	1.20	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
IPR-12A	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
IPR-14	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
IPR-15	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
IPR-16	ND	1.20	1.70	ND	0.01	0.00	NI	NI	0.00	ND	1.00	1.50	ND	ND	0.00
IPR-17	ND	1.30	1.80	ND	1.50	0.00	ND	0.60	0.25	ND	ND	0.00	ND	ND	0.00
IPR-18	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
IPR-19D	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
IPR-20	ND	0.01	0.00	ND	0.01	0.00	NI	NI	0.00	ND	0.60	0.00	NI	NI	0.00
IPR-21	ND	2.00	3.00	ND	3.10	3.00	ND	0.80	0.50	ND	3.00	4.50	ND	2.40	3.60
IPR-22	NI	NI	0.00	ND	0.90	0.00	ND	1.50	2.00	ND	0.80	1.20	ND	1.00	1.50
IPR-23	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00	ND	ND	0.00	NI	NI	0.00
IPR-24	NI	NI	0.00	ND	0.01	0.00	NI	NI	0.00	ND	1.00	1.50	NI	NI	0.00
IPR-25	ND	2.20	0.00	NI	NI	0.00	ND	2.00	3.00	ND	2.00	3.00	ND	3.40	0.00
IPR-26	ND	1.00	1.50	ND	0.80	1.20	NI	NI	0.00	NI	NI	0.00	NI	NI	0.00
IPR-27	ND	1.50	0.50	ND	1.50	0.00	ND	2.50	0.50	ND	2.00	0.00	ND	1.30	1.95
IPR-28	NI	NI	0.00	ND	0.50	0.00	ND	0.20	0.30	ND	ND	0.00	ND	0.30	0.45
IPR-29	ND	1.20	1.80	ND	0.20	0.00	ND	0.80	0.00	ND	1.00	1.50	ND	0.40	0.60
IPR-30	ND	1.50	0.00	ND	2.00	2.00	NI	NI	0.00	ND	0.40	0.00	NI	NI	0.00
	Volume Removed		**15.36**	Volume Removed		**11.58**	Volume Removed		**9.83**	Volume Removed		**17.89**	Volume Removed		**10.17**

Total volume recovered during the second quarter 2011: **64.83 gal**
Total volume of NAPL recovered since April 2007: **721.7 gal**

Well temporarily inaccessible at time of monitoring event.

Notes:

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

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

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

Table 3
NAPL Recovery for Third 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
ND - non-detect
LNAPL - light non-aqueous phase liquid
DNAPL - dense non-aqueous phase liquid

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

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

Table 4

Dissolved-Phase Concentrations of Total BTEX and Total PAH Compounds
Data Collected in First through Fourth Quarter 2011
Hempstead Intersection Street Former MGP Site

Well ID	Fourth Quarter 2011 December 14 - 28, 2011		Third Quarter 2011 September 20 - 29, 2011		Second Quarter 2011 May 23- June 3, 2011		First Quarter 2011 January 26- February 8, 2011	
	BTEX [ug/L]	PAH [ug/L]	BTEX [ug/L]	PAH [ug/L]	BTEX [ug/L]	PAH [ug/L]	BTEX [ug/L]	PAH [ug/L]
HIMW-001D	CIP	CIP						
HIMW-001I	CIP	CIP						
HIMW-001S	CIP	CIP						
HIMW-002D								
HIMW-002I								
HIMW-002S								
HIMW-003D	ND	ND			ND	ND		
HIMW-003I	ND	ND			ND	ND		
HIMW-003S	ND	ND	ND	ND	ND	ND		
HIMW-004D								
HIMW-004I								
HIMW-004S								
HIMW-005D	182	544	174	1,400	133	166	145.3	1, 178
HIMW-005I	126	2,648	159	2,499	146	2,120	136.9	2,090
HIMW-005S	ND	ND	ND	ND	ND	ND	ND	ND
HIMW-006D								
HIMW-006I	CIP	CIP						
HIMW-006S	CIP	CIP						
HIMW-007D	CIP	CIP						
HIMW-007I	CIP	CIP						
HIMW-007S	CIP	CIP						
HIMW-008D	ND	ND	ND	ND	ND	ND	ND	ND
HIMW-008I	ND	ND	ND	ND	ND	ND	ND	ND
HIMW-008S	ND	4	3	9	ND	3	ND	ND
HIMW-009D								
HIMW-009I								
HIMW-009S								
HIMW-010D								
HIMW-010I								
HIMW-010S								
HIMW-011D								
HIMW-011I								
HIMW-011S								
HIMW-012D	ND	ND	ND	ND	ND	ND	ND	ND
HIMW-012I	63	166	89	136	64	108	54.4	104
HIMW-012S	ND	ND	ND	ND	ND	ND	338.8	1,391
HIMW-013D	5	14	6	19	2	17	8.1	15
HIMW-013I	27	62	96	75	142	67	205.4	128
HIMW-013S	ND	ND	ND	ND	ND	ND		
HIMW-014D	ND	ND			ND	ND		
HIMW-014I	28	58	28	61	29	42	37	39
HIMW-015D	ND	ND	ND	ND	ND	ND	ND	ND
HIMW-015I	24	34	27	31	23	31	24.7	27
HIMW-016I								
HIMW-016S								
HIMW-017S								
HIMW-018I	CIP	CIP						
HIMW-018S	CIP	CIP						
HIMW-019I	CIP	CIP						
HIMW-019S	CIP	CIP						
HIMW-020I	1	ND	10	2	198	530	186	1,144
HIMW-020S	ND	ND	ND	ND	ND	ND	1.7	ND
HIMW-022	1	ND	2	ND	ND	ND		
HIMW-023	1	ND	2	2	43	11		
HIMW-024	671	792	900	897	870	1,020		
HIMW-025	10	ND	109	573	552	573		
PZ-02								
PZ-03								
PZ-08	CIP	CIP						

Notes:

	A blank field is "Not Sampled".
	NAPL is periodically identified in this well.
ND	Not Detected.
ug/L	micrograms per liter
CIP	Well was Closed In Place on November 10-11, 2011

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

System #2		1/7/2011			1/21/2011			2/9/2011			3/2/2011			3/18/2011		
	ID	DTW (ft)	DO (mg/L	PID (ppm)	DTW (ft)	DO (mg/L)	PID (ppm)	DTW (ft)	DO (mg/L)	PID (ppm)	DTW (ft)	DO (mg/L)	PID (ppm)	DTW (ft)	DO (mg/L)	PID (ppm)
	MP-2-1	30.57	14.57	0	30.56	11.05	0	30.51	13.12	0	30.09	11.10	0	29.43	19.60	0
	MP-2-2	31.66	29.54	0	31.62	21.30	0	31.57	40.48	0	31.13	23.57	0	30.47	39.21	0
	MP-2-3S	31.76	46.97	0.1	31.68	48.62	0	31.66	41.81	0.1	31.21	48.95	0.1	30.58	48.05	0
	MP-2-3D	31.98	47.12	0.1	31.92	48.45	0	31.91	49.01	0.1	29.25	48.50	0	30.80	49.00	0
	MP-2-4	20.50	33.35	0	CNL	CNL	CNL	20.38	32.31	0	19.95	30.60	0	19.31	35.64	0.1
	MP-2-5	CNL	CNL	CNL	CNL	CNL	CNL	CNL	CNL	CNL	18.14	17.05	0	17.53	12.35	0

DTW: Depth to water (feet)
DO: Dissolved Oxygen concentration (percent or milligrams per liter)
PID: Photoionization Detector measurement of well headspace (parts per million)
CNL: Could Not Locate, due to snow accumulation

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

		5/20/2011			5/27/2011			6/23/2011		
	ID	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	25.29	34.87	0.0	25.10	17.23	0.0	25.49	8.51	3.0
	MP-1-1D	25.17	33.32	0.0	24.97	26.39	0.0	25.27	9.39	1.6
	MP-1-2S	19.71	29.27	0.0	19.72	13.41	0.0	19.97	12.03	5.4
	MP-1-2D	19.44	47.14	0.0	19.39	25.24	0.0	19.72	21.97	2.8
	MP-1-3S	17.46	7.74	0.0	17.50	7.68	0.0	17.78	21.14	3.3
	MP-1-3D	17.47	4.61	0.0	17.48	9.04	0.0	17.77	47.52	8.5
	MP-1-4S	19.94	7.02	0.0	20.01	6.12	0.0	20.29	7.16	279.7
	MP-1-4D	20.12	39.79	0.0	20.04	48.14	0.0	20.46	20.36	54.5
	MP-1-5	NA	NA	NA	NA	NA	NA	25.03	10.39	104.2
	MP-1-6	17.20	20.87	0.0	19.25	9.48	0.0	17.53	9.20	41.2
	MP-1-7	20.50	0.61	0.0	20.49	1.65	0.0	20.85	1.07	7.2
	MP-1-8	21.47	2.67	0.0	21.53	5.21	0.0	21.82	21.06	11.4

		4/12/2011			4/28/2011			5/13/2011			5/26/2011			6/10/2011			6/24/2011		
	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	29.07	15.62	0.0	28.55	13.80	0.0	28.44	25.49	0.0	28.20	14.20	0.0	28.43	12.51	38.7	28.54	15.18	214.4
	MP-2-2	30.15	27.80	0.0	29.61	33.39	0.1	29.52	32.89	0.0	29.26	31.75	0.0	29.48	7.21	0.0	29.61	21.12	0.0
	MP-2-3S	30.28	48.68	0.1	29.71	39.41	0.1	29.62	49.12	0.0	29.35	43.64	0.0	29.60	8.68	0.0	29.71	12.13	7.1
	MP-2-3D	30.52	49.10	0.1	29.93	39.52	0.0	29.86	49.21	0.0	29.61	44.41	0.0	29.83	11.91	0.0	29.97	15.79	10.2
	MP-2-4	19.08	36.90	0.0	18.46	32.39	0.0	18.40	39.73	0.0	18.13	45.41	0.0	18.35	11.05	1.4	18.47	9.41	149.4
	MP-2-5	17.27	18.37	0.0	16.63	5.23	0.0	16.63	14.35	0.0	16.31	10.32	0.0	16.58	8.46	73.8	16.70	11.20	157.1

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

		7/12/2011			7/27/2011			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)
System #1	MP-1-1S	25.87	31.7	0.0	26.32	24.14	13.4	25.40	35.14	0.0	23.66	19.45	29.3	23.66	27.24	0.0
	MP-1-1D	25.74	26.71	11.5	26.22	36.75	7.5	25.31	47.77	2.4	23.52	39.13	33.3	23.49	31.62	6.7
	MP-1-2S	20.39	12.92	0.0	20.89	12.94	0.0	19.51	49.38	0.0	18.08	27.17	8.1	19.8	30.24	0.0
	MP-1-2D	20.13	27.74	0.0	20.5	13.30	0.0	19.3	36.14	0.0	17.68	42.13	6.1	17.69	31.28	0.0
	MP-1-3S	18.08	18.6	0.0	18.58	17.76	15.7	17.60	13.23	85.1	15.87	15.2	9.9	15.86	11.81	12.5
	MP-1-3D	18.11	36.6	8.7	18.6	36.96	6.9	17.62	38.14	62.2	15.86	19.18	17.8	15.81	17.36	41.3
	MP-1-4S	20.63	14.41	1491.0	21.12	18.66	981.0	20.11	18.14	157.0	18.38	12.12	102.0	18.36	10.51	1.7
	MP-1-4D	20.82	17.47	12.3	21.34	31.77	4.8	20.28	37.86	43.0	18.57	14.2	23.0	18.57	15.14	3.8
	MP-1-5	25.37	19.01	13.5	25.85	12.11	66.9	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	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	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	21.61	9.54	0.0	19.95	12.20	7.3	18.95	17.73	10.7

		7/11/2011			7/26/2011			8/20/2011			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)
System #2	MP-2-1	28.85	26.60	9.2	29.28	22.76	49.5	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	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	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	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	19.21	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	17.37	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 5
Groundwater Treatment Performance Monitoring
Fourth Quarter 2011
Hempstead Intersection Street Former MGP Site

System # 1		10/14/2011			10/27/2011			11/10/2011			11/22/2011			12/9/2011			12/23/2011		
	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)
	MP-1-1S	23.83	16.09	0.0	23.93	6.69	0.0	23.83	8.20	0.0	24.00	8.41	0.0	23.91	14.21	0.0	23.93	19.67	0.1
	MP-1-1D	23.63	9.17	0.9	23.78	6.94	0.9	23.68	6.79	0.0	23.85	6.25	0.0	23.75	7.77	0.0	23.76	5.28	0.2
	MP-1-2S	19.21	16.76	0.0	18.35	11.67	0.8	18.21	19.43	0.0	18.42	12.16	0.0	18.29	16.42	0.0	18.33	14.68	0.0
	MP-1-2D	17.79	44.15	0.0	17.93	12.83	0.0	17.81	43.14	0.0	18.02	17.19	0.0	17.88	18.60	0.9	17.92	37.40	0.0
	MP-1-3S	15.94	8.01	0.0	16.12	11.97	0.0	15.98	23.45	0.0	16.19	17.37	0.0	16.03	23.12	0.0	16.10	30.83	0.0
	MP-1-3D	15.92	9.04	0.0	16.10	7.56	0.3	15.94	7.59	0.0	16.17	6.20	0.0	15.99	6.71	0.0	16.05	4.92	0.5
	MP-1-4S	18.47	4.67	0.0	18.63	1.82	0.0	18.50	5.60	0.0	18.75	4.11	0.0	18.48	0.78	0.0	18.57	0.89	0.0
	MP-1-4D	18.59	7.01	0.4	18.83	7.94	1.6	18.68	3.60	0.0	18.92	23.37	38.3	18.68	26.14	0.7	18.75	12.72	0.0
	MP-1-5	23.26	14.15	0.0	23.42	10.51	0.0	23.33	10.25	0.0	23.50	17.25	0.0	23.40	27.42	0.4	23.43	22.92	0.0
	MP-1-6	15.70	5.53	0.0	15.86	5.49	0.0	15.72	8.82	0.0	15.94	7.29	0.0	15.76	6.17	0.0	15.85	8.34	0.0
	MP-1-7	19.99	7.20	0.0	19.18	1.85	0.2	18.99	2.18	0.0	19.26	3.30	0.0	18.99	0.90	0.0	19.07	11.82	0.0
	MP-1-8	20.05	11.90	0.0	20.20	8.84	0.0	20.06	8.88	0.9	20.30	9.42	0.0	20.06	16.84	0.2	20.09	11.36	0.0

System # 2		10/13/2011			10/26/2011			11/9/2011			11/23/2011			12/8/2011			12/22/2011		
	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)
	MP-2-1	26.79	14.13	31.1	26.98	7.78	0.5	26.88	5.98	0	26.87	8.05	0	26.97	10.07	0	27.05	9.20	0
	MP-2-2	27.92	16.35	3.2	28.07	9.89	0	28.00	10.71	0	28.00	11.78	0	28.09	25.85	0	28.16	18.30	0
	MP-2-3S	28.01	7.1	35.9	28.19	11.79	1.2	28.12	9.01	0	28.07	0.84	0	28.27	10.90	0.1	28.28	25.40	0
	MP-2-3D	28.24	9.18	15.8	28.39	26.31	0	28.28	11.20	0	28.25	12.58	0	28.35	15.25	0.5	28.47	32.62	0
	MP-2-4	16.79	23.21	0	16.94	7.79	0	16.83	7.09	0	16.81	14.86	0	16.87	9.31	0	17.01	16.70	0
	MP-2-5	15.01	30.08	2.1	15.14	12.02	0	15.05	9.32	0	14.99	10.89	0	15.06	10.45	0	15.22	18.38	0

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

Table 6
Groundwater Treatment Headspace Monitoring, System No. 1
Fourth Quarter 2011
Hempstead Intersection Street Former MGP Site

Date: 10/1/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	1.1	0.9	0.0	32.1	Slight	No
MP-1-1D	3.7	1.2	0.0	>40	No	No
MP-1-2S	0.7	1.6	0.0	32.0	No	No
MP-1-2D	0.0	1.2	0.0	>40	Slight	No
MP-1-3S	0.7	1.2	0.0	25.1	No	No
MP-1-3D	0.2	1.4	0.0	20.6	No	No
MP-1-4S	0.5	0.6	0.0	22.4	No	No
MP-1-4D	5.4	1.6	0.0	35.4	No	No
MP-1-5	1.8	0.8	0.0	20.9	No	No
MP-1-6	0.1	2.2	0.0	19.5	No	No
MP-1-7	0.1	1.2	0.0	20.3	No	No
MP-1-8	0.4	0.8	1.0	22.1	No	No

Date: 10/7/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.5	1.0	0.0	41.1	Slight	No
MP-1-1D	0.5	0.0	0.0	21.8	Slight	No
MP-1-2S	0.4	2.0	0.0	40.4	No	No
MP-1-2D	0.2	0.8	0.0	35.6	High	No
MP-1-3S	0.3	1.0	0.0	24.9	Slight	No
MP-1-3D	0.1	0.0	0.0	21.5	No	No
MP-1-4S	0.1	0.0	0.0	22.2	No	No
MP-1-4D	2.7	2.0	0.0	28.8	Slight	No
MP-1-5	0.4	0.2	0.0	21.5	No	No
MP-1-6	0.9	1.0	0.0	20.9	No	No
MP-1-7	1.1	0.6	0.0	20.8	No	No
MP-1-8	0.1	0.0	0.0	20.7	No	No

Date: 10/14/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.1	0.6	0.0	27.8	No	No
MP-1-1D	0.2	0.4	0.0	25.1	No	No
MP-1-2S	0.1	0.4	0.0	26.2	No	No
MP-1-2D	0.0	1.2	0.0	29.2	Moderate	No
MP-1-3S	0.0	0.8	0.0	26.1	Slight	No
MP-1-3D	0.0	0.0	0.0	20.9	No	No
MP-1-4S	0.1	0.6	0.0	20.9	No	No
MP-1-4D	0.5	0.4	0.0	22.6	No	No
MP-1-5	0.0	0.0	0.0	20.9	No	No
MP-1-6	0.0	0.0	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	0.0	20.9	No	No

Table 6
Groundwater Treatment Headspace Monitoring, System No. 1
Fourth Quarter 2011
Hempstead Intersection Street Former MGP Site

Date: 10/26/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	3.6	1.6	0.0	>40	Slight	No
MP-1-1D	1.3	1.3	0.0	24.5	No	No
MP-1-2S	1.5	2.4	0.0	>40	No	No
MP-1-2D	0.0	1.4	0.0	>40	High with Water Vapor	No
MP-1-3S	0.0	1.4	0.0	26.5	Moderate	No
MP-1-3D	0.6	0.2	0.0	20.9	No	No
MP-1-4S	1.2	5.2	1.0	>40	Moderate	No
MP-1-4D	7.1	2.4	1.0	>40	No	No
MP-1-5	0.0	0.6	0.0	20.9	No	No
MP-1-6	0.0	1.8	0.0	19.4	No	No
MP-1-7	0.0	2.6	0.0	18.9	No	No
MP-1-8	0.7	2.0	0.0	19.6	No	No

Date: 11/1/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.7	0.6	0.0	39.2	No	No
MP-1-1D	0.3	0.4	0.0	28.2	No	No
MP-1-2S	9.7	5.4	0.0	>40	No	No
MP-1-2D	0.0	0.8	0.0	>40	Slight	No
MP-1-3S	0.0	0.6	0.0	27.4	No	No
MP-1-3D	0.0	0.0	0.0	20.9	No	No
MP-1-4S	0.9	4.2	0.0	>40	No	No
MP-1-4D	6.2	1.8	1.0	>40	Very Slight	No
MP-1-5	0.0	0.0	0.0	20.9	No	No
MP-1-6	0.4	4.0	0.0	20.6	No	No
MP-1-7	3.7	1.2	0.0	20.6	No	No
MP-1-8	0.3	1.0	0.0	20.9	No	No

Date: 11/10/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	NM	1.0	0.0	40.0	No	No
MP-1-1D	NM	1.2	0.0	34.0	No	No
MP-1-2S	NM	1.6	0.0	37.3	No	No
MP-1-2D	NM	1.8	0.0	>40	No	No
MP-1-3S	NM	1.8	0.0	32.4	No	No
MP-1-3D	NM	1.8	0.0	19.5	No	No
MP-1-4S	NM	2.2	0.0	31.3	No	No
MP-1-4D	NM	1.2	0.0	>40	No	No
MP-1-5	NM	1.0	0.0	19.5	No	No
MP-1-6	NM	1.8	0.0	20.9	No	No
MP-1-7	NM	1.8	0.0	19.9	No	No
MP-1-8	NM	3.2	0.0	18.9	No	No

Table 6
Groundwater Treatment Headspace Monitoring, System No. 1
Fourth Quarter 2011
Hempstead Intersection Street Former MGP Site

Date: 11/21/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.2	1.8	0.0	>40	No	No
MP-1-1D	0.0	0.0	0.0	22.9	No	No
MP-1-2S	0.2	2.0	0.0	36.6	No	No
MP-1-2D	0.0	1.8	0.0	>40	Moderate	No
MP-1-3S	0.4	0.2	0.0	26.2	No	No
MP-1-3D	0.2	0.0	0.0	20.9	Slight	No
MP-1-4S	0.0	1.8	0.0	35.6	No	No
MP-1-4D	1.3	2.4	0.0	>40	No	No
MP-1-5	0.0	0.0	0.0	20.9	No	No
MP-1-6	0.1	0.2	0.0	20.9	No	No
MP-1-7	1.8	0.6	0.0	20.9	No	No
MP-1-8	0.1	0.2	0.0	20.9	No	No

Date: 11/30/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.0	0.8	0.0	20.6	No	No
MP-1-1D	0.5	1.2	0.0	32.3	No	No
MP-1-2S	0.0	0.6	0.0	30.0	No	No
MP-1-2D	0.0	0.6	0.0	>40	Moderate	No
MP-1-3S	0.0	0.0	0.0	23.2	Slight	No
MP-1-3D	0.1	0.4	0.0	20.9	No	No
MP-1-4S	0.0	2.6	0.0	>40	Slight	No
MP-1-4D	1.3	1.6	0.0	>40	Slight	No
MP-1-5	0.0	0.4	0.0	20.9	No	No
MP-1-6	0.1	1.0	0.0	20.5	No	No
MP-1-7	0.3	0.6	0.0	20.9	No	No
MP-1-8	0.0	0.8	0.0	20.6	No	No

Date: 12/9/2011

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.4	1.2	0.0	36.8	No	No
MP-1-1D	0.4	0.4	0.0	24.5	No	No
MP-1-2S	1.1	1.6	0.0	36.4	No	No
MP-1-2D	0.1	1.4	0.0	>40	No	No
MP-1-3S	1.4	1.0	0.0	26.7	No	No
MP-1-3D	0.2	0.0	0.0	20.9	No	No
MP-1-4S	0.4	1.0	0.0	25.1	No	No
MP-1-4D	2.5	2.4	0.0	>40	No	No
MP-1-5	1.9	0.2	0.0	20.9	No	No
MP-1-6	0.4	0.8	0.0	20.9	No	No
MP-1-7	0.4	0.8	0.0	20.9	No	No
MP-1-8	1.0	1.4	0.0	20.2	No	No

Table 6
Groundwater Treatment Headspace Monitoring, System No. 1
Fourth Quarter 2011
Hempstead Intersection Street Former MGP Site

Date: 12/16/2011

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.5	2.2	0.0	>40	No	No
MP-1-1D	0.5	1.2	0.0	28.7	No	No
MP-1-2S	0.6	5.8	0.0	>40	No	No
MP-1-2D	1.4	1.2	0.0	28.6	Strong	No
MP-1-3S	1.6	0.0	0.0	28.7	No	No
MP-1-3D	0.4	0.0	0.0	20.9	No	No
MP-1-4S	0.2	0.0	0.0	20.9	No	No
MP-1-4D	0.0	0.0	0.0	20.9	No	No
MP-1-5	0.4	0.2	0.0	20.9	No	No
MP-1-6	0.3	1.6	0.0	20.9	No	No
MP-1-7	0.7	0.0	0.0	20.9	No	No
MP-1-8	0.2	0.0	0.0	20.9	No	No

Date: 12/22/2011

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.2	0.4	0.0	26.0	No	No
MP-1-1D	0.1	0.6	0.0	24.8	No	No
MP-1-2S	0.4	6.6	0.0	>40	No	No
MP-1-2D	0.1	0.8	0.0	33.5	Moderate	No
MP-1-3S	0.1	1.8	0.0	30.8	No	No
MP-1-3D	0.2	0.6	0.0	20.9	No	No
MP-1-4S	0.4	0.0	0.0	20.9	No	No
MP-1-4D	1.0	0.4	0.0	26.4	No	No
MP-1-5	0.0	0.2	0.0	20.9	No	No
MP-1-6	0.4	1.6	0.0	20.9	No	No
MP-1-7	1.4	0.4	0.0	20.9	No	No
MP-1-8	0.3	0.0	0.0	20.9	No	No

Date: 12/29/2011

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-1-1S	0.0	1.8	0.0	>40	Slight	No
MP-1-1D	0.0	0.6	0.0	24.9	No	No
MP-1-2S	1.7	1.6	0.0	37.5	No	No
MP-1-2D	0.0	1.0	0.0	39.2	No	No
MP-1-3S	0.4	0.4	0.0	24.1	No	No
MP-1-3D	0.1	0.4	0.0	20.9	No	No
MP-1-4S	2.5	0.6	0.0	23.5	No	No
MP-1-4D	0.4	0.2	0.0	23.8	No	No
MP-1-5	0.1	0.2	0.0	20.9	No	No
MP-1-6	0.2	0.8	0.0	22.6	No	No
MP-1-7	0.5	0.8	0.0	20.9	No	No
MP-1-8	0.0	0.0	0.0	20.9	No	No

Table 7
Groundwater Treatment Headspace Monitoring, System No. 2
Fourth Quarter 2011
Hempstead Intersection Street Former MGP Site

Date: 10/1/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.5	0.2	0.0	21.5	No	No
MP-2-2	0.1	0.4	0.0	20.9	No	No
MP-2-3S	0.0	0.5	0.0	24.2	No	No
MP-2-3D	0.0	0.0	0.0	35.2	No	No
MP-2-4	0.2	1.2	0.0	26.6	Moderate	No
MP-2-5	0.3	1.6	0.0	25.8	No	No

Date: 10/7/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.5	0.0	0.0	21.5	No	No
MP-2-2	0.1	0.2	0.0	20.0	No	No
MP-2-3S	0.1	0.2	0.0	23.3	No	No
MP-2-3D	0.0	0.0	0.0	21.3	Slight	No
MP-2-4	0.1	0.2	0.0	28.7	Moderate	No
MP-2-5	0.0	1.8	0.0	28.0	Slight	No

Date: 10/14/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.3	0.0	0.0	21.3	No	No
MP-2-2	0.0	0.4	0.0	20.9	No	No
MP-2-3S	0.2	0.0	0.0	24.1	No	No
MP-2-3D	0.1	0.0	0.0	30.9	No	No
MP-2-4	0.0	0.2	0.0	24.0	No	No
MP-2-5	0.1	0.4	0.0	22.4	No	No

Date: 10/26/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.2	0.0	0.0	20.9	No	No
MP-2-2	0.4	0.0	0.0	20.9	No	No
MP-2-3S	0.2	1.6	0.0	25.9	No	No
MP-2-3D	0.2	0.0	0.0	24.3	No	No
MP-2-4	0.1	1.4	0.0	30.1	No	No
MP-2-5	0.5	3.2	1.0	>40	No	No

Table 7
Groundwater Treatment Headspace Monitoring, System No. 2
Fourth Quarter 2011
Hempstead Intersection Street Former MGP Site

Date: 11/10/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	NM	0.0	0.0	20.9	No	No
MP-2-2	NM	**0.6**	0.0	19.9	No	No
MP-2-3S	NM	**0.8**	0.0	**22.4**	No	No
MP-2-3D	NM	**0.2**	0.0	**34.0**	No	No
MP-2-4	NM	**1.2**	0.0	**29.1**	No	No
MP-2-5	NM	**2.4**	0.0	**>40**	No	No

Date: 11/21/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.0	0.0	0.0	20.9	No	No
MP-2-2	**0.2**	0.0	0.0	20.9	No	No
MP-2-3S	0.0	**0.6**	0.0	**22.4**	No	No
MP-2-3D	**0.1**	0.0	0.0	**20.9**	No	No
MP-2-4	**0.3**	**0.2**	0.0	**21.5**	No	No
MP-2-5	**0.4**	**2.2**	0.0	**>40**	No	No

Date: 11/30/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.0	0.0	0.0	20.9	No	No
MP-2-2	0.0	0.0	0.0	20.9	No	No
MP-2-3S	0.0	**0.2**	0.0	20.9	No	No
MP-2-3D	0.0	0.0	0.0	**22.4**	No	No
MP-2-4	**0.5**	**0.6**	0.0	**28.6**	No	No
MP-2-5	0.0	**1.4**	**3.0**	**38.6**	No	No

Date: 12/9/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	**0.2**	**0.2**	0.0	20.9	No	No
MP-2-2	**0.2**	0.0	0.0	20.9	No	No
MP-2-3S	**0.1**	**0.4**	0.0	**21.4**	No	No
MP-2-3D	**13.1**	0.0	0.0	**27.9**	Slight	No
MP-2-4	0.0	**1.1**	0.0	**27.2**	No	No
MP-2-5	0.0	**1.6**	**1.0**	**35.3**	No	No

Table 7
Groundwater Treatment Headspace Monitoring, System No. 2
Fourth Quarter 2011
Hempstead Intersection Street Former MGP Site

Date: 12/16/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	**0.5**	**0.4**	0.0	20.9	No	No
MP-2-2	**0.4**	0.0	0.0	20.5	No	No
MP-2-3S	**0.4**	**0.4**	0.0	20.9	No	No
MP-2-3D	**0.5**	**0.6**	0.0	**>40**	Strong	No
MP-2-4	0.0	**1.1**	0.0	**27.2**	No	No
MP-2-5	0.0	**1.6**	**1.0**	**30.6**	No	No

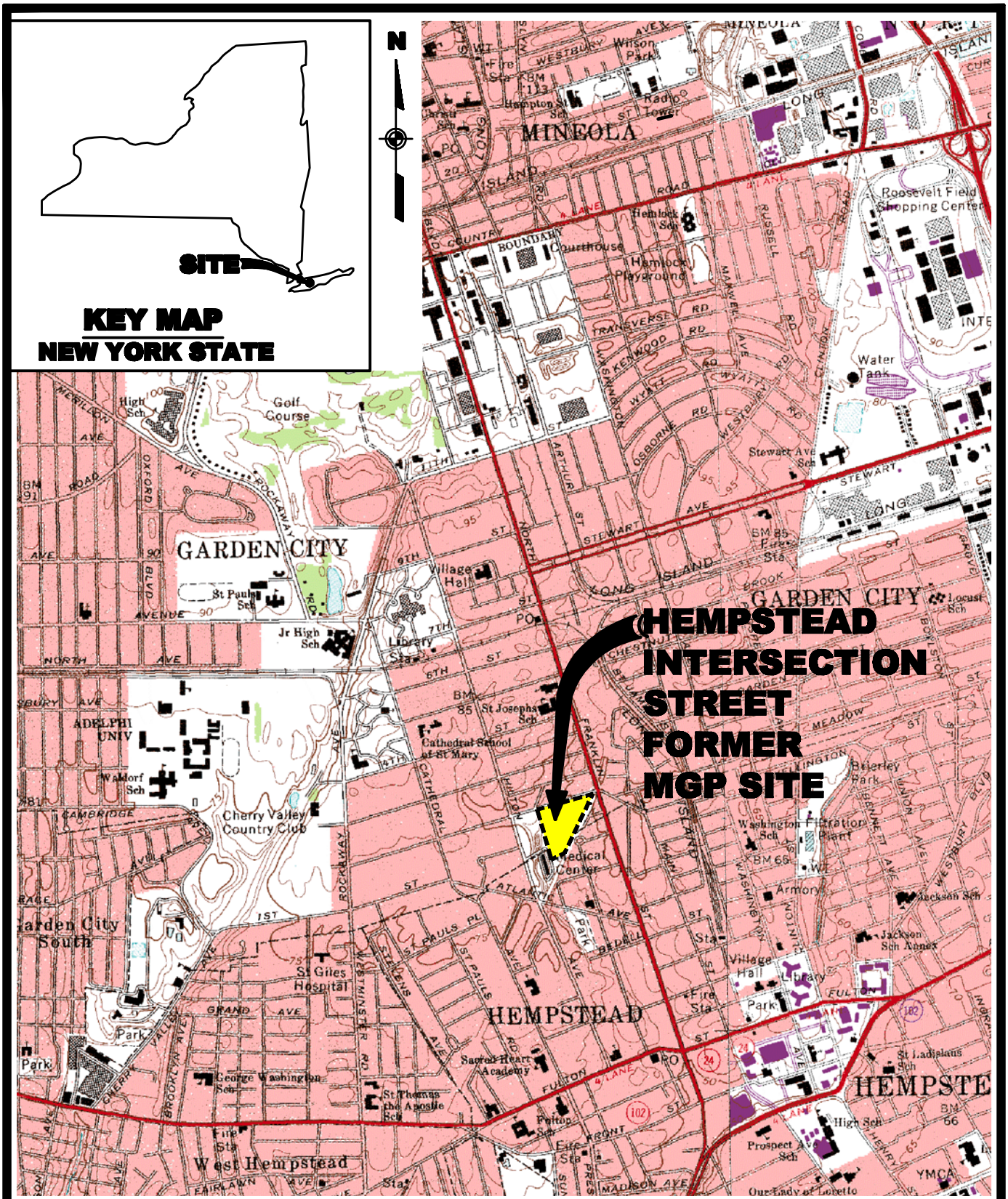
Date: 12/22/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	0.0	0.0	0.0	20.9	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	**0.2**	**1.0**	0.0	**>40**	No	No
MP-2-4	NM	NM	NM	NM	No	No
MP-2-5	NM	NM	NM	NM	No	No

Date: 12/29/11

Well	VOC (ppm)	CO2 (%)	LEL (%)	O2 (%)	Pressure	Odor
MP-2-1	**0.2**	**0.4**	0.0	20.9	No	No
MP-2-2	0.0	0.0	0.0	20.9	No	No
MP-2-3S	**0.2**	**0.2**	0.0	20.9	No	No
MP-2-3D	**0.2**	**2.2**	**0.1**	**>40**	No	No
MP-2-4	0.0	**1.8**	**1.0**	**38.2**	Moderate	No
MP-2-5	**0.3**	**1.8**	**10.0**	**>40**	No	No

FIGURES



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

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

2000' 0 2000'
SCALE IN FEET

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 4/30/2012

N

Second Street

IPR-1
HIMW-019S,I
HIVP-16
IPR-2
IPR-3
IPR-4
HIMW-001S,I,D
HIMW-003S,I,D
IPR-7
IPR-9
IPR-11
HIMW-006S,I,D
HIMW-004S,I,D
HIMW-005S,I,D
IPR-14
IPR-28
IPR-18
HIMW-016S,I
IPR-30
IPR-20
IPR-29
IPR-22
HIVP-19
HIMW-21
HIMW-008S,I,D
HIMW-020S,I
HIVP-20
PZ-02
HIMW-018S,I
PZ-03
IPR-8
IPR-5
IPR-25
IPR-26
PZ-08
IPR-27
IPR-6
HIMW-002S,I,D
OSMW-1
HIMW-011S,I,D
OSMW-2
OSMW-3
HIMW-010S,I,D
IPR-10
IPR-13
HIMW-007S,I,D
IPR-17
HIMW-009S,I,D
IPR-16
IPR-12A,B
IPR-15
IPR-19S,D
IPR-21
IPR-23
IPR-24
HIMW-017S
HIVP-21
HIMW-025
HIVP-17
HIMW-024
HIMW-012S,I,D
HIMW-023
HIMW-022
HIMW-013S,I,D
HIVP-18
HIMW-014I,D
HIMW-015I,D

Washington
Franklin
Union
Main
Atlantic
Hilton
Bedell
Cathedral
Jackson
Fulton
Front

Legend

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

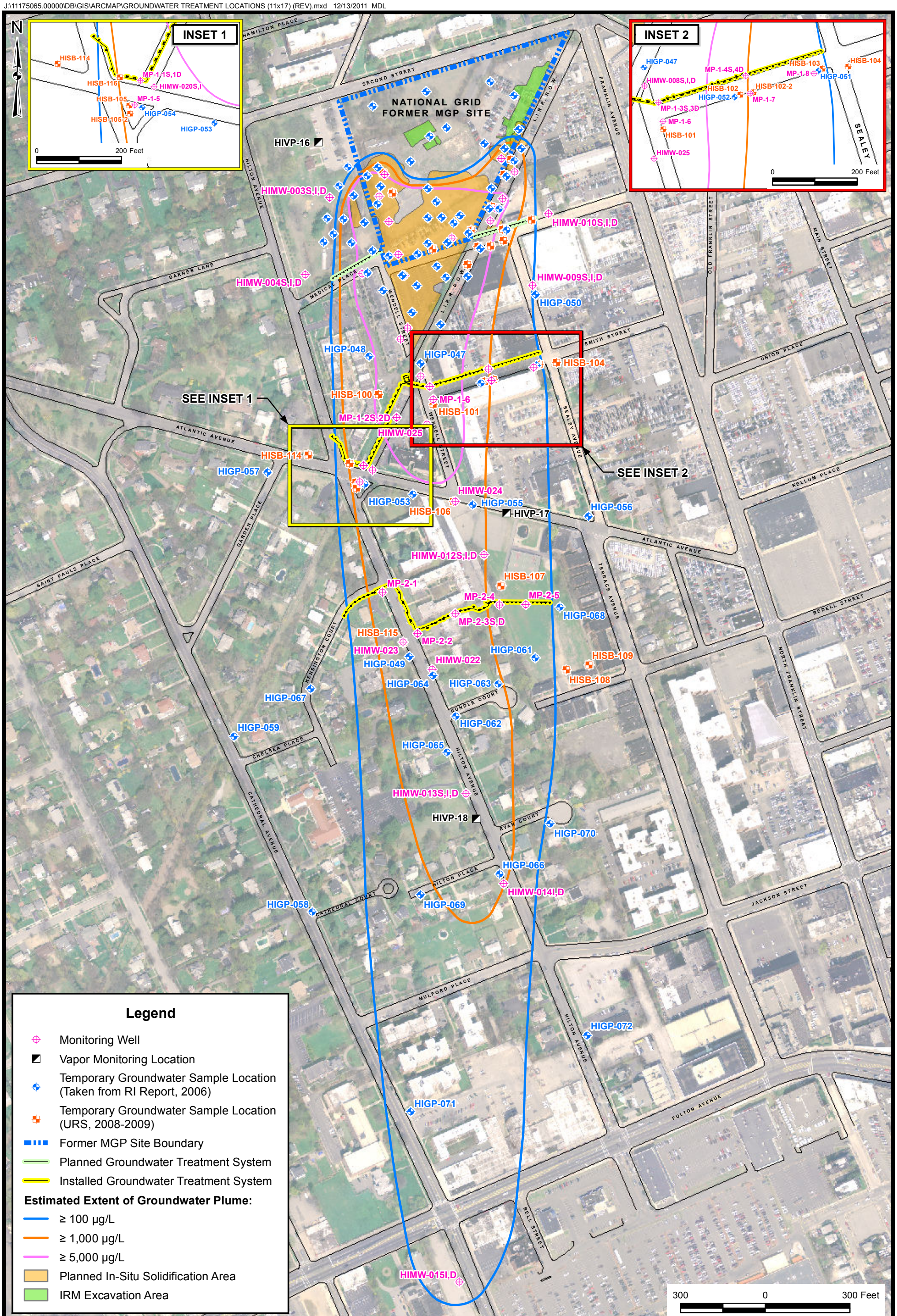
400 0 400 Feet

URS

HEMPSTEAD/GARDEN CITY, NY
SITE MAP

FIGURE 2

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



URS

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 (24)	ND–273 (34)
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	1–224 (1)	ND–1,144 (ND)

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-109 (12/10/08)		
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	2
90–94	ND	2
100–104	ND	ND

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

HIGP-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)	ND (ND)
133–143	ND–8.2 (ND)	ND–30 (ND)

HIMW-12S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
22–32	ND–338.8 (ND)	ND–1,391 (ND)
63–73	29.2–256 (63)	65–527 (166)
117–127	ND–6 (ND)	ND–2 (ND)

HIMW-022		
DEPTH	TOT. BTEX	TOT. PAHs
54–64	ND–2 (1)	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 (27)	58–156 (82)
110–120	2–30 (5)	ND–21 (14)

HIMW-023		
DEPTH	TOT. BTEX	TOT. PAHs
66–76	1–43 (1)	ND–11(ND)

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

HISB-106 (12/4/08)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	418	602
40–44	1,162	383
50–54	1,800	2,513
60–64	815	572
70–74	68	51
80–84	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	126–439 (136)	1,454–5,337 (2,446)
130–140	ND–359 (182)	ND–2,344 (544)

HIMW-14 I,D		
DEPTH	TOT. BTEX	TOT. PAHs
85–95	24–273 (28)	28–288 (58)
140–150	ND–15 (ND)	ND (ND)

HIMW-024		
DEPTH	TOT. BTEX	TOT. PAHs
44.6–54.6	671–900 (671)	792–1,020 (792)

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

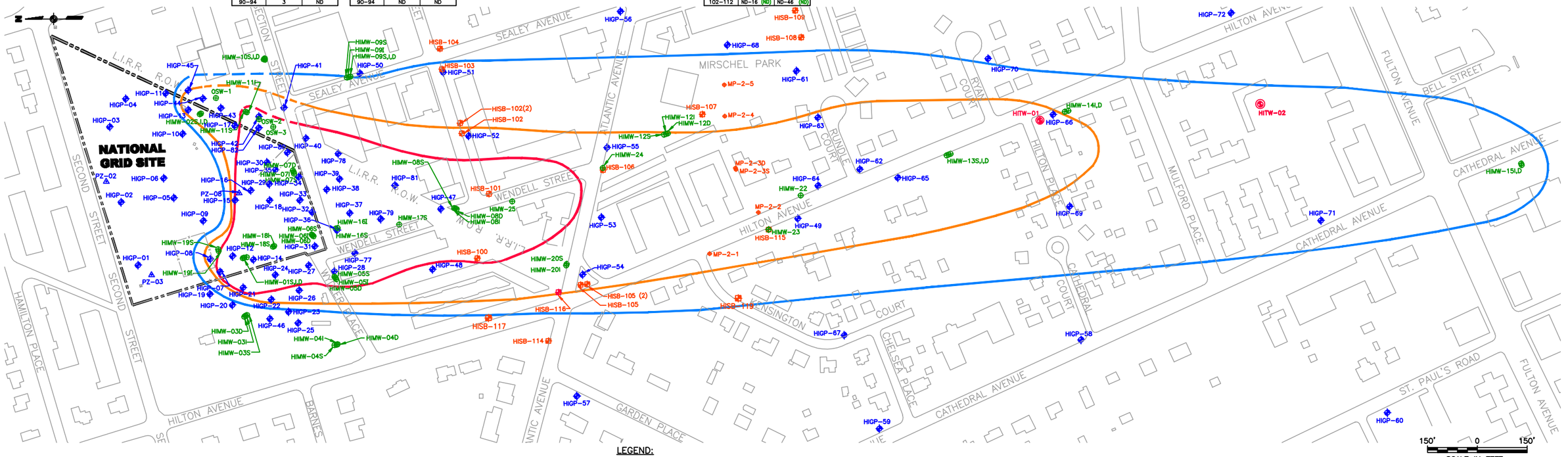
HIGP-48 (8/25/00)		
DEPTH	TOT. BTEX	TOT. PAHs
30–34	ND	2
60–64	766	926

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 (ND)	ND–3,069 (4)
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	10–552 (10)	ND–573 (ND)



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	← CONCENTRATION UNITS ARE ug/L (DEC. 2011 CONCENTRATION)
33–37	ND	ND	
60–64	ND	ND	
90–94	ND	ND	

* 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\FOURTH QUARTER 2011\FIGURE 4.dwg 2/3/12 - 5 RAL

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\DEC 2011\FIGURE 5.dwg 2/3/12 - 4 RAL

N

NATIONAL GRID
FORMER MGP SITE

PZ-02, NM
PZ-03, NM
HIMW-19S, NM
HIMW-01S, NM
IPR-8, NM
IPR-9, NM
HIMW-03S, 49.72
HIMW-18S, NM
IPR-7, NM
IPR-12A, NM
IPR-11, NM
HIMW-06S, NM
IPR-14, 49.32
HIMW-04S, 48.98
HIMW-05S, 49.10
HIMW-016S, 49.67
IPR-20, 49.08
IPR-22, 48.97
HIMW-17S, 48.90
HIMW-8S, 48.58
HIMW-20S, 48.01
HIMW-12S, 47.35
HIMW-13S, 45.10
HIMW-02S, 49.94
IPR-1, NM
IPR-3, NM
IPR-25, NM
IPR-10, NM
IPR-13, NM
HIMW-07S, NM
IPR-12B, NM
IPR-15, 49.37
IPR-19S, NM
IPR-21, 49.19
IPR-23, 49.01
IPR-24, 48.87
OSMW-1, 49.89
PZ-08, NM
HIMW-11S, 49.82
HIMW-10S, 50.18
OSMW-2, 49.64
OSMW-3, 49.56
HIMW-09S, 49.15

49.5
48.5
49
48
47.5
47
46.5
46
45.5
50

L.I.R.R. R.O.W.

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

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
DECEMBER 13, 2011

FIGURE 5

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\DEC 2011\FIGURE 6.dwg 2/3/12 - 3 RAL

N

NATIONAL GRID
FORMER MGP SITE

IPR-4, NM
IPR-5, NM
HIMW-19I, NM
IPR-2, NM
HIMW-03I, 49.56
HIMW-01I, NM
HIMW-18I, NM
HIMW-06I, NM
HIMW-04I, 48.92
HIMW-05I, 49.18
IPR-18, 49.19
HIMW-02I, 54.93
IPR-6, NM
HIMW-11I, 49.72
HIMW-07I, NM
HIMW-10I, 50.38
IPR-17, 49.52
IPR-16, 49.45
IPR-19D, 49.25
HIMW-16I, 50.17
HIMW-09I, 49.11
HIMW-08I, 48.52
HIMW-25, 48.38
HIMW-20I, 48.02
HIMW-24, 47.80
HIMW-12I, 47.38
HIMW-23, 46.75
HIMW-22, 46.54
HIMW-13I, 45.09
HIMW-14I, 44.96
HIMW-15I, 41.60

54
53
52
51
50
49
48
47
46
45
44
43
42

SECOND STREET
HILTON AVENUE
BARNES LANE
SNYDER PLACE
WENDELL STREET
L.I.R.R. R.O.W.
FRANKLIN AVENUE
INTERSECTION ST.
SEALEY AVENUE
SMITH STREET
OLD FRANKLIN STREET
MEADOW PLACE
STOWE PLACE
SAMMIS PLACE
MAIN STREET
MILLER PLACE
UNION PLACE
ATLANTIC AVENUE
GARDEN PLACE
KENSINGTON COURT
MIRSCHEL PARK
TERRACE AVENUE
MARGARET COURT
BEDELL STREET
KELLUM PLACE
NORTH FRANKLIN STREET
WEST COLUMBIA ST.
RUNDLE COURT
CHELSEA PLACE
CATHEDRAL AVENUE
RYAN COURT
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
DECEMBER 13, 2011

FIGURE 6

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\DEC 2011\FIGURE 7.dwg 2/3/12 - 4 RAL

N

NATIONAL GRID
FORMER MGP SITE

HIMW-02D, 50.01
HIMW-01D, NM
HIMW-11D, 49.70
HIMW-03D, 49.17
HIMW-07D, NM
HIMW-10D, NM
HIMW-05D, 48.91
HIMW-04D, 48.37
HIMW-06D, NM
HIMW-09D, 49.03
HIMW-8D, 48.51
HIMW-12D, 46.07
HIMW-13D, 45.02
HIMW-14D, 42.90
HIMW-15D, 40.11

50
49
48
47
46
45
44
43
42
41

SECOND STREET
HILTON AVENUE
BARNES LANE
WYDLER PLACE
WENDELL STREET
L.I.R.R. R.O.W.
INTERSECTION STREET
SEALEY AVENUE
SMITH STREET
FRANKLIN AVENUE
MAIN STREET
OLD FRANKLIN STREET
MEADOW PLACE
STOWE PLACE
SAMMS PLACE
MILLER PLACE
UNION PLACE
ATLANTIC AVENUE
GARDEN PLACE
KENSINGTON COURT
CATHEDRAL AVENUE
CHELSEA PLACE
KELLUM PLACE
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
→	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
DECEMBER 13, 2011

FIGURE 7

J:\11175065.00000\DB\GIS\ARCMAP\1211 BTEXPAH-NAPL.mxd 2/6/2012

INSET

SEE INSET

N

LOCID	BTEX [ug/L]	PAH [ug/L]	DNAPL (ft)	LNAPL (ft)
HIMW-001D	Closed in Place			
HIMW-001I	Closed in Place			
HIMW-001S	Closed in Place			
HIMW-003D				
HIMW-003I				
HIMW-003S				
HIMW-005D	182	544		
HIMW-005I	126	2,648		
HIMW-005S				
HIMW-006D	Closed in Place			
HIMW-006I	Closed in Place			
HIMW-006S	Closed in Place			
HIMW-007D	Closed in Place			
HIMW-007I	Closed in Place			
HIMW-007S	Closed in Place			
HIMW-008D				
HIMW-008I				
HIMW-008S		4		
HIMW-011D				
HIMW-011I				
HIMW-011S				
HIMW-012D				
HIMW-012I	63	166		
HIMW-012S				
HIMW-013D	5	14		
HIMW-013I	27	62		
HIMW-013S				
HIMW-014D				
HIMW-014I	28	58		
HIMW-015D				
HIMW-015I	24	34		
HIMW-016I			5.5	
HIMW-016S			5.50	
HIMW-017S			1.70	
HIMW-018I	Closed in Place			
HIMW-018S	Closed in Place			
HIMW-019I	Closed in Place			
HIMW-019S	Closed in Place			
HIMW-020I	1			
HIMW-020S				
HIMW-021			2.0	
HIMW-022	1			
HIMW-023	1			
HIMW-024	671	792		
HIMW-025	10			
IPR-01	Closed in Place			
IPR-02	Closed in Place			
IPR-03	Closed in Place			
IPR-04	Closed in Place			
IPR-05	Closed in Place			
IPR-06	Closed in Place			
IPR-07	Closed in Place			
IPR-08	Closed in Place			
IPR-09	Closed in Place			
IPR-10	Closed in Place			
IPR-11	Closed in Place			
IPR-12A	Closed in Place			
IPR-12B	Closed in Place			
IPR-13	Closed in Place			
IPR-15				
IPR-16			1.55	
IPR-17			1.32	
IPR-18			0.1	
IPR-19D			0.1	
IPR-20			1.35	
IPR-21			2.25	
IPR-22			5.2	
IPR-24			1.3	
IPR-25	Closed in Place			
IPR-26	Closed in Place			
IPR-27	Closed in Place			
IPR-28	Closed in Place			
IPR-29			2.2	
IPR-30			1.6	
PZ-08	Closed in Place			

Legend

- Monitoring Well - Product Detected
- Monitoring Well - Product Not Detected
- Monitoring Well - Closed In Place
- 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

75 0 75 Feet

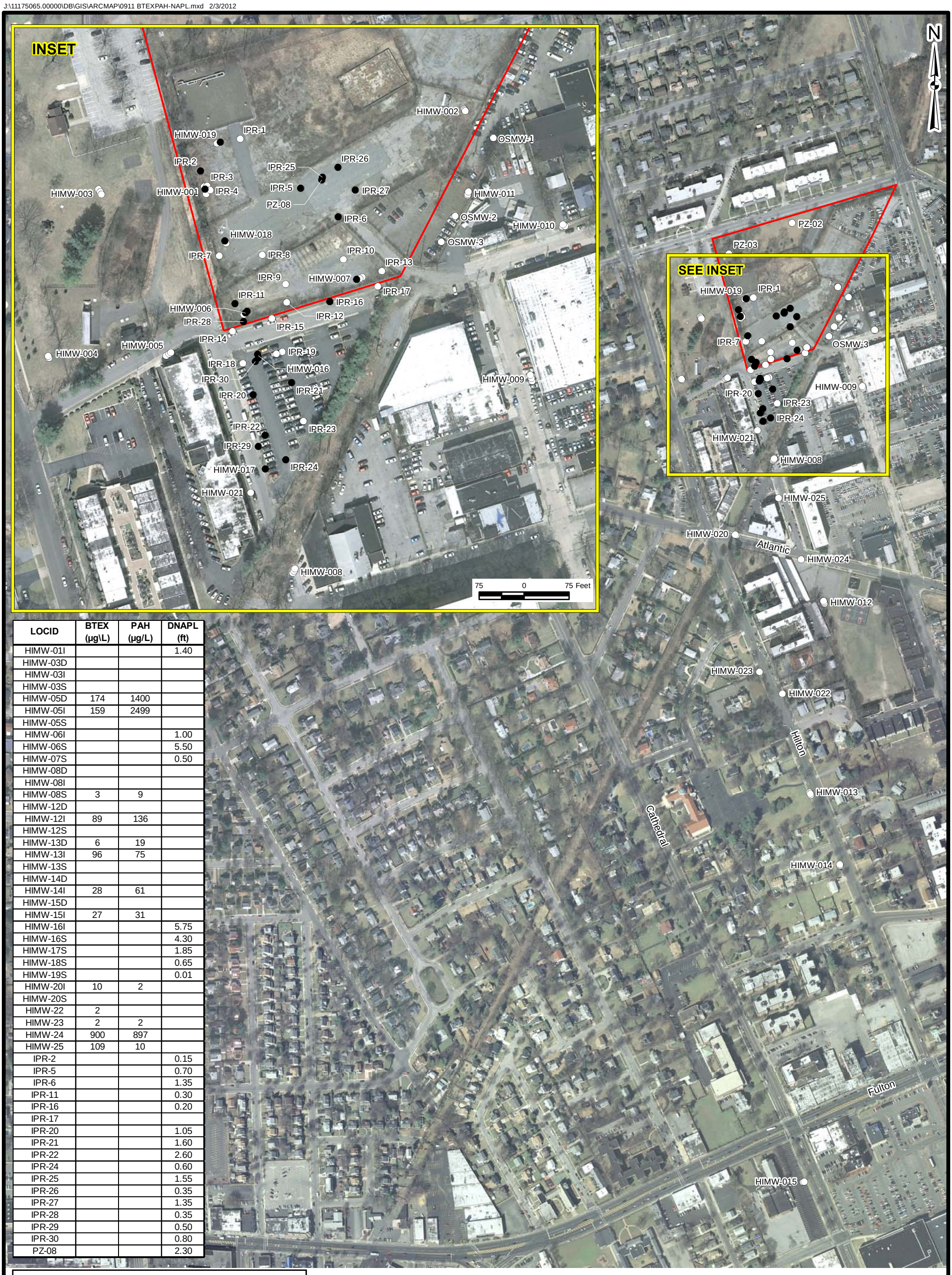
400 0 400 Feet

URS

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

FIGURE 8

J:\11175065.00000\DB\GIS\ARCMAP\0911 BTEXPAH-NAPL.mxd 2/3/2012



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

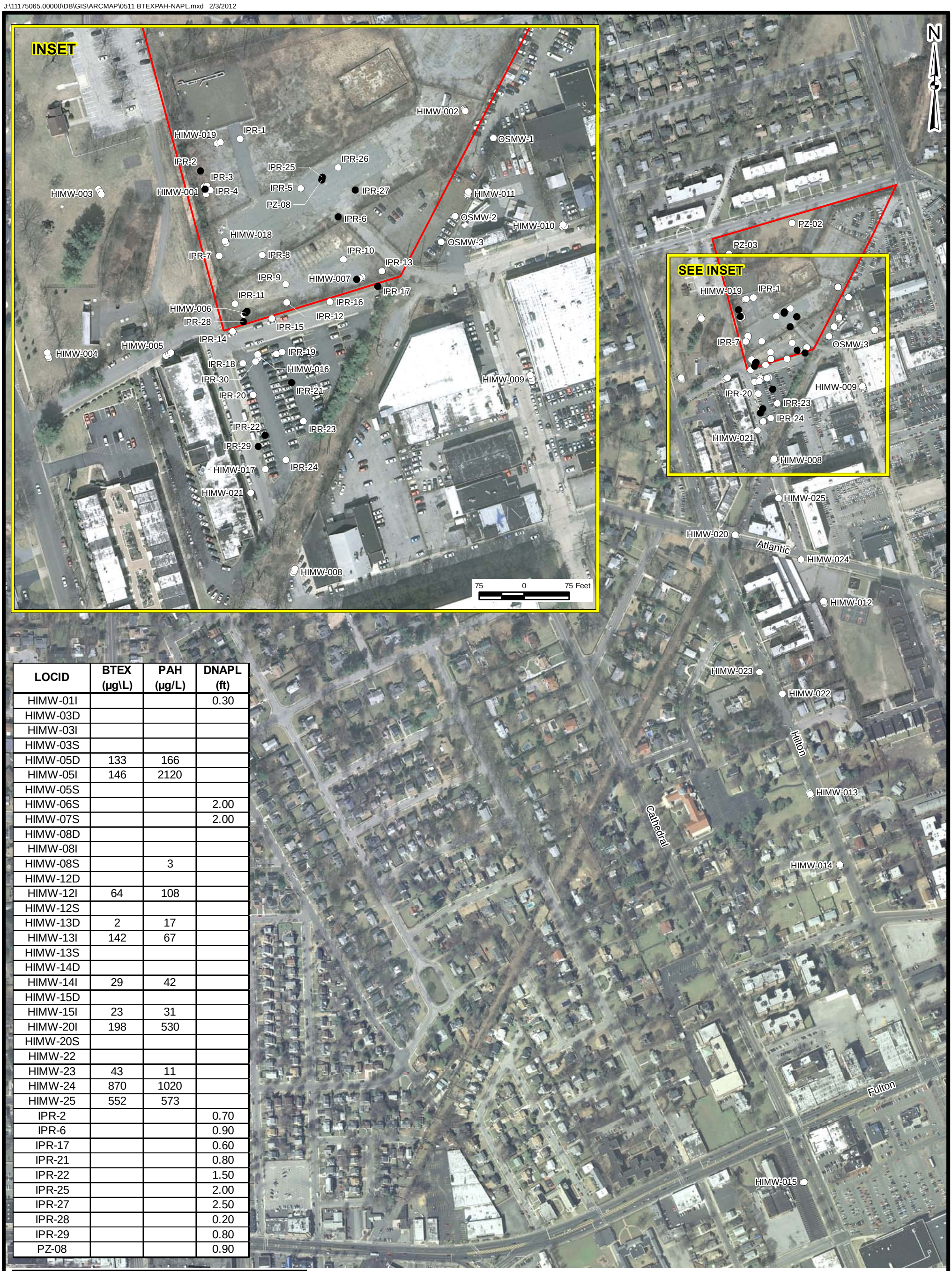
400 0 400 Feet

URS

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

FIGURE 9

J:\11175065.00000\DB\GIS\ARCMAP\0511 BTEXPAH-NAPL.mxd 2/3/2012



LOCID	BTEX (µg\L)	PAH (µg/L)	DNAPL (ft)
HIMW-01I			0.30
HIMW-03D			
HIMW-03I			
HIMW-03S			
HIMW-05D	133	166	
HIMW-05I	146	2120	
HIMW-05S			
HIMW-06S			2.00
HIMW-07S			2.00
HIMW-08D			
HIMW-08I			
HIMW-08S		3	
HIMW-12D			
HIMW-12I	64	108	
HIMW-12S			
HIMW-13D	2	17	
HIMW-13I	142	67	
HIMW-13S			
HIMW-14D			
HIMW-14I	29	42	
HIMW-15D			
HIMW-15I	23	31	
HIMW-20I	198	530	
HIMW-20S			
HIMW-22			
HIMW-23	43	11	
HIMW-24	870	1020	
HIMW-25	552	573	
IPR-2			0.70
IPR-6			0.90
IPR-17			0.60
IPR-21			0.80
IPR-22			1.50
IPR-25			2.00
IPR-27			2.50
IPR-28			0.20
IPR-29			0.80
PZ-08			0.90

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
SECOND QUARTER 2011

FIGURE 10

INSET

SEE INSET

N

HIMW-02
OSMW-1
HIMW-19
IPR-1
IPR-25
IPR-2
IPR-26
IPR-3
IPR-5
HIMW-11
HIMW-01
IPR-27
HIMW-03
IPR-4
PZ-08
OSMW-2
IPR-6
HIMW-10
HIMW-18
OSMW-3
IPR-8
IPR-7
IPR-10
IPR-13
IPR-9
HIMW-07
IPR-17
IPR-11
IPR-16
HIMW-06
IPR-28
IPR-15
IPR-12
IPR-14
HIMW-05
IPR-19D
HIMW-04
IPR-18
HIMW-16
HIMW-09
IPR-30
IPR-21
IPR-20
IPR-22
IPR-23
IPR-29
IPR-24
HIMW-17
HIMW-21
HIMW-08
75 0 75 Feet

HIMW-19
IPR-1
IPR-10
IPR-7
IPR-24
HIMW-08

HIMW-20
Atlantic
HIMW-12
Hilton
HIMW-13
Cathedral
HIMW-14
Fulton
HIMW-15

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

Legend

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

Notes:

BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes
PAH - Polynuclear Aromatic Hydrocarbons
DNAPL - Dense Non-Aqueous Phase Liquid
LNAPL - Light Non-Aqueous Phase Liquid
ug/L - Micrograms per Liter
ft - Feet of Product Thickness
NAPL thickness for all wells measured on 01/20/11
BTEX/PAH sampling occurred on 02/01/11 - 02/08/11

400 0 400 Feet

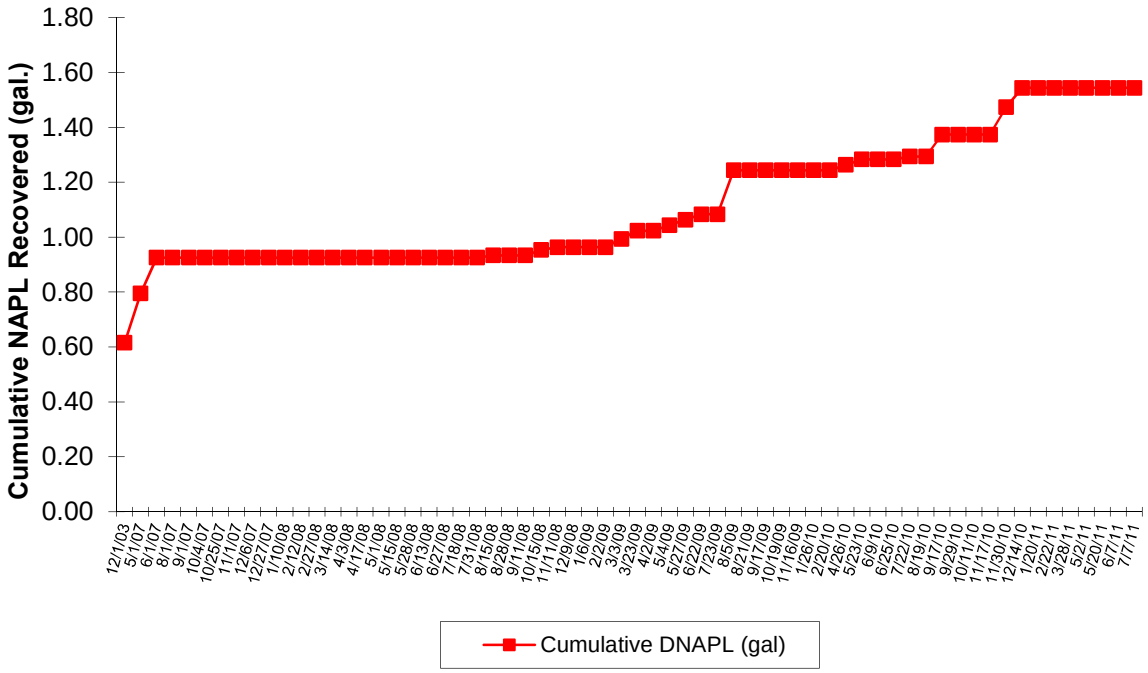
URS

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

FIGURE 11

J:\11175065.00000\DB\GIS\ARCMAP\0111 BTEXPAH-NAPL.mxd 2/3/2012

FIGURE 12A
Well HIMW-01S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



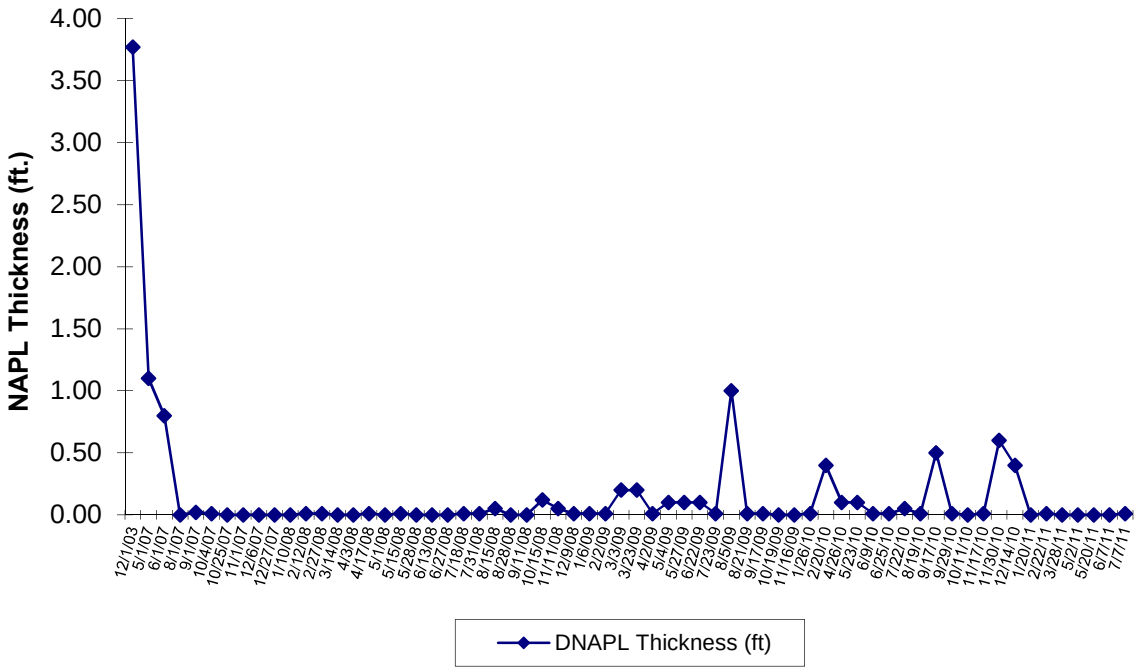
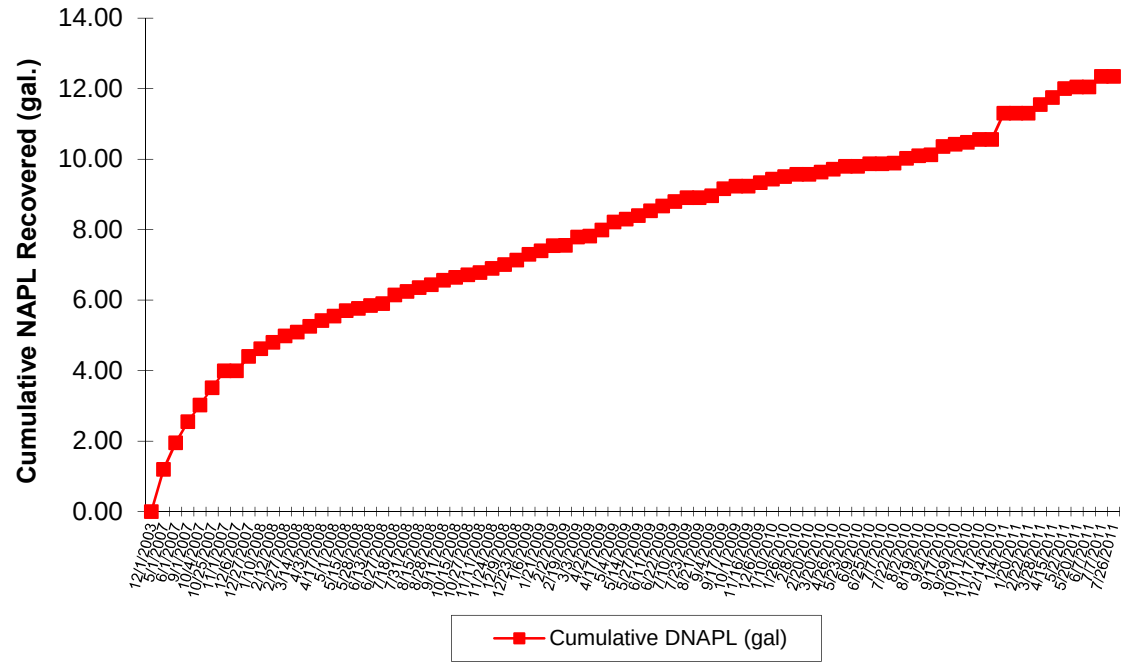


FIGURE 12B
Well HIMW-01I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



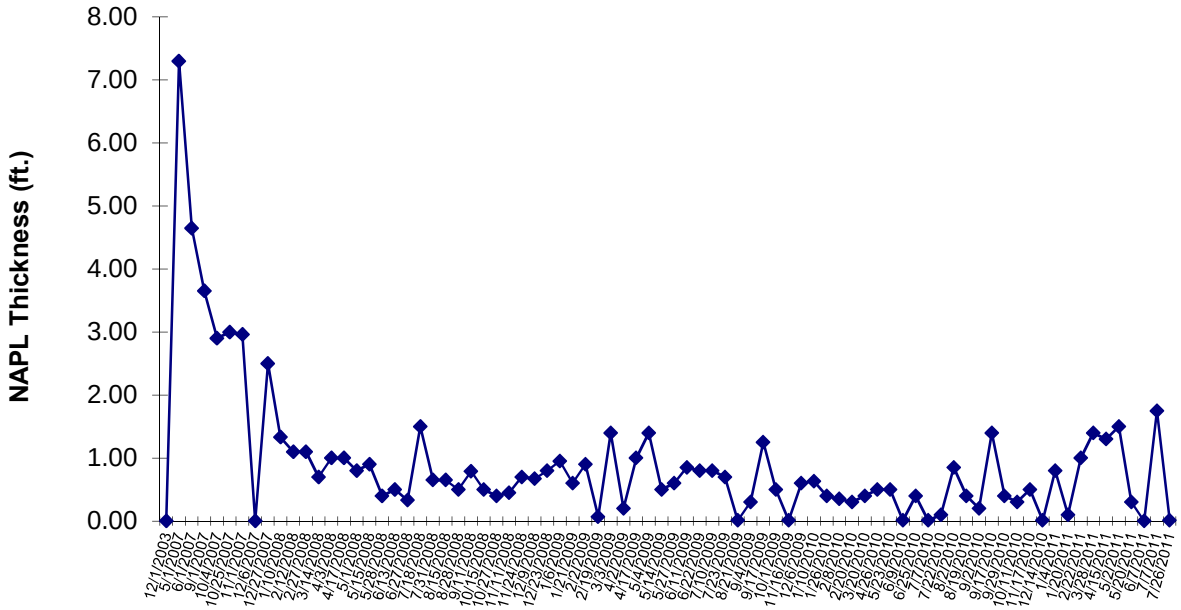
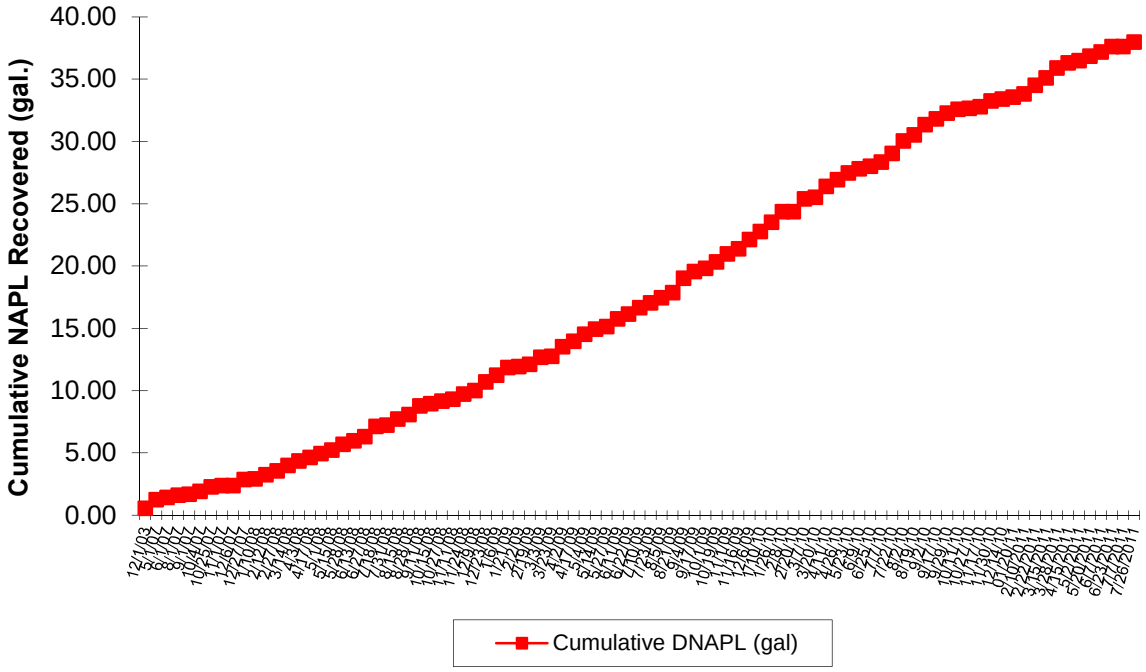


FIGURE 12C
Well HIMW-06S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



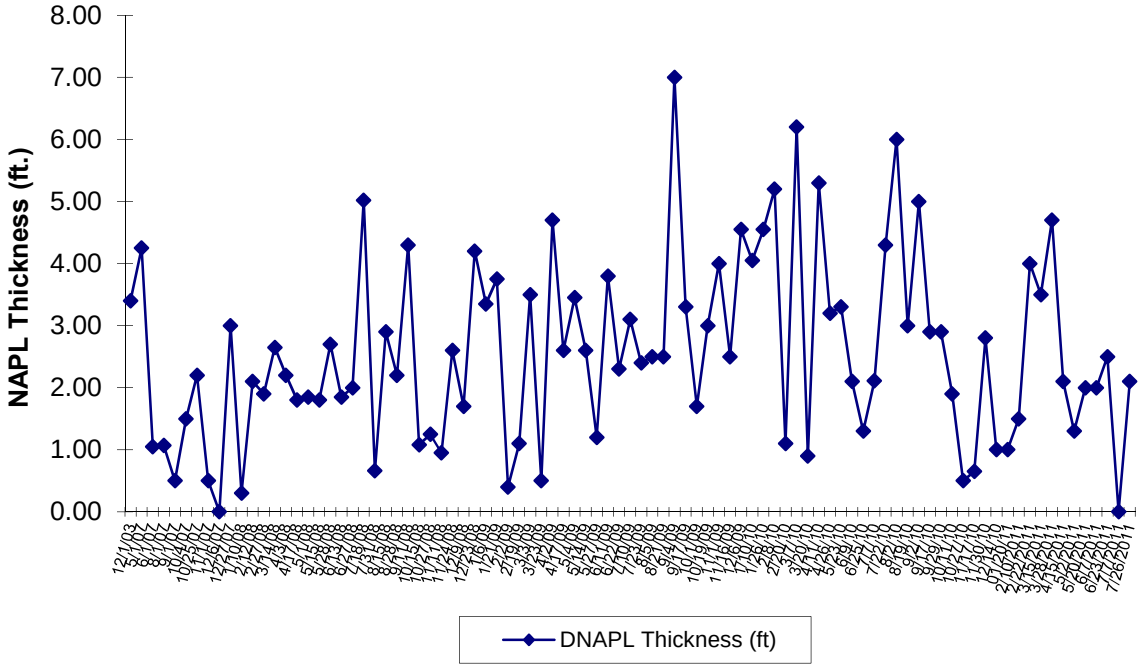
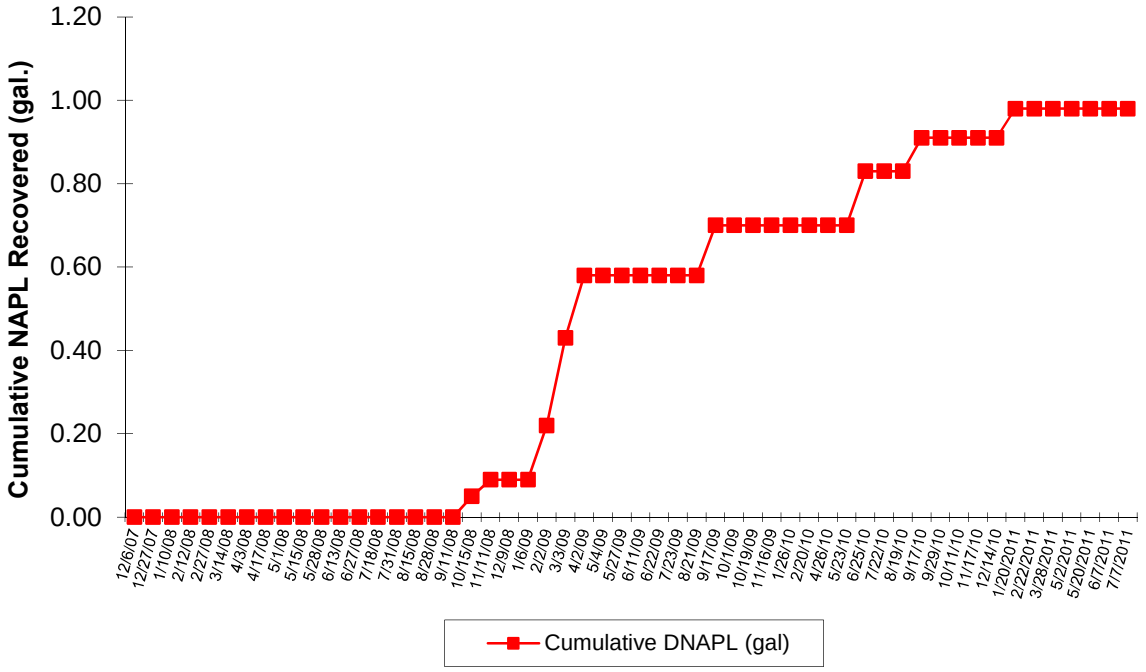


FIGURE 12D
Well HIMW-06I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



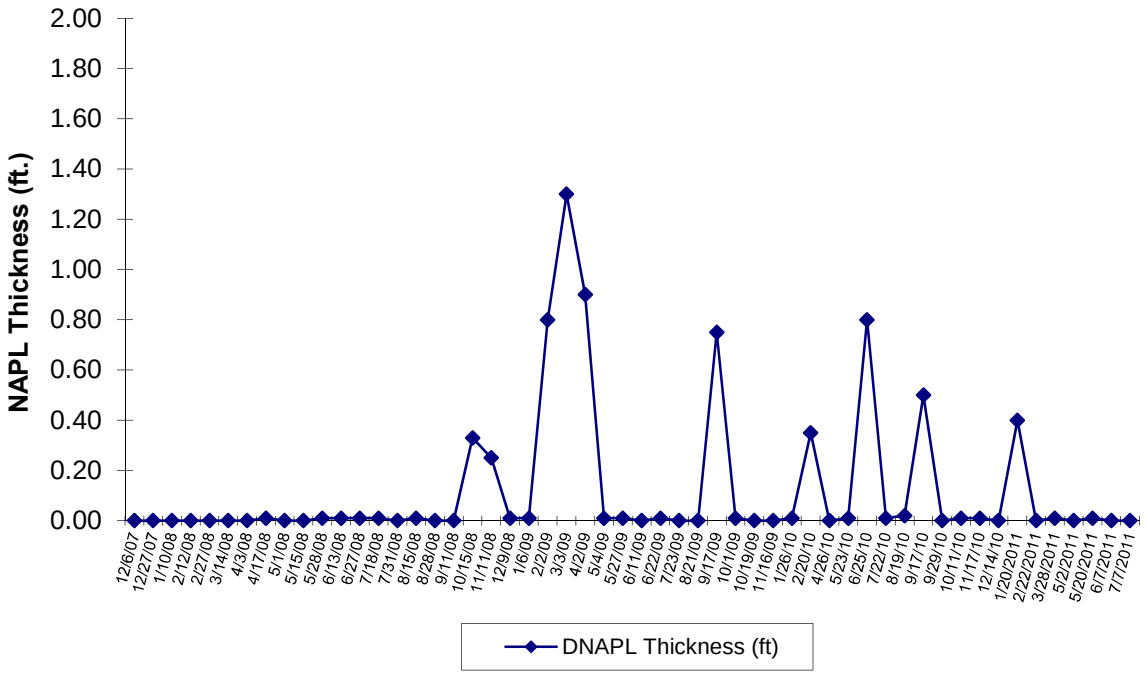
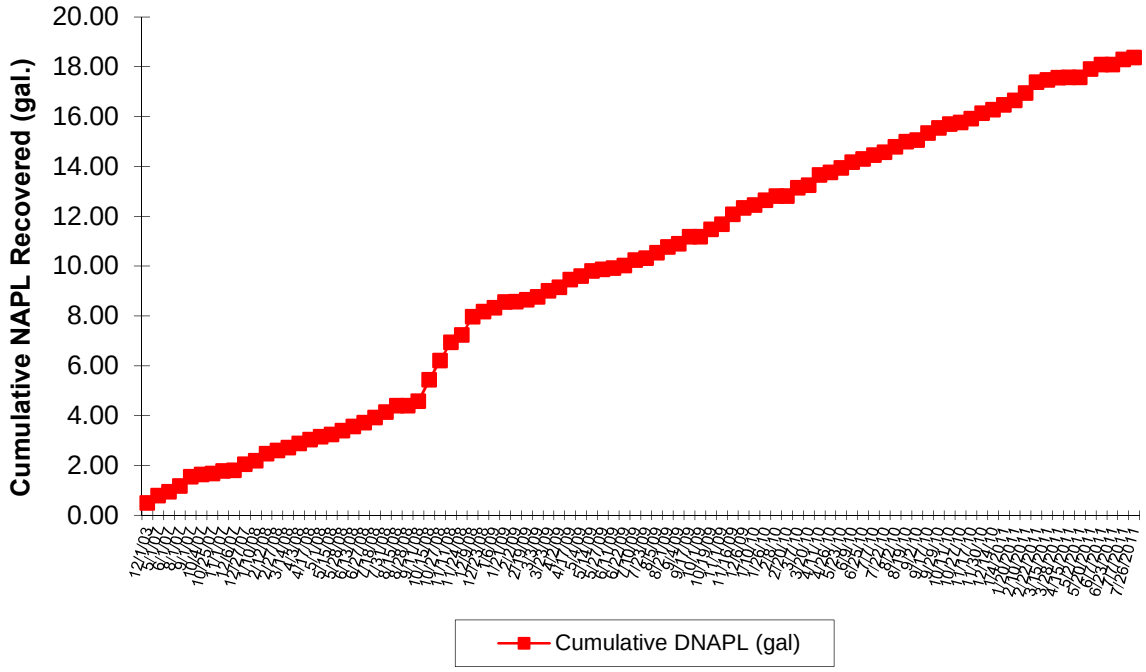


FIGURE 12E
Well HIMW-07S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



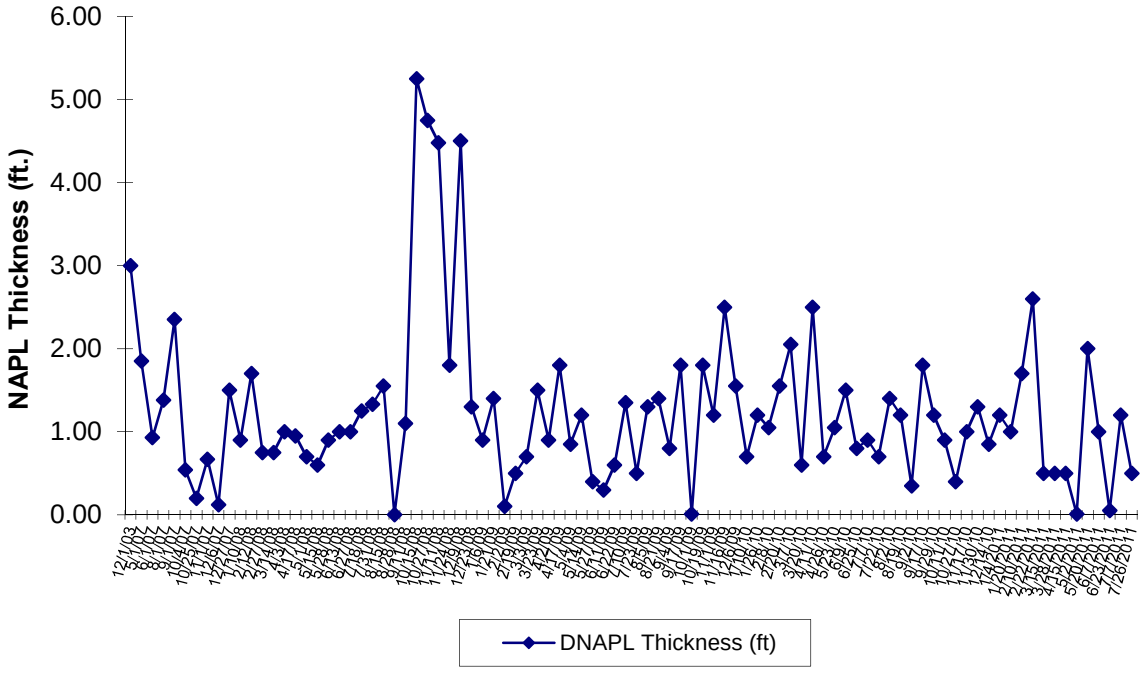
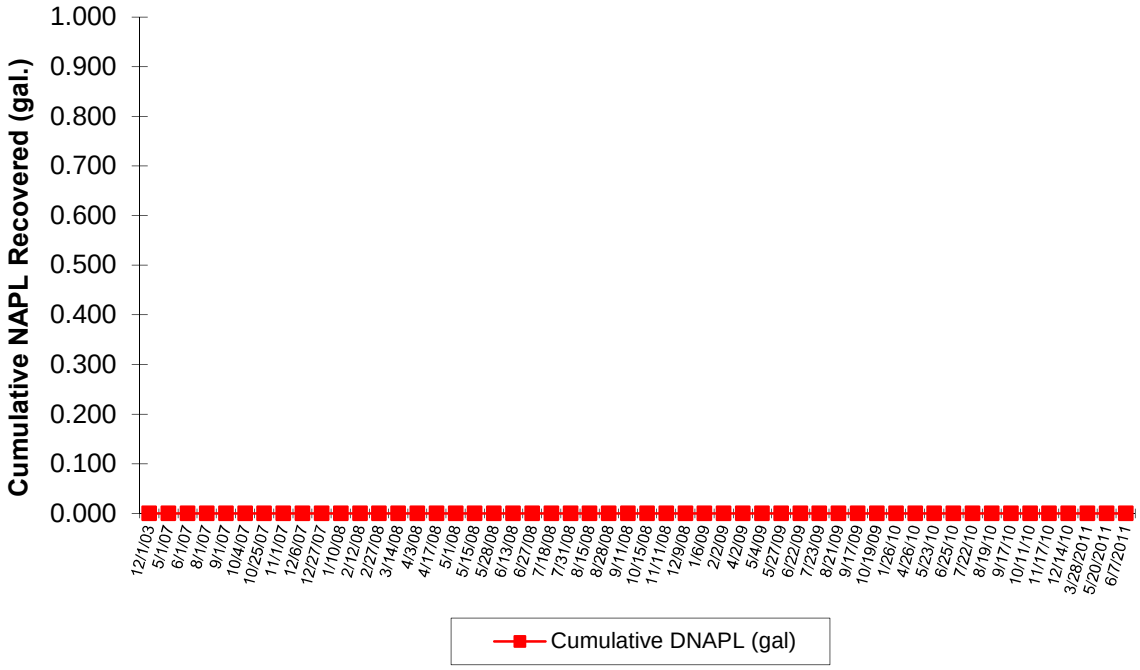


FIGURE 12F
Well HIMW-11S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



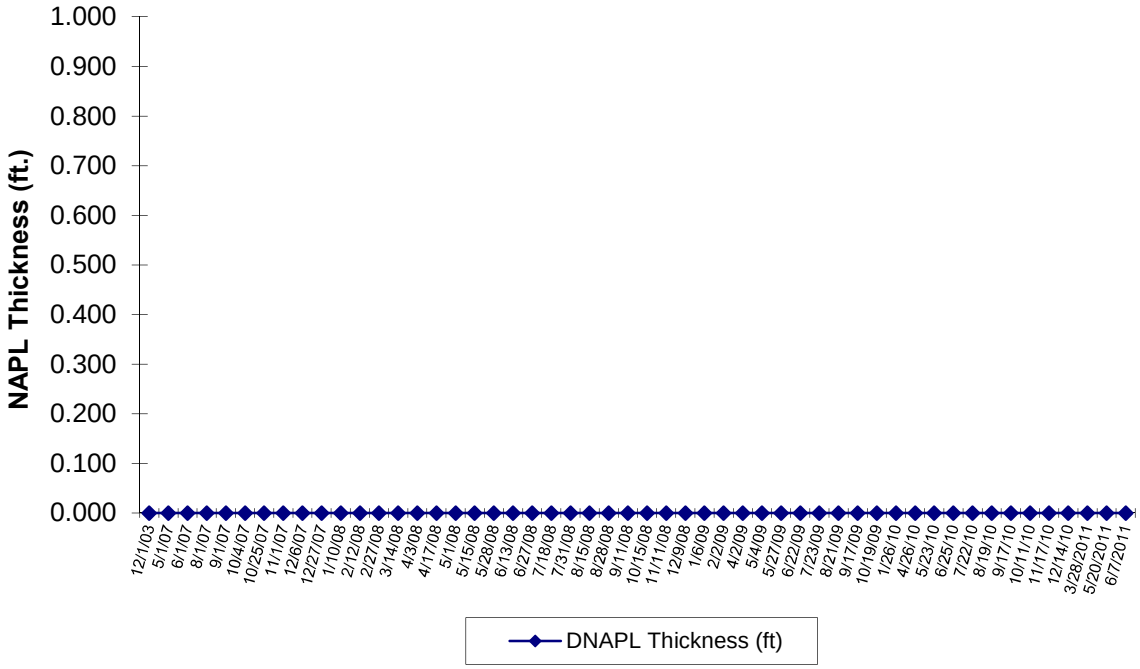
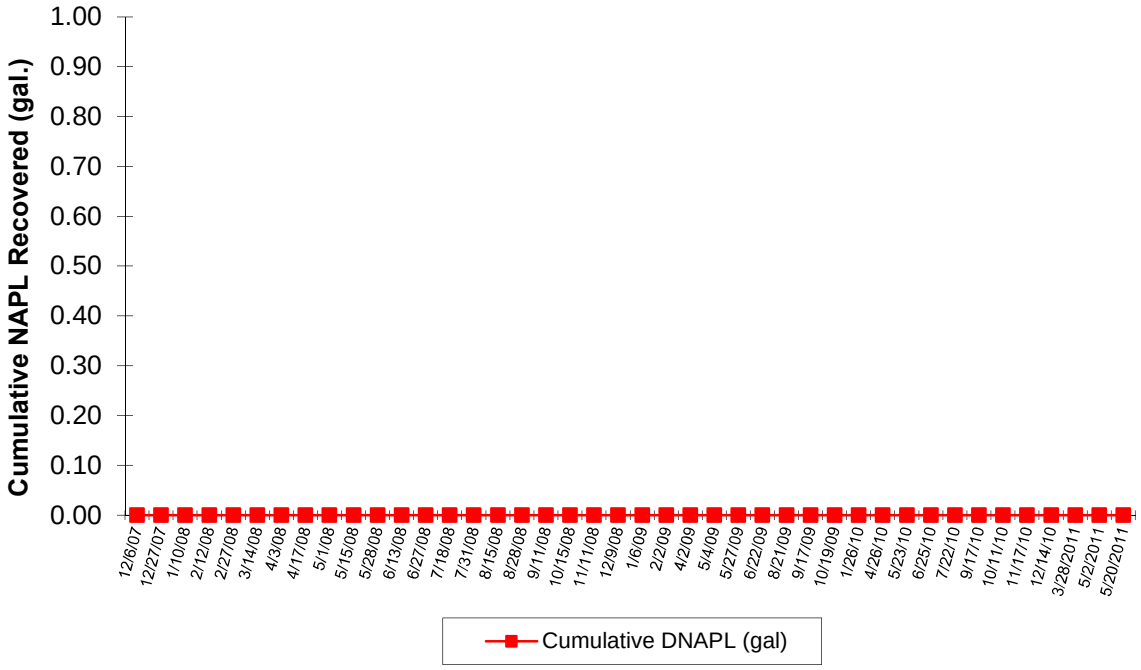


FIGURE 12G
Well HIMW-11I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



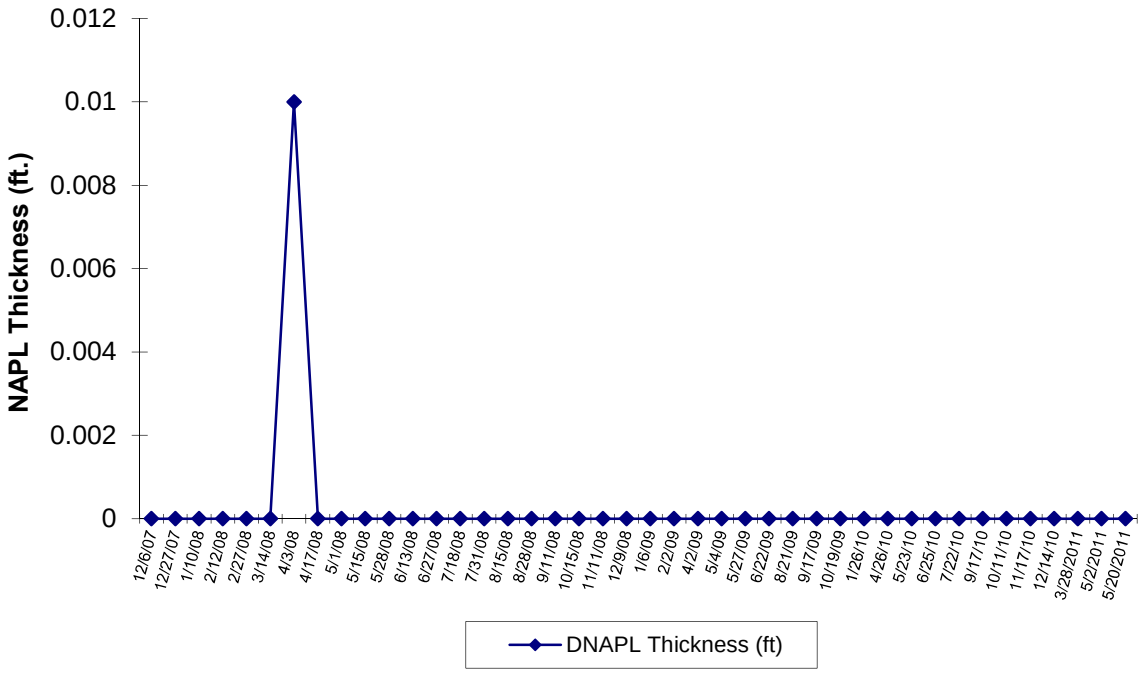
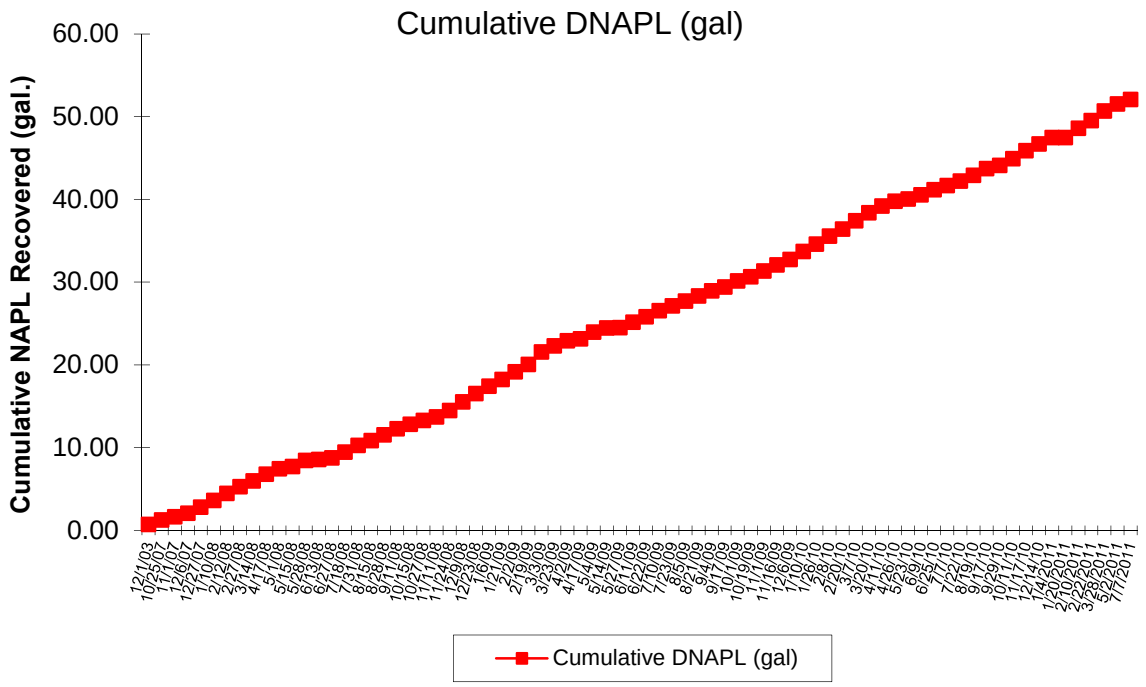


FIGURE 12H
Well HIMW-16S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



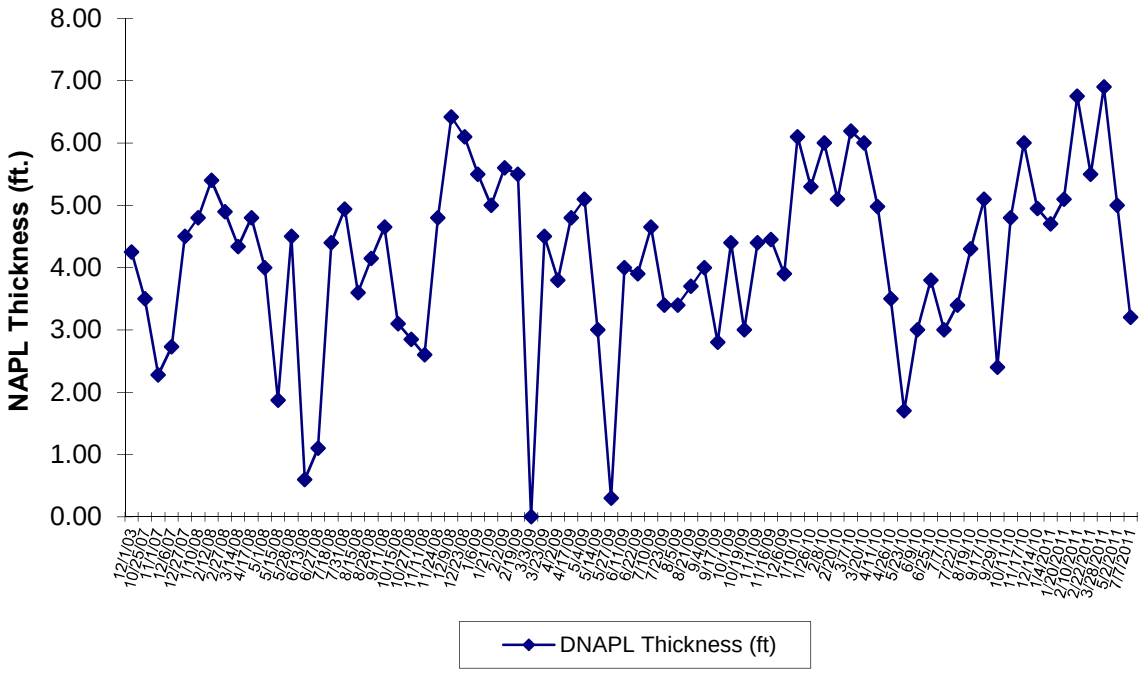
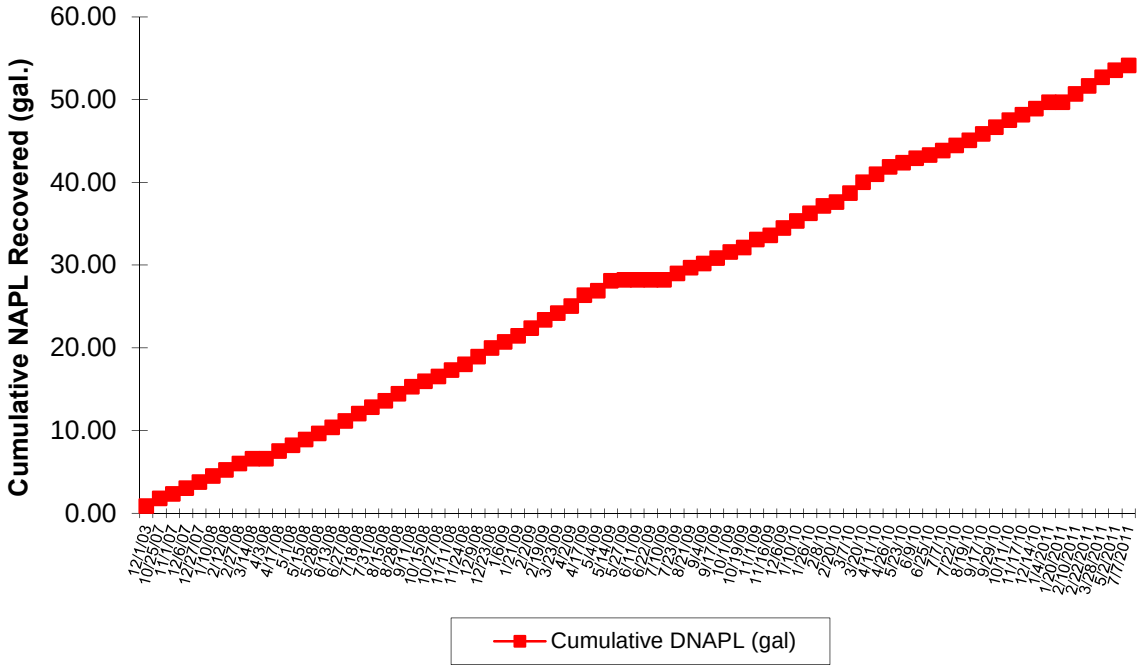


FIGURE 12I
Well HIMW-16I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



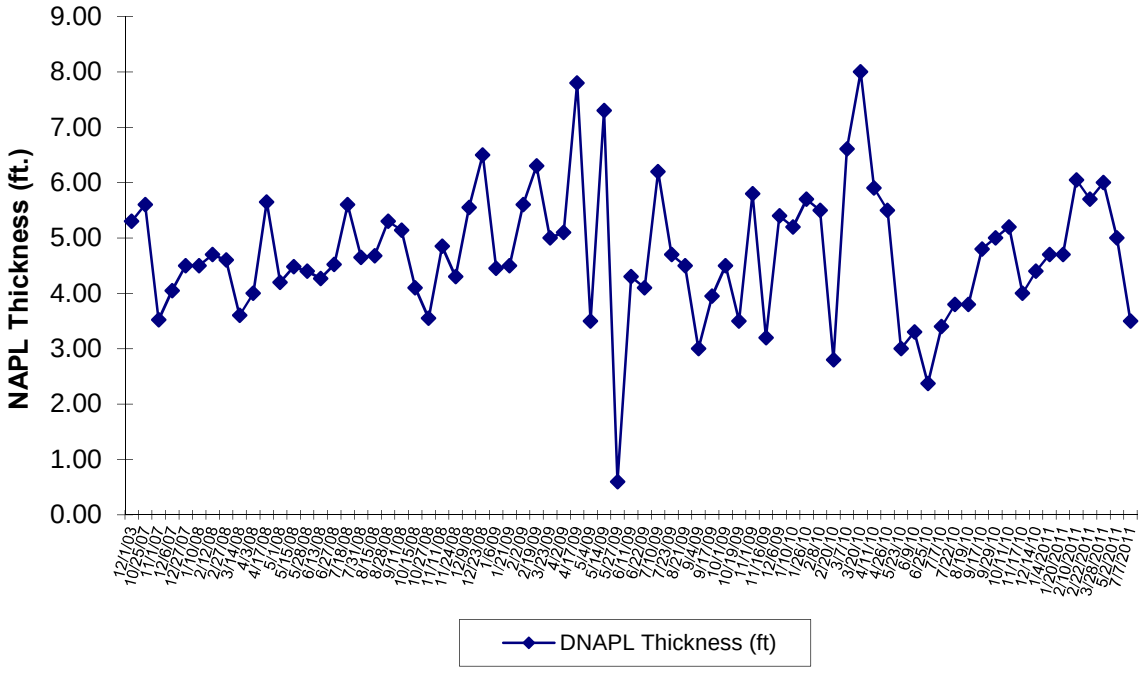
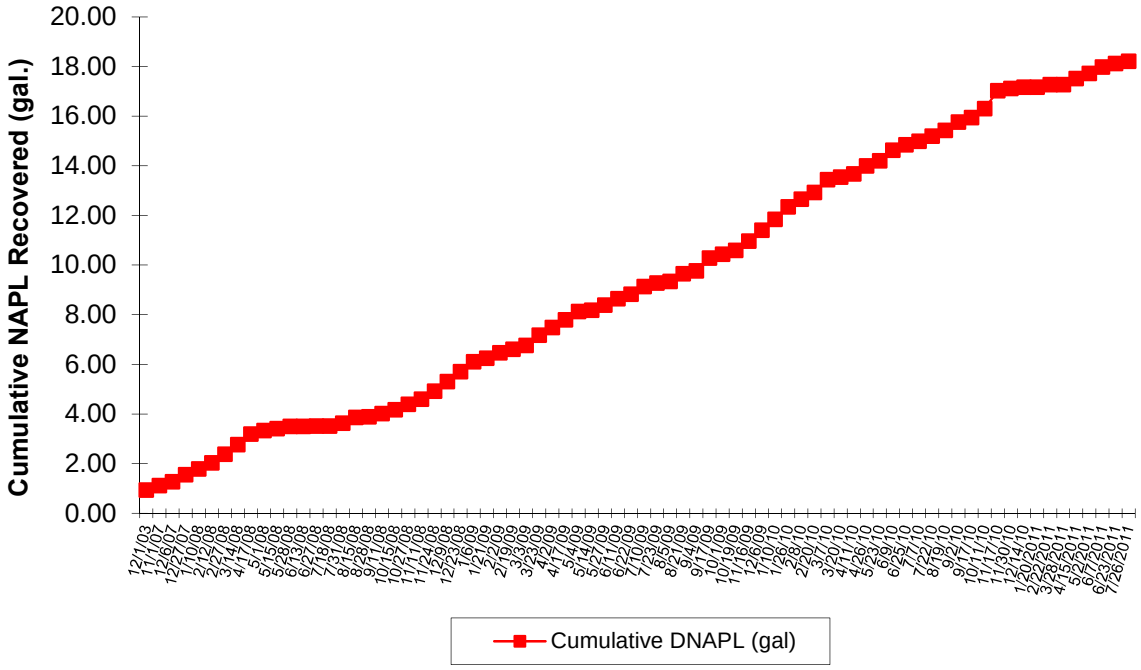


FIGURE 12J
Well HIMW-17S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



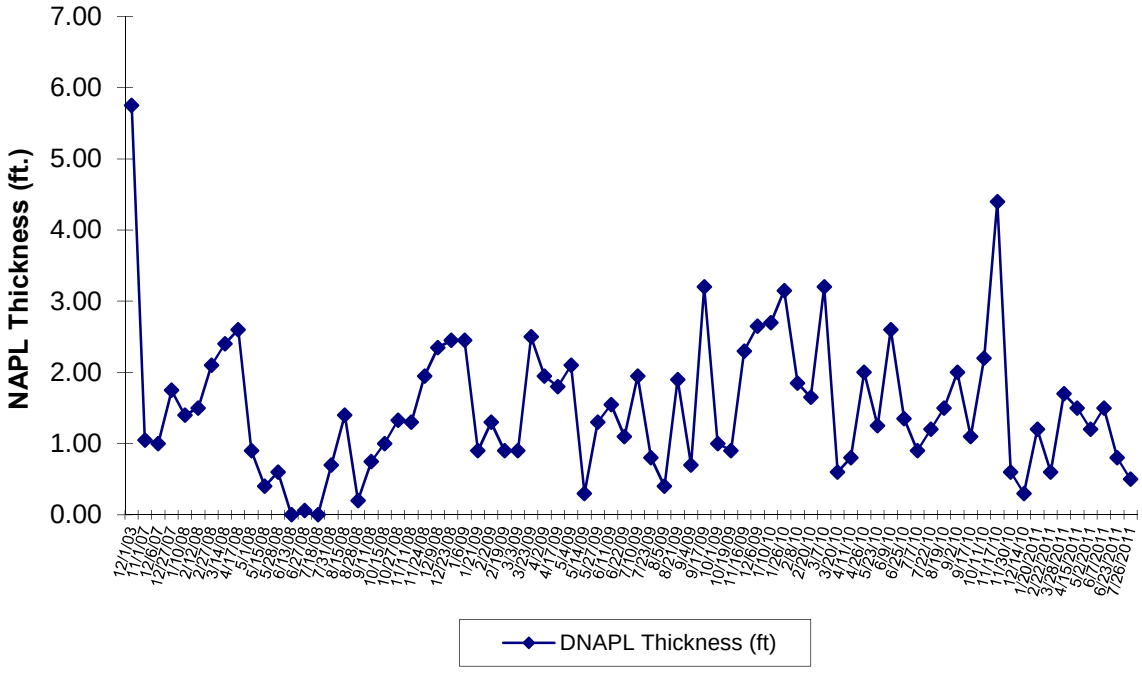
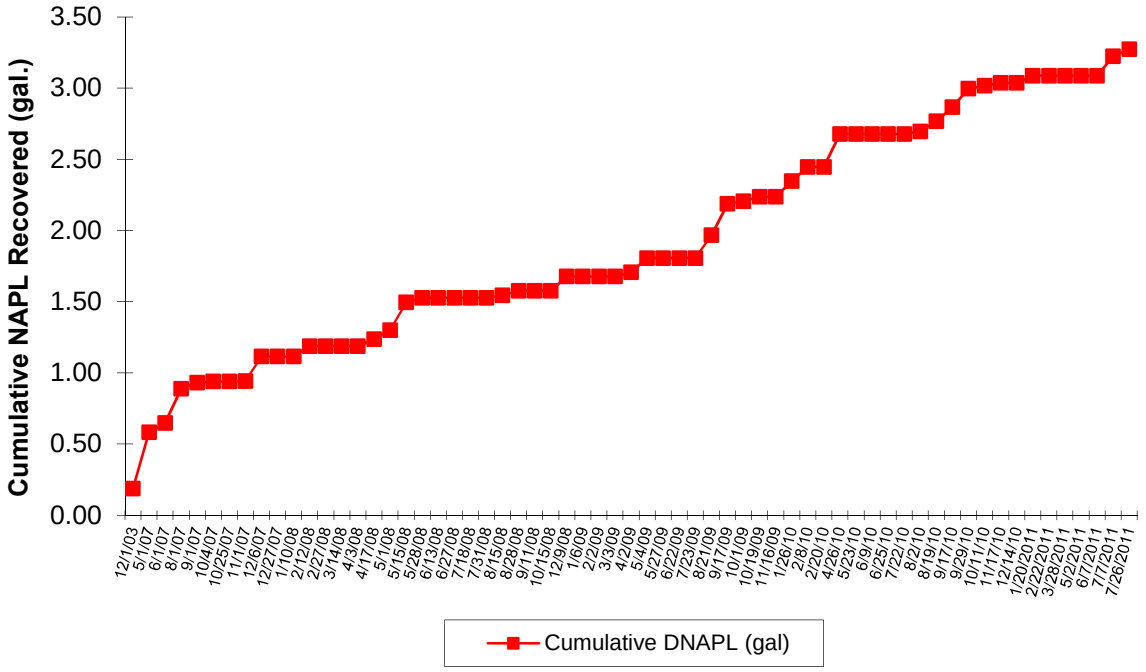


FIGURE 12K
Well HIMW-18S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



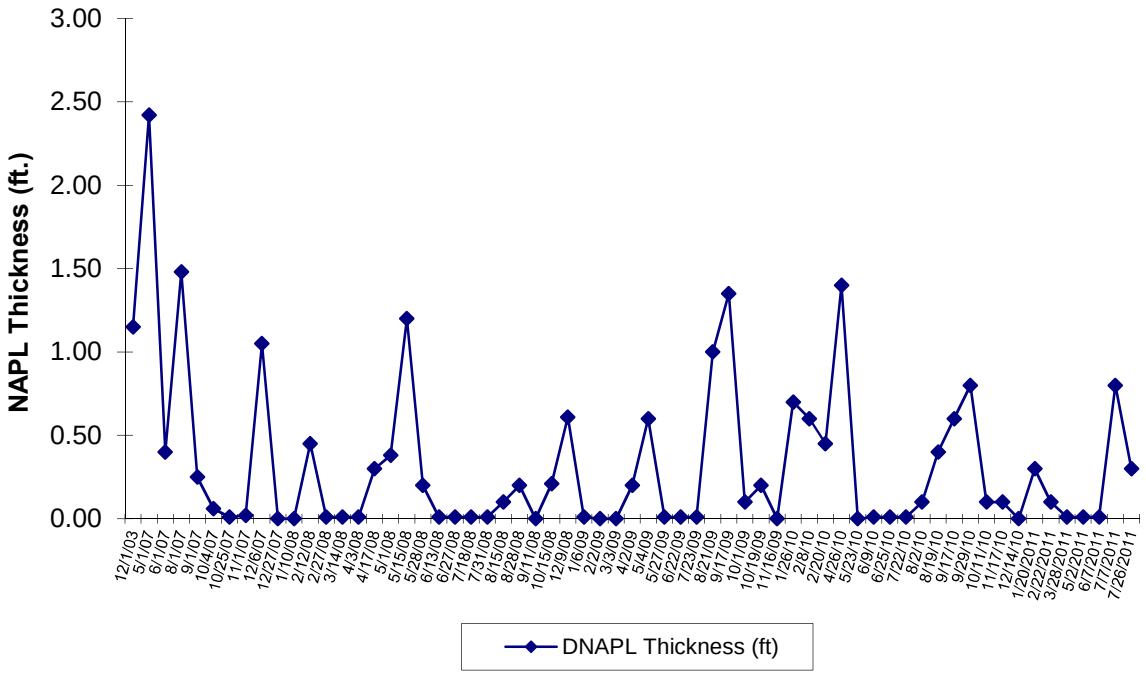
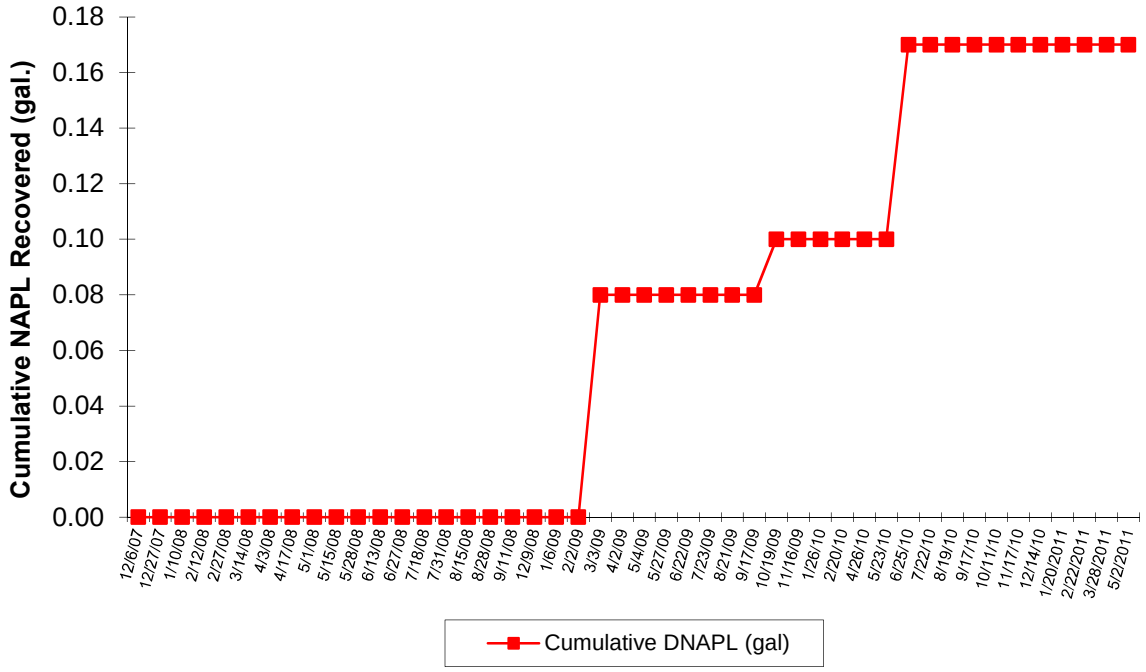


FIGURE 12L
Well HIMW-18I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



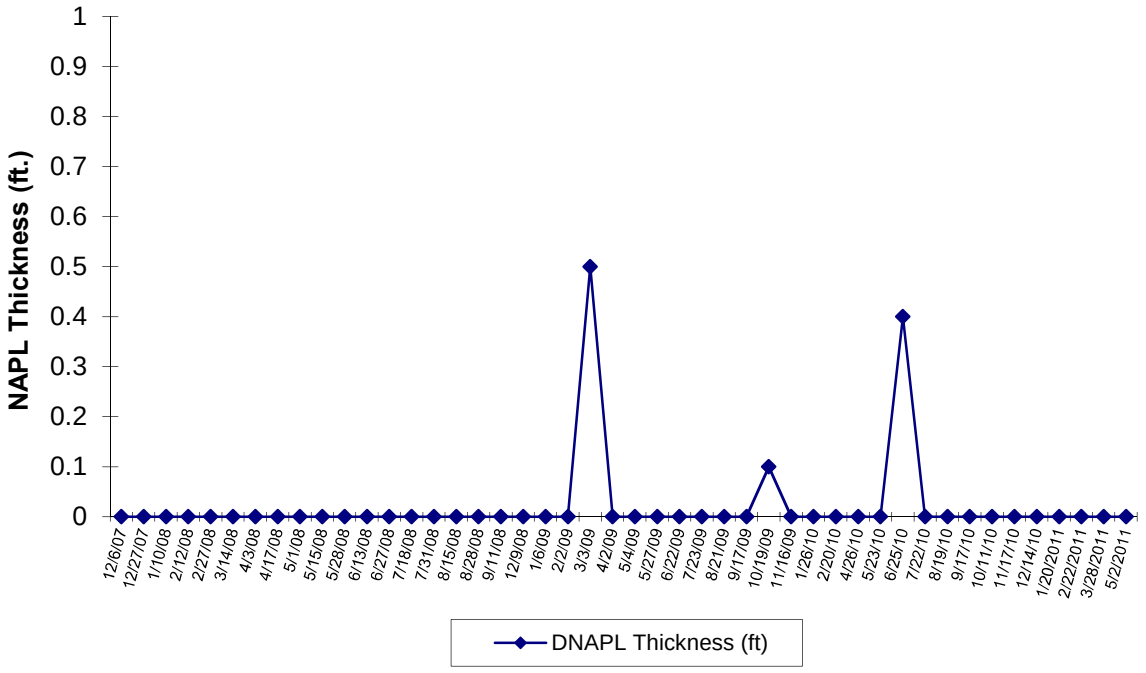
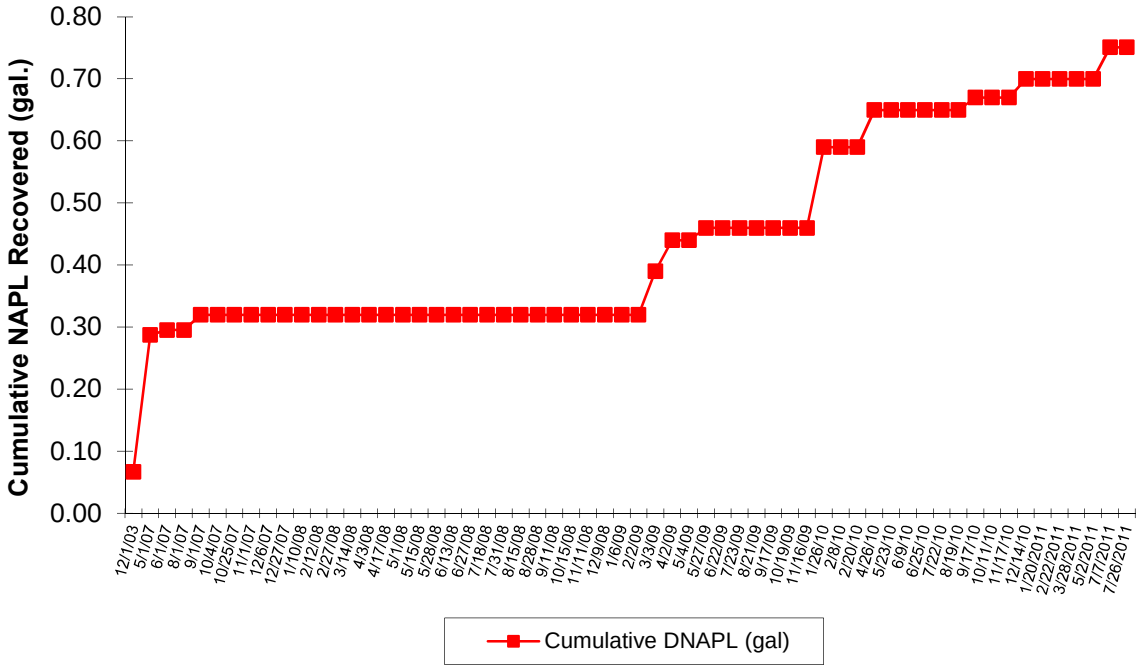


FIGURE 12M
Well HIMW-19S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



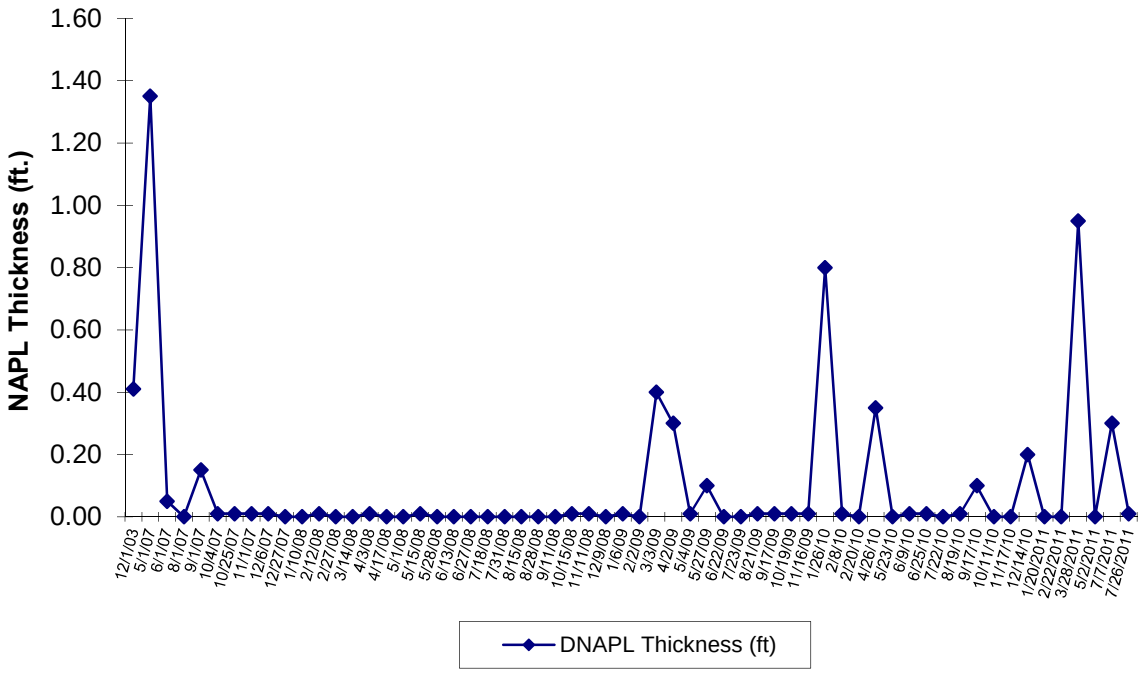
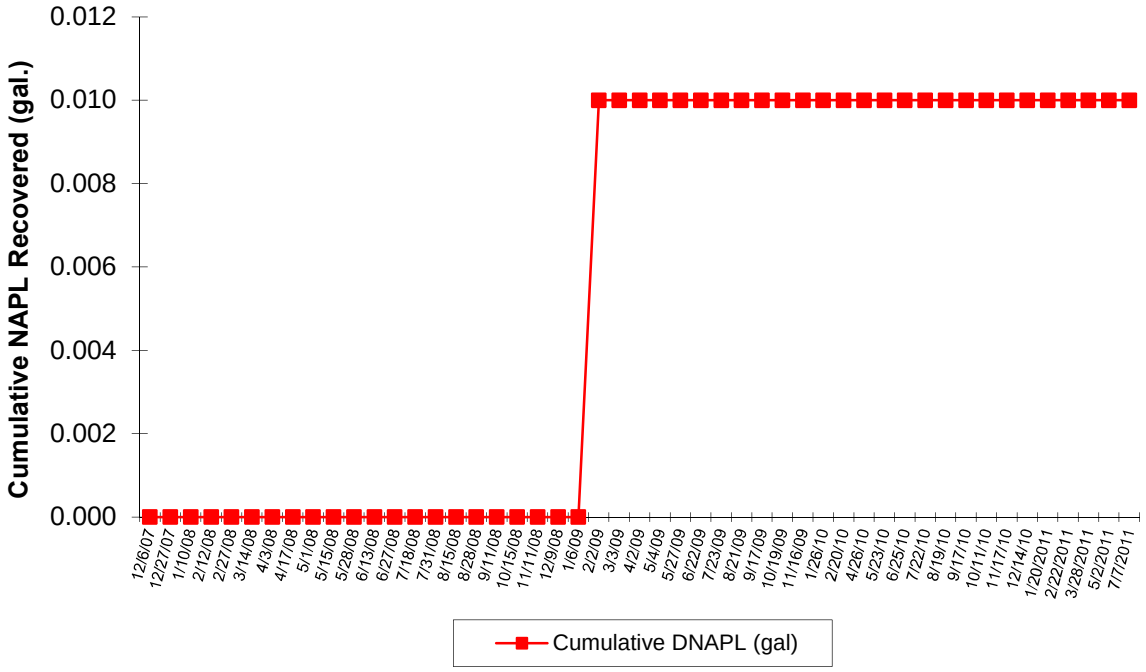


FIGURE 12N
Well HIMW-19I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



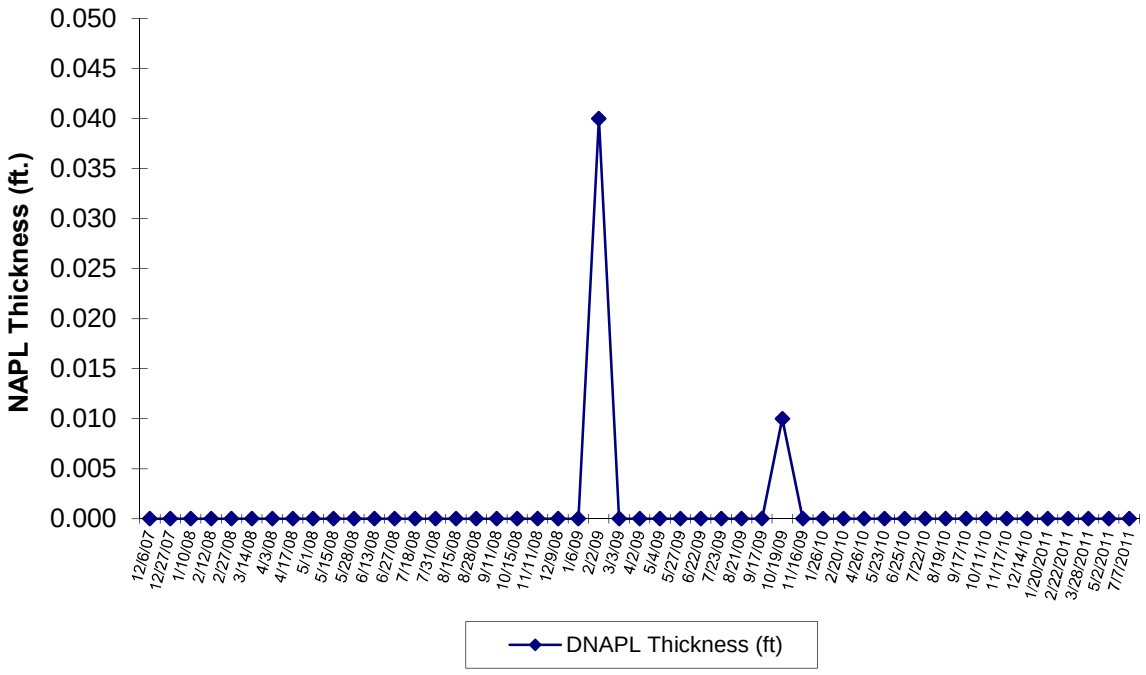
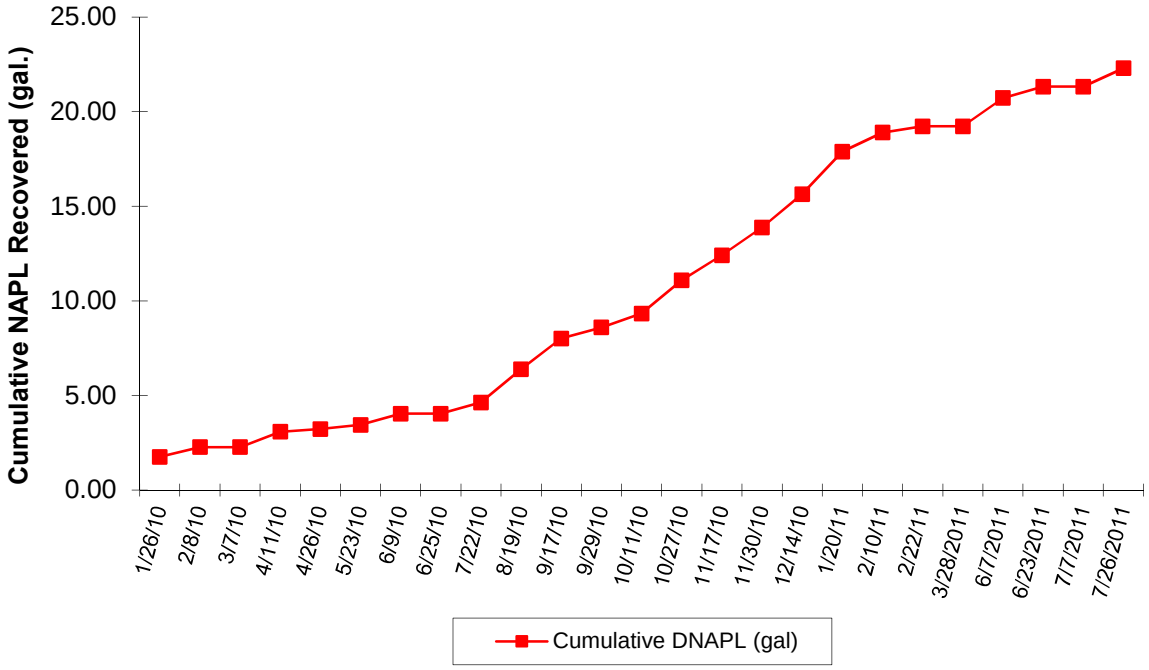


FIGURE 12O
Well HIMW-21 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



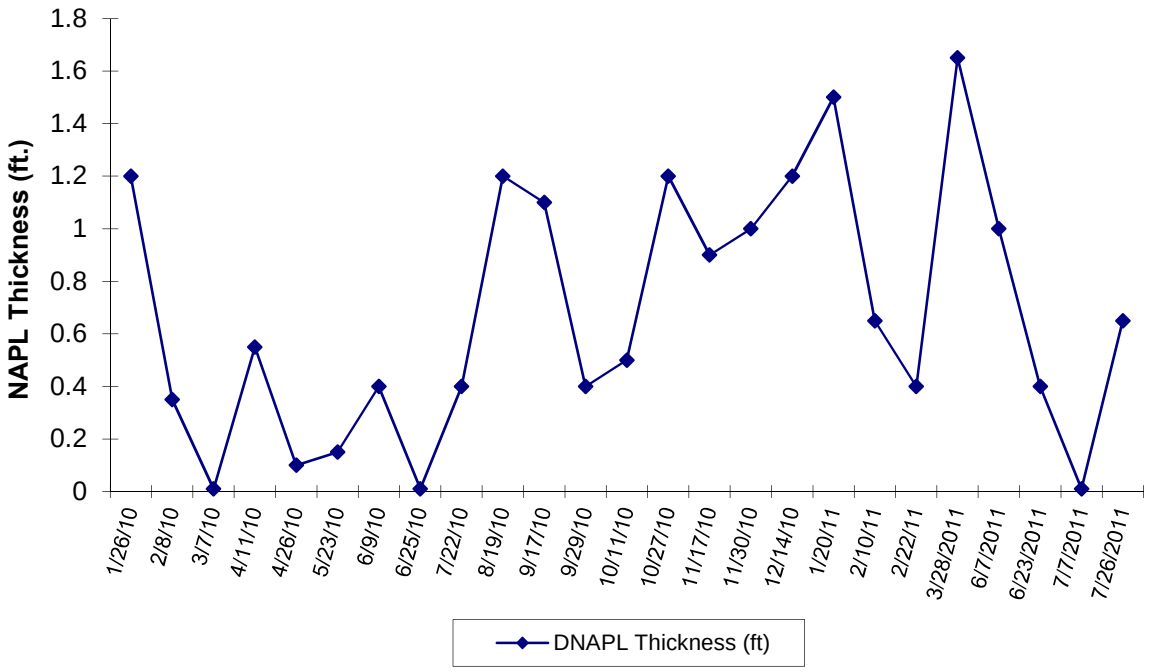
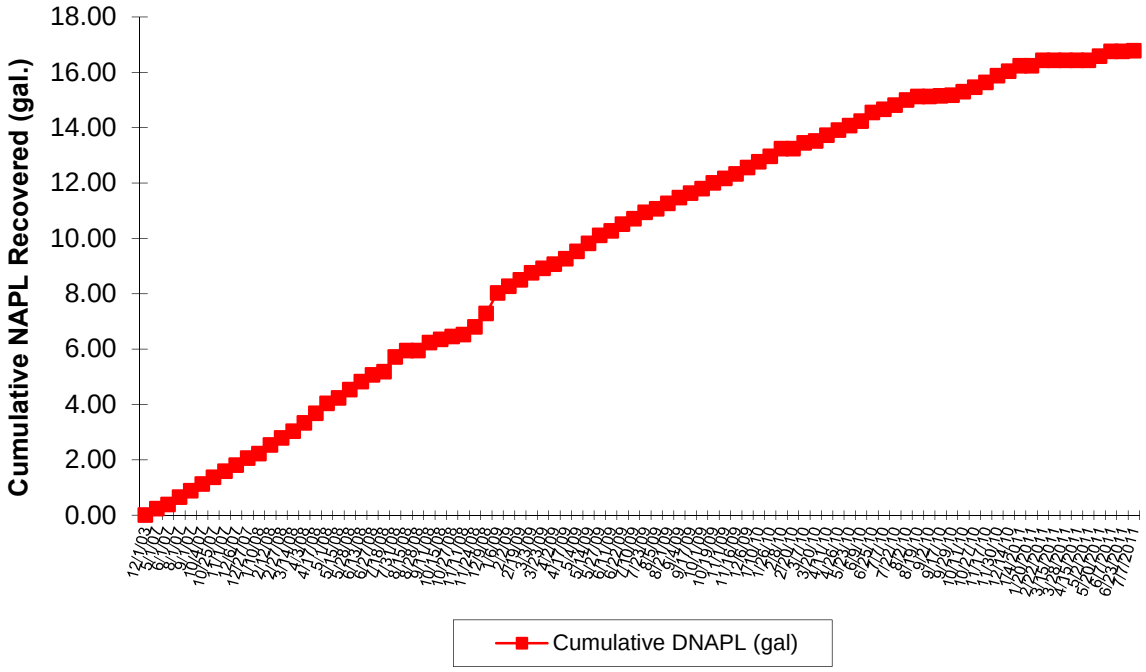


FIGURE 12P
Well PZ-08 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



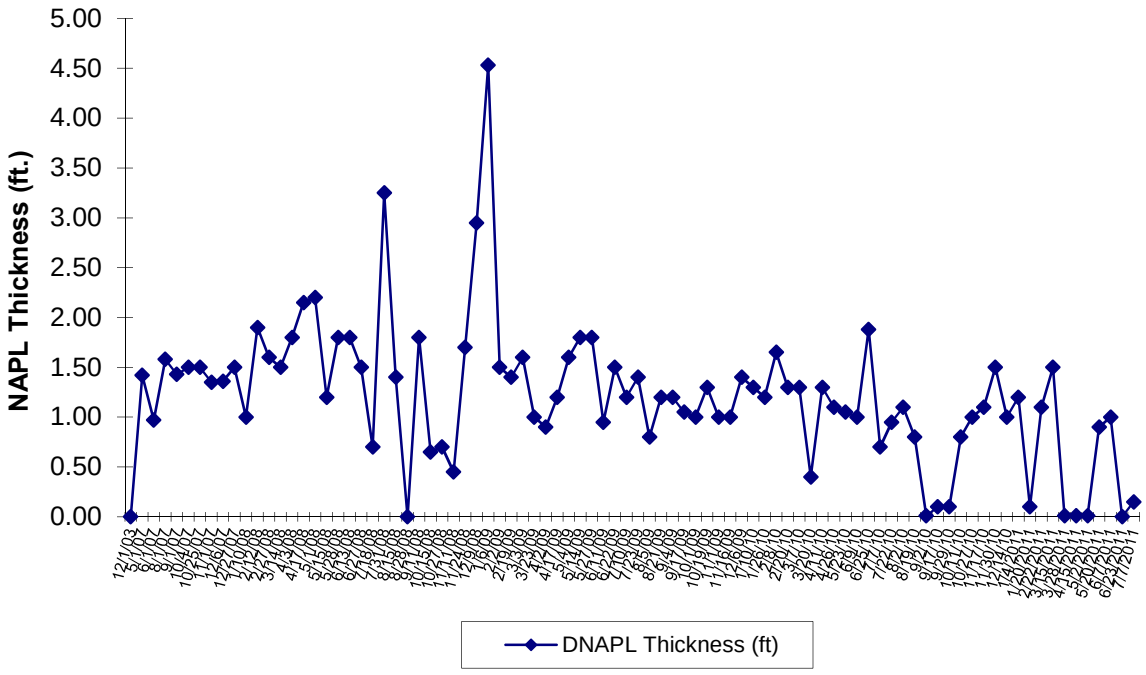
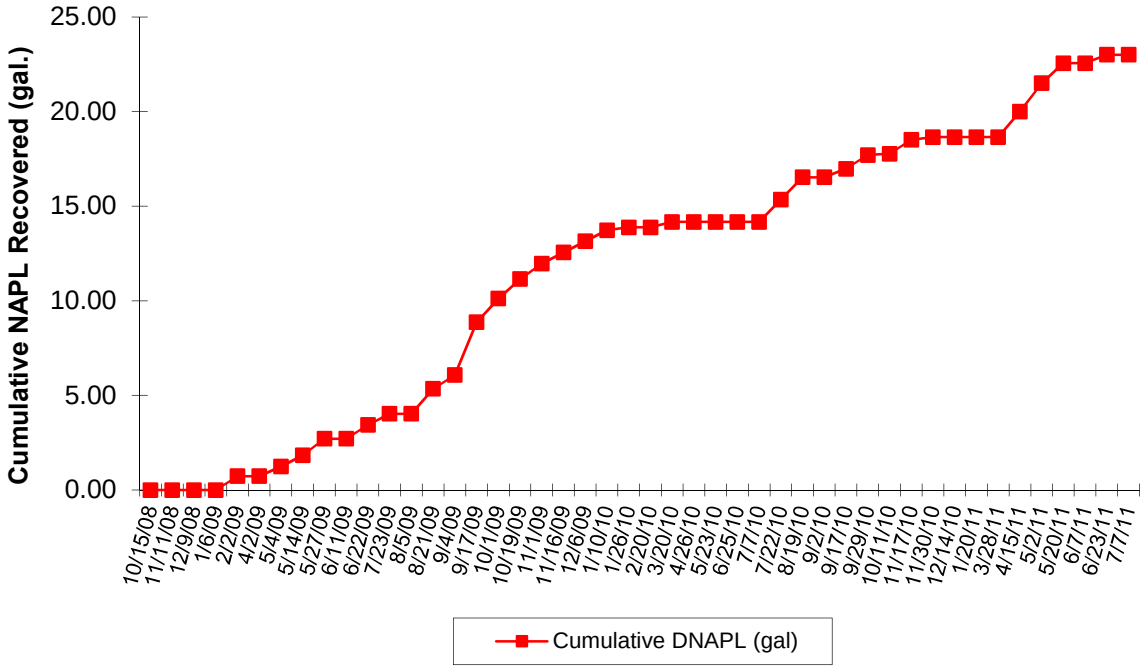


FIGURE 12Q
Well IPR-02 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



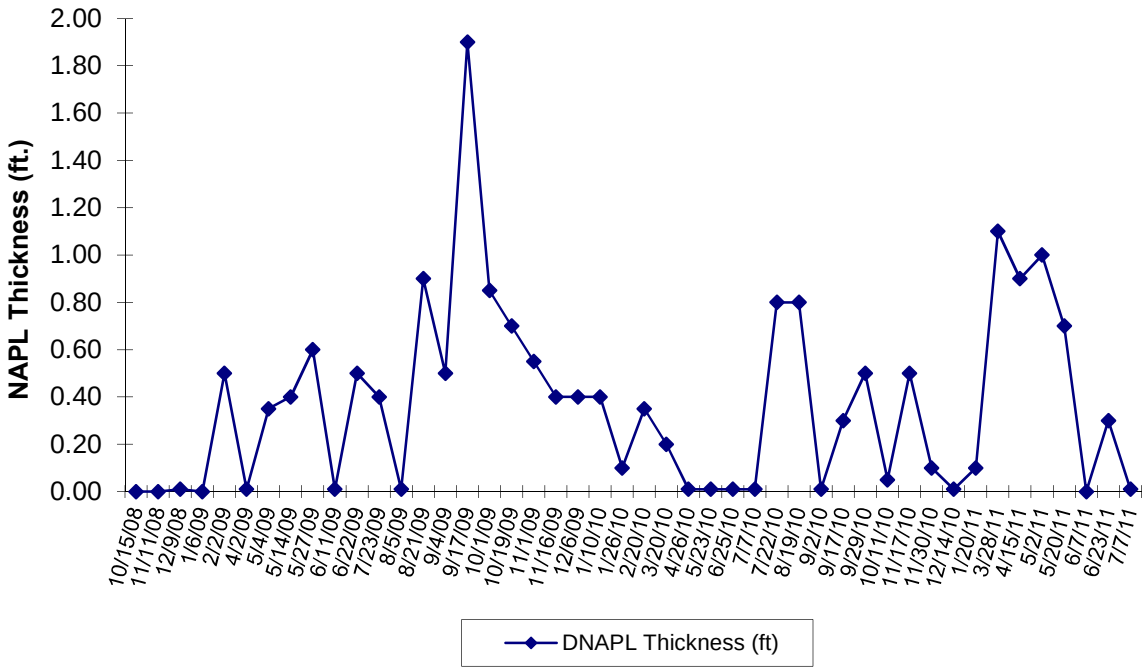
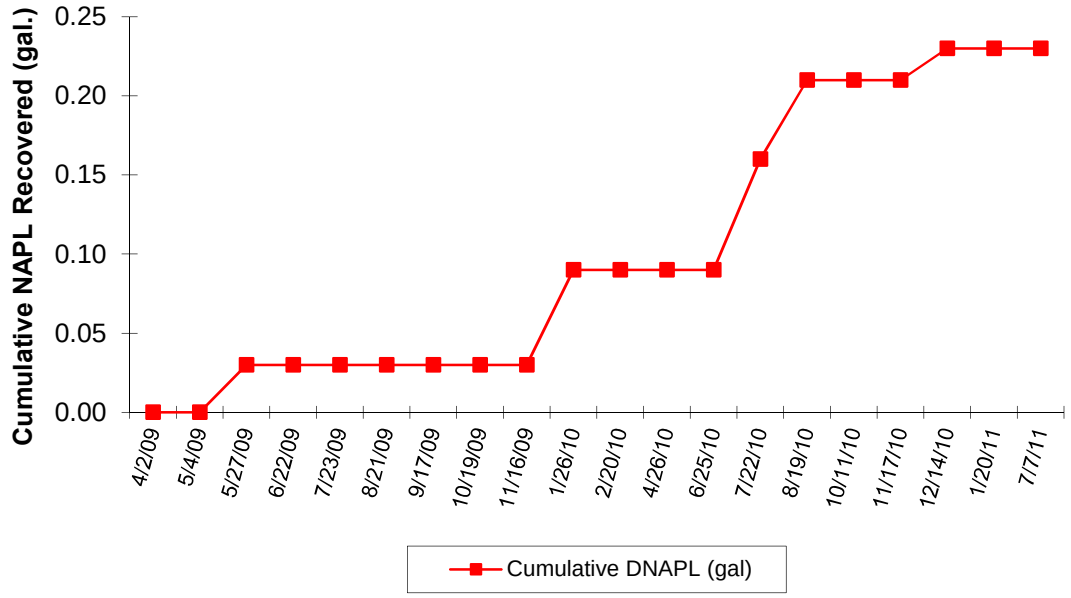


FIGURE 12R
Well IPR-05 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



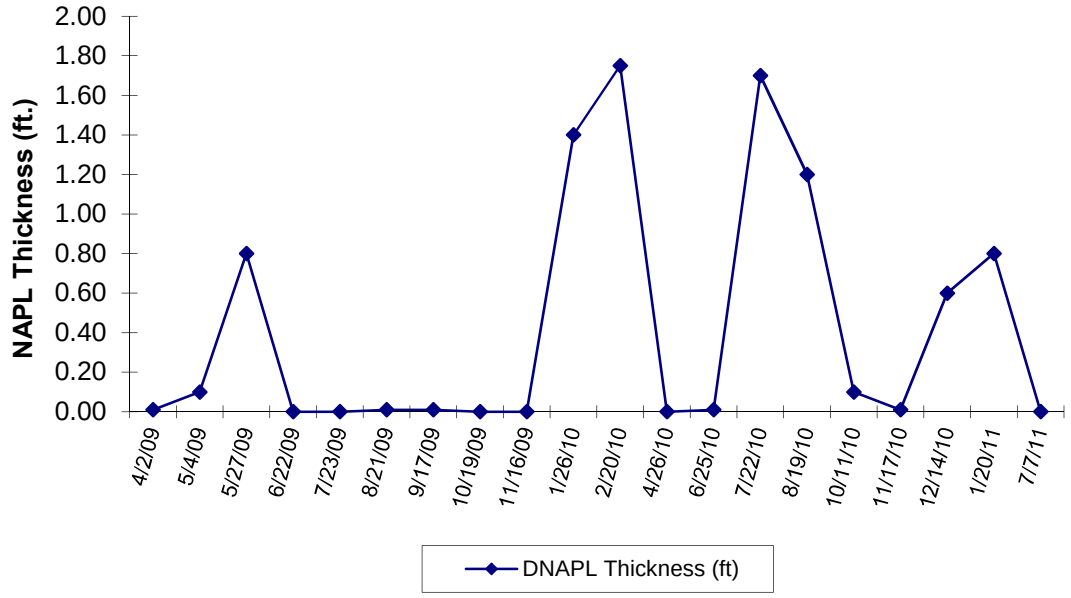
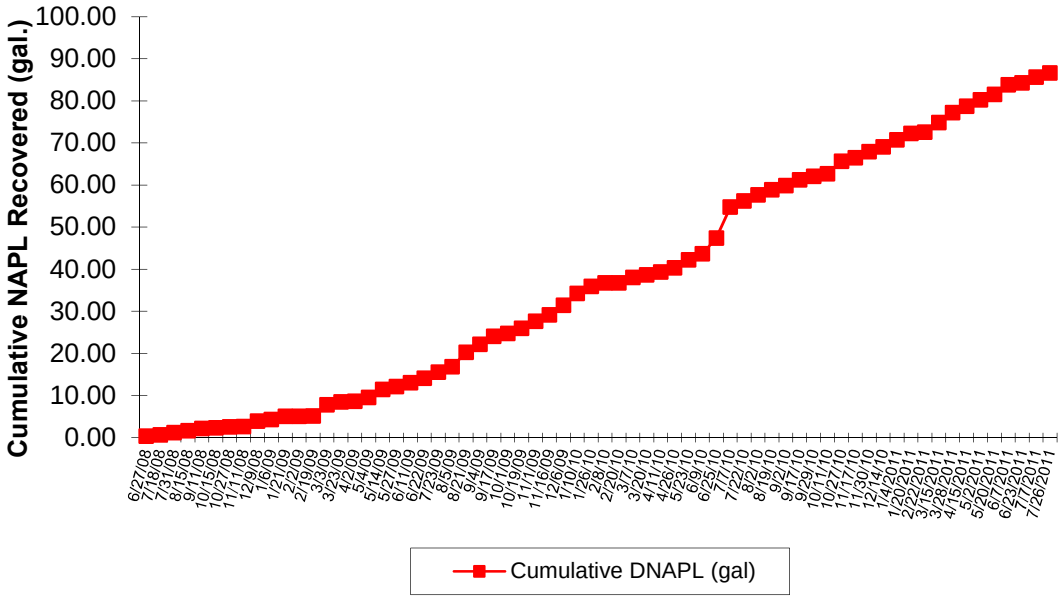


FIGURE 12S
Well IPR-06 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



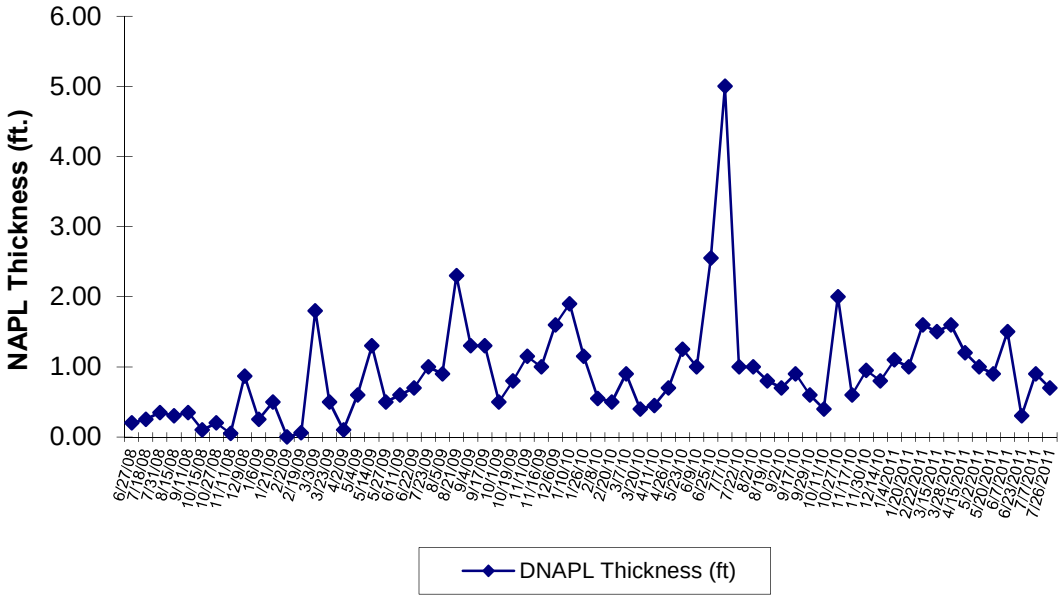
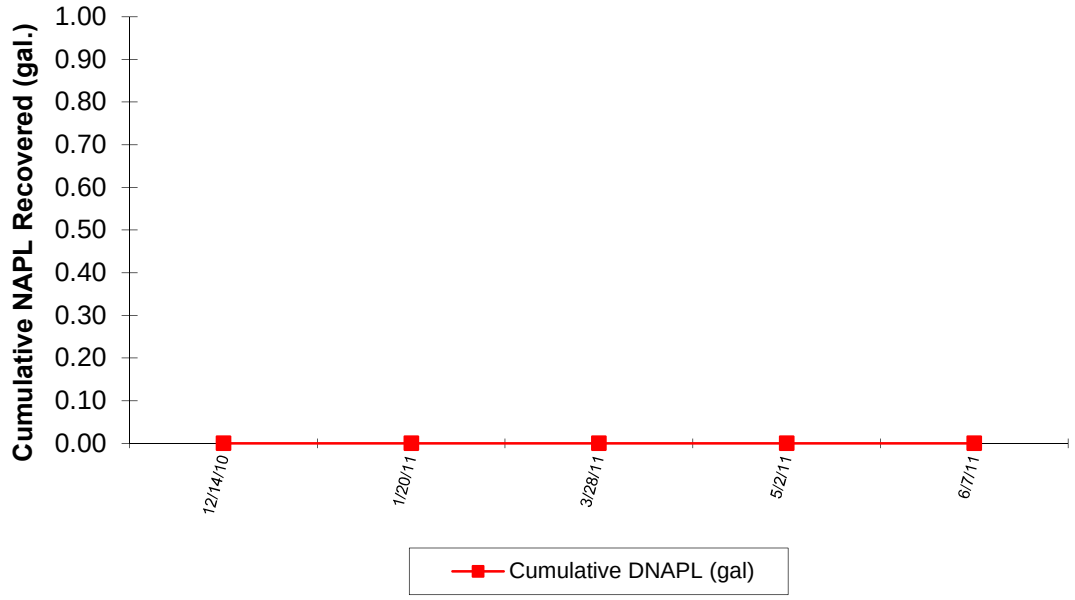


FIGURE 12T
Well IPR-07 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



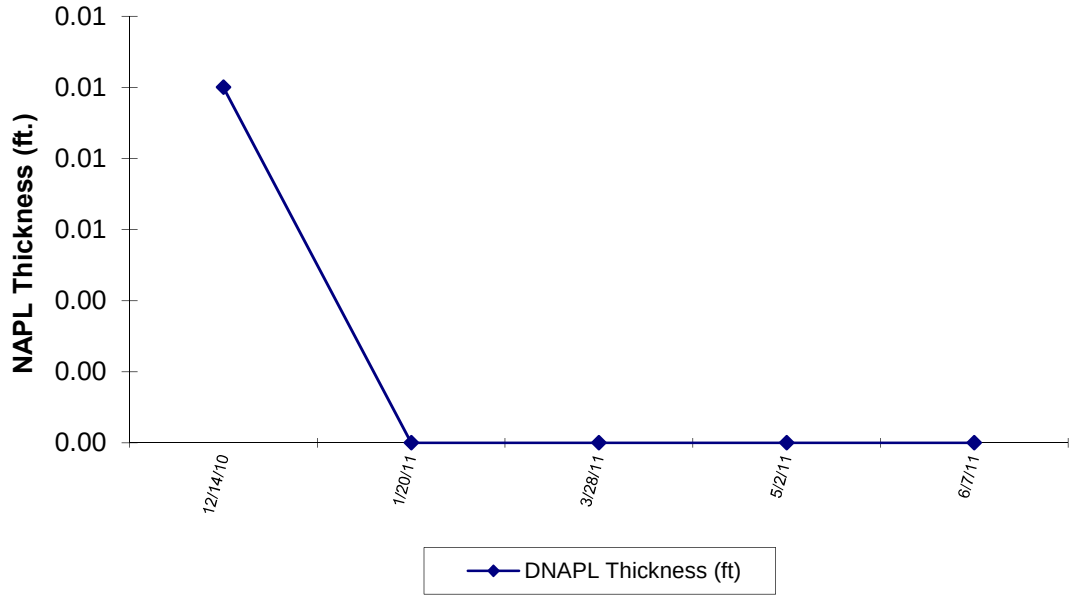
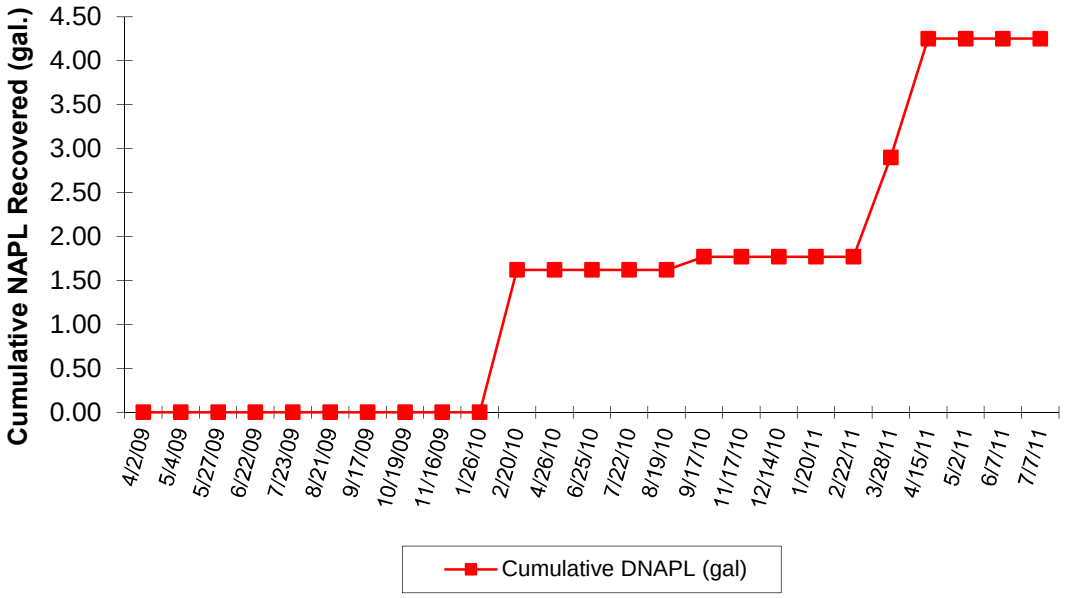


FIGURE 12U
Well IPR-09 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



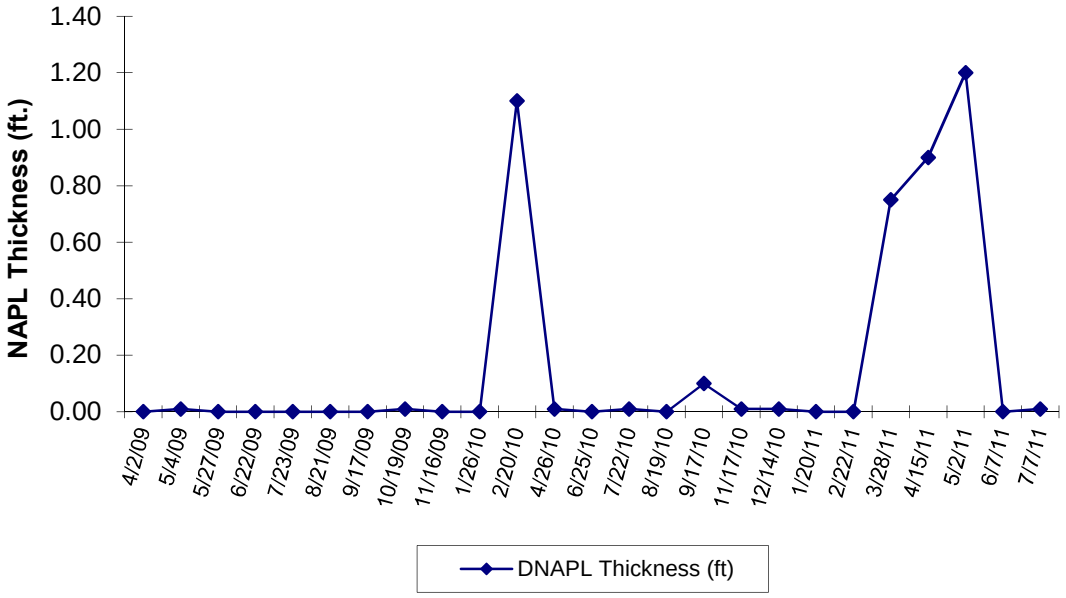
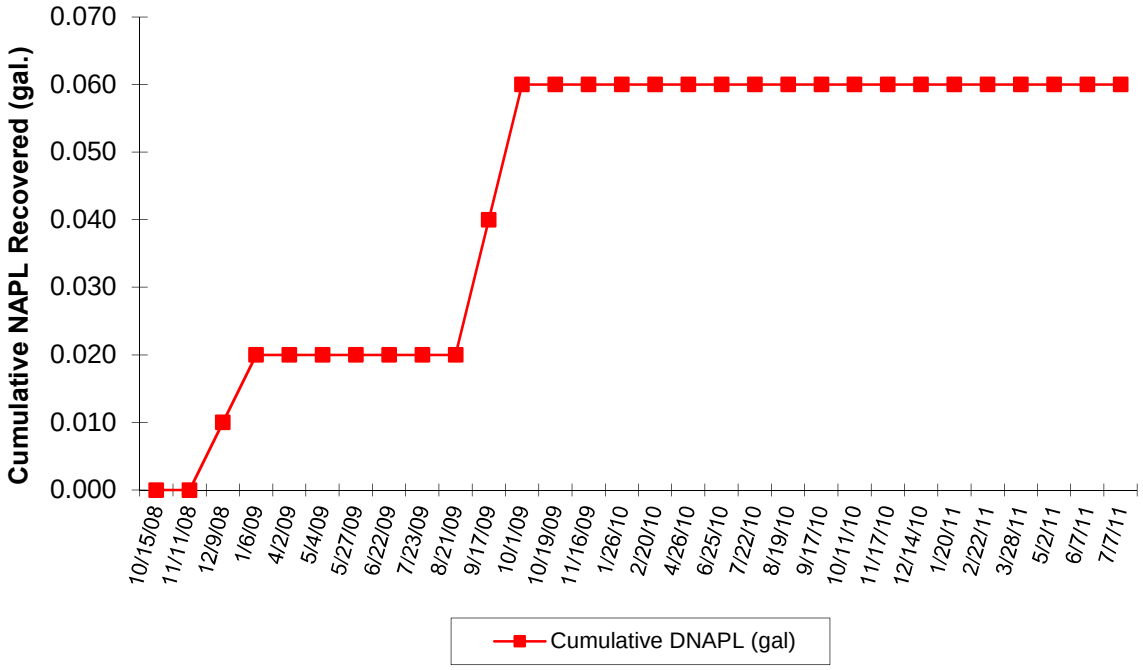


FIGURE 12V
Well IPR-12A NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



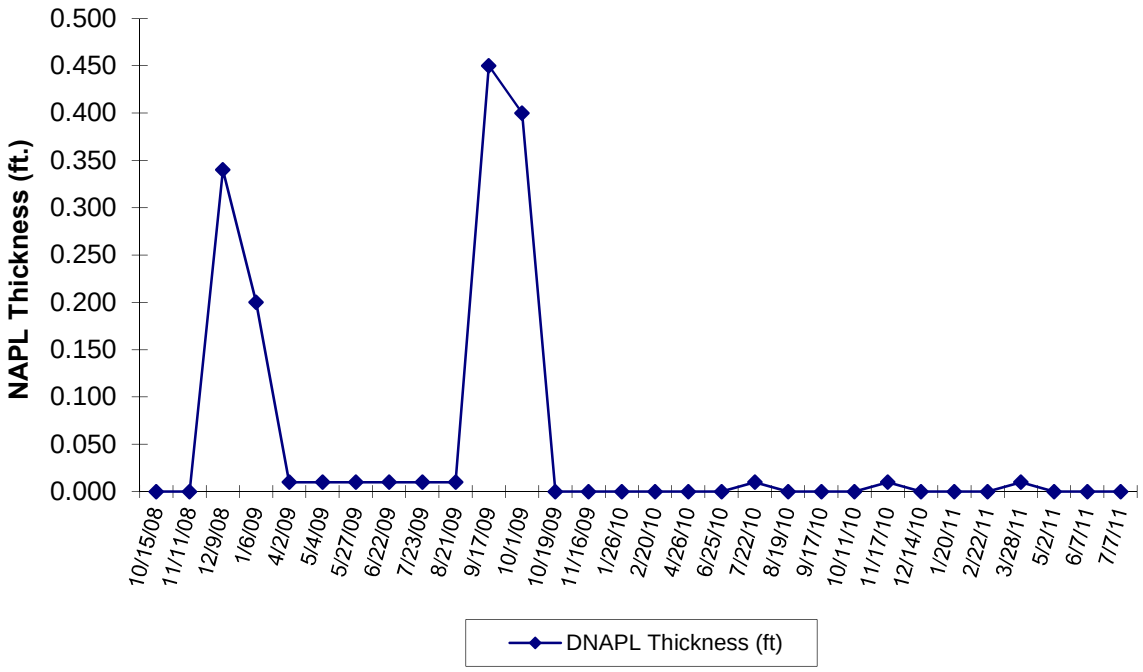
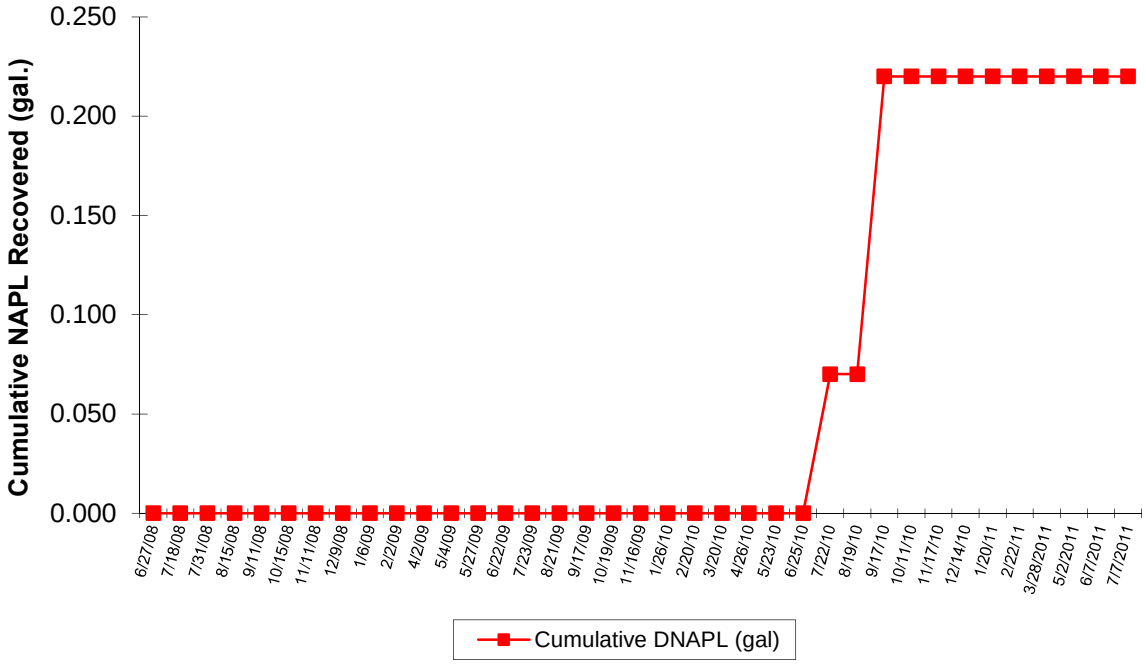


FIGURE 12W
Well IPR-15 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



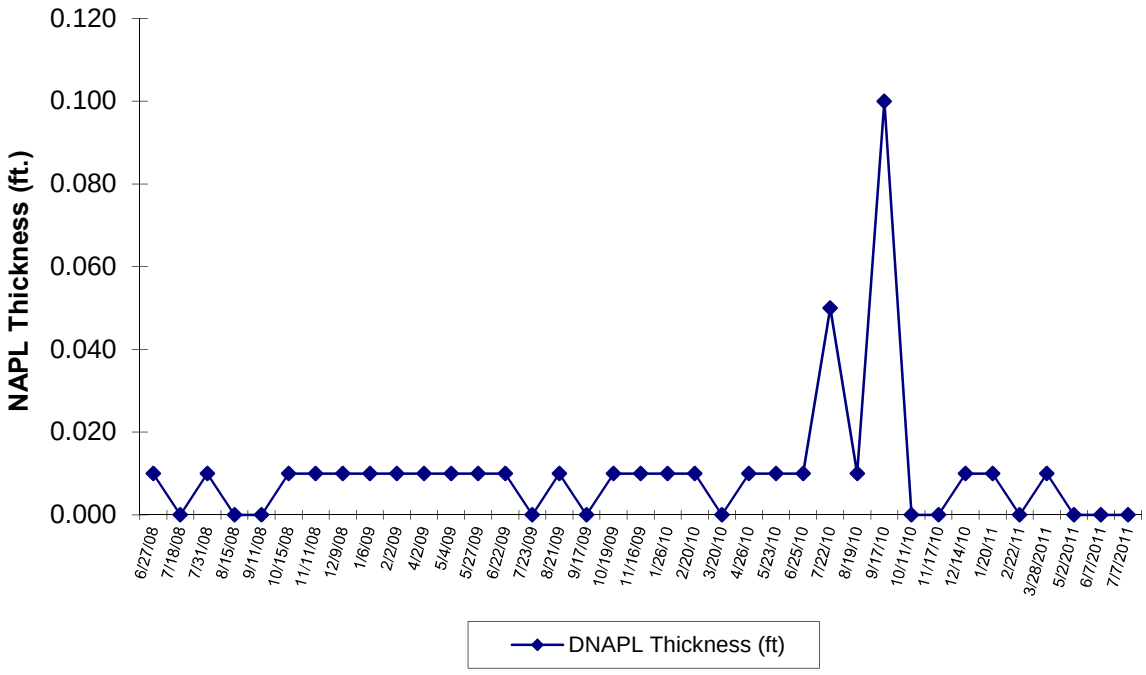
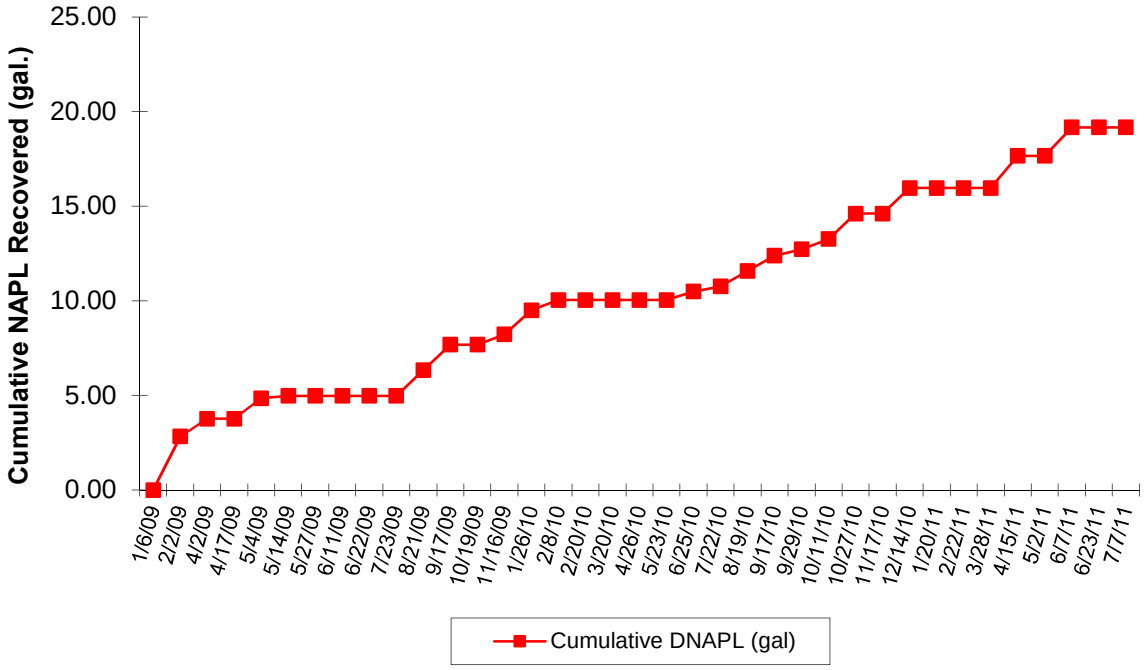


FIGURE 12X
Well IPR-16 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



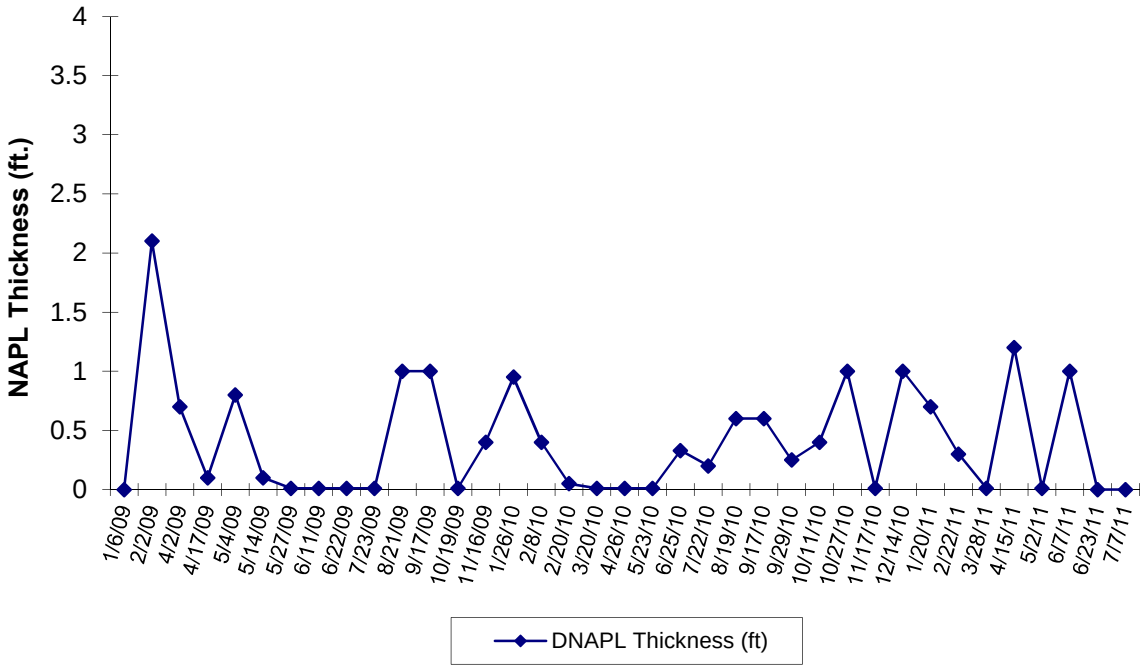
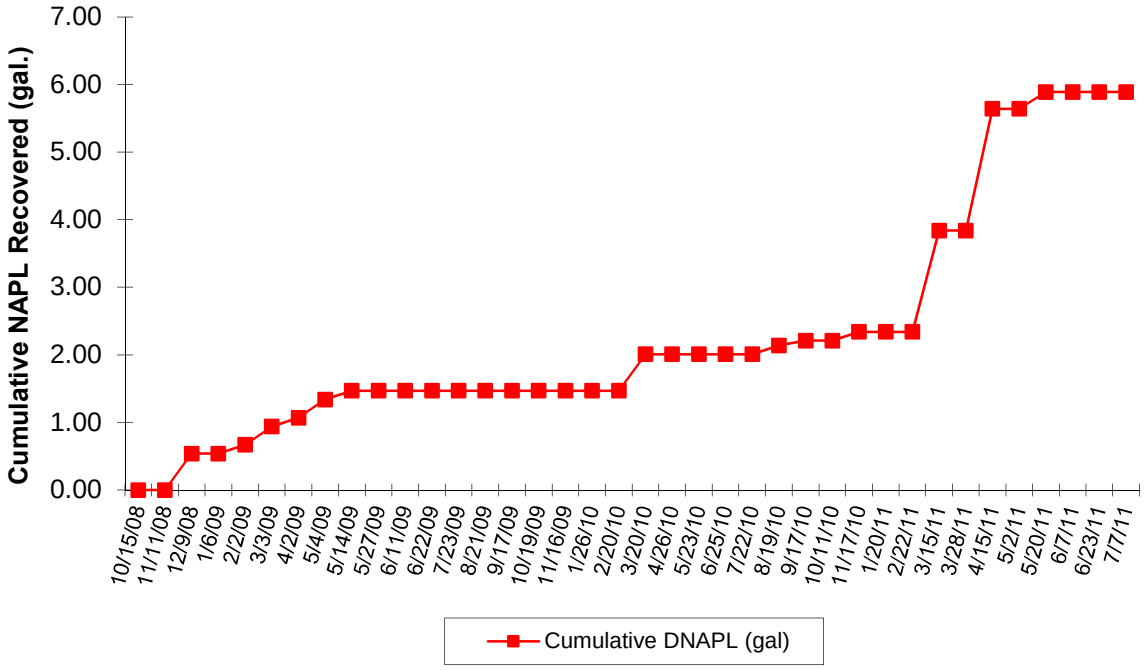


FIGURE 12Y
Well IPR-17 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



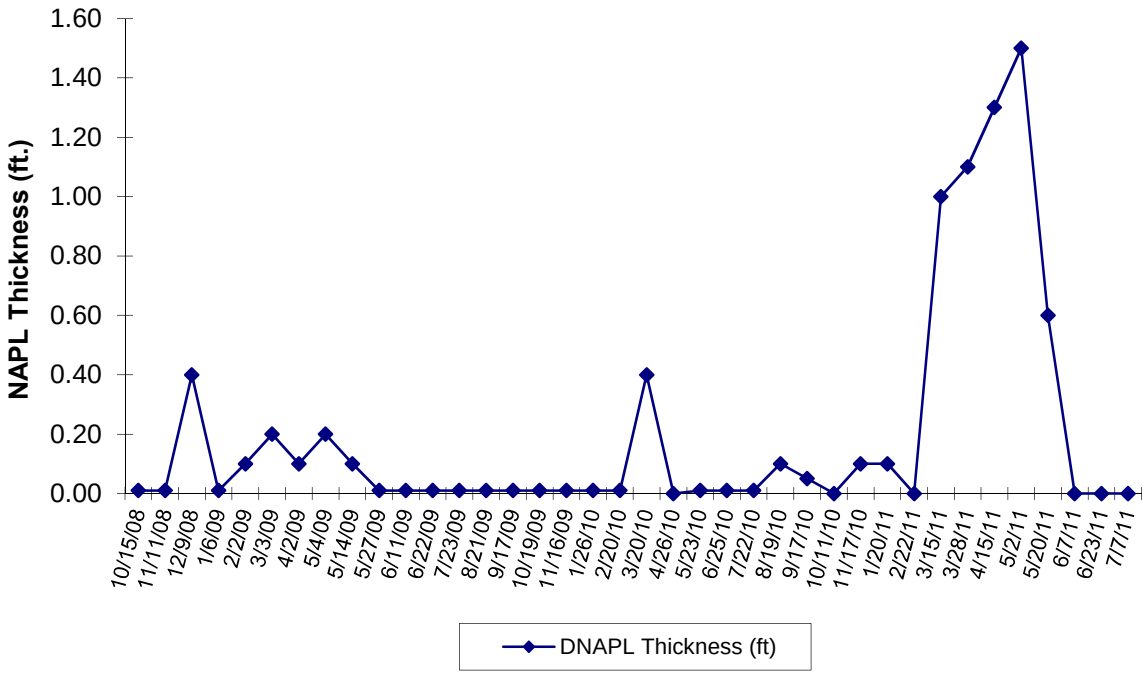
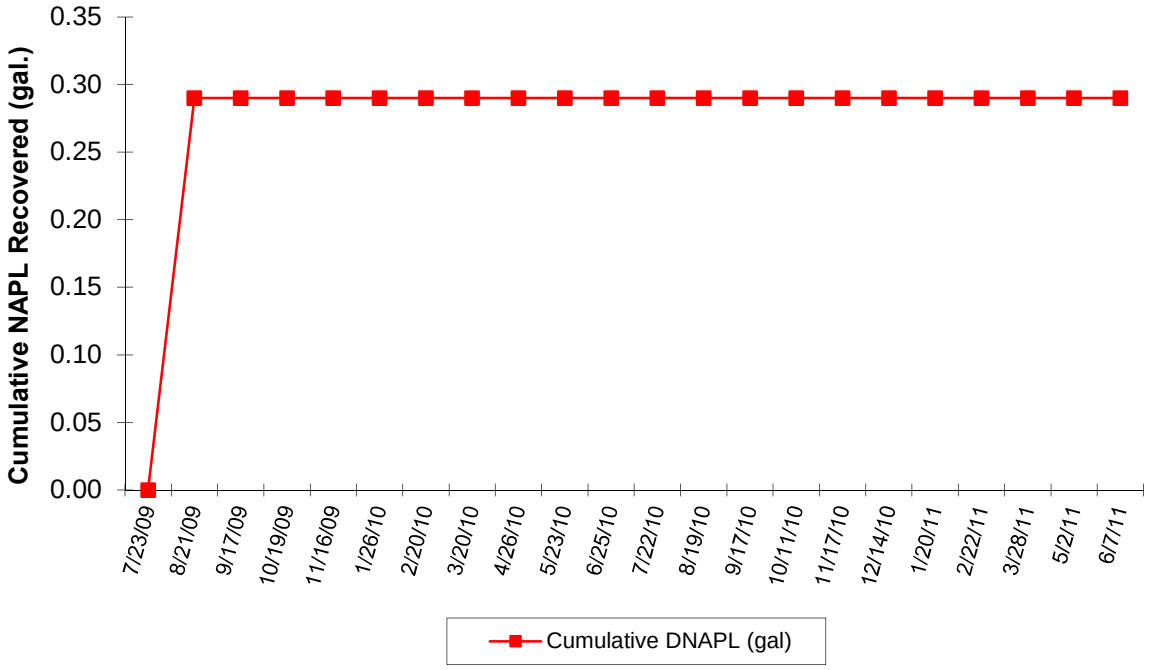


FIGURE 12Z
Well IPR-18 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



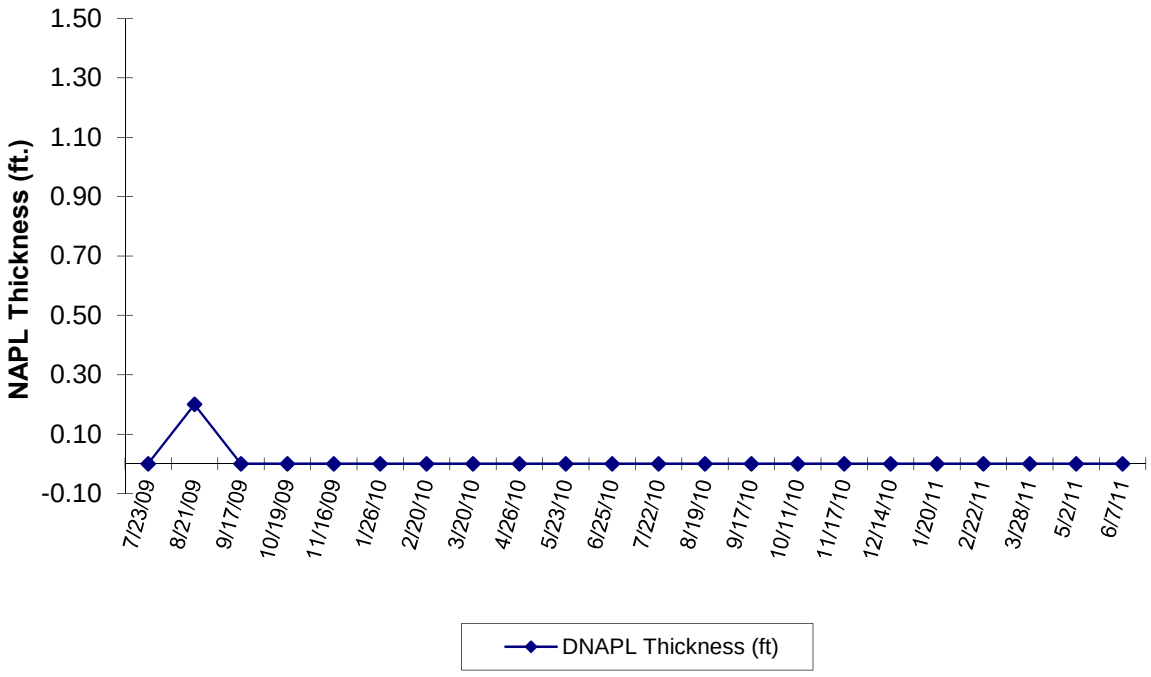
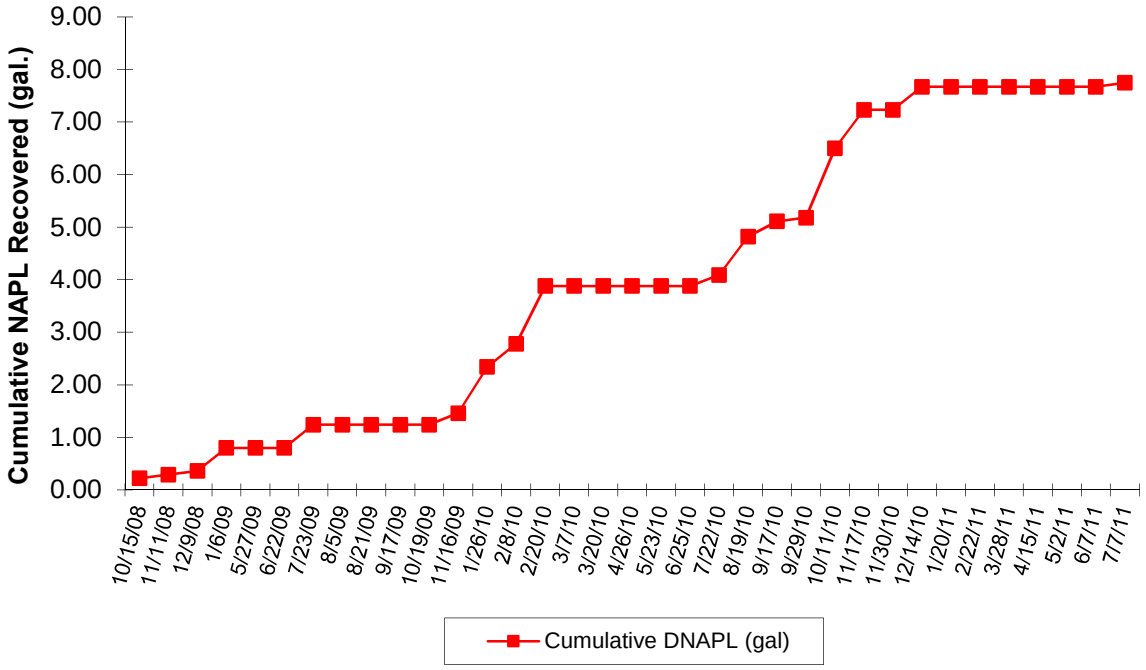


FIGURE 12AA
Well IPR-20 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



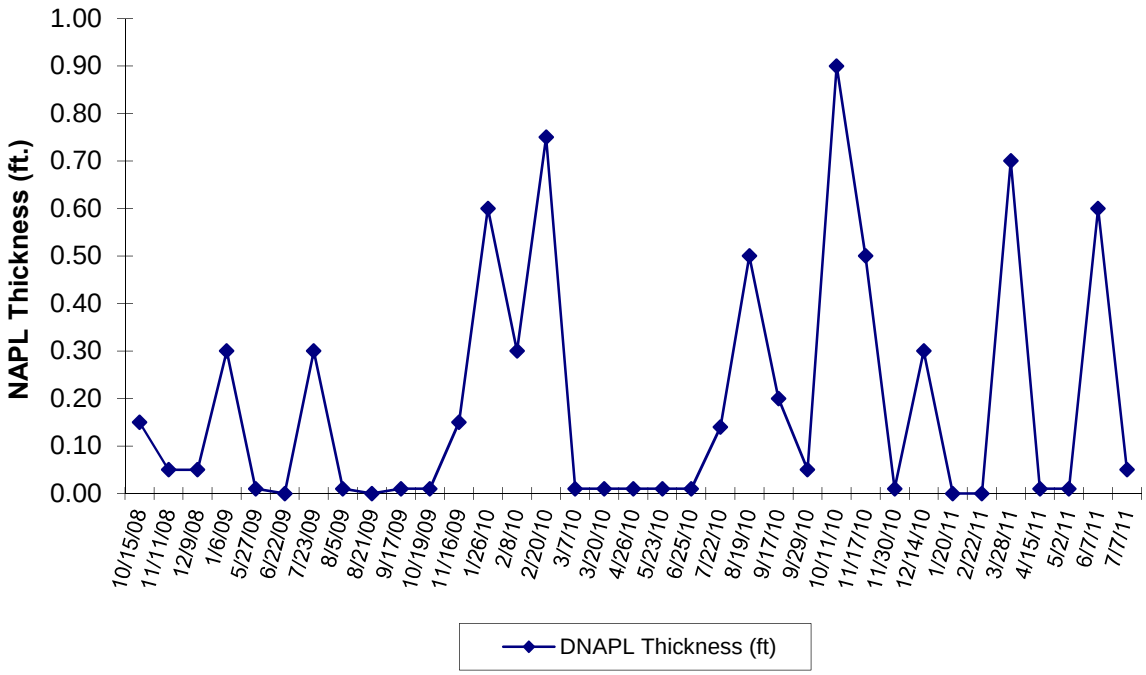
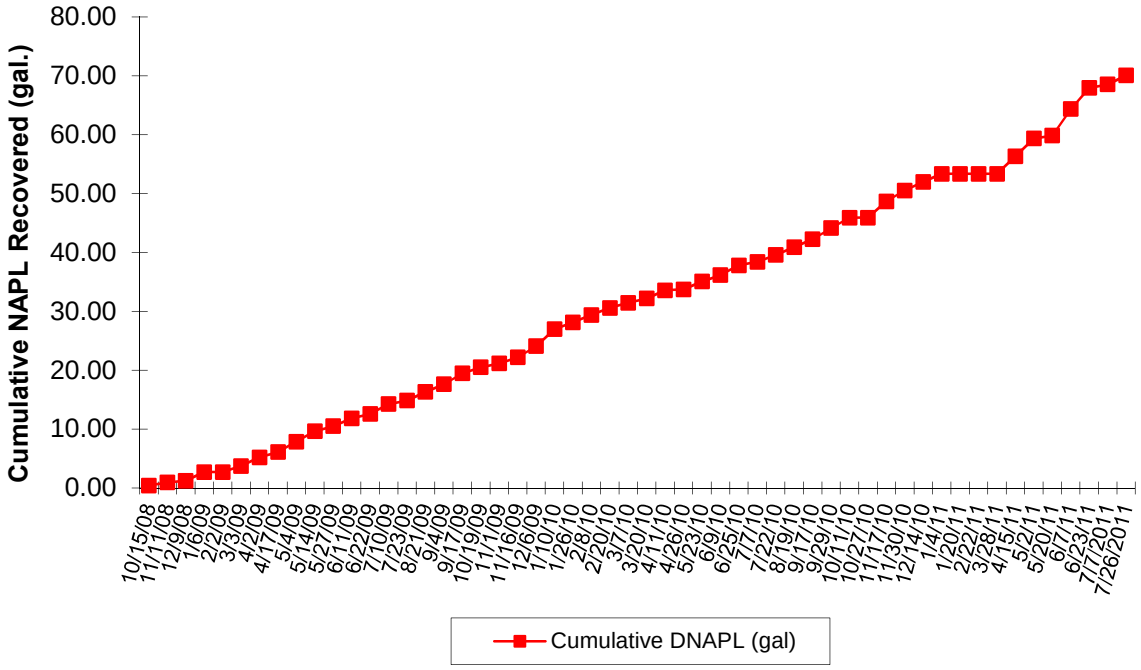


FIGURE 12AB
Well IPR-21 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



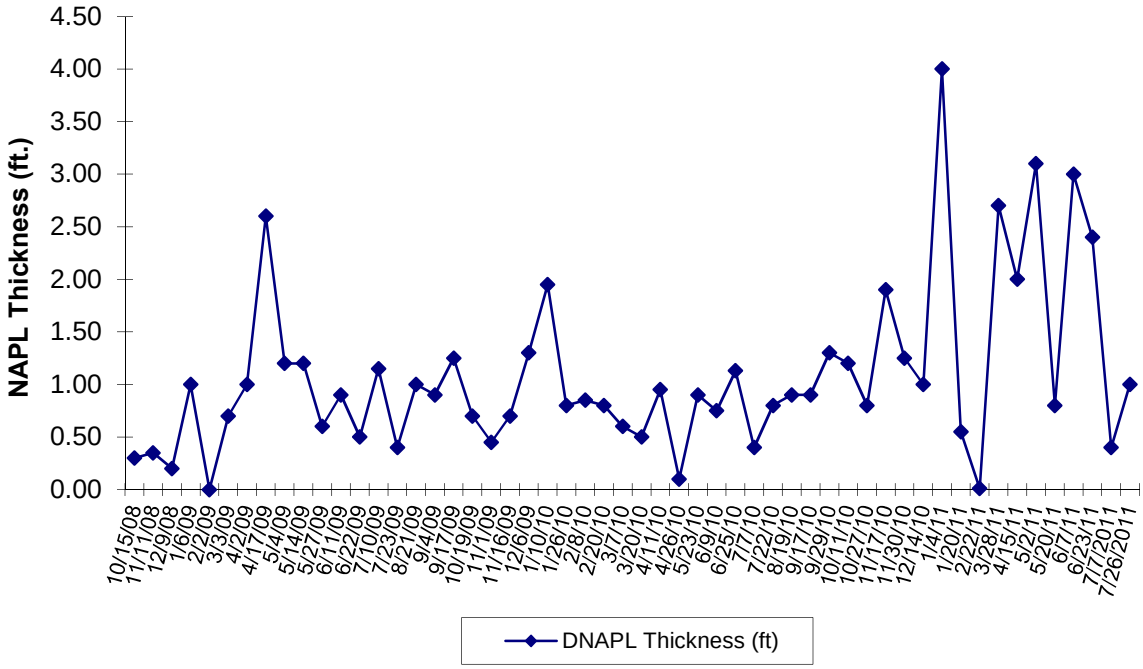
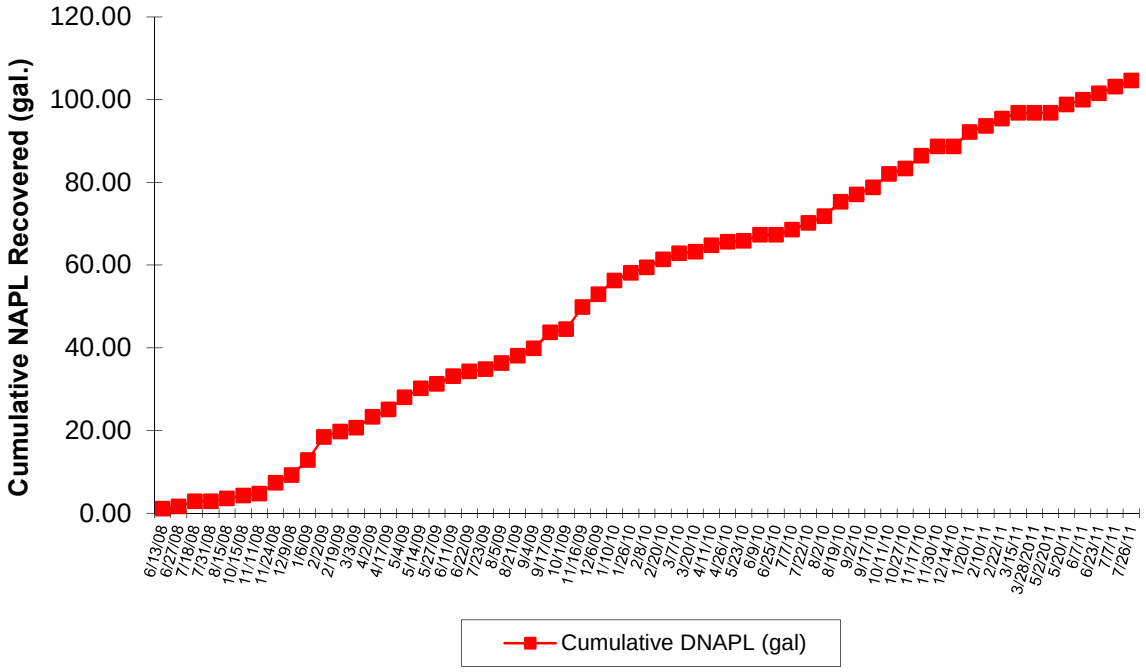


FIGURE 12AC
Well IPR-22 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



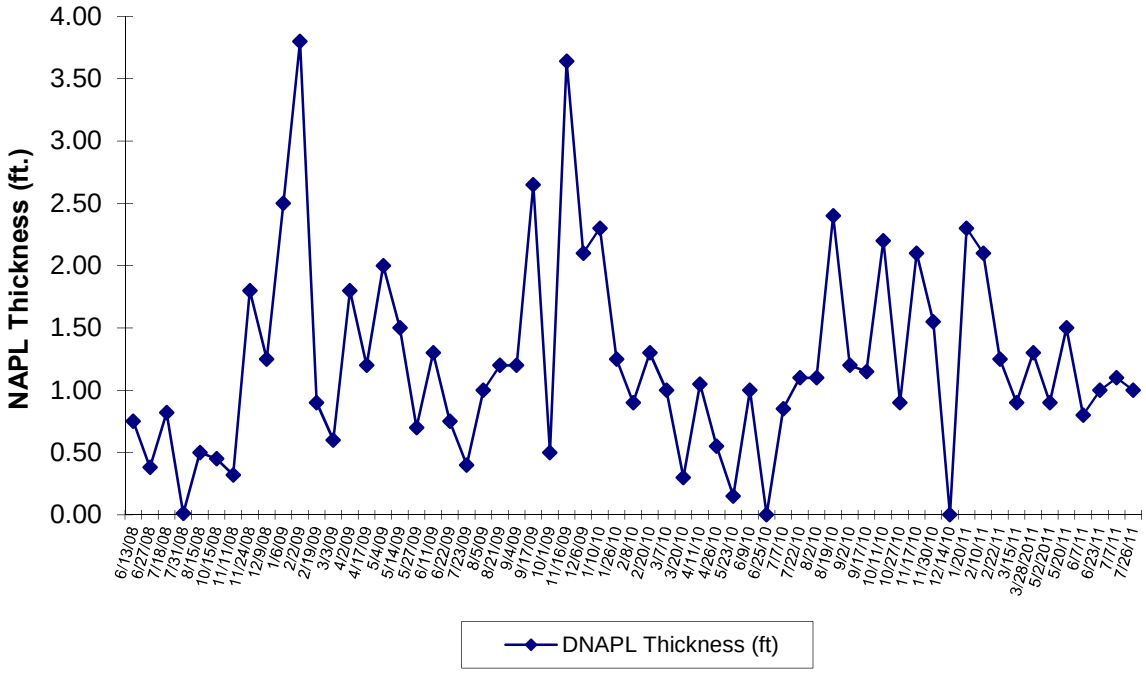
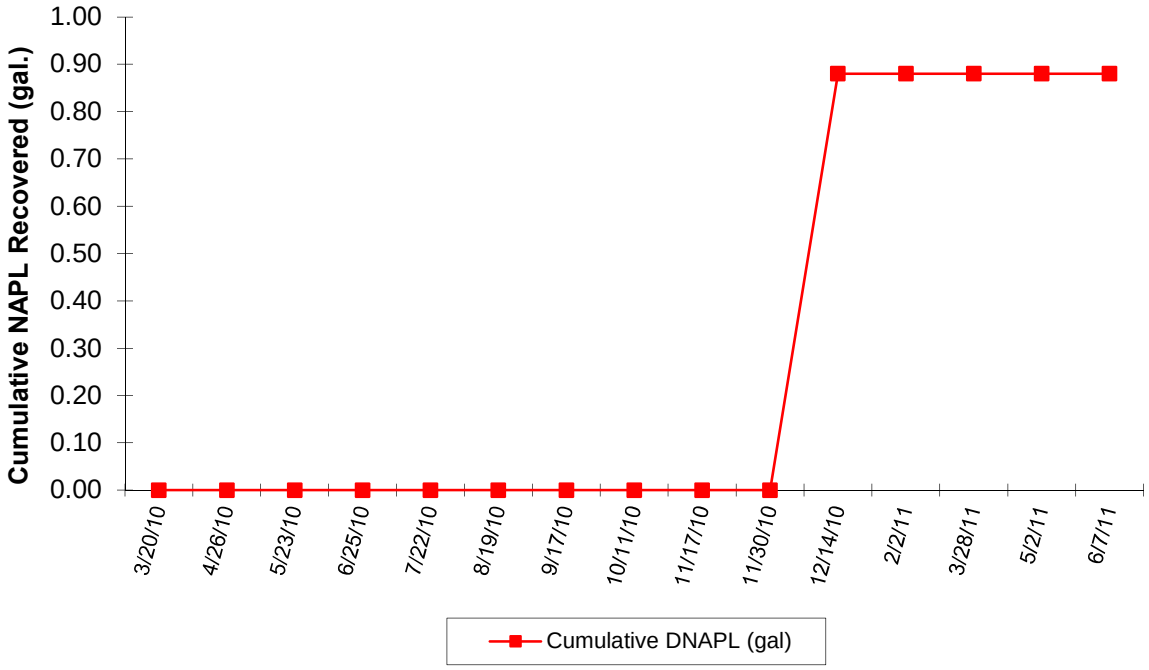


FIGURE 12AD
Well IPR- 23 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



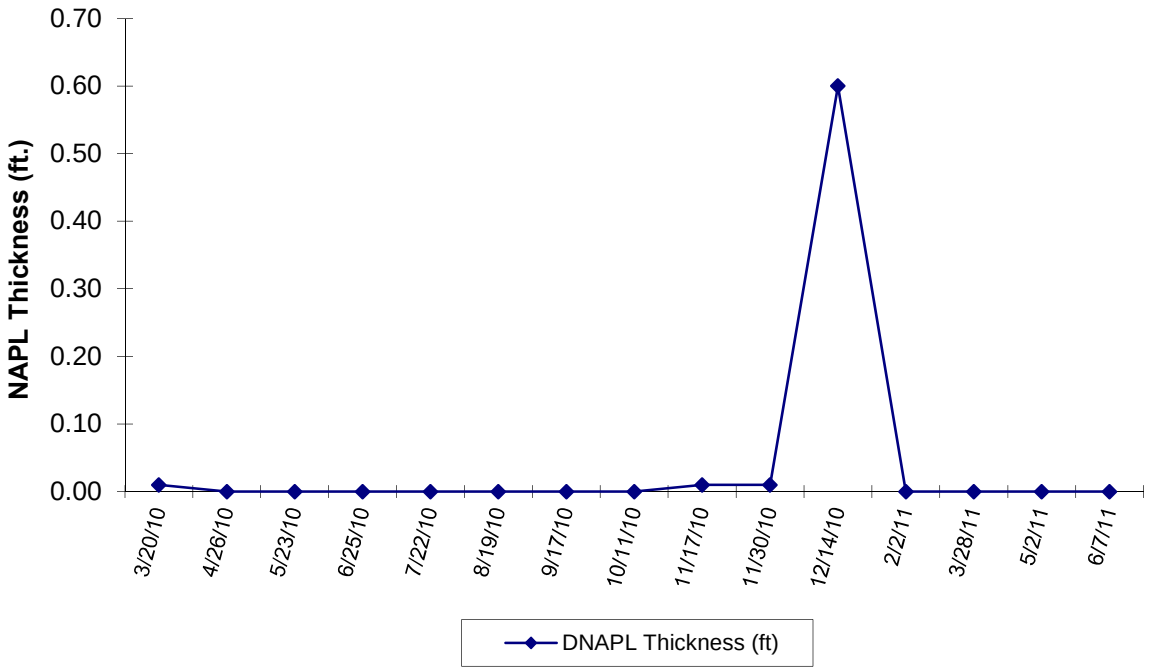
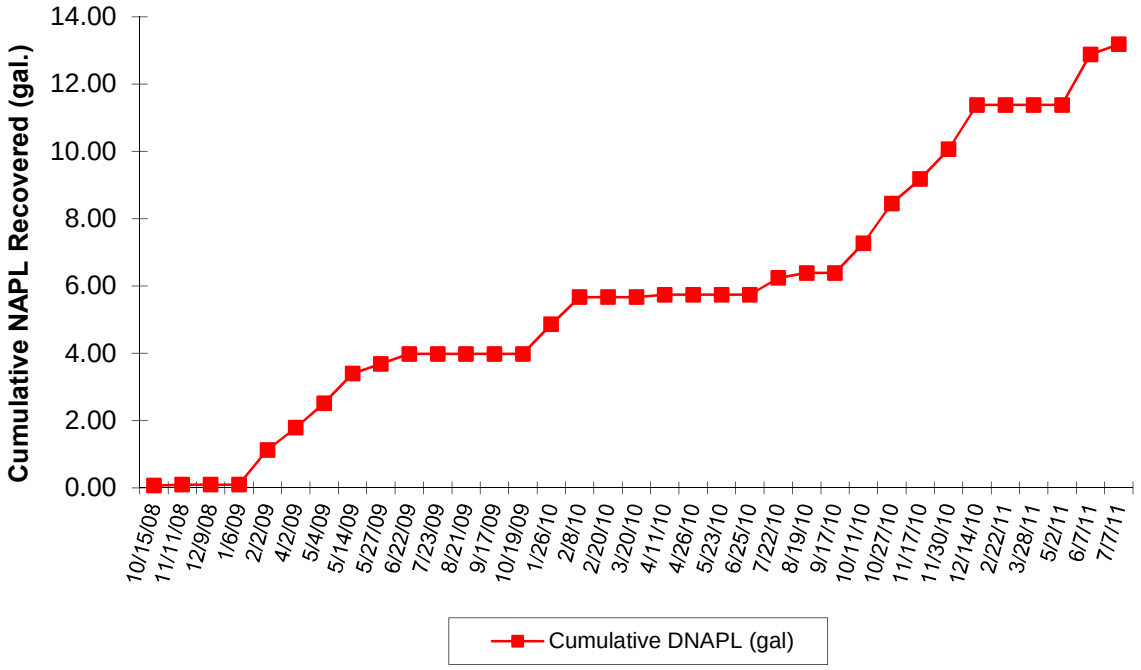


FIGURE 12AE
Well IPR-24 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



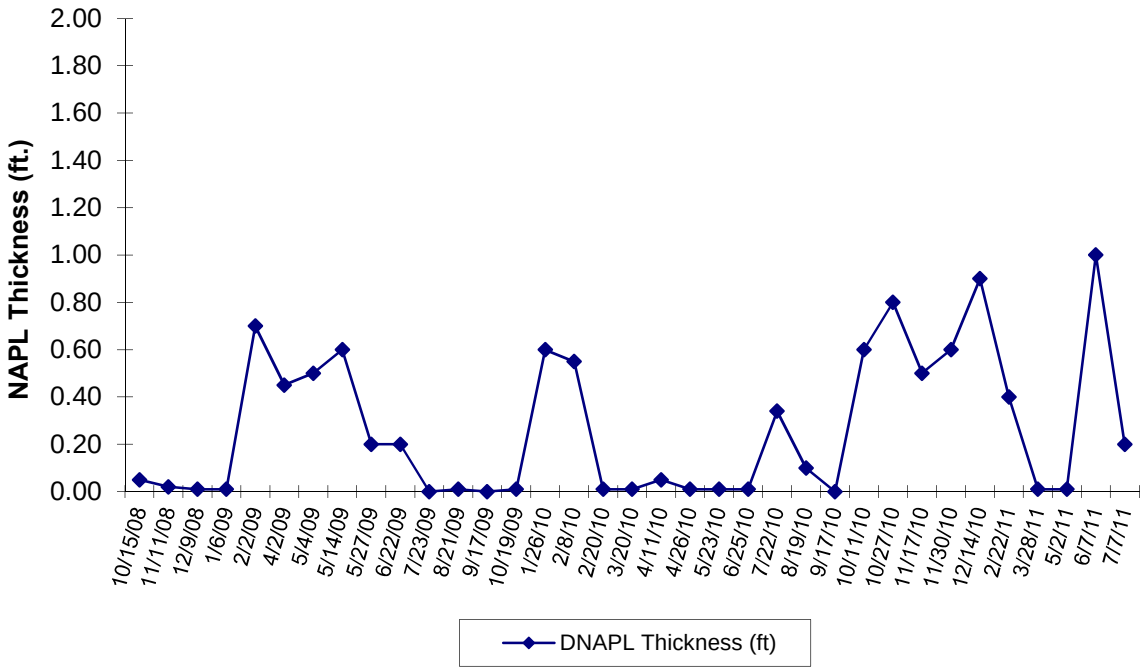
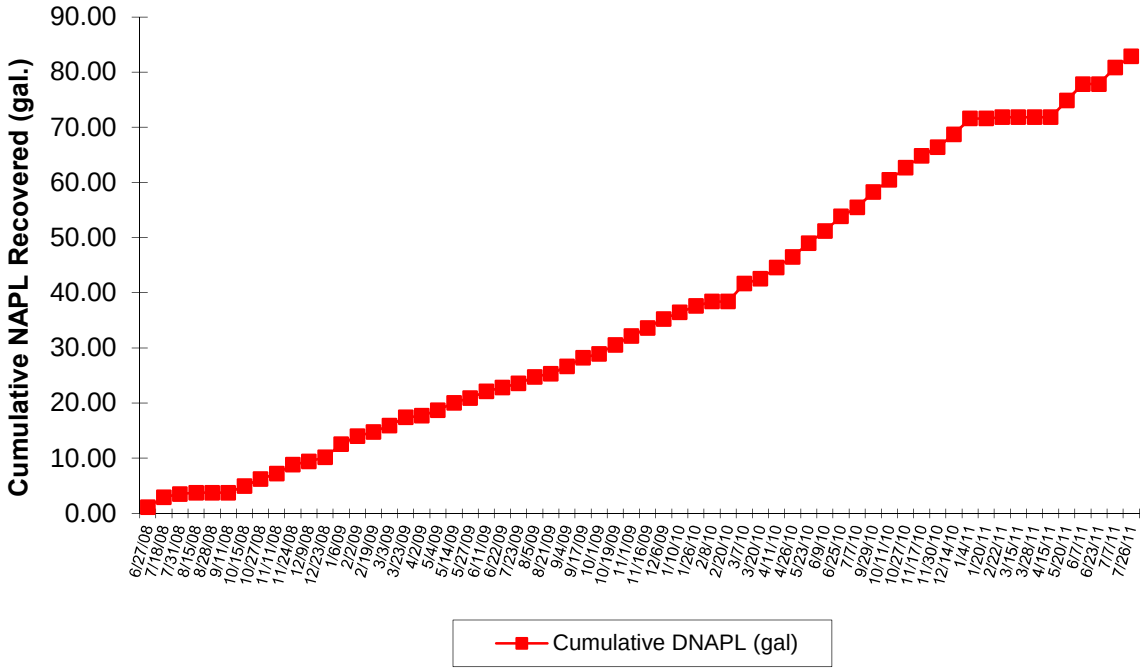


FIGURE 12AF
Well IPR-25 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



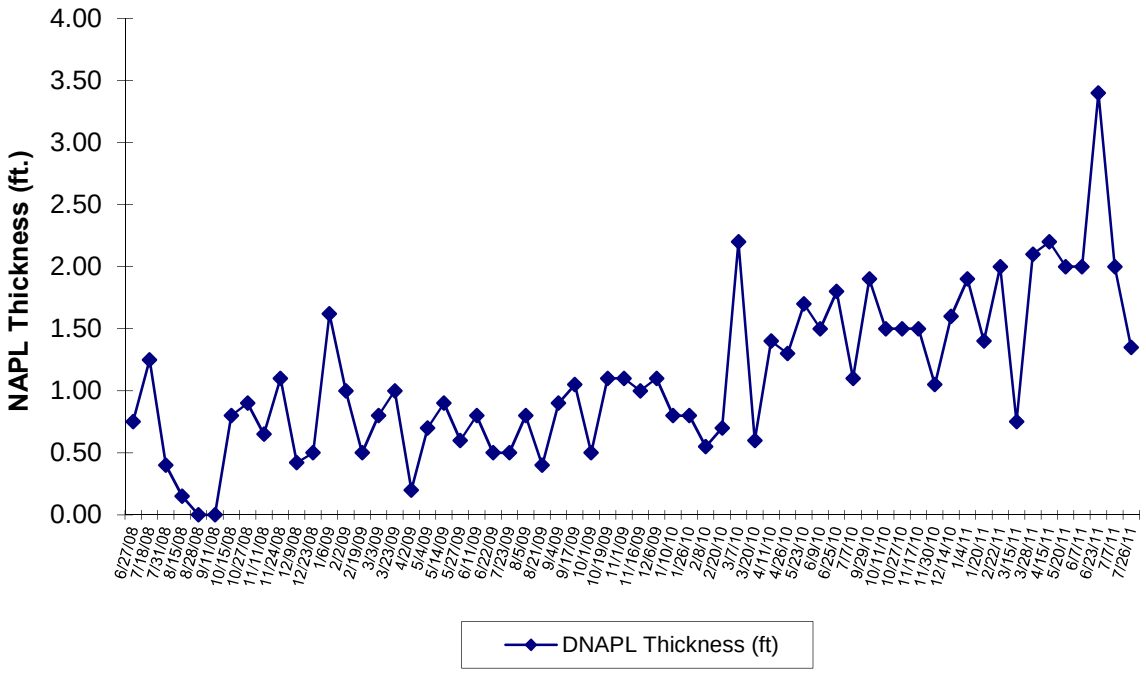
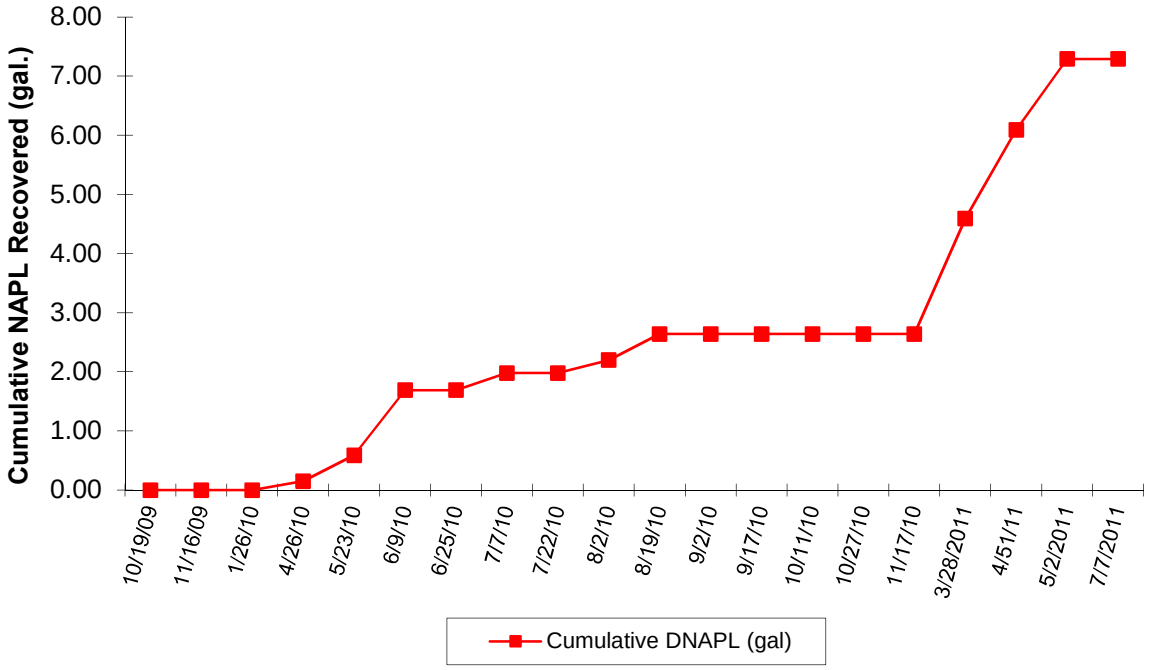


FIGURE 12AG
Well IPR-26 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



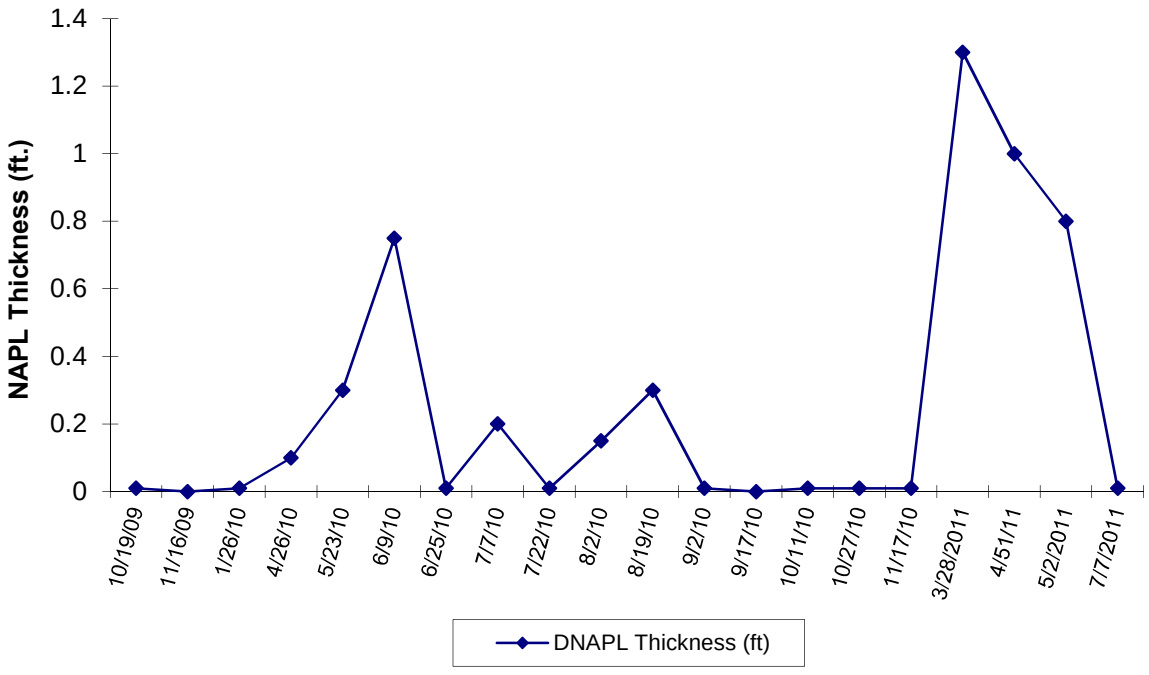
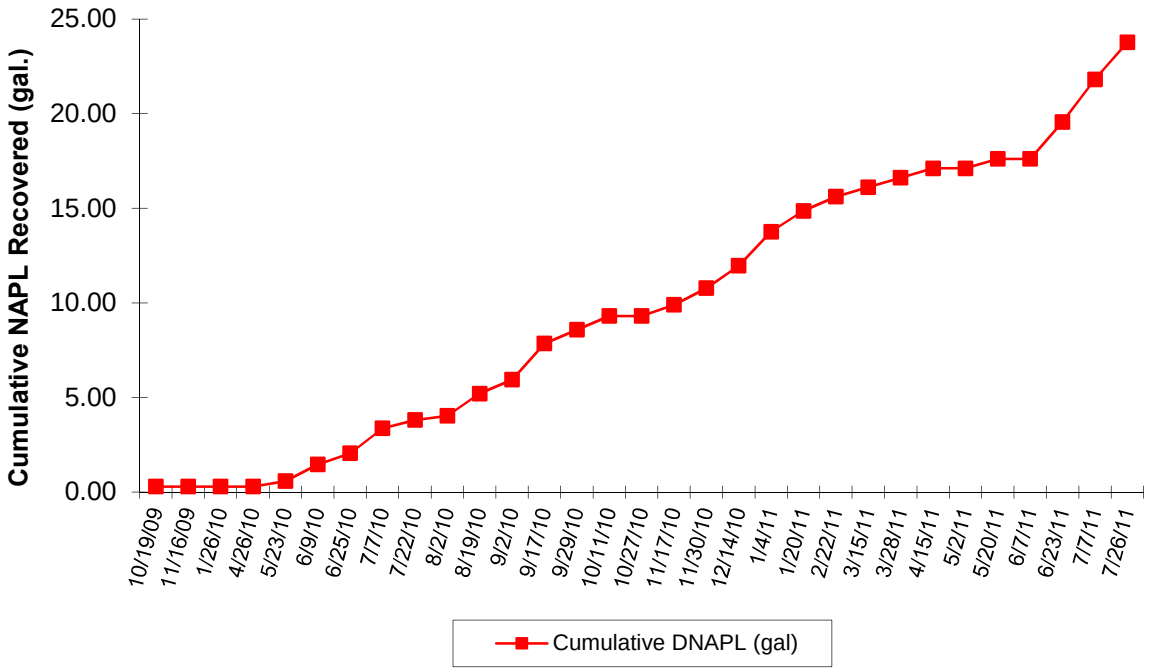


FIGURE 12AH
Well IPR-27 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



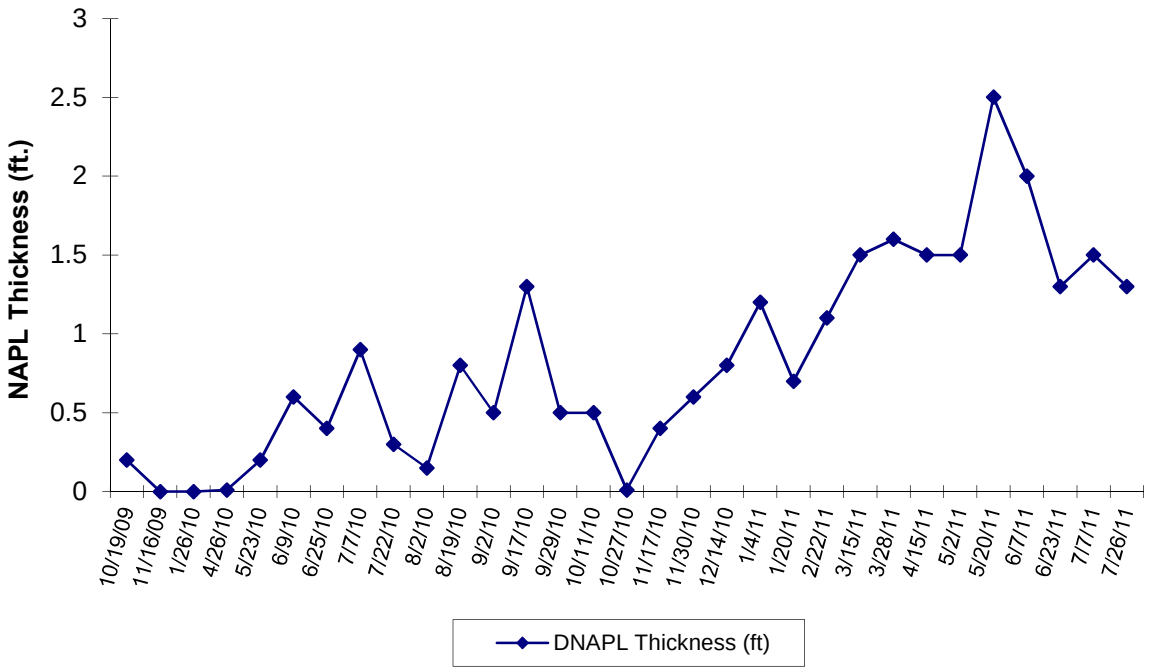
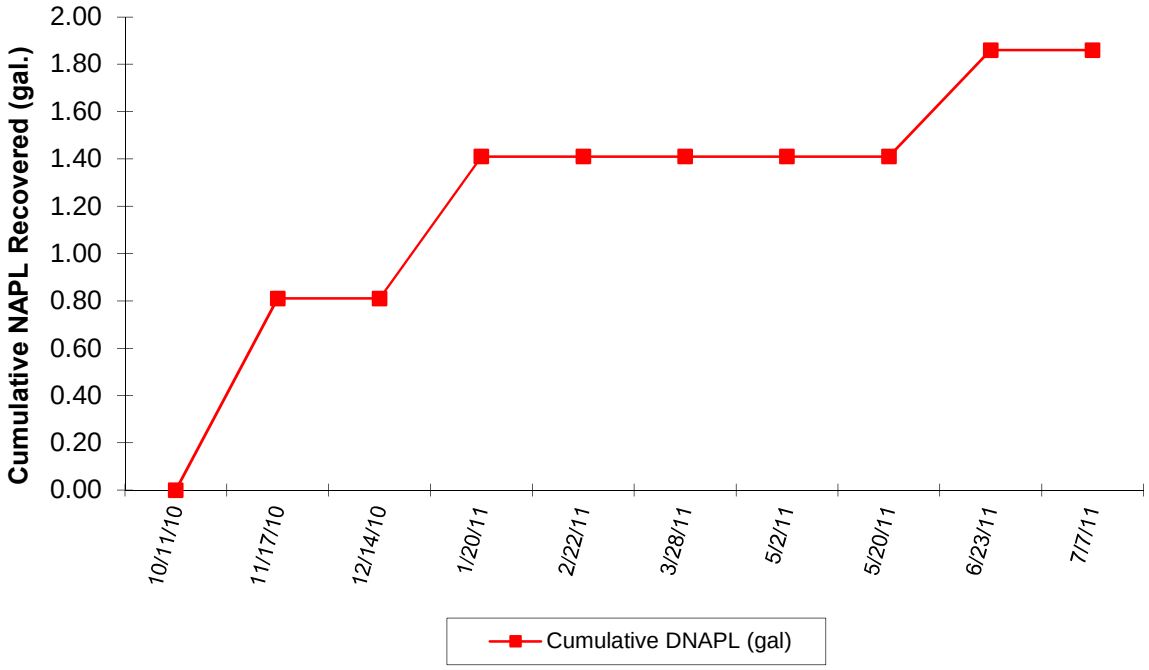


FIGURE 12AI
Well IPR-28 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



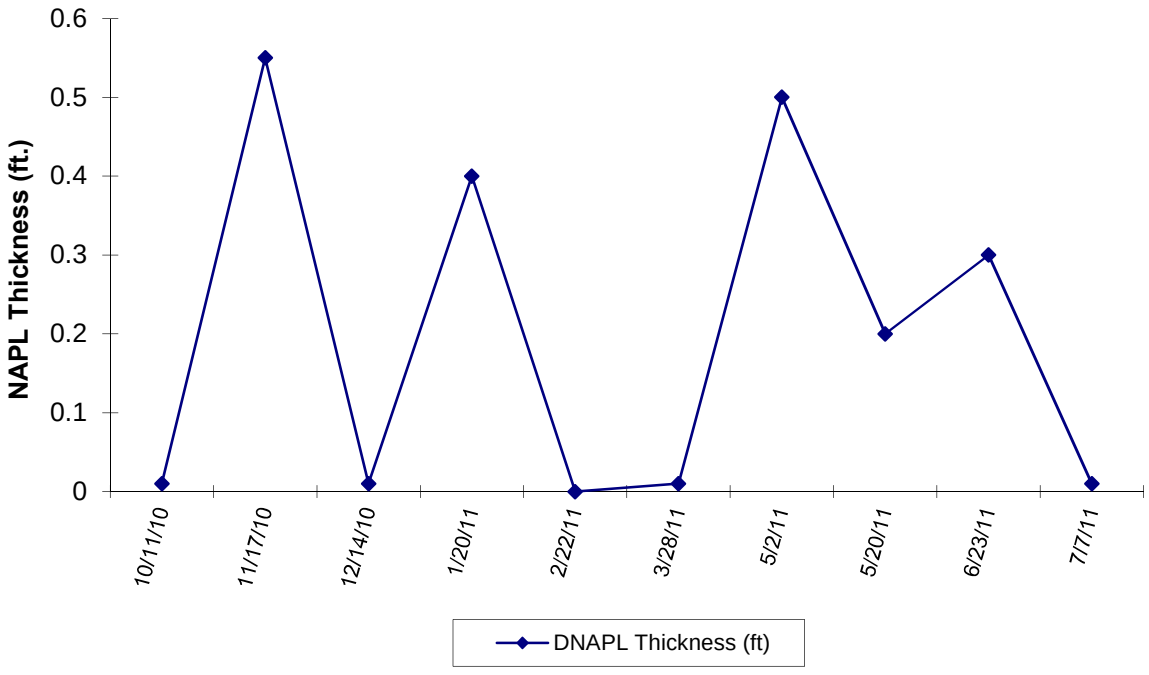
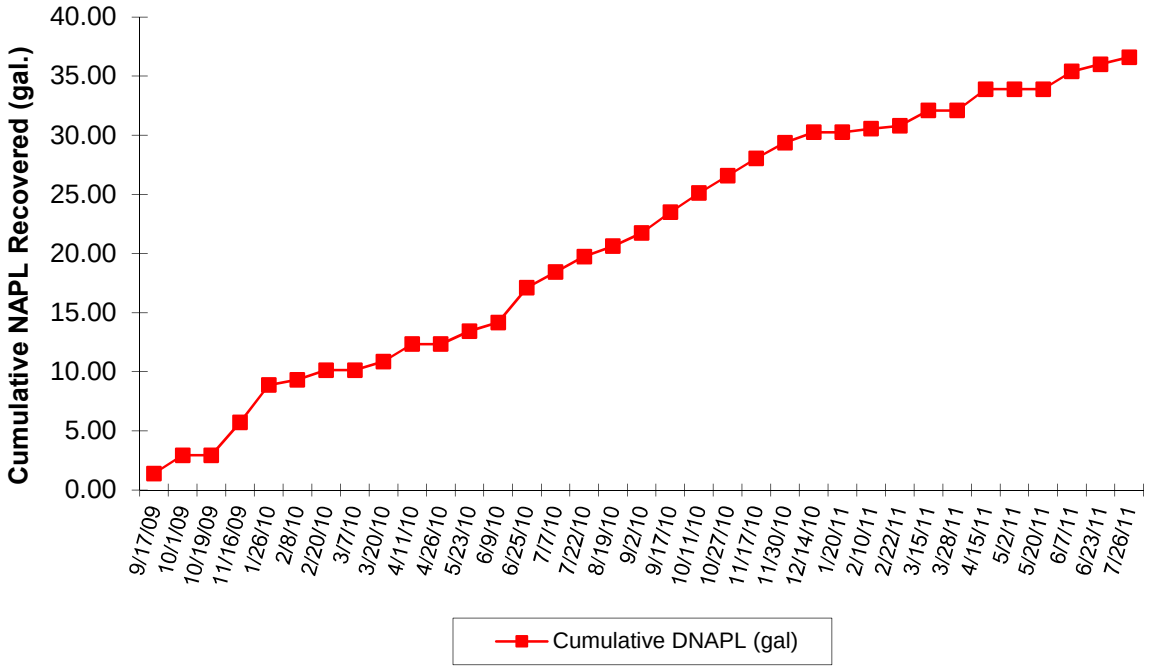


FIGURE 12AJ
Well IPR-29 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



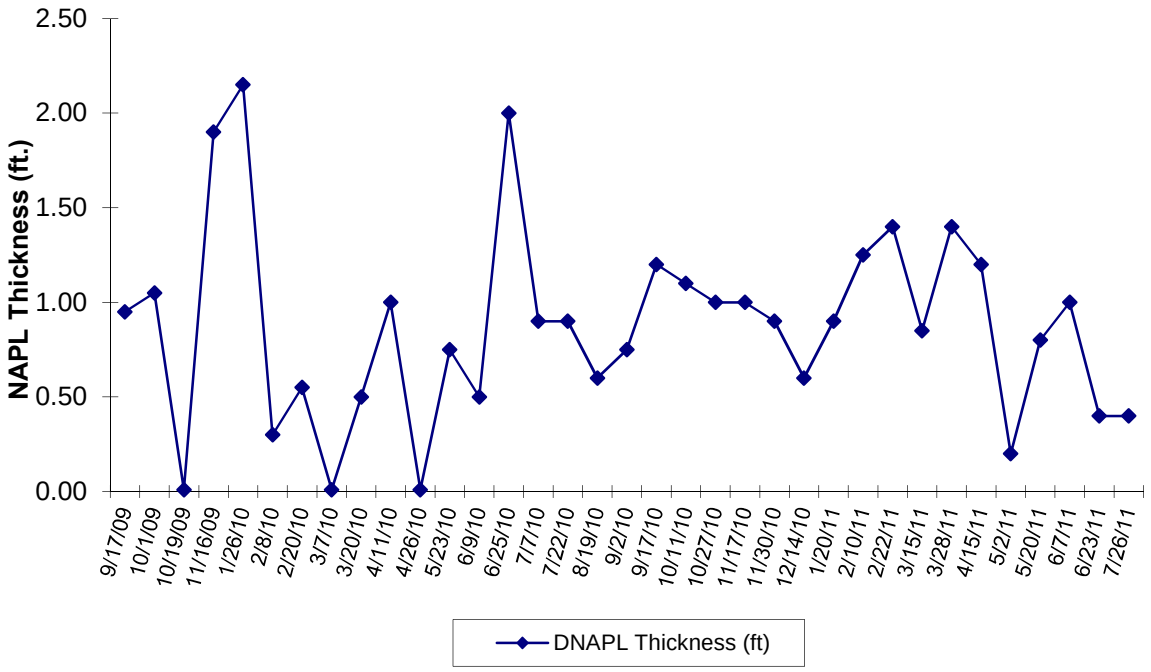
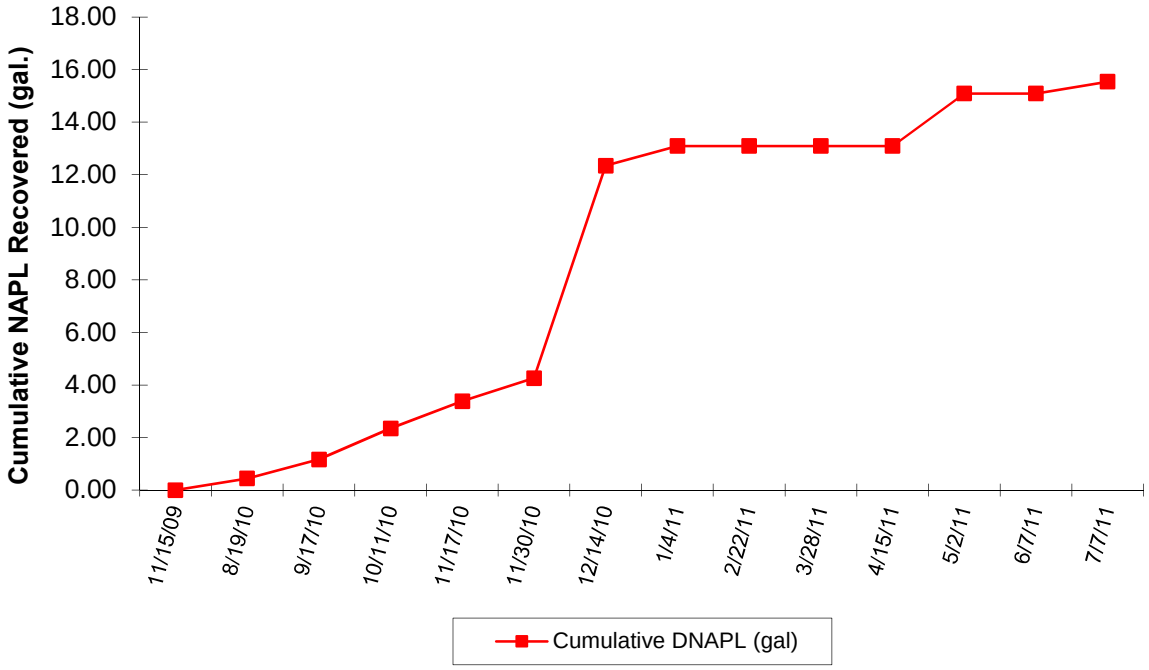
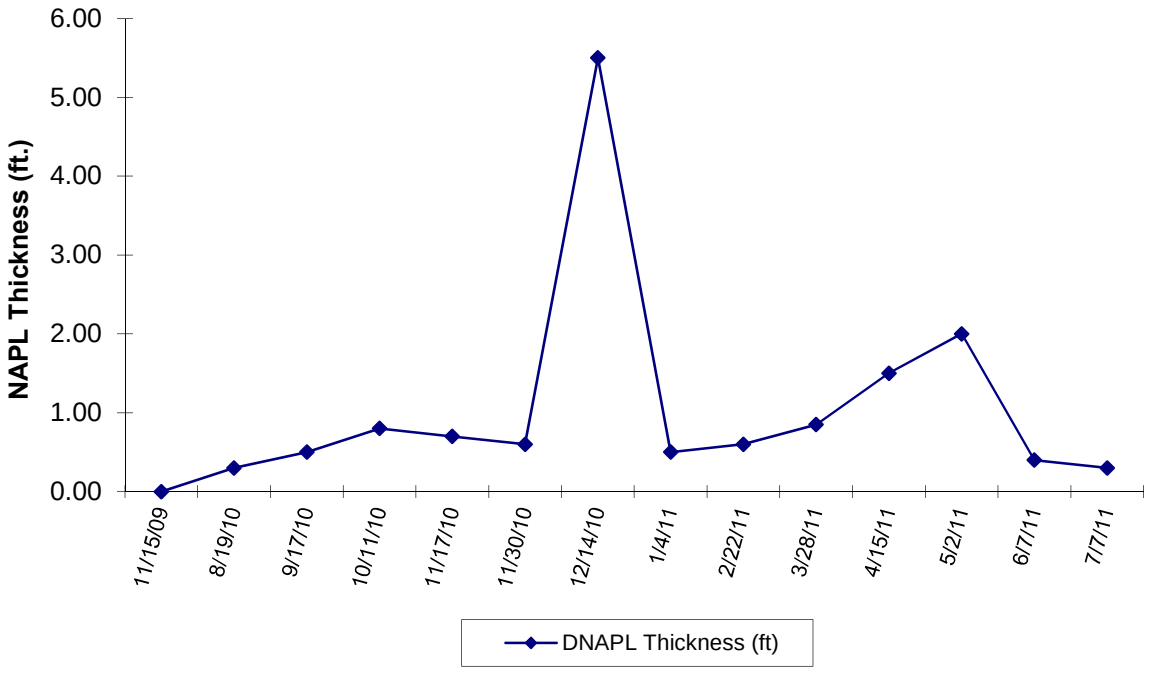


FIGURE 12AK
Well IPR-30 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site





APPENDIX A

DATA USABILITY SUMMARY REPORT

(Provided in Electronic Format Only)

APPENDIX A
DATA USABILITY SUMMARY REPORT
FOURTH QUARTER 2011

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

Analyses Performed by:
H2M LABORATORIES, INC.

Prepared For:

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

Prepared by:

URS CORPORATION
77 GOODELL STREET
BUFFALO, NY 14203

MARCH 2012

TABLE OF CONTENTS

I. INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B - Guidance for Data Deliverables and Development of Data Usability Summary Reports*, May 2010.

Analytical data for twenty-five (25) groundwater samples, two (2) field duplicates, one (1) matrix spike/matrix spike duplicate (MS/MSD) pair, one (1) field blank, and eight (8) trip blanks collected by URS personnel from December 14-28, 2011 are discussed in this DUSR. The samples were collected as part of the 2011 fourth 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 (COC), 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 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 6°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 1-3 hours of being relinquished by the field technician to the lab courier.

- The bottle labels for sample HIMW-014I did not match the COC. It was incorrectly documented on the COC as HIMW-014D, whereupon, the lab revised the sample ID accordingly.

All samples were analyzed within the required holding times.

V. NON-CONFORMANCES

For PAH analyses, the percent difference (%D) between the initial calibration (ICAL) average relative response factor (RRF) and the RRF in the continuing calibration (CCAL) standard was greater than 20.0% for chrysene. The non-detect chrysene results for samples HIMW-03D, -03I, -03S, -08D, -08I, -08S, and FB122811 were qualified 'UJ'.

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

VI. SAMPLE RESULTS AND REPORTING

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

Field duplicates were collected from monitoring well locations HIMW-14I (DUP-121411) and HIMW-024 (DUP-121911), which exhibited acceptable 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: _____ **Date:** 3/9/12

Peter R. Fairbanks, Senior Chemist

Reviewed By: _____ **Date:** 3/9/12

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-003D	HIMW-003I	HIMW-003S	HIMW-005D	HIMW-005I
Sample ID			HIMW-03D	HIMW-03I	HIMW-03S	HIMW-05D	HIMW-05I
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/20/11	12/20/11	12/20/11	12/22/11	12/21/11
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Benzene	UG/L	-	1 U	1 U	1 U	1 U	3
Ethylbenzene	UG/L	-	1 U	1 U	1 U	1 U	2
Toluene	UG/L	-	1 U	1 U	1 U	2	1
Xylene (total)	UG/L	-	1 U	1 U	1 U	180	120
Total BTEX	UG/L	100	ND	ND	ND	182	126
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	110 D	390 DJ
Acenaphthene	UG/L	-	10 U	10 U	10 U	3 J	14
Acenaphthylene	UG/L	-	10 U	10 U	10 U	45	190 DJ
Anthracene	UG/L	-	10 U	10 U	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 UJ	10 UJ	10 UJ	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	6 J	33
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	380 D	2,000 D
Phenanthrene	UG/L	-	10 U	10 U	10 U	10 U	19
Pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	ND	ND	ND	544	2,648

*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.

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

D - Result reported from a secondary dilution analysis. ND - Not detected.

Made By_PRF 01/17/12_; Checked By_AMK 01/23/12_

Detection Limits shown are PQL

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

Location ID			HIMW-005S	HIMW-008D	HIMW-008I	HIMW-008S	HIMW-012D
Sample ID			HIMW-05S	HIMW-08D	HIMW-08I	HIMW-08S	HIMW-12D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/21/11	12/28/11	12/28/11	12/28/11	12/16/11
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Benzene	UG/L	-	1 U	1 U	1 U	1 U	1 U
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	1 U	1 U	1 U	1 U
Total BTEX	UG/L	100	ND	ND	ND	ND	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	10 U	10 U
Acenaphthylene	UG/L	-	10 U	10 U	10 U	3 J	10 U
Anthracene	UG/L	-	10 U	10 U	10 U	1 J	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 UJ	10 UJ	10 UJ	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	10 U	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	ND	ND	4	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.

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

D - Result reported from a secondary dilution analysis. ND - Not detected.

Made By_PRF 01/17/12_; Checked By_AMK 01/23/12_

Detection Limits shown are PQL

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

Location ID			HIMW-012I	HIMW-012S	HIMW-013D	HIMW-013I	HIMW-013S
Sample ID			HIMW-12I	HIMW-12S	HIMW-13D	HIMW-13I	HIMW-13S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/16/11	12/16/11	12/14/11	12/14/11	12/14/11
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Benzene	UG/L	-	53	1 U	3	23	1 U
Ethylbenzene	UG/L	-	3	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	-	7	1 U	2	4	1 U
Total BTEX	UG/L	100	63	ND	5	27	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	-	56	10 U	5 J	5 J	10 U
Acenaphthylene	UG/L	-	59	10 U	9 J	35	10 U
Anthracene	UG/L	-	2 J	10 U	10 U	1 J	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	-	31	10 U	10 U	9 J	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	-	7 J	10 U	10 U	10 U	10 U
Phenanthrene	UG/L	-	11	10 U	10 U	12	10 U
Pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	166	ND	14	62	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.

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

D - Result reported from a secondary dilution analysis. ND - Not detected.

Made By_PRF 01/17/12_; Checked By_AMK 01/23/12_

Detection Limits shown are PQL

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

Location ID			HIMW-014D	HIMW-014I	HIMW-014I	HIMW-015D	HIMW-015I
Sample ID			HIMW-14D	DUP-121411	HIMW-14I	HIMW-15D	HIMW-15I
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/15/11	12/14/11	12/14/11	12/15/11	12/15/11
Parameter	**Units**	**Criteria***		Field Duplicate (1-1)			
Volatile Organic Compounds							
Benzene	UG/L	-	1 U	18	19	1 U	22
Ethylbenzene	UG/L	-	1 U	4	5	1 U	1 U
Toluene	UG/L	-	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	-	1 U	4	4	1 U	2
Total BTEX	UG/L	100	ND	26	28	ND	24
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	-	10 U	19	18	10 U	7 J
Acenaphthylene	UG/L	-	10 U	22	22	10 U	27
Anthracene	UG/L	-	10 U	1 J	1 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	8 J	9 J	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	8 J	8 J	10 U	10 U
Pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	ND	58	58	ND	34

*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.

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D - Result reported from a secondary dilution analysis. ND - Not detected.

Made By_PRF 01/17/12_; Checked By_AMK 01/23/12_

Detection Limits shown are PQL

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

Location ID			HIMW-020I	HIMW-020S	HIMW-022	HIMW-023	HIMW-024
Sample ID			HIMW-20I	HIMW-20S	HIMW-22	HIMW-23	DUP121911
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/21/11	12/22/11	12/19/11	12/19/11	12/19/11
Parameter	**Units**	**Criteria***					Field Duplicate (1-1)
Volatile Organic Compounds							
Benzene	UG/L	-	1 U	1 U	1 U	1	320 D
Ethylbenzene	UG/L	-	1 U	1 U	1 U	1 U	43
Toluene	UG/L	-	1 U	1 U	1 U	1 U	38
Xylene (total)	UG/L	-	1	1 U	1	1 U	280
Total BTEX	UG/L	100	1	ND	1	1	681
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	16
Acenaphthene	UG/L	-	10 U	10 U	10 U	10 U	26
Acenaphthylene	UG/L	-	10 U	10 U	10 U	10 U	31
Anthracene	UG/L	-	10 U	10 U	10 U	10 U	1 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	10 U	10 U	10 U	4 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	530 D
Phenanthrene	UG/L	-	10 U	10 U	10 U	10 U	9 J
Pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	ND	ND	ND	ND	617

*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.

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

D - Result reported from a secondary dilution analysis. ND - Not detected.

Made By_PRF 01/17/12_; Checked By_AMK 01/23/12_

Detection Limits shown are PQL

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

Location ID			HIMW-024	HIMW-025
Sample ID			HIMW-24	HIMW-25
Matrix			Groundwater	Groundwater
Depth Interval (ft)			-	-
Date Sampled			12/19/11	12/19/11
Parameter	**Units**	**Criteria***		
Volatile Organic Compounds				
Benzene	UG/L	-	320 D	1 U
Ethylbenzene	UG/L	-	43	2
Toluene	UG/L	-	38	2
Xylene (total)	UG/L	-	270	6
Total BTEX	UG/L	100	671	10
Semivolatile Organic Compounds				
2-Methylnaphthalene	UG/L	-	16	10 U
Acenaphthene	UG/L	-	26	10 U
Acenaphthylene	UG/L	-	35	10 U
Anthracene	UG/L	-	1 J	10 U
Benzo(a)anthracene	UG/L	-	10 U	10 U
Benzo(a)pyrene	UG/L	-	10 U	10 U
Benzo(b)fluoranthene	UG/L	-	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U
Benzo(k)fluoranthene	UG/L	-	10 U	10 U
Chrysene	UG/L	-	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U
Fluoranthene	UG/L	-	10 U	10 U
Fluorene	UG/L	-	4 J	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U
Naphthalene	UG/L	-	700 D	10 U
Phenanthrene	UG/L	-	10	10 U
Pyrene	UG/L	-	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	792	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.

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

D - Result reported from a secondary dilution analysis. ND - Not detected.

Made By_PRF 01/17/12_; Checked By_AMK 01/23/12_

Detection Limits shown are PQL

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

Location ID			FIELDQC	FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID			TB-121411	TB-121511	TB-121611	TB121911	TB122011
Matrix			Water Quality	Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)			-	-	-	-	-
Date Sampled			12/14/11	12/15/11	12/16/11	12/19/11	12/20/11
Parameter	**Units**	**Criteria***	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds							
Benzene	UG/L	-	1 U	1 U	1 U	1 U	1 U
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	1 U	1 U	1 U	1 U
Total BTEX	UG/L	100	ND	ND	ND	ND	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	NA
Acenaphthene	UG/L	-	NA	NA	NA	NA	NA
Acenaphthylene	UG/L	-	NA	NA	NA	NA	NA
Anthracene	UG/L	-	NA	NA	NA	NA	NA
Benzo(a)anthracene	UG/L	-	NA	NA	NA	NA	NA
Benzo(a)pyrene	UG/L	-	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	UG/L	-	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	UG/L	-	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	UG/L	-	NA	NA	NA	NA	NA
Chrysene	UG/L	-	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	UG/L	-	NA	NA	NA	NA	NA
Fluoranthene	UG/L	-	NA	NA	NA	NA	NA
Fluorene	UG/L	-	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	UG/L	-	NA	NA	NA	NA	NA
Naphthalene	UG/L	-	NA	NA	NA	NA	NA
Phenanthrene	UG/L	-	NA	NA	NA	NA	NA
Pyrene	UG/L	-	NA	NA	NA	NA	NA
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	NA	NA	NA	NA	NA

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

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

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

NA - The sample was not analyzed for this parameter. ND - Not detected.

Made By_PRF 01/17/12_; Checked By_AMK 01/23/12_

Detection Limits shown are PQL

J:\11175065.00000\DB\Program\EDMS.md
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[LOGDATE] >= #12/14/2011# AND [MATRIX] = 'WQ

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

Location ID			FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID			TB-122111	TB-122211	FB122811	TB122811
Matrix			Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)			-	-	-	-
Date Sampled			12/21/11	12/22/11	12/28/11	12/28/11
Parameter	**Units**	**Criteria***	Trip Blank (1-1)	Trip Blank (1-1)	Field Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds						
Benzene	UG/L	-	1 U	1 U	1 U	1 U
Ethylbenzene	UG/L	-	1 U	1 U	1 U	1 U
Toluene	UG/L	-	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	-	1 U	1 U	1 U	1 U
Total BTEX	UG/L	100	ND	ND	ND	ND
Semivolatile Organic Compounds						
2-Methylnaphthalene	UG/L	-	NA	NA	10 U	NA
Acenaphthene	UG/L	-	NA	NA	10 U	NA
Acenaphthylene	UG/L	-	NA	NA	10 U	NA
Anthracene	UG/L	-	NA	NA	10 U	NA
Benzo(a)anthracene	UG/L	-	NA	NA	10 U	NA
Benzo(a)pyrene	UG/L	-	NA	NA	10 U	NA
Benzo(b)fluoranthene	UG/L	-	NA	NA	10 U	NA
Benzo(g,h,i)perylene	UG/L	-	NA	NA	10 U	NA
Benzo(k)fluoranthene	UG/L	-	NA	NA	10 U	NA
Chrysene	UG/L	-	NA	NA	10 UJ	NA
Dibenz(a,h)anthracene	UG/L	-	NA	NA	10 U	NA
Fluoranthene	UG/L	-	NA	NA	10 U	NA
Fluorene	UG/L	-	NA	NA	10 U	NA
Indeno(1,2,3-cd)pyrene	UG/L	-	NA	NA	10 U	NA
Naphthalene	UG/L	-	NA	NA	10 U	NA
Phenanthrene	UG/L	-	NA	NA	10 U	NA
Pyrene	UG/L	-	NA	NA	10 U	NA
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	NA	NA	ND	NA

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

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

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

NA - The sample was not analyzed for this parameter. ND - Not detected.

Made By_PRF 01/17/12_; Checked By_AMK 01/23/12_

Detection Limits shown are PQL

ATTACHMENT A

VALIDATED FORM 1'S

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-03D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112841-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74214.D

Level: (low/med) LOW Date Received: 12/20/11

% Moisture: not dec. Date Analyzed: 12/22/11

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-URS143 S39

1C

EPA SAMPLE NO.

HIMW-03D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112841-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49431.D

Level: (low/med) LOW Date Received: 12/20/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/22/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/11/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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 J
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

1/17/12

KEY-URS143 S56

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-03I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112841-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74215.D

Level: (low/med) LOW Date Received: 12/20/11

% Moisture: not dec. Date Analyzed: 12/22/11

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-URS143 S40

1C

EPA SAMPLE NO.

HIMW-03I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112841-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49432.D

Level: (low/med) LOW Date Received: 12/20/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/22/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/11/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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 J
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

1/17/12

JN

KEY-URS143 S57

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-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112841-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74216.D

Level: (low/med) LOW Date Received: 12/20/11

% Moisture: not dec. Date Analyzed: 12/22/11

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-URS143 S41

1C

SEMIVOLATILE 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-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112841-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49433.D

Level: (low/med) LOW Date Received: 12/20/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/22/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/11/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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 J
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

1/17/12

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112938-001A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74223.D

Level: (low/med) LOW Date Received: 12/22/11

% Moisture: not dec. Date Analyzed: 12/28/11

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	2	
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	180	

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-05D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112938-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49360.D

Level: (low/med) LOW Date Received: 12/22/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/27/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/05/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	380 ~~250~~	~~E~~ (1)
91-57-6	2-Methylnaphthalene	110 ~~120~~	~~E~~ (1)
208-96-8	Acenaphthylene	45	
83-32-9	Acenaphthene	3	J
86-73-7	Fluorene	6	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

1/12/12

KEY-URS141 S82

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-05DDL

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112938-001BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 2\N49362.D

Level: (low/med) LOW Date Received: 12/22/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/27/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/05/12

Injection Volume: 2 (µL) Dilution Factor: 10.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	380	D
91-57-6	2-Methylnaphthalene	110	D
208-96-8	Acenaphthylene	43	DJ
83-32-9	Acenaphthene	100	U
86-73-7	Fluorene	100	U
85-01-8	Phenanthrene	100	U
120-12-7	Anthracene	100	U
206-44-0	Fluoranthene	100	U
129-00-0	Pyrene	100	U
56-55-3	Benzo(a)anthracene	100	U
218-01-9	Chrysene	100	U
205-99-2	Benzo(b)fluoranthene	100	U
207-08-9	Benzo(k)fluoranthene	100	U
50-32-8	Benzo(a)pyrene	100	U
193-39-5	Indeno(1,2,3-cd)pyrene	100	U
53-70-3	Dibenzo(a,h)anthracene	100	U
191-24-2	Benzo(g,h,i)perylene	100	U

(1) Cannot be separated from Diphenylamine

1/12/12

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112889-001A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74202.D

Level: (low/med) LOW Date Received: 12/21/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

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

CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

CAS NO.	COMPOUND		Q
71-43-2	Benzene	3	
108-88-3	Toluene	1	
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene (total)	120	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112889-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49323.D

Level: (low/med) LOW Date Received: 12/21/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/22/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/03/12

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	2000 ~~690~~	~~E~~ D
91-57-6	2-Methylnaphthalene	390 ~~300~~	~~E~~ D J
208-96-8	Acenaphthylene	190 ~~200~~	~~E~~ D J
83-32-9	Acenaphthene	14	
86-73-7	Fluorene	33	
85-01-8	Phenanthrene	19	
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

1/12/12

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-05IDL

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112889-001BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 2\N49357.D

Level: (low/med) LOW Date Received: 12/21/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/22/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/05/12

Injection Volume: 2 (µL) Dilution Factor: 40.00

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	2000	D
91-57-6	2-Methylnaphthalene	390	DJ
208-96-8	Acenaphthylene	190	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

1/12/12

KEY-URS141 S79

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112889-002A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74203.D

Level: (low/med) LOW Date Received: 12/21/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-05S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112889-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49324.D

Level: (low/med) LOW Date Received: 12/21/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/22/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/03/12

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-08D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112A37-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74228.D

Level: (low/med) LOW Date Received: 12/28/11

% Moisture: not dec. Date Analyzed: 12/28/11

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-URS143 S43

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-08D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112A37-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49436.D

Level: (low/med) LOW Date Received: 12/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/30/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/11/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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 J
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

1/17/12

KEY-URS143 S59

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-08I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112A37-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74229.D

Level: (low/med) LOW Date Received: 12/28/11

% Moisture: not dec. Date Analyzed: 12/28/11

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-URS143 S44

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-08I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112A37-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49437.D

Level: (low/med) LOW Date Received: 12/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/30/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/11/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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 J
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

1/17/12

KEY-URS143 S60

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-08S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112A37-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74230.D

Level: (low/med) LOW Date Received: 12/28/11

% Moisture: not dec. Date Analyzed: 12/28/11

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-08S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112A37-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49438.D

Level: (low/med) LOW Date Received: 12/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/30/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/11/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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	3	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 J
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

1/17/12

KEY-URS143 S61

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-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112701-001A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74199.D

Level: (low/med) LOW Date Received: 12/16/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

Soil Extract Volume: _____(µL) Soil Aliquot Volu _____(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-URS141 S55

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-12D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112701-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 1\N49256.D

Level: (low/med) LOW Date Received: 12/16/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 12/27/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112701-002A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74200.D

Level: (low/med) LOW Date Received: 12/16/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	53	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	3	
1330-20-7	Xylene (total)	7	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112701-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 1\N49257.D

Level: (low/med) LOW Date Received: 12/16/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 12/27/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	7	J
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	59	
83-32-9	Acenaphthene	56	
86-73-7	Fluorene	31	
85-01-8	Phenanthrene	11	
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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112701-003A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74201.D

Level: (low/med) LOW Date Received: 12/16/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-12S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112701-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49356.D

Level: (low/med) LOW Date Received: 12/16/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/05/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

1B

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-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-001A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74187.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: not dec. Date Analyzed: 12/21/11

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

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

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-13D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 1\N49248.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 12/27/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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	9	J
83-32-9	Acenaphthene	5	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

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-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-002A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74188.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: not dec. Date Analyzed: 12/21/11

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

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

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-13I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 1\N49249.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 12/27/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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	35	
83-32-9	Acenaphthene	5	J
86-73-7	Fluorene	9	J
85-01-8	Phenanthrene	12	
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

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-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-003A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74189.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: not dec. Date Analyzed: 12/21/11

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

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-13S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 1\N49250.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 12/27/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112642-001A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74192.D

Level: (low/med) LOW Date Received: 12/15/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

Soil Extract Volume: _____(µL) Soil Aliquot Volu _____(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-URS141 S51

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14D

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112642-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 1\N49253.D

Level: (low/med) LOW Date Received: 12/15/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 12/27/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-004A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74190.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: not dec. Date Analyzed: 12/21/11

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	19	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	5	
1330-20-7	Xylene (total)	4	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-004B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 1\N49251.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 12/27/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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	18	
86-73-7	Fluorene	9	J
85-01-8	Phenanthrene	8	J
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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-121411

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-005A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74191.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

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

CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

CAS NO.	COMPOUND		Q
71-43-2	Benzene	18	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	4	
1330-20-7	Xylene (total)	4	

KEY-URS141 S49

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP-121411

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-005B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 1\N49252.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 12/27/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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	19	
86-73-7	Fluorene	8	J
85-01-8	Phenanthrene	8	J
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

KEY-URS141 S71

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-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112642-002A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74193.D

Level: (low/med) LOW Date Received: 12/15/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

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

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-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112642-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 1\N49254.D

Level: (low/med) LOW Date Received: 12/15/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 12/27/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112642-003A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74198.D

Level: (low/med) LOW Date Received: 12/15/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

Soil Extract Volume: _____(µL) Soil Aliquot Volu _____(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	1	U
1330-20-7	Xylene (total)	2	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112642-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 1\N49255.D

Level: (low/med) LOW Date Received: 12/15/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/19/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 12/27/11

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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	27	
83-32-9	Acenaphthene	7	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

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-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112889-003A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74204.D

Level: (low/med) LOW Date Received: 12/21/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-20I

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112889-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49325.D

Level: (low/med) LOW Date Received: 12/21/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/22/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/03/12

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-20S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112938-002A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74224.D

Level: (low/med) LOW Date Received: 12/22/11

% Moisture: not dec. Date Analyzed: 12/28/11

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

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-20S

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112938-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49361.D

Level: (low/med) LOW Date Received: 12/22/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/27/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/05/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-22

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74208.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: not dec. Date Analyzed: 12/22/11

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	

KEY-URS143 S31

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-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49397.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/21/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/09/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

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-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74209.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: not dec. Date Analyzed: 12/22/11

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)	1	U

KEY-URS143 S32

1C

SEMIVOLATILE 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-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-002B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49398.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/21/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/09/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

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-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74210.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: not dec. Date Analyzed: 12/22/11

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	320 290	~~E~~ D
108-88-3	Toluene	38	
100-41-4	Ethylbenzene	43	
1330-20-7	Xylene (total)	270	

1/17/12

KEY-URS143 S33

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-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-003ADL

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74226.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: not dec. Date Analyzed: 12/28/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 2.00

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	320	D
108-88-3	Toluene	36	D
100-41-4	Ethylbenzene	42	D
1330-20-7	Xylene (total)	260	D

1/17/12

KEY-URS143 S34

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-24

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49399.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/21/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/09/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	700 ~~390~~	E D
91-57-6	2-Methylnaphthalene	16	
208-96-8	Acenaphthylene	35	
83-32-9	Acenaphthene	26	
86-73-7	Fluorene	4	J
85-01-8	Phenanthrene	10	
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

1/17/12

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-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-003BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 2\N49402.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/21/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/10/12

Injection Volume: 2 (µL) Dilution Factor: 20.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	700	D
91-57-6	2-Methylnaphthalene	22	DJ
208-96-8	Acenaphthylene	35	DJ
83-32-9	Acenaphthene	28	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

1/17/12

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP121911

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74212.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: not dec. Date Analyzed: 12/22/11

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	320 290	E D
108-88-3	Toluene	38	
100-41-4	Ethylbenzene	43	
1330-20-7	Xylene (total)	280	

1/17/12

KEY-URS143 S36

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP121911DL

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-005ADL

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74227.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: not dec. Date Analyzed: 12/28/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 2.00

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	320	D
108-88-3	Toluene	36	D
100-41-4	Ethylbenzene	41	D
1330-20-7	Xylene (total)	250	D

1/17/12

KEY-URS143 S37

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP121911

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-005B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49401.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/21/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/09/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	530 340	E D
91-57-6	2-Methylnaphthalene	16	
208-96-8	Acenaphthylene	31	
83-32-9	Acenaphthene	26	
86-73-7	Fluorene	4	J
85-01-8	Phenanthrene	9	J
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

1/17/12

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP121911DL

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-005BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 2\N49403.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/21/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/10/12

Injection Volume: 2 (µL) Dilution Factor: 10.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	530	D
91-57-6	2-Methylnaphthalene	20	DJ
208-96-8	Acenaphthylene	34	DJ
83-32-9	Acenaphthene	29	DJ
86-73-7	Fluorene	100	U
85-01-8	Phenanthrene	100	U
120-12-7	Anthracene	100	U
206-44-0	Fluoranthene	100	U
129-00-0	Pyrene	100	U
56-55-3	Benzo(a)anthracene	100	U
218-01-9	Chrysene	100	U
205-99-2	Benzo(b)fluoranthene	100	U
207-08-9	Benzo(k)fluoranthene	100	U
50-32-8	Benzo(a)pyrene	100	U
193-39-5	Indeno(1,2,3-cd)pyrene	100	U
53-70-3	Dibenzo(a,h)anthracene	100	U
191-24-2	Benzo(g,h,i)perylene	100	U

(1) Cannot be separated from Diphenylamine

1/17/12

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-25

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74211.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: not dec. Date Analyzed: 12/22/11

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	2	
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene (total)	6	

KEY-URS143 S35

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-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-004B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49400.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/21/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/09/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB122811

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112A37-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74231.D

Level: (low/med) LOW Date Received: 12/28/11

% Moisture: not dec. Date Analyzed: 12/28/11

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-URS143 S46

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FB122811

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112A37-004B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\N49439.D

Level: (low/med) LOW Date Received: 12/28/11

% Moisture: Decanted: (Y/N) N Date Extracted: 12/30/11

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/11/12

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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	UJ
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

1/17/12

KEY-URS143 S62

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-121411

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112624-006A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74184.D

Level: (low/med) LOW Date Received: 12/14/11

% Moisture: not dec. Date Analyzed: 12/21/11

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-121511

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112642-004A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74185.D

Level: (low/med) LOW Date Received: 12/15/11

% Moisture: not dec. Date Analyzed: 12/21/11

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-121611

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112701-004A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74186.D

Level: (low/med) LOW Date Received: 12/16/11

% Moisture: not dec. Date Analyzed: 12/21/11

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB121911

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112775-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74213.D

Level: (low/med) LOW Date Received: 12/19/11

% Moisture: not dec. Date Analyzed: 12/22/11

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-URS143 S38

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB122011

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112841-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74217.D

Level: (low/med) LOW Date Received: 12/20/11

% Moisture: not dec. Date Analyzed: 12/22/11

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-URS143 S42

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-122111

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112889-004A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74207.D

Level: (low/med) LOW Date Received: 12/21/11

% Moisture: not dec. Date Analyzed: 12/22/11

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-122211

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No. _____ SDG No.: KEY-URS141

Matrix: (soil/water) WATER Lab Sample ID: 1112938-003A

Sample wt/vol: 5 (g/mL ML Lab File ID: A\A74225.D

Level: (low/med) LOW Date Received: 12/22/11

% Moisture: not dec. Date Analyzed: 12/28/11

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB122811

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Matrix: (soil/water) WATER Lab Sample ID: 1112A37-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A74232.D

Level: (low/med) LOW Date Received: 12/28/11

% Moisture: not dec. Date Analyzed: 12/28/11

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-URS143 S47

ATTACHMENT B

SUPPORT DOCUMENTATION

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILE ORGANICS
SAMPLES RECEIVED: 12/14/11, 12/15/11, 12/16/11, 12/21/11 & 12/22/11
SDG #: KEY-URS141

For Sample(s):

HIMW-13D	HIMW-15D	HIMW-05I
HIMW-13I	HIMW-15I	HIMW-05S
HIMW-13S	TB-121511	HIMW-20I
HIMW-14I	HIMW-12D	TB-122111
DUP-121411	HIMW-12I	HIMW-05D
TB-121411	HIMW-12S	HIMW-20S
HIMW-14D	TB-121611	TB-122211

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

All Q.C. 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-20I 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.

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: January 6, 2012

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

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILE ORGANICS
SAMPLES RECEIVED: 12/14/11, 12/15/11, 12/16/11, 12/21/11 & 12/22/11
SDG #: KEY-URS141

For Sample(s):

HIMW-13D	HIMW-12D
HIMW-13I	HIMW-12I
HIMW-13S	HIMW-12S
HIMW-14I	HIMW-05I
DUP-121411	HIMW-05S
HIMW-14D	HIMW-20I
HIMW-15D	HIMW-05D
HIMW-15I	HIMW-20S

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

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

Sample HIMW-20I 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-05I and HIMW-05D 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-05I.

Pyrene and chrysene had a %RSD greater then 20.5% in the initial calibration. Linear regression was used.

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: January 10, 2012

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

H2M LABS, INC.

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

38804 EXTERNAL CHAIN OF CUSTODY

CLIENT: URS Corp

H2M SDG NO: KEY-URS141

PROJECT NAME/NUMBER: National Grid – 4Quarter 2011 GW Sampling
11176098.00004

SAMPLERS: (signature)/Client
John Crespo/
Megan Dascoli/Megan Dascoli - URS

DELIVERABLES:

TURNAROUND TIME: Standard

NOTES:

Project Contact: Jon Sundquist
Phone Number: 716-923-1207
PIS/Quote #

Sample Container Description: 40 ml w/ HCl; 1 l amber

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

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	VOA	BNA	Pest/PCB	Metal	CN	LAB I.D. NO.	REMARKS:
12/14/11		W	TB121411	2	X					1112624-006	
12/14/11	850	GW	H1MW-13S	4	X	X				-003	
12/14/11	1017	GW	H1MW-13I	4	X	X				-002	
12/14/11	1142	GW	H1MW-13D	4	X	X				-001	
12/14/11	1340	GW	H1MW-14I	4	X	X				-004	
12/14/11	1200	GW	DUP121411	4	X	X				-005	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Megan Dascoli	12/14/11	16.09	S.Wall	12.14.11	16.09
S.Wall	12-14-11	16:57		12-14-11	16:57

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 11.9°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

KEY-URS141 S3

Key-URS 141

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 12/14/2011 4:57:00 PM

Work Order Numbe 1112624 RcptNo: 1

Received by MelissaWatson

Completed by M. Watt

Reviewed by: JSt

Completed Date: DEC 14 2011

Reviewed Date: 12/16/11

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 11.1°
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-URS141 SAS:

Adjusted? _____ Checked b

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

KEY-URS141 S4

H2M LABS, INC.

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

38805 EXTERNAL CHAIN OF CUSTODY

CLIENT: URS Corp

H2M SDG NO:

PROJECT NAME/NUMBER: NationalGrid 4Quarter 2011 GW Sampling
11176098.00004

SAMPLERS: (signature)/Client: Megan Dascoli / Megan Dascoli/URS

DELIVERABLES:

TURNAROUND TIME:

NOTES:

Project Contact: Jon Sundquist

Phone Number: 716-923-1207

PIS/Quote #

Sample Container Description: 40 mL clear HCl; 1 L amber

ANALYSIS REQUESTED

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ORGANIC: VOA	ORGANIC: BNA	ORGANIC: Pest/PCB	INORG.: Metal	INORG.: CN	LAB I.D. NO.	REMARKS:
12/15/11	1300	W	TB121511	2	X					1112648-W4	
12/15/11	0805	GW	H1MW-15I	4	X	X				-W3	
12/15/11	1110	GW	H1MW-15D	4	X	X				-002	
12/15/11	1300	GW	H1MW-14XD	4	X	X				-001	

KSA 12/16/11

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Megan Dascoli	12/15/11	13:30		12/15/11	13:30
	12/15/11	14:46		12/15/11	14:46

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 4/2°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-URS141 S10

KEY-URS 141

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 12/15/2011 2:46:00 PM

Work Order Numbe 1112642

RcptNo: 1

Received by Tamika Ricks

Completed by: [signature]

Completed Date: 12/15/11

Reviewed by: SB

Reviewed Date: 12/16/11

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 ☐	To 4.2°
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-URS141

SAS:

Adjusted? _____ Checked b

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

KEY-URS141 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: Megan Dascoli

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

Client Instructions: Sample ID is HIMW-14D

Date Contacted: 12/15/2011 Contacted By: Jennifer Aracri

Regarding:

Comments:
1112642-001A and 001B the sample id on the chain of custody reads as HIMW-14I. On the bottles the sample id is written as HIMW-14D.

CorrectiveAction:
Sample HIMW-14I was sampled on lab#1112624-004A and 004B.

KEY-URS141 S12

H2M LABS, INC.

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

38818 EXTERNAL CHAIN OF CUSTODY

CLIENT: URS Corp **H2M SDG NO:** KEYURS141

PROJECT NAME/NUMBER: National Grid 4 Quarter 2011 GW Sampling
11176098.00004

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

DELIVERABLES:

TURNAROUND TIME: STD

NOTES:

Project Contact: Jon Sampeur
Phone Number: 716-923-1207
PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: 40 ml Clear, HCl	1 L Amber	ORGANIC: VOA	ORGANIC: BNA	ORGANIC: Pest/PCB	INORG.: Metal	INORG.: CN	LAB I.D. NO.	REMARKS:
12/16/11	8:45	GW	H1MW-12S	4	X	X						1112701 -003	
12/16/11	11:20	W	TB121611	2	X							-004	
12/16/11	9:50	GW	H1MW-12I	4	X	X						-002	
12/16/11	11:20	GW	H1MW-12D	4	X	X						-001	

ANALYSIS REQUESTED

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
John Cooper	12/16/11	12:53	S.Wall	12.16.11	12.53
S.Wall	12-16-11	14.53	M Hall	12-16-11	14:53

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 9.1 °C on ice
3. Received in good condition: (Y) or N
4. Properly preserved: (Y) or N

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

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KEY-URS141 S17

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

H2M labs

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

KEY-URS 141

Sample Receipt Checklist

Client Name KEY-URS

Date and Time Receive 12/16/2011 2:53:00 PM

Work Order Numbe 1112701

RcptNo: 1

Received by MelissaWatson

Completed by M-Wat

Completed Date: DEC 16 2011

Reviewed by: JSA

Reviewed Date: 12/19/11

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 9.1 °
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-URS141

SAS:

Adjusted? _____ Checked b

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

KEY-URS141 S18

H2M LABS, INC.
575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

38808 EXTERNAL CHAIN OF CUSTODY

CLIENT: URS Corp.

H2M SDG NO: KEY-URS141

PROJECT NAME/NUMBER: National Grid 4Q2011 GW sampling 11176098.00004

SAMPLERS: (signature)/Client: John Casper (John Casper) / URS Corp.

DELIVERABLES:

TURNAROUND TIME: Standard

NOTES:

Project Contact: Jon Sundquist

Phone Number: 716 923-1207

PIS/Quote #:

Sample Container Description: 40ml clear (VOA); 1L amber (BNA)

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	VOA	BNA	Pest/PCB						Metal	CN	LAB I.D. NO.	REMARKS:
12/21/11	805	GW	H1MW-05I	4	X	X									1112889 -001	
12/21/11	905	GW	H1MW-05S	4	X	X									-002	
12/21/11	1120	GW	H1MW-20I	4	X	X									-003	
12/21/11	1130	GW	H1MW-20I/MS	4	X	X									-	
12/21/11	1140	GW	H1MW-20I/MSD	4	X	X									-	
~~12/21/11~~		~~GW~~														
12/21/11	1140	W	TB122111	2	X										-004	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Megan [signature]	12/21/11	12.37	S. Wet [signature]	12-21-11	12.37
S. Wet [signature]	12-21-11	15.42	[signature]	12-21-11	15:42

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 5.6°, 7.3°C on ice
3. Received in good condition: (Y) or N
4. Properly preserved: (Y) or N

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

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KEY-URS141 S24

H2M labs

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

KEY-URS 141

Sample Receipt Checklist

Client Name KEY-URS

Date and Time Receive 12/21/2011 3:42:00 PM

Work Order Numbe 1112889 RcptNo: 1

Received by MelissaWatson

Completed by M Wat

Completed Date: DEC 21 2011

Reviewed by: SA

Reviewed Date: 12/22/11

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 ☐	5.6 To 7.3 °
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-URS141 SAS:

Adjusted? _____ Checked b

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

KEY-URS141 S25

H2M LABS, INC.

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

38817 EXTERNAL CHAIN OF CUSTODY

CLIENT: URS Corp. **H2M SDG NO:** KEY-URS141

PROJECT NAME/NUMBER: National Grid 4Q2011 GW sampling
11176098.00004

SAMPLERS: (signature)/Client: John Cresko (John Lesyk) / URS Corp.

DELIVERABLES:

TURNAROUND TIME: Standard

NOTES:

Project Contact: Jon Sundquist

Phone Number: 716 923 1207

PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
					40ml clear	X	X					
					1L amber	X	X					
12/22/11	820	GW	H1MW-05D	4		X	X				1112938-001	
12/22/11	1025	GW	H1MW-20S	4		X	X				-002	
											↓	
12/22/11		W	TB122211	2		X					-003	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Melanie Parrott	12/22/11	1242	S.Weed	12-22-11	12.42
S.Weed	12.22.11	13.40		12/22/11	13:40

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 17.9°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

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KEY-URS141 S31

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

Key-URS 141

Sample Receipt Checklist

Client Name KEY-URS | Date and Time Receive 12/22/2011 1:40:00 PM

Work Order Numbe 1112938 | RcptNo: 1 | Received by Tamika Ricks

Completed by: [signature] | Reviewed by: JSA

Completed Date: 12/22/11 | Reviewed Date: 12/27/11

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 10.8°
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-URS141 | SAS:

Adjusted? _____ Checked b

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

KEY-URS141 S32

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILE ORGANICS
SAMPLES RECEIVED: 12/19/11, 12/20/11 & 12/28/11
SDG #: KEY-URS143

For Sample(s):

HIMW-22	TB121911	HIMW-08D
HIMW-23	HIMW-03D	HIMW-08I
HIMW-24	HIMW-03I	HIMW-08S
HIMW-25	HIMW-03S	FB122811
DUP121911	TB122011	TB122811

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

All Q.C. 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 spike duplicate (MS/MSD) was submitted. Lab fortified blanks were analyzed and indicate good method efficiency. All compounds recovered within Q.C. limits.

Samples HIMW-24 and DUP121911 were reanalyzed at a dilution due to concentration levels of targeted analytes above the calibration range.

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: January 13, 2012

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

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILE ORGANICS
SAMPLES RECEIVED: 12/19/11, 12/20/11 & 12/28/11
SDG #: KEY-URS143

For Sample(s):

HIMW-22	HIMW-03I
HIMW-23	HIMW-03S
HIMW-24	HIMW-08D
HIMW-25	HIMW-08I
DUP121911	HIMW-08S
HIMW-03D	FB122811

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 spike duplicate was submitted. All percent recoveries and RPDs were met. Lab fortified blanks were analyzed and indicates good method efficiency. All compounds recovered within or above Q.C. limits.

Samples HIMW-24 and DUP121911 were reanalyzed at a dilution due to concentration levels of analytes above the calibration range. Both sets of data are submitted.

Pyrene and chrysene had a %RSD greater then 20.5% in the initial calibration. Linear regression was used.

Chrysene had a %D greater than 15% in the continuing calibration of 1/11/12 and 1/13/12.

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: January 13, 2012

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

H2M LABS, INC.
575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

38806 EXTERNAL CHAIN OF CUSTODY

CLIENT: URS Corp

H2M SDG NO: KEY-URS~~144~~ 143 MCW 12-19-11

PROJECT NAME/NUMBER: NationalGrid 4Q2011 GW sampling 1117698.00004

SAMPLERS: (signature)/Client: JOHN CRESPO / [signature] / URS Corp

DELIVERABLES:

TURNAROUND TIME: Standard

NOTES:

Project Contact: Jon Sundquist

Phone Number: 716-923-1207

PIS/Quote #:

Sample Container Description: 40ml clear; 1L amber

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	VOA	BNA	Pest/PCB					Metal	CN	LAB I.D. NO.	REMARKS
12/19/11	850	W	TB121911	2	X									1112775 -006	
12/19/11	850	GW	HIMW-24	4	X	X								-003	
12/19/11	1115	GW	HIMW-~~23~~	4	X	X								-002	
12/19/11	1325	GW	HIMW-22	4	X	X								-001	
12/19/11	1500	GW	HIMW-25	4	X	X								-004	
12/19/11	1200	GW	DUP121911	4	X	X								-005	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	12/19/11	15.18	S. [signature]	12.19.11	15.18
S. [signature]	12.19.11	16.23	[signature]	12-19-11	1623

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 (circled), Temp 4.3°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

MCW 12-19-11

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H2M LABS, INC.

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

38807 EXTERNAL CHAIN OF CUSTODY

CLIENT: URS Corp

H2M SDG NO: KEY-URS 143

PROJECT NAME/NUMBER: National Grid 4Q2011 GW sampling
11176098.00004

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

DELIVERABLES:

TURNAROUND TIME: standard

NOTES:

Project Contact: Jon Sundquist

Phone Number: 716 923-1207

PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description	ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
					40ml clear							
					1 L amber							
12/20/11	930	GW	H1MW-03D	4		X	X				1112841-001	
12/20/11	1135	GW	H1MW-03I	4		X	X				-002	
12/20/11	1245	GW	H1MW-03S	4		X	X				-003	
12/20/11	1245	W	TB122011	2		X					-004	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
John Cooper URS	12.20.11	13.56	Sweet	12.20.11	13.56
Sweet	12.20.11	15.45		12-20-11	15:45

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 7.9°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 Road
Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436
Website: www.h2mlabs.com

KEY-URS 143

Sample Receipt Checklist

Client Name KEY-URS | Date and Time Receive 12/20/2011 3:45:00 PM

Work Order Numbe 1112841 | RcptNo: 1 | Received by MelissaWatson

Completed by AA Wat
Completed Date: DEC 20 2011

Reviewed by: SA
Reviewed Date: 12/21/11

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 7.9 °
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-URS143 | SAS:

Adjusted? _____ Checked b

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

KEY-URS143 S11

H2M LABS, INC.

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

38816 EXTERNAL CHAIN OF CUSTODY

CLIENT: URS Corp

H2M SDG NO: KEY-URS143

PROJECT NAME/NUMBER: National Grid 4Q2011 GW sampling
11176098.00004

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

DELIVERABLES:

TURNAROUND TIME: Standard

NOTES:

Project Contact: Jon Sundquist
Phone Number: 716-923-1207
PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: 40ml clear	1L amber	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
12/28/11	1150	GW	H1MW-08S	4	X	X						1112A37-003	
12/28/11	1055	GW	H1MW-08I	4	X	X						-002	
12/28/11	0915	GW	H1MW-08D	4	X	X						-001	
12/28/11	1150	W	TB122811	2	X							-005	
12/28/11	1225	W	FB122811	4	X	X						-004	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Megan Decol	12/28/11	13.13	S. West	12-28-11	13.13
S. West	12-28-11	15.08	M. Watt	12-28-11	15.08

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 9.1°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 Road
Melville, NY 11747
TEL: 631-694-3040 FAX: 631-420-8436
Website: www.h2mlabs.com

KEY-URS143

Sample Receipt Checklist

Client Name KEY-URS | Date and Time Receive 12/28/2011 3:08:00 PM

Work Order Numbe 1112A37 | RcptNo: 1 | Received by MelissaWatson

Completed by M Watt | Reviewed by: BA

Completed Date: 12-28-11 | Reviewed Date: 12/29/11

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 9.1 °
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-URS143 | SAS:

Adjusted? _____ Checked b

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

KEY-URS143 S18

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Lab File ID: 2\N49422.D DFTPP Injection Date: 01/11/12

Instrument ID: HP5973N DFTPP Injection Time: 10:22

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	39.6
68	Less than 2% of mass 69	0.4 (1.1)1
69	Mass 69 relative abundance	40.4
70	Less than 2% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	50.3
197	Less than 1% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.3
275	10.0 - 30.0% of mass 198	24.2
365	Greater than 1% of mass 198	4.1
441	Present, but less than mass 443	11.5
442	40.0 - 110.0% of mass 198	68.3
443	17.0 - 23.0% of mass 442	12.7 (18.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD025	SSTD025	2\N49423.D	01/11/12	10:37
02	LFB-33030	LFB-33030	2\N49430.D	01/11/12	14:04
03	HIMW-03D	1112841-001B	2\N49431.D	01/11/12	14:35
04	HIMW-03I	1112841-002B	2\N49432.D	01/11/12	15:05
05	HIMW-03S	1112841-003B	2\N49433.D	01/11/12	15:36
06	MB-33098	MB-33098	2\N49434.D	01/11/12	16:07
07	LFB-33098	LFB-33098	2\N49435.D	01/11/12	16:38
08	HIMW-08D	1112A37-001B	2\N49436.D	01/11/12	17:08
09	HIMW-08I	1112A37-002B	2\N49437.D	01/11/12	17:39
10	HIMW-08S	1112A37-003B	2\N49438.D	01/11/12	18:10
11	FB122811	1112A37-004B	2\N49439.D	01/11/12	18:41

KEY-URS143 B12

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: H2M LABS INC Contract: _____

Lab Code: H2M Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS143

Instrument ID: HP5973N Calibration Date: 1/11/201 Time: 10:37

Lab File ID: 2\N49423.D Init. Calib. Date(s): 12/12/11 12/12/11

EPA Sample No.(SSTD050##): SSTD025 Init. Calib. Times: 13:46 16:25

GC Column: Rxi-5SILMS ID: 0.25 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Naphthalene	1.019	1.018		-0.1	
2-Methylnaphthalene	0.716	0.688		-3.9	
Acenaphthylene	1.819	1.812		-0.4	
Acenaphthene	1.207	1.183		-2.0	20.0
Fluorene	1.285	1.273		-0.9	
Phenanthrene	1.148	1.185		3.3	
Anthracene	1.183	1.210		2.2	
Fluoranthene	1.216	1.242		2.1	20.0
Pyrene	1.205	1.232		2.2	
Benzo(a)anthracene	1.185	1.222		3.1	
Chrysene	1.087	1.318		21.2	
Benzo(b)fluoranthene	1.602	1.617		0.9	
Benzo(k)fluoranthene	1.283	1.415		10.3	
Benzo(a)pyrene	1.351	1.416		4.8	20.0
Indeno(1,2,3-cd)pyrene	1.611	1.682		4.4	
Dibenzo(a,h)anthracene	1.310	1.390		6.1	
Benzo(g,h,i)perylene	1.354	1.317		-2.7	

All other compounds must meet a minimum RRF of 0.010.

APPENDIX B

SOIL VAPOR SAMPLING DATA

(GEI CONSULTANTS)

Table X
Analytical Soil Vapor Results
Hempstead Former MGP Site
Hempstead, New York

Constituents	NYSDOH Background Outdoor Air Concentrations 25th - 95th Percentile Range[1]	Soil Vapor						
		HIVP-16 9/28/2011	HIVP-17 9/28/2011	HIVP-18 9/28/2011	HIVP-18 HEMPDUP-01 9/28/2011	HIVP-19 9/28/2011	HIVP-20 9/28/2011	HIVP-21 9/28/2011
BTEX (µg/m^3)								
Benzene	0.6 – 5.8	1.28 U	1.28 U	1.28 U	1.28 U	1.28 U	1.28 U	1.28 U
Toluene	<0.25 – 1.9	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U
Ethylbenzene	0.6 – 21	1.51 U	**1.12 J**	**1.28 J**	**1.24 J**	**7.5**	**6.26**	**4.3**
m,p-Xylene	<0.25 – 3.1	**1.22 J**	3.47 U	3.47 U	3.47 U	3.47 U	**1.28 J**	3.47 U
o-Xylene	<0.25 – 2.5	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U	1.74 U
Other VOCs (µg/m^3)								
Acetaldehyde	NE	**12.5**	**14**	**23.8**	**18.9**	**13.3**	**20.9**	**32.2 J**
Acetone	3.4 – 58	**15.9**	**15.5**	**18.4**	**23.3**	**11.5**	**10.2**	**23.8**
Acrolein (propenal)	NE	2.29 U	2.29 U	2.29 U	2.29 U	2.29 U	**0.77 J**	2.29 U
Allyl chloride	NE	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U
Benzothiophene	NE	5.49 U	5.49 U	5.49 U	5.49 U	5.49 U	5.49 U	5.49 U
Bromodichloromethane	NE	2.68 U	2.68 U	2.68 U	2.68 U	2.68 U	2.68 U	2.68 U
Bromoform	NE	4.14 U	4.14 U	4.14 U	4.14 U	4.14 U	4.14 U	4.14 U
Bromomethane	<0.25 – 0.9	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U
1,3-Butadiene	NE	0.885 U	0.885 U	0.885 U	0.885 U	0.885 U	0.885 U	0.885 U
Butane	NE	0.951 U	0.951 U	0.951 U	0.951 U	**0.276 J**	0.951 U	**0.827 J**
2-Butanone	0.8 – 17	**1.3**	**1.13 J**	**1.52**	**1.37**	**1.74**	**2.16**	**3.66**
t-Butyl alcohol	NE	**3.55**	**0.243 J**	**0.293 J**	1.24 U	**0.529 J**	**0.685 J**	**1.22 J**
Carbon disulfide	<0.25 – 1	2.52 U	2.52 U	2.52 U	2.52 U	2.52 U	2.52 U	2.52 U
Carbon tetrachloride	<0.25	1.84 U	1.84 U	1.84 U	1.84 U	1.84 U	1.84 U	1.84 U
Chlorobenzene	<0.25 – 0.4	1.06 U	1.06 U	1.06 U	1.06 U	1.06 U	1.06 U	1.06 U
Chloroethane	<0.25 – 0.5	1.95 U	1.95 U	1.95 U	1.95 U	1.95 U	**0.43 J**	**2.7**
Chloroform	<0.25 – 4.6	0.826 U	0.826 U	0.826 U	0.826 U	0.826 U	0.826 U	0.826 U
Chloromethane	NE	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U
2-Chlorotoluene	<0.25 – 1.3	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Cryofluorane	<0.25 – 3	1.38 U	1.38 U	1.38 U	1.38 U	**0.571 J**	**0.716 J**	1.38 U
Cyclohexane	<0.25 – 3.6	2.33 U	**1.27 J**	**0.92 J**	**0.885 J**	**1.06 J**	**0.978 J**	**1.38 J**
n-Decane	NE	3.41 U	3.41 U	3.41 U	3.41 U	3.41 U	3.41 U	3.41 U
Dibromochloromethane	<0.25	3.07 U	3.07 U	3.07 U	3.07 U	3.07 U	3.07 U	3.07 U
1,2-Dibromoethane	<0.25 – 0.9	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	<0.25 – 0.7	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,3-Dichlorobenzene	<0.25 – 0.8	2.4 UJ	2.4 UJ	2.4 UJ	2.4 UJ	2.4 UJ	2.4 UJ	2.4 UJ
1,4-Dichlorobenzene	<0.25 – 11	**0.752 J**	1.98 U	1.98 U	1.98 U	**1.25 J**	**4.47**	**4.4**
Dichlorodifluoromethane	<0.25	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U
1,1-Dichloroethane	<0.25	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U
1,2-Dichloroethane	<0.25	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U
cis-1,2-Dichloroethene	<0.25	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U
trans-1,2-Dichloroethene	<0.25	1.85 U	1.85 U	1.85 U	1.85 U	1.85 U	1.85 U	1.85 U
1,1-Dichloroethene	<0.25	1.82 U	1.82 U	1.82 U	1.82 U	1.82 U	1.82 U	1.82 U
1,2-Dichloropropane	<0.25	1.82 U	1.82 U	1.82 U	1.82 U	1.82 U	1.82 U	1.82 U
cis-1,3-Dichloropropene	NE	1.44 U	1.44 U	1.44 U	1.44 U	1.44 U	1.44 U	1.44 U
trans-1,3-Dichloropropene	<0.25 – 7.6	2.79 U	**1.6 J**	2.79 U	**2.27 J**	**1.91 J**	**2.74 J**	2.79 U
1,4-Dioxane	3.3 – 220	3.77 U	**4.24**	**7.5**	**8.16**	**40.5**	**24.3**	**14.2**
n-Dodecane	NE	1.84 U	1.84 U	1.84 U	1.84 U	1.84 U	1.84 U	1.84 U
Ethanol	NE	1.97 U	1.97 U	1.97 U	1.97 U	1.97 U	1.97 U	1.97 U
2-Ethylthiophene	<0.25 – 5.1	1.64 U	1.64 U	1.64 U	1.64 U	**1.02 J**	**0.639 J**	**0.516 J**
p-Ethyltoluene	<0.25 – 7	4.27 UJ	4.27 UJ	4.27 UJ	4.27 UJ	4.27 UJ	4.27 UJ	4.27 UJ
n-Heptane	<0.25 – 3.6	1.41 U	1.41 U	1.41 U	1.41 U	1.41 U	1.41 U	1.41 U
Hexachlorobutadiene	NE	1.64 U	1.64 U	1.64 U	1.64 U	1.64 U	1.64 U	1.64 U
n-Hexane	NE	1.93 U	1.93 U	1.93 U	1.93 U	1.93 U	1.93 U	1.93 U
2-Hexanone	NE	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Indane	<0.25 – 5.9	1.44 U	1.44 U	1.44 U	1.44 U	1.44 U	1.44 U	1.44 U
Indene	<0.25 – 2.9	1.64 U	1.64 U	1.64 U	1.64 U	1.64 U	1.64 U	1.64 U
Methyl tert-butyl ether	<0.25 – 2.9	6.95 U	**5.21 J**	6.95 U	6.95 U	6.95 U	**2.04 J**	6.95 U
4-Methyl-2-pentanone	NE	11.6 U	11.6 U	11.6 U	11.6 U	11.6 U	11.6 U	11.6 U
Methylene chloride	NE	11.6 U	11.6 U	11.6 U	11.6 U	11.6 U	11.6 U	11.6 U
1-Methylnaphthalene	NE	1.61 U	1.61 U	1.61 U	1.61 U	1.61 U	1.61 U	1.61 U
2-Methylnaphthalene	NE	1.61 UJ	1.61 UJ	1.61 UJ	1.61 UJ	1.61 UJ	1.61 UJ	1.61 UJ
2-Methylthiophene	<2 – 10	2.1 U	2.1 U	**0.755 J**	2.1 U	**1.5 J**	**1.23 J**	2.1 U
3-Methylthiophene	<0.25 – 1.2	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Naphthalene	<0.25 – 2.1	1.87 U	1.87 U	1.87 U	1.87 U	1.87 U	1.87 U	1.87 U
Nonane	NE	1.18 U	1.18 U	1.18 U	1.18 U	1.18 U	1.18 U	1.18 U
n-Octane	NE	2.46 U	**3.29**	**3.44**	**3.93**	**8.43**	**5.14**	**7.2**
Pentane	<0.25 – 0.6	**0.826 J**	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
2-Propanol	NE	1.21 U	1.21 U	1.21 U	1.21 U	1.21 U	1.21 U	**1.47**
Styrene	<0.25	2.75 U	2.75 U	2.75 U	2.75 U	2.75 U	2.75 U	2.75 U
1,1,2,2-Tetrachloroethane	<0.25 – 1.6	**4.61**	**6.22**	**5.03**	**4.9**	**6.08**	**1.07 J**	**159**
Tetrachloroethene	NE	R	R	R	R	2.2 UJ	R	R
1,2,4,5-Tetramethylbenzene	NE	1.38 U	1.38 U	1.38 U	1.38 U	1.38 U	1.38 U	1.38 U
Thiophene	NE	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U	1.58 U
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.25 – 3.6	3.06 U	3.06 U	3.06 U	3.06 U	3.06 U	3.06 U	3.06 U
1,2,4-Trichlorobenzene	<0.25 – 4.8	2.97 UJ	2.97 UJ	2.97 UJ	2.97 UJ	2.97 UJ	2.97 UJ	2.97 UJ
1,1,1-Trichloroethane	<0.25 – 0.7	2.18 U	2.18 U	2.18 U	2.18 U	2.18 U	2.18 U	**11**
1,1,2-Trichloroethane	<0.25	2.18 U	2.18 U	2.18 U	2.18 U	2.18 U	2.18 U	2.18 U
Trichloroethene	<0.25 – 0.5	2.15 U	2.15 U	2.15 U	2.15 U	2.15 U	2.15 U	2.15 U
Trichlorofluoromethane	<0.25 – 6.1	**1.08 J**	**0.91 J**	**1.35 J**	**1.44 J**	**2.17 J**	**1.86 J**	**4.03**
1,2,4-Trimethylbenzene	<0.25 – 0.6	1.97 U	1.97 U	1.97 U	1.97 U	1.97 U	1.97 U	1.97 U
1,3,5-Trimethylbenzene	<0.25 – 2.5	**0.846 J**	**0.826 J**	**0.826 J**	**0.993 J**	**0.865 J**	**0.816 J**	**0.708 J**
1,2,3-Trimethylbenzene	<0.25 – 1	1.97 U	1.97 U	1.97 U	1.97 U	1.97 U	1.97 U	1.97 U
2,2,4-Trimethylpentane	<0.25 – 2	1.87 U	1.87 U	1.87 U	1.87 U	1.87 U	1.87 U	1.87 U
n-Undecane	<0.25 – 2.3	2.56 UJ	**1.57 J**	**1.09 J**	**1.32 J**	**1.34 J**	**1.26 J**	**1.71 J**
Vinyl bromide	NE	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U
Vinyl chloride	<0.25	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U
Other (%)								
Helium	NE	0.016 U	0.018 U	0.014 U	0.017 U	0.017 U	0.015 U	0.018 U

Notes:

Analytes in blue are not detected in any sample

µg/m^3 - micrograms per cubic meter
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds
NYSDOH - New York State Department of Health

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

NE - not established
NA - not analyzed

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

Validation Qualifiers:

J - estimated value
U - indicates not detected to the reporting limit
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated
R - rejected

APPENDIX C

OXYGEN SYSTEM OPERATION & MAINTENANCE MEASUREMENTS

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date:	12/23/2011
Time:	1308
Weather:	Sunny
Outdoor Temperature:	~48°F
Inside Trailer Temperature:	~70°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	2,116.8	
Feed Air Pressure *	90	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	105	(psi)
Oxygen Purity	98.8	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	105	(psi)
(readings below are made from control panel)		
Delivery Air	110	(psi)
Element Outlet Temperature	172	(^{o}F)
Running Hours	2,376	(hours)
Loading Hours	1,586	(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	35	19	OW-1-9D	88.5	OFF	OFF
OW-1-2	96.5	30	32	OW-1-6S	67.0	30	18	OW-1-10D	87.2	OFF	OFF
OW-1-3	96.3	40	32	OW-1-7S	66.9	20	18	OW-1-11D	86.1	OFF	OFF
OW-1-4	95.0	40	31	OW-1-8S	66.7	OFF	OFF	OW-1-12D	85.3	OFF	OFF
OW-1-5D	93.9	30	30	OW-1-9S	66.0	25	19	OW-1-13D	84.7	OFF	OFF
OW-1-6D	92.4	30	30	OW-1-10S	54.6	30	14	OW-1-14D	84.1	OFF	OFF
OW-1-7D	91.1	35	30	OW-1-11S	54.1	24	15	OW-1-15D	83.3	OFF	OFF
OW-1-8D	89.6	25	29	OW-1-12S	53.6	28	16	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: 12/23/2011

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	15	14	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	30	12
OW-1-14S	52.7	18	15	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	30	12
OW-1-15S	52.2	15	14	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	30	12
OW-1-16SR	51.8	OFF	OFF	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	30	13
OW-1-17S	50.7	OFF	OFF	OW-1-21D	79.5	OFF	OFF	OW-1-25S	48.8	28	14
OW-1-18S	50.2	20	13	OW-1-22D	79.5	OFF	OFF	OW-1-26SR	48.3	35	14
OW-1-19S	49.7	25	14	OW-1-23D	78.7	OFF	OFF	OW-1-27S	48.3	35	14
OW-1-20S	49.3	30	14	OW-1-24D	78.2	OFF	OFF	OW-1-28S	48.3	28	15

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	27	OW-1-29S	48.5	30	13	OW-1-33D	83.2	40	29
OW-1-26D	78.1	50	32	OW-1-30S	48.8	30	13	OW-1-34D	84.5	30	30
OW-1-27D	77.9	60	35	OW-1-31S	49.3	30	13	OW-1-35D	85.0	60	29
OW-1-28D	78.0	30	27	OW-1-32S	49.3	32	13	OW-1-36D	85.0	34	30
OW-1-29D	78.4	40	27	OW-1-33S	49.7	30	13	OW-1-37D	84.0	35	30
OW-1-30D	79.0	80	34	OW-1-34S	50.1	35	13	OW-1-38D	82.0	50	34
OW-1-31D	80.5	60	24	OW-1-35S	50.3	30	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	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.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 12/23/2011

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	12	OW-1-41D	73.6	OFF	OFF	OW-1-43	67.4	OFF	OFF
OW-1-38S	50.6	25	13	OW-1-42D	71.0	OFF	OFF	OW-1-44	66.6	38	19
OW-1-39S	50.7	40	12	OW-1-45	65.7	40	20	OW-1-51R	60.6	30	18
OW-1-40S	51.1	30	14	OW-1-46	64.3	30	18	OW-1-52	59.3	40	17
OW-1-41S	51.5	50	14	OW-1-47	63.4	30	18	OW-1-53	60.0	25	18
OW-1-42S	51.3	40	13	OW-1-48	62.5	28	18	OW-1-54	60.0	30	17
				OW-1-49	61.5	30	17				
				OW-1-50	61.0	35	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	23.76	5.28	0.2	MP-1-5	23.43	22.92	0.0				
MP-1-1S	23.93	19.67	0.1	MP-1-6	15.85	8.34	0.0				
MP-1-2D	17.92	37.40	0.0	MP-1-7	19.07	11.82	0.0				
MP-1-2S	18.33	14.68	0.0	MP-1-8	20.09	11.36	0.0				
MP-1-3D	16.05	4.92	0.5								
MP-1-3S	16.10	30.83	0.0								
MP-1-4D	18.75	12.72	0.0								
MP-1-4S	18.57	0.89	0.0								

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: 12/23/2011

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 cleaned 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:

As per URS's request restarted injection points OW-1-41S, OW-1-42S and OW-1-44 and turned off injection points OW-1-40D, OW-1-16S, OW-1-17S and OW-1-8S. Replaced four (4) bolts on manhole that were not setting properly. Wiped down all equipment and cleaned up all garbage, weeds & leaves from around fence areas.

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:	12/9/2011
Time:	1218
Weather:	Sunny
Outdoor Temperature:	~58°F
Inside Trailer Temperature:	~70°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	2,023.2	
Feed Air Pressure *	70	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	95	(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	112	(psi)
Element Outlet Temperature	174	(^{o}F)
Running Hours	2,238	(hours)
Loading Hours	1,505	(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	34	32	OW-1-5S	67.3	25	18	OW-1-9D	88.5	OFF	OFF
OW-1-2	96.5	30	31	OW-1-6S	67.0	30	18	OW-1-10D	87.2	OFF	OFF
OW-1-3	96.3	35	32	OW-1-7S	66.9	20	18	OW-1-11D	86.1	OFF	OFF
OW-1-4	95.0	40	31	OW-1-8S	66.7	22	18	OW-1-12D	85.3	OFF	OFF
OW-1-5D	93.9	30	30	OW-1-9S	66.0	22	19	OW-1-13D	84.7	OFF	OFF
OW-1-6D	92.4	30	30	OW-1-10S	54.6	25	14	OW-1-14D	84.1	OFF	OFF
OW-1-7D	91.1	35	30	OW-1-11S	54.1	28	15	OW-1-15D	83.3	OFF	OFF
OW-1-8D	89.6	40	30	OW-1-12S	53.6	28	16	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: 12/9/2011

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	15	14	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	20	13
OW-1-14S	52.7	18	15	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	20	13
OW-1-15S	52.2	20	14	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	20	13
OW-1-16SR	51.8	20	27	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	35	13
OW-1-17S	50.7	20	24	OW-1-21D	79.5	OFF	OFF	OW-1-25S	48.8	30	14
OW-1-18S	50.2	20	13	OW-1-22D	79.5	OFF	OFF	OW-1-26SR	48.3	34	13
OW-1-19S	49.7	30	15	OW-1-23D	78.7	OFF	OFF	OW-1-27S	48.3	30	14
OW-1-20S	49.3	18	15	OW-1-24D	78.2	OFF	OFF	OW-1-28S	48.3	35	15

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	28	13	OW-1-33D	83.2	50	31
OW-1-26D	78.1	50	29	OW-1-30S	48.8	28	13	OW-1-34D	84.5	40	32
OW-1-27D	77.9	40	34	OW-1-31S	49.3	25	13	OW-1-35D	85.0	35	30
OW-1-28D	78.0	30	28	OW-1-32S	49.3	28	13	OW-1-36D	85.0	30	30
OW-1-29D	78.4	40	27	OW-1-33S	49.7	20	13	OW-1-37D	84.0	35	30
OW-1-30D	79.0	60	38	OW-1-34S	50.1	30	13	OW-1-38D	82.0	40	37
OW-1-31D	80.5	50	28	OW-1-35S	50.3	40	13	OW-1-39D	78.0	30	27
OW-1-32D	81.6	30	29	OW-1-36S	50.3	20	13	OW-1-40D	76.0	50	28

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: 12/9/2011

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	30	12	OW-1-41D	73.6	OFF	OFF	OW-1-43	67.4	OFF	OFF
OW-1-38S	50.6	30	13	OW-1-42D	71.0	OFF	OFF	OW-1-44	66.6	OFF	OFF
OW-1-39S	50.7	30	13	OW-1-45	65.7	32	20	OW-1-51R	60.6	35	18
OW-1-40S	51.1	25	13	OW-1-46	64.3	35	18	OW-1-52	59.3	45	17
OW-1-41S	51.5	OFF	OFF	OW-1-47	63.4	30	18	OW-1-53	60.0	30	18
OW-1-42S	51.3	OFF	OFF	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	35	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	23.75	7.77	0.0	MP-1-5	23.40	27.42	0.4				
MP-1-1S	23.91	14.21	0.0	MP-1-6	15.76	6.17	0.0				
MP-1-2D	17.88	18.60	0.9	MP-1-7	18.99	0.90	0.0				
MP-1-2S	18.29	16.42	0.0	MP-1-8	20.06	16.84	0.2				
MP-1-3D	15.99	6.71	0.0								
MP-1-3S	16.03	23.12	0.0								
MP-1-4D	18.68	26.14	0.7								
MP-1-4S	18.48	0.78	0.0								

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: 12/9/2011

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 cleaned 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 drive shaft on booster pump sticking, sprayed with WD-40 to lubricate. Cleaned up oil buildup in oil water seperator cannister. Wiped down all equipment and cleaned up all garbage, weeds & leaves from around fence areas.

High pressure noted at MP-1-2D & MP-1-3S.

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:	11/22/2011
Time:	1315
Weather:	Rain
Outdoor Temperature:	~52°F
Inside Trailer Temperature:	~72°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,906.4	
Feed Air Pressure *	75	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	100	(psi)
Oxygen Purity	99.9	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	112	(psi)
(readings below are made from control panel)		
Delivery Air	110	(psi)
Element Outlet Temperature	147	(^{o}F)
Running Hours	2,107	(hours)
Loading Hours	1,417	(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	32	OW-1-5S	67.3	20	18	OW-1-9D	88.5	32	28
OW-1-2	96.5	28	29	OW-1-6S	67.0	28	19	OW-1-10D	87.2	38	28
OW-1-3	96.3	30	32	OW-1-7S	66.9	20	18	OW-1-11D	86.1	28	30
OW-1-4	95.0	30	31	OW-1-8S	66.7	20	19	OW-1-12D	85.3	OFF	OFF
OW-1-5D	93.9	30	30	OW-1-9S	66.0	20	20	OW-1-13D	84.7	OFF	OFF
OW-1-6D	92.4	30	30	OW-1-10S	54.6	24	14	OW-1-14D	84.1	OFF	OFF
OW-1-7D	91.1	25	30	OW-1-11S	54.1	25	15	OW-1-15D	83.3	OFF	OFF
OW-1-8D	89.6	20	30	OW-1-12S	53.6	25	16	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: 11/22/2011

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	18	14	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	20	12
OW-1-14S	52.7	18	15	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	22	12
OW-1-15S	52.2	20	14	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	20	12
OW-1-16SR	51.8	30	27	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	35	13
OW-1-17S	50.7	25	23	OW-1-21D	79.5	28	27	OW-1-25S	48.8	30	13
OW-1-18S	50.2	30	13	OW-1-22D	79.5	35	27	OW-1-26SR	48.3	30	13
OW-1-19S	49.7	30	12	OW-1-23D	78.7	30	27	OW-1-27S	48.3	28	13
OW-1-20S	49.3	20	13	OW-1-24D	78.2	30	28	OW-1-28S	48.3	30	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	32	28	OW-1-29S	48.5	27	13	OW-1-33D	83.2	45	30
OW-1-26D	78.1	60	28	OW-1-30S	48.8	27	13	OW-1-34D	84.5	40	31
OW-1-27D	77.9	50	34	OW-1-31S	49.3	25	13	OW-1-35D	85.0	42	30
OW-1-28D	78.0	30	28	OW-1-32S	49.3	20	13	OW-1-36D	85.0	30	30
OW-1-29D	78.4	35	27	OW-1-33S	49.7	22	12	OW-1-37D	84.0	35	30
OW-1-30D	79.0	40	33	OW-1-34S	50.1	28	12	OW-1-38D	82.0	28	34
OW-1-31D	80.5	45	28	OW-1-35S	50.3	40	13	OW-1-39D	78.0	30	28
OW-1-32D	81.6	30	29	OW-1-36S	50.3	21	13	OW-1-40D	76.0	30	28

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: 11/22/2011

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	33	12	OW-1-41D	73.6	38	23	OW-1-43	67.4	38	21
OW-1-38S	50.6	10	13	OW-1-42D	71.0	30	22	OW-1-44	66.6	30	19
OW-1-39S	50.7	35	13	OW-1-45	65.7	40	20	OW-1-51R	60.6	30	18
OW-1-40S	51.1	25	13	OW-1-46	64.3	35	18	OW-1-52	59.3	40	17
OW-1-41S	51.5	30	13	OW-1-47	63.4	30	18	OW-1-53	60.0	25	17
OW-1-42S	51.3	30	13	OW-1-48	62.5	35	18	OW-1-54	60.0	25	17
				OW-1-49	61.5	30	17				
				OW-1-50	61.0	35	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	23.85	6.25	0.0	MP-1-5	23.50	17.25	0.0				
MP-1-1S	24.00	8.41	0.0	MP-1-6	15.94	7.29	0.0				
MP-1-2D	18.02	17.19	0.0	MP-1-7	19.26	3.30	0.0				
MP-1-2S	18.42	12.16	0.0	MP-1-8	20.30	9.42	0.0				
MP-1-3D	16.17	6.20	0.0								
MP-1-3S	16.19	17.37	0.0								
MP-1-4D	18.92	23.37	38.3								
MP-1-4S	18.75	4.11	0.0								

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: 11/22/2011

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 cleaned 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:

Tightened belts on booster pump. Cleaned up oil buildup in oil water seperator cannister. Wiped down all equipment and cleaned up all garbage, weeds & leaves from around fence areas.

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:	11/10/2011
Time:	1233
Weather:	Sunny
Outdoor Temperature:	~74°F
Inside Trailer Temperature:	~72°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,815.5	
Feed Air Pressure *	110	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	110	(psi)
Oxygen Purity	98.5	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	110	(psi)
(readings below are made from control panel)		
Delivery Air	109	(psi)
Element Outlet Temperature	154	(^{o}F)
Running Hours	2,005	(hours)
Loading Hours	1,351	(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	32	OW-1-5S	67.3	22	18	OW-1-9D	88.5	30	28
OW-1-2	96.5	27	31	OW-1-6S	67.0	28	18	OW-1-10D	87.2	35	28
OW-1-3	96.3	30	32	OW-1-7S	66.9	22	18	OW-1-11D	86.1	28	30
OW-1-4	95.0	32	31	OW-1-8S	66.7	20	18	OW-1-12D	85.3	OFF	OFF
OW-1-5D	93.9	30	30	OW-1-9S	66.0	20	19	OW-1-13D	84.7	OFF	OFF
OW-1-6D	92.4	30	30	OW-1-10S	54.6	20	15	OW-1-14D	84.1	OFF	OFF
OW-1-7D	91.1	30	30	OW-1-11S	54.1	20	16	OW-1-15D	83.3	OFF	OFF
OW-1-8D	89.6	12	29	OW-1-12S	53.6	22	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: 11/10/2011

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	15	14	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	24	12
OW-1-14S	52.7	15	15	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	25	12
OW-1-15S	52.2	25	14	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	20	12
OW-1-16SR	51.8	23	27	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	30	13
OW-1-17S	50.7	24	20	OW-1-21D	79.5	28	27	OW-1-25S	48.8	30	13
OW-1-18S	50.2	25	14	OW-1-22D	79.5	30	27	OW-1-26SR	48.3	28	14
OW-1-19S	49.7	27	15	OW-1-23D	78.7	34	27	OW-1-27S	48.3	28	14
OW-1-20S	49.3	24	14	OW-1-24D	78.2	30	28	OW-1-28S	48.3	25	15

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	25	28	OW-1-29S	48.5	25	13	OW-1-33D	83.2	40	31
OW-1-26D	78.1	45	34	OW-1-30S	48.8	30	13	OW-1-34D	84.5	30	33
OW-1-27D	77.9	40	35	OW-1-31S	49.3	28	13	OW-1-35D	85.0	25	30
OW-1-28D	78.0	20	28	OW-1-32S	49.3	35	13	OW-1-36D	85.0	28	30
OW-1-29D	78.4	30	27	OW-1-33S	49.7	20	13	OW-1-37D	84.0	28	30
OW-1-30D	79.0	40	33	OW-1-34S	50.1	30	13	OW-1-38D	82.0	40	31
OW-1-31D	80.5	32	27	OW-1-35S	50.3	35	14	OW-1-39D	78.0	30	28
OW-1-32D	81.6	25	29	OW-1-36S	50.3	25	13	OW-1-40D	76.0	50	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 #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 11/10/2011

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	28	12	OW-1-41D	73.6	25	24	OW-1-43	67.4	24	21
OW-1-38S	50.6	24	13	OW-1-42D	71.0	25	22	OW-1-44	66.6	20	19
OW-1-39S	50.7	35	13	OW-1-45	65.7	25	20	OW-1-51R	60.6	20	18
OW-1-40S	51.1	20	13	OW-1-46	64.3	30	18	OW-1-52	59.3	35	17
OW-1-41S	51.5	40	13	OW-1-47	63.4	20	18	OW-1-53	60.0	20	18
OW-1-42S	51.3	25	13	OW-1-48	62.5	20	18	OW-1-54	60.0	15	17
				OW-1-49	61.5	30	18				
				OW-1-50	61.0	40	17				

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	23.68	6.79	0.0	MP-1-5	23.33	10.25	0.0				
MP-1-1S	23.83	8.20	0.0	MP-1-6	15.72	8.82	0.0				
MP-1-2D	17.81	43.14	0.0	MP-1-7	18.99	2.18	0.0				
MP-1-2S	18.21	19.43	0.0	MP-1-8	20.06	8.88	0.9				
MP-1-3D	15.94	7.59	0.0								
MP-1-3S	15.98	23.45	0.0								
MP-1-4D	18.68	3.60	0.0								
MP-1-4S	18.50	5.60	0.0								

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: 11/10/2011

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) ____ Normal (green) ____ 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 cleaned Yes ____ No X
8) Terminal strips checked Yes ____ No X

AS-80 O_2 Generator

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

GENERAL SYSTEM NOTES

Trailer

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

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

Shut down AC unit and set heat on a low setting. Wiped down all equipment and cleaned up all garbage, weeds & leaves from around fence areas.

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:	10/27/2011
Time:	1240
Weather:	Rain
Outdoor Temperature:	~61°F
Inside Trailer Temperature:	~70°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,707.8	
Feed Air Pressure *	110	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	100	(psi)
Oxygen Purity	98.5	(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	102	(^{o}F)
Running Hours	1,884	(hours)
Loading Hours	1,274	(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	34	32	OW-1-5S	67.3	25	18	OW-1-9D	88.5	30	28
OW-1-2	96.5	35	27	OW-1-6S	67.0	30	18	OW-1-10D	87.2	35	29
OW-1-3	96.3	35	31	OW-1-7S	66.9	25	18	OW-1-11D	86.1	30	28
OW-1-4	95.0	38	31	OW-1-8S	66.7	25	18	OW-1-12D	85.3	OFF	OFF
OW-1-5D	93.9	30	30	OW-1-9S	66.0	25	19	OW-1-13D	84.7	OFF	OFF
OW-1-6D	92.4	35	30	OW-1-10S	54.6	30	14	OW-1-14D	84.1	OFF	OFF
OW-1-7D	91.1	40	30	OW-1-11S	54.1	25	15	OW-1-15D	83.3	OFF	OFF
OW-1-8D	89.6	40	30	OW-1-12S	53.6	25	15	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: 10/27/2011

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	20	13	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	30	12
OW-1-14S	52.7	18	14	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	35	11
OW-1-15S	52.2	28	13	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	25	12
OW-1-16SR	51.8	25	27	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	35	12
OW-1-17S	50.7	35	23	OW-1-21D	79.5	30	27	OW-1-25S	48.8	30	13
OW-1-18S	50.2	22	13	OW-1-22D	79.5	33	27	OW-1-26SR	48.3	30	13
OW-1-19S	49.7	32	13	OW-1-23D	78.7	35	27	OW-1-27S	48.3	30	13
OW-1-20S	49.3	15	13	OW-1-24D	78.2	30	28	OW-1-28S	48.3	30	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	28	27	OW-1-29S	48.5	30	13	OW-1-33D	83.2	35	30
OW-1-26D	78.1	65	32	OW-1-30S	48.8	30	13	OW-1-34D	84.5	30	31
OW-1-27D	77.9	40	31	OW-1-31S	49.3	25	13	OW-1-35D	85.0	50	27
OW-1-28D	78.0	20	28	OW-1-32S	49.3	35	13	OW-1-36D	85.0	30	30
OW-1-29D	78.4	35	27	OW-1-33S	49.7	25	13	OW-1-37D	84.0	30	29
OW-1-30D	79.0	50	34	OW-1-34S	50.1	35	13	OW-1-38D	82.0	35	28
OW-1-31D	80.5	20	27	OW-1-35S	50.3	40	13	OW-1-39D	78.0	30	27
OW-1-32D	81.6	20	28	OW-1-36S	50.3	25	13	OW-1-40D	76.0	40	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 #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 10/27/2011

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	12	OW-1-41D	73.6	25	24	OW-1-43	67.4	25	20
OW-1-38S	50.6	30	13	OW-1-42D	71.0	30	22	OW-1-44	66.6	22	18
OW-1-39S	50.7	30	13	OW-1-45	65.7	30	20	OW-1-51R	60.6	20	18
OW-1-40S	51.1	25	13	OW-1-46	64.3	30	19	OW-1-52	59.3	30	17
OW-1-41S	51.5	40	14	OW-1-47	63.4	25	18	OW-1-53	60.0	35	17
OW-1-42S	51.3	35	13	OW-1-48	62.5	20	18	OW-1-54	60.0	20	17
				OW-1-49	61.5	30	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	23.78	6.94	0.9	MP-1-5	23.42	10.51	0.0				
MP-1-1S	23.93	6.69	0.0	MP-1-6	15.86	5.49	0.0				
MP-1-2D	17.93	12.83	0.0	MP-1-7	19.18	1.85	0.2				
MP-1-2S	18.35	11.67	0.8	MP-1-8	20.20	8.84	0.0				
MP-1-3D	16.10	7.56	0.3								
MP-1-3S	16.12	11.97	0.0								
MP-1-4D	18.83	7.94	1.6								
MP-1-4S	18.63	1.82	0.0								

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: 10/27/2011

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) ____ Normal (green) X High (orange) ____
3) Oil added Yes ____ No X
4) Oil changed Yes ____ No X
5) Oil filter changed Yes X No ____
6) Air filter Changed Yes X No ____
7) Oil separator cleaned Yes X No ____
8) Terminal strips checked Yes X No ____

AS-80 O_2 Generator

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

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:

Performed 6-month O&M between 10-27-11 and 10-28-11.

Repaired air leaks at two flow meters in manifolds. Adjusted fan blade in air dryer unit. Took apart auto drain and cleaned out silt buildup and blew out drain line. Changed out all filters, screens and belts on all units. Greased booster pump shaft. Wiped down all equipment, washed floor of shed and cleaned up all garbage, weeds, leaves & tree branches from around fence areas.

A pressure switch low alarm in the oxygen tank occured on Saturday, Octber 29, 2011 at approximately 1AM. The system self corrects once pressure builds up in the tank. The alarm condition was cleared via the remote access system on Saturday afternoon at approximately 1PM. We inspected the system on Monday, October 31, 2011 and found no problems with the system.

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:	10/14/2011
Time:	1244
Weather:	Rain
Outdoor Temperature:	~65°F
Inside Trailer Temperature:	~70°F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	1,610.5	
Feed Air Pressure *	105	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	100	(psi)
Oxygen Purity	97.9	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	105	(psi)
(readings below are made from control panel)		
Delivery Air	104	(psi)
Element Outlet Temperature	109	(^{o}F)
Running Hours	1,774	(hours)
Loading Hours	1,203	(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	34	32	OW-1-5S	67.3	25	18	OW-1-9D	88.5	28	28
OW-1-2	96.5	34	28	OW-1-6S	67.0	28	18	OW-1-10D	87.2	34	29
OW-1-3	96.3	32	32	OW-1-7S	66.9	25	18	OW-1-11D	86.1	30	28
OW-1-4	95.0	35	31	OW-1-8S	66.7	24	18	OW-1-12D	85.3	OFF	OFF
OW-1-5D	93.9	30	30	OW-1-9S	66.0	25	19	OW-1-13D	84.7	OFF	OFF
OW-1-6D	92.4	30	30	OW-1-10S	54.6	30	13	OW-1-14D	84.1	OFF	OFF
OW-1-7D	91.1	34	30	OW-1-11S	54.1	20	14	OW-1-15D	83.3	OFF	OFF
OW-1-8D	89.6	40	30	OW-1-12S	53.6	20	15	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: 10/14/2011

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	20	14	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	16	12
OW-1-14S	52.7	23	16	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	25	12
OW-1-15S	52.2	26	13	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	25	12
OW-1-16SR	51.8	25	27	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	30	13
OW-1-17S	50.7	35	21	OW-1-21D	79.5	30	27	OW-1-25S	48.8	30	13
OW-1-18S	50.2	18	13	OW-1-22D	79.5	30	27	OW-1-26SR	48.3	27	13
OW-1-19S	49.7	30	12	OW-1-23D	78.7	32	27	OW-1-27S	48.3	32	13
OW-1-20S	49.3	20	13	OW-1-24D	78.2	31	28	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	27	OW-1-29S	48.5	28	13	OW-1-33D	83.2	30	29
OW-1-26D	78.1	50	35	OW-1-30S	48.8	30	13	OW-1-34D	84.5	30	31
OW-1-27D	77.9	45	33	OW-1-31S	49.3	30	13	OW-1-35D	85.0	45	28
OW-1-28D	78.0	22	28	OW-1-32S	49.3	35	12	OW-1-36D	85.0	30	30
OW-1-29D	78.4	30	28	OW-1-33S	49.7	25	13	OW-1-37D	84.0	30	29
OW-1-30D	79.0	42	34	OW-1-34S	50.1	25	12	OW-1-38D	82.0	35	33
OW-1-31D	80.5	36	21	OW-1-35S	50.3	35	13	OW-1-39D	78.0	30	28
OW-1-32D	81.6	26	28	OW-1-36S	50.3	24	13	OW-1-40D	76.0	45	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 #1

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 10/14/2011

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
OW-1-37S	50.5	25	13	OW-1-41D	73.6	28	24	OW-1-43	67.4	25	21
OW-1-38S	50.6	23	13	OW-1-42D	71.0	27	22	OW-1-44	66.6	30	19
OW-1-39S	50.7	38	13	OW-1-45	65.7	30	20	OW-1-51R	60.6	30	18
OW-1-40S	51.1	30	14	OW-1-46	64.3	25	18	OW-1-52	59.3	34	17
OW-1-41S	51.5	30	15	OW-1-47	63.4	27	18	OW-1-53	60.0	15	17
OW-1-42S	51.3	30	13	OW-1-48	62.5	21	18	OW-1-54	60.0	20	17
				OW-1-49	61.5	20	18				
				OW-1-50	61.0	27	17				

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	23.63	9.17	0.9	MP-1-5	23.26	14.15	0.0				
MP-1-1S	23.83	16.09	0.0	MP-1-6	15.70	5.53	0.0				
MP-1-2D	17.79	44.15	0.0	MP-1-7	19.99	7.20	0.0				
MP-1-2S	19.21	16.76	0.0	MP-1-8	20.05	11.90	0.0				
MP-1-3D	15.92	9.04	0.0								
MP-1-3S	15.94	8.01	0.0								
MP-1-4D	18.59	7.01	0.4								
MP-1-4S	18.47	4.67	0.0								

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: 10/14/2011

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) 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 John C. from URS on-site.

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 air leaks at two flow meters in manifolds. Adjusted and tightened belts on the booster pump. Adjusted air flow to oil/water seperator bowls and soaked up oil in seperator unit.

Cleaned up all garbage, weeds, leaves & 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:	12/22/2011
Time:	1230
Weather:	Sunny
Outdoor Temperature:	~52° F
Inside Trailer Temperature:	~70° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	8,545	
Feed Air Pressure *	90	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	125	(psi)
Oxygen Purity	96.7	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	95	(psi)
(readings below are made from control panel)		
Delivery Air	97	(psi)
Element Outlet Temperature	169	(^oF)
Running Hours	8,652	(hours)
Loading Hours	8,575	(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'	40	31	OW-2-9S	75'	15	20	OW-2-10D	97.2'	30	27
OW-2-3	94.3'	45	27	OW-2-10S	75'	25	29	OW-2-11D	100.8'	40	32
OW-2-4	94.7'	20	33	OW-2-11S	76.5'	20	22	OW-2-12	94'	27	21
OW-2-5	95.3'	28	31	OW-2-13S	75'	30	16	OW-2-13D	97'	20	38
OW-2-6	95.7'	28	31	OW-2-15S	75'	OFF	OFF	OW-2-14	96.4'	30	23
OW-2-7	96'	20	30	OW-2-16S	75.5'	OFF	OFF	OW-2-15D	94.6'	OFF	OFF
OW-2-8	96.3'	24	30	OW-2-18S	74.5'	15	19	OW-2-16D	94.1'	OFF	OFF
OW-2-9D	96.7'	20	30	OW-2-20S	79'	18	22	OW-2-17	95'	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.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 12/22/2011

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'	20	28
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	25	27
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	28	27
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	35	28
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	25	32

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'	24	16	OW-2-45	61.1'	30	21	MP-2-1	27.05	9.20	0
OW-2-38	62.1'	34	19	OW-2-46	61'	25	18	MP-2-2	28.16	18.30	0
OW-2-39	60'	15	21	OW-2-47	60.5'	22	19	MP-2-3S	28.28	25.40	0
OW-2-40	61.7'	25	18					MP-2-3D	28.47	32.62	0
OW-2-41	61.7'	20	20					MP-2-4	17.01	16.70	0
OW-2-42	61.6'	35	16					MP-2-5	15.22	18.38	0
OW-2-43	61.4'	30	20								
OW-2-44R	60.6'	24	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: 12/22/2011

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 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 cleaned 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:

Adjusted pressure switch on booster pump to ensure unit is turning on at 80 PSI. Cleaned fresh air intake filter on air compressor and added a small amou of oil to compressor. Soaked up oil from seperator unit in shed. Wiped down all equipment and cleaned up all garbage, weeds & leaves from around fence areas.

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:	12/8/2011
Time:	1240
Weather:	Sunny
Outdoor Temperature:	~51° F
Inside Trailer Temperature:	~70° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	8,297	
Feed Air Pressure *	70	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	110	(psi)
Oxygen Purity	95.9	(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	131	(^oF)
Running Hours	8,398	(hours)
Loading Hours	8,325	(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'	40	31	OW-2-9S	75'	20	20	OW-2-10D	97.2'	35	28
OW-2-3	94.3'	60	27	OW-2-10S	75'	22	29	OW-2-11D	100.8'	30	32
OW-2-4	94.7'	30	28	OW-2-11S	76.5'	15	23	OW-2-12	94'	32	21
OW-2-5	95.3'	30	30	OW-2-13S	75'	30	20	OW-2-13D	97'	50	28
OW-2-6	95.7'	30	31	OW-2-15S	75'	OFF	OFF	OW-2-14	96.4'	40	29
OW-2-7	96'	30	30	OW-2-16S	75.5'	OFF	OFF	OW-2-15D	94.6'	OFF	OFF
OW-2-8	96.3'	25	30	OW-2-18S	74.5'	15	20	OW-2-16D	94.1'	OFF	OFF
OW-2-9D	96.7'	20	30	OW-2-20S	79'	20	24	OW-2-17	95'	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.

OXYGEN INJECTION OPERATION MAINTENANCE LOG SHEET

SYSTEM #2

Hempstead Intersection Street
Former MGP Site
Nassau County, New York

Date: 12/8/2011

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'	25	27
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	28	28
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	40	31
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	40	36
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	30	28

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'	30	20	OW-2-45	61.1'	30	21	MP-2-1	26.97	10.07	0
OW-2-38	62.1'	30	20	OW-2-46	61'	27	20	MP-2-2	28.09	25.85	0
OW-2-39	60'	30	19	OW-2-47	60.5'	30	20	MP-2-3S	28.27	10.90	0.1
OW-2-40	61.7'	20	20					MP-2-3D	28.35	15.25	0.5
OW-2-41	61.7'	30	20					MP-2-4	16.87	9.31	0
OW-2-42	61.6'	40	20					MP-2-5	15.06	10.45	0
OW-2-43	61.4'	30	21								
OW-2-44R	60.6'	30	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: 12/8/2011

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 cleaned 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:

Removed oil from seperator unit in shed and changed the fresh air filters on the compressor. Wiped down all equipment and cleaned up all garbage, weeds & leaves from around fence areas.

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:	11/23/2011
Time:	1239
Weather:	Rain
Outdoor Temperature:	~61° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	8,017	
Feed Air Pressure *	80	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	125	(psi)
Oxygen Purity	96.7	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	95	(psi)
(readings below are made from control panel)		
Delivery Air	100	(psi)
Element Outlet Temperature	169	(^oF)
Running Hours	8,112	(hours)
Loading Hours	8,043	(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'	40	31	OW-2-9S	75'	18	21	OW-2-10D	97.2'	50	28
OW-2-3	94.3'	40	32	OW-2-10S	75'	20	29	OW-2-11D	100.8'	28	33
OW-2-4	94.7'	30	32	OW-2-11S	76.5'	18	22	OW-2-12	94'	25	23
OW-2-5	95.3'	20	31	OW-2-13S	75'	15	20	OW-2-13D	97'	40	29
OW-2-6	95.7'	25	31	OW-2-15S	75'	30	21	OW-2-14	96.4'	30	30
OW-2-7	96'	30	30	OW-2-16S	75.5'	30	20	OW-2-15D	94.6'	40	29
OW-2-8	96.3'	20	30	OW-2-18S	74.5'	15	20	OW-2-16D	94.1'	50	28
OW-2-9D	96.7'	25	30	OW-2-20S	79'	20	23	OW-2-17	95'	25	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: 11/23/2011

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'	35	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'	15	29
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	18	29
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	20	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. 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'	28	21	MP-2-1	26.87	8.05	0
OW-2-38	62.1'	28	21	OW-2-46	61'	30	19	MP-2-2	28.00	11.78	0
OW-2-39	60'	30	19	OW-2-47	60.5'	25	19	MP-2-3S	28.07	0.84	0
OW-2-40	61.7'	40	21					MP-2-3D	28.25	12.58	0
OW-2-41	61.7'	20	20					MP-2-4	16.81	14.86	0
OW-2-42	61.6'	30	20					MP-2-5	14.99	10.89	0
OW-2-43	61.4'	30	21								
OW-2-44R	60.6'	25	19								

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: 11/23/2011

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 cleaned 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 float control in auto water bowl as unit was not shutting off. Adjusted belt on air compressor. Repaired leak at one flow meter in manifolds. Wiped down all equipment and cleaned up all garbage, weeds & leaves from around fence areas.

Found high pressure at MP-2-4.

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:	11/9/2011
Time:	1218
Weather:	Sunny
Outdoor Temperature:	~68° F
Inside Trailer Temperature:	~72° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	7,749	
Feed Air Pressure *	110	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	115	(psi)
Oxygen Purity	96.6	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	120	(psi)
(readings below are made from control panel)		
Delivery Air	115	(psi)
Element Outlet Temperature	169	(^oF)
Running Hours	7,839	(hours)
Loading Hours	7,774	(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'	25	33	OW-2-9S	75'	20	22	OW-2-10D	97.2'	28	28
OW-2-3	94.3'	50	27	OW-2-10S	75'	22	30	OW-2-11D	100.8'	28	33
OW-2-4	94.7'	28	31	OW-2-11S	76.5'	18	23	OW-2-12	94'	20	23
OW-2-5	95.3'	20	30	OW-2-13S	75'	25	22	OW-2-13D	97'	35	34
OW-2-6	95.7'	24	31	OW-2-15S	75'	22	21	OW-2-14	96.4'	30	27
OW-2-7	96'	24	30	OW-2-16S	75.5'	18	20	OW-2-15D	94.6'	50	31
OW-2-8	96.3'	20	30	OW-2-18S	74.5'	20	20	OW-2-16D	94.1'	50	36
OW-2-9D	96.7'	25	30	OW-2-20S	79'	20	22	OW-2-17	95'	25	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: 11/9/2011

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'	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'	25	29
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	20	27
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	40	38
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	30	27
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'	22	20	OW-2-45	61.1'	30	21	MP-2-1	26.88	5.98	0
OW-2-38	62.1'	18	20	OW-2-46	61'	25	20	MP-2-2	28.00	10.71	0
OW-2-39	60'	20	19	OW-2-47	60.5'	25	20	MP-2-3S	28.12	9.01	0
OW-2-40	61.7'	20	20					MP-2-3D	28.28	11.20	0
OW-2-41	61.7'	30	19					MP-2-4	16.83	7.09	0
OW-2-42	61.6'	30	20					MP-2-5	15.05	9.32	0
OW-2-43	61.4'	25	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: 11/9/2011

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 cleaned Yes No X
8) Terminal strips checked Yes No X

AS-80 O_2 Generator

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

GENERAL SYSTEM NOTES

Trailer

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

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

Repaired air leaks at two flow meters in manifolds. Shut down AC unit and turned on heat at a low setting. Wiped down all equipment and cleaned up all garbage, weeds & leaves from around fence areas.

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:	10/26/2011
Time:	1223
Weather:	Rain
Outdoor Temperature:	~64° F
Inside Trailer Temperature:	~70° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	7,473	
Feed Air Pressure *	75	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	125	(psi)
Oxygen Purity	97.5	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	80	(psi)
(readings below are made from control panel)		
Delivery Air	90	(psi)
Element Outlet Temperature	171	(^oF)
Running Hours	7,560	(hours)
Loading Hours	7,496	(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'	28	27	OW-2-9S	75'	29	22	OW-2-10D	97.2'	17	28
OW-2-3	94.3'	38	27	OW-2-10S	75'	24	27	OW-2-11D	100.8'	28	33
OW-2-4	94.7'	32	32	OW-2-11S	76.5'	20	23	OW-2-12	94'	29	22
OW-2-5	95.3'	25	30	OW-2-13S	75'	20	20	OW-2-13D	97'	48	27
OW-2-6	95.7'	28	31	OW-2-15S	75'	20	17	OW-2-14	96.4'	35	28
OW-2-7	96'	28	29	OW-2-16S	75.5'	18	20	OW-2-15D	94.6'	40	27
OW-2-8	96.3'	25	30	OW-2-18S	74.5'	18	20	OW-2-16D	94.1'	60	30
OW-2-9D	96.7'	28	30	OW-2-20S	79'	15	23	OW-2-17	95'	20	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: 10/26/2011

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'	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'	25	28
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	25	27
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	40	34
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	30	32
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	29	35

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'	28	21	MP-2-1	26.98	7.78	0.5
OW-2-38	62.1'	20	18	OW-2-46	61'	27	20	MP-2-2	28.07	9.89	0
OW-2-39	60'	25	18	OW-2-47	60.5'	25	20	MP-2-3S	28.19	11.79	1.2
OW-2-40	61.7'	20	20					MP-2-3D	28.39	26.31	0
OW-2-41	61.7'	25	20					MP-2-4	16.94	7.79	0
OW-2-42	61.6'	33	20					MP-2-5	15.14	12.02	0
OW-2-43	61.4'	22	20								
OW-2-44R	60.6'	25	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: 10/26/2011

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) X Normal (green) High (orange)
3) Oil added Yes X No
4) Oil changed Yes X No
5) Oil filter changed Yes X No
6) Air filter Changed Yes X No
7) Oil separator cleaned Yes X No
8) Terminal strips checked Yes X No

AS-80 O_2 Generator

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

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:

Performed 12-month O&M on 10-26-11 and between 10-31-11 and 11-1-11.

Repaired air leaks at three flow meters in manifolds. Adjusted fan blade in air dryer unit. Took apart auto drains and cleaned out silt buildup and blew out drain lines. Changed out all filters, screens and belts on all units. Greased booster pump shaft. Repaired leaking cooling oil site glass in compressor. Wiped down all equipment, washed floor of shed and cleaned up all garbage, weeds, leaves & tree branches from around fence areas.

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:	10/13/2011
Time:	1147
Weather:	Rain
Outdoor Temperature:	~71° F
Inside Trailer Temperature:	~70° F
Performed By:	Mike Ryan

O_2 Generator (AirSep)

Hours	7,187	
Feed Air Pressure *	75	(psi)
Cycle Pressure *	60	(psi)
Oxygen Receiver Pressure *	90	(psi)
Oxygen Purity	94.9	(percent)

* maximum reading during loading cycle

Compressor (Kaesar Rotary Screw)

Compressor Tank *	71	(psi)
(readings below are made from control panel)		
Delivery Air	79	(psi)
Element Outlet Temperature	169	(^oF)
Running Hours	7,271	(hours)
Loading Hours	7,209	(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'	20	33	OW-2-9S	75'	30	21	OW-2-10D	97.2'	31	28
OW-2-3	94.3'	26	30	OW-2-10S	75'	25	30	OW-2-11D	100.8'	30	32
OW-2-4	94.7'	27	35	OW-2-11S	76.5'	20	21	OW-2-12	94'	28	20
OW-2-5	95.3'	30	31	OW-2-13S	75'	21	18	OW-2-13D	97'	42	28
OW-2-6	95.7'	27	30	OW-2-15S	75'	30	20	OW-2-14	96.4'	35	28
OW-2-7	96'	27	30	OW-2-16S	75.5'	20	20	OW-2-15D	94.6'	40	31
OW-2-8	96.3'	26	30	OW-2-18S	74.5'	20	20	OW-2-16D	94.1'	50	37
OW-2-9D	96.7'	25	30	OW-2-20S	79'	18	22	OW-2-17	95'	30	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: 10/13/2011

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'	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'	28	28
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	28	27
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	39	26
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	35	30
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	30	36

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'	28	21	MP-2-1	26.79	14.13	31.1
OW-2-38	62.1'	20	19	OW-2-46	61'	28	20	MP-2-2	27.92	16.35	3.2
OW-2-39	60'	33	19	OW-2-47	60.5'	25	21	MP-2-3S	28.01	7.1	35.9
OW-2-40	61.7'	20	20					MP-2-3D	28.24	9.18	15.8
OW-2-41	61.7'	25	20					MP-2-4	16.79	23.21	0
OW-2-42	61.6'	30	20					MP-2-5	15.01	30.08	2.1
OW-2-43	61.4'	20	20								
OW-2-44R	60.6'	35	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: 10/13/2011

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) 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:

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

Added a small amount of oil to units. Adjusted belts and pressure switches as needed. Repaired air leak in line to auto drain.

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

Action Items: