

**Groundwater Sampling and  
NAPL Monitoring/Recovery Report  
for the Third Quarter of 2010  
(July - September 2010)  
for the Hempstead Intersection Street  
Former Manufactured Gas Plant Site  
Villages of Hempstead & Garden City  
Nassau County, New York**



**Prepared for:**

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

**Prepared by:**

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**77 Goodell Street**  
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**GROUNDWATER SAMPLING AND NAPL MONITORING/RECOVERY  
REPORT FOR THE THIRD QUARTER OF 2010 (JULY – SEPTEMBER)**

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

*Prepared for:*

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## TABLE OF CONTENTS

Page No.  

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EXECUTIVE SUMMARY .....	1
1.0 INTRODUCTION .....	1-1
2.0 FIELD ACTIVITIES .....	2-1
2.1 Groundwater Depth and NAPL Thickness Measurements .....	2-1
2.2 NAPL Recovery .....	2-1
2.3 Ground Water Sampling .....	2-1
2.4 Soil Vapor Sampling .....	2-2
3.0 RESULTS .....	3-1
3.1 Dissolved-Phase Plume .....	3-1
3.2 Potentiometric Heads and NAPL Thickness .....	3-1
3.3 Groundwater Analytical Results .....	3-1
3.4 NAPL Recovery Volumes .....	3-2
3.5 Soil Vapor Analytical Results .....	3-2
4.0 SUMMARY .....	4-1

## TABLES (Following Text)

- Table 1 Summary of Field Activities for the Third Quarter 2010

Table 2 Groundwater and NAPL Measurements for the Third Quarter 2010

Table 3 NAPL Recovery, Third Quarter 2010

Table 4 Dissolved-Phase Concentrations of Total BTEX and Total PAH Compounds for the Third Quarter 2010

## **FIGURES** (Following Tables)

- |           |  |
|-----------|--|
| Figure 1  | Location Map   |
| Figure 2  | Site Map   |
| Figure 3  | Extent of Dissolved-Phase Plume and Groundwater Analytical Results                           |
| Figure 4  | Potentiometric Surface Map for Shallow Groundwater, July 19-22, 2010                         |
| Figure 5  | Potentiometric Surface Map for Intermediate Groundwater, July 19-22, 2010                    |
| Figure 6  | Potentiometric Surface Map for Deep Groundwater, July 19-22, 2010                            |
| Figure 7  | Total Dissolved-Phase BTEX/PAH Concentrations and Free Product Thickness, Third Quarter 2010 |
| Figure 8A | Well HIMW-01S NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8B | Well HIMW-01I NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8C | Well HIMW-06S NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8D | Well HIMW-06I NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8E | Well HIMW-07S NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8F | Well HIMW-11S NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8G | Well HIMW-11I NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8H | Well HIMW-16S NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8I | Well HIMW-16I NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8J | Well HIMW-17S NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8K | Well HIMW-18S NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8L | Well HIMW-18I NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8M | Well HIMW-19S NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8N | Well HIMW-19I NAPL Thickness and Cumulative Recovery Plot                                    |
| Figure 8O | Well HIMW-21 NAPL Thickness and Cumulative Recovery Plot                                     |
| Figure 8P | Well PZ-08 NAPL Thickness and Cumulative Recovery Plot                                       |
| Figure 8Q | Well IPR-02 NAPL Thickness and Cumulative Recovery Plot                                      |
| Figure 8R | Well IPR-05 NAPL Thickness and Cumulative Recovery Plot                                      |
| Figure 8S | Well IPR-06 NAPL Thickness and Cumulative Recovery Plot                                      |
| Figure 8T | Well IPR-09 NAPL Thickness and Cumulative Recovery Plot                                      |
| Figure 8U | Well IPR-12A NAPL Thickness and Cumulative Recovery Plot                                     |
| Figure 8V | Well IPR-15 NAPL Thickness and Cumulative Recovery Plot                                      |
| Figure 8W | Well IPR-16 NAPL Thickness and Cumulative Recovery Plot                                      |

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# **GROUNDWATER SAMPLING AND NAPL MONITORING/RECOVERY REPORT THIRD QUARTER 2010**

## **HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**

- Figure 8X Well IPR-17 NAPL Thickness and Cumulative Recovery Plot
  - Figure 8Y Well IPR-18 NAPL Thickness and Cumulative Recovery Plot
  - Figure 8Z Well IPR-20 NAPL Thickness and Cumulative Recovery Plot
  - Figure 8AA Well IPR-21 NAPL Thickness and Cumulative Recovery Plot
  - Figure 8AB Well IPR-22 NAPL Thickness and Cumulative Recovery Plot
  - Figure 8AC Well IPR-24 NAPL Thickness and Cumulative Recovery Plot
  - Figure 8AD Well IPR-25 NAPL Thickness and Cumulative Recovery Plot
  - Figure 8AE Well IPR-26 NAPL Thickness and Cumulative Recovery Plot
  - Figure 8AF Well IPR-27 NAPL Thickness and Cumulative Recovery Plot
  - Figure 8AG Well IPR-29 NAPL Thickness and Cumulative Recovery Plot
  - Figure 8AH Well IPR-30 NAPL Thickness and Cumulative Recovery Plot

## **APPENDICES**

- ## Appendix A Data Usability Summary Report

## Appendix B Soil Vapor Sampling Data (GEI Consultants)

**URS CORPORATION**

## **EXECUTIVE SUMMARY**

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

Groundwater monitoring and sampling was conducted on July 19 to 29, 2010. This included measuring the depth to groundwater and NAPL thickness in 82 wells. Groundwater samples were collected from 16 wells and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs).

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

- The general direction of groundwater flow in shallow, intermediate, and deep water-bearing zones was south at an average gradient of approximately 0.002 ft/ft.
  - The dissolved-phase plume extended approximately 3,600 feet south of the site boundary.
  - DNAPL was detected in 30 wells during the third quarter of 2010. The wells were located on site or within the parking lot immediately south of the site.
  - The volume of NAPL recovered from the site wells ranged from approximately 5 to 16 gallons per event. Approximately 80 gallons of NAPL were recovered during the third quarter of 2010. Approximately 622 gallons of NAPL have been recovered since April 2007.
  - Based on a comparison between the third quarter 2010 data and the previous data the concentrations of dissolved phase total BTEX and total PAHs remained stable in the site monitoring wells.

## 1.0 INTRODUCTION

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

URS Corporation (URS) performed the following activities during the third quarter of 2010:

- Measured the depth to groundwater and NAPL thickness in accessible monitoring wells (July 19 to 22, 2010).
  - Collected groundwater samples from 16 monitoring wells for laboratory analysis (July 22 to 29, 2010).
  - Recovered NAPL from monitoring wells and piezometers (July 7, July 22, August 2, August 19, September 2, September 17, and September 29, 2010).

Quarterly groundwater monitoring and bimonthly recovery of NAPL was initiated in April 2007. Separate reports have been issued for quarterly activities performed in 2007, 2008, 2009 and 2010, and annual reports were issued that encompassed the last three quarters of 2007 and all four quarters of 2008 and 2009.

## **2.0 FIELD ACTIVITIES**

The field activities performed by URS are summarized below.

- Measurement of the depth to groundwater and NAPL thickness in 82 monitoring wells.
  - Collection of groundwater samples from 16 monitoring wells.
  - Recovery of NAPL from accessible monitoring wells that contained measurable NAPL.

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

## 2.1 Groundwater Depth and NAPL Thickness Measurements

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

## **2.2 NAPL Recovery**

NAPL was recovered from 28 wells during 7 events from July to September 2010 (Table 3). All measured NAPL consisted of dense non-aqueous phase liquid (DNAPL) located at the bottom of the wells. The DNAPL was recovered using a Waterra inertial lift pump. The quantity of the recovered NAPL was estimated based on the volume contained inside the well prior to pumping.

## **2.3      Ground Water Sampling**

Low-flow groundwater sampling methods were used, which consisted of purging groundwater at a rate of between 100 and 250 milliliters per minute. The water was pumped through a flow-through cell and monitored for pH, conductivity, turbidity, dissolved oxygen (DO), 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 (USEPA Method 8260B) and PAHs (USEPA Method 8270C) (Table 4).

## **2.4      Soil Vapor Sampling**

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

### **3.0 RESULTS**

#### **3.1 Dissolved-Phase Plume**

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

In July 2010, the concentrations of total BTEX or total PAHs in the furthest downgradient well pair (HIMW-015I/D) ranged from “not detected” (deep well, HIMW-15D) to 29 µg/L (intermediate well, HIMW-15I). The concentrations of total BTEX or total PAHs varied from “not detected” to 2,949 µg/L for wells located between the site and the HIMW-015 cluster.

#### **3.2 Potentiometric Heads and NAPL Thickness**

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

DNAPL was detected in 30 wells during the third quarter 2010 (Table 3). Figure 7 illustrates the thickness of DNAPL that was measured on July 21 to 22, 2010. Figures 8A – 8AH provide cumulative NAPL recovery and NAPL thickness plots for the period December 2003 to September 2010. All of the wells where DNAPL was identified are either on the site or within a parking lot that is immediately south of the site.

#### **3.3 Groundwater Analytical Results**

Groundwater analytical results are summarized in Table 4 and illustrated on Figure 7.

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 80 gallons of NAPL were recovered from 28 wells (Table 3). The volume of NAPL recovered varied from approximately 5 to 16 gallons per event. Approximately 622 gallons of NAPL have been recovered since April 2007.

### **3.5 Soil Vapor Analytical Results**

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

## **4.0 SUMMARY**

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

- The general direction of groundwater flow in the shallow, intermediate, and deep water-bearing zones was south at an average gradient of 0.002 ft/ft.
  - The dissolved-phase plume extended approximately 3,600 feet south of the site boundary.
  - DNAPL was detected in 30 wells during the third quarter of 2010. The wells were located on site or within the parking lot immediately south of the site.
  - The volume of NAPL recovered from the site wells varied from approximately 5 to 16 gallons per event. Approximately 80 gallons of NAPL were recovered during the third quarter of 2010. Approximately 622 gallons of NAPL have been recovered since April 2007.
  - Based on a comparison between the third quarter 2010 data and the previous data the concentrations of total BTEX and total PAHs remained stable in the site monitoring wells.
  - Analytical results for soil vapor sampling conducted in the second quarter of 2010 are presented in Appendix B.

## **GROUNDWATER SAMPLING AND NAPL MONITORING/RECOVERY REPORT THIRD QUARTER 2010**

## **HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**

## TABLES

**Table 1**  
**Hempstead Intersection Street Former MGP Site**  
**Summary of Field Activities for the Third Quarter 2010**

Well ID	Monitoring & Sampling (July 19-29, 2010)			NAPL Monitoring and Recovery						
	Groundwater Level	NAPL Thickness	Water Quality	Sept. 29, 2010	Sept. 17, 2010	Sept. 2, 2010	August 19, 2010	August 2, 2010	July 22, 2010	July 7, 2010
HIMW-001S	X	X		X	X		X		X	
HIMW-001I	X	X		X	X	X	X	X	X	X
HIMW-001D										
HIMW-002S	X									
HIMW-002I	X									
HIMW-002D	X									
HIMW-003S	X									
HIMW-003I	X									
HIMW-003D	X									
HIMW-004S										
HIMW-004I	X									
HIMW-004D	X									
HIMW-005S	X		X							
HIMW-005I	X		X							
HIMW-005D	X		X							
HIMW-006S	X	X		X	X	X	X	X	X	X
HIMW-006I	X	X		X	X		X			X
HIMW-006D	X	X								X
HIMW-007S	X	X		X	X	X	X	X	X	X
HIMW-007I	X	X			X		X			X
HIMW-007D	X	X			X		X			X
HIMW-008S	X		X							
HIMW-008I	X		X							
HIMW-008D	X		X							
HIMW-009S	X									
HIMW-009I	X									
HIMW-009D	X									
HIMW-010S	X									
HIMW-010I	X									
HIMW-010D	X									
HIMW-011S	X	X			X		X		X	
HIMW-011I	X	X			X					X
HIMW-011D							X			
HIMW-012S	X		X							
HIMW-012I	X		X							
HIMW-012D	X		X							
HIMW-013S										
HIMW-013I	X		X							
HIMW-013D	X		X							
HIMW-014I	X		X							
HIMW-014D										
HIMW-015I	X		X							
HIMW-015D	X		X							
HIMW-016S	X	X		X	X		X		X	X
HIMW-016I	X	X		X	X		X		X	X
HIMW-017S	X	X			X	X	X		X	X

**Table 1**  
**Hempstead Intersection Street Former MGP Site**  
**Summary of Field Activities for the Third Quarter 2010**

Well ID	Monitoring & Sampling (July 19-29, 2010)			NAPL Monitoring and Recovery						
	Groundwater Level	NAPL Thickness	Water Quality	Sept. 29, 2010	Sept. 17, 2010	Sept. 2, 2010	August 19, 2010	August 2, 2010	July 22, 2010	July 7, 2010
HIMW-018S	X	X		X	X		X	X	X	
HIMW-018I	X	X			X		X		X	
HIMW-019S	X	X			X		X		X	
HIMW-019I	X	X			X		X		X	
HIMW-020S	X		X							
HIMW-020I	X		X							
HIMW-21	X	X		X	X		X		X	
PZ-02										
PZ-03										
PZ-08	X	X		X	X	X	X	X	X	X
IPR-01	X	X			X		X		X	
IPR-02	X	X		X	X	X	X		X	X
IPR-03	X	X			X		X		X	
IPR-04	X	X			X		X		X	
IPR-05	X	X					X		X	
IPR-06	X	X		X	X	X	X	X	X	X
IPR-07	X	X			X		X		X	
IPR-08	X	X			X		X		X	
IPR-09	X	X			X		X		X	
IPR-10	X	X			X		X		X	
IPR-11	X	X			X		X		X	
IPR-12A	X	X			X		X		X	
IPR-12B	X	X			X		X		X	
IPR-13	X	X			X		X		X	
IPR-14	X	X			X		X		X	
IPR-15	X	X			X		X		X	
IPR-16	X	X		X	X		X		X	
IPR-17	X	X			X		X		X	
IPR-18	X	X			X		X		X	
IPR-19S										
IPR-19D	X	X			X		X		X	
IPR-20	X	X		X	X		X		X	
IPR-21	X	X		X	X		X		X	X
IPR-22	X	X			X	X	X	X	X	X
IPR-23	X	X			X		X		X	
IPR-24	X	X			X		X		X	
IPR-25				X						X
IPR-26	X	X			X	X	X	X	X	X
IPR-27	X	X		X	X	X	X	X	X	X
IPR-28	X	X			X		X		X	
IPR-29	X	X			X	X	X		X	X
IPR-30	X	X			X		X		X	
OSMW-01	X	X			X		X		X	
OSMW-02	X	X			X		X		X	
OSMW-03	X	X			X		X		X	

**Notes:**

- 1 Field marked with "X" indicates that the activity was performed.
- 2 Blank field indicates that the activity was not performed.

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

Well ID	Date	Elevation of TOR	Depth to LNAPL	Depth to Water	Depth to DNAPL	Well Depth	Thickness of LNAPL	Thickness of DNAPL <sup>(2)</sup>	Corrected Potentiometric Head <sup>(1)</sup>
		[ft amsl]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft amsl]
HIMW-01S	7/21/2010	71.61	ND	23.71	40.81	40.86	0	0.05	47.90
HIMW-01I	7/21/2010	71.68	ND	23.86	85.75	85.85	0	0.10	47.82
HIMW-01D	NM	71.95	ND	NM	ND	129.08	0	ND	NM
HIMW-02S	7/20/2010	73.82	ND	25.70	ND	42.35	0	ND	48.12
HIMW-02I	7/20/2010	78.87	ND	25.82	ND	92.90	0	ND	53.05
HIMW-02D	7/20/2010	74.13	ND	25.99	ND	118.98	0	ND	48.14
HIMW-03S	7/20/2010	65.00	ND	17.22	ND	34.80	0	ND	47.78
HIMW-03I	7/20/2010	64.94	ND	17.57	ND	87.10	0	ND	47.37
HIMW-03D	7/20/2010	65.26	ND	18.35	ND	145.50	0	ND	46.91
HIMW-04S	NM	72.74	ND	NM	ND	41.70	0	ND	NM
HIMW-04I	7/20/2010	72.78	ND	25.83	ND	90.60	0	ND	46.95
HIMW-04D	7/20/2010	72.65	ND	26.72	ND	180.50	0	ND	45.93
HIMW-05S	7/19/2010	67.19	ND	19.91	ND	39.10	0	ND	47.28
HIMW-05I	7/19/2010	67.22	ND	20.23	ND	92.30	0	ND	46.99
HIMW-05D	7/19/2010	67.22	ND	21.23	ND	139.00	0	ND	45.99
HIMW-06S	7/21/2010	68.25	ND	20.72	32.60	36.90	0	4.30	47.53
HIMW-06I	7/21/2010	67.88	ND	20.52	82.17	82.18	0	sheen	47.36
HIMW-06D	7/21/2010	67.77	ND	20.43	ND	119.95	0	0.00	47.34
HIMW-07S	7/21/2010	70.47	ND	22.90	40.04	40.74	0	0.70	47.57
HIMW-07I	7/21/2010	70.10	ND	22.91	ND	90.58	0	0.00	47.19
HIMW-07D	7/21/2010	70.40	ND	22.85	ND	117.65	0	0.00	47.55
HIMW-08S	7/19/2010	65.04	ND	18.11	ND	37.05	0	ND	46.93
HIMW-08I	7/19/2010	65.14	ND	18.33	ND	75.10	0	ND	46.81
HIMW-08D	7/19/2010	64.93	ND	18.14	ND	114.75	0	ND	46.79
HIMW-09S	7/20/2010	70.03	ND	22.69	ND	39.61	0	ND	47.34
HIMW-09I	7/20/2010	69.93	ND	22.64	ND	80.50	0	ND	47.29
HIMW-09D	7/20/2010	69.96	ND	22.77	ND	NM	0	ND	47.19
HIMW-10S	7/20/2010	71.60	ND	23.84	ND	40.27	0	ND	47.76
HIMW-10I	7/20/2010	71.47	ND	23.74	ND	91.83	0	ND	47.73
HIMW-10D	7/20/2010	71.44	ND	23.72	ND	136.02	0	ND	47.72
HIMW-11S	7/20/2010	71.62	ND	23.71	ND	41.55	0	0.00	47.91
HIMW-11I	7/20/2010	71.43	ND	23.52	ND	94.54	0	0.00	47.91
HIMW-11D	NM	71.39	ND	NM	ND	123.61	0	ND	NM
HIMW-12S	7/19/2010	61.58	ND	15.91	ND	33.47	0	ND	45.67
HIMW-12I	7/19/2010	61.59	ND	15.78	ND	75.00	0	ND	45.81
HIMW-12D	7/19/2010	61.82	ND	19.26	ND	128.45	0	ND	42.56
HIMW-13S	NM	72.83	ND	NM	ND	49.20	0	ND	NM
HIMW-13I	7/19/2010	72.60	ND	28.83	ND	82.55	0	ND	43.77
HIMW-13D	7/19/2010	72.53	ND	28.85	ND	122.50	0	ND	43.68
HIMW-14I	7/19/2010	71.71	ND	27.94	ND	96.90	0	ND	43.77
HIMW-14D	NM	71.59	ND	NM	ND	152.00	0	ND	NM
HIMW-15I	7/19/2010	64.18	ND	23.96	ND	93.10	0	ND	40.22
HIMW-15D	7/19/2010	63.96	ND	27.17	ND	155.00	0	ND	36.79
HIMW-16S	7/22/2010	67.45	ND	20.02	31.01	34.41	0	3.40	47.43
HIMW-16I	7/22/2010	67.50	ND	20.25	78.86	82.66	0	3.80	47.25
HIMW-17S	7/21/2010	65.96	ND	18.83	35.50	36.70	0	1.20	47.13
HIMW-18S	7/21/2010	69.76	ND	22.16	42.11	42.12	0	sheen	47.60
HIMW-18I	7/21/2010	69.70	ND	21.96	ND	71.22	0	0.00	47.74
HIMW-19S	7/21/2010	70.95	ND	22.90	ND	39.38	0	0.00	48.05
HIMW-19I	7/21/2010	71.27	ND	23.07	ND	68.92	0	0.00	48.20
HIMW-20S	7/19/2010	70.43	ND	24.03	ND	35.00	0	ND	46.40
HIMW-20I	7/19/2010	70.30	ND	23.91	ND	73.00	0	ND	46.39

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

Well ID	Date	Elevation of TOR	Depth to LNAPL	Depth to Water	Depth to DNAPL	Well Depth	Thickness of LNAPL	Thickness of DNAPL <sup>(2)</sup>	Corrected Potentiometric Head <sup>(1)</sup>
		[ft amsl]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft amsl]
HIMW-21	7/21/2010	NM	ND	18.47	NM	NM	0	0.40	NM
PZ-02	NM	72.96	ND	NM	ND	35.25	0	ND	NM
PZ-03	NM	64.58	ND	NM	ND	29.49	0	ND	NM
PZ-08	7/21/2010	70.51	ND	22.62	34.55	35.50	0	0.95	47.89
IPR-01	7/21/2010	70.30	ND	22.23	ND	41.94	0	0.00	48.07
IPR-02	7/21/2010	68.84	ND	20.88	69.45	70.25	0	0.80	47.96
IPR-03	7/21/2010	69.16	ND	21.28	ND	44.67	0	0.00	47.88
IPR-04	7/21/2010	69.23	ND	21.21	ND	84.35	0	0.00	48.02
IPR-05	7/21/2010	70.39	ND	22.51	50.42	52.12	0	1.70	47.88
IPR-06	7/21/2010	70.79	ND	22.97	54.40	55.40	0	1.00	47.82
IPR-07	7/21/2010	69.73	ND	22.15	ND	38.02	0	0.00	47.58
IPR-08	7/21/2010	70.51	ND	22.87	ND	40.33	0	0.00	47.64
IPR-09	7/21/2010	70.00	ND	22.38	44.94	44.95	0	sheen	47.62
IPR-10	7/21/2010	70.80	ND	23.05	ND	44.75	0	0.00	47.75
IPR-11	7/21/2010	68.29	ND	20.74	ND	44.62	0	0.00	47.55
IPR-12A	7/21/2010	70.14	ND	22.54	38.09	38.10	0	sheen	47.60
IPR-12B	7/21/2010	69.56	ND	21.97	ND	45.18	0	0.00	47.59
IPR-13	7/21/2010	70.77	ND	23.07	ND	44.41	0	0.00	47.70
IPR-14	7/22/2010	66.93	ND	19.45	ND	44.42	0	0.00	47.48
IPR-15	7/22/2010	67.93	ND	20.41	44.35	44.40	0	0.05	47.52
IPR-16	7/22/2010	69.49	ND	21.94	48.85	49.05	0	0.20	47.55
IPR-17	7/22/2010	70.60	ND	22.99	54.10	54.11	0	sheen	47.61
IPR-18	7/22/2010	66.87	ND	19.52	ND	49.95	0	0.00	47.35
IPR-19S	NM	67.68	ND	NM	ND	45.12	0	ND	NM
IPR-19D	7/22/2010	67.96	ND	20.58	89.91	89.92	0	sheen	47.38
IPR-20	7/21/2010	66.70	ND	19.42	45.26	45.40	0	0.14	47.28
IPR-21	7/21/2010	67.67	ND	20.31	44.16	44.96	0	0.80	47.36
IPR-22	7/21/2010	66.33	ND	19.19	44.30	45.40	0	1.10	47.14
IPR-23	7/21/2010	66.67	ND	19.46	ND	45.40	0	0.00	47.21
IPR-24	7/21/2010	65.88	ND	18.91	44.01	44.35	0	0.34	46.97
IPR-25	NM	70.56	ND	NM	ND	44.50	0	ND	NM
IPR-26	7/21/2010	NM	ND	22.21	NM	NM	0	sheen	NM
IPR-27	7/21/2010	NM	ND	22.95	NM	NM	0	0.30	NM
IPR-28	7/21/2010	NM	ND	20.45	NM	NM	0	0.00	NM
IPR-29	7/21/2010	NM	ND	18.74	NM	NM	0	0.90	NM
IPR-30	7/22/2010	NM	ND	19.81	NM	NM	0	0.00	NM
IPR-31	NM	NM	ND	NM	NM	NM	0	ND	NM
OSMW-01	7/20/2010	71.12	ND	23.07	42.15	42.15	0	0.00	48.05
OSMW-02	7/21/2010	71.59	ND	23.81	45.22	45.22	0	0.00	47.78
OSMW-03	7/20/2010	71.39	ND	23.69	44.73	44.73	0	0.00	47.70

Notes:

(1) Potentiometric heads in wells containing LNAPL are corrected

using a specific gravity = 0.96

(2) DNAPL thicknesses measured on 7/21/2010 - 7/22/2010

sheen Sheen = assumed thickness of 0.01 ft

NM not measured

LNAPL light non-aqueous phase liquid

DNAPL dense non-aqueous phase liquid

TOR top of riser

amsl above mean sea level

ND NAPL not detected

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

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

Total volume recovered during the third quarter 2010: **79.51 gal**

Total volume of NAPL recovered since April 2007: **621.7 gal**

Notes:

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

NA - No Access

LNAPL - light non-aqueous phase liquid

DNAPL - dense non-aqueous phase liquid

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

All HIMW (unless noted) and PZ monitoring wells are 2-inch diameter:

Vol = 0.163 gal / ft of well screen.

All IPR monitoring wells (unless noted) and HIMW-21are 6-inch diameter:

Vol = 1.469 gal / ft of well screen.

Monitoring wells IPR-16 and IPR-17 are 5.75-inch diameter:

Vol = 1.349 gal / ft of well screen.

Monitoring well IPR-05 and IPR-12A are 1-inch diameter:

Vol = 0.041 gal / ft of well screen.

**Table 4**  
**Hempstead Intersection Street Former MGP Site**  
**Dissolved-Phase Concentrations of**  
**Total BTEX Compounds and Total PAH Compounds**  
**for the Third Quarter 2010**

Well ID	Third Quarter 2010 (July 22-29, 2010) Concentrations	
	BTEX [ug/L]	PAH [ug/L]
HIMW-001D		
HIMW-001I		
HIMW-001S		
HIMW-002D		
HIMW-002I		
HIMW-002S		
HIMW-003D		
HIMW-003I		
HIMW-003S		
HIMW-004D		
HIMW-004I		
HIMW-004S		
HIMW-005D	359	2,344
HIMW-005I	186	2,949
HIMW-005S	ND	ND
HIMW-006D		
HIMW-006I		
HIMW-006S		
HIMW-007D		
HIMW-007I		
HIMW-007S		
HIMW-008D	ND	ND
HIMW-008I	ND	ND
HIMW-008S	ND	3
HIMW-009D		
HIMW-009I		
HIMW-009S		
HIMW-010D		
HIMW-010I		
HIMW-010S		
HIMW-011D		
HIMW-011I		
HIMW-011S		
HIMW-012D	ND	ND
HIMW-012I	54	125
HIMW-012S	ND	ND
HIMW-013D	4	17
HIMW-013I	313	104
HIMW-013S		
HIMW-014D		
HIMW-014I	41	32
HIMW-015D	ND	ND
HIMW-015I	20	29
HIMW-016I		
HIMW-016S		
HIMW-017S		
HIMW-018I		
HIMW-018S		
HIMW-019I		
HIMW-019S		
HIMW-020I	132	230
HIMW-020S	ND	ND
PZ-02		
PZ-03		
PZ-08		

Notes:

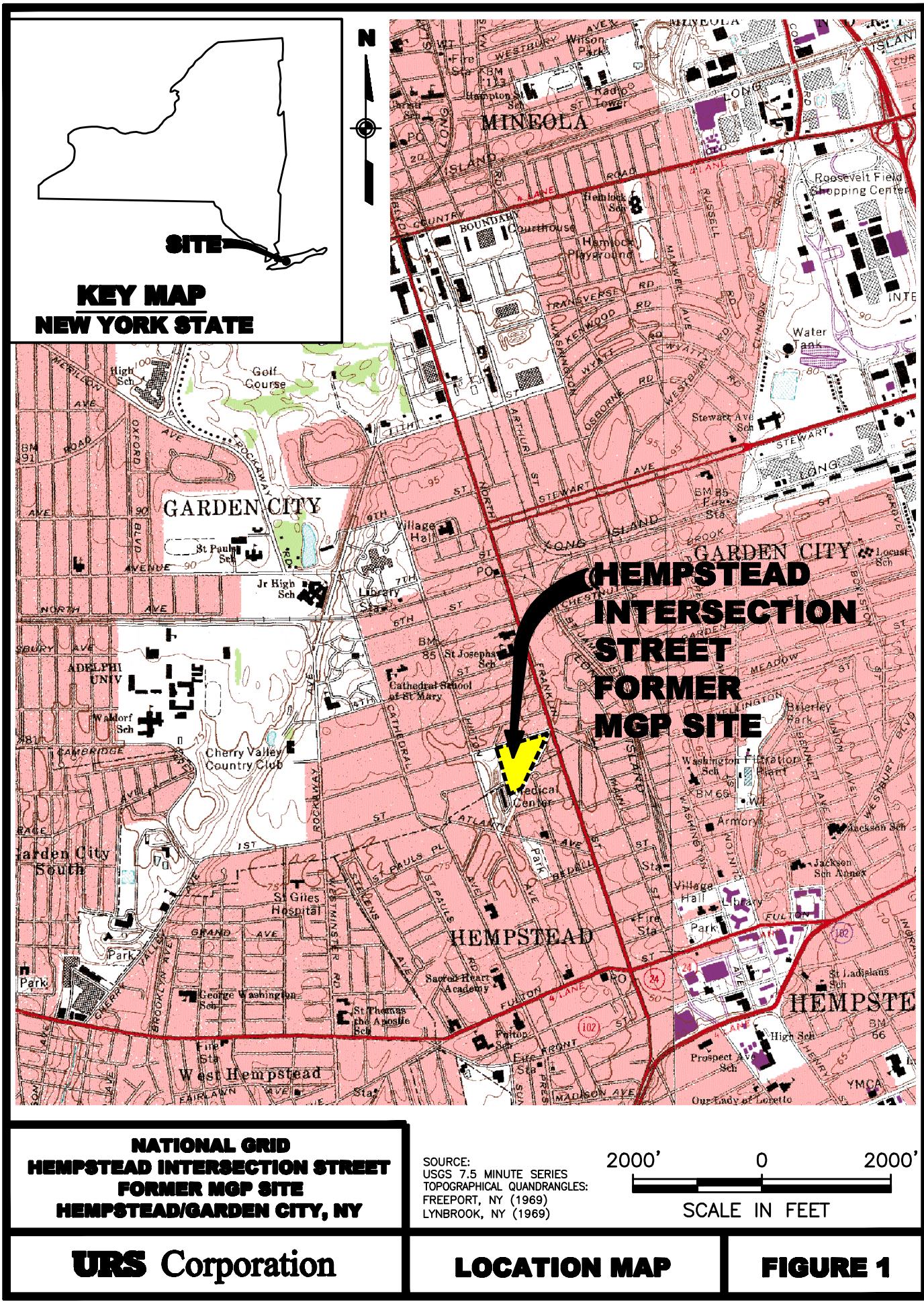
A blank field is "Not Sampled".

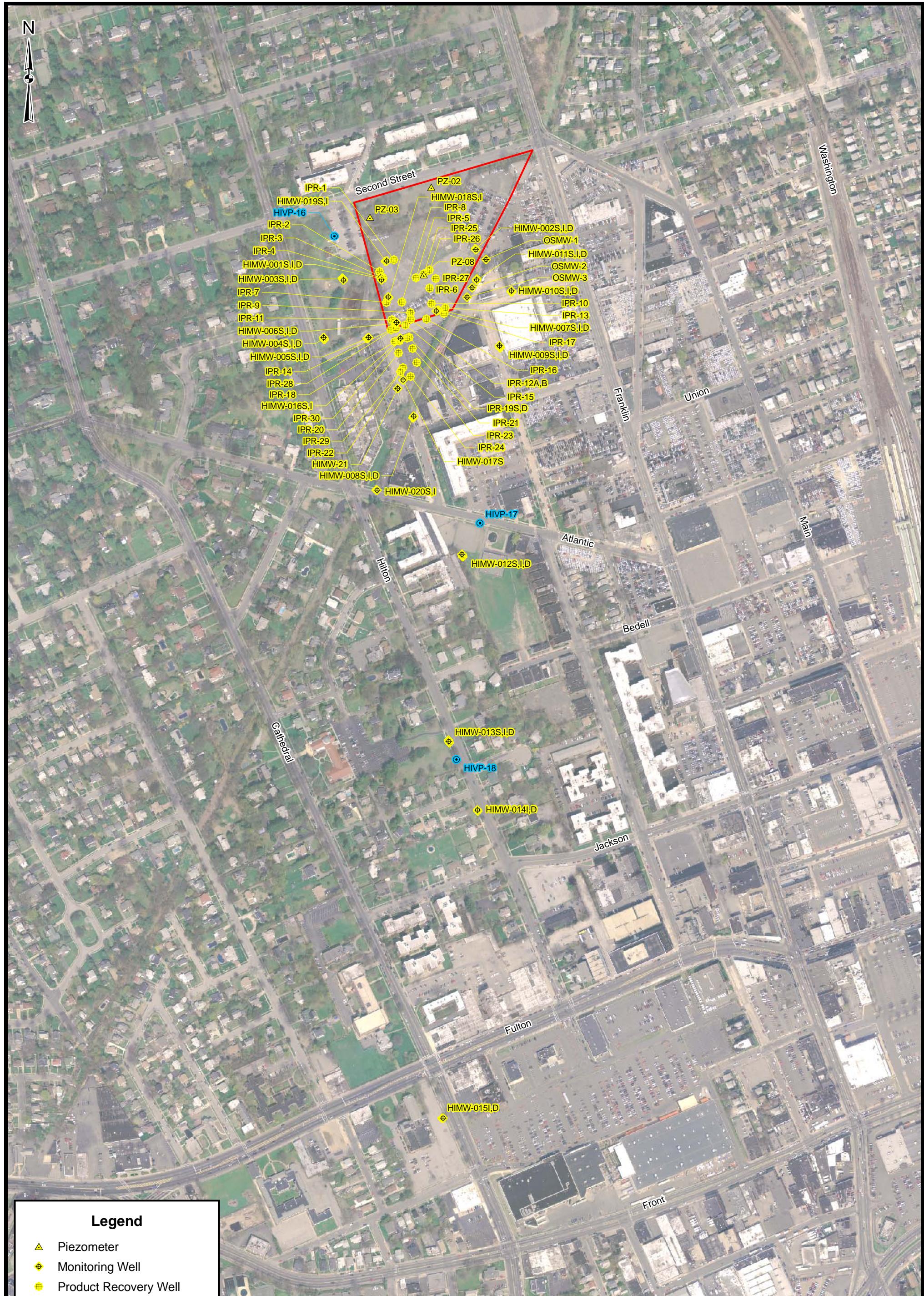
NAPL is periodically identified in this well.

ND Not Detected.

ug/L micrograms per liter

## FIGURES





#### Legend

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

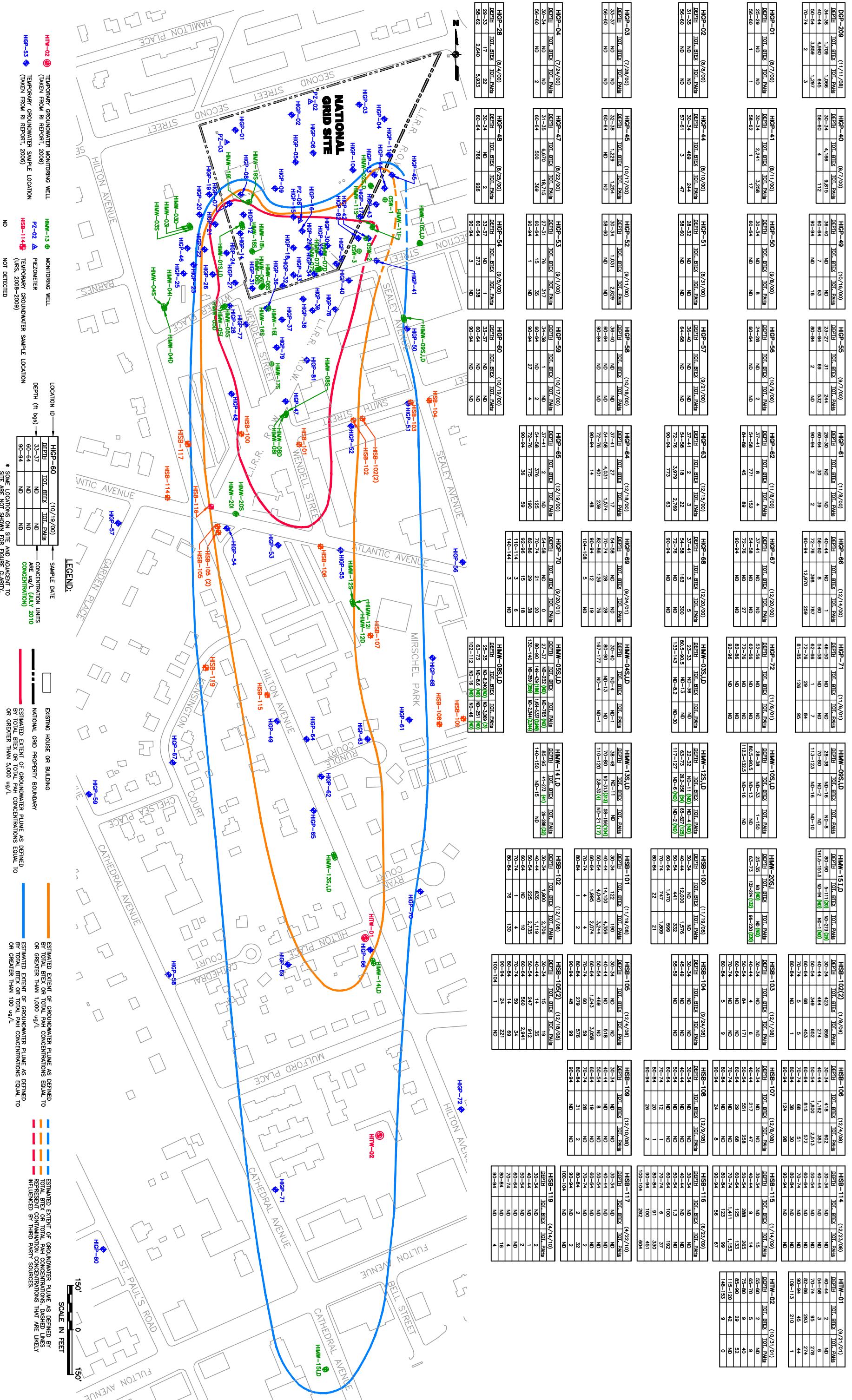
400 0 400 Feet

**URS** Corporation

# NATIONAL GRIB HEMPSTEAD INTERSECTION STREET

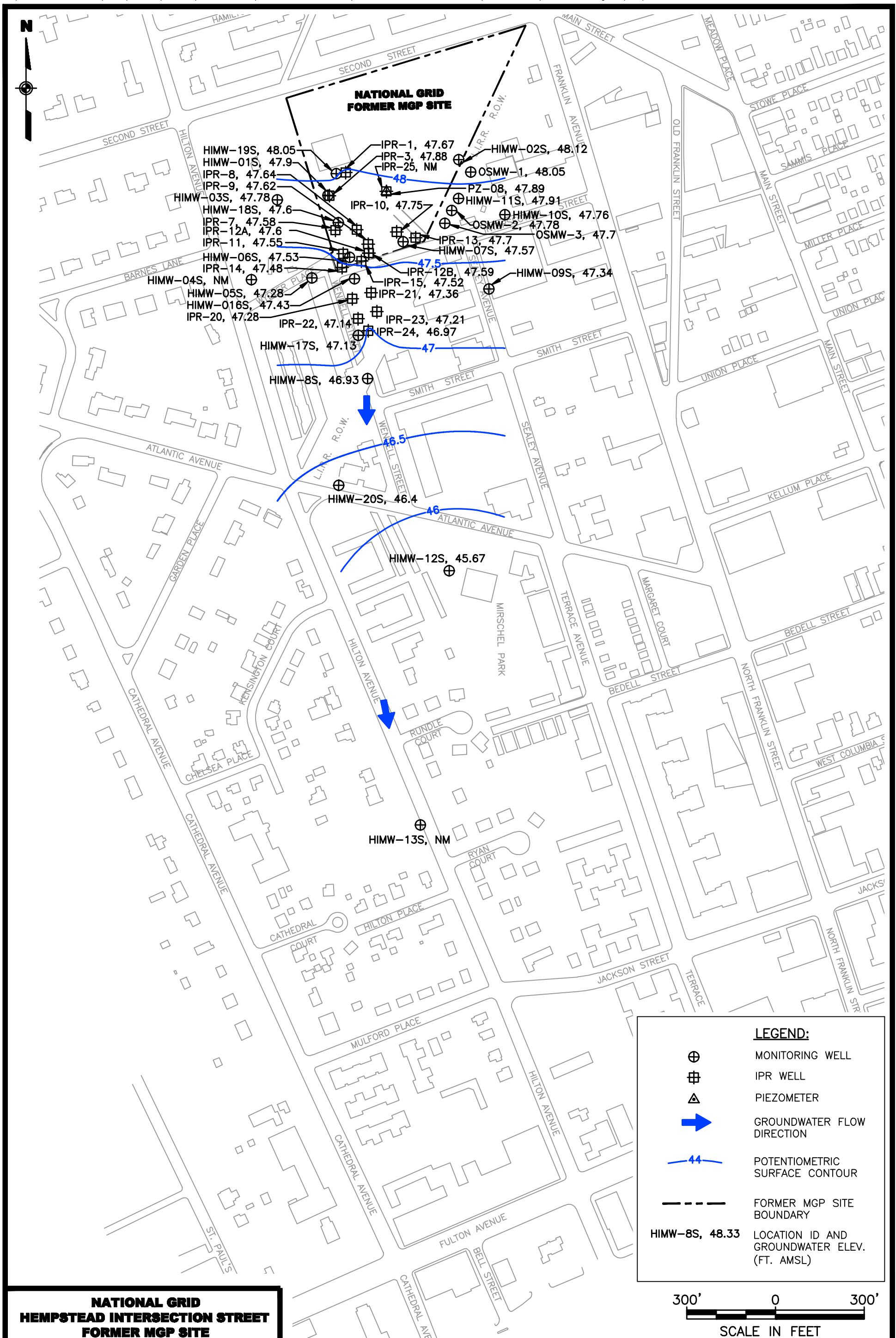
## **FORMER MGP SITE HEMPSTEAD/GARDEN CITY - NY**

<b>HITW-02</b>	TEMPORARY GROUNDWATER MONITORING WELL (TAKEN FROM RI REPORT, 2006)	<b>HMM-13</b>	MONITORING WELL PIEZOMETER
<b>HIGP-53</b>	TEMPORARY GROUNDWATER SAMPLE LOCATION (TAKEN FROM RI REPORT, 2006)	<b>HEB-111</b>	TEMPORARY GROU DWB (URS, 2008-2010)



## **EXTENT OF DISSOLVED-PHASE PLUME AND GROUNDWATER ANALYTICAL RESULTS**

**FIGURE 3**

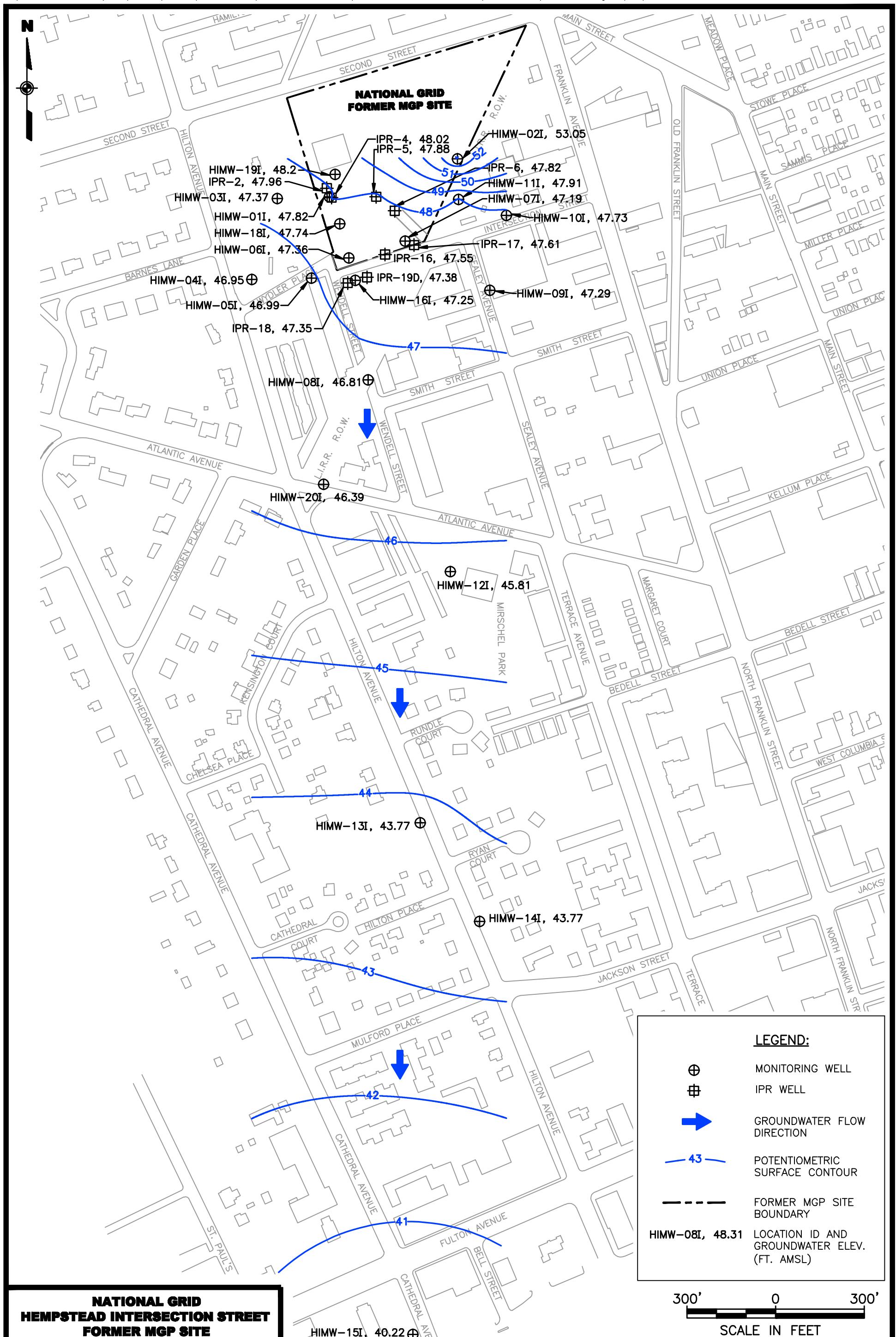


**NATIONAL GRID  
HEMPSTEAD INTERSECTION STREET  
FORMER MGP SITE  
HEMPSTEAD/GARDEN CITY, NY**

**URS Corporation**

**HEMPSTEAD/GARDEN CITY, NY  
POTENIOMETRIC SURFACE MAP FOR SHALLOW GROUNDWATER  
JULY 19-22, 2010**

**FIGURE 4**

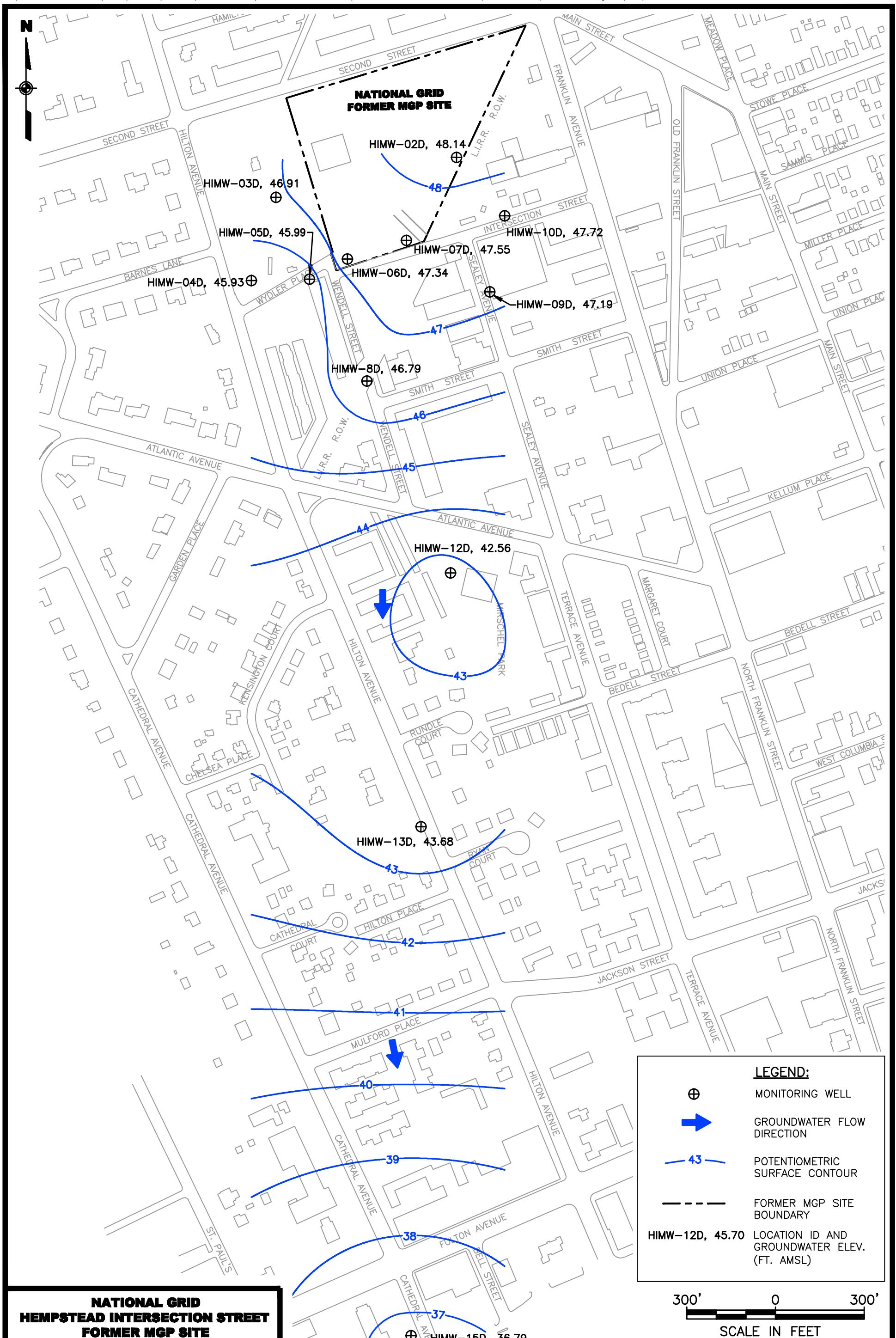


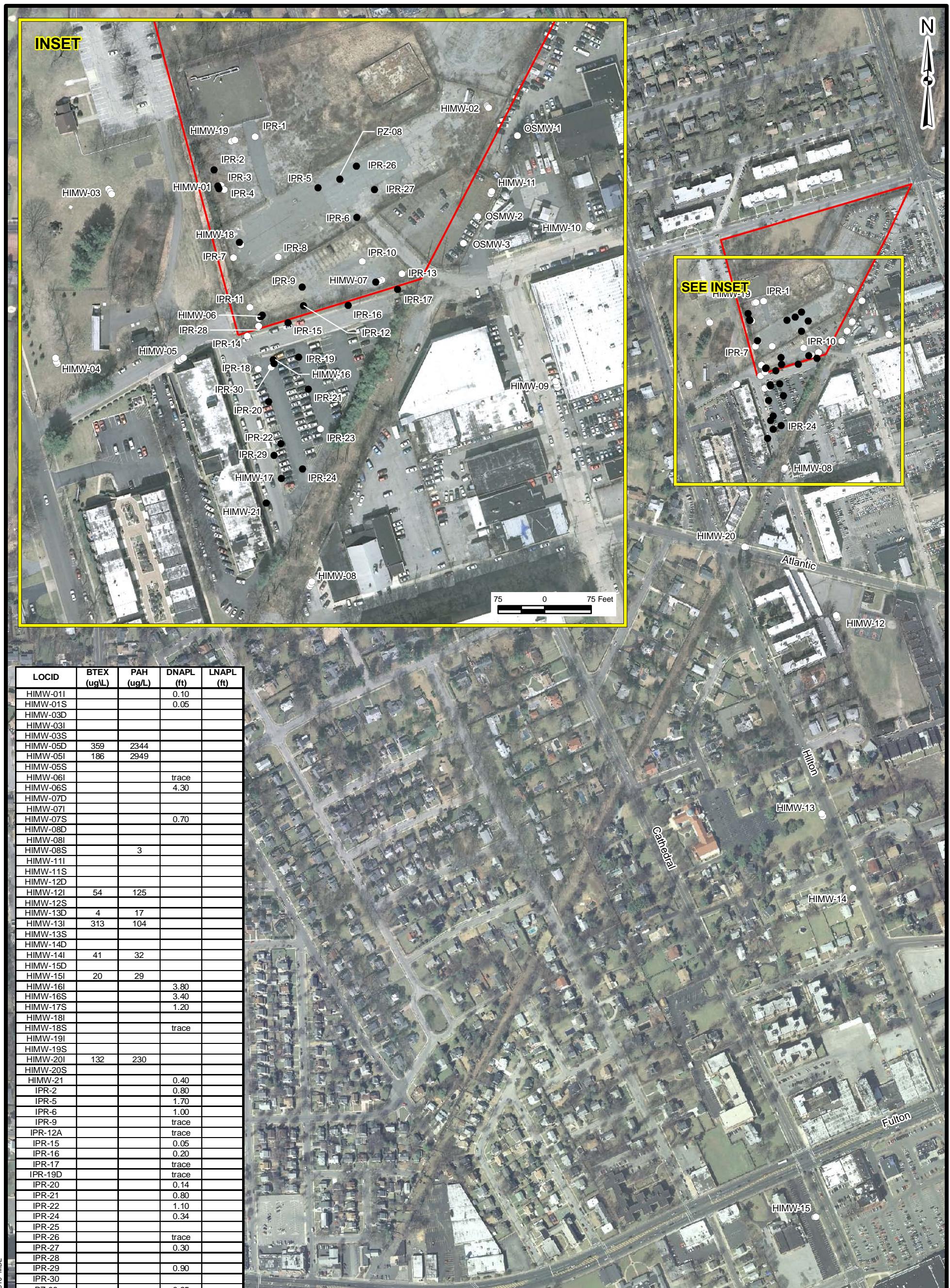
**NATIONAL GRID  
HEMPSTEAD INTERSECTION STREET  
FORMER MGP SITE  
HEMPSTEAD/GARDEN CITY, NY**

**URS Corporation**

**HEMPSTEAD/GARDEN CITY, NY  
POTENIOMETRIC SURFACE MAP FOR INTERMEDIATE GROUNDWATER  
JULY 19-22, 2010**

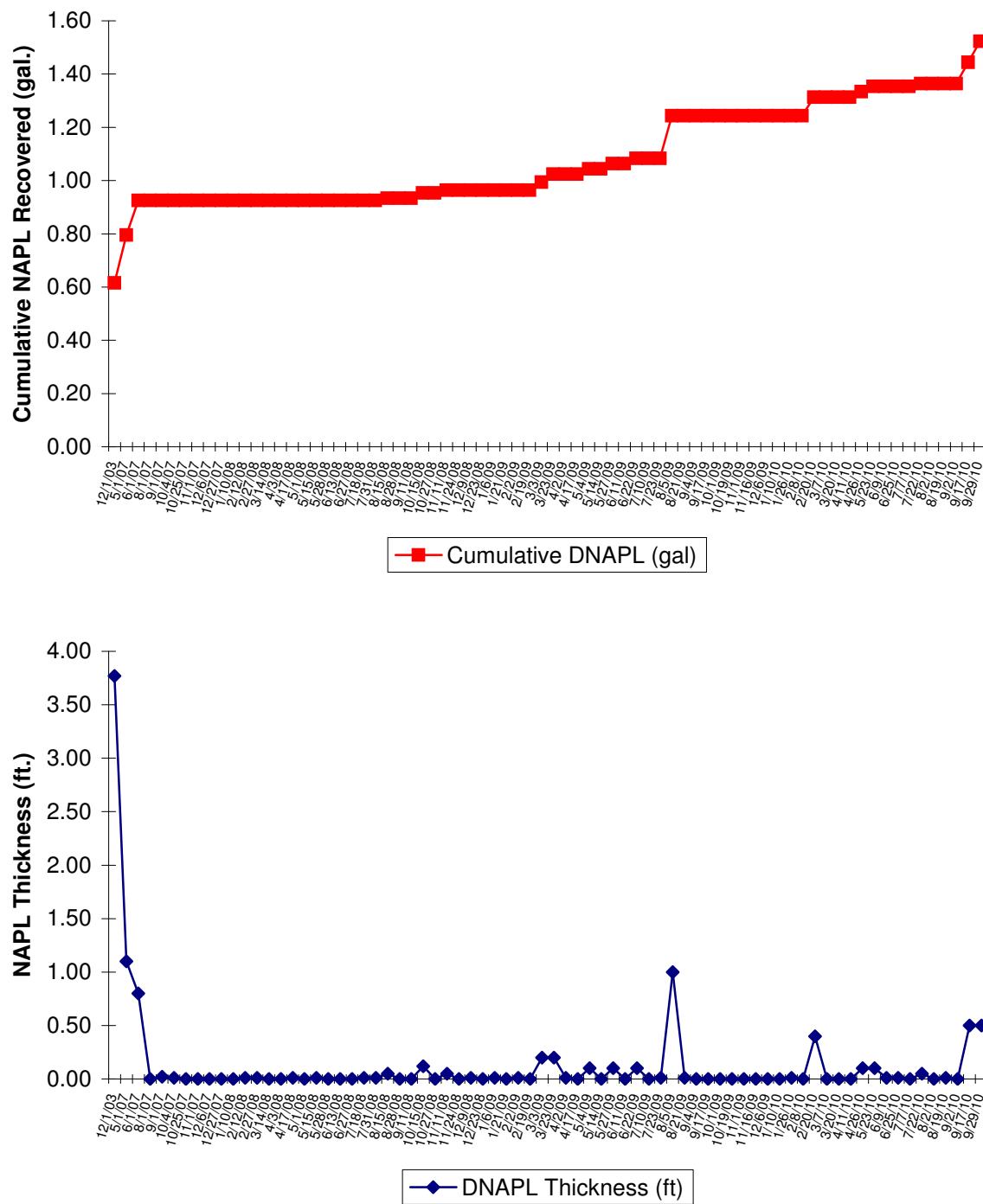
**FIGURE 5**



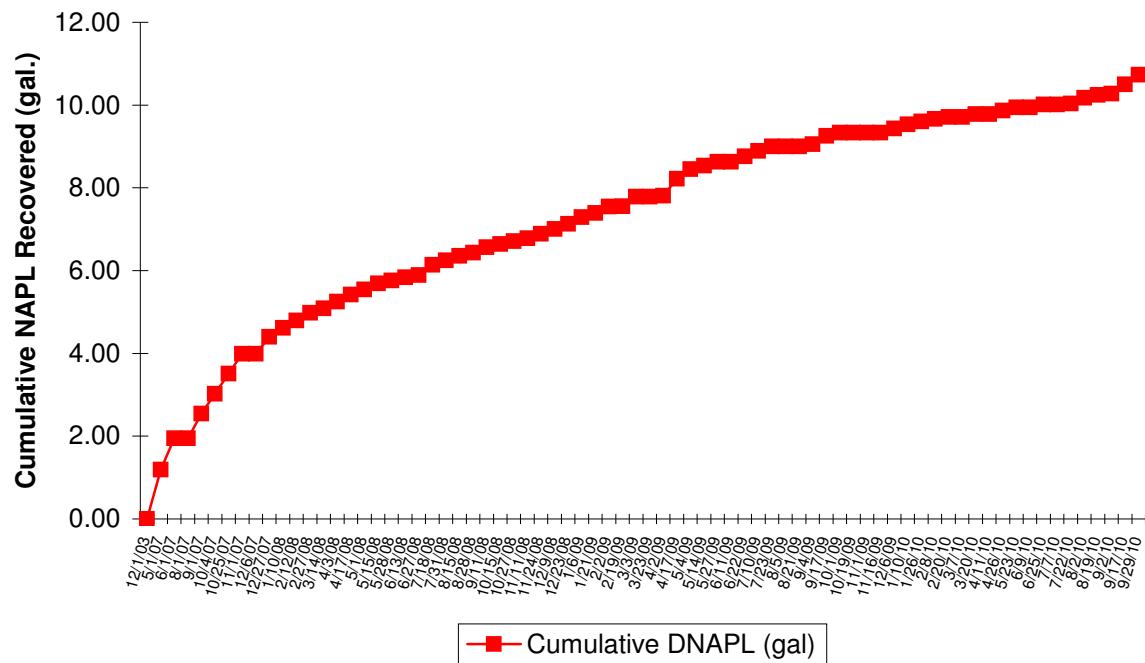


HEMPSTEAD/GARDEN CITY, NY  
TOTAL DISSOLVED-PHASE BTEX/PAH CONCENTRATIONS  
AND FREE PRODUCT THICKNESS  
THIRD QUARTER 2010

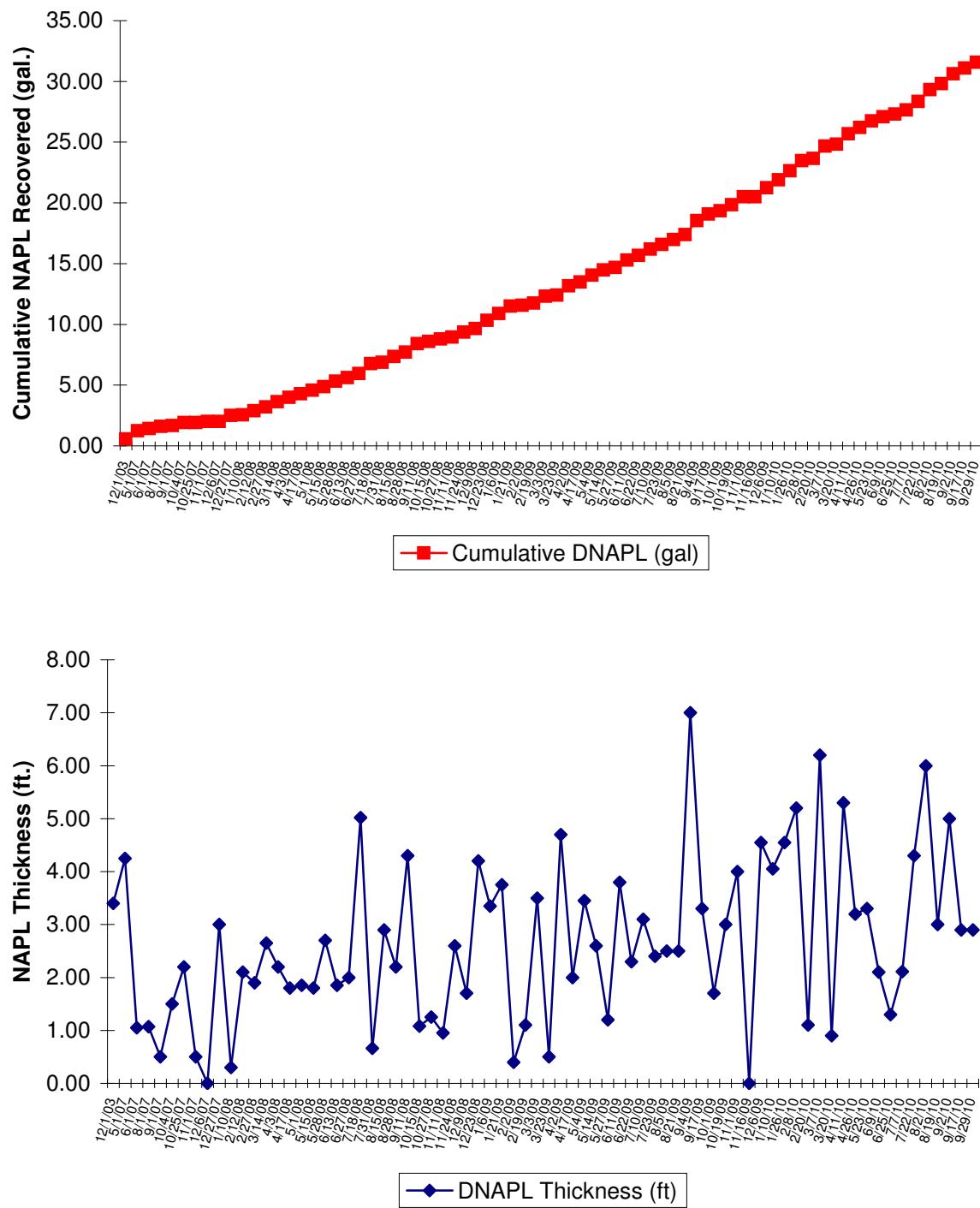
**FIGURE 8A**  
**Well HIMW-01S NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



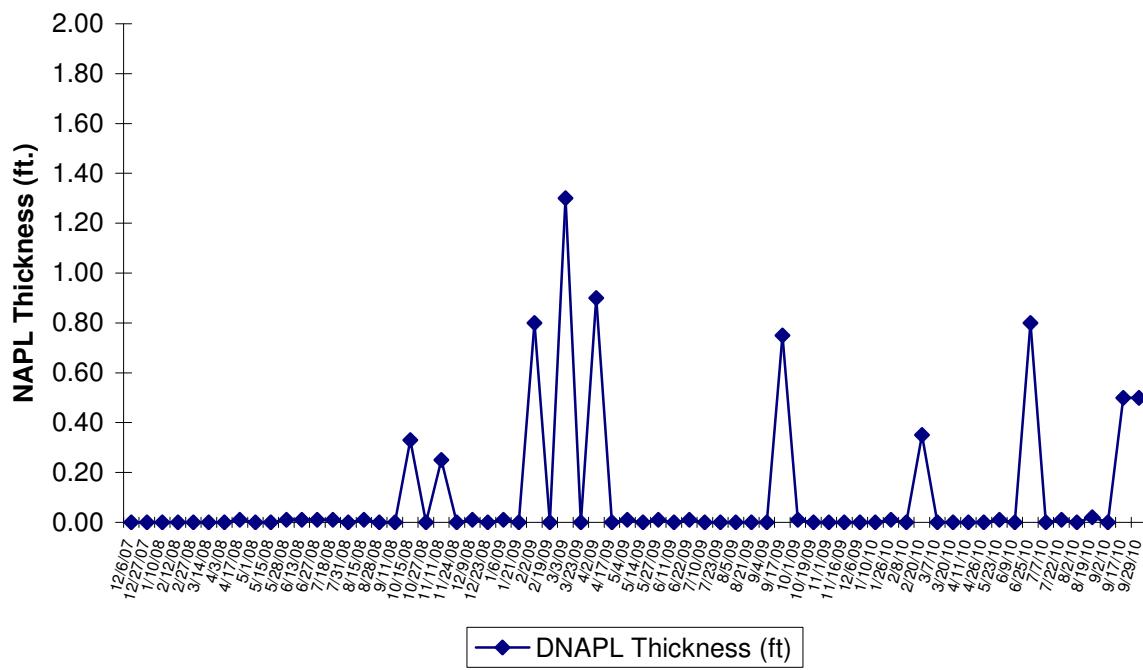
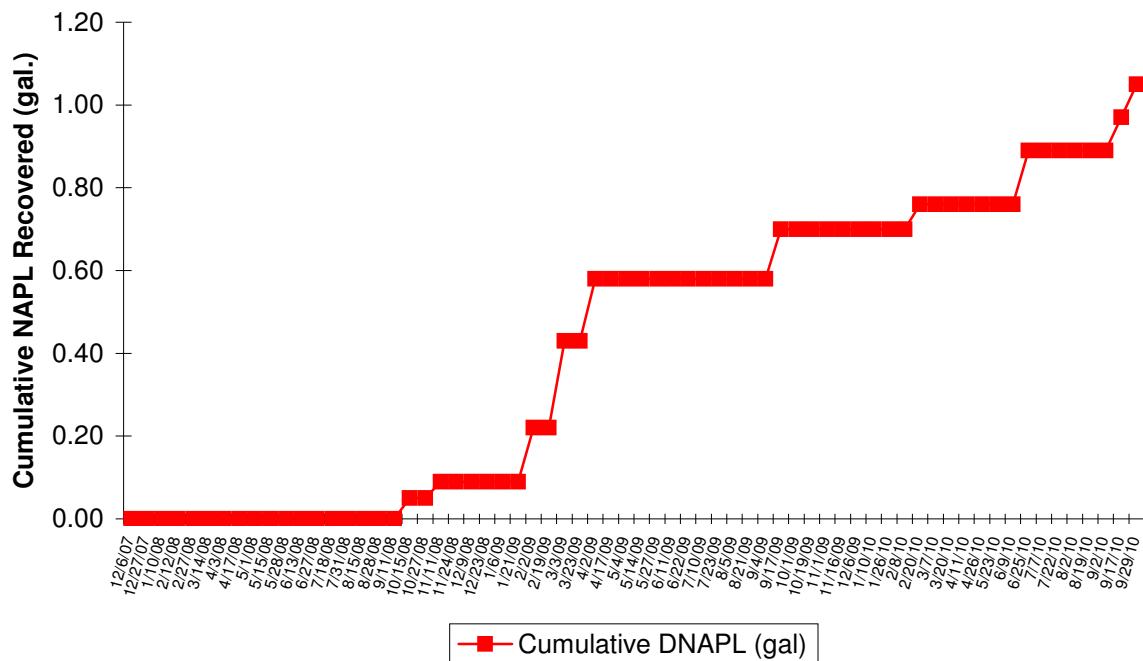
**FIGURE 8B**  
**Well HIMW-01I NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



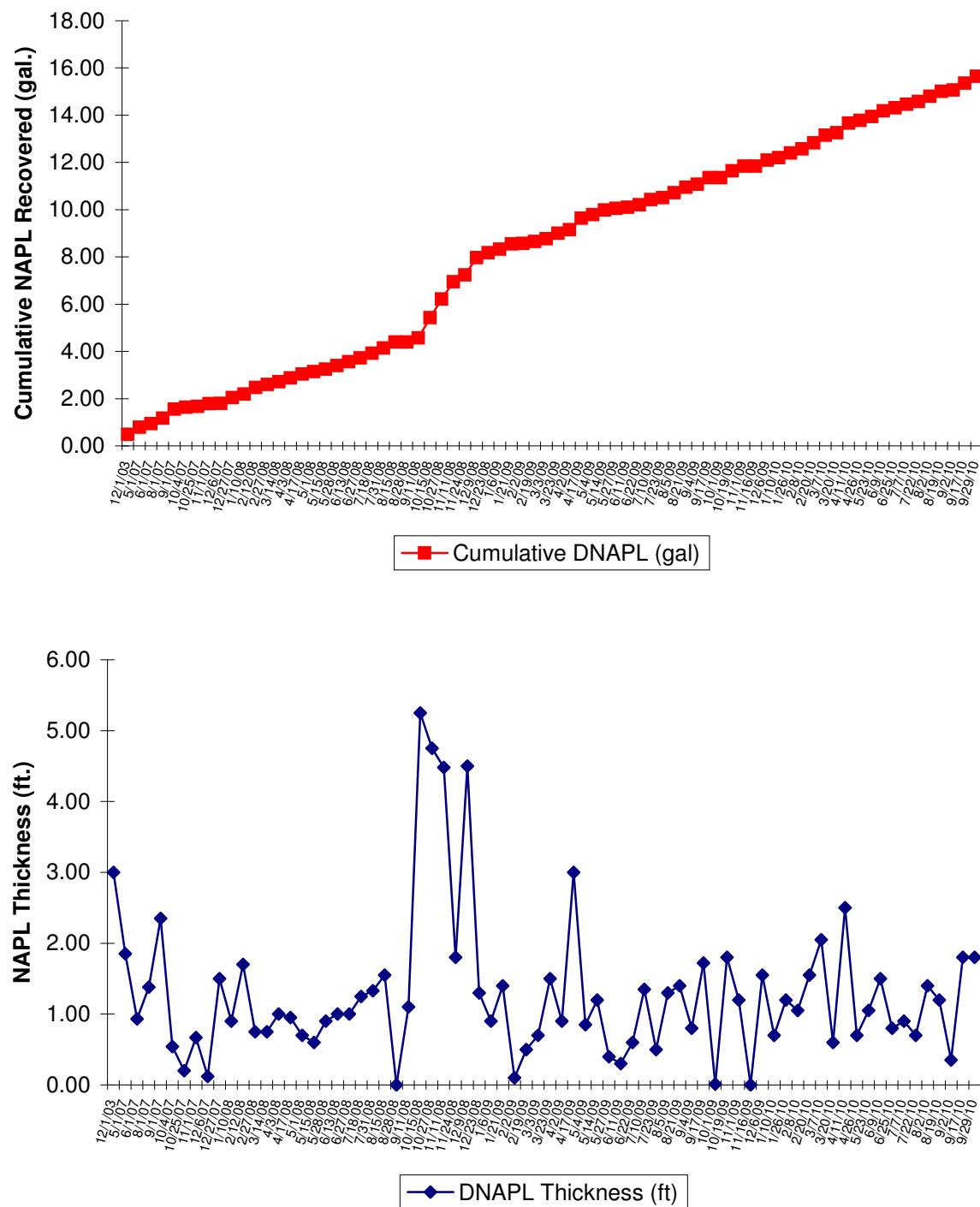
**FIGURE 8C**  
**Well HIMW-06S NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



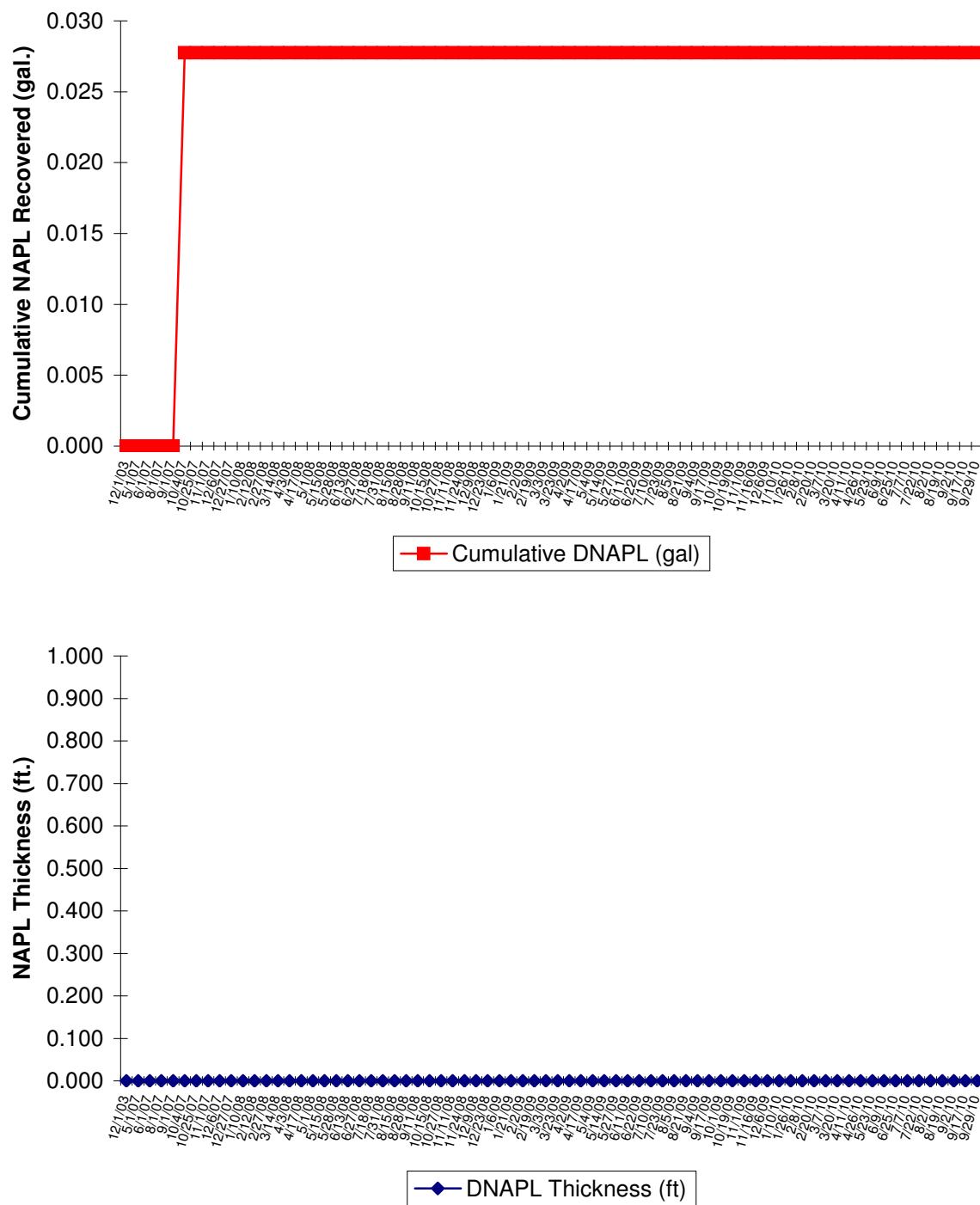
**FIGURE 8D**  
**Well HIMW-06I NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



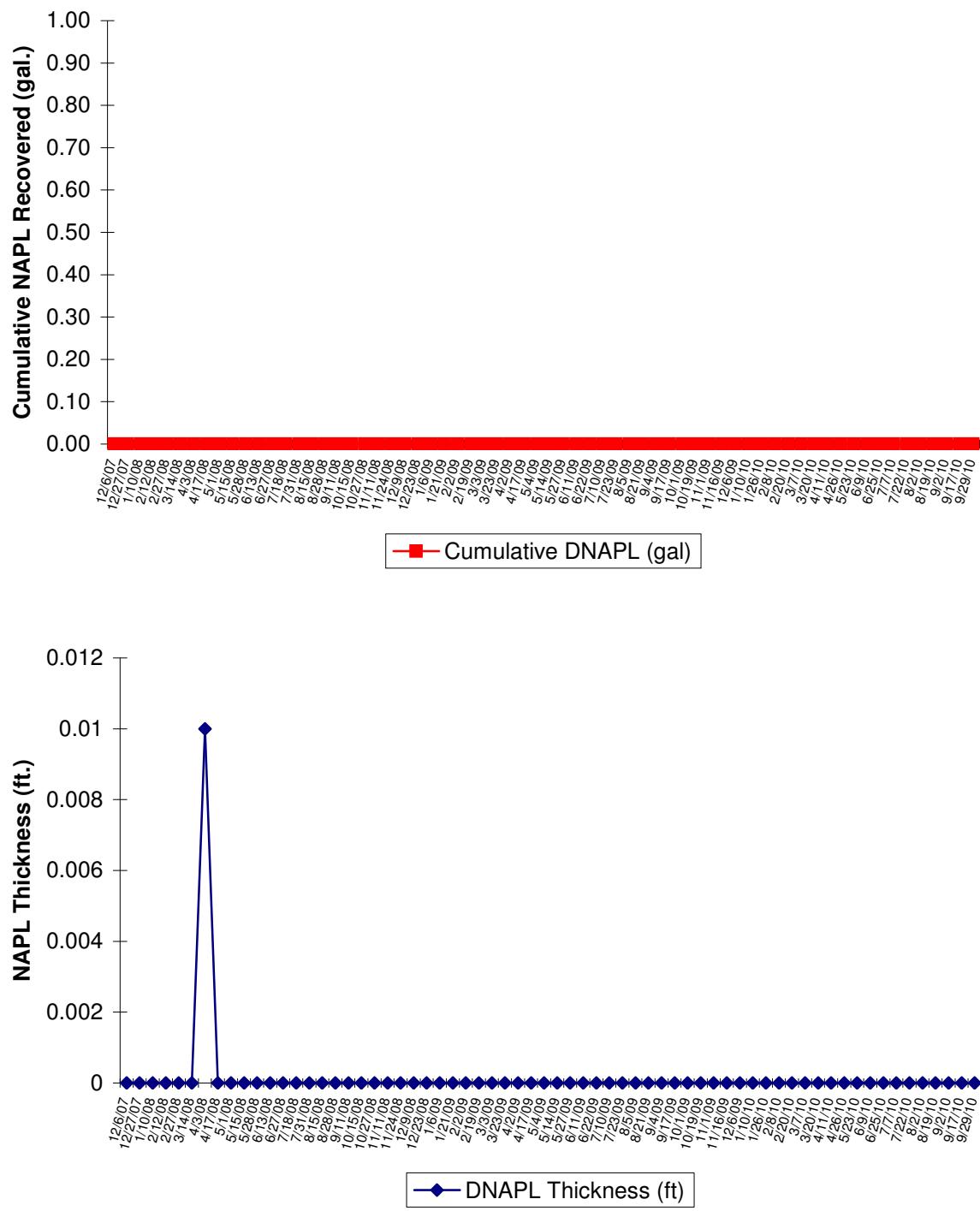
**FIGURE 8E**  
**Well HIMW-07S NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



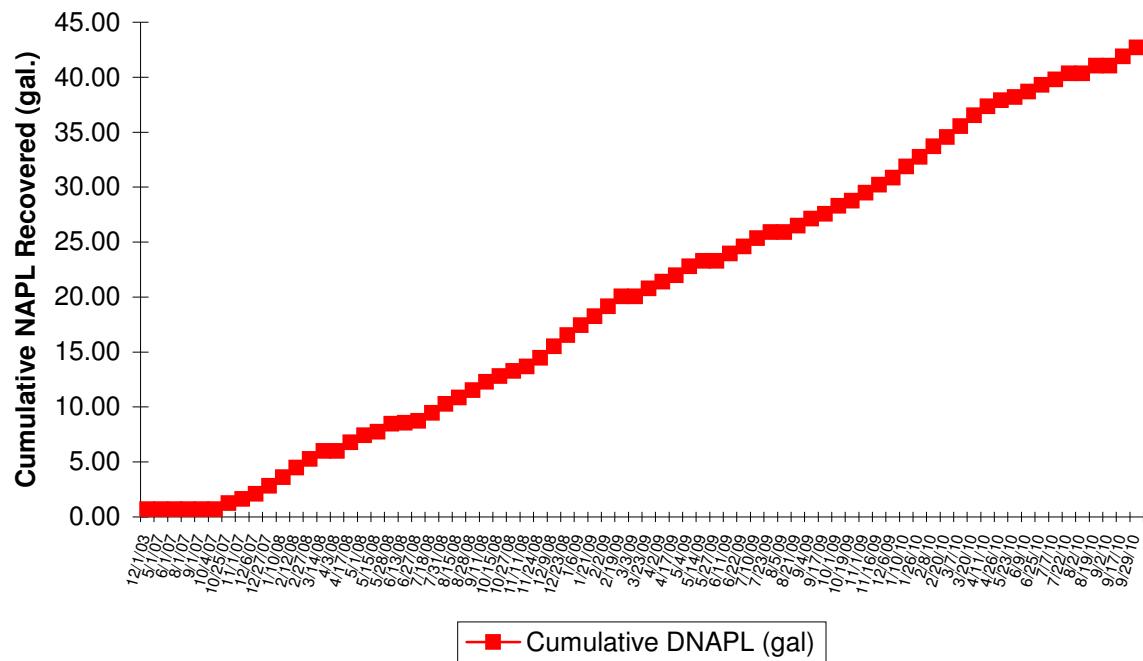
**FIGURE 8F**  
**Well HIMW-11S NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



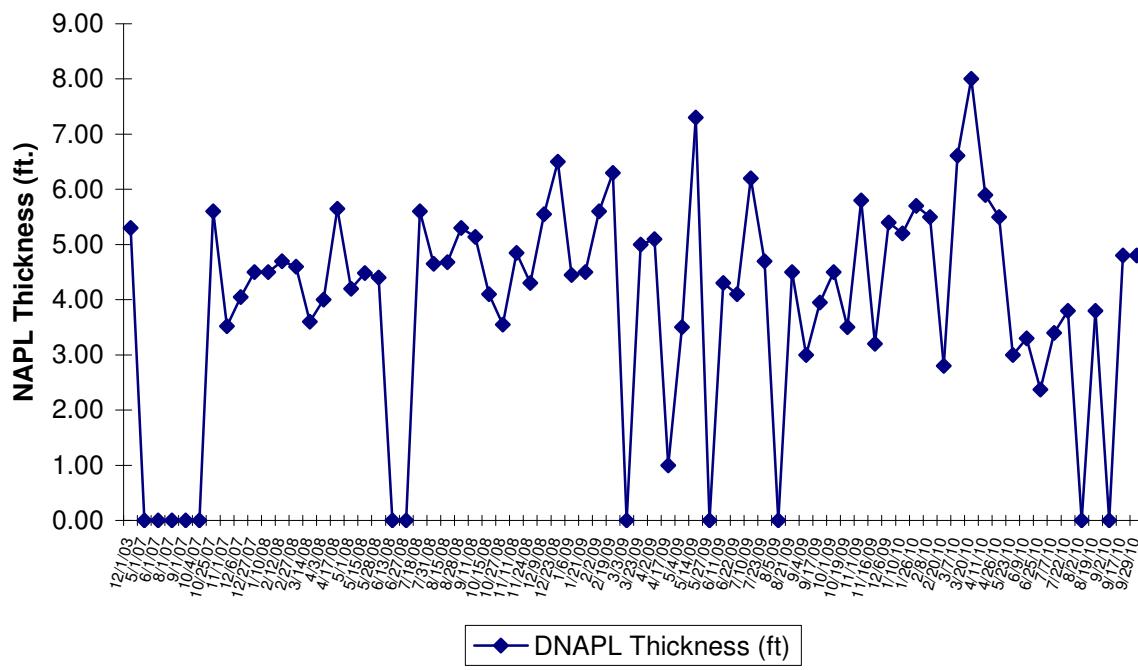
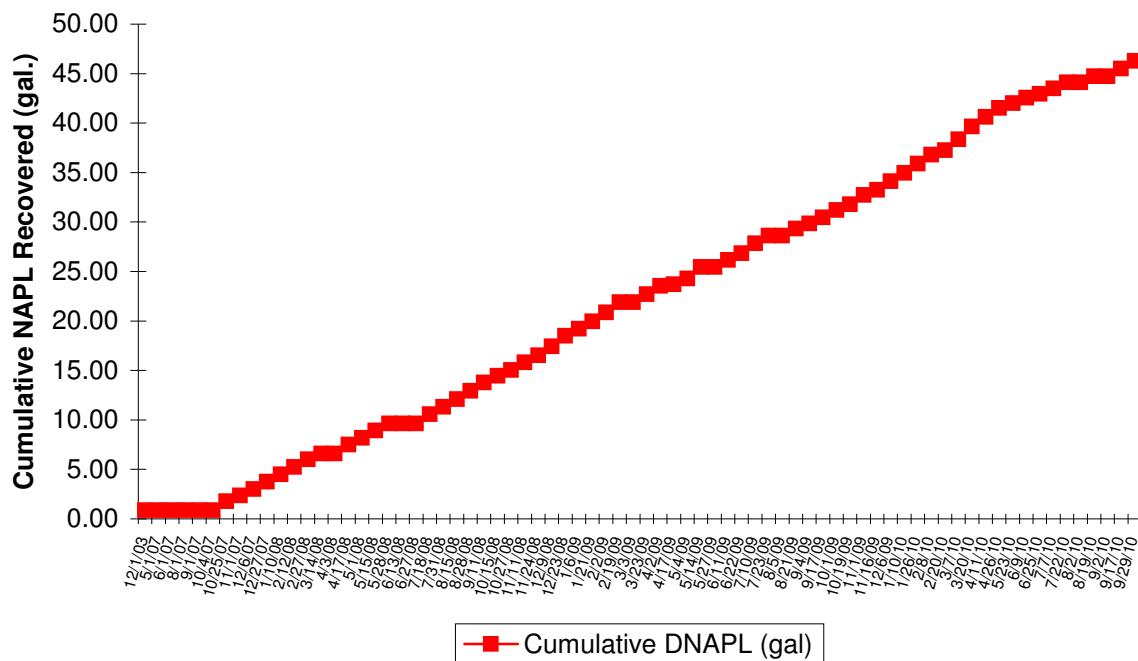
**FIGURE 8G**  
**Well HIMW-11I NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



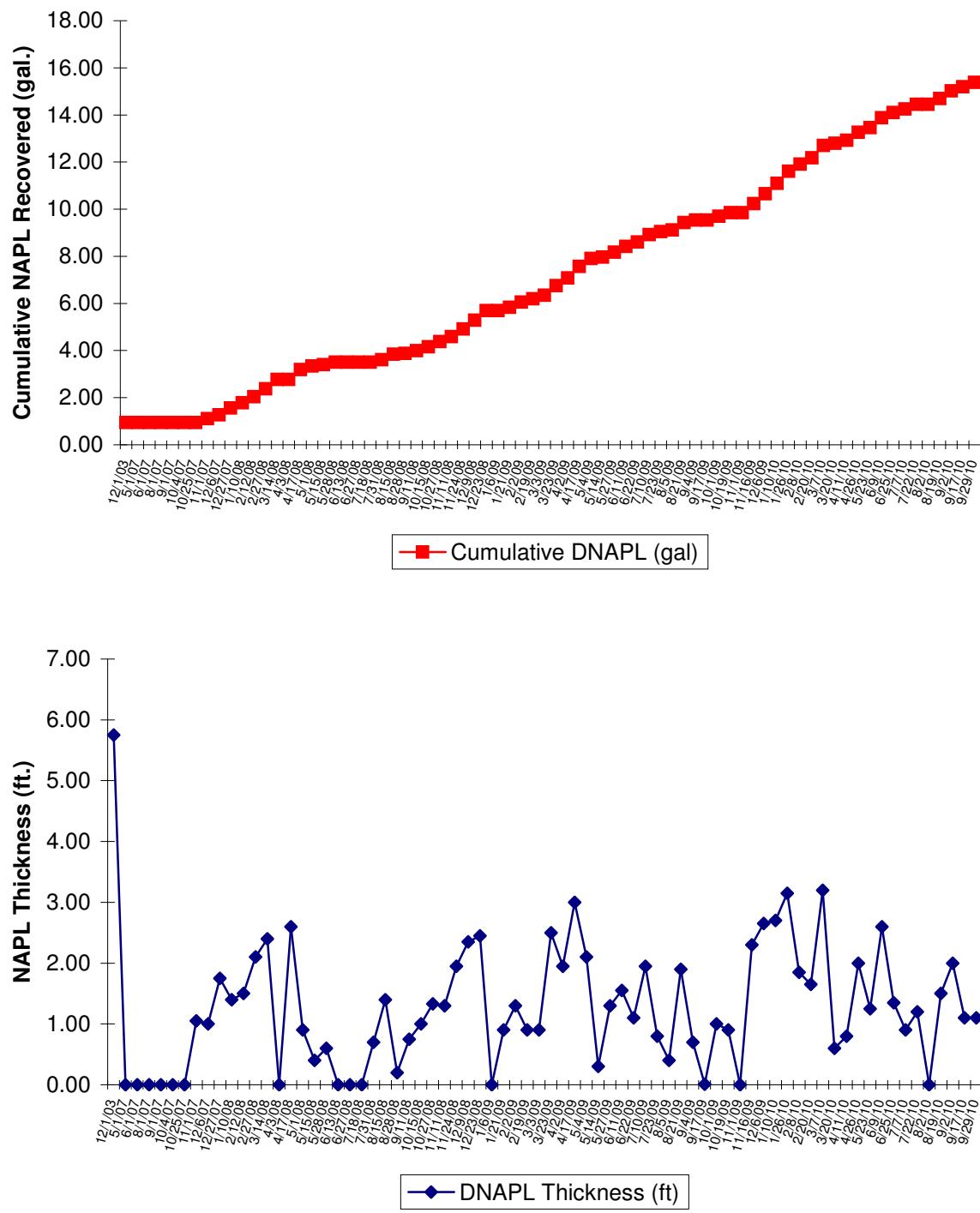
**FIGURE 8H**  
**Well HIMW-16S NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



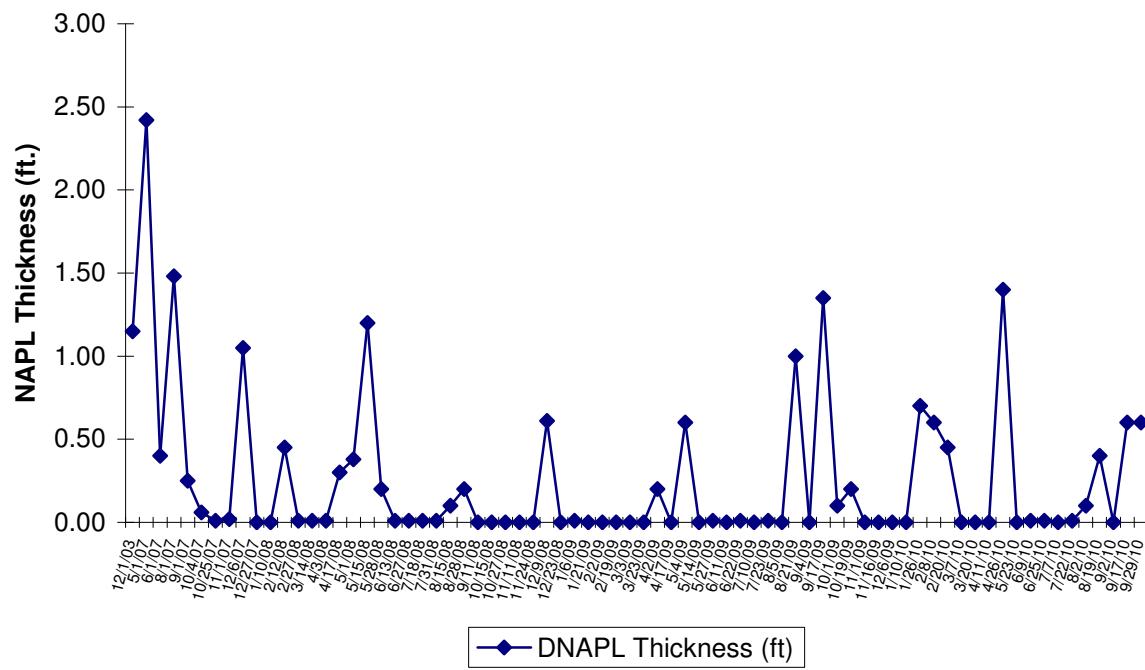
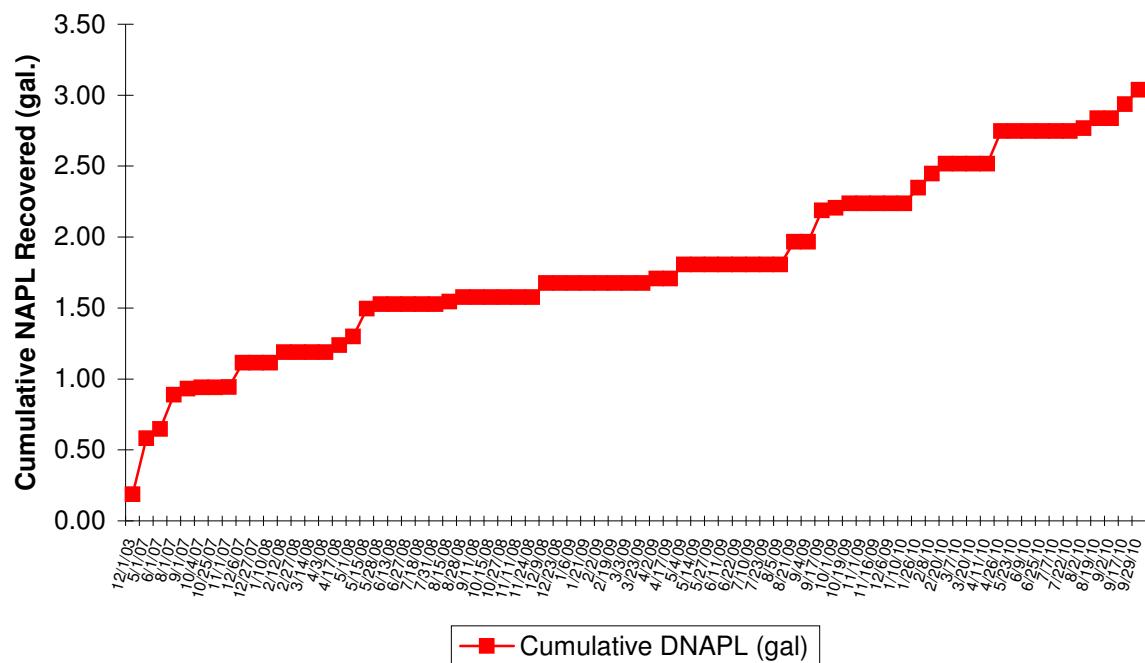
**FIGURE 8I**  
**Well HIMW-16I NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



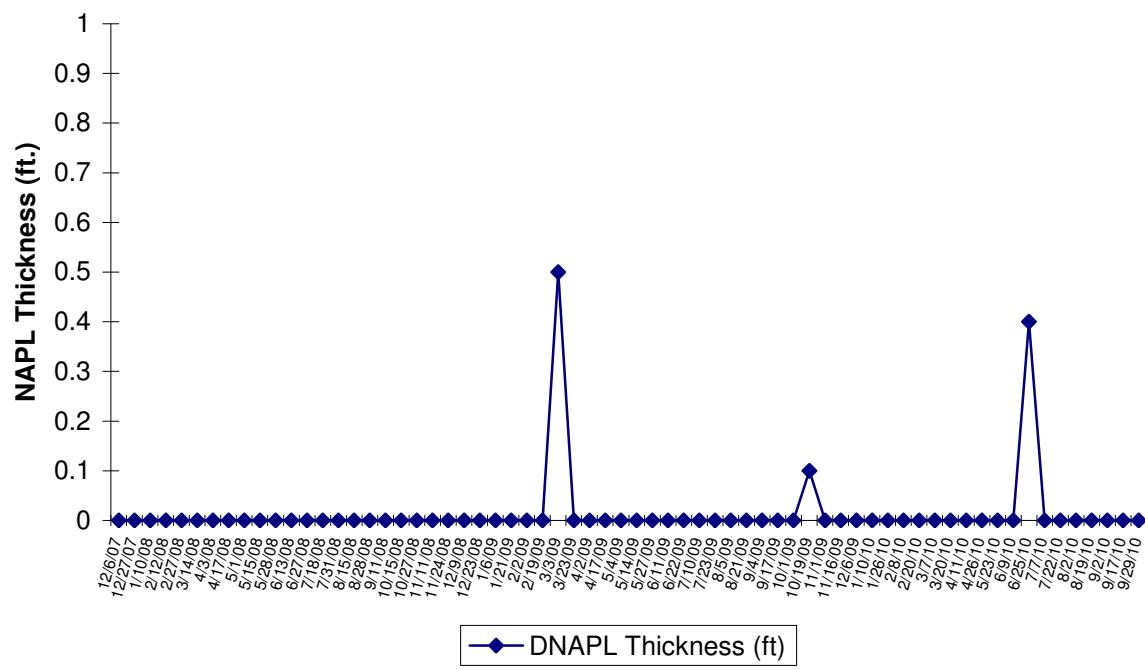
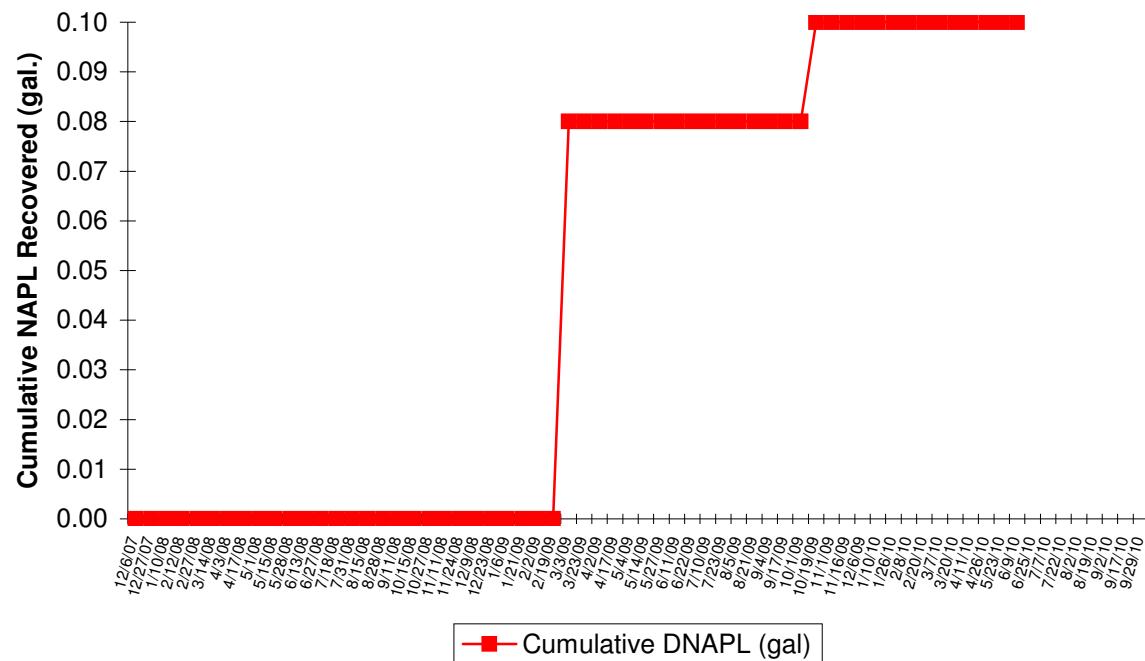
**FIGURE 8J**  
**Well HIMW-17S NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



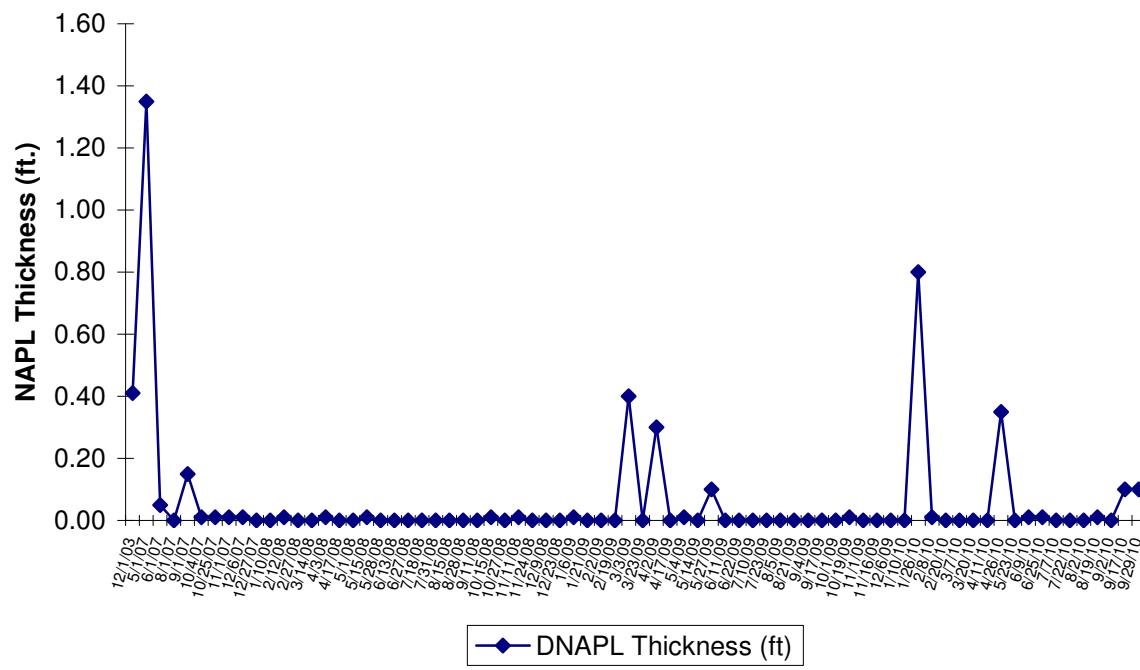
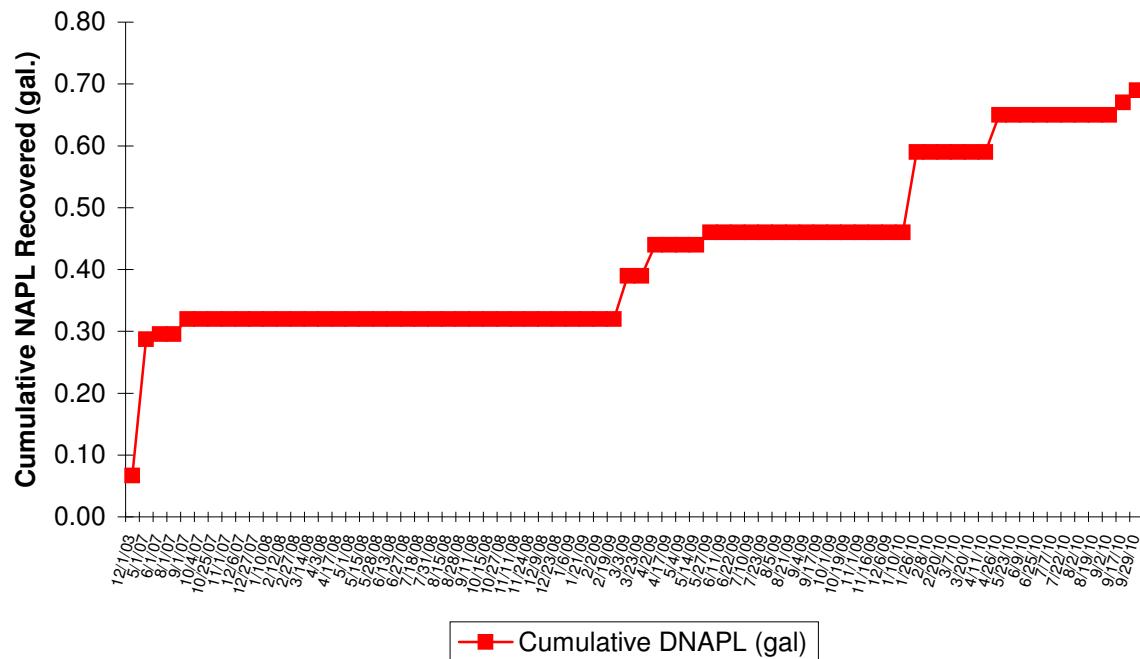
**FIGURE 8K**  
**Well HIMW-18S NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



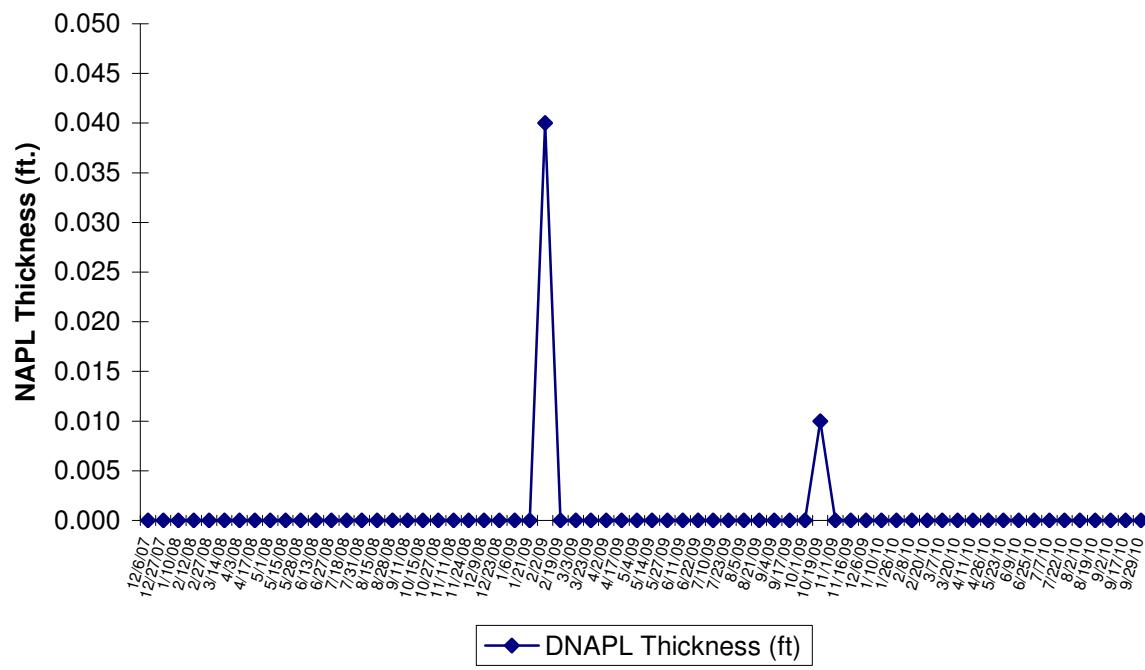
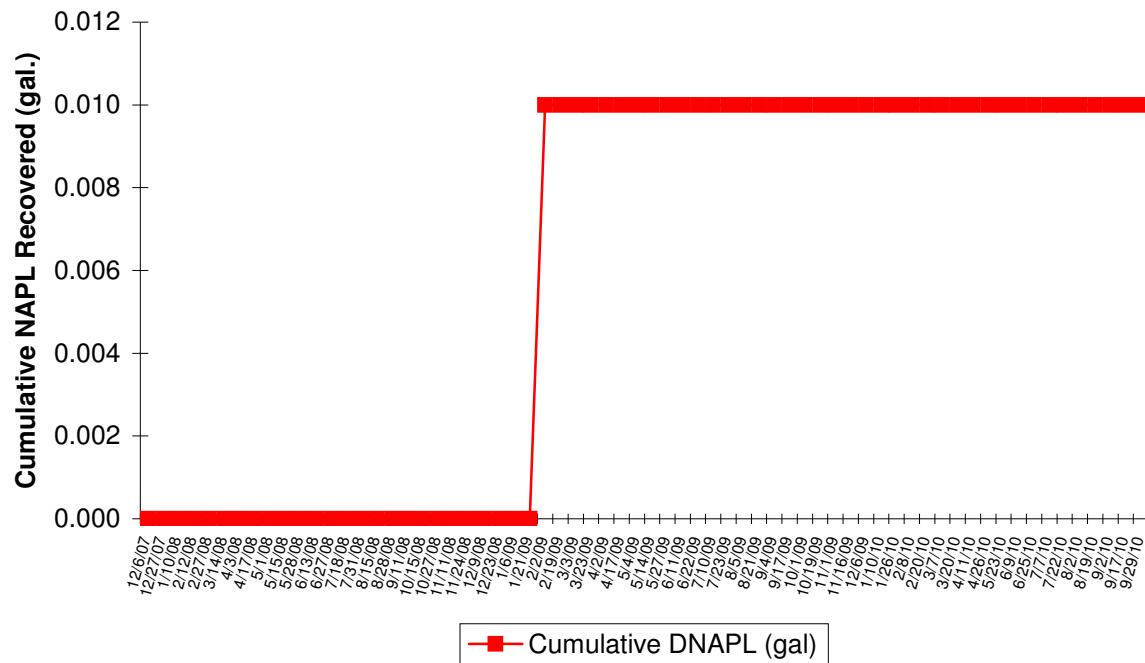
**FIGURE 8L**  
**Well HIMW-18I NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



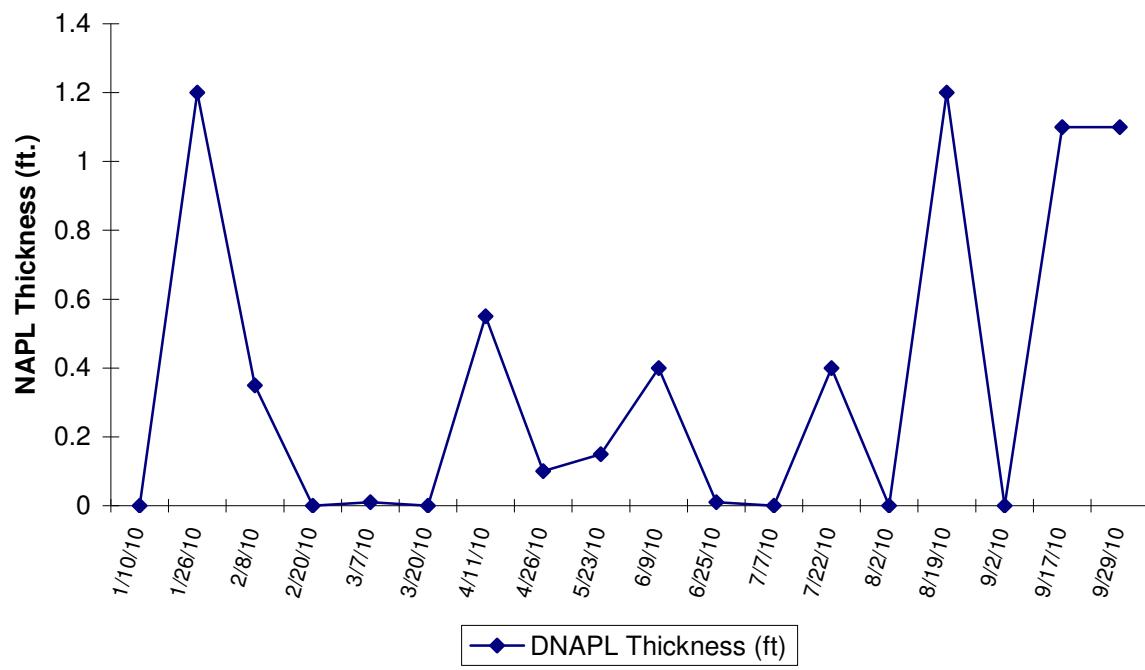
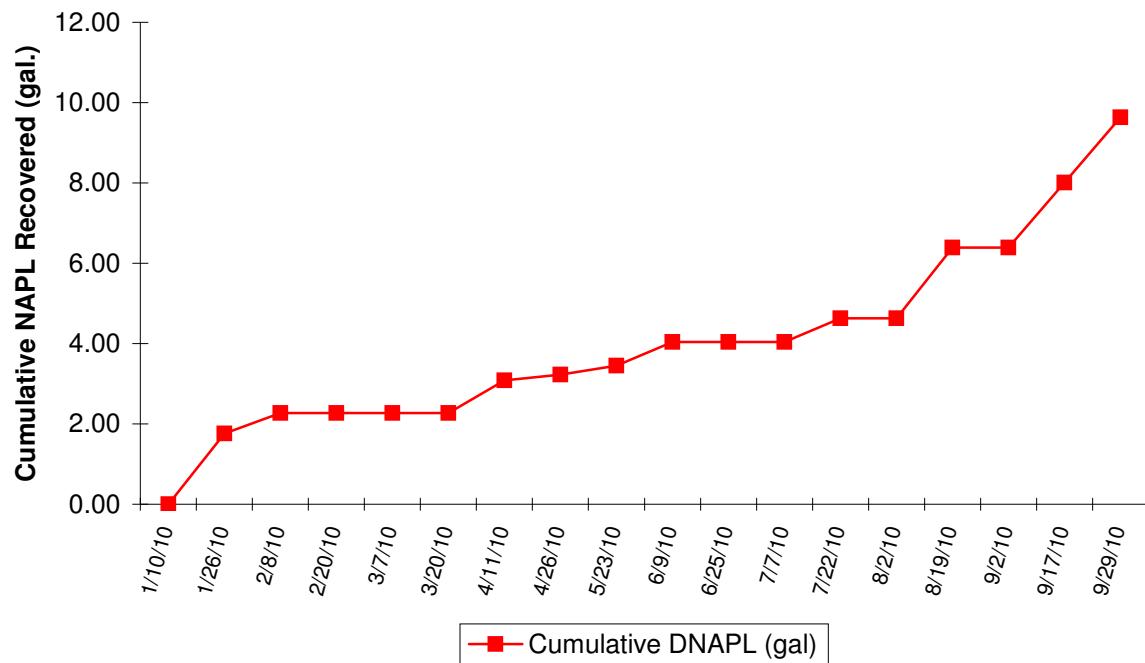
**FIGURE 8M**  
**Well HIMW-19S NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



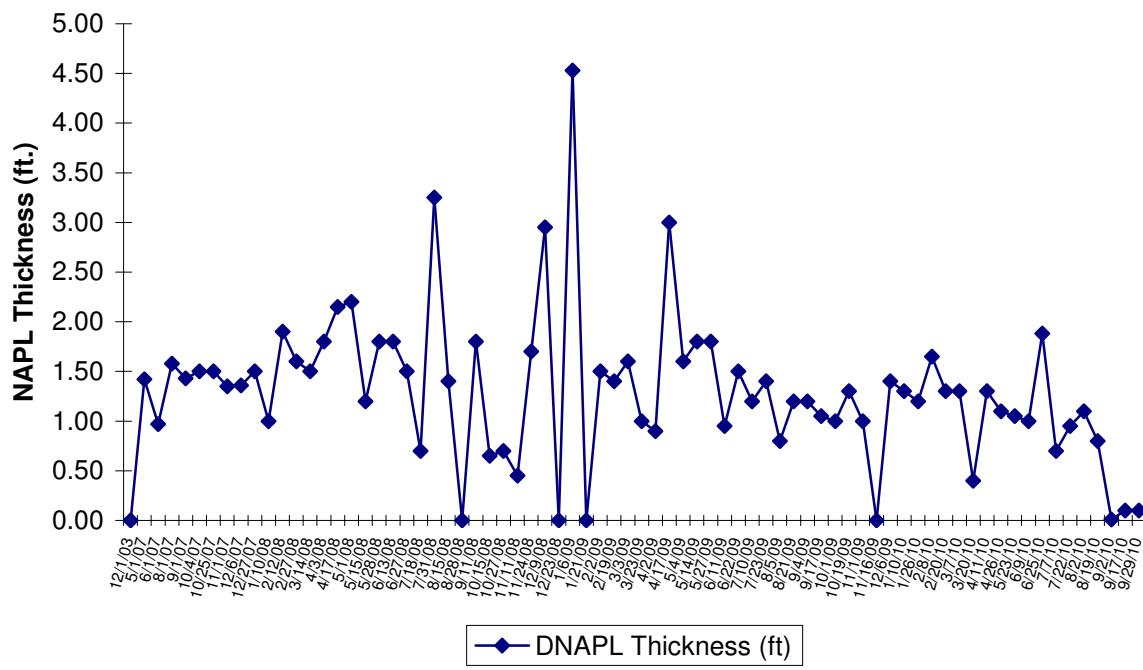
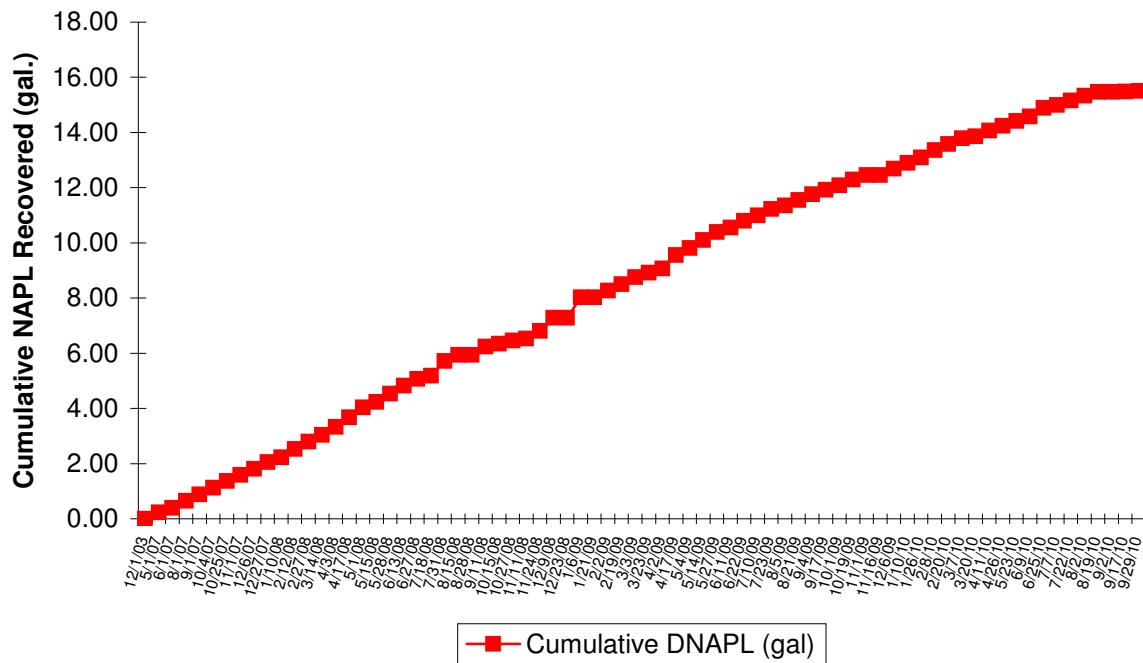
**FIGURE 8N**  
**Well HIMW-19I NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



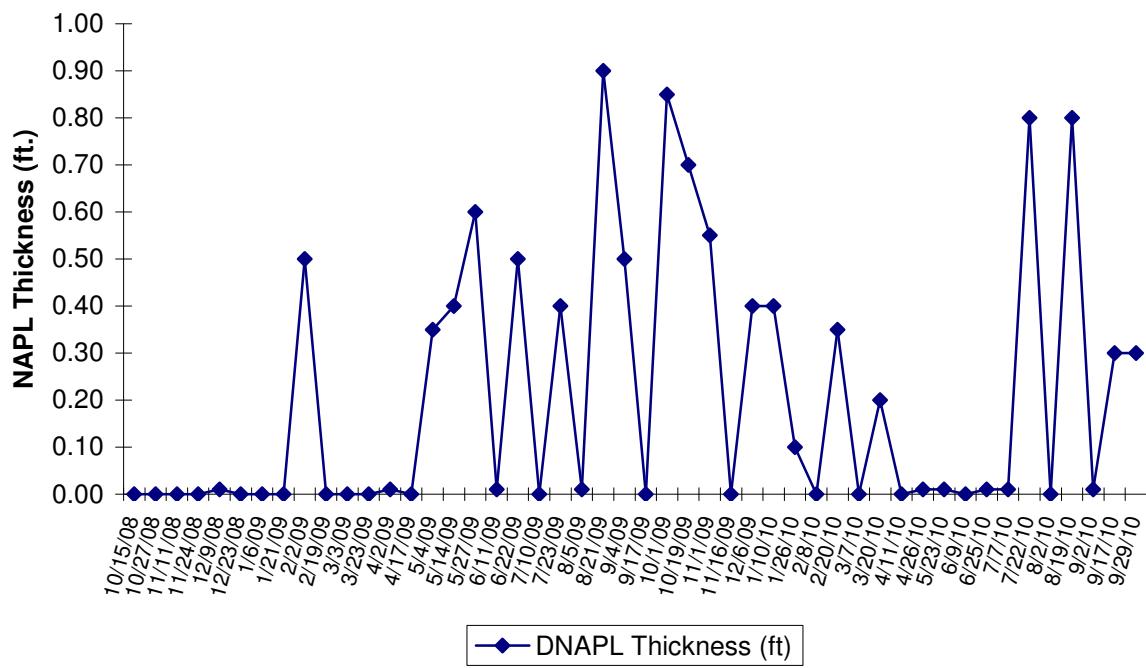
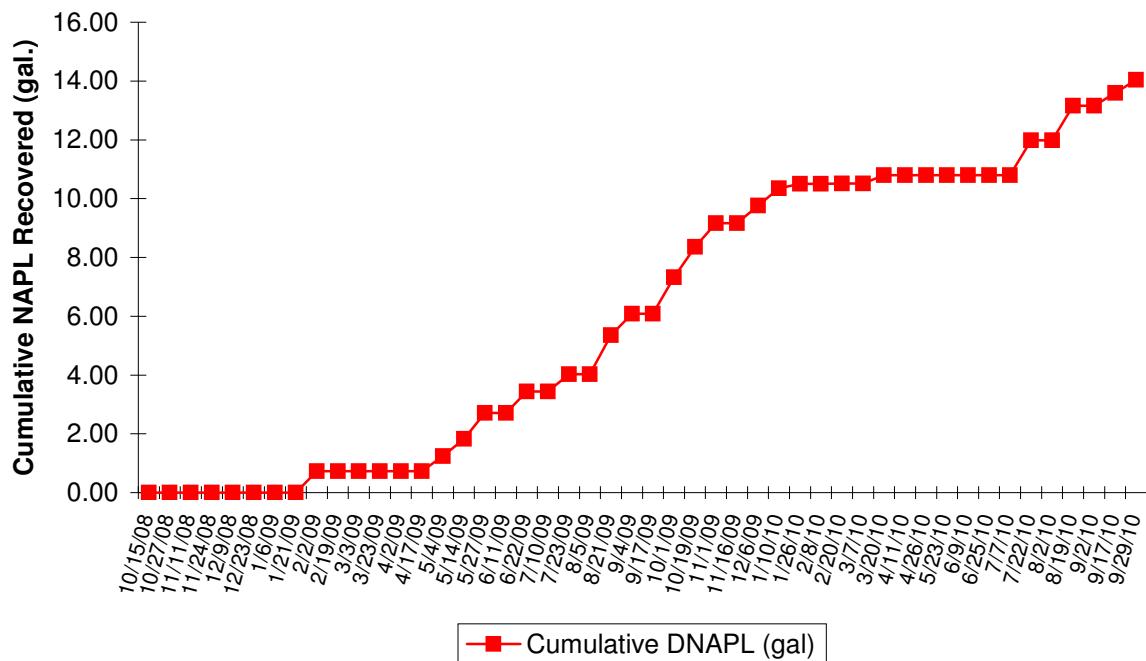
**FIGURE 8O**  
**Well HIMW-21 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



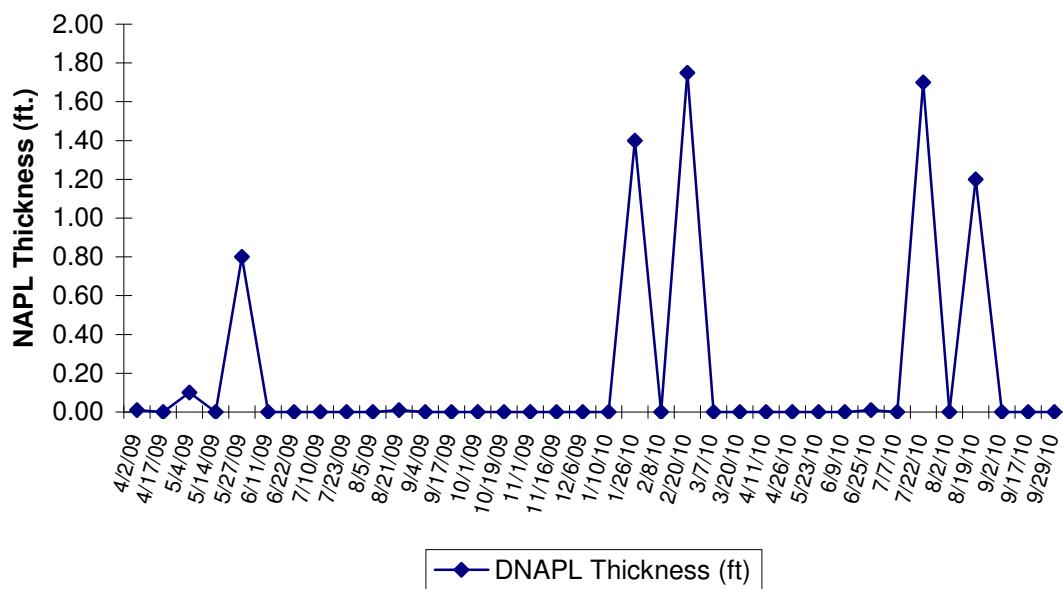
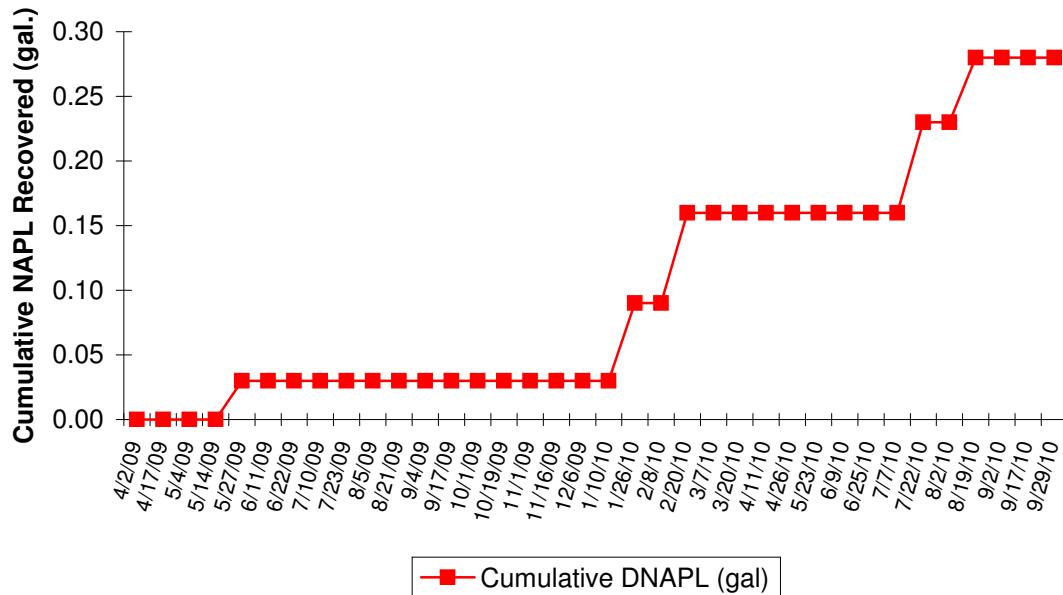
**FIGURE 8P**  
**Well PZ-08 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



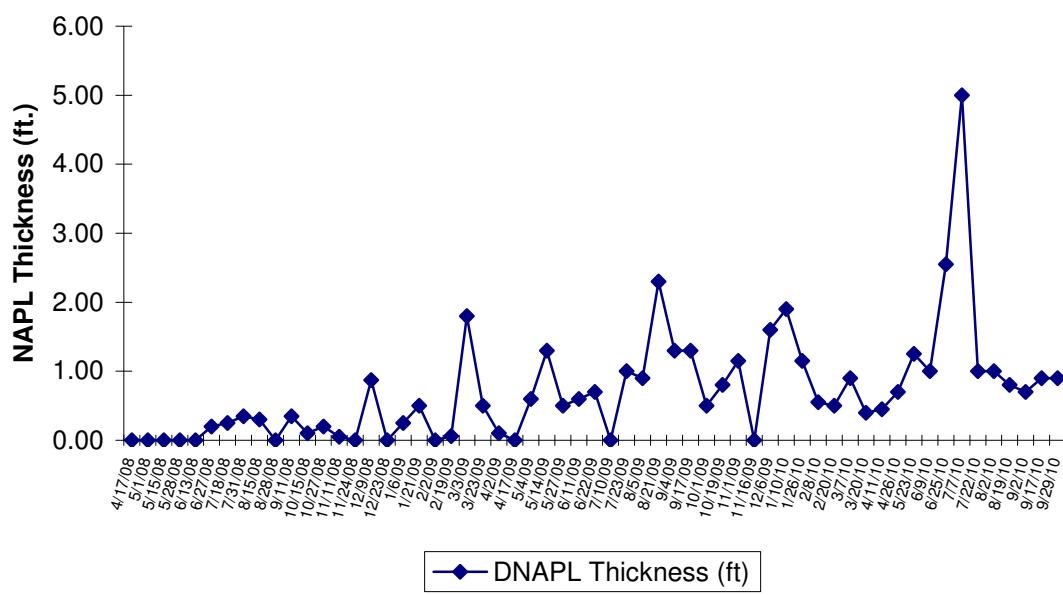
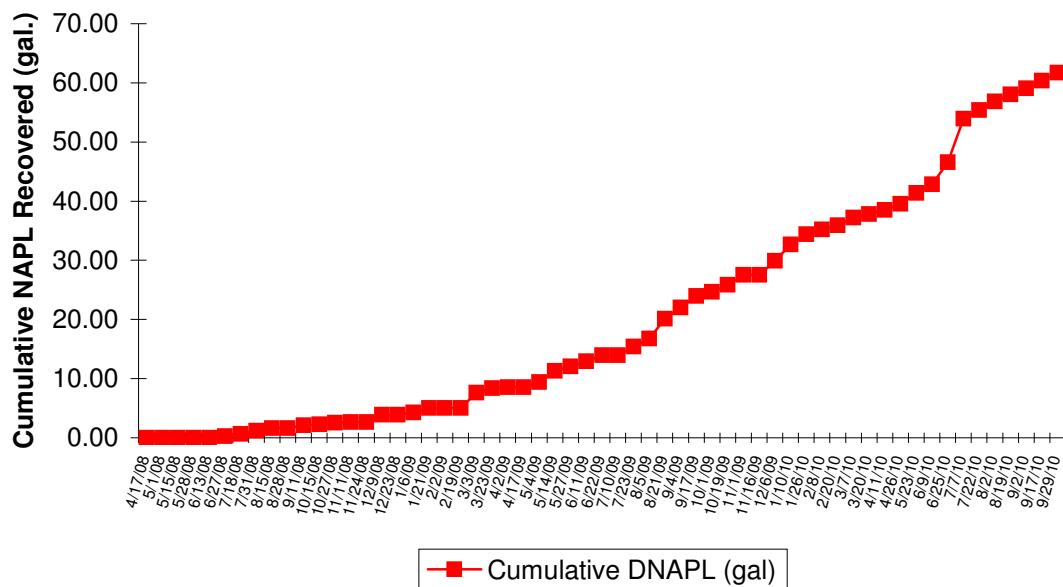
**FIGURE 8Q**  
**Well IPR-02 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



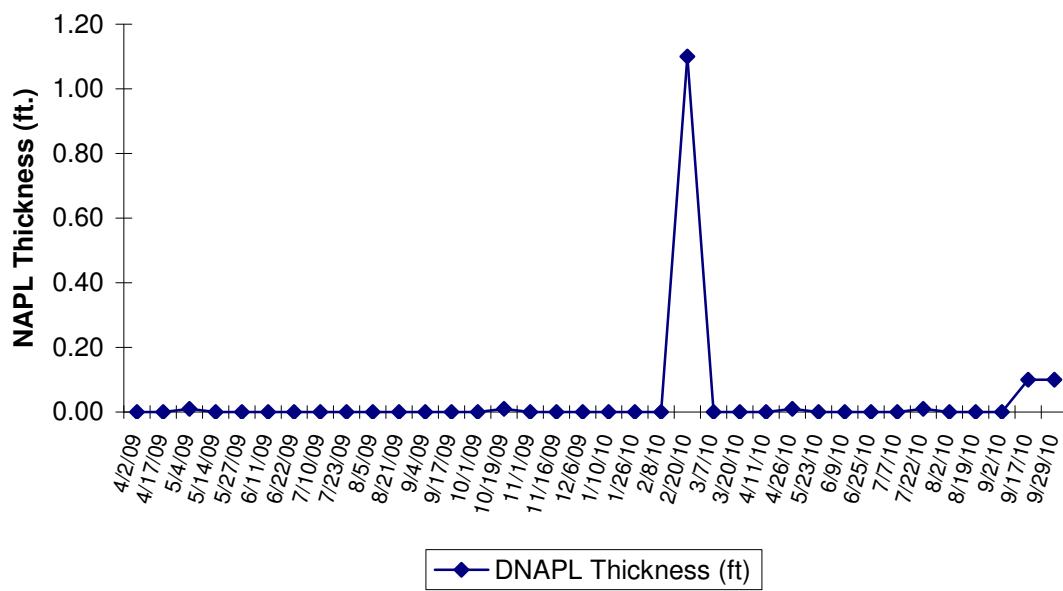
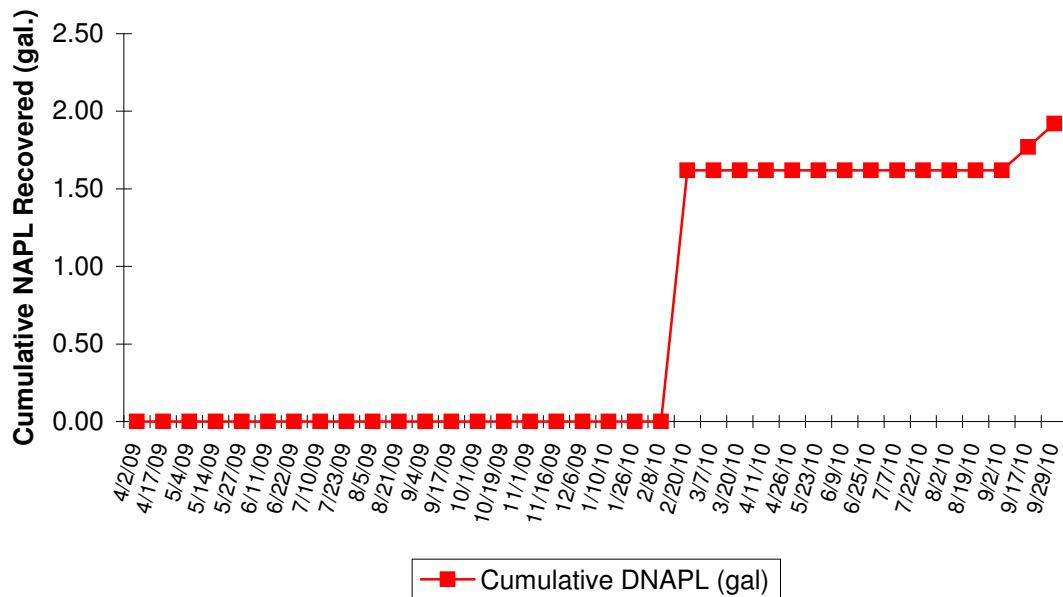
**FIGURE 8R**  
**Well IPR-05 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



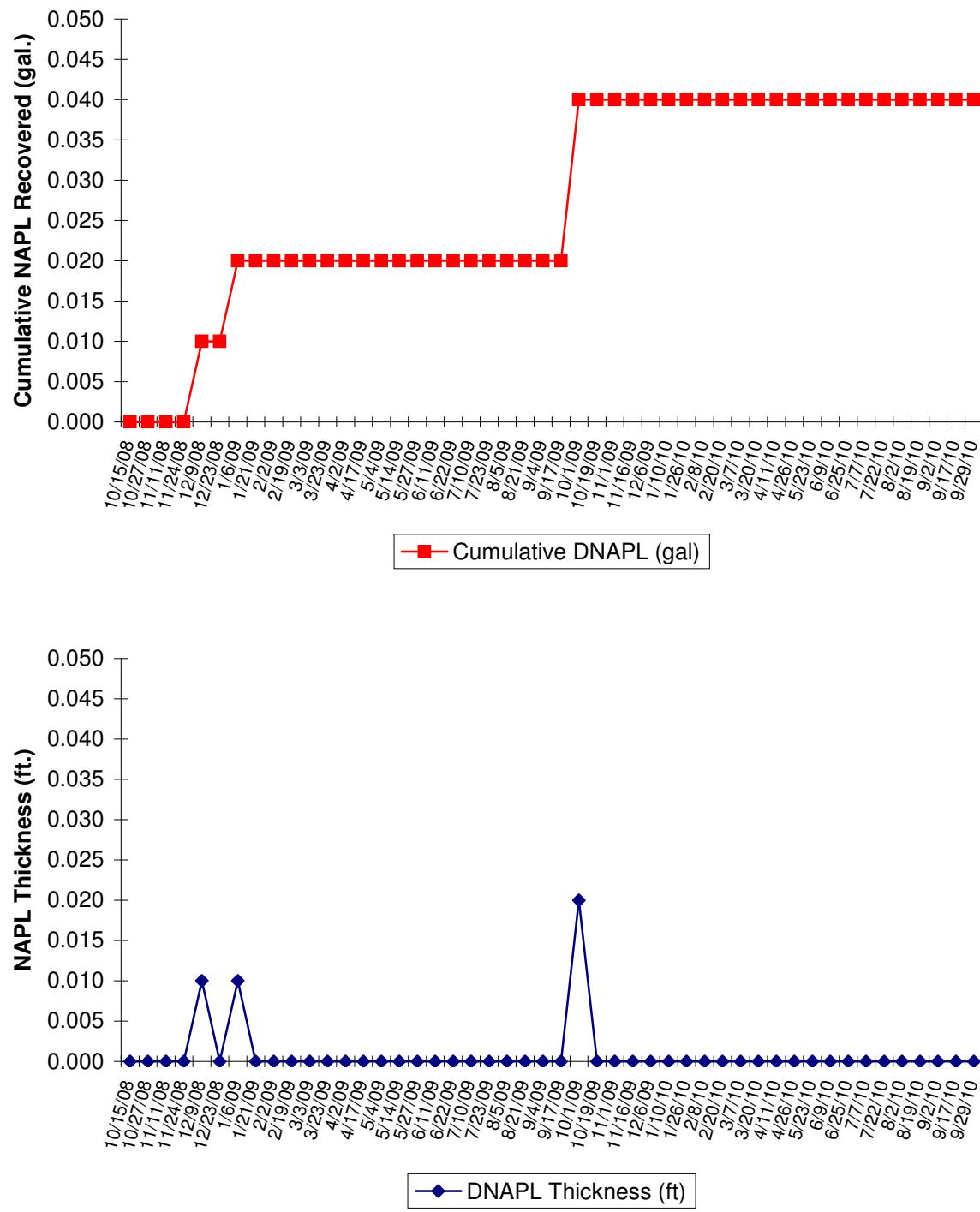
**FIGURE 8S**  
**Well IPR-06 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



**FIGURE 8T**  
**Well IPR-09 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**

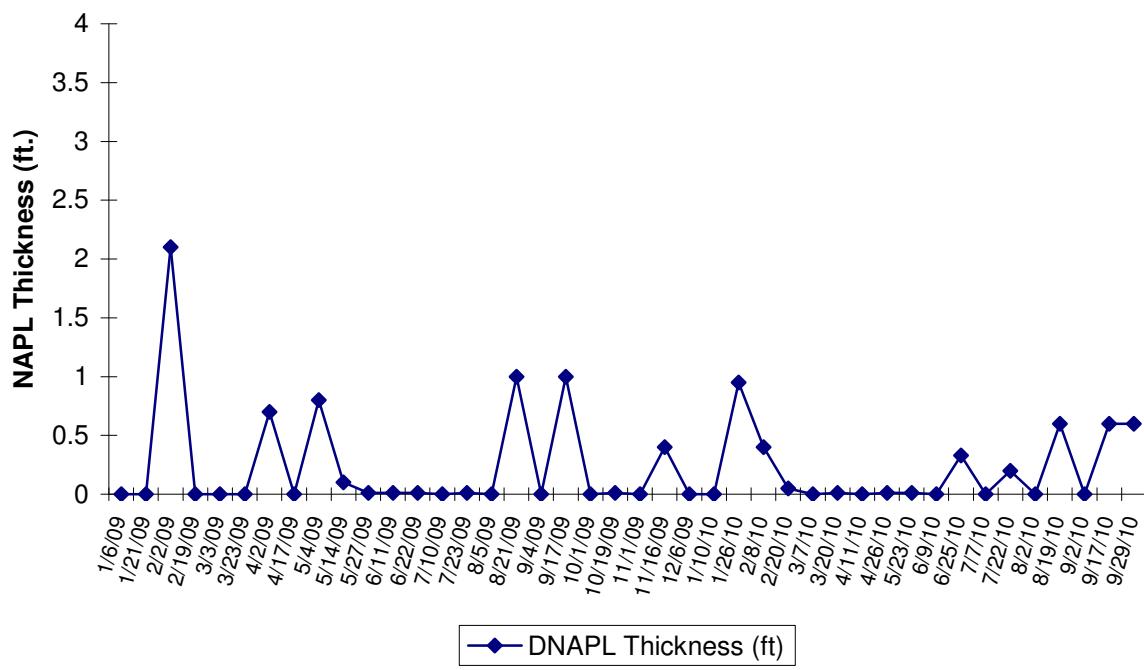
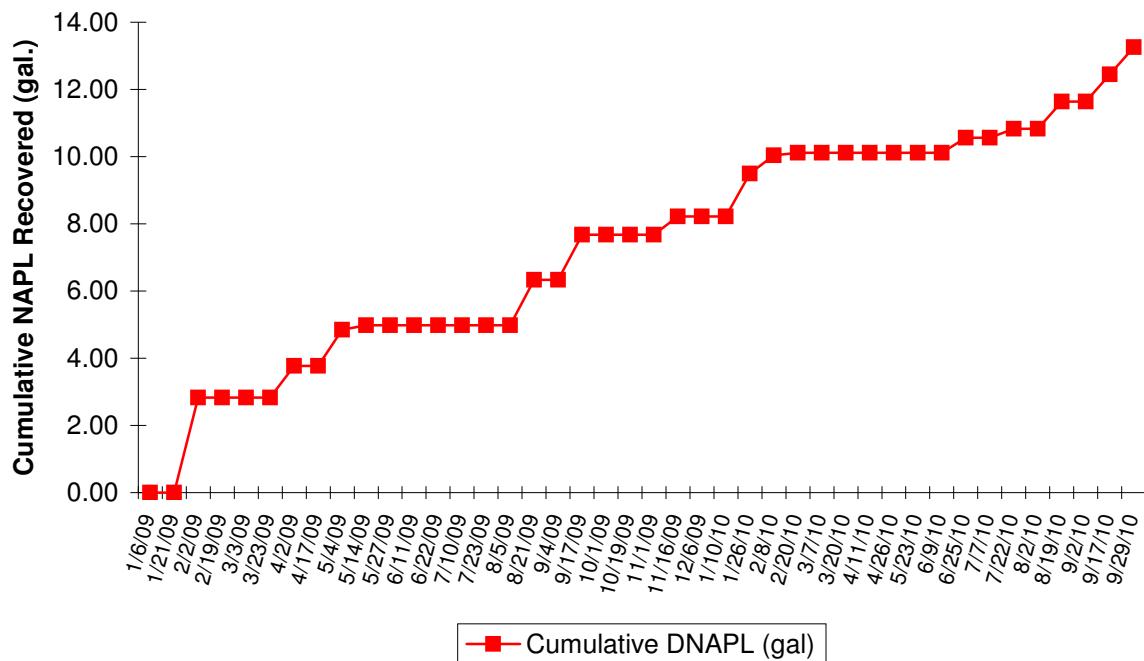


**FIGURE 8U**  
**Well IPR-12A NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**

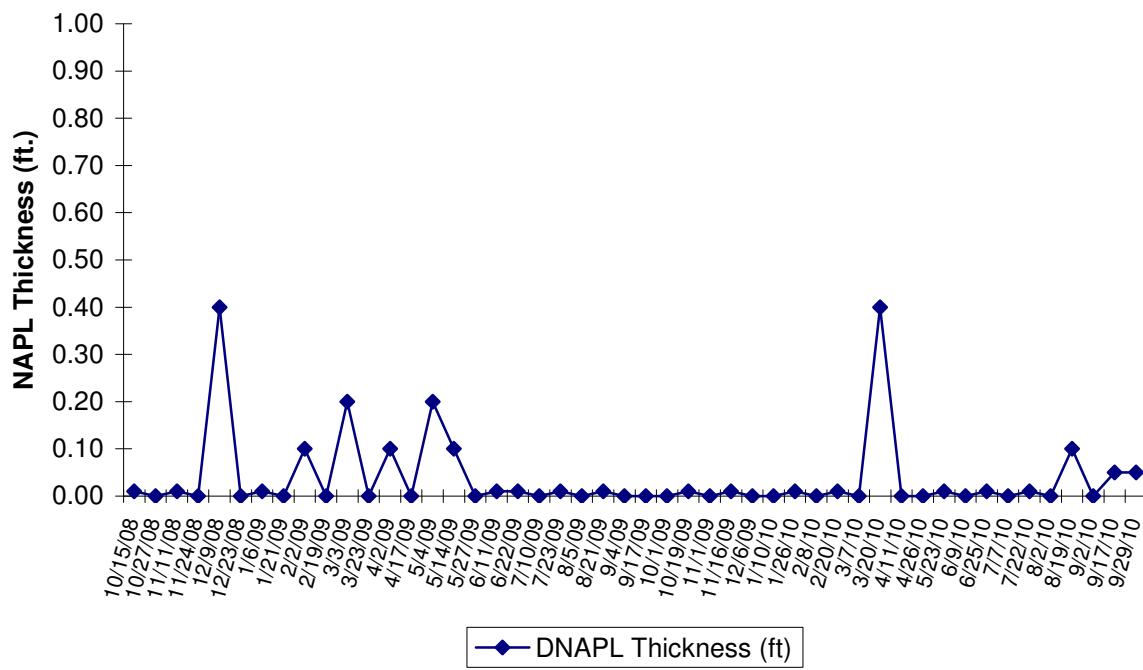
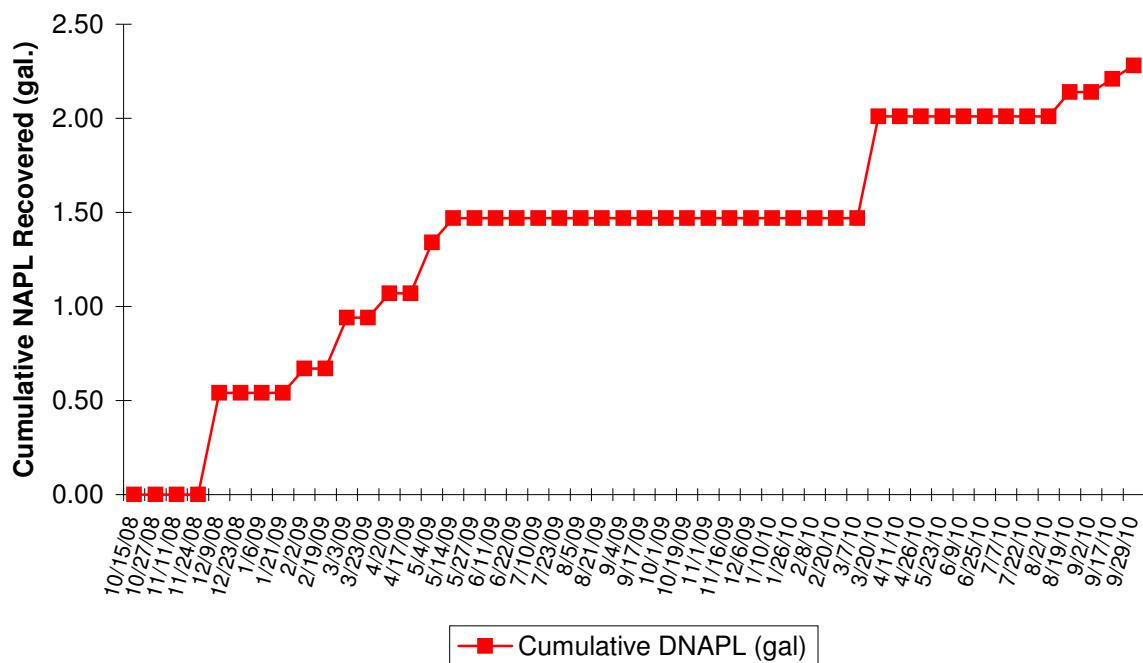




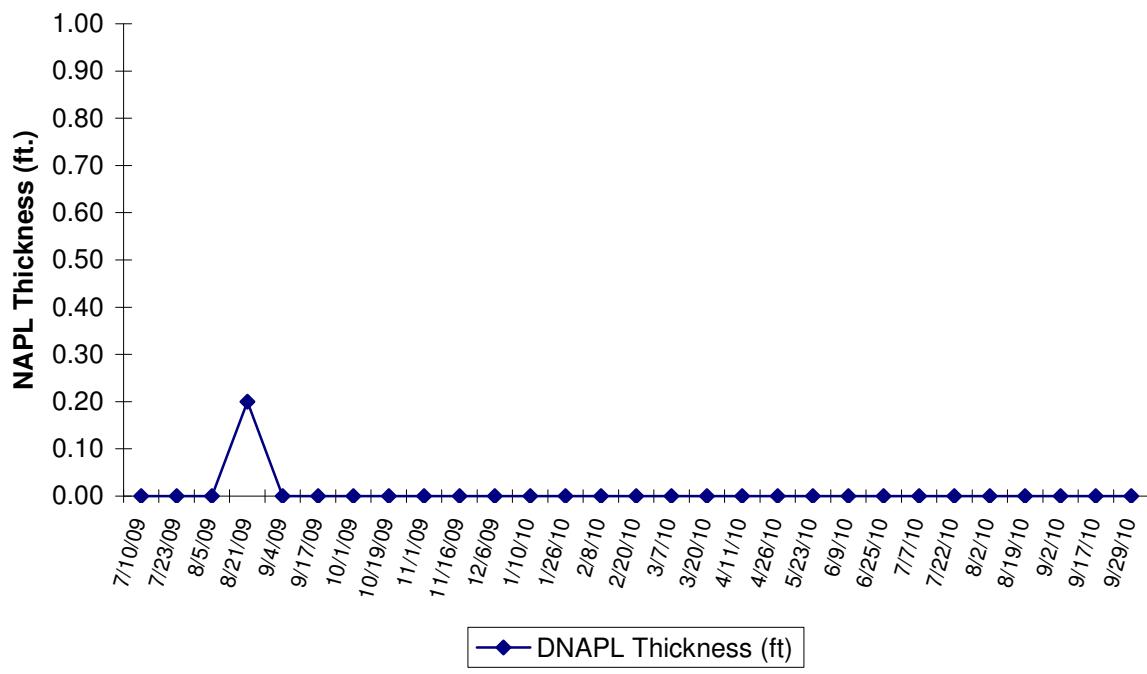
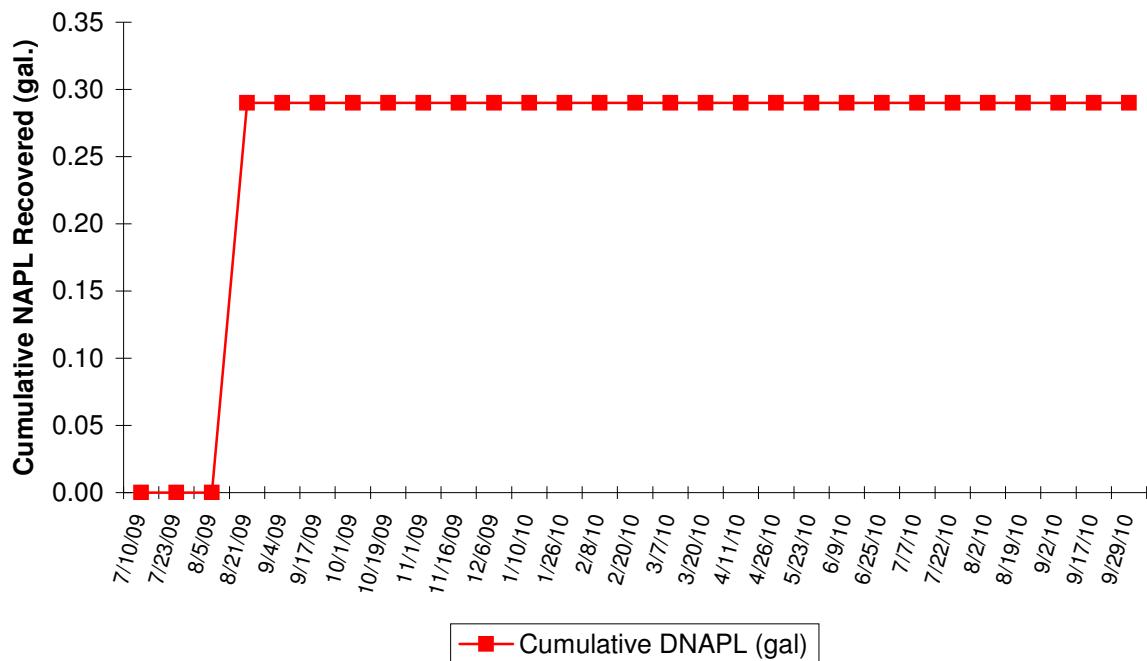
**FIGURE 8W**  
**Well IPR-16 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



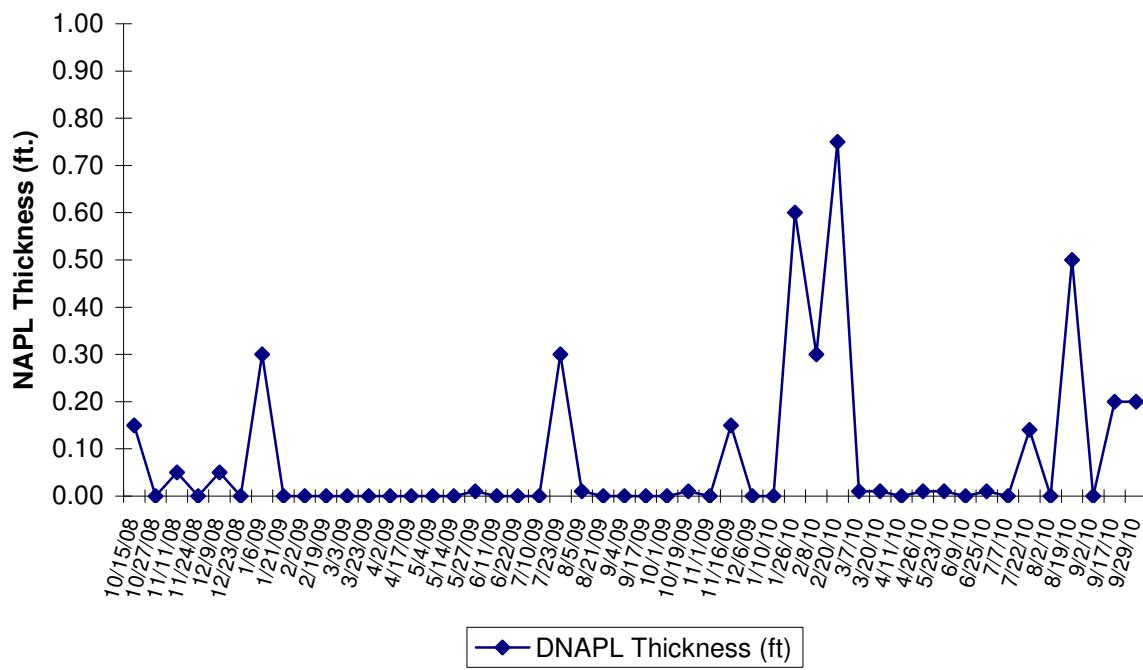
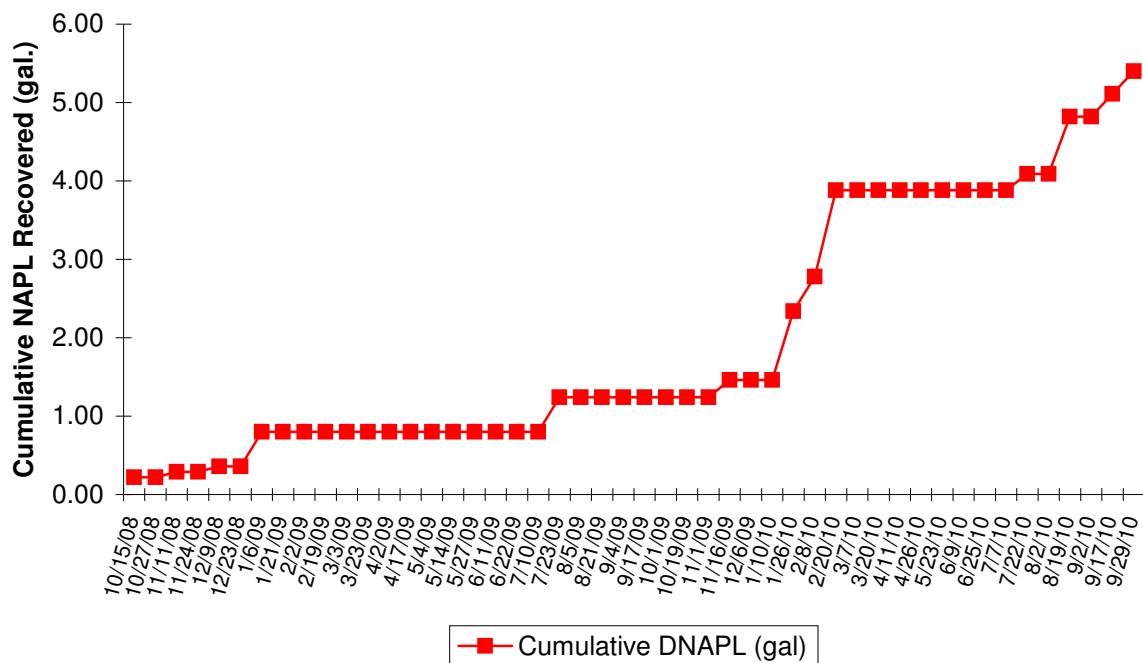
**FIGURE 8X**  
**Well IPR-17 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



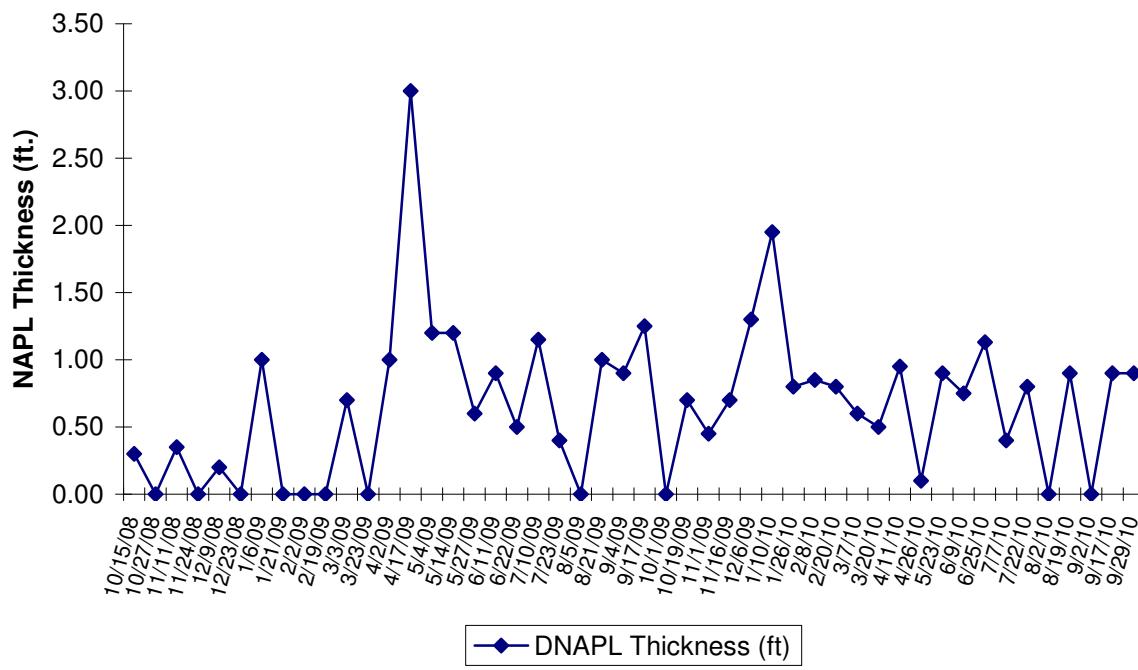
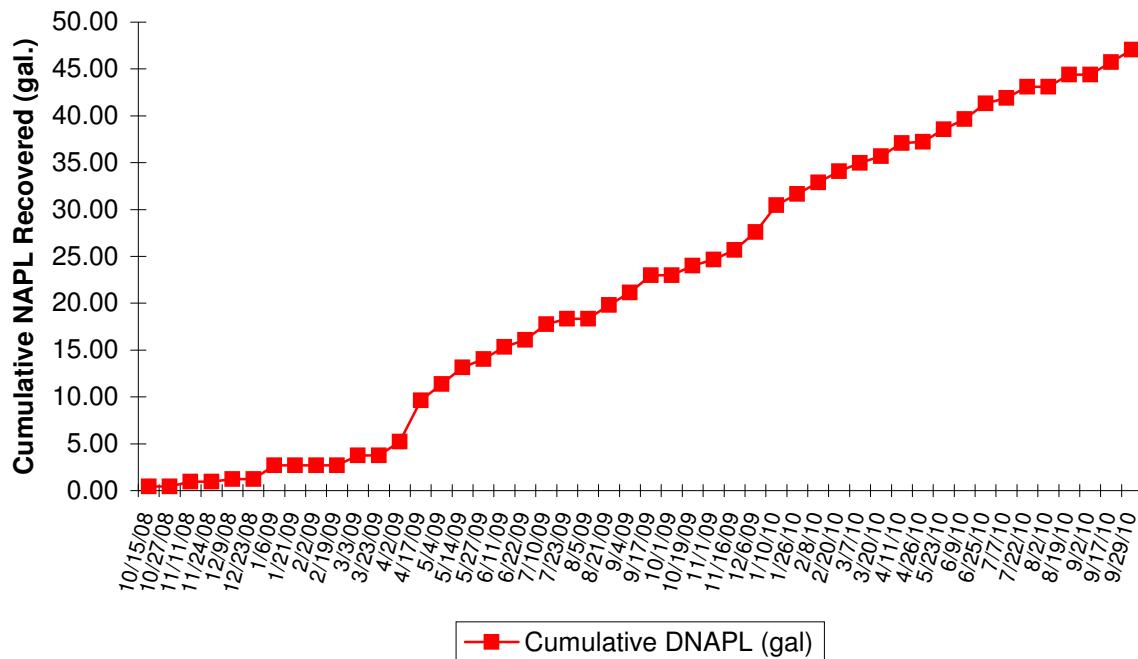
**FIGURE 8Y**  
**Well IPR-18 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



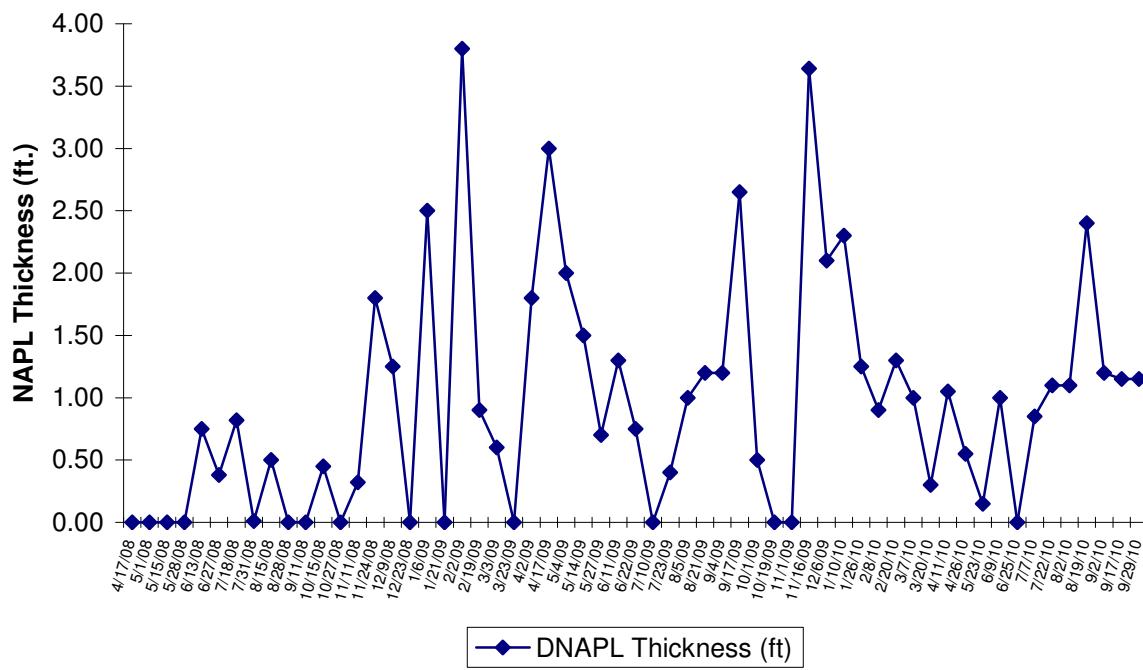
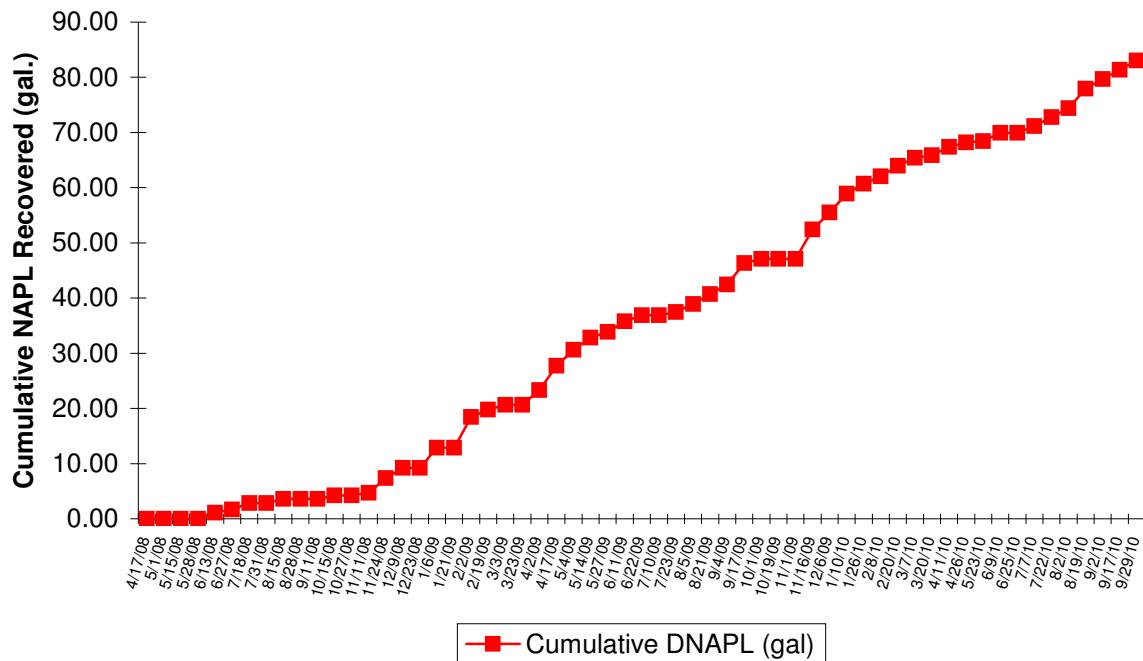
**FIGURE 8Z**  
**Well IPR-20 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



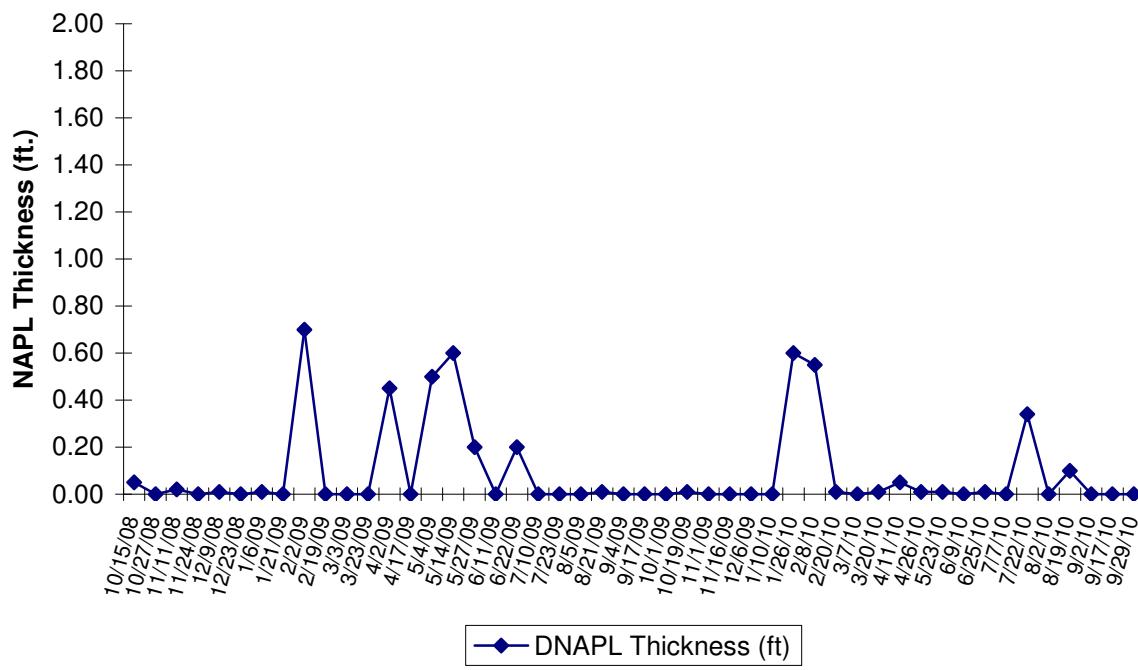
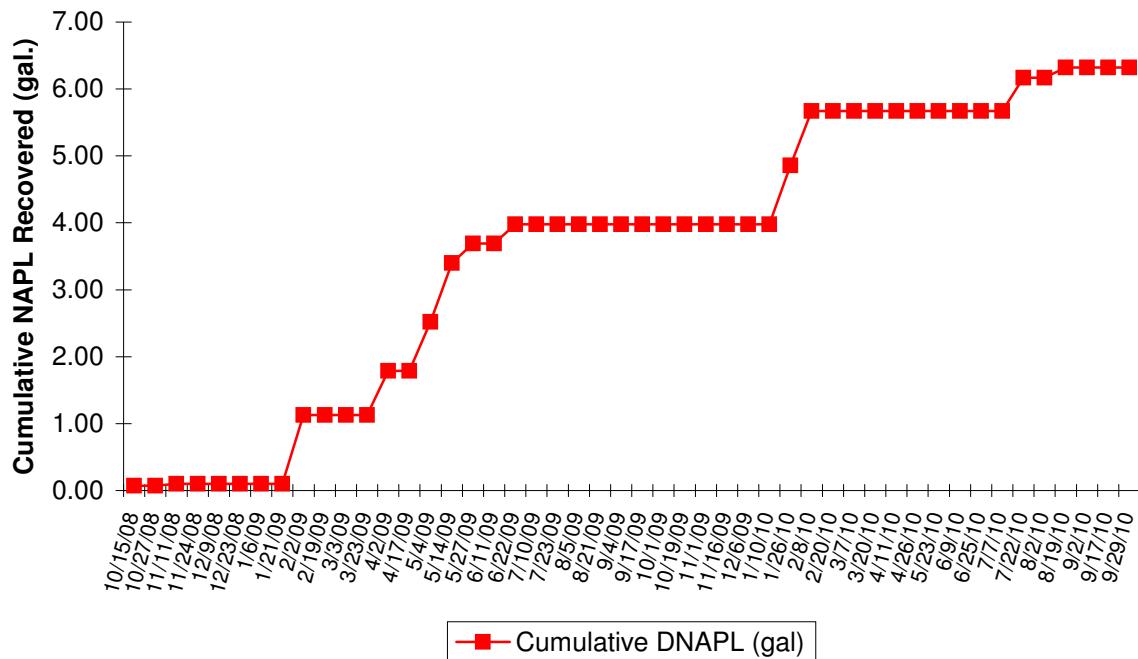
**FIGURE 8AA**  
**Well IPR-21 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



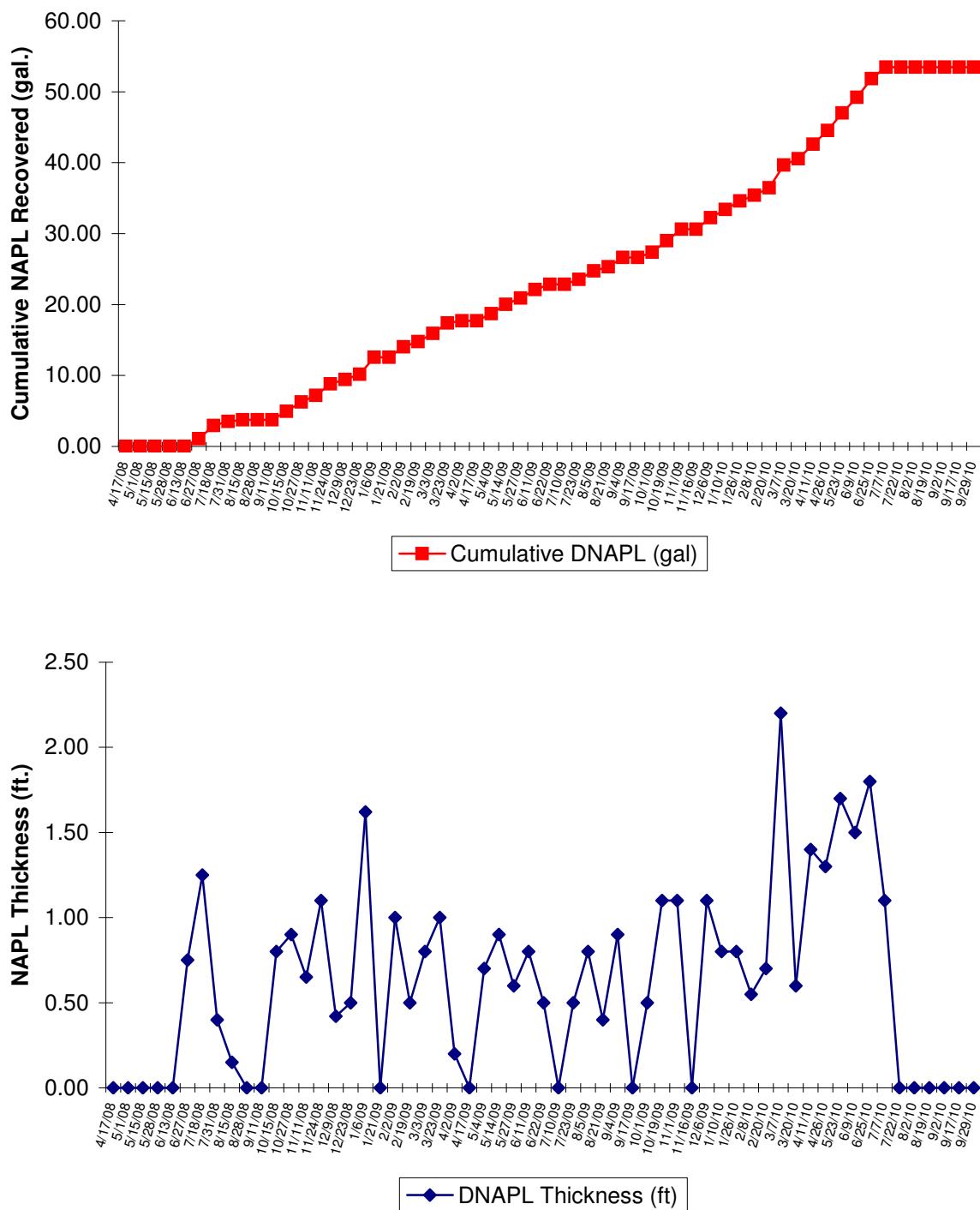
**FIGURE 8AB**  
**Well IPR-22 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



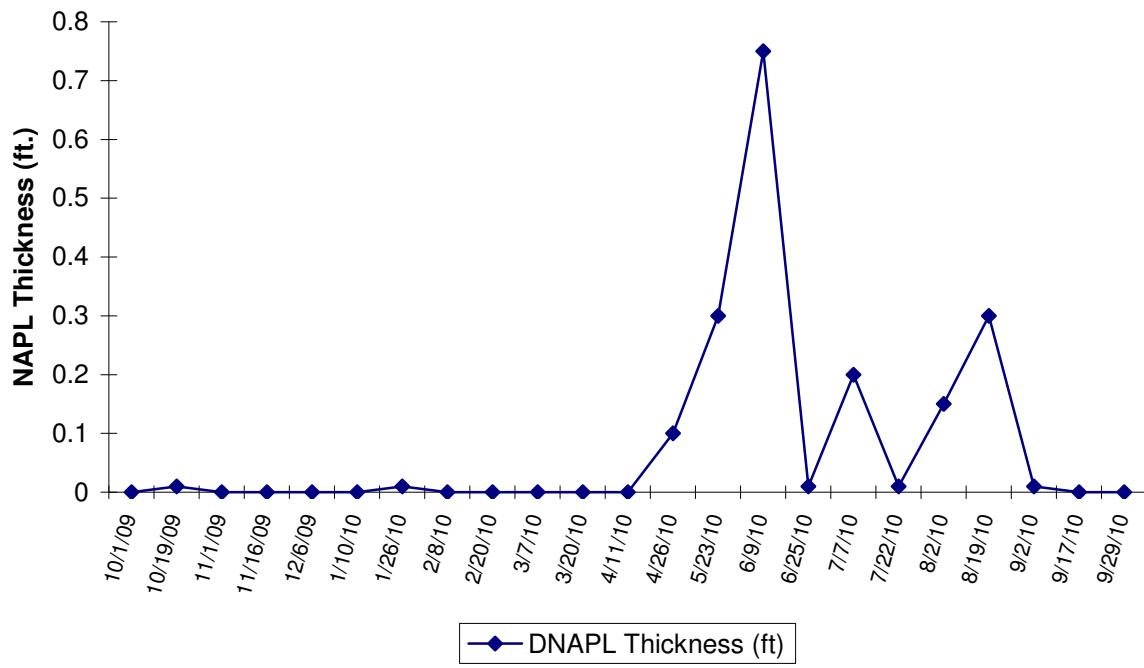
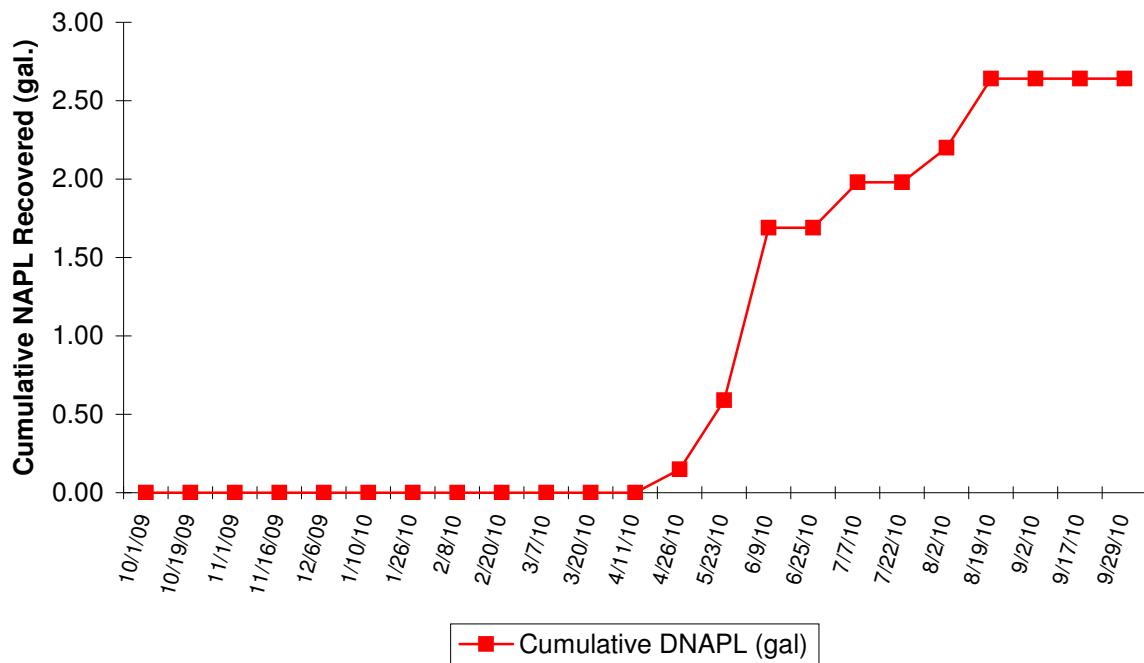
**FIGURE 8AC**  
**Well IPR-24 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



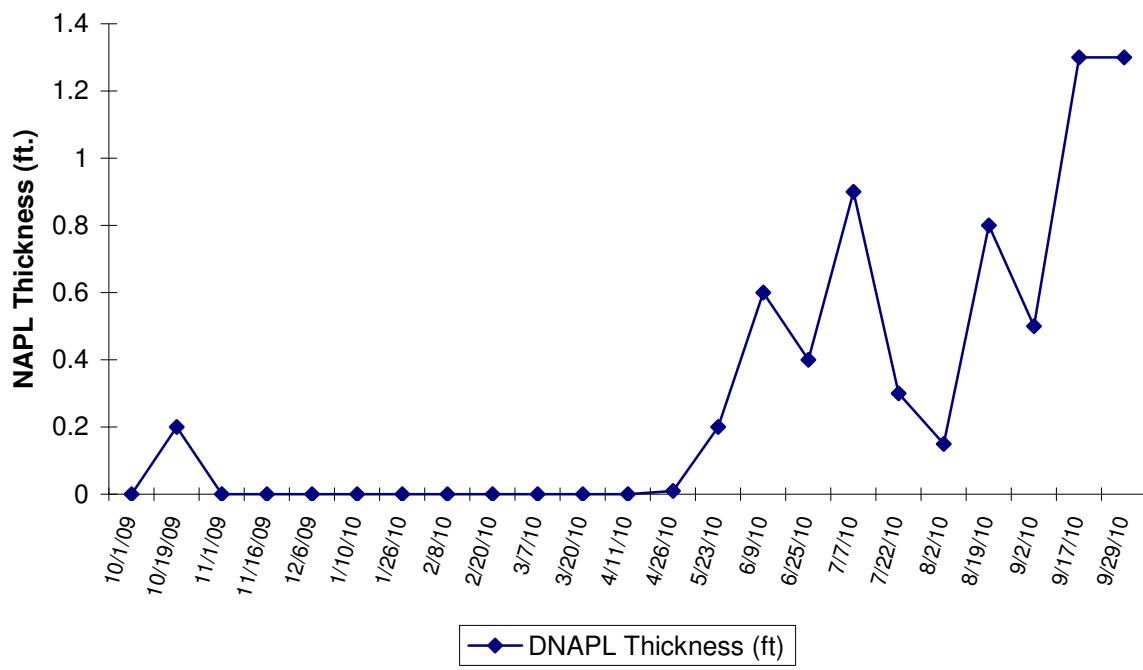
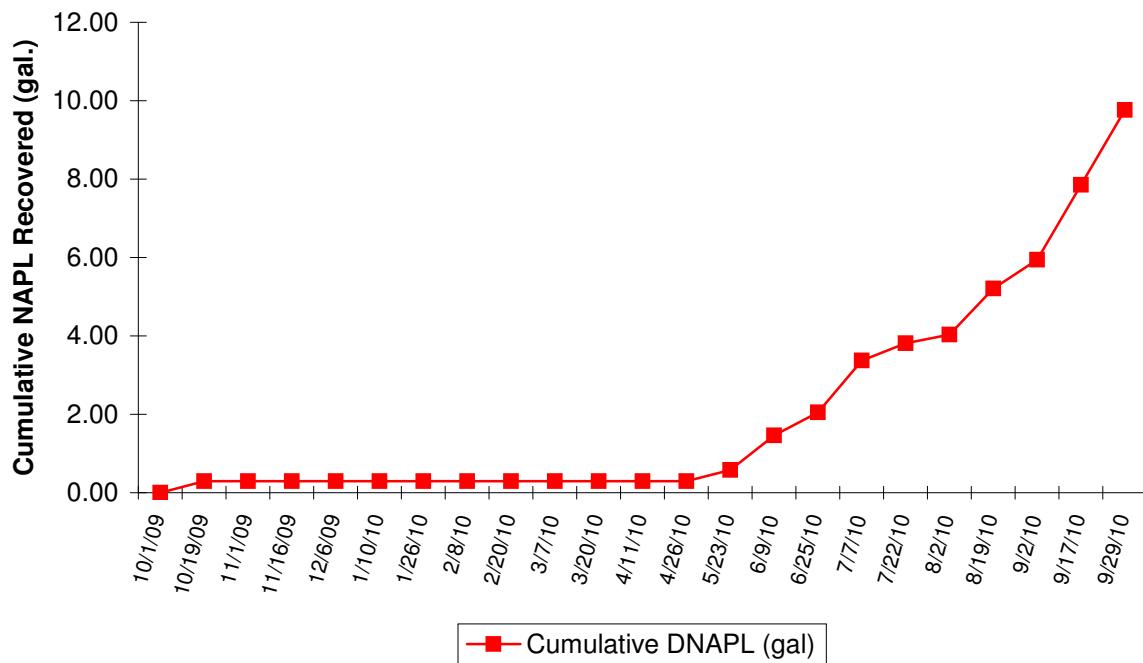
**FIGURE 8AD**  
**Well IPR-25 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



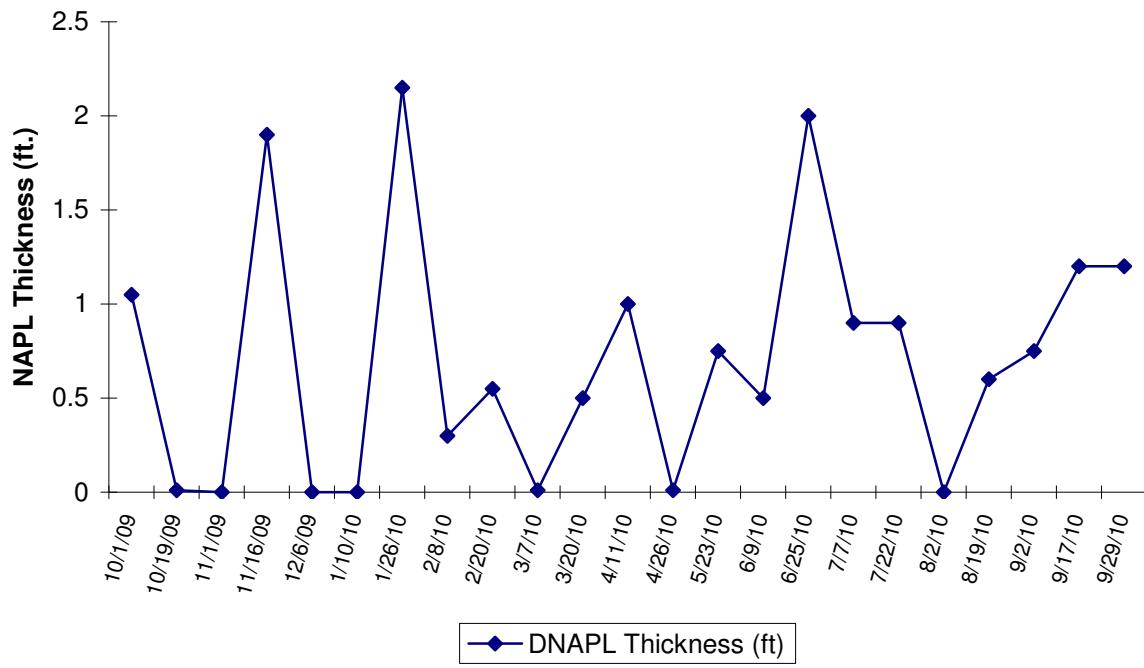
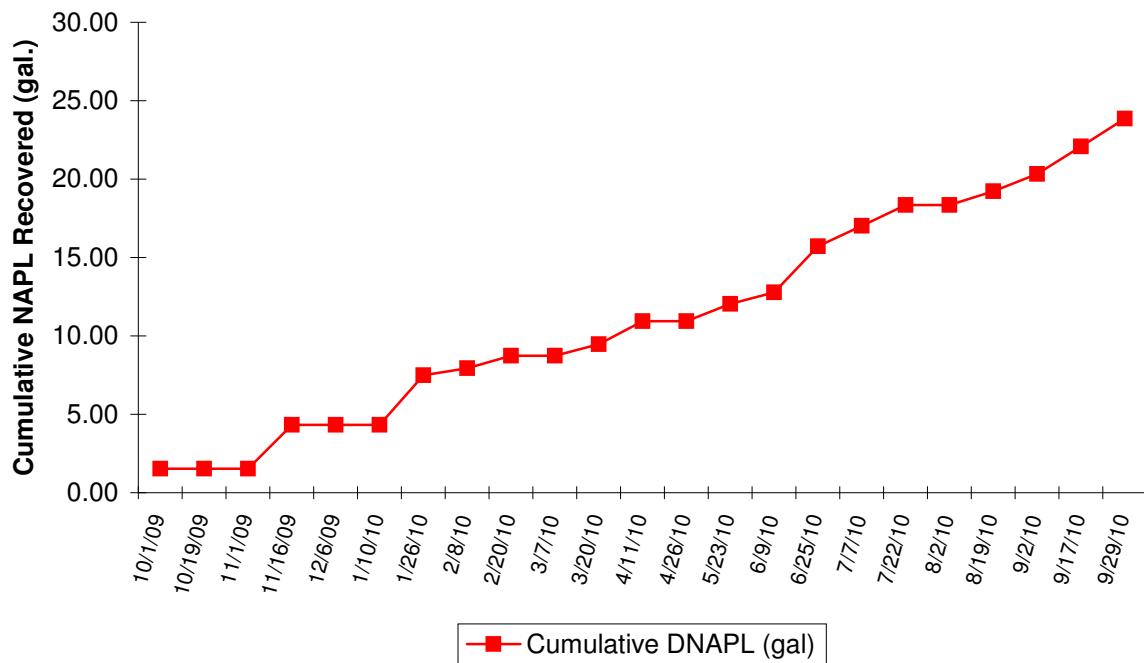
**FIGURE 8AE**  
**Well IPR-26 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



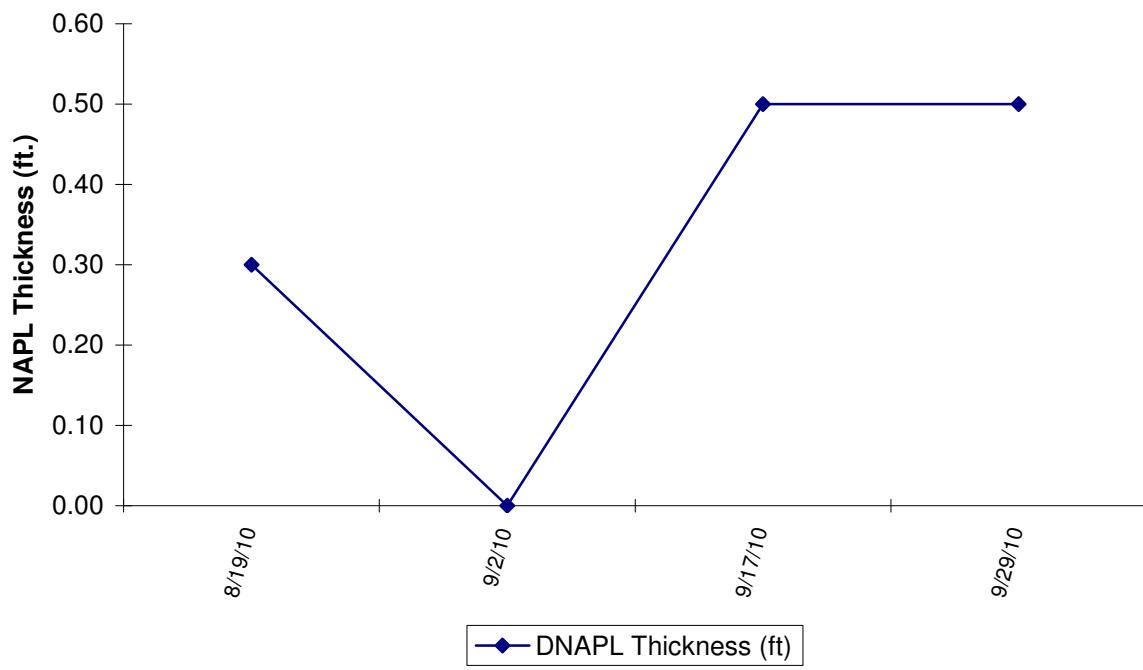
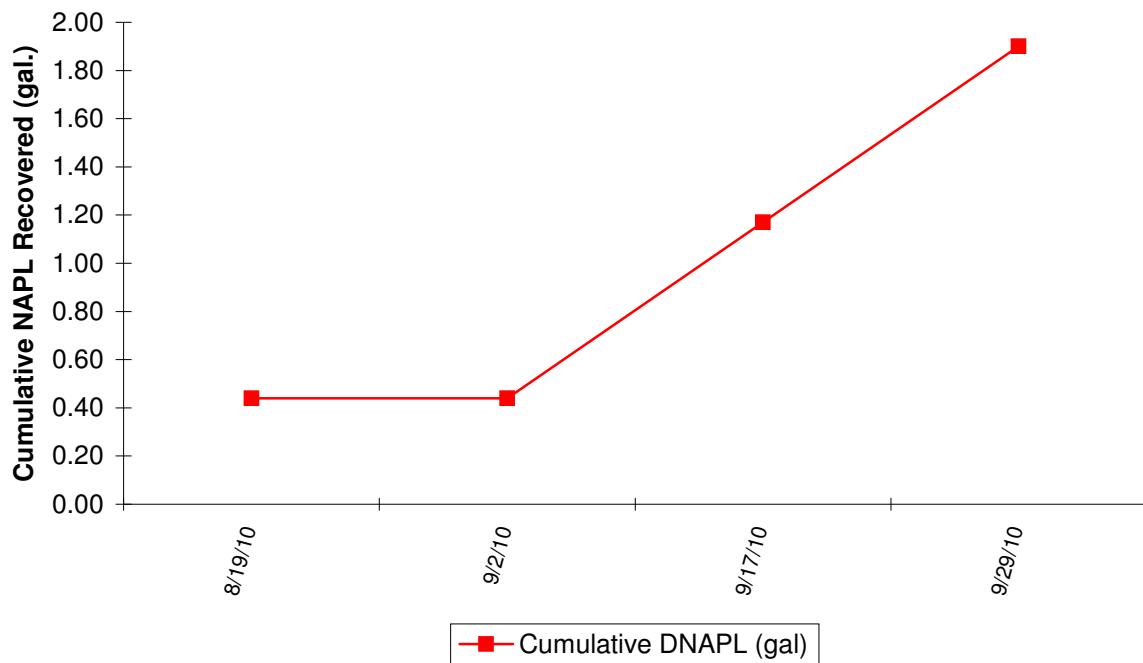
**FIGURE 8AF**  
**Well IPR-27 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



**FIGURE 8AG**  
**Well IPR-29 NAPL Thickness and Cumulative Recovery Plot**  
**Hempstead Intersection Street Former MGP Site**



**FIGURE 8AH**  
**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)**

**ATTACHMENT A**  
**DATA USABILITY SUMMARY REPORT**  
**THIRD QUARTER 2010**

**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**

**SEPTEMBER 2010**

## **TABLE OF CONTENTS**

	<u>Page No.</u>
I. INTRODUCTION .....	A-1
II. ANALYTICAL METHODOLOGIES AND DATA VALIDATION .....	A-1
III. DATA DELIVERABLE COMPLETENESS .....	A-2
IV. HOLDING TIMES/SAMPLE RECEIPT .....	A-2
V. NON-CONFORMANCES.....	A-3
VI. SAMPLE RESULTS AND REPORTING .....	A-3
VII. SUMMARY.....	A-4

### **TABLES** (Following Text)

Table A-1      Validated Groundwater Sample Analytical Results

Table A-2      Validated Field QC Sample Analytical Results

### **APPENDICES** (Following Tables)

Appendix A      Validated Form 1's

Appendix B      Support Documentation

## **I. INTRODUCTION**

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

Analytical data for sixteen (16) groundwater samples, one (1) field duplicate, one (1) matrix spike/matrix spike duplicate (MS/MSD) pair, one (1) field blank, and three (3) trip blanks collected by URS personnel from July 22-29, 2010 are discussed in this DUSR. The samples were collected as part of the 2010 third quarter groundwater monitoring event at the Hempstead Intersection Street Former MGP Site.

## **II. ANALYTICAL METHODOLOGIES AND DATA VALIDATION**

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

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

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

- *Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B, SOP HW-24, Rev. 2, August 2008; and*
- *Validating Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8270D, SOP HW-22, Rev. 4, August 2008.*

The limited data validation included a review of completeness of all required deliverables; holding times; quality control (QC) results (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.

There were no qualifications applied to the data during the data validation. 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 Appendix A. Copies of the case narratives and chain-of-custodies are presented in Appendix B.

### **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. HOLDING TIMES/SAMPLE RECEIPT**

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC), except for the following instances.

- The sample containers for HIMW-020S were mislabeled as HIMW-020I, due to a field oversight, but the collection date and time on the sample containers matched those on the COC. No qualification of the data was necessary.

All samples were analyzed within the required holding times.

## **V. NON-CONFORMANCES**

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

## **VI. SAMPLE RESULTS AND REPORTING**

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

A field duplicate was collected from monitoring well location HIMW-020S, which exhibited good field and analytical precision. There were no target compounds detected in the field duplicate and corresponding parent sample.

## VII. SUMMARY

All sample analyses were found to be compliant with the method and validation criteria, and the data are usable as reported. URS does not recommend the re-collection of any samples at this time.

Prepared By: Peter R. Fairbanks  
Peter R. Fairbanks, Senior Chemist

Date: 9/8/10

Reviewed By: George E. Kisluk  
George E. Kisluk, Senior Chemist

Date: 9/8/10

## **DEFINITIONS OF USEPA REGION II DATA QUALIFIERS**

- U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- D – The sample results are reported from a separate secondary dilution analysis.
- NJ – The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.

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

Location ID		HIMW-005D	HIMW-005I	HIMW-005S	HIMW-008D	HIMW-008I
Sample ID		HIMW-05D	HIMW-05I	HIMW-05S	HIMW-08D	HIMW-08I
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/27/10	07/28/10	07/29/10	07/28/10	07/28/10
Parameter	Units	Criteria*				
<b>Volatile Organic Compounds</b>						
Benzene	UG/L	-	1 U	3	1 U	1 U
Ethylbenzene	UG/L	-	2	2	1 U	1 U
Toluene	UG/L	-	27	1	1 U	1 U
Xylene (total)	UG/L	-	330 D	180	1 U	1 U
Total BTEX	UG/L	100	359	186	ND	ND
<b>Semivolatile Organic Compounds</b>						
2-Methylnaphthalene	UG/L	-	390 D	510 D	10 U	10 U
Acenaphthene	UG/L	-	3 J	13	10 U	10 U
Acenaphthylene	UG/L	-	49	180 DJ	10 U	10 U
Anthracene	UG/L	-	10 U	2 J	10 U	10 U
Benzo(a)anthracene	UG/L	-	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	-	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	-	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	-	10 U	10 U	10 U	10 U
Chrysene	UG/L	-	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	-	10 U	10 U	10 U	10 U
Fluorene	UG/L	-	2 J	26	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U	10 U	10 U
Naphthalene	UG/L	-	1,900 D	2,200 D	10 U	10 U
Phenanthrene	UG/L	-	10 U	18	10 U	10 U
Pyrene	UG/L	-	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	2,344	2,949	ND	ND

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

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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

D - Result reported from a secondary dilution analysis.

ND - Not detected.

Made By\_PRF 08/31/10; Checked By\_AMK 09/01/10

Detection Limits shown are PQL

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

Location ID			HIMW-008S	HIMW-012D	HIMW-012I	HIMW-012S	HIMW-013D
Sample ID			HIMW-08S	HIMW-12D	HIMW-12I	HIMW-12S	HIMW-13D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/28/10	07/27/10	07/27/10	07/27/10	07/23/10
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Benzene	UG/L	-	1 U	1 U	48	1 U	3
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	6	1 U	1
Total BTEX	UG/L	100	ND	ND	54	ND	4
<b>Semivolatile Organic Compounds</b>							
2-Methylnaphthalene	UG/L	-	10 U				
Acenaphthene	UG/L	-	10 U	10 U	44	10 U	5 J
Acenaphthylene	UG/L	-	2 J	10 U	42	10 U	12
Anthracene	UG/L	-	1 J	10 U	10 U	10 U	10 U
Benzo(a)anthracene	UG/L	-	10 U				
Benzo(a)pyrene	UG/L	-	10 U				
Benzo(b)fluoranthene	UG/L	-	10 U				
Benzo(g,h,i)perylene	UG/L	-	10 U				
Benzo(k)fluoranthene	UG/L	-	10 U				
Chrysene	UG/L	-	10 U				
Dibenz(a,h)anthracene	UG/L	-	10 U				
Fluoranthene	UG/L	-	10 U				
Fluorene	UG/L	-	10 U	10 U	26	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U				
Naphthalene	UG/L	-	10 U	10 U	3 J	10 U	10 U
Phenanthrene	UG/L	-	10 U	10 U	10	10 U	10 U
Pyrene	UG/L	-	10 U				
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	3	ND	125	ND	17

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

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

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

D - Result reported from a secondary dilution analysis.

ND - Not detected.

Made By\_PRF 08/31/10; Checked By\_AMK 09/01/10

Detection Limits shown are PQL

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

Location ID			HIMW-013I	HIMW-014I	HIMW-015D	HIMW-015I	HIMW-020I
Sample ID			HIMW-13I	HIMW-14I	HIMW-15D	HIMW-15I	HIMW-20I
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/23/10	07/23/10	07/22/10	07/22/10	07/26/10
Parameter	Units	Criteria*					
<b>Volatile Organic Compounds</b>							
Benzene	UG/L	-	300 D	30	1 U	20	76
Ethylbenzene	UG/L	-	6	8	1 U	1 U	4
Toluene	UG/L	-	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	-	7	3	1 U	1 U	52
Total BTEX	UG/L	100	313	41	ND	20	132
<b>Semivolatile Organic Compounds</b>							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	5 J
Acenaphthene	UG/L	-	9 J	9 J	10 U	5 J	10
Acenaphthylene	UG/L	-	71	12	10 U	21	140 D
Anthracene	UG/L	-	1 J	10 U	10 U	10 U	3 J
Benzo(a)anthracene	UG/L	-	10 U				
Benzo(a)pyrene	UG/L	-	10 U				
Benzo(b)fluoranthene	UG/L	-	10 U				
Benzo(g,h,i)perylene	UG/L	-	10 U				
Benzo(k)fluoranthene	UG/L	-	10 U				
Chrysene	UG/L	-	10 U				
Dibenz(a,h)anthracene	UG/L	-	10 U				
Fluoranthene	UG/L	-	10 U				
Fluorene	UG/L	-	11	5 J	10 U	10 U	18
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U				
Naphthalene	UG/L	-	1 J	10 U	10 U	10 U	32
Phenanthrene	UG/L	-	11	6 J	10 U	3 J	22
Pyrene	UG/L	-	10 U				
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	104	32	ND	29	230

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

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

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

D - Result reported from a secondary dilution analysis.

ND - Not detected.

Made By\_PRF 08/31/10; Checked By\_AMK 09/01/10

Detection Limits shown are PQL

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

<b>Location ID</b>			HIMW-020S	HIMW-020S
<b>Sample ID</b>			DUP 100726	HIMW-20S
<b>Matrix</b>			Groundwater	Groundwater
<b>Depth Interval (ft)</b>			-	-
<b>Date Sampled</b>			07/26/10	07/26/10
<b>Parameter</b>	<b>Units</b>	<b>Criteria*</b>	Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>				
Benzene	UG/L	-	1 U	1 U
Ethylbenzene	UG/L	-	1 U	1 U
Toluene	UG/L	-	1 U	1 U
Xylene (total)	UG/L	-	1 U	1 U
Total BTEX	UG/L	100	ND	ND
<b>Semivolatile Organic Compounds</b>				
2-Methylnaphthalene	UG/L	-	10 U	10 U
Acenaphthene	UG/L	-	10 U	10 U
Acenaphthylene	UG/L	-	10 U	10 U
Anthracene	UG/L	-	10 U	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	-	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U
Naphthalene	UG/L	-	10 U	10 U
Phenanthrene	UG/L	-	10 U	10 U
Pyrene	UG/L	-	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	ND	ND

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

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

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

D - Result reported from a secondary dilution analysis.

ND - Not detected.

Made By\_PRF 08/31/10\_ Checked By\_AMK 09/01/10\_

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
Sample ID			TB072310	TB100727	FB 100729	TB 100729
Matrix			Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)			-	-	-	-
Date Sampled			07/23/10	07/27/10	07/29/10	07/29/10
Parameter	Units	Criteria*	Trip Blank (1-1)	Trip Blank (1-1)	Field Blank (1-1)	Trip Blank (1-1)
<b>Volatile Organic Compounds</b>						
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
<b>Semivolatile Organic Compounds</b>						
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 U	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- Groundwater 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.

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

Made By\_PRF 08/31/10; Checked By\_AMK 09/01/10

**APPENDIX A**

**VALIDATED FORM 1'S**

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-13D

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008637-001ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9295.DLevel: (low/med) LOW Date Received: 07/23/10% Moisture: not dec. Date Analyzed: 08/04/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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)	1	

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-13I

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008637-002ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\ER9296.DLevel: (low/med) LOW Date Received: 07/23/10% Moisture: not dec. Date Analyzed: 08/04/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	300	D
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	6	
1330-20-7	Xylene (total)	7	

8/30/10  
✓

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13IDL

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water)

WATER

Lab Sample ID:

1008637-002ADLSample wt/vol: 5(g/mL) ML

Lab File ID:

10\ES9314.D

Level: (low/med)

LOW

Date Received:

07/23/10

% Moisture: not dec.

Date Analyzed:

08/05/10GC Column: Rxi-1MSID: .32 (mm)Dilution Factor: 2.00

Soil Extract Volume:

( $\mu$ L)Soil Aliquot Volume ( $\mu$ L)

## CONCENTRATION UNITS:

( $\mu$ g/L or  $\mu$ g/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
71-43-2	Benzene	300	D
108-88-3	Toluene	2	U
100-41-4	Ethylbenzene	6	D
1330-20-7	Xylene (total)	8	D

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-14I

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008637-003ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9297.DLevel: (low/med) LOW Date Received: 07/23/10% Moisture: not dec. Date Analyzed: 08/04/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	30	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	8	
1330-20-7	Xylene (total)	3	

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EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-15D

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008637-004ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9292.DLevel: (low/med) LOW Date Received: 07/23/10% Moisture: not dec. Date Analyzed: 08/04/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-URS103 S36

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15I

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103

Matrix: (soil/water) WATER Lab Sample ID: 1008637-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9293.D

Level: (low/med) LOW Date Received: 07/23/10

% Moisture: not dec. Date Analyzed: 08/04/10

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

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

KEY-URS103 S37

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

TB072310

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008637-006ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\B9294.DLevel: (low/med) LOW Date Received: 07/23/10% Moisture: not dec. Date Analyzed: 06/04/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-URS103 S38

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05D

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008773-001ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9298.DLevel: (low/med) LOW Date Received: 07/27/10% Moisture: not dec. Date Analyzed: 08/04/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	27	
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene (total)	330 340	E 1

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05DDL

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: KEY-URS SAS No.: \_\_\_\_\_SDG No.: KEY-URS103

Matrix: (soil/water)

WATERLab Sample ID: 1008773-001ADLSample wt/vol: 5(g/mL) MLLab File ID: 10\9315.D

Level: (low/med)

LOWDate Received: 07/27/10

% Moisture: not dec.

Date Analyzed: 08/05/10GC Column: Rxi-1MSID: .32 (mm)Dilution Factor: 2.00

Soil Extract Volume:

( $\mu$ L)Soil Aliquot Volume ( $\mu$ L)

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) UG/L	Q
71-43-2	Benzene	2	U
108-88-3	Toluene	28	D
100-41-4	Ethylbenzene	2	U
1330-20-7	Xylene (total)	330	D

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-12D

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008773-002ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9299.DLevel: (low/med) LOW Date Received: 07/27/10% Moisture: not dec. Date Analyzed: 08/04/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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.

HIMW-12I

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103

Matrix: (soil/water) WATER Lab Sample ID: 1008773-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 10\B9300.D

Level: (low/med) LOW Date Received: 07/27/10

% Moisture: not dec. Date Analyzed: 08/04/10

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	48	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	6	

KEY-URS103 S42

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-12S

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008773-004ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\ER9301.DLevel: (low/med) LOW Date Received: 07/27/10% Moisture: not dec. Date Analyzed: 08/04/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-20I

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008773-005ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\EG302.DLevel: (low/med) LOW Date Received: 07/27/10% Moisture: not dec. Date Analyzed: 08/05/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	76	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	4	
1330-20-7	Xylene (total)	52	

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-20S

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103

Matrix: (soil/water) WATER Lab Sample ID: 1008773-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9303.D

Level: (low/med) LOW Date Received: 07/27/10

% Moisture: not dec. Date Analyzed: 08/05/10

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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.

DUP 100726

(HIMW-0205)

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103

Matrix: (soil/water) WATER Lab Sample ID: 1008773-007A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9304.D

Level: (low/med) LOW Date Received: 07/27/10

% Moisture: not dec. Date Analyzed: 08/05/10

GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(pg/L or pg/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-URS103 S46

## VOLATILE ORGANICS ANALYSIS DATA SHEET

TB100727

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008773-008ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\89305.DLevel: (low/med) LOW Date Received: 07/27/10% Moisture: not dec. Date Analyzed: 08/05/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-051

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008835-001ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\ES9306.DLevel: (low/med) LOW Date Received: 07/28/10% Moisture: not dec. Date Analyzed: 08/05/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

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

KEY-URS103 S48

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-08D

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008835-002ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9307.DLevel: (low/med) LOW Date Received: 07/28/10% Moisture: not dec. Date Analyzed: 08/05/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-08I

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008835-003ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9316.DLevel: (low/med) LOW Date Received: 07/28/10% Moisture: not dec. Date Analyzed: 08/05/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-URS103 S50

## VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-088

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008835-004ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9319.DLevel: (low/med) LOW Date Received: 07/28/10% Moisture: not dec. Date Analyzed: 08/05/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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.

HIMW-058

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008859-001ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9320.DLevel: (low/med) LOW Date Received: 07/29/10% Moisture: not dec. Date Analyzed: 08/05/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-URS103 S52

## VOLATILE ORGANICS ANALYSIS DATA SHEET

FB 100729

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008859-002ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\X9321.DLevel: (low/med) LOW Date Received: 07/29/10% Moisture: not dec. Date Analyzed: 08/05/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-URS103 S53

## VOLATILE ORGANICS ANALYSIS DATA SHEET

TB 100729

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008859-003ASample wt/vol: 5 (g/mL) ML Lab File ID: 10\E9322.DLevel: (low/med) LOW Date Received: 07/29/10% Moisture: not dec. Date Analyzed: 08/05/10GC Column: Rxi-1MS ID: .32 (mm) Dilution Factor: 1.00

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

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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-URS103 S54

**H2M LABS, INC.**

**3.2 SEMIVOLATILES**

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-13D

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008637-001BSample wt/vol: 1000 (g/mL) ML Lab File ID: 0\N40523.DLevel: (low/med) LOW Date Received: 07/23/10% Moisture: Decanted: (Y/N) N Date Extracted: 07/27/10Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 07/30/10Injection Volume: 2 ( $\mu$ L) Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Extraction: (Type) SEPF

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg)	UG/L	Q
91-20-3	Naphthalene	10	U	
91-57-6	2-Methylnaphthalene	10	U	
208-96-8	Acenaphthylene	12		
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

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-13I

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008637-002BSample wt/vol: 1000 (g/mL) ML Lab File ID: 0\N40524.DLevel: (low/med) LOW Date Received: 07/23/10% Moisture: Decanted: (Y/N) N Date Extracted: 07/27/10Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 07/30/10Injection Volume: 2 ( $\mu$ L) Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Extraction: (Type) SEPF

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg)	UG/L	Q
91-20-3	Naphthalene	1	J	
91-57-6	2-Methylnaphthalene	10	U	
208-96-8	Acenaphthylene	71		
83-32-9	Acenaphthene	9	J	
86-73-7	Fluorene	11		
85-01-8	Phenanthrene	11		
120-12-7	Anthracene	1	J	
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
56-55-3	Benzo (a) anthracene	10	U	
218-01-9	Chrysene	10	U	
205-99-2	Benzo (b) fluoranthene	10	U	
207-08-9	Benzo (k) fluoranthene	10	U	
50-32-8	Benzo (a) pyrene	10	U	
193-39-5	Indeno (1,2,3-cd) pyrene	10	U	
53-70-3	Dibenzo (a,h) anthracene	10	U	
191-24-2	Benzo (g,h,i) perylene	10	U	

(1) Cannot be separated from Diphenylamine

KEY-URS103 S57

## SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-14I

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008637-003BSample wt/vol: 1000 (g/mL) ML Lab File ID: 0\N40525.DLevel: (low/med) LOW Date Received: 07/23/10% Moisture: Decanted: (Y/N) N Date Extracted: 07/27/10Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 07/30/10Injection Volume: 2 ( $\mu$ L) Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Extraction: (Type) SEPF

## CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

## SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-15D

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_SDG No.: KEY-URS103Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008637-004BSample wt/vol: 1000 (g/mL) MLLab File ID: 0\N40526.DLevel: (low/med) LOWDate Received: 07/23/10% Moisture: Decanted: (Y/N) NDate Extracted: 07/27/10Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 07/30/10Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/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

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-15I

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008637-005BSample wt/vol: 1000 (g/mL) MLLab File ID: 0\N40527.DLevel: (low/med) LOWDate Received: 07/23/10

% Moisture:

Decanted: (Y/N)

NDate Extracted: 07/27/10Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 07/30/10Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

## CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-05D

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103Matrix: (soil/water) WATER Lab Sample ID: 1008773-001BSample wt/vol: 1000 (g/mL) ML Lab File ID: 0\N40647.DLevel: (low/med) LOW Date Received: 07/27/10% Moisture: Decanted: (Y/N) N Date Extracted: 07/30/10Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 08/06/10Injection Volume: 2 ( $\mu$ L) Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Extraction: (Type) SEPF

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg)	UG/L	Q
91-20-3	Naphthalene	1900	880	E (D)
91-57-6	2-Methylnaphthalene	390	320	E (D)
208-96-8	Acenaphthylene		49	
83-32-9	Acenaphthene		3	J
86-73-7	Fluorene		2	J
85-01-8	Phenanthrene		10	U
120-12-7	Anthracene		10	U
206-44-0	Fluoranthene		10	U
129-00-0	Pyrene		10	U
56-55-3	Benzo (a) anthracene		10	U
218-01-9	Chrysene		10	U
205-99-2	Benzo (b) fluoranthene		10	U
207-08-9	Benzo (k) fluoranthene		10	U
50-32-8	Benzo (a) pyrene		10	U
193-39-5	Indeno (1,2,3-cd) pyrene		10	U
53-70-3	Dibenzo (a,h) anthracene		10	U
191-24-2	Benzo (g,h,i) perylene		10	U

(1) Cannot be separated from Diphenylamine

8/30/10  
✓

## SEMITOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

HIMW-05DDL

Lab Code: 10478

Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008773-001BDL

Sample wt/vol:

1000

(g/mL)

ML

Lab File ID: \_\_\_\_\_

0\N40695.D

Level: (low/med)

LOW

Date Received: \_\_\_\_\_

07/27/10

% Moisture:

Decanted: (Y/N)

N

Date Extracted: \_\_\_\_\_

07/30/10

Concentrated Extract

Volume: 1000 (μL)

Date Analyzed: \_\_\_\_\_

08/10/10

Injection Volume:

2

(μL)

Dilution Factor: \_\_\_\_\_

25.00

GPC Cleanup: (Y/N)

N

pH: \_\_\_\_\_

Extraction: (Type) SEPPE

## CONCENTRATION UNITS:

(μg/L or μg/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
91-20-3	Naphthalene	1900	D
91-57-6	2-Methylnaphthalene	390	D
208-96-8	Acenaphthylene	59	DJ
83-32-9	Acenaphthene	250	U
86-73-7	Fluorene	250	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
56-55-3	Benzo(a)anthracene	250	U
218-01-9	Chrysene	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	250	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	250	U
191-24-2	Benzo(g,h,i)perylene	250	U

(1) Cannot be separated from Diphenylamine

8/30/10

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-12D

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008773-002B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: \_\_\_\_\_

0\N40648.D

Level: (low/med)

LOW

Date Received: \_\_\_\_\_

07/27/10

% Moisture:

Decanted: (Y/N) N

Date Extracted: \_\_\_\_\_

07/30/10

Concentrated Extract Volume: 1000 (μL)

Date Analyzed: \_\_\_\_\_

08/06/10

Injection Volume: 2 (μL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: \_\_\_\_\_

Extraction: (Type) SEPFF

## 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-3
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

## SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-12I

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008773-003B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: \_\_\_\_\_

0\N40649.D

Level: (low/med) LOW

Date Received: \_\_\_\_\_

07/27/10

% Moisture: Decanted: (Y/N) N

Date Extracted: \_\_\_\_\_

07/30/10

Concentrated Extract Volume: 1000 ( $\mu$ L)

Date Analyzed: \_\_\_\_\_

08/06/10

Injection Volume: 2 ( $\mu$ L)

Dilution Factor: \_\_\_\_\_

1.00

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Extraction: (Type) SEP

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg)	UG/L	Q
91-20-3	Naphthalene	3	J	
91-57-6	2-Methylnaphthalene	10	U	
208-96-8	Acenaphthylene	42		
83-32-9	Acenaphthene	44		
86-73-7	Fluorene	26		
85-01-8	Phenanthrene	10		
120-12-7	Anthracene	10	U	
206-44-0	Fluoranthene	10	U	
129-00-0	Pyrene	10	U	
56-55-3	Benzo (a) anthracene	10	U	
218-01-9	Chrysene	10	U	
205-99-2	Benzo (b) fluoranthene	10	U	
207-08-9	Benzo (k) fluoranthene	10	U	
50-32-8	Benzo (a) pyrene	10	U	
193-39-5	Indeno (1,2,3-cd) pyrene	10	U	
53-70-3	Dibenzo (a,h) anthracene	10	U	
191-24-2	Benzo (g,h,i) perylene	10	U	

(1) Cannot be separated from Diphenylamine

1C  
SEMICVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12S

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_

Lab Code: <u>10478</u>	Case No.: <u>KEY-URS</u>	SAS No.: _____	SDG No.: <u>KEY-URS103</u>
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID: <u>1008773-004B</u>		
Sample wt/vol: <u>1000</u> (g/mL) <u>ML</u>	Lab File ID: <u>0\N40650.D</u>		
Level: (low/med) <u>LOW</u>	Date Received: <u>07/27/10</u>		
% Moisture:	Decanted: (Y/N) <u>N</u>	Date Extracted:	<u>07/30/10</u>
Concentrated Extract Volume:	<u>1000</u> ( $\mu$ L)	Date Analyzed:	<u>08/06/10</u>
Injection Volume:	<u>2</u> ( $\mu$ L)	Dilution Factor:	<u>1.00</u>
GPC Cleanup: (Y/N) <u>N</u>	pH: _____	Extraction: (Type) <u>SEPF</u>	

CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

KEY-URS103 S65

## SEMITVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-20I

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008773-005B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: \_\_\_\_\_

0\N40651.D

Level: (low/med)

LOW

Date Received: \_\_\_\_\_

07/27/10

% Moisture:

Decanted: (Y/N)

N

Date Extracted: \_\_\_\_\_

07/30/10

Concentrated Extract Volume: 1000 ( $\mu$ L)

Date Analyzed: \_\_\_\_\_

08/06/10

Injection Volume: 2 ( $\mu$ L)

Dilution Factor: 1.00

GPC Cleanup: (Y/N)

N

pH: \_\_\_\_\_

Extraction: (Type) SEPF

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg)	UG/L	Q
91-20-3	Naphthalene	32		
91-57-6	2-Methylnaphthalene	5		J
208-96-8	Acenaphthylene	140	110	B-D
83-32-9	Acenaphthene	10		
86-73-7	Fluorene	18		
85-01-8	Phenanthrene	22		
120-12-7	Anthracene	3		J
206-44-0	Fluoranthene	10		U
129-00-0	Pyrene	10		U
56-55-3	Benzo(a)anthracene	10		U
218-01-9	Chrysene	10		U
205-99-2	Benzo(b)fluoranthene	10		U
207-08-9	Benzo(k)fluoranthene	10		U
50-32-8	Benzo(a)pyrene	10		U
193-39-5	Indeno(1,2,3-cd)pyrene	10		U
53-70-3	Dibenz(a,h)anthracene	10		U
191-24-2	Benzo(g,h,i)perylene	10		U

(1) Cannot be separated from Diphenylamine

8/30/02

## SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-20IDL

Lab Name: H2M LABS, INC.

Contract:

Lab Code: 10478

Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water) WATER

Lab Sample ID: 1008773-005BDL

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 0VN40696.D

Level: (low/med)

LOW

Date Received: 07/27/10

% Moisture:

Decanted: (Y/N)

N

Date Extracted: 07/30/10

Concentrated Extract Volume: 1000 (μL)

Date Analyzed: 08/10/10

Injection Volume: 2 (μL)

Dilution Factor: 4.00

GPC Cleanup: (Y/N) N

pH: \_\_\_\_\_

Extraction: (Type) SEPF

## CONCENTRATION UNITS:

(μg/L or μg/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
91-20-3	Naphthalene	36	DJ
91-57-6	2-Methylnaphthalene	40	U
208-96-8	Acenaphthylene	140	DJ
83-32-9	Acenaphthene	12	DJ
86-73-7	Fluorene	20	DJ
85-01-8	Phenanthrene	24	DJ
120-12-7	Anthracene	40	U
206-44-0	Fluoranthene	40	U
129-00-0	Pyrene	40	U
56-55-3	Benzo (a) anthracene	40	U
218-01-9	Chrysene	40	U
205-99-2	Benzo (b) fluoranthene	40	U
207-08-9	Benzo (k) fluoranthene	40	U
50-32-8	Benzo (a) pyrene	40	U
193-39-5	Indeno (1,2,3-cd) pyrene	40	U
53-70-3	Dibenzo (a,h) anthracene	40	U
191-24-2	Benzo (g,h,i) perylene	40	U

(1) Cannot be separated from Diphenylamine

KEY-URS103 S67

## SEMICVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

HIMW-20S

Lab Code: 10478

Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008773-006B

Sample wt/vol: 1000

(g/mL)

ML

Lab File ID: \_\_\_\_\_

0\N40652.D

Level: (low/med)

LOW

Date Received: \_\_\_\_\_

07/27/10

% Moisture:

Decanted: (Y/N)

N

Date Extracted: \_\_\_\_\_

07/30/10

Concentrated Extract Volume: 1000

(μL)

Date Analyzed: \_\_\_\_\_

08/06/10

Injection Volume: 2

(μL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: \_\_\_\_\_

Extraction: (Type) SEPF

## CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP 100726

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008773-007B

Sample wt/vol: 1000

(g/mL)

ML

Lab File ID: \_\_\_\_\_

0\N40653.D

Level: (low/med)

LOW

Date Received: \_\_\_\_\_

07/27/10

% Moisture:

Decanted: (Y/N)

N

Date Extracted: \_\_\_\_\_

07/30/10

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: \_\_\_\_\_

08/06/10

Injection Volume: 2 (µL)

Dilution Factor: \_\_\_\_\_

1.00

GPC Cleanup: (Y/N) N

pH: \_\_\_\_\_

Extraction: (Type) SEPF

## CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L Q

91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

EPA SAMPLE NO.

## SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

HIMW-051

Lab Code: 10478 Case No.: KEY-URS SAS No.:        SDG No.: KEY-URS103  
 Matrix: (soil/water) WATER Lab Sample ID: 1008835-001B  
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0\N40658.D  
 Level: (low/med) LOW Date Received: 07/28/10  
 % Moisture: Decanted: (Y/N) N Date Extracted: 08/02/10  
 Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 08/07/10  
 Injection Volume: 2 ( $\mu$ L) Dilution Factor: 1.00  
 GPC Cleanup: (Y/N) N pH:        Extraction: (Type) SEPF

## CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L Q

<u>91-20-3</u>	<u>Naphthalene</u>	<u>2400</u>	<u>1200</u>	<u>ND</u>
<u>91-57-6</u>	<u>2-Methylnaphthalene</u>	<u>510</u>	<u>255</u>	<u>ND</u>
<u>208-96-8</u>	<u>Acenaphthylene</u>	<u>180</u>	<u>170</u>	<u>ND</u>
<u>83-32-9</u>	<u>Acenaphthene</u>	<u>13</u>	<u>13</u>	<u>ND</u>
<u>86-73-7</u>	<u>Fluorene</u>	<u>26</u>	<u>13</u>	<u>ND</u>
<u>85-01-8</u>	<u>Phenanthrene</u>	<u>18</u>	<u>18</u>	<u>ND</u>
<u>120-12-7</u>	<u>Anthracene</u>	<u>2</u>	<u>2</u>	<u>J</u>
<u>206-44-0</u>	<u>Fluoranthene</u>	<u>10</u>	<u>10</u>	<u>U</u>
<u>129-00-0</u>	<u>Pyrene</u>	<u>10</u>	<u>10</u>	<u>U</u>
<u>56-55-3</u>	<u>Benzo(a)anthracene</u>	<u>10</u>	<u>10</u>	<u>U</u>
<u>218-01-9</u>	<u>Chrysene</u>	<u>10</u>	<u>10</u>	<u>U</u>
<u>205-99-2</u>	<u>Benzo(b)fluoranthene</u>	<u>10</u>	<u>10</u>	<u>U</u>
<u>207-08-9</u>	<u>Benzo(k)fluoranthene</u>	<u>10</u>	<u>10</u>	<u>U</u>
<u>50-32-8</u>	<u>Benzo(a)pyrene</u>	<u>10</u>	<u>10</u>	<u>U</u>
<u>193-39-5</u>	<u>Indeno(1,2,3-cd)pyrene</u>	<u>10</u>	<u>10</u>	<u>U</u>
<u>53-70-3</u>	<u>Dibenzo(a,h)anthracene</u>	<u>10</u>	<u>10</u>	<u>U</u>
<u>191-24-2</u>	<u>Benzo(g,h,i)perylene</u>	<u>10</u>	<u>10</u>	<u>U</u>

(1) Cannot be separated from Diphenylamine

*8/30/10*

KEY-URS103 S70

## SEMICVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-05IDL

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103Matrix: (soil/water) WATERLab Sample ID: 1008835-001BDLSample wt/vol: 1000 (g/mL) MLLab File ID: 0N40697.DLevel: (low/med) LOWDate Received: 07/28/10% Moisture: Decanted: (Y/N) NDate Extracted: 08/02/10Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 08/10/10Injection Volume: 2 ( $\mu$ L)Dilution Factor: 50.00GPC 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	2200	D
91-57-6	2-Methylnaphthalene	510	D
208-96-8	Acenaphthylene	180	DJ
83-32-9	Acenaphthene	500	U
86-73-7	Fluorene	500	U
85-01-8	Phenanthrene	500	U
120-12-7	Anthracene	500	U
206-44-0	Fluoranthene	500	U
129-00-0	Pyrene	500	U
56-55-3	Benzo(a)anthracene	500	U
218-01-9	Chrysene	500	U
205-99-2	Benzo(b)fluoranthene	500	U
207-08-9	Benzo(k)fluoranthene	500	U
50-32-8	Benzo(a)pyrene	500	U
193-39-5	Indeno(1,2,3-cd)pyrene	500	U
53-70-3	Dibenzo(a,h)anthracene	500	U
191-24-2	Benzo(g,h,i)perylene	500	U

(1) Cannot be separated from Diphenylamine

8/30/10

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-08D

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_

Lab Code: <u>10478</u>	Case No.: <u>KEY-URS</u>	SAS No.: _____	SDG No.: <u>KEY-URS103</u>
Matrix: (soil/water) <u>WATER</u>		Lab Sample ID: <u>1008835-002B</u>	
Sample wt/vol: <u>1000</u> (g/mL) <u>ML</u>		Lab File ID: <u>0\N40690.D</u>	
Level: (low/med) <u>LOW</u>		Date Received: <u>07/28/10</u>	
% Moisture:	Decanted: (Y/N) <u>N</u>	Date Extracted: <u>08/02/10</u>	
Concentrated Extract Volume: <u>1000</u> ( $\mu$ L)		Date Analyzed: <u>08/10/10</u>	
Injection Volume: <u>2</u> ( $\mu$ L)		Dilution Factor: <u>1.00</u>	
GPC Cleanup: (Y/N) <u>N</u>	pH: _____	Extraction: (Type) <u>SEPF</u>	

CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-08I

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS103

Matrix: (soil/water) WATER Lab Sample ID: 1008835-003B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0\N40693.D

Level: (low/med) LOW Date Received: 07/28/10

% Moisture: Decanted: (Y/N) N Date Extracted: 08/02/10

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 08/10/10

Injection Volume: 2 ( $\mu$ L) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		( $\mu$ g/L or $\mu$ g/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

## SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

HIMW-08S

Lab Code: 10478

Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008835-004B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: \_\_\_\_\_

0\N40694.D

Level: (low/med) LOW

Date Received: \_\_\_\_\_

07/28/10

% Moisture: Decanted: (Y/N) N

Date Extracted: \_\_\_\_\_

08/02/10

Concentrated Extract Volume: 1000 ( $\mu$ L)

Date Analyzed: \_\_\_\_\_

08/10/10

Injection Volume: 2 ( $\mu$ L)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Extraction: (Type) SEPF

## CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05S

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008859-001B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: \_\_\_\_\_

0\N40654.D

Level: (low/med)

LOW

Date Received: \_\_\_\_\_

07/29/10

% Moisture:

Decanted: (Y/N) N

Date Extracted: \_\_\_\_\_

07/30/10

Concentrated Extract Volume: 1000 ( $\mu$ L)

Date Analyzed: \_\_\_\_\_

08/06/10

Injection Volume: 2 ( $\mu$ L)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Extraction: (Type) SEPF

CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/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

## SEMICVOLATILE ORGANICS ANALYSIS DATA SHEET

FB 100729

Lab Name: H2M LABS, INC.

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: KEY-URS

SAS No.: \_\_\_\_\_

SDG No.: KEY-URS103

Matrix: (soil/water) WATER

Lab Sample ID: \_\_\_\_\_

1008859-002B

Sample wt/vol: 1000

(g/mL) ML

Lab File ID: \_\_\_\_\_

0\N40655.D

Level: (low/med)

LOW

Date Received: \_\_\_\_\_

07/29/10

% Moisture:

Decanted: (Y/N)

N

Date Extracted: \_\_\_\_\_

07/30/10

Concentrated Extract Volume: 1000

(μL)

Date Analyzed: \_\_\_\_\_

08/06/10

Injection Volume: 2

(μL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: \_\_\_\_\_

Extraction: (Type) SEPF

## CONCENTRATION UNITS:

(μg/L or μg/Kg) UG/L 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

**APPENDIX B**

**SUPPORT DOCUMENTATION**

# H2M LABS, INC.

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

## 33361 EXTERNAL CHAIN OF CUSTODY

PROJECT NAME/NUMBER  
 National Grid  
 3rd Quarter GW sampling 2010

11176098.00004

SAMPLERS: (signature)/Client  
*J. D. Bahr* /H. Brian Becker  
 Megan DeAngelis/Megan Dascoli  
 DELIVERABLES:

CLIENT: URS

H2M SDG NO: Key-URS103

Project Contact:  
 Kevin Curran

Phone Number:  
 716 923-1165

PIS/Quote#

NOTES:

ANALYSIS REQUESTED

ORGANIC

INORG.  
 Me<sup>2+</sup>  
 Cl<sup>-</sup>  
 Br<sup>-</sup>  
 Na<sup>+</sup>

REMARKS:

B2A  
 B2B  
 POC

1008637-C04

-005

-003

-001

-002

-006

Total No. of Samples Contained in Sample Container Description

→

↑

TURNAROUND TIME: Standard

FIELD ID.

DATE

TIME

MATRIX

↓

4135 GW H1MW-1SD  
 1305 GW H1MW-1ST  
 9705 GW H1MW-14T  
 1101 GW H1MW-13D  
 950 GW H1MW-13T  
 1120 GW TB072310

↓

Total No. of Contaminants

↑

↓

YOA

X X

X X

X X

X X

X X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

2 X

LAB ID. NO.

1008637-C04  
 -005  
 -003  
 -001  
 -002  
 -006

Discrepancies Between Sample Labels and COC Record? Y or N  
 Explain: 1. Shipped or Hand Delivered X Airline Temp S: 6°C O: -1°C  
 2. Ambient or Glass Temp S: 6°C O: -1°C  
 3. Received in good condition D: N  
 4. Properly preserved Y: N  
 COC Tapes were:  
 1. Present on outer package: Y: N  
 2. Unbroken on outer package: Y: N  
 3. COC record present & complete upon sample receipt: Y: N

WHITE-ERSY103ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

## H2M LABS, INC.

1/8U /

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

## PROJECT NAME/NUMBER

National Grid, Hempstead, NY  
3rd Q foot 2010 GW

11176098.00004

H. Brian Becker / H.B. Becker

## DELIVERABLES:

←

TURNAROUND TIME: Standard

## ANALYSIS REQUESTED

	ORGANIC		INORG.	
	VOC	DNA	Metal	Cl
P44	8270C			
BTEX	8260B			

Total No. of  
Samples Contained  
in Container

DATE	TIME	MATRIX	FIELD ID.					ANALYST	LAB I.D. NO.	REMARKS:
			VOC	DNA	Metal	Cl				
7/16/10	1235	GW	H1MW-205	X					1008773-006	
7/16	1357	GW	H1MW-207	X						-005
7/16	1200	GW	BUP 100726	X						-007
7/17	810	GW	H1MW-05D	X						-001
7/17	950	GW	H1MIN-125	X						-004
7/17	1130	GW	H1MW-127	X						-003
7/17	1305	GW	H1MW-12-D	X						-002
7/17	1305	W	TB100727	X						-008

**LABORATORY USE ONLY**

Discrepancies Between Samples were:		
1. Shipped <input checked="" type="checkbox"/> or Hand Delivered <input type="checkbox"/>	2. Ambient or chilled Temp <input type="checkbox"/>	3. Received in good condition: <input checked="" type="checkbox"/> Or N
4. Property preserved: <input checked="" type="checkbox"/> Or N		
Date: 7/27/10	Date: 7/27/10	Date: 7/27/10
Time: 14:00	Time: 17:10	Time: 17:10

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

WHITE COPY - ORIGINAL  
KEY-COPY105 ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

KEY-URS 103

H2M LABS, INC.

Sample Receipt Checklist

Client Name KEY-URS

Date and Time Received: 7/27/2010 5:10:00 PM

Work Order Number 1008773

Received by CDB

Checklist completed by

CBell

7/28/10

Reviewed by

JAT

7/29/10

Signature

Date

Initials

Date

Matrix:

Carrier name Pickup

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Adjusted?

Checked by

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

Client contacted

No

Date contacted:

Person contacted

Contacted by:

Regarding:

Comments: Vials for sample 208 were labeled 201.

Samples were identified by collection times

Corrective Action

KEY-URS103 A13

# H2M LABS, INC.

CCQAC

575 Broad Hollow Rd, Melville, NY 11747-5076

Tel: (631) 694-3040 Fax: (631) 420-8436

## EXTERNAL CHAIN OF CUSTODY

PROJECT NAME/NUMBER National Grid Hempstead, NY 11176-018.00004	CLIENT: URS Corp.		NOTES:	PI#	H2M SDG NO: KEV-C2251Q3
				Project Contact: Kevin Connare	
SAMPLERS: (signature)/Client Ht. Brian Becker	Date No.: PAH 8270C	Time No.: 11:10 AM	Notes: Sample Container Description Container No.: BLEx 8260B	Phone Number: 716 923 1165	PIS/Quote #
DELIVERABLES:					
ANALYSIS REQUESTED					
	ORGANIC	INORG.			
DATE	TIME	MATRIX	TOA PPM	PPM PPM	LAB I.D. NO.
7/28/06 8:05	AM	HW	X	X	1008835-001
7/28/06 9:45	AM	HW	X	X	-007
7/28/06 10:00	AM	HW	X	X	✓
7/28/06 11:55	AM	HW	X	X	-003
7/28/06 1:31:00	PM	HW	X	X	✓ - 004
DISCREPANCIES BETWEEN SAMPLE LABELS AND COC RECORD? Y or N					
EXPLAIN: _____					
REQUISITIONED BY: (Signature)					
Date: 7/28/06 Time: 14:03 Received by: (Signature) S.W.					
REQUISITIONED BY: (Signature)					
Date: 7/28/06 Time: 18:13 Received by: (Signature) S.W.					
REQUISITIONED BY: (Signature)					
Date: 7/29/06 Time: 18:13 Received by: (Signature) S.W.					
REQUISITIONED BY: (Signature)					
Date: Time: Received by: (Signature)					
LABORATORY USE ONLY					
Discrepancies Between Sample Labels and COC Record? Y or N		COC Taken: _____	Samples Were:		Hand Delivered X
1. Ambient or chilled Temp. ✓		1. Received in good condition ✓	2. Unbroken on outer package: Y or N		3. Received on ice ✓
3. Property preserved: ✓		4. Property preserved: ✓	2. Unbroken on outer package: Y or N		Y or N
4. COC record present & complete upon sample receipt: Y or N		3. COC record present & complete upon sample receipt: Y or N		Y or N	

WHITE GRAY ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

# H2M LABS. INC.

30634

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

## EXTERNAL CHAIN OF CUSTODY

PROJECT NAME/NUMBER <b>National Grid Hempstead, NY</b>	<b>CLIENT:</b> YES (or)			<b>NOTES:</b>	<b>H2M SDG NO: KEY-UPRS10B</b>																																																																																																																		
							Project Contact: <b>Brian Conner</b>																																																																																																																
				Phone Number: <b>716423-1165</b>	PIS/Quote # <b></b>																																																																																																																		
SAMPLERS: (signature/client <b>Brian Becker YES</b> )																																																																																																																							
DELIVERABLES:																																																																																																																							
<p style="text-align: right;">Total No. of Containments Sample Container Description PAH 8270C</p> <p>82608 BTEX</p>				<p style="text-align: left;">Total No. of Containments Sample Container Description PAH 8270C</p>																																																																																																																			
<table border="1"> <thead> <tr> <th colspan="3">ANALYSIS REQUESTED</th> <th colspan="3">INORG.</th> <th colspan="2">REMARKS:</th> </tr> <tr> <th></th> <th>ORGANIC</th> <th></th> <th>VOL</th> <th>NO</th> <th>SEM</th> <th>Z</th> <th>LAB I.D. NO.</th> </tr> </thead> <tbody> <tr> <td>7/29/00</td> <td>G W</td> <td>H1/MW-055</td> <td>4</td> <td>X</td> <td></td> <td></td> <td>1008859 -001</td> </tr> <tr> <td>7/29/00</td> <td>W</td> <td>TB100729</td> <td>2</td> <td>X</td> <td></td> <td></td> <td>-003</td> </tr> <tr> <td>7/29/00</td> <td>W</td> <td>FB100729</td> <td>4</td> <td>X</td> <td></td> <td></td> <td>-002</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>								ANALYSIS REQUESTED			INORG.			REMARKS:			ORGANIC		VOL	NO	SEM	Z	LAB I.D. NO.	7/29/00	G W	H1/MW-055	4	X			1008859 -001	7/29/00	W	TB100729	2	X			-003	7/29/00	W	FB100729	4	X			-002																																																																								
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<p>TURNAROUND TIME: Standard</p>				<p>DATE TIME MATRIX FIELD I.D.</p> <table border="1"> <tr> <td>7/29/00 8:00 AM</td> <td>4</td> <td>14:35</td> </tr> <tr> <td>7/29/00 8:00 AM</td> <td>2</td> <td>14:35</td> </tr> <tr> <td>7/29/00 8:00 AM</td> <td>4</td> <td>14:35</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>				7/29/00 8:00 AM	4	14:35	7/29/00 8:00 AM	2	14:35	7/29/00 8:00 AM	4	14:35																																																																																																							
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<p>Reinquished by: (Signature) <b>Jeffrey Donald</b></p>				Date 7/21/00 Time 10:15 Received by: (Signature) <b>J. A. J. J. J.</b>	Date 7/29/00 Time 10:16 Received by: (Signature) <b>J. A. J. J. J.</b>	LABORATORY USE ONLY																																																																																																																	
<p>Reinquished by: (Signature) <b>Brian Becker</b></p>				Date 7/29/00 Time 14:35 Received by: (Signature) <b>Brian Becker</b>	Date 7/29/00 Time 14:35 Received by: (Signature) <b>Brian Becker</b>	<p>Samples were:            1. Shipped or Hand Delivered ✓ Article# _____            2. Ambient or chilled, Temp _____            3. Received in good condition: <input checked="" type="checkbox"/> or N            4. Property preserved: <input checked="" type="checkbox"/> or N</p>																																																																																																																	
<p>Reinquished by: (Signature) <b>Brian Becker</b></p>				Date 7/29/00 Time _____ Received by: (Signature) <b></b>	Date 7/29/00 Time _____ Received by: (Signature) <b></b>	<p>COC/Tape was:            1. Present on outer package: Y or N            2. Unbroken on outer package: Y or N            3. COC record present &amp; complete upon sample receipt: <input checked="" type="checkbox"/> or N</p>																																																																																																																	

WHITE COPY ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

# H2M LABS, INC.

**SDG NARRATIVE FOR VOLATILE ORGANICS**  
**SAMPLES RECEIVED: 7/23/10, 7/27/10, 7/28/10 & 7/29/10**  
**SDG #: KEY-URS103**

For Sample(s):

HIMW-13D	HIMW-12D	HIMW-05I
HIMW-13I	HIMW-12I	HIMW-08D
HIMW-14I	HIMW-12S	HIMW-08I
HIMW-15D	HIMW-20I	HIMW-08S
HIMW-15I	HIMW-20S	HIMW-05S
TB072310	DUP 100726	FB 100729
HIMW-05D	TB100727	TB 100729

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

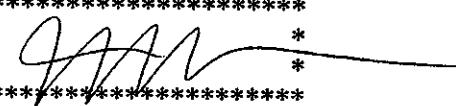
All QC data and calibrations met the requirements of the method, unless discussed below, and no problems were encountered with sample analysis. The following should be noted:

Sample HIMW-08D was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries and RPD's were met.

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

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

Date Reported: August 13, 2010

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

# H2M LABS, INC.

## SDG NARRATIVE FOR SEMIVOLATILE ORGANICS SAMPLES RECEIVED: 7/23/10, 7/27/10, 7/28/10 & 7/29/10 SDG #: KEY-URS103

For Sample(s):

HIMW-13D	HIMW-12D	HIMW-05I
HIMW-13I	HIMW-12I	HIMW-08D
HIMW-14I	HIMW-12S	HIMW-08I
HIMW-15D	HIMW-20I	HIMW-08S
HIMW-15I	HIMW-20S	HIMW-05S
HIMW-05D	DUP 100726	FB 100729

The above sample(s) was/were analyzed for a select list of semivolatile organic analytes (polynuclear aromatics) by EPA method 8270C. The acetonitrile extracts were solvent exchanged to methylene chloride. Concentrations are reported for the extracts submitted.

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:

*H*  
8/30/10  
H  
Sample HIMW-08D was analyzed as the matrix spike / matrix spike duplicate. All percent recoveries and RPD's were met. Lab fortified blanks were analyzed and indicate good method efficiency.

*PM*  
Sample HIMW-05S, HIMW-20I and HIMW-05I were reanalyzed at a dilution due to concentration levels of targeted analytes above the calibration range. Sample HIMW-05I had a high surrogate recovery for d5 nitrobenzene in the undiluted analysis. All surrogate recoveries were diluted out in the dilution.

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: August 16, 2010

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



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

Validated

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

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

Validated

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

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

Validated

**Notes:**

ug/m<sup>3</sup> - micrograms per cubic meter

BTEX - benzene, toluene, ethylbenzene, and xylenes

VOCs - volatile organic compounds

<sup>1</sup> Source: NYSDOH, October 2006. Summary of Indoor and Outdoor Levels of Volatile Organic Compounds from Fuel Oil Heated Homes reported in various locations within sampled homes in NYS, 1997-2003.

Background values for naphthalene are from the NYSDOH 1997 Control Home Database presented in Table C3 of the NYSDOH 2006 Guidance.

NE - not established

Bolding indicates a detected result concentration

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

**Validation Qualifiers:**

J - estimated value

U - indicates not detected to the reporting limit for organic analysis and the method detection limit for inorganic analysis

UJ - not detected at or above the reporting limit shown and the reporting limit is estimated