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

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
Buffalo, New York 14203

URS

June 2009

GROUNDWATER SAMPLING AND NAPL MONITORING/RECOVERY REPORT FOR THE FIRST QUARTER OF 2009 (JANUARY- MARCH)

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

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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 first quarter (January, February, and March) of 2009.

Groundwater monitoring and sampling was conducted on January 9 to 20, 2009. This included measuring the depth to groundwater and NAPL thickness in 64 wells. Groundwater samples were collected from 21 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 3,500 feet south of the site boundary.
- DNAPL was detected in 24 wells during the first quarter of 2009. 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 3 to 14 gallons per event. Approximately 46 gallons of NAPL were recovered during the first quarter of 2009. Approximately 256 gallons of NAPL have been recovered since April 2007.
- Based on a comparison between the first quarter 2009 data and the previous data the concentrations of 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 first quarter of 2009:

- Measured the depth to groundwater and NAPL thickness in accessible monitoring wells (January 6 to 8, 2009).
- Collected groundwater samples from 21 monitoring wells for laboratory analysis (January 9 to 20, 2009 and February 4, 2009).
- Recovered NAPL from monitoring wells and piezometers (January 6, January 21, February 2, February 19, March 3, and March 23, 2009).

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

2.0 FIELD ACTIVITIES

The field activities performed by URS are summarized below.

- Measurement of the depth to groundwater and NAPL thickness in 64 monitoring wells.
- Collection of groundwater samples from 21 monitoring wells.
- Recovery of NAPL from accessible monitoring wells that contained measurable NAPL.

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

2.1 Groundwater Depth and NAPL Thickness Measurements

Depths to groundwater and NAPL thickness measurements 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 24 wells during 6 events during January to March 2009 (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 250 and 500 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).

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 3,500 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 January 2009, the concentrations of total BTEX or total PAHs in the furthest downgradient well pair (HIMW-015I/D) ranged from 31 µg/L (intermediate well, HIMW-15I) to 70 µg/L (deep well, HIMW-15D). The concentrations of total BTEX or total PAHs in wells located between the site and the HIMW-015 cluster varied from "not detected" to 2,374 µg/L.

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 24 wells during the first quarter 2009 (Table 3). Figure 7 illustrates the thickness of DNAPL that was measured on January 8, 2009. Figures 8A – 8Z provide cumulative NAPL recovery and NAPL thickness plots for the period December 2003 to March 2009. 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 Draft DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B - Guidance for the Development of Data Usability Summary Reports, December 2002. An electronic copy of the DUSR is included as Attachment 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 46 gallons of NAPL were recovered from 24 wells (Table 3). The volume of NAPL recovered varied from approximately 3 to 14 gallons per event. Approximately 256 gallons of NAPL have been recovered since April 2007.

4.0 SUMMARY

Following is a summary of the first quarter 2009 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 3,500 feet south of the site boundary.
- DNAPL was detected in 24 wells during the first quarter of 2009. 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 3 to 14 gallons per event. Approximately 46 gallons of NAPL were recovered during the first quarter of 2009. Approximately 256 gallons of NAPL have been recovered since April 2007.
- Based on a comparison between the first quarter 2009 data and the previous data the concentrations of total BTEX and total PAHs remained stable in the site monitoring wells.

TABLES

Table 1

Hempstead Intersection Street Former MGP Site
Summary of Field Activities for the First Quarter 2009

Well ID	Monitoring & Sampling (Jan. 9-20, 2009)			NAPL Monitoring and Recovery					
	Groundwater Level	NAPL Thickness	Water Quality	March 23, 2009	March 3, 2009	Feb. 19, 2009	Feb. 2, 2009	Jan. 21, 2009	Jan. 6, 2009
HIMW-001S	X	X		X	X		X		X
HIMW-001I	X	X			X	X	X	X	X
HIMW-001D									
HIMW-002S									
HIMW-002I									
HIMW-002D									
HIMW-003S	X		X						
HIMW-003I	X		X						
HIMW-003D	X		X						
HIMW-004S									
HIMW-004I									
HIMW-004D									
HIMW-005S	X		X						
HIMW-005I	X		X						
HIMW-005D	X		X						
HIMW-006S	X	X		X	X	X	X	X	X
HIMW-006I	X	X			X		X		X
HIMW-006D									
HIMW-007S	X	X		X	X	X	X	X	X
HIMW-007I	X	X							
HIMW-007D	X	X							
HIMW-008S	X		X						
HIMW-008I	X		X						
HIMW-008D	X		X						
HIMW-009S									
HIMW-009I									
HIMW-009D									
HIMW-010S									
HIMW-010I									
HIMW-010D									
HIMW-011S	X	X							
HIMW-011I	X	X							
HIMW-011D									
HIMW-012S	X		X						
HIMW-012I	X		X						
HIMW-012D	X		X						
HIMW-013S	X		X						
HIMW-013I	X		X						
HIMW-013D	X		X						
HIMW-014I	X		X						
HIMW-014D	X		X						
HIMW-015I	X		X						
HIMW-015D	X		X						

Table 1

Hempstead Intersection Street Former MGP Site
Summary of Field Activities for the First Quarter 2009

Well ID	Monitoring & Sampling (Jan. 9-20, 2009)			NAPL Monitoring and Recovery					
	Groundwater Level	NAPL Thickness	Water Quality	March 23, 2009	March 3, 2009	Feb. 19, 2009	Feb. 2, 2009	Jan. 21, 2009	Jan. 6, 2009
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	X
HIMW-018S	X	X							X
HIMW-018I	X	X			X				
HIMW-019S	X	X			X				X
HIMW-019I	X	X					X		
HIMW-020S	X		X						
HIMW-020I	X		X						
PZ-02									
PZ-03									
PZ-08	X	X		X	X	X	X		X
IPR-01									
IPR-02	X	X					X		
IPR-03	X								
IPR-04	X								
IPR-05	X								
IPR-06	X	X		X	X			X	X
IPR-07	X								
IPR-08									
IPR-09	X								
IPR-10	X								
IPR-11	X								
IPR-12A	X	X							X
IPR-12B	X								
IPR-13	X								
IPR-14	X								
IPR-15	X	X					X		X
IPR-16	X	X					X		
IPR-17	X	X			X		X		X
IPR-18	X								
IPR-19S	X								
IPR-19D	X								
IPR-20	X	X							X
IPR-21	X	X			X				X
IPR-22	X	X			X	X	X		X
IPR-23	X								
IPR-24	X	X					X		X
IPR-25	X	X		X	X	X	X		X
OSMW-01	X								
OSMW-02	X								
OSMW-03	X								

Notes:

1 Field marked with "X" indicates that the activity was performed.
2 Blank field indicates that the activity was not performed.
3 HIMW-020S and HIMW-020I groundwater level and water quality were performed on 2/4/09.

Table 2

Hempstead Intersection Street Former MGP Site
Groundwater and NAPL Measurements for the First Quarter 2009

Well ID	Date	Elevation of TOR	Depth to LNAPL	Depth to Water	Depth to DNAPL	Well Depth	Thickness of LNAPL	Thickness of DNAPL	Corrected Potentiometric Head (1)
		[ft amsl]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft amsl]
HIMW-001S	1/8/2009	71.61	ND	25.40	40.1	40.9	0	0.8	46.21
HIMW-001I	1/6/2009	71.68	ND	25.74	84.9	85.9	0	0.95	45.94
HIMW-001D	NM	71.95	ND	NM	ND	129.1	0	0	NM
HIMW-002S	NM	73.82	ND	NM	ND	42.4	0	0	NM
HIMW-002I	NM	78.87	ND	NM	ND	92.9	0	0	NM
HIMW-002D	NM	74.13	ND	NM	ND	119.0	0	0	NM
HIMW-003S	1/8/2009	65.00	ND	18.98	ND	34.8	0	0	46.02
HIMW-003I	1/8/2009	64.94	ND	19.23	ND	87.1	0	0	45.71
HIMW-003D	1/8/2009	65.26	ND	19.98	ND	145.5	0	0	45.28
HIMW-004S	NM	72.74	ND	NM	ND	41.7	0	0	NM
HIMW-004I	NM	72.78	ND	NM	ND	90.6	0	0	NM
HIMW-004D	NM	72.65	ND	NM	ND	180.5	0	0	NM
HIMW-005S	1/8/2009	67.19	ND	21.71	ND	39.1	0	0	45.48
HIMW-005I	1/8/2009	67.22	ND	22.23	ND	92.3	0	0	44.99
HIMW-005D	1/8/2009	67.22	ND	22.44	ND	139.0	0	0	44.78
HIMW-006S	1/7/2009	68.25	ND	23.05	32.7	36.9	0	4.2	45.20
HIMW-006I	1/8/2009	67.88	ND	22.27	81.6	82.2	0	0.6	45.61
HIMW-006D	NM	67.77	ND	NM	ND	120.0	0	0	NM
HIMW-007S	1/7/2009	70.47	ND	25.26	39.4	40.7	0	1.30	45.21
HIMW-007I	1/8/2009	70.10	ND	24.70	ND	90.6	0	0	45.40
HIMW-007D	1/8/2009	70.40	ND	24.71	ND	117.7	0	0	45.69
HIMW-008S	1/8/2009	65.04	ND	20.03	ND	37.1	0	0	45.01
HIMW-008I	1/8/2009	65.14	ND	20.18	ND	75.1	0	0	44.96
HIMW-008D	1/8/2009	64.93	ND	19.99	ND	114.8	0	0	44.94
HIMW-009S	NM	70.03	ND	NM	ND	39.6	0	0	NM
HIMW-009I	NM	69.93	ND	NM	ND	80.5	0	0	NM
HIMW-009D	NM	69.96	ND	NM	ND	NM	0	0	NM
HIMW-010S	NM	71.60	ND	NM	ND	40.3	0	0	NM
HIMW-010I	NM	71.47	ND	NM	ND	91.8	0	0	NM
HIMW-010D	NM	71.44	ND	NM	ND	136.0	0	0	NM
HIMW-011S	1/8/2009	71.62	ND	25.47	ND	41.6	0	0	46.15
HIMW-011I	1/8/2009	71.43	ND	26.36	ND	94.5	0	0	45.07
HIMW-011D	NM	71.39	ND	NM	ND	123.6	0	0	NM
HIMW-012S	1/8/2009	61.58	ND	17.79	ND	33.5	0	0	43.79
HIMW-012I	1/8/2009	61.59	ND	17.64	ND	75.0	0	0	43.95
HIMW-012D	1/8/2009	61.82	ND	19.77	ND	128.5	0	0	42.05
HIMW-013S	1/8/2009	72.83	ND	31.04	ND	49.2	0	0	41.79
HIMW-013I	1/8/2009	72.60	ND	29.85	ND	82.6	0	0	42.75
HIMW-013D	1/8/2009	72.53	ND	30.83	ND	122.5	0	0	41.70
HIMW-014I	1/8/2009	71.71	ND	30.00	ND	96.9	0	0	41.71
HIMW-014D	1/8/2009	71.59	ND	32.34	ND	152.0	0	0	39.25
HIMW-015I	1/8/2009	64.18	ND	25.36	ND	93.1	0	0	38.82
HIMW-015D	1/8/2009	63.96	ND	25.42	ND	155.0	0	0	38.54
HIMW-016S	1/7/2009	67.45	ND	22.47	28.3	34.4	0	6.10	44.98
HIMW-016I	1/7/2009	67.50	ND	22.55	76.2	82.7	0	6.50	44.95

Table 2

Hempstead Intersection Street Former MGP Site
Groundwater and NAPL Measurements for the First Quarter 2009

Well ID	Date	Elevation of TOR	Depth to LNAPL	Depth to Water	Depth to DNAPL	Well Depth	Thickness of LNAPL	Thickness of DNAPL	Corrected Potentiometric Head (1)
		[ft amsl]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft amsl]
HIMW-017S	1/7/2009	65.96	ND	21.23	34.3	36.7	0	2.45	44.73
HIMW-018S	1/6/2009	69.76	ND	23.95	42.1	42.1	0	0.01	45.81
HIMW-018I	1/8/2009	69.70	ND	23.78	ND	71.2	0	0	45.92
HIMW-019S	1/6/2009	70.95	ND	24.80	39.4	39.4	0	0.01	46.15
HIMW-019I	1/8/2009	71.27	ND	24.87	ND	68.9	0	0	46.40
HIMW-020S	2/4/2009	70.43	ND	25.95	ND	35.0	0	0	44.48
HIMW-020I	2/4/2009	70.30	ND	25.79	ND	73.0	0	0	44.51
PZ-02	NM	72.96	ND	NM	ND	35.3	0	0	NM
PZ-03	NM	64.58	ND	NM	ND	29.5	0	0	NM
PZ-08	1/6/2009	70.51	ND	24.71	31.0	35.5	0	4.53	45.80
IPR-01	1/6/2009	70.30	ND	24.17	ND	41.9	0	0	46.13
IPR-02	1/8/2009	68.84	ND	22.57	ND	70.3	0	0.4	46.27
IPR-03	1/8/2009	69.16	ND	22.98	ND	44.7	0	0	46.18
IPR-04	1/8/2009	69.23	ND	23.18	ND	84.4	0	0	46.05
IPR-05	1/8/2009	70.39	ND	24.38	ND	52.1	0	0.01	46.01
IPR-06	1/6/2009	70.79	ND	24.90	55.2	55.4	0	0.25	45.89
IPR-07	1/8/2009	69.73	ND	24.53	ND	38.0	0	0	45.20
IPR-08	1/6/2009	70.51	ND	24.78	ND	40.3	0	0	45.73
IPR-09	1/8/2009	70.00	ND	24.18	ND	45.0	0	0	45.82
IPR-10	1/8/2009	70.80	ND	24.64	ND	44.8	0	0	46.16
IPR-11	1/8/2009	68.29	ND	22.55	ND	44.6	0	0	45.74
IPR-12A	1/6/2009	70.14	ND	22.46	37.9	38.1	0	0.2	47.68
IPR-12B	1/8/2009	69.56	ND	23.79	ND	45.2	0	0	45.77
IPR-13	1/8/2009	70.77	ND	24.89	ND	44.4	0	0	45.88
IPR-14	1/8/2009	66.93	ND	21.25	ND	44.4	0	0	45.68
IPR-15	1/6/2009	67.93	ND	22.34	44.4	44.4	0	0.01	45.59
IPR-16	1/8/2009	69.49	ND	23.72	ND	49.1	0	0.01	45.77
IPR-17	1/6/2009	70.60	ND	24.94	54.1	54.1	0	0.01	45.66
IPR-18	1/8/2009	66.87	ND	21.30	ND	50.0	0	0	45.57
IPR-19S	1/8/2009	67.68	ND	22.11	ND	45.1	0	0	45.57
IPR-19D	1/8/2009	67.96	ND	22.36	ND	89.9	0	0	45.60
IPR-20	1/6/2009	66.70	ND	21.35	45.1	45.4	0	0.3	45.35
IPR-21	1/6/2009	67.67	ND	22.26	44.0	45.0	0	1.0	45.41
IPR-22	1/6/2009	66.33	ND	21.11	42.9	45.4	0	2.5	45.22
IPR-23	1/8/2009	66.67	ND	21.30	ND	45.4	0	0	45.37
IPR-24	1/6/2009	65.88	ND	20.77	44.3	44.4	0	0.01	45.11
IPR-25	1/6/2009	70.56	ND	24.86	42.9	44.5	0	1.62	45.70
OSMW-01	1/8/2009	71.12	ND	24.92	ND	42.2	0	0	46.20
OSMW-02	1/8/2009	71.59	ND	25.62	ND	45.2	0	0	45.97
OSMW-03	1/8/2009	71.39	ND	25.50	ND	44.7	0	0	45.89

Notes:

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

Sh 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
NM Not Measured

Table 3
NAPL Recovery
First Quarter of 2009
Hempstead Intersection Street Former MGP Site

Well ID	March 23, 2009			March 3, 2009			February 19, 2009			February 2, 2009			January 21, 2009			January 6, 2009		
	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)	Thickness of LNAPL	Thickness of DNAPL	Volume Removed (1)
	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]	[ft]	[ft]	[gal]
HIMW-001S	0	0.20	0.03	0	0.20	0.03	NI	NI	0	0	0.01	0.00	NI	NI	0	0	trace	0.00
HIMW-001I	NI	NI	0	0	1.40	0.23	0	0.07	0.01	0	0.90	0.15	0	0.60	0.10	0	0.95	0.16
HIMW-006S	0	0.50	0.08	0	3.50	0.57	0	1.10	0.18	0	0.40	0.07	0	3.75	0.61	0	3.35	0.55
HIMW-006I	NI	NI	0	0	1.30	0.21	NI	NI	0	0	0.80	0.13	NI	NI	0	0	trace	0.00
HIMW-007S	0	1.50	0.24	0	0.70	0.11	0	0.50	0.08	0	0.10	0.02	0	1.40	0.23	0	0.90	0.15
HIMW-007I	NI	NI	0	0	0	0	NI	NI	0	NA	NA	0	NI	NI	0	0	0	0
HIMW-007D	NI	NI	0	0	0	0	NI	NI	0	NA	NA	0	NI	NI	0	0	0	0
HIMW-011S	NI	NI	0	0	0	0	NI	NI	0	0	0	0	NI	NI	0	0	0	0
HIMW-011I	NI	NI	0	0	0	0	NI	NI	0	0	0	0	NI	NI	0	0	0	0
HIMW-016S	0	4.50	0.73	0	0	0	0	5.50	0.90	0	5.60	0.91	0	5.00	0.82	0	5.50	0.90
HIMW-016I	0	5.00	0.82	0	0	0	0	6.30	1.03	0	5.60	0.91	0	4.50	0.73	0	4.45	0.73
HIMW-017S	0	2.50	0.41	0	0.90	0.15	0	0.90	0.15	0	1.30	0.21	0	0.90	0.15	0	0.00	0.00
HIMW-018S	NI	NI	0	0	0	0	NI	NI	0	0	0	0	NI	NI	0	0	trace	0.00
HIMW-018I	NI	NI	0	0	0.50	0.08	NI	NI	0	NA	NA	0	NI	NI	0	0	0	0
HIMW-019S	NI	NI	0	0	0.40	0.07	NI	NI	0	0	0	0	NI	NI	0	0	trace	0.00
HIMW-019I	NI	NI	0	0	0	0	NI	NI	0	0	0.04	0.01	NI	NI	0	0	0	0
PZ-08	0	1.00	0.16	0	1.60	0.26	0	1.40	0.23	0	1.50	0.24	NI	NI	0	0	4.53	0.74
IPR-02	NI	NI	0	0	0	0	NI	NI	0	0	0.50	0.73	NI	NI	0	0	0	0
IPR-06	0	0.50	0.73	0	1.80	2.64	0	0.06	0.09	0	0	0.00	0	0.5	0.73	0	0.25	0.37
IPR-12A	NI	NI	0	0	0	0	NI	NI	0	0	0	0	NI	NI	0	0	0.20	0.01
IPR-15	NI	NI	0	0	0	0	NI	NI	0	0	0.01	0.01	NI	NI	0	0	trace	0.00
IPR-16	NI	NI	0	0	0	0	NI	NI	0	0	2.10	2.83	NI	NI	0	0	0	0
IPR-17	NI	NI	0	0	0.20	0.27	NI	NI	0	0	0.10	0.13	NI	NI	0	0	trace	0.00
IPR-20	NI	NI	0	0	0	0	NI	NI	0	NA	NA	0	NI	NI	0	0	0.30	0.44
IPR-21	NI	NI	0	0	0.70	1.03	NI	NI	0	0	0	0	NI	NI	0	0	1.00	1.47
IPR-22	NI	NI	0	0	0.60	0.88	0	0.90	1.32	0	3.80	5.58	NI	NI	0	0	2.50	3.67
IPR-24	NI	NI	0	0	0	0	NI	NI	0	0	0.70	1.03	NI	NI	0	0	trace	0.00
IPR-25	0	1.00	1.47	0	0.80	1.18	0	0.50	0.73	0	1.00	1.47	NI	NI	0	0	1.62	2.38
	Volume Removed		**4.68**	Volume Removed		**7.71**	Volume Removed		**4.72**	Volume Removed		**14.45**	Volume Removed		**3.37**	Volume Removed		**11.55**

Total volume recovered during the first quarter 2008: 46.48 gal
Total volume of NAPL recovered since April 2007: 256.4 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 and PZ monitoring wells are 2-inch diameter: Vol = 0.163 gal / lft of well screen.
All IPR monitoring wells (unless noted) are 6-inch diameter: Vol = 1.469 gal / lft of well screen.
Monitoring wells IPR-16 and IPR-17 are 5.75-inch diameter: Vol = 1.349 gal / lft of well screen.
Monitoring wells IPR-06 and IPR-12A are 1-inch diameter: Vol = 0.041 gal / lft of well screen.

Table 4

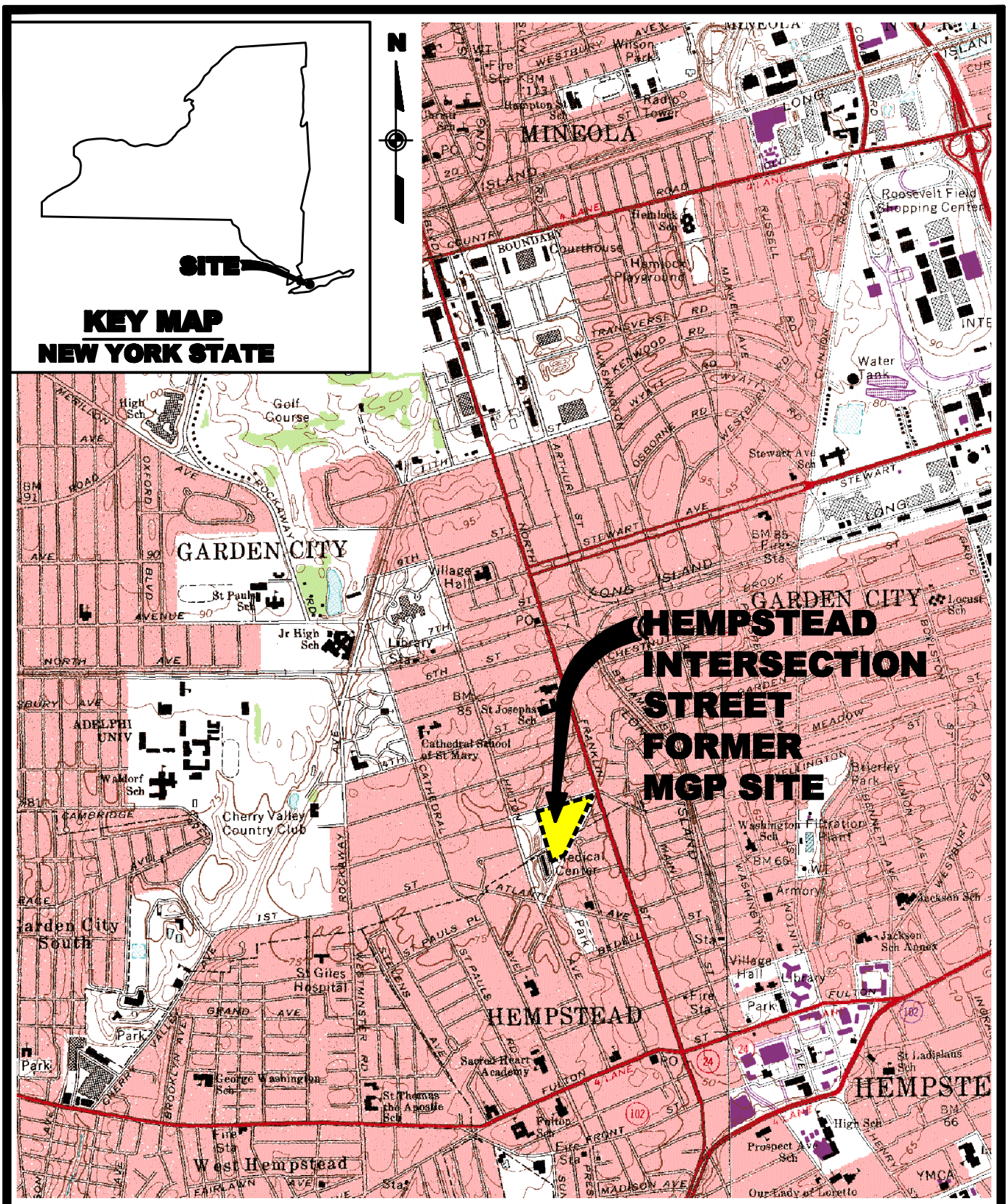
Hempstead Intersection Street Former MGP Site
Dissolved-Phase Concentrations of
Total BTEX Compounds and Total PAH Compounds
for the First Quarter 2009

Well ID	First Quarter 2009 (January 9-20, 2009) Concentrations	
	BTEX [ug/L]	PAH [ug/L]
HIMW-001D		
HIMW-001I		
HIMW-001S		
HIMW-002D		
HIMW-002I		
HIMW-002S		
HIMW-003D	ND	ND
HIMW-003I	13	ND
HIMW-003S	ND	ND
HIMW-004D		
HIMW-004I		
HIMW-004S		
HIMW-005D	48	53
HIMW-005I	189	2,374
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	7	ND
HIMW-009D		
HIMW-009I		
HIMW-009S		
HIMW-010D		
HIMW-010I		
HIMW-010S		
HIMW-011D		
HIMW-011I		
HIMW-011S		
HIMW-012D	1	ND
HIMW-012I	53	100
HIMW-012S	11	ND
HIMW-013D	7	9
HIMW-013I	45	80
HIMW-013S	ND	ND
HIMW-014D	ND	ND
HIMW-014I	101	45
HIMW-015D	70	ND
HIMW-015I	31	18
HIMW-016I		
HIMW-016S		
HIMW-017S		
HIMW-018I		
HIMW-018S		
HIMW-019I		
HIMW-019S		
HIMW-020I (1)	224	167
HIMW-020S (1)	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
(1)	Sampled 2/4/09

FIGURES



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

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

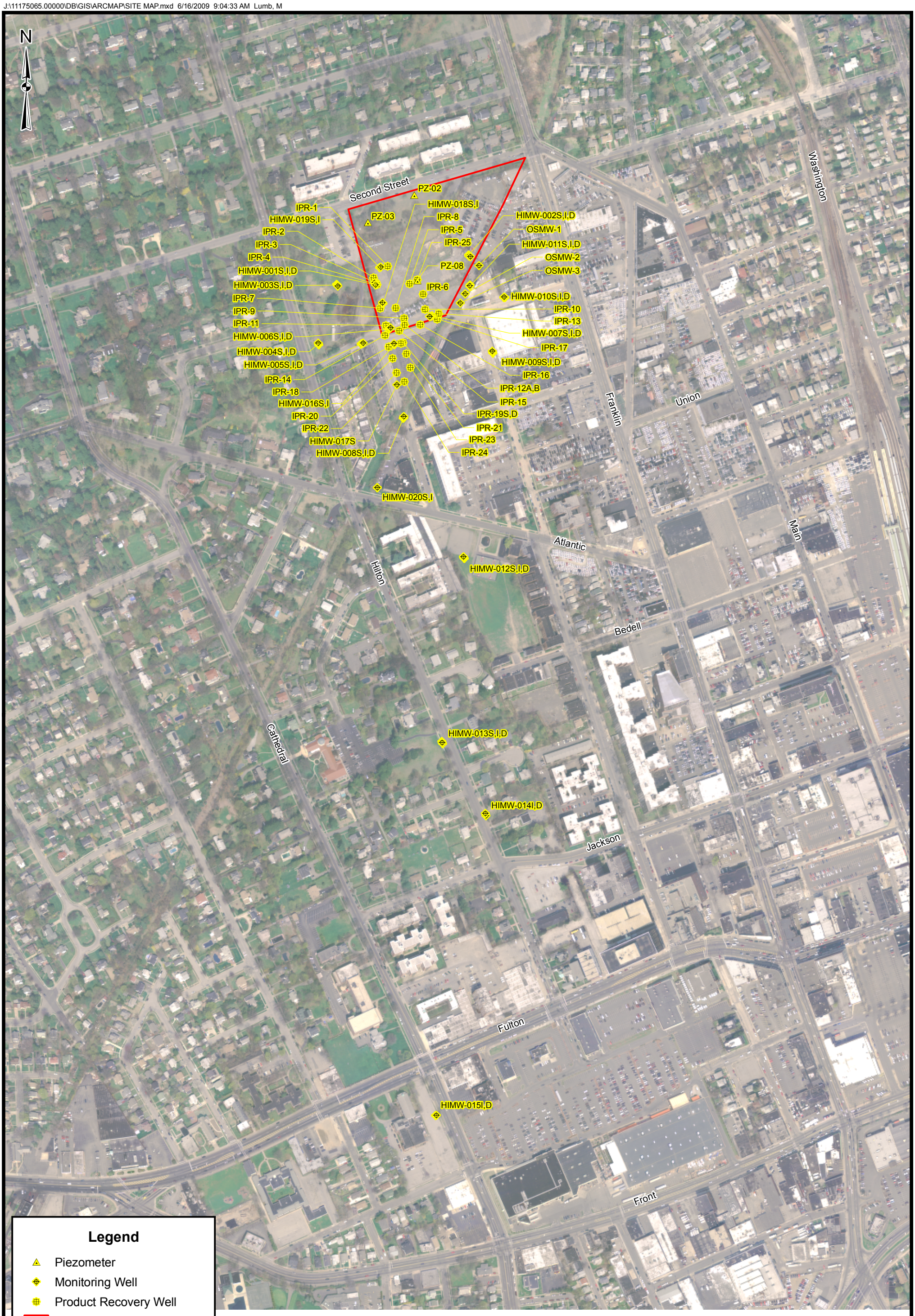
URS Corporation

LOCATION MAP

FIGURE 1

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

J:\11175065.00000\DB\GIS\ARCMAP\SITE MAP.mxd 6/16/2009 9:04:33 AM Lumb, M



URS

HEMPSTEAD/GARDEN CITY, NY
SITE MAP

FIGURE 2

N

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

HIGP-67	(12/20/00)	
DEPTH	TOT. BTEX	TOT. PAHs
37-41	ND	ND
54-58	ND	ND
72-76	ND	27
90-94	ND	ND

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

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

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

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

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

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

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

HIMW-05S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
27-37	ND-232 (ND)	ND-765 (ND)
80-90	158-439 (189)	1,454-5,337 (2,374)
130-140	ND-62 (48)	ND-301 (53)

HIMW-08S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
25-35	ND-8,240 (7)	ND-3,069 (ND)
63-73	ND-0.5 (ND)	ND-251 (ND)
102-112	ND-16 (ND)	ND-37 (ND)

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

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

HIMW-12S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
22-32	ND-11 (11)	ND-4 (ND)
63-73	38-256 (53)	98-527 (100)
117-127	ND-6 (1)	ND-2 (ND)

HIMW-13S,I,D		
DEPTH	TOT. BTEX	TOT. PAHs
38-48	ND-11 (ND)	ND (ND)
70-80	ND-164 (46)	58-156 (80)
110-120	6-30 (7)	ND-21 (9)

HIMW-14I,D		
DEPTH	TOT. BTEX	TOT. PAHs
85-95	74-273 (101)	42-288 (45)
140-150	ND-15 (ND)	ND (ND)

HIMW-15I,D		
DEPTH	TOT. BTEX	TOT. PAHs
80-90	5-111 (31)	ND-273 (18)
141.5-151.5	ND-94 (70)	ND-1 (ND)

HIMW-20S,I	(2/09)	
DEPTH	TOT. BTEX	TOT. PAHs
25-35	ND	ND
63-73	224	179

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

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

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

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

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

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

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

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

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

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

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

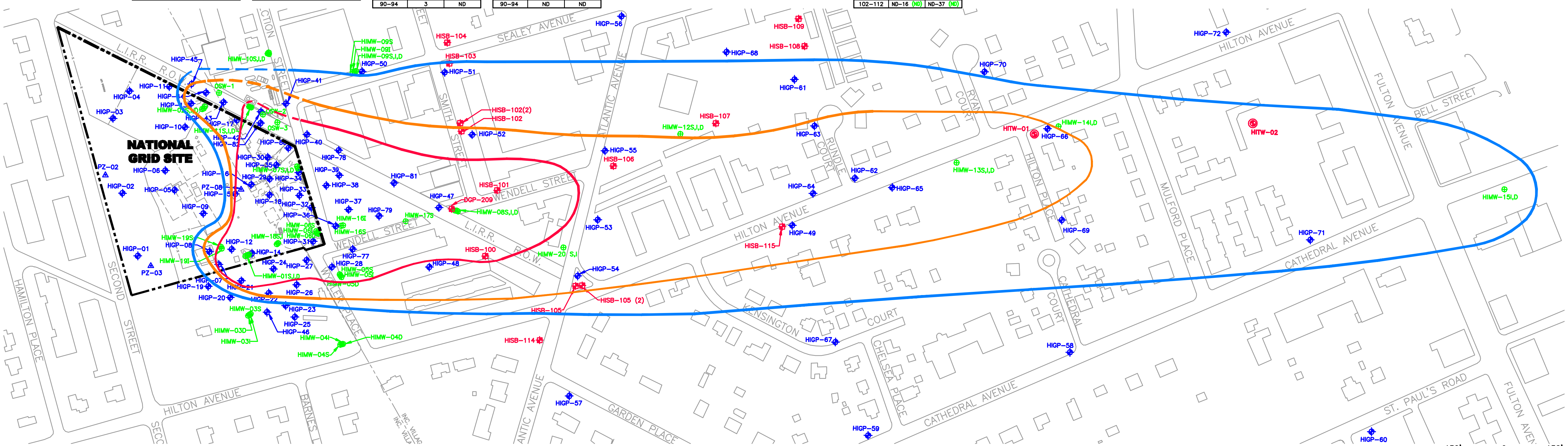
HISB-109	(12/10/08)	
DEPTH	TOT. BTEX	TOT. PAHs
30-34	ND	ND
40-44	ND	ND
50-54	8	ND
60-64	19	ND
70-74	28	ND
80-84	31	2
90-94	ND	ND

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

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

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

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



LEGEND:

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

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

HIMW-13 — MONITORING WELL

PZ-02 — PIEZOMETER

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

ND — NOT DETECTED

LOCATION ID → HIGP-60; SAMPLE DATE → (10/19/00); DEPTH (ft bgs) → DEPTH column; CONCENTRATION UNITS ARE ug/L (JAN. 2009 CONCENTRATION)

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

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

EXISTING HOUSE OR BUILDING

NATIONAL GRID PROPERTY BOUNDARY

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

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

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

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

URS Corporation

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

EXTENT OF DISSOLVED-PHASE PLUME AND GROUNDWATER ANALYTICAL RESULTS

FIGURE 3

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\MAY SUBMITTAL\FIGURE 4.dwg 6/16/09 - 1 RMB

N

NATIONAL GRID SITE

HIMW-19S, 46.15
IPR-1, 46.13
IPR-3, 46.18
IPR-25, 45.7
HIMW-01S, 46.21
OSMW-1, 46.2
IPR-9, 45.82
PZ-08, 45.8
HIMW-03S, 46.02
HIMW-11S, 46.15
HIMW-18S, 45.81
IPR-10, 46.16
OSMW-2, 45.97
IPR-7, 45.2
OSMW-3, 45.89
IPR-12A, 47.68
IPR-13, 45.88
IPR-11, 45.74
HIMW-07S, 45.21
HIMW-06S, 45.2
IPR-12B, 45.77
IPR-14, 45.68
IPR-15, 45.59
HIMW-05S,45.48
IPR-19S, 45.57
IPR-20, 45.35
IPR-21, 45.41
IPR-22, 45.22
IPR-23, 45.37
IPR-24, 45.11
HIMW-17S, 44.73
HIMW-8S, 45.01
HIMW-12S, 43.79
HIMW-13S, 41.79

46
45
44
43
42

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

LEGEND:

- MONITORING WELL
- IPR WELL
- PIEZOMETER
- GROUNDWATER FLOW DIRECTION
- 43 — POTENTIOMETRIC SURFACE CONTOUR
- FORMER MGP SITE BOUNDARY
- HIMW-8S, 45.01 — LOCATION ID AND GROUNDWATER ELEV. (FT. AMSL)

300' 0 300'
SCALE IN FEET

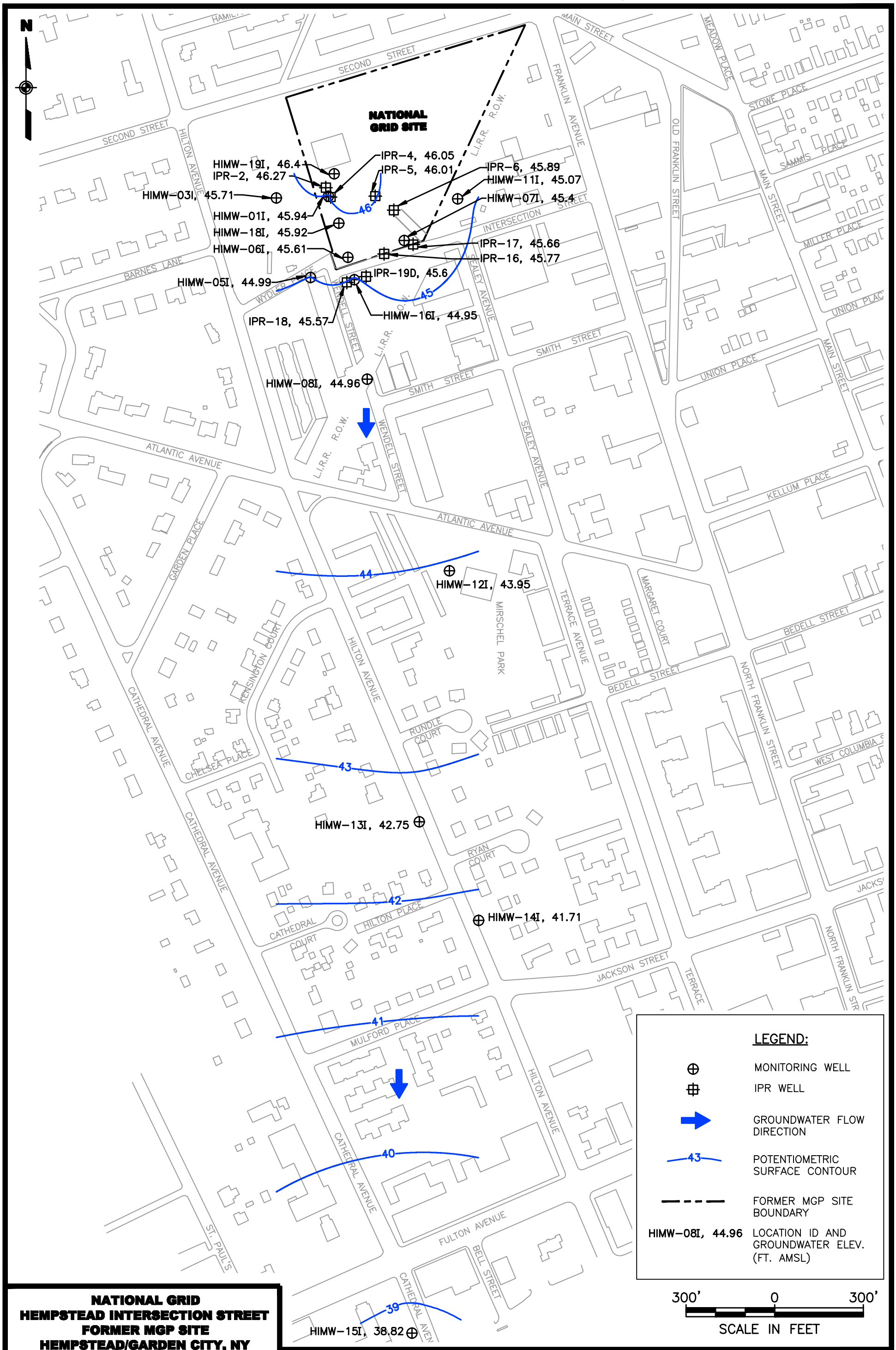
NATIONAL GRID
HEMPSTEAD INTERSECTION STREET
FORMER MGP SITE
HEMPSTEAD/GARDEN CITY, NY

URS Corporation

HEMPSTEAD/GARDEN CITY, NY
POTENTIOMETRIC SURFACE MAP FOR SHALLOW GROUNDWATER
JANUARY 6-8, 2009

FIGURE 4

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\MAY SUBMITTAL\FIGURE 5.dwg 6/16/09 - 1 RAL



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

URS Corporation

HEMPSTEAD/GARDEN CITY, NY
POTENTIOMETRIC SURFACE MAP FOR INTERMEDIATE GROUNDWATER
JANUARY 6-8, 2009

FIGURE 5

J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\SITE-WIDE REMEDY\GROUNDWATER TREATMENT\MAY SUBMITTAL\FIGURE 6.dwg 6/16/09 - 1 RAL

N

NATIONAL GRID SITE

HIMW-03D, 45.28

HIMW-05D, 44.78

HIMW-07D, 45.69

HIMW-8D, 44.94

HIMW-12D, 42.05

HIMW-13D, 41.7

HIMW-14D, 39.25

HIMW-15D, 38.54

45
44
43
42
41
40
39

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

LEGEND:

- ⊕ MONITORING WELL
- GROUNDWATER FLOW DIRECTION
- 43 POTENTIOMETRIC SURFACE CONTOUR
- FORMER MGP SITE BOUNDARY
- HIMW-12D, 42.05 LOCATION ID AND GROUNDWATER ELEV. (FT. AMSL)

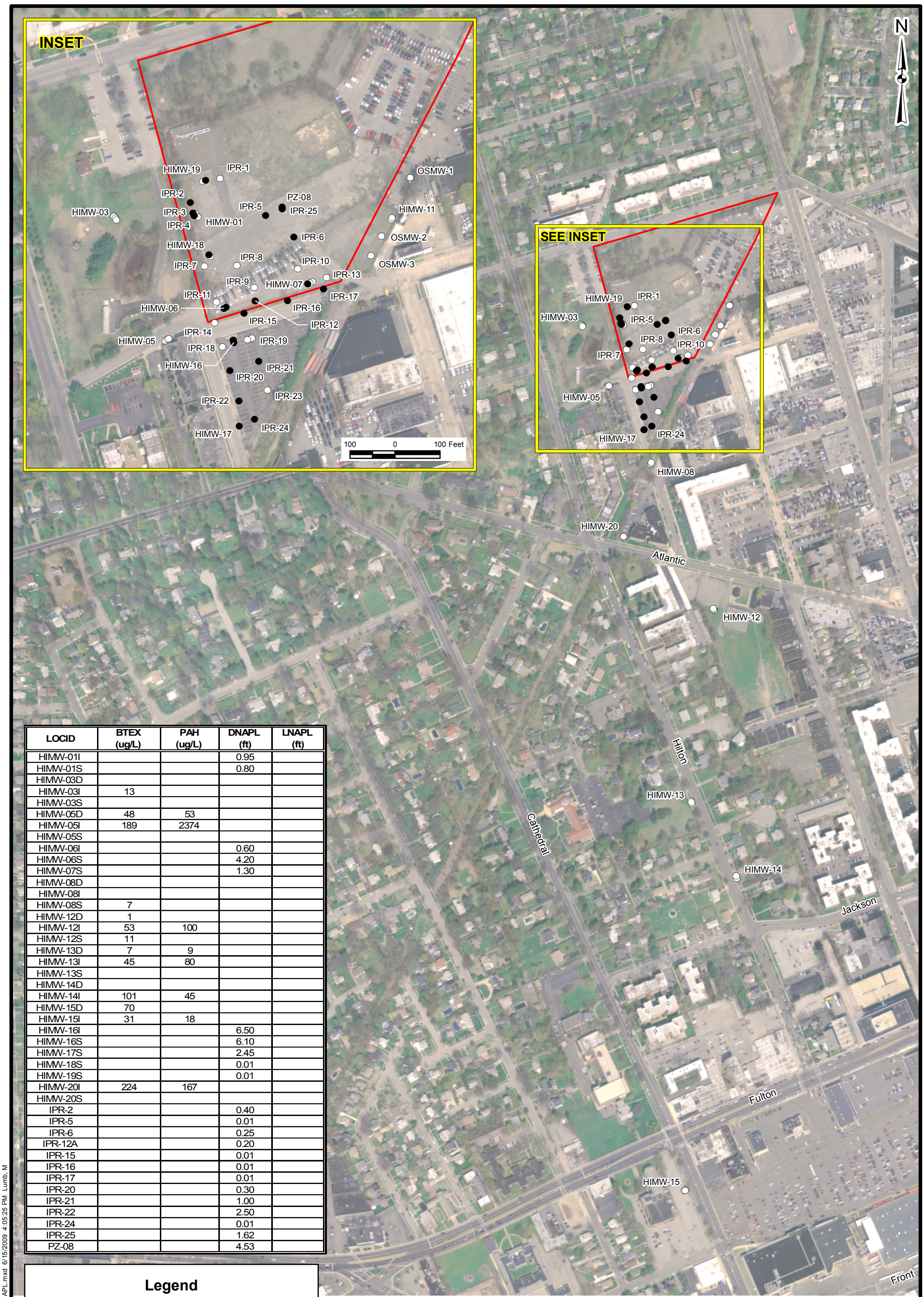
300' 0 300'
SCALE IN FEET

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

URS Corporation

HEMPSTEAD/GARDEN CITY, NY
POTENTIOMETRIC SURFACE MAP FOR DEEP GROUNDWATER
JANUARY 6-8, 2009

FIGURE 6



LOCID	BTEX (ug/L)	PAH (ug/L)	DNAPL (ft)	LNAPL (ft)
HIMW-01I			0.95	
HIMW-01S			0.80	
HIMW-03D				
HIMW-03I	13			
HIMW-03S				
HIMW-05D	48	53		
HIMW-05I	189	2374		
HIMW-05S				
HIMW-06I			0.60	
HIMW-06S			4.20	
HIMW-07S			1.30	
HIMW-08D				
HIMW-08I				
HIMW-08S	7			
HIMW-12D	1			
HIMW-12I	53	100		
HIMW-12S	11			
HIMW-13D	7	9		
HIMW-13I	45	80		
HIMW-13S				
HIMW-14D				
HIMW-14I	101	45		
HIMW-15D	70			
HIMW-15I	31	18		
HIMW-16I			6.50	
HIMW-16S			6.10	
HIMW-17S			2.45	
HIMW-18S			0.01	
HIMW-19S			0.01	
HIMW-20I	224	167		
HIMW-20S				
IPR-2			0.40	
IPR-5			0.01	
IPR-6			0.25	
IPR-12A			0.20	
IPR-15			0.01	
IPR-16			0.01	
IPR-17			0.01	
IPR-20			0.30	
IPR-21			1.00	
IPR-22			2.50	
IPR-24			0.01	
IPR-25			1.62	
PZ-08			4.53	

Legend

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

400 0 400 Feet

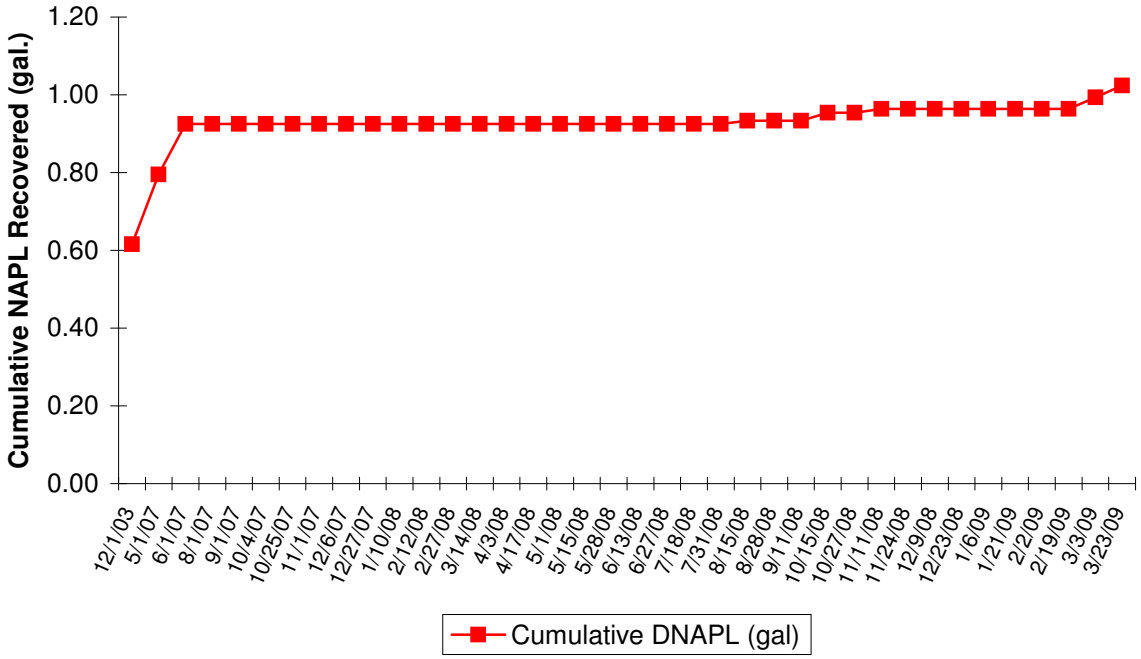
URS

HEMPSTEAD/GARDEN CITY, NY
TOTAL DISSOLVED-PHASE BTEX/PAH CONCENTRATIONS
AND FREE PRODUCT THICKNESS
FIRST QUARTER 2009

FIGURE 7

J:\11175065.00000\DB\GIS\ARCMAP\0109 BTEXPAH-NAPL.mxd 6/15/2009 4:05:25 PM Lumb, M

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



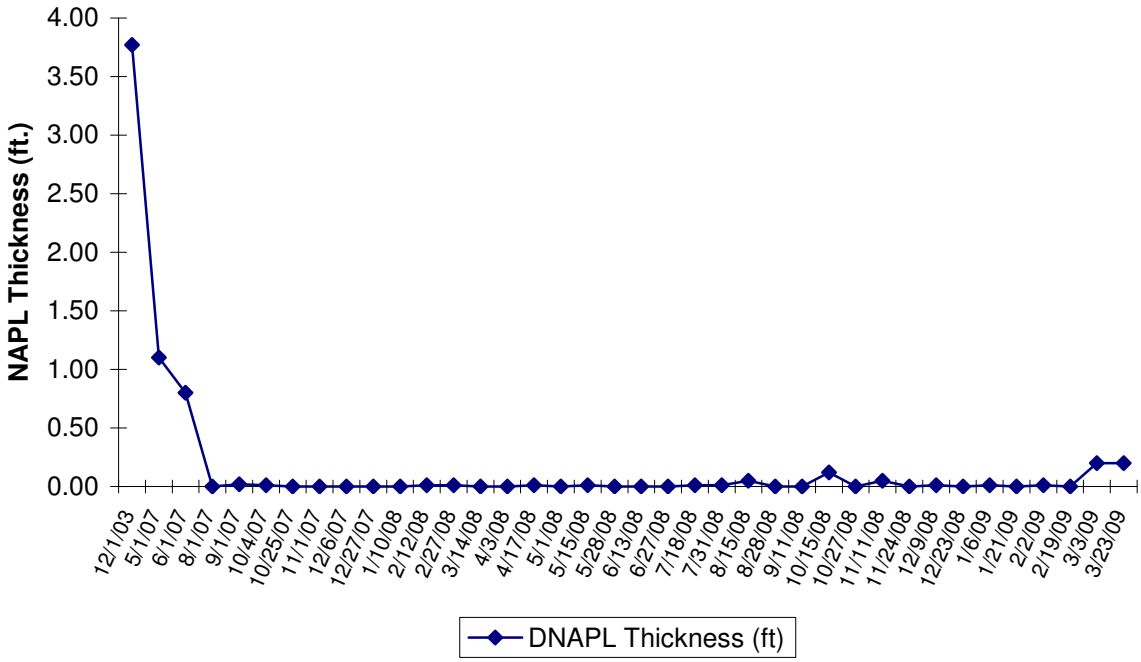
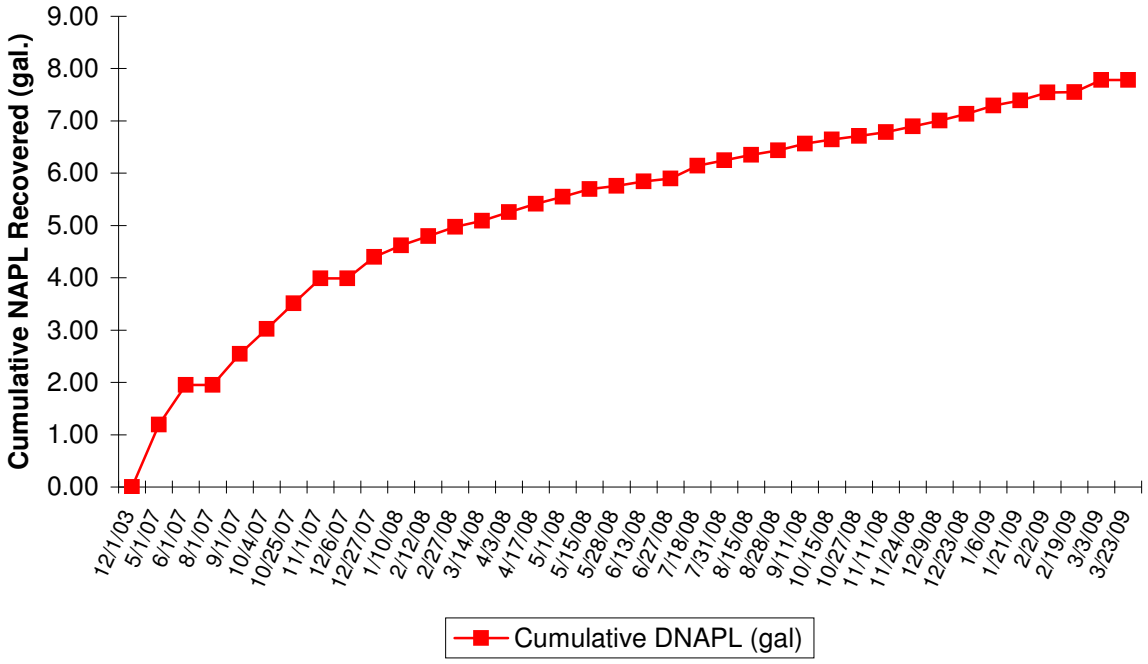


FIGURE 8B
Well HIMW-01I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



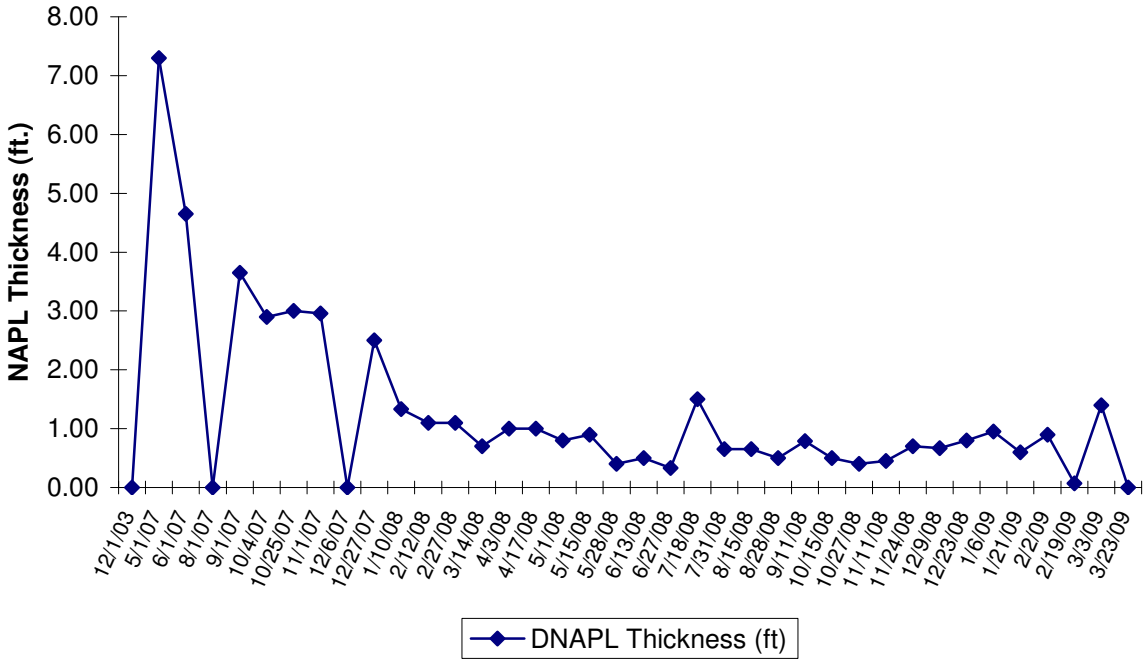
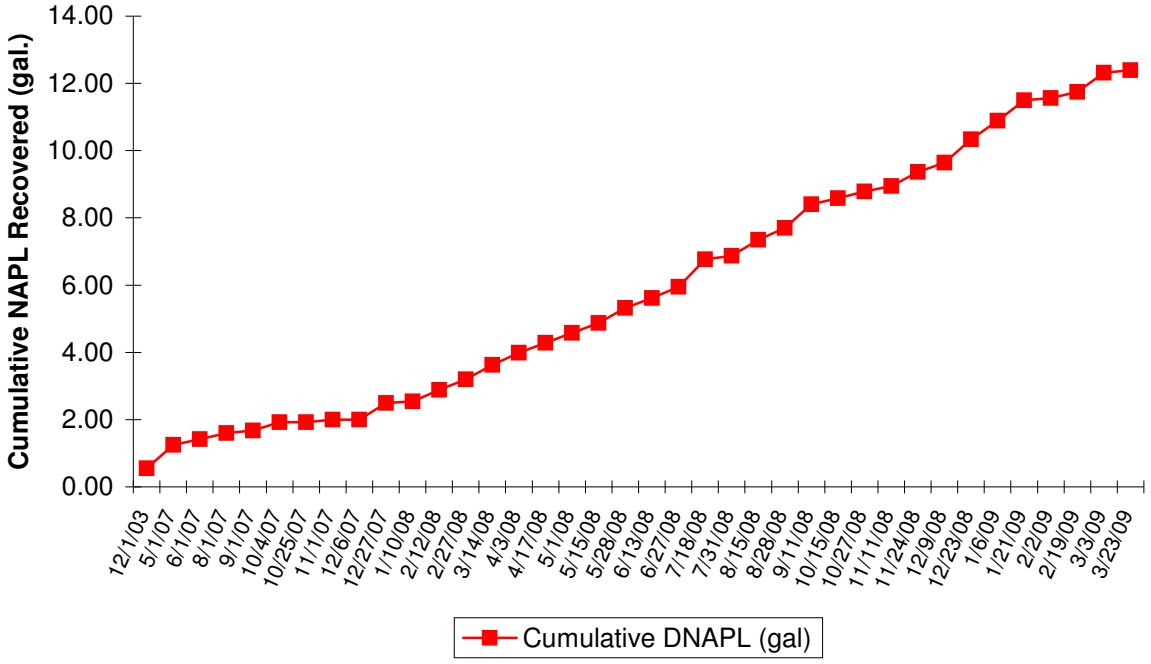


FIGURE 8C
Well HIMW-06S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



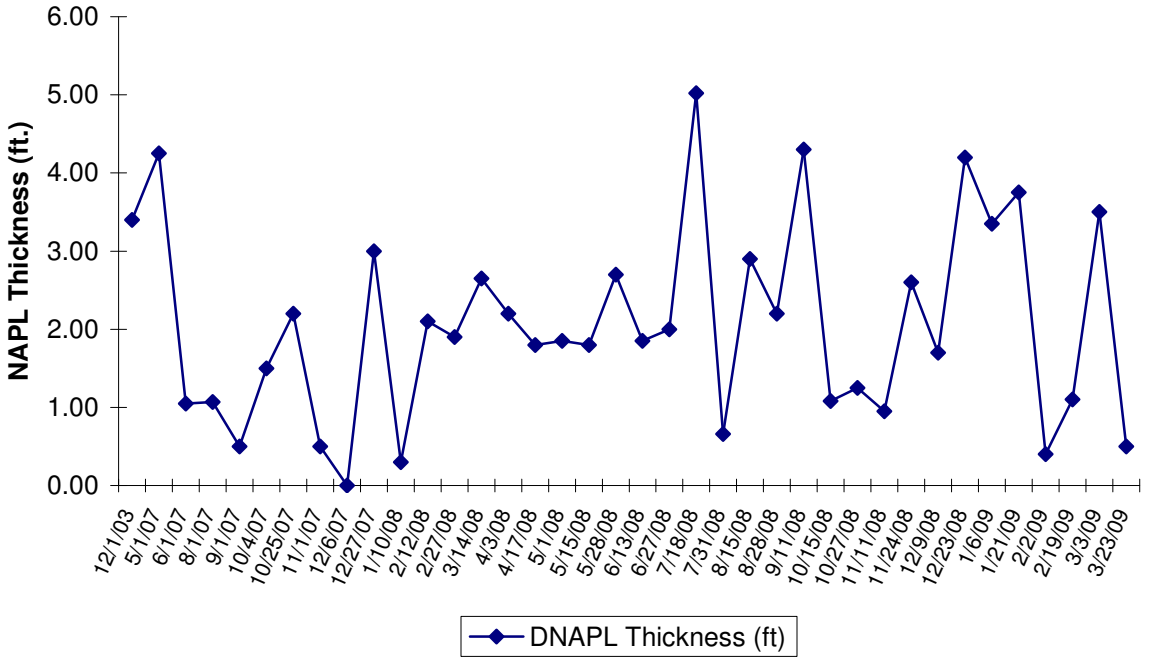
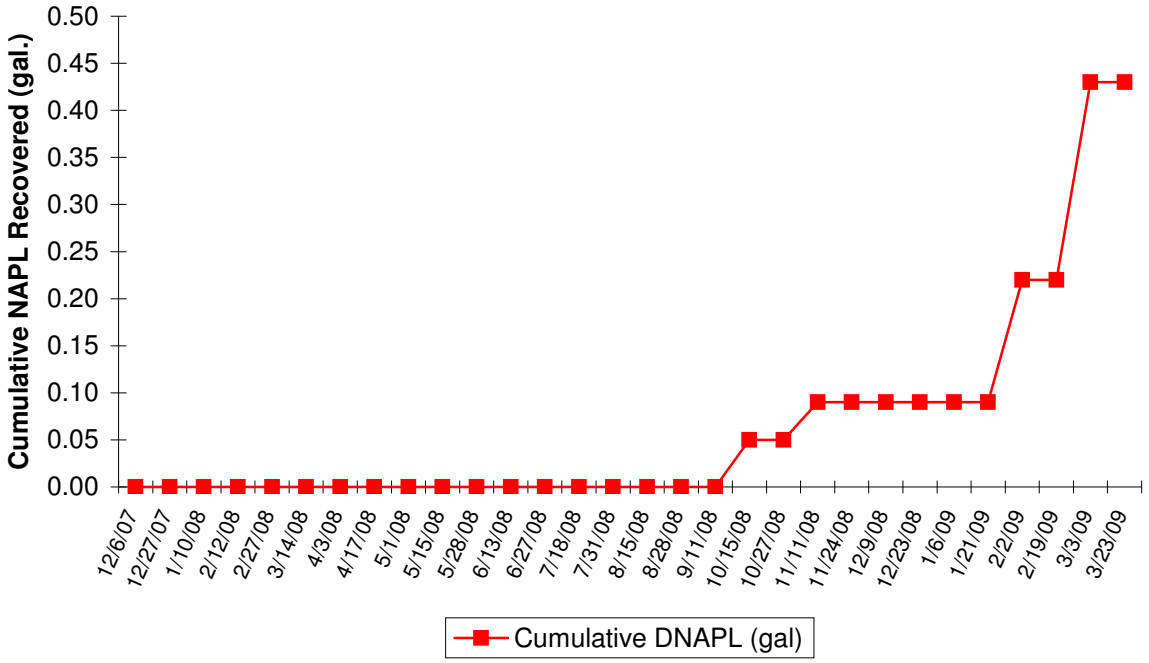


FIGURE 8D
Well HIMW-06I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



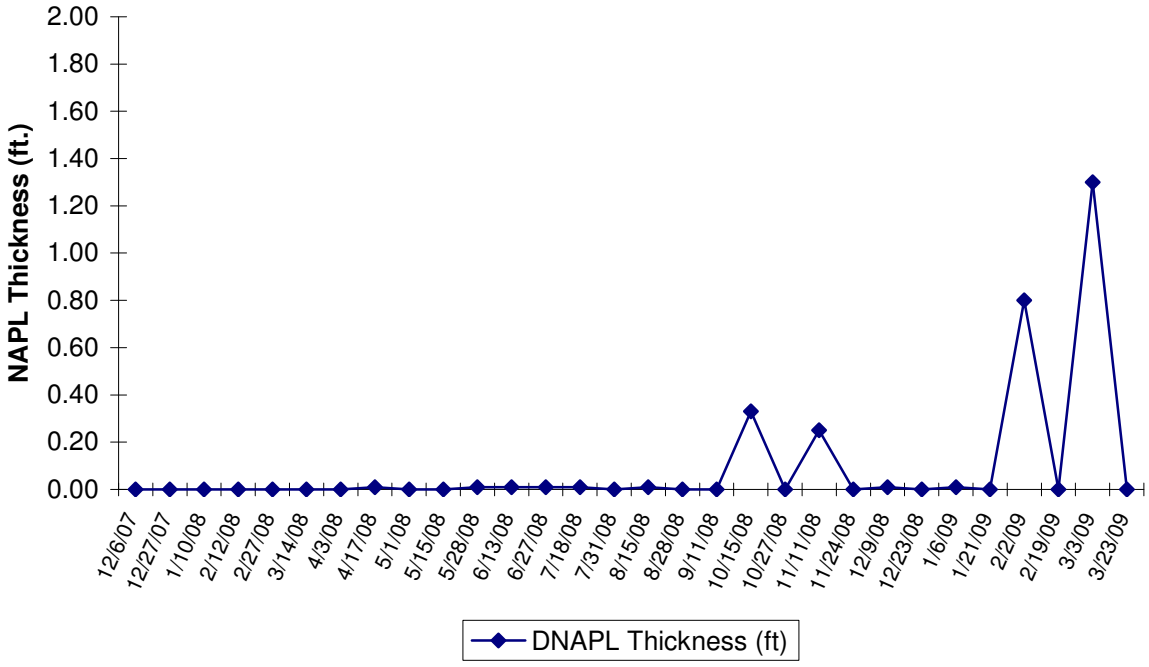
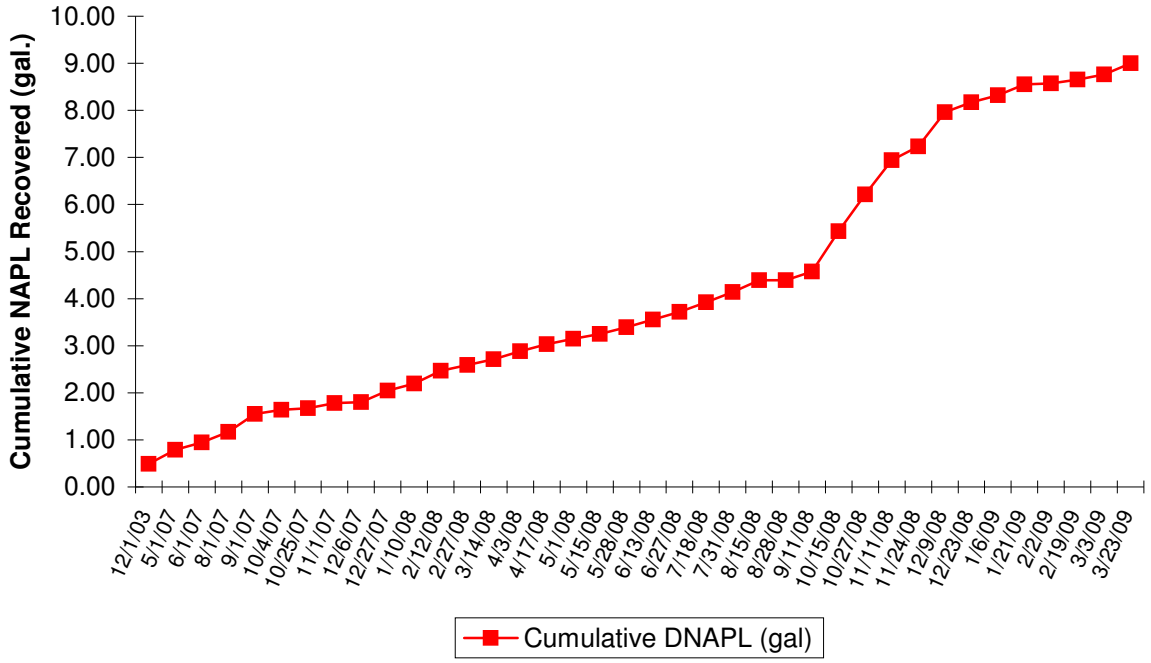


FIGURE 8E
Well HIMW-07S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



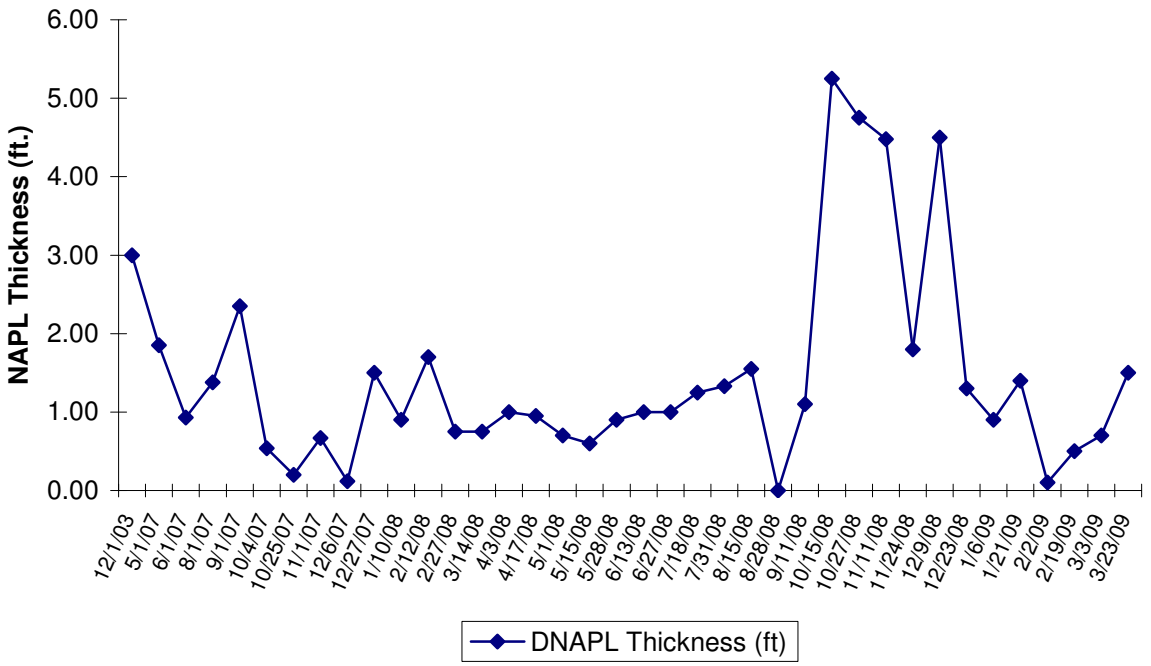
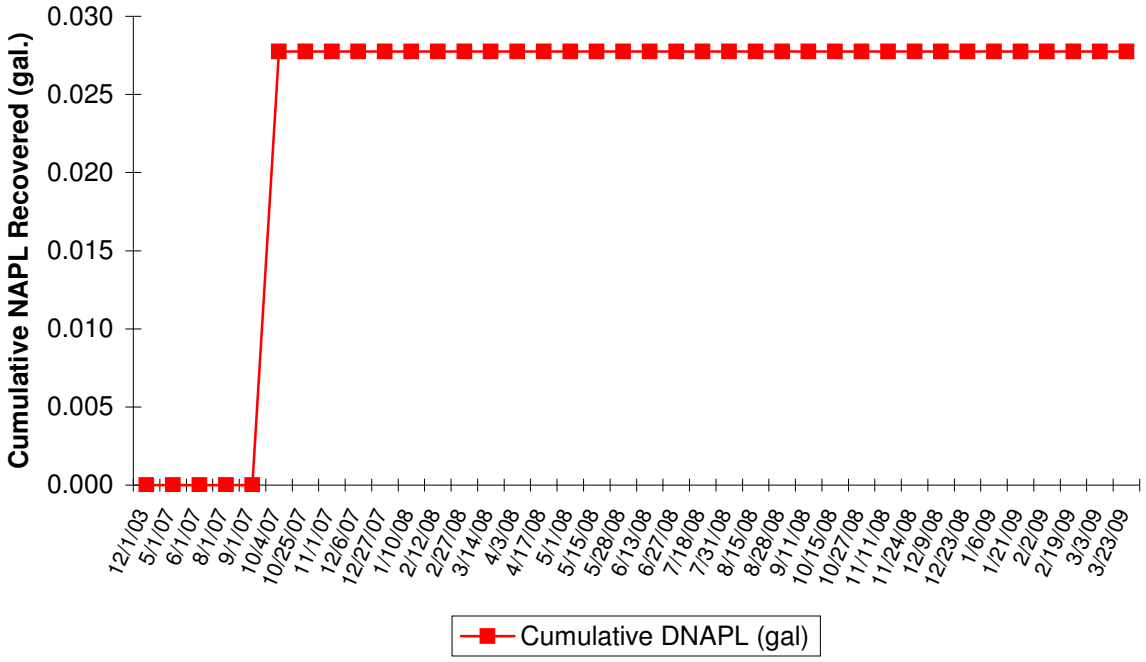


FIGURE 8F
Well HIMW-11S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



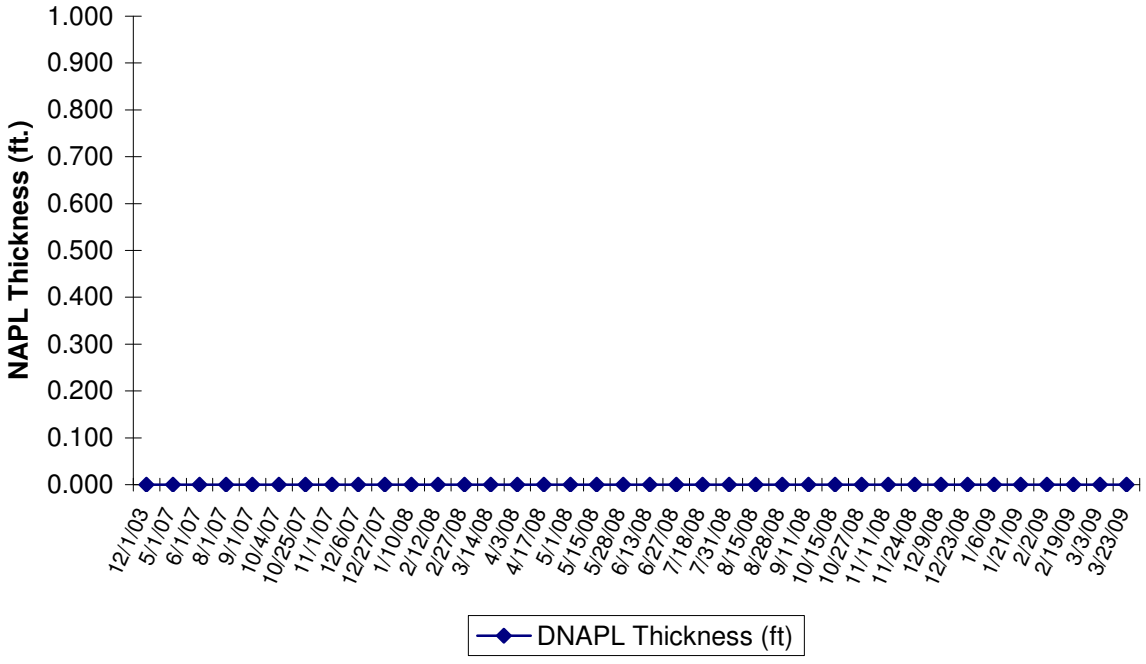
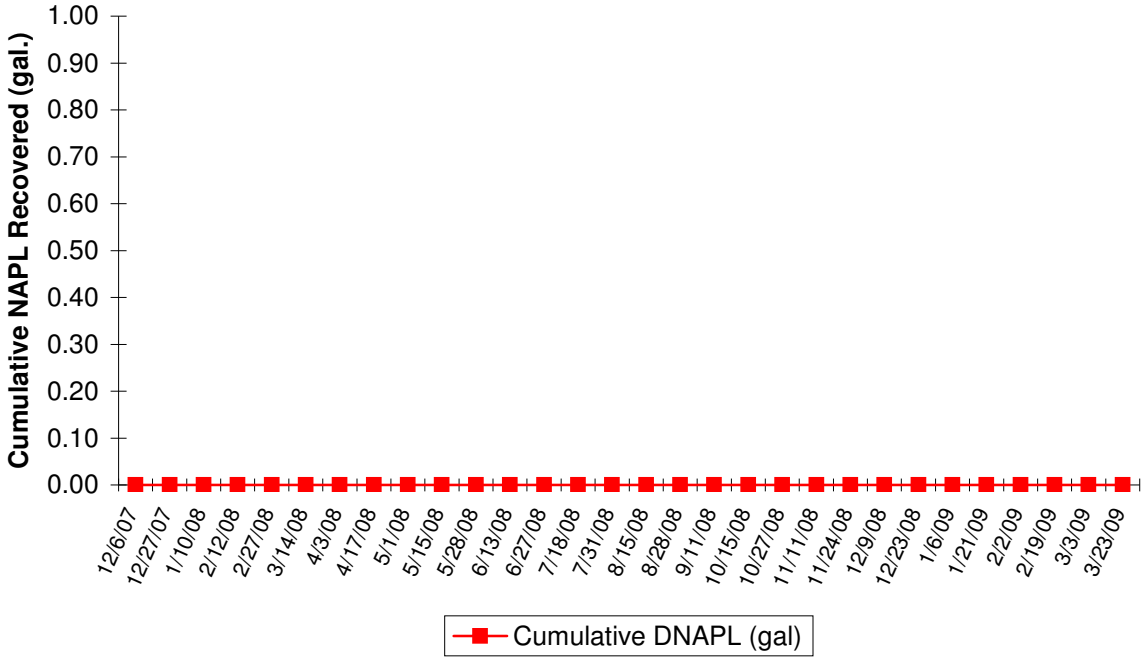


FIGURE 8G
Well HIMW-11I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



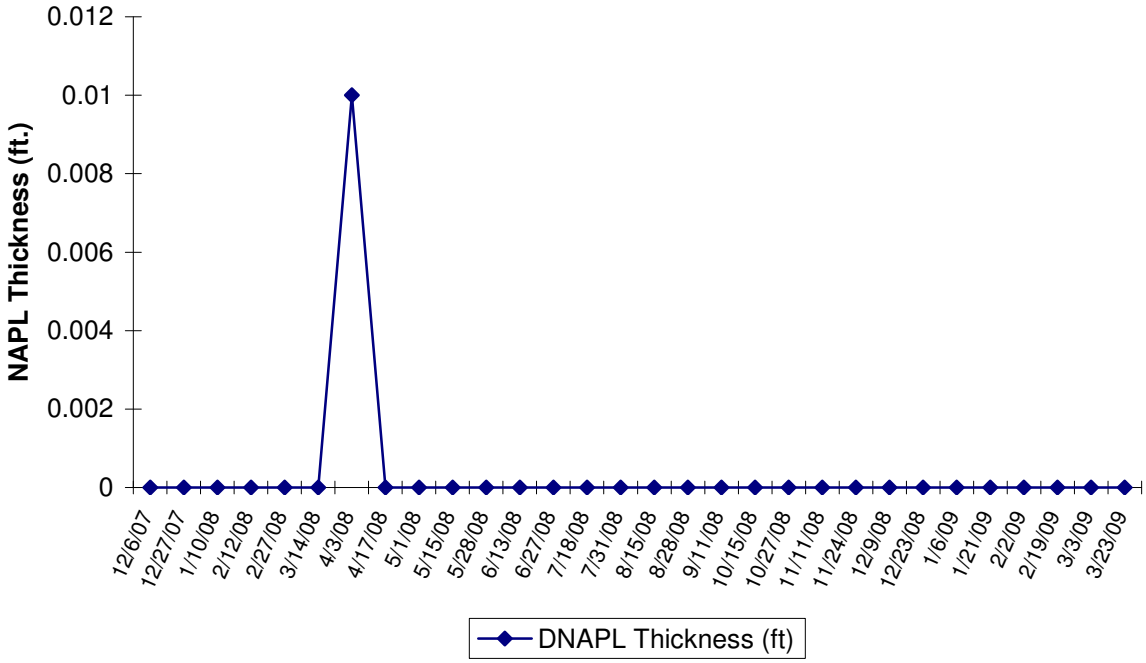
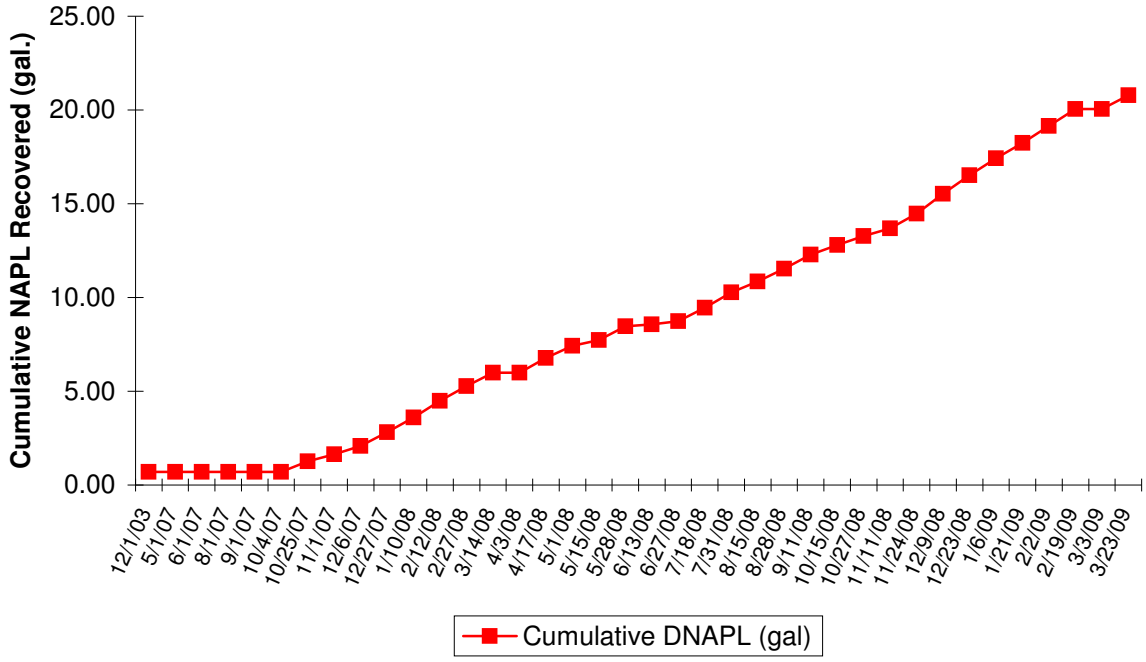


FIGURE 8H
Well HIMW-16S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



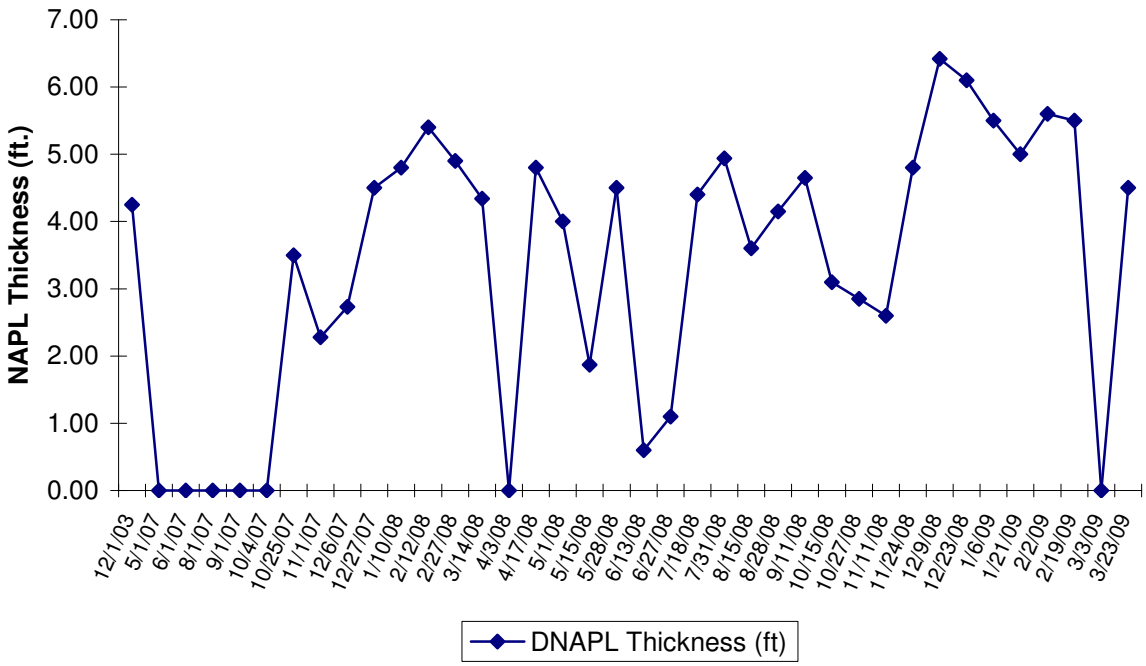
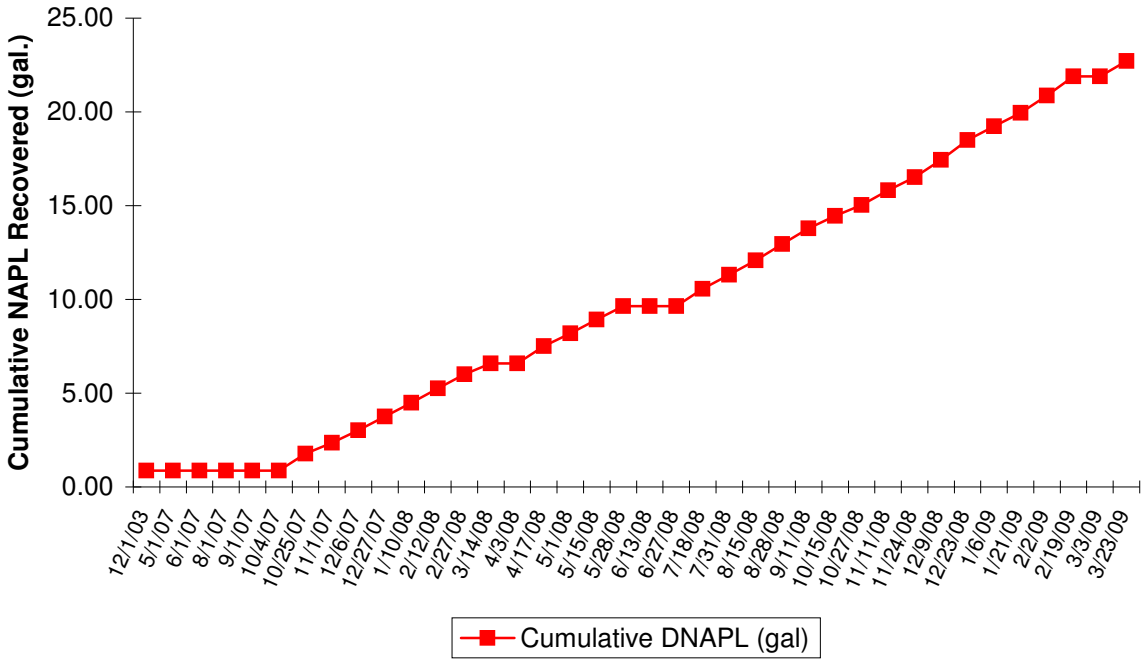


FIGURE 8I
Well HIMW-16I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



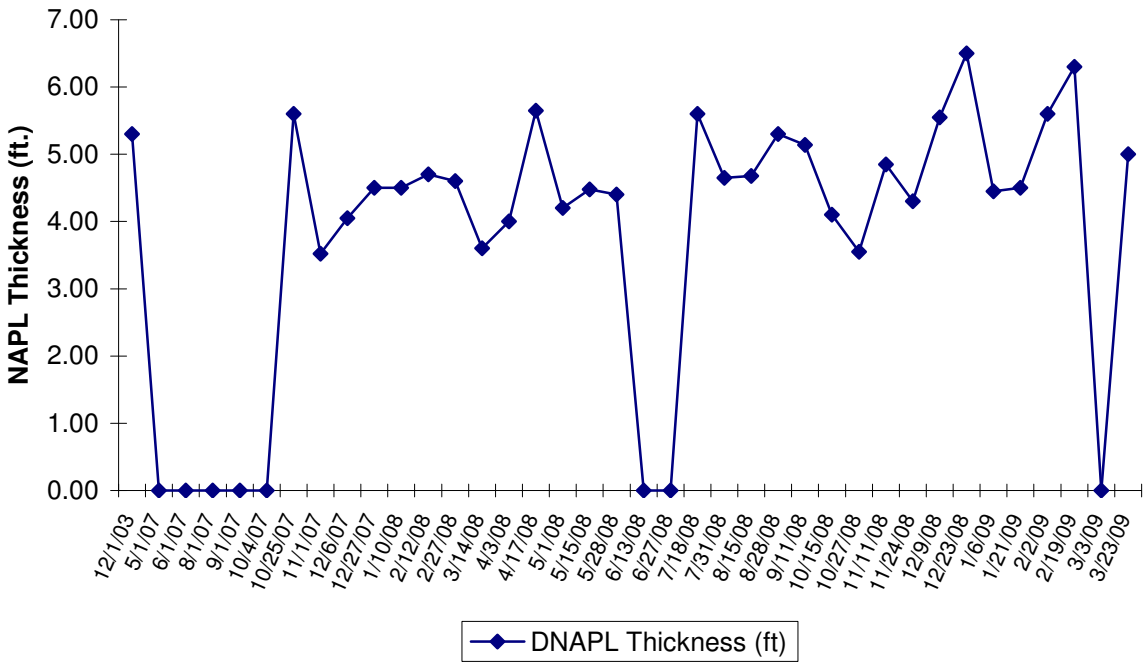
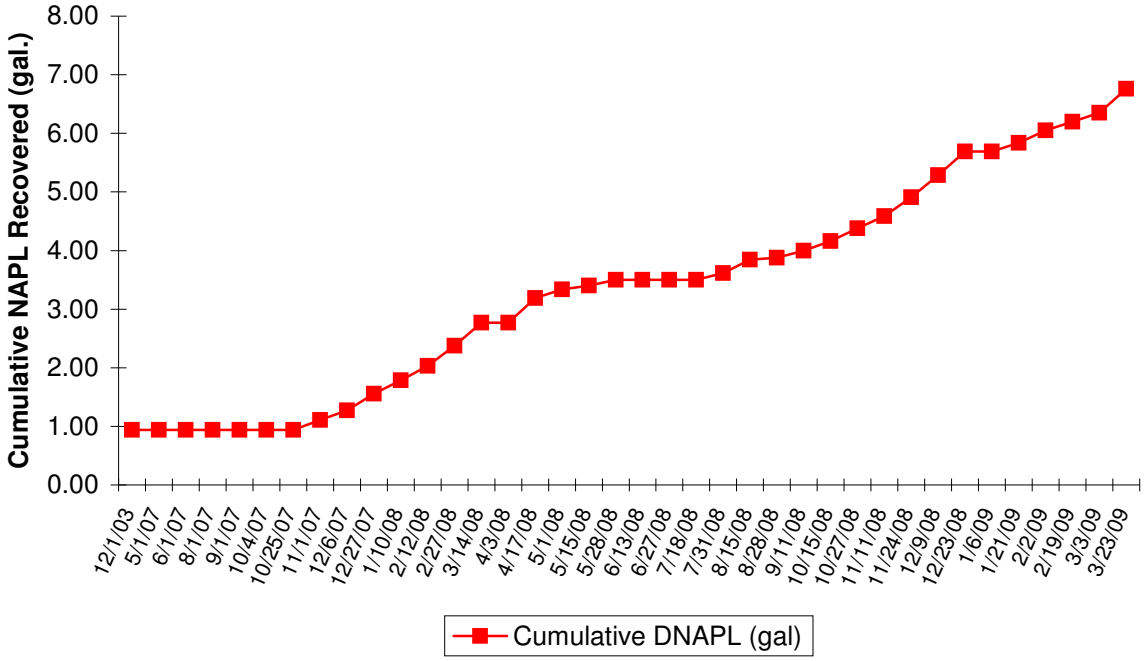


FIGURE 8J
Well HIMW-17S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



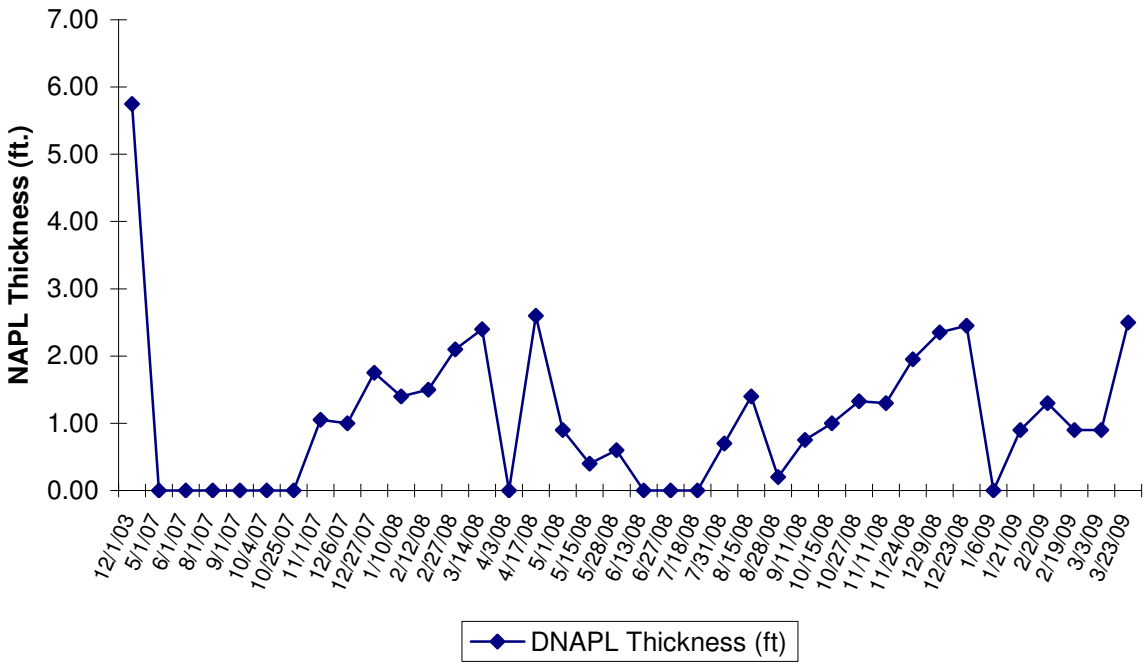
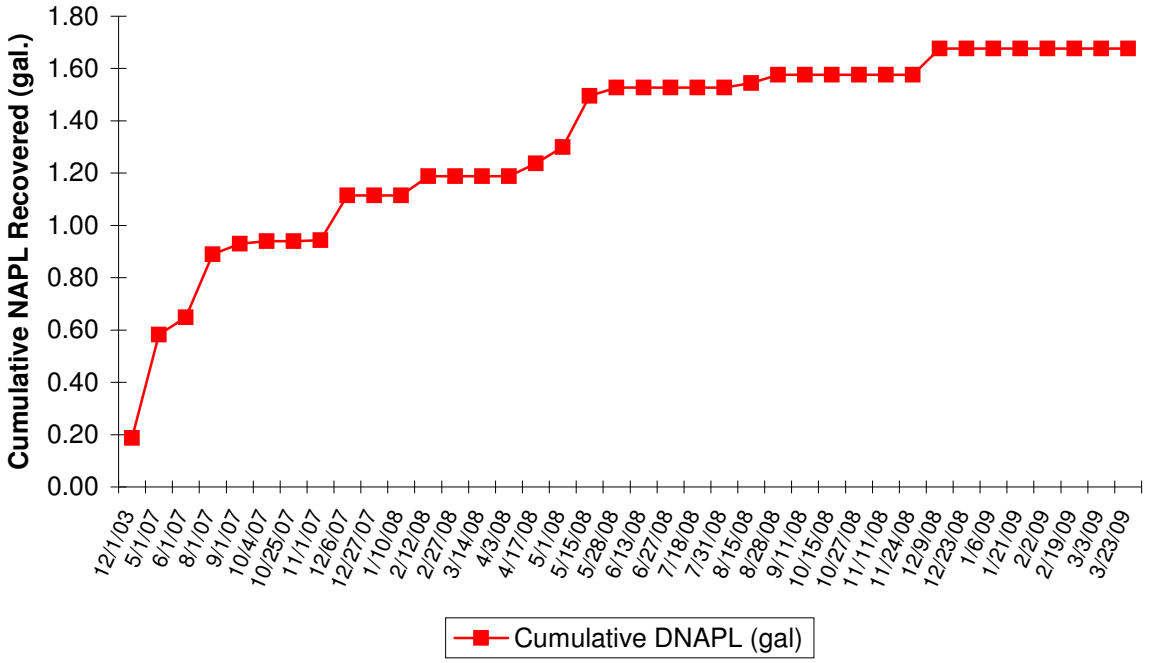


FIGURE 8K
Well HIMW-18S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



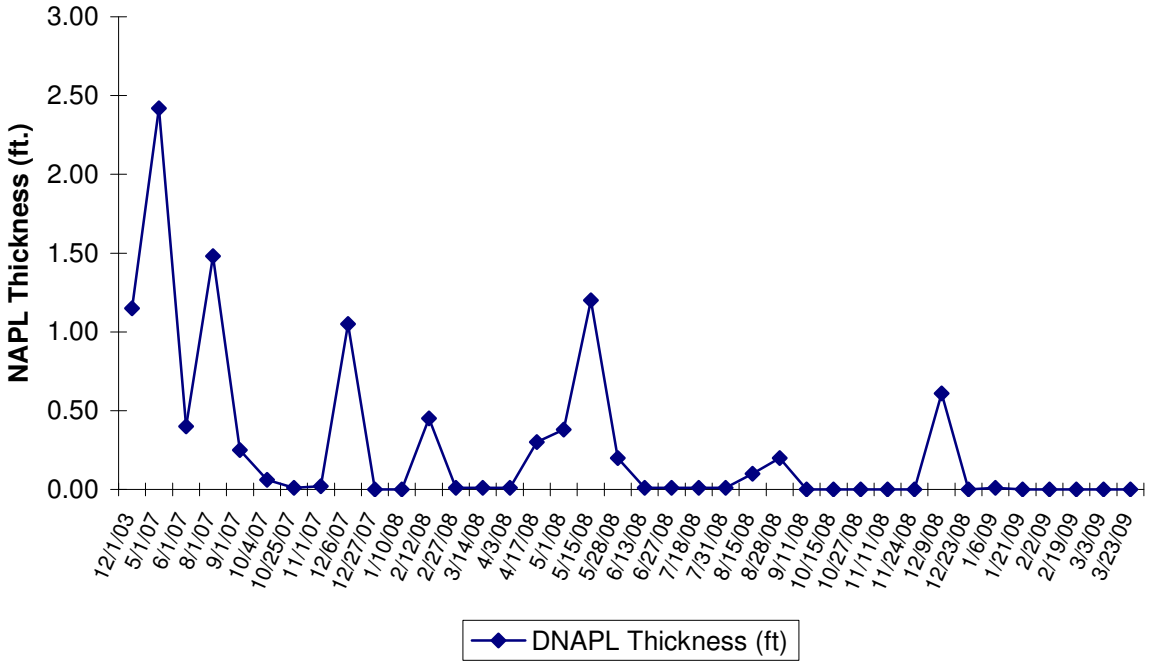
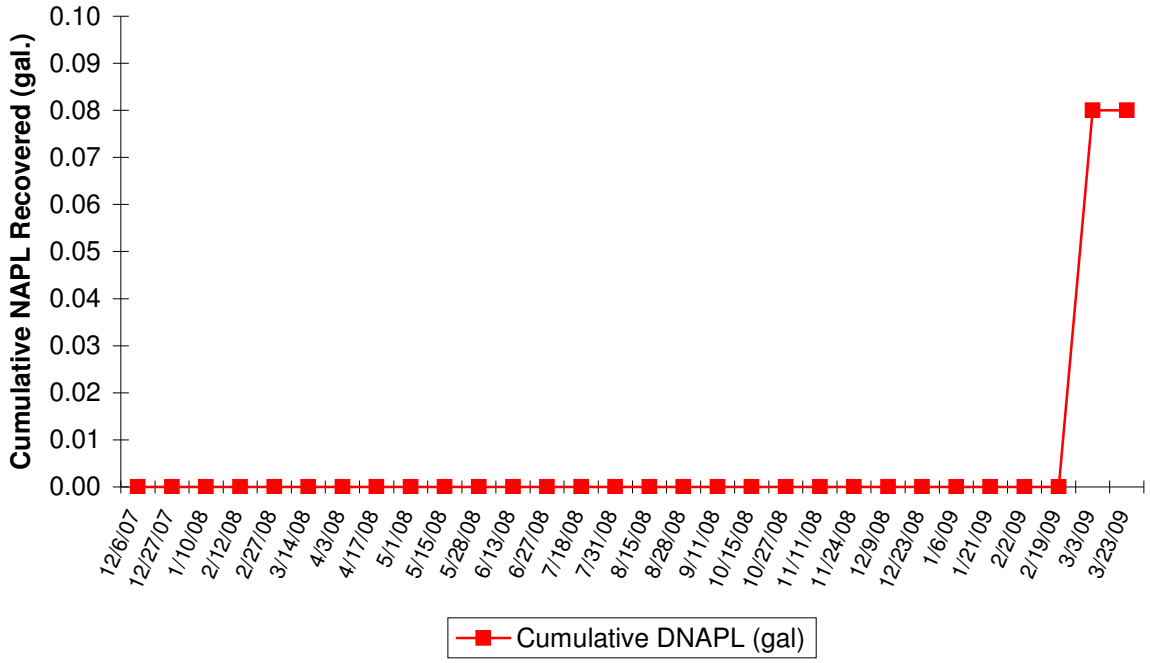


FIGURE 8L
Well HIMW-18I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



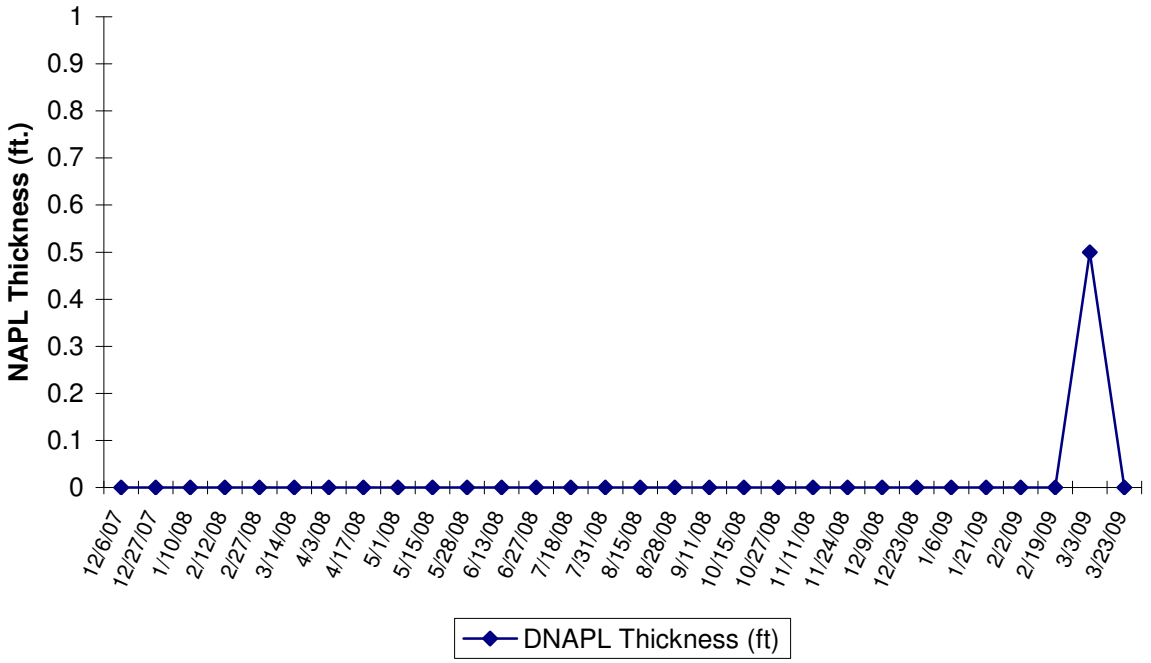
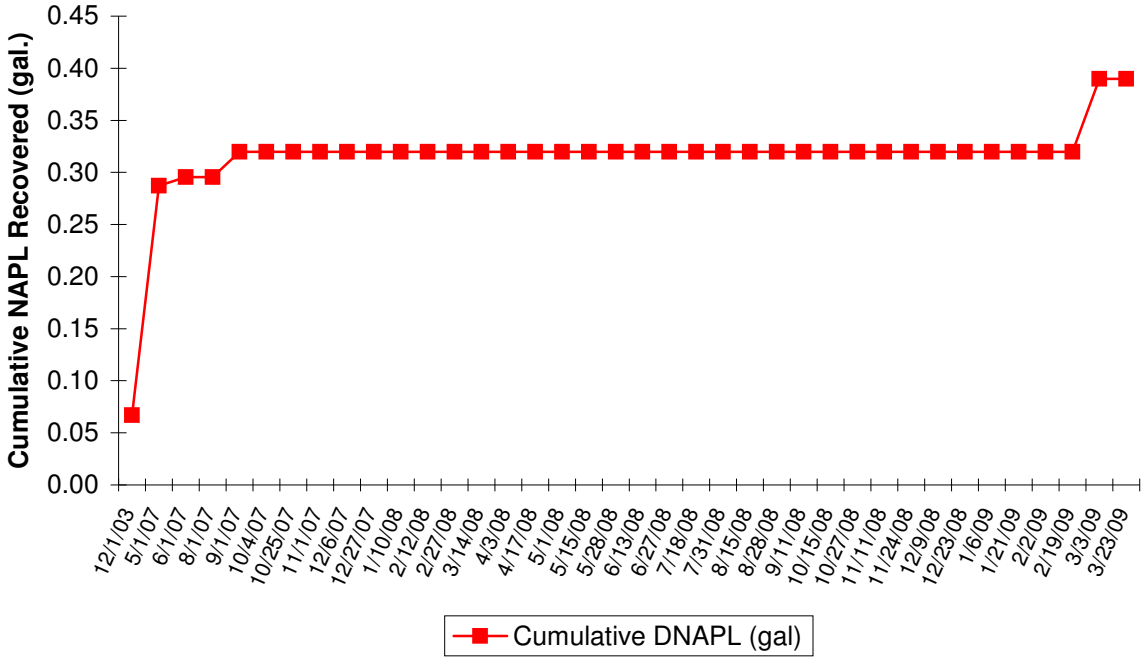


FIGURE 8M
Well HIMW-19S NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



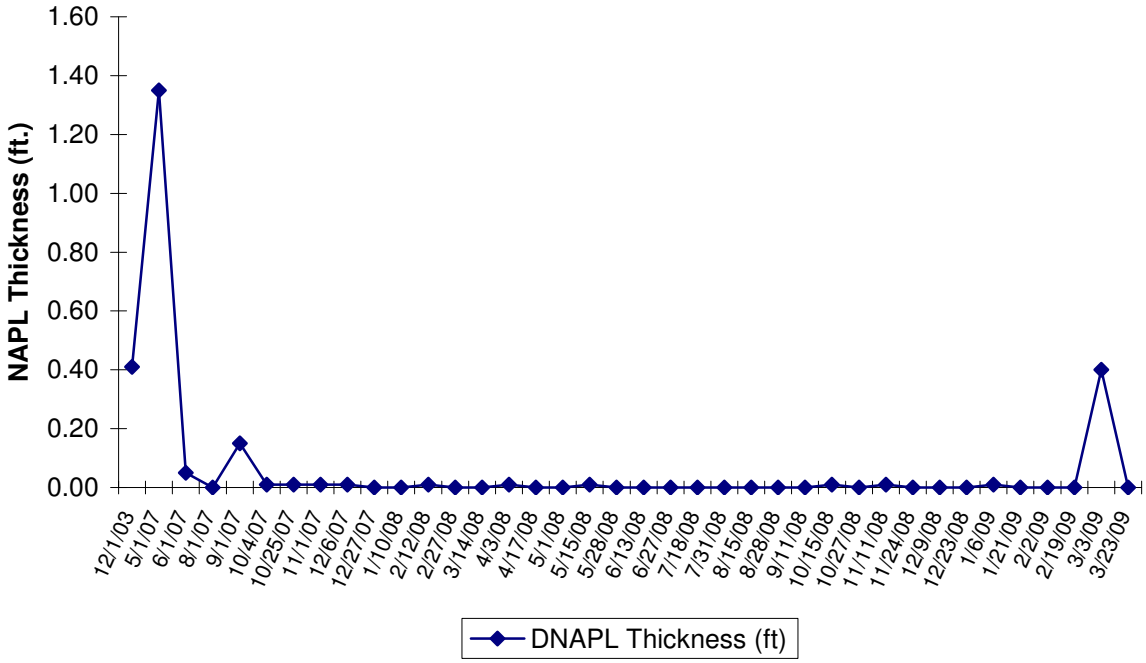
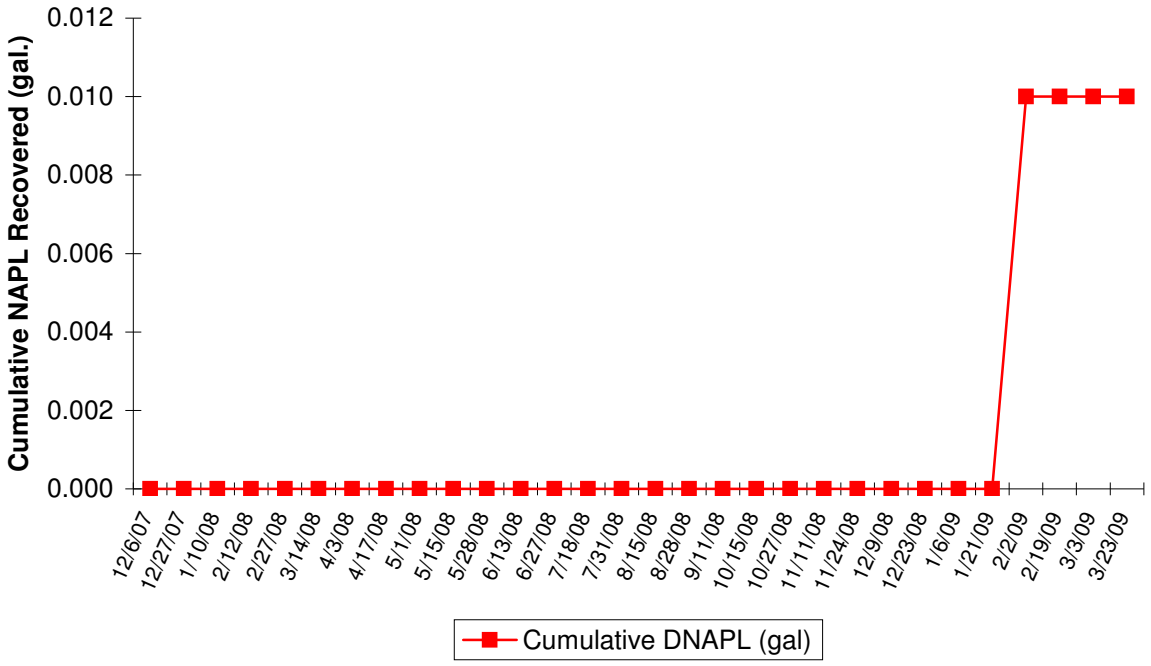


FIGURE 8N
Well HIMW-19I NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



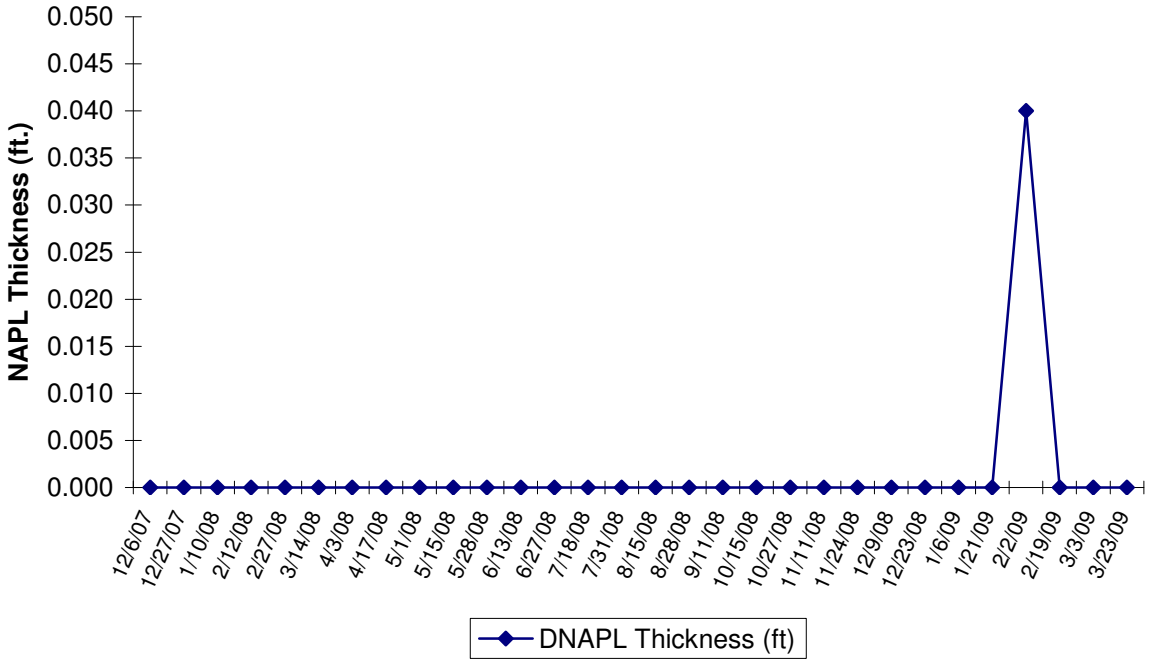
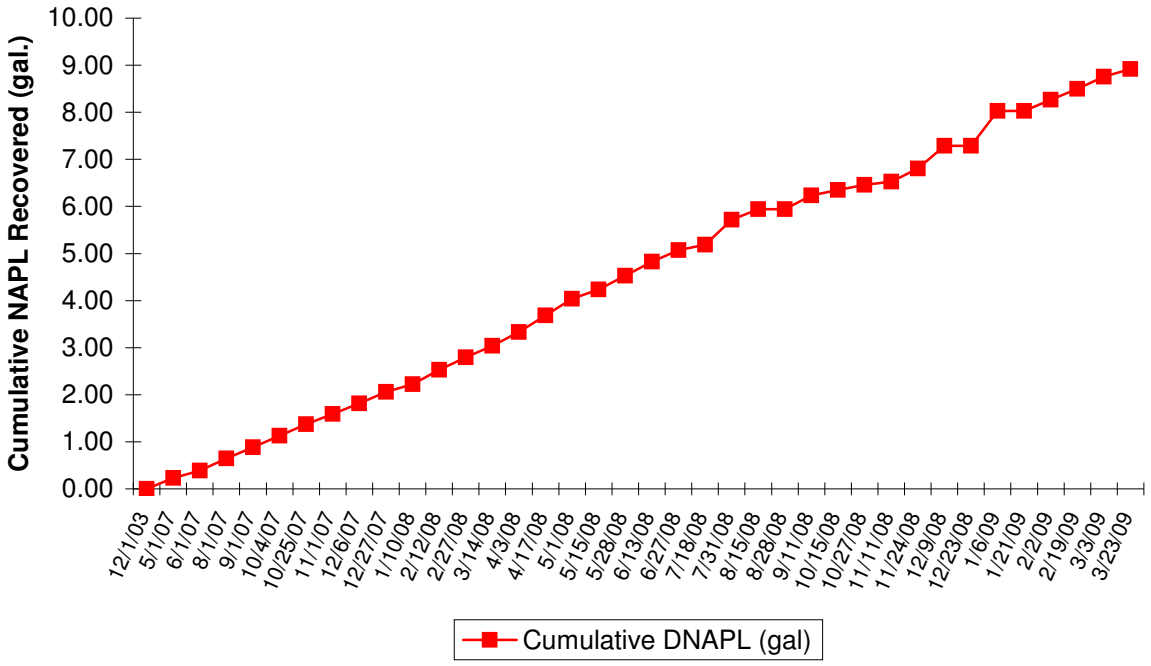


FIGURE 8O
Well PZ-08 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



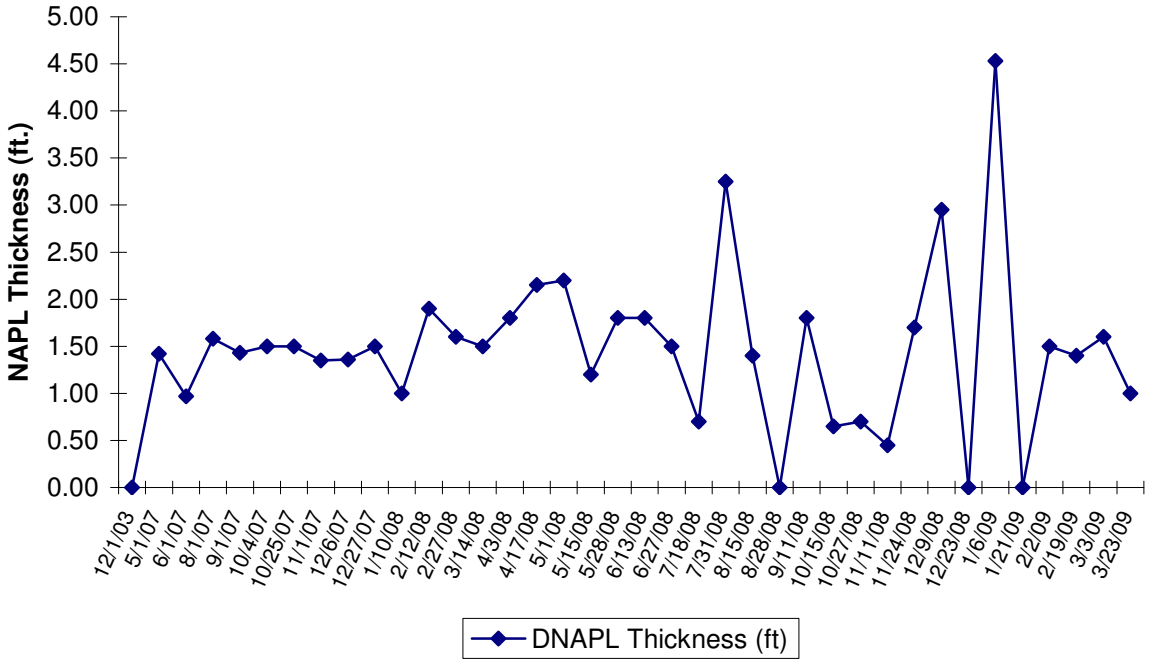
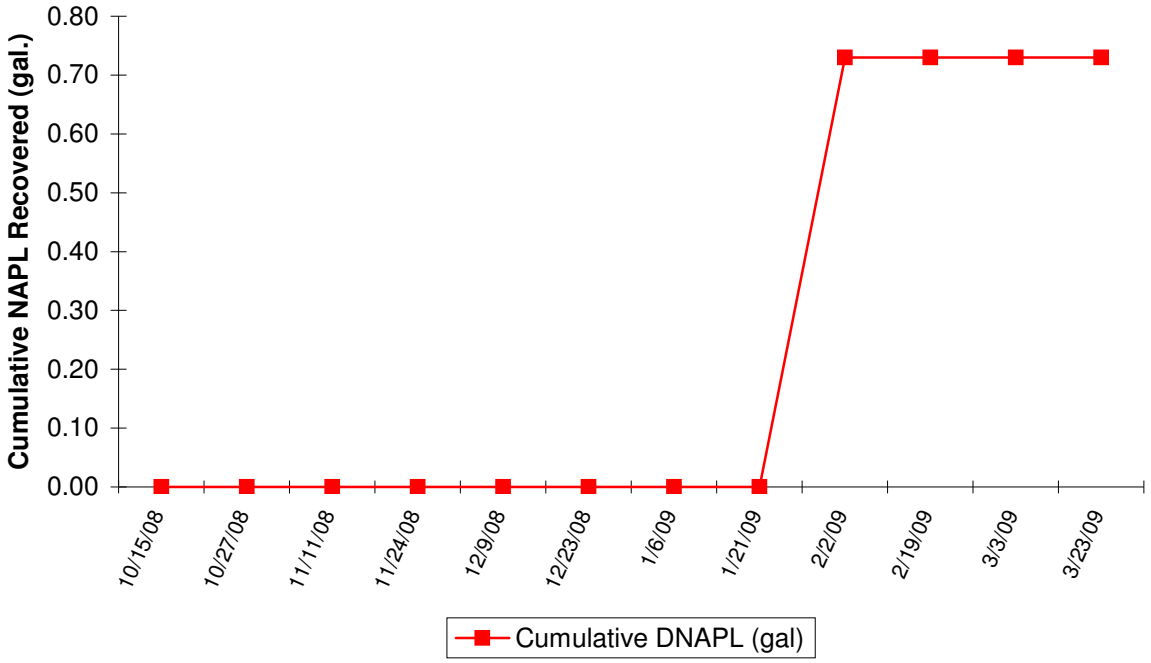


FIGURE 8P
Well IPR-02 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



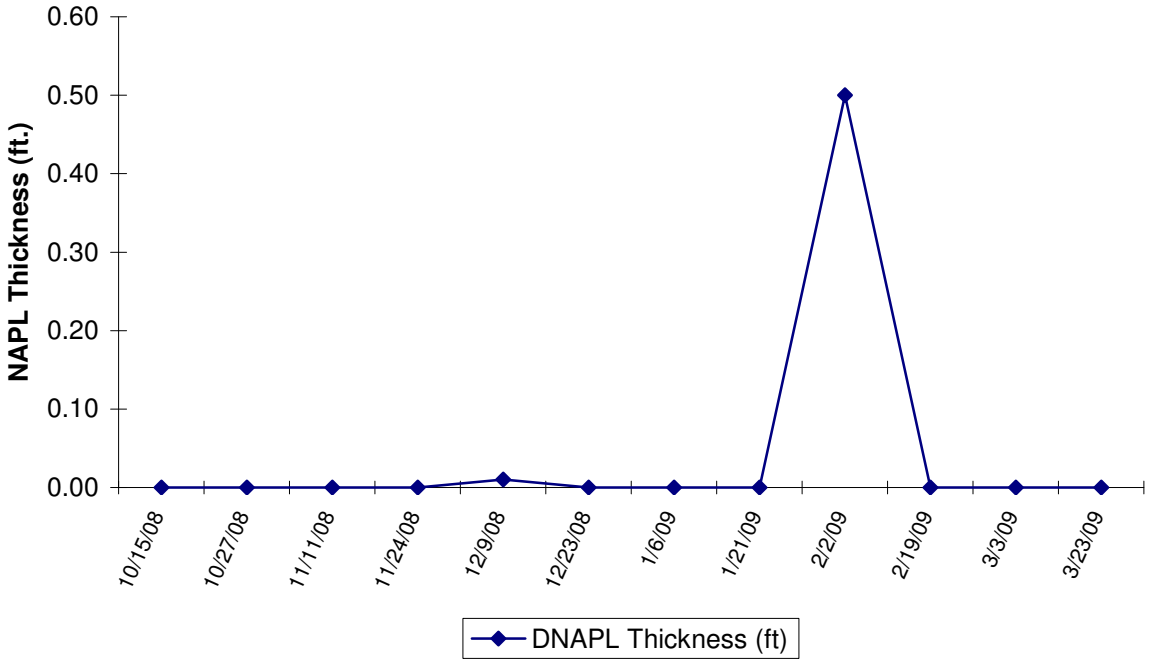
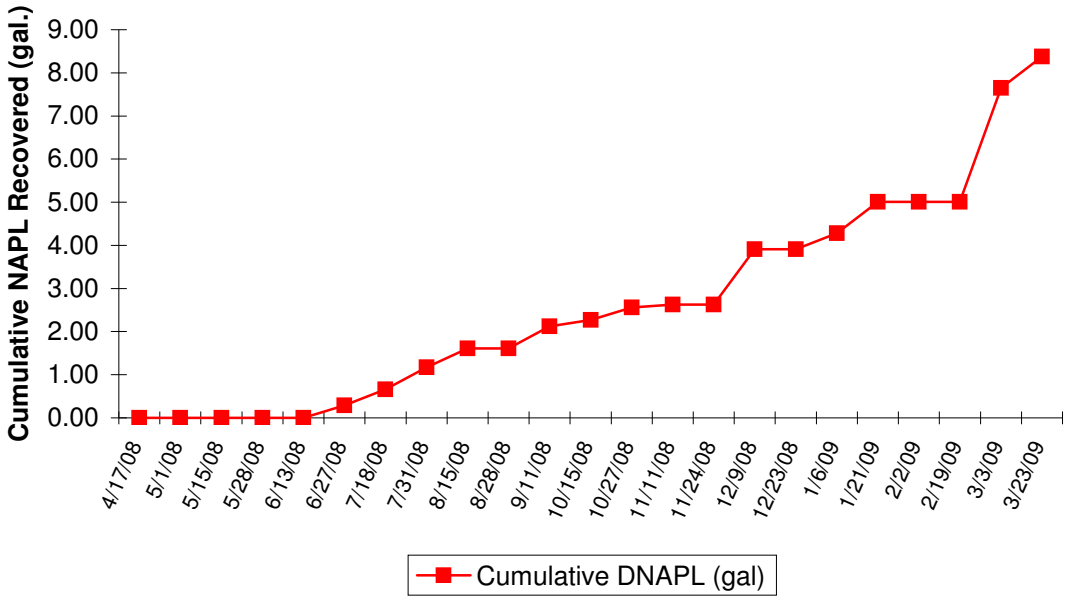


FIGURE 8Q
Well IPR-06 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



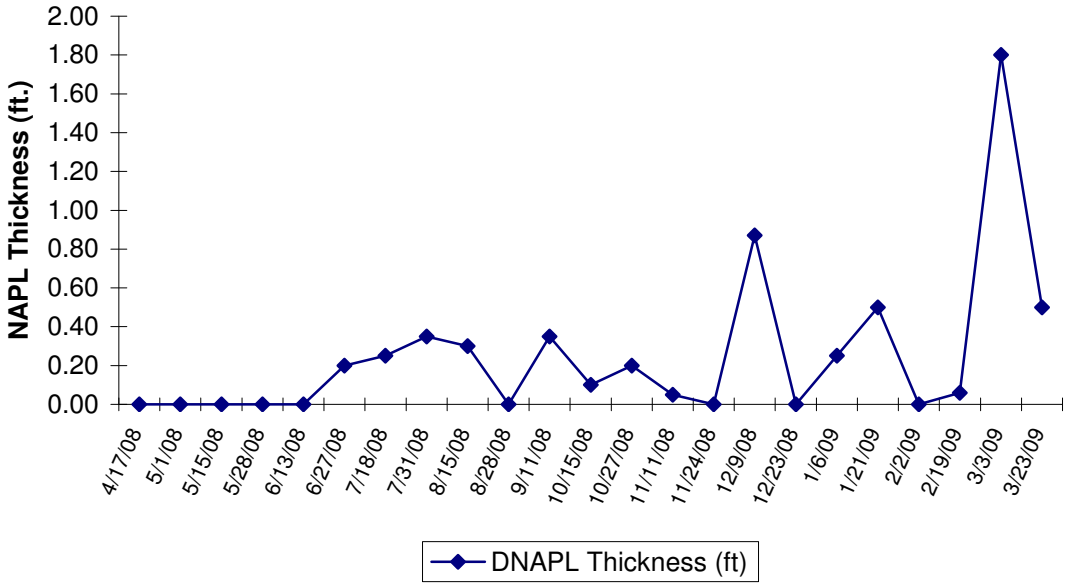
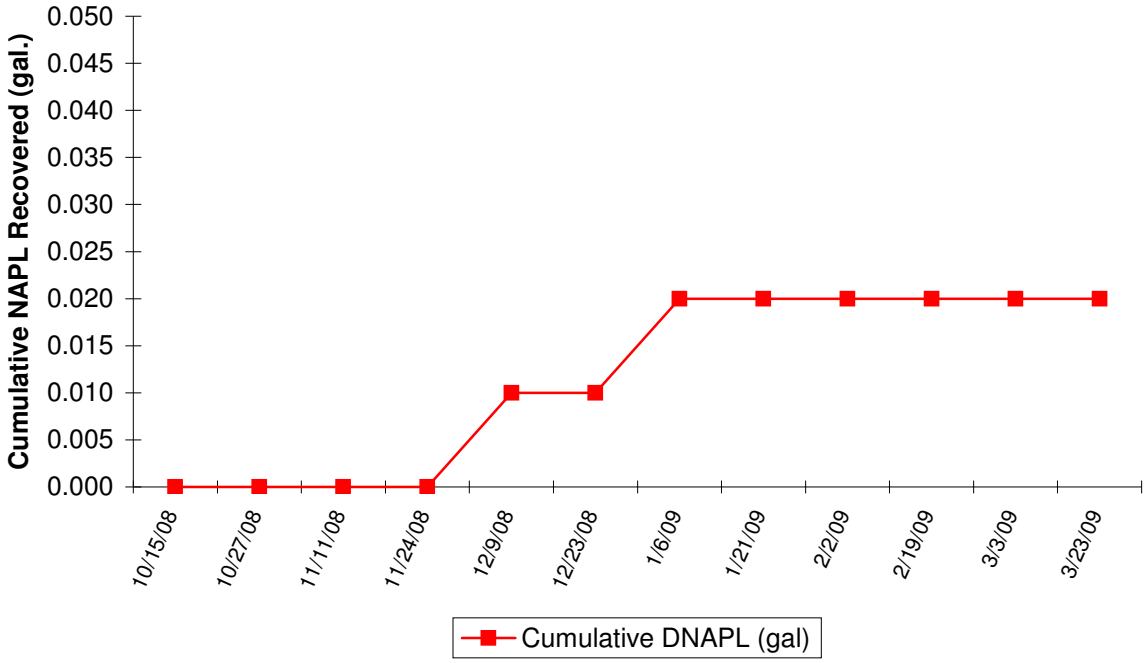


FIGURE 8R
Well IPR-12A NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



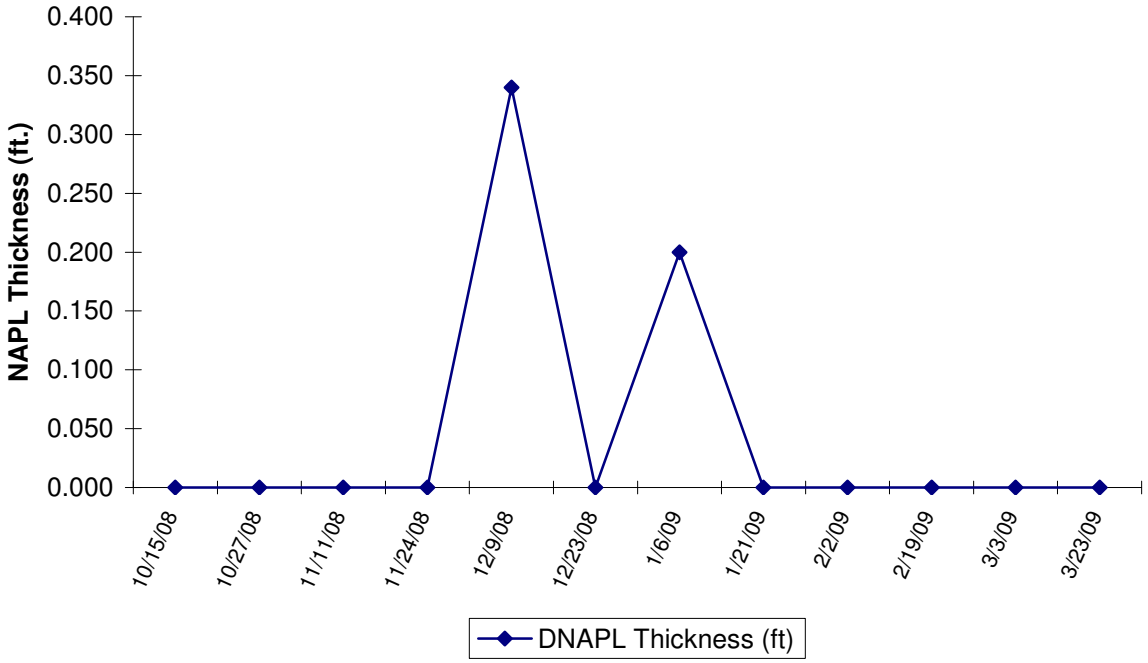
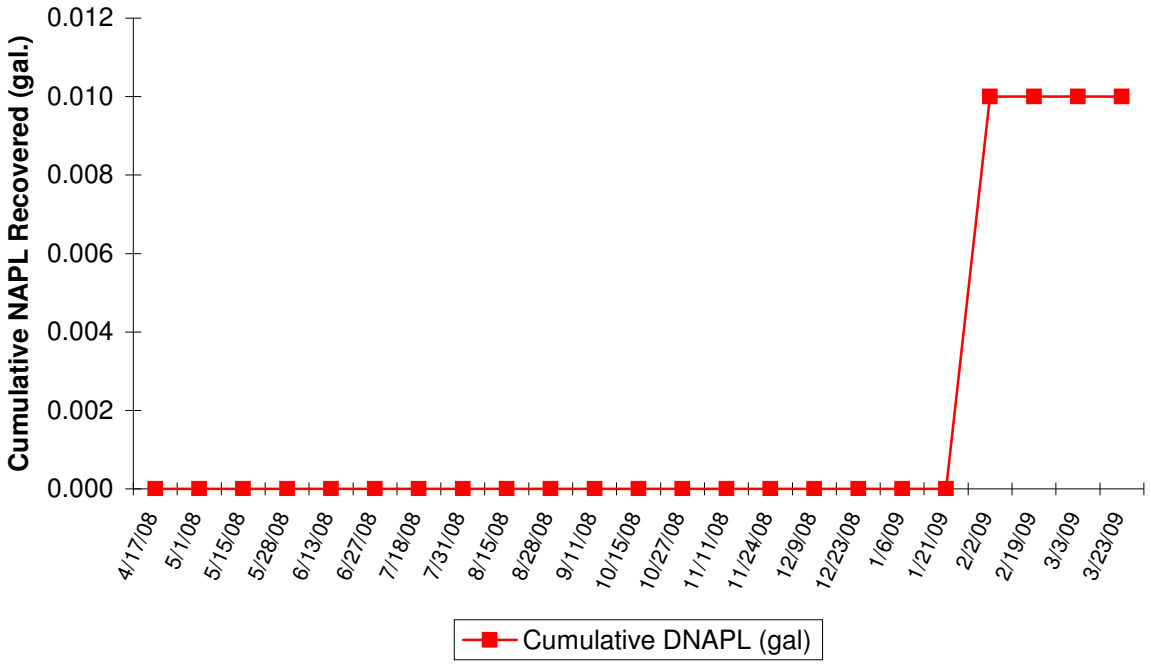


FIGURE 8S
Well IPR-15 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



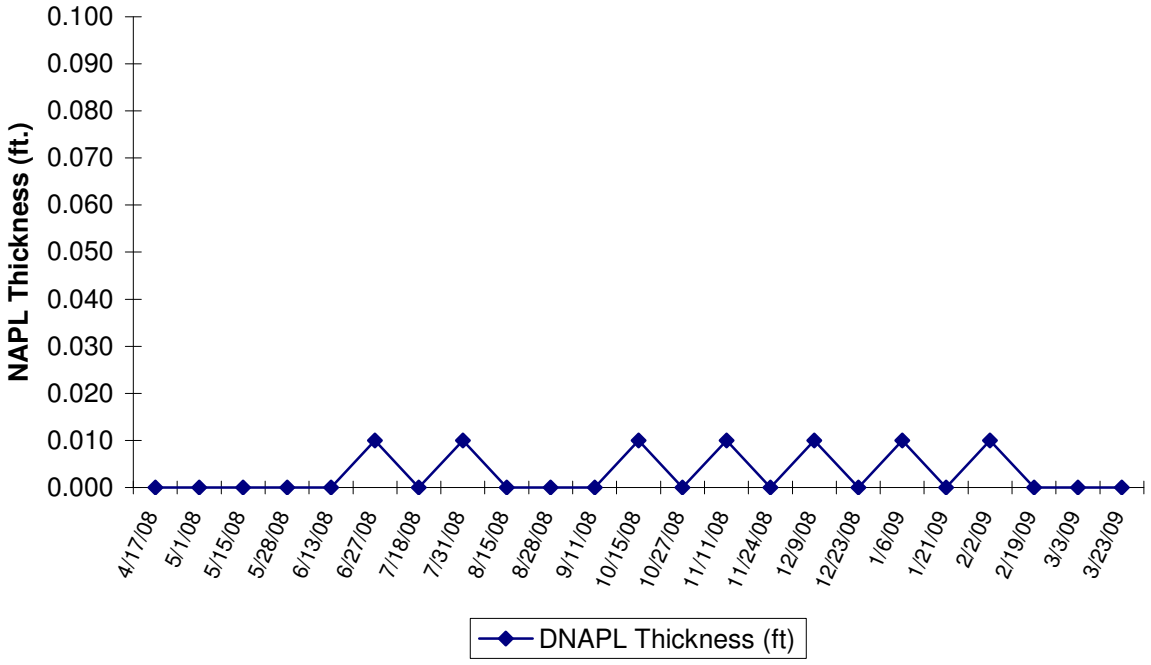
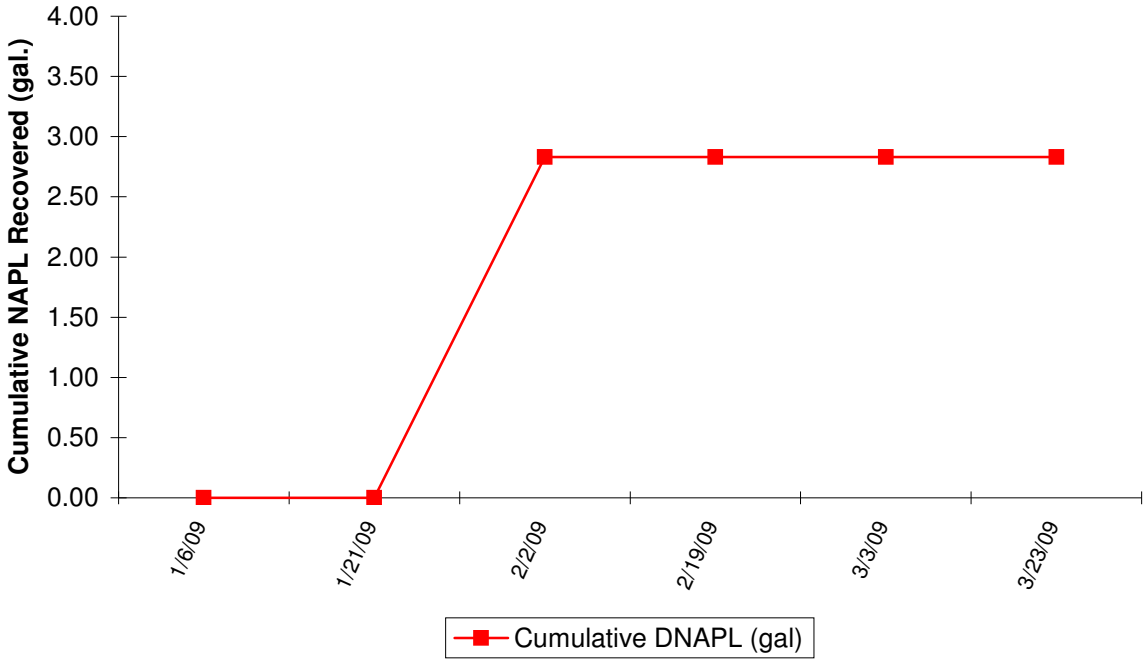


FIGURE 8T
Well IPR-16 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



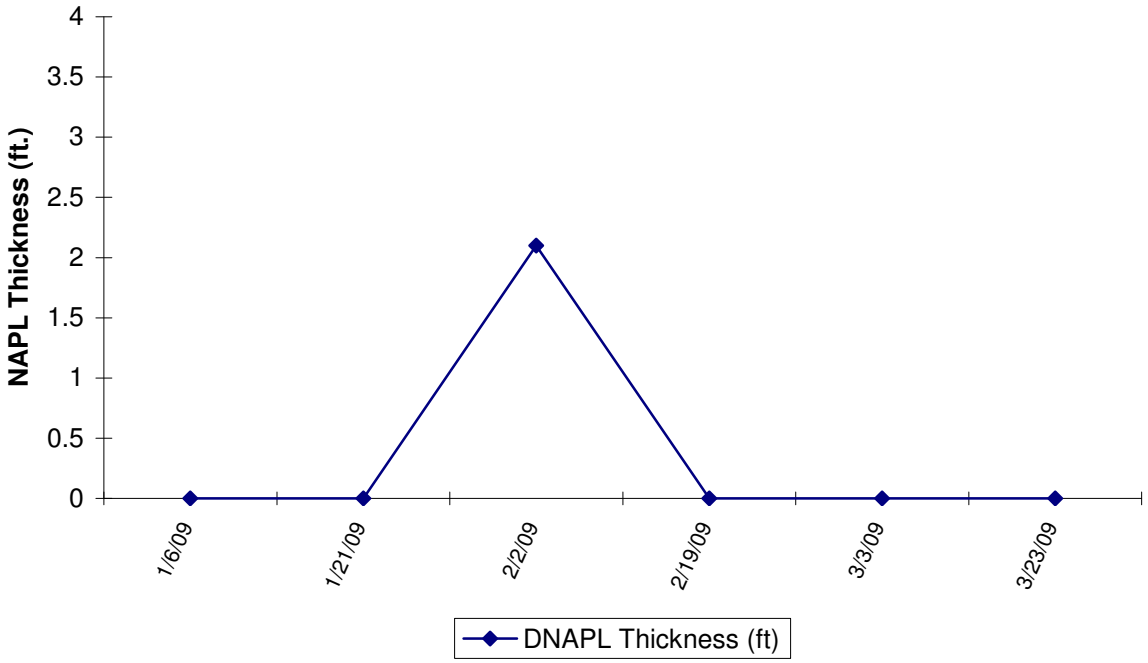
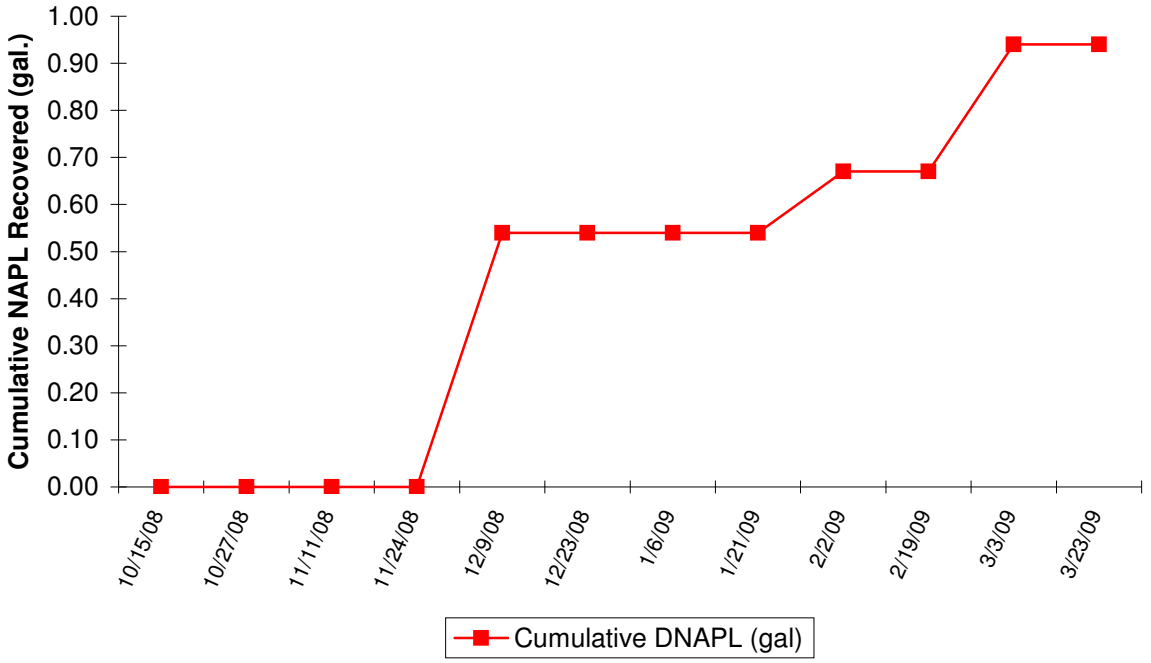


FIGURE 8U
Well IPR-17 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



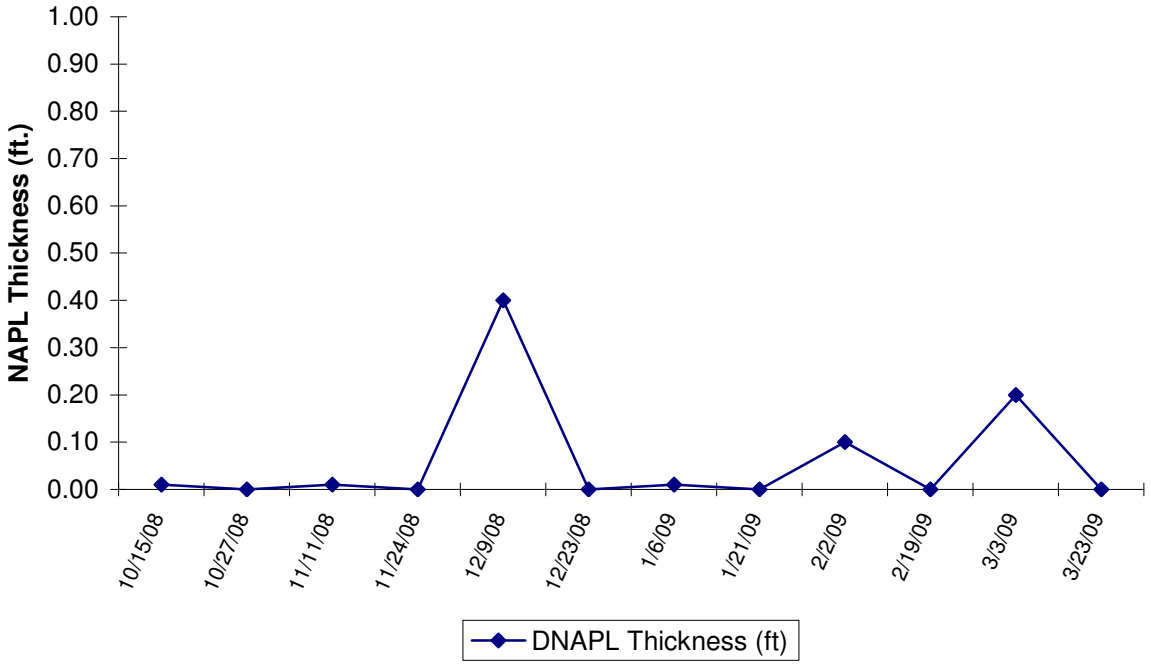
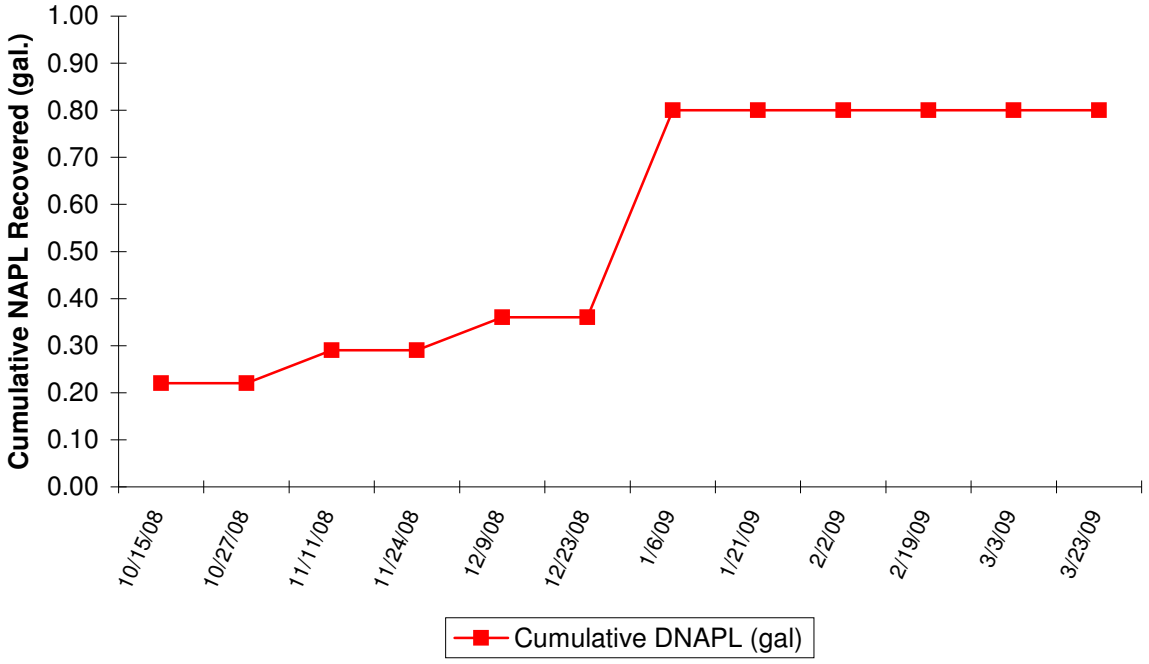


FIGURE 8V
Well IPR-20 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



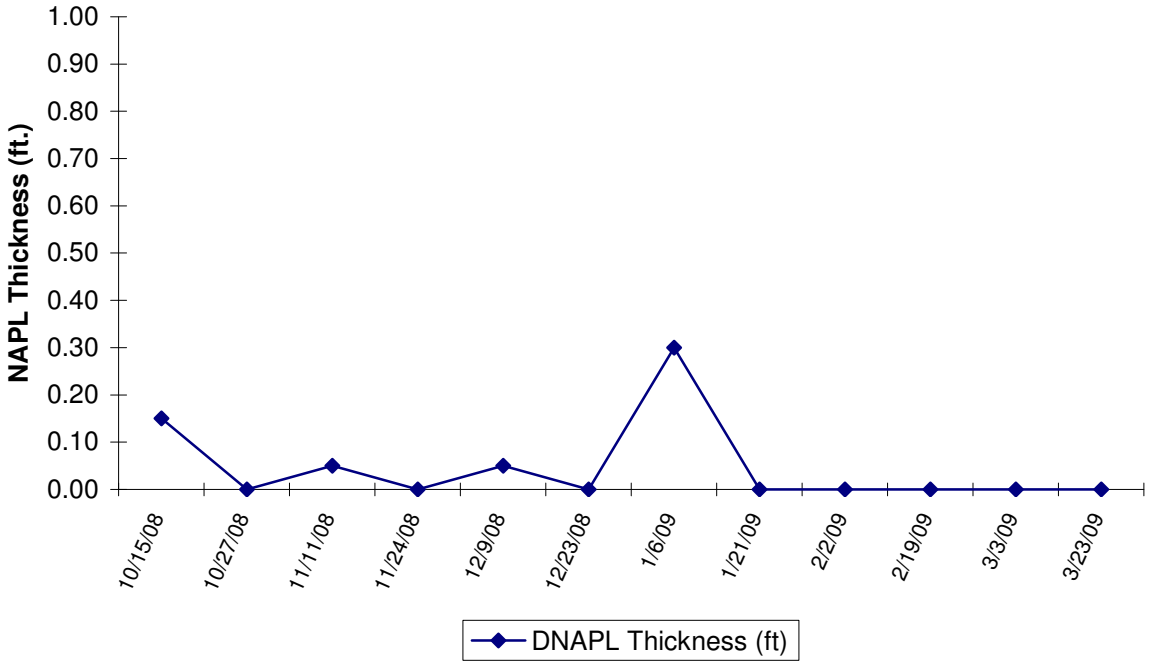
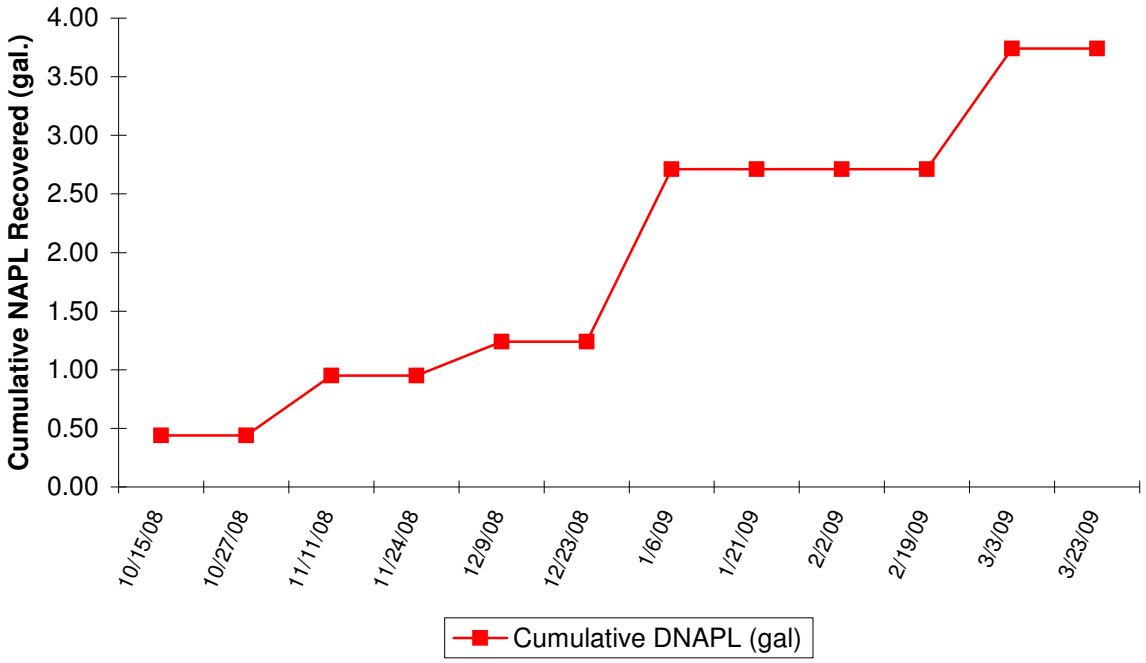


FIGURE 8W
Well IPR-21 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



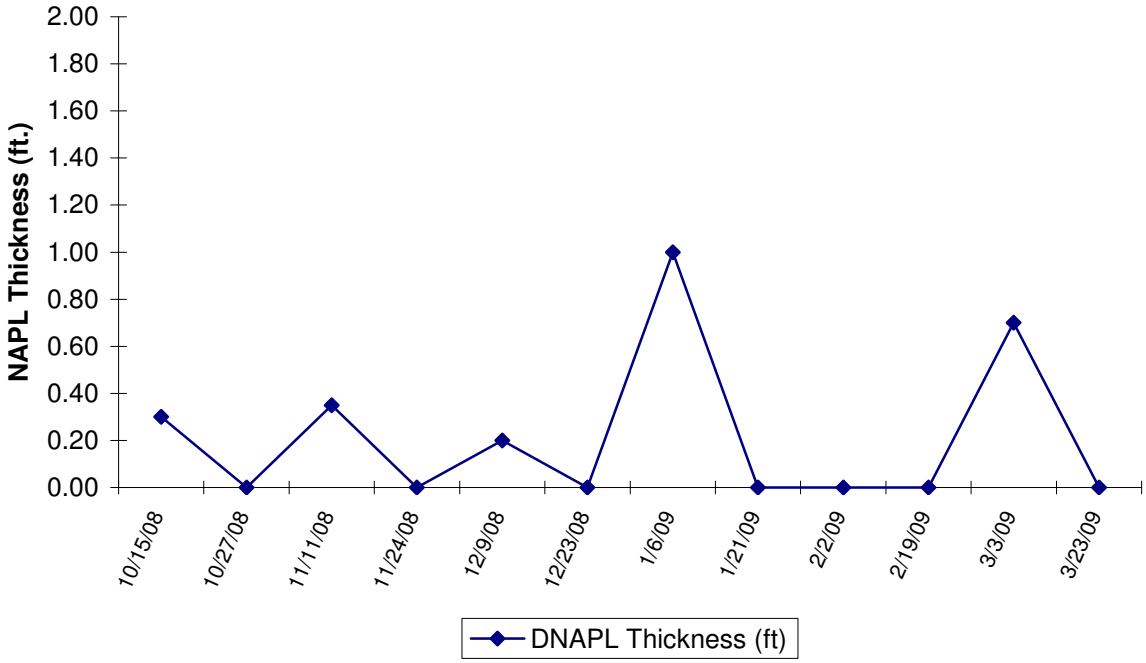
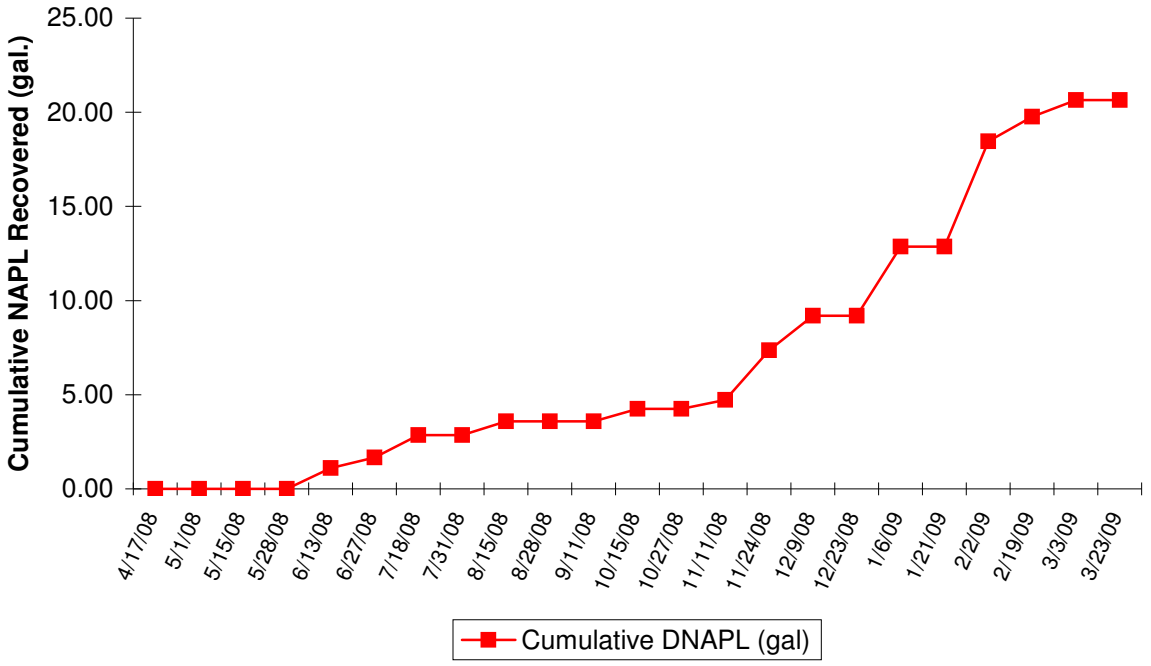


FIGURE 8X
Well IPR-22 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



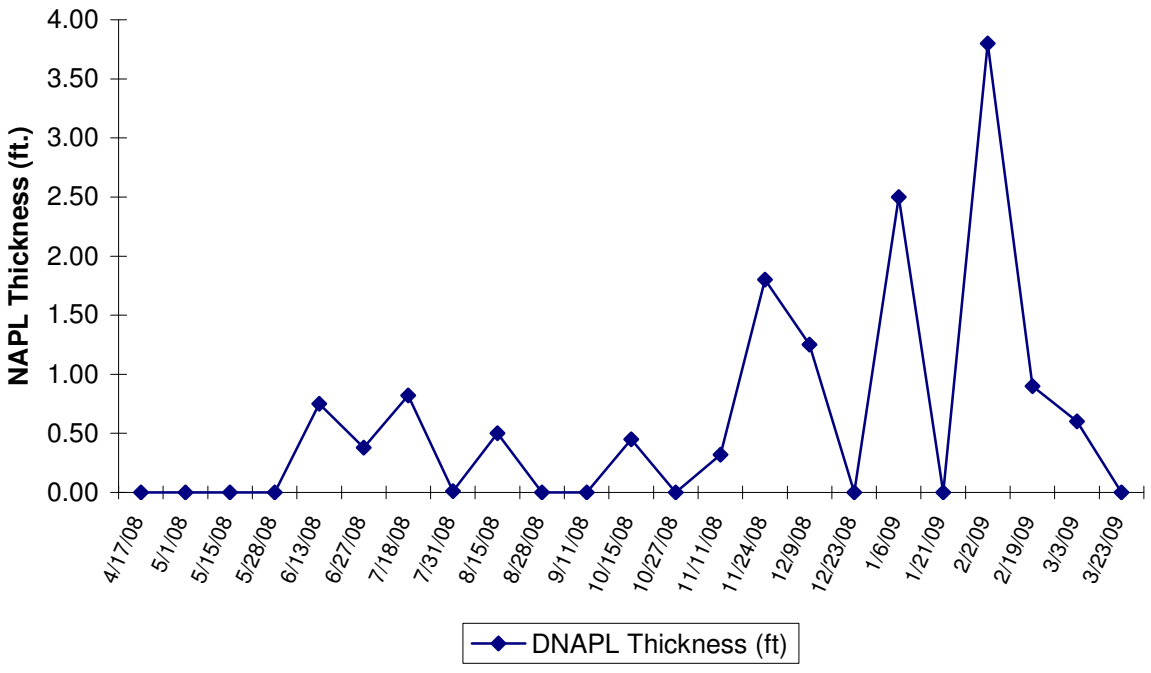
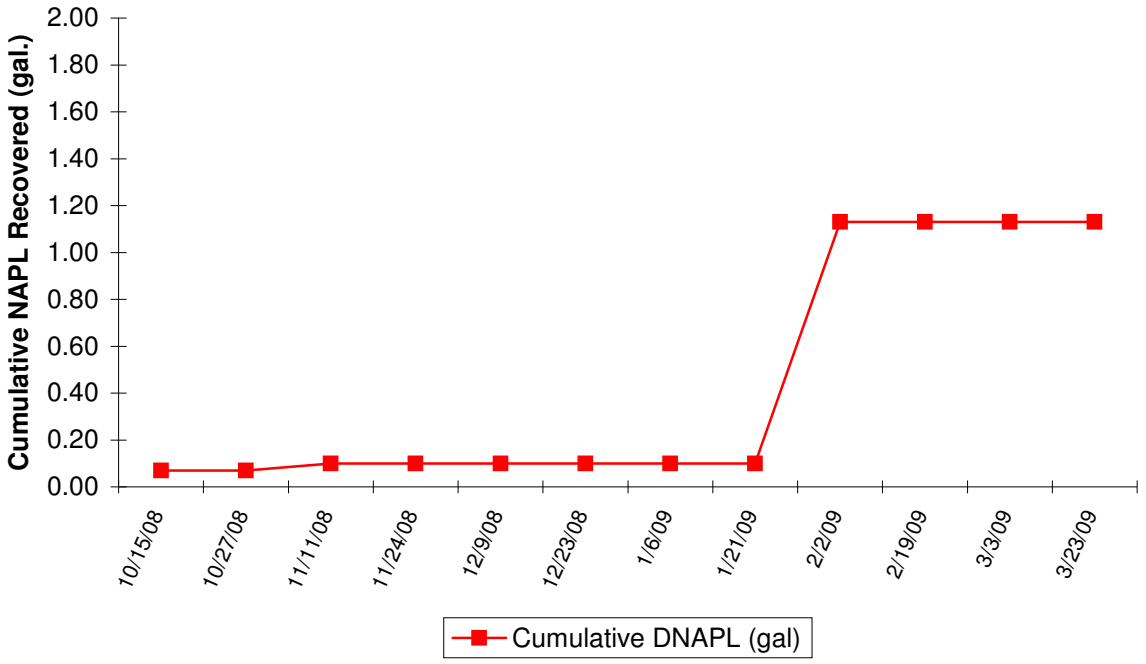


FIGURE 8Y
Well IPR-24 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site



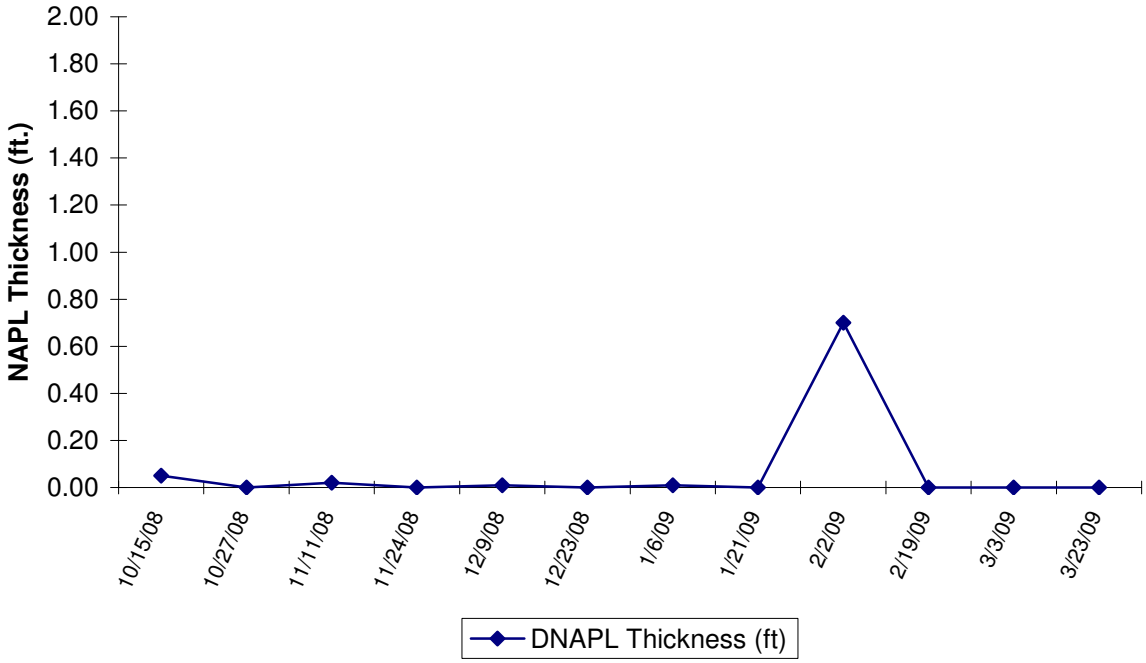
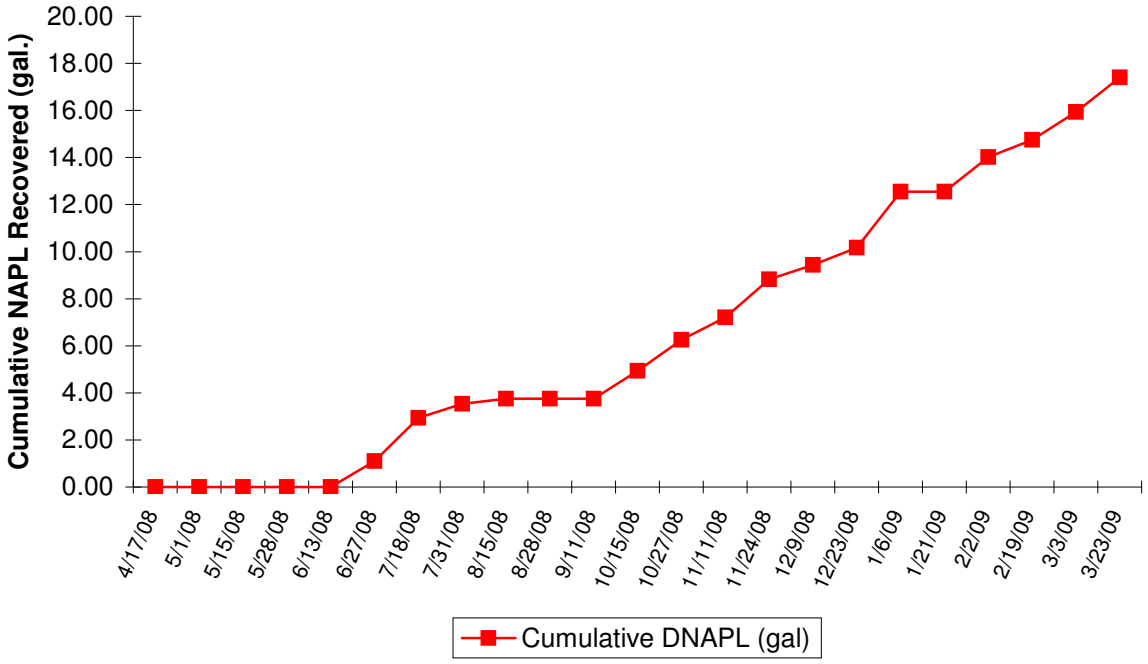
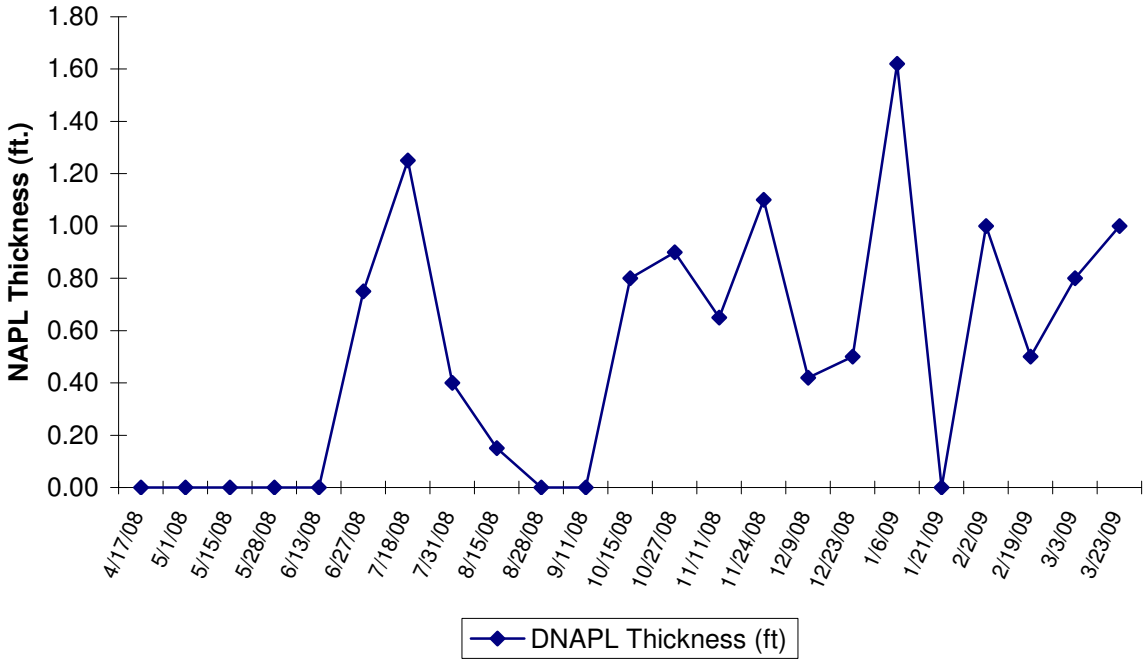


FIGURE 8Z
Well IPR-25 NAPL Thickness and Cumulative Recovery Plot
Hempstead Intersection Street Former MGP Site





ATTACHMENT A

DATA USABILITY SUMMARY REPORT

(Provided in Electronic Format Only)

ATTACHMENT A
DATA USABILITY SUMMARY REPORT
FIRST QUARTER 2009

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

MAY 2009

TABLE OF CONTENTS

I. INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Draft DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B - Guidance for the Development of Data Usability Summary Reports*, December 2002.

Analytical data for nineteen (19) groundwater samples, two (2) field duplicates, one (1) matrix spike/matrix spike duplicate (MS/MSD) pair, one (1) equipment rinsate blank, and four (4) trip blanks collected by URS personnel from January 9 to 20, 2009 are discussed in this DUSR. The samples were collected as part of the first quarter 2009 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,* October 2006; and
- *Validating Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8270D, SOP HW-22, Rev. 3,* October 2006.

The limited data validation 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.

Qualifications applied to the data include 'U' (not detected), 'J' (estimated concentration), and 'UJ' (estimated quantitation limit). The validated analytical results are presented in Tables A-1 and A-2. Copies of the validated laboratory results (i.e., Form I's) are presented in Appendix A. Documentation supporting the qualification of data is presented in Appendix B. Only problems affecting data usability are discussed in this report.

III. DATA DELIVERABLE COMPLETENESS

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

IV. 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 matrix code was not documented on the COCs.
- The one 1-liter amber bottle for groundwater sample HIMW-14D had a cracked cap because the sample froze. The laboratory transferred the sample to a new 1-liter amber bottle. The spare 1-liter amber bottle was partially frozen, but intact. This sample was analyzed for PAHs as requested on the COC, with no PAHs being detected, which is in agreement with historical data.
- Both 1-liter amber bottles for groundwater sample HIMW-03D were partially frozen, but intact. This groundwater sample was analyzed for PAHs as requested on the COC, with no PAHs being detected, which is in general agreement with historical data. The last time PAHs were detected in this sample was during the first quarter 2008 sampling event.
- For groundwater sample HIMW-05S and accompanying trip blank, 1 of 2 BTEX vials were received at the laboratory with headspace (i.e., 3.5 mm and 15 mm in size, respectively). The laboratory analyzed the vials that did not exhibit headspace.
- The collection time for groundwater sample HIMW-15D-MS/MSD was incorrectly documented on the COC. The laboratory manually revised the COC so that the collection time of the MS/MSD matched that of the parent sample.

- The laboratory received only one BTEX vial for the trip blank associated with samples collected on January 19-20, 2009. There were no QC issues associated with the BTEX analysis of the trip blank, hence, a second vial was not necessary.

Since the above referenced COC non-conformances have no significant impact on the data, no further data qualification was necessary.

All samples were analyzed within the required holding times.

V. NON-CONFORMANCES

For PAH analyses, the initial calibration (ICAL) average percent relative standard deviation (%RSD) associated with the following groundwater samples, was greater than 15% for phenanthrene and benzo(k)fluoranthene: HIMW-05I, HIMW-12I, HIMW-13I, HIMW-14I (and field duplicate DUP-01), and HIMW-15I (and field duplicate DUP-02). The phenanthrene and benzo(k)fluoranthene results for these samples were qualified 'J'.

Documentation supporting the qualification of data (i.e., Form 6) is presented in Appendix B.

VI. SAMPLE RESULTS AND REPORTING

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

VII. SUMMARY

All sample analyses were found to be compliant with the method and validation criteria, except where previously noted. Those results qualified 'J' (estimated) or 'UJ' (estimated quantitation limit) are considered conditionally usable. All other sample results are usable as reported. URS does not recommend the re-collection of any samples at this time.

Prepared By: **Peter R. Fairbanks, Sr. Project Chemist** PF **Date:** 5/29/09

Reviewed By: **Mary E. Bitka, Principal Chemist** MEB for **Date:** 5/29/09

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

Location ID			HIMW-003D	HIMW-003I	HIMW-003S	HIMW-005D	HIMW-005I
Sample ID			HIMW-3D	HIMW-3I	HIMW-3S	HIMW-5D	HIMW-5I
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			01/09/09	01/15/09	01/15/09	01/20/09	01/16/09
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Benzene	UG/L	1	1 U	1 U	1 U	1 U	4
Ethylbenzene	UG/L	5	1 U	1 U	1 U	1 U	2
Toluene	UG/L	5	1 U	9	1 U	4	13
Xylene (total)	UG/L	5	1 U	4	1 U	44	170
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	15	370 DJ
Acenaphthene	UG/L	20	10 U	10 U	10 U	10 U	10
Acenaphthylene	UG/L	-	10 U	10 U	10 U	6 J	160 DJ
Anthracene	UG/L	50	10 U	10 U	10 U	10 U	2 J
Benzo(a)anthracene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	ND	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	50	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	50	10 U	10 U	10 U	10 U	18
Indeno(1,2,3-cd)pyrene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	10	10 U	10 U	10 U	32	1,800 D
Phenanthrene	UG/L	50	10 U	10 U	10 U	10 U	14 J
Pyrene	UG/L	50	10 U	10 U	10 U	10 U	10 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

(oval) Concentration Exceeds Criteria

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

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

D - Result reported from a secondary dilution analysis. R - The data is rejected.

Made By_PRF 04/28/09_; Checked By_CMK 4/28/09

Detection Limits shown are PQL

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{LOGDATE} BETWEEN #01/09/2009# AND #01/20/2009# AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [MATRIX] = 'WG' AND [LOCID] NOT LIKE 'HISB*' AND [PARNAME] <> 'Alkalinity, Total (as CaCO3)'

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

Location ID			HIMW-005S	HIMW-008D	HIMW-008I	HIMW-008S	HIMW-012D
Sample ID			HIMW-5S	HIMW-8D	HIMW-8I	HIMW-8S	HIMW-12D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			01/16/09	01/19/09	01/19/09	01/19/09	01/13/09
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Benzene	UG/L	1	1 U	1 U	1 U	1 U	1
Ethylbenzene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Toluene	UG/L	5	1 U	1 U	1 U	5	1 U
Xylene (total)	UG/L	5	1 U	1 U	1 U	2	1 U
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	20	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Anthracene	UG/L	50	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	ND	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	50	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	50	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	10	10 U	10 U	10 U	10 U	10 U
Phenanthrene	UG/L	50	10 U	10 U	10 U	10 U	10 U
Pyrene	UG/L	50	10 U	10 U	10 U	10 U	10 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

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

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D - Result reported from a secondary dilution analysis. R - The data is rejected.

Made By_PRF 04/28/09_; Checked By_ 4/28/09

Detection Limits shown are PQL

[LOGDATE] BETWEEN #01/09/2009# AND #01/20/2009# AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [MATRIX] = 'WG' AND [LOCID] NOT LIKE 'HISB*' AND [PARNAME] <> 'Alkalinity, Total (as CaCO3)'

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

Location ID			HIMW-012I	HIMW-012S	HIMW-013D	HIMW-013I	HIMW-013S
Sample ID			HIMW-12I	HIMW-12S	HIMW-13D	HIMW-13I	HIMW-13S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			01/12/09	01/12/09	01/13/09	01/12/09	01/12/09
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
Benzene	UG/L	1	41	1	4	38	1 U
Ethylbenzene	UG/L	5	3	1 U	1 U	1 U	1 U
Toluene	UG/L	5	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	5	9	10	3	7	1 U
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	20	30	10 U	3 J	6 J	10 U
Acenaphthylene	UG/L	-	37	10 U	6 J	46	10 U
Anthracene	UG/L	50	10 U	10 U	10 U	2 J	10 U
Benzo(a)anthracene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	ND	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	50	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	50	22	10 U	10 U	13	10 U
Indeno(1,2,3-cd)pyrene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	10	3 J	10 U	10 U	10 U	10 U
Phenanthrene	UG/L	50	8 J	10 U	10 U	13 J	10 U
Pyrene	UG/L	50	10 U	10 U	10 U	10 U	10 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

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Made By_PRF 04/28/09_; Checked By_ 4/28/09

Detection Limits shown are PQL

[LOGDATE] BETWEEN #01/09/2009# AND #01/20/2009# AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [MATRIX] = 'WG' AND [LOCID] NOT LIKE 'HISB*' AND [PARNAME] <> 'Alkalinity, Total (as CaCO3)'

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

Location ID			HIMW-014D	HIMW-014I	HIMW-014I	HIMW-015D	HIMW-015I
Sample ID			HIMW-14D	DUP-01	HIMW-14I	HIMW-15D	DUP-02
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			01/09/09	01/13/09	01/13/09	01/14/09	01/14/09
Parameter	Units	Criteria*		Field Duplicate (1-1)			Field Duplicate (1-1)
Volatile Organic Compounds							
Benzene	UG/L	1	1 U	72	74	7	13
Ethylbenzene	UG/L	5	1 U	17	19	3	1
Toluene	UG/L	5	1 U	1 U	1 U	48	8
Xylene (total)	UG/L	5	1 U	7	8	12	5
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	20	10 U	13	13	10 U	3 J
Acenaphthylene	UG/L	-	10 U	19	19	10 U	12
Anthracene	UG/L	50	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	ND	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	50	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	50	10 U	6 J	7 J	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	0.002	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	10	10 U	10 U	10 U	10 U	10 U
Phenanthrene	UG/L	50	10 U	5 J	6 J	10 U	2 J
Pyrene	UG/L	50	10 U	10 U	10 U	10 U	10 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

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Made By_PRF 04/28/09_; Checked By_ 4/30/09

Detection Limits shown are PQL

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[LOGDATE] BETWEEN #01/09/2009# AND #01/20/2009# AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [MATRIX] = 'WG' AND [LOCID] NOT LIKE 'HISB*' AND [PARNAME] <> 'Alkalinity, Total (as CaCO3)'

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

Location ID			HIMW-015I
Sample ID			HIMW-15I
Matrix			Groundwater
Depth Interval (ft)			-
Date Sampled			01/14/09
Parameter	**Units**	**Criteria***	
Volatile Organic Compounds			
Benzene	UG/L	1	14
Ethylbenzene	UG/L	5	1
Toluene	UG/L	5	9
Xylene (total)	UG/L	5	7
Semivolatile Organic Compounds			
2-Methylnaphthalene	UG/L	-	10 U
Acenaphthene	UG/L	20	3 J
Acenaphthylene	UG/L	-	13
Anthracene	UG/L	50	10 U
Benzo(a)anthracene	UG/L	0.002	10 U
Benzo(a)pyrene	UG/L	ND	10 U
Benzo(b)fluoranthene	UG/L	0.002	10 U
Benzo(g,h,i)perylene	UG/L	-	10 U
Benzo(k)fluoranthene	UG/L	0.002	10 U
Chrysene	UG/L	0.002	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U
Fluoranthene	UG/L	50	10 U
Fluorene	UG/L	50	10 U
Indeno(1,2,3-cd)pyrene	UG/L	0.002	10 U
Naphthalene	UG/L	10	10 U
Phenanthrene	UG/L	50	2 J
Pyrene	UG/L	50	10 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

(14) Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. J - The reported concentration is an estimated value.
UJ - Not detected. The reported quantitation limit is an estimated value.
D - Result reported from a secondary dilution analysis. R - The data is rejected.
Made By_PRF 04/28/09_; Checked By_ 4/28/09

Detection Limits shown are PQL

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[LOGDATE] BETWEEN #01/09/2009# AND #01/20/2009# AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [MATRIX] = 'WG' AND [LOCID] NOT LIKE 'HISB*' AND [PARNAME] <> 'Alkalinity, Total (as CaCO3)'

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

Location ID			FIELDQC	FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID			TRIP BLANK 1/13	20090114-TB-1	TRIP BLANK 1/14	20090115-TB-1	FIELD BLANK
Matrix			Water Quality	Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)			-	-	-	-	-
Date Sampled			01/09/09	01/14/09	01/14/09	01/15/09	01/15/09
Parameter	Units	Criteria*	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)	Field Blank (1-1)
Volatile Organic Compounds							
Benzene	UG/L	1	1 U	10 U	1 U	10 U	1 U
Ethylbenzene	UG/L	5	1 U	10 U	1 U	10 U	1 U
Toluene	UG/L	5	1 U	10 U	1 U	10 U	1 U
Xylene (total)	UG/L	5	1 U	10 U	1 U	10 U	1 U
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	NA	NA	NA	NA	10 U
Acenaphthene	UG/L	20	NA	NA	NA	NA	10 U
Acenaphthylene	UG/L	-	NA	NA	NA	NA	10 U
Anthracene	UG/L	50	NA	NA	NA	NA	10 U
Benzo(a)anthracene	UG/L	0.002	NA	NA	NA	NA	10 U
Benzo(a)pyrene	UG/L	ND	NA	NA	NA	NA	10 U
Benzo(b)fluoranthene	UG/L	0.002	NA	NA	NA	NA	10 U
Benzo(g,h,i)perylene	UG/L	-	NA	NA	NA	NA	10 U
Benzo(k)fluoranthene	UG/L	0.002	NA	NA	NA	NA	10 U
Chrysene	UG/L	0.002	NA	NA	NA	NA	10 U
Dibenz(a,h)anthracene	UG/L	-	NA	NA	NA	NA	10 U
Fluoranthene	UG/L	50	NA	NA	NA	NA	10 U
Fluorene	UG/L	50	NA	NA	NA	NA	10 U
Indeno(1,2,3-cd)pyrene	UG/L	0.002	NA	NA	NA	NA	10 U
Naphthalene	UG/L	10	NA	NA	NA	NA	10 U
Phenanthrene	UG/L	50	NA	NA	NA	NA	10 U
Pyrene	UG/L	50	NA	NA	NA	NA	10 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit

Made By_PRF 04/28/09_; Checked By 4/28/09

Detection Limits shown are PQL

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[LOGDATE] BETWEEN #01/09/2009# AND #01/20/2009# AND [MATRIX] = 'WQ'

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

Location ID			FIELDQC	FIELDQC
Sample ID			TRIP BLANK 1/16	TRIP BLANK 1/19
Matrix			Water Quality	Water Quality
Depth Interval (ft)			-	-
Date Sampled			01/16/09	01/19/09
Parameter	Units	Criteria*	Trip Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds				
Benzene	UG/L	1	1 U	1 U
Ethylbenzene	UG/L	5	1 U	1 U
Toluene	UG/L	5	1 U	1 U
Xylene (total)	UG/L	5	1 U	1 U
Semivolatile Organic Compounds				
2-Methylnaphthalene	UG/L	-	NA	NA
Acenaphthene	UG/L	20	NA	NA
Acenaphthylene	UG/L	-	NA	NA
Anthracene	UG/L	50	NA	NA
Benzo(a)anthracene	UG/L	0.002	NA	NA
Benzo(a)pyrene	UG/L	ND	NA	NA
Benzo(b)fluoranthene	UG/L	0.002	NA	NA
Benzo(g,h,i)perylene	UG/L	-	NA	NA
Benzo(k)fluoranthene	UG/L	0.002	NA	NA
Chrysene	UG/L	0.002	NA	NA
Dibenz(a,h)anthracene	UG/L	-	NA	NA
Fluoranthene	UG/L	50	NA	NA
Fluorene	UG/L	50	NA	NA
Indeno(1,2,3-cd)pyrene	UG/L	0.002	NA	NA
Naphthalene	UG/L	10	NA	NA
Phenanthrene	UG/L	50	NA	NA
Pyrene	UG/L	50	NA	NA

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. April 2000, Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit

Made By_PRF 04/28/09_; Checked By_ 4/28/09

Detection Limits shown are PQL

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[LOGDATE] BETWEEN #01/09/2009# AND #01/20/2009# AND [MATRIX] = 'WQ'

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.

APPENDIX A

VALIDATED FORM I'S

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-3D

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A62985.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: not dec. Date Analyzed: 01/15/09

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

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

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

KEY-URS057 V29 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

HIMW-3D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-001B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44570.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/14/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/15/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12I

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A62986.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: not dec. Date Analyzed: 01/15/09

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	41	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	3	
1330-20-7	Xylene (total)	9	

KEY-URS057 V32 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-12I

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-002B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44571.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/14/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/15/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	3	J
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	37	
83-32-9	Acenaphthene	30	
86-73-7	Fluorene	22	
85-01-8	Phenanthrene	8	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

3/2/09

KEY-URS057 S32

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12S

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A62987.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: not dec. Date Analyzed: 01/15/09

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	10	

KEY-URS057 V38 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-12S

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-003B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44572.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/14/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/15/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13I

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A62988.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: not dec. Date Analyzed: 01/15/09

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	38	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	7	

KEY-URS057 V43 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

HIMW-13I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-004B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44573.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/14/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/15/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	46	
83-32-9	Acenaphthene	6	J
86-73-7	Fluorene	13	
85-01-8	Phenanthrene	13	J
120-12-7	Anthracene	2	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

3/2/09

KEY-URS057 S38

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-13S

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63033.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: not dec. Date Analyzed: 01/17/09

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

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

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

KEY-URS057 V48 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

HIMW-13S

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-005B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44574.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/14/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/16/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14D

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63034.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: not dec. Date Analyzed: 01/17/09

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

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

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

KEY-URS057 V51 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

HIMW-14D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-006B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44579.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/14/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/16/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

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

(1) Cannot be separated from Diphenylamine

KEY-URS057 S44

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-1/13

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901376-007A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63042.D

Level: (low/med) LOW Date Received: 01/13/09

% Moisture: not dec. Date Analyzed: 01/17/09

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

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

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

KEY-URS057 V54 Revised CLG 17-Mar-09

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP-01

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63046.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: not dec. Date Analyzed: 01/17/09

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	72	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	17	
1330-20-7	Xylene (total)	7	

KEY-URS057 V57 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

DUP-01

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-001B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44587.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/15/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/16/09

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	19	
83-32-9	Acenaphthene	13	
86-73-7	Fluorene	6	J
85-01-8	Phenanthrene	5	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

3/2/09

KEY-URS057 S47

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-02

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63047.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: not dec. Date Analyzed: 01/17/09

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	13	
108-88-3	Toluene	8	
100-41-4	Ethylbenzene	1	
1330-20-7	Xylene (total)	5	

KEY-URS057 V62 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

DUP-02

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-002B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44588.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/15/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/16/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12D

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63048.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: not dec. Date Analyzed: 01/17/09

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

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

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

KEY-URS057 V68 Revised CLG 17-Mar-09

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12D

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-003B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44589.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/15/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/16/09

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13D

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63049.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: not dec. Date Analyzed: 01/17/09

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

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

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

KEY-URS057 V72 Revised CLG 17-Mar-09

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13D

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-004B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44590.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/15/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/16/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14I

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63065.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: not dec. Date Analyzed: 01/19/09

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	74	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	19	
1330-20-7	Xylene (total)	8	

KEY-URS057 V77 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

HIMW-14I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-005B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44591.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/15/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/16/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	19	
83-32-9	Acenaphthene	13	
86-73-7	Fluorene	7	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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15D

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63073.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: not dec. Date Analyzed: 01/19/09

GC Column: ZB-624 ID: .18 (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	7	
108-88-3	Toluene	48	
100-41-4	Ethylbenzene	3	
1330-20-7	Xylene (total)	12	

KEY-URS057 V83 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

HIMW-15D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-006B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44592.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/15/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/16/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15I

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-007A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63074.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: not dec. Date Analyzed: 01/20/09

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	14	
108-88-3	Toluene	9	
100-41-4	Ethylbenzene	1	
1330-20-7	Xylene (total)	7	

1C

EPA SAMPLE NO.

HIMW-15I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-007B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44595.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/15/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/16/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-1/14

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901441-008A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63066.D

Level: (low/med) LOW Date Received: 01/14/09

% Moisture: not dec. Date Analyzed: 01/19/09

GC Column: ZB-624 ID: .18 (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-URS057 V95 Revised CLG 17-Mar-09

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD BLANK

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63067.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: not dec. Date Analyzed: 01/19/09

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

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

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

KEY-URS057 V97 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

FIELD BLANK

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-001B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44613.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/19/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/19/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-3I

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63075.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: not dec. Date Analyzed: 01/20/09

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	9	
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	4	

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-3I

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-002B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44614.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/19/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/19/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-3S

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63076.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: not dec. Date Analyzed: 01/20/09

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

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

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

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-3S

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-003B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44615.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/19/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/19/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-5I

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63077.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: not dec. Date Analyzed: 01/20/09

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	4	
108-88-3	Toluene	13	
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene (total)	170	

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-5I

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-004B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44616.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/19/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/19/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	1800 ~~1200~~	~~E~~ D
91-57-6	2-Methylnaphthalene	370 ~~340~~	~~E~~ D J
208-96-8	Acenaphthylene	160 ~~120~~	~~E~~ D J
83-32-9	Acenaphthene	10	
86-73-7	Fluorene	18	
85-01-8	Phenanthrene	14	J
120-12-7	Anthracene	2	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

3/2/09

KEY-URS057 S68

1C

EPA SAMPLE NO.

HIMW-5IDL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-004BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44629.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/19/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/20/09

Injection Volume: 2 (µL) Dilution Factor: 50.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene	1800	D
91-57-6	2-Methylnaphthalene	370	DJ
208-96-8	Acenaphthylene	160	DJ
83-32-9	Acenaphthene	500	U
86-73-7	Fluorene	500	U
85-01-8	Phenanthrene	500	U
120-12-7	Anthracene	500	U
206-44-0	Fluoranthene	500	U
129-00-0	Pyrene	500	U
56-55-3	Benzo(a)anthracene	500	U
218-01-9	Chrysene	500	U
205-99-2	Benzo(b)fluoranthene	500	U
207-08-9	Benzo(k)fluoranthene	500	U
50-32-8	Benzo(a)pyrene	500	U
193-39-5	Indeno(1,2,3-cd)pyrene	500	U
53-70-3	Dibenzo(a,h)anthracene	500	U
191-24-2	Benzo(g,h,i)perylene	500	U

(1) Cannot be separated from Diphenylamine

3/26/09

KEY-URS057 S69

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-5S

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63078.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: not dec. Date Analyzed: 01/20/09

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

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

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

KEY-URS057 V114 Revised CLG 17-Mar-09

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-5S

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-005B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44617.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/19/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/19/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-1/16

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS057

Matrix: (soil/water) WATER Lab Sample ID: 0901481-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63068.D

Level: (low/med) LOW Date Received: 01/16/09

% Moisture: not dec. Date Analyzed: 01/19/09

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

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

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

KEY-URS057 V117 Revised CLG 17-Mar-09

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-5D

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS059

Matrix: (soil/water) WATER Lab Sample ID: 0901560-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63267.D

Level: (low/med) LOW Date Received: 01/20/09

% Moisture: not dec. Date Analyzed: 02/01/09

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	4	
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	44	

KEY-URS059 S15

1C

EPA SAMPLE NO.

HIMW-5D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS059

Matrix: (soil/water) WATER Lab Sample ID: 0901560-001B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44692.D

Level: (low/med) LOW Date Received: 01/20/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/21/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/23/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-8D

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS059

Matrix: (soil/water) WATER Lab Sample ID: 0901560-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63268.D

Level: (low/med) LOW Date Received: 01/20/09

% Moisture: not dec. Date Analyzed: 02/01/09

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

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

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

KEY-URS059 S17

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-8D

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS059

Matrix: (soil/water) WATER Lab Sample ID: 0901560-002B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44693.D

Level: (low/med) LOW Date Received: 01/20/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/21/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/23/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-8I

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS059

Matrix: (soil/water) WATER Lab Sample ID: 0901560-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63269.D

Level: (low/med) LOW Date Received: 01/20/09

% Moisture: not dec. Date Analyzed: 02/01/09

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

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

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

KEY-URS059 S19

1C

EPA SAMPLE NO.

HIMW-8I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS059

Matrix: (soil/water) WATER Lab Sample ID: 0901560-003B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44694.D

Level: (low/med) LOW Date Received: 01/20/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/21/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/23/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

KEY-URS059 S20

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-8S

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS059

Matrix: (soil/water) WATER Lab Sample ID: 0901560-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63270.D

Level: (low/med) LOW Date Received: 01/20/09

% Moisture: not dec. Date Analyzed: 02/01/09

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

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

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

KEY-URS059 V27 Revised CLG 17-Mar-09

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-8S

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS059

Matrix: (soil/water) WATER Lab Sample ID: 0901560-004B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C44695.D

Level: (low/med) LOW Date Received: 01/20/09

% Moisture: Decanted: (Y/N) N Date Extracted: 01/21/09

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 01/23/09

Injection Volume: 2 (µL) Dilution Factor: 1.00

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

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

(1) Cannot be separated from Diphenylamine

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP BLANK 1/19

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: KEY-URS SAS No.: _____ SDG No.: KEY-URS059

Matrix: (soil/water) WATER Lab Sample ID: 0901560-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A63266.D

Level: (low/med) LOW Date Received: 01/20/09

% Moisture: not dec. Date Analyzed: 02/01/09

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

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

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

KEY-URS059 S23

APPENDIX B

SUPPORT DOCUMENTATION

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILE ORGANICS
SAMPLE(S) RECEIVED: 1/13/09, 1/14/09 & 1/16/09
SDG #: KEY-URS057

For Sample(s):

HIMW-3D	DUP-01	TRIP BLANK 1/14
HIMW-12I	DUP-02	FIELD BLANK
HIMW-12S	HIMW-12D	HIMW-3I
HIMW-13I	HIMW-13D	HIMW-3S
HIMW-13S	HIMW-14I	HIMW-5I
HIMW-14D	HIMW-15D	HIMW-5S
TRIP BLANK 1/13	HIMW-15I	TRIP BLANK 1/16

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

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

Sample HIMW-15D was analyzed as the matrix spike/matrix spike duplicate.

All percent recoveries for the lab fortified blanks and recoveries and RPDs for the MS and MSD were within QC limits.

The data package was revised to include the calibration level of 1 µg/L at the requested reporting limits.

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

Date Reported: February 5, 2009

Date Revised: March 4, 2009

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Ursula Middel
Technical Manager

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILE ORGANICS
SAMPLE RECEIVED: 1/13/09, 1/14/09 & 1/16/09
SDG #: KEY-URS057

For Sample(s):

HIMW-3D	HIMW-13D
HIMW-12I	HIMW-14I
HIMW-12S	HIMW-15D
HIMW-13I	HIMW-15I
HIMW-13S	FIELD BLANK
HIMW-14D	HIMW-3I
DUP-01	HIMW-3S
DUP-02	HIMW-5I
HIMW-12D	HIMW-5S

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

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

Sample HIMW-15D was analyzed as the matrix spike / matrix spike duplicate. All percent recoveries and RPD's were met.

Sample HIMW-5I was reanalyzed at a dilution due to concentration levels of targeted analytes above the calibration range. All surrogate recoveries are diluted out in the dilution. 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: January 27, 2009

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Joann M. Slavin
Senior Vice President

KEY-URS057 A3

Form 6

(BNA) IN WATER INITIAL CALIBRATION DATA

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

Lab Code: 10478 Case No.: KEY-URS SAS No.: SDG No.: KEY-URS057

Instrument ID: HP5972 Calibration Dates: 12/25/08 12/25/08

Heated Purge: (Y/N) N Calibration Times: 15:12 19:15

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

LAB FILE ID: SSTD005= C44229.D SSTD010= C44230.D SSTD025= C44226.D SSTD040= C44231.D SSTD060= C44232.D
SSTD080= C44233.D

COMPOUND	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	% RSD	R^2
N-Nitrosodiphenylamine *	0.8455560	0.8686688	0.7227435	0.7909130	0.7384872	0.6822195	0.775	9.4	*
1,2-Diphenylhydrazine	0.8577713	0.8713896	0.7191547	0.7460977	0.7143292	0.7072503	0.769	9.8	
4-Bromophenyl-phenylether	0.3256123	0.3410256	0.2844007	0.2954292	0.2857723	0.2683252	0.300	9.2	
Hexachlorobenzene	0.4397681	0.4437588	0.3716892	0.4093752	0.3920659	0.3556351	0.402	8.9	
Pentachlorophenol *	0	0.2705859	0.2353937	0.2489815	0.2324599	0.2109554	0.240	9.2	*
Phenanthrene	1.394663	1.3800877	1.0822604	1.0752093	1.0310157	0.9520423	1.153	16.3	
Anthracene	1.4103286	1.4412203	1.1692384	1.2504865	1.1809546	1.0655544	1.253	11.7	
Carbazole	1.213517	1.2877095	1.0748577	1.1622846	1.0735697	1.0026954	1.136	9.2	
Benzidine	0.2616974	0.3050736	0.2402016	0.1840505	0.1790898	0.1823235	0.225	23.1	
Di-n-butyl phthalate	1.9915092	1.9812728	1.5988769	1.7041474	1.5628637	1.4277316	1.711	13.5	
Fluoranthene *	1.3131798	1.3804775	1.1134293	1.1851962	1.1126324	1.0248498	1.188	11.3	*
Pyrene	1.5102963	1.5806862	1.3067249	1.4015566	1.4460202	1.4457315	1.449	6.4	
Butyl benzyl phthalate	0.9275142	0.9382773	0.7276827	0.7749119	0.7773884	0.7672331	0.819	11.0	
3,3'-Dichlorobenzidine	0.5173304	0.4966738	0.4484998	0.4218894	0.4270174	0.4292168	0.457	8.9	
Benzo(a)anthracene	1.4690748	1.5305009	1.2627497	1.4300793	1.4418199	1.3682585	1.417	6.5	
Chrysene	1.3364596	1.4320908	1.1661047	1.2190897	1.1751373	1.2274194	1.259	8.3	
Bis(2-ethylhexyl)phthalate	1.3335458	1.3274827	1.0031322	1.0552838	1.0548974	1.0909129	1.144	12.8	
Octachlorocyclopentene	0.280595	0.2963061	0.2754973	0.2398279	0.2009514	0.1902278	0.247	17.9	
Di-n-octyl phthalate *	2.2701725	2.2805358	1.7338906	1.8765054	1.6870587	1.6961917	1.924	14.6	*
Benzo(b)fluoranthene	1.6486243	1.7994902	1.3896573	1.6328469	1.5539327	1.4003463	1.571	10.0	
Benzo(k)fluoranthene	1.3662798	1.3257478	1.0616184	1.0318913	1.0536556	0.8478732	1.115	17.6	
Benzo(a)pyrene *	1.3296873	1.3867184	1.1584301	1.3338638	1.2358412	1.1940515	1.273	7.1	*
Indeno(1,2,3-cd)pyrene	1.5926417	1.7055713	1.4051949	1.6493566	1.4767985	1.3629185	1.532	9.0	

H2M LABS, INC.

SDG NARRATIVE FOR WET CHEMISTRY
SAMPLES RECEIVED: 1/13/09
SDG #: KEY-URS057

For Samples:

HIMW-12I
HIMW-12S
HIMW-13I
HIMW-12S

Samples were received by H2M Labs, Inc. for select wet chemistry analysis.

Samples were prepared and analyzed using the following methods:

Alkalinity	SM2320B

Samples utilized for QC analysis were listed on the QC summary report.

No problems were noted during the analysis of this sample group.

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

Date Reported: January 20, 2009

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* *
****
Vincent Stancampiano
Vice President

KEY-URS057 A4

30065

H2M LABS, INC.

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

EXTERNAL CHAIN OF CUSTODY

CLIENT:

H2M SDG NO: KEY-UQS057

PROJECT NAME/NUMBER: National Grid - Hempstead. 11175065.

SAMPLERS: (signature)/Client: Joanne Wright & URS. David Swan

DELIVERABLES:

TURNAROUND TIME:

NOTES:

Project Contact: Kevin Conroe.

Phone Number: 716.923.1165.

PIS/Quote # 11175065.

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ORGANIC: VOA	ORGANIC: BNA	ORGANIC: Pest/PCB	BTEX (SW8260B)	PAHs (SW8270C)		ALKALINITY	INORG.: Metal	INORG.: CN	LAB I.D. NO.	REMARKS:
1/9/09	11.30		HIMW - 3D.	4				2	2					0901376-001	
1/9/09	—		TRIP BLANK.								D.			-007	
1/9/09	15:00		HIMW - 14D.	4.				2	2					-006	
1/12/09	10.20		HIMW - 13S.	5				2	2		1			-005	
1/12/09	12.20		HIMW - 13I.	5				2	2		1.			-004	
1/12/09	2.55		HIMW - 12S.	5.				2	2		1			-003	
1/12/09	4.35.		HIMW - 12I.	5.				2	2		1			-002	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Wright.	1/13/09	0930	FedEx	1/13/09	1157
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	1/13/09	1536		1/13/09	15:36
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N

Explain:

Samples were:
1. Shipped ___ or Hand Delivered X Airbill# _____
2. Ambient or chilled, Temp 0.5°C
3. Received in good condition: (Y) or N
4. Properly preserved (Y) or N DMC 1/13/09

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

KEY-UQS057-ORIGINAL WHITE COPY

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

KEY-URS057

H2M LABS, INC.

Sample Receipt Checklist

Client Name KEY-URS

Date and Time Received: 1/13/2009 3:36:00 PM

Work Order Number 0901376

Received by dmc

Checklist completed by [signature] 1/13/09 (Signature / Date)

Reviewed by JSA 1/15/09 (Initials / Date)

Matrix:

Carrier name Pickup

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

Adjusted? _____ Checked by _____

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

Client contacted YES Date contacted: 1/15/09 Person contacted DIANE WRITE

Contacted by: KEN ARNOLD Regarding _____

Comments: FOR SAMPLE HIMW-140; ONE 1L BOTTLE CRACKED DUE TO SAMPLE BEING FROZEN. SPARE BOTTLE FOR HIMW-140 AND BOTH 1L BOTTLES FOR HIMW-3D CONTAINED PARTIAL FROZEN SAMPLES. NO SPARE VIAL RECEIVED FOR TRIP BLANK.

Corrective Action FOR CRACKED BOTTLE, SAMPLE VOLUME WAS TRANSFERRED TO NEW BOTTLE AT LAB.

KEY-URS057 A7

H2M LABS, INC.

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

30069

EXTERNAL CHAIN OF CUSTODY

CLIENT: URS.

H2M SDG NO: KEY-URS 057

PROJECT NAME/NUMBER: Hempstead – National Grid. 11175065.

SAMPLERS: (signature)/Client: Joanne Wright & David Swain } URS.

DELIVERABLES:

TURNAROUND TIME:

NOTES: Quarterly Groundwater Monitoring

Project Contact: Kevin Comare.

Phone Number: 716.923.1165.

PIS/Quote #: 11175065.

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	BTEX (SW8260B)	PAHs (SW 8270C)	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
1/8/09	10.50		HIMW-14I.	4				2	2			0901441 - 005 AB	
1/13/09	12.40		HIMW-13D.	4				2	2			- 004	
1/13/09	2.10		HIMW-12D.	4				2	2			- 003	
1/13/09	11.10		DUP-01	4				2	2			- 001	
1/14/09	10.45		DUP-02.	4				2	2			- 002	
1/14/09	10.35		HIMW-15I.	4				2	2			- 007	
1/14/09	12.00		HIMW-15D.	4				2	2			- 006	
1/14/09	12.10		MS/MD. K	4				2	2			- ↓	
	12.00		TRIP BLANK.									- 008A	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	1.14.09	15.29	S.West	1.14.09	15.29
S.West	1.14.09	16.15		1/14/09	1615
	Date	Time		Date	Time
	Date	Time		Date	Time

LABORATORY USE ONLY

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

Samples were:
1. Shipped___ or Hand Delivered ✓ Airbill# _____
2. Ambient or chilled, Temp. 8
3. Received in good condition: Y or N
4. Properly preserved: Y or N

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

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

KEY-URS057A14

H2M LABS, INC.

Sample Receipt Checklist KEY-URS 057

Client Name KEY-URS | Date and Time Received: 1/14/2009 4:15:00 PM

Work Order Number 0901441 | Received by EM

Checklist completed by [signature] Signature | 1/14/09 Date | Reviewed by JSA Initials | 1/16/09 Date

Matrix: | Carrier name Pickup

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

Adjusted? _____ Checked by _____

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

Client contacted YES Date contacted: 1/16/09 Person contacted DAVID SWAIN

Contacted by: JEN ARAGRI Regarding _____

Comments: MS/MSD (Hmw-150) only had double volume.

Corrective Action _____

KEY-URS057 A15

H2M LABS, INC.

30068

EXTERNAL CHAIN OF CUSTODY

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

CLIENT: URS.

H2M SDG NO: KEY-URS057

PROJECT NAME/NUMBER: National Grid Hempstead. Project #: 11175065.

SAMPLERS: (signature)/Client: Joanne Wright } URS. David Swain }

DELIVERABLES:

TURNAROUND TIME:

NOTES: Quarterly Groundwater monitoring

Project Contact: Kevin Connare

Phone Number: 716.923.1165.

PIS/Quote #: 11175065.

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	Sample Container Description: BTEX (SW8260B)	Sample Container Description: PAHs (SW8270C)	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
1/15/09	13.00		HMW-~~5I~~, 3I	4				2	2			0901481 - 002 AB	
1/16/09	10.25		HMW-~~5S~~ 3S	4				2	2			- 003 AB	
			TRIP BLANK.	2								- 006 A	
1/15/09	13.50		FIELD BLANK.	4				2	2			- 001 AB	
1/16/09	12.00		HMW-5I.	4				2	2			- 004	
1/16/09	1.15		HMW-5S.	4				2	2			- 005	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	1/16/09	14:00	[signature]	1-16-09	14:00
[signature]	1-16-09	2:45 3:45	[signature]	1/16/09	1445 1845
		Dem 1/16/09			Dem 1/16/09

LABORATORY USE ONLY

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

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

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

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

KEY-URS057 A20

H2M LABS, INC.

Sample Receipt Checklist KEY-URS 057

Client Name KEY-URS | Date and Time Received: 1/16/2009 2:45:00 PM

Work Order Number 0901481 | Received by EM

Checklist completed by [signature] Signature 1/16/09 Date | Reviewed by JSA Initials 1/19/09 Date

Matrix: | Carrier name Pickup

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

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 CEM 1/16/09

Comments: TB and H1MW-5S each have one vial w/headspace, 3, 15 mm and 3.5 mm, respectively

Corrective Action USE AS SPARES ONLY

KEY-URS057 A21

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILE ORGANICS
SAMPLES RECEIVED: 1/20/09
SDG #: KEY-URS059

For Sample(s):

HIMW-5D	HIMW-8S
HIMW-8D	TRIP BLANK 1/19
HIMW-8I	

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

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

No matrix spike/matrix spike duplicate was submitted. A Lab fortified blank was analyzed. All percent recoveries were within QC limits.

The data package was revised to include the calibration level of 1 µg/L at the requested reporting limits.

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

Date Reported: February 4, 2009

Date Revised: March 4, 2009

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Ursula Middel
Technical Manager

KEY-URS059 A3 Revised MTM 05Mar-09

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILE ORGANICS
SAMPLE RECEIVED: 1/20/09
SDG #: KEY-URS059

For Sample(s):

HIMW-5D
HIMW-8D
HIMW-8I
HIMW-8S

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

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

No matrix spike / matrix spike duplicate was submitted. Lab fortified blanks were analyzed and indicate good method efficiency.

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

Date Reported: January 29, 2009

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

KEY-URS059 A4

H2M LABS, INC.

30066

EXTERNAL CHAIN OF CUSTODY

059

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

H2M SDG NO: KEY-URS057 ~~059~~

CLIENT:

PROJECT NAME/NUMBER
NATIONAL GRID - HEMPSTEAD,
11175065.

SAMPLERS: (signature)/Client
Joanne Wright & URS.
David Swan

DELIVERABLES:

TURNAROUND TIME:

NOTES:

Project Contact: KEVIN CONNARE (DEM 1/20/09)

Phone Number: 716.923.1165.

PIS/Quote # 11175065.

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	BTEX (SW8260B)	PAHs (SW8270C)	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
1/19/09	9.40		HMW-8S.	4.				2	2			0901560-004AB	
—			TRIP BLANK.	2.								-005A	
1/19/09	1.40		HMW-8I.	4				2	2			-003AB	
1/19/09	11.50		HMW-8D.	4				2	2			-002	
1/20/09	9.12.40.		HMW-5D.	4				2	2			-001	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
JWright.	1/20/09	12.55	[signature]	1-20-09	12:55
[signature]	1-20-09	3'40	[signature]	1/20/09	15'40
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

LABORATORY USE ONLY

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

Samples were:
1. Shipped___ or Hand Delivered ✓ Airbill# _____
2. Ambient or chilled, Temp_____
3. Received in good condition: (Y) or N
4. Properly preserved: (Y) or N

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

KEY-URS059-A6

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

H2M LABS, INC.

Sample Receipt Checklist KEY-URS 059

Client Name KEY-URS

Date and Time Received: 1/20/2009 3:40:00 PM

Work Order Number 0901560

Received by EM

Checklist completed by _____ Signature _____ Date 1/20/09

Reviewed by JSA Initials 1/21/09 Date

Matrix: Carrier name Pickup

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

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: The Trip Blank had only one vial - no issue.

Corrective Action _____

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