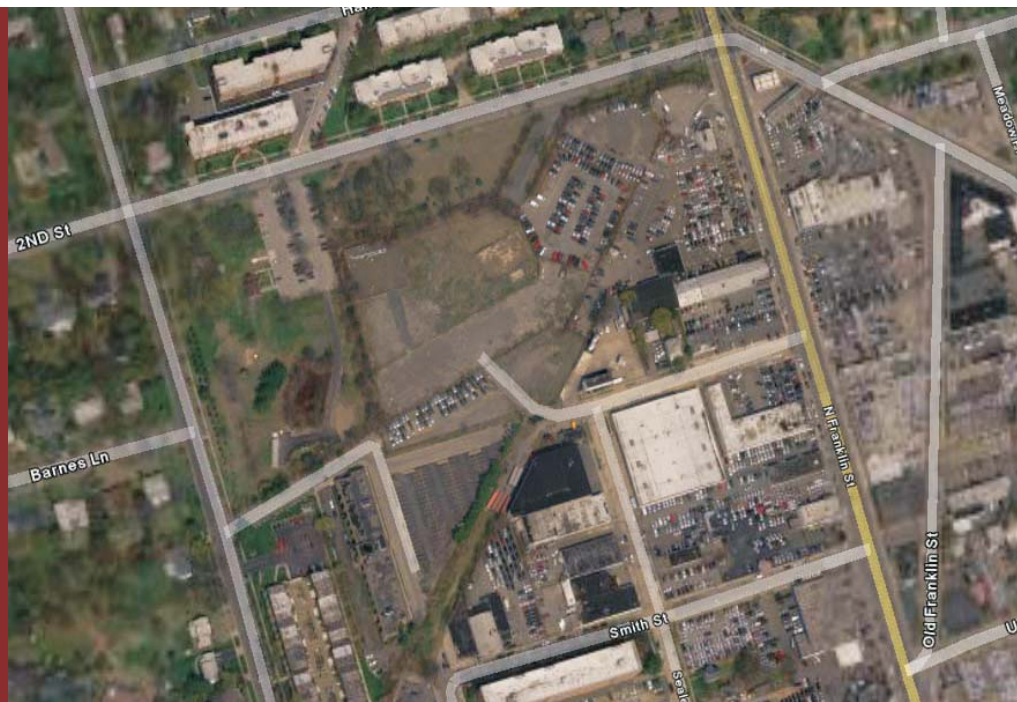


**Groundwater Sampling and NAPL  
Monitoring/Recovery Report for  
the First Quarter of 2008  
(January - March 2008)  
for the Hempstead Intersection Street  
Former Manufactured Gas Plant Site  
Villages of Garden City & Hempstead  
Long Island, New York**



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**GROUNDWATER SAMPLING AND NAPL MONITORING/RECOVERY REPORT  
FOR THE FIRST QUARTER OF 2008  
(JANUARY-MARCH, 2008)**

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

**Prepared For:  
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175 EAST OLD COUNTRY RD.  
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**JUNE 2008**

**GROUNDWATER SAMPLING AND NAPL MONITORING/RECOVERY REPORT  
FOR THE FIRST QUARTER OF 2008  
(JANUARY-MARCH, 2008)**

**HEMPSTEAD INTERSECTION STREET**

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## **1.0 INTRODUCTION**

In April 2007, URS initiated a quarterly groundwater data acquisition and reporting effort for the National Grid Hempstead Intersection Street Former MGP Site (Site), shown on Figures 1 and 2. The program includes measuring the potentiometric heads and free product thicknesses in all accessible Site monitoring wells (once every quarter), sampling and analysis of groundwater from a select group of Site monitoring wells (once every quarter), and recovering free product from several of the Site monitoring wells approximately twice per month. The objective of this effort is to establish a current hydrogeologic and groundwater quality baseline within the project area, and to monitor the conditions during and after the implementation of the remedial program for the Site.

Separate reports are issued for the first, second, and third quarter activities performed during each calendar year. Following the completion of the fourth quarter activities, an annual report for the entire calendar year is prepared, encompassing results from all of the four quarters. To date, one annual report was issued (2007 Annual Groundwater Sampling and NAPL Monitoring/Recovery report for the Hempstead Intersection Street Former Manufactured Gas Plant Site, February 2008).

This quarterly report summarizes the potentiometric head and product thickness measurements; ground water quality sampling and analysis; and product recovery for the period of January, February and March of 2008 (first quarter 2008).

## **2.0 FIELD INVESTIGATION ACTIVITIES**

The field activities performed by URS consisted of the following tasks:

- Measuring water levels and product thicknesses in 53 of the Site's monitoring wells.
- Collecting samples of ground water from 19 of the Site's monitoring wells.
- Recovering product from accessible monitoring wells that contain measurable product.

### **2.1 Ground Water Level and Product Thickness**

Depths to groundwater and product thicknesses were measured in 53 of the Site's monitoring wells (Table 1): 47 wells on January 22, 2007; and in 6 wells on January 23, 2007. Depth to water was measured using a manual water level indicator. Product measurements were performed using two methods: an oil/water interface probe and a weighted string.

### **2.2 Ground Water Sampling**

During the first quarter 2008 event, groundwater samples were collected from 19 Site monitoring wells between January 23 and 31, 2008. Details of the monitoring well network and sampling schedule are presented in Table 1.

Low-flow groundwater sampling methods and procedures are used to sample the monitoring wells in this period. Low-flow sampling involves a relatively low (between 250 and 500 milliliters per minute) known fixed pumping rate established by the sampler. This is accomplished using a Grundfos Redi-Flow 2 pump that includes a regulator to control the power output of the pump, which also controls the flow rate. The flow rate is established by timing the flow into a graduated cylinder over a known unit of time. Low-flow sampling also involves monitoring several water quality parameters for stabilization. These parameters include pH, conductivity, turbidity, dissolved oxygen (DO), and oxidation reduction potential (ORP). Stabilization is achieved when three consecutive readings over a fixed time period (15 minutes in this case) are consistent within a given percent (usually 10 percent). Once stabilization has occurred, analytical sampling can begin.

All activities reported in this summary report are conducted under a Health and Safety Plan developed in accordance with Occupational Safety and Health Administration (OSHA) requirements. Groundwater sampling is performed using modified Level D Health and Safety personal protective equipment (PPE).

Only wells that do not contain free product are included in this quarterly sampling program. During the pre-sampling purging activities, measurements are taken to confirm that product is not present.

### **2.3 Product Recovery**

During the first quarter 2008, four product recovery events were conducted. Free product was recovered from the total of eight Site monitoring wells (Table 1). Recovery of dense non-aqueous phase liquid (DNAPL) from the wells at the site is conducted using the following procedure. First, all accessible wells included in the recovery program are gauged using an oil/water interface probe. Gauging the wells is used to determine the depth to water, depth and thickness to any possible light non-aqueous phase liquid (LNAPL) at the top of the water column, and depth and thickness to possible DNAPL at the bottom of the water column. Wells found to contain DNAPL are also gauged with a weighted cotton string coated with oil indicator paste to confirm product level measurements. A Hammerhead pump is used to pump water and product from the bottom of the DNAPL-containing wells. Wells that do not contain DNAPL are not pumped. The Hammerhead pump uses compressed air (powered by a generator) to push water and product up the well through polyethylene tubing and into a container. Following that, the mixture is transferred from the container into a 55-gallon steel drum for subsequent disposal.

The quantity of the recovered product is estimated as the volume of product contained inside the well prior to pumping, based on the cross sectional area of the well screen multiplied by the measured NAPL thickness. Unlike the monitoring of water levels and product thicknesses, and the water quality sampling, product recovery is not conducted on a quarterly schedule. Instead, product is recovered once to twice each month, as shown in Table 1.

### **3.0 RESULTS**

This section presents results of the monitoring of potentiometric heads and product thicknesses, groundwater quality sampling, and free product recovery conducted during the first quarter 2008 (January, February, and March 2008).

#### **3.1 Potentiometric Heads and Product Thickness**

First quarter 2008 groundwater and product (both DNAPL and LNAPL) measurements are presented in Table 2. Table 2 also contains calculated potentiometric heads. In the past, the potentiometric heads were corrected for the presence of LNAPL, where appropriate. The correction was based on the LNAPL density obtained from the NAPL sampling/characterization program conducted in 2007 and described in the *2007 Annual Groundwater Sampling and NAPL Monitoring/Recovery report for the Hempstead Intersection Street Former Manufactured Gas Plant Site*, February 2008. However, LNAPL was not detected in any of the Site wells during the first quarter 2008 monitoring event. Therefore, the correction for the presence of LNAPL was not required (note: DNAPL, which was identified in some wells, does not affect the potentiometric heads).

The January 22-23, 2008 potentiometric heads have been used to develop three first quarter 2008 contour maps: the shallow ground water (wells screened up to 45 feet below ground surface, or bgs), intermediate ground water (wells screened between 45 and 95 feet bgs) and the deep ground water (wells screened at depths greater than 95 feet bgs). These contour maps are presented in Figures 3 through 5.

Figure 6 shows the thickness of free product throughout the study area, recorded during the first quarter 2008 groundwater monitoring event.

#### **3.2 Groundwater Analytical Results**

Historically, the dissolved-phase plume at the Site has been defined as the total concentration of benzene, toluene, ethylbenzene and xylene (BTEX) or the total concentration of the polycyclic aromatic hydrocarbons (PAH). The BTEX/PAH data for the first quarter 2008 sampling (January 23-31, 2008) are summarized in Table 3 and presented on Figure 7.



A Quarterly 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. The DUSR is included in this report as Attachment A. A limited data validation was performed on the samples collected following the guidelines in USEPA Region II documents. 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 that the data is useable as reported.

### **3.3 Product Recovery Volumes**

The volume of product recovered during the first quarter of 2008 is shown in Table 4. The total for the quarter was approximately 11 gallons.

#### 4.0 SUMMARY

This section contains a short summary of the first quarter 2008 data presented in the report.

During the first quarter of 2008, the general direction of groundwater flow in the study area was to the south. The average hydraulic gradient was on the order of 1/1,000 ft/ft.

Free product was detected in eleven wells at nine locations (a location is defined as either a single wells or a well cluster). Eight of the nine locations where free product was identified are either on Site or within the parking lot of the Medical Office Building immediately south of the Site. One location – well HIMW-010S – is off site, immediately east of the Oswego Oil facility. The thickness of the free product layer was between approximately 0.1 and 5.4 ft. All product detections were DNAPL; LNAPL was not observed in any of the monitoring wells.

Four product recovery events were conducted during the first quarter of 2008. The volume of product recovered from the site wells was between approximately 2 and 3 gallons per event. Four recovery events were conducted during the first quarter 2008. The total volume of product recovered during the first quarter of 2008 was approximately 11 gallons.

The extent of the dissolved-phase plume during the first quarter of 2008 is summarized on Figure 8. The core of the plume, as defined either by the presence of free product, or by total BTEX or total PAH concentration greater than 1,000 micrograms per liter ( $\mu\text{g/L}$ ), extends to the distance of approximately 400 feet south of the site's boundary. In January 2008, concentrations of total BTEX and total PAH's in the downgradient-most well pair (HIMW-015I/D), located approximately 3,500 feet south of the site's boundary, were reported to be between "not detected" (deep well) and 5.9  $\mu\text{g/L}$  for total BTEX and 273  $\mu\text{g/L}$  for total PAHs (intermediate well). Concentrations of total BTEX and total PAHs in wells located between the Site and the HIMW-015 cluster were from "not detected" to 251  $\mu\text{g/L}$ .

Historically, the concentrations of total PAH's in the HIMW-015 well cluster were at least an order of magnitude lower than the January 2008 concentration of 273  $\mu\text{g/L}$ . Validated groundwater data for the Second Quarter sampling event in April 2008 (Table 5) indicate that all concentrations in HIMW-015 were at their historical levels (results are "ND" for PAH's, and less

than 5 µg/L for BTEX). It is presumed that the January 2008 data are anomalous. National Grid will continue to monitor the concentrations in HIMW-015 S/I to verify that the plume remains stable.

Based on a comparison between the first quarter 2008 data and the previous data (see *2007 Annual Groundwater Sampling and NAPL Monitoring/Recovery report for the Hempstead Intersection Street Former Manufactured Gas Plant Site*, February 2008), the concentrations of total BTEX and total PAHs remained stable in most of the wells.

# **TABLES**

Table 1

**Hempstead Intersection Street Former MGP Site  
Summary of Field Activities for the First Quarter 2008**

Well ID	Monitoring & Sampling			Product Recovery			
	Water Level	Product Thickness	Water Quality	Mar 14, 2008	Feb 27, 2008	Feb 12, 2008	Jan 10, 2008
HIMW-001S	X	X					
HIMW-001I	X	X		X	X	X	X
HIMW-001D	X	X					
HIMW-002S	X	X					
HIMW-002I	X	X					
HIMW-002D	X	X					
HIMW-003S	X	X	X				
HIMW-003I	X	X	X				
HIMW-003D	X	X	X				
HIMW-004S	X	X					
HIMW-004I	X	X					
HIMW-004D	X	X					
HIMW-005S	X	X	X				
HIMW-005I	X	X	X				
HIMW-005D	X	X	X				
HIMW-006S	X	X		X	X	X	X
HIMW-006I	X	X					
HIMW-006D	X	X					
HIMW-007S	X	X		X	X	X	X
HIMW-007I	X	X					
HIMW-007D	X	X					
HIMW-008S	X	X	X				
HIMW-008I	X	X	X				
HIMW-008D	X	X	X				
HIMW-009S	X	X					
HIMW-009I	X	X					
HIMW-009D	X	X					
HIMW-010S	X	X					
HIMW-010I	X	X					
HIMW-010D	X	X					
HIMW-011S	X	X					
HIMW-011I	X	X					
HIMW-011D	X	X					
HIMW-012S	X	X	X				
HIMW-012I	X	X	X				
HIMW-012D	X	X	X				
HIMW-013S	X	X	X				
HIMW-013I	X	X	X				
HIMW-013D	X	X	X				
HIMW-014I	X	X	X				
HIMW-014D	X	X	X				
HIMW-015I	X	X	X				
HIMW-015D	X	X	X				
HIMW-016S	X	X		X	X	X	X
HIMW-016I	X	X		X	X	X	X
HIMW-017S	X	X		X	X	X	X
HIMW-018S	X	X				X	
HIMW-018I	X	X					
HIMW-019S	X	X					
HIMW-019I	X	X					
PZ-02	X	X					
PZ-03	X	X					
PZ-08	X	X		X	X	X	X

Notes:

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

Table 2

**Hempstead Intersection Street Former MGP Site  
Groundwater and Product Measurements for the First Quarter 2008**

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	1/22/2008	71.61	ND	25.87	40.89	41.00	0	0.11	45.74
HIMW-001I	1/22/2008	71.68	ND	26.51	88.68	89.50	0	0.82	45.17
HIMW-001D	1/22/2008	71.95	ND	26.38	ND	127.10	0	0	45.57
HIMW-002S	1/22/2008	73.82	ND	27.91	ND	42.20	0	0	45.91
HIMW-002I	1/22/2008	78.87	ND	28.01	ND	91.60	0	0	50.86
HIMW-002D	1/22/2008	74.13	ND	28.21	ND	111.30	0	0	45.92
HIMW-003S	1/22/2008	65.00	ND	19.42	ND	34.80	0	0	45.58
HIMW-003I	1/22/2008	64.94	ND	19.43	ND	87.10	0	0	45.51
HIMW-003D	1/22/2008	65.26	ND	20.21	ND	144.50	0	0	45.05
HIMW-004S	1/22/2008	72.74	ND	27.79	ND	41.40	0	0	44.95
HIMW-004I	1/22/2008	72.78	ND	27.85	ND	90.73	0	0	44.93
HIMW-004D	1/22/2008	72.65	ND	28.23	ND	180.20	0	0	44.42
HIMW-005S	1/22/2008	67.19	ND	22.10	ND	39.10	0	0	45.09
HIMW-005I	1/22/2008	67.22	ND	21.84	ND	92.30	0	0	45.38
HIMW-005D	1/22/2008	67.22	ND	22.68	ND	140.00	0	0	44.54
HIMW-006S	1/22/2008	68.25	ND	22.81	34.07	36.10	0	2.03	45.44
HIMW-006I	1/22/2008	67.88	ND	22.61	ND	82.20	0	0	45.27
HIMW-006D	1/22/2008	67.77	ND	22.46	ND	118.58	0	0	45.31
HIMW-007S	1/22/2008	70.47	ND	25.07	36.35	40.75	0	4.40	45.40
HIMW-007I	1/22/2008	70.10	ND	25.07	ND	91.00	0	0	45.03
HIMW-007D	1/22/2008	70.40	ND	25.02	ND	119.50	0	0	45.38
HIMW-008S	1/22/2008	65.04	ND	20.38	ND	37.20	0	0	44.66
HIMW-008I	1/22/2008	65.14	ND	20.53	ND	75.10	0	0	44.61
HIMW-008D	1/22/2008	64.93	ND	20.33	ND	114.75	0	0	44.60
HIMW-009S	1/23/2008	70.03	ND	24.87	ND	39.70	0	0	45.16
HIMW-009I	1/23/2008	69.93	ND	24.82	ND	80.50	0	0	45.11
HIMW-009D	1/23/2008	69.96	ND	24.92	ND	123.10	0	0	45.04
HIMW-010S	1/22/2008	71.60	ND	26.13	39.37	39.90	0	0.53	45.47
HIMW-010I	1/22/2008	71.47	ND	25.98	ND	90.60	0	0	45.49
HIMW-010D	1/22/2008	71.44	ND	25.91	ND	134.20	0	0	45.53
HIMW-011S	1/22/2008	71.62	ND	25.91	37.20	40.25	0	3.05	45.71
HIMW-011I	1/22/2008	71.43	ND	25.76	ND	93.40	0	0	45.67
HIMW-011D	1/22/2008	71.39	ND	25.77	ND	123.45	0	0	45.62
HIMW-012S	1/22/2008	61.58	ND	18.02	ND	33.50	0	0	43.56
HIMW-012I	1/22/2008	61.59	ND	17.88	ND	75.00	0	0	43.71
HIMW-012D	1/22/2008	61.82	ND	19.71	ND	128.45	0	0	42.11
HIMW-013S	1/22/2008	72.83	ND	31.17	ND	49.20	0	0	41.66
HIMW-013I	1/22/2008	72.60	ND	30.93	ND	82.60	0	0	41.67
HIMW-013D	1/22/2008	72.53	ND	30.93	ND	122.50	0	0	41.60
HIMW-014I	1/22/2008	71.71	ND	30.07	ND	96.90	0	0	41.64
HIMW-014D	1/22/2008	71.59	ND	31.87	ND	122.50	0	0	39.72
HIMW-015I	1/22/2008	64.18	ND	25.21	ND	93.10	0	0	38.97
HIMW-015D	1/22/2008	63.96	ND	26.55	ND	155.00	0	0	37.41
HIMW-016S	1/23/2008	67.45	ND	22.17	31.76	34.41	0	2.65	45.28
HIMW-016I	1/23/2008	67.50	ND	20.28	78.85	82.66	0	3.81	47.22
HIMW-017S	1/23/2008	65.96	ND	20.97	35.42	35.48	0	0.06	44.99
HIMW-018S	1/22/2008	69.76	ND	24.21	42.32	42.80	0	0.48	45.55
HIMW-018I	1/22/2008	69.70	ND	24.10	ND	71.80	0	0	45.60
HIMW-019S	1/22/2008	70.95	ND	25.06	ND	38.65	0	0	45.89
HIMW-019I	1/22/2008	71.27	ND	25.26	ND	69.10	0	0	46.01
PZ-02	1/22/2008	72.96	ND	26.66	ND	35.60	0	0	46.30
PZ-03	1/22/2008	64.58	ND	18.54	ND	29.90	0	0	46.04
PZ-08	1/22/2008	70.51	ND	24.81	34.42	36.00	0	1.58	45.70

Notes:

Sh - sheen (assumed thickness of 0.01 ft) TOR - top of riser  
 NM - not measured amsl - above mean sea level  
 LNAPL - light non-aqueous phase liquid ND - NAPL not detected  
 DNAPL - dense non-aqueous phase liquid  
 (1) - Potentiometric heads in wells containing LNAPL are corrected  
 using a specific gravity = 0.96

**Table 3**  
**Hempstead Intersection Street Former MGP Site**  
**Dissolved-Phase Concentrations of Total BTEX Compounds and Total PAH Compounds**  
**for the First Quarter 2008**

Well ID	First Quarter 2008 (Jan 23-31, 2008)	
	Concentrations	
	BTEX [ug/L]	PAH [ug/L]
HIMW-001D		
HIMW-001I		
HIMW-001S		
HIMW-002D		
HIMW-002I		
HIMW-002S		
HIMW-003D	ND	30
HIMW-003I	9.9	ND
HIMW-003S	ND	ND
HIMW-004D		
HIMW-004I		
HIMW-004S		
HIMW-005D	1.2	ND
HIMW-005I	210.3	5337
HIMW-005S	ND	ND
HIMW-006D		
HIMW-006I		
HIMW-006S		
HIMW-007D		
HIMW-007I		
HIMW-007S		
HIMW-008D	ND	ND
HIMW-008I	ND	251
HIMW-008S	ND	5
HIMW-009D		
HIMW-009I		
HIMW-009S		
HIMW-010D		
HIMW-010I		
HIMW-010S		
HIMW-011D		
HIMW-011I		
HIMW-011S		
HIMW-012D	ND	ND
HIMW-012I	49.9	149
HIMW-012S	ND	ND
HIMW-013D	8.5	17
HIMW-013I	41.4	120
HIMW-013S	ND	ND
HIMW-014D	ND	ND
HIMW-014I	90	76
HIMW-015D	ND	ND
HIMW-015I	5.9	273
HIMW-016I		
HIMW-018I		
HIMW-019I		
PZ-02		
PZ-03		
PZ-08		

Notes:

ND - Not Detected.

NAPL is periodically identified in this well.

A blank field is "Not Sampled".

ug/L - micrograms per liter

**Table 4**

**Hempstead Intersection Street Former MGP Site  
Product Recovery for the First Quarter 2008**

Well ID	March 14, 2008			February 27, 2008			February 12, 2008			January 10, 2008		
	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]
HIMW-001S	0	0	0	0	Trace	0	0	Trace	0	0	0	0
HIMW-001I	0	0.7	0.11	0	1.1	0.18	0	1.1	0.18	0	1.33	0.22
HIMW-006S	0	2.65	0.43	0	1.9	0.31	0	2.1	0.34	0	0.3	0.05
HIMW-006I	0	0	0	0	0	0	0	0	0	0	0	0
HIMW-007S	0	0.75	0.12	0	0.75	0.12	0	1.7	0.28	0	0.9	0.15
HIMW-007I	0	0	0	0	0	0	0	0	0	0	0	0
HIMW-007D	0	0	0	0	0	0	0	0	0	0	0	0
HIMW-010S	NI	NI	0	NI	NI	0	NI	NI	0	NI	NI	0
HIMW-011S	0	0	0	0	0	0	0	0	0	0	0	0
HIMW-011I	0	0	0	0	0	0	0	0	0	0	0	0
HIMW-016S	0	4.34	0.71	0	4.9	0.80	0	5.4	0.88	0	4.8	0.78
HIMW-016I	0	3.6	0.59	0	4.6	0.75	0	4.7	0.77	0	4.5	0.73
HIMW-017S	0	2.4	0.39	0	2.1	0.34	0	1.5	0.24	0	1.4	0.23
HIMW-018S	0	Trace	0	0	Trace	0	0	0.45	0.07	0	0	0.00
HIMW-018I	0	0	0	0	0	0	0	0	0	0	0	0
HIMW-019S	0	0	0	0	0	0	0	Trace	0	0	0	0
HIMW-019I	0	0	0	0	0	0	0	0	0	0	0	0
PZ-08	0	1.5	0.24	0	1.6	0.26	0	1.9	0.31	0	1.0	0.16
	Volume Removed <b>2.60</b>			Volume Removed <b>2.77</b>			Volume Removed <b>3.08</b>			Volume Removed <b>2.32</b>		

**Total volume for the First quarter 2008: 10.77 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 monitoring wells are 2-inch diameter: Vol = 0.163 gal / lft of well screen.




**TABLE 5**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**NATIONAL GRID - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**  
**APRIL 2008**

Location ID			HIMW-015I	HIMW-015I
Sample ID			HIMW-0150	HIMW-015I
Matrix			Groundwater	Groundwater
Depth Interval (ft)			-	-
Date Sampled			04/07/08	04/07/08
Parameter	Units	*	Field Duplicate (1-1)	
<b>Volatile Organic Compounds</b>				
Benzene	UG/L	1	5	4
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
<b>Semivolatile Organic Compounds</b>				
2-Methylnaphthalene	UG/L	-	10 U	10 U
Acenaphthene	UG/L	20	2 J	2 J
Acenaphthylene	UG/L	50	6 J	5 J
Anthracene	UG/L	50	10 U	10 U
Benzo(a)anthracene	UG/L	0.002	10 U	10 U
Benzo(a)pyrene	UG/L	ND	10 U	10 U
Benzo(b)fluoranthene	UG/L	0.002	10 U	10 U
Benzo(g,h,i)perylene	UG/L	50	10 U	10 U
Benzo(k)fluoranthene	UG/L	0.002	10 U	10 U
Chrysene	UG/L	0.002	10 U	10 U
Dibenz(a,h)anthracene	UG/L	50	10 U	10 U
Fluoranthene	UG/L	50	10 U	10 U
Fluorene	UG/L	50	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	0.002	10 U	10 U
Naphthalene	UG/L	10	10 U	10 U
Phenanthrene	UG/L	50	10 U	10 U
Pyrene	UG/L	50	10 U	10 U

\* - 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

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

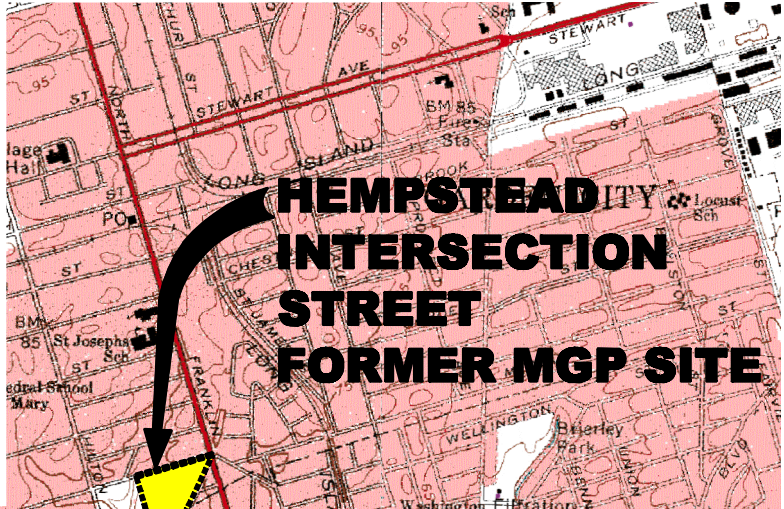
Made By\_PRF 06/04/08\_; Checked By\_NP 06/04/08\_

Detection Limits shown are PQL

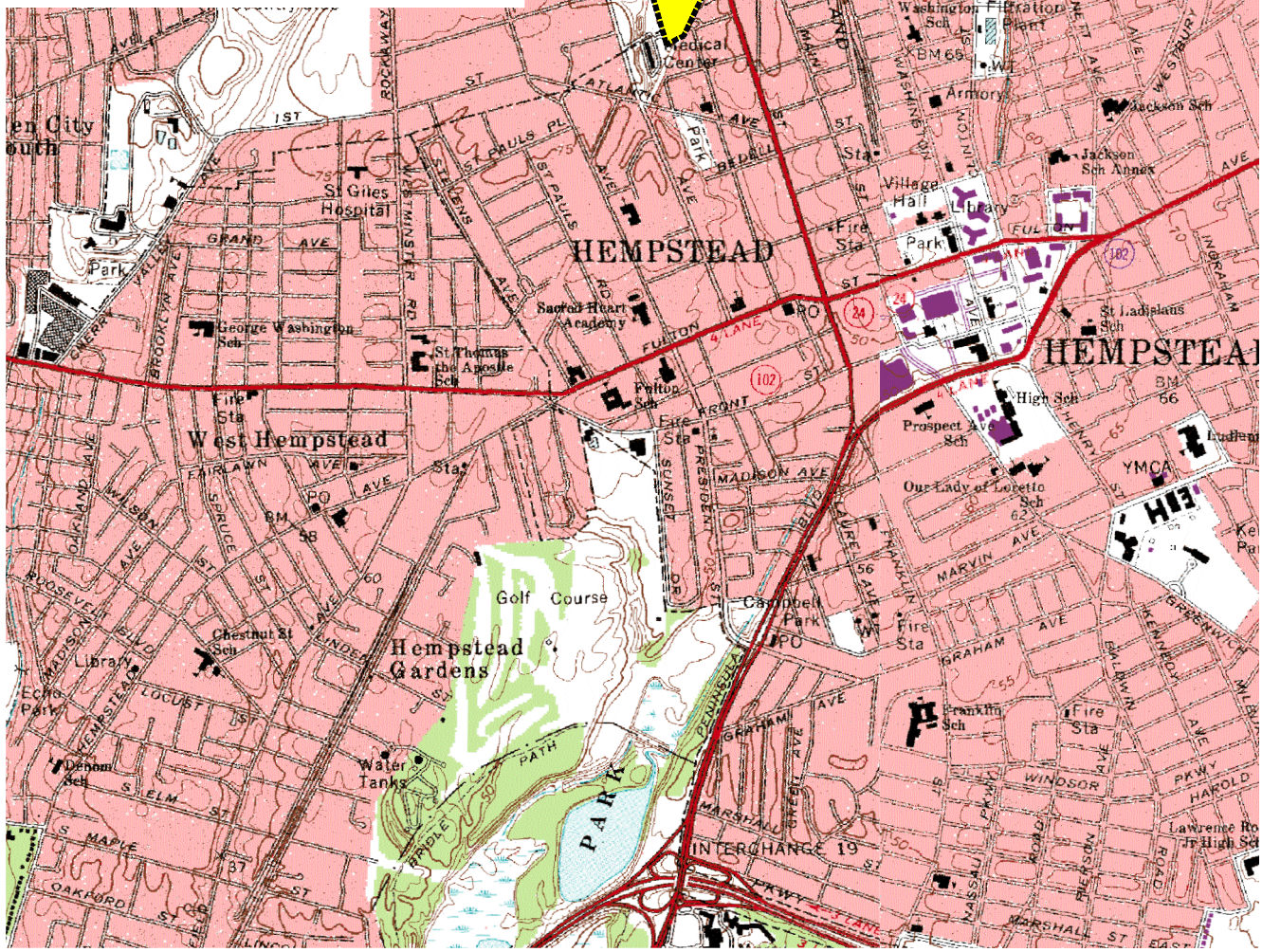
# FIGURES



**KEY MAP**  
**NEW YORK STATE**



**HEMPSTEAD CITY**  
**INTERSECTION STREET**  
**FORMER MGP SITE**



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

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

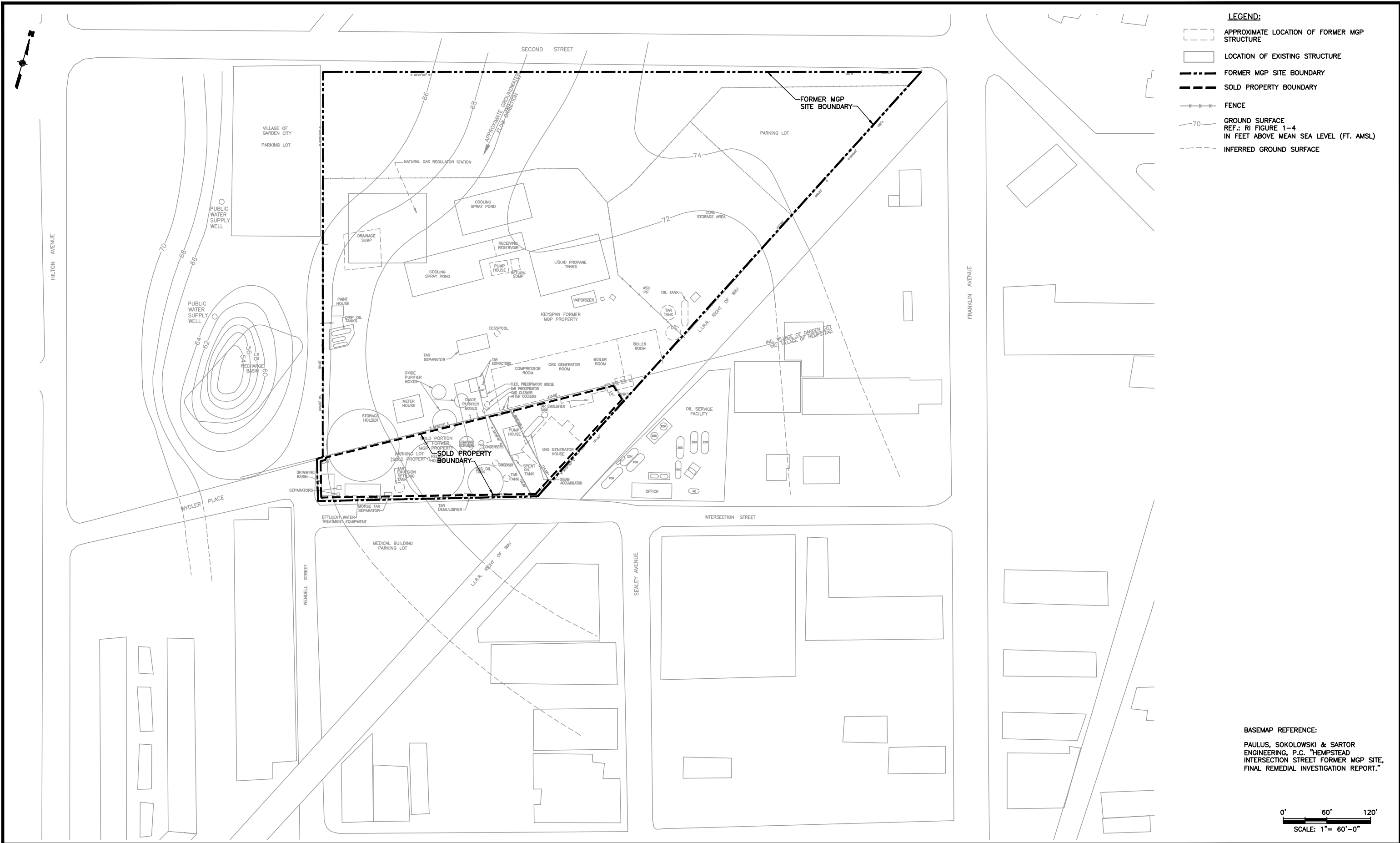


**URS Corporation**

**SITE LOCATION MAP**

**FIGURE 1**

A:\117585.000\GIS\DWG\NATIONAL GRID\HEMPSTEAD\FIGURE 2-2.dwg 1:2 6/2/08 - 3 IN.



**URS Corporation**

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

**SITE MAP**

**FIGURE 2**



**Legend**

- ⊕ Monitoring Well
- ➡ Groundwater Flow Direction
- ④ Potentiometric Surface Contour
- Former MGP Site Boundary

Location ID — HIMW-002S, 44.30 — Groundwater Elevation (FT. AMSL)

FT. AMSL = FEET ABOVE MEAN SEA LEVEL







GARDEN CITY/HEMPSTEAD, NY  
 POTENTIOMETRIC SURFACE MAP FOR SHALLOW GROUNDWATER  
 JANUARY 22-23, 2008

FIGURE 3

J:\1175065.000\00\GIS\ARC\MAP\0108\_SHALLOW GW CONTOURS.mxd 3/26/2008 9:12:09 AM Lumb, M

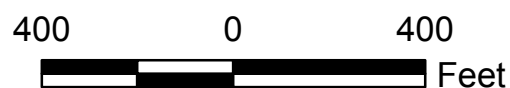


**Legend**

-  Monitoring Well
-  Groundwater Flow Direction
-  Potentiometric Surface Contour
-  Former MGP Site Boundary

Location ID — HIMW-0021, 49.27 — Groundwater Elevation (FT. AMSL)

FT. AMSL = FEET ABOVE MEAN SEA LEVEL



GARDEN CITY/HEMPSTEAD, NY  
 POTENTIOMETRIC SURFACE MAP FOR INTERMEDIATE GROUNDWATER  
 JANUARY 22-23, 2008

FIGURE 4

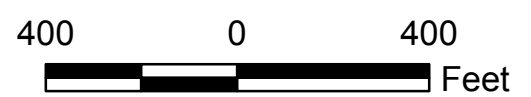


**Legend**

- ⊕ Monitoring Well
- ➔ Groundwater Flow Direction
- ④ Potentiometric Surface Contour
- Former MGP Site Boundary

Location ID — HIMW-002D, 45.20 — Groundwater Elevation (FT. AMSL)

FT. AMSL = FEET ABOVE MEAN SEA LEVEL



GARDEN CITY/HEMPSTEAD, NY  
 POTENTIOMETRIC SURFACE MAP FOR DEEP GROUNDWATER  
 JANUARY 22-23, 2008

FIGURE 5







**HIMW-003S**  
BTEX, ND  
PAH, ND

**HIMW-003I**  
BTEX, 9.9  
PAH, ND

**HIMW-003D**  
BTEX, ND  
PAH, 30

**HIMW-005S**  
BTEX, ND  
PAH, ND

**HIMW-005I**  
BTEX, 210.3  
PAH, 5337

**HIMW-005D**  
BTEX, 1.2  
PAH, ND

**HIMW-013S**  
BTEX, ND  
PAH, ND

**HIMW-013I**  
BTEX, 41.4  
PAH, 120

**HIMW-013D**  
BTEX, 8.5  
PAH, 17

**HIMW-008S**  
BTEX, ND  
PAH, 5

**HIMW-008I**  
BTEX, ND  
PAH, 251

**HIMW-008D**  
BTEX, ND  
PAH, ND

**HIMW-012S**  
BTEX, ND  
PAH, ND

**HIMW-012I**  
BTEX, 49.9  
PAH, 149

**HIMW-012D**  
BTEX, ND  
PAH, ND

**HIMW-014I**  
BTEX, 90  
PAH, 76

**HIMW-014D**  
BTEX, ND  
PAH, ND

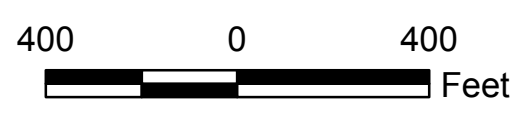
**HIMW-015I**  
BTEX, 5.9  
PAH, 273

**HIMW-015D**  
BTEX, ND  
PAH, ND

**Legend**

- Monitoring Well - Not Sampled
- Monitoring Well - Compound Not Detected
- Monitoring Well - Compound Detected
- Former MGP Site Boundary

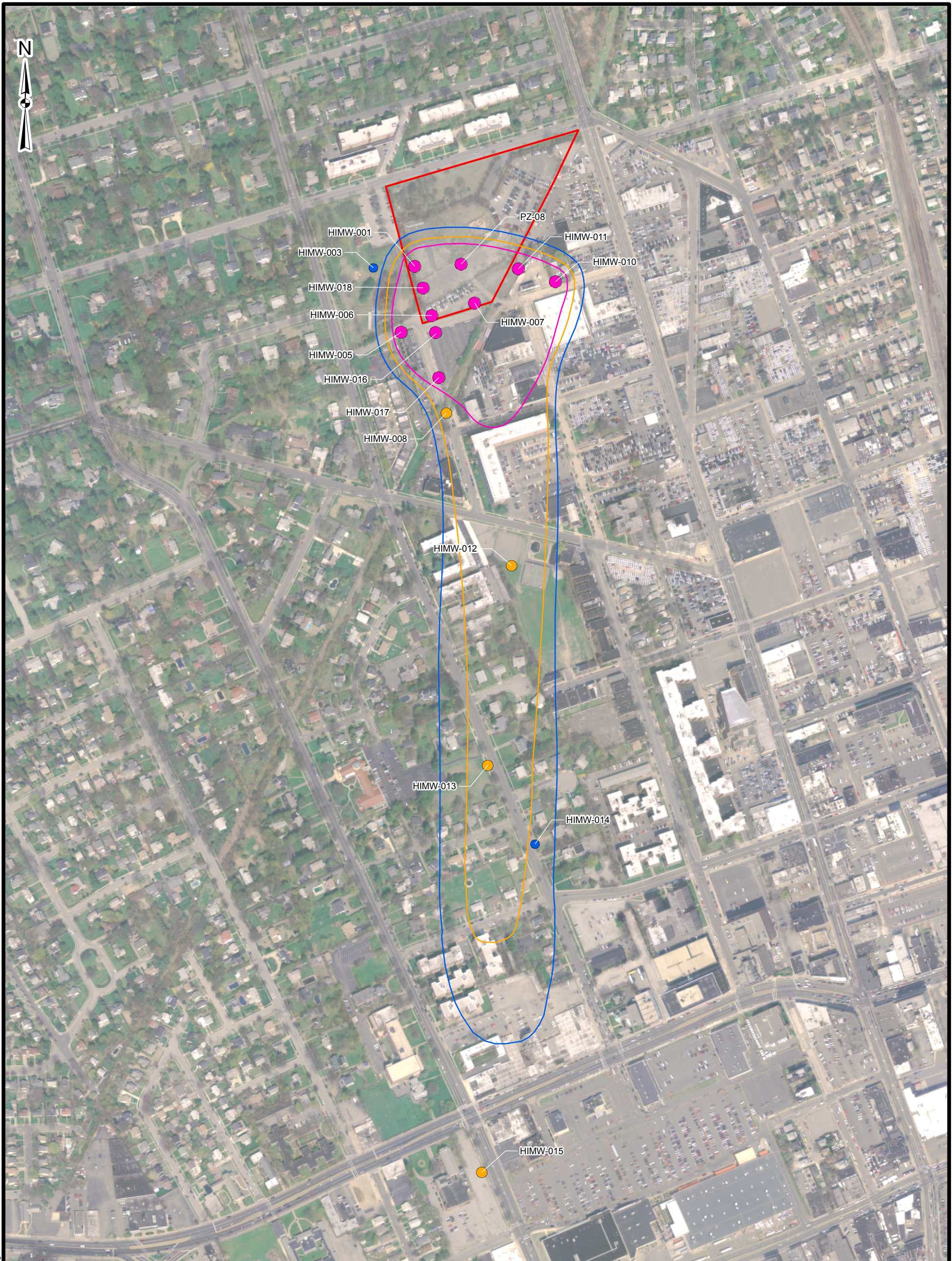
Location ID — HIMW-002D  
BTEX, ND — Concentration  
PAH, ND (ug/L)



GARDEN CITY/HEMPSTEAD, NY  
TOTAL DISSOLVED-PHASE BTEX AND PAH CONCENTRATIONS  
JANUARY 23-31, 2008

FIGURE 7

J:\1175065.000\00\GIS\ARCMAP108 BTEXPAH.mxd 3/20/2008 11:26:27 AM Lumb, M



**Legend**

Monitoring Well Cluster - Highest BTEX/ PAH Concentrations (ug/L):

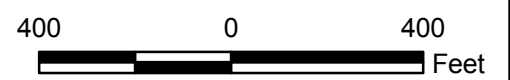
- Not Detected
- 1 - 10
- 10 - 100
- 100 - 1,000
- > 1,000; or Product Detected

— Former MGP Site Boundary

Isoconcentration Line (ug/L):

- 50
- 100
- 1,000

Contour drawn based on historical data from HIMW-015. January 2008 data is potentially anomalous, as confirmed by April 2008 data, which is reflective of historical concentrations.



J:\11175065.000\00\GIS\ARCMAP\0108 DISSOLVE PHASE PLUME.mxd 6/12/2008

**ATTACHMENT A**

**DATA USABILITY SUMMARY REPORT**

**FIRST QUARTER 2008**

**ATTACHMENT A  
DATA USABILITY SUMMARY REPORT  
FIRST QUARTER 2008**

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

**Analyses Performed by:  
H2M LABORATORIES, INC.**

**Prepared For:  
KEYSPAN CORPORATION  
175 EAST OLD COUNTRY RD.  
HICKSVILLE, NY 11801**

**Prepared by:  
URS CORPORATION  
77 GOODELL STREET  
BUFFALO, NY 14203**

**MARCH 2008**

## TABLE OF CONTENTS

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I. INTRODUCTION .....	A-1
II. ANALYTICAL METHODOLOGIES AND DATA VALIDATION .....	A-1
III. DATA DELIVERABLE COMPLETENESS .....	A-2
IV. HOLDING TIMES/SAMPLE RECEIPT .....	A-2
V. NON-CONFORMANCES.....	A-2
VI. SAMPLE RESULTS AND REPORTING .....	A-3
VII. SUMMARY .....	A-3

### TABLES (Following Text)

Table A-1	Validated Groundwater Sample Analytical Results
Table A-2	Validated Field QC Sample Analytical Results

### APPENDICES (Following Tables)

Appendix A	Validated Form 1's
Appendix B	Support Documentation

## **I. INTRODUCTION**

Analytical data for the twenty (20) groundwater samples, one matrix spike/matrix spike duplicate (MS/MSD) pair, one field blank, and three trip blanks collected by URS personnel on January 23–31, 2008 are discussed in this DUSR. The samples were collected as part of the first quarter 2008 groundwater monitoring event at the Hempstead Intersection Street Former MGP Site. 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.

## **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
- Polycyclic 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 1'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, under proper chain-of-custody (COC), and were analyzed within the required holding times.

### **V. NON-CONFORMANCES**

There were no non-conformances related to the sample analyses.

## 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.

Sample HIMW-5I, HIMW-15I, and HIMW-8I required secondary dilutions in order to quantify the project target analytes (i.e., PAHs) within the calibration range of the instrument. 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, Senior Chemist

PF

Date: 4/4/08

Reviewed By: Mary E. Bitka, Principal Chemist

MGB

Date: 4/4/08



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

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

**TABLE A-1**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**KEYSPAN CORPORATION - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**  
**JANUARY - MARCH 2008**

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		01/25/08	01/29/08	01/31/08	01/28/08	01/29/08
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Benzene	UG/L	1 U	4.3	1 U	1 U	5.2
Ethylbenzene	UG/L	1 U	1 U	1 U	1 U	2.8
Toluene	UG/L	1 U	1.3	1 U	1.2	2.3
Xylene (total)	UG/L	1 U	4.3	1 U	1 U	200
<b>Semivolatile Organic Compounds</b>						
2-Methylnaphthalene	UG/L	4 J	10 U	10 U	10 U	1,000 D
Acenaphthene	UG/L	10 U	10 U	10 U	10 U	18
Acenaphthylene	UG/L	2 J	10 U	10 U	10 U	350 DJ
Anthracene	UG/L	10 U	10 U	10 U	10 U	3 J
Benzo(a)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	10 U	10 U	10 U	10 U	42
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	24	10 U	10 U	10 U	3,900 D
Phenanthrene	UG/L	10 U	10 U	10 U	10 U	24
Pyrene	UG/L	10 U	10 U	10 U	10 U	10 U

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Made By\_PRF 03/05/08\_; Checked By\_NP 03/05/08\_

Detection Limits shown are PQL

**TABLE A-1**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**KEYSPAN CORPORATION - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**  
**JANUARY - MARCH 2008**

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		01/30/08	01/25/08	01/30/08	01/31/08	01/23/08
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Benzene	UG/L	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	UG/L	1 U	1 U	1 U	1 U	1 U
Toluene	UG/L	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	1 U	1 U	1 U	1 U	1 U
<b>Semivolatile Organic Compounds</b>						
2-Methylnaphthalene	UG/L	10 U	10 U	42	10 U	10 U
Acenaphthene	UG/L	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U	14	3 J	10 U
Anthracene	UG/L	10 U	10 U	10 U	1 J	10 U
Benzo(a)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	10 U	10 U	3 J	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	1 J	10 U
Naphthalene	UG/L	10 U	10 U	190 D	10 U	10 U
Phenanthrene	UG/L	10 U	10 U	2 J	10 U	10 U
Pyrene	UG/L	10 U	10 U	10 U	10 U	10 U

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Made By\_PRF 03/05/08\_; Checked By\_NP 03/05/08\_

Detection Limits shown are PQL

**TABLE A-1**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**KEYSPAN CORPORATION - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**  
**JANUARY - MARCH 2008**

Location ID		HIMW-012I	HIMW-012S	HIMW-013D	HIMW-013D	HIMW-013I
Sample ID		HIMW-12I	HIMW-12S	HIMW-130D	HIMW-13D	HIMW-13I
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/30/08	01/25/08	01/28/08	01/28/08	01/29/08
Parameter	Units			Field Duplicate (1-1)		
<b>Volatile Organic Compounds</b>						
Benzene	UG/L	34	1 U	3.5	1 U	33
Ethylbenzene	UG/L	7.0	1 U	1 U	1 U	1.4
Toluene	UG/L	1.1	1 U	1.0	1 U	1 U
Xylene (total)	UG/L	7.8	1 U	4.0	1 U	7.0
<b>Semivolatile Organic Compounds</b>						
2-Methylnaphthalene	UG/L	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	48	10 U	5 J	6 J	11
Acenaphthylene	UG/L	54	10 U	8 J	9 J	66
Anthracene	UG/L	10 U	10 U	10 U	10 U	2 J
Benzo(a)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	34	10 U	10 U	10 U	18
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	6 J	10 U	10 U	2 J	2 J
Phenanthrene	UG/L	7 J	10 U	10 U	10 U	21
Pyrene	UG/L	10 U	10 U	10 U	10 U	10 U

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Made By\_PRF 03/05/08\_; Checked By\_NP 03/05/08\_

Detection Limits shown are PQL

Advanced Selection: Q1-2008 Data  
 J:\1175065.00000.DBV\Program\EDMS.mde  
 Printed: 4/3/2008 11:26:00 AM

[LOGDATE] BETWEEN #01/23/2008# AND #01/31/2008# AND ([SACODE] = 'N' OR (SACODE) = 'FD') AND [MATRIX] = 'WG'

**TABLE A-1**  
**VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**KEYSPAN CORPORATION - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**  
**JANUARY - MARCH 2008**

Location ID		HIMW-013S	HIMW-014D	HIMW-014I	HIMW-015D	HIMW-015I
Sample ID		HIMW-13S	HIMW-14D	HIMW-14I	HIMW-15D	HIMW-15I
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		01/31/08	01/25/08	01/28/08	01/23/08	01/24/08
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Benzene	UG/L	1 U	1 U	53	1 U	5.9
Ethylbenzene	UG/L	1 U	1 U	26	1 U	1 U
Toluene	UG/L	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	1 U	1 U	11	1 U	1 U
<b>Semivolatile Organic Compounds</b>						
2-Methylnaphthalene	UG/L	10 U	10 U	10 U	10 U	48
Acenaphthene	UG/L	10 U	10 U	25	10 U	36
Acenaphthylene	UG/L	10 U	10 U	33	10 U	10 U
Anthracene	UG/L	10 U	10 U	1 J	10 U	7 J
Benzo(a)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U	3 J
Fluorene	UG/L	10 U	10 U	10	10 U	19
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	10 U	10 U	2 J	10 U	130 D
Phenanthrene	UG/L	10 U	10 U	5 J	10 U	27
Pyrene	UG/L	10 U	10 U	10 U	10 U	3 J

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis.

Made By\_PRF 03/05/08\_; Checked By\_NP 03/05/08\_

Detection Limits shown are PQL

Advanced Selection: Q1-2008 Data  
 J:\1175085.0000\DBP\Program\EDMS.mde  
 Printed: 4/3/2008 11:28:00 AM

(LOGDATE) BETWEEN #01/23/2008# AND #01/31/2008# AND ( [SACODE] = 'N' OR [SACODE] = 'D' ) AND [MATRIX] = 'WG'

**TABLE A-2**  
**VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS**  
**KEYSPAN CORPORATION - HEMPSTEAD INTERSECTION STREET FORMER MGP SITE**  
**JANUARY - MARCH 2008**

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		TB 012508	FB 012908	TB 013008	TB 013108
Matrix		Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-
Date Sampled		01/25/08	01/29/08	01/30/08	01/31/08
Parameter	Units	Trip Blank (1-1)	Field Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)
<b>Volatile Organic Compounds</b>					
Benzene	UG/L	1 U	1 U	1 U	1 U
Ethylbenzene	UG/L	1 U	1 U	1 U	1 U
Toluene	UG/L	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	1 U	1 U	1 U	1 U
<b>Semivolatile Organic Compounds</b>					
2-Methylnaphthalene	UG/L	NA	10 U	NA	NA
Acenaphthene	UG/L	NA	10 U	NA	NA
Acenaphthylene	UG/L	NA	10 U	NA	NA
Anthracene	UG/L	NA	10 U	NA	NA
Benzo(a)anthracene	UG/L	NA	10 U	NA	NA
Benzo(a)pyrene	UG/L	NA	10 U	NA	NA
Benzo(b)fluoranthene	UG/L	NA	10 U	NA	NA
Benzo(g,h,i)perylene	UG/L	NA	10 U	NA	NA
Benzo(k)fluoranthene	UG/L	NA	10 U	NA	NA
Chrysene	UG/L	NA	10 U	NA	NA
Dibenz(a,h)anthracene	UG/L	NA	10 U	NA	NA
Fluoranthene	UG/L	NA	10 U	NA	NA
Fluorene	UG/L	NA	10 U	NA	NA
Indeno(1,2,3-cd)pyrene	UG/L	NA	10 U	NA	NA
Naphthalene	UG/L	NA	10 U	NA	NA
Phenanthrene	UG/L	NA	10 U	NA	NA
Pyrene	UG/L	NA	10 U	NA	NA

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

Made By\_PRF 03/05/08; Checked By\_NP 03/05/08

Detection Limits shown are PQL

**APPENDIX A**

**VALIDATED FORM 1'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-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801855-001A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57773.D  
 Level: (low/med) LOW Date Received: 01/25/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 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 pg/Kg)	UG/L
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-URS017 S22



1A  
VOLATILE 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-URS017

Matrix: (soil/water) WATER Lab Sample ID: 0801855-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57774.D

Level: (low/med) LOW Date Received: 01/25/08

% Moisture: not dec. Date Analyzed: 02/05/08

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) <u>UG/L</u>	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-URS017 S24

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-URS017

Matrix: (soil/water) WATER Lab Sample ID: 0801855-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57775.D

Level: (low/med) LOW Date Received: 01/25/08

% Moisture: not dec. Date Analyzed: 02/05/08

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-URS017 S26

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-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801855-004A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57776.D  
 Level: (low/med) LOW Date Received: 01/25/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 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 pg/Kg) <u>UG/L</u>	<u>Q</u>
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-URS017 S28

1A

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14D

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS SAS No.: \_\_\_\_\_SDG No.: KEY-URS017

Matrix: (soil/water)

WATERLab Sample ID: 0801855-005ASample wt/vol: 5(g/mL) MLLab File ID: A\A57777.D

Level: (low/med)

LOWDate Received: 01/25/08

% Moisture: not dec.

Date Analyzed: 02/05/08GC Column: ZB-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(μL)

Soil Aliquot Volume \_\_\_\_\_ (μL)

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

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15D

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_  
 Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801855-006A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57778.D  
 Level: (low/med) LOW Date Received: 01/25/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00  
 Soil Extract Volume: \_\_\_\_\_ (μL) Soil Aliquot Volume \_\_\_\_\_ (μL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(pg/L or pg/Kg) <u>UG/L</u>	<u>Q</u>
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-URS017 S32

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB 013008

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_  
 Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801986-012A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57791.D  
 Level: (low/med) LOW Date Received: 01/30/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 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) <u>UG/L</u>	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-URS017 S62

1A

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-3S

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS SAS No.: \_\_\_\_\_SDG No.: KEY-URS018

Matrix: (soil/water)

WATERLab Sample ID: 0802015-001ASample wt/vol: 5(g/mL) MLLab File ID: A\A57805.D

Level: (low/med)

LOWDate Received: 01/31/08

% Moisture: not dec.

Date Analyzed: 02/06/08GC Column: ZB-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) <u>UG/L</u>	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-URS018 S15

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-URS018  
 Matrix: (soil/water) WATER Lab Sample ID: 0802015-002A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57806.D  
 Level: (low/med) LOW Date Received: 01/31/08  
 % Moisture: not dec. Date Analyzed: 02/06/08  
 GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00  
 Soil Extract Volume: \_\_\_\_\_ (μL) Soil Aliquot Volume \_\_\_\_\_ (μL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(pg/L or pg/Kg) <u>UG/L</u>	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-URS018 S17



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13S

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_  
 Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS018  
 Matrix: (soil/water) WATER Lab Sample ID: 0802015-003A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57807.D  
 Level: (low/med) LOW Date Received: 01/31/08  
 % Moisture: not dec. Date Analyzed: 02/06/08  
 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) <u>UG/L</u>	<u>Q</u>
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-URS018 S19

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB 013108

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_  
 Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS018  
 Matrix: (soil/water) WATER Lab Sample ID: 0802015-004A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57808.D  
 Level: (low/med) LOW Date Received: 01/31/08  
 % Moisture: not dec. Date Analyzed: 02/06/08  
 GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00  
 Soil Extract Volume: \_\_\_\_\_ (μL) Soil Aliquot Volume \_\_\_\_\_ (μL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(pg/L or μg/Kg)	UG/L
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-URS018 S21

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-130D

Lab Name: H2M LABS, INC. Contract: \_\_\_\_\_  
 Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801986-010A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57767.D  
 Level: (low/med) LOW Date Received: 01/30/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 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 pg/Kg) UG/L	Q
71-43-2	Benzene	3.5	
108-88-3	Toluene	1.0	
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	4.0	

KEY-URS017 S60

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-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801986-009A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57766.D  
 Level: (low/med) LOW Date Received: 01/30/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00  
 Soil Extract Volume: \_\_\_\_\_ (μL) Soil Aliquot Volume \_\_\_\_\_ (μL)

CONCENTRATION UNITS:  
(μg/L or μg/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (μg/L or μg/Kg) UG/L	Q
71-43-2	Benzene	53	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	26	
1330-20-7	Xylene (total)	11	

KEY-URS017 S58

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-URS017

Matrix: (soil/water)

WATER

Lab Sample ID: 0801855-007A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: A\A57779.D

Level: (low/med)

LOW

Date Received: 01/25/08

% Moisture: not dec.

Date Analyzed: 02/05/08

GC Column: ZB-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

( $\mu$ L)

Soil Aliquot Volume \_\_\_\_\_

( $\mu$ L)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) <u>UG/L</u>	Q
71-43-2	Benzene	5.9	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U

KEY-URS017 S34

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB 012508

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

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS017

Matrix: (soil/water) WATER Lab Sample ID: 0801855-008A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57780.D

Level: (low/med) LOW Date Received: 01/25/08

% Moisture: not dec. Date Analyzed: 02/05/08

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-URS017 S37

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB 012908

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS SAS No.: \_\_\_\_\_SDG No.: KEY-URS017

Matrix: (soil/water)

WATERLab Sample ID: 0801986-011ASample wt/vol: 5(g/mL) MLLab File ID: A\A57768.D

Level: (low/med)

LOWDate Received: 01/30/08

% Moisture: not dec.

Date Analyzed: 02/05/08GC Column: ZB-624ID: .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-URS017 S38

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-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801986-001A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57783.D  
 Level: (low/med) LOW Date Received: 01/30/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 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	4.3	
108-88-3	Toluene	1.3	
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	4.3	

KEY-URS017 S40



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-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801986-008A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57790.D  
 Level: (low/med) LOW Date Received: 01/30/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 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
71-43-2	Benzene	33	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1.4	
1330-20-7	Xylene (total)	7.0	

KEY-URS017 S56

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-URS017

Matrix: (soil/water) WATER Lab Sample ID: 0801986-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57784.D

Level: (low/med) LOW Date Received: 01/30/08

% Moisture: not dec. Date Analyzed: 02/05/08

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	1.2	
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	1	U

KEY-URS017 S42

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-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801986-003A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57785.D  
 Level: (low/med) LOW Date Received: 01/30/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00  
 Soil Extract Volume: \_\_\_\_\_ (μL) Soil Aliquot Volume \_\_\_\_\_ (μL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(pg/L or μg/Kg) UG/L	Q
71-43-2	Benzene	5.2	
108-88-3	Toluene	2.3	
100-41-4	Ethylbenzene	2.8	
1330-20-7	Xylene (total)	200	

KEY-URS017 S44

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-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801986-004A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57786.D  
 Level: (low/med) LOW Date Received: 01/30/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00  
 Soil Extract Volume: \_\_\_\_\_ (μL) Soil Aliquot Volume \_\_\_\_\_ (μL)

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

KEY-URS017 S47

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-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801986-005A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57787.D  
 Level: (low/med) LOW Date Received: 01/30/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 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-URS017 S49

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-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801986-006A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57788.D  
 Level: (low/med) LOW Date Received: 01/30/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 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
71-43-2	Benzene	34	Q
108-88-3	Toluene	1.1	
100-41-4	Ethylbenzene	7.0	
1330-20-7	Xylene (total)	7.8	

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-URS017  
 Matrix: (soil/water) WATER Lab Sample ID: 0801986-007A  
 Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A57789.D  
 Level: (low/med) LOW Date Received: 01/30/08  
 % Moisture: not dec. Date Analyzed: 02/05/08  
 GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00  
 Soil Extract Volume: \_\_\_\_\_ (μL) Soil Aliquot Volume \_\_\_\_\_ (μL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(pg/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-URS017 S54

IC  
SEMIVOLATILE 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-URS017

Matrix: (soil/water) WATER

Lab Sample ID: 0801855-001B

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

Lab File ID: A\C39715.D

Level: (low/med) LOW

Date Received: 01/25/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 01/28/08

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 01/31/08

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	24		
91-57-6	2-Methylnaphthalene	4		J
208-96-8	Acenaphthylene	2		J
83-32-9	Acenaphthene	10		U
86-73-7	Fluorene	10		U
85-01-8	Phenanthrene	10		U
120-12-7	Anthracene	10		U
206-44-0	Fluoranthene	10		U
129-00-0	Pyrene	10		U
56-55-3	Benzo(a)anthracene	10		U
218-01-9	Chrysene	10		U
205-99-2	Benzo(b)fluoranthene	10		U
207-08-9	Benzo(k)fluoranthene	10		U
50-32-8	Benzo(a)pyrene	10		U
193-39-5	Indeno(1,2,3-cd)pyrene	10		U
53-70-3	Dibenzo(a,h)anthracene	10		U
191-24-2	Benzo(g,h,i)perylene	10		U

(1) Cannot be separated from Diphenylamine



## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-8D

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS017Matrix: (soil/water) WATERLab Sample ID: 0801855-002BSample wt/vol: 1000 (g/mL) MLLab File ID: A\C39716.DLevel: (low/med) LOWDate Received: 01/25/08% Moisture: Decanted: (Y/N) NDate Extracted: 01/28/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 01/31/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

## CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12D

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS017Matrix: (soil/water) WATERLab Sample ID: 0801855-003BSample wt/vol: 1000 (g/mL) MLLab File ID: A\C39717.DLevel: (low/med) LOWDate Received: 01/25/08% Moisture: Decanted: (Y/N) NDate Extracted: 01/28/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 01/31/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

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

(1) Cannot be separated from Diphenylamine

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12S

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS017Matrix: (soil/water) WATERLab Sample ID: 0801855-004BSample wt/vol: 1000 (g/mL) MLLab File ID: A\C39718.DLevel: (low/med) LOWDate Received: 01/25/08% Moisture: Decanted: (Y/N) NDate Extracted: 01/28/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 01/31/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

## CONCENTRATION UNITS:

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

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

(1) Cannot be separated from Diphenylamine

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14D

Lab Name: H2M LABS, INC.

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

Lab Code: 10478

Case No.: KEY-URS

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

SDG No.: KEY-URS017

Matrix: (soil/water) WATER

Lab Sample ID: 0801855-005B

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

Lab File ID: A\C39719.D

Level: (low/med) LOW

Date Received: 01/25/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 01/28/08

Concentrated Extract Volume: 1000 (μL)

Date Analyzed: 01/31/08

Injection Volume: 2 (μL)

Dilution Factor: 1.00

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

Extraction: (Type) SEPF

CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15D

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS017Matrix: (soil/water) WATERLab Sample ID: 0801855-006BSample wt/vol: 1000 (g/mL) MLLab File ID: A\C39722.DLevel: (low/med) LOWDate Received: 01/25/08% Moisture: Decanted: (Y/N) NDate Extracted: 01/28/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 01/31/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

## CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15I

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS017Matrix: (soil/water) WATERLab Sample ID: 0801855-007BSample wt/vol: 1000 (g/mL) MLLab File ID: A\C39723.DLevel: (low/med) LOWDate Received: 01/25/08% Moisture: Decanted: (Y/N) NDate Extracted: 01/28/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 01/31/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		( $\mu$ g/L or $\mu$ g/Kg)	UG/L Q
91-20-3	Naphthalene	100	E
91-57-6	2-Methylnaphthalene	48	
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	36	
86-73-7	Fluorene	19	
85-01-8	Phenanthrene	27	
120-12-7	Anthracene	7	J
206-44-0	Fluoranthene	3	J
129-00-0	Pyrene	3	J
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

NP  
3/5/08

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15IDL

Lab Name: H2M LABS, INC.

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

Lab Code: 10478

Case No.: KEY-URS

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

SDG No.: KEY-URS017

Matrix: (soil/water) WATER

Lab Sample ID: 0801855-007BDL

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

Lab File ID: A\C39744.D

Level: (low/med) LOW

Date Received: 01/25/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 01/28/08

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 02/01/08

Injection Volume: 2 (µL)

Dilution Factor: 4.00

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

Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(µg/L or µg/Kg)	UG/L Q
91-20-3	Naphthalene	130	D
91-57-6	2-Methylnaphthalene	60	D
208-96-8	Acenaphthylene	40	U
83-32-9	Acenaphthene	45	D
86-73-7	Fluorene	23	DJ
85-01-8	Phenanthrene	35	DJ
120-12-7	Anthracene	9	DJ
206-44-0	Fluoranthene	40	U
129-00-0	Pyrene	40	U
56-55-3	Benzo (a) anthracene	40	U
218-01-9	Chrysene	40	U
205-99-2	Benzo (b) fluoranthene	40	U
207-08-9	Benzo (k) fluoranthene	40	U
50-32-8	Benzo (a) pyrene	40	U
193-39-5	Indeno (1,2,3-cd) pyrene	40	U
53-70-3	Dibenzo (a, h) anthracene	40	U
191-24-2	Benzo (g, h, i) perylene	40	U

NP  
3/5/08

(1) Cannot be separated from Diphenylamine

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB 012908

Lab Name: H2M LABS, INC.

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

Lab Code: 10478

Case No.: KEY-URS

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

SDG No.: KEY-URS017

Matrix: (soil/water) WATER

Lab Sample ID: 0801986-011B

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

Lab File ID: A\C39778.D

Level: (low/med) LOW

Date Received: 01/30/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 02/04/08

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 02/05/08

Injection Volume: 2 (µL)

Dilution Factor: 1.00

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

Extraction: (Type) SEPF

CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine



## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-3I

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS017Matrix: (soil/water) WATERLab Sample ID: 0801986-001BSample wt/vol: 1000 (g/mL) MLLab File ID: A\C39767.DLevel: (low/med) LOWDate Received: 01/30/08% Moisture: Decanted: (Y/N) NDate Extracted: 02/04/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 02/05/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

1C  
SEMIVOLATILE 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-URS017

Matrix: (soil/water) WATER

Lab Sample ID: 0801986-002B

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

Lab File ID: A\C39768.D

Level: (low/med) LOW

Date Received: 01/30/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 02/04/08

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

Date Analyzed: 02/05/08

Injection Volume: 2 ( $\mu$ L)

Dilution Factor: 1.00

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

Extraction: (Type) SEPF

CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-5I

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS017Matrix: (soil/water) WATERLab Sample ID: 0801986-003BSample wt/vol: 1000 (g/mL) MLLab File ID: A\C39769.DLevel: (low/med) LOWDate Received: 01/30/08% Moisture: Decanted: (Y/N) NDate Extracted: 02/04/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 02/05/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		( $\mu$ g/L or $\mu$ g/Kg)	UG/L Q
<del>91-20-3</del>	<del>Naphthalene</del>	<del>1900</del>	<del>E</del>
<del>91-57-6</del>	<del>2-Methylnaphthalene</del>	<del>710</del>	<del>E</del>
<del>208-96-8</del>	<del>Acenaphthylene</del>	<del>230</del>	<del>E</del>
83-32-9	Acenaphthene	18	
86-73-7	Fluorene	42	
85-01-8	Phenanthrene	24	
120-12-7	Anthracene	3	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

NA  
3/5/08

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-5IDL

Lab Name: H2M LABS, INC.

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

Lab Code: 10478

Case No.: KEY-URS

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

SDG No.: KEY-URS017

Matrix: (soil/water) WATER

Lab Sample ID: 0801986-003BDL

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

Lab File ID: A\C39807.D

Level: (low/med) LOW

Date Received: 01/30/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 02/04/08

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 02/06/08

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	3900	D
91-57-6	2-Methylnaphthalene	1000	D
208-96-8	Acenaphthylene	350	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

*NP*  
*3/5/08*

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-5S

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS017Matrix: (soil/water) WATERLab Sample ID: 0801986-004BSample wt/vol: 1000 (g/mL) MLLab File ID: A\C39770.DLevel: (low/med) LOWDate Received: 01/30/08% Moisture: Decanted: (Y/N) NDate Extracted: 02/04/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 02/05/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

## CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

1C  
SEMIVOLATILE 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-URS017

Matrix: (soil/water) WATER

Lab Sample ID: 0801986-005B

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

Lab File ID: A\C39771.D

Level: (low/med) LOW

Date Received: 01/30/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 02/04/08

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 02/05/08

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	150		E
91-57-6	2-Methylnaphthalene	42		
208-96-8	Acenaphthylene	14		
83-32-9	Acenaphthene	10		U
86-73-7	Fluorene	3		J
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

UP  
3/5/08

(1) Cannot be separated from Diphenylamine

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-8IDL

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

Lab Code: 10478 Case No.: KEY-URS SAS No.: \_\_\_\_\_ SDG No.: KEY-URS017

Matrix: (soil/water) WATER Lab Sample ID: 0801986-005BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: A\C39808.D

Level: (low/med) LOW Date Received: 01/30/08

% Moisture: Decanted: (Y/N) N Date Extracted: 02/04/08

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 02/06/08

Injection Volume: 2 (µL) Dilution Factor: 4.00

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	190		D
91-57-6	2-Methylnaphthalene	49		D
208-96-8	Acenaphthylene	18		DJ
<del>83-32-9</del>	<del>Acenaphthene</del>	<del>40</del>		<del>U</del>
<del>86-73-7</del>	<del>Fluorene</del>	<del>40</del>		<del>U</del>
85-01-8	Phenanthrene	40		U
120-12-7	Anthracene	40		U
206-44-0	Fluoranthene	40		U
129-00-0	Pyrene	40		U
56-55-3	Benzo (a)anthracene	40		U
218-01-9	Chrysene	40		U
205-99-2	Benzo (b)fluoranthene	40		U
207-08-9	Benzo (k) fluoranthene	40		U
50-32-8	Benzo (a)pyrene	40		U
<del>193-39-5</del>	<del>Indeno (1, 2, 3-cd) pyrene</del>	<del>40</del>		<del>U</del>
53-70-3	Dibenzo (a, h) anthracene	40		U
191-24-2	Benzo (g, h, i) perylene	40		U

NIP

(1) Cannot be separated from Diphenylamine

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-URS018

Matrix: (soil/water) WATER

Lab Sample ID: 0802015-002B

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

Lab File ID: 8\N24222.D

Level: (low/med) LOW

Date Received: 01/31/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 02/07/08

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

Date Analyzed: 02/07/08

Injection Volume: 2 ( $\mu$ L)

Dilution Factor: 1.00

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

Extraction: (Type) SEPF

CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine



1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12I

Lab Name: H2M LABS, INC.

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

Lab Code: 10478

Case No.: KEY-URS

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

SDG No.: KEY-URS017

Matrix: (soil/water) WATER

Lab Sample ID: 0801986-006B

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

Lab File ID: A\C39772.D

Level: (low/med) LOW

Date Received: 01/30/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 02/04/08

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 02/05/08

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	6		J
91-57-6	2-Methylnaphthalene	10		U
208-96-8	Acenaphthylene	54		
83-32-9	Acenaphthene	48		
86-73-7	Fluorene	34		
85-01-8	Phenanthrene	7		J
120-12-7	Anthracene	10		U
206-44-0	Fluoranthene	10		U
129-00-0	Pyrene	10		U
56-55-3	Benzo(a)anthracene	10		U
218-01-9	Chrysene	10		U
205-99-2	Benzo(b)fluoranthene	10		U
207-08-9	Benzo(k)fluoranthene	10		U
50-32-8	Benzo(a)pyrene	10		U
193-39-5	Indeno(1,2,3-cd)pyrene	10		U
53-70-3	Dibenzo(a,h)anthracene	10		U
191-24-2	Benzo(g,h,i)perylene	10		U

(1) Cannot be separated from Diphenylamine

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13D

Lab Name: H2M LABS, INC.

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

Lab Code: 10478

Case No.: KEY-URS

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

SDG No.: KEY-URS017

Matrix: (soil/water) WATER

Lab Sample ID: 0801986-007B

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

Lab File ID: A\C39773.D

Level: (low/med) LOW

Date Received: 01/30/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 02/04/08

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 02/05/08

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

(1) Cannot be separated from Diphenylamine

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13I

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS017Matrix: (soil/water) WATERLab Sample ID: 0801986-008BSample wt/vol: 1000 (g/mL) MLLab File ID: A\C39775.DLevel: (low/med) LOWDate Received: 01/30/08% Moisture: Decanted: (Y/N) NDate Extracted: 02/04/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 02/05/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) UG/L	Q
91-20-3	Naphthalene	2	J
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	66	
83-32-9	Acenaphthene	11	
86-73-7	Fluorene	18	
85-01-8	Phenanthrene	21	
120-12-7	Anthracene	2	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1C

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14I

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS017Matrix: (soil/water) WATERLab Sample ID: 0801986-009BSample wt/vol: 1000 (g/mL) MLLab File ID: A\C39776.DLevel: (low/med) LOWDate Received: 01/30/08% Moisture: Decanted: (Y/N) NDate Extracted: 02/04/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 02/05/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg)	UG/L	Q
91-20-3	Naphthalene	2		J
91-57-6	2-Methylnaphthalene	10		U
208-96-8	Acenaphthylene	33		
83-32-9	Acenaphthene	25		
86-73-7	Fluorene	10		
85-01-8	Phenanthrene	5		J
120-12-7	Anthracene	1		J
206-44-0	Fluoranthene	10		U
129-00-0	Pyrene	10		U
56-55-3	Benzo(a)anthracene	10		U
218-01-9	Chrysene	10		U
205-99-2	Benzo(b)fluoranthene	10		U
207-08-9	Benzo(k)fluoranthene	10		U
50-32-8	Benzo(a)pyrene	10		U
193-39-5	Indeno(1,2,3-cd)pyrene	10		U
53-70-3	Dibenzo(a,h)anthracene	10		U
191-24-2	Benzo(g,h,i)perylene	10		U

(1) Cannot be separated from Diphenylamine

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-130D

Lab Name: H2M LABS, INC.

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

Lab Code: 10478

Case No.: KEY-URS

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

SDG No.: KEY-URS017

Matrix: (soil/water) WATER

Lab Sample ID: 0801986-010B

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

Lab File ID: A\C39777.D

Level: (low/med) LOW

Date Received: 01/30/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 02/04/08

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

Date Analyzed: 02/05/08

Injection Volume: 2 ( $\mu$ L)

Dilution Factor: 1.00

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

Extraction: (Type) SEPF

CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-3S

Lab Name: H2M LABS, INC.

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

Lab Code: 10478Case No.: KEY-URS

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

SDG No.: KEY-URS018Matrix: (soil/water) WATERLab Sample ID: 0802015-001BSample wt/vol: 1000 (g/mL) MLLab File ID: 8\N24221.DLevel: (low/med) LOWDate Received: 01/31/08% Moisture: Decanted: (Y/N) NDate Extracted: 02/07/08Concentrated Extract Volume: 1000 ( $\mu$ L)Date Analyzed: 02/07/08Injection Volume: 2 ( $\mu$ L)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: \_\_\_\_\_Extraction: (Type) SEPF

## CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13S

Lab Name: H2M LABS, INC.

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

Lab Code: 10478

Case No.: KEY-URS

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

SDG No.: KEY-URS018

Matrix: (soil/water) WATER

Lab Sample ID: 0802015-003B

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

Lab File ID: 8\N24223.D

Level: (low/med) LOW

Date Received: 01/31/08

% Moisture: Decanted: (Y/N) N

Date Extracted: 02/07/08

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 02/07/08

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

**APPENDIX B**

**SUPPORT DOCUMENTATION**



# H2M LABS, INC.

**SDG NARRATIVE FOR SEMIVOLATILE ANALYSES  
SAMPLES RECEIVED: 1/25/08 & 1/30/08  
SDG #: KEY-URS017**

For Samples:

HIMW-3D	HIMW-15I	HIMW-12I
HIMW-8D	HIMW-3I	HIMW-13D
HIMW-12D	HIMW-5D	HIMW-13I
HIMW-12S	HIMW-5I	HIMW-14I
HIMW-14D	HIMW-5S	HIMW-
HIMW-15D	HIMW-8I	FB 012908

The above samples were analyzed for a specific list of semivolatile organic analytes by EPA method 8270C.

Sample HIMW-14D was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries and RPD's were met. Lab fortified blanks were analyzed and indicates good method efficiency.

Samples HIMW-15I, HIMW-5I and HIMW-8I were reanalyzed at a dilution due to concentration levels of targeted analytes above the calibration range. The surrogate standards were diluted out in the dilution of sample HIMW-5I. 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: February 19, 2008

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

KEY-URS017 S18

# H2M LABS, INC.

**SDG NARRATIVE FOR VOLATILE ORGANICS  
SAMPLES RECEIVED: 1/31/08  
SDG #: KEY-URS018**

For Samples:

HIMW-3S  
HIMW-8S  
HIMW-13S  
TB 013108

The above samples were analyzed for a select list of volatile organic analytes by method 8260.

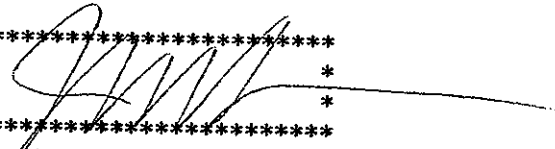
All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- No matrix spike/matrix spike duplicate was submitted. A lab-fortified blank was analyzed indicating 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: February 13, 2008.

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Joann M. Slavin  
Senior Vice President

KEY-URS018 S10

# H2M LABS, INC.

**SDG NARRATIVE FOR SEMIVOLATILE ANALYSES  
SAMPLES RECEIVED: 1/31/08  
SDG #: KEY-URS018**

For Samples:

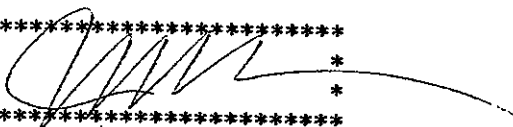
HIMW-3S  
HIMW-8S  
HIMW-13S

The above samples were analyzed for a specific list of semivolatile organic analytes by EPA method 8270C.

No matrix spike/matrix spike duplicate was submitted. A lab fortified blank was analyzed and indicates 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: February 13, 2008

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\* \*  
\*\*\*\*\*

Joann M. Slavin  
Senior Vice President

KEY-URS018 S11

# H2M LABS, INC.

SDG NARRATIVE FOR VOLATILE ORGANICS  
SAMPLES RECEIVED: 1/25/08 & 1/30/08  
SDG #: KEY-URS017

For Samples:

HIMW-3D	HIMW-5I
HIMW-8D	HIMW-5S
HIMW-12D	HIMW-8I
HIMW-12S	HIMW-12I
HIMW-14D	HIMW-13D
HIMW-15D	HIMW-13I
HIMW-15I	HIMW-14I
TB 012508	HIMW-130D
HIMW-3I	FB 012908
HIMW-5D	TB 013008

The above samples were analyzed for a select list of volatile organic analytes by method 8260.

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-14D was analyzed as the matrix spike/matrix spike duplicate sample. All percent recoveries and RPD's were met. A lab fortified blank was analyzed and indicates 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: February 13, 2008

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Joann M. Slavin  
Senior Vice President

KEY-URS017 S17

# H2M LABS, INC.

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

24614

## EXTERNAL CHAIN OF CUSTODY

CLIENT: H2M SDG NO: KEY-UN5017

Project Contact: Mike Averborgs  
 Phone Number: 973 785 0700  
 PIS/Quote #

NOTES:  
 Analysis is for BTEX + PAHs ONLY  
 This for chain for 2 coolers

Page 1 of 2

Sample Description: 40 ml Amber (HCL) 1L Amber

PROJECT NAME/NUMBER: Keyspan - Hempstead 1175065  
 SAMPLERS: (signature) Client: Cary Full / uas  
 DELIVERABLES: Full Cat B  
 TURNAROUND TIME: normal

DATE	TIME	MATRIX	FIELD I.D.	ANALYSIS REQUESTED			REMARKS:
				ORGANIC	INORG.	LAB I.D. NO.	
1/29/08	0945	GW	HIMW-5D	2	2	080986-002	1 IL Amber not broken included
1/29/08	1205		HIMW-13D	2	2	-017	
1/29/08	1300		HIMW-130D	2	2	-010	
1/29/08	1420		HIMW-14I	2	2	-019	
			TRB	2	2	-017	
			FB	2	2	-011	
1/29/08	0920			2	2	-008	
1/29/08	0800	GW	HIMW-5I	2	2	-001	
1/29/08	1120	GW	HIMW-3I	2	2	-008	
1/29/08	1315	GW	HIMW-13I	2	2	-004	
1/30/08	1080	GW	HIMW-5S	2	2		

Relinquished by: (Signature)		Date	Time	Received by: (Signature)	Date	Time
Cary Full		1/30/08	15:09	S.W. J	1/30/08	15:09
Cary Full		1/30/08	15:58	Talson Hunter	1/30/08	15:58
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:

LABORATORY USE ONLY

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 Taps were:  
 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 COPY A ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

# H2M LABS, INC.

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

24674

## EXTERNAL CHAIN OF CUSTODY

PROJECT NAME/NUMBER <b>Keyspan - Hempstead 1175065</b>		CLIENT: <b>URS</b>		H2M SDG NO: <b>SEN-0001</b>		Project Contact: <b>Mike Akerbergs</b>	
SAMPLERS: (signature) Client <b>Conrad / URS</b>		Sample Description <b>40 ml Amber (PC)</b>		Notes: <b>Analysis for BTEX + PAHs only</b>		Phone Number: <b>973 785-0700</b>	
DELIVERABLES: <b>Full Cat B</b>		Sample Container <b>↑</b>				PIS/Quote #	
TURNAROUND TIME: <b>Normal</b>		Total No. of Containers <b>4</b>		ANALYSIS REQUESTED			
		ORGANIC		INORG.			
DATE	TIME	MATRIX	FIELD I.D.	ORGANIC	INORG.	LAB I.D. NO.	REMARKS:
1/31/08	0825	GN	HIMW-85	2	3		
↓	1055	↓	HIMW-35	↓	↓		
↓	1305	↓	HIMW-135	↓	↓		
1/31/08			YB	2			
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time
<b>[Signature]</b>		1/31/08	7:40	<b>[Signature]</b>		1/31/08	2:40
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time
<b>[Signature]</b>		1/31/08	15:30	<b>[Signature]</b>		1/31/08	15:30
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time
<b>[Signature]</b>				<b>[Signature]</b>			
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time
<b>[Signature]</b>				<b>[Signature]</b>			

KWYTEJRS018 ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

**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 LABEL WERE:  
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

# H2M LABS, INC.

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

PROJECT NAME/NUMBER

Keyspan

Hempstead

11175065

SAMPLERS: (signature)/Client

00004

DELIVERABLES:

full Cat B

TURNAROUND TIME:

normal

DATE	TIME	MATRIX	FIELD I.D.	LAB I.D. NO.	REMARKS:
1/23/08	1050	GW	HIMW-15D	-006	
1/23/08	1340		HIMW-12D	-003	
1/24/08	925		HIMW-15I	-007	
1/29/08	0855		HIMW-14D	-005	
1/29/08	0855		HIMW-14D	-001	
1/29/08	1150		HIMW-3D	-008	
			TB		
1/29/08	1340		HIMW-8D	-001	
1/29/08	1525		HIMW-12S	-004	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
<i>[Signature]</i>	1/25/08	15:36	<i>[Signature]</i>	1-25-08	15:36
<i>[Signature]</i>	1-25-08	16:26	<i>[Signature]</i>	1/25/08	16:20
<i>[Signature]</i>			<i>[Signature]</i>		
<i>[Signature]</i>			<i>[Signature]</i>		

CLIENT: *[Signature]*

Sample Description: *[Signature]*  
 Total No. of Containers: 4  
 ANALYSIS REQUESTED: ORGANIC, METAL  
 NOTES: This chain for less 2 containers

PROJECT NAME/NUMBER: Keyspan  
 H2M SDG NO: Key00004  
 Project Contact: Mike Akersberg  
 Phone Number: 973-785-0700  
 PIS/Quote #

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 Trace 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