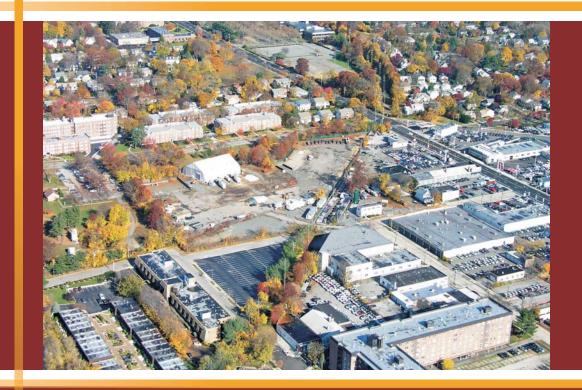
## national**grid**

Groundwater Sampling, NAPL
Monitoring/Recovery and Groundwater
Treatment Performance Report for the
Second Quarter of 2012 (April - June 2012)
for the Hempstead Intersection Street
Former Manufactured Gas Plant Site
Villages of Hempstead & Garden City
Nassau County, New York



**Prepared for:** 

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

**Prepared by:** 

URS Corporation - New York 77 Goodell Street Buffalo, New York 14203



**December 2012** 

GROUNDWATER SAMPLING AND GROUNDWATER TREATMENT PERFORMANCE REPORT FOR THE SECOND QUARTER OF 2012 (APRIL - JUNE)

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

Prepared for:

National Grid 175 East Old Country Rd. Hicksville, NY 11801

Prepared by:

URS Corporation 77 Goodell Street Buffalo, New York 14203

December 2012

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## 2<sup>nd</sup> QUARTER GROUNDWATER SAMPLING AND GROUNDWATER TREATMENT PERFORMANCE REPORT

## HEMPSTEAD INTERSECTION STREET FORMER MGP SITE

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#### **ACRONYMS AND ABBREVIATIONS**

amsl above mean sea level

BTEX benzene, toluene, ethylbenzene, xylenes

DNAPL dense non-aqueous phase liquid

DO dissolved oxygen

DUSR data usability summary report

ft foot (feet)

HIMW Hempstead Intersection (Street) monitoring well

IPR Intersection (Street) product recovery

ISS In Situ Solidification

LNAPL light non-aqueous phase liquid

MGP manufactured gas plant

MP monitoring points

NAPL non-aqueous phase liquid

ND not detected

NI not included

NM not measured

NYSDEC New York State Department of Environmental Conservation

ORP oxidation-reduction potential

PAHs polycyclic aromatic hydrocarbons

PZ piezometer QC quality control

RI remedial investigation

Sh sheen

TOR top of riser

URS URS Corporation

USEPA United States Environmental Protection Agency

μg/L micrograms per liter

#### **EXECUTIVE SUMMARY**

This report provides a summary of field activities, analytical results, and data interpretations associated with groundwater sampling and groundwater treatment system performance for the Hempstead Intersection Street Former Manufactured Gas Plant (MGP) site in the second quarter 2012 (April through June).

Groundwater monitoring and sampling was conducted on June 13 through June 25, 2012. This included measuring the depth to groundwater and NAPL thickness in 57 wells. Groundwater samples were collected from 25 wells and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs).

Dissolved oxygen measurements were taken by Fenley & Nicol during the second quarter of 2012 for System No. 1 on April 6, April 19, May 7, May 18, June 1, and June 18, a total of six (6) events and were taken for System No. 2 on April 5, April 17, May 4, May 17, May 3, June 15, and June 27, for a total of seven (7) events.

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

- The general direction of groundwater flow in shallow, intermediate, and deep waterbearing zones was south at an average gradient that ranged from approximately 0.002-0.003 feet per feet (ft/ft).
- The 100  $\mu$ g/L dissolved-phase plume extended up to approximately 1,500 ft south of the site boundary.
- Dense non-aqueous phase liquid (DNAPL) was detected in 14 existing wells during the second quarter of 2012. The wells were located within a parking lot immediately south of the site.
- Based on a comparison between the second quarter 2012 data and the previous data, the concentrations of total BTEX and total PAHs remained stable or decreased in most site monitoring wells. A couple of site monitoring wells did show an increase in concentrations of total BTEX and PAHs; Section 3.1 provides further detail on the results of second quarter 2012 groundwater analytical results.

#### **URS CORPORATION**

- The first of two oxygenation systems (System No. 2) was brought on line in October 2010 and has successfully promoted increased aerobic conditions in the aquifer near the system during the second quarter of 2012.
- The second of two oxygenation systems (System No. 1) was brought on line in April 2011 and has successfully promoted increased aerobic conditions in the aquifer near the system during the second quarter of 2012.
- Bimonthly headspace and water quality parameters were collected from the
  monitoring points for Systems No. 1 and No. 2 by Fenley & Nicol. During the second
  quarter, Fenley & Nicol monitored System No. 1 during six events and System No. 2
  during seven events.

#### 1.0 INTRODUCTION

This report summarizes potentiometric head measurements, NAPL thickness measurements, and groundwater quality sampling performed during the second quarter of 2012 at the Hempstead Intersection Street Former MGP Site (refer to Figures 1 and 2).

Quarterly groundwater monitoring and bimonthly recovery of NAPL was initiated in April 2007; bimonthly recovery of NAPL was discontinued in July 2011. A separate report has been issued for first quarter activities performed in 2012 (URS 2012a). While separate reports are typically provided for the first three quarters of the year, the fourth quarter data get reported as part of the Annual Report.

#### 2.0 FIELD ACTIVITIES

The field activities performed by URS during the second quarter of 2012 are summarized below.

- Measurement of the depth to groundwater and NAPL thickness in 57 monitoring wells.
- Collection of groundwater samples from monitoring wells.

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

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

#### 2.1 Groundwater Depth and NAPL Thickness Measurements

Depths to groundwater and NAPL thickness measurements for second quarter 2012 are listed in Table 2. An electronic oil/water interface probe was used to measure the depth to groundwater and check for the presence of LNAPL. DNAPL thickness was measured using a weighted cotton string that absorbs oil.

#### 2.2 NAPL Recovery

NAPL recovery ended in the third quarter of 2011 after the July 26, 2011 event because of the start of the In Situ Solidification (ISS) remediation project. Approximately 745 gallons of NAPL were recovered between 2007 and 2011.

### 2.3 Groundwater Sampling

Low-flow groundwater sampling methods were used, which included purging groundwater at a rate of between 100 and 500 milliliters per minute. The water was pumped through a flow-through cell and monitored for pH, conductivity, turbidity, dissolved oxygen (DO), temperature, and oxidation-reduction potential (ORP). Purging was continued until stable conditions were achieved (defined as three consecutive stable readings [i.e.  $\pm$  10 percent] over a

15 minute period). Groundwater samples were collected afterwards and shipped using chain-of-custody procedures to H2M laboratories, Inc. for analysis of BTEX (United States Environmental Protection Agency [USEPA] Method 8260B) and PAHs (USEPA Method 8270C). Purge water is stored in an onsite storage tank for subsequent offsite disposal under a non-hazardous waste manifest. Quality Assurance/Quality Control samples were collected at the frequency of one duplicate per 20 samples, one field blank per sampling event, and one trip blank per courier pick up of samples.

There were 25 monitoring wells sampled during the June 13 through June 25 groundwater sampling event.

#### 2.4 Groundwater Treatment System Operation

National Grid operates two oxygenation systems to treat groundwater in the downgradient plume. System No. 1 is located along Smith Street, a portion of the Long Island Railroad Right of Way, and a portion of Hilton Avenue and began operation in April 2011. System No. 2 extends from Mirschel Park in the east to Kensington Court in the west and began operation in October 2010. Figure 3 shows the locations of the two systems.

The performance of System No. 1 and System No. 2 was monitored through the measurement of water levels, headspace gas, and water quality parameters in the groundwater approximately twice per month by Fenley & Nicol, see Table 4. Fenley & Nicol performed water level measurement, well headspace monitoring with a photoionization detector (PID) and an oxygen meter, and dissolved oxygen measurements with a dissolved oxygen meter.

The full system data is included in Appendix B and shows the systems are effective in increasing the dissolved oxygen levels to augment biodegradation of dissolved phase MGP compounds in groundwater.

#### 3.0 RESULTS

#### 3.1 Dissolved-Phase Plume

The extent of the dissolved-phase groundwater plume boundary is shown in Figure 4. The downgradient boundary of the plume, which is defined by total BTEX or PAH concentrations greater than  $100~\mu g/L$ , extends approximately 1,500 feet south of the site boundary. Based on comparison with previous quarterly groundwater monitoring data, the concentrations of total BTEX and PAHs in groundwater have generally remained stable or decreased somewhat. Only three wells had minor increases in concentrations whereas nine of the wells had decreasing concentrations.

In June 2012, concentrations of total BTEX and PAHs in the furthest downgradient well pair (HIMW-15I/D) ranged from "not-detected" (deep well HIMW-15D) to 31  $\mu$ g/L of total PAHs in HIMW-15I (intermediate well); representing a drop in concentration compared to first quarter 2012. Total BTEX in HIMW-15I remained relatively stable; decreasing from 21  $\mu$ g/L in first quarter 2012 to 17  $\mu$ g/L in second quarter 2012.

Several monitoring wells (HIMW-5D, HIMW-13I, HIMW-20I, HIMW-23, HIMW-24, and HIMW-25) showed significant decreases in concentrations of total BTEX and PAHs compared to first quarter 2012. HIMW-5D had concentrations of total BTEX change from 91µg/L in first quarter to 41 µg/L in second quarter and total PAHs change from 2,698 µg/L in first quarter to 813 µg/L in second quarter. HIMW-13I had concentrations of total BTEX change from 27 µg/L in first quarter to 4µg/L in second quarter and total PAHs change from 63 µg/L in first quarter to 13 µg/L in second quarter. HIMW-20I had concentrations of total BTEX change from 710 µg/L in first quarter to 474 µg/L in second quarter and total PAHs change from 3,968 μg/L in first quarter to 2,446 μg/L in second quarter. HIMW-23 had concentrations of total BTEX change from 30 µg/L in first quarter to 3 µg/L in second quarter and total PAHs change from 43 µg/L in first quarter to 7 µg/L in second quarter. HIMW-24 had concentrations of total BTEX change from 827 µg/L in first quarter to 125 µg/L in second quarter and total PAHs change from 808 µg/L in first quarter to 134 µg/L in second quarter. HIMW-25 had concentrations of total BTEX change from 12 µg/L in first quarter to 2 µg/L in second quarter while total PAHs remained mostly stable ranging from "not-detected" in first quarter to 1 µg/L in second quarter.

Three monitoring wells (HIMW-08S, HIMW-14I and HIMW-22) show minor increases in concentrations of total BTEX and PAHs compared to first quarter 2012. For well HIMW-08S, the total BTEX increased from 3 to 6 µg/L and total PAHs increased from 15 to 25 µg/L from the first to the second quarter 2012. HIMW-14 increased from 33 µg/L to 67 µg/L of total BTEX between first and second quarter 2012. Total PAHs in HIMW-14I dropped slightly from 78 µg/L to 58 µg/L between first and second quarter 2012. HIMW-22 increased from 45 µg/L to 83 µg/L of total BTEX between first and second quarter 2012. Total PAHs in HIMW-22 increased from 17 µg/L in first quarter to 91 µg/L in second quarter 2012. Concentrations for all site monitoring wells sampled this quarter are listed in Table 3. Some other wells (e.g. HIMW-13D) had increases of 1 µg/L which is not a noteworthy change in concentration range.

### 3.2 Potentiometric Heads and NAPL Thickness

Potentiometric heads and NAPL thickness measurements for second quarter 2012 are presented in Table 2. Potentiometric surface maps for shallow, intermediate and deep groundwater zones were developed using this data and are shown in Figures 5, 6, and 7, respectively. The data indicates that the direction of groundwater flow within the well field was south at an average gradient that ranged from approximately 0.002-0.003 ft/ft.

DNAPL was detected in 14 of the existing wells during the second quarter 2012 All of the wells where DNAPL was identified are within a parking lot that is immediately south of the site.

#### 3.3 Groundwater Analytical Results

Groundwater analytical results are summarized in Table 3 and illustrated on Figures 4 and 8.

A Data Usability Summary Report (DUSR) was prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B – Guidance for the Development of Data Usability Summary Reports, May 2010. An electronic copy of the DUSR is included as Appendix A. The review included a review of holding times; completeness of all required deliverables; quality control (QC) results

(blanks, instrument tunes, calibration standards, matrix spike recoveries, duplicate analyses, and laboratory control sample recoveries) to determine if the data are within the protocol-required QC limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers. All sample analyses were found to be compliant with the method and validation criteria and the data is useable as reported.

#### 3.4 NAPL Recovery Volumes

NAPL recovery activities were discontinued in July 2011 because of the start of In Situ Solidification (ISS) remediation. Approximately 745 gallons of NAPL was recovered between April 2007 and July 2011.

#### 3.5 Groundwater Treatment System Performance

#### System No. 1

The groundwater treatment System No. 1 started operation on April 27, 2011. Fenley & Nicol conduct bimonthly monitoring including measurement of water depth, dissolved oxygen concentration, and headspace vapors by photoionization detector monitoring and percent oxygen with an oxygen meter. A summary of the data collected from the monitoring points in the first quarter 2012 is presented on Table 4.

Dissolved phase oxygen concentrations in the monitoring point (MP) wells continued a trend started at the end of the first quarter of lower, but still aerobic oxygen concentrations. Delivery wells installed adjacent to the oxygen delivery line (MP-1-1S through MP-1-4D) were all between about 1.5 mg/L and 4.7 mg/L measured at the bottom of the screens, with an average of about 2.7 mg/L. Dissolved oxygen concentrations towards the top of the screens were higher (averaging about 6.8 mg/L), but decreased during this quarter. These oxygen concentrations, though lower than before, indicate the presence of sufficient oxygen to support aerobic conditions.

Oxygen concentrations in the MP wells located downgradient of the plume (MP-1-5 through MP-1-8) showed dissolved phase oxygen concentrations ranging between 1.4 mg/L to 3.0 mg/L. Dissolved oxygen concentrations were generally lower in the downgradient wells, as is

expected with the biological process proceeding while groundwater flows downgradient, yet still remained uniformly aerobic.

Headspace oxygen concentrations remained high in all the shallow MPs installed along the delivery line. These elevated readings represent short circuiting of oxygen from the delivery wells to the MPs. Because the MPs are capped, this short circuiting does not act as a pathway for oxygen to escape the wells rather than become dissolved.

#### System No. 2

The groundwater treatment System No. 2 started operation on October 11, 2010. Fenley & Nicol conduct bimonthly monitoring including measurement of water depth, dissolved oxygen concentration, and headspace vapors by photoionization detector monitoring and percent oxygen with an oxygen meter. A summary of the data collected from the monitoring points in the first quarter 2012 is presented on Table 4.

Dissolved phase oxygen concentrations in the monitoring point (MP) wells continued a trend started at the end of the first quarter of low, but still aerobic oxygen concentrations. Oxygen concentrations were all between about 1.4 mg/L and 3.5 mg/L measured at the bottom of the screens, with an average of about 2.5 mg/L. Dissolved oxygen concentrations towards the top of the screens were higher (averaging about 7.3 mg/L), but decreased during this quarter. These oxygen concentrations, though lower than before, demonstrate the presence of sufficient oxygen to support aerobic conditions.

Headspace oxygen concentrations were much lower this quarter than earlier quarters (typically 20% - 25%), with only sporadic increases in MP-2-2D and MP-2-5, wells previously exhibiting high headspace oxygen. However, oxygen greater than the detector's upper limit of 40% were not detected in any wells.

#### 4.0 SUMMARY

Following is a summary of the second quarter 2012 groundwater sampling and NAPL monitoring/recovery data presented in this report:

- The general direction of groundwater flow in shallow, intermediate, and deep water-bearing zones was south at an average gradient of 0.002-0.003 ft/ft.
- The dissolved-phase plume extended up to approximately 1,500 feet south of the site boundary.
- Dense non-aqueous phase liquid (DNAPL) was detected in 14 existing wells during the second quarter of 2012. The wells were located within a parking lot immediately south of the site.
- Based on a comparison between the second quarter 2012 data and the previous data, the concentrations of total BTEX and total PAHs remained stable or decreased in most site monitoring wells. A couple of site monitoring wells did show an increase in concentrations of total BTEX and PAHs.
- The first of two oxygenation systems (System No. 2), brought on line in October 2010, has successfully promoted increased aerobic conditions in the aquifer near the system.
- The second of two oxygenation systems (System No. 1), brought on line in April 2011, has successfully promoted increased aerobic conditions in the aquifer near the system.
- Bimonthly headspace and water quality parameters were collected from the monitoring points for Systems No. 1 and No. 2 by Fenley & Nicol. During the second quarter, Fenley & Nicol monitored System No. 1 during six events and System No. 2 during seven events.

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- URS, 2008c. Groundwater Sampling and NAPL Monitoring/Recovery Report for the Second Quarter of 2008 (April June 2008) for the Hempstead Intersection Street Former Manufactured Gas Plant Site. October.
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- URS, 2010b. Groundwater Sampling and NAPL Monitoring/Recovery Report for the First Quarter of 2010 (January March 2010) for the Hempstead Intersection Street Former Manufactured Gas Plant Site. April.
- URS, 2010c. Groundwater Sampling and NAPL Monitoring/Recovery Report for the Second Quarter of 2010 (April June 2010) for the Hempstead Intersection Street Former Manufactured Gas Plant Site. September.

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- URS, 2011c. Groundwater Sampling and NAPL Monitoring/Recovery Report for the Third Quarter of 2011 (July- September 2011) for the Hempstead Intersection Street Former Manufactured Gas Plant Site. December.
- URS, 2012a. 2011 Annual Groundwater Sampling and NAPL Monitoring/Recovery Report for the Hempstead Intersection Street Former Manufactured Gas Plant Site. February.
- URS, 2012b. Groundwater Sampling and NAPL Monitoring/Recovery Report for the First Quarter of 2012 (January March 2012) for the Hempstead Intersection Street Former Manufactured Gas Plant Site. July.

## **TABLES**

Table 1
Summary of Field Activities for the Second Quarter 2012 (1), (2)
Hempstead Intersection Street Former MGP Site

Well ID	Quarterly Monitoring & Sampling Event (June 13-June 25, 2012)							
	Water NAPL Water							
	Level	Thickness	Quality					
HIMW-002S	X	X	Quarity					
HIMW-002S	X	X						
HIMW-002D	X	X						
	X	X	X					
HIMW-003S HIMW-003I	X	X	X					
HIMW-003D	X	X	X					
HIMW-003D	X	X	Λ					
HIMW-004S	X	X						
HIMW-0041	X	X						
	X	X	v					
HIMW-005S HIMW-005I	X	X	X X					
HIMW-0051 HIMW-005D	X	X	X					
	X	X	X					
HIMW-008S	X	X	X					
HIMW-008I 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**								
HIMW-011S								
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						
HIMW-016I	X	X						
HIMW-017S	X	X						
HIMW-20S	X	X	X					
HIMW-20I	X	X	X					
HIMW-21	X	X						
HIMW-22	X	X	X					
HIMW-23	X	X	X					
HIMW-24	X	X	X					
HIMW-25	X	X	X					

Table 1
Summary of Field Activities for the Second Quarter 2012 (1), (2)
Hempstead Intersection Street Former MGP Site

Well ID	Quarterly Monitoring & Sampling Event (June 13-June 25, 2012)						
	Water Level	NAPL Thickness	Water Quality				
D7.02	LCVCI	THICKICSS	Quanty				
PZ-02							
PZ-03							
IPR-14	X	X					
IPR-15	X	X					
IPR-16	X	X					
IPR-17	X	X					
IPR-18	X	X					
IPR-19S*							
IPR-19D	X	X					
IPR-20	X	X					
IPR-21	X	X					
IPR-22	X	X					
IPR-23	X	X					
IPR-24	X	X					
IPR-29	X	X					
IPR-30	X	X					
OSMW-01	X	X					
OSMW-02							
OSMW-03							

#### Notes:

- Field marked with "X" indicates that the activity was performed.
- 2 Blank field indicates that the activity was not performed.
- \* IPR-19S is covered with cold patch and is inaccessible.
- \*\* HIMW-10D was destroyed by sidewalk/driveway construction.

Table 2
Groundwater and NAPL Measurements
Second Quarter 2012
Hempstead Intersection Street Former MGP Site

Well ID	Date	Elevation of TOR	Depth to LNAPL	Depth to Water	Depth to DNAPL	Well Depth	Thickness of LNAPL	Thickness of DNAPL	Corrected Potentiometric Head <sup>(1)</sup>
		[ft amsl]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft amsl]
HIMW-02S	6/13/2012	73.82	ND	24.73	ND	41.6	0	0.00	49.09
HIMW-02I	6/13/2012	78.87	ND	24.87	ND	91.5	0	0.00	54.00
HIMW-02D	6/13/2012	74.13	ND	25.06	ND	117.3	0	0.00	49.07
HIMW-03S	6/13/2012	65.00	ND	17.28	ND	34.7	0	0.00	47.72
HIMW-03I	6/13/2012	64.94	ND	16.52	ND	86.9	0	0.00	48.42
HIMW-03D	6/13/2012	65.26	ND	16.18	ND	145.3	0	0.00	49.08
HIMW-04S	6/13/2012	72.74	ND	24.73	ND	41.6	0	0.00	48.01
HIMW-04I	6/13/2012	72.78	ND	24.85	ND	90.5	0	0.00	47.93
HIMW-04D	6/13/2012	72.65	ND	25.48	ND	180.5	0	0.00	47.17
HIMW-05S	6/14/2012	67.19	ND	18.98	ND	39.1	0	0.00	48.21
HIMW-05I	6/14/2012	67.22	ND	19.25	ND	92.3	0	0.00	47.97
HIMW-05D	6/14/2012	67.22	ND	19.78	ND	139.0	0	0.00	47.44
HIMW-08S	6/13/2012	65.04	ND	17.31	ND	37.1	0	0.00	47.73
HIMW-08I	6/13/2012	65.14	ND	17.42	ND	75.1	0	0.00	47.72
HIMW-08D	6/13/2012	64.93	ND	17.25	ND	114.8	0	0.00	47.68
HIMW-09S	6/13/2012	70.03	ND	21.66	ND	39.6	0	0.00	48.37
HIMW-09I	6/13/2012	69.93	ND	21.64	ND	80.5	0	0.00	48.29
HIMW-09D	6/13/2012	69.96	ND	21.77	ND	122.8	0	0.00	48.19
HIMW-10S	6/13/2012	71.60	ND	22.30	ND	39.1	0	0.00	49.30
HIMW-10I	6/13/2012	71.47	ND	22.07	ND	91.4	0	0.00	49.40
HIMW-10D	NM	71.44	ND	NM	ND	136.0	0	0.00	NM
HIMW-11S	NM	71.62	ND	NM	ND	41.6	0	0.00	NM
HIMW-11I	6/13/2012	71.43	ND	25.55	ND	94.5	0	0.00	45.88
HIMW-11D	6/13/2012	71.39	ND	22.56	ND	123.6	0	0.00	48.83
HIMW-12S	6/13/2012	61.58	ND	15.04	ND	33.5	0	0.00	46.54
HIMW-12I	6/13/2012	61.59	ND	14.90	ND	75.0	0	0.00	46.69
HIMW-12D	6/13/2012	61.82	ND	17.13	ND	128.5	0	0.00	44.69
HIMW-13S	6/13/2012	72.83	ND	28.48	ND	48.9	0	0.00	44.35
HIMW-13I	6/13/2012	72.60	ND	28.27	ND	82.6	0	0.00	44.33
HIMW-13D	6/13/2012	72.53	ND	28.25	ND	122.5	0	0.00	44.28
HIMW-14I	6/13/2012	71.71	ND	27.42	ND	96.9	0	0.00	44.29
HIMW-14D	6/13/2012	71.59	ND	29.94	ND	152.6	0	0.00	41.65
HIMW-15I	6/13/2012	64.18	ND	23.00	ND	93.1	0	0.00	41.18
HIMW-15D	6/13/2012	63.96	ND	25.01	ND	155.0	0	0.00	38.95
HIMW-16S	6/13/2012	67.45	ND	19.21	29.01	34.4	0	5.40	48.24
HIMW-16I	6/13/2012	67.50	ND	19.27	76.26	82.7	0	6.40	48.23
HIMW-17S	6/13/2012	65.96	ND	17.99	33.50	36.7	0	3.20	47.97
HIMW-20S	6/13/2012	70.43	ND	23.28	ND	35.0	0	0.00	47.15
HIMW-20I	6/13/2012	70.30	ND	23.13	ND	73.0	0	0.00	47.17

### Table 2 Groundwater and NAPL Measurements Second Quarter 2012

#### **Hempstead Intersection Street Former MGP Site**

Well ID	Date	Elevation of TOR	Depth to LNAPL	Depth to Water	Depth to DNAPL	Well Depth	Thickness of LNAPL	Thickness of DNAPL	Corrected Potentiometric Head <sup>(1)</sup>
		[ft amsl]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft amsl]
HIMW-21	6/13/2012	NM	ND	17.55	42.3	45.3	0	3.00	NM
HIMW-22	6/13/2012	NM	ND	28.35	ND	65.0	0	0.00	
HIMW-23	6/13/2012	NM	ND	28.48	ND	77.0	0	0.00	
HIMW-24	6/13/2012	NM	ND	12.75	ND	56.0	0	0.00	
HIMW-25	6/13/2012	NM	ND	15.16	ND	53.0	0	0.00	
PZ-02	6/14/2012	72.96	NM	NM	NM	35.3	NM	NM	NM
PZ-03	6/14/2012	64.58	NM	NM	NM	29.5	NM	NM	NM
IPR-14	6/14/2012	66.93	ND	18.44	ND	44.4	0	0.00	48.49
IPR-15	6/14/2012	67.93	ND	19.42	ND	44.4	0	0.00	48.51
IPR-16	6/14/2012	69.49	ND	20.93	48.85	49.1	0	0.20	48.56
IPR-17	6/14/2012	70.60	ND	21.95	54.10	54.1	0	0.01	48.65
IPR-18	6/14/2012	66.87	ND	18.53	ND	50.0	0	0.00	48.34
IPR-19S	NM	67.68	NM	NM	NM	45.1	NM	NM	NM
IPR-19D	6/14/2012	67.96	ND	19.56	89.91	89.9	0	0.01	48.40
IPR-20	6/13/2012	66.70	ND	18.54	44.40	45.4	0	1.00	48.16
IPR-21	6/14/2012	67.67	ND	19.37	44.61	45.0	0	0.35	48.30
IPR-22	6/13/2012	66.33	ND	18.27	40.15	45.4	0	5.25	48.06
IPR-23	6/14/2012	66.67	ND	18.53	ND	45.4	0	0.00	48.14
IPR-24	6/13/2012	65.88	ND	17.88	42.0	44.4	0	2.40	48.00
IPR-29	6/13/2012	NM	ND	17.85	45.2	49.7	0	4.50	NM
IPR-30	6/14/2012	NM	ND	18.84	NM	NM	0	1.00	NM
OSMW-01	6/13/2012	71.12	NM	22.08	NM	42.2	0	0.00	49.04
OSMW-02	NM	71.59	NM	NM	NM	45.2	0	NM	NM
OSMW-03	NM	71.39	NM	NM	NM	44.7	0	NM	NM

#### Notes:

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

sheen Sheen = assumed thickness of 0.01 ft

NM not measured

LNAPL light non-aqueous phase liquid DNAPL dense non-aqueous phase liquid

TOR top of riser

amsl above mean sea level
ND NAPL not detected

#### Table 3

## Dissolved-Phase Concentrations of Total BTEX and Total PAH Compounds for the Second Quarter of 2012

## **Hempstead Intersection Street Former MGP Site**

WIII	Second Quarter 2012 June 13 - June 25, 2012					
Well ID	BTEX	РАН				
	[ug/L]	[ug/L]				
HIMW-002D						
HIMW-002I						
HIMW-002S						
HIMW-003D	ND	ND				
HIMW-003I	ND	ND				
HIMW-003S	ND	ND				
HIMW-004D						
HIMW-004I						
HIMW-004S						
HIMW-005D	41	813				
HIMW-005I	150	2,471				
HIMW-005S	ND	2,471 ND				
HIMW-003S	ND ND	ND ND				
HIMW-008I	ND	1				
HIMW-008S	6	25				
HIMW-008S HIMW-009D	0	25				
HIMW-009I						
HIMW-009S						
HIMW-010D						
HIMW-010I						
HIMW-010S						
HIMW-011D						
HIMW-011I						
HIMW-011S						
HIMW-012D	ND	ND				
HIMW-012I	68	135				
HIMW-012S	ND	ND				
HIMW-013D	7	29				
HIMW-013I	4 (DUP- 5)	13 (DUP- 12)				
HIMW-013S	ND	ND				
HIMW-014D	ND	ND				
HIMW-014I	67	58				
HIMW-015D	ND	ND				
HIMW-015I	17	31				
HIMW-016I						
HIMW-016S						
HIMW-017S						
HIMW-020I	474	2,446				
HIMW-020S	ND (DUP- ND)	ND (DUP- ND)				
HIMW-021	I					
HIMW-022	83	91				
HIMW-023	3	7				
HIMW-024	125	134				
HIMW-025	2	1				
PZ-02						
PZ-03						

Notes:

A blank field is "Not Sampled".

NAPL is periodically identified in this well.

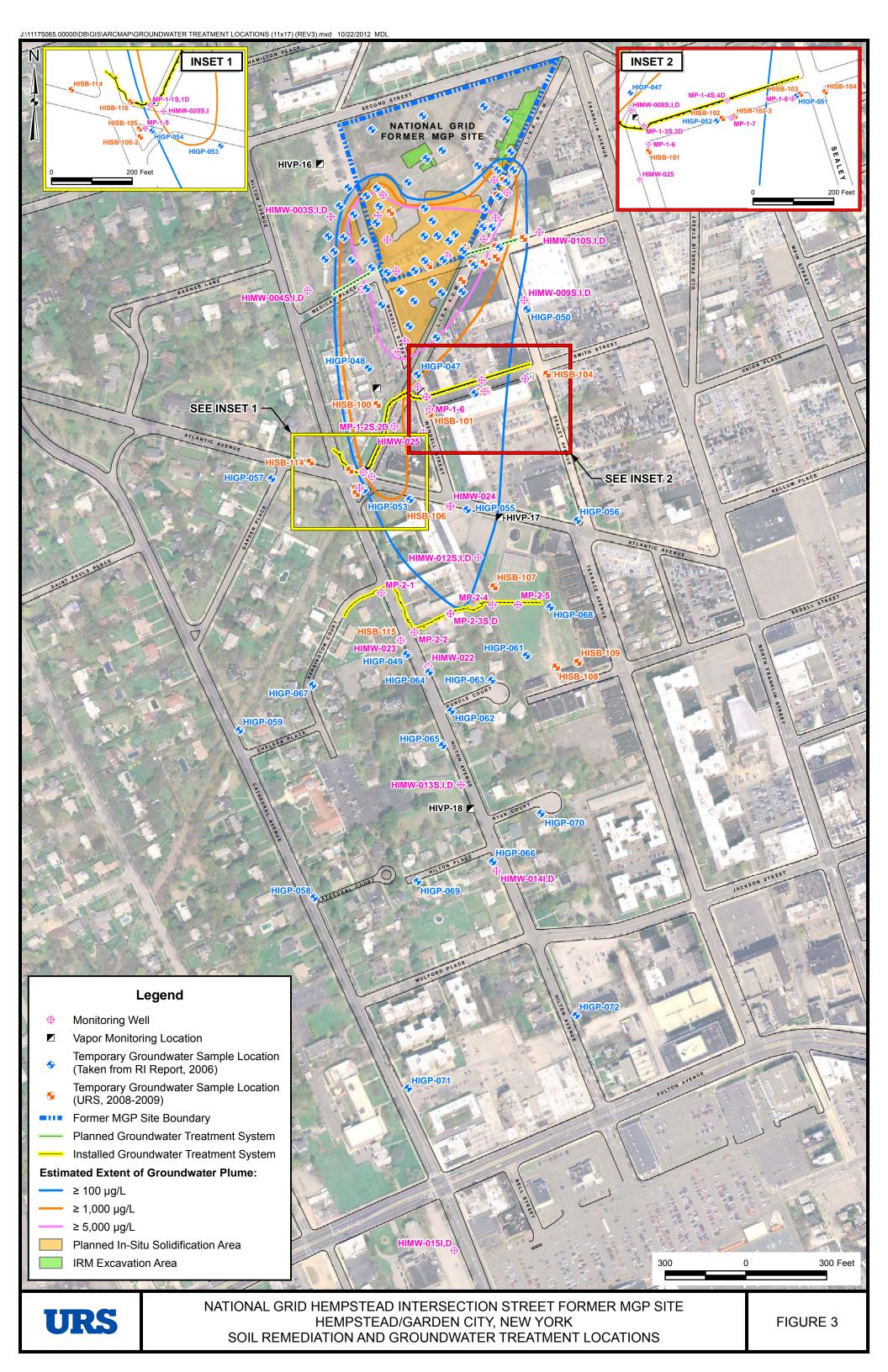
ND Not Detected.

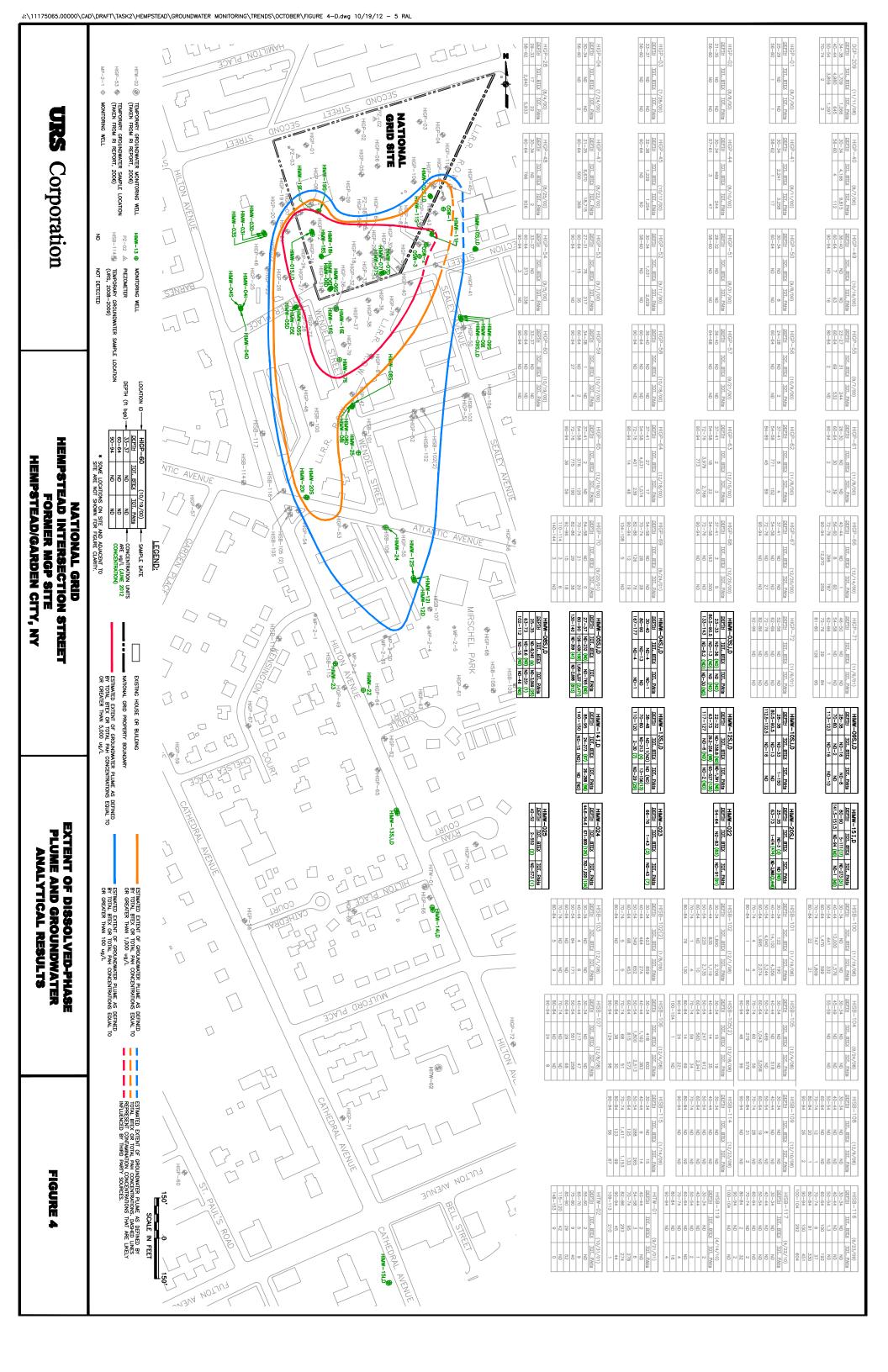
ug/L micrograms per liter

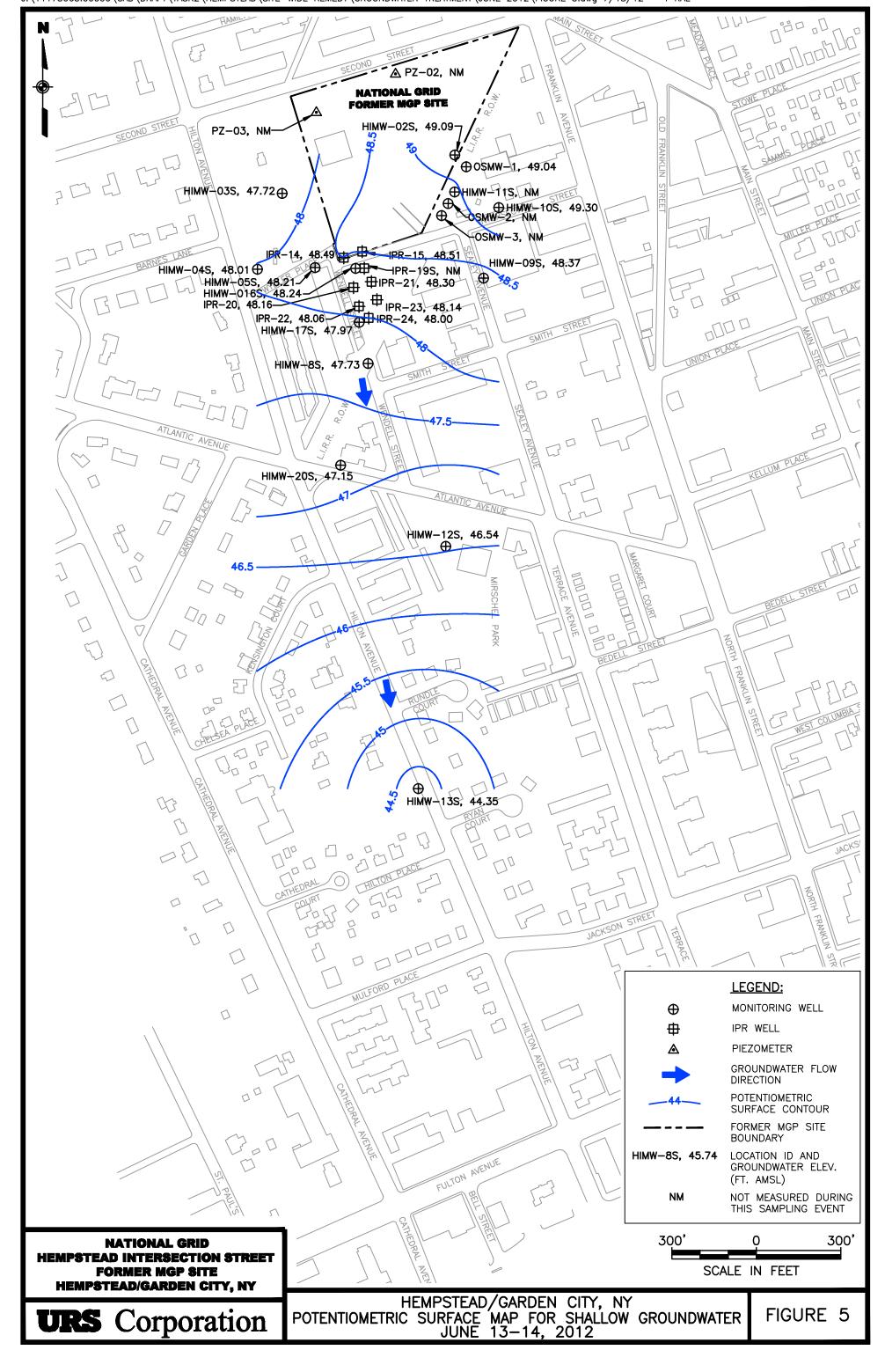
## **FIGURES**

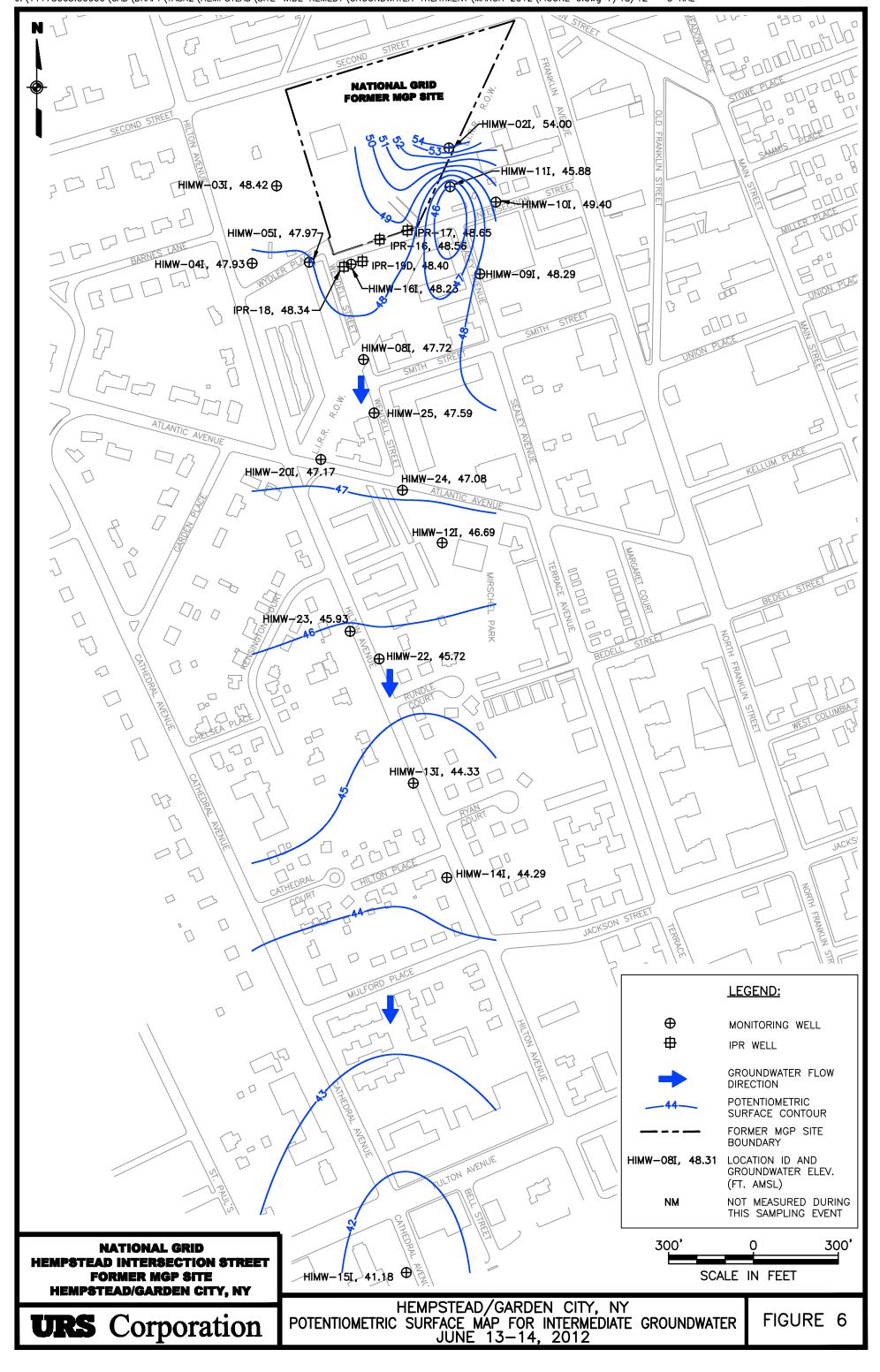
Æ J:\11175065.00000\CAD\DRAFT\TASK2\HEMPSTEAD\GROUNDWATER MONITORING\FIGURE-1.dwg 3/13/09

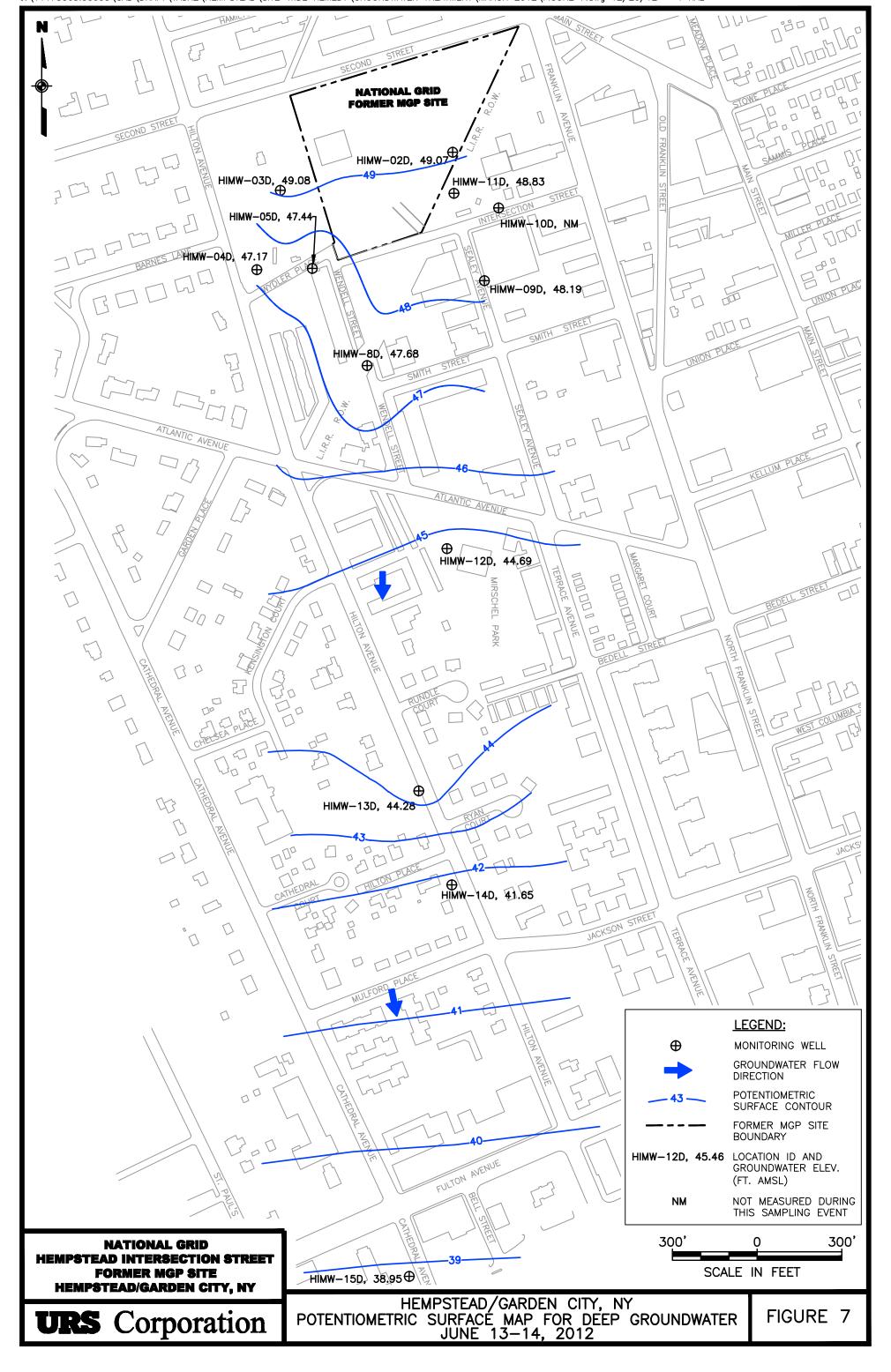


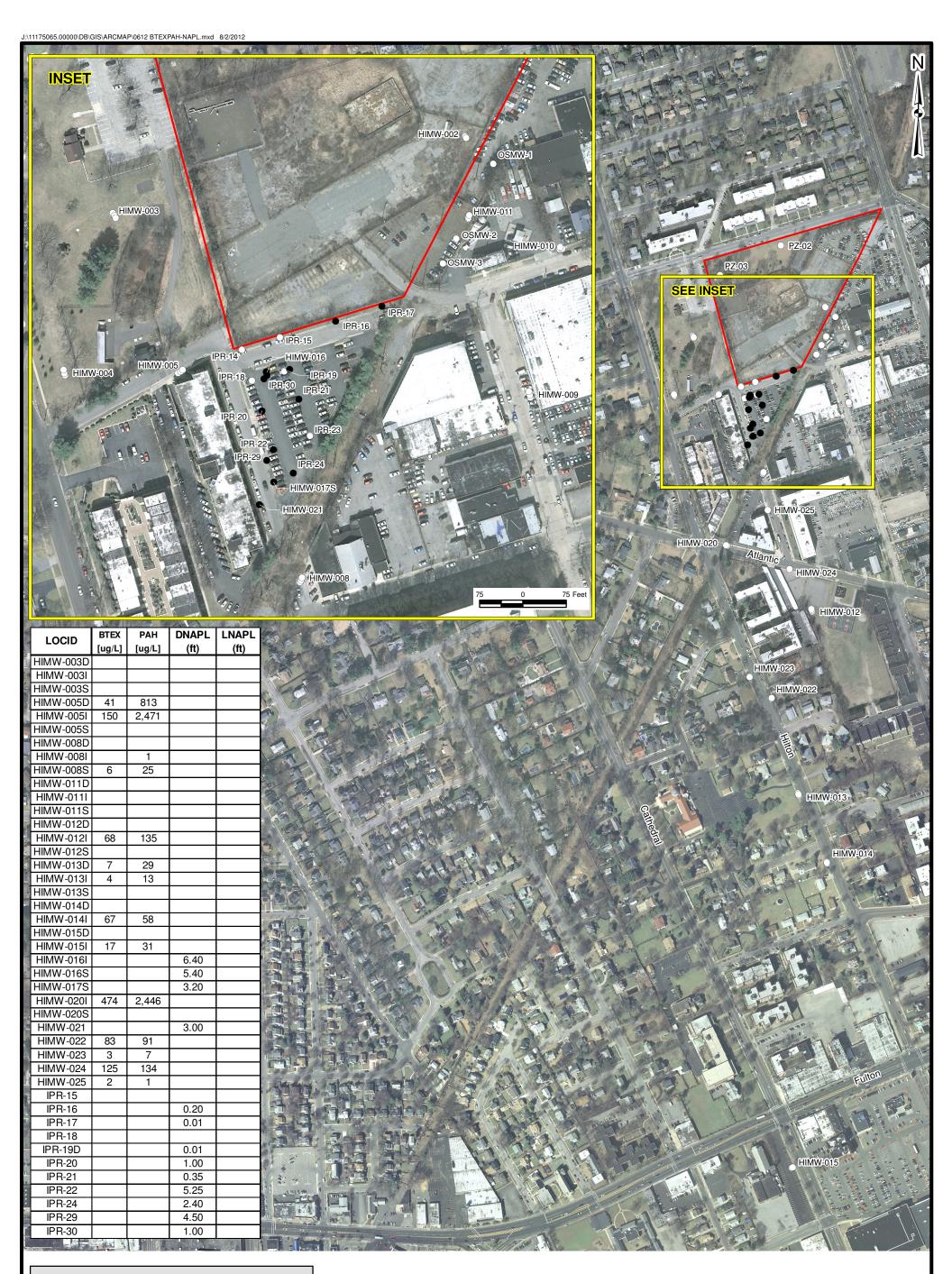












## Legend

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

## Notes:

BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes PAH - Polynuclear Aromatic Hydrocarbons DNAPL - Dense Non-Aqueous Phase Liquid LNAPL - Light Non-Aqueous Phase Liquid µg/L - Micrograms per Liter

ft - Feet of Product Thickness





## APPENDIX A DATA USABILITY SUMMARY REPORT

(Provided in Electronic Format Only)

# APPENDIX A DATA USABILITY SUMMARY REPORT SECOND QUARTER 2012

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

Analyses Performed by: H2M LABORATORIES, INC.

Prepared For:

NATIONAL GRID

175 EAST OLD COUNTRY RD.

HICKSVILLE, NY 11801

Prepared by:

URS CORPORATION
77 GOODELL STREET
BUFFALO, NY 14203

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#### I. INTRODUCTION

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

This DUSR discusses the usability of the analytical data for twenty-five (25) groundwater samples, two (2) field duplicates, two (2) matrix spike/matrix spike duplicate (MS/MSD) pairs, and four (4) trip blanks collected by URS personnel on June 14-25, 2012. The samples were collected as part of the 2012 second quarter groundwater monitoring event at the Hempstead Intersection Street Former MGP Site.

#### II. ANALYTICAL METHODOLOGIES AND DATA VALIDATION

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

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

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

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

The limited data validation included a review of: completeness of all required deliverables; holding times; quality control (QC) results (i.e., instrument tunes, calibration standards, field/lab blanks, matrix spike recoveries, field duplicate analyses, laboratory control sample recoveries, and surrogate/internal standard recoveries) to determine if the data are within the protocol-required QC limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers.

The validated analytical results are presented in Tables A-1 and A-2. Copies of the validated laboratory results (i.e., Form 1's) are presented in Attachment A. Copies of the chain-of-custodies, case narratives, and documentation supporting the qualification of data are presented in Attachment B. Only problems affecting data usability are discussed in this report.

#### III. DATA DELIVERABLE COMPLETENESS

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

#### IV. SAMPLE RECEIPT/HOLDING TIMES

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC). All samples were analyzed within the required holding times.

#### V. NON-CONFORMANCES

There were no non-conformances noted during the data review, thus, all data are usable as reported.

#### VI. SAMPLE RESULTS AND REPORTING

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

Field duplicates were collected from monitoring well locations HIMW-13I and HIMW-20S, which exhibited good field and analytical precision.

#### VII. SUMMARY

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

Prepared By: // Carlos Chamiet

Date: 7/30/12

Teter K. Fairbanks, Semor Chemis

Reviewed By:

George E. Kisluk, Senior Chemist

Date: 7-30-12

#### **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.

Location ID			HIMW-003D	HIMW-003I	HIMW-003S	HIMW-005D	HIMW-005I
Sample ID			HIMW-03D	HIMW-03I	HIMW-03S	HIMW-05D	HIMW-05I
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (f	t)					.•:	•
Date Sampled			06/21/12	06/20/12	06/20/12	06/21/12	06/20/12
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	UG/L	*	1 U	1 U	1 U	7	5
Ethylbenzene	UG/L		1 U	1 U	1 U	1 U	4
Toluene	UG/L	·	1 U	1 U	10	1 U	1
Xylene (total)	UG/L	•	1 U	1 U	1 U	34	140
Total BTEX	UG/L	100	ND	ND	ND	41	150
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	-	10 U	10 U	10 U	140 DJ	430 DJ
Acenaphthene	UG/L		10 U	10 U	10 U	3 J	14
Acenaphthylene	UG/L	3	10 U	10 U	10 U	44	180 DJ
Anthracene	UG/L	•	10 U	10 U	10 U	10 U	2 J
Benzo(a)anthracene	UG/L	•	10 U				
Benzo(a)pyrene	UG/L	ä	10 U				
Benzo(b)fluoranthene	UG/L	•	10 U				
Benzo(g,h,i)perylene	UG/L	×	10 U				
Benzo(k)fluoranthene	UG/L	•	10 U				
Chrysene	UG/L		10 U				
Dibenz(a,h)anthracene	UG/L		10 U				
Fluoranthene	UG/L	3	10 U				
Fluorene	UG/L	Ě	10 U	10 U	10 U	6 J	28
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U				
Naphthalene	UG/L		10 U	10 U	10 U	620 D	1,800 D
Phenanthrene	UG/L		10 U	10 U	10 U	10 U	17
Pyrene	UG/L	-	10 U				
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	ND	ND	ND	813	2,471

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

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit:

J - The reported concentration is an estimated value.

Location ID			HIMW-005S	HIMW-008D	HIMW-008I	HIMW-008S	HIMW-012D
Sample ID			HIMW-05S	HIMW-08D	HIMW-08!	HIMW-08S	HIMW-12D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (f	t)		[₩]	>	3.5%		-
Date Sampled			06/20/12	06/19/12	06/19/12	06/19/12	06/18/12
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	UG/L	*	1 U	1 U	1 U	2	10
Ethylbenzene	UG/L	3	1 U	1 U	1 U	1 U	1 U
Toluene	UG/L	X.	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	-	1 U	1 U	1 U	4	1 U
Total BTEX	UG/L	100	ND	ND	ND	6	ND
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	Ě	10 U	10 U	10 U	3 J	10 U
Acenaphthene	UG/L	-	10 U				
Acenaphthylene	UG/L	=	10 U	10 U	10 U	5 J	10 U
Anthracene	UG/L	5-	10 U	10 U	10 U	2 J	10 U
Benzo(a)anthracene	UG/L	-	10 U				
Benzo(a)pyrene	UG/L	Ħ	10 U				
Benzo(b)fluoranthene	UG/L	=	10 U				
Benzo(g,h,i)perylene	UG/L		10 U	10 U	10 U	1 J	10 U
Benzo(k)fluoranthene	UG/L		10 U				
Chrysene	UG/L	9	10 U				
Dibenz(a,h)anthracene	UG/L	(4)	10 U				
Fluoranthene	UG/L		10 U				
Fluorene	UG/L		10 U				
Indeno(1,2,3-cd)pyrene	UG/L	(4)	10 U				
Naphthalene	UG/L	3 <b>•</b> Σ	10 U	10 U	10 U	13	10 U
Phenanthrene	UG/L	3)	10 U	10 U	10 U	1 J	10 U
Pyrene	UG/L		10 U	10 U	1 J	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	ND	ND	1	25	ND

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

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

Location ID Sample ID			HIMW-012I HIMW-12I	HIMW-012S HIMW-12S	HIMW-013D HIMW-13D	HIMW-013I DUP-061512	HIMW-013I
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (f	t)		91:	5 <b>×</b> 0	3000	7#	-
Date Sampled			06/18/12	06/18/12	06/15/12	06/15/12	06/15/12
Parameter	Units	Criteria*				Field Duplicate (1-1)	
Volatile Organic Compounds							
Benzene	UG/L	-	62	1 U	5	5	4
Ethylbenzene	UG/L	-	2	1 U	1 U	1 U	1 U
Toluene	UG/L	COL	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	•	4	1 U	2	1 U	1 U
Total BTEX	UG/L	100	68	ND	7	5	4
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	24	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L		46	10 U	9 J	10 U	10 U
Acenaphthylene	UG/L		45	10 U	20	5 J	6 J
Anthracene	UG/L	- E	1 J	10 U	10 U	10 U	10 U
Benzo(a)anthracene	UG/L	:	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	37	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	200	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	36	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	(3)	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L		28	10 U	10 U	2 J	2 J
Indeno(1,2,3-cd)pyrene	UG/L	220	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	(#2)	3 J	10 U	10 U	10 U	10 U
Phenanthrene	UG/L	(30)	12	10 U	10 U	5 J	5 J
Pyrene	UG/L	Said:	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	135	ND	29	12	13

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

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

Location ID			HIMW-013S	HIMW-014D	HIMW-0141	HIMW-015D	HIMW-015I
Sample ID			HIMW-13S	HIMW-14D	HIMW-14I	HIMW-15D	HIMW-15I
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (f	t)		X <b>₩</b> (0		:00	3 <b>4</b> ,	-
Date Sampled			06/14/12	06/15/12	06/15/12	06/14/12	06/14/12
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Benzene	UG/L	-	1 U	1 U	27	1 U	15
Ethylbenzene	UG/L		1 U	1 U	25	1 U	1 U
Toluene	UG/L	7.07	1 U	1 U	1 U	1 U	1 U
Xylene (total)	UG/L	2	1 U	1 U	15	1 U	2
Total BTEX	UG/L	100	ND	ND	67	ND	17
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	1	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	:-	10 U	10 U	20	10 U	6 J
Acenaphthylene	UG/L	*	10 U	10 U	22	10 U	22
Anthracene	UG/L	*	10 U	10 U	1 J	10 U	10 U
Benzo(a)anthracene	UG/L	•	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	· ·	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L		10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	•	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L		10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	=	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L		10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	1000	10 U	10 U	7 J	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L		10 U	10 U	1 J	10 U	10 U
Phenanthrene	UG/L	3	10 U	10 U	7 J	10 U	3 J
Pyrene	UG/L	197	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	ND	ND	58	ND	31

<sup>\*</sup>Criteria- Goundwater Plume Delineation/Design Criteria, Pre-Design Investigation Work Plan for In-Situ Solidification for the Hempstead Intersection Street Former MGP Site, Appendix E, Final,

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

Location ID Sample ID Matrix			HIMW-0201	HIMW-020S DUP062112 Groundwater	HIMW-020S HIMW-20S Groundwater	HIMW-022 HIMW-22 Groundwater	HIMW-023 HIMW-23
			HIMW-20I Groundwater				
							Groundwater
Depth Interval (f	t)		:•):		(*)	(#)	
Date Sampled			06/21/12	06/21/12	06/21/12	06/25/12	06/25/12
Parameter	Units	Criteria*		Field Duplicate (1-1)			
Volatile Organic Compounds							
Benzene	UG/L	-	47	1 U	1 U	50	1
Ethylbenzene	UG/L	18	19	1 U	1 U	1 U	1 U
Toluene	UG/L	7(0)	48	1 U	1 U	1 U	1 U
Xylene (total)	UG/L		360 D	1 U	1 U	33	2
Total BTEX	UG/L	100	474	ND	ND	83	3
Semivolatile Organic Compounds							
2-Methylnaphthalene	UG/L	3	350 DJ	10 U	10 U	10 U	10 U
Acenaphthene	UG/L		15	10 U	10 U	2 J	1 J
Acenaphthylene	UG/L		220 DJ	10 U	10 U	22	5 J
Anthracene	UG/L	•	4 J	10 U	10 U	10 U	10 U
Benzo(a)anthracene	UG/L	*	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	34	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	100	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	3	28	10 U	10 U	1 J	1 J
Indeno(1,2,3-cd)pyrene	UG/L	-	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	-	1,800 D	10 U	10 U	63	10 U
Phenanthrene	UG/L	-	29	10 U	10 U	3 J	10 U
Pyrene	UG/L	(a)	10 U	10 U	10 U	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	2,446	ND	ND	91	7

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

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit,

J - The reported concentration is an estimated value.

Location ID	HIMW-024	HIMW-025		
Sample ID	HIMW-24	HIMW-25		
Matrix			Groundwater	Groundwater
Depth Interval (f	t)		•	( <b>4</b> )
Date Sampled			06/18/12	06/19/12
Parameter	Units	Criteria*		
Volatile Organic Compounds				
Benzene	UG/L	2	68	1 U
Ethylbenzene	UG/L	•	8	1 U
Toluene	UG/L	-	3	1 U
Kylene (total)	UG/L	*	46	2
Total BTEX	UG/L	100	125	2
Semivolatile Organic Compounds				
2-Methylnaphthalene	UG/L	-	10 U	10 U
Acenaphthene	UG/L	-	10	10 U
Acenaphthylene	UG/L		15	10 U
Anthracene	UG/L	<u>.</u>	1 J	10 U
Benzo(a)anthracene	UG/L	:-	10 U	10 U
Benzo(a)pyrene	UG/L		10 U	10 U
Benzo(b)fluoranthene	UG/L	30	10 U	10 U
Benzo(g,h,i)perylene	UG/L	129	10 U	10 U
Benzo(k)fluoranthene	UG/L	(#).	10 U	10 U
Chrysene	UG/L	•	10 U	10 U
Dibenz(a,h)anthracene	UG/L	(2)	10 U	10 U
Fluoranthene	UG/L	E#0	10 U	10 U
Fluorene	UG/L	#X	2 J	10 U
Indeno(1,2,3-cd)pyrene	UG/L	140	10 U	10 U
Naphthalene	UG/L	*	98 D	1 J
Phenanthrene	UG/L		8 J	10 U
Pyrene	UG/L	•	10 U	10 U
Total Polynuclear Aromatic Hydrocarbons	UG/L	100	134	1

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

Flags assigned during chemistry validation are shown.

U - Not detected above the reported quantitation limit.

J - The reported concentration is an estimated value.

D - Result reported from a secondary dilution analysis. ND - Not detected, Made By\_PRF 07/25/12\_; Checked By

Location ID			FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID			TB-061412	TB-061812	TB-062012	TB-062512
Matrix			Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (	ft)		•	-		:=:
Date Sampled			06/14/12	06/18/12	06/21/12	06/25/12
Parameter	Units	Criteria*	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds						
Benzene	UG/L	-	1 U	1 U	1 U	1 U
Ethylbenzene	UG/L	•	1 U	1 U	1 U	1 U
Toluene	UG/L		1 U	1 U	1 U	1 U
Xylene (total)	UG/L	*	1 U	1 U	1 U	1 U
Total BTEX	UG/L	100	ND	ND	ND	ND

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit.

D - Result reported from a secondary dilution analysis.

<sup>\*</sup>Criteria- Goundwater Plume Delineation/Design Criteria, Pre-Design Investigation Work Plan for In-Situ Solidification for the Hempstead Intersection Street Former MGP Site, Appendix E, Final,

# ATTACHMENT A VALIDATED FORM 1'S

EPA	SAMPLE	NO.
-		

HIMW-03D			
	 -	 	

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

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206934-001A

Sample wt/vol:  $\underline{5}$  (g/mL)  $\underline{\text{ML}}$  Lab File ID:  $\underline{12 \backslash \text{G15312}}$ .

Level: (low/med) LOW Date Received: 06/21/12

% Moisture: not dec. Date Analyzed: 06/22/12

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

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

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

EPA	SAMPLE	NO.

HIMW-03I

Lab Name: H2M LABS	INC	ntract:	
Lab Code: H2M	Case No.: KEY-URS	SAS No.:	SDG No.: KEY-URS153
Matrix: (soil/water)	WATER	Lab Sample ID:	1206934-002A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	12\G15313.
Level: (low/med)	TOM	Date Received:	06/21/12
% Moisture: not dec.		Date Analyzed:	06/22/12
GC Column: Rtx-624	ID: <u>.18</u> (m	m) Dilution Factor:	1.00

(µL)

Soil Extract Volume:

CONCENTRATION UNITS:

Soil Aliquot Volume \_\_\_\_(µL)

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

EPA SAMPLE NO.

HIMW-03S

Lab Name: H2M L	ABS INC	Contr	act:	
Lab Code: H2M	Case No.:	KEY-URS SA	S No.:	SDG No.: KEY-URS153
Matrix: (soil/wat	ter) WATER		Lab Sample ID:	1206934-003A
Sample wt/vol:	<u>5</u> (g/m	T) <u>WT</u>	Lab File ID:	12\G15320.
Level: (low/med	d) <u>LOW</u>		Date Received:	06/21/12
% Moisture: not	dec.		Date Analyzed:	06/26/12
GC Column: Rtx	-624 I	D: <u>.18</u> (mm)	Dilution Factor:	1.00
Soil Extract Vol	ume:	(µL)	Soil Aliquot Vol	Lume (µL)

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

EPA SAMPLE NO.

HIMW-05D

Lab Name:	H2M LABS INC	Contract:	

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Lab Sample ID: 1206934-004A Matrix: (soil/water) WATER

Lab File ID: 12\G15321. Sample wt/vol: 5 (g/mL) ML

Date Received: 06/21/12 Level: (low/med) LOW

Date Analyzed: 06/26/12 % Moisture: not dec.

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

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

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	7	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1220-20-7	Xylene (total)	34	L

EPA SAMPLE NO.

Lab Name:	H2M LABS	INC	Contra	et:	
Lab Code:	н2м	Case No.: KI	EY-URS SAS	No.:	SDG No.: KEY-URS153
Matrix: (so	il/water)	WATER		Lab Sample ID:	1206934-005A
Sample wt/v	rol: <u>5</u>	(g/mL) <u>l</u>	МI	Lab File ID:	12\G15322.
Level: (1	ow/med)	LOW		Date Received:	06/21/12
% Moisture:	not dec.			Date Analyzed:	06/26/12
GC Column:	Rtx-624	ID:	.18 (mm)	Dilution Factor:	1.00
Soil Extrac	et Volume:		(µL)	Soil Aliquot Vol	ume(µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	5	
	Toluene	1	
108-88-3		4	
100-41-4	Ethylbenzene	140	
1330-20-7	Xylene (total)		

EPA SAMPLE NO.

HIMW-05S

Lab Name: H2M LABS I	NC Contrac	ot:	
Lab Code: H2M	Case No.: KEY-URS SAS	No.:	SDG No.: KEY-URS153
Matrix: (soil/water)	WATER	Lab Sample ID;	1206934-006A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	12\G15323.
Level: (low/med)	LOW	Date Received:	06/21/12
% Moisture: not dec.		Date Analyzed:	06/26/12
GC Column: Rtx-624	ID: <u>.18</u> (mm)	Dilution Factor:	1.00
Cail Water of Wolume:	(pL)	Soil Aliquot Vol	nwe (hr)

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
100-41-4	Yulene (total)	1	U

# KEY-URS153 S32

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA	SAMPLE	NO.
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HIMW-08D

Lab Name:	H2M LABS II	NC .	Co	ontract:			
Lab Code:	н2м	Case No.:	KEY-URS	SAS No.:		SDG No.:	KEY-URS153
Matrix: (so	il/water)	WATER		Lab San	mple ID:	1206812-0	04A
Sample wt/v	rol: <u>5</u>	(g/mL	) WIT	Lab Fil	le ID:	12\G15308	÷

Level: (low/med) LOW Date Received: 06/19/12

% Moisture: not dec. Date Analyzed: 06/22/12

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

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

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	Ŭ	
1330-20-7	Xvlene (total)	1	U	

EPA SAMPLE NO.

HIMW~08I

Lab Name: H2M LABS INC Contract:

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206812-003A

Sample wt/vol:  $\underline{5}$  (g/mL)  $\underline{ML}$  Lab File ID:  $\underline{12\backslash G15307}$ .

Level: (low/med) LOW Date Received: 06/19/12

% Moisture: not dec. Date Analyzed: 06/22/12

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

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

CAS NO. COMPOUND		(µg/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)		U	

HIMW-08S		

Lab Name: H2M LA	BS INC	Contract:			
Lab Code: H2M	Case No.: KEY-	URS SAS No.		SDG No.:	KEY-URS153
Matrix: (soil/wate	er) <u>WATER</u>	Lab	Sample ID:	1206812-00	)2A
Sample wt/vol:	<u>5</u> (g/mL) <u>ML</u>	Lab	File ID:	12\G15304	<u>.</u>
Level: (low/med	) <u>LOW</u>	Dat	e Received:	06/19/12	
% Moisture: not d	ec.	Dat	e Analyzed:	06/22/12	
GC Column: Rtx-	624 ID: <u>.18</u>	(mm) Dil	ution Factor:	1.00	
Soil Extract Volu	me: (	µL) Soi	l Aliquot Volu	ıme	(µL)

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

#### VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO
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HIMW-12D

Lab Name:	H2M LABS IN	C Cont	ract:	
Lab Code:	н2м	Case No.: KEY-URS SA	S No.:	SDG No.: KEY-URS152
Matrix: (so	il/water)	WATER	Lab Sample ID:	1206801-003A
Sample wt/vo	o1: <u>5</u>	(g/mL) ML	Lab File ID:	12\G15278.
Level: (le	ow/med)	LOW	Date Received:	06/19/12
% Moisture:	not dec.		Date Analyzed:	06/21/12
GC Column:	Rtx-624	ID: <u>.18</u> (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:	(µL)	Soil Aliquot Vol	ume (µL)

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	Xvlene (total)	1	Ü

#### VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12I

Lab Name:	H2M LABS	INC	Contra	ot:	
Lab Code: H	12M	Case No.:	KEY-URS SAS	No.:	SDG No.: KEY-URS152
Matrix: (soi	1/water)	WATER		Lab Sample ID:	1206801-002A
Sample wt/vo	1: <u>5</u>	(g/mL)	ML	Lab File ID:	12\G15277.
Level: (lo	w/med)	LOW		Date Received:	06/19/12
% Moisture:	not dec.			Date Analyzed:	06/21/12
GC Column:	Rtx-624	ID:	.18 (mm)	Dilution Factor:	1.00
Soil Workwork	Values		(11T )	Sail Blismat Wals	.mo (11T)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	62	
108-88-3	Toluene	1 1	U
100-41-4	Ethylbenzene	2	
1330-20-7	Xylene (total)	4	

#### VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-12S

 Lab Name:
 H2M LABS INC
 Contract:

 Lab Code:
 H2M
 Case No.:
 KEY-URS
 SAS No.:
 SDG No.:
 KEY-URS152

 Matrix:
 (soil/water)
 WATER
 Lab Sample ID:
 1206801-001A

 Sample wt/vol:
 5
 (g/mL) ML
 Lab File ID:
 12\G15276.

 Level:
 (low/med)
 LOW
 Date Received:
 06/19/12

% Moisture: not dec. Date Analyzed: 06/21/12

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

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

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	บ
1330-20-7	Xylene (total)	1	บ

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA	SAMPLE	NO
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HIMW-13D

Lab Name:	H2M LABS I	NC	Contract:			
Lab Code:	<u>H2M</u>	Case No.: KEY-UR	SAS No.:		SDG No.:	KEY-URS152
Matrix: (so	oil/water)	WATER	Lab	Sample ID:	1206695-0	02A
Sample wt/v	701: <u>5</u>	(g/mL) <u>ML</u>	Lab	File ID:	12\G15237	<u>.</u>
Level: (1	Low/med)	LOW	Date	Received:	06/15/12	
% Moisture:	not dec.		Date	Analyzed:	06/19/12	
GC Column:	Rtx-624	ID: <u>.18</u>	(mm) Dilu	tion Factor:	1.00	
Seil Sytune	at Volume:	(12L)	Soil	l Aliquot Volu	me	(nr)

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

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-13I

Lab Name: H2M LABS INC Contract: Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS152 Matrix: (soil/water) WATER Lab Sample ID: 1206695-003A (g/mL) ML Lab File ID: 12\G15238. Sample wt/vol: 5 Date Received: 06/15/12 Level: (low/med) LOW Date Analyzed: 06/19/12 % Moisture: not dec. GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00 (µL) Soil Aliquot Volume (µL) Soil Extract Volume:

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

#### VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-061512

Matrix: (soil/water) WATER Lab Sample ID: 1206695-001A

Sample wt/vol:  $\frac{5}{}$  (g/mL) ML Lab File ID:  $\frac{12 \cdot G15236}{}$ 

Level: (low/med) LOW Date Received: 06/15/12

% Moisture: not dec. Date Analyzed: 06/19/12

GC Column: Rtx-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 5

108-88-3 Toluene 1 U

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

#### VOLATILE ORGANICS ANALYSIS DATA SHEET

(µL)

Soil Extract Volume:

EPA SAMPLE NO.

HIMW-13S

CONCENTRATION UNITS:

Soil Aliquot Volume (µL)

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	Xvlene (total)	1	U

#### VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE	

HIMW-14D

Lab Name:	H2M LABS INC		Contrac	et:	
Lab Code:	<u>н2м</u> с	Case No.: K	EY-URS SAS	No.:	SDG No.: KEY-URS152
Matrix: (so	il/water)	WATER		Lab Sample ID:	1206695-005A
Sample wt/v	ol: <u>5</u>	(g/mL)	ML	Lab File ID:	12\G15240.
Level: (1	ow/med)	LOW		Date Received:	06/15/12
% Moisture:	not dec.			Date Analyzed:	06/19/12
GC Column:	Rtx-624	ID:	.18 (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	Soil Aliquot Volu	me (hr)

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

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14I

Contract: Lab Name: H2M LABS INC Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS152 Lab Sample ID: 1206695-006A Matrix: (soil/water) WATER 12\G15241. Sample wt/vol: 5 (g/mL) ML Lab File ID: Level: (low/med) LOW Date Received: 06/15/12 Date Analyzed: 06/19/12 % Moisture: not dec. GC Column: Rtx-624 ID: 18 (mm) Dilution Factor: 1.00 (µL) Soil Aliquot Volume (µL) Soil Extract Volume:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Ō
71-43-2	Benzene	27	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	25	
1330-20-7	Xylene (total)	15	

#### VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-15D

Lab Name:	H2M LABS	INC	Contra	ct:	
Lab Code:	н2м	Case No.:	KEY-URS SAS	No.:	SDG No.: KEY-URS152
Matrix: (so	il/water)	WATER		Lab Sample ID:	1206695-007A
Sample wt/v	ol: <u>5</u>	(g/mL	) <u>ML</u>	Lab File ID:	12\G15242.
Level: (1	ow/med)	TOM		Date Received:	06/15/12
% Moisture:	not dec.			Date Analyzed:	06/19/12
GC Column:	Rtx-624	ID Wilders	: <u>.18</u> (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	Soil Aliquot Vol	ume (µL)

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

#### VOLATILE ORGANICS ANALYSIS DATA SHEET

E DA	SAMPLE	MO

HIMW-15I

Lab Name: H2M LAB	S INC Contra	act:	
Lab Code: H2M	Case No.: KEY-URS SAS	No.:	SDG No.: KEY-URS152
Matrix: (soil/water	) <u>WATER</u>	Lab Sample ID:	1206695-008A
Sample wt/vol:	5 (g/mL) <u>ML</u>	Lab File ID:	12\G15243.
Level: (low/med)	TOM	Date Received:	06/15/12
% Moisture: not ded	3.	Date Analyzed:	06/19/12
GC Column: Rtx-62	1D: .18 (mm)	Dilution Factor:	1.00
Soil Extract Volume	; (pL)	Soil Aliquot Vol	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Õ
71-43-2	Benzene	15	
108-88-3	Toluene	1	Ū
100-41-4	Ethylbenzene	1	Ų
1330-20-7	Xylene (total)	2	

EPA SAMPLE NO.

HIMW-20I

Lab Name:	H2M LABS	INC	С	ontract:			
Lab Code:	H2M	Case No.:	KEY-URS	SAS No.:	(	SDG No.:	KEY-URS153
Matrix: (so:	il/water)	WATER		Lab	Sample ID:	1206934-0	7A
Sample wt/ve	ol: <u>5</u>	(g/mL	ML	Lab	File ID:	12\G15318	<b>L</b> <sub>11</sub>
Level: (le	ow/med)	TOM		Date	Received:	06/21/12	
% Moisture:	not dec.			Date	Analyzed:	06/26/12	
GC Column:	Rtx-624	ID:	<u>.18</u> (n	nm) Dilu	tion Factor:	1.00	
Soil Extrac	t Volume:		(hr)	Soil	. Aliquot Volu	me	(µL)

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L		
71-43-2	Benzene	47		
108-88-3	Toluene	48		
100-41-4	Ethylbenzene	19		
1330-20-7	Xylene (total)	360 350	ZD)	

7/24/12

EPA SAMPLE NO.

HIMW-20IDL

Lab Name: H2M LABS INC

Contract:

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER

Lab Sample ID: 1206934-007ADL

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 12\G15329.

Level: (low/med) LOW

Date Received: 06/21/12

% Moisture: not dec.

Date Analyzed: 06/26/12

GC Column: Rtx-624

ID: .18 (mm) Dilution Factor: 2.00

Soil Extract Volume:

(µL) Soil Aliquot Volume (µL)

COMPOUND	(hg/L or hg/kg) UG/L	Q	
Benzene	46	D	
	46	D	
	18	D	
Xylene (total)	360	D	
	Benzene Toluene Ethylbenzene	Benzene	

71-43-2

108-88-3

100-41-4 1330-20-7 Benzene

Toluene

Ethylbenzene

Xylene (total)

EPA	SAMPLE	NO.	
HIMW-	20S		

U

U

Lab Name: H2M LABS I	NC Contra	ct:	
Lab Code: H2M	Case No.: KEY-URS SAS	No.:	SDG No.: KEY-URS153
Matrix: (soil/water)	WATER	Lab Sample ID:	1206934-008A
Sample wt/vol: 5	(g/mL) <u>ML</u>	Lab File ID:	12\G15324.
Level: (low/med)	TOM	Date Received:	06/21/12
% Moisture: not dec.		Date Analyzed:	06/26/12
GC Column: Rtx-624	ID: <u>.18</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(pL)	Soil Aliquot Vol	me (hr)
		CONCE	TRATION UNITS:
CAS NO.	COMPOUND	(µg/L	or μg/Kg) <u>UG/L</u> Q

EPA SAMPLE NO.

DUP062112

Lab Name: H2M LABS INC

Contract:

HIMW -0205

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER

Lab Sample ID: 1206934-009A

Sample wt/vol: 5 (g/mL) ML

Lab File ID: 12\G15319.

Level: (low/med) LOW

Date Received: 06/21/12

% Moisture: not dec.

Date Analyzed: 06/26/12

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

Soil Extract Volume:

(μL) Soil Aliquot Volume (μL)

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

EPA	SAMPLE	NO.	
_		-	

HIMW-22

Lab Name: H2M LABS INC Contract:

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206A16-001A

Sample wt/vol:  $\underline{5}$  (g/mL)  $\underline{ML}$  Lab File ID:  $\underline{12\backslash G15327}$ .

Level: (low/med) LOW Date Received: 06/25/12

% Moisture: not dec. Date Analyzed: 06/26/12

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

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

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	50	
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (total)	33	

1A

Soil Extract Volume:

# VOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW	-23		

EPA SAMPLE NO.

Lab Name: H2M LABS	INC Contr	ract:	
Lab Code: H2M	Case No.: KEY-URS SA	S No.:	SDG No.: KEY-URS153
Matrix: (soil/water)	WATER	Lab Sample ID:	1206A16-002A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	12\G15328.
Level: (low/med)	TOM	Date Received:	06/25/12
% Moisture: not dec.		Date Analyzed:	06/26/12
GC Column: Rtx-624	ID: <u>.18</u> (mm)	Dilution Factor:	1.00

CONCENTRATION UNITS:

(μL) Soil Aliquot Volume (μL)

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

	 _	
HIMW-24		

EPA SAMPLE NO.

Lab Name: H2M LABS I	Contra	ot:	
Lab Code: H2M	Case No.: KEY-URS SAS	No.:	SDG No.: KEY-URS153
Matrix: (soil/water)	WATER	Lab Sample ID:	1206812-001A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	12\G15306.
Level: (low/med)	LOW	Date Received:	06/19/12
% Moisture: not dec.		Date Analyzed:	06/22/12
GC Column: Rtx-624	ID: <u>.18</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(hr)	Soil Aliquot Vol	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	68	
108-88-3	Toluene	3	
100-41-4	Ethylbenzene	8	
1330-20-7	Xylene (total)	46	

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# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA	SAMPLE	NO.
ELLER	CELLER AND	*10.

HIMW-25

SDG No.: KEY-URS153

Lab	Name:	H2M LABS	INC	Co	ontract:	
Lab	Code:	н2м	Case No.:	KEY-URS	SAS No.:	

% Moisture: not dec.

Matrix: (soil/water) WATER Lab Sample ID: 1206812-005A

Date Analyzed: 06/22/12

Sample wt/vol: <u>5</u> (g/mL) <u>ML</u> Lab File ID: <u>12\G15309</u>.

Level: (low/med) LOW Date Received: 06/19/12

Level: (low/med) LOW Date Received: 06/19/12

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

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

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
71-43-2	Benzene	1	Ŭ
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1220 20 7	Yulone (total)	2	

#### 1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-061412

Lab Name:	H2M LABS I	INC	Co	ntract			
Lab Code:	<u>H2M</u>	Case No.:	KEY-URS	SAS No	.:	SDG No.:	KEY-URS152
Matrix: (so	il/water)	WATER		La	b Sample ID:	1206695-0	09A
Sample wt/v	ol: <u>5</u>	(g/mL)	ML	La	b File ID:	12\G15244	<u>.</u>
Level: (1	ow/med)	TOM		Da	te Received:	06/15/12	
% Moisture:	not dec.			Da	ate Analyzed:	06/19/12	
GC Column:	Rtx-624	ID:	<u>.18</u> (m	n) Di	llution Factor:	1.00	
Soil Extrac	t Volume:		(µL)	Sc	oil Aliquot Volu	me	(pL)

CAS NO.	COMPOUND	(hg/r or hg/kg) ng/r	Q
71-43-2	Benzene	1	U
108-88-3	Toluene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xvlene (total)	1	U

# 554

# 1A VOLATILE ORGANICS ANALYSIS DATA SHEET

108-88-3

100-41-4

1330-20-7

Toluene Ethylbenzene

Xylene (total)

EPA SAMPLE NO.

TB-061812

Lab Name: H2M	LABS INC	Contract	t:		
Lab Code: H2M	Case No.:	KEY-URS SAS N	lo.:	SDG No.: E	EY-URS153
Matrix: (soil/wa	ater) WATER	I	Lab Sample ID:	1206812-006	<u>5A</u>
Sample wt/vol:	<u>5</u> (g/mL)	<u>mr</u> 1	Lab File ID:	12\G15305.	
Level: (low/m	ed) LOW	I	Date Received:	06/19/12	
% Moisture: not	dec.	I	Date Analyzed:	06/22/12	
GC Column: Rt:	x-624 ID:	.18 (mm)	Dilution Factor:	1.00	
Soil Extract Vo	lume:	(hr)	Soil Aliquot Volu	e	(µL)
			CONCEN	TRATION UNI	TS:
CAS NO.	COMPOUND		(µg/L	or µg/Kg) U	G/L Q
	12-2   Benzene			1	U

FDA	SAMPLE	NO

TB-062012

Lab Name: H2M	LABS INC	Cor	ntract:	
Lab Code: H2M	Cas	No.: KEY-URS	SAS No.:	SDG No.: KEY-URS153
Matrix: (soil/	water)	MATER	Lab Sample ID:	1206934-010A
Sample wt/vol:	<u>5</u>	(g/mL) ML	Lab File ID:	12\G15325.
Level: (low/	med) LOV	!	Date Received:	06/21/12
% Moisture: no	t dec.		Date Analyzed:	06/26/12
GC Column: Rt	Ex-624	ID: <u>.18</u> (mm	n) Dilution Factor:	1.00
Soil Extract V	olume:	(pL)	Soil Aliquot Vol	(pL)
			CONCE	TRATION UNITS:

CAS NO.	COMPOUND	(hg/L or hg/kg) UG/L	Q	
71-43-2	Benzené	1	ซ	
108-88-3	Toluene	1	ט	
100-41-4	Ethylbenzene	1	U	
1330-20-7	Xylene (total)	1	U	

EPA SAMPLE NO.

TB-062512

Lab Name: H2M LABS	INC Contract	ct:	
Lab Code: <u>H2M</u>	Case No.: KEY-URS SAS	No.:	SDG No.: KEY-URS153
Matrix: (soil/water)	WATER	Lab Sample ID:	1206A16-003A
Sample wt/vol: 5	(g/mL) <u>ML</u>	Lab File ID:	12\G15326.
Level: (low/med)	TOM	Date Received:	06/25/12
% Moisture: not dec.		Date Analyzed:	06/26/12
GC Column: Rtx-624	ID: <u>.18</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(pL)	Soil Aliquot Vol	μme(μL)

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

HIMW-03D

Lab	Name:	H2M LABS	INC	Contract:	

Matrix: (soil/water) WATER Lab Sample ID: 1206934-001B

Sample wt/vol:  $\underline{1000}$  (g/mL)  $\underline{\text{ml}}$  Lab File ID:  $\underline{2\mbox{\tt R10143.D}}$ 

Level: (low/med) LOW Date Received: 06/21/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/22/12

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 06/29/12

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

GPC Cleanup: (Y/N)  $\underline{N}$  pH: \_\_\_\_ Extraction: (Type)  $\underline{CONT}$ 

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) <u>UG/L</u>	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	Ü
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	Ų
86-73-7	Fluorene	10	Ü
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	υ
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

<sup>(1)</sup> Cannot be separated from Diphenylamine

IEO-WMIH

Lab	Name:	H2M	LABS	INC	Contract:	

Matrix: (soil/water) WATER Lab Sample ID: 1206934-002B

Sample wt/vol:  $\underline{1000}$  (g/mL)  $\underline{\text{ml}}$  Lab File ID:  $\underline{2 \text{\sc R10144.D}}$ 

Level: (low/med) LOW Date Received: 06/21/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/22/12

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/29/12

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

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

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) <u>UG/L</u>	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-B	Acenaphthylene	10	ับ
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	Ŭ
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	Ü
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(q,h,i)perylene	10	U

<sup>(1)</sup> Cannot be separated from Diphenylamine

HIMW-03S

Lab Name: H2M LABS IN	NC	Contract		
Lab Code: H2M	Case No.: KEY-U	JRS SAS	No.:	SDG No.: KEY-URS153
Matrix: (soil/water)	WATER		Lab Sample ID:	1206934-003B
Sample wt/vol: 1	.000 (g/mL)	<u>ml</u>	Lab File ID:	2\R10145.D
Level: (low/med)	TOM		Date Received:	06/21/12
% Moisture:	Decanted: (Y/N)	N	Date Extracted:	06/22/12
Concentrated Extract	Volume: <u>1000</u> (	(μ <b>L</b> )	Date Analyzed:	06/29/12
Injection Volume:	<u>2</u> (μL)		Dilution Factor:	1.00
GPC Cleanup: (Y/N)	N H:		Extraction: (Type)	CONT

# CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) <u>UG/L</u>	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	ט
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	Ū
85-01-8	Phenanthrene	10	Ŭ
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	υ
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	Ŭ
191-24-2	Benzo(g,h,i)perylene	10	U

<sup>(1)</sup> Cannot be separated from Diphenylamine

GPC Cleanup: (Y/N)  $\underline{N}$  pH: \_\_\_\_

#### EPA SAMPLE NO.

#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-05D

Lab Name:	H2M LABS INC	Contract:

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206934-004B

Sample wt/vol:  $\underline{1000}$  (g/mL)  $\underline{ml}$  Lab File ID:  $\underline{2}R10146.D$ 

Level: (low/med) LOW Date Received: 06/21/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/22/12

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/29/12

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

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

#### CONCENTRATION UNITS:

CAS NO. COMPOUND ( $\mu$ g/L or  $\mu$ g/Kg) UG/L Q

91-20-3	Naphthalene	620 530	ED
91-57-6	2-Methylnaphthalene	140 120	EDJ
208-96-8	Acenaphthylene	44	
83-32-9	Acenaphthene	3	J
86-73-7	Fluorene	6	J
85-01-8	Phenanthrene	10	Ū
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	ט
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	υ
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	Ū

(1) Cannot be separated from Diphenylamine

7/24/12

EPA SAMPLE NO.

HIMW-05DDL

Lab Name:	H2M LABS INC	Contract:	

Lab Code: H2M Case No.: KEY-URS SAS No.:

SDG No.: KEY-URS153

Matrix: (soil/water) WATER

Lab Sample ID:

1206934-004BDL

Sample wt/vol:

1000

(g/mL) <u>ML</u>

Lab File ID:

2\R10190.D

Level: (low/med)

LOW

Date Received:

06/21/12

% Moisture:

Decanted: (Y/N) N

Date Extracted:

06/22/12

07/03/12

Concentrated Extract Volume: 1000 (µL)

Date Analyzed:

Injection Volume:  $\underline{2}$  ( $\mu$ L)

Dilution Factor: 20.00

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

Extraction: (Type) CONT

# CONCENTRATION UNITS:

CAS NO
--------

#### COMPOUND

(µg/	L or	μg/1	Kg)	UG/	<u>L</u>	Q

*****				
91-20-3	Naphthalene	/	620	D
91-57-6	2-Methylnaphthaler	ne	140	DJ
208-96-8	Acenaphthylene		50	DJ
83-32-9	Acenaphthene	/	200	Ū
86-73-7	Fluorene		200	U
85-01-8	Phenanthrene		200	บ
120-12-7	Anthracene		200	Ū
206-44-0	Fluoranthene		200	Ü
129-00-0	Pyrene		200	U
56-55-3	Benzo(a)anthracene	e	200	U
218-01-9	Chrysene		200	Ū
205-99-2	Benzo(b) fluoranthe	Benzo(b)fluoranthene		U
207-08-9	Benzo(k) fluoranthe	Benzo(k) fluoranthene		U
50-32-8	Benzo(a)pyrene	. \	200	U
193-39-5		Indeno(1,2,3-cd)pyrene		U
53-70-3	Dibenzo(a,h)anthra	acene	200	U
191-24-2	Benzo(g,h,i)peryle	ene /	200	U

(1) Cannot be separated from Diphenylamine

#### EPA SAMPLE NO.

#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-05I

Lab Name:	H2M LABS INC	Contract:	

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206934-005B

Sample wt/vol:  $\underline{1000}$  (g/mL)  $\underline{\text{ml}}$  Lab File ID:  $\underline{2\mbox{R10147.D}}$ 

Level: (low/med) LOW Date Received: 06/21/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/22/12

Concentrated Extract Volume:  $1000 (\mu L)$  Date Analyzed: 06/29/12

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

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

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) $\underline{\text{UG}}$	S/L Q
91-20-3	Naphthalene	1800 1500	E
91-57-6	2-Methylnaphthalene	430 380	ED
208-96-8	Acenaphthylene	180 160	ED
83-32-9	Acenaphthene	14	
86-73-7	Fluorene	28	
85-01-8	Phenanthrene	17	
120-12-7	Anthracene	2	J
206-44-0	Fluoranthene	10	ע
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	υ
205-99-2	Benzo(b) fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	Ų

(1) Cannot be separated from Diphenylamine

50-32-8 Benzo(a)pyrene

193-39-5 Indeno(1,2,3-cd)pyrene

191-24-2 Benzo(g,h,i)perylene

53-70-3 Dibenzo(a,h)anthracene

7/24/12

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HIMW-05IDL

Lab Name:	H2M LABS INC	Contract:	
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Lab Code: H2M

Case No.: KEY-URS SAS No.:\_\_\_\_ SDG No.: KEY-URS153

Matrix: (soil/water) WATER

Lab Sample ID:

1206934-005BDL

Sample wt/vol:

1000

(g/mL) ML Lab File ID:

2 R10191.D

Level:

(low/med)

LOW

Date Received:

06/21/12

% Moisture:

Decanted: (Y/N)

Date Extracted:

06/22/12

N

Concentrated Extract Volume:

1000 (µL)

Date Analyzed:

07/03/12

Injection Volume:

 $(\mu L)$ 

Dilution Factor: 50.00

Extraction: (Type) CONT

GPC Cleanup: (Y/N) N

pH:

# CONCENTRATION UNITS:

CAS NO.	COMPOUND		(µg/L or µg/Kg) UG/L	Q
91-20-3	Naphthalene		1800	D
91-57-6	2-Methylnaphth	alene /	430	DJ
208-96-8	Acenaphthylene		180	DJ
83-32-9	Acenaphthene		500	บั
86-73-7	Fluorene		500	U
85-01-8	Phenanthrene		500	Ŭ
120-12-7	Anthracene		500	Ŭ
206-44-0	Fluoranthene		500	U
129-00-0	Pyrene		500	Ü
56-55-3	Benzo(a)anthracene		500	U
218-01-9	Chrysene		500	U
205-99-2	Benzo(b)fluora	Benzo(b) fluoranthene		U
207-08-9	Benzo(k)fluora	nthene /	500	U
50-32-8	Benzo(a)pyrene	Benzo(a)pyrene		U
193-39-5	Indeno(1,2,3-c	d)pyrene	500	U
53-70-3	Dibenzo(a,h)an	thracene \	500	U
191-24-2	Benzo(g,h,i)pe	rylene	500	U

(1) Cannot be separated from Diphenylamine

1C

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-05S

Lab Name: H2M LABS I	NC	Cont	ract:	
Lab Code: H2M	Case No.: KE	Y-URS	SAS No.:	SDG No.: KEY-URS15
Matrix: (soil/water)	WATER		Lab Sample ID:	1206934-006B
Sample wt/vol:	1000 (g/mI	) <u>ml</u>	Lab File ID:	2\R10148.D
Level: (low/med)	LOW		Date Received:	06/21/12
% Moisture:	Decanted: (Y/N)	$\overline{\mathbf{N}}$	Date Extracted:	06/22/12
Concentrated Extract	Volume: <u>1000</u>	$(\mu \mathtt{L})$	Date Analyzed:	06/29/12
Injection Volume:	<u>2</u> (μL)		Dilution Factor:	1.00

# CONCENTRATION UNITS:

Extraction: (Type) CONT

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) $\underline{\mathtt{UG/L}}$	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	1.0	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	บ
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	Ū
193-39-5	Indeno(1,2,3-cd)pyrene	10	Ū
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	Ŭ

<sup>(1)</sup> Cannot be separated from Diphenylamine

GPC Cleanup: (Y/N)  $\underline{N}$  pH: \_\_\_\_

HIMW-08D

Lab Name: H2M LABS INC Contract:

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206812-004B

Sample wt/vol: 1000 (g/mL) ml Lab File ID:  $2\R10081.D$ 

Level: (low/med) <u>LOW</u> Date Received: <u>06/19/12</u>

% Moisture: Decanted: (Y/N) N Date Extracted: 06/21/12

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 06/22/12

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

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

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) $\underline{\text{UG/L}}$	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	Ų
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	Ū
86-73-7	Fluorene	10	Ŭ
85-01-8	Phenanthrene	10	Ŭ
120-12-7	Anthracene	1.0	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	Ũ
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	Ų
205-99-2	Benzo(b) fluoranthene	10	Ų
207-08-9	Benzo(k)fluoranthene	10	υ
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	υ
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

<sup>(1)</sup> Cannot be separated from Diphenylamine

I80-WMIH

Lab Name:	H2M LABS INC	Contract:
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Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206812-003B

Sample wt/vol:  $\underline{1000}$  (g/mL)  $\underline{\text{ml}}$  Lab File ID:  $\underline{2 \setminus \text{R10080.D}}$ 

Level: (low/med) LOW Date Received: 06/19/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/21/12

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 06/22/12

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

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

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) $\underline{\text{UG/L}}$	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	1	J
56-55-3	Benzo(a)anthracene	10	Ų
218-01-9	Chrysene	10	Ũ
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	Ü
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	υ
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

<sup>(1)</sup> Cannot be separated from Diphenylamine

HIMW-	0	8	s
	•	_	•

Lab Name: H2M LABS INC	Contrac	t:	Lands -
Lab Code: H2M Case No.:	KEY-URS SA	S No.:	SDG No.: KEY-URS153
Matrix: (soil/water) WATER		Lab Sample ID:	1206812-002B
Sample wt/vol: 1000 (g	y/mL) <u>ml</u>	Lab File ID:	2\R10139.D
Level: (low/med) <u>LOW</u>		Date Received:	06/19/12
% Moisture: Decanted: (Y	/N) <u>N</u>	Date Extracted:	06/21/12
Concentrated Extract Volume: 1	<u>000</u> (μL)	Date Analyzed:	06/29/12
Injection Volume: $\underline{2}$ ( $\mu L$ )		Dilution Factor:	1.00
GPC Cleanup: (Y/N) N	рН:	Extraction: (Type	) <u>CONT</u>

# CONCENTRATION UNITS:

		CONCENTRATION ONLIS:	
CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) $\underline{ t UG/L}$	Q
91-20-3	Naphthalene	13	
91-57-6	2-Methylnaphthalene	3	J
208-96-8	Acenaphthylene	5	J
83-32-9	Acenaphthene	10	Ŭ
86-73-7	Fluorene	10	Ū
85-01-8	Phenanthrene	1 1	J
120-12-7	Anthracene	2	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b) fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	Ŭ
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	Ŭ
191-24-2	Benzo(g,h,i)perylene	1	J

(1) Cannot be separated from Diphenylamine

HIMW-12D

Lab Name: H2M LABS INC Contract:

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS152

Matrix: (soil/water) WATER Lab Sample ID: 1206801-003B

Sample wt/vol:  $\underline{1000}$  (g/mL)  $\underline{ml}$  Lab File ID:  $\underline{2\R10046.D}$ 

Level: (low/med) LOW Date Received: 06/19/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/20/12

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 06/21/12

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

GPC Cleanup: (Y/N)  $\underline{N}$  pH: \_\_\_\_ Extraction: (Type)  $\underline{CONT}$ 

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

<sup>(1)</sup> Cannot be separated from Diphenylamine

HIMW-12I

Lab Name: H2M LABS INC Contract: Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS152 Lab Sample ID: 1206801-002B Matrix: (soil/water) WATER Lab File ID: 2\R10045.D (g/mL) <u>ml</u> Sample wt/vol: 1000 Level: (low/med) LOW Date Received: 06/19/12 Date Extracted: 06/20/12 Decanted: (Y/N) N % Moisture: Date Analyzed: 06/21/12 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1.00 Injection Volume:  $\underline{2}$  ( $\mu$ L) Extraction: (Type) CONT GPC Cleanup: (Y/N) N pH: \_\_\_\_

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) $\underline{\text{UG/L}}$ Q

91-20-3	Naphthalene	3	J
91-57-6	2-Methylnaphthalene	10	υ
208-96-8	Acenaphthylene	45	
83-32-9	Acenaphthene	46	
86-73-7	Fluorene	28	
85-01-8	Phenanthrene	12	
120-12-7	Anthracene	1	J
206-44-0	Fluoranthene	10	Ų
129-00-0	Pyrene	10	Ü
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	Ū
205-99-2	Benzo(b) fluoranthene	10	Ų
207-08-9	Benzo(k) fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	Ų
193-39-5	Indeno(1,2,3-cd)pyrene	10	Ū
53-70-3	Dibenzo(a,h)anthracene	10	Ų
191-24-2	Benzo(g,h,i)perylene	10	Ü

<sup>(1)</sup> Cannot be separated from Diphenylamine

HIMW-12S

Lab Name:	H2M LABS INC	Contract:
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Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS152

Matrix: (soil/water) WATER

Lab Sample ID: 1206801-001B

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

Lab File ID:

2\R10042.D

Level: (low/med) LOW

Date Received: 06/19/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/20/12

Injection Volume:  $\underline{2}$  ( $\mu$ L)

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 06/21/12

Dilution Factor: 1.00

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

Extraction: (Type) CONT

#### CONCENTRATION UNITS:

CAS	NO.	

#### COMPOUND

# (ug/L or ug/Kg) UG/L

ı	Q

CAS NO.	COMPOUND	(μg/Π OI μg/Kg) <u>OG/Π</u>	Q
91-20-3	Naphthalene	10	υ
91-57-6	2-Methylnaphthalene	10	Ų
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	Ų
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	บ
206-44-0	Fluoranthene	10	Ų
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	Ų
207-08-9	Benzo(k) fluoranthene	10	Ū
50-32-8	Benzo(a)pyrene	10	Ų
193-39-5	Indeno(1,2,3-cd)pyrene	10	Ų
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	Ų

<sup>(1)</sup> Cannot be separated from Diphenylamine

HIMW-13D

Contract: Lab Name: H2M LABS INC

Lab Code: H2M Case No.: KEY-URS SAS No.:

SDG No.: KEY-URS152

Matrix: (soil/water) WATER

Lab Sample ID:

1206695-002B

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

Lab File ID:

2\N51828.D

Level: (low/med)

<u> LOW</u>

Date Received: 06/15/12

% Moisture:

Decanted: (Y/N) N Date Extracted: 06/18/12

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 06/21/12

Injection Volume:  $\underline{2}$  ( $\mu$ L)

Dilution Factor: 1.00

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

Extraction: (Type) CONT

#### CONCENTRATION UNITS:

CAS NO.

COMPOUND

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

		(mg/ = 0- mg/3/ <u>++/ -</u>	_
91-20-3	Naphthalene	10	Ų
91-57-6	2-Methylnaphthalene	10	Ū
208-96-8	Acenaphthylene	20	
83-32-9	Acenaphthene	9	J
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	Ų
120-12-7	Anthracene	10	Ų
206-44-0	Fluoranthene	10	Ų
129-00-0	Pyrene	10	Ü
56-55-3 Benzo(a)anthracene		o(a)anthracene 10	Ų
218-01-9	Chrysene	10	Ū
205-99-2	Benzo(b)fluoranthene	10	Ų
207-08-9	07-08-9 Benzo(k)fluoranthene 10	10	Ţ
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	Ų
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

<sup>(1)</sup> Cannot be separated from Diphenylamine

HIMW-13I

Lab Name: H2M LABS INC Contract:

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS152

Matrix: (soil/water) WATER Lab Sample ID: 1206695-003B

Sample wt/vol: 1000 (g/mL) ml Lab File ID:  $2\N51829.D$ 

Level: (low/med) LOW Date Received: 06/15/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/18/12

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 06/21/12

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

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

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) <u>ŲG/L</u>	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	6	J
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	2	J
85-01-8	Phenanthrene	5	J
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	Ų
129-00-0	Pyrene	10	Ų
56-55-3	Benzo(a)anthracene	10	Ų
218-01-9	Chrysene	10	Ų
205-99-2	Benzo(b)fluoranthene	10	Ŭ
207-08-9	Benzo(k)fluoranthene	10	Ų
50-32-8	Benzo(a)pyrene	10	Ū
193-39-5	Indeno(1,2,3-cd)pyrene	10	Ų
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

DUP-061512

Lab Name: H2M LABS INC Contract: Lab Code: H2M Case No.: KEY-URS SAS No.:

(HIMW-13I) SDG No.: KEY-URS152

Matrix: (soil/water) WATER

Lab Sample ID:

1206695-001B

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

Lab File ID:

2\N51827.D

Level: (low/med) LOW

Date Received: 06/15/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/18/12

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/21/12

Dilution Factor: 1.00

Injection Volume:  $\underline{2}$  ( $\mu$ L)

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

Extraction: (Type) CONT

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(μg/L or μg/Kg) UG/L

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

<sup>(1)</sup> Cannot be separated from Diphenylamine

HIMW-13S

 Lab Name:
 H2M LABS INC
 Contract:

 Lab Code:
 H2M
 Case No.:
 KEY-URS
 SAS No.:
 SDG No.:
 KEY-URS152

 Matrix:
 (soil/water)
 WATER
 Lab Sample ID:
 1206695-004B

 Sample wt/vol:
 1000
 (g/mL)
 ml
 Lab File ID:
 2\N51830.D

 Level:
 (low/med)
 LOW
 Date Received:
 06/15/12

 % Moisture:
 Decanted:
 (Y/N)
 N
 Date Extracted:
 06/18/12

 Concentrated Extract Volume:
 1000
 (μL)
 Date Analyzed:
 06/21/12

 Injection Volume:
 2
 (μL)
 Dilution Factor:
 1.00

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

#### CONCENTRATION UNITS:

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

(1) Cannot be separated from Diphenylamine

HIMW-14D

Lab Name: H2M LABS INC	Contract:	<u> </u>
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Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS152

Matrix: (soil/water) WATER Lab Sample ID: 1206695-005B

Sample wt/vol: 1000 (g/mL) ml Lab File ID:  $2\N51831.D$ 

Level: (low/med)  $\underline{LOW}$  Date Received:  $\underline{06/15/12}$ 

% Moisture: Decanted: (Y/N) N Date Extracted: 06/18/12

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 06/21/12

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

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

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) $\underline{ t UG/L}$	Q
91-20-3	Naphthalene	10	Ŭ
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	Ų
83-32-9	Acenaphthene	10	Ü
86-73-7	Fluorene	10	Ų
85-01-8	Phenanthrene	10	Ŭ
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	Ų
129-00-0	Pyrene	1.0	Ū
56-55-3	Benzo(a)anthracene	10	U U
218-01-9	Chrysene	10	
205-99-2	Benzo(b) fluoranthene	10	Ŭ
207-08-9	Benzo(k) fluoranthene	10	Ţ
50-32-8	Benzo(a)pyrene	10	Ų
193-39-5	Indeno(1,2,3-cd)pyrene	10	Ţ
53-70-3	Dibenzo(a,h)anthracene	10	Ų
191-24-2	Benzo(g,h,i)perylene	10	U

<sup>(1)</sup> Cannot be separated from Diphenylamine

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# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HIMW-14I

Lab Name: H2M LABS INC Contract:

Lab Code: H2M Case No.: KEY-URS SAS No.:

SDG No.: KEY-URS152

Matrix: (soil/water) WATER

Lab Sample ID: 1206695-006B

Sample wt/vol:

1000

(g/mL) ml

Lab File ID:

2\N51834.D

Level: (low/med)

LOW

Date Received: 06/15/12

% Moisture:

Date Extracted: 06/19/12

Decanted: (Y/N) N

Concentrated Extract Volume: 1000 (µL)

Injection Volume:  $\underline{2}$  ( $\mu$ L)

Date Analyzed: 06/21/12

Dilution Factor: 1.00

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

Extraction: (Type) CONT

CAS NO.	COMPOUND	(μg/L or μg/Kg) <u>UG/L</u>	Q
91-20-3	Naphthalene	1	J
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	22	
83-32-9	Acenaphthene	20	
86-73-7	Fluorene	7	J
85-01-8	Phenanthrene	7	J
120-12-7	Anthracene	1	J
206-44-0	Fluoranthene	10	Ū
129-00-0	Pyrene	10	U U U
56-55-3	Benzo(a)anthracene	10 10 10	
218-01-9	Chrysene		
205-99-2	Benzo(b) fluoranthene		
207-08-9	Benzo(k)fluoranthene	10	Ū
50-32-8 Benzo(a)pyrene		10	Ü
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

<sup>(1)</sup> Cannot be separated from Diphenylamine

EPA SAMPLE NO.

HIMW-15D

Lab	Name:	H2M	LABS	INC			Cont	ract		
Lab	Code:	H2M			Case	No.:	KEY-URS	SAS	No.:	

Matrix: (soil/water) WATER

Lab Sample ID:

SDG No.: KEY-URS152 1206695-007B

(g/mL) ml

N

Lab File ID:

2\N51835.D

Sample wt/vol: Level: (low/med)

1000

06/15/12

LOW

Date Received:

% Moisture:

Decanted: (Y/N)

Date Extracted:

06/19/12

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

Date Analyzed:

06/21/12

Injection Volume:

2 (μL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: \_\_\_\_

Extraction: (Type) CONT

#### CONCENTRATION UNITS:

10

10

U

Ų

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

<sup>(1)</sup> Cannot be separated from Diphenylamine

53-70-3 Dibenzo(a,h)anthracene

191-24-2 Benzo(g,h,i)perylene

HIMW-15I

Lab	Name:	H2M LABS INC	Contract:	<u> </u>

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS152

Matrix: (soil/water) WATER Lab Sample ID: 1206695-008B

Sample wt/vol:  $\underline{1000}$  (g/mL)  $\underline{ml}$  Lab File ID:  $\underline{2}$ \N51836.D

Level: (low/med) LOW Date Received: 06/15/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/19/12

Concentrated Extract Volume:  $\underline{1000}$  ( $\mu L$ ) Date Analyzed:  $\underline{06/21/12}$ 

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

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

# CONCENTRATION UNITS:

		CONCEMIRATION ONLIS:	
CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) <u>UG/L</u>	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	Ŭ
208-96-8	Acenaphthylene	22	
83-32-9	Acenaphthene	6	J
86-73-7	Fluorene	10	Ų
85-01-8	Phenanthrene	3	J
120-12-7	Anthracene	10	IJ
206-44-0	Fluoranthene	10	Ū
129-00-0	Pyrene	10	Ų
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	1.0	Ų
205-99-2	Benzo(b) fluoranthene	10	Ų
207-08-9	Benzo(k) fluoranthene	10	Ų
50-32-8	Benzo(a)pyrene	10	Ų
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	Ų
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

HIMW-20I

Lab	Name:	H2M LABS	INC	Contract:	

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206934-007B

Sample wt/vol: 1000 (g/mL) ml Lab File ID:  $2\R10192.D$ 

Level: (low/med) LOW Date Received: 06/21/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/22/12

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 07/03/12

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

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

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u> Q

0110	00111 00112	17.57 = 1.57	
91-20-3	Naphthalene	800 1500	EL
91-57-6	2-Methylnaphthalene	350 300	-E-C
208-96-8	Acenaphthylene	220 190	E
83-32-9	Acenaphthene	15	
86-73-7	Fluorene	28	
85-01-8	Phenanthrene	29	
120-12-7	Anthracene	4	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	Ŭ
191-24-2	Benzo(g,h,i)perylene	10	Ū

<sup>(1)</sup> Cannot be separated from Diphenylamine

#### EPA SAMPLE NO.

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-20IDL

Lab Name: H2M LABS INC Contract: \_

SAS No.: Lab Code: H2M Case No.: KEY-URS

LOW

SDG No.: KEY-URS153

Matrix: (soil/water) WATER

Lab Sample ID:

1206934-007BDL

1000 (g/mL) ML

Lab File ID:

2\R10206.D

Level:

Date Received:

06/21/12

(low/med)

% Moisture:

Decanted: (Y/N) N Date Extracted:

06/22/12

Concentrated Extract Volume: 1000 (µL)

Sample wt/vol:

Date Analyzed:

07/03/12

Injection Volume:

 $(\mu L)$ 2

Dilution Factor: 50.00

GPC Cleanup: (Y/N) N

pH:

Extraction: (Type) CONT

# CONCENTRATION UNITS:

CAS NO.

COMPOUND

 $(\mu g/L \text{ or } \mu g/Kg) UG/L$ 

0110		1 1/10/ 1/10/ 0/ <u></u>	-
91-20-3	Naphthalene	1800	D
91-57-6	2-Methylnaphthalene	350	DJ
208-96-8	Acenaphthylene	220	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	Ŭ
207-08-9	Benzo(k) fluoranthene	500	Ų
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	Ū
191-24-2	Benzo(g,h,i)perylene	500	U

(1) Cannot be separated from Diphenylamine

OLM04.2

HIMW-20S

Lab Name: H2M LABS INC Contract:

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206934-008B

Sample wt/vol: 1000 (g/mL) ml Lab File ID:  $2\R10193.D$ 

Level: (low/med) LOW Date Received: 06/21/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/22/12

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 07/03/12

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

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

CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) <u>UG/L</u>	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	Ü
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	Ū
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	Ŭ
207-08-9	Benzo(k) fluoranthene	10	ט
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	Ū
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	Ū

<sup>(1)</sup> Cannot be separated from Diphenylamine

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

(HIMW-205)

Lab Code: H2M Case No.: KEY-URS SAS No.:

SDG No.: KEY-URS153

Matrix: (soil/water) WATER

Lab Sample ID: <u>1206934-009B</u>

Sample wt/vol: 1000

(g/mL) <u>ml</u> Lab File ID:

2\R10194.D

Level: (low/med)

LOW

Date Received: 06/21/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/22/12

Concentrated Extract Volume: 1000 (µL)

Injection Volume:  $\underline{2}$  ( $\mu$ L)

Date Analyzed: 07/03/12

Dilution Factor: 1.00

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

Extraction: (Type) CONT

CAS NO		COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) <u>UG/L</u>	r O	
	91-20-3	Naphthalene	10	Ū	

91-20-3	Naphthalene	10	ע
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	υ
206-44-0	Fluoranthene	10	Ū
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	Ų
193-39-5	Indeno(1,2,3-cd)pyrene	10	υ
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

<sup>(1)</sup> Cannot be separated from Diphenylamine

HIMW-22

Lab	Name:	H2M	LABS	INC			Con	tract	•			
Lab	Code:	H2M			Case	No.:	KEY-URS	SAS	No.:	SDG	No.:	KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206A16-001B

Sample wt/vol: 1000 (g/mL) ml Lab File ID: 2\R10197.D

Level: (low/med) LOW Date Received: 06/25/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/26/12

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 07/03/12

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

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

CAS NO.	COMPOUND	$(\mu g/L \text{ or } \mu g/Kg)  \underline{UG/L}$	Q
91-20-3	Naphthalene	63	
91-57-6	2-Methylnaphthalene	10	บ
208-96-8	Acenaphthylene	22	
83-32-9	Acenaphthene	2	J
86-73-7	Fluorene	1	J
85-01-8	Phenanthrene	3	J
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	υ
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	Ų

<sup>(1)</sup> Cannot be separated from Diphenylamine

HIMW-23

Lab	Name:	H2M LABS INC	Contract:	
		A STATE OF THE REAL PROPERTY.		

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206A16-002B

Sample wt/vol: 1000 (g/mL) <u>ml</u> Lab File ID: 2\R10198.D

Level: (low/med) LOW Date Received: 06/25/12

% Moisture: Decanted: (Y/N)  $\underline{N}$  Date Extracted:  $\underline{06/26/12}$ 

Concentrated Extract Volume: 1000 ( $\mu$ L) Date Analyzed: 07/03/12

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

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

		OULCELLIAITEDI DICTID.	
CAS NO.	COMPOUND	( $\mu$ g/L or $\mu$ g/Kg) $\underline{\text{UG/L}}$	Q
91-20-3	Naphthalene	10	U
91-57-6	2-Methylnaphthalene	10	Ū
208-96-8	Acenaphthylene	5	J
83-32-9	Acenaphthene	1	J
86-73-7	Fluorene	1	J
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	บ
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

<sup>(1)</sup> Cannot be separated from Diphenylamine

HIMW-24

Lab	Name:	H2M LABS INC	Contract:	

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206812-001B

Sample wt/vol:  $\underline{1000}$  (g/mL)  $\underline{\text{ml}}$  Lab File ID:  $\underline{2\mbox{R10078.D}}$ 

Level: (low/med) Date Received: 06/19/12

% Moisture: Decanted: (Y/N) N Date Extracted: 06/21/12

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/22/12

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

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

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) UG/L Q
CAS NO.	COMPOUND	(μg/L or μg/Kg) UG/L Q

Naphthalene	98 83	BD	
2-Methylnaphthalene	10	U	
Acenaphthylene	15		
Acenaphthene	10		
Fluorene	2	J	
Phenanthrene	8	J	
Anthracene	1	J	
Fluoranthene	10	U	
Pyrene	10	U	
Benzo(a)anthracene	10	U	
Chrysene	10	U	
Benzo(b)fluoranthene	10	U	
Benzo(k) fluoranthene	10	U	
Benzo(a)pyrene	10	U	
Indeno(1,2,3-cd)pyrene	10	U	
Dibenzo(a,h)anthracene	1.0	U	
Benzo(g,h,i)perylene	10	Ü	
	2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene  Anthracene Fluoranthene Pyrene Benzo(a) anthracene Chrysene Benzo(b) fluoranthene Benzo(a) pyrene Indeno(1,2,3-cd) pyrene Dibenzo(a,h) anthracene	2-Methylnaphthalene       10         Acenaphthylene       15         Acenaphthene       10         Fluorene       2         Phenanthrene       8         Anthracene       1         Fluoranthene       10         Pyrene       10         Benzo(a) anthracene       10         Chrysene       10         Benzo(b) fluoranthene       10         Benzo(k) fluoranthene       10         Benzo(a) pyrene       10         Indeno(1,2,3-cd) pyrene       10         Dibenzo(a,h) anthracene       10	

<sup>(1)</sup> Cannot be separated from Diphenylamine

7/24/12

#### EPA SAMPLE NO.

#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

HIMW-24DL

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

Lab Code: H2M Case No.: KEY-URS SAS No.:

SDG No.: KEY-URS153

Matrix: (soil/water) WATER

Lab Sample ID:

1206812-001BDL

Sample wt/vol:

1000

(g/mL) ML

Lab File ID:

2\R10140.D

Level: (low/med)

LOW

Date Received:

06/19/12

% Moisture:

Decanted: (Y/N) N Date Extracted:

06/21/12

Concentrated Extract Volume: 1000 (µL)

Date Analyzed:

06/29/12

Injection Volume:

2 (μL) Dilution Factor: 2.00

GPC Cleanup: (Y/N) N

pH: \_\_\_\_

Extraction: (Type) CONT

#### CONCENTRATION UNITS:

CAS NO.	COMP	CINUC	(μg/L	or µg/Kg) <u>UG/</u> I	i Ö
	O1 OO 1 Monbah	7000		0.0	Г

91-20-3	Naphthalene	98	D
91-57-6	2-Methylmaphthalene	20	U
208-96-8	Acenaphthylene	17	DJ
83-32-9	Acenaphthene	12	DJ
86-73-7	Fluorene	1	J
85-01-8	Phenanthrene	/ 10	DJ
120-12-7	Anthracene	20	U
206-44-0	Fluoranthene	20	U
129-00-0	Pyrene	20	Ū
56-55-3	Benzo(a)anthracene	20	U
218-01-9	Chrysene	20	U
205-99-2	Benzo(b)fluoranthene	20	U
207-08-9	Benzo(k)fluoranthene	20	U
50-32-8	Benzo(a)pyrene	20	U
193-39-5	Indeno(1,2,3-cd)pyrene	20	ט
53-70-3	Dibenzo(a,h)anthracene	20	υ
191-24-2	Benzo(g,h,i)perylene	20	U

(1) Cannot be separated from Diphenylamine

#### SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

7.7	-	11/1	TAT		2	
Ω	_	LI	W	_	4	2

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

Lab Code: H2M Case No.: KEY-URS SAS No.: SDG No.: KEY-URS153

Matrix: (soil/water) WATER Lab Sample ID: 1206812-005B

Sample wt/vol:  $\underline{1000}$  (g/mL)  $\underline{\text{ml}}$  Lab File ID:  $\underline{2\mbox{R10082.D}}$ 

Level: (low/med) Date Received: 06/19/12 LOW

% Moisture: Decanted: (Y/N)  $\underline{N}$  Date Extracted:  $\underline{06/21/12}$ 

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/22/12

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

GPC Cleanup: (Y/N)  $\underline{N}$  pH: \_\_\_\_ Extraction: (Type)  $\underline{CONT}$ 

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) <u>UG/L</u>	Q
91-20	-3 Naphthalene	1	J
01 57	C 2 Mothylmanhthalone	10	TT

91-20-3	Naphthalene	1	J
91-57-6	2-Methylnaphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	υ
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	Ū
120-12-7	Anthracene	10	ŭ
206-44-0	Fluoranthene	10	ט
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	ŭ
193-39-5	Indeno(1,2,3-cd)pyrene	10	Ū
53-70-3	Dibenzo(a,h)anthracene	10	Ū
191-24-2	Benzo(g,h,i)perylene	10	U

<sup>(1)</sup> Cannot be separated from Diphenylamine

# ATTACHMENT B SUPPORT DOCUMENTATION

39998 EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076

Fair Sunks Phone Number: Present on outer package: Y or N
 Unbroken on outer package: Y or N
 COC record present & complete upon sample receipt: Y or N
 Y or N 716 956 5636 REMARKS: HZM SDG NO: 太中一〇个 Project Confact: 1. Shipped or Hand Deliyened 2. Ambient or Chillielt, Temp (2) 3. Received in good condition: Y or N PIS/Quote # 4. Properly preserved: Y or N LABORATORY USE ONLY 92 603 000 8 3 3 COC Tape was; flease eall peter Falusia AB I.D. NO. question 5 WITH AMY Discrepancies Between COC Record? Yor N NOTES: Sample Labels and Explain: CM NORG. Metal JEP 13-40 ANALYSIS REQUESTED 3 Time Time \*E-UZ Date ete 2H49 PCB PoeV ORGANIC **AN8** AQV XA18 CLIENT: × Descuption Containers Ţ Sample Container Total No. of Received by: (Signature) Received by: (Signature) NATIONAL GRAD-HEMYSTERAN/11176098 つらせ 0/12/12/15/0 Time Time Time FIELD I.D. / URS HIND - CH Tel: (631) 694-3040 Fax: (631) 420-8436 HIMM - 13D 7 6/17/12 141 Dup-061512 5 Date Date 18-06.14 ı - MWIH - AWIH J. CRESPO, NOUND HIMM Standard TIME MIME SAMPLERS: (signature)/Client PROJECT NAME/NUMBER MATRIX TURNAROUND TIME: Ag ddished by: (Signature) Relinquished by: (Signature) shed by: (Signature inquighed by (Signature DELIVERABLES: 1035 120 230 TIME 250 1440 025 O-3121/0 0440 OOLO DATE 214/19

PINK COPY - LABORATORY

YELLOW COPY - CLIENT

39999 EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076

Total (634) 604, 2040 Eav. (634) 420, 8436

O/O PLOSE HONOW KG, MAINING, N. 1.1141-1010							-	X	1
Tel: (631) 694-3040 Fax: (631) 420-8436	CLIENT:	Ë	- Contract		2		H2M SDG	H2M SDG NO: KEY-URS 152 153	~
PROJECT NAME/NUMBER NATIONAL GRID-Home STEAD / 11176098	J@L					NOTES: Please call Peter	fet	Project Contact:	Г
	Contail		>			Fairbanks with	ofuks with	Phone Number:	Т
SAMPLERS: (signature)/Cilent	89Q	E O	027			4		716 856 5636	
J.C.ROSPO, N. OLING /URS	4	77A XE	28 HV					PIS/Quote #	
DELIVERABLES:		rt8	14						1
		ANAL	ANALYSIS REQUESTED	UESTED					
TURNAROUND TIME: StratokRO	Otal N	ORGANIC			INORG.				
DATE TIME MATRIX FIELD I.D.		ANS Need	FCB		Metal	LAB I.D. NO	NO.	REMARKS:	
6/19/12/0838 As 14/1/W-125		X	IX			1206801	100-	KEY-URS152	T
1 10836 1 HIMW-125 MS		×	X			1	1 ,	1	ı -
95M SZI-MWIH   9880	   	X	×				٠ ا		_
	\ Ы	×	×				- 002		
1135   HIMW-12D	<u>,</u>	X	×			->	- 003	1	
4 1305 HIMM-24	3	×	×			1206312	100-	KEY-URS 153	
614/12 0745 HIMW -085	5	X	X				700-	_	
180- mm H 1960 1		×	×				. 003		-
1045 HIMM -08D	7	×	X			<b>}</b>	1004		
1 HIMM - 25	2	×	×			<b>→</b>	2007	<b>~</b>	
Refinquished by: (Signature)    Marketing   Market   Mark	rieture).	6	Date 6.19.12	Time		LABORA	LABORATORY USE ONLY	ורא	
by: (Signature)	ESS.	1	Date //-19-12	_	Sample Labels COC Record?		1. Shipped or H 2. Ambient of chille 3. Received is good	1. Shipped or Hand Delivered Varbility 2. Ambient of chilled ) temp 3.9.0.1.1.2.0. 3. Received in 2008 condition (19 N	
Refinquished by: (Signature) Date Time Received by (Si	by (Signature)	, en	Date		Explain:		f. Property preserve	N CON	
							COC Tape was: 1. Present on outer	COC Tape was:  1. Present on outer package: Y driv	
Care (Signature) Date (Signature)	naure)		Cate				2. Unbroken on outs 3-COC record pres	Unbroken on outer package: Y of (N)     A-COC record present & complete upon sample receipt:     Y of N	
							,		7

PINK COPY - LABORATORY

WRITE-GORY 1-59 BIGINAL

YELLOW COPY - CLIENT

40003 EXTERNAL CHAIN OF CUSTODY

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

PETER MIRBANKS HZM SDG NO: KEY-URS 193 1. Shipped or Hand Delivered Airbill#
2. Ambient of chilley, Temp 3. 9 C. 1.2. c
3. Received in good condition. Yor N on 1.0.0.
4. Property preserved (The N 716 8565636 REMARKS: Present on outer package: York
 Unbroken on outer package: York Project Contact: Phone Number: 3-COC record present & complete upon y or N PIS/Quote # LABORATORY USE ONLY COC Tape was: Please all Act Pallbanks with - 005 400. and directions 2 LAB I.D. NO. 1206812 Discrepancies Between COC Record? Yor N NOTES: Sample Labels and CM Explain: **INORG** Metal 1450 514141-9 ANALYSIS REQUESTED E E 61912 Date POERS X HAA PCB ORGANIC ANB AOV 818X 826018 CLIENT Total No. of some to the total new sections to the new sec Description Sample Container Time Received by: (Signature) Received by: (Signature) Notional Galother Stead / 11176098 1418 6:19.12 14.50 TIme FIELD I.D. M < 0 6/14/12 Date Date TB-06/8/2 HIMM-25 HIMW-25 TURNAROUND TIME: Standard J.CRESTO, N. O. W. SAMPLERS: (signature)/Client PROJECT NAME/NUMBER DATE TIME MATRIX ţ Ag 子 nguished by: (Signature) Relinquished by. (Signature) Relinquished by: (Signature) Relinquished by: (Signature) DELIVERABLES: 1220 (20 7/1/1/2 **乙級**り 9/6//0

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H2M LABS, INC. 575 Broad Hollow Rd, Melville, NY 11747-5076

40000 EXTERNAL CHAIN OF CUSTODY

PRO

Tel: (631) 694-3040 Fax: (631) 420-8436	) 420-8436	CLIENT:	.EZ	ZZ Z	1. WRS		H2M SD	HZM SDG NO: K KN LURS K S
PROJECT NAME/NUMBER						NOTES:		Project Confact:
NATIONAL BRID-HEMPSTEAND /11716098	8 STEAN / 1176098	e Container scription	6	つ	***************************************	200	Please Call Peter Fairbanks	
SAMPLERS: (signature)/Client	/0.05		1 <del>93</del> 28	oLz8		3	with any greates	3 116 8SG 3 SS S
DELIVERABLES:	7 / 000	1	⊼बारी	HAY				
			1 1	ANALYSIS REQUESTED	ESTED			:
TURNARGUND TIME: STRUDGR D	٨D	M lajo Contal	ORGANIC			INORG.		î.
DATE TIME MATRIX	FIELD I.D.		AOV, BNA Poet		~	Metal	LAB I.D. NO.	REMARKS:
512.0 Ag	HIMW-05S	7	X	I X		//ċ	206934 au	ļα
-	HIMW-05I	4	$\forall$	X			1 005	2
1010 HIMW	HIMW-035	7	   ×	1X			<u> </u>	2
1140   HIMM-03	FOST V	7	<b>×</b>	7			500 ·	ಜ
0-84 48-0	TB-062012	7	メ				010	Ω
6/21/12/0805 Ag/ HIMW	HIMW-OSD	4	×	X			3	-1
1 6950 1 HIMW-	HIMW-03D V	5	<b>×</b>	>			100	10
1000 Due	DUPOGEII2	4	$\times$	入			(W)	6
1126 1, HIMW	HIMW-205	7	$\searrow$	$\overline{\times}$			COD	P
WMINI V DESTIVI	\	۱۷		X			1 W	17
Relinquished by (Signature)	Time Received by: (Sign	(auther		Date C	Time		LABORATORY USE ONLY	ONLY
The Kh	(Z   58   7/1/2	8		27 170	27.78	Discrepancies Between	1. Shipped	or Hand Delivered Airbilit
Relinquished by: (Signature)	621/12/1500		)	Date   6/2/12	Unime IS: UD	Sample Labels and COC Record? Yor N	-	100 E
Reinquished by: (Signature)	Time Received by: (Sig	nature)		Date	∏me	EXPAIN:	a. Tippeny page	
, , , , , , , , , , , , , , , , , , ,				į			COC Tape was:	COC Tape was: 1. Present on outer package: Y or(N)
reinquisned by: (signaure)	Date received by: (agus	(ama)		S S S S S S S S S S S S S S S S S S S	<u> </u>		2. Unbroken on 3. COC record p	<ol> <li>Undower on outer package: T of N I/I R</li> <li>COC record present &amp; complete upon sample receipt:</li> </ol> (Yor N

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PINK COPY - LABORATORY

H2M LABS, INC. 575 Broad Hollow Rd, Melville, NY 11747-5076

40001 EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, meliville, IV 11141-5010				1						
Tel:(631) 694-3040 Fax: (631) 420-8436	CLIENT:	Ë	URS		Gold.			HZM SDG	HZM SDG NO: KEY-UKS 153	_
PROJECT NAME/NUMBER							NOTES:	, my	Project Contact:	
NATIONAL CATOR HOMPSTOND /11/76093	netalner rion	ઇલ		201	»		Peter	PETER PAPELSAMES	PETER FAIRBANE	4
	ole Co	うつて		. Z. &			AND ACTIONS	2	5	
SAMPLERS: (signature)/Client		ð			_		Querranis	. F	1695 958 M	
July CRESTO / URS CORP ,		メヨコ		H+					*	
DELIVERABLES:		-8		d						
Ŋ			ANALY	SIS RE	ANALYSIS REQUESTED				9	
TURNAROUND TIME: Star かんこう	M lato latno:	ORG	ORGANIC			INORG.	₹G.			
DATE TIME MATRIX FIELD I.D.		AQV	BNA Post			Metal	S LAB	LAB I.D. NO.	REMARKS:	
1108/411:25 AB HIMW-23	4	×		×			4140061	16 002		
6/2/1/13/05/4a HIMW-22	አ	×		×			J	1 cm -		
20	4	×					<u>ተ</u>	- 35		
						-				
		-								
Date	(author)	<			Time		LABO	LABORATORY USE ONLY	/LY	
11/21/21/21/21/21/21/20/20/20/20/20/20/20/20/20/20/20/20/20/	Jana	$\langle$		1529	47.70		Discrepancies Between	1. Shipped	ockland Delivered . Kairbill*	
Relinquished by: (Signature)			/ .	b/aste	e	72	Sample Labels and COC Record? Yor N		3	
Remajurshed by: (Signature) Date Time Received by: (Sign	hattine)	)		Date			Explain:	4. Properly preserv	ec. Corn	
		}						COC Tape was: 1. Present on outer	package: Y or N	
Refinquished by: (Signature) Date Time Received by: (Signature)	nature)			Date	E L			2. Unbroken on out	2. Unbroken on outer package: Yor N LOI 4. 3. COC record present & complete upon sample receipt:	
								Ybrn		

PINK COPY - LABORATORY

YELLOW COPY - CLIENT

#### SDG NARRATIVE FOR VOLATILE ORGANICS SAMPLES RECEIVED: 6/15/12 & 6/19/12 SDG #: KEY-URS152

For Sample(s):

DUP-0615	12 HIMW	V-15D
HIMW-13	D HIMW	V-15I
HIMW-13	TB-06	1412
HIMW-13	S HIMV	V-12S
HIMW-14	D HIMW	V-12I
HIMW-14	I HIMV	V-12D

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

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

Sample HIMW-12S was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries and RPDs were met. Lab fortified blanks were analyzed and indicate good method efficiency.

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: July 12, 2012

Joann M. Slavin

Senior Vice President

#### SDG NARRATIVE FOR SEMIVOLATILE ORGANICS SAMPLES RECEIVED: 6/15/12 & 6/19/12 SDG #: KEY-URS152

For Sample(s):

DUP-061512	HIMW-15D
HIMW-13D	HIMW-15I
HIMW-13I	HIMW-12S
HIMW-13S	HIMW-12I
HIMW-14D	HIMW-12D
HIMW-14I	

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

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

Sample HIMW-12S was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries and RPDs were met. Lab fortified blanks were analyzed and indicate good method efficiency.

Benzy(k)fluoranthene had a %RSD greater than 15% and a quadratic regression was applied.

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: July 12, 2012

Senior Vice President

#### SDG NARRATIVE FOR VOLATILE ORGANICS SAMPLES RECEIVED: 6/19/12, 6/21/12 & 6/25/12 SDG #: KEY-URS153

For Sample(s):

HIMW-24	HIMW-03I	DUP062112
		=
HIMW-08S	HIMW-03S	TB-062012
HIMW-08I	HIMW-05D	HIMW-22
HIMW-08D	HIMW-05I	HIMW-23
HIMW-25	HIMW-05S	TB-062512
TB-061812	HIMW-20I	
HIMW-03D	HIMW-20S	

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

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

Sample HIMW-25 was analyzed as the matrix spike/matrix spike duplicate. The matrix spike/matrix spike duplicate sample was spiked to 100 ug/L. All percent recoveries and RPDs were met. Lab fortified blanks were analyzed and indicate good method efficiency.

Sample HIMW-20I was reanalyzed at a dilution due to concentration levels of targeted analytes above the calibration range. Both sets of data are submitted.

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

Date Reported: July 23, 2012

XEY-URS153 S23

#### SDG NARRATIVE FOR SEMIVOLATILE ORGANICS SAMPLES RECEIVED: 6/19/12, 6/21/12 & 6/25/12 SDG #: KEY-URS153

For Sample(s):

HIMW-24	HIMW-03I	HIMW-20I
HIMW-08S	HIMW-03S	HIMW-20S
HIMW-08I	HIMW-05D	DUP062112
HIMW-08D	HIMW-05I	HIMW-22
HIMW-25	HIMW-05S	HIMW-23
HIMW-03D		

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

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

Sample HIMW-25 was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries and RPDs were met. Lab fortified blanks were analyzed and indicate good method efficiency.

Benzo(k)fluoranthene had a %RSD greater than 15%, and a quadratic function was applied for the initial calibration. % D in the continuous calibration check (CCV) on 7/3/12 for the analyte exceeded 15%. Since the analyte was not found in any of the analyses on that date, no data are affected.

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: July 16, 2012

Ursula Middel Technical Manager

# APPENDIX B OXYGEN SYSTEM OPERATION & MAINTENANCE MEASUREMENTS

#### SYSTEM #1

Date: Time: Weather: Outdoor Temper Inside Trailer Temp Performed B	perature:	13 Su ~7: ~7	2012 118 nny 5° F O° F								
	O <sub>2</sub> G <sub>0</sub>	enerator (A	irSep)				Compressor	(Kaesar Rota	rv Screw	7)	
Hours			2,919.0		Compressor T		<u> </u>	(	115	<del>/</del>	(psi)
Feed Air Pressure *			110	(psi)	Delivery Air	(rea	dings below	are made from	control p	panel)	(psi)
Cycle Pressure *			60	(psi)	Element Outle	et Temperatu	ire		169		(oF)
Oxygen Receiver Pressu	re *			100 (psi)	Running Hou Loading Hou				3,493 2,221		(hours) (hours)
Oxygen Purity * maximum reading during loa	ading cycle		96.5	(percent)	* maximum read	ling during load	ing cycle				
I	njection Bank 1	1		O <sub>2</sub> Inject	ion System #1 Injection Bank 2				Injecti	on Bank 3	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	35	32	OW-1-5S	67.3	30	18	OW-1-9D	88.5	OFF	OFF
OW-1-2	96.5	40	30	OW-1-6S	67.0	35	18	OW-1-10D	87.2	OFF	OFF
OW-1-3	96.3	40	31	OW-1-7S	66.9	40	18	OW-1-11D	86.1	OFF	OFF
OW-1-4	95.0	45	30	OW-1-8S	66.7	OFF	OFF	OW-1-12D	85.3	OFF	OFF
OW-1-5D	93.9	35	30	OW-1-9S	66.0	30	19	OW-1-13D	84.7	OFF	OFF
OW-1-6D	92.4	30	30	OW-1-10S	54.6	35	13	OW-1-14D	84.1	OFF	OFF
OW-1-7D	91.1	40	30	OW-1-11S	54.1	45	14	OW-1-15D	83.3	OFF	OFF
OW-1-8D	89.6	OFF	OFF	OW-1-12S	53.6	50	15	OW-1-16D	82.5	OFF	OFF
				rate of ~30 scfh provided that Bank #1 and Bank #3 were set		g was no greate	r than the press	ures provided in the	e hydrostat	ic tables prepar	ed by URS

#### SYSTEM #1

								Date:		4/6/201	2
				O. Injectic	on System #1						
I	njection Bank 4	4			Injection Bank 5				Injecti	on Bank 6	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-13S	53.1	35	14	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	30	12
OW-1-14S	52.7	30	15	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	30	12
OW-1-15S	52.2	45	14	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	3-	12
OW-1-16SR	51.8	OFF	OFF	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	40	13
OW-1-17S	50.7	OFF	OFF	OW-1-21D	79.5	OFF	OFF	OW-1-25S	48.8	35	14
OW-1-18S	50.2	55	13	OW-1-22D	79.5	OFF	OFF	OW-1-26SR	48.3	35	14
OW-1-19S	49.7	65	13	OW-1-23D	78.7	OFF	OFF	OW-1-27S	48.3	35	14
OW-1-20S	49.3	40	13	OW-1-24D	78.2	OFF	OFF	OW-1-28S	48.3	40	14
				rate of ~30 scfh provided that the Bank #5 were set at 3 minutes.	ne pressure reading	g was no greate	r than the press	ures provided in the	e hydrostat	ic tables prepare	ed by URS
				O <sub>2</sub> Injection	on System #1						
	njection Bank 7	7			Injection Bank 8				Injecti	on Bank 9	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-25D	78.1	35	28	OW-1-29S	48.5	35	13	OW-1-33D	83.2	30	29
OW-1-26D	78.1	50	29	OW-1-30S	48.8	35	13	OW-1-34D	84.5	40	30
OW-1-27D	77.9	45	30	OW-1-31S	49.3	30	13	OW-1-35D	85.0	70	30
OW-1-28D	78.0	30	28	OW-1-32S	49.3	40	13	OW-1-36D	85.0	30	30
OW-1-29D	78.4	35	27	OW-1-33S	49.7	30	13	OW-1-37D	84.0	35	29
OW-1-30D	79.0	55	33	OW-1-34S	50.1	35	13	OW-1-38D	82.0	45	28
OW-1-31D	80.5	50	28	OW-1-35S	50.3	40	13	OW-1-39D	78.0	35	28
OW-1-32D	81.6	40	28	OW-1-36S	50.3	30	13	OW-1-40D	76.0	OFF	OFF
	on point flows w		the target flow	rate of ~30 scfh provided that the	ne pressure reading	g was no greate	r than the press	ures provided in the	hydrostat	ic tables prepare	ed by URS
								Date:		2/9/190	0

#### SYSTEM #1

Hempstead Intersection Street Former MGP Site Nassau County, New York

				O <sub>2</sub> Injection	on System #1						
Ir	jection Bank 1	0		I	njection Bank 11				Injection	on Bank 12	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-37S	50.5	40	13	OW-1-41D	73.6	OFF	OFF	OW-1-43	67.4	OFF	OFF
OW-1-38S	50.6	35	13	OW-1-42D	71.0	OFF	OFF	OW-1-44	66.6	30	19
OW-1-39S	50.7	50	14	OW-1-45	65.7	40	19	OW-1-51R	60.6	40	18
OW-1-40S	51.1	40	13	OW-1-46	64.3	45	18	OW-1-52	59.3	60	14
OW-1-41S	51.5	20	12	OW-1-47	63.4	35	17	OW-1-53	60.0	35	17
OW-1-42S	51.3	40	13	OW-1-48	62.5	40	18	OW-1-54	60.0	40	17
				OW-1-49	61.5	30	17				
				OW-1-50	61.0	40	18				

Comments:

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

					C	0 <sub>2</sub> Injectio	n System #2					
	Mon	itoring Points	Log			Mo	nitoring Points L	og		Monitori	ng Points Log	
ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DO (mg/L) Middle	DO (mg/L) Top
MP-1-1D	24.80	22.9	2.24	37.5	MP-1-5	24.46	21.7	1.67	10.3	MP-1-1D	7.21	11.85
MP-1-1S	24.95	40.0	2.97	18	MP-1-6	16.93	25.7	2.81	1.4	MP-1-2D	7.97	12.12
MP-1-2D	18.97	25.4	2,88	11	MP-1-7	20.20	20.9	1.47	2.4	MP-1-3D	3.84	11.02
MP-1-2S	19.40	40.0	4.52	7.5	MP-1-8	21.25	22.4	2.79	2.2	MP-1-4D	11.04	16.52
MP-1-3D	17.15	20.9	3.09	35								
MP-1-3S	17.14	40.0	4.56	227.9								
MP-1-4D	19.88	29.2	2.63	3.0								
MP-1-4S	19.68	38.2	3.64	2.7								

Comments:

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

#### SYSTEM #1

								D	ate:	4/6/2012	
				OPI	ERATIONAL 1	NOTES					
GA5 Air (	Compressor			-		10125					
	1) Oil Leve * Unload	el Checked with system un d system, wait until Delive el with system unloaded		s less than 9	) psi	Yes	X	No			
	3) Oil adde	Low (red)	X Yes	X	Normal (green)	No		High (orang	ge)		
	<ol> <li>Oil chan</li> <li>Oil filter</li> </ol>	0	Yes Yes			No	X				
	6) Air filter	r Changed rator changed	Yes Yes			No No	X				
		l strips checked	Yes	X		No	Λ				
AS-80 O <sub>2</sub>	Generator										
	1) Prefilter	changed ing changed	Yes Yes			No	X				
	2) Coalesci	ing changed	168				Λ				
				GENI	ERAL SYSTEN	<u> 1 NOTES</u>					
<u>Trailer</u>	1)	Performed general house			rash inside and	out, etc.) Yes	X		No		
	2)	Abnormal conditions ob	served (e.g. vanda	alism _							
	3)	Other major activities co	mpleted								
	4)	Supplies needed									
	5)	Visitors									
											$\dashv$
		es such as any alarm/shu l/filter/gasket and/or any									
		tor unit. Added a small ar ent and cleaned up all gar				d belt. Ad	justed pressu	ure switch on booster	pump to resol	ve low pressure at ta	nks.
Electric N	1eter # 96-934	-323 tied into Pole #4									
Action It	ems:										

#### SYSTEM #1

Date: Time: Weather: Outdoor Tempera Inside Trailer Temp Performed By	erature:	13 Su: ~78 ~72	/2020 307 nnny 8° F 2° F								
	O <sub>2</sub> Ge	enerator (Ai	rSep)			(	Compressor	(Kaesar Rotai	ry Screw	ı)	
Hours			3,016.1	-	Compressor T	'ank *			105		(psi)
Feed Air Pressure *			110	(psi)	Dell'erren Ain	(read	dings below	are made from	•	anel)	()
Cycle Pressure *			65	_(psi)	Delivery Air Element Outle	et Temperatu	ıre		113		(psi) (oF)
Oxygen Receiver Pressur	re *				Running Hour Loading Hour				3,602 2,290		(hours) (hours)
Oxygen Purity * maximum reading during loa	iding cycle		98.1	(percent)	* maximum readi	ing during load	ing cycle				
I	njection Bank 1				Injection Bank 2				Injecti	on Bank 3	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	40	32	OW-1-5S	67.3	25	18	OW-1-9D	88.5	OFF	OFF
OW-1-2	96.5	35	30	OW-1-6S	67.0	30	18	OW-1-10D	87.2	OFF	OFF
OW-1-3	96.3	35	31	OW-1-7S	66.9	40	17	OW-1-11D	86.1	OFF	OFF
OW-1-4	95.0	40	31	OW-1-8S	66.7	OFF	OFF	OW-1-12D	85.3	OFF	OFF
OTT 1 55	93.9	30	30	OW-1-9S	66.0	45	19	OW-1-13D	84.7	OFF	OFF
OW-1-5D		1									***************************************
OW-1-5D	92.4	30	30	OW-1-10S	54.6	30	13	OW-1-14D	84.1	OFF	OFF
	92.4 91.1	30 40	30	OW-1-10S OW-1-11S	54.6 54.1	30	13	OW-1-14D	84.1	OFF	OFF OFF
OW-1-6D											

#### SYSTEM #1

				O <sub>2</sub> Inject	on System #1			1			
ID	Injection Bank 4			ID	Injection Bank 5	g <sub>1</sub>				on Bank 6	<del></del>
	Depth	scfh	psi		Depth	sefh	psi	ID	Depth	scfh	psi
OW-1-13S	53.1	30	14	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	30	12
OW-1-14S	52.7	35	15	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	30	12
OW-1-15S	52.2	30	13	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	30	12
OW-1-16SR	51.8	OFF	OFF	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	40	13
OW-1-17S	50.7	OFF	OFF	OW-1-21D	79.5	OFF	OFF	OW-1-25S	48.8	35	13
OW-1-18S	50.2	40	13	OW-1-22D	79.5	OFF	OFF	OW-1-26SR	48.3	25	13
OW-1-19S	49.7	40	13	OW-1-23D	78.7	OFF	OFF	OW-1-27S	48.3	30	13
				l				11			
				OW-1-24D  rate of ~30 scfh provided that sank #5 were set at 3 minutes.  O <sub>2</sub> Inject	78.2 the pressure reading	OFF g was no greate	OFF r than the press	OW-1-28S ures provided in the	48.3	35 ic tables prepar	
nents: All injecti Corporatio	on point flows w	ere adjusted to g readings. Inju	the target flow	rate of ~30 scfh provided that Bank #5 were set at 3 minutes.	the pressure reading				e hydrostat		
All injecti Corporatio	on point flows w	ere adjusted to g readings. Inju	the target flow	rate of ~30 scfh provided that Bank #5 were set at 3 minutes.	the pressure reading				e hydrostat	ic tables prepar	ed by URS
nents: All injecti Corporatio	on point flows won after collecting	ere adjusted to g readings. Inju	the target flow rection times at E	rate of ~30 scfh provided that rank #5 were set at 3 minutes.  O <sub>2</sub> Inject	the pressure reading on System #1 Injection Bank 8	g was no greate	r than the press	ures provided in the	e hydrostat  Injecti	ic tables prepar	ps
nents: All injecti Corporation	on point flows won after collecting  Injection Bank 7	ere adjusted to g readings. Inju-	the target flow rection times at E	rate of ~30 scfh provided that thank #5 were set at 3 minutes.  O <sub>2</sub> Inject  ID	the pressure reading On System #1 Injection Bank 8 Depth	g was no greate	r than the press	ures provided in the	Injecti Depth	on Bank 9	ps 29
nents: All injecti Corporation  ID  OW-1-25D	on point flows won after collecting  Injection Bank 7  Depth  78.1	ere adjusted to g readings. Injo	the target flow a cetion times at E	rate of ~30 scfh provided that tank #5 were set at 3 minutes.  O2 Inject  ID  OW-1-298	the pressure reading on System #1 Injection Bank 8 Depth 48.5	g was no greate	r than the press  psi  13	ID OW-1-33D	Injecti Depth 83.2	on Bank 9 scfh 40	psi 29
ID  OW-1-25D  OW-1-26D	on point flows we not after collecting  Injection Bank 7  Depth  78.1	ere adjusted to g readings. Injute seefings and seefings and seefings are seefings. Seefing and seefings are seefings and seefings are seefings and seefings are seefings are seefings and seefings are seefings are seefings.	the target flow is exciton times at E  psi  27  30	rate of ~30 scfh provided that rank #5 were set at 3 minutes.  O2 Inject  ID  OW-1-29S  OW-1-30S	the pressure reading  on System #1  Injection Bank 8  Depth  48.5	g was no greate scfh 25	r than the press  psi 13	ID OW-1-33D OW-1-34D	Injecti Depth 83.2 84.5	on Bank 9 scfh 40	psi 29 30 29
ID  OW-1-25D  OW-1-26D  OW-1-27D	on point flows we not after collecting  Injection Bank 7  Depth  78.1  78.1  77.9	scfh 30 50	the target flow tection times at E  psi 27 30 29	ate of ~30 scfh provided that tank #5 were set at 3 minutes.  O2 Inject  ID  OW-1-29S  OW-1-30S  OW-1-31S	the pressure reading  ion System #1 Injection Bank 8 Depth 48.5 48.8 49.3	scfh 25 25 30	r than the press  psi 13 13	Ures provided in the  ID  OW-1-33D  OW-1-34D  OW-1-35D	Injecti Depth 83.2 84.5	on Bank 9 scfh 40 35	14 psi psi 29 30 29 30 29
ID  OW-1-25D  OW-1-27D  OW-1-28D	on point flows we on after collecting  Injection Bank 7  Pepth  78.1  77.9  78.0	sefh 30 50 30	the target flow ection times at E  psi  27  30  29  28	ate of ~30 scfh provided that rank #5 were set at 3 minutes.  O2 Inject  ID  OW-1-29S  OW-1-30S  OW-1-31S  OW-1-32S	the pressure reading  ion System #1 Injection Bank 8 Depth 48.5 48.8 49.3	sefh   25   25   30   40	psi 13 13 13	Ures provided in the  ID  OW-1-33D  OW-1-34D  OW-1-35D  OW-1-36D	Injecti   Depth   83.2   84.5   85.0   85.0	on Bank 9 sefh 40 35 70	psi 29 30 29 30
ID  OW-1-25D  OW-1-26D  OW-1-27D  OW-1-28D  OW-1-29D	on point flows we on after collecting  Injection Bank 7  78.1  78.1  77.9  78.0  78.4	sefh 30 50 30 40	psi 27 30 29 28	ate of ~30 scfh provided that Bank #5 were set at 3 minutes.  O2 Inject  ID  OW-1-29S  OW-1-30S  OW-1-31S  OW-1-32S  OW-1-33S	the pressure reading  ion System #1 Injection Bank 8 Depth  48.5  48.8 49.3 49.3	sefh   25   25   30   40   30	psi 13 13 13 13	Ures provided in the  ID  OW-1-33D  OW-1-34D  OW-1-35D  OW-1-36D  OW-1-37D	Injecti   Depth   83.2   84.5   85.0   84.0	on Bank 9 scfh 40 35 70 25	29 30 29 29

#### SYSTEM #1

Hempstead Intersection Street Former MGP Site Nassau County, New York

				O <sub>2</sub> Injection	on System #1						
Iı	njection Bank 10	0		I	njection Bank 11				Injection	on Bank 12	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-37S	50.5	30	12	OW-1-41D	73.6	OFF	OFF	OW-1-43	67.4	OFF	OFF
OW-1-38S	50.6	25	13	OW-1-42D	71.0	OFF	OFF	OW-1-44	66.6	20	18
OW-1-39S	50.7	45	13	OW-1-45	65.7	30	20	OW-1-51R	60.6	25	17
OW-1-40S	51.1	25	13	OW-1-46	64.3	30	18	OW-1-52	59.3	40	17
OW-1-41S	51.5	30	12	OW-1-47	63.4	30	18	OW-1-53	60.0	20	17
OW-1-42S	51.3	20	12	OW-1-48	62.5	30	18	OW-1-54	60.0	30	17
				OW-1-49	61.5	30	18				
				OW-1-50	61.0	25	17				

Comments:

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

					C	2 Injectio	n System #2					
	Mon	itoring Points	Log			Mo	nitoring Points L	og		Monitori	ng Points Log	
ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DO (mg/L) Middle	DO (mg/L) Top
MP-1-1D	25.07	21.9	1.84	7.2	MP-1-5	24.73	1.3	1.25	4.5	MP-1-1D	2.67	8.61
MP-1-1S	24.25	39.2	3.09	13	MP-1-6	17.21	20.9	2.56	3.0	MP-1-2D	3.14	6.93
MP-1-2D	19.65	40.0	2.91	30	MP-1-7	20.52	20.9	1.60	0	MP-1-3D	3.67	12.49
MP-1-2S	19.24	23.4	4.74	4.1	MP-1-8	21.54	21.2	3.04	2.1	MP-1-4D	3.09	11.02
MP-1-3D	17.40	20.6	3.22	36								
MP-1-3S	17.44	40.0	4.73	69.9								
MP-1-4D	20.17	31.4	2.11	1.1								
MP-1-4S	19.98	40.0	3.99	0								

Comments:

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

#### SYSTEM #1

					Date:	4/19/2020
		OP	PERATIONAL NOTES	S		
A5 Air Compress						
	l Level Checked with system		Yes	X	No	
		very Air Pressure is less than 9	9 psi			
2) Oil	l Level with system unloaded		Normal (ansan)	v	High (arongs)	
3) Oil	Low (re l added	Yes X	Normal (green)	<u> </u>	High (orange)	-
,	l changed	Yes X	. No			
	l filter changed	Yes X	No			
,	r filter Changed	Yes X	No			
7) Oil	l separator changed	Yes X	No			
8) Te	rminal strips checked	Yes X	No			
S-80 O <sub>2</sub> Generato	<u>or</u>					
1) Pre	efilter changed	Yes X	No	1		
2) Co	palescing changed	Yes X	No	-		
		GEN	ERAL SYSTEM NOT	ES		
		<del></del>				
<u>iiler</u>						
1)	Performed general ho	isekeeping (i.e. sweep, collect				
			Yes	X	No	-
2)	Abnormal conditions	observed (e.g. vandalism				
2)	Abhormar conditions	boserved (e.g. vandarism				
3)	Other major activities	completed				
4)	Supplies needed					
''	варриез несаса	-				
5)	Visitors					
acard mouting ac	ativities such as any alamm/s	hutdowns, sampling, mainter	anaa matarial			
		nutuowns, sampning, mainter ny other abnormal operating				
-	oth O&M on all equipment be		conditions			
Tormed 12 mon	itii Octivi oli ali equipiliciit oc	tween + 1) 12 and + 20 12.				
ok apart air com	pressor and changed filters a	nd cooling oil. Installed new b	elt on compressor. Clea	aned out coolin	ng canister of debris and emptied o	out oil and water from
parator unit. To	ok apart auto drains on all un	ts and cleaned out silt build up	. Changed filters in wat	ter trap and rep	placed o-rings in unit. Flushed out	oil building up in base
	*		0		rs in shed. Found fan in air condit	ioner unit not functionir
eds to be service	ed by Matrix. Wiped down al	l equipment and cleaned up all	garbage & leaves from	around fence a	ireas.	
aatria Matar # 06	6-934-323 tied into Pole #4					
	0-754-545 tied IIIO Poie #4					
ction Items:						

#### SYSTEM #1

Date: Time: Weather: Outdoor Temper Inside Trailer Temp Performed B	perature:	13 Clo	2012 00 oudy 5° F )° F Ryan								
	O <sub>2</sub> Go	enerator (Ai	rSep)				Compressor	(Kaesar Rota	y Screw	y)	
Hours			3,154.3		Compressor T	ſank *			105		(psi)
Feed Air Pressure *			110	(psi)		(rea	dings below	are made from	control p	oanel)	
Cycle Pressure *			65	(psi)	Delivery Air Element Outle	et Temperatu	ıre		107		(psi) (oF)
Oxygen Receiver Pressu	re *			110 (psi)	Running Hou Loading Hou				3,761 2,387		(hours)
Oxygen Purity * maximum reading during loa	ading cycle		98.1	(percent)	* maximum read	ing during load	ing cycle				
I	njection Bank 1	1		O <sub>2</sub> Injects	ion System #1 Injection Bank 2				Injecti	on Bank 3	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	40	32	OW-1-5S	67.3	35	18	OW-1-9D	88.5	OFF	OFF
OW-1-2	96.5	40	29	OW-1-6S	67.0	30	18	OW-1-10D	87.2	OFF	OFF
OW-1-3	96.3	45	31	OW-1-7S	66.9	30	18	OW-1-11D	86.1	OFF	OFF
OW-1-4	95.0	50	30	OW-1-8S	66.7	OFF	OFF	OW-1-12D	85.3	OFF	OFF
OW-1-5D	93.9	35	29	OW-1-9S	66.0	30	19	OW-1-13D	84.7	OFF	OFF
OW-1-6D	92.4	40	29	OW-1-10S	54.6	30	14	OW-1-14D	84.1	OFF	OFF
OW-1-7D	91.1	40	29	OW-1-11S	54.1	35	15	OW-1-15D	83.3	OFF	OFF
OW-1-8D	89.6	OFF	OFF	OW-1-12S	53.6	30	15	OW-1-16D	82.5	OFF	OFF
				rate of ~30 scfh provided that Bank #1 and Bank #3 were set		g was no greate	r than the press	ures provided in the	hydrostat	ic tables prepar	ed by URS

#### SYSTEM #1

In ID				O. Inject	ion System #1						
ID	njection Bank 4			O <sub>2</sub> Inject	Injection Bank 5				Injecti	ion Bank 6	
	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	ps
OW-1-13S	53.1	40	15	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	35	12
OW-1-14S	52.7	50	16	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	35	12
OW-1-15S	52.2	30	14	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	30	12
OW-1-16SR	51.8	OFF	OFF	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	40	13
OW-1-17S	50.7	OFF	OFF	OW-1-21D	79.5	OFF	OFF	OW-1-25S	48.8	35	1:
OW-1-18S	50.2	40	13	OW-1-22D	79.5	OFF	OFF	OW-1-26SR	48.3	30	13
OW-1-19S	49.7	35	14	OW-1-23D	78.7	OFF	OFF	OW-1-27S	48.3	35	1.
OW-1-20S	49.3	45	14	OW-1-24D	78.2	OFF	OFF	OW-1-28S	48.3	30	14
				O <sub>2</sub> Inject	ion System #1						
In	njection Bank 7			O <sub>2</sub> Inject					Injecti	ion Bank 9	
In ID	njection Bank 7	scfh	psi	O <sub>2</sub> Inject	ion System #1	sefh	psi	ID	Injecti Depth	ion Bank 9	p
			<b>psi</b> 27		ion System #1 Injection Bank 8	scfh 30	<b>psi</b> 13	ID OW-1-33D			
ID	Depth	scfh		ID	ion System #1 Injection Bank 8 Depth				Depth	scfh	2
ID OW-1-25D	<b>Depth</b> 78.1	scfh 35	27	ID OW-1-29S	ion System #1 Injection Bank 8 Depth 48.5	30	13	OW-1-33D	83.2	sefh 30	3
OW-1-25D OW-1-26D	78.1 78.1	35 60	27 27	ID  OW-1-29S  OW-1-30S	Injection Bank 8 Depth 48.5	30 30	13	OW-1-33D OW-1-34D	83.2 84.5	30 35	3
OW-1-25D OW-1-26D OW-1-27D	78.1 78.1 77.9	35 60 35	27 27 32	ID  OW-1-29S  OW-1-30S  OW-1-31S	Injection Bank 8	30 30 30	13 13 12	OW-1-33D OW-1-34D OW-1-35D	Depth	scfh 30 35 60	2 2 3 1 1 2 2 2 2
OW-1-25D OW-1-26D OW-1-27D OW-1-28D	78.1 78.1 77.9 78.0	sefh 35 60 35 30	27 27 32 28	ID  OW-1-298  OW-1-308  OW-1-318  OW-1-328	Injection Bank 8	30 30 30 40	13 13 12 13	OW-1-33D OW-1-34D OW-1-35D OW-1-36D	83.2 84.5 85.0 85.0	scfh 30 35 60 35	2 3 1 1 2 2
OW-1-25D OW-1-26D OW-1-27D OW-1-28D OW-1-29D	78.1 78.1 78.1 77.9 78.0	sefh 35 60 35 30 30	27 27 32 28 27	ID  OW-1-29S  OW-1-30S  OW-1-31S  OW-1-32S  OW-1-33S	Injection Bank 8	30 30 30 40 30	13 13 12 13 13	OW-1-33D OW-1-34D OW-1-35D OW-1-36D OW-1-37D	83.2 84.5 85.0 85.0 84.0	sefh 30 35 60 35 35	2 3 1 2 2

#### SYSTEM #1

Hempstead Intersection Street Former MGP Site Nassau County, New York

				O <sub>2</sub> Injection							
Ir	njection Bank 1	0		I	njection Bank 11				Injecti	on Bank 12	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-37S	50.5	30	12	OW-1-41D	73.6	OFF	OFF	OW-1-43	67.4	OFF	OFF
OW-1-38S	50.6	25	12	OW-1-42D	71.0	OFF	OFF	OW-1-44	66.6	25	19
OW-1-39S	50.7	45	12	OW-1-45	65.7	30	19	OW-1-51R	60.6	30	18
OW-1-40S	51.1	30	13	OW-1-46	64.3	35	16	OW-1-52	59.3	50	15
OW-1-41S	51.5	30	13	OW-1-47	63.4	30	17	OW-1-53	60.0	35	17
OW-1-42S	51.3	25	13	OW-1-48	62.5	30	18	OW-1-54	60.0	30	16
				OW-1-49	61.5	30	17				
				OW-1-50	61.0	40	17				

Comments:

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

					C	2 Injectio	n System #2					
	Mon	itoring Points	Log			Mo	nitoring Points L	og		Monitori	ng Points Log	
ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DO (mg/L) Middle	DO (mg/L) Top
MP-1-1D	25.13	20.9	1.52	17.2	MP-1-5	24.76	20.9	1.97	21.7	MP-1-1D	2.12	3.48
MP-1-1S	25.98	40.0	2.69	5.1	MP-1-6	17.21	22.9	1.67	3.7	MP-1-2D	2.82	6.48
MP-1-2D	19.67	40.0	2.08	0	MP-1-7	20.43	20.8	1.45	0	MP-1-3D	3.19	7.69
MP-1-2S	19.25	29.7	2.27	0	MP-1-8	21.47	20.9	2.27	4.2	MP-1-4D	2.59	9.12
MP-1-3D	17.44	19.6	2.64	0								
MP-1-3S	17.46	40.0	4.04	0								
MP-1-4D	20.13	35.9	1.48	36.1								
MP-1-4S	19.95	40.0	2.87	6.7								

Comments:

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

#### SYSTEM #1

					Date:	5/7/2012
			PERATIONAL N	IOTES		
GA5 Air Compressor			TERATIONAL I	OIES		
1) Oil Leve * Unloa	el Checked with system unle d system, wait until Deliver el with system unloaded		n 9 psi	Yes X	No	
3) Oil adde	Low (red)_ed	Yes	Normal (green)	No X	High (orange)	-
4) Oil char 5) Oil filte 6) Air filte	r changed	Yes Yes Yes	_ _ _	No X No X No X		
	arator changed al strips checked	YesYes	_ _	No X No X		
AS-80 O <sub>2</sub> Generator						
1) Prefilter 2) Coalesc	changed ing changed	Yes Yes	<u> </u>	No X No X		
		GE	NERAL SYSTEM	INOTES		
<u>Trailer</u> 1) 2)	Performed general housek		et trash inside and o	yes X	No	-
		aved (e.g. vandansin				
3)	Other major activities con	npleted				
4)	Supplies needed					
5)	Visitors					
	ies such as any alarm/shut l/filter/gasket and/or any o	, .	,			
	at in water bowl #1 and char up all garbage & leaves from		in base of unit. So	aked up small amount	t of oil and water from separator υ	ınit. Wiped down all
Electric Meter # 96-934	-323 tied into Pole #4					
Action Items:						

#### SYSTEM #1

Date: Time: Weather: Outdoor Temper		13 Su ~74	/2012 311 anny 4° F	- - -							
Inside Trailer Temp Performed B			e Ryan	- -							
	O <sub>2</sub> Ge	enerator (A	irSep)				Compressor	(Kaesar Rota	ry Screw	i <mark>)</mark>	
Hours			3,225.9	-	Compressor T	Γank *			110		(psi)
Feed Air Pressure *			70	(psi)	D 11	(rea	dings below	are made from	-	anel)	<i>(</i> )
Cycle Pressure *			60	(psi)	Delivery Air Element Outle	et Temperati	ıre		107		(psi) (oF)
Oxygen Receiver Pressu		105 (psi)	Running Hou Loading Hou				3,845		(hours)		
Oxygen Purity * maximum reading during lo	ading cycle		97.9	(percent)	* maximum read	ling during load	ling cycle				
1	Injection Bank 1			O <sub>2</sub> Injecti	ion System #1 Injection Bank 2				Injecti	on Bank 3	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	35	32	OW-1-5S	67.3	30	17	OW-1-9D	88.5	OFF	OFF
OW-1-2	96.5	35	28	OW-1-6S	67.0	30	18	OW-1-10D	87.2	OFF	OFF
OW-1-3	96.3	30	31	OW-1-7S	66.9	28	18	OW-1-11D	86.1	OFF	OFF
OW-1-4	95.0	30	30	OW-1-8S	66.7	OFF	OFF	OW-1-12D	85.3	OFF	OFF
OW-1-5D	93.9	30	30	OW-1-9S	66.0	30	18	OW-1-13D	84.7	OFF	OFF
OW-1-6D	OW-1-10S	54.6	25	14	OW-1-14D	84.1	OFF	OFF			
OW-1-7D	OW-1-11S	54.1	30	15	OW-1-15D	83.3	OFF	OFF			
OW-1-8D	OFF	OW-1-12S	53.6	30	15	OW-1-16D	82.5	OFF	OFF		
<b>1</b> 1	l i	ļ	l i	<b>!</b> !	I		J I	1	1		1

#### SYSTEM #1

Inj ID											
				O <sub>2</sub> Inject	ion System #1						
ID	jection Bank 4				Injection Bank 5				Injecti	on Bank 6	
	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-13S	53.1	30	13	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	30	12
OW-1-14S	52.7	30	14	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	30	12
OW-1-15S	52.2	30	13	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	25	12
OW-1-16SR	51.8	OFF	OFF	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	40	13
OW-1-17S	50.7	OFF	OFF	OW-1-21D	79.5	OFF	OFF	OW-1-25S	48.8	30	13
OW-1-18S	50.2	25	13	OW-1-22D	79.5	OFF	OFF	OW-1-26SR	48.3	25	13
OW-1-19S	49.7	40	12	OW-1-23D	78.7	OFF	OFF	OW-1-27S	48.3	30	13
					50.0	OFF	oee.		40.0	20	14
				OW-1-24D  rate of ~30 scfh provided that Bank #5 were set at 3 minutes			OFF or than the press	OW-1-28S ures provided in the	48.3 e hydrostat	30 tic tables prepar	
ments: All injection Corporation a	n point flows we	ere adjusted to t g readings. Inje	the target flow	rate of ~30 scfh provided that Bank #5 were set at 3 minutes	the pressure reading				e hydrostat		
ments: All injection Corporation a	n point flows we after collecting	ere adjusted to t g readings. Inje	the target flow	rate of ~30 scfh provided that Bank #5 were set at 3 minutes	the pressure reading				e hydrostat	tic tables prepar	ed by UR
ments: All injection Corporation a	n point flows we after collecting	ere adjusted to t g readings. Inje	the target flow rection times at E	rate of ~30 scfh provided that Bank #5 were set at 3 minutes O <sub>2</sub> Inject	the pressure reading ion System #1 Injection Bank 8	g was no greate	er than the press	ures provided in the	Injecti	on Bank 9	ed by UR
ments: All injection Corporation a	n point flows we after collecting	ere adjusted to t g readings. Inje	the target flow a ection times at E	rate of ~30 scfh provided that sank #5 were set at 3 minutes  O <sub>2</sub> Inject	the pressure reading ion System #1 Injection Bank 8 Depth	g was no greate	psi	ures provided in the	Injecti Depth	on Bank 9	ed by UR
Ments: All injection Corporation of Injury ID OW-1-25D	n point flows we after collecting	ere adjusted to to g readings. Inje	the target flow a cotion times at E psi	rate of ~30 scfh provided that sank #5 were set at 3 minutes  O <sub>2</sub> Inject  ID  OW-1-29S	the pressure reading ion System #1 Injection Bank 8 Depth 48.5	g was no greate	psi 12	ID OW-1-33D	Injecti Depth 83.2	on Bank 9 scfh 30	property 2
Ments: All injection Corporation at Injury ID OW-1-25D OW-1-26D	n point flows we after collecting  jection Bank 7  Depth  78.1	ere adjusted to to greadings. Inje	the target flow in extreme at E	rate of ~30 scfh provided that sank #5 were set at 3 minutes  O2 Inject  ID  OW-1-29S  OW-1-30S	the pressure reading ion System #1 Injection Bank 8 Depth 48.5	scfh 30 35	psi 12	ID OW-1-33D OW-1-34D	Injecti Depth 83.2 84.5	on Bank 9 scfh 30	2 2 3
All injection Corporation at Inj ID OW-1-25D OW-1-26D OW-1-27D	n point flows we after collecting  jection Bank 7  Depth  78.1  78.1	ere adjusted to to greadings. Inje  scfh  30  50  60	psi 27 28 30	rate of ~30 scfh provided that sank #5 were set at 3 minutes  O2 Inject  ID  OW-1-29S  OW-1-30S  OW-1-31S	the pressure reading ion System #1 Injection Bank 8 Depth 48.5 48.8 49.3	scfh 30 35 40	psi 12 13	ures provided in the  ID  OW-1-33D  OW-1-35D	Injecti Depth 83.2 84.5	on Bank 9 scfh 30 35	2: 3 3 3 6
Ments: All injection Corporation at Inj ID OW-1-25D OW-1-26D OW-1-27D OW-1-28D	n point flows we after collecting piection Bank 7  Depth 78.1  78.1  77.9  78.0	scfh 30 50 60	psi 27 28 30 28	Tate of ~30 scfh provided that Bank #5 were set at 3 minutes  O2 Inject  ID  OW-1-29S  OW-1-30S  OW-1-31S	the pressure reading ion System #1 Injection Bank 8 Depth 48.5 48.8 49.3	scfh 30 35 40	psi 12 13 13 13	ures provided in the  ID  OW-1-33D  OW-1-34D  OW-1-35D  OW-1-36D	Injecti   Depth   83.2   84.5   85.0   85.0	30 35 40 20	2: 33 34 22:
Ments: All injection Corporation at Inj ID OW-1-25D OW-1-26D OW-1-27D OW-1-28D OW-1-29D	78.1 78.0 78.4	scfh 30 50 60 30	psi 27 28 30 28	Tate of ~30 scfh provided that Bank #5 were set at 3 minutes  O2 Inject  ID  OW-1-29S  OW-1-30S  OW-1-31S  OW-1-32S  OW-1-33S	the pressure reading ion System #1 Injection Bank 8 Depth 48.5 48.8 49.3 49.3	sefh 30 35 40 40 30	psi 12 13 13 13 13	Ures provided in the  ID  OW-1-33D  OW-1-34D  OW-1-35D  OW-1-36D  OW-1-37D	Injecti   Depth   83.2   84.5   85.0   84.0	30 35 40 20 30	

#### SYSTEM #1

Hempstead Intersection Street Former MGP Site Nassau County, New York

				O <sub>2</sub> Injection	on System #1						
Ir	jection Bank 1	0		I	njection Bank 11				Injection	on Bank 12	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-37S	50.5	25	12	OW-1-41D	73.6	OFF	OFF	OW-1-43	67.4	OFF	OFF
OW-1-38S	50.6	25	13	OW-1-42D	71.0	OFF	OFF	OW-1-44	66.6	25	19
OW-1-39S	50.7	40	13	OW-1-45	65.7	30	20	OW-1-51R	60.6	30	18
OW-1-40S	51.1	20	13	OW-1-46	64.3	25	18	OW-1-52	59.3	40	16
OW-1-41S	51.5	30	13	OW-1-47	63.4	25	18	OW-1-53	60.0	20	17
OW-1-42S	51.3	25	13	OW-1-48	62.5	25	18	OW-1-54	60.0	70	17
				OW-1-49	61.5	20	17				
				OW-1-50	61.0	20	18				

Comments:

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

					C	2 Injectio	n System #2					
	Mon	itoring Points	Log			Mo	nitoring Points L	og		Monitori	ng Points Log	
ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DO (mg/L) Middle	DO (mg/L) Top
MP-1-1D	25.14	20.9	2.14	35.1	MP-1-5	24.80	20.9	2.40	114.1	MP-1-1D	2.65	4.36
MP-1-1S	25.30	40.0	1.96	3.4	MP-1-6	17.24	20.9	2.07	0.0	MP-1-2D	2.25	5.97
MP-1-2D	19.32	40.0	1.89	0	MP-1-7	20.51	20.9	1.40	0	MP-1-3D	2.81	5.31
MP-1-2S	19.71	28.8	3.65	0	MP-1-8	21.54	20.9	2.30	0.0	MP-1-4D	2.01	5.89
MP-1-3D	17.46	20.9	2.31	0								
MP-1-3S	17.48	40.0	3.88	0								
MP-1-4D	20.16	35.8	1.73	4.4								
MP-1-4S	19.98	40.0	2.68	184.7								

Comments:

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

#### SYSTEM #1

						Date:	5/18/2012
				OPERATIONAL	NOTES		
5 Air Com	pressor						
1		el Checked with system u			Yes X	No	
_		d system, wait until Deliv	ery Air Pressure is less	than 9 psi			
2	.) Oil Leve	l with system unloaded					
		Low (red	·	Normal (green)	<u>X</u>	High (orange)	
	3) Oil added		Yes		No X		
	Oil chang	•	Yes		No X		
	<ul><li>6) Oil filter</li><li>6) Air filter</li></ul>	0	Yes Yes		No X No X		
		rator changed	Yes		No X		
		l strips checked	Yes X		No A		
O	, remina	i strips enecked	105 11				
-80 O <sub>2</sub> Gen	<u>nerator</u>						
1	) Prefilter	changed	Yes		No X		
		ng changed	Yes		No X		
				GENERAL SYSTEM	M NOTES		
				GENERAL STOTE	THOTES		
<u>ler</u>							
1	)	Performed general hous	sekeeping (i.e. sweep, co	ollect trash inside and	out, etc.)		
					Yes X	No	
2	<b>:</b> )	Abnormal conditions of	oserved (e.g. vandalism				
3	3)	Other major activities of	ompleted				
4	.)	Supplies needed					
_							
5	5)	Visitors					
		es such as any alarm/sh					
		/filter/gasket and/or an					
						pressure and reinstalled. Wire brushed	
				all equipment and clear	ned up all garbage & le	eaves from around fence areas. Pulled	all weeds along ga
nmed tree I	imb from o	other property hitting the	system shed roof.				
	W 0 6 0 2 4	222 di 11 di 12 11 11 11 11 11 11 11 11 11 11 11 11					
		-323 tied into Pole #4					
tion Items:	:						

#### SYSTEM #1

Date: Time: Weather: Outdoor Temper: Inside Trailer Temp Performed B	perature:	12 Sur ~65 ~69	2012 240 nny 5° F 9° F								
	O <sub>2</sub> Ge	enerator (Ai	irSep)				Compressor	(Kaesar Rota	v Screw	7)	
Hours			3,312.4		Compressor T			`	105	<u> </u>	(psi)
Feed Air Pressure *			70	(psi)	Delivery Air	(rea	dings below	are made from	control p	oanel)	(psi)
Cycle Pressure *	Cycle Pressure *60(psi)						Element Outlet Temperature 102 (ol				
Oxygen Receiver Pressur	100 (psi)	Running Hou Loading Hou				3,945 2,498		(hours)			
Oxygen Purity * maximum reading during loa	ading cycle		97.1	(percent)	* maximum read	ing during load	ing cycle				
I	njection Bank 1	ı		O <sub>2</sub> Injecti	ion System #1 Injection Bank 2				Injecti	on Bank 3	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-1	95.5	35	32	OW-1-5S	67.3	25	18	OW-1-9D	88.5	OFF	OFF
OW-1-2	96.5	30	28	OW-1-6S	67.0	25	18	OW-1-10D	87.2	OFF	OFF
OW-1-3	96.3	30	31	OW-1-7S	66.9	20	18	OW-1-11D	86.1	OFF	OFF
OW-1-4	95.0	30	31	OW-1-8S	66.7	OFF	OFF	OW-1-12D	85.3	OFF	OFF
OW-1-5D	93.9	25	30	OW-1-9S	66.0	25	19	OW-1-13D	84.7	OFF	OFF
OW-1-6D	OW-1-10S	54.6	20	14	OW-1-14D	84.1	OFF	OFF			
OW-1-7D	OW-1-11S	54.1	30	15	OW-1-15D	83.3	OFF	OFF			
OW-1-8D	OW-1-12S	53.6	30	16	OW-1-16D	82.5	OFF	OFF			
				rate of ~30 scfh provided that Bank #1 and Bank #3 were set		g was no greate	r than the press	ures provided in the	hydrostat	ic tables prepar	ed by URS

#### SYSTEM #1

								Date:		6/1/201	2
					on System #1				<b>T</b> • •	D 16	
ID	njection Bank 4  Depth	scfh	psi	ID	Injection Bank 5  Depth	scfh	psi	ID	Depth	on Bank 6 scfh	psi
OW-1-13S	53.1	20	14	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	20	12
OW-1-14S	52.7	30	15	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	25	12
OW-1-15S	52.2	25	14	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	20	12
OW-1-16SR	51.8	OFF	OFF	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	30	13
OW-1-17S	50.7	OFF	OFF	OW-1-21D	79.5	OFF	OFF	OW-1-25S	48.8	30	13
OW-1-18S	50.2	25	13	OW-1-22D	79.5	OFF	OFF	OW-1-26SR	48.3	30	13
OW-1-19S	49.7	30	15	OW-1-23D	78.7	OFF	OFF	OW-1-27S	48.3	25	14
OW-1-20S	49.3	45	14	OW-1-24D	78.2	OFF	OFF	OW-1-28S	48.3	30	14
				rate of ~30 scfh provided that the Bank #5 were set at 3 minutes.	ne pressure readinș	g was no greate	r than the press	ures provided in the	e hydrostat	ic tables prepare	ed by URS
				O <sub>2</sub> Injection	on System #1						
	njection Bank				Injection Bank 8					on Bank 9	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-25D	78.1	30	27	OW-1-29S	48.5	20	13	OW-1-33D	83.2	40	29
OW-1-26D	78.1	60	29	OW-1-30S	48.8	25	13	OW-1-34D	84.5	35	31
OW-1-27D	77.9	50	31	OW-1-31S	49.3	20	13	OW-1-35D	85.0	60	29
OW-1-28D	78.0	30	28	OW-1-32S	49.3	35	12	OW-1-36D	85.0	30	30
OW-1-29D	78.4	40	27	OW-1-33S	49.7	25	13	OW-1-37D	84.0	30	29
OW-1-30D	79.0	60	33	OW-1-34S	50.1	10	13	OW-1-38D	82.0	40	27
OW-1-31D	80.5	50	21	OW-1-35S	50.3	15	13	OW-1-39D	78.0	20	27
OW-1-32D	81.6	20	28	OW-1-36S	50.3	20	13	OW-1-40D	76.0	OFF	OFF
	on point flows w		the target flow	rate of ~30 scfh provided that the	ne pressure reading	g was no greate	r than the press	ures provided in the	e hydrostat	ic tables prepare	ed by URS
								Date:		6/1/201	2

#### SYSTEM #1

Hempstead Intersection Street Former MGP Site Nassau County, New York

				O <sub>2</sub> Injection	on System #1						
In	jection Bank 1	0		I	njection Bank 11				Injection	on Bank 12	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi
OW-1-37S	50.5	30	12	OW-1-41D	73.6	OFF	OFF	OW-1-43	67.4	OFF	OFF
OW-1-38S	50.6	25	13	OW-1-42D	71.0	OFF	OFF	OW-1-44	66.6	20	18
OW-1-39S	50.7	35	13	OW-1-45	65.7	25	18	OW-1-51R	60.6	25	17
OW-1-40S	51.1	20	13	OW-1-46	64.3	20	18	OW-1-52	59.3	40	15
OW-1-41S	51.5	30	13	OW-1-47	63.4	20	18	OW-1-53	60.0	20	16
OW-1-42S	51.3	25	13	OW-1-48	62.5	25	17	OW-1-54	60.0	30	17
				OW-1-49	61.5	20	17				
				OW-1-50	61.0	30	18				

Comments:

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

					0	2 Injectio	n System #2			1			
	Mon	itoring Points	Log			Mo	nitoring Points L	og		Monitori	ng Points Log		
ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DO (mg/L) Middle	DO (mg/L) Top	
MP-1-1D	24.86	20.9	1.86	NR	MP-1-5	24.52	20.9	1.82	NR	MP-1-1D	2.01	3.00	
MP-1-1S	25.04	39.9	1.87	NR	MP-1-6	16.99	20.9	2.08	NR	MP-1-2D	2.05	2.39	
MP-1-2D	19.04	39.6	1.84	NR	MP-1-7	20.26	20.9	1.82	NR	MP-1-3D	2.89	3.59	
MP-1-2S	19.45	40.0	3.35	NR	MP-1-8	21.32	18.0	2.61	NR	MP-1-4D	1.99	3.09	
MP-1-3D	17.20	19.3	2.51	NR									
MP-1-3S	17.25	40.0	3.71	NR									
MP-1-4D	19.95	23.2	2.06	NR									
MP-1-4S	19.76	40.0	2.71	NR									

Comments:

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

#### SYSTEM #1

						Date:	6/1/2012
			Ol	PERATIONAL N	NOTES		
GA5 Air Com	npressor						
1	Oil Level * Unload	•	oaded* ry Air Pressure is less than	9 psi	Yes X	No	
2	2) Oil Level	with system unloaded		N 1 ()	v	III als (a mana a)	
3	3) Oil added	Low (red)	Yes	Normal (green)	No X	High (orange)	
	Oil chang		Yes	_	No X		
	6) Oil filter		Yes	=	No X		
	Air filter	•	Yes	_	No X		
7	) Oil separa	ntor changed	Yes	_	No X		
8	3) Terminal	strips checked	Yes X	=	No		
AS-80 O <sub>2</sub> Ger	nerator						
1	) Prefilter o	hanged	Yes		No X		
2	2) Coalescin	g changed	Yes	<del>-</del>	No X		
			GEN	ERAL SYSTEM	INOTES		
<u>Trailer</u>	D)	Danfamus d. con anal h assas	raamina (i.a. arraam, aallaat	tuo ah in ai da an da			
1	1)	Performed general nouse	keeping (i.e. sweep, collect	trash inside and c	Yes X	No	
					ies A	No	
2	2)	Abnormal conditions obs	erved (e.g. vandalism				
	,		(				
2		Otherwise					
3	3)	Other major activities con	npieted				
4	4)	Supplies needed					
5	5)	Visitors					
3	))	VISITORS					
	•						
		-	downs, sampling, mainter				
transported (	off-site, oil/	filter/gasket and/or any	other abnormal operating	g conditions:			
Removed a sn	nall quantity	of oil from the separator	unit. Wiped down all equi	ipment and cleane	d up all garbage & le	aves from around fence areas. Pul	ed all weeds along gates
fence areas. A	A service tec	chnician from AFCO Hon	ne Appliance was on-site to	evaluate the issu	es with the Fredrich A	Air Conditioner. It was determined	that the compressor in th
unit is blown	and the syst	em needs to be replaced.	Due to the limited access to	o the AC unit opti	ons are being evaluat	ed with Matrix for the replacement	of this unit.
During the O	&M event th	e PID stopped working a	nd readings were not collec	eted.			
Electric Meter	r # 96-934-3	323 tied into Pole #4					
Action Items	:						

#### SYSTEM #1

Date: Time:			/2012 325	-							
Weather:			nny	-							
Outdoor Tempera			8° F	-							
Inside Trailer Temp			5° F	_							
Performed By	y:	Mike	Ryan	<u>-</u>							
	O <sub>2</sub> Go	enerator (A	irSep)				Compressor	(Kaesar Rotai	y Screv	v)	
Hours 3,430.0				-	Compressor T	ank *			110		(psi)
Feed Air Pressure *	(psi)	Delivery Air	(rea	dings below	are made from	•	panel)	(5)			
Cycle Pressure *	Cycle Pressure * 70 (psi)					et Temperatu	ıra		106		(psi) (oF)
Cycle Hessule				(psi)	Element Outle	et Temperati	116		100		(01')
Oxygen Receiver Pressur	re *			100	Running Hou	rs			4,081		(hours)
, ,				(psi)	Loading Hour				2,581		(hours)
				* /							,
Oxygen Purity			98.5	(percent)							
* maximum reading during loa	iding cycle		, , , ,	_(F)	* maximum read	ing during load	ing cycle				
* maximum reading during loading cycle  * maximum reading during loading cycle  O <sub>2</sub> Injection System #1											
				O <sub>2</sub> Injection	on System #1						
In	njection Bank 1	1			on System #1 Injection Bank 2				Injecti	on Bank 3	
ID	njection Bank 1	1 sefh	psi			scfh	psi	ID	Injecti Depth	on Bank 3	psi
	<u> </u>		<b>psi</b> 32		Injection Bank 2	sefh 30	psi 18	ID OW-1-9D			psi OFF
ID	Depth	scfh		ID	Injection Bank 2  Depth				Depth	scfh	
ID OW-1-1	Depth 95.5	scfh 30	32	ID OW-1-5S	Depth 67.3	30	18	OW-1-9D	Depth 88.5	scfh OFF	OFF
OW-1-1 OW-1-2	95.5 96.5	30 30	32	OW-1-5S OW-1-6S	Injection Bank 2 Depth 67.3 67.0	30 40	18	OW-1-9D	88.5 87.2	off OFF	OFF OFF
OW-1-1 OW-1-2 OW-1-3	95.5 96.5 96.3	30 30 30	32 28 31	OW-1-5S OW-1-6S OW-1-7S	Depth   67.3   67.0   66.9	30 40 30	18 19 18	OW-1-9D OW-1-10D OW-1-11D	88.5 87.2 86.1	off OFF OFF	OFF OFF
OW-1-1 OW-1-2 OW-1-3 OW-1-4	95.5 96.5 96.3	30 30 30 30 40	32 28 31 30	OW-1-5S OW-1-6S OW-1-7S OW-1-8S	Depth   67.3   67.0   66.9   66.7	30 40 30 OFF	18 19 18 OFF	OW-1-9D OW-1-10D OW-1-11D OW-1-12D	88.5 87.2 86.1 85.3	off OFF OFF OFF	OFF OFF OFF
OW-1-1 OW-1-2 OW-1-3 OW-1-4 OW-1-5D	95.5 96.5 96.3 95.0	scfh 30 30 30 40 30	32 28 31 30 30	OW-1-5S OW-1-6S OW-1-7S OW-1-8S OW-1-9S	Depth   67.3   67.0   66.9   66.7   66.0	30 40 30 OFF 30	18 19 18 OFF 19	OW-1-9D OW-1-10D OW-1-11D OW-1-12D OW-1-13D	88.5 87.2 86.1 85.3 84.7	scfh OFF OFF OFF OFF	OFF OFF OFF
OW-1-1 OW-1-2 OW-1-3 OW-1-4 OW-1-5D OW-1-6D	95.5 96.5 96.3 95.0 93.9	30 30 30 30 40 30 45	32 28 31 30 30 30	OW-1-5S OW-1-6S OW-1-7S OW-1-8S OW-1-9S OW-1-10S	Depth   67.3   67.0   66.9   66.7   66.0   54.6	30 40 30 OFF 30 40	18 19 18 OFF 19 15	OW-1-9D OW-1-10D OW-1-11D OW-1-12D OW-1-13D OW-1-14D	Depth	Sefh OFF OFF OFF OFF	OFF OFF OFF OFF

#### SYSTEM #1

								Date:		6/18/201	2			
	O <sub>2</sub> Injection System #1  Injection Bank 4													
ID	<del></del>	scfh	nai	ID	Depth	scfh	ngi	ID	_	49.3 30 12 48.8 30 12 48.4 40 13 48.8 35 13 48.3 30 13 48.3 40 13 48.3 40 14 drostatic tables prepared by URS  Injection Bank 9 epth scfh psi				
	Depth		psi				psi			•				
OW-1-13S	53.1	20	14	OW-1-17D	79.5	OFF	OFF	OW-1-21S	49.3	25	12			
OW-1-14S	52.7	25	15	OW-1-18D	78.3	OFF	OFF	OW-1-22S	49.3	30	12			
OW-1-15S	52.2	30	13	OW-1-19D	78.9	OFF	OFF	OW-1-23S	48.8	30	12			
OW-1-16SR	51.8	OFF	OFF	OW-1-20D	79.5	OFF	OFF	OW-1-24S	48.4	40	13			
OW-1-17S	50.7	OFF	OFF	OW-1-21D	79.5	OFF	OFF	OW-1-25S	48.8	35	13			
OW-1-18S	50.2	30	13	OW-1-22D	79.5	OFF	OFF	OW-1-26SR	48.3	30	13			
OW-1-19S	49.7	40	14	OW-1-23D	78.7	OFF	OFF	OW-1-27S	48.3	40	13			
OW-1-20S	49.3	50	14	OW-1-24D	78.2	OFF	OFF	OW-1-28S	48.3	40	14			
					he pressure reading	g was no greate	r than the press	ures provided in the	hydrostat	ic tables prepare	ed by URS			
Corporatio	n after collecting	g readings. Inje	ection times at I	Bank #5 were set at 3 minutes.										
					on System #1									
ID	njection Bank 7		<del></del>	ID	Injection Bank 8	- a		TD.	_					
10	Depth	scfh	psi		Depth	scfh	psi	ID	Deptn	scin	psi			
OW-1-25D	78.1	30	28	OW-1-29S	48.5	30	13	OW-1-33D	83.2	40	30			
OW-1-26D	78.1	60	29	OW-1-30S	48.8	25	13	OW-1-34D	84.5	40	32			
OW-1-27D	77.9	50	31	OW-1-31S	49.3	20	14	OW-1-35D	85.0	60	29			
OW-1-28D	78.0	30	28	OW-1-32S	49.3	30	13	OW-1-36D	85.0	30	30			
OW-1-29D	78.4	40	27	OW-1-33S	49.7	30	13	OW-1-37D	84.0	30	30			
OW-1-30D	79.0	60	38	OW-1-34S	50.1	35	13	OW-1-38D	82.0	40	28			
OW-1-31D	80.5	40	29	OW-1-35S	50.3	40	13	OW-1-39D	78.0	30	28			
OW-1-32D	81.6	20	30	OW-1-36S	50.3	40	13	OW-1-40D	76.0	OFF	OFF			
			the target flow	rate of ~30 scfh provided that the	he pressure reading	g was no greate	r than the press	ures provided in the	hydrostat	ic tables prepare	ed by URS			
All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.														
								Date:		6/18/201				

#### SYSTEM #1

Hempstead Intersection Street Former MGP Site Nassau County, New York

O <sub>2</sub> Injection System #1												
Ir	jection Bank 1	0		I	njection Bank 11			Injection Bank 12				
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	psi	
OW-1-37S	50.5	40	12	OW-1-41D	73.6	OFF	OFF	OW-1-43	67.4	OFF	OFF	
OW-1-38S	50.6	35	13	OW-1-42D	71.0	OFF	OFF	OW-1-44	66.6	30	19	
OW-1-39S	50.7	50	13	OW-1-45	65.7	30	19	OW-1-51R	60.6	30	18	
OW-1-40S	51.1	25	13	OW-1-46	64.3	30	18	OW-1-52	59.3	40	16	
OW-1-41S	51.5	25	14	OW-1-47	63.4	30	18	OW-1-53	60.0	35	17	
OW-1-42S	51.3	30	12	OW-1-48	62.5	35	18	OW-1-54	60.0	35	17	
				OW-1-49	61.5	25	17					
				OW-1-50	61.0	30	16					

Comments:

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

O <sub>2</sub> Injection System #2												
	itoring Points	Log			Monitoring Points Log				Monitoring Points Log			
ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	ID	DO (mg/L) Middle	DO (mg/L) Top
MP-1-1D	24.51	20.9	2.34	0	MP-1-5	24.15	20.9	2.29	0	MP-1-1D	1.69	2.22
MP-1-1S	24.68	20.9	1.99	0	MP-1-6	16.60	20.9	2.26	0	MP-1-2D	2.01	3.25
MP-1-2D	18.67	24.8	1.44	0	MP-1-7	19.87	20.9	1.73	0.2	MP-1-3D	2.54	3.18
MP-1-2S	19.68	32.9	3.31	0	MP-1-8	20.92	19.7	2.02	0	MP-1-4D	2.12	3.15
MP-1-3D	16.83	19.7	2.35	0								
MP-1-3S	16.85	38.9	3.20	0								
MP-1-4D	19.54	28.1	1.90	5.5								
MP-1-4S	19.36	24.7	3.18	0.8								

Comments:

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

### SYSTEM #1

						Date:	6/18/2012
				OPERATIONAL	NOTES		
GA5 Air C	Compressor						
5.15 · m	1) Oil Leve * Unload	el Checked with system un d system, wait until Delive el with system unloaded		than 9 psi	Yes X	No	
	3) Oil adde	Low (red)	Yes	Normal (green)	No X	High (orange)	-
	<ul><li>4) Oil chan</li><li>5) Oil filter</li></ul>	<u> </u>	Yes Yes	<del></del>	No X No X		
	6) Air filter	· ·	Yes		No X		
	7) Oil sepa	rator changed	Yes		No X		
	8) Termina	l strips checked	Yes		No X		
AS-80 O <sub>2</sub> (	Generator						
_	1) Prefilter		Yes		NoX		
	2) Coalesci	ng changed	Yes	<u> </u>	No X		
				GENERAL SYSTEM	M NOTES		
<u>Trailer</u>	1)	Performed general house	keeping (i.e. sweep, co	ollect trash inside and	out, etc.) Yes X	No	-
	2)	Abnormal conditions obs	erved (e.g. vandalism				
	3)	Other major activities co	mpleted				
	4)	Supplies needed					
		-					
	5)	Visitors					
		es such as any alarm/shu /filter/gasket and/or any					
		arator control handle by ins Systematic was on-site to				aned up all garbage & leaves from	around fence areas. A
Electric M	eter # 96-934-	-323 tied into Pole #4					
Action Ite	ms:						
İ							

### SYSTEM #2

Tir Wea Outdoor Te Inside Trailer	ate: me: ather: emperature: Temperature: med By:	12 Su ~7 ~7	/2012 240 unny 75° F 10° F e Ryan	- - - -										
	O <sub>2</sub> Gen	erator (Air	rSep)				Com	npressor (Kaesar Rotary Screw)						
Hours			10,647	-	Compressor	Tank *			80		(psi)			
Feed Air Press	ure *		75	(psi)			(readings	s below are mad	de from co	ontrol panel)				
				_	Delivery Ai				87		(psi)			
Cycle Pressure	, *		60	(psi)	Element Ou	tlet Tempe	rature		172		(°F)			
Oxygen Receiv	ver Pressure *			115 (psi)	Running Ho Loading Ho				10,786		(hours) (hours)			
Oxygen Purity * maximum readin	ng during loading cy	ycle	97.8	_(percent)	* maximum re			e						
				1	O <sub>2</sub> Injection		2				~			
ID	Injection Ba  Depth	nk A scfh	psi	ID	Injection Ba  Depth	nk B scfh	psi	ID	Depth	jection Bank (	scfh			
	Бери	SCIII	Por	12	Берин	SCIII	Por	ID.	Бери	SCIII	belli			
OW-2-2	90.2'	35	32	OW-2-9S	75'	40	20	OW-2-10D	97.2'	35	28			
OW-2-2 OW-2-3	90.2'		32	OW-2-9S OW-2-10S	75'	40	20	OW-2-11D	97.2'	35	28			
		35		-										
OW-2-3	94.3'	35 45	28	OW-2-10S	75'	45	30	OW-2-11D	100.8'	35	32			
OW-2-3	94.3'	35 45 40	28	OW-2-10S OW-2-11S	75'	45	30	OW-2-11D	100.8'	35	32			
OW-2-3 OW-2-4 OW-2-5	94.3' 94.7' 95.3'	35 45 40 30	28 33 30	OW-2-11S OW-2-13S	75' 76.5' 75'	45 50 45	30 21 19	OW-2-11D OW-2-12 OW-2-13D	100.8' 94' 97'	35 40 60	32 20 31			
OW-2-3 OW-2-4 OW-2-5	94.3' 94.7' 95.3' 95.7'	35 45 40 30 30	28 33 30 31	OW-2-10S  OW-2-11S  OW-2-13S  OW-2-15S	75' 76.5' 75'	45 50 45 OFF	30 21 19 OFF	OW-2-11D  OW-2-12  OW-2-13D  OW-2-14	94' 97' 96.4'	35 40 60 36	32 20 31 29			
OW-2-3 OW-2-4 OW-2-5 OW-2-6 OW-2-7	94.3' 94.7' 95.3' 95.7'	35 45 40 30 30 30	28 33 30 31 30	OW-2-10S  OW-2-11S  OW-2-13S  OW-2-15S  OW-2-16S	75' 76.5' 75' 755'	45 50 45 OFF	30 21 19 OFF	OW-2-11D  OW-2-12  OW-2-13D  OW-2-14  OW-2-15D	94' 97' 96.4' 94.6'	35 40 60 36 OFF	32 20 31 29 OFF			

### SYSTEM #2

Hempstead Intersection Street Former MGP Site Nassau County, New York

				]	Nassau Cour	ity, New Yo	ork					
								Date:		4/5	/2012	
					O <sub>2</sub> Injection	System #2	2					
	Injection Ba	ınk D			Injection Ba	nk E			Iı	njection Bank	F	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	sc	fh
OW-2-18D	95.5'	OFF	OFF	OW-2-22S	76'	OFF	OFF	OW-2-26D	95'	OFF	Ol	FF
OW-2-19	96.1'	OFF	OFF	OW-2-24S	77.8'	OFF	OFF	OW-2-27	93.5'	OFF	OI	FF
OW-2-20D	96.6'	OFF	OFF	OW-2-26S	74'	OFF	OFF	OW-2-28D	92.1'	OFF	Ol	FF
OW-2-21	96.6'	OFF	OFF	OW-2-28S	76'	OFF	OFF	OW-2-29	92.2'	40	2	9
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	40	2	8
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	55	3	2
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	60	3	4
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	40	3	8
Comments:				get flow rate of ~30 njection banks D &			ire reading v	vas no greater than	the pressure	es provided in the	ne hydrostatic ta	ables prepared
					O <sub>2</sub> Injection	System #2	2					
	Injection Ba	ınk G			Injection Ba	nk H			Mon	itoring Points	Log	
ID	Depth	scfh	psi	ID	Depth	sefh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)
OW-2-37	62.8'	30	20	OW-2-45	61.1'	30	22	MP-2-1	27.97	21.2	3.64	0
		1				l			l			l

	O <sub>2</sub> Injection system π <sup>2</sup>												
	Injection Ba	nk G			Injection Bar	nk H			Mon	itoring Points	Log		
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	
OW-2-37	62.8'	30	20	OW-2-45	61.1'	30	22	MP-2-1	27.97	21.2	3.64	0	
OW-2-38	62.1'	30	20	OW-2-46	61'	40	20	MP-2-2	29.07	20.9	4.22	13.3	
OW-2-39	60'	35	20	OW-2-47	60.5'	35	20	MP-2-3S	29.19	21.7	1.81	2.5	
OW-2-40	61.7'	30	21	ID	DO (mg/L) Middle	DO (m To		MP-2-3D	29.38	27.7	1.85	5.8	
OW-2-41	61.7'	25	20	MP-2-2	6.57	8.0	2	MP-2-4	17.92	24.9	3.16	70.1	
OW-2-42	61.6'	45	19	MP-2-3S	1.42	15.2	24	MP-2-5	16.15	23.4	3.96	7.1	
OW-2-43	61.4'	40	20	MP-2-3D	5.03	20.7	77						
OW-2-44R	60.6'	40	20	MP-2-5	5.37	18.8	87						

# SYSTEM #2

				Date:	4/5/2012
		OPERATIONAL MOTI	3G		
GA5 Air Compress	201	OPERATIONAL NOTE	<u>.S</u>		
1) Oil l * Ur	Level Checked with system unloaded* nload system, wait until Delivery Air Press Level with system unloaded	1		X	No
5) Oil i 6) Air i 7) Oil s	Low (red)added changed filter changed filter Changed separator cleaned minal strips checked	Normal (green)   Yes	<u>X</u> Higl	h (orange) No No No No No	X X X X
AS-80 O <sub>2</sub> Generato					
	filter changed descing changed	Yes		No	X X
		GENERAL SYSTEM NO	ΓES		
ŕ	formed general housekeeping (i.e. sweep, control of the conditions observed (e.g. vandalism	Yes X		No	
3) Othe	er major activities completed				
4) Supj	plies needed				
5) Visi	itors				
	tivities such as any alarm/shutdowns, sa te, oil/filter/gasket and/or any other abno		l		
apart auto drain and	seperator unit in shed. Found build up of d cleaned out silt build up in unit. Drained age & leaves from around fence areas.		-		
Electric Meter # 96	5-929-544 tied into Pole #3				
Action Items:					

# SYSTEM #2

Tir Wea	nte: me: ather: emperature:	1: St	7/2012 314 nnny 75° F	- - -									
	Temperature: med By:		'0° F e Ryan	- -									
	O <sub>2</sub> Gen	erator (Ai	rSep)		l l		Com	pressor (Kaesa	ar Rotary	Screw)			
Hours			10,898	-	Compressor	r Tank *			75	-	(psi)		
Feed Air Press	sure *		80	(psi)	D. I' A		(readings	s below are made		ontrol panel)			
Cycle Pressure	·*		50	(psi)	Delivery Ai Element Ou		rature		172		(psi) (°F)		
Oxygen Recei	ver Pressure *			125 (psi)	Running Ho			11,039 (hour 10,939) (hour					
Oxygen Purity * maximum readir	ng during loading c	ycle	97.9	(percent)	* maximum re			:					
	Injection Ba	nlr A		1	O <sub>2</sub> Injection Ba		<u>Z</u>		T-	ijection Bank (	7		
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	scfh		
OW-2-2	90.2'	40	31	OW-2-9S	75'	30	21	OW-2-10D	97.2'	35	28		
OW-2-3	94.3'	45	21	OW-2-10S	75'	30	30	OW-2-11D	100.8'	30	33		
OW-2-4	94.7'	50	32	OW-2-11S	76.5'	30	22	OW-2-12	94'	25	21		
OW-2-5	95.3'	30	30	OW-2-13S	75'	45	20	OW-2-13D	97'	50	28		
OW-2-6	95.7'	40	31	OW-2-15S	75'	OFF	OFF	OW-2-14	96.4'	40	29		
OW-2-7	96'	30	30	OW-2-16S	75.5'	OFF	OFF	OW-2-15D	94.6'	OFF	OFF		
OW-2-8	96.3'	30	30	OW-2-18S	74.5'	35	19	OW-2-16D	94.1'	OFF	OFF		
OW-2-9D	96.7'	30	31	OW-2-20S	79'	30	23	OW-2-17	95'	OFF	OFF		
	90.7												

### SYSTEM #2

Hempstead Intersection Street Former MGP Site Nassau County, New York

								Date:	,	4/17	7/2012	
					O <sub>2</sub> Injection	System #2	2					
	Injection Ba	ank D			Injection Ba	nk E			Ir	jection Bank	F	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	set	fh
OW-2-18D	95.5'	OFF	OFF	OW-2-22S	76'	OFF	OFF	OW-2-26D	95'	OFF	OF	Ŧ
OW-2-19	96.1'	OFF	OFF	OW-2-24S	77.8'	OFF	OFF	OW-2-27	93.5'	OFF	OF	Ŧ
OW-2-20D	96.6'	OFF	OFF	OW-2-26S	74'	OFF	OFF	OW-2-28D	92.1'	OFF	OF	Ŧ
OW-2-21	96.6'	OFF	OFF	OW-2-28S	76'	OFF	OFF	OW-2-29	92.2'	35	28	8
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	50	2	7
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	40	24	4
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	40	32	2
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	35	31	8
omments:				get flow rate of ~30 njection banks D &			re reading v	vas no greater than	the pressure	es provided in the	ne hydrostatic ta	bles prepar
					O <sub>2</sub> Injection	System #2	2					
	Injection Ba	ank G			Injection Bar	nk H			Mon	itoring Points	Log	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppn
OW 2.27	C2.81	20	20	OW 2.45	61.11	20	21	MD 2.1	20.21	20.0	1.24	1.0

	O <sub>2</sub> Injection System #2												
	Injection Ba	ınk G			Injection Ba	nk H			Mon	itoring Points	Log		
ID	Depth	scfh	psi	ID	Depth	sefh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)	
OW-2-37	62.8'	30	20	OW-2-45	61.1'	30	21	MP-2-1	28.21	20.9	1.24	1.0	
OW-2-38	62.1'	35	19	OW-2-46	61'	30	19	MP-2-2	29.32	20.9	3.47	0	
OW-2-39	60'	40	18	OW-2-47	60.5'	35	18	MP-2-3S	29.45	21.4	2.40	0.4	
OW-2-40	61.7'	30	20	ID	DO (mg/L) Middle	DO (n To		MP-2-3D	29.65	29.7	2.22	0.5	
OW-2-41	61.7'	30	20	MP-2-2	3.79	10.2	25	MP-2-4	18.18	28.5	2.47	0.7	
OW-2-42	61.6'	40	18	MP-2-3S	3.29	10.4	44	MP-2-5	16.39	26.0	3.54	0.2	
OW-2-43	61.4'	45	20	MP-2-3D	3.75	12.3	37						
OW-2-44R	60.6'	40	20	MP-2-5	4.24	12.0	65						
								•					

### SYSTEM #2

	Date: 4/17/2012
OPERATIONAL NOT	TES
GA5 Air Compressor	
Oil Level Checked with system unloaded*     * Unload system, wait until Delivery Air Pressure is less than 9 psi     Oil Level with system unloaded	Yes X No
Low (red) Normal (green)	X High (orange)
3) Oil added Yes X	No
4) Oil changed Yes X	No
5) Oil filter changed Yes X 6) Air filter Changed Yes X	No
7) Oil separator cleaned Yes X	No No
8) Terminal strips checked Yes X	No
AS-80 O <sub>2</sub> Generator	
1) Prefilter changed Yes X	No
2) Coalescing changed Yes X	No No
GENERAL SYSTEM NO	OTES
Trailer  1) Performed general housekeeping (i.e. sweep, collect trash inside and out, etc  Yes X	c.) No
Abnormal conditions observed (e.g. vandalism)	
Other major activities completed	
4) Supplies needed	
5) Visitors	
Record routine activities such as any alarm/shutdowns, sampling, maintenance, mater transported off-site, oil/filter/gasket and/or any other abnormal operating conditions:	
Performed 6-month O&M on all equipment on 4-17-12 and 4-18-12.	
Took apart air compressor and changed filters and cooling oil. Installed new belt on compre water from separator unit. Took apart auto drains on all units and cleaned out silt build up. out oil building up in base of air separator unit and replaced filters. Repaired both check va Repaired small leak in piping on low pressure air tank. Wiped down all equipment and clea	Changed filters in water trap and replaced o-rings in unit. Flushed alues on the booster pumps. Changed all fresh air filters in shed.
Electric Meter # 96-929-544 tied into Pole #3	
Action Items:	

# SYSTEM #2

Tii Wea Outdoor To Inside Trailer	ate: me: ather: emperature: Temperature: med By:	1: Clo ~7 ~7	/2012 307 oudy /2° F 0° F e Ryan								
	O <sub>2</sub> Gen	erator (Ai	rSep)				Com	pressor (Kaesa	<mark>r Rotary</mark>	Screw)	
Hours			11,298	-	Compressor	Tank *			95		(psi)
Feed Air Press	sure *		90	(psi)	(readings below are made from control panel)						(psi)
Cycle Pressure	*		60	(psi)	Delivery Air 105 Element Outlet Temperature 171						
Oxygen Recei	ver Pressure *			115 (psi)	Running Ho Loading Ho				11,440 11,325		(hours)
Oxygen Purity * maximum readir	ng during loading cy	ycle	97.7	(percent)	* maximum re			·			
	Injection Ba	-1- A			O <sub>2</sub> Injection  Injection Ba		2		T	jection Bank (	7
ID	Depth Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	scfh
OW-2-2	90.2'	40	28	OW-2-9S	75'	30	20	OW-2-10D	97.2'	20	28
OW-2-3	94.3'	40	28	OW-2-10S	75'	30	30	OW-2-11D	100.8'	30	32
OW-2-4	94.7'	40	32	OW-2-11S	76.5'	35	22	OW-2-12	94'	30	20
OW-2-5	95.3'	30	31	OW-2-13S	75'	40	20	OW-2-13D	97'	45	33
OW-2-6	95.7'	35	30	OW-2-15S	75'	OFF	OFF	OW-2-14	96.4'	30	30
OW-2-7	96'	30	30	OW-2-16S	75.5'	OFF	OFF	OW-2-15D	94.6'	OFF	OFF
OW-2-8	96.3'	30	30	OW-2-18S	74.5'	50	19	OW-2-16D	94.1'	OFF	OFF
OW-2-9D	96.7'	35	30	OW-2-20S	79'	40	23	OW-2-17	95'	OFF	OFF
	70.7										

### SYSTEM #2

Hempstead Intersection Street Former MGP Site Nassau County, New York

				I	Nassau Cour	ity, New Y	ork				
								Date:		5/4	/2012
					O <sub>2</sub> Injection	System #	2				
	Injection Ba	ınk D			Injection Ba				Ir	jection Bank	F
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	scfh
OW-2-18D	95.5'	OFF	OFF	OW-2-22S	76'	OFF	OFF	OW-2-26D	95'	OFF	OFF
OW-2-19	96.1'	OFF	OFF	OW-2-24S	77.8'	OFF	OFF	OW-2-27	93.5'	OFF	OFF
OW-2-20D	96.6'	OFF	OFF	OW-2-26S	74'	OFF	OFF	OW-2-28D	92.1'	OFF	OFF
OW-2-21	96.6'	OFF	OFF	OW-2-28S	76'	OFF	OFF	OW-2-29	92.2'	30	29
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	30	37
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	35	32
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	40	39
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	30	34
Comments:				get flow rate of ~30 njection banks D &			are reading v	vas no greater than	the pressure	s provided in th	ne hydrostatic tables prepared
					O <sub>2</sub> Injection	System #	2				
	Injection Ba	ınk G			Injection Ba	nk H			Mon	itoring Points	Log

					O <sub>2</sub> Injection	System #2	2					
	Injection Ba	nk G			Injection Bar	nk H			Mon	itoring Points	Log	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)
OW-2-37	62.8'	35	20	OW-2-45	61.1'	30	21	MP-2-1	28.24	24.6	1.41	5.3
OW-2-38	62.1'	30	22	OW-2-46	61'	30	19	MP-2-2	29.32	22.8	3.11	0
OW-2-39	60'	30	20	OW-2-47	60.5'	35	19	MP-2-3S	29.42	21.5	2.89	0
OW-2-40	61.7'	45	20	ID	DO (mg/L) Middle	DO (n To		MP-2-3D	29.62	23.3	1.71	1.2
OW-2-41	61.7'	40	20	MP-2-2	3.63	10.0	05	MP-2-4	18.15	23.7	2.08	0
OW-2-42	61.6'	30	18	MP-2-3S	3.29	7.7	17	MP-2-5	16.33	20.9	3.18	0
OW-2-43	61.4'	30	20	MP-2-3D	3.18	10.2	28					
OW-2-44R	60.6'	30	20	MP-2-5	3.72	9.1	19					

# SYSTEM #2

				Date:	5/4/2012
		OPED ATION AT NOT	TO CO		
CAF Air Co		OPERATIONAL NOT	ES		
GA5 Air Co	ompressor  1) Oil Level Checked with system unloaded*		Vac	X	No
	* Unload system, wait until Delivery Air Press	ura is lace than 0 nei	1 es		NO
	2) Oil Level with system unloaded	ure is less than 9 psi			
		Normal (green)	X Hic	gh (orange)	
	3) Oil added	Yes Yes	IIIg	No	X
	4) Oil changed	Yes		No_	
	5) Oil filter changed	Yes		No_	
	6) Air filter Changed	Yes		No _	
	7) Oil separator cleaned	Yes		No _	X
	8) Terminal strips checked	Yes		No _	X
	o) Terminal strips elected	103			
AS-80 O <sub>2</sub> G	Senerator				
	1) Prefilter changed	Yes		No	X
	2) Coalescing changed	Yes		No _	X
					<del></del>
		GENERAL SYSTEM NO	OTES		
<u>Trailer</u>					
	1) Performed general housekeeping (i.e. sweep, co		)		
		Yes X		No_	
	2) Abnormal conditions observed (e.g. vandalism	)			
	3) Other major activities completed				
	4) Supplies needed				
				<del></del>	
	5) Visitors				
	5) VISITOIS				
	atine activities such as any alarm/shutdowns, sai	= =	al		
transported	d off-site, oil/filter/gasket and/or any other abno	rmal operating conditions:			
Made repair	r to threads and replaced bolts at monitoring point	MP-2-4. Wiped down all equip	pment and cle	aned up all ga	arbage & leaves from around fence areas.
T1					
Electric Me	ter # 96-929-544 tied into Pole #3				
Action Iten	as:				

### SYSTEM #2

Tii Wea Outdoor Te Inside Trailer	tte: ne: ther: emperature: Temperature: ned By:	1 Su ~6 ~7	7/2012 114 inny 59° F 0° F e Ryan	-							
	O <sub>2</sub> Gen	erator (Ai	rSep)				Com	pressor (Kaesa	ar Rotary	Screw)	
Hours			11,594	-	Compressor	Tank *			110		(psi)
Feed Air Press	ure *		90	(psi)			(readings	s below are made			
Cycle Pressure	*		60	(psi)	Delivery Ai Element Ou		rature		95 171		(psi) (°F)
Oxygen Receiv	ver Pressure *			115 (psi)	Running Ho Loading Ho				11,736 11,610		(hours)
Oxygen Purity * maximum readin	g during loading c	ycle	97.8	(percent)	* maximum re			·			
					O <sub>2</sub> Injection		2				~
ID	Injection Ba  Depth	scfh	psi	ID	Injection Ba  Depth	scfh	psi	ID	Depth	jection Bank ( scfh	scfh
OW-2-2	90.2'	40	29	OW-2-9S	75'	30	20	OW-2-10D	97.2'	25	28
OW-2-3	94.3'	60	28	OW-2-10S	75'	30	30	OW-2-11D	100.8'	25	33
OW-2-4	94.7'	40	30	OW-2-11S	76.5'	30	21	OW-2-12	94'	30	20
OW-2-5	95.3'	35	31	OW-2-13S	75'	35	18	OW-2-13D	97'	50	21
OW-2-6	95.7'	40	30	OW-2-15S	75'	OFF	OFF	OW-2-14	96.4'	40	22
OW-2-7	96'	30	30	OW-2-16S	75.5'	OFF	OFF	OW-2-15D	94.6'	OFF	OFF
OW-2-8	96.3'	30	30	OW-2-18S	74.5'	30	19	OW-2-16D	94.1'	OFF	OFF
OW-2-9D	96.7'	30	30	OW-2-20S	79'	25	23	OW-2-17	95'	OFF	OFF
Comments:	All injection point by URS Corporation			get flow rate of ~30	) scfh provided	that the pressu	ure reading v	vas no greater than	the pressure	s provided in th	ne hydrostatic tables prepared

### SYSTEM #2

Hempstead Intersection Street Former MGP Site Nassau County, New York

				1	Nassau Cour	ity, New Yo	ork					
								Date:		5/17	7/2012	
					O <sub>2</sub> Injection	System #2	2					
	Injection Ba	nk D			Injection Ba	nk E			Iı	njection Bank	F	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	sc	fh
OW-2-18D	95.5'	OFF	OFF	OW-2-22S	76'	OFF	OFF	OW-2-26D	95'	OFF	Ol	FF
OW-2-19	96.1'	OFF	OFF	OW-2-24S	77.8'	OFF	OFF	OW-2-27	93.5'	OFF	Ol	FF
OW-2-20D	96.6'	OFF	OFF	OW-2-26S	74'	OFF	OFF	OW-2-28D	92.1'	OFF	Ol	FF
OW-2-21	96.6'	OFF	OFF	OW-2-28S	76'	OFF	OFF	OW-2-29	92.2'	20	2	9
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	25	2	8
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	40	3	3
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	30	3	7
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	20	3	5
Comments:				get flow rate of ~30 njection banks D &			re reading v	vas no greater than	the pressure	es provided in the	ne hydrostatic ta	ables prepared
					O <sub>2</sub> Injection		2					
	Injection Ba	ınk G			Injection Ba	nk H			Mon	itoring Points	Log	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)

	O <sub>2</sub> Injection System #2													
	Injection Ba	nk G			Injection Ba	nk H			Mon	itoring Points	Log			
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)		
OW-2-37	62.8'	30	20	OW-2-45	61.1'	45	21	MP-2-1	28.30	24.3	2.05	702.5		
OW-2-38	62.1'	30	19	OW-2-46	61'	25	20	MP-2-2	29.36	21.5	2.41	0		
OW-2-39	60'	40	19	OW-2-47	60.5'	25	19	MP-2-3S	29.45	20.9	2.32	1.1		
OW-2-40	61.7'	35	20	ID	DO (mg/L) Middle	DO (m To		MP-2-3D	29.66	34.8	1.81	0.9		
OW-2-41	61.7'	45	20	MP-2-2	3.39	3.8	33	MP-2-4	18.18	24.2	2.31	0		
OW-2-42	61.6'	40	20	MP-2-3S	1.57	2.5	51	MP-2-5	16.40	23.4	2.76	163.3		
OW-2-43	61.4'	40	20	MP-2-3D	2.71	3.0	08							
OW-2-44R	60.6'	30	19	MP-2-5	3.25	6.4	18							

### SYSTEM #2

		Date:	5/17/2012
	OPER ATIONAL MA	AMEN C	
CATAL C	OPERATIONAL NO	<u> PTES</u>	
GA5 Air Compressor		Voc. V No.	
Oil Level Checked with system unloaded*     * Unload system, wait until Delivery Air F		Yes X No	
2) Oil Level with system unloaded	ressure is less than 9 psi		
Low (red)	Normal (green)	X High (orange)	
3) Oil added	Yes	No X	
4) Oil changed	Yes	No X	
5) Oil filter changed	Yes	No X	
6) Air filter Changed	Yes	No X	
7) Oil separator cleaned	Yes	No X	
8) Terminal strips checked	Yes	No X	
AS-80 O <sub>2</sub> Generator			
1) Prefilter changed	Vac	No X	
2) Coalescing changed	Yes Yes	No X No X	ļ
2) Coalescing Changed	105	140 <u>A</u>	
	GENERAL SYSTEM N	NOTES	
Trailer			
1) Performed general housekeeping (i.e. swee	en collect trash inside and out e	tc)	
1) Terrormed general nousekeeping (i.e. swee	Yes X	No	
	100		
2) Abnormal conditions observed (e.g. vanda	lism)		
· · ·			
3) Other major activities completed			
4) Supplies needed			
5) Visitors			
Record routine activities such as any alarm/shutdowns			
transported off-site, oil/filter/gasket and/or any other a	onormal operating conditions	•	
0 W. I. I. W. 0 2010			
On Wednesday, May 9, 2012 at approximately 3:38 am th	e system triggered a power failu	re alarm which was followed by a booste	r pump alarm. A technician
was dispatched to the site and discovered that all of the co was cycled and observed for faults. No issues were notice			
hours.	d and the system was left fulling	ig. Total downtime for this alarm conditi	on was approximately 14
nours.			
Met with Atlas Asphalt and reviewed seal coating of drive	eway.		
Removed and cleaned 1/2" brass check valve at booster pr		re. Cleaned out o-ring and plunger and re	einstalled. Wiped down all
equipment and cleaned up all garbage & leaves from arou	nd tence areas.		
Electric Meter # 96-929-544 tied into Pole #3			
Election from 170 727 544 ded into 1 ole 113			
Action Items:			
ACCION ACCINO			

# SYSTEM #2

Tii Wea Outdoor Te	nte: me: tther: emperature:	1: Su ~8	/2012 319 inny 31° F /2° F								
	Temperature: ned By:		e Ryan	- -							
	O <sub>2</sub> Gen	erator (Ai	rSep)				Com	pressor (Kaesa	ar Rotary	Screw)	
Hours			11,933	-	Compressor	r Tank *			100		(psi)
Feed Air Press	ure *		60	(psi)			(readings	s below are made		ontrol panel)	
Cycle Pressure	, *		60	(psi)	Delivery Ai Element Ou		erature		118		(psi) (°F)
Oxygen Receiv	ver Pressure *			125 (psi)	Running Ho Loading Ho				12,074 11,936		(hours)
Oxygen Purity * maximum readir	ng during loading c	ycle	96.6	_(percent)	* maximum re			•			
	Injection Ba	nk A		<u> </u>	O <sub>2</sub> Injection Ba		2		In	jection Bank (	۹
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	scfh
OW-2-2	90.2'	35	28	OW-2-9S	75'	25	21	OW-2-10D	97.2'	20	28
OW-2-3	94.3'	40	29	OW-2-10S	75'	30	30	OW-2-11D	100.8'	30	33
OW-2-4	94.7'	30	33	OW-2-11S	76.5'	25	22	OW-2-12	94'	20	20
OW-2-5	95.3'	30	30	OW-2-13S	75'	25	20	OW-2-13D	97'	30	31
OW-2-6	95.7'	30	31	OW-2-15S	75'	OFF	OFF	OW-2-14	96.4'	25	29
OW-2-7	96'	20	29	OW-2-16S	75.5'	OFF	OFF	OW-2-15D	94.6'	OFF	OFF
OW-2-8	96.3'	30	30	OW-2-18S	74.5'	25	19	OW-2-16D	94.1'	OFF	OFF
OW-2-9D	96.7'	35	30	OW-2-20S	79'	25	23	OW-2-17	95'	OFF	OFF
Comments:	All injection point by URS Corporation			get flow rate of ~30	0 scfh provided	that the pressu	ure reading v	vas no greater than	the pressure	es provided in the	ne hydrostatic tables prepared

### SYSTEM #2

Hempstead Intersection Street Former MGP Site Nassau County, New York

					Nassau Coun	ity, New Y	ork					
								Date:		5/3	1/2012	
					O <sub>2</sub> Injection	System #	2					
	Injection Ba	ınk D			Injection Ba	nk E			Iı	njection Bank	F	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	sc	fh
OW-2-18D	95.5'	OFF	OFF	OW-2-22S	76'	OFF	OFF	OW-2-26D	95'	OFF	OI	FF
OW-2-19	96.1'	OFF	OFF	OW-2-24S	77.8'	OFF	OFF	OW-2-27	93.5'	OFF	Ol	FF
OW-2-20D	96.6'	OFF	OFF	OW-2-26S	74'	OFF	OFF	OW-2-28D	92.1'	OFF	OI	FF
OW-2-21	96.6'	OFF	OFF	OW-2-28S	76'	OFF	OFF	OW-2-29	92.2'	30	2	9
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	40	2	7
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	45	2	8
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	50	3	1
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	60	3	8
comments:	All injection point by URS Corporati						ire reading v	vas no greater than	the pressure	es provided in the	he hydrostatic ta	ables prepare
					O <sub>2</sub> Injection	System #	2					
	Injection Ba	ınk G			Injection Bar	nk H			Mon	itoring Points	Log	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm
OW-2-37	62.8'	20	20	OW-2-45	61.1'	35	21	MP-2-1	27.97	24.9	1.93	312.2
OW-2-38	62.1'	30	19	OW-2-46	61'	40	19	MP-2-2	29.05	20.9	2.68	0.2
OW-2-39	60'	25	19	OW-2-47	60.5'	35	19	MP-2-3S	29.17	21.1	3.41	0
					DO (mg/L)	DO (n	ng/L.)			***************************************		

ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)
OW-2-37	62.8'	20	20	OW-2-45	61.1'	35	21	MP-2-1	27.97	24.9	1.93	312.2
OW-2-38	62.1'	30	19	OW-2-46	61'	40	19	MP-2-2	29.05	20.9	2.68	0.2
OW-2-39	60'	25	19	OW-2-47	60.5'	35	19	MP-2-3S	29.17	21.1	3.41	0
OW-2-40	61.7'	20	21	ID	DO (mg/L) Middle	DO (n To		MP-2-3D	29.38	35.2	1.86	0.7
OW-2-41	61.7'	20	20	MP-2-2	3.10	3.3	39	MP-2-4	17.91	22.7	2.19	0.2
OW-2-42	61.6'	30	20	MP-2-3S	2.18	2.5	53	MP-2-5	16.12	22.0	2.55	86.1
OW-2-43	61.4'	30	20	MP-2-3D	2.94	4.5	59					
OW-2-44R	60.6'	30	20	MP-2-5	2.42	3.2	27					

## SYSTEM #2

				Date:	5/31/2012
		ODED ATIONAL NOTE:	n		
CA5 Air Commune		OPERATIONAL NOTES	8		
GA5 Air Compres	ssor I Level Checked with system unloaded*		Vac	X	No
	Jnload system, wait until Delivery Air Pressui	re is less than 9 nsi	108	Λ	110
	Level with system unloaded	re is less than 5 psi			
2) 011	•	Normal (green)	X High	h (orange)	
3) Oil	l added	Yes		No No	X
[	l changed	Yes		No	X
1	I filter changed	Yes		No	X
	r filter Changed	Yes		No	
7) Oil	l separator cleaned	Yes		No	X
8) Tei	rminal strips checked	Yes X		No	
AS-80 O <sub>2</sub> Generate	or				
	— efilter changed	Yes		No	X
	alescing changed	Yes		No	
		GENERAL SYSTEM NOT	ES		
<u>Trailer</u> 1) Per	rformed general housekeeping (i.e. sweep, col	llect trash inside and out, etc.) YesX		No_	
2) Ab	onormal conditions observed (e.g. vandalism)				
3) Oth	her major activities completed				
4) Sup	pplies needed				
5) Vis	sitors				
	ctivities such as any alarm/shutdowns, sam ite, oil/filter/gasket and/or any other abnor				
	blown off fitting on separator unit. Reattache d fence areas. Pulled weeds from along fence		nps. Wiped o	down all equi	ipment and cleaned up all garbage &
Electric Meter # 90	6-929-544 tied into Pole #3				
Action Items:					

### SYSTEM #2

Da Tir Wea Outdoor Te Inside Trailer Perforn	ne: ther: emperature: Temperature:	1: Su ~7 ~7	5/2012 307 Junny 5° F 2° F e Ryan								
	O <sub>2</sub> Gen	erator (Ai	rSep)				Com	pressor (Kaesa	ar Rotary	Screw)	
Hours			12,294	-	Compressor	Tank *			95		(psi)
Feed Air Press	ure *		90	(psi)			(readings	s below are made		ontrol panel)	
Cycle Pressure	*		60	(psi)	Delivery Ai Element Ou		rature		93		(psi) (°F)
Oxygen Receiv	ver Pressure *			125 (psi)	Running Ho Loading Ho				12,435 12,285		(hours)
Oxygen Purity * maximum readin	g during loading cy	ycle	97.7	(percent)	* maximum re			>			
					O <sub>2</sub> Injection		2				~
ID	Injection Ba  Depth	scfh	psi	ID	Injection Ba  Depth	scfh	psi	ID	Depth	jection Bank ( scfh	scfh
OW-2-2	90.2'	40	28	OW-2-9S	75'	35	21	OW-2-10D	97.2'	35	28
OW-2-3	94.3'	60	29	OW-2-10S	75'	40	30	OW-2-11D	100.8'	30	32
OW-2-4	94.7'	30	32	OW-2-11S	76.5'	35	22	OW-2-12	94'	80	21
OW-2-5	95.3'	40	31	OW-2-13S	75'	30	20	OW-2-13D	97'	50	29
OW-2-6	95.7'	30	30	OW-2-15S	75'	OFF	OFF	OW-2-14	96.4'	30	28
OW-2-7	96'	30	30	OW-2-16S	75.5'	OFF	OFF	OW-2-15D	94.6'	OFF	OFF
OW-2-8	96.3'	30	30	OW-2-18S	74.5'	30	20	OW-2-16D	94.1'	OFF	OFF
OW-2-9D	96.7'	30	30	OW-2-20S	79'	35	23	OW-2-17	95'	OFF	OFF
Comments:	All injection point by URS Corporation			get flow rate of ~30	) scfh provided	that the pressu	are reading v	vas no greater than	the pressure	s provided in th	ne hydrostatic tables prepared

### SYSTEM #2

Hempstead Intersection Street Former MGP Site Nassau County, New York

				I	Nassau Cour	MGP Site	ork					
								Date:		6/1:	5/2012	
					O <sub>2</sub> Injection	n System #2	2					
	Injection Ba	ınk D			Injection Ba	nk E			Iı	njection Bank	F	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	sc	fh
OW-2-18D	95.5'	OFF	OFF	OW-2-22S	76'	OFF	OFF	OW-2-26D	95'	OFF	Ol	FF
OW-2-19	96.1'	OFF	OFF	OW-2-24S	77.8'	OFF	OFF	OW-2-27	93.5'	OFF	Ol	FF
OW-2-20D	96.6'	OFF	OFF	OW-2-26S	74'	OFF	OFF	OW-2-28D	92.1'	OFF	Ol	FF
OW-2-21	96.6'	OFF	OFF	OW-2-28S	76'	OFF	OFF	OW-2-29	92.2'	30	2	9
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	40	2	8
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	40	2	7
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	45	3	9
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	30	3	3
Comments:	All injection point by URS Corporation						ire reading v	vas no greater than	the pressure	es provided in the	ne hydrostatic ta	ables prepared
					O <sub>2</sub> Injection	n System #2	2					
	Injection Ba	nk G			Injection Ba	nk H			Mon	itoring Points	Log	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)
OW-2-37	62.8'	20	20	OW-2-45	61.1'	30	21	MP-2-1	27.66	24.9	1.61	0.0
OW-2-38	62.1'	40	19	OW-2-46	61'	25	18	MP-2-2	28.75	18.2	2.63	0.3

	Injection Ba	ınk G			Injection Ba	nk H		Monitoring Points Log				
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)
OW-2-37	62.8'	20	20	OW-2-45	61.1'	30	21	MP-2-1	27.66	24.9	1.61	0.0
OW-2-38	62.1'	40	19	OW-2-46	61'	25	18	MP-2-2	28.75	18.2	2.63	0.3
OW-2-39	60'	30	19	OW-2-47	60.5'	30	19	MP-2-3S	28.84	20.9	2.40	0.5
OW-2-40	61.7'	35	21	ID	DO (mg/L) Middle	DO (n To		MP-2-3D	29.05	21.2	1.94	0
OW-2-41	61.7'	40	20	MP-2-2	2.86	3.2	9	MP-2-4	17.57	20.9	1.74	0.1
OW-2-42	61.6'	40	19	MP-2-3S	2.51	2.8	1	MP-2-5	15.76	22.6	2.01	0.1
OW-2-43	61.4'	40	20	MP-2-3D	2.44	3.1	4					
OW-2-44R	60.6'	30	20	MP-2-5	2.26	2.8	9					

## SYSTEM #2

		Date:	6/15/2012						
	ODED ATION AL MOTES								
GA5 Air Com	OPERATIONAL NOTES								
1)	Oil Level Checked with system unloaded*  * Unload system, wait until Delivery Air Pressure is less than 9 psi	Yes X	No						
3)	Oil Level with system unloaded  Low (red) X Normal (green)  Oil added Yes X	High (orange) No							
5) 6)	Oil changed Yes Oil filter changed Yes Air filter Changed Yes	No X No X No X							
	Oil separator cleaned Yes Terminal strips checked Yes X	No X	 						
AS-80 O <sub>2</sub> Ger									
	Prefilter changed Yes Coalescing changed Yes	No X No X	 						
	GENERAL SYSTEM NOTE	ES							
<u>Trailer</u>	Performed general housekeeping (i.e. sweep, collect trash inside and out, etc.)  Yes X	No							
2)	2) Abnormal conditions observed (e.g. vandalism)								
3)	Other major activities completed								
4)	Supplies needed								
5)	Visitors								
Record routine activities such as any alarm/shutdowns, sampling, maintenance, material transported off-site, oil/filter/gasket and/or any other abnormal operating conditions:									
Adjusted lock on door as door was found to not be locking properly. Wiped down all equipment and cleaned up all garbage & leaves from around fence areas.									
Electric Meter # 96-929-544 tied into Pole #3  Action Items:									

### SYSTEM #2

Tir Wea Outdoor Te	emperature: Temperature:	10 Su ~7 ~6	7/2012 018 unny '9° F '4° F e Ryan									
	O <sub>2</sub> Gen	erator (Ai	rSep)		Compressor (Kaesar Rotary Screw)							
Hours 12,558			-	Compressor	Compressor Tank * 85							
Feed Air Press	ure *		80	(psi)	(readings below are made from control panel)							
Cycle Pressure *60			60	(psi)	Delivery Air 79 Element Outlet Temperature 171					(psi) (°F)		
Oxygen Receiver Pressure *			125 (psi)						(hours)			
Oxygen Purity 87.7 (perces maximum reading during loading cycle					* maximum re							
O <sub>2</sub> Injection System #2											~	
ID	Injection Ba  Depth	scfh	psi	ID	Injection Bank B Injection Bank C  Depth scfh psi ID Depth scfh						scfh	
OW-2-2	90.2'	45	29	OW-2-9S	75'	35	21	OW-2-10D	97.2'	35	28	
OW-2-3	94.3'	60	29	OW-2-10S	75'	35	30	OW-2-11D	100.8'	30	33	
OW-2-4	94.7'	40	33	OW-2-11S	76.5'	40	22	OW-2-12	94'	50	20	
OW-2-5	95.3'	35	31	OW-2-13S	75' 30 20		OW-2-13D	97'	40	32		
OW-2-6	95.7'	35	31	OW-2-15S	75' OFF OFF		OW-2-14	96.4'	35	29		
OW-2-7	96'	35	30	OW-2-16S	75.5'	OFF	OFF	OW-2-15D	94.6'	OFF	OFF	
OW-2-8	96.3'	30	30	OW-2-18S	74.5'	35	20	OW-2-16D	94.1'	OFF	OFF	
OW-2-9D	96.7'	30	30	OW-2-20S	79'	30	23	OW-2-17	95'	OFF	OFF	
Comments:	All injection point flows were adjusted to the target flow rate of ~30 scfh provided that the pressure reading was no greater than the pressures provided in the hydrostatic tables prepared by URS Corporation after collecting readings.											

### SYSTEM #2

Hempstead Intersection Street Former MGP Site Nassau County, New York

					Nassau Cour	nty, New Y	ork					
								Date:		6/2	7/2012	
					O <sub>2</sub> Injection	n System #	2					
	Injection Ba	nk D			Injection Ba	nk E			Iı	njection Bank	F	
ID	Depth	scfh	psi	ID	Depth	scfh	psi	ID	Depth	scfh	sc	fh
OW-2-18D	95.5'	OFF	OFF	OW-2-22S	76'	OFF	OFF	OW-2-26D	95'	OFF	Ol	FF
OW-2-19	96.1'	OFF	OFF	OW-2-24S	77.8'	OFF	OFF	OW-2-27	93.5'	OFF	OFF	
OW-2-20D	96.6'	OFF	OFF	OW-2-26S	74'	OFF	OFF	OW-2-28D	92.1'	OFF	OFF	
OW-2-21	96.6'	OFF	OFF	OW-2-28S	76'	OFF	OFF	OW-2-29	92.2'	30	29	
OW-2-22D	96.3'	OFF	OFF	OW-2-30S	67.8'	OFF	OFF	OW-2-30D	88'	40	27	
OW-2-23	97.2'	OFF	OFF	OW-2-34	71'	OFF	OFF	OW-2-31	86'	50	31	
OW-2-24D	97'	OFF	OFF	OW-2-35	69.2'	OFF	OFF	OW-2-32	84'	55	35	
OW-2-25	96'	OFF	OFF	OW-2-36	64.8'	OFF	OFF	OW-2-33	82'	30	34	
Comments:				get flow rate of ~30 njection banks D &			ire reading v	vas no greater than	the pressure	es provided in the	ne hydrostatic ta	ables prepare
					O <sub>2</sub> Injection	n System #	2					
Injection Bank G				Injection Bank H				Monitoring Points Log				
ID	Depth	sefh	psi	ID	Depth	scfh	psi	ID	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)
OW-2-37	62.8'	20	20	OW-2-45	61.1'	25	22	MP-2-1	27.45	24.5	2.03	11.8
OW-2-38	62 1'	30	20	OW-2-46	61'	45	21	MP-2-2	28 53	18.2	2.73	0

Injection Bank G   Injection E	scfh 25	<b>psi</b> 22	ID MP-2-1	DTW	Oxygen Headspace (%O2)	DO (mg/L) Bottom	PID (ppm)
OW-2-37 62.8' 20 20 OW-2-45 61.1'	25			DTW	Headspace		PID (ppm)
		22	MD 2.1				
OW-2-38 62.1' 30 20 OW-2-46 61'			IVIP-2-1	27.45	24.5	2.03	11.8
	45	21	MP-2-2	28.53	18.2	2.73	0
OW-2-39 60' 35 19 OW-2-47 60.5'	55	21	MP-2-3S	28.63	20.5	2.21	0
OW-2-40 61.7' 30 21 <b>ID DO</b> (mg/L) Middle	DO (m		MP-2-3D	28.86	24.2	2.51	12.3
OW-2-41 61.7' 30 20 MP-2-2 3.20	5.0	2	MP-2-4	17.37	32.1	2.44	2.1
OW-2-42 61.6' 30 21 MP-2-3S 2.08	3.3	0	MP-2-5	15.56	38.2	3.26	15.0
OW-2-43 61.4' 30 21 MP-2-3D 3.11	4.1	7					
OW-2-44R 60.6' 30 20 MP-2-5 3.51	3.8	7					

### SYSTEM #2

		Date:	6/27/2012						
OPERATIONAL NOTES									
GA5 Air Compressor									
Oil Level Checked with system unloaded*		Yes X No_							
* Unload system, wait until Delivery Air F	Pressure is less than 9 psi								
2) Oil Level with system unloaded									
	X Normal (green)	High (orange)							
3) Oil added	Yes X	No							
4) Oil changed	Yes Yes	No X							
5) Oil filter changed	Yes	No X							
6) Air filter Changed	Yes	No X							
7) Oil separator cleaned	Yes X	No X							
8) Terminal strips checked	Yes X	No							
AS-80 O <sub>2</sub> Generator									
1) Prefilter changed	Yes	No X							
2) Coalescing changed	Yes Yes	No X No X							
	GENERAL SYSTEM	NOTES							
Trailer	Waster to the the said and and								
Performed general housekeeping (i.e. sweet									
	Yes X	No							
2) Abnormal conditions observed (e.g. yends	liam)								
2) Adnormal conditions observed (e.g. vanda	2) Abnormal conditions observed (e.g. vandalism)								
Other major activities completed									
4) Supplies needed									
->									
5) Visitors									

#### SYSTEM #2

Hempstead Intersection Street Former MGP Site Nassau County, New York

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

Between June 21 and 22, 2012, the tip seals were replaced in the booster pump as they were worn out causing the pump to cycle more often. Took apart and cleaned the dust buildup from inside the inline check valve.

On Friday, June 22, 2012 at approximately 8:02 AM a compressor alarm was triggered due to a power failure. Mike Ryan arrived at the site shortly thereafter and reset the components and restarted the system. Total down time for this alarm was less than 1 hour.

On Saturday, June 23, 2012 there were two alarm conditions at the System #2 location. Both alarms were due to low pressure at the primary and secondary oxygen receiver tanks. Mike Ryan was dispatched to the site and discovered that the tanks were readings pressures below 20 PSI and that the Booster Pump would not cycle due to a power outage. In addition, the solenoid valve associated with Bank #3 was stuck open which caused the storage tanks to drain. Mike took apart the solenoid valve and cleaned out the dirt and dust build up and changed the o-ring. He restarted the system and allowed the oxygen level to building back up before cycling the system on a few different banks to ensure that the system was operating properly. Once everything checked out he secured the site and left the system running. Total down time associated with this alarm condition was approximately 12 hours.

On Monday, June 25, 2012 a compressor alarm was triggered by the system at approximately 8:59 AM. This alarm was triggered due to the heavy thunderstorms that occurred during that morning. Mike Ryan was dispatched to the site in the afternoon and reset all of the components and restarted the system. Total down time for this alarm condition was approximately 6 hours.

Added small amount of oil to compressor and adjusted tension on belt. Repaired small leak in 3/4" union on air holding tank. Wiped down all equipment and cleaned up all garbage & leaves from around fence areas. Pulled weeds in and around fence area of shed.

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

Action Items: