

**STATUS REPORT
FOR PERIOD COVERING
APRIL THROUGH JUNE 2008**

172 Armistice Blvd.
Pawtucket
Rhode Island
02860

401-723-9900
FAX 401-723-9973

**S & H SUNOCO
905 CRANSTON STREET
CRANSTON, RHODE ISLAND
(LS-0757)**

Submitted to:

**Ms. Paula-Jean Therrien
Rhode Island Department of
Environmental Management
Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908**



SAGE
ENVIRONMENTAL

Prepared for:

**S & H Realty, Inc.
P.O. Box 41634
Providence, Rhode Island 02904**

Prepared by:

**SAGE Environmental, Inc.
172 Armistice Blvd
Pawtucket, Rhode Island 02860**

SAGE Project No. R016



SAGE
ENVIRONMENTAL

RECEIVED
D.E.M. / O.W.M.

2008 AUG 18 P 12:12

**STATUS REPORT
FOR PERIOD COVERING
APRIL THROUGH JUNE 2008
S & H SUNOCO
905 CRANSTON STREET
CRANSTON, RHODE ISLAND
(LS-0757)**

Submitted to:

**Ms. Paula-Jean Therrien
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, RI 02908**

Prepared for:

**S & H Realty, Inc.
P.O. Box 41634
Providence, Rhode Island 02904**

Prepared by:

**SAGE Environmental, Inc.
172 Armistice Blvd
Pawtucket, RI 02860**

SAGE Project No. R016

172 Armistice Blvd.
Pawtucket, Rhode Island 02860
401-723-9900
FAX 401-723-9973
www.sageenviromental.net



SAGE
ENVIRONMENTAL

August 15, 2008

RECEIVED
D.E.M. / O.W.M.

2008 AUG 18 P 12: 00

Ms. Paula-Jean Therrien
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908

RE: Status Report
S&H Sunoco (LS-0757)
905 Cranston Street
Cranston, Rhode Island
SAGE Project No. R016

Dear Ms. Therrien:

Enclosed please find a Status Report documenting activities related to the soil vapor extraction (SVE) remediation system operating at the referenced Site. This report documents monitoring, operation, and maintenance activities for the approximate period from April 1, 2008 through June 30, 2008.

Should you have any questions regarding the contents of the report, please contact this office.

Sincerely,
SAGE Environmental, Inc.

Brian F. Koch
Senior Geologist

Bruce W. Clark
Principal

BFK/BWC:car

Enclosure

c: Mr. Frank Hindle, S&H Realty, Inc.
R016R

172 Armistice Blvd.
Pawtucket, Rhode Island 02860
401-723-9900
FAX 401-723-9973
www.sageenviromental.net

TABLE OF CONTENTS

| | | |
|------------|--|----------|
| 1.0 | INTRODUCTION..... | 1 |
| 2.0 | GROUNDWATER MONITORING | 1 |
| 2.1 | Groundwater Gauging..... | 1 |
| 2.2 | Separate Phase Petroleum Evaluation | 2 |
| 2.3 | Water Table Elevation Assessment..... | 3 |
| 2.4 | Groundwater Sampling and Analysis..... | 4 |
| 2.5 | Evaluation of Current Site Conditions..... | 5 |
| 3.0 | SOIL VAPOR EXTRACTION SYSTEM MONITORING | 6 |
| 4.0 | FINDINGS AND CONCLUSIONS..... | 7 |
| 5.0 | RECOMMENDATIONS..... | 9 |

Figures

| | |
|-----------------|---|
| Figure 1 | Site Location Map |
| Figure 2 | Site Plan |
| Figure 3 | Daily Average Levellogger Readings and Rainfall |
| Figure 4 | Levellogger Readings and SVE Influent PID Readings |

Appendices

| | |
|-------------------|---|
| Appendix A | Monitor Well Gauging Summary Logs |
| Appendix B | Groundwater Sampling Laboratory Analytical Data and Chain-of-Custody Documentation |

Attachments

| | |
|---------------------|---|
| Attachment 1 | Equivalent Head Elevations Over Time |
| Attachment 2 | Separate Phase Petroleum Thickness Over Time |
| Attachment 3 | Groundwater Analytical Results Over Time |

1.0 INTRODUCTION

SAGE Environmental, Inc. (*SAGE*) presents this status report for environmental services provided at the former S&H Sunoco gasoline service station located at 905 Cranston Street in Cranston, Rhode Island (Site). A Site Location Map identifying the Site on the USGS Providence, Rhode Island Quadrangle Map is included as **Figure 1**. A Site Plan identifying pertinent Site features is included as **Figure 2**.

This report summarizes corrective actions associated with the referenced location for the approximate period April 1, 2008 through June 30, 2008. Specific activities for this period included:

- groundwater gauging
- groundwater sampling and analysis
- operations and maintenance site visits

2.0 GROUNDWATER MONITORING

Groundwater gauging and monitoring activities conducted during this reporting period are summarized below.

2.1 Groundwater Gauging

As recommended in *SAGE*'s January 26, 2007 Status Report, and approved by RIDEM in a letter dated February 21, 2007, the gauging frequency of select Site monitor wells was reduced from monthly to quarterly.

Groundwater elevation data were obtained during this reporting period on May 7, 2008 using an ORS electronic oil/water interface probe. Equivalent head elevations calculated from data generated during the gauging event are summarized in **Table 1**. A summary of monitor well gauging data for the gauging event is included as **Appendix A**. A summary of equivalent head data from February 11, 1999 through May 7, 2008 is included as **Attachment 1**.

Monitor well gauging performed during the reporting period indicates that the average depth to groundwater beneath the Site on May 7, 2008 was determined to be approximately 31.5 feet below grade.

Table 1
Equivalent Head Elevations
May 7, 2008

| Monitor Well | MP Elevations | Equivalent Head Elevation |
|--------------|---------------|---------------------------|
| ECS-1 | WELL CLOSED | |
| ECS-2 | 97.69 | 69.99 |
| ECS-3 | WELL CLOSED | |
| GZ-1 | 99.19 | 66.98 |
| GZ-2 | WELL CLOSED | |
| GZ-3 | 99.34 | 67.06 |
| MW-1 | WELL CLOSED | |
| MW-2 | WELL CLOSED | |
| MW-3 | WELL CLOSED | |
| MW-4 | 98.99 | 67.02 |
| MW-5 | WELL CLOSED | |
| MW-6 | 97.25 | 66.96 |
| MW-7 | WELL CLOSED | |
| MW-8 | WELL CLOSED | |
| MW-9 | 98.60 | 67.04 |
| MW-10 | WELL CLOSED | |
| MW-11 | WELL CLOSED | |
| MW-12 | WELL CLOSED | |
| VW-1 | 99.10 | NG |
| VW-2 | 98.67 | NG |
| VW-3 | 98.56 | NG |

NG = Not Gauged

MP = Measuring Point

2.2 Separate Phase Petroleum Evaluation

No separate phase petroleum (SPP) was identified during this reporting period in Site monitor wells. A summary of SPP identified during previous monitor well gauging events conducted between February 11, 1999 and May 7, 2008 is included as **Attachment 2**. Measurable SPP (SPP thickness equal to or greater than 0.01 feet) was last detected in a Site monitor well during gauging activities performed on May 21, 2002.

2.3 Water Table Elevation Assessment

A hydrogeological investigation is being conducted at the Site in conjunction with the weekly routine monitoring of the soil vapor extraction (SVE) remediation system.

On June 14, 2006, a levellogger was deployed in monitor well MW-4, and a barologger and rain gage were installed at the Site. A levellogger is a pressure-sensitive electronic instrument which, when deployed (submerged and suspended) in a groundwater monitor well, continually measures and records the height of the water column above the instrument. The water column height data are combined with barometric pressure data (recorded by the barologger) and well elevation survey data to yield the local water table elevation. This continuous record of water table elevation provided by the levellogger at the Site is being used in conjunction with the rainfall data to investigate the local water table excursion dynamics, response to storm runoff, and historic level occurrence.

Under normal conditions groundwater levels exhibit cyclical seasonal fluctuations and generally correlate with precipitation. Water level highs usually follow increased precipitation as can be seen in **Figure 3**, which displays daily average levellogger readings and rainfall during the reporting period. Water level increases were seen after rainfall events on March 15 and March 19, 2008.

Due to the historical presence of separate-phase petroleum (SPP) at the Site, the existence of a vertical "smear zone" is expected, as SPP floating on the water table surface was carried up and down by water table excursions and subsequently was deposited on exposed soils. As such, groundwater contaminant concentrations and SVE influent readings would be expected to exhibit a dependence on the elevation of the water table within the smear zone, with generally higher concentrations and readings during periods of low table and exposed soils within the smear zone. Comparison of the levellogger record from MW-4 to SVE influent concentrations since June of 2006 indicates that the highest influent SVE concentrations generally occurred shortly after a decline in the water table.

During this reporting period, levellogger data recorded in MW-4 (**Figure 4**) indicates that the water level has steadily fallen approximately one foot. In late March 2008, the SVE system influent concentrations increased from 8 ppm to 410 ppm, indicating that the SVE system is still effectively removing VOCs from subsurface soils.

Continued levellogger deployment is recommended to ensure that SVE system decommissioning is not considered until a lower water table condition is encountered and potential rebound is investigated.

2.4 Groundwater Sampling and Analysis

Groundwater samples were obtained on May 7, 2008 from select Site monitor wells (MW-4, MW-6, MW-9, ECS-2, GZ-1, and GZ-3). Prior to sampling, monitor wells were purged of a minimum of three well volumes of water. Samples were collected using dedicated, disposable bailers and were placed in analyte-specific containers. Following sample collection, the samples were placed in a cooler with ice and were transported to a Rhode Island-certified laboratory under Chain-of-Custody documentation for analysis of benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tert-butyl ether (MTBE) via EPA Method 8021B. Analytical results for groundwater samples collected on May 7, 2008 are summarized in **Table 2**. Analytical results for groundwater samples collected from Site monitor wells between May 17, 1999 and May 7, 2008 are summarized in **Attachment 3**. Certificates of Analyses and Chain-of-Custody documentation for the May 7, 2008 groundwater-sampling event are included in **Appendix B**.

Table 2
Groundwater Analytical Results
May 7, 2008

| Sample / Date | Concentration | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL |
|--|---------------|----------|----------|----------|-------------------|-------------------|--------------------------|--------------------------|
| | MW-4 | MW-6 | MW-9 | ECS-2 | GZ-1 | GZ-3 | GB Groundwater | |
| Analyte | 5/7/2008 | 5/7/2008 | 5/7/2008 | 5/7/2008 | 5/7/2008 | 5/7/2008 | | |
| Volatiles, Purgeable Aromatics by 8021B (ug/L): | | | | | | | | |
| Benzene | 42 | <1 | 38 | <20 | 300 ^b | 100 | 140 | 18000 |
| Ethylbenzene | 590 | <1 | 160 | 230 | 1500 | 1100 | 1600 | 16000 |
| Methyl tert-butyl ether (MTBE) | 63 | <1 | 12 | <20 | <80 | <50 | 5000 | NE |
| Toluene | 200 | <1 | 11 | 590 | 7400 ^b | 2400 ^b | 1700 | 21000 |
| Xylenes (total) | 2500 | <1 | 120 | 1700 | 9600 | 10000 | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.

NE: No allowable limit is established for the substance

<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x)

Sample Results:

b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives

According to the Rhode Island Department of Environmental Management (RIDEM) Groundwater Classification Map, the Site lies within an area designated as GB. A GB Groundwater Classification is defined as those groundwater resources that have been designated as not suitable for public or private drinking water use without prior treatment.

Groundwater samples collected on May 7, 2008 identified exceedances of RIDEM Method 1 GB Groundwater Objectives for petroleum related compounds (i.e., BTEX

and/or MTBE) in samples collected from monitor wells GZ-1 and GZ-3. Laboratory analysis of the groundwater samples collected from the remaining monitor wells sampled during this reporting period (MW-4, MW-6, MW-9, and ECS-2) indicates that these wells were compliant with RIDEM Method 1 GB Groundwater Objectives for BTEX and MTBE at the time sampled.

2.5 Evaluation of Current Site Conditions

A summary of SPP measurements obtained during monitor well gauging events conducted between February 11, 1999 and May 7, 2008 is included as **Attachment 2**. During each gauging event, depth to product (where present) and depth to water were gauged in Site monitor wells using an electronic oil/water interface probe. Locations of Site monitor wells are depicted on **Figure 2**. Gauging data indicates that SPP with a measured thickness of greater than 0.01 feet has not been observed in a Site monitor well since May 21, 2002. On May 21, 2002, SPP with a measured thickness of 0.01 feet was observed in monitor well GZ-3.

Gauging data indicates that sporadic occurrences of SPP with a thickness of equal to or greater than 0.01 feet were observed in monitor wells MW-1, MW-2, MW-3, MW-4, ECS-1, ECS-2, GZ-1, GZ-2 and GZ-3 between February 11, 1999 and May 21, 2002. No occurrences of SPP with measured thicknesses of equal to or greater than 0.01 feet have been observed in the remaining Site monitor wells (MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11 or MW-12). Based on gauging data collected, SPP occurrences were limited to on-Site monitor wells. A summary of maximum SPP thicknesses recorded in monitor wells MW-1, MW-2, MW-3, MW-4, ECS-1, ECS-2, GZ-1, GZ-2 and GZ-3 between February 11, 1999 and May 21, 2002 is included in **Table 3**.

Table 3
Summary of Maximum SPP Occurrences

| Monitor Well | Maximum SPP Thickness Detected | Date of Maximum SPP Occurrence |
|--------------|--------------------------------|--------------------------------|
| MW-1 | 3.45 feet | 10/27/99 |
| MW-2 | 0.01 feet | 8/12/99 |
| MW-3 | 0.02 feet | 8/12 and 9/24/99 |
| MW-4 | 1.36 feet | 2/13/02 |
| ECS-1 | 0.43 feet | 2/13/02 |
| ECS-2 | 0.68 feet | 5/17/99 |
| GZ-1 | 0.10 feet | 2/17/00 |
| GZ-2 | 0.60 feet* | 12/26/00 |
| GZ-3 | 0.30 feet | 11/15/00 |

* Thickness estimated from product removed in first bailer lowered into monitor well.

Based on monthly monitor well gauging activities performed since May 21, 2002, and quarterly monitor well gauging activities performed since January 2007, it appears that occurrences of SPP at the Site have been eliminated through a combination of manual product recovery efforts and removal via the SVE system operating at the Site.

Data for quarterly sampling performed of Site monitor wells on May 7, 2008 indicate that exceedances of RIDEM Method 1 GB Groundwater Objectives have been similar to recent quarterly sampling events. A summary of quarterly groundwater monitoring results for samples collected between May 17, 1999 and May 7, 2008 is included as **Attachment 3**. In general, recent analytical results for benzene and MTBE have exhibited a continuous decline in concentrations and similar patterns have also been observed for ethylbenzene, toluene and total xylenes. Based on results for the previous year of quarterly groundwater sampling (May 2007 through May 2008), exceedances of RIDEM Method 1 GB Groundwater Objectives were limited to monitor wells ECS-2, GZ-1, and GZ-3.

3.0 SOIL VAPOR EXTRACTION SYSTEM MONITORING

The SVE system has operated continuously since the previous reporting period using a two blower carbon drum system. During the operational period of SVE Blower #1 and SVE Blower #2 were connected to vent lateral-2, located within the tank field. The effluent vapors from each blower were treated with vapor phase carbon prior to release. Readings obtained during monitoring of the two blower SVE system, including photoionization detector (PID) screening results of the influent and effluent, are summarized in **Table 4**.

Table 4
Vapor Phase Carbon System Inspection Summary
April through June 2008

| Vapor Phase Carbon System | | | | | |
|---------------------------|--------------|-----------------------------|----------|----------------------|----------|
| Date | Inspected By | PID Screening Results (ppm) | | | |
| | | VL-2 Blower (Pump 1) | | VL-2 Blower (Pump 2) | |
| | | Influent | Effluent | Influent | Effluent |
| 4/4/2008 | ZB | 49.1 | 5.8 | 93.2 | 8.6 |
| 4/11/2008 | FM | 13 | 2 | 33 | 10 |
| 4/18/2008 | FM | 7 | ND | 27 | ND |
| 4/25/2008 | TS | 11.5 | ND | 24.4 | ND |
| 5/2/2008 | BF | 211 | 0.2 | 109 | ND |
| 5/9/2008 | BF | 22.7 | 0.4 | 0.4 | ND |
| 5/16/2008 | FM | 9 | ND | 14 | ND |
| 5/23/2008 | BF | 20.1 | ND | ND | ND |
| 5/30/2008 | BF/SL | 1.3 | ND | 57.3 | 3.7 |
| 6/6/2008 | BF | 41.2 | 7.8 | 91.4 | ND |
| 6/13/2008 | FM | 15 | 2 | 21 | 1 |
| 6/20/2008 | FM | 8 | ND | 20 | ND |
| 6/27/2008 | BF | 410 | 293 | 671 | 12.6 |

PID – Photoionization detector

ND – not detected

ppm - parts per million

PID screening of SVE Blower #1 revealed detections of total photoionizable compounds ranging from 1.3 ppm to 410 ppm. PID screening of SVE Blower #2 observed concentrations of total photoionizable compounds ranging from ND ppm to 671 ppm. Spent carbon drums were changed out on both Systems #1 and #2 on April 17 and June 20, 2008.

4.0 FINDINGS AND CONCLUSIONS

A summary of findings for activities conducted during the approximate period of April 1, 2008 through June 30, 2008 is presented below.

Monitor well gauging performed during the reporting period indicated that the average depth to groundwater beneath the Site during the reporting period was determined to be approximately 31.5 feet below grade.

No SPP was observed in Site monitor wells during this reporting period. As such, no measurable SPP was recovered via manual bailing of Site monitor wells. It should be noted that measurable SPP (SPP thickness equal to or greater than 0.01 feet) was last detected in a Site monitor well on May 21, 2002. Based on monthly monitor well gauging activities performed since May 21, 2002, and quarterly monitor well gauging since January 2007, it appears that occurrences of SPP at the Site have been eliminated through a combination of manual product recovery efforts and removal via the SVE system operating at the Site.

Groundwater samples collected on May 7, 2008 identified exceedances of RIDEM Method 1 GB Groundwater Objectives for the petroleum related compound toluene in the groundwater samples collected from monitor wells GZ-1 and GZ-3 and benzene in the groundwater sample collected from monitor well GZ-1. Laboratory analysis of the groundwater samples collected from monitor wells MW-4, MW-6, MW-9, and ECS-2 indicates that these wells were compliant with RIDEM Method 1 GB Groundwater Objectives for BTEX and MTBE at the time sampled.

Based on a comparison of analytical data for groundwater samples collected during the reporting period and historical analytical results since May 17, 1999, a significant downward trend continues to be observed in concentrations of BTEX and MTBE in groundwater beneath the Site. Analytical results for quarterly groundwater monitoring conducted between May 2007 and May 2008 indicate that exceedances of RIDEM Method 1 GB Groundwater Objectives are currently limited to monitor wells ECS-2, GZ-1, and GZ-3.

The SVE system has operated almost continuously since the previous reporting period using a two blower carbon drum system. SVE Blower #2, however, was off upon arrival during 7 site visits. During the operational period of SVE Blower #1 and SVE Blower #2 were connected to vent lateral-2, located within the tank field. Weekly PID screening of SVE Blower #1 revealed detections of total photoionizable compounds ranging from 1.3 ppm to 410 ppm. PID screening of SVE Blower #2 observed concentrations of total photoionizable compounds ranging from ND ppm to 671 ppm.

Results of monitoring activities conducted at the Site during this reporting period indicate that exceedances of RIDEM Method 1 GB Groundwater Objectives persist in groundwater beneath the Site. However, in general, an overall downward trend in concentrations of total BTEX and MTBE has been observed in groundwater based on historical analytical results for groundwater samples collected since May 1999.

5.0 RECOMMENDATIONS

Based on the results of data generated during the reporting period and an evaluation of current Site conditions, *SAGE* recommends the following:

- Continued quarterly groundwater monitoring of monitor wells MW-4, MW-9, ECS-2, GZ-1 and GZ-3;
- Conduct annual groundwater monitoring for monitor well MW-6.

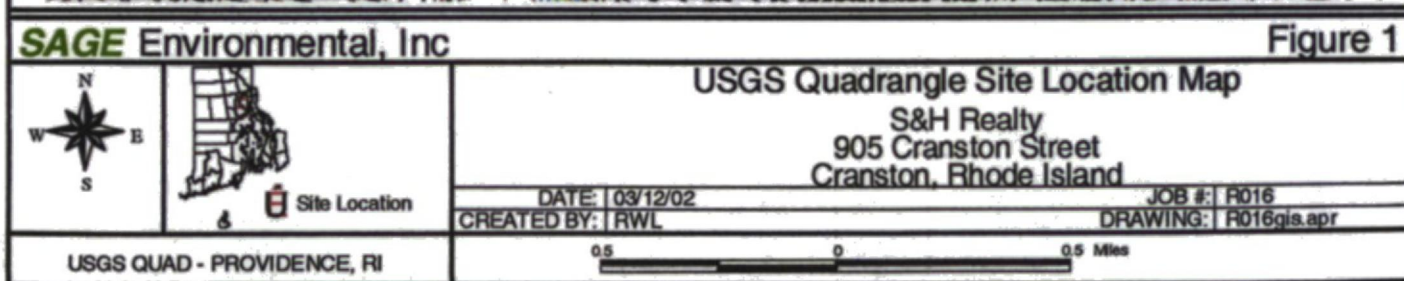
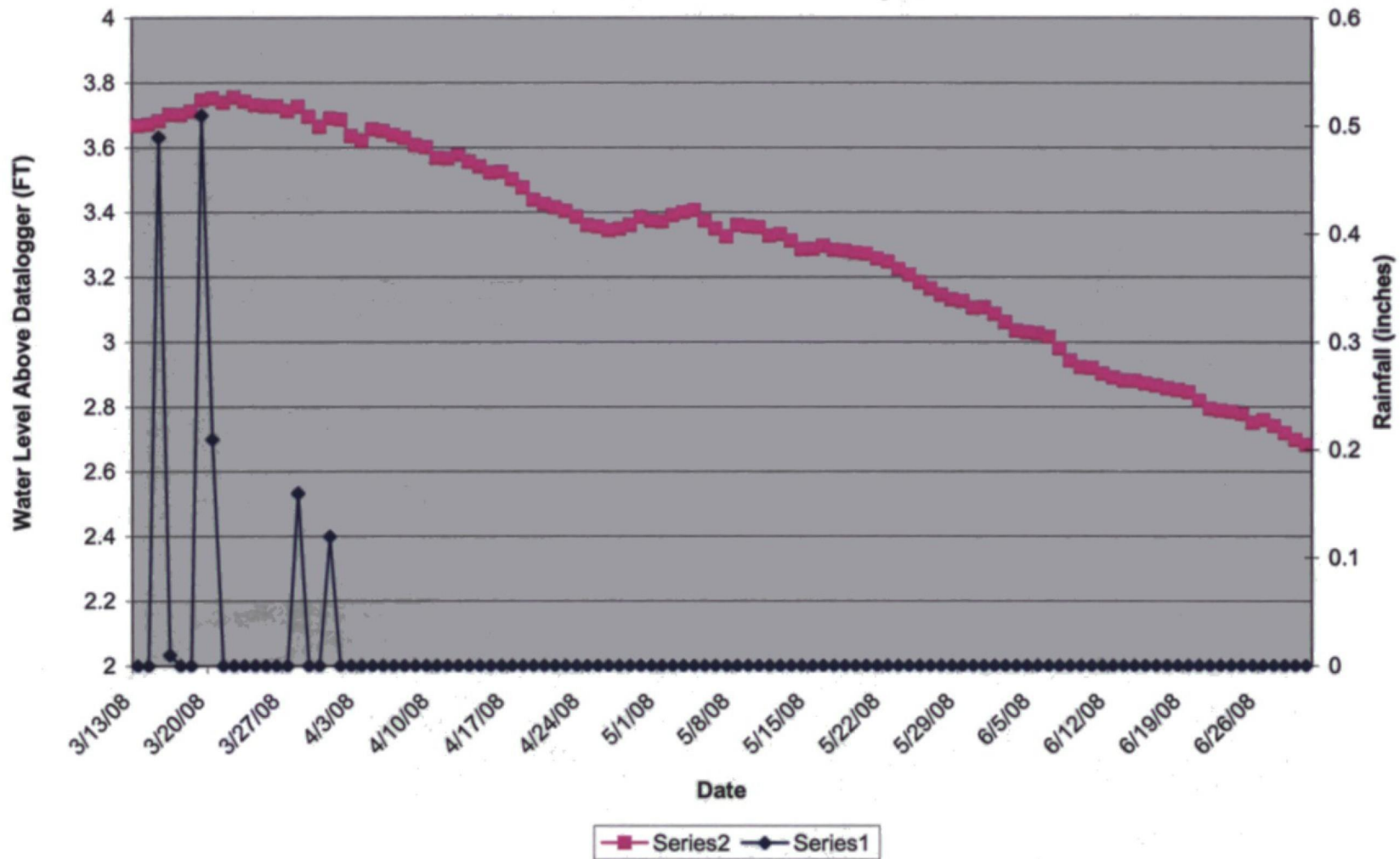


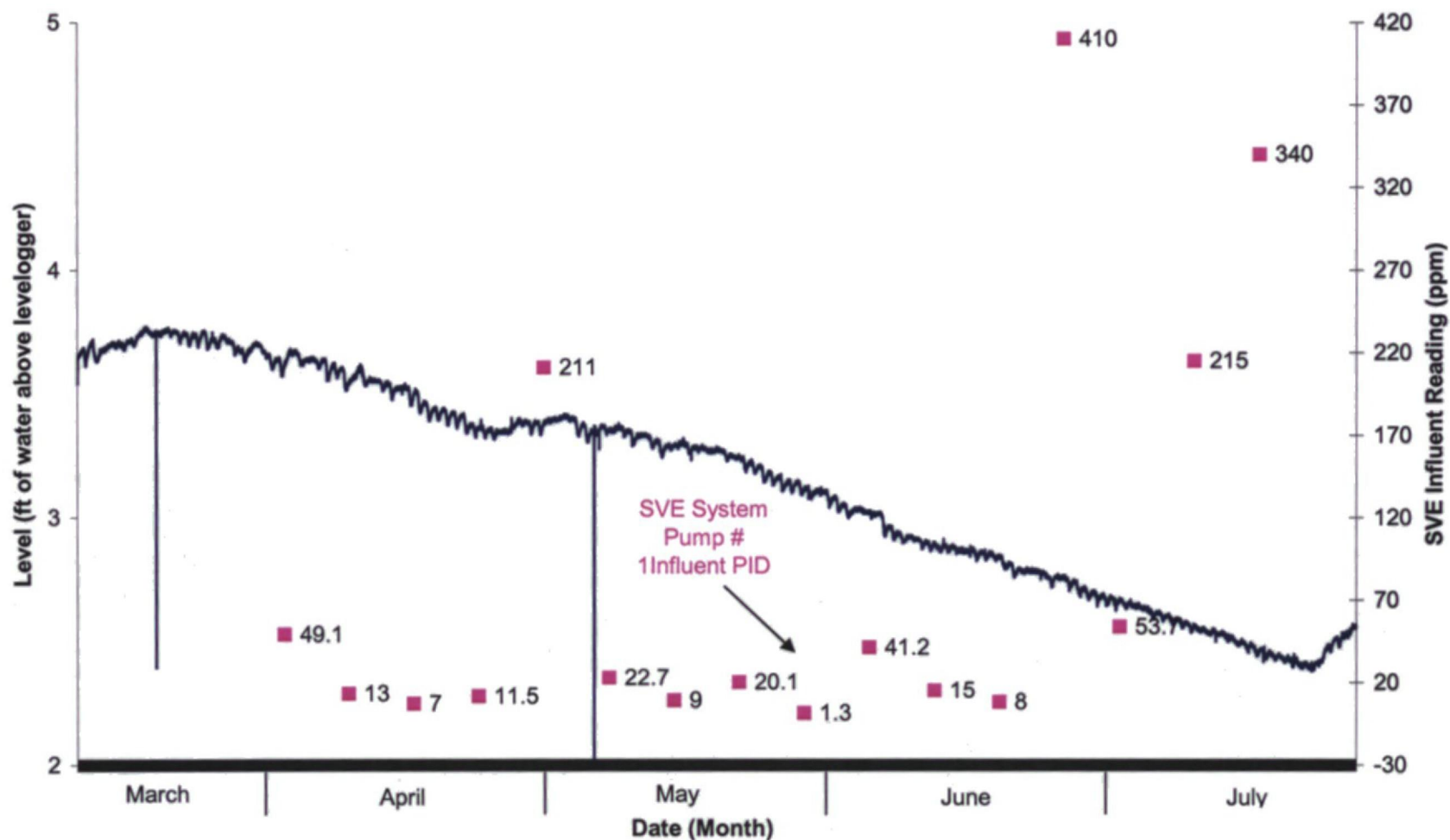
Figure 1



Figure 3
Daily Average Levellogger Readings and Rainfall
S&H Sunoco Cranston, RI



**Figure 4: Baro-Compensated Water Level
& SVE Influent Readings
Former S & H Sunoco, Cranston, RI
March 12, 2008 to July 27, 2008**



S & H SUNOCO
CRANSTON STREET, CRANSTON, RHODE ISLAND

| Instrument | ORS Interface Probe | | | | Sage Job # | R016 |
|---|--------------------------|-----------------------------|---------------------------|------------------------------|---------------------------------|--------------------------------|
| Checked By | | | | | Date: | 5/7/2008 |
| Gauged By | ZB | | | | <i>M.P. Elevations : 5/8/06</i> | |
| Well # | MP Elev (pvc) | Depth to Product | Depth to Water | Product Thickness | Product Bailed | Equivalent HD Elev. |
| ECS-1 | WELL CLOSED | | | | | |
| ECS-2 | 97.69 | — | 30.70 | 0.00 | — | 66.99 |
| ECS-3 | WELL CLOSED | | | | | |
| GZ-1 | 99.19 | NG | 32.21 | 0.00 | — | 66.98 |
| GZ-2 | WELL CLOSED | | | | | |
| GZ-3 | 99.34 | — | 32.28 | 0.00 | — | 67.06 |
| MW-1 | WELL CLOSED | | | | | |
| MW-2 | WELL CLOSED | | | | | |
| MW-3 | WELL CLOSED | | | | | |
| MW-4 | 98.99 | — | 31.97 | 0.00 | — | 67.02 |
| MW-5 | WELL CLOSED | | | | | |
| MW-6 | 97.25 | — | 30.29 | 0.00 | — | 66.96 |
| MW-7 | WELL CLOSED | | | | | |
| MW-8 | WELL CLOSED | | | | | |
| MW-9 | 98.60 | — | 31.56 | 0.00 | — | 67.04 |
| MW-10 | WELL CLOSED | | | | | |
| MW-11 | WELL CLOSED | | | | | |
| MW-12 | WELL CLOSED | | | | | |
| VW-1 | 99.10 | NG | NG | NG | NG | NG |
| VW-2 | 98.67 | NG | NG | NG | NG | NG |
| VW-3 | 98.56 | NG | NG | NG | NG | NG |
| COMMENTS: | | | | | | |
| MW-10, 11 and 12 are 1.25" monitor wells, remaining monitor wells are 2" | | | | | | |
| — = No separate-phase petroleum identified | | | | | | |
| N.G. = Not gauged | | | | | | |
| Specific gravity of petroleum assumed = 0.75 | | | | | | |
| MW-1, MW-2, MW-3, MW-5, MW-7, MW-8, MW-10, MW-11, MW-12, ECS-1, ECS-3 and GZ-2 closed on 10/25/06 | | | | | | |



Premier
Laboratory, Inc

51 Louisa Viens Drive
Dayville, CT 06241
FAX: 860-774-2689
860-774-6814 800-932-1150

ANALYTICAL DATA REPORT

Report Number: E805528

Project: R016

prepared for:

Sage Environmental, Inc.
172 Armistice Blvd.
Pawtucket, RI 02860

Attn: Brian Koch

Received Date: 5/8/2008

Report Date: 5/13/2008

Premier Laboratory, Inc
Authorized Signature



Certifications:

CT (PH-0465), MA (M-CT008), ME (CT050), NH (2020), NJ (CT002), NY (11549), RI (RI246), VT (VT11549)



Report No: E805528
Client: Sage Environmental, Inc
Project: R016

CASE NARRATIVE / METHOD CONFORMANCE SUMMARY

Premier Laboratory, Inc received six samples from Sage Environmental, Inc on 05/08/2008. The samples were analyzed from the following list of analyses:

Volatiles, Purgeable Aromatics by 8021B in GW/SW
8021

Variances:

SDG:

None reported.

Method:

None reported.

QA/QC:

Sample 5, GZ-1, Volatiles, Purgeable Aromatics by 8021B: One surrogate spike was outside quality control limits for the sample, due to matrix interference. The sample was re-extracted and re-analyzed and the surrogate was still outside control limits.

Sample 6, GZ-3, Volatiles, Purgeable Aromatics by 8021B: One surrogate spike was outside quality control limits for the sample, due to matrix interference. The sample was re-extracted and re-analyzed and the surrogate was still outside control limits.

VOLATILE ORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, Inc

Customer: Sage Environmental, Inc

PL Report No: E805528

Location: Cranston, RI

PL Sample No: 1

Project: R016

Sample Description: MW-4

Date Collected: 5/7/2008

Matrix: Aqueous

Date Received: 5/8/2008

Percent Moisture: N/A

Date Extracted: By:

Sample Weight/Volume:

Date Analyzed: 05/09/08 By: DDD

Dilution Factor: 16

Method: 8021

Soil Extract Volume:

QC Batch#: 61024

Lab Data File: 2050908.D

Units: ug/L

| CAS No. | Parameter | Result | DL |
|-------------------------|--------------------------------|----------|----|
| 71-43-2 | Benzene | 42 | 16 |
| 100-41-4 | Ethylbenzene | 590 | 16 |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | 63 | 16 |
| 108-88-3 | Toluene | 200 | 16 |
| 1330-20-7 | Xylenes (total) | 2500 | 16 |
| Surrogate | Recovery | Limits | |
| 4-Bromochlorobenzene #2 | 129% | 74%-131% | |
| Fluorobenzene #2 | 67% | 63%-122% | |
| Trifluorotoluene #2 | 92% | 72%-126% | |

VOLATILE ORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, Inc

Customer: Sage Environmental, Inc

PL Report No: E805528

Location: Cranston, RI

PL Sample No: 2

Project: R016

Sample Description: MW-6

Date Collected: 5/7/2008

Matrix: Aqueous

Date Received: 5/8/2008

Percent Moisture: N/A

Date Extracted: By:

Sample Weight/Volume:

Date Analyzed: 05/09/08 By: DDD

Dilution Factor: 1

Method: 8021

Soil Extract Volume:

QC Batch#: 61024

Lab Data File: 2050906.D

Units: ug/L

| CAS No. | Parameter | Result | DL |
|-------------------------|--------------------------------|----------|-----|
| 71-43-2 | Benzene | ND | 1.0 |
| 100-41-4 | Ethylbenzene | ND | 1.0 |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | 1.0 |
| 108-88-3 | Toluene | ND | 1.0 |
| 1330-20-7 | Xylenes (total) | ND | 1.0 |
| Surrogate | Recovery | Limits | |
| 4-Bromochlorobenzene #2 | 119% | 74%-131% | |
| Fluorobenzene #2 | 64% | 63%-122% | |
| Trifluorotoluene #2 | 84% | 72%-126% | |

VOLATILE ORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, Inc

PL Report No: E805528

PL Sample No: 3

Date Collected: 5/7/2008

Date Received: 5/8/2008

Date Extracted: By:

Date Analyzed: 05/09/08 By: DDD

Method: 8021

QC Batch#: 61024

Units: ug/L

Customer: Sage Environmental, Inc

Location: Cranston, RI

Project: R016

Sample Description: MW-9

Matrix: Aqueous

Percent Moisture: N/A

Sample Weight/Volume:

Dilution Factor: 1

Soil Extract Volume:

Lab Data File: 2050907.D

| CAS No. | Parameter | Result | DL |
|-----------|--------------------------------|--------|-----|
| 71-43-2 | Benzene | 38 | 1.0 |
| 100-41-4 | Ethylbenzene | 160 | 1.0 |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | 12 | 1.0 |
| 108-88-3 | Toluene | 11 | 1.0 |
| 1330-20-7 | Xylenes (total) | 120 | 1.0 |

| Surrogate | Recovery | Limits |
|-------------------------|----------|----------|
| 4-Bromochlorobenzene #2 | 121% | 74%-131% |
| Fluorobenzene #2 | 81% | 63%-122% |
| Trifluorotoluene #2 | 105% | 72%-126% |

VOLATILE ORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, Inc

Customer: Sage Environmental, Inc

PL Report No: E805528

Location: Cranston, RI

PL Sample No: 4

Project: R016

Sample Description: ECS-2

Date Collected: 5/7/2008

Matrix: Aqueous

Date Received: 5/8/2008

Percent Moisture: N/A

Date Extracted: By:

Sample Weight/Volume:

Date Analyzed: 05/09/08 By: DDD

Dilution Factor: 20

Method: 8021

Soil Extract Volume:

QC Batch#: 61024

Lab Data File: 2050909.D

Units: ug/L

| CAS No. | Parameter | Result | DL |
|-----------|--------------------------------|--------|----|
| 71-43-2 | Benzene | ND | 20 |
| 100-41-4 | Ethylbenzene | 230 | 20 |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | 20 |
| 108-88-3 | Toluene | 590 | 20 |
| 1330-20-7 | Xylenes (total) | 1700 | 20 |

| Surrogate | Recovery | Limits |
|-------------------------|----------|----------|
| 4-Bromochlorobenzene #2 | 131% | 74%-131% |
| Fluorobenzene #2 | 65% | 63%-122% |
| Trifluorotoluene #2 | 89% | 72%-126% |

VOLATILE ORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, Inc

Customer: Sage Environmental, Inc

PL Report No: E805528

Location: Cranston, RI

PL Sample No: 5

Project: R016

Sample Description: GZ-1

Date Collected: 5/7/2008

Matrix: Aqueous

Date Received: 5/8/2008

Percent Moisture: N/A

Date Extracted: By:

Sample Weight/Volume:

Date Analyzed: 05/09/08 By: DDD

Dilution Factor: 80

Method: 8021

Soil Extract Volume:

QC Batch#: 61024

Lab Data File: 2050912.D

Units: ug/L

| CAS No. | Parameter | Result | DL |
|-----------|--------------------------------|--------|----|
| 71-43-2 | Benzene | 300 | 80 |
| 100-41-4 | Ethylbenzene | 1500 | 80 |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | 80 |
| 108-88-3 | Toluene | 7400 | 80 |
| 1330-20-7 | Xylenes (total) | 9600 | 80 |

| Surrogate | Recovery | Limits |
|-------------------------|----------|----------|
| 4-Bromochlorobenzene #2 | 115% | 74%-131% |
| Fluorobenzene #2 | 57% | 63%-122% |
| Trifluorotoluene #2 | 77% | 72%-126% |

VOLATILE ORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, Inc

Customer: Sage Environmental, Inc

PL Report No: E805528

Location: Cranston, RI

PL Sample No: 6

Project: R016

Sample Description: GZ-3

Date Collected: 5/7/2008

Matrix: Aqueous

Date Received: 5/8/2008

Percent Moisture: N/A

Date Extracted: By:

Sample Weight/Volume:

Date Analyzed: 05/09/08 By: DDD

Dilution Factor: 50

Method: 8021

Soil Extract Volume:

QC Batch#: 61024

Lab Data File: 2050913.D

Units: ug/L

| CAS No. | Parameter | Result | DL |
|-----------|--------------------------------|--------|----|
| 71-43-2 | Benzene | 100 | 50 |
| 100-41-4 | Ethylbenzene | 1100 | 50 |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | 50 |
| 108-88-3 | Toluene | 2400 | 50 |
| 1330-20-7 | Xylenes (total) | 10000 | 50 |

| Surrogate | Recovery | Limits |
|-------------------------|----------|----------|
| 4-Bromochlorobenzene #2 | 120% | 74%-131% |
| Fluorobenzene #2 | 56% | 63%-122% |
| Trifluorotoluene #2 | 80% | 72%-126% |



Premier Laboratory, LLC
CHAIN OF CUSTODY

www.PremierLaboratory.com

SHADED AREAS
FOR LAB
USE ONLY

Lab WO#

E005520

Project Manager

JR

COPY OF REPORT TO

CUSTOMER: _____
ADDRESS: _____
SAGE Environmental, Inc.
172 Armistice Blvd
Pawtucket, RI 02860
ATTENTION: _____
E-MAIL: sage@sageenvironmental.net
PHONE: 723-9400 FAX: 723-9973

BILLING INFORMATION

BILL TO: _____
ADDRESS: _____
SAGE Environmental, Inc.
172 Armistice Blvd
Pawtucket, RI 02860
ATTENTION: _____
TELEPHONE: _____
PURCHASE ORDER #: Ro16

PROJECT INFORMATION

PROJECT: Ro16
PROJECT LOCATION: Cranston STATE: RI
PROJECT MANAGER: Brian Koch
IN CASE WE HAVE ANY QUESTIONS WHEN SAMPLES ARRIVE WE SHOULD CALL:
E-MAIL: same
TELEPHONE: ↓
FAX: _____

| SAMPLE IDENTIFICATION | DATE COLLECTED | TIME COLLECTED | SAMPLE TYPE | | SAMPLE MATRIX | # OF BOTTLES | ANALYSIS | | | | | | | | | | PRESERVATIVES | | | | |
|-----------------------|----------------|----------------|-------------|------|---------------|--------------|----------|--|--|--|--|--|--|--|--|--|---------------|-----|------|------|----------|
| | | | COMPOSITE | CRAB | | | | | | | | | | | | | H2SO4 | HCL | HNO3 | HAOH | NON-PRES |
| MW-4 | 5/7/08 | 1040 | | X | AQ | 2 | X | | | | | | | | | | ✓ | | | | |
| MW-6 | ↓ | 1015 | | ↓ | ↓ | 2 | X | | | | | | | | | | ✓ | | | | |
| MW-9 | ↓ | 1030 | | ↓ | ↓ | 2 | X | | | | | | | | | | ✓ | | | | |
| ECS-2 | ↓ | 1105 | | ↓ | ↓ | 2 | X | | | | | | | | | | ✓ | | | | |
| GZ-1 | ↓ | 1135 | | ↓ | ↓ | 2 | X | | | | | | | | | | ✓ | | | | |
| GZ-3 | ↓ | 1120 | | ↓ | ↓ | 2 | X | | | | | | | | | | ✓ | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

CUSTODY TRANSFER

| SAMPLER: | DATE | TIME |
|--------------------|--------|-------|
| <u>[Signature]</u> | 5-7-08 | 1230 |
| RECEIVED: | | |
| <u>[Signature]</u> | | |
| RELINQUISHED: | 5/8/08 | 9:30 |
| <u>[Signature]</u> | 5-8-08 | 09:30 |
| RECEIVED: | 5-8-08 | 16:35 |
| <u>[Signature]</u> | 5/8/08 | 16:35 |

TURNAROUND (INDICATE IN CALENDAR DAYS): _____ FAX _____ HARD COPY _____ E-MAIL _____
EXPEDITED SERVICE MAY BE SUBJECT TO SURCHARGE

COMMENTS * BTEX + MTBE ONLY!

CONDITIONS UPON RECEIPT: (Check One)

☒ Cooled

☐ Ambient

1-1 °C Upon Receipt at Lab

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

PAGE 1 of 1

**Equivalent Head Elevations Over Time
February through December 1999**

| Monitor Well | MP Elevations | 2/11/99 | 3/5/99 | 4/9/99 | 5/17/99 | 6/9/99 | 7/7/99 | 8/12/99 | 9/24/99 | 10/27/99 | 11/8/99 | 11/17/99 | 12/20/99 |
|--------------|---------------|---------|--------|--------|---------|--------|--------|---------|---------|----------|---------|----------|----------|
| ECS-1 | 96.50 | 66.15 | 66.17 | 66.62 | 65.99 | NG | NG | 64.71 | 65.15 | 65.08 | 65.16 | NG | 64.84 |
| ECS-2 | 97.88 | 66.16 | 65.94 | 66.54 | 65.86 | 65.78 | 65.31 | 64.67 | 65.11 | 65.05 | 65.09 | NG | 64.82 |
| ECS-3 | NG | DRY | NG | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| GZ-1 | 99.29 | 66.10 | 66.23 | NG | 65.92 | 65.83 | 65.36 | 64.73 | 65.13 | NG | NG | 65.07 | 64.79 |
| GZ-2 | 97.39 | 66.08 | 66.25 | 66.55 | 65.93 | 65.84 | 65.35 | 64.72 | 65.13 | NG | 65.17 | NG | 64.84 |
| GZ-3 | 99.43 | 66.06 | 66.22 | 66.53 | 65.92 | 65.79 | 65.34 | 64.72 | 65.11 | NG | 65.16 | NG | 64.84 |
| MW-1 | 98.53 | 66.07 | 66.23 | 66.52 | 65.89 | 65.82 | 65.34 | 64.71 | 65.11 | 64.24 | 65.16 | NG | 64.81 |
| MW-2 | 98.57 | 66.09 | 66.25 | 66.54 | 65.93 | 65.83 | 65.35 | 64.73 | 65.14 | 65.08 | 65.20 | NG | 64.84 |
| MW-3 | 98.01 | 66.05 | 66.91 | 66.55 | 65.93 | 65.79 | 65.35 | 64.73 | 65.13 | 65.13 | NG | NG | 64.82 |
| MW-4 | 98.99 | 66.08 | 61.23 | 66.53 | 65.91 | 65.81 | 65.33 | 64.70 | 65.10 | 65.03 | NG | 65.05 | 64.80 |
| MW-5 | 95.28 | NE | NE | NE | 66.58 | 66.45 | 66.04 | 65.41 | 65.56 | 65.66 | 65.78 | NG | 65.49 |
| MW-6 | 97.25 | NE | NE | NE | 65.88 | 65.78 | 65.29 | 64.66 | 65.06 | 65.36 | 65.11 | NG | 64.77 |
| MW-7 | 96.89 | NE | NE | NE | 65.88 | 65.78 | 65.28 | 64.67 | 65.08 | 65.00 | 65.13 | NG | 64.78 |
| MW-8 | 99.31 | NE | NE | NE | 65.89 | 65.8 | 65.32 | 64.69 | 65.10 | 65.03 | 65.15 | NG | 64.80 |
| MW-9 | 98.60 | NE | NE | NE | 65.95 | 65.84 | 65.35 | 64.74 | 65.14 | 65.07 | 64.17 | NG | 64.84 |
| VW-1 | 99.10 | NE | NE | NE | NG | NG | 65.08 | NG | 65.01 | 64.97 | NG | 65.08 | DRY |

NG = Not Gauged

NE = Non Existing (Monitor wells MW-5 through MW-9 and vent well VW-1 were installed on April 28 and 29, 1999.)

**Equivalent Head Elevations Over Time
January through December 2000**

| Monitor Well | MP Elevations | 1/19/00 | 2/17/00 | 3/21/00 | 4/26/00 | 5/30/00 | 6/27/00 | 7/24/00 | 8/9/00 | 9/14/00 | 10/23/00 | 11/15/00 | 12/26/00 |
|--------------|---------------|---------|---------|---------|---------|---------|---------|---------|--------|---------|----------|----------|----------|
| ECS-1 | 96.50 | 64.96 | 65.02 | 65.39 | 66.11 | 66.45 | NG | 65.83 | 65.58 | NG | 64.65 | 64.57 | 64.93 |
| ECS-2 | 97.88 | 64.93 | 65.00 | 65.31 | 66.05 | 66.36 | 66.35 | 65.76 | 65.54 | 64.98 | 64.56 | 64.53 | 65.31 |
| ECS-3 | NG | DRY | DRY | DRY | NG | NG | DRY | NG | NG | DRY | DRY | DRY | DRY |
| GZ-1 | 99.29 | 64.98 | 64.99 | 65.35 | 66.05 | 66.36 | 66.35 | 65.76 | 65.54 | 65.76 | 64.63 | 64.54 | 64.92 |
| GZ-2 | 97.39 | 62.92 | 65.00 | 65.37 | 66.05 | 66.37 | 66.36 | 65.77 | 65.55 | 65.07 | 64.65 | 64.57 | NG |
| GZ-3 | 99.43 | 67.00 | 65.01 | 65.37 | 66.05 | 66.36 | 66.35 | 65.77 | 65.54 | 65.13 | 64.65 | 64.76 | NG |
| MW-1 | 98.53 | 64.94 | 65.01 | 65.36 | NG | NG | 66.36 | 65.79 | 65.53 | 65.08 | 64.64 | 64.56 | NG |
| MW-2 | 98.57 | 64.98 | 65.02 | 65.38 | 66.08 | 66.38 | 66.36 | 65.79 | 65.56 | 66.09 | 64.68 | 64.62 | 64.96 |
| MW-3 | 98.01 | 64.98 | 65.01 | 65.37 | 66.06 | 66.37 | 66.36 | 65.78 | 65.56 | 65.57 | 64.66 | 64.58 | 64.94 |
| MW-4 | 98.99 | 64.93 | 65.00 | 65.38 | 66.09 | 66.40 | 66.35 | 65.76 | 65.55 | 65.07 | 64.66 | 64.58 | 64.92 |
| MW-5 | 95.28 | 65.58 | 65.64 | 66.04 | 66.70 | 67.03 | 67.03 | 66.46 | 66.19 | 65.76 | 65.30 | 65.12 | 65.47 |
| MW-6 | 97.25 | 64.92 | 64.95 | 65.33 | 66.00 | 66.31 | 66.30 | 65.72 | 65.49 | 65.02 | 64.59 | 64.51 | 64.88 |
| MW-7 | 96.89 | 64.92 | 64.96 | 65.34 | 66.03 | 66.32 | 66.30 | 65.72 | 65.50 | 65.02 | 64.62 | 64.53 | 64.91 |
| MW-8 | 99.31 | 64.94 | 64.98 | 65.36 | 66.04 | 66.33 | 66.31 | 65.74 | 65.52 | 65.04 | 64.62 | 64.56 | 64.92 |
| MW-9 | 98.60 | 64.98 | 67.02 | NG | 66.09 | 66.38 | 66.36 | 65.78 | 65.57 | 65.09 | 64.68 | 64.50 | 64.96 |
| VW-1 | 99.10 | NG | NG | NG | NG | NG | 66.52 | NG | NG | NG | NG | NG | NG |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January 2001 through December 2001**

| Monitor Well | MP Elevations | 1/24/01 | 2/28/01 | 3/27/01 | 4/19/01 | 5/2/01 | 6/8/01 | 7/17/01 | 8/16/01 | 8/30/01 | 9/26/01 | 10/26/01 | 11/28/01 | 12/31/01 |
|--------------|---------------|---------|---------|---------|---------|--------|-----------|---------|---------|---------|---------|----------|----------|----------|
| ECS-1 | 96.50 | 64.90 | 65.19 | 66.01 | 67.16 | 67.09 | 66.83 | 66.70 | NG | 65.91 | 65.42 | 64.91 | 64.39 | 63.68 |
| ECS-2 | 97.88 | 64.85 | 65.11 | 65.92 | 67.04 | 66.99 | 66.77 | 66.60 | 65.99 | NG | 65.36 | 64.85 | 64.35 | 64.09 |
| ECS-3 | -- | DRY | DRY | DRY | DRY | DRY | Destroyed | | | | | | | |
| GZ-1 | 99.29 | 64.89 | 65.11 | 65.94 | 67.03 | 66.97 | 66.76 | 66.59 | 65.99 | NG | 65.36 | 64.87 | 64.35 | 64.07 |
| GZ-2 | 97.39 | 64.90 | 65.13 | 65.98 | 67.05 | 66.98 | 66.75 | 66.60 | 66.01 | NG | 65.37 | 64.88 | 64.37 | 63.90 |
| GZ-3 | 99.43 | 64.90 | 65.13 | 65.96 | 67.02 | 66.97 | 66.76 | NG | NG | 65.82 | 65.37 | NG | 64.35 | 64.12 |
| MW-1 | 98.53 | NG | 64.23 | 64.97 | 67.04 | 66.96 | 66.78 | 66.59 | 66.03 | NG | 65.38 | 64.90 | 64.21 | 64.03 |
| MW-2 | 98.57 | 64.96 | 65.15 | 66.02 | 67.04 | 66.98 | 66.78 | 66.62 | 66.02 | NG | 65.40 | 64.90 | 64.37 | 64.12 |
| MW-3 | 98.01 | 64.98 | 65.15 | 65.95 | 67.10 | 66.99 | 66.77 | 66.63 | 66.02 | NG | 65.39 | 64.89 | 64.35 | 64.12 |
| MW-4 | 98.99 | 64.95 | 65.14 | 66.97 | 67.01 | 66.97 | 66.76 | 66.59 | 66.01 | NG | 65.38 | 64.88 | 64.38 | 64.40 |
| MW-5 | 95.28 | 65.66 | 65.92 | 66.73 | 67.75 | 67.67 | 67.28 | 67.19 | 66.58 | NG | 65.97 | 65.48 | 64.97 | 64.63 |
| MW-6 | 97.25 | 64.87 | 65.08 | 65.90 | 66.99 | 66.93 | 66.71 | 66.54 | 65.97 | NG | 65.33 | 64.82 | 64.31 | 64.04 |
| MW-7 | 96.89 | 64.87 | 65.08 | 65.92 | 66.97 | 66.91 | 65.09 | 66.53 | 65.96 | NG | 65.32 | 64.83 | 64.32 | 64.06 |
| MW-8 | 99.31 | 64.90 | 65.10 | 65.94 | 66.99 | 66.93 | 66.74 | 66.56 | 65.98 | NG | 65.34 | 64.85 | 64.33 | 64.08 |
| MW-9 | 98.60 | 64.93 | 65.14 | 65.99 | 67.04 | 66.98 | 66.78 | 66.62 | 66.03 | NG | 65.39 | 64.90 | 64.39 | 64.12 |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January 2002 through December 2002**

| Monitor Well | MP Elevations | 1/30/02 | 2/13/02 | 3/14/02 | 4/5/02* | 4/18/02 | 4/25/02* | 5/21/02 | 6/21/02 | 7/23/02 | 8/9/02 | 9/20/02 | 10/17/02 | 11/14/02 | 12/13/02 |
|--------------|---------------|-----------|---------|---------|---------|---------|----------|---------|---------|---------|--------|---------|----------|----------|----------|
| ECS-1 | 96.50 | 63.62 | 63.91 | 64.05 | 64.38 | 64.46 | 64.42 | 64.81 | 65.00 | 64.56 | 64.38 | 64.23 | 64.34 | 64.40 | 65.12 |
| ECS-2 | 97.88 | 63.63 | 63.94 | 64.03 | -- | 64.43 | -- | 64.77 | 64.97 | 64.53 | 64.36 | 64.21 | 64.31 | 64.40 | 65.09 |
| ECS-3 | -- | Destroyed | | | | | | | | | | | | | |
| GZ-1 | 99.29 | 63.96 | 63.91 | 64.03 | -- | 64.44 | -- | 64.76 | 64.96 | 64.53 | 64.34 | 64.20 | 64.32 | 64.37 | 65.07 |
| GZ-2 | 97.39 | 63.97 | 63.90 | 64.07 | 64.33 | 64.47 | 64.42 | 64.79 | 64.99 | 64.55 | 64.35 | 64.21 | 64.31 | 62.39 | 65.09 |
| GZ-3 | 99.43 | 63.92 | 63.93 | 64.04 | -- | 64.45 | -- | 64.79 | 64.98 | 64.53 | 64.32 | 64.19 | 64.31 | 64.38 | 65.09 |
| MW-1 | 98.53 | 64.03 | 63.94 | 64.05 | -- | NG | -- | 64.84 | NG | NG | 64.38 | 64.24 | 64.36 | 64.46 | 65.09 |
| MW-2 | 98.57 | 64.01 | 63.96 | 64.08 | -- | 64.45 | -- | 64.83 | 65.00 | 64.56 | 64.35 | 64.23 | 64.35 | 64.43 | 65.00 |
| MW-3 | 98.01 | 64.00 | 63.96 | 64.05 | -- | 64.46 | -- | 64.80 | 64.97 | 64.57 | 64.38 | 64.22 | 64.33 | 64.42 | 65.11 |
| MW-4 | 98.99 | 64.01 | 63.83 | 63.98 | 64.37 | 64.49 | 64.38 | 64.82 | 64.99 | 64.59 | 64.40 | 64.25 | 64.37 | 64.44 | 65.13 |
| MW-5 | 95.28 | 64.51 | 64.51 | 64.63 | -- | 65.22 | -- | 65.44 | 65.82 | 65.42 | 65.16 | 64.76 | 64.99 | 65.09 | 65.91 |
| MW-6 | 97.25 | 63.94 | 63.89 | 63.97 | -- | 64.40 | -- | 64.74 | 64.91 | 64.50 | 64.30 | 64.15 | 64.26 | 64.35 | 65.05 |
| MW-7 | 96.89 | 63.95 | 63.90 | 64.01 | -- | 64.41 | -- | 64.77 | 64.91 | 64.49 | 64.29 | 64.18 | 64.29 | 64.37 | 65.05 |
| MW-8 | 99.31 | 63.97 | 63.91 | 64.03 | -- | 64.42 | -- | 64.78 | 64.98 | 64.51 | 64.33 | 64.20 | 64.31 | 64.39 | 65.06 |
| MW-9 | 98.60 | 64.01 | 63.95 | 64.06 | -- | 64.48 | -- | 64.83 | 64.99 | 64.56 | 64.37 | 64.23 | 64.34 | 64.44 | 65.11 |
| MW-10 | 100.06 | 63.95 | 63.89 | 63.99 | -- | 64.41 | -- | 64.79 | 64.94 | 64.50 | 64.30 | 64.17 | 64.30 | 64.38 | 65.05 |
| MW-11 | 100.53 | 63.92 | 63.90 | 64.02 | -- | 64.40 | -- | 64.78 | 64.92 | 64.49 | 64.30 | 64.18 | 64.30 | 64.38 | 65.04 |
| MW-12 | 100.18 | 64.03 | 63.97 | 64.10 | -- | 66.91 | -- | 64.85 | 64.99 | 64.56 | 64.38 | 64.26 | 64.36 | 64.45 | 65.13 |

NG = Not Gauged

* Indicates a limited gauging event due to the presence of SPP in these wells.

**Equivalent Head Elevations Over Time
January 2003 through December 2003**

| Monitor Well | MP Elevations | 1/14/03 | 2/6/03 | 3/24/03 | 4/16/03 | 5/9/03 | 6/12/03 | 7/11/03 | 8/27/03 | 9/26/03 | 10/21/03 | 11/5/03 | 12/9/03 |
|---------------------|----------------------|----------------|---------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|
| ECS-1 | 96.50 | 67.40 | 65.88 | 66.30 | 66.79 | 67.13 | 67.08 | 67.22 | 67.01 | 65.11 | 66.25 | 66.35 | 65.96 |
| ECS-2 | 97.88 | 66.04 | 65.79 | 66.23 | 66.72 | 67.02 | 67.00 | 67.14 | 66.93 | 66.95 | 66.19 | 66.28 | 65.89 |
| ECS-3 | -- | Destroyed | | | | | | | | | | | |
| GZ-1 | 99.29 | 66.02 | 65.76 | 67.21 | 66.71 | 67.00 | 66.98 | 67.11 | 66.89 | 66.47 | 66.17 | 66.27 | 65.88 |
| GZ-2 | 97.39 | 66.06 | 65.79 | 66.24 | 66.76 | 67.04 | 67.00 | 67.14 | 66.93 | 66.49 | 66.22 | 66.29 | 65.91 |
| GZ-3 | 99.43 | 66.02 | 65.77 | 66.22 | 66.72 | 67.01 | 66.99 | 67.11 | 66.92 | 66.47 | 66.17 | 66.28 | 65.90 |
| MW-1 | 98.53 | 66.04 | 65.82 | 66.26 | 66.71 | 67.01 | 67.14 | 73.50 | 66.95 | 66.51 | 65.90 | NG | NG |
| MW-2 | 98.57 | 66.06 | 65.80 | 66.26 | 66.77 | 67.03 | 67.08 | 67.92 | 66.97 | 66.51 | 66.23 | 66.87 | 65.92 |
| MW-3 | 98.01 | 66.05 | 65.79 | 66.26 | 66.75 | 67.04 | 67.02 | 67.15 | 66.96 | 66.52 | 66.22 | 66.31 | 65.93 |
| MW-4 | 98.99 | 66.05 | 65.81 | 66.26 | 66.77 | 67.03 | 67.01 | 67.16 | 66.94 | 66.49 | 66.21 | 66.29 | 65.92 |
| MW-5 | 95.28 | 66.79 | 66.58 | 66.86 | 67.31 | 67.67 | 67.54 | 67.70 | 67.48 | 67.07 | 66.73 | 66.78 | 66.52 |
| MW-6 | 97.25 | 65.99 | 65.75 | 66.20 | 66.71 | 67.00 | 66.96 | 67.12 | 66.91 | 66.45 | 66.15 | 66.25 | 65.88 |
| MW-7 | 96.89 | 65.99 | 65.73 | 66.18 | 66.72 | 66.96 | 66.93 | 67.07 | 66.86 | 66.41 | 66.14 | 66.24 | 65.85 |
| MW-8 | 99.31 | 66.00 | 65.75 | 66.20 | 66.72 | 66.97 | 66.95 | 67.09 | 66.90 | 66.46 | 66.16 | 66.21 | 65.86 |
| MW-9 | 98.60 | 66.04 | 65.79 | 66.24 | 66.76 | 67.03 | 66.99 | 67.14 | 66.94 | 66.49 | 66.20 | 66.29 | 65.91 |
| MW-10 | 100.06 | 65.98 | 65.67 | 66.17 | 66.70 | 66.96 | 66.94 | 67.05 | 66.89 | 66.44 | 66.15 | 66.25 | 65.84 |
| MW-11 | 100.53 | 65.98 | 65.71 | 66.16 | 66.67 | 66.95 | 66.92 | 67.04 | 66.88 | 66.42 | 66.14 | 66.23 | 65.83 |
| MW-12 | 100.18 | 66.05 | 65.79 | 66.24 | 66.77 | 69.02 | 67.01 | 67.12 | 66.94 | 66.49 | 66.20 | 66.28 | 65.92 |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January through December 2004**

| Monitor Well | MP Elevations | 1/13/04 | 2/16/04 | 3/24/04 | 4/12/04 | 5/19/04 | 6/30/04 | 7/21/04 | 8/25/04 | 9/17/04 | 10/6/04 | 11/17/04 | 12/24/04 |
|--------------|---------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|
| ECS-1 | 96.50 | 66.86 | 66.86 | NG | 66.41 | 67.09 | 66.487 | 66.16 | 66.11 | 65.78 | 66.14 | 65.73 | 66.28 |
| ECS-2 | 97.88 | NG | NG | 65.94 | 66.37 | 66.99 | 66.42 | 66.12 | 66.07 | 65.73 | 66.08 | 65.68 | 66.25 |
| ECS-3 | -- | Destroyed | | | | | | | | | | | |
| GZ-1 | 99.29 | 66.78 | 66.41 | 65.90 | 66.36 | 66.95 | 66.38 | 66.09 | 66.03 | 65.72 | 66.04 | 65.67 | 66.20 |
| GZ-2 | 97.39 | 66.77 | 66.95 | 65.96 | 66.39 | 67.03 | 66.42 | 66.13 | 66.09 | 65.78 | 66.09 | 65.72 | 66.28 |
| GZ-3 | 99.43 | 66.79 | 66.43 | 65.91 | 66.38 | 66.97 | 66.39 | 66.11 | 66.07 | 65.75 | 66.07 | 65.68 | 67.23 |
| MW-1 | 98.53 | 96.81 | 66.48 | 65.97 | 66.42 | 66.99 | 66.42 | 66.17 | 66.11 | 65.77 | 66.09 | 65.71 | 66.28 |
| MW-2 | 98.57 | 67.06 | 66.49 | 65.97 | 66.49 | 67.15 | 66.43 | 66.16 | 66.11 | 65.78 | 66.11 | 65.73 | 66.32 |
| MW-3 | 98.01 | 66.82 | 66.49 | 65.96 | 66.40 | 67.00 | 66.42 | 66.15 | 66.09 | 65.77 | 66.10 | 65.71 | 66.26 |
| MW-4 | 98.99 | 66.83 | 66.48 | 65.97 | 66.40 | 67.03 | 66.42 | 66.13 | 66.10 | 66.77 | 66.11 | 65.71 | 66.28 |
| MW-5 | 95.28 | 67.44 | 67.02 | 66.45 | 66.83 | 67.60 | 66.96 | 66.62 | 66.49 | 66.26 | 66.56 | 66.22 | 66.73 |
| MW-6 | 97.25 | 66.76 | 66.41 | 65.91 | 66.34 | 66.95 | 66.36 | 66.09 | 66.03 | 65.71 | 66.05 | 65.66 | 66.20 |
| MW-7 | 96.89 | 66.74 | 66.42 | 65.89 | 66.34 | 66.91 | 66.34 | 66.08 | 66.03 | 62.70 | 66.04 | 65.67 | 66.21 |
| MW-8 | 99.31 | 66.76 | 66.42 | 65.90 | 66.36 | 66.96 | 66.37 | 66.08 | 66.03 | 65.72 | 66.05 | 65.66 | 66.26 |
| MW-9 | 98.60 | 66.81 | 66.45 | 65.96 | 66.39 | 67.00 | 66.41 | 66.13 | 66.07 | 65.74 | 66.09 | 65.69 | 66.26 |
| MW-10 | 100.06 | 66.73 | 66.40 | 65.89 | 66.34 | 66.93 | 66.36 | 66.07 | 66.02 | 65.71 | 66.05 | 65.65 | 66.22 |
| MW-11 | 100.53 | 66.73 | 66.44 | 65.87 | 66.33 | 66.91 | 66.34 | 66.05 | 66.01 | 65.68 | 66.03 | 65.62 | 66.20 |
| MW-12 | 100.18 | 66.80 | 66.46 | 65.95 | 66.40 | 66.98 | 66.42 | 66.13 | 66.09 | 65.77 | 66.13 | 65.72 | 66.28 |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January through December 2005**

| Monitor Well | MP Elevations | 1/11/05 | 2/1/05 | 3/18/05 | 4/22/05 | 5/13/05 | 6/17/05 | 7/15/05 | 8/29/05 | 9/16/05 | 10/31/05 | 11/28/05 | 12/21/05 |
|--------------|---------------|-----------|--------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| ECS-1 | 96.50 | 66.28 | NG | 67.15 | NG | NG | 67.47 | 66.79 | 65.90 | 66.09 | 67.79 | 67.76 | 67.83 |
| ECS-2 | 97.88 | 66.25 | 66.97 | 67.06 | 68.06 | 30.91 | 67.39 | 66.76 | 65.86 | 66.08 | 67.74 | 67.68 | 67.80 |
| ECS-3 | -- | Destroyed | | | | | | | | | | | |
| GZ-1 | 99.29 | 66.20 | NG | 67.03 | NG | NG | NG | NG | NG | NG | 67.71 | 67.66 | 67.76 |
| GZ-2 | 97.39 | 66.28 | 66.95 | 67.08 | 68.05 | 67.96 | 67.40 | 66.74 | 65.86 | 66.15 | 67.76 | 67.72 | 67.76 |
| GZ-3 | 99.43 | 67.23 | 67.28 | 67.07 | 68.01 | 67.91 | 67.35 | 66.69 | 65.83 | 65.98 | NG | NG | NG |
| MW-1 | 98.53 | 66.28 | 66.97 | 67.07 | 68.04 | 67.92 | 67.40 | 66.74 | 65.88 | 65.98 | 67.8 | 67.74 | 67.81 |
| MW-2 | 98.57 | 66.32 | 66.98 | 67.09 | 68.07 | 67.94 | 67.42 | 66.78 | 65.90 | 66.02 | 67.82 | 67.77 | 67.81 |
| MW-3 | 98.01 | 66.26 | 67.00 | 67.08 | 68.05 | 67.95 | 67.41 | 66.77 | 65.88 | 74.96 | 67.8 | 67.77 | 67.83 |
| MW-4 | 98.99 | 66.28 | 66.97 | 66.07 | 68.05 | 67.97 | 67.44 | 66.78 | 65.88 | 65.99 | 67.69 | 67.75 | 67.77 |
| MW-5 | 95.28 | 66.73 | 67.55 | 67.59 | 68.64 | 68.88 | 67.89 | 67.23 | 66.35 | 66.26 | 68.16 | 68.18 | 68.28 |
| MW-6 | 97.25 | 66.20 | 66.94 | 67.04 | 68.03 | 67.91 | 67.35 | 66.71 | 65.82 | 65.90 | 67.75 | 67.71 | 67.8 |
| MW-7 | 96.89 | 66.21 | 66.84 | 67.00 | 67.96 | 67.89 | 67.34 | 66.70 | 65.81 | 65.94 | 67.75 | 67.69 | 67.77 |
| MW-8 | 99.31 | 66.26 | 66.92 | 67.01 | 67.98 | 67.90 | 67.35 | 66.70 | 65.82 | 65.92 | 67.76 | 67.69 | 67.76 |
| MW-9 | 98.60 | 66.26 | 66.95 | 67.06 | 68.02 | 67.91 | 67.40 | 66.74 | 65.86 | 65.99 | 67.79 | 67.71 | 67.79 |
| MW-10 | 100.06 | 66.22 | NG | 67.02 | 67.96 | 67.87 | 67.35 | 66.71 | 65.82 | 65.88 | 67.74 | 67.66 | 67.75 |
| MW-11 | 100.53 | 66.20 | 66.86 | 67.01 | 67.94 | 67.85 | 67.32 | 66.68 | 65.80 | 65.89 | 67.7 | 67.65 | 67.73 |
| MW-12 | 100.18 | 66.28 | 66.97 | 67.09 | 68.03 | 67.93 | 67.39 | 66.76 | 65.88 | 66.03 | 67.79 | 67.74 | 67.81 |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January through December 2006**

| Monitor Well | MP Elevations | 1/27/06 | 2/20/06 | 3/31/06 | 4/21/06 | 5/8/06 | 6/23/06 | 7/28/06 | 8/18/06 | 10/19/06 | 11/9/06 |
|--------------|---------------|-----------|---------|---------|---------|--------|---------|---------|---------|----------|---------|
| ECS-1 | 96.29 | NG | NG | 67.45 | 67.04 | 66.90 | NG | 68.17 | 67.50 | 66.54 | NG |
| ECS-2 | 97.69 | 68.01 | 68.25 | 67.37 | 66.97 | 66.84 | NG | 68.11 | 67.43 | 66.49 | 66.95 |
| ECS-3 | -- | Destroyed | | | | | | | | | |
| GZ-1 | 99.19 | 67.96 | 67.66 | 67.35 | 66.97 | 66.81 | 68.34 | 68.06 | 67.41 | 66.49 | 66.93 |
| GZ-2 | 97.14 | 68.00 | 67.72 | 67.39 | 66.98 | 66.85 | NG | 68.09 | 67.44 | 66.50 | NG |
| GZ-3 | 99.34 | 67.98 | NG | NG | NG | NG | 67.49 | NG | 67.39 | NG | NG |
| MW-1 | 98.53 | 68.02 | 67.74 | 67.35 | NG | 66.89 | NG | NG | NG | NG | NG |
| MW-2 | 98.57 | 68.05 | 67.77 | 67.45 | NG | 66.91 | NG | NG | 67.47 | NG | NG |
| MW-3 | 98.01 | 68.06 | 67.77 | 67.42 | NG | 66.90 | NG | NG | 67.45 | NG | NG |
| MW-4 | 98.99 | 68.04 | 67.75 | 67.44 | 67.04 | 66.90 | 68.39 | 68.11 | 67.44 | 66.56 | 67.03 |
| MW-5 | 95.28 | 68.49 | 68.18 | 67.88 | NG | 67.28 | NG | NG | 67.94 | NG | NG |
| MW-6 | 97.25 | 68.00 | 67.71 | 67.39 | NG | 66.84 | NG | NG | 67.44 | NG | NG |
| MW-7 | 96.89 | 67.97 | 67.69 | 67.34 | NG | 66.83 | NG | NG | 67.39 | NG | NG |
| MW-8 | 99.31 | 67.98 | 67.69 | 67.36 | NG | 66.83 | NG | NG | 67.39 | NG | NG |
| MW-9 | 98.60 | 68.02 | 67.71 | 67.40 | 67.00 | 66.88 | 69.36 | 68.12 | 67.45 | 66.54 | 66.99 |
| MW-10 | 99.90 | 67.95 | 67.66 | 67.33 | NG | 67.80 | NG | NG | 67.37 | NG | NG |
| MW-11 | 100.53 | 67.95 | 67.65 | 68.32 | NG | 66.81 | NG | NG | 67.37 | NG | NG |
| MW-12 | 100.18 | NG | 67.74 | 67.40 | NG | 66.90 | NG | NG | 67.43 | NG | NG |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January through December 2007**

| Monitor Well | MP Elevations | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 |
|---------------------|----------------------|----------------|----------------|----------------|----------------|
| ECS-1 | WELL CLOSED | | | | |
| ECS-2 | 97.69 | 67.03 | 69.66 | 67.38 | 66.14 |
| ECS-3 | WELL CLOSED | | | | |
| GZ-1 | 99.19 | 66.99 | 68.59 | 67.38 | 66.10 |
| GZ-2 | WELL CLOSED | | | | |
| GZ-3 | 99.34 | 66.99 | 68.59 | 67.36 | 66.14 |
| MW-1 | WELL CLOSED | | | | |
| MW-2 | WELL CLOSED | | | | |
| MW-3 | WELL CLOSED | | | | |
| MW-4 | 98.99 | 67.04 | 68.64 | 67.44 | 66.20 |
| MW-5 | WELL CLOSED | | | | |
| MW-6 | 97.25 | NG | 68.63 | 67.41 | 66.16 |
| MW-7 | WELL CLOSED | | | | |
| MW-8 | WELL CLOSED | | | | |
| MW-9 | 98.90 | 67.09 | 68.60 | 67.4 | 66.19 |
| MW-10 | WELL CLOSED | | | | |
| MW-11 | WELL CLOSED | | | | |
| MW-12 | WELL CLOSED | | | | |

NG = Not Gauged

**Equivalent Head Elevations Over Time
February and May 2008**

| Monitor Well | MP Elevations | 2/8/08 | 5/7/08 |
|---------------------|----------------------|---------------|---------------|
| ECS-1 | 96.29 | WELL CLOSED | WELL CLOSED |
| ECS-2 | 97.69 | 66.71 | 66.99 |
| ECS-3 | --- | Destroyed | Destroyed |
| GZ-1 | 99.19 | NG | NG |
| GZ-2 | 97.14 | WELL CLOSED | WELL CLOSED |
| GZ-3 | 99.34 | 66.73 | 67.06 |
| MW-1 | 98.53 | WELL CLOSED | WELL CLOSED |
| MW-2 | 98.57 | WELL CLOSED | WELL CLOSED |
| MW-3 | 98.01 | WELL CLOSED | WELL CLOSED |
| MW-4 | 98.99 | 66.80 | 67.02 |
| MW-5 | 95.28 | WELL CLOSED | WELL CLOSED |
| MW-6 | 97.25 | 66.74 | 66.96 |
| MW-7 | 96.89 | WELL CLOSED | WELL CLOSED |
| MW-8 | 99.31 | WELL CLOSED | WELL CLOSED |
| MW-9 | 98.60 | 66.79 | 67.04 |
| MW-10 | 99.90 | WELL CLOSED | WELL CLOSED |
| MW-11 | 100.53 | WELL CLOSED | WELL CLOSED |
| MW-12 | 100.18 | WELL CLOSED | WELL CLOSED |

NG = Not Gauged

**Separate Phase Petroleum Thickness
March through December 1999**

| Monitor Well | 2/11/99 | 3/5/99 | 4/9/99 | 5/17/99 | 6/9/99 | 7/7/99 | 8/12/99 | 9/24/99 | 10/27/99 | 11/8/99 | 11/17/99 | 12/20/99 |
|--------------|---------|--------|--------|---------|--------|--------|---------|---------|----------|---------|----------|----------|
| ECS-1 | 0.15 | 0.25 | <.01 | NP | NG | NP | 0.23 | 0.01 | NP | NP | NG | NP |
| ECS-2 | 0.45 | 0.37 | 0.11 | 0.68 | 0.60 | 0.61 | 0.47 | 0.01 | NP | NP | NG | 0.38 |
| ECS-3 | NP | 0.01 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| GZ-1 | NP | NP | NG | NP | NP | NP | 0.01 | 0.06 | NG | NG | 0.04 | 0.01 |
| GZ-2 | 0.01 | <.01 | NP | NP | NP | NP | 0.03 | 0.06 | NG | 0.05 | NG | 0.06 |
| GZ-3 | NP | <.01 | <.01 | NP | NP | NP | 0.01 | 0.08 | NG | NG | NG | 0.01 |
| MW-1 | NP | <.01 | <.01 | NP | NP | NP | 0.49 | 0.25 | 3.45 | 0.12 | NG | 0.39 |
| MW-2 | NP | <.01 | NP | NP | NP | NP | 0.01 | NP | NP | NP | NG | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | 0.02 | 0.02 | NP | NP | NG | NP |
| MW-4 | NP | <.01 | <.01 | NP | NP | NP | 0.23 | 0.63 | 0.54 | NG | 0.36 | 0.55 |
| MW-5 | NI | NI | NI | NP | NP | NP | NP | NP | NP | NP | NG | NP |
| MW-6 | NI | NI | NI | NP | NP | NP | NP | NP | NP | NP | NG | NP |
| MW-7 | NI | NI | NI | NP | NP | NP | NP | NP | NP | NP | NG | NP |
| MW-8 | NI | NI | NI | NP | NP | NP | NP | NP | NP | NP | NG | NP |
| MW-9 | NI | NI | NI | NP | NP | NP | NP | NP | NP | NP | NG | NP |

NP = No product

NG = Not gauged

NI = Not installed as of date gauged (Monitor wells MW-5 through MW-9 and vent well VW-1 were installed on April 28 and 29, 1999.)

**Separate Phase Petroleum Thickness
January through December 2000**

| Monitor Well | 1/19/00 | 2/17/00 | 3/21/00 | 4/26/00 | 5/30/00 | 6/27/00 | 7/24/00 | 8/9/00 | 9/14/00 | 10/23/00 | 11/15/00 | 12/26/00 |
|--------------|---------|---------|---------|---------|---------|---------|---------|--------|---------|----------|----------|----------|
| ECS-1 | NP | 0.01 | NP | NP | 0.01 | NG | NP | <0.01 | NG | <0.01 | NP | NP |
| ECS-2 | NP | 0.02 | NP | NP | NP | NP | NP | 0.06 | <0.01 | <0.01 | 0.04 | 0.60 |
| ECS-3 | DRY | DRY | NP | DRY | DRY | NP | DRY | DRY | DRY | DRY | DRY | DRY |
| GZ-1 | 0.02 | 0.10 | NP | NP | NP | NP | NP | NP | NP | NP | <0.01 | NP |
| GZ-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | 0.02 | 0.60* |
| GZ-3 | NP | 0.02 | NP | NP | NP | NP | NP | NP | NP | NP | 0.30 | 0.10* |
| MW-1 | 0.03 | 0.10 | <0.01 | NG | NG | NP | NG | NG | NP | 0.38 | NP | <0.01 |
| MW-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-4 | 0.61 | 0.32 | NP | NP | NP | NP | NP | <0.01 | NP | 0.04 | 0.34 | 0.04 |
| MW-5 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |

NP = No product

NG = Not gauged

(*) = Product thickness estimated with a bailer

**Separate Phase Petroleum Thickness
January 2001 through December 2001**

| Monitor Well | 1/24/01 | 2/28/01 | 3/27/01 | 4/19/01 | 5/2/01 | 6/8/01 | 7/17/01 | 8/16/01 | 8/30/01 | 9/26/01 | 10/26/01 | 11/28/01 | 12/31/01 |
|--------------|---------|---------|---------|---------|--------|--------|-----------|---------|---------|---------|----------|----------|----------|
| ECS-1 | NP | 0.01 | NP | <0.01 | <0.01 | <0.01 | <0.01 | NA | 0.02 | NP | NP | <0.01 | NP |
| ECS-2 | NP | 0.01 | NP | NP | <0.01 | NP | NP | NP | NG | NP | NP | <0.01 | <0.01 |
| ECS-3 | NP | NP | NP | NP | NP | NP | Destroyed | | | | | | |
| GZ-1 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| GZ-2 | NP | 0.01 | NP | <0.01 | NP | <0.01 | NA | NP | NG | NP | NP | NP | NP |
| GZ-3 | 0.25 | 0.01 | NP | NP | NP | NP | NG | NA | NP | NP | NP | NP | NP |
| MW-1 | NP | 0.01 | NP | NP | NP | NP | NP | NP | NG | NP | NP | <0.01 | NP |
| MW-2 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-4 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | 0.04 | NP |
| MW-5 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |

NP = No product

NG = Not gauged

**Separate Phase Petroleum Thickness
January 2002 through December 2002**

| Monitor Well | 1/30/02 | 2/13/02 | 3/14/02 | 4/5/02* | 4/18/02 | 4/25/02* | 5/21/02 | 6/21/02 | 7/23/02 | 8/9/02 | 9/20/02 | 10/17/02 | 11/14/02 | 12/13/02 |
|--------------|-----------|---------|---------|---------|---------|----------|---------|---------|---------|--------|---------|----------|----------|----------|
| ECS-1 | NP | 0.43' | <0.01' | <0.01' | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-2 | 0.01' | 0.01' | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-3 | Destroyed | | | | | | | | | | | | | |
| GZ-1 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-2 | 0.01' | 0.52' | <0.01' | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-3 | NP | NP | 0.01' | NG | NP | NG | 0.01' | <0.01' | NP | NP | NP | NP | NP | NP |
| MW-1 | NP | <0.01' | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-2 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-4 | 0.01' | 1.36' | 0.84' | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-5 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |

NP = No Product

NG = Not gauged

* Indicates a limited gauging event due to the presence of SPP in these wells.

**Separate Phase Petroleum Thickness
January 2003 through December 2003**

| Monitor Well | 1/14/03 | 2/6/03 | 3/24/03 | 4/16/03 | 5/9/03 | 6/12/03 | 7/11/03 | 8/27/03 | 9/26/03 | 10/21/03 | 11/5/03 | 12/9/03 |
|--------------|-----------|--------|---------|---------|--------|---------|---------|---------|---------|----------|---------|---------|
| ECS-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-3 | Destroyed | | | | | | | | | | | |
| GZ-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NG | NG |
| MW-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-4 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-5 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-10 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-11 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-12 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |

NP = No Product
NG = Not gauged

**Separate Phase Petroleum Thickness
January through December 2004**

| Monitor Well | 1/13/04 | 2/16/04 | 3/24/04 | 4/12/04 | 5/19/04 | 6/30/04 | 7/21/04 | 8/25/04 | 9/17/04 | 10/6/04 | 11/17/04 | 12/24/04 |
|---------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| ECS-1 | NP | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-2 | NG | NG | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-3 | Destroyed | | | | | | | | | | | |
| GZ-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-4 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-5 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-10 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-11 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-12 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |

NP = No Product

NG = Not gauged

**Separate Phase Petroleum Thickness
January through December 2005**

| Monitor Well | 1/11/05 | 2/1/05 | 3/18/05 | 4/22/05 | 5/13/05 | 6/17/05 | 7/15/05 | 8/29/05 | 9/16/05 | 10/31/05 | 11/28/05 | 12/21/05 |
|--------------|-----------|--------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| ECS-1 | NP | NG | NP | NP | NG | NP | NP | NG | NG | NG | NG | NP |
| ECS-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-3 | Destroyed | | | | | | | | | | | |
| GZ-1 | NP | NG | NP | NP | NG | NP | NG | NG | NG | NG | NG | NG |
| GZ-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-4 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-5 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-10 | NP | NG | NP | NP | NG | NP | NP | NG | NG | NG | NG | NP |
| MW-11 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-12 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |

NP = No Product

NG = Not gauged

**Separate Phase Petroleum Thickness
January through December 2006**

| Monitor Well | 1/27/06 | 2/20/06 | 3/31/06 | 4/21/06 | 5/8/06 | 6/23/06 | 7/28/06 | 8/18/06 | 10/19/06 | 11/9/06 |
|--------------|-----------|---------|---------|---------|--------|---------|---------|---------|----------|---------|
| ECS-1 | NG | NG | NP | NP | NP | NP | NP | NP | NP | NG |
| ECS-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-3 | Destroyed | | | | | | | | | |
| GZ-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NG |
| GZ-3 | NP | NP | NG | NG | NG | NG | NG | NP | NG | NP |
| MW-1 | NP | NP | NP | NP | NP | NP | NG | NG | NG | NG |
| MW-2 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-3 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-4 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-5 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-6 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-7 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-8 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-10 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-11 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-12 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |

NP = No Product

NG = Not gauged

**Separate Phase Petroleum Thickness
January through December 2007**

| Monitor Well | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 |
|---------------------|----------------|----------------|----------------|----------------|
| ECS-1 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| ECS-2 | NP | NP | NP | NP |
| ECS-3 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| GZ-1 | NP | NP | NP | NP |
| GZ-2 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| GZ-3 | NP | NP | NP | NP |
| MW-1 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-2 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-3 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-4 | NP | NP | NP | NP |
| MW-5 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-6 | NP | NP | NP | NP |
| MW-7 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-8 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-9 | NP | NP | NP | NP |
| MW-10 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-11 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-12 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |

NP = No Product

**Separate Phase Petroleum Thickness
February and May 2008**

| Monitor Well | 2/8/08 | 5/7/08 |
|---------------------|---------------|---------------|
| ECS-1 | WELL CLOSED | WELL CLOSED |
| ECS-2 | NP | NP |
| ECS-3 | WELL CLOSED | WELL CLOSED |
| GZ-1 | NG | NG |
| GZ-2 | WELL CLOSED | WELL CLOSED |
| GZ-3 | NP | NP |
| MW-1 | WELL CLOSED | WELL CLOSED |
| MW-2 | WELL CLOSED | WELL CLOSED |
| MW-3 | WELL CLOSED | WELL CLOSED |
| MW-4 | NP | NP |
| MW-5 | WELL CLOSED | WELL CLOSED |
| MW-6 | NP | NP |
| MW-7 | WELL CLOSED | WELL CLOSED |
| MW-8 | WELL CLOSED | WELL CLOSED |
| MW-9 | NP | NP |
| MW-10 | WELL CLOSED | WELL CLOSED |
| MW-11 | WELL CLOSED | WELL CLOSED |
| MW-12 | WELL CLOSED | WELL CLOSED |

NP = No Product

NG = Not gauged

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | |
|---|---------------------|---------|---------|---------|---------|--------------------|-------------------|---------|--------------------|---------------------|----------|--------------------|--------------------|--------------------|-------------------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|---------|---------|-----------------------------|--------------------------------|---------|--------|--------|------|-------|-------|
| | MW-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 11000 ^b | SPP | SPP | SPP | NS | 2700 ^b | 870 ^b | SPP | 1600 ^b | 3200 ^b | SPP | 1300 ^b | 2000 ^b | 890 ^b | <350 ^d | 5.2 | 3.7 | 23 | NS | 120 | NS-SFR | NS-SFR | 8.1 | NS-SFR | 8 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 | |
| Ethylbenzene | 2800 ^b | | | | | 1700 ^b | 420 | | 2400 ^b | <3000 ^d | | <1200 | 1200 | 1600 ^b | 1200 | 64 | 12 | 7.2 | | 56 | | | 47 | | 8.1 | | <1 | | 8.7 | | | | | | | | | | 1600 | 16000 |
| MTBE | 400000 ^b | | | | | 23000 ^b | 8800 ^b | | 16000 ^b | 150000 ^b | | 66000 ^b | 47000 ^b | 17000 ^b | 3900 | 8.9 | 7.2 | 490 | | 50 | | | 5.3 | | <1 | | <1 | | 2.2 | | | | | | | | | 5000 | NE | |
| Toluene | 26000 ^{bu} | | | | | 6500 ^b | 4700 ^b | | 9700 ^b | 16000 ^b | | 3200 ^b | 8600 ^b | 6500 ^b | 2700 ^b | 97 | 29 | 13 | | 110 | | | 10 | | 2.3 | | <1 | | <1 | | | | | | | | | | 1700 | 21000 |
| Total Xylenes | 15000 | | | | | 11000 | 3800 | | 22000 | 18000 | | 15000 | 9400 | 11000 | 12000 | 450 | 230 | 110 | | 360 | | | 320 | | 54 | | <1 | | 56 | | | | | | | | | | NE | NE |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDE M UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDE M Method 1 Objective | RIDE M GB Groundwater UCL | | | | | | | |
|---------------|---|---------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|-------------------|---------|--------|-------------------|---------|-------------------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|---------|---------|------------------------------|---------------------------------|---------|---------|---------|--------|--------|-------|-------|
| Analyte | MW-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | | | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | | |
| | Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 6200 ^b | SPP | 2200 ^b | 2500 ^b | 1100 ^b | 690 ^b | 2200 ^b | 360 ^b | 890 ^b | 180 ^b | 210 ^b | <20 | <3 | <50 | <2 | <25 | <5 | <15 | <8 | <1 | NS-SFR | NS-SFR | <3 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 | |
| Ethylbenzene | 2100 ^b | | | 1200 | 1100 | 440 | 320 | 2500 ^b | 2900 ^b | 670 | 800 | 2900 ^b | 1300 | 120 | 2200 ^b | 140 | 1400 | 330 | 1500 | 560 | 180 | | | 320 | | 110 | | 43 | | 45 | | | | | | | | | | 1600 | 16000 |
| MTBE | 22000 ^b | | | 630 | 1800 | 470 | 24 | <200 | 290 | 61 | <50 | <200 | <20 | 5.5 | <50 | 4.5 | <25 | 5.5 | <15 | <8 | <1 | | | 5 | | <1 | | 1.2 | | 1.5 | | | | | | | | | 5000 | NE | |
| Toluene | 13000 ^b | | | 4200 ^b | 6300 ^b | 1700 ^b | 340 | 13000 ^b | 5900 ^b | 1900 ^b | 3000 ^b | 9200 ^b | 540 | 26 | 3600 ^b | 59 | 2200 ^b | 200 | 710 | 140 | 21 | | | 49 | | <1 | | <1 | | <1 | | | | | | | | | 1700 | 21000 | |
| Total Xylenes | 7800 | | | 3800 | 4400 | 1900 | 570 | 8300 | 9700 | 2700 | 2600 | 11000 | 2000 | 97 | 7200 | 170 | 5300 | 770 | 5000 | 2380 | 400 | | | 710 | | 48 | | 36 | | 12 | | | | | | | | | NE | NE | |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDE M UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit
* Analysis via EPA Method 8260B

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | |
|---------------|---|---------|---------|--------------------|-------------------|-------------------|----------|---------|--------|---------|-------------------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|---------|-----------------------------|--------------------------------|---------|---------|---------|---------|--------|--------|-------|
| | MW-3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | | | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | |
| Analyte | Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | | |
| Benzene | 1700 ^b | SPP | | 1900 ^b | 1300 ^b | 270 ^b | 53 | 120 | 39 | 35 | 13 | <10 | <10 | <10 | <10 | <10 | <2 | 1.5 | <3 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | 2400 ^b | | | 3000 ^b | 2300 ^b | | 920 | 170 | 410 | 450 | 820 | 200 | 330 | 300 | 260 | 88 | 89 | 80 | 44 | 50 | 3 | 18 | | <1 | | 21 | | 24 | | 20 | | | | | | | | | 1600 | 16000 |
| MTBE | <750 | | | 390 | 133 | <50 | <50 | <20 | <20 | <50 | 5.5 | <10 | 11 | <10 | <10 | <10 | 2.9 | 2.8 | <3 | 1.6 | | | <1 | | <1 | | 1.7 | | 1.1 | | | | | | | | | | 5000 | NE |
| Toluene | 11000 ^b | | | 12000 ^b | 8200 ^b | 3700 ^b | 880 | 1400 | 670 | | 3300 ^b | 200 | 530 | 110 | 300 | 150 | 120 | 110 | 20 | 11 | <3 | 3.6 | | <1 | | <1 | | <1 | | <1 | | | | | | | | | 1700 | 21000 |
| Total Xylenes | 12600 | | | 17000 | 9700 | 4500 | 980 | 2000 | 1500 | 4700 | 720 | 1700 | 1000 | 1700 | 660 | 680 | 1000 | 260 | 300 | 262 | 240 | | | | 7.1 | | 150 | | 160 | | 120 | | | | | | | | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x);
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit
* Analysis via EPA Method 8260B

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | | | | |
|---------------|---|---------|---------|---------|---------|--------|---------------------|--------------------|--------|---------|---------------------|---------------------|---------------------|--------------------|----------|---------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|---------|------------------|-----------------------------|--------------------------------|---------|---------|---------|---------|--------|--------|------|------|------|-------|-------|
| | MW-4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | | | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | | | | | |
| Analyte | Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | | | | | | |
| Benzene | <2000 ^b | | SPP | | NS | SPP | | 12000 ^b | SPP | SPP | | 16000 ^b | 11000 ^b | 10000 ^b | SPP | SPP | | <15000 ^d | <15000 ^d | <15000 ^d | 3800 ^b | 2600 ^b | NS | 3100 ^b | 2600 ^b | 2200 ^b | 1500 ^b | 960 ^b | 1200 ^b | 120 | 200 ^b | 120 | 160 ^b | 22 | 31 | 82 | 130 | 27 | 9.1 | 64 | 46 | 42 | 140 | 18000 |
| Ethylbenzene | <20000 ^b | | | | | | 2300 ^b | | | | 8900 ^b | 5100 ^b | <10000 ^d | | | | <15000 ^d | <15000 ^d | <15000 ^d | 2900 ^b | <2000 ^d | | 2400 ^b | 2400 ^b | 1800 ^b | 1600 | 1600 | 1000 | 120 | 520 | 94 | 310 | 190 | 100 | 270 | 430 | 210 | 160 | 600 | 790 | 590 | 1600 | 16000 | |
| MTBE | 550000 ^b | | | | | | 940000 ^b | | | | 820000 ^b | 310000 ^b | 560000 ^b | | | | 720000 ^b | 650000 ^b | 680000 ^b | 220000 ^b | 130000 ^b | | 170000 ^b | 48000 ^b | 42000 ^b | 36000 ^b | 10000 ^b | 11000 ^b | 550 | 330 | 41 | 30 | 16 | 21 | 35 | 50 | <1 | 16 | 77 | 47 | 63 | 5000 | NE | |
| Toluene | 26000 sm | | | | | | 26000 sm | | | | 41000 sm | 37000 sm | 42000 sm | | | | 41000 sm | 29000 sm | 33000 sm | 16000 ^b | 13000 ^b | | 20000 ^b | 14000 ^b | 5000 ^b | 3800 ^b | 4200 ^b | 1700 | 260 | 1000 | 170 | 220 | 86 | 33 | 180 | 290 | 140 | 130 | 700 | 410 | 200 | 1700 | 21000 | |
| Total Xylenes | <20000 | | | | | | 16000 | | | | 29000 | 23000 | 24000 | | | | 60000 | 20000 | <15000 | 21000 | 13000 | | 17600 | 16000 | 12000 | 12000 | 11000 | 6200 | 970 | 4100 | 720 | 1000 | 1100 | 590 | 960 | 1500 | 540 | 880 | 3200 | 3400 | 2500 | NE | NE | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x);
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit
* Analysis via EPA Method 8260B

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | |
|---|---------------|----------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|---------|-----------------------------|--------------------------------|---------|---------|---------|---------|--------|--------|-------|
| | MW-5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | | | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1600 | 16000 |
| MTBE | <5 | 12 | <1 | 1.3 | <1 | <1 | 1 | <1.0 | <1 | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 5000 | NE |
| Toluene | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1700 | 21000 |
| Total Xylenes | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | 4.7 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NE | NE |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.

<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).

NE: No allowable limit is established for the substance

NS: Not Sampled

NS-SFR: Not Sampled, Sampling Frequency Reduced

SPP: Separate phase petroleum present

Sample Results:

b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;

d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives

u: Analyte concentration in this sample exceeds the RIDE M UCL.

v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit

* Analysis via EPA Method 8260B

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDE M Method 1 Objective | RIDE M GB Groundwater UCL | | | | | | | |
|---|---------------|----------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|---------|------------------------------|---------------------------------|---------|---------|---------|---------|--------|--------|-------|
| | MW-6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | | | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 6.2 | 1.2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <2 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | <1 | <1 | NS-SFR | NS-SFR | <1 | 140 | 18000 | |
| Ethylbenzene | <5 | 3.5 | 11 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1600 | 16000 | |
| MTBE | <5 | 8.6 | <1 | 2.4 | 3.9 | 4 | 3.3 | 5.7 | 13 | 12 | 4 | 4.7 | <1 | <1 | <1 | 1.7 | 4.9 | 1.7 | 1.6 | 1.2 | | | | 210 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 5000 | NE |
| Toluene | <5 | 6.8 | 20 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1700 | 21000 |
| Total Xylenes | <5 | 21 | 62 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NE | NE |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.

<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).

NE: No allowable limit is established for the substance

NS: Not Sampled

NS-SFR: Not Sampled, Sampling Frequency Reduced

SPP: Separate phase petroleum present

Sample Results:

b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;

d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives

u: Analyte concentration in this sample exceeds the RIDE M UCL.

v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit

* Analysis via EPA Method 8260B

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sumoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDE M Method 1 Objective | RIDE M GB Groundwater UCL | | | | | | | | |
|---|---------------|------------------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|------------------------------|---------------------------------|---------|---------|---------|---------|---------|---------|--------|--------|
| | MW-7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | | | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | | | |
| Benzene | 59 | 140 ^b | 73 | 56 | 17 | 11 | 2.8 | <0.5 | 0.68 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1600 | 16000 |
| MTBE | <5 | <1 | <1 | <1 | 11 | 3.2 | <1 | 1 | 11 | 1.6 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 5000 | NE |
| Toluene | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1700 | 21000 |
| Total Xylenes | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | 5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NE | NE |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDE M UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | |
|---|---------------------|----------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|-------------------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|---------|-----------------------------|--------------------------------|---------|---------|--------|--------|------|-------|
| | MW-8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99 ^a | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | |
| Benzene | 7500 ^b | 10000 ^b | 13000 ^b | 8800 ^b | 12000 ^b | 5600 ^b | 5500 ^b | 3100 ^b | 2400 ^b | 1400 ^b | 2000 ^b | 1200 ^b | 320 ^b | 100 | 67 | 8.2 | 6.6 | 5.5 | 36 | 23 | NS-SFR | NS-SFR | 20 | NS-SFR | 1.3 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | 2500 ^b | <2500 ^d | <2500 ^d | 1800 ^b | 2700 ^b | 1500 | 1500 | 1900 ^b | 1500 | 1500 | 1300 | 890 | 380 | 88 | 130 | 16 | 27 | 18 | 15 | 14 | | | 25 | | 20 | | <1 | | 7.1 | | | | | | | | | | 1600 | 16000 |
| MTBE | 440000 ^b | 780000 ^b | 560000 ^b | 240000 ^b | 410000 ^b | 85000 ^b | 33000 ^b | 7100 ^b | 3700 | 36000 ^b | 44000 ^b | 19000 ^b | 7500 ^b | 2600 | 1400 | 52 | 22 | 53 | 680 | 620 | | | 12 | | 6 | | <1 | | 1.4 | | | | | | | | | | 5000 | NI |
| Toluene | 10000 ^b | 12000 ^b | 13000 ^b | 14000 ^b | 17000 ^b | 12000 ^b | 10000 ^b | 14000 ^b | 6700 ^b | 6100 ^b | 3200 ^b | 2000 ^b | <150 | <50 | <50 | <1 | 2.8 | <1 | <5 | 5.4 | | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | 1700 | 21000 |
| Total Xylenes | 10000 | 7500 | <2500 | 6900 | 8600 | 5800 | 4800 | 8000 | 5400 | 6600 | 4700 | 2600 | 1300 | 480 | 1200 | 43 | 38 | 3.6 | 6.3 | 26 | | | 17 | | 23 | | <1 | | 4.3 | | | | | | | | | | NI | NI |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDE M UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit
^a Analysis via EPA Method 8260B

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | |
|---|---------------------|--------------------|-------------------|---------|-------------------|--------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|------------------|--------------------|------------------|-------------------|-----------------------------|--------------------------------|---------|---------|---------|--------|--------|----------------|-------|--|
| | MW-9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | GB Groundwater | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | <2500 ^d | <250 ^d | <25 | 1.5 | 4.8 | <50 | 120 | 610 ^b | 1700 ^b | 2500 ^b | 5000 ^b | 5000 ^b | 8000 ^b | 9400 ^b | 11000 ^b | <10000 ^d | 8300 ^b | 8000 ^b | 4000 ^b | 4200 ^b | 4600 ^b | 2800 ^b | 1800 ^b | 280 ^b | 450 ^b | 1500 ^b | 430 ^b | 660 ^b | 370 ^b | 360 ^b | 210 ^b | 360 ^b | 140 | 61 | 73 | 93 | 38 | 140 | 18000 | |
| Ethylbenzene | <2500 ^d | <250 | <25 | <0.5 | <0.5 | <50 | <100 | <100 | <1000 | <2000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <10000 ^d | <2000 ^d | <4000 ^d | <2000 ^d | <2000 ^d | <2000 ^d | <800 | <400 | <100 | 220 | 600 | <40 | 190 | 45 | 58 | <15 | 150 | 73 | 11 | 62 | 14 | 160 | 1600 | 16000 | |
| MTBE | 120000 ^b | 96000 ^b | 6100 ^b | 1000 | 9300 ^b | 3300 | 13000 ^b | 850000 ^b | 140000 ^b | 210000 ^b | 250000 ^b | 160000 ^b | 300000 ^b | 520000 ^b | 520000 ^b | 590000 ^b | 620000 ^b | 570000 ^b | 250000 ^b | 280000 ^b | 230000 ^b | 110000 ^b | 53000 ^b | 11000 ^b | 16000 ^b | 48000 ^b | 4600 | 14000 ^b | 4000 | 5800 ^b | 1600 | 3400 | 780 | 100 | 20 | 42 | 12 | 5000 | NE | |
| Toluene | <2500 ^d | <250 | <25 | <0.5 | <0.5 | <50 | <100 | 220 | <1000 | <2000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <10000 ^d | <2000 ^d | <4000 ^d | <2000 ^d | <2000 ^d | <2000 ^d | <800 | <400 | <100 | <120 | <500 | <40 | <100 | <25 | <50 | <15 | <25 | 2.9 | <1 | 6 | 1.1 | 11 | 1700 | 21000 | |
| Total Xylenes | <2500 | <250 | <25 | <0.5 | <0.5 | <50 | <100 | 230 | <1000 | <2000 | <5000 | <5000 | <5000 | <5000 | <5000 | <10000 | <2000 | <4000 | <2000 | <2000 | <2000 | <800 | <400 | <100 | 160 | <500 | <40 | 330 | <25 | 110 | <15 | 230 | 31 | 9.4 | 74 | 4 | 120 | NE | NE | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x);
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | | | |
|---|---------------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|-------------------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|-----------------------------|--------------------------------|---------|---------|---------|---------|---------|--------|--------|----------------|-------|----|
| | MW-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | GB Groundwater | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | 17 | <5 | 2.2 | <150 ^d | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 | |
| Ethylbenzene | | | | | | | | | | | | | <5 | <5 | <1 | <150 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | 1600 | 16000 | |
| MTBE | | | | | | | | | | | | | 300 | 260 | 79 | 8700 ^b | 58 | 82 | 130 | 26 | | | 7.1 | | 2.4 | | 7 | | 9.4 | | | | | | | | | | 5000 | NE |
| Toluene | | | | | | | | | | | | | <5 | <5 | <1 | <150 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | 1700 | 21000 | |
| Total Xylenes | | | | | | | | | | | | | <5 | <5 | <1 | <150 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | NE | NE | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x);
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

Historical Groundwater Analytical Results - BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDE M Method 1 Objective | RIDE M GB Groundwater UCL | | | | | | | | | |
|---|---------------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|----------------|------------------------------|---------------------------------|---------|---------|---------|---------|---------|--------|--------|------|-------|
| | MW-11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | | | | | |
| Benzene | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | | 1600 | 16000 |
| MTBE | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | 1.6 | 1.5 | <1 | | | 8.8 | | 5.5 | | 2 | | 1.6 | | | | | | | | | 5000 | NI |
| Toluene | | | | | | | | | | | | | 1.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | 1700 | 21000 |
| Total Xylenes | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | NI | NI |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x>: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDE M UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDE M Method 1 Objective | RIDE M GB Groundwater UCL | | | | | | | |
|---|---------------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|------------------------------|---------------------------------|---------|---------|---------|--------|--------|------|-------|
| | MW-12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | | |
| Benzene | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | | 1600 | 16000 |
| MTBE | | | | | | | | | | | | | <1 | <1 | 1.1 | <1 | 2.4 | 12 | 19 | 20 | | | 4 | | 2 | | 1.8 | | 1.5 | | | | | | | | | 5000 | NE |
| Toluene | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | | 1700 | 21000 |
| Total Xylenes | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | NE | NE |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x>: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDE M UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | |
|---|---------------------|---------|---------------------|---------|---------|--------|---------------------|---------|--------|---------|----------|---------|--------------------|-------------------|-------------------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|-----------------------------|--------------------------------|---------|---------|---------|--------|--------|------|-------|
| | ECS-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/30/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | | |
| Benzene | <250 ^u | SPP | 2000 ^b | SPP | SPP | SPP | <250 ^u | SPP | SPP | SPP | SPP | SPP | <300 ^u | <300 ^u | <300 ^u | <20 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <5 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | 8200 ^b | | 5400 ^b | | | | 4000 ^b | | | | | | 2800 ^b | 2500 ^b | 660 | 49 | <1 | 1 | 4.3 | 9.6 | | | 52 | | <1 | | <1 | | <1 | | | | | | | | | 1600 | 16000 |
| MTBE | <2500 | | <500 | | | | 6700 ^b | | | | | | <300 | <300 | <300 | <20 | <1 | <1 | <1 | 1.1 | | | <5 | | <1 | | <1 | | <1 | | | | | | | | | 5000 | NE |
| Toluene | 49000 ^{bu} | | 44000 ^{bu} | | | | 28000 ^{bu} | | | | | | 12000 ^b | 8700 ^b | 1000 | 33 | <1 | 1.6 | 5.7 | 11 | | | 47 | | <1 | | <1 | | <1 | | | | | | | | | 1700 | 21000 |
| Total Xylenes | 52000 | | 36000 | | | | 26000 | | | | | | 39000 | 34000 | 16000 | 1700 | 22 | 99 | 229 | 280 | | | 1400 | | <1 | | <1 | | <1 | | | | | | | | | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x);
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | |
|---|---------------|---------|---------|---------|---------------------|--------|----------|---------|--------|---------------------|----------|---------|-------------------|------------------|------------------|------------------|------------------|---------|------------------|---------|------------------|-------------------|-------------------|------------------|---------|-------------------|----------|---------|--------|---------|-----------------------------|--------------------------------|---------|---------|-------------------|-------------------|--------|------|-------|
| | ECS-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | SPP | SPP | SPP | | 3000 ^b | SPP | SPP | SPP | SPP | 4500 ^b | SPP | SPP | 680 ^b | 260 ^b | 180 ^b | 350 ^b | 160 ^b | 79 | 450 ^b | NS | 380 ^b | 1100 ^b | 510 ^b | 900 ^b | 20 | 200 ^b | 110 | 13 | 69 | 5 | 180 ^b | 61 | 1.4 | <20 | 49 | 49 | <20 | 140 | 18000 |
| Ethylbenzene | | | | | 3900 ^b | | | | | 3000 ^b | | | 1000 | 720 | 620 | 240 | 80 | 320 | 430 | | 250 | 710 | 490 | 190 | 140 | 760 | 270 | 180 | 620 | 140 | 950 | 720 | 39 | 360 | 990 | 990 | 230 | 1600 | 16000 |
| MTBE | | | | | 9000 ^b | | | | | 1400 | | | 1500 | 170 | <100 | 620 | 2500 | 58 | 280 | | 130 | 160 | <40 | 28 | <4 | <20 | <10 | <5 | <10 | <5 | <15 | 24 | <1 | <20 | <20 | <20 | <20 | 5000 | NE |
| Toluene | | | | | 34000 ^{bu} | | | | | 24000 ^{bu} | | | 3800 ^b | 1300 | 770 | 600 | 880 | 440 | 980 | | 1600 | 6400 ^b | 4400 ^b | 1500 | 450 | 2300 ^b | 870 | 550 | 1600 | 340 | 1900 ^b | 1900 ^b | 74 | 680 | 2500 ^b | 2500 ^b | 590 | 1700 | 21000 |
| Total Xylenes | | | | | 23000 | | | | | 20000 | | | 11000 | 6500 | 5600 | 1600 | 920 | 3800 | 2900 | | 2500 | 6500 | 5000 | 2700 | 980 | 5400 | 2300 | 1300 | 4100 | 980 | 6100 | 5900 | 330 | 2800 | 7400 | 7400 | 1700 | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x);
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

Historical Groundwater Analytical Results - BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDE M Method 1 Objective GB Groundwater | RIDE M GB Groundwater UCL | | | | | | | |
|---|----------------------|----------------------|---------|---------|----------------------|---------|--------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|-------------------|--------------------|--------------------|-------------------|--------------------|---------------------|-------------------|--------|---------------------|--------------------|--------------------|---------------------|---------------------|--------------------|---|---------------------------------|---------------------|--------------------|-------------------|-------------------|---------|--------|--------|
| | GZ-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/30/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | | | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | <100000 ^b | <25000 ^b | NS | SPP | 32000 ^{bu} | <0.5 | SPP | 23000 ^{bu} | 14000 ^b | 13000 ^b | 18000 ^{bu} | 16000 ^b | 9000 ^b | 6900 ^b | 8500 ^b | 2500 ^b | 2400 ^b | 1900 ^b | 2100 ^b | 2400 ^b | 1500 ^b | 1800 ^b | 2100 ^b | NS | NS | 1800 ^b | 1400 ^b | 930 ^b | 1400 ^b | 1000 ^b | 1100 ^b | 1600 ^b | 490 ^b | 1500 ^b | 1400 ^b | NS | 300 ^b | 140 | 18000 | |
| Ethylbenzene | <100000 ^b | <25000 ^b | | | 5700 ^b | <0.5 | | 7100 ^b | 4300 ^b | <8000 ^d | <8000 ^d | <10000 ^d | <3000 ^d | <3000 ^d | <3000 ^d | 3300 ^b | 1000 | 1200 | 1300 | 1800 ^b | 2200 ^b | 1700 ^b | 2600 ^b | 3900 ^b | | | 3900 ^b | 3300 ^b | 1700 ^b | 4000 ^b | 2000 ^b | 2700 ^b | 3600 ^b | 2200 ^b | 3200 ^b | 4100 ^b | 1500 | 1600 | 16000 | |
| MTBE | 2600000 ^b | 3700000 ^b | | | 2500000 ^b | 29 | | 600000 ^b | 370000 ^b | 560000 ^b | 670000 ^b | 460000 ^b | 150000 ^b | 150000 ^b | 160000 ^b | 33000 ^b | 16000 ^b | 9600 ^b | 12000 ^b | 9000 ^b | 2200 | 2400 | 4400 | | | <250 | <150 | <75 | <150 | <150 | <150 | <1 | <160 | <160 | <80 | 5000 | NE | NE | | |
| Toluene | <100000 ^b | 60000 ^{bu} | | | 62000 ^{bu} | 0.74 | | 50000 ^{bu} | 22000 ^{bu} | 38000 ^{bu} | 45000 ^{bu} | 45000 ^{bu} | 30000 ^{bu} | 27000 ^{bu} | 46000 ^{bu} | 11000 ^b | 8300 ^b | 9800 ^b | 14000 ^b | 19000 ^b | 9700 ^b | 16000 ^b | 39000 ^{bu} | | | 32000 ^{bu} | 20000 ^b | 10000 ^b | 22000 ^{bu} | 15000 ^{bu} | 20000 ^b | 25000 ^{bu} | 8000 ^b | 22000 ^{bu} | 21000 ^b | | 7400 ^b | 1700 | 21000 | |
| Total Xylenes | <100000 | 55000 | | | 28000 | <0.5 | | 32000 | 16000 | 12000 | 12000 | 11000 | 14000 | 14000 | 14000 | 23000 | 6200 | 6200 | 6300 | 9000 | 12000 | 7400 | 12000 | 22000 | | | 23000 | 19000 | 10000 | 22000 | 13000 | 18000 | 24000 | 12000 | 22000 | 29000 | | 9600 | NE | NE |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDE M UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit
* Analysis via EPA Method 8260B

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDE M Method 1 Objective GB Groundwater | RIDE M GB Groundwater UCL | | | | |
|---|---------------------|----------|---------|--------------------|--------------------|---------------------|--------|----------|--------------------|---------------------|---------|----------|-------------------|-------------------|--------------------|----------|-------------------|-------------------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|---------|---------|---|---------------------------------|---------|---------|---------|--------|
| | GZ-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | | | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 20000 ^{bu} | SPP | SPP | 4000 ^b | 5200 ^b | 11000 ^b | SPP | SPP | 1600 ^b | 2600 ^b | NS | SPP | <400 ^d | 730 ^b | 25 | 68 | <40 | <20 | <30 | <25 | <25 | <10 | <8 | <10 | <3 | <40 | <10 | <5 | <20 | <10 | NS | NS | NS | NS | NS | NS | 140 | 18000 | |
| Ethylbenzene | 3200 ^b | | | 1700 ^b | 1300 | 2300 ^b | | | 1800 ^b | 2200 ^b | | | 1100 | 1300 | 310 | 170 | 450 | 210 | 330 | 120 | 96 | 120 | 43 | 25 | 5.2 | <40 | 27 | 5 | <20 | <10 | | | | | | | | 1600 | 16000 |
| MTBE | <1200 | | | 10000 ^b | 2300 | <800 | | | 410 | <400 | | | <400 | <400 | 30 | <35 | <40 | <20 | <30 | <25 | <25 | <10 | <8 | <10 | <3 | <40 | <10 | <5 | <20 | <10 | | | | | | | | 5000 | NE |
| Toluene | 40000 ^{bu} | | | 19000 ^b | 20000 ^b | 36000 ^{bu} | | | 16000 ^b | 26000 ^{bu} | | | | 5700 ^b | 13000 ^b | 380 | 1900 ^b | 2300 ^b | 560 | 920 | 230 | 140 | 230 | 140 | 97 | 29 | 160 | 69 | 18 | 53 | <10 | | | | | | | 1700 | 21000 |
| Total Xylenes | 20000 | | | 15000 | 17000 | 21000 | | | 23000 | 27000 | | | | 29000 | 16000 | 3800 | 4200 | 6400 | 5400 | 9300 | 6400 | 3700 | 3300 | 2200 | 2100 | 600 | 9100 | 3500 | 1600 | 5900 | 2200 | | | | | | | NE | NE |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDE M UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit
* Analysis via EPA Method 8260B

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | | |
|---|----------------------|---------|---------|---------|----------------------|--------|----------|---------|---------------------|---------------------|---------------------|---------------------|---------|---------------------|--------------------|-------------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-----------------------------|--------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------|-------|
| | GZ-3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/30/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | 5/7/08 | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | | | |
| Benzene | <5000 ^b | SPP | SPP | SPP | 29000 ^{bu} | NS | SPP | SPP | 6200 ^b | 12000 ^b | 13000 ^b | 9200 ^b | SPP | 5700 ^b | 1800 ^b | 790 ^b | 590 ^b | 1600 ^b | 1800 ^b | 1300 ^b | 1200 ^b | 1100 ^b | 1200 ^b | 670 ^b | 490 ^b | 750 ^b | 660 ^b | 580 ^b | NS | 660 ^b | 1100 ^b | 880 ^b | 630 ^b | 850 ^b | 580 ^b | 580 ^b | 100 | 140 | 18000 |
| Ethylbenzene | <50000 ^d | | | | 5200 ^b | | | | 2500 ^b | <5000 ^d | <5000 ^d | <8000 ^d | | 3000 ^b | 1500 | 580 | 510 | 2000 ^b | 2200 ^b | 2400 ^b | 2600 ^b | 2200 ^b | 2600 ^b | 2900 ^b | 2600 ^b | 2200 ^b | 3100 ^b | 2800 ^b | | 2400 ^b | 3300 ^b | 2700 ^b | 2500 ^b | 2500 ^b | 2100 ^b | 2100 ^b | 1100 | 1600 | 16000 |
| MTBE | 1400000 ^b | | | | 1900000 ^b | | | | 220000 ^b | 510000 ^b | 420000 ^b | 560000 ^b | | 160000 ^b | 24000 ^b | 3000 | 4400 | 8400 ^b | 20000 ^b | 12000 ^b | 3900 | 1200 | 330 | <100 | <75 | <100 | <100 | <100 | | <100 | <100 | <100 | <1 | <100 | <100 | <100 | <50 | 5000 | NE |
| Toluene | <50000 ^d | | | | 62000 ^{bu} | | | | 22000 ^{bu} | 33000 ^{bu} | 45000 ^{bu} | 40000 ^{bu} | | 26000 ^{bu} | 9000 ^b | 1700 ^b | 1400 | 11000 ^b | 14000 ^b | 14000 ^b | 15000 ^b | 13000 ^b | 16000 ^b | 14000 ^b | 10000 ^b | 11000 ^b | 17000 ^b | 9900 ^b | | 8200 ^b | 11000 ^b | 9000 ^b | 6200 ^b | 7800 ^b | 6300 ^b | 6300 ^b | 2400 ^b | 1700 | 21000 |
| Total Xylenes | <50000 | | | | 33000 | | | | 17000 | 15000 | 21000 | 30000 | | 25000 | 11000 | 3500 | 2400 | 9900 | 13500 | 15000 | 15000 | 14000 | 17000 | 18000 | 16000 | 17000 | 20000 | 19000 | | 18000 | 24000 | 21000 | 14000 | 20000 | 19000 | 19000 | 10000 | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x>: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance.
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit
* Analysis via EPA Method 8260B

**STATUS REPORT
FOR PERIOD COVERING**

JANUARY THROUGH MARCH 2008

172 Armistice Blvd. **S & H SUNOCO**
Pawtucket **905 CRANSTON STREET**
Rhode Island **CRANSTON, RHODE ISLAND**
02860 **(LS-0757)**
401-723-9900
FAX 401-723-9973

Submitted to:

**Ms. Paula-Jean Therrien
Rhode Island Department of
Environmental Management
Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908**

Prepared for:

**S & H Realty, Inc.
P.O. Box 41634
Providence, Rhode Island 02904**

Prepared by:

**SAGE Environmental, Inc.
172 Armistice Blvd
Pawtucket, Rhode Island 02860**

SAGE Project No. R016





RECEIVED
D.E.M. / O.W.M.

2008 MAY 13 P 12:13
SAGE
ENVIRONMENTAL

**STATUS REPORT
FOR PERIOD COVERING
JANUARY THROUGH MARCH 2008
S & H SUNOCO
905 CRANSTON STREET
CRANSTON, RHODE ISLAND
(LS-0757)**

Submitted to:

**Ms. Paula-Jean Therrien
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, RI 02908**

Prepared for:

**S & H Realty, Inc.
P.O. Box 41634
Providence, Rhode Island 02904**

Prepared by:

**SAGE Environmental, Inc.
172 Armistice Blvd
Pawtucket, RI 02860**

SAGE Project No. R016

172 Armistice Blvd.
Pawtucket, Rhode Island 02860
401-723-9900
FAX 401-723-9973
www.sageenviromental.net



SAGE
ENVIRONMENTAL

May 12, 2008

RECEIVED
D.E.M. / O.W.M.

2008 MAY 13 P 12:13

Ms. Paula-Jean Therrien
Rhode Island Department of Environmental Management
Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908

RE: Status Report
S&H Sunoco (LS-0757)
905 Cranston Street
Cranston, Rhode Island
SAGE Project No. R016

Dear Ms. Therrien:

Enclosed please find a Status Report documenting activities related to the soil vapor extraction (SVE) remediation system operating at the referenced Site. This report documents monitoring, operation, and maintenance activities for the approximate period from January 1, 2008 through March 31, 2008.

Should you have any questions regarding the contents of the report, please contact this office.

Sincerely,
SAGE Environmental, Inc.

Brian F. Koch
Senior Geologist

Bruce W. Clark
Principal

BFK/BWC:car

Enclosure

c: Mr. Frank Hindle, S&H Realty, Inc.
R016R

172 Armistice Blvd.
Pawtucket, Rhode Island 02860
401-723-9900
FAX 401-723-9973
www.sageenviromental.net

TABLE OF CONTENTS

| | | |
|------------|--|----------|
| 1.0 | INTRODUCTION..... | 1 |
| 2.0 | GROUNDWATER MONITORING | 1 |
| 2.1 | Groundwater Gauging..... | 1 |
| 2.2 | Separate Phase Petroleum Evaluation | 2 |
| 2.3 | Water Table Elevation Assessment..... | 3 |
| 2.4 | Groundwater Sampling and Analysis..... | 4 |
| 2.5 | Evaluation of Current Site Conditions..... | 5 |
| 3.0 | SOIL VAPOR EXTRACTION SYSTEM MONITORING | 6 |
| 4.0 | FINDINGS AND CONCLUSIONS | 7 |
| 5.0 | RECOMMENDATIONS..... | 9 |

Figures

| | |
|-----------------|--|
| Figure 1 | Site Location Map |
| Figure 2 | Site Plan |
| Figure 3 | Daily Average Levelogger Readings and Rainfall |
| Figure 4 | Levelogger Readings and SVE Influent PID Readings |

Appendices

| | |
|-------------------|---|
| Appendix A | Monitor Well Gauging Summary Logs |
| Appendix B | Groundwater Sampling Laboratory Analytical Data and Chain-of-Custody Documentation |

Attachments

| | |
|---------------------|---|
| Attachment 1 | Equivalent Head Elevations Over Time |
| Attachment 2 | Separate Phase Petroleum Thickness Over Time |
| Attachment 3 | Groundwater Analytical Results Over Time |

1.0 INTRODUCTION

SAGE Environmental, Inc. (SAGE) presents this status report for environmental services provided at the former S&H Sunoco gasoline service station located at 905 Cranston Street in Cranston, Rhode Island (Site). A Site Location Map identifying the Site on the USGS Providence, Rhode Island Quadrangle Map is included as **Figure 1**. A Site Plan identifying pertinent Site features is included as **Figure 2**.

This report summarizes corrective actions associated with the referenced location for the approximate period January 1, 2008 through March 31, 2008. Specific activities for this period included:

- groundwater gauging
- groundwater sampling and analysis
- operations and maintenance site visits

2.0 GROUNDWATER MONITORING

Groundwater gauging and monitoring activities conducted during this reporting period are summarized below.

2.1 Groundwater Gauging

As recommended in SAGE's January 26, 2007 Status Report, and approved by RIDEM in a letter dated February 21, 2007, the gauging frequency of select Site monitor wells was reduced from monthly to quarterly.

Groundwater elevation data were obtained during this reporting period on February 8, 2008 using an ORS electronic oil/water interface probe. Equivalent head elevations calculated from data generated during the gauging event are summarized in **Table 1**. A summary of monitor well gauging data for the gauging event is included as **Appendix A**. A summary of equivalent head data from February 11, 1999 through February 8, 2008 is included as **Attachment 1**.

Monitor well gauging performed during the reporting period indicates that the average depth to groundwater beneath the Site on February 8, 2008 was determined to be approximately 31.6 feet below grade.

Table 1
Equivalent Head Elevations
February 8, 2008

| Monitor Well | MP Elevations | Equivalent Head Elevation |
|--------------|---------------|---------------------------|
| ECS-1 | WELL CLOSED | |
| ECS-2 | 97.69 | 66.71 |
| ECS-3 | WELL CLOSED | |
| GZ-1 | 99.19 | NG |
| GZ-2 | WELL CLOSED | |
| GZ-3 | 99.34 | 66.73 |
| MW-1 | WELL CLOSED | |
| MW-2 | WELL CLOSED | |
| MW-3 | WELL CLOSED | |
| MW-4 | 98.99 | 66.80 |
| MW-5 | WELL CLOSED | |
| MW-6 | 97.25 | 66.74 |
| MW-7 | WELL CLOSED | |
| MW-8 | WELL CLOSED | |
| MW-9 | 98.60 | 66.79 |
| MW-10 | WELL CLOSED | |
| MW-11 | WELL CLOSED | |
| MW-12 | WELL CLOSED | |
| VW-1 | 99.10 | NG |
| VW-2 | 98.67 | NG |
| VW-3 | 98.56 | NG |

NG = Not Gauged

MP = Measuring Point

2.2 Separate Phase Petroleum Evaluation

No separate phase petroleum (SPP) was identified during this reporting period in Site monitor wells. A summary of SPP identified during previous monitor well gauging events conducted between February 11, 1999 and February 8, 2008 is included as **Attachment 2**. Measurable SPP (SPP thickness equal to or greater than 0.01 feet) was last detected in a Site monitor well during gauging activities performed on May 21, 2002.

2.3 Water Table Elevation Assessment

A hydrogeological investigation is being conducted at the Site in conjunction with the weekly routine monitoring of the soil vapor extraction (SVE) remediation system.

On June 14, 2006, a levellogger was deployed in monitor well MW-4, and a barologger and rain gage were installed at the Site. A levellogger is a pressure-sensitive electronic instrument which, when deployed (submerged and suspended) in a groundwater monitor well, continually measures and records the height of the water column above the instrument. The water column height data are combined with barometric pressure data (recorded by the barologger) and well elevation survey data to yield the local water table elevation. This continuous record of water table elevation provided by the levellogger at the Site is being used in conjunction with the rainfall data to investigate the local water table excursion dynamics, response to storm runoff, and historic level occurrence.

Under normal conditions groundwater levels exhibit cyclical seasonal fluctuations and generally correlate with precipitation. Water level highs usually follow increased precipitation as can be seen in **Figure 3**, which displays daily average levellogger readings and rainfall during the reporting period. Water level increases can be seen after rainfall events on February 13, and March 8, 2008.

Due to the historical presence of separate-phase petroleum (SPP) at the Site, the existence of a vertical "smear zone" is expected, as SPP floating on the water table surface was carried up and down by water table excursions and subsequently was deposited on exposed soils. As such, groundwater contaminant concentrations and SVE influent readings would be expected to exhibit a dependence on the elevation of the water table within the smear zone, with generally higher concentrations and readings during periods of low table and exposed soils within the smear zone. Comparison of the levellogger record from MW-4 to SVE influent concentrations since June of 2006 indicates that the highest influent SVE concentrations generally occurred shortly after a decline in the water table.

During this reporting period, levellogger data recorded in MW-4 (**Figure 4**) indicates that the water level has risen approximately 0.6 feet. During the same period, SVE system influent concentrations increased from 3 ppm to 115 ppm, indicating that the SVE system is still effectively removing VOCs from subsurface soils.

Continued levellogger deployment is recommended to ensure that SVE system decommissioning is not considered until a low water table condition is encountered and potential rebound is investigated.

2.4 Groundwater Sampling and Analysis

Groundwater samples were obtained on February 8, 2008 from select Site monitor wells (MW-4, MW-9, ECS-2, and GZ-3). Well GZ-1 was not sampled because a car was parked over it preventing access. Prior to sampling, monitor wells were purged of a minimum of three well volumes of water. Samples were collected using dedicated, disposable bailers and were placed in analyte-specific containers. Following sample collection, the samples were placed in a cooler with ice and were transported to a Rhode Island-certified laboratory under Chain-of-Custody documentation for analysis of benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tert-butyl ether (MTBE) via EPA Method 8021B. Analytical results for groundwater samples collected on February 8, 2008 are summarized in **Table 2**. Analytical results for groundwater samples collected from Site monitor wells between May 17, 1999 and February 8, 2008 are summarized in **Attachment 3**. Certificates of Analyses and Chain-of-Custody documentation for the February 8, 2008 groundwater-sampling event are included in **Appendix B**.

Table 2
Groundwater Analytical Results
February 8, 2008

| Sample / Date | Concentration | | | | RIDEM Method 1 Objective GB Groundwater | RIDEM GB Groundwater UCL |
|--|---------------|----------|----------|-------------------|---|--------------------------------|
| | MW-4 | MW-9 | ECS-2 | GZ-3 | | |
| Analyte | 2/8/2008 | 2/8/2008 | 2/8/2008 | 2/8/2008 | | |
| Volatiles, Purgeable Aromatics by 8021B (ug/L): | | | | | | |
| Benzene | 46 | 93 | 28 | 190 ^b | 140 | 18000 |
| Ethylbenzene | 790 | 14 | 580 | 1600 | 1600 | 16000 |
| Methyl tert-butyl ether (MTBE) | 47 | 42 | 22 | <100 | 5000 | NE |
| Toluene | 410 | 1.1 | 1200 | 3800 ^b | 1700 | 21000 |
| Xylenes (total) | 3400 | 4 | 4600 | 14000 | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.

NE: No allowable limit is established for the substance

<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x)

Sample Results:

b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives

According to the Rhode Island Department of Environmental Management (RIDEM) Groundwater Classification Map, the Site lies within an area designated as GB. A GB Groundwater Classification is defined as those groundwater resources that have been designated as not suitable for public or private drinking water use without prior treatment.

Groundwater samples collected on February 8, 2008 identified exceedances of RIDEM Method 1 GB Groundwater Objectives for petroleum related compounds (i.e., BTEX and/or MTBE) in sample collected from monitor well GZ-3. Laboratory analysis of the groundwater samples collected from the remaining monitor wells sampled during this reporting period (MW-4, MW-9, and ECS-3) indicates that these wells were compliant with RIDEM Method 1 GB Groundwater Objectives for BTEX and MTBE at the time sampled.

2.5 Evaluation of Current Site Conditions

A summary of SPP measurements obtained during monitor well gauging events conducted between February 11, 1999 and February 8, 2008 is included as **Attachment 2**. During each gauging event, depth to product (where present) and depth to water were gauged in Site monitor wells using an electronic oil/water interface probe. Locations of Site monitor wells are depicted on **Figure 2**. Gauging data indicates that SPP with a measured thickness of greater than 0.01 feet has not been observed in a Site monitor well since May 21, 2002. On May 21, 2002, SPP with a measured thickness of 0.01 feet was observed in monitor well GZ-3.

Gauging data indicates that sporadic occurrences of SPP with a thickness of equal to or greater than 0.01 feet were observed in monitor wells MW-1, MW-2, MW-3, MW-4, ECS-1, ECS-2, GZ-1, GZ-2 and GZ-3 between February 11, 1999 and May 21, 2002. No occurrences of SPP with measured thicknesses of equal to or greater than 0.01 feet have been observed in the remaining Site monitor wells (MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11 or MW-12). Based on gauging data collected, SPP occurrences were limited to on-Site monitor wells. A summary of maximum SPP thicknesses recorded in monitor wells MW-1, MW-2, MW-3, MW-4, ECS-1, ECS-2, GZ-1, GZ-2 and GZ-3 between February 11, 1999 and May 21, 2002 is included in **Table 3**.

Table 3
Summary of Maximum SPP Occurrences

| Monitor Well | Maximum SPP Thickness Detected | Date of Maximum SPP Occurrence |
|--------------|--------------------------------|--------------------------------|
| MW-1 | 3.45 feet | 10/27/99 |
| MW-2 | 0.01 feet | 8/12/99 |
| MW-3 | 0.02 feet | 8/12 and 9/24/99 |
| MW-4 | 1.36 feet | 2/13/02 |
| ECS-1 | 0.43 feet | 2/13/02 |
| ECS-2 | 0.68 feet | 5/17/99 |
| GZ-1 | 0.10 feet | 2/17/00 |
| GZ-2 | 0.60 feet* | 12/26/00 |
| GZ-3 | 0.30 feet | 11/15/00 |

* Thickness estimated from product removed in first bailer lowered into monitor well.

Based on monthly monitor well gauging activities performed since May 21, 2002, and quarterly monitor well gauging activities performed since January 2007, it appears that occurrences of SPP at the Site have been eliminated through a combination of manual product recovery efforts and removal via the SVE system operating at the Site.

Data for quarterly sampling performed of Site monitor wells on February 8, 2008 indicate that exceedances of RIDEM Method 1 GB Groundwater Objectives have been similar to recent quarterly sampling events. A summary of quarterly groundwater monitoring results for samples collected between May 17, 1999 and February 8, 2008 is included as **Attachment 3**. In general, recent analytical results for benzene and MTBE have exhibited a continuous decline in concentrations and similar patterns have also been observed for ethylbenzene, toluene and total xylenes. Based on results for the previous year of quarterly groundwater sampling (February 2007 through February 2008), exceedances of RIDEM Method 1 GB Groundwater Objectives were limited to monitor wells MW-9, ECS-2, GZ-1, and GZ-3.

3.0 SOIL VAPOR EXTRACTION SYSTEM MONITORING

The SVE system operated continuously since the previous reporting period using a two blower carbon drum system. During the start of the operational period of SVE Blower #1, the system vented from vent well VW-3, while SVE Blower #2 vented from vent well VW-1 and vent lateral-2, located within the tank field. On March 12, 2008, vapor point data was collected for system realignment and optimization. Based on the vapor point data, both blowers were connected to vent lateral-2, located within the tank field on March 14, 2008. The effluent vapors from each blower were treated with vapor phase carbon prior to release. Readings obtained during monitoring of the two blower SVE system, including photoionization detector (PID) screening results of the influent and effluent, are summarized in **Table 4**.

Table 4
Vapor Phase Carbon System Inspection Summary
January through March 2008

| Vapor Phase Carbon System | | | | | |
|---------------------------|--------------|-----------------------------|----------|-------------------------------|----------|
| Date | Inspected By | PID Screening Results (ppm) | | | |
| | | VW-3 Blower (Pump 1) | | VW-1, VL-2 Blower (Pump 2) | |
| | | Influent | Effluent | Influent | Effluent |
| 1/4/2008 | BA | ND | ND | 3 | 14 |
| 1/11/2008 | FM | ND | ND | 8 | 2.8 |
| 1/18/2008 | FM | ND | ND | 5 | ND |
| 1/25/2008 | FM | ND | ND | 2 | ND |
| 2/1/2008 | FM | ND | ND | 41 | ND |
| 2/8/2008 | FM/BF | ND | ND | 1.8 | 2.6 |
| 2/15/2008 | FM | ND | ND | 5 | ND |
| 2/22/2008 | FM | ND | ND | 49 | ND |
| 2/29/2008 | BF | ND | ND | 10.2 | ND |
| 3/7/2008 | TS | ND | ND | 115 | 51 |
| 3/14/2008 | FM | ND | ND | 36 | ND |
| 3/21/2008 | FM | 10 | ND | 42 | 10 |
| 3/28/2008 | FM | 17 | ND | 63 | ND |

PID – Photoionization detector

ND – not detected

ppm - parts per million

PID screening of SVE Blower #1 revealed detections of total photoionizable compounds ranging from ND ppm to 17 ppm. PID screening of SVE Blower #2 observed concentrations of total photoionizable compounds ranging from ND ppm to 47 ppm. Spent carbon drums were changed out on System #2 on February 15 and March 14, 2008.

4.0 FINDINGS AND CONCLUSIONS

A summary of findings for activities conducted during the approximate period of January 1, 2008 through March 31, 2008 is presented below.

Monitor well gauging performed during the reporting period indicated that the average depth to groundwater beneath the Site during the reporting period was determined to be approximately 31.6 feet below grade.

No SPP was observed in Site monitor wells during this reporting period. As such, no measurable SPP was recovered via manual bailing of Site monitor wells. It should be noted that measurable SPP (SPP thickness equal to or greater than 0.01 feet) was last detected in a Site monitor well on May 21, 2002. Based on monthly monitor well gauging activities performed since May 21, 2002, and quarterly monitor well gauging since January 2007, it appears that occurrences of SPP at the Site have been eliminated through a combination of manual product recovery efforts and removal via the SVE system operating at the Site.

Groundwater samples collected on February 8, 2008 identified exceedances of RIDEM Method 1 GB Groundwater Objectives for petroleum related compounds benzene and toluene in the groundwater sample collected from monitor well GZ-3. Laboratory analysis of the groundwater samples collected from monitor wells MW-4, MW-9, and ECS-2 indicates that these wells were compliant with RIDEM Method 1 GB Groundwater Objectives for BTEX and MTBE at the time sampled. Well GZ-1 was not accessible for sampling due to a parked car.

Based on a comparison of analytical data for groundwater samples collected during the reporting period and historical analytical results since May 17, 1999, a significant downward trend continues to be observed in concentrations of BTEX and MTBE in groundwater beneath the Site. Analytical results for quarterly groundwater monitoring conducted between February 2007 and February 2008 indicate that exceedances of RIDEM Method 1 GB Groundwater Objectives are currently limited to monitor wells MW-9, ECS-2, GZ-1, and GZ-3.

The SVE system has operated continuously since the previous reporting period using a two blower carbon drum system. During the start of the operational period of SVE Blower #1, the system vented from vent well VW-3, while SVE Blower #2 vented from vent well VW-1 and vent lateral-2, located within the tank field. On March 12, 2008, vapor point data was collected for system realignment and optimization. Based on the vapor point data, both blowers were connected to vent lateral-2, located within the tank field on March 14, 2008. Weekly PID screening of SVE Blower #1 revealed detections of total photoionizable compounds ranging from ND ppm to 17 ppm. PID screening of SVE Blower #2 observed concentrations of total photoionizable compounds ranging from ND ppm to 47 ppm.

Results of monitoring activities conducted at the Site during this reporting period indicate that exceedances of RIDEM Method 1 GB Groundwater Objectives persist in groundwater beneath the Site. However, in general, an overall downward trend in concentrations of total BTEX and MTBE has been observed in groundwater based on historical analytical results for groundwater samples collected since May 1999.

5.0 RECOMMENDATIONS

Based on the results of data generated during the reporting period and an evaluation of current Site conditions, *SAGE* recommends the following:

- Continued quarterly groundwater monitoring of monitor wells MW-4, MW-9, ECS-2, GZ-1 and GZ-3;
- Conduct annual groundwater monitoring for monitor well MW-6.

FIGURES



SAGE Environmental, Inc

Figure 1

USGS Quadrangle Site Location Map

S&H Realty
905 Cranston Street
Cranston, Rhode Island

DATE: 03/12/02
CREATED BY: RWL

JOB #: R016
DRAWING: R016gis.apr



Site Location

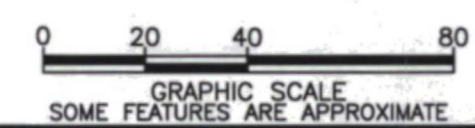
USGS QUAD - PROVIDENCE, RI

0.5 0 0.5 Miles



FIGURE 2

| | |
|---|---------------------|
| SAGE Environmental, Inc. | |
| SITE PLAN | |
| 905 CRANSTON STREET CRANSTON, RHODE ISLAND | |
| DATE: 12/11/01 | DWG NO. R016SITPLAN |
| DRAWN BY: CMM | JOB NO. R016 |



S & H SUNOCO
CRANSTON STREET, CRANSTON, RHODE ISLAND

| Instrument | ORS Interface Probe | | | | Sage Job # | R016 |
|---|--------------------------|-----------------------------|---------------------------|------------------------------|---------------------------------|--------------------------------|
| Checked By | | | | | Date: | 2/8/2008 |
| Gauged By | FM/BF | | | | <i>M.P. Elevations : 5/8/06</i> | |
| Well # | MP Elev (pvc) | Depth to Product | Depth to Water | Product Thickness | Product Bailed | Equivalent HD Elev. |
| ECS-1 | WELL CLOSED | | | | | |
| ECS-2 | 97.69 | — | 30.98 | 0.00 | — | 66.71 |
| ECS-3 | WELL CLOSED | | | | | |
| GZ-1 | 99.19 | NG | NG | NG | — | NG |
| GZ-2 | WELL CLOSED | | | | | |
| GZ-3 | 99.34 | — | 32.61 | 0.00 | — | 66.73 |
| MW-1 | WELL CLOSED | | | | | |
| MW-2 | WELL CLOSED | | | | | |
| MW-3 | WELL CLOSED | | | | | |
| MW-4 | 98.99 | — | 32.19 | 0.00 | — | 66.80 |
| MW-5 | WELL CLOSED | | | | | |
| MW-6 | 97.25 | — | 30.51 | 0.00 | — | 66.74 |
| MW-7 | WELL CLOSED | | | | | |
| MW-8 | WELL CLOSED | | | | | |
| MW-9 | 98.60 | — | 31.81 | 0.00 | — | 66.79 |
| MW-10 | WELL CLOSED | | | | | |
| MW-11 | WELL CLOSED | | | | | |
| MW-12 | WELL CLOSED | | | | | |
| VW-1 | 99.10 | NG | NG | NG | NG | NG |
| VW-2 | 98.67 | NG | NG | NG | NG | NG |
| VW-3 | 98.56 | NG | NG | NG | NG | NG |
| COMMENTS: | | | | | | |
| MW-10, 11 and 12 are 1.25" monitor wells, remaining monitor wells are 2" | | | | | | |
| — = No separate-phase petroleum identified | | | | | | |
| N.G. = Not gauged | | | | | | |
| Specific gravity of petroleum assumed = 0.75 | | | | | | |
| MW-1, MW-2, MW-3, MW-5, MW-7, MW-8, MW-10, MW-11, MW-12, ECS-1, ECS-3 and GZ-2 closed on 10/25/06 | | | | | | |



Premier
Laboratory, Inc

31 Louisa Viens Drive
Dayville, CT 06241
FAX: 860-774-2689
860-774-6814 800-932-1150

ANALYTICAL DATA REPORT

Report Number: E802590

Project: R016

prepared for:

Sage Environmental, Inc.
172 Armistice Blvd.
Pawtucket, RI 02860

Attn: Brian Koch

Received Date: 2/11/2008

Report Date: 2/15/2008

Premier Laboratory, LLC
Authorized Signature



Certifications:

CT (PH-0465), MA (M-CT008), ME (CT050), NH (2020), NJ (CT002), NY (11549), RI (RI246)



Report No: E802590
Client: Sage Environmental, Inc
Project: R016

CASE NARRATIVE / METHOD CONFORMANCE SUMMARY

Premier Laboratory, Inc received four samples from Sage Environmental, Inc on 02/11/2008. The samples were analyzed from the following list of analyses:

Volatiles, Purgeable Aromatics by 8021B in GW/SW
8021

Variances:

SDG:

None reported.

Method:

None reported.

QA/QC:

Sample 2, MW-9, Volatiles, Purgeable Aromatics by 8021B: One surrogate spike was outside quality control limits for the sample, due to matrix interference. The sample was re-extracted and re-analyzed and the surrogate was still outside control limits.

VOLATILE ORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, Inc

Customer: Sage Environmental, Inc

PL Report No: E802590

Location: Cranston, RI

PL Sample No: 1

Project: R016

Sample Description: MW-4

Date Collected: 2/8/2008

Matrix: Aqueous

Date Received: 2/11/2008

Percent Moisture: N/A

Date Extracted: By:

Sample Weight/Volume:

Date Analyzed: 02/14/08 By: ALB

Dilution Factor: 16

Method: 8021

Soil Extract Volume:

QC Batch#: 59554

Lab Data File: 2021408.D

Units: ug/L

| CAS No. | Parameter | Result | DL |
|-------------------------|--------------------------------|----------|----|
| 71-43-2 | Benzene | 46 | 16 |
| 100-41-4 | Ethylbenzene | 790 | 16 |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | 47 | 16 |
| 108-88-3 | Toluene | 410 | 16 |
| 1330-20-7 | Xylenes (total) | 3400 | 16 |
| Surrogate | Recovery | Limits | |
| 4-Bromochlorobenzene #2 | 96% | 74%-131% | |
| Fluorobenzene #2 | 76% | 63%-122% | |
| Trifluorotoluene #2 | 103% | 72%-126% | |

VOLATILE ORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, Inc

Customer: Sage Environmental, Inc

PL Report No: E802590

Location: Cranston, RI

PL Sample No: 2

Project: R016

Sample Description: MW-9

Date Collected: 2/8/2008

Matrix: Aqueous

Date Received: 2/11/2008

Percent Moisture: N/A

Date Extracted: By:

Sample Weight/Volume:

Date Analyzed: 02/13/08 By: ALB

Dilution Factor: 1

Method: 8021

Soil Extract Volume:

QC Batch#: 59537

Lab Data File: 2021311.D

Units: ug/L

| CAS No. | Parameter | Result | DL |
|-------------------------|--------------------------------|----------|-----|
| 71-43-2 | Benzene | 93 | 1.0 |
| 100-41-4 | Ethylbenzene | 14 | 1.0 |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | 42 | 1.0 |
| 108-88-3 | Toluene | 1.1 | 1.0 |
| 1330-20-7 | Xylenes (total) | 4.0 | 1.0 |
| Surrogate | Recovery | Limits | |
| 4-Bromochlorobenzene #2 | 102% | 74%-131% | |
| Fluorobenzene #2 | 131% | 63%-122% | |
| Trifluorotoluene #2 | 118% | 72%-126% | |

VOLATILE ORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, Inc

Customer: Sage Environmental, Inc

PL Report No: E802590

Location: Cranston, RI

PL Sample No: 3

Project: R016

Sample Description: ECS-2

Date Collected: 2/8/2008

Matrix: Aqueous

Date Received: 2/11/2008

Percent Moisture: N/A

Date Extracted: By:

Sample Weight/Volume:

Date Analyzed: 02/13/08 By: ALB

Dilution Factor: 20

Method: 8021

Soil Extract Volume:

QC Batch#: 59537

Lab Data File: 2021315.D

Units: ug/L

| CAS No. | Parameter | Result | DL |
|-------------------------|--------------------------------|----------|----|
| 71-43-2 | Benzene | 28 | 20 |
| 100-41-4 | Ethylbenzene | 580 | 20 |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | 22 | 20 |
| 108-88-3 | Toluene | 1200 | 20 |
| 1330-20-7 | Xylenes (total) | 4600 | 20 |
| Surrogate | Recovery | Limits | |
| 4-Bromochlorobenzene #2 | 98% | 74%-131% | |
| Fluorobenzene #2 | 91% | 63%-122% | |
| Trifluorotoluene #2 | 99% | 72%-126% | |

VOLATILE ORGANIC ANALYSIS DATA SHEET

Laboratory: Premier Laboratory, Inc

Customer: Sage Environmental, Inc

PL Report No: E802590

Location: Cranston, RI

PL Sample No: 4

Project: R016

Sample Description: GZ-1

Date Collected: 2/8/2008

Matrix: Aqueous

Date Received: 2/11/2008

Percent Moisture: N/A

Date Extracted: By:

Sample Weight/Volume:

Date Analyzed: 02/14/08 By: ALB

Dilution Factor: 100

Method: 8021

Soil Extract Volume:

QC Batch#: 59554

Lab Data File: 2021407.D

Units: ug/L

| CAS No. | Parameter | Result | DL |
|-------------------------|--------------------------------|----------|-----|
| 71-43-2 | Benzene | 190 | 100 |
| 100-41-4 | Ethylbenzene | 1600 | 100 |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | 100 |
| 108-88-3 | Toluene | 3800 | 100 |
| 1330-20-7 | Xylenes (total) | 14000 | 100 |
| Surrogate | Recovery | Limits | |
| 4-Bromochlorobenzene #2 | 118% | 74%-131% | |
| Fluorobenzene #2 | 73% | 63%-122% | |
| Trifluorotoluene #2 | 89% | 72%-126% | |



PAGE 1 of 1

**Equivalent Head Elevations Over Time
February through December 1999**

| Monitor Well | MP Elevations | 2/11/99 | 3/5/99 | 4/9/99 | 5/17/99 | 6/9/99 | 7/7/99 | 8/12/99 | 9/24/99 | 10/27/99 | 11/8/99 | 11/17/99 | 12/20/99 |
|--------------|---------------|---------|--------|--------|---------|--------|--------|---------|---------|----------|---------|----------|----------|
| ECS-1 | 96.50 | 66.15 | 66.17 | 66.62 | 65.99 | NG | NG | 64.71 | 65.15 | 65.08 | 65.16 | NG | 64.84 |
| ECS-2 | 97.88 | 66.16 | 65.94 | 66.54 | 65.86 | 65.78 | 65.31 | 64.67 | 65.11 | 65.05 | 65.09 | NG | 64.82 |
| ECS-3 | NG | DRY | NG | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| GZ-1 | 99.29 | 66.10 | 66.23 | NG | 65.92 | 65.83 | 65.36 | 64.73 | 65.13 | NG | NG | 65.07 | 64.79 |
| GZ-2 | 97.39 | 66.08 | 66.25 | 66.55 | 65.93 | 65.84 | 65.35 | 64.72 | 65.13 | NG | 65.17 | NG | 64.84 |
| GZ-3 | 99.43 | 66.06 | 66.22 | 66.53 | 65.92 | 65.79 | 65.34 | 64.72 | 65.11 | NG | 65.16 | NG | 64.84 |
| MW-1 | 98.53 | 66.07 | 66.23 | 66.52 | 65.89 | 65.82 | 65.34 | 64.71 | 65.11 | 64.24 | 65.16 | NG | 64.81 |
| MW-2 | 98.57 | 66.09 | 66.25 | 66.54 | 65.93 | 65.83 | 65.35 | 64.73 | 65.14 | 65.08 | 65.20 | NG | 64.84 |
| MW-3 | 98.01 | 66.05 | 66.91 | 66.55 | 65.93 | 65.79 | 65.35 | 64.73 | 65.13 | 65.13 | NG | NG | 64.82 |
| MW-4 | 98.99 | 66.08 | 61.23 | 66.53 | 65.91 | 65.81 | 65.33 | 64.70 | 65.10 | 65.03 | NG | 65.05 | 64.80 |
| MW-5 | 95.28 | NE | NE | NE | 66.58 | 66.45 | 66.04 | 65.41 | 65.56 | 65.66 | 65.78 | NG | 65.49 |
| MW-6 | 97.25 | NE | NE | NE | 65.88 | 65.78 | 65.29 | 64.66 | 65.06 | 65.36 | 65.11 | NG | 64.77 |
| MW-7 | 96.89 | NE | NE | NE | 65.88 | 65.78 | 65.28 | 64.67 | 65.08 | 65.00 | 65.13 | NG | 64.78 |
| MW-8 | 99.31 | NE | NE | NE | 65.89 | 65.8 | 65.32 | 64.69 | 65.10 | 65.03 | 65.15 | NG | 64.80 |
| MW-9 | 98.60 | NE | NE | NE | 65.95 | 65.84 | 65.35 | 64.74 | 65.14 | 65.07 | 64.17 | NG | 64.84 |
| VW-1 | 99.10 | NE | NE | NE | NG | NG | 65.08 | NG | 65.01 | 64.97 | NG | 65.08 | DRY |

NG = Not Gauged

NE = Non Existing (Monitor wells MW-5 through MW-9 and vent well VW-1 were installed on April 28 and 29, 1999.)

**Equivalent Head Elevations Over Time
January through December 2000**

| Monitor Well | MP Elevations | 1/19/00 | 2/17/00 | 3/21/00 | 4/26/00 | 5/30/00 | 6/27/00 | 7/24/00 | 8/9/00 | 9/14/00 | 10/23/00 | 11/15/00 | 12/26/00 |
|--------------|---------------|---------|---------|---------|---------|---------|---------|---------|--------|---------|----------|----------|----------|
| ECS-1 | 96.50 | 64.96 | 65.02 | 65.39 | 66.11 | 66.45 | NG | 65.83 | 65.58 | NG | 64.65 | 64.57 | 64.93 |
| ECS-2 | 97.88 | 64.93 | 65.00 | 65.31 | 66.05 | 66.36 | 66.35 | 65.76 | 65.54 | 64.98 | 64.56 | 64.53 | 65.31 |
| ECS-3 | NG | DRY | DRY | DRY | NG | NG | DRY | NG | NG | DRY | DRY | DRY | DRY |
| GZ-1 | 99.29 | 64.98 | 64.99 | 65.35 | 66.05 | 66.36 | 66.35 | 65.76 | 65.54 | 65.76 | 64.63 | 64.54 | 64.92 |
| GZ-2 | 97.39 | 62.92 | 65.00 | 65.37 | 66.05 | 66.37 | 66.36 | 65.77 | 65.55 | 65.07 | 64.65 | 64.57 | NG |
| GZ-3 | 99.43 | 67.00 | 65.01 | 65.37 | 66.05 | 66.36 | 66.35 | 65.77 | 65.54 | 65.13 | 64.65 | 64.76 | NG |
| MW-1 | 98.53 | 64.94 | 65.01 | 65.36 | NG | NG | 66.36 | 65.79 | 65.53 | 65.08 | 64.64 | 64.56 | NG |
| MW-2 | 98.57 | 64.98 | 65.02 | 65.38 | 66.08 | 66.38 | 66.36 | 65.79 | 65.56 | 66.09 | 64.68 | 64.62 | 64.96 |
| MW-3 | 98.01 | 64.98 | 65.01 | 65.37 | 66.06 | 66.37 | 66.36 | 65.78 | 65.56 | 65.57 | 64.66 | 64.58 | 64.94 |
| MW-4 | 98.99 | 64.93 | 65.00 | 65.38 | 66.09 | 66.40 | 66.35 | 65.76 | 65.55 | 65.07 | 64.66 | 64.58 | 64.92 |
| MW-5 | 95.28 | 65.58 | 65.64 | 66.04 | 66.70 | 67.03 | 67.03 | 66.46 | 66.19 | 65.76 | 65.30 | 65.12 | 65.47 |
| MW-6 | 97.25 | 64.92 | 64.95 | 65.33 | 66.00 | 66.31 | 66.30 | 65.72 | 65.49 | 65.02 | 64.59 | 64.51 | 64.88 |
| MW-7 | 96.89 | 64.92 | 64.96 | 65.34 | 66.03 | 66.32 | 66.30 | 65.72 | 65.50 | 65.02 | 64.62 | 64.53 | 64.91 |
| MW-8 | 99.31 | 64.94 | 64.98 | 65.36 | 66.04 | 66.33 | 66.31 | 65.74 | 65.52 | 65.04 | 64.62 | 64.56 | 64.92 |
| MW-9 | 98.60 | 64.98 | 67.02 | NG | 66.09 | 66.38 | 66.36 | 65.78 | 65.57 | 65.09 | 64.68 | 64.50 | 64.96 |
| VW-1 | 99.10 | NG | NG | NG | NG | NG | 66.52 | NG | NG | NG | NG | NG | NG |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January 2001 through December 2001**

| Monitor Well | MP Elevations | 1/24/01 | 2/28/01 | 3/27/01 | 4/19/01 | 5/2/01 | 6/8/01 | 7/17/01 | 8/16/01 | 8/30/01 | 9/26/01 | 10/26/01 | 11/28/01 | 12/31/01 |
|--------------|---------------|---------|---------|---------|---------|--------|-----------|---------|---------|---------|---------|----------|----------|----------|
| ECS-1 | 96.50 | 64.90 | 65.19 | 66.01 | 67.16 | 67.09 | 66.83 | 66.70 | NG | 65.91 | 65.42 | 64.91 | 64.39 | 63.68 |
| ECS-2 | 97.88 | 64.85 | 65.11 | 65.92 | 67.04 | 66.99 | 66.77 | 66.60 | 65.99 | NG | 65.36 | 64.85 | 64.35 | 64.09 |
| ECS-3 | -- | DRY | DRY | DRY | DRY | DRY | Destroyed | | | | | | | |
| GZ-1 | 99.29 | 64.89 | 65.11 | 65.94 | 67.03 | 66.97 | 66.76 | 66.59 | 65.99 | NG | 65.36 | 64.87 | 64.35 | 64.07 |
| GZ-2 | 97.39 | 64.90 | 65.13 | 65.98 | 67.05 | 66.98 | 66.75 | 66.60 | 66.01 | NG | 65.37 | 64.88 | 64.37 | 63.90 |
| GZ-3 | 99.43 | 64.90 | 65.13 | 65.96 | 67.02 | 66.97 | 66.76 | NG | NG | 65.82 | 65.37 | NG | 64.35 | 64.12 |
| MW-1 | 98.53 | NG | 64.23 | 64.97 | 67.04 | 66.96 | 66.78 | 66.59 | 66.03 | NG | 65.38 | 64.90 | 64.21 | 64.03 |
| MW-2 | 98.57 | 64.96 | 65.15 | 66.02 | 67.04 | 66.98 | 66.78 | 66.62 | 66.02 | NG | 65.40 | 64.90 | 64.37 | 64.12 |
| MW-3 | 98.01 | 64.98 | 65.15 | 65.95 | 67.10 | 66.99 | 66.77 | 66.63 | 66.02 | NG | 65.39 | 64.89 | 64.35 | 64.12 |
| MW-4 | 98.99 | 64.95 | 65.14 | 66.97 | 67.01 | 66.97 | 66.76 | 66.59 | 66.01 | NG | 65.38 | 64.88 | 64.38 | 64.40 |
| MW-5 | 95.28 | 65.66 | 65.92 | 66.73 | 67.75 | 67.67 | 67.28 | 67.19 | 66.58 | NG | 65.97 | 65.48 | 64.97 | 64.63 |
| MW-6 | 97.25 | 64.87 | 65.08 | 65.90 | 66.99 | 66.93 | 66.71 | 66.54 | 65.97 | NG | 65.33 | 64.82 | 64.31 | 64.04 |
| MW-7 | 96.89 | 64.87 | 65.08 | 65.92 | 66.97 | 66.91 | 65.09 | 66.53 | 65.96 | NG | 65.32 | 64.83 | 64.32 | 64.06 |
| MW-8 | 99.31 | 64.90 | 65.10 | 65.94 | 66.99 | 66.93 | 66.74 | 66.56 | 65.98 | NG | 65.34 | 64.85 | 64.33 | 64.08 |
| MW-9 | 98.60 | 64.93 | 65.14 | 65.99 | 67.04 | 66.98 | 66.78 | 66.62 | 66.03 | NG | 65.39 | 64.90 | 64.39 | 64.12 |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January 2002 through December 2002**

| Monitor Well | MP Elevations | 1/30/02 | 2/13/02 | 3/14/02 | 4/5/02* | 4/18/02 | 4/25/02* | 5/21/02 | 6/21/02 | 7/23/02 | 8/9/02 | 9/20/02 | 10/17/02 | 11/14/02 | 12/13/02 |
|--------------|---------------|-----------|---------|---------|---------|---------|----------|---------|---------|---------|--------|---------|----------|----------|----------|
| ECS-1 | 96.50 | 63.62 | 63.91 | 64.05 | 64.38 | 64.46 | 64.42 | 64.81 | 65.00 | 64.56 | 64.38 | 64.23 | 64.34 | 64.40 | 65.12 |
| ECS-2 | 97.88 | 63.63 | 63.94 | 64.03 | -- | 64.43 | -- | 64.77 | 64.97 | 64.53 | 64.36 | 64.21 | 64.31 | 64.40 | 65.09 |
| ECS-3 | -- | Destroyed | | | | | | | | | | | | | |
| GZ-1 | 99.29 | 63.96 | 63.91 | 64.03 | -- | 64.44 | -- | 64.76 | 64.96 | 64.53 | 64.34 | 64.20 | 64.32 | 64.37 | 65.07 |
| GZ-2 | 97.39 | 63.97 | 63.90 | 64.07 | 64.33 | 64.47 | 64.42 | 64.79 | 64.99 | 64.55 | 64.35 | 64.21 | 64.31 | 62.39 | 65.09 |
| GZ-3 | 99.43 | 63.92 | 63.93 | 64.04 | -- | 64.45 | -- | 64.79 | 64.98 | 64.53 | 64.32 | 64.19 | 64.31 | 64.38 | 65.09 |
| MW-1 | 98.53 | 64.03 | 63.94 | 64.05 | -- | NG | -- | 64.84 | NG | NG | 64.38 | 64.24 | 64.36 | 64.46 | 65.09 |
| MW-2 | 98.57 | 64.01 | 63.96 | 64.08 | -- | 64.45 | -- | 64.83 | 65.00 | 64.56 | 64.35 | 64.23 | 64.35 | 64.43 | 65.00 |
| MW-3 | 98.01 | 64.00 | 63.96 | 64.05 | -- | 64.46 | -- | 64.80 | 64.97 | 64.57 | 64.38 | 64.22 | 64.33 | 64.42 | 65.11 |
| MW-4 | 98.99 | 64.01 | 63.83 | 63.98 | 64.37 | 64.49 | 64.38 | 64.82 | 64.99 | 64.59 | 64.40 | 64.25 | 64.37 | 64.44 | 65.13 |
| MW-5 | 95.28 | 64.51 | 64.51 | 64.63 | -- | 65.22 | -- | 65.44 | 65.82 | 65.42 | 65.16 | 64.76 | 64.99 | 65.09 | 65.91 |
| MW-6 | 97.25 | 63.94 | 63.89 | 63.97 | -- | 64.40 | -- | 64.74 | 64.91 | 64.50 | 64.30 | 64.15 | 64.26 | 64.35 | 65.05 |
| MW-7 | 96.89 | 63.95 | 63.90 | 64.01 | -- | 64.41 | -- | 64.77 | 64.91 | 64.49 | 64.29 | 64.18 | 64.29 | 64.37 | 65.05 |
| MW-8 | 99.31 | 63.97 | 63.91 | 64.03 | -- | 64.42 | -- | 64.78 | 64.98 | 64.51 | 64.33 | 64.20 | 64.31 | 64.39 | 65.06 |
| MW-9 | 98.60 | 64.01 | 63.95 | 64.06 | -- | 64.48 | -- | 64.83 | 64.99 | 64.56 | 64.37 | 64.23 | 64.34 | 64.44 | 65.11 |
| MW-10 | 100.06 | 63.95 | 63.89 | 63.99 | -- | 64.41 | -- | 64.79 | 64.94 | 64.50 | 64.30 | 64.17 | 64.30 | 64.38 | 65.05 |
| MW-11 | 100.53 | 63.92 | 63.90 | 64.02 | -- | 64.40 | -- | 64.78 | 64.92 | 64.49 | 64.30 | 64.18 | 64.30 | 64.38 | 65.04 |
| MW-12 | 100.18 | 64.03 | 63.97 | 64.10 | -- | 66.91 | -- | 64.85 | 64.99 | 64.56 | 64.38 | 64.26 | 64.36 | 64.45 | 65.13 |

NG = Not Gauged

* Indicates a limited gauging event due to the presence of SPP in these wells.

**Equivalent Head Elevations Over Time
January 2003 through December 2003**

| Monitor Well | MP Elevations | 1/14/03 | 2/6/03 | 3/24/03 | 4/16/03 | 5/9/03 | 6/12/03 | 7/11/03 | 8/27/03 | 9/26/03 | 10/21/03 | 11/5/03 | 12/9/03 |
|---------------------|----------------------|----------------|---------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|
| ECS-1 | 96.50 | 67.40 | 65.88 | 66.30 | 66.79 | 67.13 | 67.08 | 67.22 | 67.01 | 65.11 | 66.25 | 66.35 | 65.96 |
| ECS-2 | 97.88 | 66.04 | 65.79 | 66.23 | 66.72 | 67.02 | 67.00 | 67.14 | 66.93 | 66.95 | 66.19 | 66.28 | 65.89 |
| ECS-3 | -- | Destroyed | | | | | | | | | | | |
| GZ-1 | 99.29 | 66.02 | 65.76 | 67.21 | 66.71 | 67.00 | 66.98 | 67.11 | 66.89 | 66.47 | 66.17 | 66.27 | 65.88 |
| GZ-2 | 97.39 | 66.06 | 65.79 | 66.24 | 66.76 | 67.04 | 67.00 | 67.14 | 66.93 | 66.49 | 66.22 | 66.29 | 65.91 |
| GZ-3 | 99.43 | 66.02 | 65.77 | 66.22 | 66.72 | 67.01 | 66.99 | 67.11 | 66.92 | 66.47 | 66.17 | 66.28 | 65.90 |
| MW-1 | 98.53 | 66.04 | 65.82 | 66.26 | 66.71 | 67.01 | 67.14 | 73.50 | 66.95 | 66.51 | 65.90 | NG | NG |
| MW-2 | 98.57 | 66.06 | 65.80 | 66.26 | 66.77 | 67.03 | 67.08 | 67.92 | 66.97 | 66.51 | 66.23 | 66.87 | 65.92 |
| MW-3 | 98.01 | 66.05 | 65.79 | 66.26 | 66.75 | 67.04 | 67.02 | 67.15 | 66.96 | 66.52 | 66.22 | 66.31 | 65.93 |
| MW-4 | 98.99 | 66.05 | 65.81 | 66.26 | 66.77 | 67.03 | 67.01 | 67.16 | 66.94 | 66.49 | 66.21 | 66.29 | 65.92 |
| MW-5 | 95.28 | 66.79 | 66.58 | 66.86 | 67.31 | 67.67 | 67.54 | 67.70 | 67.48 | 67.07 | 66.73 | 66.78 | 66.52 |
| MW-6 | 97.25 | 65.99 | 65.75 | 66.20 | 66.71 | 67.00 | 66.96 | 67.12 | 66.91 | 66.45 | 66.15 | 66.25 | 65.88 |
| MW-7 | 96.89 | 65.99 | 65.73 | 66.18 | 66.72 | 66.96 | 66.93 | 67.07 | 66.86 | 66.41 | 66.14 | 66.24 | 65.85 |
| MW-8 | 99.31 | 66.00 | 65.75 | 66.20 | 66.72 | 66.97 | 66.95 | 67.09 | 66.90 | 66.46 | 66.16 | 66.21 | 65.86 |
| MW-9 | 98.60 | 66.04 | 65.79 | 66.24 | 66.76 | 67.03 | 66.99 | 67.14 | 66.94 | 66.49 | 66.20 | 66.29 | 65.91 |
| MW-10 | 100.06 | 65.98 | 65.67 | 66.17 | 66.70 | 66.96 | 66.94 | 67.05 | 66.89 | 66.44 | 66.15 | 66.25 | 65.84 |
| MW-11 | 100.53 | 65.98 | 65.71 | 66.16 | 66.67 | 66.95 | 66.92 | 67.04 | 66.88 | 66.42 | 66.14 | 66.23 | 65.83 |
| MW-12 | 100.18 | 66.05 | 65.79 | 66.24 | 66.77 | 69.02 | 67.01 | 67.12 | 66.94 | 66.49 | 66.20 | 66.28 | 65.92 |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January through December 2004**

| Monitor Well | MP Elevations | 1/13/04 | 2/16/04 | 3/24/04 | 4/12/04 | 5/19/04 | 6/30/04 | 7/21/04 | 8/25/04 | 9/17/04 | 10/6/04 | 11/17/04 | 12/24/04 |
|--------------|---------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|
| ECS-1 | 96.50 | 66.86 | 66.86 | NG | 66.41 | 67.09 | 66.487 | 66.16 | 66.11 | 65.78 | 66.14 | 65.73 | 66.28 |
| ECS-2 | 97.88 | NG | NG | 65.94 | 66.37 | 66.99 | 66.42 | 66.12 | 66.07 | 65.73 | 66.08 | 65.68 | 66.25 |
| ECS-3 | -- | Destroyed | | | | | | | | | | | |
| GZ-1 | 99.29 | 66.78 | 66.41 | 65.90 | 66.36 | 66.95 | 66.38 | 66.09 | 66.03 | 65.72 | 66.04 | 65.67 | 66.20 |
| GZ-2 | 97.39 | 66.77 | 66.95 | 65.96 | 66.39 | 67.03 | 66.42 | 66.13 | 66.09 | 65.78 | 66.09 | 65.72 | 66.28 |
| GZ-3 | 99.43 | 66.79 | 66.43 | 65.91 | 66.38 | 66.97 | 66.39 | 66.11 | 66.07 | 65.75 | 66.07 | 65.68 | 67.23 |
| MW-1 | 98.53 | 96.81 | 66.48 | 65.97 | 66.42 | 66.99 | 66.42 | 66.17 | 66.11 | 65.77 | 66.09 | 65.71 | 66.28 |
| MW-2 | 98.57 | 67.06 | 66.49 | 65.97 | 66.49 | 67.15 | 66.43 | 66.16 | 66.11 | 65.78 | 66.11 | 65.73 | 66.32 |
| MW-3 | 98.01 | 66.82 | 66.49 | 65.96 | 66.40 | 67.00 | 66.42 | 66.15 | 66.09 | 65.77 | 66.10 | 65.71 | 66.26 |
| MW-4 | 98.99 | 66.83 | 66.48 | 65.97 | 66.40 | 67.03 | 66.42 | 66.13 | 66.10 | 66.77 | 66.11 | 65.71 | 66.28 |
| MW-5 | 95.28 | 67.44 | 67.02 | 66.45 | 66.83 | 67.60 | 66.96 | 66.62 | 66.49 | 66.26 | 66.56 | 66.22 | 66.73 |
| MW-6 | 97.25 | 66.76 | 66.41 | 65.91 | 66.34 | 66.95 | 66.36 | 66.09 | 66.03 | 65.71 | 66.05 | 65.66 | 66.20 |
| MW-7 | 96.89 | 66.74 | 66.42 | 65.89 | 66.34 | 66.91 | 66.34 | 66.08 | 66.03 | 62.70 | 66.04 | 65.67 | 66.21 |
| MW-8 | 99.31 | 66.76 | 66.42 | 65.90 | 66.36 | 66.96 | 66.37 | 66.08 | 66.03 | 65.72 | 66.05 | 65.66 | 66.26 |
| MW-9 | 98.60 | 66.81 | 66.45 | 65.96 | 66.39 | 67.00 | 66.41 | 66.13 | 66.07 | 65.74 | 66.09 | 65.69 | 66.26 |
| MW-10 | 100.06 | 66.73 | 66.40 | 65.89 | 66.34 | 66.93 | 66.36 | 66.07 | 66.02 | 65.71 | 66.05 | 65.65 | 66.22 |
| MW-11 | 100.53 | 66.73 | 66.44 | 65.87 | 66.33 | 66.91 | 66.34 | 66.05 | 66.01 | 65.68 | 66.03 | 65.62 | 66.20 |
| MW-12 | 100.18 | 66.80 | 66.46 | 65.95 | 66.40 | 66.98 | 66.42 | 66.13 | 66.09 | 65.77 | 66.13 | 65.72 | 66.28 |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January through December 2005**

| Monitor Well | MP Elevations | 1/11/05 | 2/1/05 | 3/18/05 | 4/22/05 | 5/13/05 | 6/17/05 | 7/15/05 | 8/29/05 | 9/16/05 | 10/31/05 | 11/28/05 | 12/21/05 |
|--------------|---------------|-----------|--------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| ECS-1 | 96.50 | 66.28 | NG | 67.15 | NG | NG | 67.47 | 66.79 | 65.90 | 66.09 | 67.79 | 67.76 | 67.83 |
| ECS-2 | 97.88 | 66.25 | 66.97 | 67.06 | 68.06 | 30.91 | 67.39 | 66.76 | 65.86 | 66.08 | 67.74 | 67.68 | 67.80 |
| ECS-3 | -- | Destroyed | | | | | | | | | | | |
| GZ-1 | 99.29 | 66.20 | NG | 67.03 | NG | NG | NG | NG | NG | NG | 67.71 | 67.66 | 67.76 |
| GZ-2 | 97.39 | 66.28 | 66.95 | 67.08 | 68.05 | 67.96 | 67.40 | 66.74 | 65.86 | 66.15 | 67.76 | 67.72 | 67.76 |
| GZ-3 | 99.43 | 67.23 | 67.28 | 67.07 | 68.01 | 67.91 | 67.35 | 66.69 | 65.83 | 65.98 | NG | NG | NG |
| MW-1 | 98.53 | 66.28 | 66.97 | 67.07 | 68.04 | 67.92 | 67.40 | 66.74 | 65.88 | 65.98 | 67.8 | 67.74 | 67.81 |
| MW-2 | 98.57 | 66.32 | 66.98 | 67.09 | 68.07 | 67.94 | 67.42 | 66.78 | 65.90 | 66.02 | 67.82 | 67.77 | 67.81 |
| MW-3 | 98.01 | 66.26 | 67.00 | 67.08 | 68.05 | 67.95 | 67.41 | 66.77 | 65.88 | 74.96 | 67.8 | 67.77 | 67.83 |
| MW-4 | 98.99 | 66.28 | 66.97 | 66.07 | 68.05 | 67.97 | 67.44 | 66.78 | 65.88 | 65.99 | 67.69 | 67.75 | 67.77 |
| MW-5 | 95.28 | 66.73 | 67.55 | 67.59 | 68.64 | 68.88 | 67.89 | 67.23 | 66.35 | 66.26 | 68.16 | 68.18 | 68.28 |
| MW-6 | 97.25 | 66.20 | 66.94 | 67.04 | 68.03 | 67.91 | 67.35 | 66.71 | 65.82 | 65.90 | 67.75 | 67.71 | 67.8 |
| MW-7 | 96.89 | 66.21 | 66.84 | 67.00 | 67.96 | 67.89 | 67.34 | 66.70 | 65.81 | 65.94 | 67.75 | 67.69 | 67.77 |
| MW-8 | 99.31 | 66.26 | 66.92 | 67.01 | 67.98 | 67.90 | 67.35 | 66.70 | 65.82 | 65.92 | 67.76 | 67.69 | 67.76 |
| MW-9 | 98.60 | 66.26 | 66.95 | 67.06 | 68.02 | 67.91 | 67.40 | 66.74 | 65.86 | 65.99 | 67.79 | 67.71 | 67.79 |
| MW-10 | 100.06 | 66.22 | NG | 67.02 | 67.96 | 67.87 | 67.35 | 66.71 | 65.82 | 65.88 | 67.74 | 67.66 | 67.75 |
| MW-11 | 100.53 | 66.20 | 66.86 | 67.01 | 67.94 | 67.85 | 67.32 | 66.68 | 65.80 | 65.89 | 67.7 | 67.65 | 67.73 |
| MW-12 | 100.18 | 66.28 | 66.97 | 67.09 | 68.03 | 67.93 | 67.39 | 66.76 | 65.88 | 66.03 | 67.79 | 67.74 | 67.81 |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January through December 2006**

| Monitor Well | MP Elevations | 1/27/06 | 2/20/06 | 3/31/06 | 4/21/06 | 5/8/06 | 6/23/06 | 7/28/06 | 8/18/06 | 10/19/06 | 11/9/06 |
|--------------|---------------|-----------|---------|---------|---------|--------|---------|---------|---------|----------|---------|
| ECS-1 | 96.29 | NG | NG | 67.45 | 67.04 | 66.90 | NG | 68.17 | 67.50 | 66.54 | NG |
| ECS-2 | 97.69 | 68.01 | 68.25 | 67.37 | 66.97 | 66.84 | NG | 68.11 | 67.43 | 66.49 | 66.95 |
| ECS-3 | -- | Destroyed | | | | | | | | | |
| GZ-1 | 99.19 | 67.96 | 67.66 | 67.35 | 66.97 | 66.81 | 68.34 | 68.06 | 67.41 | 66.49 | 66.93 |
| GZ-2 | 97.14 | 68.00 | 67.72 | 67.39 | 66.98 | 66.85 | NG | 68.09 | 67.44 | 66.50 | NG |
| GZ-3 | 99.34 | 67.98 | NG | NG | NG | NG | 67.49 | NG | 67.39 | NG | NG |
| MW-1 | 98.53 | 68.02 | 67.74 | 67.35 | NG | 66.89 | NG | NG | NG | NG | NG |
| MW-2 | 98.57 | 68.05 | 67.77 | 67.45 | NG | 66.91 | NG | NG | 67.47 | NG | NG |
| MW-3 | 98.01 | 68.06 | 67.77 | 67.42 | NG | 66.90 | NG | NG | 67.45 | NG | NG |
| MW-4 | 98.99 | 68.04 | 67.75 | 67.44 | 67.04 | 66.90 | 68.39 | 68.11 | 67.44 | 66.56 | 67.03 |
| MW-5 | 95.28 | 68.49 | 68.18 | 67.88 | NG | 67.28 | NG | NG | 67.94 | NG | NG |
| MW-6 | 97.25 | 68.00 | 67.71 | 67.39 | NG | 66.84 | NG | NG | 67.44 | NG | NG |
| MW-7 | 96.89 | 67.97 | 67.69 | 67.34 | NG | 66.83 | NG | NG | 67.39 | NG | NG |
| MW-8 | 99.31 | 67.98 | 67.69 | 67.36 | NG | 66.83 | NG | NG | 67.39 | NG | NG |
| MW-9 | 98.60 | 68.02 | 67.71 | 67.40 | 67.00 | 66.88 | 69.36 | 68.12 | 67.45 | 66.54 | 66.99 |
| MW-10 | 99.90 | 67.95 | 67.66 | 67.33 | NG | 67.80 | NG | NG | 67.37 | NG | NG |
| MW-11 | 100.53 | 67.95 | 67.65 | 68.32 | NG | 66.81 | NG | NG | 67.37 | NG | NG |
| MW-12 | 100.18 | NG | 67.74 | 67.40 | NG | 66.90 | NG | NG | 67.43 | NG | NG |

NG = Not Gauged

**Equivalent Head Elevations Over Time
January through November 2007**

| Monitor Well | MP Elevations | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 |
|---------------------|----------------------|----------------|----------------|----------------|----------------|
| ECS-1 | WELL CLOSED | | | | |
| ECS-2 | 97.69 | 67.03 | 69.66 | 67.38 | 66.14 |
| ECS-3 | WELL CLOSED | | | | |
| GZ-1 | 99.19 | 66.99 | 68.59 | 67.38 | 66.10 |
| GZ-2 | WELL CLOSED | | | | |
| GZ-3 | 99.34 | 66.99 | 68.59 | 67.36 | 66.14 |
| MW-1 | WELL CLOSED | | | | |
| MW-2 | WELL CLOSED | | | | |
| MW-3 | WELL CLOSED | | | | |
| MW-4 | 98.99 | 67.04 | 68.64 | 67.44 | 66.20 |
| MW-5 | WELL CLOSED | | | | |
| MW-6 | 97.25 | NG | 68.63 | 67.41 | 66.16 |
| MW-7 | WELL CLOSED | | | | |
| MW-8 | WELL CLOSED | | | | |
| MW-9 | 98.90 | 67.09 | 68.60 | 67.4 | 66.19 |
| MW-10 | WELL CLOSED | | | | |
| MW-11 | WELL CLOSED | | | | |
| MW-12 | WELL CLOSED | | | | |

NG = Not Gauged

**Equivalent Head Elevations Over Time
February 2008**

| Monitor Well | MP Elevations | 2/8/08 |
|---------------------|----------------------|---------------|
| ECS-1 | 96.29 | WELL CLOSED |
| ECS-2 | 97.69 | 66.71 |
| ECS-3 | --- | Destroyed |
| GZ-1 | 99.19 | NG |
| GZ-2 | 97.14 | WELL CLOSED |
| GZ-3 | 99.34 | 66.73 |
| MW-1 | 98.53 | WELL CLOSED |
| MW-2 | 98.57 | WELL CLOSED |
| MW-3 | 98.01 | WELL CLOSED |
| MW-4 | 98.99 | 66.80 |
| MW-5 | 95.28 | WELL CLOSED |
| MW-6 | 97.25 | 66.74 |
| MW-7 | 96.89 | WELL CLOSED |
| MW-8 | 99.31 | WELL CLOSED |
| MW-9 | 98.60 | 66.79 |
| MW-10 | 99.90 | WELL CLOSED |
| MW-11 | 100.53 | WELL CLOSED |
| MW-12 | 100.18 | WELL CLOSED |

NG = Not Gauged

**Separate Phase Petroleum Thickness
March through December 1999**

| Monitor Well | 2/11/99 | 3/5/99 | 4/9/99 | 5/17/99 | 6/9/99 | 7/7/99 | 8/12/99 | 9/24/99 | 10/27/99 | 11/8/99 | 11/17/99 | 12/20/99 |
|--------------|---------|--------|--------|---------|--------|--------|---------|---------|----------|---------|----------|----------|
| ECS-1 | 0.15 | 0.25 | <.01 | NP | NG | NP | 0.23 | 0.01 | NP | NP | NG | NP |
| ECS-2 | 0.45 | 0.37 | 0.11 | 0.68 | 0.60 | 0.61 | 0.47 | 0.01 | NP | NP | NG | 0.38 |
| ECS-3 | NP | 0.01 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| GZ-1 | NP | NP | NG | NP | NP | NP | 0.01 | 0.06 | NG | NG | 0.04 | 0.01 |
| GZ-2 | 0.01 | <.01 | NP | NP | NP | NP | 0.03 | 0.06 | NG | 0.05 | NG | 0.06 |
| GZ-3 | NP | <.01 | <.01 | NP | NP | NP | 0.01 | 0.08 | NG | NG | NG | 0.01 |
| MW-1 | NP | <.01 | <.01 | NP | NP | NP | 0.49 | 0.25 | 3.45 | 0.12 | NG | 0.39 |
| MW-2 | NP | <.01 | NP | NP | NP | NP | 0.01 | NP | NP | NP | NG | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | 0.02 | 0.02 | NP | NP | NG | NP |
| MW-4 | NP | <.01 | <.01 | NP | NP | NP | 0.23 | 0.63 | 0.54 | NG | 0.36 | 0.55 |
| MW-5 | NI | NI | NI | NP | NP | NP | NP | NP | NP | NP | NG | NP |
| MW-6 | NI | NI | NI | NP | NP | NP | NP | NP | NP | NP | NG | NP |
| MW-7 | NI | NI | NI | NP | NP | NP | NP | NP | NP | NP | NG | NP |
| MW-8 | NI | NI | NI | NP | NP | NP | NP | NP | NP | NP | NG | NP |
| MW-9 | NI | NI | NI | NP | NP | NP | NP | NP | NP | NP | NG | NP |

NP = No product

NG = Not gauged

NI = Not installed as of date gauged (Monitor wells MW-5 through MW-9 and vent well VW-1 were installed on April 28 and 29, 1999.)

**Separate Phase Petroleum Thickness
January through December 2000**

| Monitor Well | 1/19/00 | 2/17/00 | 3/21/00 | 4/26/00 | 5/30/00 | 6/27/00 | 7/24/00 | 8/9/00 | 9/14/00 | 10/23/00 | 11/15/00 | 12/26/00 |
|--------------|---------|---------|---------|---------|---------|---------|---------|--------|---------|----------|----------|----------|
| ECS-1 | NP | 0.01 | NP | NP | 0.01 | NG | NP | <0.01 | NG | <0.01 | NP | NP |
| ECS-2 | NP | 0.02 | NP | NP | NP | NP | NP | 0.06 | <0.01 | <0.01 | 0.04 | 0.60 |
| ECS-3 | DRY | DRY | NP | DRY | DRY | NP | DRY | DRY | DRY | DRY | DRY | DRY |
| GZ-1 | 0.02 | 0.10 | NP | NP | NP | NP | NP | NP | NP | NP | <0.01 | NP |
| GZ-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | 0.02 | 0.60* |
| GZ-3 | NP | 0.02 | NP | NP | NP | NP | NP | NP | NP | NP | 0.30 | 0.10* |
| MW-1 | 0.03 | 0.10 | <0.01 | NG | NG | NP | NG | NG | NP | 0.38 | NP | <0.01 |
| MW-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-4 | 0.61 | 0.32 | NP | NP | NP | NP | NP | <0.01 | NP | 0.04 | 0.34 | 0.04 |
| MW-5 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |

NP = No product

NG = Not gauged

(*) = Product thickness estimated with a bailer

**Separate Phase Petroleum Thickness
January 2001 through December 2001**

| Monitor Well | 1/24/01 | 2/28/01 | 3/27/01 | 4/19/01 | 5/2/01 | 6/8/01 | 7/17/01 | 8/16/01 | 8/30/01 | 9/26/01 | 10/26/01 | 11/28/01 | 12/31/01 |
|--------------|---------|---------|---------|---------|--------|--------|-----------|---------|---------|---------|----------|----------|----------|
| ECS-1 | NP | 0.01 | NP | <0.01 | <0.01 | <0.01 | <0.01 | NA | 0.02 | NP | NP | <0.01 | NP |
| ECS-2 | NP | 0.01 | NP | NP | <0.01 | NP | NP | NP | NG | NP | NP | <0.01 | <0.01 |
| ECS-3 | NP | NP | NP | NP | NP | NP | Destroyed | | | | | | |
| GZ-1 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| GZ-2 | NP | 0.01 | NP | <0.01 | NP | <0.01 | NA | NP | NG | NP | NP | NP | NP |
| GZ-3 | 0.25 | 0.01 | NP | NP | NP | NP | NG | NA | NP | NP | NP | NP | NP |
| MW-1 | NP | 0.01 | NP | NP | NP | NP | NP | NP | NG | NP | NP | <0.01 | NP |
| MW-2 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-4 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | 0.04 | NP |
| MW-5 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NG | NP | NP | NP | NP |

NP = No product

NG = Not gauged

**Separate Phase Petroleum Thickness
January 2002 through December 2002**

| Monitor Well | 1/30/02 | 2/13/02 | 3/14/02 | 4/5/02* | 4/18/02 | 4/25/02* | 5/21/02 | 6/21/02 | 7/23/02 | 8/9/02 | 9/20/02 | 10/17/02 | 11/14/02 | 12/13/02 |
|--------------|-----------|---------|---------|---------|---------|----------|---------|---------|---------|--------|---------|----------|----------|----------|
| ECS-1 | NP | 0.43' | <0.01' | <0.01' | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-2 | 0.01' | 0.01' | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-3 | Destroyed | | | | | | | | | | | | | |
| GZ-1 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-2 | 0.01' | 0.52' | <0.01' | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-3 | NP | NP | 0.01' | NG | NP | NG | 0.01' | <0.01' | NP | NP | NP | NP | NP | NP |
| MW-1 | NP | <0.01' | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-2 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-4 | 0.01' | 1.36' | 0.84' | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-5 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NG | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP |

NP = No Product

NG = Not gauged

* Indicates a limited gauging event due to the presence of SPP in these wells.

**Separate Phase Petroleum Thickness
January 2003 through December 2003**

| Monitor Well | 1/14/03 | 2/6/03 | 3/24/03 | 4/16/03 | 5/9/03 | 6/12/03 | 7/11/03 | 8/27/03 | 9/26/03 | 10/21/03 | 11/5/03 | 12/9/03 |
|--------------|-----------|--------|---------|---------|--------|---------|---------|---------|---------|----------|---------|---------|
| ECS-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-3 | Destroyed | | | | | | | | | | | |
| GZ-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NG | NG |
| MW-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-4 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-5 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-10 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-11 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-12 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |

NP = No Product
NG = Not gauged

**Separate Phase Petroleum Thickness
January through December 2004**

| Monitor Well | 1/13/04 | 2/16/04 | 3/24/04 | 4/12/04 | 5/19/04 | 6/30/04 | 7/21/04 | 8/25/04 | 9/17/04 | 10/6/04 | 11/17/04 | 12/24/04 |
|---------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| ECS-1 | NP | NP | NG | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-2 | NG | NG | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-3 | Destroyed | | | | | | | | | | | |
| GZ-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-4 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-5 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-10 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-11 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-12 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |

NP = No Product

NG = Not gauged

**Separate Phase Petroleum Thickness
January through December 2005**

| Monitor Well | 1/11/05 | 2/1/05 | 3/18/05 | 4/22/05 | 5/13/05 | 6/17/05 | 7/15/05 | 8/29/05 | 9/16/05 | 10/31/05 | 11/28/05 | 12/21/05 |
|--------------|-----------|--------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| ECS-1 | NP | NG | NP | NP | NG | NP | NP | NG | NG | NG | NG | NP |
| ECS-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-3 | Destroyed | | | | | | | | | | | |
| GZ-1 | NP | NG | NP | NP | NG | NP | NG | NG | NG | NG | NG | NG |
| GZ-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-3 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-4 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-5 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-6 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-7 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-8 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-10 | NP | NG | NP | NP | NG | NP | NP | NG | NG | NG | NG | NP |
| MW-11 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-12 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |

NP = No Product

NG = Not gauged

**Separate Phase Petroleum Thickness
January through December 2006**

| Monitor Well | 1/27/06 | 2/20/06 | 3/31/06 | 4/21/06 | 5/8/06 | 6/23/06 | 7/28/06 | 8/18/06 | 10/19/06 | 11/9/06 |
|--------------|-----------|---------|---------|---------|--------|---------|---------|---------|----------|---------|
| ECS-1 | NG | NG | NP | NP | NP | NP | NP | NP | NP | NG |
| ECS-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| ECS-3 | Destroyed | | | | | | | | | |
| GZ-1 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| GZ-2 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NG |
| GZ-3 | NP | NP | NG | NG | NG | NG | NG | NP | NG | NP |
| MW-1 | NP | NP | NP | NP | NP | NP | NG | NG | NG | NG |
| MW-2 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-3 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-4 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-5 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-6 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-7 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-8 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-9 | NP | NP | NP | NP | NP | NP | NP | NP | NP | NP |
| MW-10 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-11 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |
| MW-12 | NP | NP | NP | NP | NP | NP | NG | NP | NG | NG |

NP = No Product

NG = Not gauged

**Separate Phase Petroleum Thickness
January through September 2007**

| Monitor Well | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 |
|---------------------|----------------|----------------|----------------|----------------|
| ECS-1 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| ECS-2 | NP | NP | NP | NP |
| ECS-3 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| GZ-1 | NP | NP | NP | NP |
| GZ-2 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| GZ-3 | NP | NP | NP | NP |
| MW-1 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-2 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-3 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-4 | NP | NP | NP | NP |
| MW-5 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-6 | NP | NP | NP | NP |
| MW-7 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-8 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-9 | NP | NP | NP | NP |
| MW-10 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-11 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |
| MW-12 | WELL CLOSED | WELL CLOSED | WELL CLOSED | WELL CLOSED |

NP = No Product

**Separate Phase Petroleum Thickness
February 2008**

| Monitor Well | 2/8/08 |
|--------------|-------------|
| ECS-1 | WELL CLOSED |
| ECS-2 | NP |
| ECS-3 | WELL CLOSED |
| GZ-1 | NG |
| GZ-2 | WELL CLOSED |
| GZ-3 | NP |
| MW-1 | WELL CLOSED |
| MW-2 | WELL CLOSED |
| MW-3 | WELL CLOSED |
| MW-4 | NP |
| MW-5 | WELL CLOSED |
| MW-6 | NP |
| MW-7 | WELL CLOSED |
| MW-8 | WELL CLOSED |
| MW-9 | NP |
| MW-10 | WELL CLOSED |
| MW-11 | WELL CLOSED |
| MW-12 | WELL CLOSED |

NP = No Product

NG = Not gauged

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | | |
|---|---------------------|---------|---------|---------|---------|--------------------|-------------------|---------|--------------------|---------------------|----------|--------------------|--------------------|--------------------|-------------------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|-----------------------------|--------------------------------|---------|---------|---------|---------|---------|--------|-------------------|-------|-------|
| | MW-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | GB Groundwater | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 11000 ^b | SPP | SPP | SPP | NS | 2700 ^b | 870 ^b | SPP | 1600 ^b | 3200 ^b | SPP | 1300 ^b | 2000 ^b | 890 ^b | <350 ^d | <2 | 3.7 | 23 | NS | 120 | NS-SFR | NS-SFR | 8.1 | NS-SFR | 8 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 | |
| Ethylbenzene | 2800 ^b | | | | | 1700 ^b | 420 | | 2400 ^b | <3000 ^d | | <1200 | 1200 | 1600 ^b | 1200 | 64 | 12 | 7.2 | | 56 | | | 47 | NS-SFR | 8.1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 1600 | 16000 |
| MTBE | 400000 ^b | | | | | 23000 ^b | 8800 ^b | | 16000 ^b | 150000 ^b | | 66000 ^b | 47000 ^b | 17000 ^b | 3900 | 8.9 | 7.2 | 490 | | 50 | | | 5.3 | | <1 | | <1 | | 2.2 | | | | | | | 5000 | NE | | |
| Toluene | 26000 ^{bu} | | | | | 6500 ^b | 4700 ^b | | 9700 ^b | 16000 ^b | | 3200 ^b | 8600 ^b | 6500 ^b | 2700 ^b | 97 | 29 | 13 | | 110 | | | 10 | | 2.3 | | <1 | | <1 | | | | | | | 1700 | 23000 | | |
| Total Xylenes | 15000 | | | | | 11000 | 3800 | | 22000 | 18000 | | 15000 | 9400 | 11000 | 12000 | 450 | 230 | 110 | | 360 | | | 320 | | 54 | | <1 | | 56 | | | | | | | NE | NE | | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x>: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | | |
|---|--------------------|----------|-------------------|-------------------|-------------------|------------------|--------------------|-------------------|-------------------|-------------------|-------------------|----------|---------|-------------------|--------|-------------------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|-----------------------------|--------------------------------|---------|--------|---------|---------|---------|---------|---------|---------|--------|
| | MW-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | | | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 6200 ^b | SPP | 2200 ^b | 2500 ^b | 1100 ^b | 690 ^b | 2200 ^b | 360 ^b | 890 ^b | 180 ^b | 210 ^b | <20 | <3 | <50 | <2 | <25 | <5 | <15 | <8 | <1 | NS-SFR | NS-SFR | <3 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | 2100 ^b | | 1200 | 1100 | 440 | 320 | 2500 ^b | 2900 ^b | 670 | 800 | 2900 ^b | 1300 | 120 | 2200 ^b | 140 | 1400 | 330 | 1500 | 560 | 180 | | | 320 | | 110 | | 43 | | 45 | | | | | | | | | 1600 | 16000 |
| MTBE | 22000 ^b | | 630 | 1800 | 470 | 24 | <200 | 290 | 61 | <50 | <200 | <20 | 5.5 | <50 | 4.5 | <25 | 5.5 | <15 | <8 | <1 | | | 5 | | <1 | | 1.2 | | 1.5 | | | | | | | | | 5000 | NI |
| Toluene | 13000 ^b | | 4200 ^b | 6300 ^b | 1700 ^b | 340 | 13000 ^b | 5900 ^b | 1900 ^b | 3000 ^b | 9200 ^b | 540 | 26 | 3600 ^b | 59 | 2200 ^b | 200 | 710 | 140 | 21 | | | 49 | | <1 | | <1 | | <1 | | | | | | | | 1700 | 23000 | |
| Total Xylenes | 7800 | | 3800 | 4400 | 1900 | 570 | 8300 | 9700 | 2700 | 2600 | 11000 | 2000 | 97 | 7200 | 170 | 5300 | 770 | 5000 | 2380 | 400 | | | 710 | | 48 | | 36 | | 12 | | | | | | | | NI | NI | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x>: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit
* Analysis via EPA Method 8260B

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | |
|---|--------------------|----------------------|--------------------|-------------------|-------------------|---------|--------|----------|-------------------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|-----------------------------|--------------------------------|---------|---------|---------|---------|---------|---------|--------|-------------------|
| | MW-3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99 ^a | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | | | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | GB Groundwater |
| Volatiles, Purgeable Aromatics by EPA 8021B (ng/L): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 1700 ^b | SPP | 1900 ^b | 1300 ^b | 270 ^b | 53 | 120 | 39 | 35 | 13 | <10 | <10 | <10 | <10 | <10 | <10 | <2 | 1.5 | <3 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | 2400 ^b | | 3000 ^b | 2300 ^b | 920 | 170 | 410 | 450 | 820 | 200 | 330 | 300 | 260 | 88 | 89 | 80 | 44 | 50 | 3 | 18 | | | <1 | | 21 | | 24 | | 20 | | | | | | | | | | 1600 | 16000 |
| MTBE | <750 | | 390 | 133 | <50 | <50 | <20 | <20 | <50 | 5.5 | <10 | 11 | <10 | <10 | <10 | <10 | 2.9 | 2.8 | <3 | 1.6 | | | <1 | | <1 | | 1.7 | | | | | | | | | | | | 5000 | NE |
| Toluene | 11000 ^b | | 12000 ^b | 8200 ^b | 3700 ^b | 880 | 1400 | 670 | 3300 ^b | 200 | 530 | 110 | 300 | 150 | 120 | 110 | 20 | 11 | <3 | 3.6 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | | 1700 | 21000 |
| Total Xylenes | 12600 | | 17000 | 9700 | 4500 | 980 | 2000 | 1500 | 4700 | 720 | 1700 | 1000 | 1700 | 660 | 680 | 1000 | 260 | 300 | 262 | 240 | | | 7.1 | | 150 | | 160 | | 120 | | | | | | | | | | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.

c.x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).

NE: No allowable limit is established for the substance

NS: Not Sampled

NS-SFR: Not Sampled, Sampling Frequency Reduced

SPP: Separate phase petroleum present

Sample Results:

b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;

d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives

u: Analyte concentration in this sample exceeds the RIDEM UCL

v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

* Analysis via EPA Method 8260B

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | |
|---|----------------------|---------|---------|---------|---------|---------------------|----------|---------|---------------------|---------------------|---------------------|---------|---------|---------------------|---------------------|---------------------|---------------------|---------------------|---------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------|------------------|---------|------------------|---------|-----------------------------|--------------------------------|---------|---------|---------|---------|---------|--------|-------|
| | MW-4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5/17/99 ^a | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | | | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | |
| Analyte | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | <20000 ^b | SPP | | NS | SPP | 12000 ^b | SPP | SPP | 16000 ^b | 11000 ^b | 10000 ^b | SPP | SPP | <15000 ^d | <15000 ^d | <15000 ^d | 3800 ^b | 2600 ^b | NS | 3100 ^b | 2600 ^b | 2200 ^b | 1500 ^b | 960 ^b | 1200 ^b | 120 | 200 ^b | 120 | 160 ^b | 22 | 31 | 82 | 130 | 27 | 9.1 | 64 | 46 | 140 | 18000 |
| Ethylbenzene | <20000 ^b | | | | | 2300 ^b | | | 8900 ^b | 5100 ^b | <10000 ^d | | | <15000 ^d | <15000 ^d | <15000 ^d | 2900 ^b | <2000 ^d | | 2400 ^b | 2400 ^b | 1800 ^b | 1600 | 1600 | 1000 | 120 | 520 | 94 | 310 | 190 | 100 | 270 | 430 | 210 | 160 | 600 | 790 | 1600 | 16000 |
| MTBE | 550000 ^b | | | | | 940000 ^b | | | 820000 ^b | 310000 ^b | 560000 ^b | | | 720000 ^b | 650000 ^b | 680000 ^b | 220000 ^b | 130000 ^b | | 170000 ^b | 48000 ^b | 42000 ^b | 36000 ^b | 10000 ^b | 11000 ^b | 550 | 330 | 41 | 30 | 16 | 21 | 35 | 50 | <1 | 16 | 77 | 47 | 5000 | NE |
| Toluene | 26000 ^{bu} | | | | | 26000 ^{bu} | | | 41000 ^{bu} | 37000 ^{bu} | 42000 ^{bu} | | | 41000 ^{bu} | 29000 ^{bu} | 33000 ^{bu} | 16000 ^b | 13000 ^b | | 20000 ^b | 14000 ^b | 5000 ^b | 3800 ^b | 4200 ^b | 1700 | 260 | 1000 | 170 | 220 | 86 | 33 | 180 | 290 | 140 | 130 | 700 | 410 | 1700 | 21000 |
| Total Xylenes | <20000 | | | | | 16000 | | | 29000 | 23000 | 24000 | | | 60000 | 20000 | <15000 | 21000 | 13000 | | 17600 | 16000 | 12000 | 12000 | 11000 | 6200 | 970 | 4100 | 720 | 1000 | 1100 | 590 | 960 | 1500 | 540 | 880 | 3200 | 3400 | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.

c.x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).

NE: No allowable limit is established for the substance

NS: Not Sampled

NS-SFR: Not Sampled, Sampling Frequency Reduced

SPP: Separate phase petroleum present

Sample Results:

b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;

d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives

u: Analyte concentration in this sample exceeds the RIDEM UCL

v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

* Analysis via EPA Method 8260B

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | | |
|---|---------------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|-----------------------------|--------------------------------|---------|---------|---------|---------|---------|--------|--------|-------|-------|
| | MW-5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/1799* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | 140 | 18000 | | |
| Ethylbenzene | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 1600 | 16000 |
| MTBE | <5 | 12 | <1 | 1.3 | <1 | <1 | 1 | <1.0 | <1 | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | 5000 | NE | |
| Toluene | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | 1700 | 21000 | |
| Total Xylenes | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | 4.7 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | NE | NE | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
cx: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit
* Analysis via EPA Method 8260B

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | | |
|---|---------------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|-----------------------------|--------------------------------|---------|---------|---------|---------|---------|--------|--------|-------|-------|
| | MW-6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/1799* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 6.2 | 1.2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <2 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | <1 | <1 | NS-SFR | NS-SFR | 140 | 18000 | |
| Ethylbenzene | <5 | 3.5 | 11 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <2 | | <1 | | <1 | | <1 | | NS-SFR | NS-SFR | NS-SFR | NS-SFR | <1 | <1 | NS-SFR | NS-SFR | 1600 | 16000 |
| MTBE | <5 | 8.6 | <1 | 2.4 | 3.9 | 4 | 3.3 | 5.7 | 13 | 12 | 4 | 4.7 | <1 | <1 | <1 | 1.7 | 4.9 | 1.7 | 1.6 | 1.2 | | | 210 | | <1 | | <1 | | <1 | | | | <1 | <1 | | | 5000 | NE | |
| Toluene | <5 | 6.8 | 20 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <2 | | <1 | | <1 | | <1 | | | | <1 | <1 | | | 1700 | 21000 | | |
| Total Xylenes | <5 | 21 | 62 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <2 | | <1 | | <1 | | <1 | | | | 2 | 2 | | | NE | NE | | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
cx: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit
* Analysis via EPA Method 8260B

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | |
|---|---------------|------------------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|-----------------------------|--------------------------------|---------|---------|---------|---------|---------|--------|------|-------|
| | MW-7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 59 | 140 ^b | 73 | 56 | 17 | 11 | 2.8 | <0.5 | 0.68 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | | | | | | | | | 1600 | 16000 |
| MTBE | <5 | <1 | <1 | <1 | 11 | 3.2 | <1 | 1 | 11 | 1.6 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | | | | | | | | | 5000 | NI |
| Toluene | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | | | | | | | | | 1700 | 21000 |
| Total Xylenes | <5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 | 5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | NE | NI |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.

<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).

NE: No allowable limit is established for the substance

NS: Not Sampled

NS-SFR: Not Sampled, Sampling Frequency Reduced

SPP: Separate phase petroleum present

Sample Results:

b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives.

d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives

u: Analyte concentration in this sample exceeds the RIDEM UCL.

v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | |
|---|----------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|-------------------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|-----------------------------|--------------------------------|---------|---------|---------|--------|------|-------|
| | MW-8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 ^a | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 7500 ^b | 10000 ^b | 13000 ^b | 8800 ^b | 12000 ^b | 5600 ^b | 5500 ^b | 3100 ^b | 2400 ^b | 1400 ^b | 2000 ^b | 1200 ^b | 320 ^b | 300 | 67 | 8.2 | 6.6 | 5.5 | 36 | 23 | NS-SFR | NS-SFR | 20 | NS-SFR | 1.3 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | 2500 ^b | <2500 ^d | <2500 ^d | 1800 ^b | 2700 ^b | 1500 | 1500 | 1900 ^b | 1500 | 1500 | 1300 | 890 | 380 | 88 | 130 | 16 | 27 | 18 | 15 | 14 | | | 25 | | 20 | | <1 | | 7.1 | | | | | | | | 1600 | 16000 |
| MTBE | 440000 ^b | 780000 ^b | 560000 ^b | 240000 ^b | 410000 ^b | 85000 ^b | 33000 ^b | 7100 ^b | 3700 | 36000 ^b | 44000 ^b | 19000 ^b | 7500 ^b | 2600 | 1400 | 52 | 22 | 53 | 680 | 620 | | | 12 | | 6 | | <1 | | 1.4 | | | | | | | | 5000 | NE |
| Toluene | 10000 ^b | 12000 ^b | 13000 ^b | 14000 ^b | 17000 ^b | 12000 ^b | 10000 ^b | 14000 ^b | 6700 ^b | 6100 ^b | 3200 ^b | 2000 ^b | <150 | <50 | <50 | <1 | 2.8 | <1 | <5 | 5.4 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | 1700 | 21000 |
| Total Xylenes | 10000 | 7500 | <2500 | 6900 | 8600 | 5800 | 4800 | 8000 | 5400 | 6600 | 4700 | 2600 | 1300 | 480 | 1200 | 43 | 38 | 3.6 | 6.3 | 26 | | | 17 | | 23 | | <1 | | 4.3 | | | | | | | | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.

<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).

NE: No allowable limit is established for the substance

NS: Not Sampled

NS-SFR: Not Sampled, Sampling Frequency Reduced

SPP: Separate phase petroleum present

Sample Results:

b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives.

d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives

u: Analyte concentration in this sample exceeds the RIDEM UCL.

v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

^a Analysis via EPA Method 8260B

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | |
|---|---------------------|--------------------|-------------------|---------|-------------------|---------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|------------------|--------------------|------------------|-------------------|-----------------------------|--------------------------------|---------|---------|---------|---------|--------|-------------|
| | MW-9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | Groundwater |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | <2500 ^d | <250 ^d | <25 | 1.5 | 4.8 | <50 | 120 | 610 ^b | 1700 ^b | 2500 ^b | 5000 ^b | 5000 ^b | 8000 ^b | 9400 ^b | 11000 ^b | <10000 ^d | 8300 ^b | 8000 ^b | 4000 ^b | 4200 ^b | 4600 ^b | 2800 ^b | 1800 ^b | 280 ^b | 450 ^b | 1500 ^b | 430 ^b | 660 ^b | 370 ^b | 360 ^b | 210 ^b | 360 ^b | 140 | 61 | 73 | 93 | 140 | 18000 |
| Ethylbenzene | <2500 ^d | <250 | <25 | <0.5 | <0.5 | <50 | <100 | <100 | <1000 | <2000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <10000 ^d | <2000 ^d | <4000 ^d | <2000 ^d | <2000 ^d | <2000 ^d | <800 | <400 | <100 | 220 | 600 | <40 | 190 | 45 | 58 | <15 | 150 | 73 | 11 | 62 | 14 | 1600 | 16000 |
| MTBE | 120000 ^b | 96000 ^b | 6100 ^b | 1000 | 9300 ^b | 3300 | 13000 ^b | 850000 ^b | 140000 ^b | 210000 ^b | 250000 ^b | 160000 ^b | 300000 ^b | 520000 ^b | 520000 ^b | 590000 ^b | 620000 ^b | 570000 ^b | 250000 ^b | 280000 ^b | 230000 ^b | 110000 ^b | 53000 ^b | 11000 ^b | 16000 ^b | 48000 ^b | 4600 | 14000 ^b | 4000 | 5800 ^b | 1600 | 3400 | 780 | 100 | 20 | 42 | 5000 | NE |
| Toluene | <2500 ^d | <250 | <25 | <0.5 | <0.5 | <50 | <100 | 220 | <1000 | <2000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <5000 ^d | <10000 ^d | <2000 ^d | <4000 ^d | <2000 ^d | <2000 ^d | <2000 ^d | <800 | <400 | <100 | <120 | <500 | <40 | <100 | <25 | <50 | <15 | <25 | 2.9 | <1 | 6 | 1.1 | 1700 | 21000 |
| Total Xylenes | <2500 | <250 | <25 | <0.5 | <0.5 | <50 | <100 | 230 | <1000 | <2000 | <5000 | <5000 | <5000 | <5000 | <5000 | <10000 | <2000 | <4000 | <2000 | <2000 | <2000 | <800 | <400 | <100 | 160 | <500 | <40 | 330 | <25 | 110 | <15 | 230 | 31 | 9.4 | 74 | 4 | NE | NE |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.

cx: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).

NE: No allowable limit is established for the substance

NS: Not Sampled

NS-SFR: Not Sampled, Sampling Frequency Reduced

SPP: Separate phase petroleum present

Sample Results:

b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;

d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives

u: Analyte concentration in this sample exceeds the RIDE M UCL.

v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDE M Method 1 Objective | RIDE M GB Groundwater UCL | | | | | | | | | | |
|---|---------------|---------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|-------------------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|-------------------|------------------------------|---------------------------------|---------|--------|---------|---------|---------|---------|---------|---------|--------|----|
| | MW-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | | | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | | | | | | |
| Benzene | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | 17 | <5 | 2.2 | <150 ^d | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 | |
| Ethylbenzene | | | | | | | | | | | | | <5 | <5 | <1 | <150 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | 1600 | 16000 | |
| MTBE | | | | | | | | | | | | | 300 | 260 | 79 | 8700 ^b | 58 | 82 | 130 | 26 | | | 7.1 | | 2.4 | | 7 | | 9.4 | | | | | | | | | | 5000 | NE |
| Toluene | | | | | | | | | | | | | <5 | <5 | <1 | <150 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | 1700 | 21000 | |
| Total Xylenes | | | | | | | | | | | | | <5 | <5 | <1 | <150 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | | NE | NE |

Where necessary, the RIDE M objectives, in ppm, have been converted to ppb to match the laboratory reporting method.

cx: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).

NE: No allowable limit is established for the substance

NS: Not Sampled

NS-SFR: Not Sampled, Sampling Frequency Reduced

SPP: Separate phase petroleum present

Sample Results:

b: Analyte concentration in this sample exceeds RIDE M GB Groundwater Objectives;

d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDE M GB Groundwater Objectives

u: Analyte concentration in this sample exceeds the RIDE M UCL.

v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDE M Upper Concentration Limit

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | |
|---|---------------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|---------|---------|-----------------------------|--------------------------------|---------|--------|--------|-------|-------|
| | MW-11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | |
| Benzene | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | 1600 | 16000 | |
| MTBE | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | 1.6 | 1.5 | <1 | | | 8.8 | | 5.5 | | 2 | | 1.6 | | | | | | | | 5000 | NI | |
| Toluene | | | | | | | | | | | | | 1.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | 1700 | 21000 | |
| Total Xylenes | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | NI | NI | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x> Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives.
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | |
|---|---------------|---------|---------|---------|---------|--------|----------|---------|--------|---------|----------|---------|---------|--------|----------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|---------|---------|-----------------------------|--------------------------------|---------|--------|--------|------|-------|----|
| | MW-12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | | | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | |
| Benzene | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 | |
| Ethylbenzene | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | | 1600 | 16000 | |
| MTBE | | | | | | | | | | | | | <1 | <1 | 1.1 | <1 | 2.4 | 12 | 19 | 20 | | | 4 | | 2 | | 1.8 | | 1.5 | | | | | | | | | | 5000 | NE |
| Toluene | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | | 1700 | 21000 | |
| Total Xylenes | | | | | | | | | | | | | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | <1 | | <1 | | <1 | | <1 | | | | | | | | | | NE | NE | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x> Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives.
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | |
|---------------|---|---------|---------------------|---------|---------|--------|---------------------|---------|--------|---------|----------|---------|--------------------|-------------------|-------------------|---------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|--------|---------|-----------------------------|--------------------------------|---------|---------|---------|---------|---------|--------|-------|
| | ECS-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/30/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | | | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | |
| Analyte | Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | GB Groundwater | | | | | | | | |
| Benzene | <2500 ^d | SPP | 2000 ^b | SPP | SPP | SPP | <2500 ^d | SPP | SPP | SPP | SPP | SPP | <300 ^d | <300 ^d | <300 ^d | <20 | <1 | <1 | <1 | <1 | NS-SFR | NS-SFR | <5 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | <1 | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | NS-SFR | 140 | 18000 |
| Ethylbenzene | 8200 ^b | | 5400 ^b | | | | 4000 ^b | | | | | | 2800 ^b | 2500 ^b | 660 | 49 | <1 | 1 | 4.1 | 9.6 | | | 52 | | <1 | | <1 | | <1 | | | | | | | | | 1600 | 16000 |
| MTBE | <2500 | | <500 | | | | 6700 ^b | | | | | | <300 | <300 | <300 | <20 | <1 | <1 | <1 | 1.1 | | | <5 | | <1 | | <1 | | <1 | | | | | | | | 5000 | NE | |
| Toluene | 49000 ^{bu} | | 44000 ^{bu} | | | | 28000 ^{bu} | | | | | | 12000 ^b | 8700 ^b | 1000 | 33 | <1 | 1.6 | 5.7 | 11 | | | 47 | | <1 | | <1 | | <1 | | | | | | | | 1700 | 21000 | |
| Total Xylenes | 52000 | | 36000 | | | | 26000 | | | | | | 39000 | 34000 | 16000 | 1700 | 22 | 99 | 229 | 280 | | | 1400 | | <1 | | <1 | | <1 | | | | | | | | NE | NE | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
cx: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | |
|---|---------------|---------|---------|---------|---------------------|---------|--------|----------|---------|---------------------|---------|----------|-------------------|------------------|------------------|------------------|------------------|--------|------------------|---------|------------------|-------------------|-------------------|------------------|--------|-------------------|---------|----------|---------|--------|-----------------------------|--------------------------------|---------|---------|-------------------|---------|---------|---------|
| | ECS-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Analyte | 5/17/99 | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | | | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | SPP | SPP | SPP | | 3000 ^b | SPP | SPP | SPP | SPP | 4500 ^b | SPP | SPP | 680 ^b | 260 ^b | 180 ^b | 350 ^b | 160 ^b | 79 | 450 ^b | NS | 380 ^b | 1100 ^b | 510 ^b | 900 ^b | 20 | 200 ^b | 110 | 13 | 69 | 5 | 180 ^b | 61 | 1.4 | <20 | 49 | 28 | 140 | 18000 |
| Ethylbenzene | | | | | 3900 ^b | | | | | 3000 ^b | | | 1000 | 720 | 620 | 240 | 80 | 320 | 430 | | 250 | 710 | 490 | 190 | 140 | 760 | 270 | 180 | 620 | 140 | 950 | 720 | 39 | 360 | 990 | 580 | 1600 | 16000 |
| MTBE | | | | | 9000 ^b | | | | | 1400 | | | 1500 | 170 | <100 | 620 | 2500 | 58 | 280 | | 130 | 160 | <40 | 28 | <4 | <20 | <10 | <5 | <10 | <5 | <15 | 24 | <1 | <20 | <20 | 22 | 5000 | NE |
| Toluene | | | | | 34000 ^{bu} | | | | | 24000 ^{bu} | | | 3800 ^b | 1300 | 770 | 600 | 880 | 440 | 980 | | 1600 | 6400 ^b | 4400 ^b | 1500 | 450 | 2300 ^b | 870 | 550 | 1600 | 340 | 1900 ^b | 1900 ^b | 74 | 680 | 2500 ^b | 1200 | 1700 | 21000 |
| Total Xylenes | | | | | 23000 | | | | | 20000 | | | 11000 | 6500 | 5600 | 1600 | 920 | 3800 | 2900 | | 2500 | 6500 | 5000 | 2700 | 980 | 5400 | 2300 | 1300 | 4100 | 980 | 6100 | 5900 | 330 | 2800 | 7400 | 4600 | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
cx: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit

Historical Groundwater Analytical Results – BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | |
|---|----------------------|----------------------|---------|---------|---------|----------------------|----------|---------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|-------------------|--------------------|--------------------|-------------------|--------------------|---------------------|---------|---------|---------------------|--------------------|--------------------|---------------------|-----------------------------|--------------------------------|---------------------|-------------------|---------------------|--------------------|-------------------|------|-------|-------|
| | GZ-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/30/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | GB Groundwater | | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | <100000 ^b | <25000 ^b | | NS | SPP | 32000 ^{bu} | <0.5 | SPP | 23000 ^{bu} | 14000 ^b | 13000 ^b | 18000 ^{bu} | 16000 ^b | 9000 ^b | 6900 ^b | 8500 ^b | 2500 ^b | 2400 ^b | 1900 ^b | 2100 ^b | 2400 ^b | 1500 ^b | 1800 ^b | 2100 ^b | NS | NS | 1800 ^b | 1400 ^b | 930 ^b | 1400 ^b | 1000 ^b | 1100 ^b | 1600 ^b | 490 ^b | 1500 ^b | 1400 ^b | NS | 140 | 18000 | |
| Ethylbenzene | <100000 ^b | <25000 ^b | | | | 5700 ^b | <0.5 | | 7100 ^b | 4300 ^b | <8000 ^d | <8000 ^d | <10000 ^d | <3000 ^d | <3000 ^d | 3300 ^b | 1000 | 1200 | 1300 | 1800 ^b | 2200 ^b | 1700 ^b | 2600 ^b | 3900 ^b | | NS | NS | 3900 ^b | 3300 ^b | 1700 ^b | 4000 ^b | 2000 ^b | 2700 ^b | 3600 ^b | 2200 ^b | 3200 ^b | 4100 ^b | | 1600 | 16000 |
| MTBE | 2600000 ^b | 3700000 ^b | | | | 2500000 ^b | 29 | | 600000 ^b | 370000 ^b | 560000 ^b | 670000 ^b | 460000 ^b | 150000 ^b | 150000 ^b | 160000 ^b | 33000 ^b | 16000 ^b | 9600 ^b | 12000 ^b | 9000 ^b | 2200 | 2400 | 4400 | | | | <250 | <150 | <75 | <150 | <150 | <150 | <150 | <1 | <160 | <160 | | 5000 | NE |
| Toluene | <100000 ^b | 60000 ^{bu} | | | | 62000 ^{bu} | 0.74 | | 50000 ^{bu} | 22000 ^{bu} | 38000 ^{bu} | 45000 ^{bu} | 45000 ^{bu} | 30000 ^{bu} | 27000 ^{bu} | 46000 ^{bu} | 11000 ^b | 8300 ^b | 9800 ^b | 14000 ^b | 19000 ^b | 9700 ^b | 16000 ^b | 39000 ^{bu} | | | 32000 ^{bu} | 20000 ^b | 10000 ^b | 22000 ^{bu} | 15000 ^{bu} | 20000 ^b | 25000 ^{bu} | 8000 ^b | 22000 ^{bu} | 21000 ^b | | 1700 | 21000 | |
| Total Xylenes | <100000 | 55000 | | | | 28000 | <0.5 | | 32000 | 16000 | 12000 | 12000 | 11000 | 14000 | 14000 | 23000 | 6200 | 6200 | 6300 | 9000 | 12000 | 7400 | 12000 | 22000 | | | 23000 | 19000 | 10000 | 22000 | 13000 | 18000 | 24000 | 12000 | 22000 | 29000 | | NE | NE | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives.
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit
* Analysis via EPA Method 8260B

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | | | | | |
|---|---------------------|---------|---------|--------------------|--------------------|---------------------|----------|---------|--------------------|---------------------|----------|---------|-------------------|--------------------|----------|-------------------|-------------------|---------|---------|---------|---------|---------|----------|--------|---------|---------|----------|---------|-----------------------------|--------------------------------|---------|---------|---------|---------|---------|--------|-------------------|-------|
| | GZ-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/16/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | GB Groundwater | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 20000 ^{bu} | SPP | SPP | 4000 ^b | 5200 ^b | 11000 ^b | SPP | SPP | 1600 ^b | 2600 ^b | NS | SPP | <400 ^d | 730 ^b | 25 | 68 | <40 | <20 | <30 | <25 | <25 | <10 | <8 | <10 | <3 | <40 | <10 | <5 | <20 | <10 | NS | NS | NS | NS | NS | 140 | 18000 | |
| Ethylbenzene | 3200 ^b | | | 1700 ^b | 1300 | 2300 ^b | | | 1800 ^b | 2200 ^b | | | 1100 | 1300 | 310 | 170 | 450 | 210 | 330 | 120 | 96 | 120 | 43 | 25 | 5.2 | <40 | 27 | 5 | <20 | <10 | | | | | | | 1600 | 16000 |
| MTBE | <1200 | | | 10000 ^b | 2300 | <800 | | | 410 | <400 | | | <400 | <400 | 30 | <35 | <40 | <20 | <30 | <25 | <25 | <10 | <8 | <10 | <3 | <40 | <10 | <5 | <20 | <10 | | | | | | 5000 | NE | |
| Toluene | 40000 ^{bu} | | | 19000 ^b | 20000 ^b | 36000 ^{bu} | | | 16000 ^b | 26000 ^{bu} | | | 5700 ^b | 13000 ^b | 380 | 1900 ^b | 2300 ^b | 560 | 920 | 230 | 140 | 230 | 140 | 97 | 29 | 160 | 69 | 18 | 53 | <10 | | | | | | 1700 | 21000 | |
| Total Xylenes | 20000 | | | 15000 | 17000 | 21000 | | | 23000 | 27000 | | | 29000 | 16000 | 3800 | 4200 | 6400 | 5400 | 9300 | 6400 | 3700 | 3300 | 2200 | 2100 | 600 | 9100 | 3500 | 1600 | 5900 | 2200 | | | | | | NE | NE | |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x: Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives.
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit
* Analysis via EPA Method 8260B

Historical Groundwater Analytical Results - BTEX and MTBE
S&H Sunoco R016
905 Cranston Street
Cranston, Rhode Island

| Sample/Date | Concentration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | RIDEM Method 1 Objective | RIDEM GB Groundwater UCL | | | | |
|---|-----------------------|---------|---------|---------|----------------------|--------|----------|---------|---------------------|---------------------|---------------------|---------------------|---------|---------------------|--------------------|-------------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------|-------------------|--------------------|-------------------|-----------------------------|--------------------------------|-------------------|-------------------|-------|-------|
| | GZ-3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analyte | 5/17/99* | 8/12/99 | 11/9/99 | 2/17/00 | 5/30/00 | 8/9/00 | 11/15/00 | 2/28/01 | 5/2/01 | 8/30/01 | 11/28/01 | 2/13/02 | 5/21/02 | 8/9/02 | 11/14/02 | 2/13/03 | 5/9/03 | 8/27/03 | 11/5/03 | 2/16/04 | 5/19/04 | 8/25/04 | 11/17/04 | 2/1/05 | 5/13/05 | 8/29/05 | 11/28/05 | 2/20/06 | 5/8/06 | 8/18/06 | 11/9/06 | 2/28/07 | 5/11/07 | 8/10/07 | 11/7/07 | 2/8/08 | | |
| Volatiles, Purgeable Aromatics by EPA 8021B (ug/l): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | <5000 ^b | SPP | SPP | SPP | 29000 ^{bu} | NS | SPP | SPP | 6200 ^b | 12000 ^b | 13000 ^b | 9200 ^b | SPP | 5700 ^b | 1800 ^b | 790 ^b | 590 ^b | 1600 ^b | 1800 ^b | 1300 ^b | 1200 ^b | 1100 ^b | 1200 ^b | 670 ^b | 490 ^b | 750 ^b | 660 ^b | 580 ^b | NS | 660 ^b | 1100 ^b | 880 ^b | 630 ^b | 850 ^b | 580 ^b | 190 ^b | 140 | 18000 |
| Ethylbenzene | <50000 ^b | | | | 5200 ^b | | | | 2500 ^b | <5000 ^u | <5000 ^u | <8000 ^u | | 3000 ^b | 1500 | 580 | 510 | 2000 ^b | 2200 ^b | 2400 ^b | 2600 ^b | 2200 ^b | 2600 ^b | 2900 ^b | 2600 ^b | 2200 ^b | 3100 ^b | 2800 ^b | | 2400 ^b | 3300 ^b | 2700 ^b | 2500 ^b | 2500 ^b | 2100 ^b | 1600 | 16000 | |
| MTBE | 14000000 ^b | | | | 1900000 ^b | | | | 220000 ^b | 510000 ^b | 420000 ^b | 560000 ^b | | 160000 ^b | 24000 ^b | 3000 | 4400 | 8400 ^b | 20000 ^b | 12000 ^b | 3900 | 1200 | 330 | <100 | <75 | <100 | <100 | <100 | | <100 | <100 | <100 | <1 | <100 | <100 | <100 | 5000 | NE |
| Toluene | <50000 ^u | | | | 62000 ^{bu} | | | | 22000 ^{bu} | 33000 ^{bu} | 45000 ^{bu} | 40000 ^{bu} | | 26000 ^{bu} | 9000 ^b | 1700 ^b | 1400 | 11000 ^b | 14000 ^b | 14000 ^b | 15000 ^b | 13000 ^b | 16000 ^b | 14000 ^b | 10000 ^b | 11000 ^b | 17000 ^b | 9900 ^b | | 8200 ^b | 11000 ^b | 9000 ^b | 6200 ^b | 7800 ^b | 6300 ^b | 3800 ^b | 1700 | 21000 |
| Total Xylenes | <50000 | | | | 33000 | | | | 17000 | 15000 | 21000 | 30000 | | 25000 | 11000 | 3500 | 2400 | 9900 | 13500 | 15000 | 15000 | 14000 | 17000 | 18000 | 16000 | 17000 | 20000 | 19000 | | 18000 | 24000 | 21000 | 14000 | 20000 | 19000 | 14000 | NE | NE |

Where necessary, the RIDEM objectives, in ppm, have been converted to ppb to match the laboratory reporting method.
<x> Indicates analyte concentration not detected at or above specified laboratory quantitation limit (x).
NE: No allowable limit is established for the substance
NS: Not Sampled
NS-SFR: Not Sampled, Sampling Frequency Reduced
SPP: Separate phase petroleum present
Sample Results:
b: Analyte concentration in this sample exceeds RIDEM GB Groundwater Objectives;
d: Although the analyte was not detected, the laboratory quantitation limit for this sample exceeds RIDEM GB Groundwater Objectives
u: Analyte concentration in this sample exceeds the RIDEM UCL.
v: Although the analyte was not detected, the laboratory quantitation limit for the sample exceeds the RIDEM Upper Concentration Limit
* Analysis via EPA Method 8260B