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FINAL SEMI-ANNUAL O&M REPORT
REMEDIAL WORK ELEMENTS I, II AND IV
REPORTING PERIOD JANUARY 1THROUGH JUNE 30, 2009

Malta Rocket Fuel Area Site
Malta, New York

August 5, 2009

Submitted to:

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CERTIFICATION: This document has been reviewed and is prepared in accordance with the contract documents.

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1.0 INTRODUCTION

This operations and maintenance (O&M) report documents ongoing O&M activities conducted at the Malta Rocket Fuel Area (MRFA) Site, in the Town of Malta, New York. This report has been prepared in accordance with the following documents:

- *Operation and Maintenance Manual, Remedial Work Element I, Drinking Water, dated March 31, 1998 and prepared by ERM - Northeast, Inc.*
- *Operation and Maintenance Manual, Remedial Work Element I, Drinking Water, dated January 15, 2002, and prepared by IT Corporation, Inc., currently Shaw Environmental, Inc. (Shaw).*
- *Operations and Maintenance Manual, Remedial Work Element II, Groundwater, dated January 22, 1998 and prepared by ERM - Northeast, Inc.*, and *Addendum No. 1, January 31, 2005.*
- *Operation and Maintenance Manual, Remedial Work Element IV, Institutional Controls, dated September 9, 1999, revised September 27, 1999, prepared by IT Corporation, Inc., currently Shaw.*

This report covers all site activities performed at the Site, as required in each of the previously referenced documents, for the period from January 1 through June 30, 2009.

2.0 O&M OF REMEDIAL WORK ELEMENT I (Drinking Water)

According to the provisions of the *Operation and Maintenance Manual, Remedial Work Element I, Drinking Water, IT Corporation, Inc., January 15, 2002*, six regularly scheduled monthly site visits were performed to inspect the groundwater treatment system (system) operation, record system operating conditions, and to determine system treatment effectiveness. The site visits took place on January 27, February 13, March 9, April 15, May 13, and June 3, 2009.

The groundwater treatment system is comprised of a packed tower air stripper. System influent and effluent samples were collected during the February 13 and May 13, 2008 site visits to document adherence to the treatment system discharge objectives. Analytical results from these sample events, including validated analytical results and chain of custody forms, are provided in **Appendices A** and **B**. The validation summary is included in **Appendix C**.

During the reporting period, recovery well RW-2D operated at a daily average flow rate of approximately 0.820 gallons per minute (gpm) (**Appendix D**). As a result of the limited use of the test station, the system's flow rate is less than historically recorded. Early in March 2008 operation of recovery well RW-1D was discontinued due to damage of the pump discharge piping. Details are provided in later sections of this report.

Review of the analytical results for influent and effluent treatment system samples collected in February and May 2009 confirm that during the reporting period, the system's effluent water quality was compliant with the chemical specific effluent requirements presented in the O&M manual. Air stripper blower pressure readings, as well as the effluent water quality data, demonstrate that the air stripper's packing material does not need cleaning or replacement. Additional discussions regarding air stripper flow, air stripper blower pressure readings and water quality sampling are presented below.

2.1 Remote Telemetry/Programmable Logic Controller

To ensure that the system operates continuously, system operating parameters are visually monitored during each of the monthly site visits and on a continual basis by a Remote Telemetry Unit (RTU). During the reporting period, the RTU notified key project personnel of alarm conditions via facsimile and voice messaging.

On January 6, 2009 Shaw received a call from the remote telemetry system identifying low building temperature. Shaw's operator responded to the call and learned the building's furnace was not operating due to no heating oil. The property owner was notified, oil was delivered and the furnace was restarted. During the short period when the furnace was not operating, the property owner used propane heaters to keep the building warm and system remained operational.

On June 3, 2009 a low air stripper blower amperage alarm occurred. The alarm was the result of the blower switch being turned off. Immediately following the low air stripper blower amperage alarm the operating recovery well was automatically turned off. Shaw was then notified of the alarm condition via the remote telemetry system. Shaw mobilized to the site and returned the switch to the "on" position.

The alarm conditions identified by the RTU during the reporting period confirmed the proper operation of the system and the RTU's effectiveness in notifying project personnel of alarm conditions.

2.2 Visual System Inspection

Visual inspections were made of all accessible system components during monthly site visits in accordance with attached **Table 1**, **Maintenance Checklist**. Inspections were performed to check for signs of component wear, process piping leaks and each of the general maintenance requirements. **Table 2, Equipment Log, Air Stripper Maintenance** includes a summary of observations made during the visual inspections.

Maintenance activities included regular inspection of the air stripper blower intake for obstructions, inspection of all process valves and piping to prevent leakage of untreated groundwater, and inspection of the air stripper sight tube for sediment buildup. In addition, the operation of the transfer sump pump and associated high level float were checked. The settling tank interior was also visually inspected for signs of sediment buildup or corrosion and the reservoir level was checked during each monthly visit.

2.2.1 Recovery Well Pump Inspection

Recovery well pump RW-2D was inspected during the May 13, 2009 site visit. Shaw personnel utilized confined space entry procedures to enter well vault and disconnect water supply piping. All system piping and electrical power supplies were locked and tagged out during maintenance

and inspection activities. The pump and associated down well pipe casing were removed by hand. The pump and discharge piping were inspected for corrosion, loose or damaged parts and other signs of wear or damage that would indicate a potential for pump failure.

A light accumulation of debris was observed on the pump intake. Water and a clean cloth were used to remove the debris. No other issues were observed with the pump and it was subsequently re-installed. Following re-installation, the pump was restarted and associated piping was inspected for leaks.

2.2.2 100,000 Gallon Reservoir Inspection

The annual inspection of the 100,000 gallon reservoir was performed on May 13, 2009. The visual inspection of the reservoir did not reveal any problems. A hand held spotlight was used to assist personnel in the inspection of the interior reservoir walls. There were no signs of cracks in the concrete or any type of buildup or growth activity. The standpipe was observed to be in good condition.

2.2.3 Air Stripper Tower Inspection

Shaw accessed the top section of the air stripper tower on May 13, 2009. The protective cover was removed to allow access to the tower demister and spray nozzle. The demister pad was in good condition with no buildup of any material or precipitate. The spray nozzle was in good condition and did not require cleaning beyond a wipe down. The air stripper tower packing was inspected at the top of the column and determined to be in good condition. No evidence of precipitate accumulation or clogging was observed from the top of the air stripper column.

2.3 Operating Measurements

2.3.1 Water Flow Measurements

Water flow measurements for well RW-2D was collected during monthly site visits as presented in **Table 3**, **Process Operating Report**. The instantaneous totalizer readings collected at the Site demonstrate average recovery well water flow rates for the period of January 1 to June 30, 2009 as follows:

Well RW-1D: 0.0000 gpm
Well RW-2D: 0.7282 gpm
System Avg: 0.7282 gpm

Average daily water flow data as recorded by the on-site data logger are provided in **Appendix D**. Information obtained from the data logger indicates an average daily water flow rate of 0.820 gpm for the reporting period. The average water flow rate calculated from field observations (0.7282) is statistically the same to the average daily water flow rate calculated from the data logger (0.820), confirming the data logger's accuracy and usefulness in verifying field observations.

2.3.2 Blower Air Pressure

Measurements of the air stripper blower back pressure were recorded on a weekly basis via RTU monitoring and during monthly O&M site visits. Readings collected during monthly O&M site visits from the pressure gauge installed to monitor the air stripper back pressure are provided in **Table 3**. Pressure readings ranged from 3.20 to 3.60 inches of water column during the current period. The pressure readings were well within the acceptable range of readings that are specified in the *Operation and Maintenance Manual, Remedial Work Element I, Drinking Water, IT Corporation, Inc., January 15, 2002*. Pressure readings will continue to be monitored in the future to ensure proper system performance.

2.4 Water Quality Data

2.4.1 Sample Collection

Samples of the drinking water system influent and effluent were collected on February 13 and May 13, 2009 and analyzed by Columbia Analytical Laboratories, Inc., of Rochester, New York. Influent and effluent water samples were analyzed for volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method Contract Laboratory Program (CLP) OLC-02, modified to include hexachlorobutadiene, 1,2,3-trichlorobenzene and trichlorofluoromethane as summarized in **Table 4**.

The validated analytical results for the February 13 and May 13, 2009 samples are provided in **Appendices A** and **B**. All validation was performed by Data Validation Services, Inc. of North Creek, New York. Validation reports are included in **Appendix C**.

2.4.2 VOC Analytical Results

The drinking water system effluent sampling results for carbon tetrachloride indicated detections during the February and May sampling events at estimated concentrations of 0.4µg/l and

0.19µg/l, respectively. TCE were detected at estimated concentrations of 0.5µg/l and 0.27µg/l within the effluent samples collected during the February and May monitoring events. The results for the February and May events qualified as estimated value by the laboratory because the observed concentrations are less than the laboratory method reporting limit. In each case the estimated results are below the performance standards and drinking water quality standards.

The influent concentrations for TCE and carbon tetrachloride observed during this reporting period were similar to the influent concentrations for these compounds observed during the previous reporting period. The drinking water system influent and effluent sample results for TCE and carbon tetrachloride are summarized in the table below.

Analyte	Date Sampled	Influent (µg/l)	Effluent (µg/l)	Performance Standard (µg/l)
Carbon Tetrachloride	February 13, 2009	50	0.4 J	5
	May 13, 2009	32	0.19 J	5
TCE	February 13, 2009	65	0.5 J	5
	May 13, 2009	50	0.27 J	5

Note: ND = not detected

The air stripper influent chloroform concentrations are similar to the chloroform air stripper influent concentrations observed during the previous reporting period. Chloroform was detected at concentrations of 7 µg/l and 5.4 µg/l in the February 13, 2009 and May 13, 2009 air stripper influent samples, respectively. Chloroform was not detected in the air stripper effluent samples collected on February 13, 2009 and May 13, 2009. The drinking water system influent and effluent sample results for chloroform are summarized below.

Analyte	Date Sampled	Influent (µg/l)	Effluent (µg/l)	Criteria (µg/l)
Chloroform	February 13, 2009	7	ND	70
	May 13, 2009	5.4	ND	70

Note: ND = not detected

Based upon analytical data collected during this reporting period, the drinking water system's removal efficiency was greater than 99 percent for all volatile organic analytes.

3.0 O&M OF REMEDIAL WORK ELEMENT II (Groundwater)

3.1 Sample Collection

Modifications to the Early Warning Monitoring System (EWMS) monitoring program have been specified in *Addendum No. 1, Operations and Maintenance Manual, Remedial Work Element II-Groundwater, Malta Rocket Fuel Area Site, General Electric Company, January 31, 2005* (Addendum No. 1). In accordance with the *Operations and Maintenance Manual for Remedial Work Element II - Ground Water, ERM Northeast, Inc., January 22, 1998,* (O&M-GW) and Addendum No. 1, unfiltered groundwater samples were collected on May 12 and 13, 2009 from the EWMS. In accordance with the *Five-Year Review Report, Malta Rocket Fuel Area Superfund site, United States Environmental Protection Agency (EPA), September 24, 2004* (Five Year Review Report) including a table titled *"Proposed Modifications to Groundwater and Surface Water Sampling Regimes at the Malta Rocket Fuel Area Site"* and a letter from GE to the USEPA dated October 26, 2004, EWMS samples were collected from monitoring wells DGC-3S, DGC-4S, 4D, 11D, 13D, 14D, M-24DR, M-25D, M-27D, M-29D (**Figure 1**). Blind duplicate samples were collected from well 13D for VOCs, chromium and hexavalent chromium. Trip blanks were also analyzed.

In accordance with communications between the Luther Forest Development Corporation and the USEPA, monitoring wells M-24S, M-24D, M-33I and M-33S were decommissioned. Monitoring well M-24DR was installed at a new location approved by the USEPA and will be sampled as part of the continued Remedial Work Element II – Groundwater Monitoring Program. **Figure 1** shows the location of the replacement well M-24DR.

Samples from all designated monitoring well sampling locations were analyzed for VOCs by USEPA Method OLC-02.1 by Columbia Analytical Services, Inc. in Rochester, New York. Samples from wells 13D and 27D were also analyzed for unfiltered total matrix chromium following CLP procedures and unfiltered hexavalent chromium by SW-846 Method 7196 (*Test Methods for Evaluating Solid Waste*, 3rd Edition, November 1986).

Results of the May 2009 semi-annual EWMS sampling event are summarized in **Table 5**. The laboratory reports are presented in **Appendix B**. The data validation report is included in **Appendix C**. A summary of analytical results from 1987 through this reporting period for samples collected at locations currently included in the EWMS sampling program is provided in **Tables 6**, **7**, and **8**.

In accordance with the O&M-GW, time vs. concentration plots for carbon tetrachloride at monitoring well M-27D are included as **Figure 2. Figure 3** includes a comparison of simulated versus observed concentrations of carbon tetrachloride at monitoring well M-27D.

3.2 Chromium Analytical Results

Results of the unfiltered total chromium analysis collected in May 2009 at wells 13D and 27D indicated concentrations of 7.1 µg/l and 0.88 µg/l, respectively. These concentrations are below the New York State Ground Water Standard (NYSGWS) of 50 µg/l.

Analytical results showed no detectable concentrations of hexavalent chromium at the method detection limit of 10 µg/l for both groundwater samples (13D & M-27D). The NYSGWS for hexavalent chromium is 50 µg/l.

3.3 VOC Analytical Results

Carbon tetrachloride was detected in monitoring wells M-24DR, M-25D, M-27D M-29D, 13D and 11D at concentrations of 16 µg/l, 52 µg/l, 7.6 µg/l, 30 µg/l, 1.1 µg/l and 11 µg/l, respectively. All other monitoring well sample locations were non-detect for carbon tetrachloride during the reporting period. The time vs. concentration plot for carbon tetrachloride in well M-27D is presented in **Figure 2**.

Chloroform was detected in monitoring wells 11D and M-29D at concentrations of 1.4 µg/l and 2.5 µg/l, respectively. In addition chloroform was detected at estimated concentrations in monitoring wells M-24DR, M-25D, M-27D and 13D at concentrations of 0.68 µg/l, 3.8 µg/l, 0.30 µg/l, and 0.15 µg/l, respectively.

TCE was detected in monitoring wells in M-24DR, M-25D, M-27D, M-29D and 11D at concentrations of 49 µg/l, 93 µg/l, 11 µg/l, 11 µg/l and 1.6 µg/l respectively. Trichlorofluoromethane was also detected in monitoring well M-27D at an estimated concentration of 0.15 µg/l. 1,1,1-Trichloroethane was detected in monitoring well M-29D at a concentration of 3.4 µg/l. TCE, trichlorofluoromethane and 1,1,1-trichloroethane were not detected at the remainder of the monitoring well locations during this reporting period.

3.4 Comparison of Observed VOC Concentrations to Simulation Results

Carbon tetrachloride and TCE concentrations detected during this monitoring period were compared to the results from the contaminant fate and transport modeling reported in **Appendix A** of the O&M-GW. The comparison was performed for carbon tetrachloride in monitoring well M-27D (**Figure 3**). As shown in **Figure 3**, the simulated carbon tetrachloride results are much higher than the observed concentrations.

4.0 INSTITUTIONAL CONTROLS

O&M activities for remedial Work Element IV, Institutional Controls, are conducted on an annual basis. Shaw conducts semi-annual visual inspections of the environmental restriction zone during the annual and semi-annual groundwater sampling activities. An evaluation of environmental easement restrictions is performed in October via interviews with property owner representatives.

5.0 SUMMARY

5.1 Drinking Water

The drinking water treatment system is operating effectively. The treatment equipment will continue to be monitored as necessary to ensure the continued operation of all components and to maintain a reliable source of water for the Test Station. All of the treatment system effluent samples collected as part of the performance monitoring during the current period were compliant with the performance standards.

5.2 Early Warning Monitoring System (EWMS)

The analytical results from this reporting period are summarized as follows:

- Total chromium was detected at monitoring wells 13D and 27D. The Chromium detections collected from these monitoring wells were below the NYSGWS of 50 µg/l.
- Hexavalent chromium was not detected at the any of the monitoring well locations.
- Carbon tetrachloride was detected in monitoring wells M-24DR, M-25D, M-27D M-29D, 13D and 11D at concentrations of 16 µg/l, 52 µg/l, 7.6 µg/l, 30 µg/l, 1.1 µg/l and 11 µg/l, respectively. The NYSGWS for carbon tetrachloride is 5 µg/l. All other water sample locations were non-detect for carbon tetrachloride during the reporting period.
- Chloroform was detected in monitoring wells 11D and 29D at concentrations of 1.4 µg/l and 2.5 µg/l, respectively. In addition chloroform was detected at estimated concentrations in monitoring wells M-24DR, M-25D, M-27D and 13D at concentrations of 0.68 µg/l, 3.8 µg/l, 0.30 µg/l, and 0.15 µg/l, respectively.
- TCE was detected in monitoring wells in M-24DR, M-25D, M-27D, M-29D and 11D at concentrations of 49 µg/l, 93 µg/l, 11 µg/l, 11 µg/l and 1.6 µg/l respectively. Trichlorofluoromethane was also detected in monitoring well M-27D at an estimated concentration of 0.15 µg/l. 1,1,1-Trichloroethane was detected in monitoring well M-29D at a concentration of 3.4 µg/l. TCE, trichlorofluoromethane and 1,1,1-trichloroethane were not detected at the remainder of the monitoring well locations during this reporting period. The NYSGWS for TCE, trichlorofluoromethane and 1,1,1-trichloroethane is 5 µg/l.
- As shown in **Figure 3**, simulated concentrations of carbon tetrachloride are much higher than the observed concentrations.

TABLES

TABLE 1
MAINTENANCE CHECKLIST
OPERATION AND MAINTENANCE PLAN
TEST STATION WATER SUPPLY AND TREATMENT SYSTEM
MALTA ROCKET FUEL AREA SITE

Equipment Name	Item	Action	Frequency	Comments
Well Pump 1D	Pump bowls	Check for signs of iron fouling & impeller wear	Annually	More frequently if problems occur
Well Pump 2D	Pump bowls	Check for signs of iron fouling & impeller wear	Annually	More frequently if problems occur
Control Valves	Miscellaneous	Inspect for leaks	Monthly	Exercise valves annually
Air Stripper Sight Tube		Inspect for siltation and biofouling	Monthly	Adjust frequency depending on operating experience
Air Stripper Spray Nozzle		Inspect for fouling	Annually	No required routine maintenance
Air Stripper Blower	Intake	Inspect and clean	Monthly	Adjust frequency depending on operating experience
Air Stripper Blower	Motor & bearings	Check and lubricate	Annually	More frequently as problems occur
Air Stripper Unit	Packing	Clean or replace	Every 5 years	Adjust frequency depending on operating experience

TABLE 1
MAINTENANCE CHECKLIST
OPERATION AND MAINTENANCE PLAN
TEST STATION WATER SUPPLY AND TREATMENT SYSTEM
MALTA ROCKET FUEL AREA SITE

Equipment Name	Item	Action	Frequency	Comments
Mist Eliminator	Mesh screen	Clean or replace	Annually	Adjust frequency depending on operating experience
Settling Tank		Inspect for siltation	Monthly	Adjust frequency depending on operating experience
Settling Tank High Level Float Switch		Check operation	Monthly	Replace float switch every 5 years
100K Gallon Reservoir		Inspect for siltation, debris, etc.	Annually	Adjust frequency depending on operating experience
Level Sensor	Probe	Manually check start-up/shutdown. Check probe float for free range of motion. Remove and inspect for buildup of minerals if resistance is detected.	Monthly	Adjust frequency depending on operating experience
Misc. Guys, Hardware etc.		Inspect	Annually	Adjust frequency depending on operating experience
System Interlocks	Settling Tank High Level Blower Low Pressure Blower Low Amps Building Low Temperature	Check for proper operation. System should alarm after pre-set delay period.	Monthly	Adjust frequency depending on operating experience

TABLE 2
EQUIPMENT LOG,
AIR STRIPPER MAINTENANCE
MALTA ROCKET FUEL AREA SITE

Date	Operator	Operational Status of System	Work Performed
01/06/09	Brian Neumann	Arrival – OK Departure – OK	Alarm response. System interlock testing performed – all OK. Building was cold, no oil in tank for heater. Site contact was notified.
01/27/09	Brian Neumann	Arrival - OK Departure – OK	Monthly O&M visit. System interlock testing performed – all OK.
02/13/09	Marc Flanagan	Arrival – OK Departure – OK	Monthly O&M visit. System interlock testing performed – all OK. Collected system samples for VOAs.
03/09/09	Brian Neumann	Arrival – OK Departure – OK	Monthly O&M visit. System interlock testing performed – all OK.
04/06/09	Marc Flanagan	Arrival –OK Departure – OK	Arrive on site to develop M-24DR.
04/15/09	Brian Neumann	Arrival – Not OK Departure – OK	Monthly O&M visit. System interlock testing performed – all OK.
05/13/09	Marc Flanagan	Arrival – OK Departure – OK	Monthly O&M visit. System interlock testing performed – all OK. Collected system samples for VOAs and quarterly groundwater samples.
06/03/09	Marc Flanagan	Arrival - Not OK Departure – OK	Alarm Response. Blower in "off" position upon arrival. Complete monthly O&M visit. System interlock testing performed – all OK.

TABLE 3
PROCESS OPERATING REPORT
WATER TREATMENT SYSTEM
MALTA ROCKET FUEL AREA SITE

1	2	3					4					5
DATE	TIME	WATER FLOW --LINE 1D					WATER FLOW --LINE 2D					PROBLEMS OR COMMENTS
		1D LINE FLOW METER RDG(GPM)	1D LINE TOTALIZER RDG(GAL)	ELAPSED TIME (DAYS)	TOTAL FLOW THIS PERIOD (GAL)	AVG FLOW THIS PERIOD (GPM)	2D LINE FLOW METER RDG(GPM)	2D LINE TOTALIZER RDG(GAL)	ELAPSED TIME (DAYS)	TOTAL FLOW THIS PERIOD (GAL)	AVG FLOW THIS PERIOD (GPM)	
12/10/2008	9:10	0.0	4,703,000	21	NA	NA	6.0	6,970,300	21	NA	NA	Recorded in previous report, replicated here for calculation purposes.
1/27/2009	13:30	0.0	4,703,000	48	0	0.00	8.5	7,015,800	48	45,500	0.66	RW-1 is on LOTO
2/13/2009	8:15	0.0	4,703,000	17	0	0.00	5.6	7,031,600	17	15,800	0.65	RW-1 is on LOTO
3/9/2009	11:05	0.0	4,703,000	24	0	0.00	6.0	7,054,100	24	22,500	0.65	RW-1 is on LOTO
4/15/2009	10:20	0.0	4,703,000	37	0	0.00	7.0	7,088,900	37	34,800	0.65	RW-1 is on LOTO
5/13/2009	7:20	0.0	4,703,000	28	0	0.00	6.4	7,113,200	28	24,300	0.60	RW-1 is on LOTO
6/3/2009	9:00	0.0	4,703,000	21	0	0.00	6.5	7,153,800	21	40,600	1.34	RW-1 is on LOTO
Summary				175	0	0.0000			175	183,500	0.7282	

NR = Not Recorded
NA = Not Applicable
LOTO = Lock Out Tag Out

TABLE 3
PROCESS OPERATING REPORT
WATER TREATMENT SYSTEM
MALTA ROCKET FUEL AREA SITE

1	2	3			4	5
DATE	TIME	STANDPIPE	LEVEL	SAMPLES	AIR	PROBLEMS OR COMMENTS
		LEVEL	PROBE	TAKEN ?	BLOWER	
		(FT)	OK ?		PRESSURE	
					OK?	
1/27/2009	13:30	12 - 13	Yes	No	Yes-3.6	Monthly O&M visit. Interlock checks OK. RW-1 remains LOTO.
2/13/2009	8:15	12 - 13	Yes	Yes	Yes-3.6	Monthly O&M visit. Interlock checks OK. RW-1 remains LOTO. Quarterly system samples collected.
3/9/2009	11:05	12 - 13	Yes	No	Yes-3.5	Monthly O&M visit. Interlock checks OK. RW-1 remains LOTO.
4/15/2009	10:20	12-13	Yes	No	Yes-3.2	Monthly O&M visit. Interlock checks OK. RW-1 remains LOTO.
5/13/2009	7:20	12-13	Yes	Yes	Yes-3.2	Monthly O&M visit. Interlock checks OK. RW-1 remains LOTO. Quarterly system samples collected.
6/3/2009	9:00	12 - 13	Yes	No	Yes-3.2	Monthly O&M visit. Interlock checks OK. RW-1 remains LOTO. Blower was in OFF position upon arrival.

Notes:
LOTO = Lock Out Tag Out

TABLE 4
SUMMARY OF DRINKING WATER SAMPLING PROGRAM, PRESERVATIVES, HOLDING TIMES AND CONTAINERS
MALTA ROCKET FUEL AREA SITE

Sample	Sampling Frequency	Sample Matrix	Analytical Parameters	Analytical Method Reference[1]	Sample Preservation	Holding Times[2]	Containers
Influent	1 per quarter	Water	CLP OLC VOCs	USEPA CLP OLCO2	Hcl, Cool, <4°C	14 days	3 - 40 ml glass vials with teflon septa and plastic screw caps
Effluent	1 per quarter	Water	CLP OLC VOCs	USEPA CLP OLCO2	Hcl, Cool, <4°C	14 days	3 - 40 ml glass vials with teflon septa and plastic screw caps

Notes:

1. *USEPA CLP OLCO2 analysis modified to include hexachlorobutadiene, 1,2,3 trichlorobenzene and trichlorofluoromethane to match the EWMS ground water analyses.*
2. *Holding times begin at the time of sample collection.*

TABLE 5
MAY 2009 WATER QUALITY ANALYTICAL RESULTS
SEMI-ANNUAL SAMPLING

Compound	Remedial Action Objective	DGC-3S	DGC-4S	4D	11D	13D	DUPE A (13D)	14 D	M-24DR	DUPE B (M-24DR)	M-25D	M-27D
Acetone	50	5 UJ	1.9 J	5 UJ	2.8 J	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	7.3 J	5 UJ
Carbon Disulfide	None*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	11	1.1	1.3	1 U	16	14	52	7.6
Chloroform	7	1 U	1 U	1 U	1.4	0.15 J	0.19 J	1 U	0.68 J	0.65 J	3.8 J	0.30 J
2-Butanone	5	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	25 UJ	5 UJ
Trichloroethene	5	1 U	1 U	1 U	1.6	1 U	1 U	1 U	49	49	93	11
Trichlorofluoromethane	5*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.15 J
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U
1,1-Dichloroethene	NP	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U
Chromium	50*	NA	NA	NA	NA	7.1	9.3	NA	NA	NA	NA	0.88
Hexavalent Chromium	50*	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	10 U
Field Parameters												
pH	--	5.91	7.33	9.37	7.17	7.37	--	7.10	8.06	--	7.59	6.98
Temperature (celsius)	--	7.68	9.63	8.98	9.43	9.88	--	8.96	8.94	--	9.53	9.12
Conductivity (umhos/cm)	--	0.04	0.167	0.083	0.308	0.244	--	0.224	0.206	--	0.345	0.185
Dissolved Oxygen	--	7.9	3.73	6.84	8.0	0.0	--	10.76	9.90	--	5.5	9.8
Turbidity (NTUs)	--	159	104	184	20.9	179	--	9.8	25.8	--	20.8	62.0
Depth To Water (feet)	--	11.88	5.59	34.85	27.28	34.25	--	40.95	34.45	--	27.35	35.95
Ground Water Elevation (feet)	--	193.92	200.21	291.65	292.4	295.02	--	300.42	286.12	--	287.11	268.32

Notes:

1. All analytical concentrations are in µg/l (micrograms per liter (ppb)).
2. Only compounds detected at one or more sampling points are listed.
3. NA - not analyzed for.
4. U - analyte was not detected, and value shown is the detection limit.
5. J - estimated value due to data validation requirements or concentration less than CRQL (organics only).
6. B - The reported value is less than the CRDL but greater than the IDL (inorganics only).

* Based on NYSDEC Final Combined Regulatory Impact and Environmental Impact Statement (Title 6, Chapter X, Parts 700-706, 1998), identified for comparison purposes only.

7. D - Indentifies all compounds analyzed at a secondary dilution factor.
8. NM - Not measured due to equipment malfunction.
9. NP - Not promulgated.

TABLE 5
MAY 2009 WATER QUALITY ANALYTICAL RESULTS
SEMI-ANNUAL SAMPLING

Compound	Remedial Action Objective	M-29D	Trip Blank	Trip Blank	Trip Blank	Cooler Blank	SW-A	SW-B	SW-D	SW-E	SW-F	SW-G
Acetone	50	4.4 J	3.2 J	5 UJ	5 UJ	5 UJ	NA	NA	NA	NA	NA	NA
Carbon Disulfide	None*	2 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	30	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA
Chloroform	7	2.5	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA
2-Butanone	5	10 UJ	5 UJ	5 UJ	5 UJ	5 UJ	NA	NA	NA	NA	NA	NA
Trichloroethene	5	11	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	50*	2 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	5	3.4	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	NP	2 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA
Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexavalent Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters												
pH	--	7.07	--	--	--	--	NA	NA	NA	NA	NA	NA
Temperature (celsius)	--	10.39	--	--	--	--	NA	NA	NA	NA	NA	NA
Conductivity (umhos/cm)	--	0.284	--	--	--	--	NA	NA	NA	NA	NA	NA
Dissolved Oxygen	--	8.4	--	--	--	--	NA	NA	NA	NA	NA	NA
Turbidity (NTUs)	--	8.7	--	--	--	--	NA	NA	NA	NA	NA	NA
Depth To Water (feet)	--	42.78	--	--	--	--	NA	NA	NA	NA	NA	NA
Ground Water Elevation (feet)	--	291.88	--	--	--	--	NA	NA	NA	NA	NA	NA

Notes:

1. All analytical concentrations are in µg/l (micrograms per liter (ppb)).
2. Only compounds detected at one or more sampling points are listed.
3. NA - not analyzed for.
4. U - analyte was not detected, and value shown is the detection limit.
5. J - estimated value due to data validation requirements or concentration less than CRQL (organics only).
6. B - The reported value is less than the CRDL but greater than the IDL (inorganics only).

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7. D - Indentifies all compounds analyzed at a secondary dilution factor.
8. NM - Not measured due to equipment malfunction.
9. NP - Not promulgated.

TABLE 6
SUMMARY OF WATER QUALITY ANALYTICAL RESULTS
MONITORING WELLS DGC-3S, DGC-4S, 13S
JUNE 1987 - MAY 2009
SEMI-ANNUAL SAMPLING

Wells / Compounds	Remedial Action Objective	6/29-7/1/1987	7/31/87	11/5/87	1/19-1/20/1988	4/18-4/19/1988	7/20-7/21/1988	10/11-10/12/88	1/19-1/20/89	4/10/89	7/12/89	8/15/1989
DGC-3S												
Benzene	0.7*	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	None*	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND
Aluminum	100*	0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	25*	NA	NA	NA	NA	<0.005 mg/L	NA	NA	NA	NA	NA	NA
Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexavalent Chromium	50*	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
DGC-4S												
Carbon Disulfide	None*	--	--	--	--	--	--	--	--	--	--	--
Chromium	50*	--	--	--	--	--	--	--	--	--	--	--
13S												
Benzene	0.7*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	None*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	5*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexavalent Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Units are µg/l (ppb) unless otherwise stated.

Only detected compounds are listed.

NA = Not analyzed.

ND = Not detected.

NS = Not sampled.

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dp = Duplicate sample.

E = Estimated concentration: due to interference.

D = Concentration determined from a sample dilution.

J = Estimated concentration.

V = Estimated concentration: due to variance to quality control limits.

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TABLE 6
SUMMARY OF WATER QUALITY ANALYTICAL RESULTS
MONITORING WELLS DGC-3S, DGC-4S, 13S
JUNE 1987 - MAY 2009
SEMI-ANNUAL SAMPLING

Wells / Compounds	Remedial Action Objective	11/30/1989	5/30/90	8/28/90	12/6/90	4/8-4/10/1991	6/12-6/13/1991	9/23-9/24/1991	12/26-12/27/91	2/10-2/11/92	6/1-6/2/1992	9/28-9/29/1992
DGC-3S												
Benzene	0.7*	ND	ND	ND	ND	ND	ND	0.2 J	ND	ND/NDdp	ND	ND
Carbon Disulfide	None*	ND	ND	ND	NA	8 V / 7 Vdp	4	ND	ND	ND/NDdp	ND	ND
Aluminum	100*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	25*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	50*	NA	NA	NA	NA	NA	NA	6.1	62.2E/70.3Edp	16.2/ND*, 14.6/ND*dp	25.2/ND*	ND
Hexavalent Chromium	50*	no data	NA	NA	NA	NA	NA	NA	NA	ND/4*/ND dp	NA	NA
DGC-4S												
Carbon Disulfide	None*	- -	- -	- -	- -	ND/0.5Vdp	ND	ND	ND	ND	ND	ND/ND dp
Chromium	50*	- -	- -	- -	- -	NA	NA	15.9	11.9 E	ND/ND*	ND/ND*	ND/ND dp
13S												
Benzene	0.7*	NA	NA	NA	NA	2	0.7/0.6 Jdp	1	ND	ND	ND	ND
Carbon Disulfide	None*	NA	NA	NA	NA	60 D	0.6	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	NA	18/16 dp	6.4	4.4	8	24 J/24 Jdp	8	12	9	6 J	9
Chloroform	7	NA	ND	ND	ND	ND	0.8/0.9 Jdp	ND	0.4 J	0.3 J	ND	ND
Trichloroethene	5	NA	ND	ND	ND	ND	ND	0.4 J	0.9	0.6	ND	0.6
Trichlorofluoromethane	5*	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5
Chromium	50*	NA	NA	NA	NA	336 V	NA	269/261**	316 E/562 E**	282/498**	504/512**	179/172**
Hexavalent Chromium	50*	NA	NA	NA	NA	NA	NA	280	486/302**	260/310**	NA	287

Notes:

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E = Estimated concentration: due to interference.

D = Concentration determined from a sample dilution.

J = Estimated concentration.

V = Estimated concentration: due to variance to quality control limits.

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TABLE 6
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MONITORING WELLS DGC-3S, DGC-4S, 13S
JUNE 1987 - MAY 2009
SEMI-ANNUAL SAMPLING

Wells / Compounds	Remedial Action Objective	11/18-11/19/1992	3/17-3/18/1993	5/25-5/26/1993	8/24-8/25/1993	11/8-11/9/1993	2/22-2/23/1994	5/18-5/19/1994	8/24-8/25/1994	11/15-11/16/1994	5/23/1995	10/17/1995
DGC-3S												
Benzene	0.7*	ND	ND	ND	ND	ND	ND	ND V	ND	ND	ND	ND
Carbon Disulfide	None*	ND	ND	ND	0.8	ND	ND	ND V	ND	ND	ND	ND
Aluminum	100*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	25*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	50*	33.6/ND*	18.5	4.3 B	4.7B	19.4	23.9	4.5 B	9.9 B	11.1	NA	NA
Hexavalent Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DGC-4S												
Carbon Disulfide	None*	4 V	ND	0.3 J	0.2J	ND	ND	ND V/ND V dp	ND	ND	ND	ND
Chromium	50*	8.6 B	48.1/ND*	ND	3.3B	ND	31.2/ND*	ND/ND dp	5.6 B	ND	NA	NA
13S												
Benzene	0.7*	0.4 JV	ND	ND	ND	ND	ND/ND dp	ND	ND	ND	NA	NA
Carbon Disulfide	None*	ND	ND	ND	ND	ND	ND/ND dp	ND	ND	ND	NA	NA
Carbon Tetrachloride	5	16 V	15	10	17	18	20/9 dp	9	9	9	NA	NA
Chloroform	7	0.6 V	0.6	0.4 J	0.6	0.7	ND/ND dp	0.4 J	0.3 J	ND	NA	NA
Trichloroethene	5	1 V	2	0.6	ND	2	2/1 dp	0.8	1	0.9	NA	NA
Trichlorofluoromethane	5*	0.9 V	2	0.5	ND	2	2/1 dp	0.9	1	ND	NA	NA
Chromium	50*	585/576**	746/614**	198/609**	787/716**	572/610**	580/357** 567/357** dp	406/434**	133 V/157 V**	44.2 V/95.8 V**	140 J	52.7 J
Hexavalent Chromium	50*	493	663	460	800	560	530/540 dp	340	101	36	150	48

Notes:

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TABLE 6
SUMMARY OF WATER QUALITY ANALYTICAL RESULTS
MONITORING WELLS DGC-3S, DGC-4S, 13S
JUNE 1987 - MAY 2009
SEMI-ANNUAL SAMPLING

Wells / Compounds	Remedial Action											
DGC-3S	**Objective**	**5/14/1996**	**10/23/1996**	**6/2/1997**	**10/14/1997**	**5/28/1998**	**10/29/1998**	**5/11/1999**	**10/26/1999**	**5/22/2000**	**10/24/2000**	**5/15/2001**
Benzene	0.7*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	None*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aluminum	100*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	25*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexavalent Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DGC-4S												
Carbon Disulfide	None*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13S												
Benzene	0.7*	NA	NA	1U	1U	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	None*	NA	NA	1U	1U	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	NA	NA	1U	8	NA	NA	NA	NA	NA	NA	NA
Chloroform	7	NA	NA	1U	1U	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	5*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	50*	44.8	46.4	90.7/90.9**	71.4	71.2	98.6 J	72.4	169	249	29.9	136
Hexavalent Chromium	50*	47	47	97	67	51	54.0 J	71.0	178	262	41	12.3

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TABLE 6
SUMMARY OF WATER QUALITY ANALYTICAL RESULTS
MONITORING WELLS DGC-3S, DGC-4S, 13S
JUNE 1987 - MAY 2009
SEMI-ANNUAL SAMPLING

Wells / Compounds	Remedial Action											
DGC-3S	**Objective**	**10/23/2001**	**5/29/2002**	**10/29/2002**	**4/9/2003**	**10/9/2003**	**5/25/2004**	**11/2004**	**5/24/2005**	**10/2005**	**5/23/2006**	**10/16/2006**
Benzene	0.7*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	None*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aluminum	100*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	25*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexavalent Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DGC-4S												
Carbon Disulfide	None*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13S												
Benzene	0.7*	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Carbon Disulfide	None*	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Carbon Tetrachloride	5	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Chloroform	7	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Trichloroethene	5	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Trichlorofluoromethane	5*	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Chromium	50*	43.3	13.4	34.8	52.2	49.4	20.1	NA	NS	NS	NS	NS
Hexavalent Chromium	50*	43.6 J	18	3.59	45	51.5	11	11.2	NS	NS	NS	NS

Notes:

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TABLE 6
SUMMARY OF WATER QUALITY ANALYTICAL RESULTS
MONITORING WELLS DGC-3S, DGC-4S, 13S
JUNE 1987 - MAY 2009
SEMI-ANNUAL SAMPLING

Wells / Compounds	Remedial Action Objective	5/14/2007	10/16/2007	5/15/2008	10/13/2008	5/13/2009
DGC-3S						
Benzene	0.7*	ND	ND	ND	ND	ND
Carbon Disulfide	None*	ND	ND	ND	ND	ND
Aluminum	100*	NA	NA	NA	NA	NA
Lead	25*	NA	NA	NA	NA	NA
Chromium	50*	NA	NA	NA	NA	NA
Hexavalent Chromium	50*	NA	NA	NA	NA	NA
DGC-4S						
Carbon Disulfide	None*	ND	ND	ND	ND	ND
Chromium	50*	NA	NA	NA	NA	NA
13S						
Benzene	0.7*	NS	NS	NS	NS	NS
Carbon Disulfide	None*	NS	NS	NS	NS	NS
Carbon Tetrachloride	5	NS	NS	NS	NS	NS
Chloroform	7	NS	NS	NS	NS	NS
Trichloroethene	5	NS	NS	NS	NS	NS
Trichlorofluoromethane	5*	NS	NS	NS	NS	NS
Chromium	50*	NS	NS	NS	NS	NS
Hexavalent Chromium	50*	NS	NS	NS	NS	NS

Notes:

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ND = Not detected.

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TABLE 7
SUMMARY OF WATER QUALITY ANALYTICAL RESULTS
MONITORING WELLS M-27S, M-27D, M-33S, M-33I
JUNE 1992 - MAY 2009
SEMI-ANNUAL SAMPLING

M-27S	Remedial Action Objective	6/5/1992	11/11/1992	3/14/1994	5/23/1995	10/17/1995	5/14/1996	10/23/1996	6/2/1997	10/14/1997	5/28/1998	10/29/1998	5/11/1999
Carbon Disulfide	None*	ND	ND	not sampled	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J
Chloromethane	5	40	ND	not sampled	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	50*	8.4 B/ND**	57.4/ND**	not sampled	ND	ND	ND	ND	ND	ND	ND	3.2 BJ	0.98B
Hexavalent Chromium	50*	NA	NA	not sampled	ND	ND	ND	ND	ND	ND	ND	ND	ND
M-27D													
Carbon Tetrachloride	5	75/62 dp	23	not sampled	33/42 dp	56	31	28	26	22	27	26 / 27 dp	20.3 / 20.1 dp
Chloroform	7	ND	3	not sampled	4/4 dp	5	3	3	3	2	3	2 / 2 dp	1.8 / 1.8 dp
Chloromethane	5	4 J/28 dp	ND	not sampled	ND/ND dp	ND	ND	ND	ND	ND	ND	ND / ND	ND / ND dp
Trichloroethene	5											ND/ND dp	4.1/4.1 dp
Trichlorofluoromethane	5*	no data	no data	not sampled	no data	no data	no data	no data	no data	no data	no data	0.3 J / 0.3 J dp	0.92J / 0.99J dp
Chromium	50*	2.0 B/ND** 2.0 B/ND** dp	19.8/ND**	not sampled	ND/ND dp	ND	ND	ND	ND	1.2B	ND	4.6 BJ / 4.8 BJ dp	1.4 B / 1.3 B dp
Hexavalent Chromium	50*	NA	NA	not sampled	ND/ND dp	ND	ND	ND	ND	ND	ND	ND / ND dp	ND / ND dp
M-33S													
VOCs	-	not sampled	not sampled	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
M-33I													
VOCs	-	not sampled	not sampled	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

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TABLE 7
SUMMARY OF WATER QUALITY ANALYTICAL RESULTS
MONITORING WELLS M-27S, M-27D, M-33S, M-33I
JUNE 1992 - MAY 2009
SEMI-ANNUAL SAMPLING

M-27S	Remedial Action Objective	10/26/1999	5/22/2000	10/24/2000	5/15/2001	10/23/2001	5/29/2002	10/29/2002	4/15/2003	10/9/2003	5/25/2004	11/2004	5/24/2005
Carbon Disulfide	None*	ND / ND dp	ND	ND	ND / ND dp	ND / ND dp	ND / ND dp	ND J / ND J dp	ND	ND / 0.11 J dp	ND	NA	NA
Chloromethane	5	ND / ND dp	ND	ND	ND / ND dp	ND / ND dp	ND / ND dp	ND J / ND J dp	ND	ND / ND dp	ND	NA	NA
Chromium	50*	0.85B/0.90b dp	1.1B	1.2B	ND / ND dp	ND / ND dp	ND / ND dp	1.2 B	8.5 B	1.0 B / 1.8 B dp	83.1	2.6 B / 2.2 B dp	NA
Hexavalent Chromium	50*	ND / ND dp	ND	ND	ND / ND dp	ND / ND dp	ND / ND dp	ND / ND dp	ND UJ	ND U / ND dp	ND	ND	NA
M-27D													
Carbon Tetrachloride	5	22.3	26.7D/28.9D dp	19.2/19.8 dp	13.8	16.2	14.5	24.2 DJ	5.1 / 4.5 dp	16.6	3 / 2.7 dp	22.1	21
Chloroform	7	1.8	ND / ND dp	1.7J /1.3 dp	1.1	1.1	0.94J	2.4	ND / ND dp	1.0	0.53 JB / 0.55 JB dp	ND	ND
Chloromethane	5	ND	ND / ND dp	ND / ND dp	ND	ND	ND	ND	ND ND dp	ND	ND ND dp	ND	ND
Trichloroethene	5	10.7	12.8 / 12.1 dp	26.4 /26.5D dp	19.4	27 D	22.7	14	2.4 / 2.2 dp	21.8 D	3.2 / 2.9 dp	22.7	18
Trichlorofluoromethane	5*	1.4	1.9 / 1.8 dp	2.9 / 2.9 dp	2.0	2.2	1.5	0.96 J	0.21J / 0.18J dp	2.3	0.27 J / 0.29 J dp	2.3	1.3
Chromium	50*	0.81B	2B/1.8B dp	1.2B/1.2B dp	ND	1.5 B	2 B	1.5 B	5.9B / 6.1B dp	1.2 B	22.6 / 21.3 dp	2.6 B	1.7 B
Hexavalent Chromium	50*	ND	ND/ND dp	ND/ND dp	ND	ND	ND	ND	ND / ND dp	ND	ND / ND dp	ND	ND
M-33S													
VOCs	-	ND	ND	ND	8.0 J	ND	ND	ND	ND	ND	ND	ND	ND
M-33I													
VOCs	-	ND	ND	ND	4.1 J	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Units are ug/l (ppb) unless otherwise stated.

Only detected compounds are listed.

NA = Not analyzed.

ND = Not detected.

J = Estimated concentration.

dp = Duplicate sample.

B = The reported value is less than the CRQL/CRDL but greater than the IDL.

D = Indentifies compound analyzed at a secondary dilution factor.

* Based on NYSDEC Final Combined Regulatory Impact and Environmental Impact Statement (Title 6, Chapter X, Parts 700-706, 1998), identified for comparison purposes only.

** = Filtered Sample.

TABLE 7
SUMMARY OF WATER QUALITY ANALYTICAL RESULTS
MONITORING WELLS M-27S, M-27D, M-33S, M-33I
JUNE 1992 - MAY 2009
SEMI-ANNUAL SAMPLING

M-27S	Remedial Action Objective	10/2005	5/23/2006	10/16/2006	5/14/2007	10/16/2007	5/14/2008	10/13/2008	5/13/2009
Carbon Disulfide	None*	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	5	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA
Hexavalent Chromium	50*	NA	NA	NA	NA	NA	NA	NA	NA
M-27D									
Carbon Tetrachloride	5	13	22	12	15	10	11	9	7.6
Chloroform	7	ND	2	0.76J	2	0.7J	ND	0.6 J	0.30 J
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	24	16	21	15	14	13	11	11
Trichlorofluoromethane	5*	1.0	1 J	1.0	0.9J	0.8J	0.6J	0.3 J	0.15 J
Chromium	50*	1.6 B	2.7	1.7 BJ	ND	ND	ND	0.810	0.88
Hexavalent Chromium	50*	ND	ND	ND	ND	ND	ND	ND	ND
M-33S									
VOCs	-	ND	ND	ND	ND	ND	ND	ND	--
M-33I									
VOCs	-	ND	ND	ND	ND	ND	NA	ND	--

Notes:

Units are ug/l (ppb) unless otherwise stated.

Only detected compounds are listed.

NA = Not analyzed.

ND = Not detected.

J = Estimated concentration.

dp = Duplicate sample.

B = The reported value is less than the CRQL/CRDL but greater than the IDL.

D = Indentifies compound analyzed at a secondary dilution factor.

* Based on NYSDEC Final Combined Regulatory Impact and Environmental Impact Statement (Title 6, Chapter X, Parts 700-706, 1998), identified for comparison purposes only.

** = Filtered Sample.

-- = Well Removed according to instruction by Environmental Protection Agency

TABLE 8
SUMMARY OF WATER QUALITY ANALYTICAL RESULTS
MONITORING WELLS 4D, 11D, M-24D, M-25D, M-29D, 13D
JUNE 1992 - MAY 2009
SEMI-ANNUAL SAMPLING

Wells / Compounds	Remedial Action Objective	6/1-6/2/1992	11/18-11/19/1992	11/2004	5/24/2005	10/24/2005	5/23/2006	10/16/2006	5/14/2007	10/16/2007	5/14/2008	10/13/2008	5/13/2009
4D													
Acetone	50	ND	ND R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11D													
Acetone	50	ND	ND R	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8 J
Carbon Tetrachloride	5	ND	6	4.6	13	14	15	12	12	13	11	10	11
Chloroform	7	ND	3	ND	4.0	3.0	4.0	3.0	3	2	ND	2	1.4
Trichloroethene	5	9J	7	ND	0.8 J	0.9J	1 J	2.0	1	1	1	2	1.6
M-24D													
Acetone	50	ND	ND R	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
Carbon Tetrachloride	5	10	0.7	0.59 J	10	10	11	11	10	9	9	10	---
Chloroform	7	ND	ND	ND	0.6 J	0.5J	0.5 J	0.44 J	0.4 J	0.4 J	ND	0.3 J	---
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---
M-24DR													
Acetone	50	--	--	--	--	--	--	--	--	--	--	--	ND
Carbon Tetrachloride	5	--	--	--	--	--	--	--	--	--	--	--	16
Chloroform	7	--	--	--	--	--	--	--	--	--	--	--	0.68 J
Trichloroethene	5	--	--	--	--	--	--	--	--	--	--	--	49
M-25D													
Acetone	50	ND	ND R	ND	ND	ND	49 D*	25 JD	ND	ND	ND	ND	7.3 J
Carbon Tetrachloride	5	48	27R	86.8 D	81 D	91	76 D*	71 D	60	65	56	52	52
Chloroform	7	ND	3R	8.7	8.0	9.0	8 D*	7 D	7	6	ND	4	3.8 J
Trichloroethene	5	3J	8R	16.1	35 D	37	28 D*	22 D	31	34	52	79 D	93
M-29D													
Acetone	50	ND	ND R	ND	ND	ND	16 D*	ND	ND	ND	ND	ND	4.4 J
Carbon Tetrachloride	5	79	84	10.8	38 D	37	39 D*	33 D	32	34	33	32	30
Chloroform	7	ND	14	ND	4.0	5.0	5 D*	4 D	3	3	ND	2	2.5
Trichloroethene	5	19	24	6.0	14	13	14 D*	12 D	11	11	11	10	11
13D													
Chromium	50*	98.4	38.9 J	4.5 B	78.3	60.8 J	11	17.1	25.3	5.2B	13.2	7.3	7.1
Hexavalent Chromium	50*	NA	NA	10 U	10 U	10 U	10 U	14.2	10 U	10 U	10 U	10 U	10 U

Notes:

Units are µg/l (ppb) unless otherwise stated.
Only detected compounds are listed.
See Remedial Investigation report for additional c
NA = Not analyzed.
ND = Not detected.
NS = Not sampled.
B = The reported value is less than the CRQL/CF
dp = Duplicate sample.
E = Estimated concentration: due to interference.
R = Analysis rejected

D* = Concentration determined from a sample dilution.
J = Estimated concentration.
V = Estimated concentration: due to variance to quality control limits.
- - = Not sampled: well installed in March, 2009.
--- = Well Removed according to instruction by Environmental Protection Agency
* Based on NYSDEC Final Combined Regulatory Impact and Environmental Impact Statement (Title 6, Chapter X, Parts 700-706, 1998), identified for comparison purposes only.
** = Filtered Sample.

FIGURES

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
ALBANY, NY	S. SHKOLNIK 07/14/09			134815D1

ROUTE 9P

COLD SPRINGS WELLS

COLD SPRINGS ROAD

CRAMER ROAD

SW-E

SW-F

SW-G

7

8

6a

6b

M-33S/33I

LUTHER FOREST
RESIDENTIAL
DEVELOPMENT

M-26S/26D

M-11S/11D

M-24S/24D

M-24DR

M-15

M-31S/31D

M-34

M-28S/28D

4S/4D

MW-4

M-18

M-30

M-1/14D

M-32

M-29S/29D

M-17

2S

M-19

MW-3

RW-1D

M-16

M-23

MW-2

M-35S/35I

PLAINS ROAD

M-22

M-21

M-20

1a

1b

M-25S/25D

10S/10D

13S/13D

RW-2D

3S/3D

M-27S/27D

SW-D

2b

2c

SW-B

SW-A

DGC-3S

DGC-4S

PW-4

PW-3

PW-2

PW-1

PW-6

KNAPP ROAD

LEGEND

RW-1D	RECOVERY WELL
M-23	SINGLE WELL LOCATION
DGC-4S	WELL PAIR LOCATION & ID#
PW-2	PUMPING WELL LOCATION & ID#
M-24S	ABANDONED WELL LOCATION
M-24DR	REPLACED WELL LOCATION
	LUTHER FOREST WELL FIELD
SW-D	SURFACE WATER SAMPLE LOCATION & ID#
6b	RAVINE LOCATION & ID#
— —	APPROXIMATE MRFA SITE BOUNDARY
.....	250' GROUND SURFACE CONTOUR LINE
.....	ENVIRONMENTAL RESTRICTION BOUNDARY

NOTE:
LOCATIONS OF RW-1D AND RW-2D ARE APPROXIMATE.

REFERENCE:
BASE MAP SOURCE: ERM-NORTHEAST
ENVIRONMENTAL RESOURCES MANAGEMENT

DRAWING NOT TO SCALE

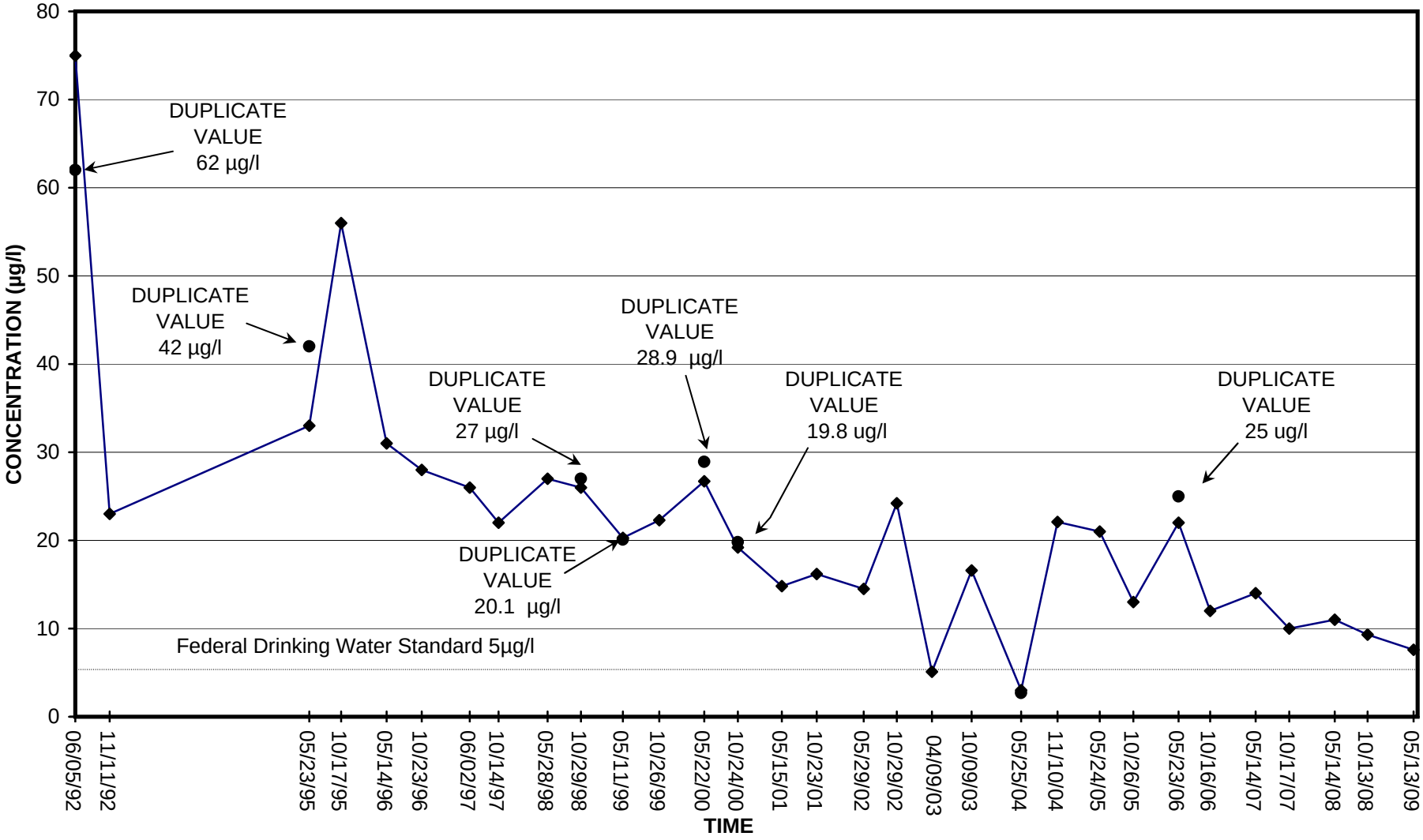
Shaw
Shaw Environmental, Inc.

MALTA ROCKET FUEL AREA SITE
MALTA, NEW YORK

FIGURE 1
SITE LOCATION MAP

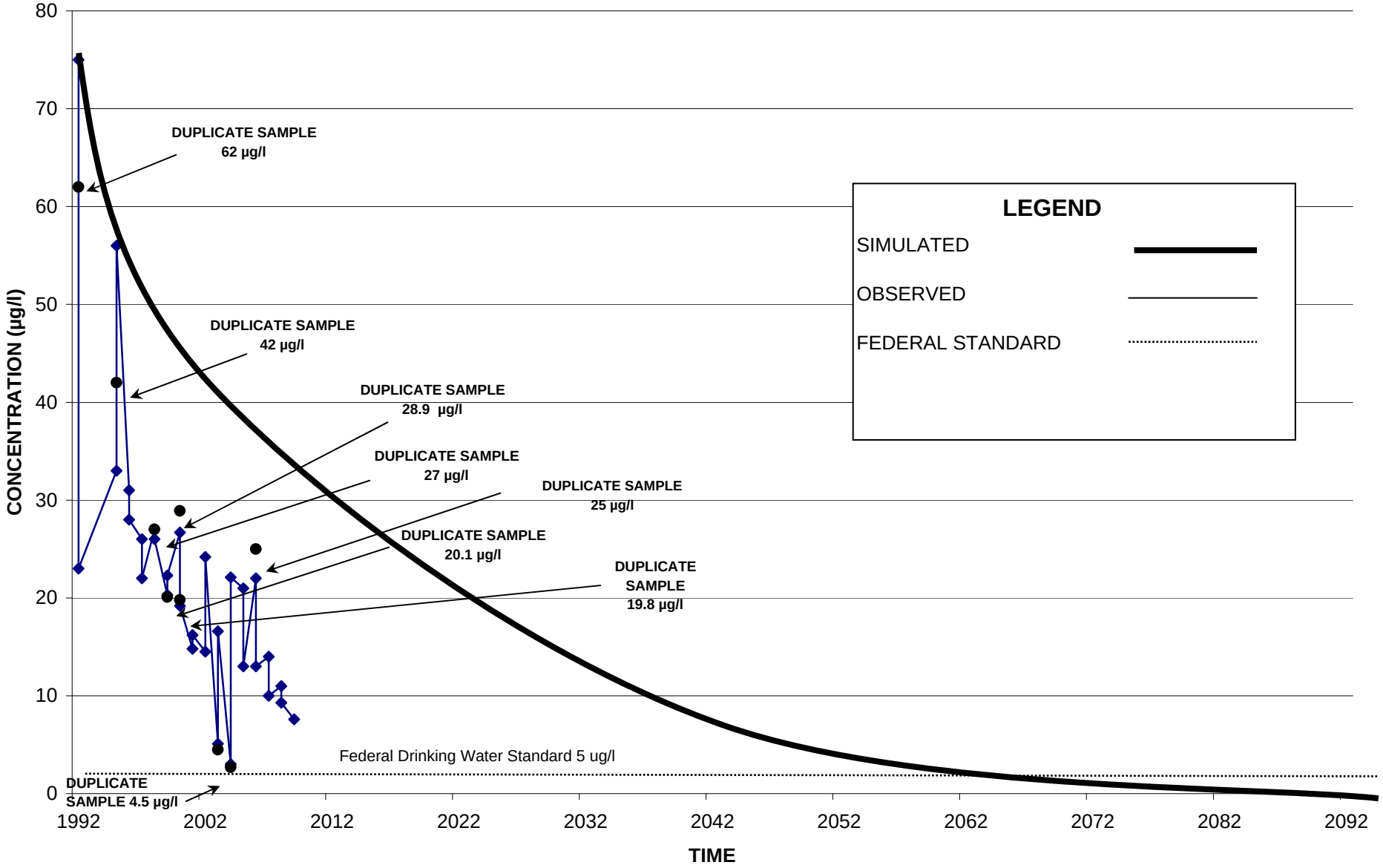
L:\project\MRFA\134815\134815D1.dwg
Plot Date/Time: 08/05/09 11:00am
Format Revised: 11/23/99
Image: .
Xref: .

FIGURE 2
WELL M-27D CARBON TETRACHLORIDE CONCENTRATIONS



X:\MG\MRFA\Semi-Annual Reports\Jan 1 through June 30 2009\Figures 2-3.xls

FIGURE 3
SIMULATED VERSUS OBSERVED (MAY 2009)
CARBON TETRACHLORIDE CONCENTRATIONS
AT WELL M-27D



X:\MG\MRFA\Semi-Annual Reports\Jan 1 through June 30 2009\Figures 2-3.xls

APPENDIX A

LABORATORY DATA, INFLUENT/EFFLUENT WATER SAMPLES

FEBRUARY 13, 2009

QUALIFIED SAMPLE RESULTS FORMS

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MRFA-INFL

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-001|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4318.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	UJ
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	7	
107-06-2	1,2-Dichloroethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	50 ~~52~~	~~E~~
71-43-2	Benzene	1	U
79-01-6	Trichloroethene	65 ~~65~~	~~E~~
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	(m+p) Xylene	1	U
1330-20-7	o-Xylene	1	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
75-25-2	Bromoform	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MRFA-INFL

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-001|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4318.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	UUJ
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MRFA-INFL

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-001|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4318.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DIRFA-DUPE A

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-002|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4316.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	U UJ
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	0.3	J
71-43-2	Benzene	1	U
79-01-6	Trichloroethene	0.4	J
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	(m+p) Xylene	1	U
1330-20-7	o-Xylene	1	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
75-25-2	Bromoform	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DIRFA-DUPE A

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-002|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4316.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U UJ
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DIRFA-DUPE A

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: _____ SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-002|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4316.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. _____ Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MRFA-EFFLUENT

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-003|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4312.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	U UJ
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	0.4	J
71-43-2	Benzene	1	U
79-01-6	Trichloroethene	0.5	J
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	(m+p) Xylene	1	U
1330-20-7	o-Xylene	1	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
75-25-2	Bromoform	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MRFA-EFFLUENT

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-003|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4312.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
MRFA-EFFLUENT

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: _____ SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-003|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4312.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. _____ Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP BLANK

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-004|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4314.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	2	J J
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	(m+p) Xylene	1	U
1330-20-7	o-Xylene	1	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
75-25-2	Bromoform	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP BLANK

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-004|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4314.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	UUJ
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: _____ SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-004|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4314.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. _____ Date Analyzed: 2/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

COOLER BLK

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-005|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4336.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/23/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	5	UUJ
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	(m+p) Xylene	1	U
1330-20-7	o-Xylene	1	U
100-42-5	Styrene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
75-25-2	Bromoform	1	U
541-73-1	1,3-Dichlorobenzene	1	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

COOLER BLK

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-005|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4336.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. Date Analyzed: 2/23/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U UJ
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

COOLER BLK

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-833 SAS No.: _____ SDG No.: MRFA-INF

Matrix: (soil/water) WATER Lab Sample ID: R0900833-005|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W4336.D

Level: (low/med) LOW Date Received: 2/17/09

% Moisture: not dec. _____ Date Analyzed: 2/23/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

APPENDIX B

LABORATORY DATA, GROUNDWATER SAMPLES (MAY 12 AND 13, 2009) AND LABORATORY DATA, INFLUENT/EFFLUENT WATER SAMPLES (MAY 13, 2009)

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	DUPE A	**Units:**	µg/L
Lab Code:	R0902679-001	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/14/09 13:39		153654	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/14/09 13:39		153654	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/14/09 13:39		153654	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/14/09 13:39		153654	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/14/09 13:39		153654	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/14/09 13:39		153654	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/14/09 13:39		153654	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/14/09 13:39		153654	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/14/09 13:39		153654	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/14/09 13:39		153654	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/14/09 13:39		153654	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/14/09 13:39		153654	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/14/09 13:39		153654	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/14/09 13:39		153654	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/14/09 13:39		153654	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/14/09 13:39		153654	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/14/09 13:39		153654	
Acetone	5.0 12 J	UJ	5.0	0.97	1	NA	5/14/09 13:39		153654	
Benzene	1.0	U	1.0	0.057	1	NA	5/14/09 13:39		153654	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/14/09 13:39		153654	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/14/09 13:39		153654	
Bromoform	1.0	U	1.0	0.083	1	NA	5/14/09 13:39		153654	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/14/09 13:39		153654	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/14/09 13:39		153654	
Carbon Tetrachloride	**1.3**		1.0	0.073	1	NA	5/14/09 13:39		153654	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/14/09 13:39		153654	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/14/09 13:39		153654	
Chloroform	**0.19**	J	1.0	0.12	1	NA	5/14/09 13:39		153654	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 13:39		153654	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/14/09 13:39		153654	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/14/09 13:39		153654	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 13:39		153654	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/14/09 13:39		153654	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	DUPE A	**Units:**	µg/L
Lab Code:	R0902679-001	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/14/09 13:39		153654	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/14/09 13:39		153654	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/14/09 13:39		153654	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/14/09 13:39		153654	
Styrene	1.0	U	1.0	0.054	1	NA	5/14/09 13:39		153654	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/14/09 13:39		153654	
Toluene	1.0	U	1.0	0.049	1	NA	5/14/09 13:39		153654	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/14/09 13:39		153654	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/14/09 13:39		153654	
Trichloroethene (TCE)	1.0	U	1.0	0.077	1	NA	5/14/09 13:39		153654	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/14/09 13:39		153654	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/14/09 13:39		153654	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	100	80-120	5/14/09 13:39		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUPE A

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-001|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5582.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. _____ Date Analyzed: 5/14/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Shaw Environmental & Infrastructure, Inc.
Project: GE MRFA Project #134815
Sample Matrix: Water

Sample Name: 13D
Lab Code: R0902679-002

Service Request: R0902679
Date Collected: 5/12/09 1345
Date Received: 5/13/09

Units: µg/L
Basis: NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/14/09 14:22		153654	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/14/09 14:22		153654	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/14/09 14:22		153654	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/14/09 14:22		153654	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/14/09 14:22		153654	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/14/09 14:22		153654	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/14/09 14:22		153654	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/14/09 14:22		153654	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/14/09 14:22		153654	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/14/09 14:22		153654	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/14/09 14:22		153654	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/14/09 14:22		153654	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/14/09 14:22		153654	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/14/09 14:22		153654	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/14/09 14:22		153654	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/14/09 14:22		153654	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/14/09 14:22		153654	
Acetone	5.0	U UJ	5.0	0.97	1	NA	5/14/09 14:22		153654	
Benzene	1.0	U	1.0	0.057	1	NA	5/14/09 14:22		153654	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/14/09 14:22		153654	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/14/09 14:22		153654	
Bromoform	1.0	U	1.0	0.083	1	NA	5/14/09 14:22		153654	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/14/09 14:22		153654	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/14/09 14:22		153654	
Carbon Tetrachloride	**1.1**		1.0	0.073	1	NA	5/14/09 14:22		153654	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/14/09 14:22		153654	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/14/09 14:22		153654	
Chloroform	**0.15**	J	1.0	0.12	1	NA	5/14/09 14:22		153654	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 14:22		153654	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/14/09 14:22		153654	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/14/09 14:22		153654	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 14:22		153654	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/14/09 14:22		153654	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 1345
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	13D	**Units:**	µg/L
Lab Code:	R0902679-002	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/14/09 14:22		153654	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/14/09 14:22		153654	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/14/09 14:22		153654	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/14/09 14:22		153654	
Styrene	1.0	U	1.0	0.054	1	NA	5/14/09 14:22		153654	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/14/09 14:22		153654	
Toluene	1.0	U	1.0	0.049	1	NA	5/14/09 14:22		153654	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/14/09 14:22		153654	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/14/09 14:22		153654	
Trichloroethene (TCE)	1.0	U	1.0	0.077	1	NA	5/14/09 14:22		153654	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/14/09 14:22		153654	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/14/09 14:22		153654	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	98	80-120	5/14/09 14:22		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

13D

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-002|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5583.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. _____ Date Analyzed: 5/14/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 1307
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	M-27D	**Units:**	µg/L
Lab Code:	R0902679-004	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/14/09 14:58		153654	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/14/09 14:58		153654	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/14/09 14:58		153654	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/14/09 14:58		153654	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/14/09 14:58		153654	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/14/09 14:58		153654	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/14/09 14:58		153654	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/14/09 14:58		153654	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/14/09 14:58		153654	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/14/09 14:58		153654	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/14/09 14:58		153654	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/14/09 14:58		153654	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/14/09 14:58		153654	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/14/09 14:58		153654	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/14/09 14:58		153654	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/14/09 14:58		153654	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/14/09 14:58		153654	
Acetone	5.0	U UJ	5.0	0.97	1	NA	5/14/09 14:58		153654	
Benzene	1.0	U	1.0	0.057	1	NA	5/14/09 14:58		153654	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/14/09 14:58		153654	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/14/09 14:58		153654	
Bromoform	1.0	U	1.0	0.083	1	NA	5/14/09 14:58		153654	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/14/09 14:58		153654	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/14/09 14:58		153654	
Carbon Tetrachloride	**7.6**		1.0	0.073	1	NA	5/14/09 14:58		153654	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/14/09 14:58		153654	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/14/09 14:58		153654	
Chloroform	**0.30**	J	1.0	0.12	1	NA	5/14/09 14:58		153654	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 14:58		153654	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/14/09 14:58		153654	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/14/09 14:58		153654	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 14:58		153654	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/14/09 14:58		153654	

Comments:

Client: Shaw Environmental & Infrastructure, Inc.
Project: GE MRFA Project #134815
Sample Matrix: Water

Service Request: R0902679
Date Collected: 5/12/09 1307
Date Received: 5/13/09

Sample Name: M-27D
Lab Code: R0902679-004

Units: µg/L
Basis: NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/14/09 14:58		153654	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/14/09 14:58		153654	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/14/09 14:58		153654	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/14/09 14:58		153654	
Styrene	1.0	U	1.0	0.054	1	NA	5/14/09 14:58		153654	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/14/09 14:58		153654	
Toluene	1.0	U	1.0	0.049	1	NA	5/14/09 14:58		153654	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/14/09 14:58		153654	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/14/09 14:58		153654	
Trichloroethene (TCE)	**11**		1.0	0.077	1	NA	5/14/09 14:58		153654	
Trichlorofluoromethane (CFC 11)	**0.15**	J	1.0	0.12	1	NA	5/14/09 14:58		153654	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/14/09 14:58		153654	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	102	80-120	5/14/09 14:58		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M-27D

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-004|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5584.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. _____ Date Analyzed: 5/14/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 1225
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	DGC-3S	**Units:**	µg/L
Lab Code:	R0902679-005	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/14/09 15:34		153654	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/14/09 15:34		153654	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/14/09 15:34		153654	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/14/09 15:34		153654	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/14/09 15:34		153654	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/14/09 15:34		153654	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/14/09 15:34		153654	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/14/09 15:34		153654	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/14/09 15:34		153654	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/14/09 15:34		153654	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/14/09 15:34		153654	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/14/09 15:34		153654	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/14/09 15:34		153654	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/14/09 15:34		153654	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/14/09 15:34		153654	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/14/09 15:34		153654	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/14/09 15:34		153654	
Acetone	5.0	U UJ	5.0	0.97	1	NA	5/14/09 15:34		153654	
Benzene	1.0	U	1.0	0.057	1	NA	5/14/09 15:34		153654	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/14/09 15:34		153654	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/14/09 15:34		153654	
Bromoform	1.0	U	1.0	0.083	1	NA	5/14/09 15:34		153654	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/14/09 15:34		153654	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/14/09 15:34		153654	
Carbon Tetrachloride	1.0	U	1.0	0.073	1	NA	5/14/09 15:34		153654	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/14/09 15:34		153654	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/14/09 15:34		153654	
Chloroform	1.0	U	1.0	0.12	1	NA	5/14/09 15:34		153654	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 15:34		153654	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/14/09 15:34		153654	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/14/09 15:34		153654	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 15:34		153654	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/14/09 15:34		153654	

Comments:

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 1225
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	DGC-3S	**Units:**	µg/L
Lab Code:	R0902679-005	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/14/09 15:34		153654	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/14/09 15:34		153654	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/14/09 15:34		153654	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/14/09 15:34		153654	
Styrene	1.0	U	1.0	0.054	1	NA	5/14/09 15:34		153654	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/14/09 15:34		153654	
Toluene	1.0	U	1.0	0.049	1	NA	5/14/09 15:34		153654	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/14/09 15:34		153654	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/14/09 15:34		153654	
Trichloroethene (TCE)	1.0	U	1.0	0.077	1	NA	5/14/09 15:34		153654	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/14/09 15:34		153654	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/14/09 15:34		153654	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	103	80-120	5/14/09 15:34		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DGC-3S

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-005|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5585.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. Date Analyzed: 5/14/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 1150
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	DGC-4S	**Units:**	µg/L
Lab Code:	R0902679-006	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/14/09 16:10		153654	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/14/09 16:10		153654	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/14/09 16:10		153654	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/14/09 16:10		153654	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/14/09 16:10		153654	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/14/09 16:10		153654	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/14/09 16:10		153654	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/14/09 16:10		153654	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/14/09 16:10		153654	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/14/09 16:10		153654	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/14/09 16:10		153654	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/14/09 16:10		153654	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/14/09 16:10		153654	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/14/09 16:10		153654	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/14/09 16:10		153654	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/14/09 16:10		153654	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/14/09 16:10		153654	
Acetone	**1.9**	J J	5.0	0.97	1	NA	5/14/09 16:10		153654	
Benzene	1.0	U	1.0	0.057	1	NA	5/14/09 16:10		153654	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/14/09 16:10		153654	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/14/09 16:10		153654	
Bromoform	1.0	U	1.0	0.083	1	NA	5/14/09 16:10		153654	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/14/09 16:10		153654	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/14/09 16:10		153654	
Carbon Tetrachloride	1.0	U	1.0	0.073	1	NA	5/14/09 16:10		153654	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/14/09 16:10		153654	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/14/09 16:10		153654	
Chloroform	1.0	U	1.0	0.12	1	NA	5/14/09 16:10		153654	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 16:10		153654	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/14/09 16:10		153654	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/14/09 16:10		153654	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 16:10		153654	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/14/09 16:10		153654	

Comments:

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 1150
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	DGC-4S	**Units:**	µg/L
Lab Code:	R0902679-006	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/14/09 16:10		153654	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/14/09 16:10		153654	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/14/09 16:10		153654	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/14/09 16:10		153654	
Styrene	1.0	U	1.0	0.054	1	NA	5/14/09 16:10		153654	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/14/09 16:10		153654	
Toluene	1.0	U	1.0	0.049	1	NA	5/14/09 16:10		153654	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/14/09 16:10		153654	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/14/09 16:10		153654	
Trichloroethene (TCE)	1.0	U	1.0	0.077	1	NA	5/14/09 16:10		153654	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/14/09 16:10		153654	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/14/09 16:10		153654	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	100	80-120	5/14/09 16:10		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DGC-4S

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-006|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5586.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. _____ Date Analyzed: 5/14/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Client: Shaw Environmental & Infrastructure, Inc.
Project: GE MRFA Project #134815
Sample Matrix: Water

Service Request: R0902679
Date Collected: 5/12/09 0955
Date Received: 5/13/09

Sample Name: M-25D
Lab Code: R0902679-007

Units: µg/L
Basis: NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	5.0	U	5.0	0.41	5	NA	5/14/09 18:33		153654	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.75	5	NA	5/14/09 18:33		153654	
1,1,2-Trichloroethane	5.0	U	5.0	0.60	5	NA	5/14/09 18:33		153654	
1,1-Dichloroethane (1,1-DCA)	5.0	U	5.0	0.60	5	NA	5/14/09 18:33		153654	
1,1-Dichloroethene (1,1-DCE)	5.0	U	5.0	0.55	5	NA	5/14/09 18:33		153654	
1,2,3-Trichlorobenzene	5.0	U	5.0	0.30	5	NA	5/14/09 18:33		153654	
1,2,4-Trichlorobenzene	5.0	U	5.0	0.24	5	NA	5/14/09 18:33		153654	
1,2-Dibromo-3-chloropropane (DBCP)	5.0	U UJ	5.0	1.3	5	NA	5/14/09 18:33		153654	
1,2-Dibromoethane	5.0	U	5.0	0.65	5	NA	5/14/09 18:33		153654	
1,2-Dichloroethane	5.0	U	5.0	0.86	5	NA	5/14/09 18:33		153654	
1,2-Dichlorobenzene	5.0	U	5.0	0.40	5	NA	5/14/09 18:33		153654	
1,2-Dichloropropane	5.0	U	5.0	0.50	5	NA	5/14/09 18:33		153654	
1,3-Dichlorobenzene	5.0	U	5.0	0.31	5	NA	5/14/09 18:33		153654	
1,4-Dichlorobenzene	5.0	U	5.0	0.38	5	NA	5/14/09 18:33		153654	
2-Butanone (MEK)	25	U UJ	25	7.1	5	NA	5/14/09 18:33		153654	
2-Hexanone	25	U	25	5.5	5	NA	5/14/09 18:33		153654	
4-Methyl-2-pentanone	25	U	25	2.7	5	NA	5/14/09 18:33		153654	
Acetone	**7.3**	J J	25	4.9	5	NA	5/14/09 18:33		153654	
Benzene	5.0	U	5.0	0.29	5	NA	5/14/09 18:33		153654	
Bromochloromethane	5.0	U	5.0	0.50	5	NA	5/14/09 18:33		153654	
Bromodichloromethane	5.0	U	5.0	0.25	5	NA	5/14/09 18:33		153654	
Bromoform	5.0	U	5.0	0.42	5	NA	5/14/09 18:33		153654	
Bromomethane	5.0	U	5.0	2.1	5	NA	5/14/09 18:33		153654	
Carbon Disulfide	5.0	U	5.0	1.0	5	NA	5/14/09 18:33		153654	
Carbon Tetrachloride	**52**		5.0	0.37	5	NA	5/14/09 18:33		153654	
Chlorobenzene	5.0	U	5.0	0.44	5	NA	5/14/09 18:33		153654	
Chloroethane	5.0	U	5.0	0.47	5	NA	5/14/09 18:33		153654	
Chloroform	**3.8**	J	5.0	0.60	5	NA	5/14/09 18:33		153654	
Chloromethane	5.0	U	5.0	0.65	5	NA	5/14/09 18:33		153654	
cis-1,2-Dichloroethene	**0.60**	J	5.0	0.50	5	NA	5/14/09 18:33		153654	
cis-1,3-Dichloropropene	5.0	U	5.0	0.35	5	NA	5/14/09 18:33		153654	
Dibromochloromethane	5.0	U	5.0	0.65	5	NA	5/14/09 18:33		153654	
Ethylbenzene	5.0	U	5.0	0.29	5	NA	5/14/09 18:33		153654	

Comments:

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 0955
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	M-25D	**Units:**	µg/L
Lab Code:	R0902679-007	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	5.0	U	5.0	0.60	5	NA	5/14/09 18:33		153654	
m,p-Xylenes	5.0	U	5.0	0.65	5	NA	5/14/09 18:33		153654	
Dichloromethane (Methylene Chloride)	5.0	U	5.0	0.55	5	NA	5/14/09 18:33		153654	
o-Xylene	5.0	U	5.0	0.38	5	NA	5/14/09 18:33		153654	
Styrene	5.0	U	5.0	0.27	5	NA	5/14/09 18:33		153654	
Tetrachloroethene (PCE)	5.0	U	5.0	0.42	5	NA	5/14/09 18:33		153654	
Toluene	5.0	U	5.0	0.25	5	NA	5/14/09 18:33		153654	
trans-1,2-Dichloroethene	5.0	U	5.0	0.46	5	NA	5/14/09 18:33		153654	
trans-1,3-Dichloropropene	5.0	U	5.0	0.40	5	NA	5/14/09 18:33		153654	
Trichloroethene (TCE)	**93**		5.0	0.39	5	NA	5/14/09 18:33		153654	
Trichlorofluoromethane (CFC 11)	5.0	U	5.0	0.60	5	NA	5/14/09 18:33		153654	
Vinyl Chloride	5.0	U	5.0	0.65	5	NA	5/14/09 18:33		153654	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	101	80-120	5/14/09 18:33		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M-25D

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-007|5.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5590.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. _____ Date Analyzed: 5/14/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 5.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Shaw Environmental & Infrastructure, Inc.
Project: GE MRFA Project #134815
Sample Matrix: Water

Service Request: R0902679
Date Collected: 5/12/09 0910
Date Received: 5/13/09

Sample Name: M-11D
Lab Code: R0902679-008

Units: µg/L
Basis: NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/14/09 16:45		153654	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/14/09 16:45		153654	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/14/09 16:45		153654	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/14/09 16:45		153654	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/14/09 16:45		153654	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/14/09 16:45		153654	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/14/09 16:45		153654	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/14/09 16:45		153654	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/14/09 16:45		153654	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/14/09 16:45		153654	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/14/09 16:45		153654	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/14/09 16:45		153654	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/14/09 16:45		153654	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/14/09 16:45		153654	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/14/09 16:45		153654	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/14/09 16:45		153654	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/14/09 16:45		153654	
Acetone	**2.8**	J J	5.0	0.97	1	NA	5/14/09 16:45		153654	
Benzene	1.0	U	1.0	0.057	1	NA	5/14/09 16:45		153654	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/14/09 16:45		153654	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/14/09 16:45		153654	
Bromoform	1.0	U	1.0	0.083	1	NA	5/14/09 16:45		153654	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/14/09 16:45		153654	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/14/09 16:45		153654	
Carbon Tetrachloride	**11**		1.0	0.073	1	NA	5/14/09 16:45		153654	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/14/09 16:45		153654	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/14/09 16:45		153654	
Chloroform	**1.4**		1.0	0.12	1	NA	5/14/09 16:45		153654	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 16:45		153654	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/14/09 16:45		153654	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/14/09 16:45		153654	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 16:45		153654	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/14/09 16:45		153654	

Comments:

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 0910
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	M-11D	**Units:**	µg/L
Lab Code:	R0902679-008	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/14/09 16:45		153654	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/14/09 16:45		153654	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/14/09 16:45		153654	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/14/09 16:45		153654	
Styrene	1.0	U	1.0	0.054	1	NA	5/14/09 16:45		153654	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/14/09 16:45		153654	
Toluene	**0.10**	J	1.0	0.049	1	NA	5/14/09 16:45		153654	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/14/09 16:45		153654	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/14/09 16:45		153654	
Trichloroethene (TCE)	**1.6**		1.0	0.077	1	NA	5/14/09 16:45		153654	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/14/09 16:45		153654	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/14/09 16:45		153654	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	101	80-120	5/14/09 16:45		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M-11D

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-008|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5587.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. _____ Date Analyzed: 5/14/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 0840
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	M-29D	**Units:**	µg/L
Lab Code:	R0902679-009	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	**3.4**		2.0	0.17	2	NA	5/14/09 17:58		153654	
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.30	2	NA	5/14/09 17:58		153654	
1,1,2-Trichloroethane	2.0	U	2.0	0.24	2	NA	5/14/09 17:58		153654	
1,1-Dichloroethane (1,1-DCA)	2.0	U	2.0	0.24	2	NA	5/14/09 17:58		153654	
1,1-Dichloroethene (1,1-DCE)	2.0	U	2.0	0.22	2	NA	5/14/09 17:58		153654	
1,2,3-Trichlorobenzene	2.0	U	2.0	0.12	2	NA	5/14/09 17:58		153654	
1,2,4-Trichlorobenzene	2.0	U	2.0	0.096	2	NA	5/14/09 17:58		153654	
1,2-Dibromo-3-chloropropane (DBCP)	2.0	U UJ	2.0	0.50	2	NA	5/14/09 17:58		153654	
1,2-Dibromoethane	2.0	U	2.0	0.26	2	NA	5/14/09 17:58		153654	
1,2-Dichloroethane	2.0	U	2.0	0.34	2	NA	5/14/09 17:58		153654	
1,2-Dichlorobenzene	2.0	U	2.0	0.16	2	NA	5/14/09 17:58		153654	
1,2-Dichloropropane	2.0	U	2.0	0.20	2	NA	5/14/09 17:58		153654	
1,3-Dichlorobenzene	2.0	U	2.0	0.13	2	NA	5/14/09 17:58		153654	
1,4-Dichlorobenzene	2.0	U	2.0	0.15	2	NA	5/14/09 17:58		153654	
2-Butanone (MEK)	10	U UJ	10	2.9	2	NA	5/14/09 17:58		153654	
2-Hexanone	10	U	10	2.2	2	NA	5/14/09 17:58		153654	
4-Methyl-2-pentanone	10	U	10	1.1	2	NA	5/14/09 17:58		153654	
Acetone	**4.4**	J J	10	2.0	2	NA	5/14/09 17:58		153654	
Benzene	2.0	U	2.0	0.12	2	NA	5/14/09 17:58		153654	
Bromochloromethane	2.0	U	2.0	0.20	2	NA	5/14/09 17:58		153654	
Bromodichloromethane	2.0	U	2.0	0.10	2	NA	5/14/09 17:58		153654	
Bromoform	2.0	U	2.0	0.17	2	NA	5/14/09 17:58		153654	
Bromomethane	2.0	U	2.0	0.84	2	NA	5/14/09 17:58		153654	
Carbon Disulfide	2.0	U	2.0	0.40	2	NA	5/14/09 17:58		153654	
Carbon Tetrachloride	**30**		2.0	0.15	2	NA	5/14/09 17:58		153654	
Chlorobenzene	2.0	U	2.0	0.18	2	NA	5/14/09 17:58		153654	
Chloroethane	2.0	U	2.0	0.19	2	NA	5/14/09 17:58		153654	
Chloroform	**2.5**		2.0	0.24	2	NA	5/14/09 17:58		153654	
Chloromethane	2.0	U	2.0	0.26	2	NA	5/14/09 17:58		153654	
cis-1,2-Dichloroethene	**0.24**	J	2.0	0.20	2	NA	5/14/09 17:58		153654	
cis-1,3-Dichloropropene	2.0	U	2.0	0.14	2	NA	5/14/09 17:58		153654	
Dibromochloromethane	2.0	U	2.0	0.26	2	NA	5/14/09 17:58		153654	
Ethylbenzene	2.0	U	2.0	0.12	2	NA	5/14/09 17:58		153654	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 0840
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	M-29D	**Units:**	µg/L
Lab Code:	R0902679-009	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	2.0	U	2.0	0.24	2	NA	5/14/09 17:58		153654	
m,p-Xylenes	2.0	U	2.0	0.26	2	NA	5/14/09 17:58		153654	
Dichloromethane (Methylene Chloride)	2.0	U	2.0	0.22	2	NA	5/14/09 17:58		153654	
o-Xylene	2.0	U	2.0	0.15	2	NA	5/14/09 17:58		153654	
Styrene	2.0	U	2.0	0.11	2	NA	5/14/09 17:58		153654	
Tetrachloroethene (PCE)	2.0	U	2.0	0.17	2	NA	5/14/09 17:58		153654	
Toluene	2.0	U	2.0	0.098	2	NA	5/14/09 17:58		153654	
trans-1,2-Dichloroethene	2.0	U	2.0	0.19	2	NA	5/14/09 17:58		153654	
trans-1,3-Dichloropropene	2.0	U	2.0	0.16	2	NA	5/14/09 17:58		153654	
Trichloroethene (TCE)	**11**		2.0	0.16	2	NA	5/14/09 17:58		153654	
Trichlorofluoromethane (CFC 11)	2.0	U	2.0	0.24	2	NA	5/14/09 17:58		153654	
Vinyl Chloride	2.0	U	2.0	0.26	2	NA	5/14/09 17:58		153654	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	99	80-120	5/14/09 17:58		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M-29D

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-009|2.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5589.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. _____ Date Analyzed: 5/14/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 2.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

Client: Shaw Environmental & Infrastructure, Inc.
Project: GE MRFA Project #134815
Sample Matrix: Water

Service Request: R0902679
Date Collected: 5/12/09 0810
Date Received: 5/13/09

Sample Name: 14D
Lab Code: R0902679-010

Units: µg/L
Basis: NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/14/09 17:21		153654	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/14/09 17:21		153654	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/14/09 17:21		153654	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/14/09 17:21		153654	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/14/09 17:21		153654	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/14/09 17:21		153654	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/14/09 17:21		153654	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/14/09 17:21		153654	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/14/09 17:21		153654	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/14/09 17:21		153654	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/14/09 17:21		153654	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/14/09 17:21		153654	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/14/09 17:21		153654	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/14/09 17:21		153654	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/14/09 17:21		153654	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/14/09 17:21		153654	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/14/09 17:21		153654	
Acetone	5.0	U UJ	5.0	0.97	1	NA	5/14/09 17:21		153654	
Benzene	1.0	U	1.0	0.057	1	NA	5/14/09 17:21		153654	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/14/09 17:21		153654	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/14/09 17:21		153654	
Bromoform	1.0	U	1.0	0.083	1	NA	5/14/09 17:21		153654	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/14/09 17:21		153654	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/14/09 17:21		153654	
Carbon Tetrachloride	1.0	U	1.0	0.073	1	NA	5/14/09 17:21		153654	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/14/09 17:21		153654	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/14/09 17:21		153654	
Chloroform	1.0	U	1.0	0.12	1	NA	5/14/09 17:21		153654	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 17:21		153654	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/14/09 17:21		153654	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/14/09 17:21		153654	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 17:21		153654	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/14/09 17:21		153654	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09 0810
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	14D	**Units:**	µg/L
Lab Code:	R0902679-010	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/14/09 17:21		153654	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/14/09 17:21		153654	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/14/09 17:21		153654	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/14/09 17:21		153654	
Styrene	1.0	U	1.0	0.054	1	NA	5/14/09 17:21		153654	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/14/09 17:21		153654	
Toluene	1.0	U	1.0	0.049	1	NA	5/14/09 17:21		153654	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/14/09 17:21		153654	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/14/09 17:21		153654	
Trichloroethene (TCE)	1.0	U	1.0	0.077	1	NA	5/14/09 17:21		153654	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/14/09 17:21		153654	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/14/09 17:21		153654	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	99	80-120	5/14/09 17:21		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

14D

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-010|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5588.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. _____ Date Analyzed: 5/14/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Shaw Environmental & Infrastructure, Inc.
Project: GE MRFA Project #134815
Sample Matrix: Water

Service Request: R0902679
Date Collected: 5/13/09
Date Received: 5/13/09

Sample Name: Cooler Blank
Lab Code: R0902679-011

Units: µg/L
Basis: NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/19/09 22:45		154241	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/19/09 22:45		154241	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/19/09 22:45		154241	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/19/09 22:45		154241	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/19/09 22:45		154241	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/19/09 22:45		154241	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/19/09 22:45		154241	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/19/09 22:45		154241	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/19/09 22:45		154241	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/19/09 22:45		154241	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/19/09 22:45		154241	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/19/09 22:45		154241	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/19/09 22:45		154241	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/19/09 22:45		154241	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/19/09 22:45		154241	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/19/09 22:45		154241	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/19/09 22:45		154241	
Acetone	5.0	U UJ	5.0	0.97	1	NA	5/19/09 22:45		154241	
Benzene	1.0	U	1.0	0.057	1	NA	5/19/09 22:45		154241	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/19/09 22:45		154241	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/19/09 22:45		154241	
Bromoform	1.0	U	1.0	0.083	1	NA	5/19/09 22:45		154241	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/19/09 22:45		154241	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/19/09 22:45		154241	
Carbon Tetrachloride	1.0	U	1.0	0.073	1	NA	5/19/09 22:45		154241	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/19/09 22:45		154241	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/19/09 22:45		154241	
Chloroform	1.0	U	1.0	0.12	1	NA	5/19/09 22:45		154241	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 22:45		154241	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/19/09 22:45		154241	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/19/09 22:45		154241	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 22:45		154241	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/19/09 22:45		154241	

Comments:

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	Cooler Blank	**Units:**	µg/L
Lab Code:	R0902679-011	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/19/09 22:45		154241	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/19/09 22:45		154241	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/19/09 22:45		154241	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/19/09 22:45		154241	
Styrene	1.0	U	1.0	0.054	1	NA	5/19/09 22:45		154241	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/19/09 22:45		154241	
Toluene	1.0	U	1.0	0.049	1	NA	5/19/09 22:45		154241	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/19/09 22:45		154241	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/19/09 22:45		154241	
Trichloroethene (TCE)	1.0	U	1.0	0.077	1	NA	5/19/09 22:45		154241	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/19/09 22:45		154241	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/19/09 22:45		154241	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	96	80-120	5/19/09 22:45		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

COOLER BLK

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-011|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5653.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. _____ Date Analyzed: 5/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R0902679-012	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/14/09 19:09		153654	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/14/09 19:09		153654	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/14/09 19:09		153654	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/14/09 19:09		153654	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/14/09 19:09		153654	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/14/09 19:09		153654	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/14/09 19:09		153654	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/14/09 19:09		153654	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/14/09 19:09		153654	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/14/09 19:09		153654	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/14/09 19:09		153654	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/14/09 19:09		153654	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/14/09 19:09		153654	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/14/09 19:09		153654	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/14/09 19:09		153654	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/14/09 19:09		153654	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/14/09 19:09		153654	
Acetone	5.0	U UJ	5.0	0.97	1	NA	5/14/09 19:09		153654	
Benzene	1.0	U	1.0	0.057	1	NA	5/14/09 19:09		153654	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/14/09 19:09		153654	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/14/09 19:09		153654	
Bromoform	1.0	U	1.0	0.083	1	NA	5/14/09 19:09		153654	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/14/09 19:09		153654	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/14/09 19:09		153654	
Carbon Tetrachloride	1.0	U	1.0	0.073	1	NA	5/14/09 19:09		153654	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/14/09 19:09		153654	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/14/09 19:09		153654	
Chloroform	1.0	U	1.0	0.12	1	NA	5/14/09 19:09		153654	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 19:09		153654	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/14/09 19:09		153654	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/14/09 19:09		153654	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/14/09 19:09		153654	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/14/09 19:09		153654	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/12/09
Sample Matrix:	Water	**Date Received:**	5/13/09
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R0902679-012	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/14/09 19:09		153654	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/14/09 19:09		153654	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/14/09 19:09		153654	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/14/09 19:09		153654	
Styrene	1.0	U	1.0	0.054	1	NA	5/14/09 19:09		153654	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/14/09 19:09		153654	
Toluene	1.0	U	1.0	0.049	1	NA	5/14/09 19:09		153654	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/14/09 19:09		153654	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/14/09 19:09		153654	
Trichloroethene (TCE)	1.0	U	1.0	0.077	1	NA	5/14/09 19:09		153654	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/14/09 19:09		153654	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/14/09 19:09		153654	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	99	80-120	5/14/09 19:09		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-012|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5591.D

Level: (low/med) LOW Date Received: 5/13/09

% Moisture: not dec. _____ Date Analyzed: 5/14/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	DUPE B	**Units:**	µg/L
Lab Code:	R0902679-013	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/19/09 17:57		154241	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/19/09 17:57		154241	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/19/09 17:57		154241	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/19/09 17:57		154241	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/19/09 17:57		154241	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/19/09 17:57		154241	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/19/09 17:57		154241	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	UUJ	1.0	0.25	1	NA	5/19/09 17:57		154241	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/19/09 17:57		154241	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/19/09 17:57		154241	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/19/09 17:57		154241	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/19/09 17:57		154241	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/19/09 17:57		154241	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/19/09 17:57		154241	
2-Butanone (MEK)	5.0	UUJ	5.0	1.5	1	NA	5/19/09 17:57		154241	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/19/09 17:57		154241	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/19/09 17:57		154241	
Acetone	5.0	UUJ	5.0	0.97	1	NA	5/19/09 17:57		154241	
Benzene	1.0	U	1.0	0.057	1	NA	5/19/09 17:57		154241	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/19/09 17:57		154241	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/19/09 17:57		154241	
Bromoform	1.0	U	1.0	0.083	1	NA	5/19/09 17:57		154241	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/19/09 17:57		154241	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/19/09 17:57		154241	
Carbon Tetrachloride	**14**		1.0	0.073	1	NA	5/19/09 17:57		154241	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/19/09 17:57		154241	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/19/09 17:57		154241	
Chloroform	**0.65**	J	1.0	0.12	1	NA	5/19/09 17:57		154241	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 17:57		154241	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/19/09 17:57		154241	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/19/09 17:57		154241	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 17:57		154241	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/19/09 17:57		154241	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	DUPE B	**Units:**	µg/L
Lab Code:	R0902679-013	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/19/09 17:57		154241	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/19/09 17:57		154241	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/19/09 17:57		154241	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/19/09 17:57		154241	
Styrene	1.0	U	1.0	0.054	1	NA	5/19/09 17:57		154241	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/19/09 17:57		154241	
Toluene	1.0	U	1.0	0.049	1	NA	5/19/09 17:57		154241	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/19/09 17:57		154241	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/19/09 17:57		154241	
Trichloroethene (TCE)	49 ~~46~~	E	1.0	0.077	1	NA	5/19/09 17:57		154241	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/19/09 17:57		154241	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/19/09 17:57		154241	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	93	80-120	5/19/09 17:57		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUPE B

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-013|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5645.D

Level: (low/med) LOW Date Received: 5/14/09

% Moisture: not dec. _____ Date Analyzed: 5/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	DUPE C	**Units:**	µg/L
Lab Code:	R0902679-014	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/19/09 20:22		154241	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/19/09 20:22		154241	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/19/09 20:22		154241	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/19/09 20:22		154241	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/19/09 20:22		154241	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/19/09 20:22		154241	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/19/09 20:22		154241	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/19/09 20:22		154241	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/19/09 20:22		154241	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/19/09 20:22		154241	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/19/09 20:22		154241	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/19/09 20:22		154241	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/19/09 20:22		154241	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/19/09 20:22		154241	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/19/09 20:22		154241	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/19/09 20:22		154241	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/19/09 20:22		154241	
Acetone	**1.4**	J J	5.0	0.97	1	NA	5/19/09 20:22		154241	
Benzene	1.0	U	1.0	0.057	1	NA	5/19/09 20:22		154241	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/19/09 20:22		154241	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/19/09 20:22		154241	
Bromoform	1.0	U	1.0	0.083	1	NA	5/19/09 20:22		154241	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/19/09 20:22		154241	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/19/09 20:22		154241	
Carbon Tetrachloride	**0.17**	J	1.0	0.073	1	NA	5/19/09 20:22		154241	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/19/09 20:22		154241	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/19/09 20:22		154241	
Chloroform	1.0	U	1.0	0.12	1	NA	5/19/09 20:22		154241	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 20:22		154241	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/19/09 20:22		154241	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/19/09 20:22		154241	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 20:22		154241	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/19/09 20:22		154241	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	DUPE C	**Units:**	µg/L
Lab Code:	R0902679-014	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/19/09 20:22		154241	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/19/09 20:22		154241	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/19/09 20:22		154241	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/19/09 20:22		154241	
Styrene	1.0	U	1.0	0.054	1	NA	5/19/09 20:22		154241	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/19/09 20:22		154241	
Toluene	1.0	U	1.0	0.049	1	NA	5/19/09 20:22		154241	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/19/09 20:22		154241	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/19/09 20:22		154241	
Trichloroethene (TCE)	**0.27**	J	1.0	0.077	1	NA	5/19/09 20:22		154241	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/19/09 20:22		154241	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/19/09 20:22		154241	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	95	80-120	5/19/09 20:22		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUPE C

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-014|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5649.D

Level: (low/med) LOW Date Received: 5/14/09

% Moisture: not dec. _____ Date Analyzed: 5/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09 0920
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	M-24 DR	**Units:**	µg/L
Lab Code:	R0902679-015	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/19/09 16:49		154241	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/19/09 16:49		154241	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/19/09 16:49		154241	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/19/09 16:49		154241	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/19/09 16:49		154241	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/19/09 16:49		154241	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/19/09 16:49		154241	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/19/09 16:49		154241	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/19/09 16:49		154241	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/19/09 16:49		154241	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/19/09 16:49		154241	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/19/09 16:49		154241	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/19/09 16:49		154241	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/19/09 16:49		154241	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/19/09 16:49		154241	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/19/09 16:49		154241	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/19/09 16:49		154241	
Acetone	5.0	U UJ	5.0	0.97	1	NA	5/19/09 16:49		154241	
Benzene	1.0	U	1.0	0.057	1	NA	5/19/09 16:49		154241	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/19/09 16:49		154241	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/19/09 16:49		154241	
Bromoform	1.0	U	1.0	0.083	1	NA	5/19/09 16:49		154241	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/19/09 16:49		154241	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/19/09 16:49		154241	
Carbon Tetrachloride	**16**		1.0	0.073	1	NA	5/19/09 16:49		154241	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/19/09 16:49		154241	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/19/09 16:49		154241	
Chloroform	**0.68**	J	1.0	0.12	1	NA	5/19/09 16:49		154241	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 16:49		154241	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/19/09 16:49		154241	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/19/09 16:49		154241	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 16:49		154241	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/19/09 16:49		154241	

Comments:

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09 0920
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	M-24 DR	**Units:**	µg/L
Lab Code:	R0902679-015	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/19/09 16:49		154241	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/19/09 16:49		154241	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/19/09 16:49		154241	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/19/09 16:49		154241	
Styrene	1.0	U	1.0	0.054	1	NA	5/19/09 16:49		154241	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/19/09 16:49		154241	
Toluene	1.0	U	1.0	0.049	1	NA	5/19/09 16:49		154241	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/19/09 16:49		154241	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/19/09 16:49		154241	
Trichloroethene (TCE)	49 ~~48~~	E	1.0	0.077	1	NA	5/19/09 16:49		154241	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/19/09 16:49		154241	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/19/09 16:49		154241	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	95	80-120	5/19/09 16:49		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M-24 DR

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-015|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5643.D

Level: (low/med) LOW Date Received: 5/14/09

% Moisture: not dec. _____ Date Analyzed: 5/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Shaw Environmental & Infrastructure, Inc.
Project: GE MRFA Project #134815
Sample Matrix: Water

Service Request: R0902679
Date Collected: 5/13/09 0845
Date Received: 5/14/09

Sample Name: MRFA INFLUENT
Lab Code: R0902679-016

Units: µg/L
Basis: NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	2.5	U		2.5	0.21	2.5	NA	5/19/09 18:31		154241	
1,1,2,2-Tetrachloroethane	2.5	U		2.5	0.38	2.5	NA	5/19/09 18:31		154241	
1,1,2-Trichloroethane	2.5	U		2.5	0.30	2.5	NA	5/19/09 18:31		154241	
1,1-Dichloroethane (1,1-DCA)	2.5	U		2.5	0.30	2.5	NA	5/19/09 18:31		154241	
1,1-Dichloroethene (1,1-DCE)	2.5	U		2.5	0.28	2.5	NA	5/19/09 18:31		154241	
1,2,3-Trichlorobenzene	2.5	U		2.5	0.15	2.5	NA	5/19/09 18:31		154241	
1,2,4-Trichlorobenzene	2.5	U		2.5	0.12	2.5	NA	5/19/09 18:31		154241	
1,2-Dibromo-3-chloropropane (DBCP)	2.5	U	UJ	2.5	0.63	2.5	NA	5/19/09 18:31		154241	
1,2-Dibromoethane	2.5	U		2.5	0.33	2.5	NA	5/19/09 18:31		154241	
1,2-Dichloroethane	2.5	U		2.5	0.43	2.5	NA	5/19/09 18:31		154241	
1,2-Dichlorobenzene	2.5	U		2.5	0.20	2.5	NA	5/19/09 18:31		154241	
1,2-Dichloropropane	2.5	U		2.5	0.25	2.5	NA	5/19/09 18:31		154241	
1,3-Dichlorobenzene	2.5	U		2.5	0.16	2.5	NA	5/19/09 18:31		154241	
1,4-Dichlorobenzene	2.5	U		2.5	0.19	2.5	NA	5/19/09 18:31		154241	
2-Butanone (MEK)	13	U	UJ	13	3.6	2.5	NA	5/19/09 18:31		154241	
2-Hexanone	13	U		13	2.8	2.5	NA	5/19/09 18:31		154241	
4-Methyl-2-pentanone	13	U		13	1.4	2.5	NA	5/19/09 18:31		154241	
Acetone	**3.6**	J	J	13	2.5	2.5	NA	5/19/09 18:31		154241	
Benzene	2.5	U		2.5	0.15	2.5	NA	5/19/09 18:31		154241	
Bromochloromethane	2.5	U		2.5	0.25	2.5	NA	5/19/09 18:31		154241	
Bromodichloromethane	2.5	U		2.5	0.13	2.5	NA	5/19/09 18:31		154241	
Bromoform	2.5	U		2.5	0.21	2.5	NA	5/19/09 18:31		154241	
Bromomethane	2.5	U		2.5	1.1	2.5	NA	5/19/09 18:31		154241	
Carbon Disulfide	2.5	U		2.5	0.50	2.5	NA	5/19/09 18:31		154241	
Carbon Tetrachloride	**32**			2.5	0.19	2.5	NA	5/19/09 18:31		154241	
Chlorobenzene	2.5	U		2.5	0.22	2.5	NA	5/19/09 18:31		154241	
Chloroethane	2.5	U		2.5	0.24	2.5	NA	5/19/09 18:31		154241	
Chloroform	**5.4**			2.5	0.30	2.5	NA	5/19/09 18:31		154241	
Chloromethane	2.5	U		2.5	0.33	2.5	NA	5/19/09 18:31		154241	
cis-1,2-Dichloroethene	2.5	U		2.5	0.25	2.5	NA	5/19/09 18:31		154241	
cis-1,3-Dichloropropene	2.5	U		2.5	0.18	2.5	NA	5/19/09 18:31		154241	
Dibromochloromethane	2.5	U		2.5	0.33	2.5	NA	5/19/09 18:31		154241	
Ethylbenzene	2.5	U		2.5	0.15	2.5	NA	5/19/09 18:31		154241	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09 0845
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	MRFA INFLUENT	**Units:**	µg/L
Lab Code:	R0902679-016	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	2.5	U	2.5	0.30	2.5	NA	5/19/09 18:31		154241	
m,p-Xylenes	2.5	U	2.5	0.33	2.5	NA	5/19/09 18:31		154241	
Dichloromethane (Methylene Chloride)	2.5	U	2.5	0.28	2.5	NA	5/19/09 18:31		154241	
o-Xylene	2.5	U	2.5	0.19	2.5	NA	5/19/09 18:31		154241	
Styrene	2.5	U	2.5	0.14	2.5	NA	5/19/09 18:31		154241	
Tetrachloroethene (PCE)	2.5	U	2.5	0.21	2.5	NA	5/19/09 18:31		154241	
Toluene	2.5	U	2.5	0.13	2.5	NA	5/19/09 18:31		154241	
trans-1,2-Dichloroethene	2.5	U	2.5	0.23	2.5	NA	5/19/09 18:31		154241	
trans-1,3-Dichloropropene	2.5	U	2.5	0.20	2.5	NA	5/19/09 18:31		154241	
Trichloroethene (TCE)	**50**		2.5	0.20	2.5	NA	5/19/09 18:31		154241	
Trichlorofluoromethane (CFC 11)	2.5	U	2.5	0.30	2.5	NA	5/19/09 18:31		154241	
Vinyl Chloride	2.5	U	2.5	0.33	2.5	NA	5/19/09 18:31		154241	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	93	80-120	5/19/09 18:31		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MRFA INFL

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-016|2.5

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5646.D

Level: (low/med) LOW Date Received: 5/14/09

% Moisture: not dec. _____ Date Analyzed: 5/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 2.5

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09 0850
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	MRFA EFFLUENT	**Units:**	µg/L
Lab Code:	R0902679-017	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/19/09 16:20		154241	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/19/09 16:20		154241	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/19/09 16:20		154241	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/19/09 16:20		154241	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/19/09 16:20		154241	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/19/09 16:20		154241	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/19/09 16:20		154241	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/19/09 16:20		154241	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/19/09 16:20		154241	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/19/09 16:20		154241	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/19/09 16:20		154241	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/19/09 16:20		154241	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/19/09 16:20		154241	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/19/09 16:20		154241	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/19/09 16:20		154241	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/19/09 16:20		154241	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/19/09 16:20		154241	
Acetone	5.0	~~1.1 J~~ UJ	5.0	0.97	1	NA	5/19/09 16:20		154241	
Benzene	1.0	U	1.0	0.057	1	NA	5/19/09 16:20		154241	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/19/09 16:20		154241	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/19/09 16:20		154241	
Bromoform	1.0	U	1.0	0.083	1	NA	5/19/09 16:20		154241	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/19/09 16:20		154241	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/19/09 16:20		154241	
Carbon Tetrachloride	**0.19**	J	1.0	0.073	1	NA	5/19/09 16:20		154241	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/19/09 16:20		154241	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/19/09 16:20		154241	
Chloroform	1.0	U	1.0	0.12	1	NA	5/19/09 16:20		154241	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 16:20		154241	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/19/09 16:20		154241	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/19/09 16:20		154241	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 16:20		154241	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/19/09 16:20		154241	

Comments:

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09 0850
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	MRFA EFFLUENT	**Units:**	µg/L
Lab Code:	R0902679-017	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/19/09 16:20		154241	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/19/09 16:20		154241	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/19/09 16:20		154241	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/19/09 16:20		154241	
Styrene	1.0	U	1.0	0.054	1	NA	5/19/09 16:20		154241	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/19/09 16:20		154241	
Toluene	1.0	U	1.0	0.049	1	NA	5/19/09 16:20		154241	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/19/09 16:20		154241	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/19/09 16:20		154241	
Trichloroethene (TCE)	**0.27**	J	1.0	0.077	1	NA	5/19/09 16:20		154241	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/19/09 16:20		154241	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/19/09 16:20		154241	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	97	80-120	5/19/09 16:20		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MRFA EFFL

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-017|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5642.D

Level: (low/med) LOW Date Received: 5/14/09

% Moisture: not dec. _____ Date Analyzed: 5/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R0902679-018	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.081	1	NA	5/19/09 15:48		154241	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.15	1	NA	5/19/09 15:48		154241	
1,1,2-Trichloroethane	1.0	U	1.0	0.12	1	NA	5/19/09 15:48		154241	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.12	1	NA	5/19/09 15:48		154241	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.11	1	NA	5/19/09 15:48		154241	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.060	1	NA	5/19/09 15:48		154241	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.048	1	NA	5/19/09 15:48		154241	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.25	1	NA	5/19/09 15:48		154241	
1,2-Dibromoethane	1.0	U	1.0	0.13	1	NA	5/19/09 15:48		154241	
1,2-Dichloroethane	1.0	U	1.0	0.17	1	NA	5/19/09 15:48		154241	
1,2-Dichlorobenzene	1.0	U	1.0	0.079	1	NA	5/19/09 15:48		154241	
1,2-Dichloropropane	1.0	U	1.0	0.10	1	NA	5/19/09 15:48		154241	
1,3-Dichlorobenzene	1.0	U	1.0	0.062	1	NA	5/19/09 15:48		154241	
1,4-Dichlorobenzene	1.0	U	1.0	0.075	1	NA	5/19/09 15:48		154241	
2-Butanone (MEK)	5.0	U UJ	5.0	1.5	1	NA	5/19/09 15:48		154241	
2-Hexanone	5.0	U	5.0	1.1	1	NA	5/19/09 15:48		154241	
4-Methyl-2-pentanone	5.0	U	5.0	0.53	1	NA	5/19/09 15:48		154241	
Acetone	5.0	U UJ	5.0	0.97	1	NA	5/19/09 15:48		154241	
Benzene	1.0	U	1.0	0.057	1	NA	5/19/09 15:48		154241	
Bromochloromethane	1.0	U	1.0	0.10	1	NA	5/19/09 15:48		154241	
Bromodichloromethane	1.0	U	1.0	0.050	1	NA	5/19/09 15:48		154241	
Bromoform	1.0	U	1.0	0.083	1	NA	5/19/09 15:48		154241	
Bromomethane	1.0	U	1.0	0.42	1	NA	5/19/09 15:48		154241	
Carbon Disulfide	1.0	U	1.0	0.20	1	NA	5/19/09 15:48		154241	
Carbon Tetrachloride	1.0	U	1.0	0.073	1	NA	5/19/09 15:48		154241	
Chlorobenzene	1.0	U	1.0	0.087	1	NA	5/19/09 15:48		154241	
Chloroethane	1.0	U	1.0	0.093	1	NA	5/19/09 15:48		154241	
Chloroform	1.0	U	1.0	0.12	1	NA	5/19/09 15:48		154241	
Chloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 15:48		154241	
cis-1,2-Dichloroethene	1.0	U	1.0	0.10	1	NA	5/19/09 15:48		154241	
cis-1,3-Dichloropropene	1.0	U	1.0	0.069	1	NA	5/19/09 15:48		154241	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	5/19/09 15:48		154241	
Ethylbenzene	1.0	U	1.0	0.057	1	NA	5/19/09 15:48		154241	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0902679
Project:	GE MRFA Project #134815	**Date Collected:**	5/13/09
Sample Matrix:	Water	**Date Received:**	5/14/09
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R0902679-018	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.12	1	NA	5/19/09 15:48		154241	
m,p-Xylenes	1.0	U	1.0	0.13	1	NA	5/19/09 15:48		154241	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.11	1	NA	5/19/09 15:48		154241	
o-Xylene	1.0	U	1.0	0.075	1	NA	5/19/09 15:48		154241	
Styrene	1.0	U	1.0	0.054	1	NA	5/19/09 15:48		154241	
Tetrachloroethene (PCE)	1.0	U	1.0	0.083	1	NA	5/19/09 15:48		154241	
Toluene	1.0	U	1.0	0.049	1	NA	5/19/09 15:48		154241	
trans-1,2-Dichloroethene	1.0	U	1.0	0.092	1	NA	5/19/09 15:48		154241	
trans-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	5/19/09 15:48		154241	
Trichloroethene (TCE)	1.0	U	1.0	0.077	1	NA	5/19/09 15:48		154241	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.12	1	NA	5/19/09 15:48		154241	
Vinyl Chloride	1.0	U	1.0	0.13	1	NA	5/19/09 15:48		154241	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	93	80-120	5/19/09 15:48		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-2679 SAS No.: _____ SDG No.: DUPE-A

Matrix: (soil/water) WATER Lab Sample ID: R0902679-018|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5641.D

Level: (low/med) LOW Date Received: 5/14/09

% Moisture: not dec. _____ Date Analyzed: 5/19/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Shaw Environmental & Infrastructure, Inc.
Project: GE MRFA
Sample Matrix: Water

Service Request: R0903008
Date Collected: 5/28/09 1510
Date Received: 5/29/09

Sample Name: 4D
Lab Code: R0903008-001

Units: µg/L
Basis: NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.14	1	NA	6/8/09 14:51		156694	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.12	1	NA	6/8/09 14:51		156694	
1,1,2-Trichloroethane	1.0	U	1.0	0.11	1	NA	6/8/09 14:51		156694	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.11	1	NA	6/8/09 14:51		156694	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.17	1	NA	6/8/09 14:51		156694	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.18	1	NA	6/8/09 14:51		156694	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.13	1	NA	6/8/09 14:51		156694	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.34	1	NA	6/8/09 14:51		156694	
1,2-Dibromoethane	1.0	U	1.0	0.14	1	NA	6/8/09 14:51		156694	
1,2-Dichloroethane	1.0	U	1.0	0.057	1	NA	6/8/09 14:51		156694	
1,2-Dichlorobenzene	1.0	U	1.0	0.090	1	NA	6/8/09 14:51		156694	
1,2-Dichloropropane	1.0	U	1.0	0.15	1	NA	6/8/09 14:51		156694	
1,3-Dichlorobenzene	1.0	U	1.0	0.092	1	NA	6/8/09 14:51		156694	
1,4-Dichlorobenzene	1.0	U	1.0	0.085	1	NA	6/8/09 14:51		156694	
2-Butanone (MEK)	5.0	U UJ	5.0	0.75	1	NA	6/8/09 14:51		156694	
2-Hexanone	5.0	U	5.0	0.51	1	NA	6/8/09 14:51		156694	
4-Methyl-2-pentanone	5.0	U	5.0	0.56	1	NA	6/8/09 14:51		156694	
Acetone	5.0 ~~0.87 J~~	UJ	5.0	0.70	1	NA	6/8/09 14:51		156694	
Benzene	1.0	U	1.0	0.098	1	NA	6/8/09 14:51		156694	
Bromochloromethane	1.0	U	1.0	0.18	1	NA	6/8/09 14:51		156694	
Bromodichloromethane	1.0	U	1.0	0.15	1	NA	6/8/09 14:51		156694	
Bromoform	1.0	U	1.0	0.14	1	NA	6/8/09 14:51		156694	
Bromomethane	1.0	U	1.0	0.12	1	NA	6/8/09 14:51		156694	
Carbon Disulfide	1.0	U	1.0	0.16	1	NA	6/8/09 14:51		156694	
Carbon Tetrachloride	1.0	U	1.0	0.12	1	NA	6/8/09 14:51		156694	
Chlorobenzene	1.0	U	1.0	0.14	1	NA	6/8/09 14:51		156694	
Chloroethane	1.0	U	1.0	0.21	1	NA	6/8/09 14:51		156694	
Chloroform	1.0	U	1.0	0.15	1	NA	6/8/09 14:51		156694	
Chloromethane	1.0	U	1.0	0.12	1	NA	6/8/09 14:51		156694	
cis-1,2-Dichloroethene	1.0	U	1.0	0.11	1	NA	6/8/09 14:51		156694	
cis-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	6/8/09 14:51		156694	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	6/8/09 14:51		156694	
Ethylbenzene	1.0	U	1.0	0.13	1	NA	6/8/09 14:51		156694	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0903008
Project:	GE MRFA	**Date Collected:**	5/28/09 1510
Sample Matrix:	Water	**Date Received:**	5/29/09
Sample Name:	4D	**Units:**	µg/L
Lab Code:	R0903008-001	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.18	1	NA	6/8/09 14:51		156694	
m,p-Xylenes	1.0	U	1.0	0.22	1	NA	6/8/09 14:51		156694	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.16	1	NA	6/8/09 14:51		156694	
o-Xylene	1.0	U	1.0	0.11	1	NA	6/8/09 14:51		156694	
Styrene	1.0	U	1.0	0.096	1	NA	6/8/09 14:51		156694	
Tetrachloroethene (PCE)	1.0	U	1.0	0.15	1	NA	6/8/09 14:51		156694	
Toluene	1.0	U	1.0	0.098	1	NA	6/8/09 14:51		156694	
trans-1,2-Dichloroethene	1.0	U	1.0	0.16	1	NA	6/8/09 14:51		156694	
trans-1,3-Dichloropropene	1.0	U	1.0	0.060	1	NA	6/8/09 14:51		156694	
Trichloroethene (TCE)	1.0	U	1.0	0.16	1	NA	6/8/09 14:51		156694	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.18	1	NA	6/8/09 14:51		156694	
Vinyl Chloride	1.0	U	1.0	0.14	1	NA	6/8/09 14:51		156694	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	97	80-120	6/8/09 14:51		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

4D

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-3008 SAS No.: SDG No.: 4D

Matrix: (soil/water) WATER Lab Sample ID: R0903008-001|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5912.D

Level: (low/med) LOW Date Received: 5/29/09

% Moisture: not dec. Date Analyzed: 6/8/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Shaw Environmental & Infrastructure, Inc.
Project: GE MRFA
Sample Matrix: Water

Service Request: R0903008
Date Collected: 5/28/09
Date Received: 5/29/09

Sample Name: Trip Blank
Lab Code: R0903008-002

Units: µg/L
Basis: NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.14	1	NA	6/8/09 15:21		156694	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.12	1	NA	6/8/09 15:21		156694	
1,1,2-Trichloroethane	1.0	U	1.0	0.11	1	NA	6/8/09 15:21		156694	
1,1-Dichloroethane (1,1-DCA)	1.0	U	1.0	0.11	1	NA	6/8/09 15:21		156694	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.17	1	NA	6/8/09 15:21		156694	
1,2,3-Trichlorobenzene	1.0	U	1.0	0.18	1	NA	6/8/09 15:21		156694	
1,2,4-Trichlorobenzene	1.0	U	1.0	0.13	1	NA	6/8/09 15:21		156694	
1,2-Dibromo-3-chloropropane (DBCP)	1.0	U UJ	1.0	0.34	1	NA	6/8/09 15:21		156694	
1,2-Dibromoethane	1.0	U	1.0	0.14	1	NA	6/8/09 15:21		156694	
1,2-Dichloroethane	1.0	U	1.0	0.057	1	NA	6/8/09 15:21		156694	
1,2-Dichlorobenzene	1.0	U	1.0	0.090	1	NA	6/8/09 15:21		156694	
1,2-Dichloropropane	1.0	U	1.0	0.15	1	NA	6/8/09 15:21		156694	
1,3-Dichlorobenzene	1.0	U	1.0	0.092	1	NA	6/8/09 15:21		156694	
1,4-Dichlorobenzene	1.0	U	1.0	0.085	1	NA	6/8/09 15:21		156694	
2-Butanone (MEK)	5.0	U UJ	5.0	0.75	1	NA	6/8/09 15:21		156694	
2-Hexanone	5.0	U	5.0	0.51	1	NA	6/8/09 15:21		156694	
4-Methyl-2-pentanone	5.0	U	5.0	0.56	1	NA	6/8/09 15:21		156694	
Acetone	**3.2**	J J	5.0	0.70	1	NA	6/8/09 15:21		156694	
Benzene	1.0	U	1.0	0.098	1	NA	6/8/09 15:21		156694	
Bromochloromethane	1.0	U	1.0	0.18	1	NA	6/8/09 15:21		156694	
Bromodichloromethane	1.0	U	1.0	0.15	1	NA	6/8/09 15:21		156694	
Bromoform	1.0	U	1.0	0.14	1	NA	6/8/09 15:21		156694	
Bromomethane	1.0	U	1.0	0.12	1	NA	6/8/09 15:21		156694	
Carbon Disulfide	1.0	U	1.0	0.16	1	NA	6/8/09 15:21		156694	
Carbon Tetrachloride	1.0	U	1.0	0.12	1	NA	6/8/09 15:21		156694	
Chlorobenzene	1.0	U	1.0	0.14	1	NA	6/8/09 15:21		156694	
Chloroethane	1.0	U	1.0	0.21	1	NA	6/8/09 15:21		156694	
Chloroform	1.0	U	1.0	0.15	1	NA	6/8/09 15:21		156694	
Chloromethane	1.0	U	1.0	0.12	1	NA	6/8/09 15:21		156694	
cis-1,2-Dichloroethene	1.0	U	1.0	0.11	1	NA	6/8/09 15:21		156694	
cis-1,3-Dichloropropene	1.0	U	1.0	0.079	1	NA	6/8/09 15:21		156694	
Dibromochloromethane	1.0	U	1.0	0.13	1	NA	6/8/09 15:21		156694	
Ethylbenzene	1.0	U	1.0	0.13	1	NA	6/8/09 15:21		156694	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Shaw Environmental & Infrastructure, Inc.	**Service Request:**	R0903008
Project:	GE MRFA	**Date Collected:**	5/28/09
Sample Matrix:	Water	**Date Received:**	5/29/09
Sample Name:	Trip Blank	**Units:**	µg/L
Lab Code:	R0903008-002	**Basis:**	NA

Low Level Water Volatile Organic Compounds by GC/MS

Analytical Method: CLP-VOA OLC02.1

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Hexachlorobutadiene	1.0	U	1.0	0.18	1	NA	6/8/09 15:21		156694	
m,p-Xylenes	1.0	U	1.0	0.22	1	NA	6/8/09 15:21		156694	
Dichloromethane (Methylene Chloride)	**0.41**	J	1.0	0.16	1	NA	6/8/09 15:21		156694	
o-Xylene	1.0	U	1.0	0.11	1	NA	6/8/09 15:21		156694	
Styrene	1.0	U	1.0	0.096	1	NA	6/8/09 15:21		156694	
Tetrachloroethene (PCE)	1.0	U	1.0	0.15	1	NA	6/8/09 15:21		156694	
Toluene	1.0	U	1.0	0.098	1	NA	6/8/09 15:21		156694	
trans-1,2-Dichloroethene	1.0	U	1.0	0.16	1	NA	6/8/09 15:21		156694	
trans-1,3-Dichloropropene	1.0	U	1.0	0.060	1	NA	6/8/09 15:21		156694	
Trichloroethene (TCE)	1.0	U	1.0	0.16	1	NA	6/8/09 15:21		156694	
Trichlorofluoromethane (CFC 11)	1.0	U	1.0	0.18	1	NA	6/8/09 15:21		156694	
Vinyl Chloride	1.0	U	1.0	0.14	1	NA	6/8/09 15:21		156694	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	95	80-120	6/8/09 15:21		

Comments:

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: CAS/ROCH Contract: SHAW

Lab Code: 10145 Case No.: R09-3008 SAS No.: SDG No.: 4D

Matrix: (soil/water) WATER Lab Sample ID: R0903008-002|1.0

Sample wt/vol: 25.0 (g/ml) ML Lab File ID: W5913.D

Level: (low/med) LOW Date Received: 5/29/09

% Moisture: not dec. Date Analyzed: 6/8/09

GC Column: DB-VRX ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

APPENDIX C

DATA VALIDATION REPORTS

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
Facsimile 518-251-4428

June 29, 2009

Marc Flanagan
Shaw Environmental
13 British American Blvd.
Latham, NY 12110

RE: Validation of MRFA Malta Site Data Packages
CAS Sub Nos. R0900833, R0902679, and R0903008

Dear Mr. Flanagan:

Review has been completed for the data packages generated by Columbia Analytical Services (CAS), pertaining to aqueous samples collected 02/13/09 through 05/28/09 at the MRFA Malta Site. Nineteen samples (including three field duplicates), cooler blanks, and trip blanks were processed for site-specific low level volatiles. Two of these samples and a field duplicate were also analyzed for total and hexavalent chromium. Methodologies utilized are those of the USEPA OLC02.1, EPA CLP ILM and SW846 7196.

Data validation was performed with guidance from the most current editions of the USEPA CLP National Functional Guidelines for Organic and Inorganic Data Review and the USEPA SOPs HW-2 and HW-6, with consideration for the specific methodologies. The following items were reviewed:

* Data Completeness
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicate Correlations
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Instrumental Tunes
* Calibration/CRI Standards
* Instrument IDLs
* ICP Serial Dilutions
* Method Compliance
* Sample Result Verification

The items showing deficiencies are discussed in the following sections of this report. All others were found to be acceptable as outlined in the above-mentioned validation procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the raw data, and generated in compliance with protocol requirements.

In summary, sample processing was conducted primarily with compliance to protocol requirements and with adherence to quality criteria. Sample results are usable as reported, or usable with minor qualification of some of the volatile results as estimated, or with edit to non-detection. These are discussed in the following analytical sections.

Copies of laboratory identification summaries and case narratives are attached to this narrative, and should be reviewed in conjunction with this text. Data summary packages are also submitted with qualifiers applied in red ink to report forms.

Chain-of-Custody

A down-arrow was missing from the matrix entry on the custody form associated with samples collected 05/12/09.

The laboratory receipt date entry for samples collected 5/28/09 does not show the year.

Low Level Volatile Analyses

The results for analytes initially flagged as "E" by the laboratory are to be derived from the dilution analyses of the samples.

The detected results for acetone in 4D, MRFA-Effluent, and DUPEA are edited to reflect non-detection due to very poor mass spectral quality.

Matrix spikes (MS and MSD) of MRFA-Influent (05/09), MRFA-Influent (02/09), M-27D, and 4D show acceptable accuracy and precision for the twelve analytes evaluated.

Volatile blind field duplicate correlations for MRFA-Effluent (02/09), 13D, M-24DR, and Effluent (05/09) are well within validation guidelines.

Acetone and 1,2-dibromo-3-chloropropane exhibit low relative response factors (RRFs) (inherent with the methodology) in all of the project calibration standards. 2-Butanone also shows low RRFs in the calibration standards associated with the May 2009 analyses. The usability of those data is evidenced by spike recoveries and calibration standard responses, but the reporting limits and detected values for those compounds in the specific associated samples should be considered estimated ("UJ" or "J" qualifiers), possibly biased low.

Some of the samples were analyzed at initial dilution due to target analyte concentrations. This results in elevated reporting limits for analytes not detected in the affected samples.

Holding times were met, and surrogate and internal standard responses are within required limits.

Total Chromium Analyses

The matrix spike/lab duplicate accuracy and precision determinations were performed on M-27D, and show recovery and duplicate correlation within recommended limits. The field duplicate evaluation for 13D also shows good correlation.

The serial dilution evaluation of M-27D is not applicable due to low sample concentrations.

Instrument performance was acceptable. Reported results are substantiated by the raw data, and generated in compliance with required protocols. Quality control parameter results meet validation requirements.

Hexavalent Chromium Analyses

Review was conducted for method compliance, holding times, transcription, calculations, standard and blank acceptability, accuracy and precision, etc., as applicable to the procedure. All were found to be acceptable unless noted below.

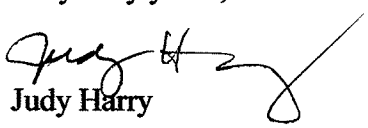
The matrix spike/laboratory duplicate accuracy and precision determinations were performed on M-27D, and show recovery and duplicate correlation within recommended limits.

The field duplicate correlation for 13D was also within guidelines.

Holding times were met. Reported results are substantiated by the raw data, and generated in compliance with required protocols.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,



Judy Harry

VALIDATION QUALIFIER DEFINITIONS

DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the national qualifiers assigned to results in the data review process. If the Regions choose to use additional qualifiers, a complete explanation of those qualifiers should accompany the data review.

U - **The analyte was analyzed for, but was not detected above the reported sample quantitation limit.**

J - **The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.**

N - **The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification."**

NJ - **The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.**

UJ - **The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.**

R - **The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.**

CLIENT and LABORATORY SAMPLE IDs and CASE NARRATIVES

CAS ASP/CLP Batching Form/Login Sheet

Client Proj #: MRFA-INFLUENT
Submission: R0900833
Client: Shaw Environmental & Infrastruct
Client Rep: JJAEGER
Project: GE MRFA Project #134815

Batch Complete: Yes
Diskette Requested: No
Date: 2/17/09
Custody Seal: Present/Absent:
Chain of Custody: Present/Absent:

Date Revised:
Date Due: 3/10/09
Protocol: CLP
Shipping No.:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R0900833-001QC	MRFA-INFLUENT	Water	CLP-VOA OLC02.1	2/13/09	2/17/09			
R0900833-002	DIRFA-DUPE A	Water	CLP-VOA OLC02.1	2/13/09	2/17/09			
R0900833-003	MRFA-EFFLUENT	Water	CLP-VOA OLC02.1	2/13/09	2/17/09			
R0900833-004	TRIP BLANK	Water	CLP-VOA OLC02.1	2/13/09	2/17/09			

Folder Comments: need extra 3 compounds

CAS ASP/CLP Batching Form/Login Sheet

Client Proj #: DUPE A
Submission: R0902679
Client: Shaw Environmental & Infrastruct
Client Rep: JJAEGER
Project: GE MRFA Project #134815

Batch Complete: Yes
Diskette Requested: No
Date: 5/18/09
Custody Seal: Present/Absent:
Chain of Custody: Present/Absent:

Date Revised:
Date Due: 6/4/09
Protocol: SW846
Shipping No.:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R0902679-001	DUPE A	Water	7196A, CLP-METALS ILM05.3, CLP-VOA OLC02.1	5/12/09	5/13/09			
R0902679-002	13D	Water	7196A, CLP-METALS ILM05.3, CLP-VOA OLC02.1	5/12/09	5/13/09			
R0902679-004QC	M-27D	Water	7196A, CLP-METALS ILM05.3, CLP-VOA OLC02.1	5/12/09	5/13/09			
R0902679-005	DGC-3S	Water	CLP-VOA OLC02.1	5/12/09	5/13/09			
R0902679-006	DGC-4S	Water	CLP-VOA OLC02.1	5/12/09	5/13/09			
R0902679-007	M-25D	Water	CLP-VOA OLC02.1	5/12/09	5/13/09			
R0902679-008	M-11D	Water	CLP-VOA OLC02.1	5/12/09	5/13/09			
R0902679-009	M-29D	Water	CLP-VOA OLC02.1	5/12/09	5/13/09			
R0902679-010	14D	Water	CLP-VOA OLC02.1	5/12/09	5/13/09			
R0902679-011	Cooler Blank	Water	CLP-VOA OLC02.1	5/13/09	5/13/09			
R0902679-012	TRIP BLANK	Water	CLP-VOA OLC02.1	5/12/09	5/13/09			
R0902679-013	DUPE B	Water	CLP-VOA OLC02.1	5/13/09	5/14/09			
R0902679-014	DUPE C	Water	CLP-VOA OLC02.1	5/13/09	5/14/09			
R0902679-015	M-24 DR	Water	CLP-VOA OLC02.1	5/13/09	5/14/09			
R0902679-016QC	MRFA INFLUENT	Water	CLP-VOA OLC02.1	5/13/09	5/14/09			
R0902679-017	MRFA EFFLUENT	Water	CLP-VOA OLC02.1	5/13/09	5/14/09			
R0902679-018	TRIP BLANK	Water	CLP-VOA OLC02.1	5/13/09	5/14/09			

0003

Folder Comments: need extra 3 compounds, e-mail invoices to Karen and Steve

CAS ASP/CLP Batching Form/Login Sheet

Client Proj #:		Batch Complete: Yes	Date Revised:
Submission:	R0903008	Diskette Requested: No	Date Due: 6/19/09
Client:	Shaw Environmental & Infrastruct	Date: 5/29/09	Protocol: CLP
Client Rep:	JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project:	GE MRFA	Chain of Custody: Present/Absent:	

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R0903008-001	4D	Water	CLP-VOA OLC02.1	5/28/09	5/29/09			
R0903008-002	Trip Blank	Water	CLP-VOA OLC02.1	5/28/09	5/29/09			
R0903008-003	Cooler Blank	Water	CLP-VOA OLC02.1	5/28/09	5/29/09			

115055

Folder Comments: need extra 3 compounds, e-mail invoices to Karen and Steve

CASE NARRATIVE

COMPANY: Shaw Environmental
GE MRFA Project #134815
SUBMISSION #: R0900833

Shaw samples were collected on 02/13/09 and received at CAS on 02/14/09 in good condition.

VOLATILE ORGANICS

Four samples and one cooler blank were analyzed for OLC 2.1 Volatiles by CLP methodology.

All the initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within QC limits.

Site specific QC was performed on MRFA Influent. All MS/MSD recoveries were within limits. All Reference spike recoveries were within limits. All RPD's were within limits.

Various compounds for MRFA Influent have been flagged with an "E" as being outside the calibration range of the instrument. The sample was repeated at a dilution and both sets of data have been reported out.

The Laboratory blanks associated with these samples were free of contamination.

All samples were analyzed within required holding times.

No other analytical or QC problems were encountered.

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

CASE NARRATIVE

COMPANY: Shaw Environmental
GE MRFA Project #134815
SUBMISSION #: R0902679

Shaw samples were collected on 05/12-13/09 and received at CAS on 05/13-14/09 in good condition.

INORGANICS

Three water samples were analyzed for Total Chromium and Hexavalent Chromium. Please see attached data pages for method numbers.

Site specific QC was performed on M-27D. All MS and Blank spike recoveries were within limits. All RPD's were within limits.

No analytical or QC problems were encountered.

VOLATILE ORGANICS

Seventeen water samples and one cooler blank were analyzed for OLC 2.1 Volatiles by CLP methodology.

All the initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within QC limits.

Site specific QC was performed on MRFA Influent and M-27D. All MS/MSD recoveries were within limits. All Reference spike recoveries were within limits. All RPD's were within limits.

Various compounds for DUPE B and M-24 DR have been flagged with an "E" as being outside the calibration range of the instrument. The samples were repeated at dilutions and both sets of data have been reported out.

The Laboratory blanks associated with these samples were free of contamination.

All samples were analyzed within required holding times.

No other analytical or QC problems were encountered.

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

CASE NARRATIVE

COMPANY: Shaw Environmental
GE MRFA Project #134815
SERVICE REQUEST #: R0903008

Shaw samples were collected on 05/28/09 and received at CAS on 05/29/09 in good condition.

VOLATILE ORGANICS

Two water samples and one cooler blank were analyzed for OLC 2.1 Volatiles by CLP methodology.

All the initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within QC limits.

Site specific QC was not requested for these samples, however was performed on 4D. All MS/MSD recoveries were within limits. All Reference spike recoveries were within limits. All RPD's were within limits.

The Laboratory blanks associated with these samples were free of contamination.

All samples were analyzed within required holding times.

No other analytical or QC problems were encountered.

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

APPENDIX D

AIR STRIPPER FLOW DATA

Appendix D

Date		Well #2 Flow (gal)	Well #1 Flow (gal)	Well #2 Average (gpm)	Well #1 Average (gpm)	Total Daily Average Flow (gpm)
1/1/2009	Total	1,060	0	0.74	0.00	0.74
1/2/2009	Total	170	0	0.12	0.00	0.12
1/3/2009	Total	0	0	0.00	0.00	0.00
1/4/2009	Total	2,670	0	1.85	0.00	1.85
1/5/2009	Total	870	0	0.60	0.00	0.60
1/6/2009	Total	1,070	0	0.74	0.00	0.74
1/7/2009	Total	860	0	0.60	0.00	0.60
1/8/2009	Total	840	0	0.58	0.00	0.58
1/9/2009	Total	960	0	0.67	0.00	0.67
1/10/2009	Total	1,110	0	0.77	0.00	0.77
1/11/2009	Total	880	0	0.61	0.00	0.61
1/12/2009	Total	990	0	0.69	0.00	0.69
1/13/2009	Total	1,050	0	0.73	0.00	0.73
1/14/2009	Total	1,050	0	0.73	0.00	0.73
1/15/2009	Total	760	0	0.53	0.00	0.53
1/16/2009	Total	1,010	0	0.70	0.00	0.70
1/17/2009	Total	1,120	0	0.78	0.00	0.78
1/18/2009	Total	1,010	0	0.70	0.00	0.70
1/19/2009	Total	940	0	0.65	0.00	0.65
1/20/2009	Total	880	0	0.61	0.00	0.61
1/21/2009	Total	1,060	0	0.74	0.00	0.74
1/22/2009	Total	1,080	0	0.75	0.00	0.75
1/23/2009	Total	970	0	0.67	0.00	0.67
1/24/2009	Total	910	0	0.63	0.00	0.63
1/25/2009	Total	970	0	0.67	0.00	0.67
1/26/2009	Total	1,050	0	0.73	0.00	0.73
1/27/2009	Total	900	0	0.63	0.00	0.63
1/28/2009	Total	1,110	0	0.77	0.00	0.77
1/29/2009	Total	800	0	0.56	0.00	0.56
1/30/2009	Total	1,160	0	0.81	0.00	0.81
1/31/2009	Total	970	0	0.67	0.00	0.67
2/1/2009	Total	920	0	0.64	0.00	0.64
2/2/2009	Total	980	0	0.68	0.00	0.68
2/3/2009	Total	840	0	0.58	0.00	0.58
2/4/2009	Total	970	0	0.67	0.00	0.67
2/5/2009	Total	1,050	0	0.73	0.00	0.73
2/6/2009	Total	910	0	0.63	0.00	0.63
2/7/2009	Total	1,000	0	0.69	0.00	0.69
2/8/2009	Total	800	0	0.56	0.00	0.56
2/9/2009	Total	960	0	0.67	0.00	0.67
2/10/2009	Total	1,040	0	0.72	0.00	0.72
2/11/2009	Total	1,030	0	0.72	0.00	0.72
2/12/2009	Total	960		0.67	0.00	0.67
2/13/2009	Total	840	0	0.58	0.00	0.58
2/14/2009	Total	1,210	0	0.84	0.00	0.84
2/15/2009	Total	900	0	0.63	0.00	0.63
2/16/2009	Total	850	0	0.59	0.00	0.59
2/17/2009	Total	960	0	0.67	0.00	0.67
2/18/2009	Total	1,040	0	0.72	0.00	0.72
2/19/2009	Total	1,010	0	0.70	0.00	0.70

Appendix D

Date		Well #2 Flow (gal)	Well #1 Flow (gal)	Well #2 Average (gpm)	Well #1 Average (gpm)	Total Daily Average Flow (gpm)
2/20/2009	Total	1,050	0	0.73	0.00	0.73
2/21/2009	Total	850	0	0.59	0.00	0.59
2/22/2009	Total	970	0	0.67	0.00	0.67
2/23/2009	Total	790	0	0.55	0.00	0.55
2/24/2009	Total	1,070	0	0.74	0.00	0.74
2/25/2009	Total	800	0	0.56	0.00	0.56
2/26/2009	Total	950	0	0.66	0.00	0.66
2/27/2009	Total	1,010	0	0.70	0.00	0.70
2/28/2009	Total	830	0	0.58	0.00	0.58
3/1/2009	Total	990	0	0.69	0.00	0.69
3/2/2009	Total	880	0	0.61	0.00	0.61
3/3/2009	Total	950	0	0.66	0.00	0.66
3/4/2009	Total	920	0	0.64	0.00	0.64
3/5/2009	Total	980	0	0.68	0.00	0.68
3/6/2009	Total	830	0	0.58	0.00	0.58
3/7/2009	Total	860	0	0.60	0.00	0.60
3/8/2009	Total	890	0	0.62	0.00	0.62
3/9/2009	Total	940	0	0.65	0.00	0.65
3/10/2009	Total	990	0	0.69	0.00	0.69
3/11/2009	Total	860	0	0.60	0.00	0.60
3/12/2009	Total	970	0	0.67	0.00	0.67
3/13/2009	Total	1,030	0	0.72	0.00	0.72
3/14/2009	Total	910	0	0.63	0.00	0.63
3/15/2009	Total	930	0	0.65	0.00	0.65
3/16/2009	Total	970	0	0.67	0.00	0.67
3/17/2009	Total	740	0	0.51	0.00	0.51
3/18/2009	Total	1,090	0	0.76	0.00	0.76
3/19/2009	Total	910	0	0.63	0.00	0.63
3/20/2009	Total	1,040	0	0.72	0.00	0.72
3/21/2009	Total	800	0	0.56	0.00	0.56
3/22/2009	Total	970	0	0.67	0.00	0.67
3/23/2009	Total	1,040	0	0.72	0.00	0.72
3/24/2009	Total	850	0	0.59	0.00	0.59
3/25/2009	Total	850	0	0.59	0.00	0.59
3/26/2009	Total	910	0	0.63	0.00	0.63
3/27/2009	Total	1,030	0	0.72	0.00	0.72
3/28/2009	Total	870	0	0.60	0.00	0.60
3/29/2009	Total	790	0	0.55	0.00	0.55
3/30/2009	Total	870	0	0.60	0.00	0.60
3/31/2009	Total	1,020	0	0.71	0.00	0.71
4/1/2009	Total	910	0	0.63	0.00	0.63
4/2/2009	Total	910	0	0.63	0.00	0.63
4/3/2009	Total	790	0	0.55	0.00	0.55
4/4/2009	Total	1,040	0	0.72	0.00	0.72
4/5/2009	Total	950	0	0.66	0.00	0.66
4/6/2009	Total	860	0	0.60	0.00	0.60
4/7/2009	Total	810	0	0.56	0.00	0.56
4/8/2009	Total	990	0	0.69	0.00	0.69
4/9/2009	Total	980	0	0.68	0.00	0.68
4/10/2009	Total	880	0	0.61	0.00	0.61
4/11/2009	Total	870	0	0.60	0.00	0.60

Appendix D

Date		Well #2 Flow (gal)	Well #1 Flow (gal)	Well #2 Average (gpm)	Well #1 Average (gpm)	Total Daily Average Flow (gpm)
4/12/2009	Total	860	0	0.60	0.00	0.60
4/13/2009	Total	920	0	0.64	0.00	0.64
4/14/2009	Total	1,040	0	0.72	0.00	0.72
4/15/2009	Total	800	0	0.56	0.00	0.56
4/16/2009	Total	860	0	0.60	0.00	0.60
4/17/2009	Total	870	0	0.60	0.00	0.60
4/18/2009	Total	920	0	0.64	0.00	0.64
4/19/2009	Total	980	0	0.68	0.00	0.68
4/20/2009	Total	870	0	0.60	0.00	0.60
4/21/2009	Total	790	0	0.55	0.00	0.55
4/22/2009	Total	920	0	0.64	0.00	0.64
4/23/2009	Total	990	0	0.69	0.00	0.69
4/24/2009	Total	990	0	0.69	0.00	0.69
4/25/2009	Total	980	0	0.68	0.00	0.68
4/26/2009	Total	850	0	0.59	0.00	0.59
4/27/2009	Total	900	0	0.63	0.00	0.63
4/28/2009	Total	850	0	0.59	0.00	0.59
4/29/2009	Total	950	0	0.66	0.00	0.66
4/30/2009	Total	910	0	0.63	0.00	0.63
5/1/2009	Total	780	0	0.54	0.00	0.54
5/2/2009	Total	990	0	0.69	0.00	0.69
5/3/2009	Total	930	0	0.65	0.00	0.65
5/4/2009	Total	850	0	0.59	0.00	0.59
5/5/2009	Total	840	0	0.58	0.00	0.58
5/6/2009	Total	910	0	0.63	0.00	0.63
5/7/2009	Total	960	0	0.67	0.00	0.67
5/8/2009	Total	840	0	0.58	0.00	0.58
5/9/2009	Total	840	0	0.58	0.00	0.58
5/10/2009	Total	960	0	0.67	0.00	0.67
5/11/2009	Total	840	0	0.58	0.00	0.58
5/12/2009	Total	1,000	0	0.69	0.00	0.69
5/13/2009	Total	820	0	0.57	0.00	0.57
5/14/2009	Total	6,310	0	4.38	0.00	4.38
5/15/2009	Total	10,480	0	7.28	0.00	7.28
5/16/2009	Total	10,010	0	6.95	0.00	6.95
5/17/2009	Total	840	0	0.58	0.00	0.58
5/18/2009	Total	930	0	0.65	0.00	0.65
5/19/2009	Total	920	0	0.64	0.00	0.64
5/20/2009	Total	770	0	0.53	0.00	0.53
5/21/2009	Total	950	0	0.66	0.00	0.66
5/22/2009	Total	880	0	0.61	0.00	0.61
5/23/2009	Total	990	0	0.69	0.00	0.69
5/24/2009	Total	890	0	0.62	0.00	0.62
5/25/2009	Total	810	0	0.56	0.00	0.56
5/26/2009	Total	940	0	0.65	0.00	0.65
5/27/2009	Total	1,000	0	0.69	0.00	0.69
5/28/2009	Total	950	0	0.66	0.00	0.66
5/29/2009	Total	880	0	0.61	0.00	0.61
5/30/2009	Total	1,060	0	0.74	0.00	0.74
5/31/2009	Total	880	0	0.61	0.00	0.61
6/1/2009	Total	240	0	0.17	0.00	0.17

Appendix D

Date		Well #2 Flow (gal)	Well #1 Flow (gal)	Well #2 Average (gpm)	Well #1 Average (gpm)	Total Daily Average Flow (gpm)
6/2/2009	Total	0	0	0.00	0.00	0.00
6/3/2009	Total	0	0	0.00	0.00	0.00
6/4/2009	Total	3,560	0	2.47	0.00	2.47
6/5/2009	Total	1,140	0	0.79	0.00	0.79
6/6/2009	Total	780	0	0.54	0.00	0.54
6/7/2009	Total	810	0	0.56	0.00	0.56
6/8/2009	Total	1,050	0	0.73	0.00	0.73
6/9/2009	Total	1,020	0	0.71	0.00	0.71
6/10/2009	Total	900	0	0.63	0.00	0.63
6/11/2009	Total	980	0	0.68	0.00	0.68
6/12/2009	Total	980	0	0.68	0.00	0.68
6/13/2009	Total	1,150	0	0.80	0.00	0.80
6/14/2009	Total	880	0	0.61	0.00	0.61
6/15/2009	Total	730	0	0.51	0.00	0.51
6/16/2009	Total	1,210	0	0.84	0.00	0.84
6/17/2009	Total	1,160	0	0.81	0.00	0.81
6/18/2009	Total	1,060	0	0.74	0.00	0.74
6/19/2009	Total	960	0	0.67	0.00	0.67
6/20/2009	Total	990	0	0.69	0.00	0.69
6/21/2009	Total	870	0	0.60	0.00	0.60
6/22/2009	Total	6,450	0	4.48	0.00	4.48
6/23/2009	Total	9,140	0	6.35	0.00	6.35
6/24/2009	Total	1,280	0	0.89	0.00	0.89
6/25/2009	Total	1,390	0	0.97	0.00	0.97
6/26/2009	Total	1,200	0	0.83	0.00	0.83
6/27/2009	Total	1,460	0	1.01	0.00	1.01
6/28/2009	Total	1,280	0	0.89	0.00	0.89
6/29/2009	Total	1,020	0	0.71	0.00	0.71
6/30/2009	Total	5,140	0	3.57	0.00	3.57
Grand Total		**213,670**	**0**	**0.820**	**0.000**	**0.820**