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**Semi-Annual  
Monitoring Report**

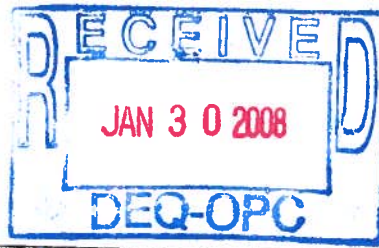
**Hercules Incorporated  
Hattiesburg, Mississippi**

Prepared for:  
**Hercules Incorporated**

**December 2007**

**Eco-Systems, Inc.**  
Consultants, Engineers, and Scientists





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## 1.0 INTRODUCTION

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Hercules Incorporated (Hercules) commissioned Eco-Systems, Inc. (Eco-Systems) to conduct groundwater and surface water monitoring at the Hattiesburg, Mississippi facility. The site location is shown in Figure 1. The work is being conducted in accordance with the Corrective Action Plan Revision 01 (CAP) prepared by Groundwater & Environmental Services, Inc. (GES) dated January 20, 2005, which was approved by the Mississippi Department of Environmental Quality (MDEQ) in a letter dated January 25, 2005 and modified in a letter from MDEQ to Hercules dated August 18, 2006. The eight quarterly monitoring events specified in the CAP were completed in May 2007 and discussed in the second Annual Monitoring Report (Eco-Systems, August 2007). In accordance with the recommendation of the 2007 Annual Monitoring report, surface water and groundwater monitoring is being continued on a semi-annual basis.

This report describes sampling activities and analytical results for the 1<sup>st</sup> semi-annual monitoring event. During this event, water levels were measured at 18 wells and 15 piezometers, surface water samples were collected from six locations in Green's Creek, and groundwater samples were collected from 18 monitoring wells. As required by the CAP, as approved and modified, surface water and groundwater samples collected during monitoring events are being analyzed for Appendix IX volatile organic compounds (VOCs). During the annual monitoring event, which is conducted in May, samples from seven monitoring wells specified by the MDEQ are also analyzed for dioxathion and dioxenethion.

## **2.0 FIELD ACTIVITIES**

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Field activities conducted during this semi-annual sampling event include sample collection from 18 monitoring wells and 6 surface water monitoring locations. Groundwater and surface water samples were analyzed for Appendix IX VOC's only.

### **2.1 GROUNDWATER SAMPLE COLLECTION**

On November 27 & 28, Eco-Systems personnel collected groundwater levels from the 18 monitoring wells to be sampled during the quarterly monitoring event and from the 15 piezometers at the site. A summary of the water level measurements obtained on November 26, 2007 is included as Table 1. A potentiometric surface map has been prepared from the November 26, 2007 groundwater elevations and is included as Figure 3.

Groundwater sample collection was conducted on November 27 & 28, 2007. Prior to collecting groundwater samples, the monitoring wells were purged using traditional volume based methods. Purging was conducted until temperature, pH, specific conductance, and turbidity had stabilized. The water quality field parameters were measured with calibrated instruments and recorded in the field book along with the cumulative amount of water evacuated and time of batch parameter testing. Groundwater collection logs are attached as Appendix A.

Once field parameters stabilized, groundwater collected for analysis was sampled by collecting water directly into new sample containers supplied by the analytical laboratories. During the collection of field replicates that were collected for quality assurance and quality control (QA/QC), alternating aliquots were placed in each replicate bottle until each bottle was filled.

In general, the order of sampling was from least impacted to most impacted, based on historical data. Tubing used during purging and sampling was either dedicated to each well or disposed of after use. Subsequent to sampling, sample containers were labeled, placed and sealed on ice and shipped to the designated offsite laboratory for analysis. Chain-of-custody documentation accompanied the sample cooler. Personnel involved in sampling used clean, disposable gloves, which were changed between each sample collection. All non-disposable sampling equipment was decontaminated as outlined in Section 2.4

During this event, groundwater samples were collected from permanent monitoring wells MW-2 through MW-19. Groundwater samples were collected in new sample containers supplied by the analytical laboratories. Filled sample containers were placed on ice in coolers. Groundwater samples for VOC analyses were shipped via overnight courier to Test America Laboratories in Savannah, Georgia for analysis.



## **2.2 SURFACE WATER SAMPLE COLLECTION**

On November 26, 2007, six surface water samples were collected from the previously established sampling points along Green's Creek, CM-0 to CM-5. Samples were collected beginning with the most downstream location and proceeding upstream to each successive sampling location. Surface water samples were collected directly into new sample containers that were supplied by the analytical laboratories. The filled sample containers were labeled, packed and shipped/delivered in the same manner as groundwater samples discussed in Section 2.1.

## **2.3 QUALITY ASSURANCE/QUALITY CONTROL**

For quality assurance/quality control (QA/QC) purposes, two duplicate groundwater samples, three rinsate samples, two trip blank samples, and three matrix spike and matrix spike duplicate (MS/MSD) were collected during field sampling activities. The duplicate groundwater samples were collected in alternating aliquots that were placed in each replicate bottle until each bottle was filled. The rinsate samples were prepared by pouring deionized water over groundwater sampling tubing and collecting the rinsate into new disposable sample containers supplied by the analytical laboratory. QA/QC samples were labeled, stored and shipped in the same manner as groundwater and surface water samples. QA/QC samples were analyzed for the same constituents as groundwater and surface water samples.

## **2.4 DECONTAMINATION**

In general, groundwater sampling equipment that would contact the groundwater sample was single-use, disposable equipment. For any re-usable groundwater sampling equipment decontamination was accomplished by the following procedure:

- 1) Phosphate-free detergent wash.
- 2) Potable water rinse.
- 3) Deionized water rinse.
- 4) Isopropanol rinse.
- 5) Organic-free water rinse or air dry.

If it was necessary to store or transport decontaminated equipment, the decontaminated equipment was placed in either a new, disposable plastic bag or wrapped in aluminum foil.



## **2.5 OTHER PROCEDURES**

Procedures for sample collection, sample containerization and packing, sample shipment, cross-contamination control, drummed material disposal, field documentation, chain-of-custody, data review, and other work items not specifically covered in this document were conducted in accordance with the Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EPA Region IV, May, 2001), (EISOPQAM)

### **3.0 RESULTS**

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Groundwater and surface water samples collected from the Hercules site were analyzed for Appendix IX VOC's according to U.S. EPA Method 8260B. Laboratory analytical reports for the samples collected during this monitoring event are included in Appendix B and summarized in Table 2 and Table 3.

#### **3.1 GROUNDWATER ANALYTICAL RESULTS**

Discussion presented in this section summarizes the analytical results for groundwater samples collected from monitoring wells MW-2 through MW-19 on November 27 & 28, 2007.

VOC's were not detected in groundwater samples collected from wells MW-02, MW-03, MW-04, MW-06, MW-07, MW-10, MW-11, MW-12, and MW-16.

Analysis of the groundwater sample collected from monitoring well MW-08 detected benzene, carbon tetrachloride, and toluene at concentrations above their TRG's.

Analysis of the groundwater sample collected from monitoring well MW-09 detected benzene at a concentration above its respective TRG.

Analysis of the groundwater sample collected from monitoring well MW-13 detected benzene, carbon tetrachloride, and chloroform at concentrations above their respective TRG's.

Analysis of the groundwater sample collected from monitoring well MW-17 detected benzene, chlorobenzene, carbon tetrachloride, chloroform, and toluene at concentrations above their respective TRG's.

Analysis of the groundwater sample collected from monitoring well MW-19 detected benzene at a concentration above its respective TRG.

#### **3.2 SURFACE WATER ANALYTICAL RESULTS**

Discussion presented in this section summarizes the analytical results for surface water samples collected from sampling locations CM-0 through CM-5 on November 26, 2007.

VOC's were not detected in surface water samples collected from locations CM-00, CM-01, CM-02, CM-04, and CM-05.

### **3.3 QA/QC SAMPLE ANALYTICAL RESULTS**

Analytical reports for the QA/QC samples are included in Appendix B and summarized in Table 3.

Duplicate groundwater samples were collected from MW-04, and MW-09. Analysis of the duplicate groundwater sample collected from MW-04 and the original MW-04 indicated all constituents were below MDL.

Analysis of the duplicate groundwater sample collected from monitoring well MW-09 detected the similar concentrations of benzene, 1,1-dichloroethene and toluene. Chloromethane was detected at a concentration above its respective TRG in the duplicate MW-09 sample only.

Toluene was detected in similar concentrations in the three rinsate samples (RS-01, RS-02, RS-03) collected during the November 2007 sampling event. However, the concentration of Toluene detected in the rinsates was both low and consistent (5.5µg/L to 6.8µg/L). Similar detections of toluene were not found in groundwater samples associated with the rinsates blanks and toluene was only detected in groundwater samples where historical data indicates that toluene is present. Therefore, the detection of toluene in the rinsate samples does not appear to have materially affected surface water and groundwater samples. The detection of toluene in the rinsate samples appears, instead to be an artifact related to either rinsate sample collection or laboratory procedure.

VOC's were not detected in either of the trip blanks.

Review of the analytical reports for VOC's that were submitted by Test America indicates that spike sample recoveries for the spiked volatile organic constituents in the MS and MSD samples were within the acceptable recovery ranges reported by the laboratory for each of the spiked constituents.

As reported by Test America, all method blanks were non-detect for VOC's. The laboratory QC spike sample recoveries for VOC's detected in site samples were within the limits reported by the laboratory. Analyses were conducted within the 14 day holding time. Based on the information received and reviewed, the VOC analyses were conducted under controlled conditions and the data package is acceptable for use as reported, without qualification.



**TABLES**

**TABLE 1**  
**SUMMARY OF GROUNDWATER ELEVATION DATA**

*November, 2007*  
*Hercules, Incorporated*  
*Hattiesburg, Mississippi*

WELL NO.	TOC ELEVATION (ft.) <sup>1</sup>	WATER DEPTH (ft) <sup>2</sup>	GROUNDWATER ELEVATION (ft.)
<b>PERMANENT MONITOR WELLS</b>			
MW-1	174.12	NA <sup>3</sup>	NA
MW-2	160.07	8.43	151.64
MW-3	160.03	8.81	151.22
MW-4	159.75	11.77	147.98
MW-5	160.99	8.75	152.24
MW-6	174.05	10.19	163.86
MW-7	183.96	15.71	168.25
MW-8	179.99	15.62	164.37
MW-9	181.97	13.54	168.43
MW-10	159.88	12.22	147.66
MW-11	157.18	8.95	148.23
MW-12	162.17	8.86	153.31
MW-13	175.23	9.54	165.69
MW-14	169.23	13.55	155.68
MW-15	172.21	20.65	151.56
MW-16	175.62	16.97	158.65
MW-17	186.13	18.94	167.91
MW-18	165.31	6.53	158.78
MW-19	172.25	11.62	160.63
<b>STAFF GAUGES</b>			
SG-1	NA	NA	NA
SG-2	NA	NA	NA
SG-3	NA	NA	NA
SG-4	NA	NA	NA
<b>PIEZOMETERS</b>			
TP-1	172.18	NA	NA
TP-2	171.72	12.41	159.31
TP-3	169.74	10.85	158.89
TP-4	163.64	10.43	153.21
TP-5	160.54	9.86	150.68
TP-6	158.63	9.60	149.03
TP-7	167.17	9.98	157.19
TP-8	183.79	15.79	168.00
TP-9	163.44	6.42	157.02
TP-10	179.69	15.11	164.58
TP-11	162.26	11.42	150.84
TP-12	159.95	12.45	147.50
TP-13	156.99	8.80	148.19
TP-14	162.59	6.14	156.45
TP-16	179.72	13.92	165.80
TP-17	182.71	17.60	165.11

**NOTES:**

- 1- Elevations are in feet relative to mean sea level.
- 2 - Depth to water is in feet below top of casing. Staff gauge readings are in feet above the base of the staff.
- 3 - Data not available.







Location	Date	Concentration (mg/L)														
		Acetone	Benzene	Chlorobenzene	Carbon Tetrachloride	Chloroform	Bromomethane	Chloroethane	Chloromethane	Dibromochloromethane	cis-1,2-dichloroethene	Isopropylbenzene	methylene chloride	methyl ethyl ketone	methyl isobutyl ketone	
MW-07	Aug-05	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	Nov-05	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	Feb-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	May-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	Aug-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
	Nov-06	< 25	93.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10	< 10.0	
	Feb-07	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10	< 10.0	
	May-07	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10	< 10.0	
	Nov-07	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10	< 10.0	
MW-08	Dec-02	ND	6,900	290	16,000	1,800	14.07	66.0	39.2	4.45	19	4.6	26.1	NA	NA	
	Feb-03	NA	< 500.0	230	12,000	1,300	7.10	85.5	3.34	< 10.0	17.5	4.35	< 13.0	NA	NA	
	Aug-05	< 6300	18,000	< 250	3,500	510	< 250	< 250	< 250	NA	NA	NA	< 1,300	< 10.0	< 10.0	
	Nov-05	< 2,500	17,000	160	1,000	260	< 100	< 100	< 100	NA	NA	NA	< 500	< 10.0	< 10.0	
	Feb-06	< 2,500	11,000	160	480	130	< 100	< 100	< 100	NA	NA	NA	< 500	< 10.0	< 10.0	
	May-06	< 630	11,000	170	2,200	280	< 25	< 25	< 25	NA	29	NA	380	< 10.0	< 10.0	
	Aug-06	750	15,000	220	640	450	< 1.0	3.8	< 1.0	NA	34	NA	510	< 10.0	< 10.0	
	Nov-06	< 2,500	13,000	< 100	330	< 100	< 100	< 100	< 100	NA	< 100	NA	< 500	< 1,000	< 1,000	
	Feb-07	< 250	990	24	840	100	< 10	< 10	< 10	NA	< 10	NA	< 50	< 100	< 100	
May-07	< 2,500	9,600	220	6,100	890	< 50	< 50	< 50	NA	< 50	NA	< 250	< 500	< 500		
Nov-07	< 2,500	14,000	< 100	370	< 100	< 100	< 100	< 100	NA	NA	NA	< 500	< 10.0	< 10.0		
MW-09	Dec-02	ND	9.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.48	NA	NA	
	Feb-03	NA	64.3	J 5.85	20.7	J 9.83	J 10.0	19.7	< 10.0	< 10.0	J 1.92	< 13.0	NA	NA	NA	
	Aug-05	< 25	12	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	Nov-05	< 25	16.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	Feb-06	< 25	18.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	May-06	< 25	8.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
	Aug-06	< 25	10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
	Nov-06	34.0	18.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	6.8	< 10.0	48.0	
	Feb-07	< 25.0	7.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
May-07	< 25.0	8.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0		
Nov-07	< 25.0	9.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0		
MW-10	Aug-03	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	NA	NA	
	Aug-05	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	Nov-05	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	Feb-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	May-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
	Aug-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
	Nov-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
	Feb-07	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
	May-07	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
Nov-07	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0		
MW-11	Dec-02	ND	114	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
	Feb-03	NA	J 6.39	< 10.0	< 10.0	< 10.0	< 10.0	< 12.0	< 10.0	< 10.0	< 10.0	< 13.0	NA	NA	NA	
	Aug-03	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	NA	NA	NA	
	Aug-05	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	Nov-05	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	Feb-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	May-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0	
	Aug-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
	Nov-06	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0	
Feb-07	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0		
May-07	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0		
Nov-07	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0		





Location	Date														
		Acetone	Benzene	Chlorobenzene	Carbon Tetrachloride	Chloroform	Bromomethane	Chloroethane	Chloromethane	Dibromochloromethane	cis-1,2-dichloroethene	isopropylbenzene	methylene chloride	methyl ethyl ketone	methyl isobutyl ketone
MW-18	Aug-05	< 25	10	45	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0
	Nov-05	< 25	3.9	26	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0
	Feb-06	< 25	4.2	31	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0
	May-06	< 25	6.5	35	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
	Aug-06	< 25	4.8	34	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
	Nov-06	61	2.9	23	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
	Feb-07	< 25	4.1	28	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
	May-07	< 25	4.0	33	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
	Nov-07	< 25	1.2	26	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
MW-19	Aug-05	< 25	20	7.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0
	Nov-05	< 25	19	6.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0
	Feb-06	< 25	22	9.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	NA	NA	< 5.0	< 10.0	< 10.0
	May-06	28	21	7.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
	Aug-06	< 25	18	6.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
	Nov-06	< 25	20	6.2	< 1.0	< 1.0	< 1.0	1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
	Feb-07	< 25	32	8.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
	May-07	< 25	36	9.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
	Nov-07	< 25	44	10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	NA	< 5.0	< 10.0	< 10.0
TRG*		608	5.0	100	5.0	0.155	8.52	3.64	1.43	0.126	70	679	5.0	1,910	139

1 - NA indicates that the analyte was not analyzed.  
 2 - "<" indicates that the concentration of the analyte is less than the concentrations show  
 3 - ND = Non Detect / No detection limit available.  
 4 - Target Remediation Goals are taken from the Tier I Target Remedial Goal Table of d  
 5 - TRG not yet established for this analyte.

**TABLE 3**  
**SUMMARY OF QA/QC SAMPLE ANALYTICAL RESULTS**

*Hercules Incorporated*  
*Hattiesburg, Mississippi*  
*November 2007*

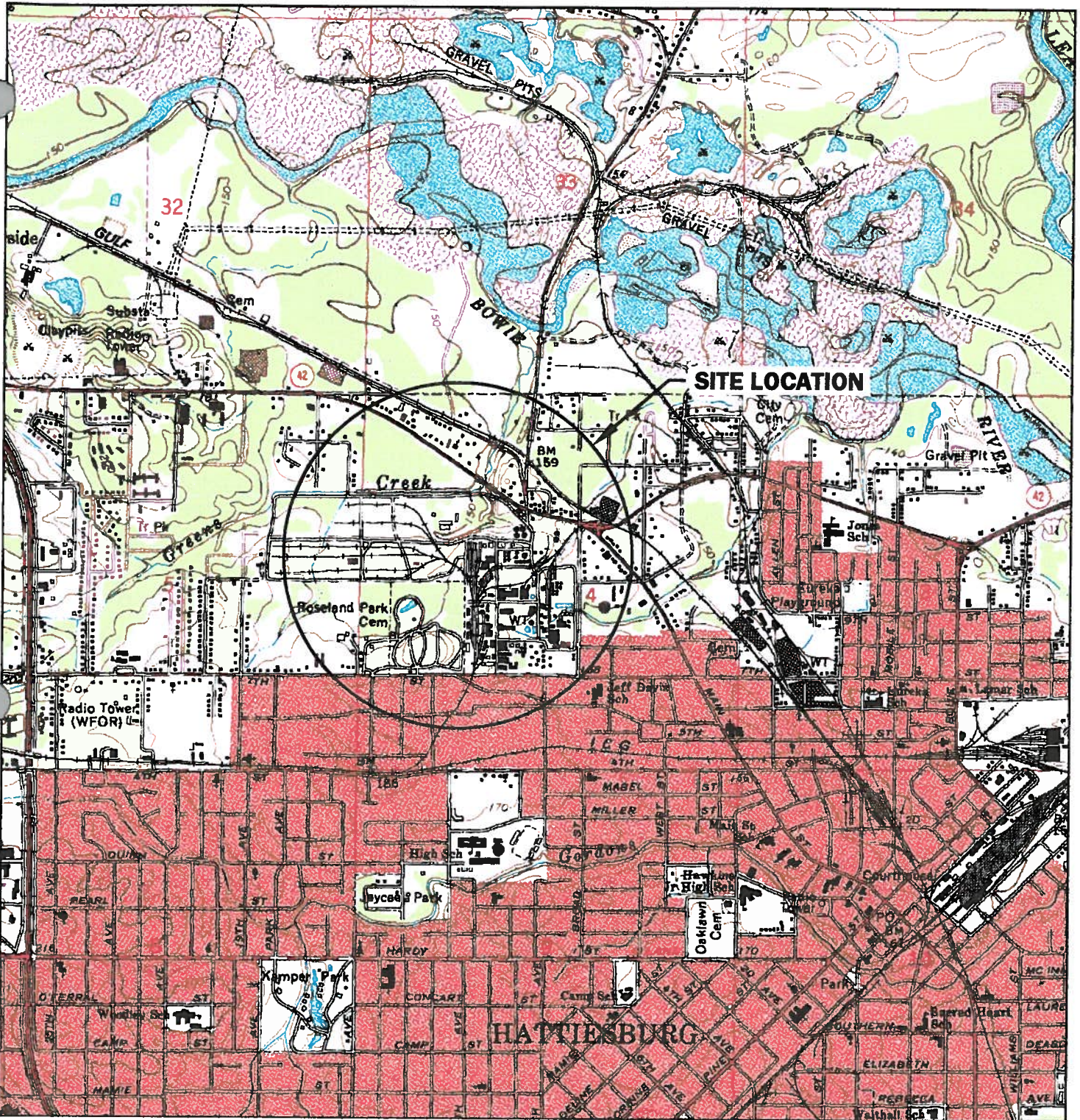
Location	Concentrations in µg/L												
	Acetone	Benzene	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroform	1,1-Dichloroethene	Ethylbenzene	Methylene Chloride	Toluene	Tetrachloroethene	Chloromethane	1,2-Dichloropropane
MW-04	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-04 DUP	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
% variation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MW-09	< 25	9.1	< 1.0	< 1.0	< 1.0	< 1.0	3.7	< 1.0	< 5.0	1.5	< 1.0	< 1.0	< 1.0
MW-09 DUP	< 25	9.4	< 1.0	< 1.0	< 1.0	< 1.0	4.1	< 1.0	< 5.0	1.6	< 1.0	2.1	< 1.0
% variation	0%	3%	0%	0%	0%	0%	9%	0%	0%	6%	0%	52%	0%
RS-01	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	6.1	< 1.0	< 1.0	< 1.0
RS-02	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	6.8	< 1.0	< 1.0	< 1.0
RS-03	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	5.5	< 1.0	< 1.0	< 1.0
TB-01	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0

1 - "<" indicates that the concentration of the analyte is less than the concentrations shown.

2 - Samples were not analyzed for dioxathion constituents.

**FIGURES**





QUADRANGLE LOCATION



**HERCULES INCORPORATED**  
**HATTIESBURG, MISSISSIPPI**

**Eco-Systems, Inc.**   
 Consultants, Engineers and Scientists

SCALE: 1"=2000'	DRAWN BY: MTW	DATE: 11/26/07
	CHKD. BY:	DATE:

PROJECT NO. HER25080	CAD FILE HER25080-TOP0.dwg
-------------------------	-------------------------------

**SITE LOCATION MAP**

**FIGURE**  
1



**APPENDIX A  
GROUNDWATER COLLECTION LOGS**



# Groundwater Sample Collection Log

Project Name: Heracles  
 Project Number: 25040-CC-015

Boring ID: MW-02  
 Site Location: \_\_\_\_\_

Start Date: 11-27-2007 Finish Date: 11-27-2007  
 Sample Technician: CT, JB  
 Purge/Sample Method: Reinstillation Pump / Volume Based  
 Well Diameter (d): 2"  
 Total Depth (TD): 20.5  
 Approximate Depth of Water Column (h): \_\_\_\_\_  
 (h = TD - DTW [ft-btoc]): 17.67  
 Calculated Well Volume (V = 6hd<sup>2</sup>): \_\_\_\_\_  
 (V = vol in gal; d = well diam. in ft): 1.97 | 3x = 5.90 | 5x = 9.85

Date	Time	DTW (ft-btoc)
11-26-07	11:00	8.43
11-27-07	09:55	7.90
11-27-07	10:00	7.90

## WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
11/27/07 09:45	0.0	5.81	131.7	21.3	550			
09:50	0.5	5.83	80.8	21.2	9.0			
09:53	1.5	5.71	82.0	20.5	11.0			
09:55	2.0	5.64	86.6	21.7	6.6			
10:00	2.5	5.63	87.6	21.7	3.7			
10:03	3.0	5.59	89.8	21.2	2.7			
10:06	3.5	5.63	92.0	21.6	2.4			
10:10	4.0	5.64	91.5	21.5	1.9			
10:13	4.5	5.64	92.6	21.6	4.3			
10:16	5.0	5.67	92.3	21.6	0.50			
10:20	5.5	5.64	95.1	21.6	0.30			
10:25	6.0	5.68	92.9	21.7	0.00			

Sample Identification: HER-MW02-112707  
HER-MW02-112707 (MS/MSD)  
 Weather Conditions During Sampling: overcast, 55°  
 Comments: \_\_\_\_\_

Date	Time	Sample Container	Preservative
11-27-07	10:25	4- 40ml VOA	
"	"	"	
"	"	"	

Sample Technician: CT, JB Date: 11-27-07

- Notes:
- ft-btoc = feet below top of casing.
  - gal = gallons.
  - mS/cm = milliSiemens per centimeter.
  - °C = degrees Celsius.
  - NTU = Nephelometric Turbidity Units.
  - mg/L = milligrams per liter.
  - mV = millivolts.



# Groundwater Sample Collection Log

Project Name: Herules  
Project Number: 25090-CC-VMS

Boring ID: MW-03  
Site Location: \_\_\_\_\_

Start Date: 11-27-07 Finish Date: 11-27-07

Sample Technician: CT / JB

Purge/Sample Method: permeable casing / volume based

Well Diameter (d): 2"

Total Depth (TD): 18

Approximate Depth of Water Column (h) (h = TD - DTW [ft-btoc]): 9.19

Calculated Well Volume (V = 6hd<sup>2</sup>) (V = vol in gal; d = well diam. in ft): 1.50 x 3 = 4.50 x 5 = 7.50

Date	Time	DTW (ft-btoc)
11-26-07	10:45	8.81 JB
11-27-07	09:00	<del>10.50</del> 9.19
11-27-07	09:10	9.50

## WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
11-27-07 / 0850	0.0	5.32	78.6	21.2	16			
0855	0.5	5.28	77.6	20.8	15			
0858	1.0	5.16	74.0	21.0	12			
0903	1.5	5.05	70.9	21.1	4.5			
0906	2.0	4.98	71.0	21.2	3.2			
0910	2.5	4.96	71.3	21.2	2.6			
0913	3.0	4.96	70.4	20.9	2.7			
0915	3.5	4.95	69.5	20.6	1.9			
0918	4.0	4.93	69.0	20.8	1.0			
0922	4.5	4.92	68.5	21.0	0.65			

Sample Identification: HER-MW03-112707

Weather Conditions During Sampling: overcast 50°

Comments: windy

Sample Technician: CT / JB Date: 11-27-07

- Notes:
- ft-btoc = feet below top of casing.
  - gal = gallons.
  - mS/cm = milliSiemens per centimeter.
  - °C = degrees Celsius.
  - NTU = Nephelometric Turbidity Units.
  - mg/L = milligrams per liter.
  - mV = millivolts.

Date	Time	Sample Container	Preservative
11-27-07	0915	41-40ml VOA's	HCC
"	0922	"	"

RS2  
MW03



Environmental Engineers and Scientists

Project Name: Heracles  
 Project Number: 25080

Boring ID: MW-4  
 Site Location: \_\_\_\_\_

Start Date: 11-27-2007 Finish Date: 11-27-2007  
 Sample Technician: CT, JB  
 Purge/Sample Method: Peristaltic Pump  
 Well Diameter (d): 2'  
 Total Depth (TD): 18.5  
 Approximate Depth of Water Column (h) (h= TD - DTW [ft-btoc]): 6.73  
 Calculated Well Volume (V=6hd<sup>2</sup>) (V = vol in gal; d = well diam. in ft): 1.10 | 3x = 3.29 | 5x = 5.48

Date	Time	DTW (ft-btoc)
11-27-07	11:20	11.77
11-27-07	12:07	11.69
11-27-07	12:06	12.00

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (µmS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
11-27-07 12:00	0.0	5.79	705		12			
12:03	0.5	5.82	560		6.1			
12:06	1.0	5.80	535		2.6			
12:09	1.5	5.84	528		1.9			
12:12	2.0	5.79	530		1.4			
12:15	2.5	5.77	527		1.4			
12:18	3.0	5.81	526		0.95			
12:25	3.5	5.80	530		1.1			

Sample Identification: HER-MW04-112707  
MW04 (FDI)  
 Weather Conditions During Sampling: 60° partly cloudy  
 Comments: \_\_\_\_\_

Date	Time	Sample Container	Preservative
11-27-07	12:25	4 - 10ml VOA	ELC

Sample Technician: CT, JB Date: 11-27-07

- Notes:
- ft-btoc = feet below top of casing.
  - gal = gallons.
  - mS/cm = milliSiemens per centimeter.
  - °C = degrees Celsius.
  - NTU = Nephelometric Turbidity Units.
  - mg/L = milligrams per liter.
  - mV = millivolts.





# Groundwater Sample Collection Log

Client Name: Herules  
Project Number: 25080

Boring ID: MW-05  
Site Location: \_\_\_\_\_

Start Date: 11-27-07 Finish Date: 11-27-07  
Sample Technician: CT, JB  
Purge/Sample Method: Peristaltic Pump  
Well Diameter (d): 2"  
Total Depth (TD): 16.5  
Approximate Depth of Water Column (h) (h = TD - DTW [ft-btoc]): 9.75  
Calculated Well Volume (V = 6hd<sup>2</sup>) (V = vol in gal; d = well diam. in ft): 1.59 | 3x = 4.75 | 5x = 7.95

Depth-to-Water (DTW) Measurements		
Date	Time	DTW (ft-btoc)
11-26-07	12:17	8.75
11-27-07	13:40	8.58

## WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
11/27/07/1330	0:0	6.21	589	22.9	13			
1333	0.5	6.31	589	23.2	13			
1336	1.0	6.24	591	22.6	12			
1339	1.5	6.15	635	22.5	8.6			
1342	2.0	6.12	655	22.9	4.1			
1345	2.5	6.15	664	22.7	1.5			
1348	3.0	6.13	670	22.9	0.65			
1351	3.5	6.10	668	22.8	1.9			
1354	4.0	6.10	667	23.2	1.3			
1357	4.5	6.08	683	23.2	0.50			
1400	5.0	6.11	692	22.7	0.45			

Sample Identification: HER-MW05-112707

Weather Conditions During Sampling: 65-70° clear skies

Comments: effluent observed

Sample Technician: CT, JB Date: 11/27/07

- Notes:
- ft-btoc = feet below top of casing.
  - gal = gallons.
  - mS/cm = milliSiemens per centimeter.
  - °C = degrees Celsius.
  - NTU = Nephelometric Turbidity Units.
  - mg/L = milligrams per liter.
  - mV = millivolts.

## GROUNDWATER SAMPLE CONTAINERS

Date	Time	Sample Container	Preservative
11/27/07	1405	4-40ml vials	HER





Collection Log

Project Name: Acropolis  
 Project Number: \_\_\_\_\_

Boring ID: MW 06  
 Site Location: \_\_\_\_\_

Start Date: 11-27-2007 Finish Date: 11-27-2007  
 Sample Technician: CS, JB  
 Purge/Sample Method: Peristaltic Pump  
 Well Diameter (d): \_\_\_\_\_  
 Total Depth (TD): 23.25  
 Approximate Depth of Water Column (h)  
 (h = TD - DTW [ft-btoc]): 13.06  
 Calculated Well Volume (V = 6hd<sup>2</sup>)  
 (V = vol in gal; d = well diam. in ft): 2.13 | 3x = 6.38 | 5x = 10.64

Date	Time	DTW (ft-btoc)
11/26/07	12:30	10.19
11/27/07	15:00	11.40

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
11-27-07 / 1438	0.0	5.59	350	NA	13			
1444	0.5	5.48	327	NA	2.5			
1448	1.0	5.44	334	NA	21			
1451	1.5	5.56	142.8	23.6	15			
1455	2.0	5.54	138.4	24.1	8.9			
1458	2.5	5.52	139.1	23.4	1.3			
1502	3.0	5.55	141.1	23.4	4.6			
1505	3.5	5.48	140.8	23.2	3.2			
1508	4.0	5.51	138.2	23.2	2.7			
1511	4.5	5.63	142.9	23.6	2.5			
1514	5.0	5.58	143.8	23.4	1.0			
1520	5.5	5.49	142.5	22.9	1.0			
1525	6.0	5.53	144.7	22.8	1.0			
1528	6.5	5.50	143.8	22.7	1.0			

Sample Identification: HER - MW06 - 112707

Weather Conditions During Sampling: 65° Clear

Comments: Temperature meters not working

Sample Technician: CS, JB Date: 11-27-07

- Notes:
- ft-btoc = feet below top of casing.
  - gal = gallons.
  - mS/cm = milliSiemens per centimeter.
  - °C = degrees Celsius.
  - NTU = Nephelometric Turbidity Units.
  - mg/L = milligrams per liter.
  - mV = millivolts.

Date	Time	Sample Container	Preservative
11-27-07	1530	4 40ml VOA	HCL



# Groundwater Sample Collection Log

Project Name: Hercules  
Project Number: 25000

Boring ID: MW-07  
Site Location: \_\_\_\_\_

Start Date: 11-28-2007 Finish Date: 11-28-2007  
Sample Technician: CT, JB  
Purge/Sample Method: Isostatic Pumping  
Well Diameter (d): \_\_\_\_\_  
Total Depth (TD): 27.5  
Approximate Depth of Water Column (h) (h= TD - DTW [ft-btoc]): 6.79  
Calculated Well Volume (V=6hd<sup>2</sup>) (V = vol in gal; d = well diam. in ft): 1.10 | 3x 3.32 | 5x = 5.53

Depth-to-Water (DTW) Measurements		
Date	Time	DTW (ft-btoc)
11-26-07	13:10	15.71
11-28-07	08:56	15.99
11-28-07	09:17	16.00

### WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
11-28-07 08:50	0.0	5.30	30.2		310			
08:53	0.5	5.52	127.9		22			
08:56	1.0	5.54	129.4		209			
08:59	1.5	7.00	129.3		24			
09:02	2.0	7.08	135.8		15			
09:05	2.5	7.21	142.3		7.8			
09:08	3.0	7.49	140.9		4.4			
09:11	3.5	7.68	143.4		3.7			
09:14	4.0	7.90	145.0		2.9			
09:17	4.5	7.88	150.2		3.6			
09:20	5.0	8.00	147.6		4.3			
09:23	5.5	8.02	148.6		2.8			
09:26	6.0	8.24	150.5		2.9			

Sample Identification: HER-MW07-112807  
HER-MW07-112807 (MS/MSP)  
Weather Conditions During Sampling: 40° Clear  
Comments: \_\_\_\_\_

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
11-28-07	09:30	4-40 ml VOA	HCl
	09:20	"	HCl
	09:30	"	HCl
	09:30	"	HCl

Sample Technician: CT, JB Date: 11-28-07

- Notes:
- ft-btoc = feet below top of casing.
  - gal = gallons.
  - mS/cm = milliSiemens per centimeter.
  - °C = degrees Celsius.
  - NTU = Nephelometric Turbidity Units.
  - mg/L = milligrams per liter.
  - mV = millivolts.

RS  
MS  
MSD



# Groundwater Sample Collection Log

Project Name: Herules  
 Project Number: 25080-CC-MS

Boring ID: MW08  
 Site Location: \_\_\_\_\_

Start Date: 11-28-07 Finish Date: 11-28-07  
 Sample Technician: CT, JB  
 Purge/Sample Method: Peristaltic Pump  
 Well Diameter (d): \_\_\_\_\_  
 Total Depth (TD): 18.5  
 Approximate Depth of Water Column (h) (h = TD - DTW [ft-btoc]): 2.88  
 Calculated Well Volume (V = 6hd<sup>2</sup>) (V = vol in gal; d = well diam. in ft): 0.46 3x = 1.40 5x = 2.3

Depth-to-Water (DTW) Measurements		
Date	Time	DTW (ft-btoc)
<u>11-28-07</u>	<u>13:32</u>	<u>15.62</u>
<u>11-28-07</u>	<u>14:17</u>	<u>16.22</u>

### WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
<u>11-28-07 / 14:05</u>	<u>0.0</u>	<u>6.22</u>	<u>959</u>	<u>27.2</u>	<u>1.3</u>			
<u>14:08</u>	<u>0.5</u>	<u>6.17</u>	<u>933</u>	<u>26.2</u>	<u>8.4</u>			
<u>14:11</u>	<u>1.0</u>	<u>6.18</u>	<u>911</u>	<u>27.8</u>	<u>1.2</u>			
<u>14:14</u>	<u>1.5</u>	<u>6.16</u>	<u>930</u>	<u>27.3</u>	<u>1.1</u>			
<u>14:17</u>	<u>2.0</u>	<u>6.18</u>	<u>912</u>	<u>27.5</u>	<u>0.0</u>			
<u>14:20</u>	<u>2.5</u>	<u>6.15</u>	<u>898</u>	<u>27.4</u>	<u>0.3</u>			

Sample Identification: HER-MW08-112807  
 Weather Conditions During Sampling: 70° Ho  
 Comments: \_\_\_\_\_

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
<u>11-28-07</u>	<u>14:25</u>	<u>4 - 40ml Vials</u>	<u>HCL</u>

Sample Technician: CT, JB Date: 11-28-07

- Notes:
- ft-btoc = feet below top of casing.
  - gal = gallons.
  - mS/cm = milliSiemens per centimeter.
  - °C = degrees Celsius.
  - NTU = Nephelometric Turbidity Units.
  - mg/L = milligrams per liter.
  - mV = millivolts.



# Groundwater Sample Collection Log

Site Name: Hercules  
Project Number: 25080

Boring ID: MW-09  
Site Location: \_\_\_\_\_

Start Date: 11-28-07 Finish Date: 11-28-07  
Sample Technician: CJ, JB  
Purge/Sample Method: Peristaltic Pump  
Well Diameter (d): \_\_\_\_\_  
Total Depth (TD): 20  
Approximate Depth of Water Column (h) \_\_\_\_\_  
(h = TD - DTW [ft-btoc]): 6.46  
Calculated Well Volume (V = 6hd<sup>2</sup>) \_\_\_\_\_  
(V = vol in gal; d = well diam. in ft): 1.05 | 3x = 3.16 | 5x = 5.26

Depth-to-Water (DTW) Measurements		
Date	Time	DTW (ft-btoc)
11-28-07	13:25	13.54
11-28-07	13:28	13.76
11-28-07	13:33	13.77

### WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (µS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
11-28-07   1325	0.0	6.01	689	26.2	2.5			
1328	0.5	5.98	710	25.8	2.0			
1330	1.0	5.96	662	26.0	1.9			
1332	1.5	5.93	638	26.2	0.70			
1334	2.0	5.91	622	26.4	0.60			
1336	2.5	5.87	627	26.4	1.0			
1338	3.0	5.93	634	26.3	0.45			
1340	3.5	5.90	629	26.3	3.5			
1342	4.0	5.92	636	26.4	1.8			
1345	4.5	5.90	645	26.4	1.2			
1347	5.0	5.92	650	26.4	5.3			
1349	5.5	5.90	644	26.3	3.5			

Sample Identification: HER-MW09-112807  
HER-MW09-112807 (FD)  
Weather Conditions During Sampling: 650 Clear  
Comments: \_\_\_\_\_

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
11-28-07	1355	4-40ml VOA	HCl

Sample Technician: CJ, JB Date: 11-28-07

- Notes:
- ft-btoc = feet below top of casing.
  - gal = gallons.
  - mS/cm = milliSiemens per centimeter.
  - °C = degrees Celsius.
  - NTU = Nephelometric Turbidity Units.
  - mg/L = milligrams per liter.
  - mV = millivolts.









# Groundwater Sample Collection Log

Project Name: Hercules  
Project Number: \_\_\_\_\_

Boring ID: MW-12  
Site Location: \_\_\_\_\_

Start Date: 11-27-2007 Finish Date: 11-27-2007  
Sample Technician: CT TB  
Purge/Sample Method: Peristaltic Pump  
Well Diameter (d): 2"  
Total Depth (TD): 12  
Approximate Depth of Water Column (h): 3.14  
(h = TD - DTW [ft-btoc])  
Calculated Well Volume (V = 6hd<sup>2</sup>): 0.51 / 3x = 1.53 / 6x = 2.55  
(V = vol in gal; d = well diam. in ft)

Date	Time	DTW (ft-btoc)
11-27-07	12:25	8.86
11-27-07	14:23	10.72

## WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Oxidation/Reduction Potential (mV)	Comments
11/27/07 14:20	0.0	5.91	96.8	21.8	17			
14:23	0.5	5.76	92.7	22.2	32			
14:26	1.0	5.75	101.2	22.5	19			
14:29	1.5	5.96	86.5	21.9	9.1			
14:32	2.0	well emptied						

Sample Identification: HER-MW12-112707  
Weather Conditions During Sampling: 65° clear sky  
Comments: \_\_\_\_\_

Date	Time	Sample Container	Preservative
11-27-07	15:40	4-40M1 Va	HCL

Sample Technician: CT TB Date: 11-27-2007

- Notes:
- ft-btoc = feet below top of casing.
  - gal = gallons.
  - mS/cm = milliSiemens per centimeter.
  - °C = degrees Celsius.
  - NTU = Nephelometric Turbidity Units.
  - mg/L = milligrams per liter.
  - mV = millivolts.



















**APPENDIX B  
LABORATORY ANALYTICAL RESULTS**

## ANALYTICAL REPORT

Job Number: 680-32249-1

Job Description: Hercules Hattiesburg 4Q07 MW and DA Soil

For:

Hercules Inc.  
Research Center - Bldg 8139/15  
500 Hercules Road  
Wilmington, DE 19808-1599  
Attention: Mr. Timothy Hassett



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Lidya Gulizia  
Project Manager I  
lidya.gulizia@testamericainc.com  
12/14/2007

cc: Mr. Charles Coney

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who signed this test report.



**Job Narrative**  
**680-J32249-1**

**Receipt**

Method(s) 8260B: The following sample(s) was received with headspace in the sample vials: HER-MW05-112707 (680-32249-10), HER-MW14-112807 (680-32249-19), HER-MW15-112807 (680-32249-20). All of the vials for each of these have headspace in them.

The soil volatile samples were received unpreserved as bulk samples.

All other samples were received in good condition within temperature requirements.

**GC/MS VOA**

Method(s) 8260B: The following sample was diluted due to the abundance of non-target analytes: HER-DA2-112807 (680-32249-31). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: HER-DA2-112807 (680-32249-31).

Method(s) 8260B: The following sample(s) was diluted due to the abundance of non-target analytes: HER-DA1-112807 (680-32249-30). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

**GC/MS Semi VOA**

Method(s) 8270C: Samples have surrogate recoveries outside of established limits. Re-extract

Method(s) 8270C: A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for four analytes to recover outside criteria for this method when a full list spike is utilized. The LCS associated with batch 92817 had less than four analytes outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method(s) 8270C: The following samples was diluted due to the abundance of target analytes: HER-DA1-112807 (680-32249-30), HER-DA2-112807 (680-32249-31). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

**GC Semi VOA**

Method(s) 8081A\_8082: The following samples were diluted due to the nature of the sample matrix: HER-DA1-112807 (680-32249-30), HER-DA2-112807 (680-32249-31). Elevated reporting limits (RLs) are provided.

Method(s) 8081A\_8082: Matrix spikes could not be recovered due to sample matrix interferences which required sample dilution. The associated laboratory control standard (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

**General Chemistry**

No analytical or quality issues were noted.

**Comments**

No additional comments.

## METHOD SUMMARY

Client: Hercules Inc.

Job Number: 680-32249-1

Description	Lab Location	Method	Preparation Method
<b>Matrix Solid</b>			
Volatile Organic Compounds by GC/MS	TAL SAV	SW846 8260B	
Purge and Trap	TAL SAV		SW846 5030A
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL SAV	SW846 8270C	
Ultrasonic Extraction	TAL SAV		SW846 3550B
Organochlorine Pesticides & Polychlorinated Biphenyls by Gas Chromatography	TAL SAV	SW846 8081A_8082	
Ultrasonic Extraction	TAL SAV		SW846 3550B
Chlorinated Herbicides by GC	TAL SAV	SW846 8151A	
Chlorinated Herbicides by GC - Solids Prep	TAL SAV		SW846 8151A
<b>Matrix Water</b>			
Volatile Organic Compounds by GC/MS	TAL SAV	SW846 8260B	
Purge-and-Trap	TAL SAV		SW846 5030B

### Lab References:

TAL SAV = TestAmerica Savannah

### Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: Hercules Inc.

Job Number: 680-32249-1

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
SW846 8260B	Bearden, Robert	RB
SW846 8260B	LeSeane, Latika Rene	LL
SW846 8260B	Lui, Chung	CL
SW846 8270C	Johnson, Brad	BJ
SW846 8081A_8082	Kellar, Joshua	JK
SW846 8151A	Kellar, Joshua	JK

## SAMPLE SUMMARY

Client: Hercules Inc.

Job Number: 680-32249-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-32249-1	HER-CM00-112607	Water	11/26/2007 1505	11/29/2007 0923
680-32249-2	HER-CM01-112607	Water	11/26/2007 1500	11/29/2007 0923
680-32249-3	HER-CM02-112607	Water	11/26/2007 1455	11/29/2007 0923
680-32249-4	HER-CM03-112607	Water	11/26/2007 1450	11/29/2007 0923
680-32249-4MS	HER-CM03-112607	Water	11/26/2007 1450	11/29/2007 0923
680-32249-4MSD	HER-CM03-112607	Water	11/26/2007 1450	11/29/2007 0923
680-32249-5	HER-CM04-112607	Water	11/26/2007 1445	11/29/2007 0923
680-32249-6	HER-CM05-112607	Water	11/26/2007 1435	11/29/2007 0923
680-32249-7	HER-MW02-112707	Water	11/27/2007 1025	11/29/2007 0923
680-32249-7MS	HER-MW02-112707	Water	11/27/2007 1025	11/29/2007 0923
680-32249-7MSD	HER-MW02-112707	Water	11/27/2007 1025	11/29/2007 0923
680-32249-8	HER-MW03-112707	Water	11/27/2007 0922	11/29/2007 0923
680-32249-9	HER-MW04-112707	Water	11/27/2007 1225	11/29/2007 0923
680-32249-10	HER-MW05-112707	Water	11/27/2007 1405	11/29/2007 0923
680-32249-11	HER-MW06-112707	Water	11/27/2007 1530	11/29/2007 0923
680-32249-12	HER-MW07-112807	Water	11/28/2007 0930	11/29/2007 0923
680-32249-12MS	HER-MW07-112807	Water	11/28/2007 0930	11/29/2007 0923
680-32249-12MSD	HER-MW07-112807	Water	11/28/2007 0930	11/29/2007 0923
680-32249-13	HER-MW08-112807	Water	11/28/2007 1425	11/29/2007 0923
680-32249-14	HER-MW09-112807	Water	11/28/2007 1355	11/29/2007 0923
680-32249-15	HER-MW10-112707	Water	11/27/2007 1145	11/29/2007 0923
680-32249-16	HER-MW11-112707	Water	11/27/2007 1300	11/29/2007 0923
680-32249-17	HER-MW12-112707	Water	11/27/2007 1540	11/29/2007 0923
680-32249-18	HER-MW13-112807	Water	11/28/2007 1320	11/29/2007 0923
680-32249-19	HER-MW14-112807	Water	11/28/2007 1225	11/29/2007 0923
680-32249-20	HER-MW15-112807	Water	11/28/2007 1135	11/29/2007 0923
680-32249-21	HER-MW16-112807	Water	11/28/2007 1055	11/29/2007 0923
680-32249-22	HER-MW17-112807	Water	11/28/2007 1505	11/29/2007 0923
680-32249-23	HER-MW18-112707	Water	11/27/2007 1630	11/29/2007 0923
680-32249-24	HER-MW19-112807	Water	11/28/2007 0830	11/29/2007 0923
680-32249-25	HER-RS1-112607	Water	11/26/2007 1425	11/29/2007 0923
680-32249-26	HER-RS2-112707	Water	11/27/2007 0915	11/29/2007 0923
680-32249-27	HER-RS3-112807	Water	11/28/2007 0920	11/29/2007 0923
680-32249-28	HER-FD1-112707	Water	11/27/2007 0000	11/29/2007 0923
680-32249-29	HER-FD2-112807	Water	11/28/2007 0000	11/29/2007 0923
680-32249-30	HER-DA1-112807	Solid	11/28/2007 1530	11/29/2007 0923
680-32249-31	HER-DA2-112807	Solid	11/28/2007 1550	11/29/2007 0923
680-32249-32TB	TRIP BLANK	Water	11/28/2007 0000	11/29/2007 0923



# SAMPLE RESULTS

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM00-112607

Lab Sample ID: 680-32249-1

Date Sampled: 11/26/2007 1505

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92567	Instrument ID: GC/MS Volatiles - O
Preparation:	5030B		Lab File ID: o0320.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/03/2007 1431		Final Weight/Volume: 5 mL
Date Prepared:	12/03/2007 1431		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM00-112607

Lab Sample ID: 680-32249-1

Date Sampled: 11/26/2007 1505

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92567

Instrument ID: GC/MS Volatiles - O

Preparation: 5030B

Lab File ID: o0320.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/03/2007 1431

Final Weight/Volume: 5 mL

Date Prepared: 12/03/2007 1431

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	96		75 - 120
Dibromofluoromethane	97		75 - 121
Toluene-d8 (Surr)	90		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

**Client Sample ID:** HER-CM01-112607

Lab Sample ID: 680-32249-2

Date Sampled: 11/26/2007 1500

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92512	Instrument ID: GC/MS Volatiles - O C2
Preparation:	5030B		Lab File ID: o0315.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/01/2007 0352		Final Weight/Volume: 5 mL
Date Prepared:	12/01/2007 0352		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0



# Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM01-112607

Lab Sample ID: 680-32249-2

Date Sampled: 11/26/2007 1500

Client Matrix: Water

Date Received: 11/29/2007 0923

## 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92512

Instrument ID: GC/MS Volatiles - O C2

Preparation: 5030B

Lab File ID: o0315.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/01/2007 0352

Final Weight/Volume: 5 mL

Date Prepared: 12/01/2007 0352

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	94		75 - 120
Dibromofluoromethane	98		75 - 121
Toluene-d8 (Surr)	91		75 - 120

# Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM02-112607

Lab Sample ID: 680-32249-3

Date Sampled: 11/26/2007 1455

Client Matrix: Water

Date Received: 11/29/2007 0923

## 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92512	Instrument ID:	GC/MS Volatiles - O C2
Preparation:	5030B		Lab File ID:	o0317.d
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	12/01/2007 0421		Final Weight/Volume:	5 mL
Date Prepared:	12/01/2007 0421			

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM02-112607

Lab Sample ID: 680-32249-3

Date Sampled: 11/26/2007 1455

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92512

Instrument ID: GC/MS Volatiles - O C2

Preparation: 5030B

Lab File ID: o0317.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/01/2007 0421

Final Weight/Volume: 5 mL

Date Prepared: 12/01/2007 0421

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	93		75 - 120
Dibromofluoromethane	97		75 - 121
Toluene-d8 (Surr)	89		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM03-112607

Lab Sample ID: 680-32249-4

Date Sampled: 11/26/2007 1450

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92567	Instrument ID: GC/MS Volatiles - O
Preparation:	5030B		Lab File ID: o0322.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/03/2007 1459		Final Weight/Volume: 5 mL
Date Prepared:	12/03/2007 1459		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0



**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM03-112607

Lab Sample ID: 680-32249-4

Date Sampled: 11/26/2007 1450

Client Matrix: Water

Date Received: 11/29/2007 0923

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 680-92567

Instrument ID: GC/MS Volatiles - O

Preparation: 5030B

Lab File ID: o0322.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/03/2007 1459

Final Weight/Volume: 5 mL

Date Prepared: 12/03/2007 1459

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	94		75 - 120
Dibromofluoromethane	93		75 - 121
Toluene-d8 (Surr)	89		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM04-112607

Lab Sample ID: 680-32249-5

Date Sampled: 11/26/2007 1445

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92567	Instrument ID: GC/MS Volatiles - O
Preparation:	5030B		Lab File ID: o0326.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/03/2007 1607		Final Weight/Volume: 5 mL
Date Prepared:	12/03/2007 1607		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM04-112607

Lab Sample ID: 680-32249-5

Date Sampled: 11/26/2007 1445

Client Matrix: Water

Date Received: 11/29/2007 0923

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 680-92567

Instrument ID: GC/MS Volatiles - O

Preparation: 5030B

Lab File ID: o0326.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/03/2007 1607

Final Weight/Volume: 5 mL

Date Prepared: 12/03/2007 1607

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	91	75 - 120
Dibromofluoromethane	99	75 - 121
Toluene-d8 (Surr)	91	75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM05-112607

Lab Sample ID: 680-32249-6

Date Sampled: 11/26/2007 1435

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92567	Instrument ID: GC/MS Volatiles - O
Preparation:	5030B		Lab File ID: o0328.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/03/2007 1635		Final Weight/Volume: 5 mL
Date Prepared:	12/03/2007 1635		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0



Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-CM05-112607

Lab Sample ID: 680-32249-6

Date Sampled: 11/26/2007 1435

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92567

Instrument ID: GC/MS Volatiles - O

Preparation: 5030B

Lab File ID: o0328.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/03/2007 1635

Final Weight/Volume: 5 mL

Date Prepared: 12/03/2007 1635

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	92		75 - 120
Dibromofluoromethane	95		75 - 121
Toluene-d8 (Surr)	90		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW02-112707

Lab Sample ID: 680-32249-7

Date Sampled: 11/27/2007 1025

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92567	Instrument ID: GC/MS Volatiles - O
Preparation:	5030B		Lab File ID: o0330.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/03/2007 1704		Final Weight/Volume: 5 mL
Date Prepared:	12/03/2007 1704		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW02-112707

Lab Sample ID: 680-32249-7

Date Sampled: 11/27/2007 1025

Client Matrix: Water

Date Received: 11/29/2007 0923

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 680-92567

Instrument ID: GC/MS Volatiles - O

Preparation: 5030B

Lab File ID: o0330.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/03/2007 1704

Final Weight/Volume: 5 mL

Date Prepared: 12/03/2007 1704

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	93		75 - 120
Dibromofluoromethane	99		75 - 121
Toluene-d8 (Surr)	89		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW03-112707

Lab Sample ID: 680-32249-8

Date Sampled: 11/27/2007 0922

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92567	Instrument ID: GC/MS Volatiles - O
Preparation:	5030B		Lab File ID: o0332.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/03/2007 1732		Final Weight/Volume: 5 mL
Date Prepared:	12/03/2007 1732		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0



**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW03-112707

Lab Sample ID: 680-32249-8

Date Sampled: 11/27/2007 0922

Client Matrix: Water

Date Received: 11/29/2007 0923

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**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 680-92567

Instrument ID: GC/MS Volatiles - O

Preparation: 5030B

Lab File ID: o0332.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/03/2007 1732

Final Weight/Volume: 5 mL

Date Prepared: 12/03/2007 1732

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	93		75 - 120
Dibromofluoromethane	96		75 - 121
Toluene-d8 (Surr)	89		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW04-112707

Lab Sample ID: 680-32249-9

Date Sampled: 11/27/2007 1225

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0448.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0208

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0208

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW04-112707

Lab Sample ID: 680-32249-9

Date Sampled: 11/27/2007 1225

Client Matrix: Water

Date Received: 11/29/2007 0923

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0448.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0208

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0208

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
<b>Surrogate</b>	<b>%Rec</b>		<b>Acceptance Limits</b>
4-Bromofluorobenzene	100		75 - 120
Dibromofluoromethane	98		75 - 121
Toluene-d8 (Surr)	93		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW05-112707

Lab Sample ID: 680-32249-10

Date Sampled: 11/27/2007 1405

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92536

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0445.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/03/2007 1947

Final Weight/Volume: 5 mL

Date Prepared: 12/03/2007 1947

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	1.6		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW05-112707

Lab Sample ID: 680-32249-10

Date Sampled: 11/27/2007 1405

Client Matrix: Water

Date Received: 11/29/2007 0923

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 680-92536

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0445.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/03/2007 1947

Final Weight/Volume: 5 mL

Date Prepared: 12/03/2007 1947

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	95		75 - 120
Dibromofluoromethane	95		75 - 121
Toluene-d8 (Surr)	94		75 - 120



# Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW06-112707

Lab Sample ID: 680-32249-11

Client Matrix: Water

Date Sampled: 11/27/2007 1530

Date Received: 11/29/2007 0923

## 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0449.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0235

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0235

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW06-112707

Lab Sample ID: 680-32249-11

Date Sampled: 11/27/2007 1530

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B Analysis Batch: 680-92630 Instrument ID: GC/MS Volatiles - B  
Preparation: 5030B Lab File ID: b0449.d  
Dilution: 1.0 Initial Weight/Volume: 5 mL  
Date Analyzed: 12/04/2007 0235 Final Weight/Volume: 5 mL  
Date Prepared: 12/04/2007 0235

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	93		75 - 120
Dibromofluoromethane	98		75 - 121
Toluene-d8 (Surr)	93		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

**Client Sample ID:** HER-MW07-112807

Lab Sample ID: 680-32249-12

Date Sampled: 11/28/2007 0930

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0456.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0546

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0546

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW07-112807

Lab Sample ID: 680-32249-12

Date Sampled: 11/28/2007 0930

Client Matrix: Water

Date Received: 11/29/2007 0923

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0456.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0546

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0546

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	89	75 - 120
Dibromofluoromethane	99	75 - 121
Toluene-d8 (Surr)	95	75 - 120

**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW08-112807

Lab Sample ID: 680-32249-13

Date Sampled: 11/28/2007 1425

Client Matrix: Water

Date Received: 11/29/2007 0923

**8260B Volatile Organic Compounds by GC/MS**

Method:	8260B	Analysis Batch: 680-92536	Instrument ID:	GC/MS Volatiles - B
Preparation:	5030B		Lab File ID:	b0441.d
Dilution:	100		Initial Weight/Volume:	5 mL
Date Analyzed:	12/03/2007 1758		Final Weight/Volume:	5 mL
Date Prepared:	12/03/2007 1758			

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<2500		2500
Acetonitrile	<4000		4000
Acrolein	<2000		2000
Acrylonitrile	<2000		2000
Benzene	14000		100
Dichlorobromomethane	<100		100
Bromoform	<100		100
Bromomethane	<100		100
2-Butanone (MEK)	<1000		1000
Carbon disulfide	<200		200
Carbon tetrachloride	370		100
Chlorobenzene	<100		100
Chloroethane	<100		100
Chloroform	<100		100
Chloromethane	<100		100
2-Chloro-1,3-butadiene	<100		100
3-Chloro-1-propene	<100		100
Chlorodibromomethane	<100		100
1,2-Dibromo-3-Chloropropane	<100		100
Ethylene Dibromide	<100		100
Dibromomethane	<100		100
trans-1,4-Dichloro-2-butene	<200		200
Dichlorodifluoromethane	<100		100
1,1-Dichloroethane	<100		100
1,2-Dichloroethane	<100		100
1,1-Dichloroethene	<100		100
cis-1,2-Dichloroethene	<100		100
trans-1,2-Dichloroethene	<100		100
1,2-Dichloropropane	<100		100
cis-1,3-Dichloropropene	<100		100
trans-1,3-Dichloropropene	<100		100
Ethylbenzene	110		100
Ethyl methacrylate	<100		100
2-Hexanone	<1000		1000
Iodomethane	<500		500
Isobutyl alcohol	<4000		4000
Methacrylonitrile	<2000		2000
Methylene Chloride	<500		500
Methyl methacrylate	<100		100
4-Methyl-2-pentanone (MIBK)	<1000		1000
Pentachloroethane	<500		500
Propionitrile	<2000		2000
Styrene	<100		100
1,1,1,2-Tetrachloroethane	<100		100



**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW08-112807

Lab Sample ID: 680-32249-13

Date Sampled: 11/28/2007 1425

Client Matrix: Water

Date Received: 11/29/2007 0923

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**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 680-92536

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0441.d

Dilution: 100

Initial Weight/Volume: 5 mL

Date Analyzed: 12/03/2007 1758

Final Weight/Volume: 5 mL

Date Prepared: 12/03/2007 1758

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<100		100
Tetrachloroethene	<100		100
Toluene	110		100
1,1,1-Trichloroethane	<100		100
1,1,2-Trichloroethane	<100		100
Trichloroethene	<100		100
Trichlorofluoromethane	<100		100
1,2,3-Trichloropropane	<100		100
Vinyl acetate	<200		200
Vinyl chloride	<100		100
Xylenes, Total	<200		200
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	87		75 - 120
Dibromofluoromethane	100		75 - 121
Toluene-d8 (Surr)	94		75 - 120

# Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW09-112807

Lab Sample ID: 680-32249-14

Date Sampled: 11/28/2007 1355

Client Matrix: Water

Date Received: 11/29/2007 0923

## 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0450.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0302

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0302

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	9.1		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	3.7		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW09-112807

Lab Sample ID: 680-32249-14

Date Sampled: 11/28/2007 1355

Client Matrix: Water

Date Received: 11/29/2007 0923

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**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0450.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0302

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0302

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	1.5		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	94	75 - 120
Dibromofluoromethane	97	75 - 121
Toluene-d8 (Surr)	93	75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW10-112707

Lab Sample ID: 680-32249-15

Date Sampled: 11/27/2007 1145

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B  
Preparation: 5030B  
Dilution: 1.0  
Date Analyzed: 12/04/2007 0330  
Date Prepared: 12/04/2007 0330

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B  
Lab File ID: b0451.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW10-112707

Lab Sample ID: 680-32249-15

Date Sampled: 11/27/2007 1145

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B  
Preparation: 5030B  
Dilution: 1.0  
Date Analyzed: 12/04/2007 0330  
Date Prepared: 12/04/2007 0330

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B  
Lab File ID: b0451.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	91		75 - 120
Dibromofluoromethane	99		75 - 121
Toluene-d8 (Surr)	92		75 - 120



## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW11-112707

Lab Sample ID: 680-32249-16

Date Sampled: 11/27/2007 1300

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0452.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0357

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0357

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoforn	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

**Analytical Data**

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW11-112707

Lab Sample ID: 680-32249-16

Date Sampled: 11/27/2007 1300

Client Matrix: Water

Date Received: 11/29/2007 0923

**8260B Volatile Organic Compounds by GC/MS**

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0452.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0357

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0357

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	89		75 - 120
Dibromofluoromethane	99		75 - 121
Toluene-d8 (Surr)	94		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

**Client Sample ID:** HER-MW12-112707

Lab Sample ID: 680-32249-17

Date Sampled: 11/27/2007 1540

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0453.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0424

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0424

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW12-112707

Lab Sample ID: 680-32249-17

Date Sampled: 11/27/2007 1540

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B  
Preparation: 5030B  
Dilution: 1.0  
Date Analyzed: 12/04/2007 0424  
Date Prepared: 12/04/2007 0424

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B  
Lab File ID: b0453.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	90	75 - 120
Dibromofluoromethane	98	75 - 121
Toluene-d8 (Surr)	92	75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW13-112807

Lab Sample ID: 680-32249-18

Date Sampled: 11/28/2007 1320

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92630	Instrument ID: GC/MS Volatiles - B
Preparation:	5030B		Lab File ID: b0457.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/04/2007 0613		Final Weight/Volume: 5 mL
Date Prepared:	12/04/2007 0613		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	180		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	560	E	1.0
Chlorobenzene	9.0		1.0
Chloroethane	<1.0		1.0
Chloroform	140		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	1.2		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0



Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW13-112807

Lab Sample ID: 680-32249-18

Date Sampled: 11/28/2007 1320

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B  
Preparation: 5030B  
Dilution: 1.0  
Date Analyzed: 12/04/2007 0613  
Date Prepared: 12/04/2007 0613

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B  
Lab File ID: b0457.d  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	91		75 - 120
Dibromofluoromethane	101		75 - 121
Toluene-d8 (Surr)	92		75 - 120

Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW13-112807

Lab Sample ID: 680-32249-18

Date Sampled: 11/28/2007 1320

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B Analysis Batch: 680-92648 Instrument ID: GC/MS Volatiles - B  
Preparation: 5030B Lab File ID: b0462.d  
Dilution: 5.0 Initial Weight/Volume: 5 mL  
Date Analyzed: 12/04/2007 1713 Run Type: DL Final Weight/Volume: 5 mL  
Date Prepared: 12/04/2007 1713

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<130		130
Acetonitrile	<200		200
Acrolein	<100		100
Acrylonitrile	<100		100
Benzene	150	D	5.0
Dichlorobromomethane	<5.0		5.0
Bromoform	<5.0		5.0
Bromomethane	<5.0		5.0
2-Butanone (MEK)	<50		50
Carbon disulfide	<10		10
Carbon tetrachloride	430	D	5.0
Chlorobenzene	8.2	D	5.0
Chloroethane	<5.0		5.0
Chloroform	130	D	5.0
Chloromethane	<5.0		5.0
2-Chloro-1,3-butadiene	<5.0		5.0
3-Chloro-1-propene	<5.0		5.0
Chlorodibromomethane	<5.0		5.0
1,2-Dibromo-3-Chloropropane	<5.0		5.0
Ethylene Dibromide	<5.0		5.0
Dibromomethane	<5.0		5.0
trans-1,4-Dichloro-2-butene	<10		10
Dichlorodifluoromethane	<5.0		5.0
1,1-Dichloroethane	<5.0		5.0
1,2-Dichloroethane	<5.0		5.0
1,1-Dichloroethene	<5.0		5.0
cis-1,2-Dichloroethene	<5.0		5.0
trans-1,2-Dichloroethene	<5.0		5.0
1,2-Dichloropropane	<5.0		5.0
cis-1,3-Dichloropropene	<5.0		5.0
trans-1,3-Dichloropropene	<5.0		5.0
Ethylbenzene	<5.0		5.0
Ethyl methacrylate	<5.0		5.0
2-Hexanone	<50		50
Iodomethane	<25		25
Isobutyl alcohol	<200		200
Methacrylonitrile	<100		100
Methylene Chloride	<25		25
Methyl methacrylate	<5.0		5.0
4-Methyl-2-pentanone (MIBK)	<50		50
Pentachloroethane	<25		25
Propionitrile	<100		100
Styrene	<5.0		5.0
1,1,1,2-Tetrachloroethane	<5.0		5.0

Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW13-112807

Lab Sample ID: 680-32249-18

Date Sampled: 11/28/2007 1320

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B Analysis Batch: 680-92648 Instrument ID: GC/MS Volatiles - B  
Preparation: 5030B Lab File ID: b0462.d  
Dilution: 5.0 Initial Weight/Volume: 5 mL  
Date Analyzed: 12/04/2007 1713 Run Type: DL Final Weight/Volume: 5 mL  
Date Prepared: 12/04/2007 1713

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<5.0		5.0
Tetrachloroethene	<5.0		5.0
Toluene	<5.0		5.0
1,1,1-Trichloroethane	<5.0		5.0
1,1,2-Trichloroethane	<5.0		5.0
Trichloroethene	<5.0		5.0
Trichlorofluoromethane	<5.0		5.0
1,2,3-Trichloropropane	<5.0		5.0
Vinyl acetate	<10		10
Vinyl chloride	<5.0		5.0
Xylenes, Total	<10		10

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	92	75 - 120
Dibromofluoromethane	104	75 - 121
Toluene-d8 (Surr)	91	75 - 120

# Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW14-112807

Lab Sample ID: 680-32249-19

Date Sampled: 11/28/2007 1225

Client Matrix: Water

Date Received: 11/29/2007 0923

## 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92630	Instrument ID:	GC/MS Volatiles - B
Preparation:	5030B		Lab File ID:	b0458.d
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	12/04/2007 0640		Final Weight/Volume:	5 mL
Date Prepared:	12/04/2007 0640			

Analyte	Result (ug/L)	Qualifier	RL
Acetone	72		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW14-112807

Lab Sample ID: 680-32249-19

Date Sampled: 11/28/2007 1225

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0458.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0640

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0640

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	90		75 - 120
Dibromofluoromethane	99		75 - 121
Toluene-d8 (Surr)	94		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW15-112807

Lab Sample ID: 680-32249-20

Date Sampled: 11/28/2007 1135

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92630	Instrument ID: GC/MS Volatiles - B
Preparation:	5030B		Lab File ID: b0459.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/04/2007 0707		Final Weight/Volume: 5 mL
Date Prepared:	12/04/2007 0707		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	62		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0



Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW15-112807

Lab Sample ID: 680-32249-20

Date Sampled: 11/28/2007 1135

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0459.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0707

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0707

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	97		75 - 120
Dibromofluoromethane	98		75 - 121
Toluene-d8 (Surr)	93		75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW16-112807

Lab Sample ID: 680-32249-21

Date Sampled: 11/28/2007 1055

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92630	Instrument ID: GC/MS Volatiles - B
Preparation:	5030B		Lab File ID: b0460.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/04/2007 0735		Final Weight/Volume: 5 mL
Date Prepared:	12/04/2007 0735		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0

Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW16-112807

Lab Sample ID: 680-32249-21

Date Sampled: 11/28/2007 1055

Client Matrix: Water

Date Received: 11/29/2007 0923

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-92630

Instrument ID: GC/MS Volatiles - B

Preparation: 5030B

Lab File ID: b0460.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 12/04/2007 0735

Final Weight/Volume: 5 mL

Date Prepared: 12/04/2007 0735

Analyte	Result (ug/L)	Qualifier	RL
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Acceptance Limits
4-Bromofluorobenzene	92	75 - 120
Dibromofluoromethane	99	75 - 121
Toluene-d8 (Surr)	95	75 - 120

## Analytical Data

Client: Hercules Inc.

Job Number: 680-32249-1

Client Sample ID: HER-MW17-112807

Lab Sample ID: 680-32249-22

Date Sampled: 11/28/2007 1505

Client Matrix: Water

Date Received: 11/29/2007 0923

### 8260B Volatile Organic Compounds by GC/MS

Method:	8260B	Analysis Batch: 680-92648	Instrument ID: GC/MS Volatiles - B
Preparation:	5030B		Lab File ID: b0463.d
Dilution:	200		Initial Weight/Volume: 5 mL
Date Analyzed:	12/04/2007 1741		Final Weight/Volume: 5 mL
Date Prepared:	12/04/2007 1741		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<5000		5000
Acetonitrile	<8000		8000
Acrolein	<4000		4000
Acrylonitrile	<4000		4000
Benzene	2800		200
Dichlorobromomethane	<200		200
Bromoform	<200		200
Bromomethane	<200		200
2-Butanone (MEK)	<2000		2000
Carbon disulfide	<400		400
Carbon tetrachloride	45000	E	200
Chlorobenzene	850		200
Chloroethane	<200		200
Chloroform	4600		200
Chloromethane	<200		200
2-Chloro-1,3-butadiene	<200		200
3-Chloro-1-propene	<200		200
Chlorodibromomethane	<200		200
1,2-Dibromo-3-Chloropropane	<200		200
Ethylene Dibromide	<200		200
Dibromomethane	<200		200
trans-1,4-Dichloro-2-butene	<400		400
Dichlorodifluoromethane	<200		200
1,1-Dichloroethane	<200		200
1,2-Dichloroethane	<200		200
1,1-Dichloroethene	<200		200
cis-1,2-Dichloroethene	<200		200
trans-1,2-Dichloroethene	<200		200
1,2-Dichloropropane	<200		200
cis-1,3-Dichloropropene	<200		200
trans-1,3-Dichloropropene	<200		200
Ethylbenzene	<200		200
Ethyl methacrylate	<200		200
2-Hexanone	<2000		2000
Iodomethane	<1000		1000
Isobutyl alcohol	<8000		8000
Methacrylonitrile	<4000		4000
Methylene Chloride	<1000		1000
Methyl methacrylate	<200		200
4-Methyl-2-pentanone (MIBK)	<2000		2000
Pentachloroethane	<1000		1000
Propionitrile	<4000		4000
Styrene	<200		200
1,1,1,2-Tetrachloroethane	<200		200