Eco•Systems, Inc.
Consultants, Engineers, and Scientists

January 27, 2010

Mr. William McKercher
Environmental Engineer
Office of Pollution Control
Mississippi Department of Environmental Quality (MDEQ)
P.O. Box 2261
Jackson, Mississippi 39225

Re: ***2nd Semi-Annual 2009 Monitoring Report***
Hercules Incorporated
Hattiesburg, Mississippi
ESI Project No. HER12029128

Dear Mr. McKercher:

Eco-Systems, Inc. (Eco-Systems) is pleased to submit the enclosed two copies of the 2nd Semi-Annual 2009 Monitoring Report prepared on behalf of Hercules, Incorporated. The report includes discussion of the December 2009 surface water and groundwater monitoring event.

If you have any questions or require additional information, please do not hesitate to call Mr. Timothy Hassett at (302) 995-3456 or Chris Waters (Eco-Systems) at (251) 342-0700.

Sincerely,

A. Chris Waters, RPG
Senior Scientist

cc: Timothy Hassett – Hercules Inc. w/ enclosure
C. S. Jordan – Hercules, Hattiesburg w/ enclosure

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1.0 INTRODUCTION

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 2nd semi-annual monitoring event for 2009. During this event, water levels were measured at 23 monitoring wells and 13 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). The site layout, location of monitoring wells and piezometers, and Green's Creek are illustrated on **Figure 2**.

2.0 FIELD ACTIVITIES

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.

2.1 GROUNDWATER SAMPLE COLLECTION

On December 7, 2009 Eco-Systems personnel collected groundwater levels from the 18 monitoring wells to be sampled during the monitoring event and from 5 additional monitoring wells and 13 piezometers at the site. A summary of the water level measurements obtained on December 7, 2009 is included as **Table 1**. A potentiometric surface map has been prepared from the December 7, 2009 groundwater elevations and is included as Figure 3.

Groundwater sample collection was conducted December 7 through 10, 2009. 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 laboratory. 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 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 December 7, 2009, six surface water samples were collected from the previously established sampling points along Green's Creek, CM-00 through CM-05. Samples were collected beginning with the most downstream location, CM-05, and proceeding upstream to each successive sampling location. Surface water samples were collected directly into new sample containers that were supplied by the analytical laboratory. 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, three duplicate groundwater samples, four rinsate samples, one trip blank sample, and two 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

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 December 8th, 9th, and 10th, 2009.

3.1.1 Volatile Organic Compounds

VOC's were not detected in groundwater samples collected from 13 of the 18 monitoring wells (MW-02, MW-03, MW-04, MW-5, MW-6, MW-07, MW-10, MW-11, MW-12, MW-14, MW-15, MW-16, and MW-18).

Analysis of the groundwater sample collected from monitoring well MW-08 detected chlorobenzene, carbon tetrachloride, chloroform, and methylene chloride at concentrations above their respective TRG's. Ethylbenzene, toluene, and total xylenes were detected at concentrations below the TRG. The laboratory dilution factor resulted in elevated detection limits.

Analysis of the groundwater sample collected from monitoring well MW-09 detected acetone and benzene at concentrations below their respective TRG's.

Analysis of the groundwater sample collected from monitoring well MW-13 detected benzene, carbon tetrachloride, and chloroform at concentrations above their respective TRG's. Chlorobenzene was detected below the TRG. The laboratory dilution factor resulted in elevated detection limits.

Analysis of the groundwater sample collected from monitoring well MW-17 detected benzene, chlorobenzene, carbon tetrachloride, and chloroform at concentrations above their respective TRG's. The laboratory dilution factor resulted in elevated detection limits.

Analysis of the groundwater sample collected from monitoring well MW-19 detected benzene and chloroform at concentrations above their respective TRG's. Chlorobenzene, carbon tetrachloride, ethylbenzene, toluene, and total xylenes were detected at concentrations below their respective TRGs.

3.2 SURFACE WATER ANALYTICAL RESULTS

Discussion presented in this section summarizes the analytical results for surface water samples collected from sampling locations CM-00 through CM-05 on December 7, 2009.

3.2.1 Volatile Organic Compounds

VOC's were not detected in surface water samples collected from locations CM-00, CM-01, and CM-03. Benzene was detected at concentrations below the TRG in CM-04. Acetone was detected at concentrations below the TRG in samples collected from CM-02 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 (labeled FD01-120909), MW-13 (labeled FD02-120909), and MW-17 (labeled FD03-121009). 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 samples collected from monitoring wells MW-13 and MW-17 detected the similar concentrations of all parameters.

VOC's were not detected in the rinsate samples (RS01-120709 and RS03-120909). Styrene was detected in rinsate samples RS-01-121009 and RS02-120809, however, no styrene was reported in any environmental sample.

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.

Test America reported that the sample vials containing the groundwater samples collected from MW-14 and MW-5 arrived with air in the headspace of the sample containers. However, since analytical data for both samples were consistent with historical results, the presence of air in the headspace does not appear to have had a material effect on the analytical data.

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.

4.0 FINDINGS AND CONCLUSIONS

The findings and conclusions in this section are based on data obtained during the December 2009 monitoring event.

4.1 SLUDGE PITS

Groundwater monitoring in the sludge pit area is conducted using five monitoring wells. Monitoring wells MW-2 and MW-3 are located north of the sludge pits in historically up gradient positions. Monitoring wells MW-4, MW-10, and MW-11 are located south of the sludge pits in historically down gradient positions.

VOCs were not detected in samples collected from sludge pit area monitoring wells MW-2, MW-3, MW-4, MW-10, and MW-11. Based on current and historical analytical results, VOCs are not migrating from the sludge pits at concentrations above TRGs.

4.2 GREEN'S CREEK

VOCs were not detected in samples collected from surface water monitoring locations CM-00, CM-01, and CM-03 during this monitoring event. Benzene was detected at concentrations below the TRG in sample CM-04. Low concentrations of acetone were detected in samples collected at CM-02 and CM-05; however, these detections may be a laboratory artifact. Based on the current and historical analytical results, VOCs in excess of TRGs are not migrating from the site via Green's Creek.

4.3 FORMER LANDFILL

Groundwater monitoring of the former landfill area is conducted using five monitoring wells. Monitoring wells MW-8 and MW-13 are located south and east of the former landfill in historically up gradient positions. Monitoring wells MW-5, MW-6, and MW-12 are located north of the former landfill in historically down gradient positions.

In samples collected from the up gradient wells MW-8 and MW-13, concentrations of benzene, chlorobenzene, carbon tetrachloride, and chloroform persist at concentrations above TRGs. Ethylbenzene, toluene, and total xylenes were detected in MW-8 at concentrations below the TRG in the December 2009 event; however, were not detected above the method detection limit in the May 2009 event.

No VOCs were detected in the samples collected from MW-5, MW-6, and MW-12. The lack of VOCs in groundwater samples in down gradient wells indicates that VOCs are not migrating from the landfill at concentrations above TRGs.

4.4 GROUNDWATER

Concentrations of benzene, chlorobenzene, carbon tetrachloride, and toluene above the TRG persist in samples collected from monitoring well MW-17, which is located in a suspected source area. Concentrations of these constituents have fluctuated, but remain generally stable.

Discussion of monitoring wells MW-8 and MW-13, which are near the suspected source area, is included in Section 4.3.

Concentrations of benzene have not been detected in samples collected from monitoring well MW-9 above the TRG since the November 2007 sampling event. Acetone was detected in monitoring well MW-9 during this event at concentrations below the TRG. All other parameter concentrations in monitoring well MW-9 remain non-detect.

VOCs were not detected in the December 2009 groundwater sample collected from MW-16 and have not occurred in samples collected from MW-16 since November 2005.

4.5 EASTERN PLANT AREA

Monitoring wells MW-18 and MW-19, which are located east of plant buildings, were installed as part of the CAP, but potentiometric information has not indicated that these wells are part of the previously defined area of groundwater containing volatile organic constituents. Therefore, monitoring wells MW-18 and MW-19 are discussed separately.

All parameters were detected at concentrations below their respective method detection limits in samples collected from monitoring well MW-18.

Concentrations of benzene and chloroform above the TRG persist in samples collected from monitoring well MW-19. Chlorobenzene, carbon tetrachloride, ethylbenzene, toluene, and total xylenes were detected in samples collected from monitoring well MW-19 at concentrations below the TRG during the December 2009 monitoring event.

TABLES

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA
December 2009
Hercules, Incorporated
Hattiesburg, Mississippi

WELL NO.	TOC ELEVATION (ft.)[1]	WATER DEPTH (ft)[2]	GROUNDWATER ELEVATION (ft.)
PERMANENT MONITOR WELLS			
MW-1	174.12	NA[3]	NA
MW-2	160.07	4.67	155.40
MW-3	160.03	6.22	153.81
MW-4	159.75	11.02	148.73
MW-5	160.99	7.71	153.28
MW-6	174.05	8.52	165.53
MW-7	183.96	14.65	169.31
MW-8	179.99	15.25	164.74
MW-9	181.97	12.03	169.94
MW-10	159.88	11.07	148.81
MW-11	157.18	8.37	148.81
MW-12	162.17	8.04	154.13
MW-13	175.23	8.82	166.41
MW-14	169.23	14.67	154.56
MW-15	172.21	19.74	152.47
MW-16	175.62	17.26	158.36
MW-17	186.13	18.29	167.84
MW-18	165.31	4.84	160.47
MW-19	172.25	11.29	160.96
MW-20	168.62	6.03	162.59
MW-21	163.66	2.41	161.25
MW-22	167.62	6.20	161.42
MW-23	162.38	3.41	158.97
MW-24	164.98	8.01	156.97
STAFF GAUGES			
SG-1	NA	NA	NA
SG-2	NA	NA	NA
SG-3	NA	NA	NA
SG-4	NA	NA	NA
PIEZOMETERS			
TP-1	172.18	NA[3]	NA
TP-2	171.72	10.81	160.91
TP-3	169.74	9.75	159.99
TP-4	163.64	3.52	160.12
TP-5	160.54	NA[3]	NA
TP-6	158.63	8.84	149.79
TP-7	167.17	7.34	159.83
TP-8	183.79	14.73	169.06
TP-9	163.44	NA[3]	NA
TP-10	179.69	14.97	164.72
TP-11	162.26	9.95	152.31
TP-12	159.95	11.10	148.85
TP-13	156.99	8.15	148.84
TP-14	162.59	4.32	158.27
TP-16	179.72	13.14	166.58
TP-17	182.71	17.20	165.51

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	methylene chloride	methyl ethyl ketone	methyl isobutyl ketone
CM-00	Sep-0	5.0	NA	NA
	Aug-0	5.0	< 10.0	< 10.0
	Nov-0	5.0	< 10.0	< 10.0
	Feb-0	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Aug-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	Feb-0	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Dec-(	5.0	< 10.0	< 10.0
CM-01	Feb-0	13.0	NA	NA
	Sep-0	5.0	NA	NA
	Aug-0	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	Feb-0	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Aug-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	Feb-0	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Dec-(	5.0	< 10.0	< 10.0
CM-02	Feb-0	13.0	NA	NA
	Aug-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	Feb-0	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Aug-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	Feb-0	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Dec-(	5.0	< 10.0	< 10.0
CM-03	Feb-0	13.0	NA	NA
	Aug-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	Feb-0	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Aug-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	Feb-0	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Dec-(	5.0	< 10.0	< 10.0
CM-04	Feb-0	13.0	NA	NA
	Aug-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	Feb-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Aug-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	160.0	< 10.0
	Feb-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Nov-(	5.0	< 10.0	< 10.0
	May-(	5.0	< 10.0	< 10.0
	Dec-(	5.0	< 10.0	< 10.0

1 - NA indicates that
2 - "<" indicates that
3 - ND = Non Detect
4 - Target Remediati
5 - TRO not yet estab

Location	Date	methylene chloride	methyl ethyl ketone	methyl isobutyl ketone
CM-05	Feb-0[illegible]	3.0	NA	NA
	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Dec-0[illegible]	[illegible].0	< 10.0	< 10.0
MW-02	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Dec-0[illegible]	[illegible].0	< 10.0	< 10.0
MW-03	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	54	< 10.0
	Feb-0[illegible]	[illegible].0	< 10	< 10.0
	May-0[illegible]	[illegible].0	< 10	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Dec-0[illegible]	[illegible].0	< 10.0	< 10.0
MW-04	Dec-0[illegible]	ND	NA	NA
	Feb-0[illegible]	3.0	NA	NA
	Aug-0[illegible]	[illegible].0	NA	NA
	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Dec-0[illegible]	[illegible].0	< 10.0	< 10.0
MW-05	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Dec-0[illegible]	[illegible].0	< 10.0	< 10.0
MW-06	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Aug-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	Feb-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Nov-0[illegible]	[illegible].0	< 10.0	< 10.0
	May-0[illegible]	[illegible].0	< 10.0	< 10.0
	Dec-0[illegible]	[illegible].0	< 10.0	< 10.0

1 - NA indicates that t
2 - "<" indicates that t
3 - ND = Non Detect
4 - Target Remediatio
5 - TRG not yet estabi

Location	Date	methylene chloride	methyl ethyl ketone	methyl isobutyl ketone
MW-07	Aug-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	Feb-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Aug-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10	< 10.0
	Feb-[illegible]5.0	< 10	< 10.0
	May-[illegible]5.0	< 10	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Dec-[illegible]5.0	< 10.0	< 10.0
MW-08	Dec-[illegible]26.1	NA	NA
	Feb-[illegible]13.0	NA	NA
	Aug-[illegible]1,300	< 10.0	< 10.0
	Nov-[illegible]500	< 10.0	< 10.0
	Feb-[illegible]500	< 10.0	< 10.0
	May-[illegible]388	< 10.0	< 10.0
	Aug-[illegible]518	< 10.0	< 10.0
	Nov-[illegible]300	< 1,000	< 1,000
	Feb-[illegible]50	< 100	< 100
	May-[illegible]250	< 500	< 500
	Nov-[illegible]500	< 10.0	< 10.0
	May-[illegible]500	< 10.0	< 10.0
	Nov-[illegible]178	< 10.0	< 10.0
	May-[illegible]125	< 250	< 250
	Dec-[illegible]388	< 250	< 250
MW-09	Dec-[illegible]2.48	NA	NA
	Feb-[illegible]13.0	NA	NA
	Aug-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	Feb-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Aug-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]6.8	< 10.0	48.0
	Feb-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Dec-[illegible]5.0	< 10.0	< 10.0
MW-10	Aug-[illegible]5.0	NA	NA
	Aug-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	Feb-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Aug-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	Feb-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Dec-[illegible]5.0	< 10.0	< 10.0
MW-11	Dec-[illegible]ND	NA	NA
	Feb-[illegible]13.0	NA	NA
	Aug-[illegible]5.0	NA	NA
	Aug-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	Feb-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Aug-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	Feb-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Dec-[illegible]5.0	< 10.0	< 10.0
MW-12	Aug-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	Feb-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Aug-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	Feb-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Nov-[illegible]5.0	< 10.0	< 10.0
	May-[illegible]5.0	< 10.0	< 10.0
	Dec-[illegible]5.0	< 10.0	< 10.0

1 - NA indicates that
2 - "<" indicates that
3 - ND = Non Detect
4 - Target Remediati
5 - TRG not yet estal

Location	Date	methylene chloride	methyl ethyl ketone	methyl isobutyl ketone
MW-13	Aug-02	< 5.0	< 10.0	< 10.0
	Nov-02	< 5.0	< 10.0	< 10.0
	Feb-03	< 5.0	< 10.0	< 10.0
	May-03	< 5.0	< 10.0	< 10.0
	Aug-03	< 5.0	< 10.0	< 10.0
	Nov-03	< 5.0	< 10.0	< 10.0
	Feb-07	< 5.0	< 10.0	< 10.0
	May-04	< 5.0	< 10.0	< 10.0
	Nov-04	< 5.0	< 10.0	< 10.0
	May-05	< 100	< 200	< 200
	Nov-05	< 100	< 200	< 200
	May-06	< 125	< 250	< 250
	Dec-06	< 120	< 250	< 250
MW-14	Aug-02	< 5.0	< 10.0	< 10.0
	Nov-02	< 5.0	< 10.0	< 10.0
	Feb-03	< 5.0	< 10.0	< 10.0
	May-03	< 5.0	< 10.0	< 10.0
	Aug-03	< 5.0	< 10.0	< 10.0
	Nov-03	< 5.0	< 10.0	< 10.0
	Feb-07	< 5.0	< 10.0	< 10.0
	May-04	< 5.0	< 10.0	< 10.0
	Nov-04	< 5.0	< 10.0	< 10.0
	May-05	< 5.0	< 10.0	< 10.0
	Nov-05	< 5.0	< 10.0	< 10.0
	May-06	< 10	< 20	< 20
	Dec-06	< 5	< 10	< 10
MW-15	Aug-02	< 5.0	< 10.0	< 10.0
	Nov-02	< 5.0	< 10.0	< 10.0
	Feb-03	< 5.0	< 10.0	< 10.0
	May-03	< 5.0	< 10.0	< 10.0
	Aug-03	< 5.0	< 10.0	< 10.0
	Nov-03	< 5.0	< 10.0	< 10.0
	Feb-07	< 5.0	< 10.0	< 10.0
	May-04	< 5.0	< 10.0	< 10.0
	Nov-04	< 5.0	< 10.0	< 10.0
	May-05	< 5.0	< 10.0	< 10.0
	Nov-05	< 5.0	< 10.0	< 10.0
	May-06	< 25	< 50	< 50
	Dec-06	< 5	< 10	< 10
MW-16	Aug-02	< 5.0	< 10.0	< 10.0
	Nov-02	< 5.0	< 10.0	< 10.0
	Feb-03	< 5.0	< 10.0	< 10.0
	May-03	< 5.0	< 10.0	< 10.0
	Aug-03	< 5.0	< 10.0	< 10.0
	Nov-03	< 5.0	< 10.0	< 10.0
	Feb-07	< 5.0	< 10.0	< 10.0
	May-04	< 5.0	< 10.0	< 10.0
	Nov-04	< 5.0	< 10.0	< 10.0
	May-05	< 5.0	< 10.0	< 10.0
	Nov-05	< 5.0	< 10.0	< 10.0
	May-06	< 5.0	< 10.0	< 10.0
	Dec-06	< 5.0	< 10.0	< 10.0
MW-17	Aug-02	1,300	NA	NA
	Nov-02	1,500	NA	NA
	Feb-03	1,500	NA	NA
	May-03	1,300	NA	NA
	Aug-03	18	< 10.0	< 10.0
	Nov-04	< 1,000	< 2,000	< 2,000
	Feb-01	< 1,000	< 2000	< 2,000
	May-04	< 100	< 200	570
	Nov-04	< 1,000	< 2,000	< 2,000
	May-05	< 1,000	< 2,000	< 2,000
	Nov-05	< 1,000	< 2,000	< 2,000
	May-06	< 1,000	< 2,000	< 2,000
	Dec-06	< 500	< 1,000	< 1,000
MW-18	Aug-02	< 5.0	< 10.0	< 10.0
	Nov-02	< 5.0	< 10.0	< 10.0
	Feb-03	< 5.0	< 10.0	< 10.0
	May-03	< 5.0	< 10.0	< 10.0
	Aug-03	< 5.0	< 10.0	< 10.0
	Nov-03	< 5.0	< 10.0	< 10.0
	Feb-07	< 5.0	< 10.0	< 10.0
	May-04	< 5.0	< 10.0	< 10.0
	Nov-04	< 5.0	< 10.0	< 10.0
	May-05	< 5.0	< 10.0	< 10.0
	Nov-05	< 5.0	< 10.0	< 10.0
	May-06	< 5.0	< 10.0	< 10.0
	Dec-06	< 5.0	< 10.0	< 10.0
MW-19	Aug-02	< 5.0	< 10.0	< 10.0
	Nov-02	< 5.0	< 10.0	< 10.0
	Feb-03	< 5.0	< 10.0	< 10.0
	May-03	< 5.0	< 10.0	< 10.0
	Aug-03	< 5.0	< 10.0	< 10.0
	Nov-03	< 5.0	< 10.0	< 10.0
	Feb-07	< 5.0	< 10.0	< 10.0
	May-04	< 5.0	< 10.0	< 10.0
	Nov-04	< 5.0	< 10.0	< 10.0
	May-05	< 5.0	< 10.0	< 10.0
	Nov-05	< 5.0	< 10.0	< 10.0
	May-06	< 5.0	< 10.0	< 10.0
	Dec-06	< 5.0	< 10.0	< 10.0
TRG[4]		5.0	1,910	139

1 - NA indicates that t
2 - "<" indicates that t
3 - ND = Non Detect
4 - Target Remediatio
5 - TRG not yet estab

TABLE 3
SUMMARY OF QA/QC SAMPLE ANALYTICAL RESULTS

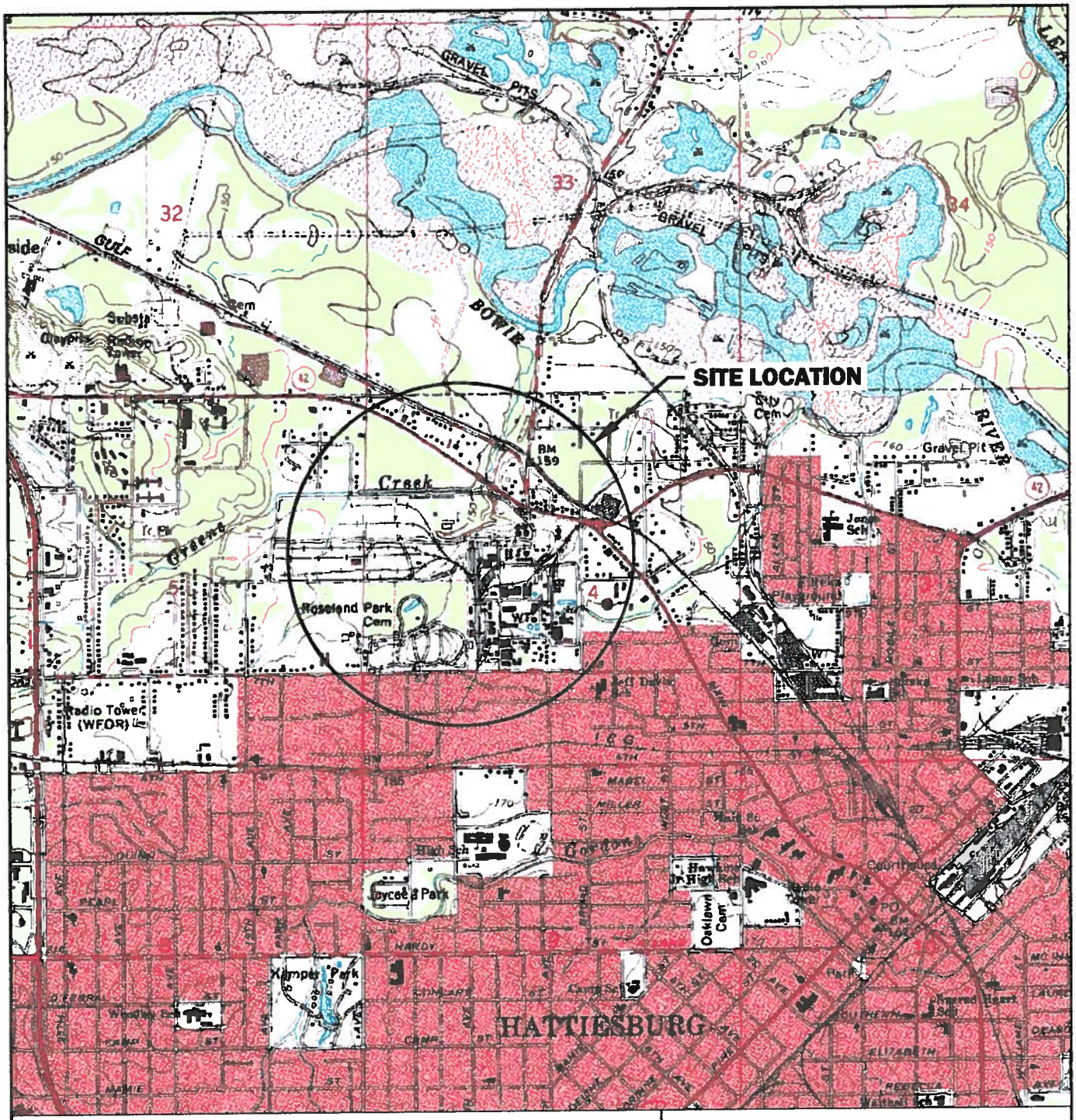
Location	*Concentrations in µg/L*				
	Benzene	**Carbon Tetrachloride**	**Chlorobenzene**	**Toluene**	**Chloroform**
MW-04	< 1.0	< 1.0	< 1.0	< 1	1.0
MW-04 FD01	< 1.0	< 1.0	< 1.0	< 1	1.0
RPD	0%	0%	0%	0%	0%
MW-13	**790**	**2,000**	29	< 25	**310**
MW-13 FD02	**640**	**2,100**	26	< 25	**500**
RPD	21.0%	4.87%	3.92%	0%	46.9%
MW-17	**4,500**	**54,000**	**1200**	< 500	**7,100**
MW-17 FD03	**4,100**	**50,000**	**1,100**	< 500	**6,400**
RPD	9.30%	7.69%	8.70%	0%	10.4%
RS-01	< 1.0	< 1.0	< 1.0	< 1.0	1.0
RS-02	< 1.0	< 1.0	< 1.0	< 3.9	1.0
RS-03	< 1.0	< 1.0	< 1.0	< 2.3	1.0
TB-01	< 1.0	< 1.0	< 1.0	< 1	1.0
TB-02	< 1.0	< 1.0	< 1.0	< 1	1.0

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

2 - ND indicates that the data was not detected

2 - RPD = relative percent difference

FIGURES



QUADRANGLE LOCATION

SOURCE: DeLORME 3D TopoQuads – HATTIESBURG, MISSISSIPPI

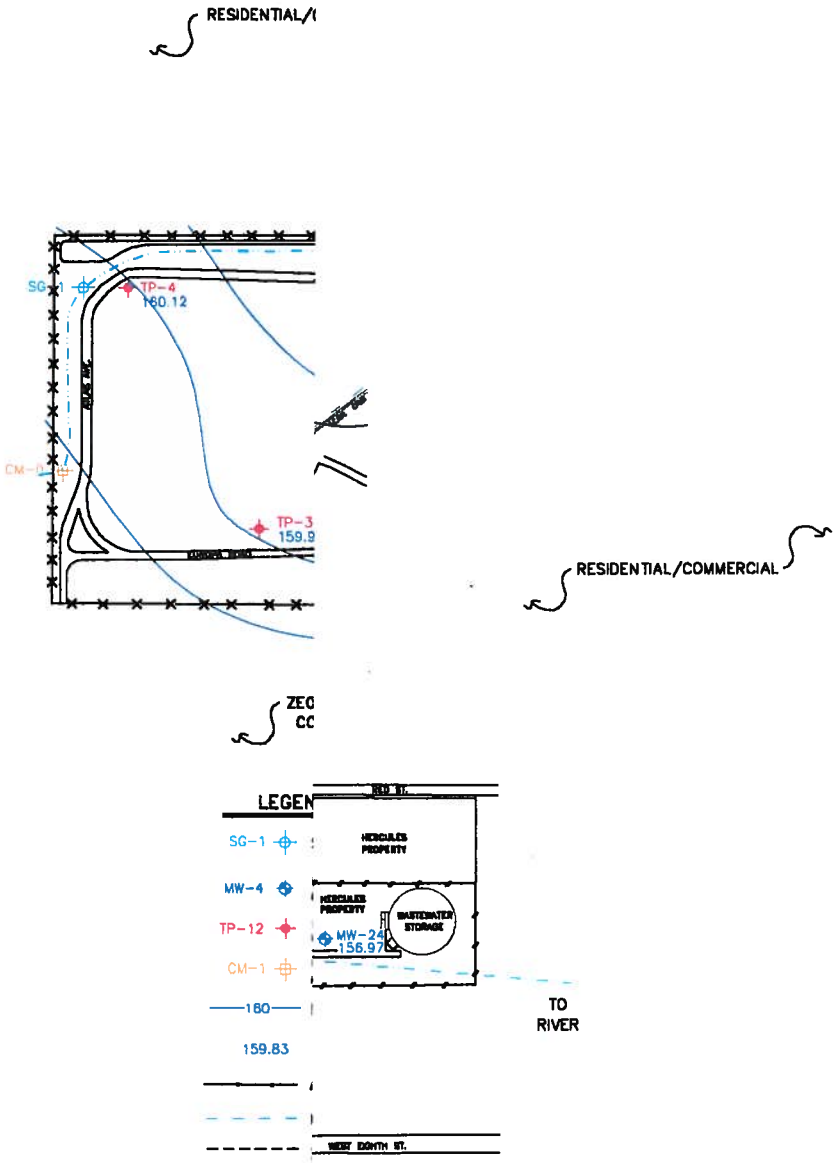
HERCULES INCORPORATED
HATTIESBURG, MISSISSIPPI

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-TOPO.dwg	

SITE LOCATION MAP

FIGURE 1



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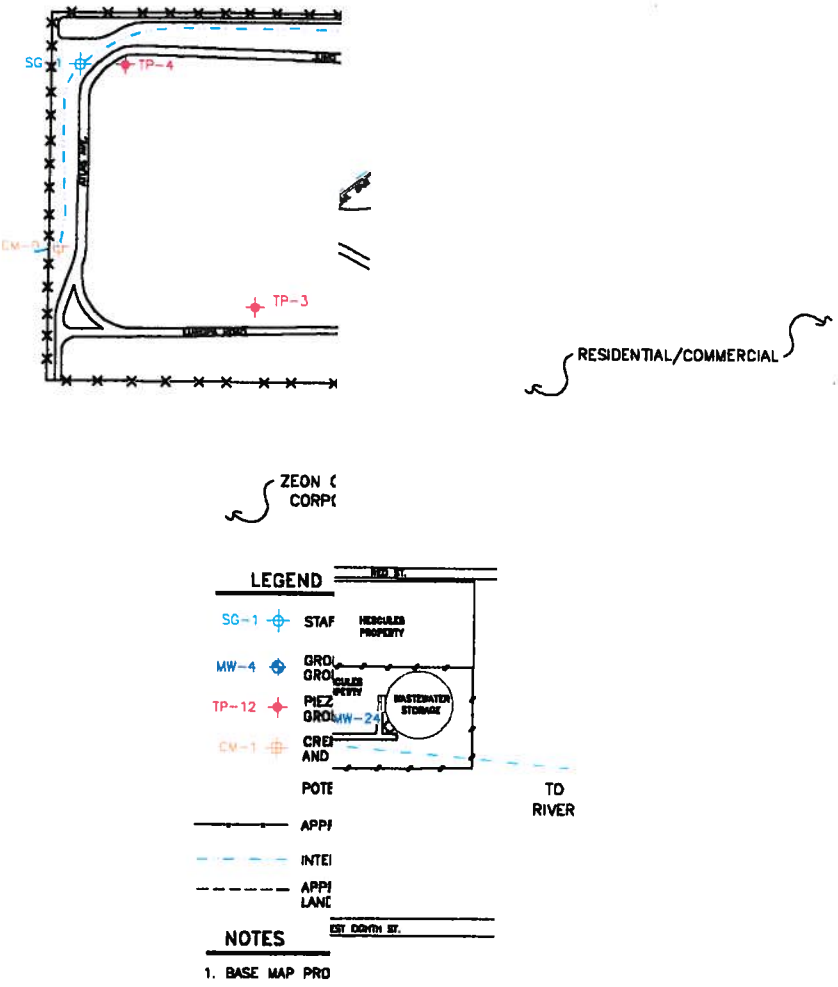
Houston, TX • Nashville, TN • Atlanta, GA
Hattiesburg, MS • Gulfport, MS

HERCULES INCORPORATED
HATTIESBURG, MISSISSIPPI

POTENTIOMETRIC SURFACE MAP
(DECEMBER 7, 2009)

PROJECT No. HER12029128
CAD FILE NAME HER12029128-F03.dwg
FIGURE 3
REVISION 0



SCALE
200 0 200 400 FEET

co·Systems, Inc. sultants, Engineers and Scientists ason, MS • Meridian, MS • Mobile, AL ston, TX • Nashville, TN • Atlanta, GA Hattiesburg, MS • Gulfport, MS	HERCULES INCORPORATED HATTIESBURG, MISSISSIPPI SITE MAP	PROJECT No. HER1202912B CAD FILE NAME HER1202912B-F02.dwg FIGURE 2 REVISION 0	

APPENDIX A
GROUNDWATER COLLECTION LOGS

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128

Boring ID: MW-3
Site Location: Hattiesburg, MS

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 160.03
Total Depth of Well (ft 18.00
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 11.78
Calculated Well Volume ($V=6hd^2$)
(V = vol in gal; D = well diam. in ft): 1.92
Groundwater Elevation AMSL 153.81

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	16:25	6.22
12/8/2009	9:45	5.74
12/8/2009	9:58	5.75
12/8/2009	10:05	5.77

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (ms/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/8/2009	0.40	4.99	0.077	18.14	3.93	4.04	191.4	Clear
9:55	1.00	4.92	0.075	18.20	3.01	3.59	190.5	Clear
10:00	1.20	4.90	0.075	18.26	2.56	3.40	190.3	Clear
10:05	1.40	4.87	0.075	18.39	2.07	3.35	191.0	Clear

Sample Identification: HER-MW03-120809 & HER-RS02-120809

Other Conditions During Sampling Clear, 78°F

Comments: Analysis for Appendix IX VOC's 8260b

Signature: For Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/8/2009	10:05	3-40ml VOAs	None
RS02	10:00	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-2
Site Location: Hattiesburg, MS

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 160.07
Total Depth of Well (ft 20.50
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 15.83
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 2.58
Groundwater Elevation AMSL 155.40

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	16:27	4.67
12/8/2009	10:35	3.85
12/8/2009	10:39	3.88
12/8/2009	10:45	3.91
12/8/2009	10:53	3.96

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (ms/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/8/09 10:40	0.25	5.70	0.079	18.50	25.7	5.67	137.1	Turbid
10:45	0.50	5.68	0.079	18.44	11.0	4.43	153.8	Slightly Turbid
10:49	0.60	5.61	0.079	18.49	9.49	4.45	153.5	Clear
10:53	0.80	5.53	0.079	18.54	7.36	3.71	148.9	Clear
10:58	1.00	5.50	0.079	18.51	5.98	3.41	141.7	Clear
11:00	1.10	5.49	0.079	18.50	5.27	3.21	140.2	Clear

Sample Identification: HER-MW02-120809 , HER-MW02-120809-MS , HER-MW02-120809-MSD
Weather Conditions During Sampling Rain, 76°F
Comments:
Analysis for Appendix IX VOC's 8260b
Signature: for Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/8/2009	11:00	3-40ml VOAs	None
MS	11:00	3-40ml VOAs	None
MSD	11:00	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-10
Site Location: Hattiesburg, MS

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 159.88
Total Depth of Well (ft 18.50
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 7.43
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 1.21
Groundwater Elevation AMSL 148.81

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	16:34	11.07
12/9/2009	8:28	10.56
12/9/2009	8:33	10.71
12/9/2009	8:40	10.79

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (ms/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 8:23	0.10	6.86	0.038	20.01	45	0.39	-31.6	Turbid
8:32	0.20	6.69	0.037	19.96	40	0.25	-32.4	Turbid
8:39	0.30	6.56	0.036	19.94	40	0.12	-29.4	Turbid
8:42	0.50	6.51	0.036	19.94	40	0.11	-28.6	Turbid
8:45	0.70	6.50	0.035	19.94	40	0.12	-27.6	Turbid
8:49	0.90	6.47	0.035	19.95	40	0.10	-30.1	Turbid

Sample Identification: HER-MW10-120909

Weather Conditions During Sampling Clear, 57°F

Comments:
Analysis for Appendix IX VOC's 8260b

Signature: For Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	8:50	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-4
Site Location: Hattiesburg, MS

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 159.75
Total Depth of Well (ft 18.74
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 7.72
Calculated Well Volume ($V=6hd^2$)
(V = vol in gal; D = well diam. in ft): 1.26
Groundwater Elevation AMSL 148.73

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	16:37	11.02
12/9/2009	8:48	10.55
12/9/2009	8:56	10.55
12/9/2009	9:01	10.57

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (ms/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 8:49	0.10	6.18	0.195	20.20	14.5	8.68	-4.9	Slightly turbid
8:53	0.20	6.15	0.394	21.22	8.03	0.47	-31.0	Clear
8:56	0.30	6.13	0.397	21.34	8.53	0.34	-41.7	Clear
8:59	0.40	6.15	0.399	21.35	5.40	0.26	-45.3	Clear
9:02	0.50	6.15	0.399	21.36	5.02	0.29	-44.6	Clear
9:05	0.60	6.16	0.400	21.36	4.91	0.28	-43.6	Clear

Sample Identification: HER-MW04-120909 , HER-FD01-120909

Weather Conditions During Sampling Clear, 58°F

Comments:
Analysis for Appendix IX VOC's 8260b

Signature: for Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	9:08	3-40ml VOAs	None
FD01	NA	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-11
Site Location: Hattiesburg, MS

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 157.18
Total Depth of Well (ft 17.00
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 8.63
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 1.41
Groundwater Elevation AMSL 148.81

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	16:38	8.37
12/9/2009	7:55	7.70
12/9/2009	8:13	7.72
12/9/2009	8:19	7.73
12/9/2009	8:24	7.73

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (ms/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 8:10	0.10	5.67	0.154	18.75	42.8	3.08	95.7	Turbid
8:14	0.30	5.64	0.154	18.70	40.1	1.20	103.6	Turbid
8:16	0.40	5.57	0.154	18.62	36.6	0.44	117.6	Turbid
8:19	0.50	5.50	0.154	18.53	34.4	0.32	126.0	Turbid
8:22	0.60	5.45	0.154	18.43	31.0	0.36	132.4	Turbid
8:24	0.70	5.45	0.154	18.39	31.8	0.38	132.0	Turbid

Sample Identification: HER-MW11-120909

Weather Conditions During Sampling Clear, 58°F

Comments:
Analysis for Appendix IX VOC's 8260b

Signature: For Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	8:26	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-5
Site Location: Hattiesburg, MS

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 160.99
Total Depth of Well (ft 18.50
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 10.79
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 1.76
Groundwater Elevation AMSL 153.28

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:01	7.71
12/9/2009	9:36	7.35
12/9/2009	9:46	9.05
12/9/2009	9:51	9.02
12/9/2009	9:54	8.98
12/9/2009	10:00	8.88
12/9/2009	10:04	8.90
12/9/2009	10:09	8.89

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (ms/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 9:42	0.20	7.03	0.358	18.61	49.1	8.22	-6.1	Turbid
9:45	0.40	6.85	0.355	18.23	43.3	3.67	14.1	Turbid
9:50	0.60	6.74	0.352	17.95	37.4	1.73	25.6	Turbid
9:53	0.80	6.70	0.349	17.64	Not Obtained	1.69	31.4	Turbid
9:56	0.90	6.67	0.346	17.53	28.4	1.44	25.1	Turbid
9:58	1.00	6.67	0.346	17.64	24.2	1.43	20.8	Turbid
10:00	1.10	6.68	0.345	17.45	20.1	1.85	16.8	Turbid
10:02	1.20	6.68	0.345	17.42	18.0	1.66	11.4	Slightly Turbid
10:04	1.30	6.70	0.345	17.50	13.9	1.43	4.3	Slightly Turbid
10:08	1.50	6.72	0.346	17.53	12.8	1.30	-1.1	Slightly Turbid
10:10	1.60	6.73	0.346	17.53	10.8	1.25	-2.0	Clear

Sample Identification: HER-MW05-120909

Other Conditions During Sampling Clear, 59°F

Comments: Sheen in bucket
Analysis for Appendix IX VOC's 8260b

Signature: For Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	10:12	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-12
Site Location: Hattiesburg, MS

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 162.17
Total Depth of Well (ft 12.00
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 3.96
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 0.65
Groundwater Elevation AMSL 154.13

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:04	8.04
12/9/2009	9:34	7.91
12/9/2009	9:46	7.04
12/9/2009	9:50	7.05

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (ms/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 9:41	0.10	6.38	0.080	19.35	45	1.49	-51.8	Turbid
9:44	0.20	6.34	0.080	19.37	28	0.58	-53.0	Turbid
9:46	0.40	6.33	0.081	19.43	16	0.31	-50.4	Slightly Turbid
9:49	0.60	6.33	0.081	19.29	13	0.26	-50.4	Slightly Turbid
9:52	0.80	6.33	0.081	19.22	10.0	0.16	-49.1	Clear
9:55	1.00	6.33	0.081	19.09	8.8	0.14	-47.6	Clear

Sample Identification: HER-MW12-120909

Other Conditions During Sampling Clear, 58°F

Comments:
Analysis for Appendix IX VOC's 8260b

Signature: For Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	10:00	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-6
Site Location: Hattiesburg, MS

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 174.05
Total Depth of Well (ft 23.25
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 14.73
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 2.40
Groundwater Elevation AMSL 165.53

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:06	8.52
12/9/2009	10:20	7.69
12/9/2009	10:39	8.00
12/9/2009	10:43	8.01
12/9/2009	10:49	8.04

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (ms/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 10:35	0.20	6.47	0.172	21.93	17	1.63	-13.4	Slightly Turbid
10:38	0.40	6.48	0.172	21.91	18	1.60	-16.3	Slightly Turbid
10:41	0.60	6.49	0.171	21.74	12	1.59	-18.3	Slightly Turbid
10:45	0.70	6.50	0.170	21.63	13	1.55	-19.3	Slightly Turbid
10:50	0.80	6.50	0.171	21.80	11	1.57	-19.7	Slightly Turbid
10:55	1.00	6.51	0.171	21.79	10.0	1.53	-20.2	Clear

Sample Identification: HER-MW06-120909 , HER-RS03-120909

Weather Conditions During Sampling Clear, 57°F

Comments:
Analysis for Appendix IX VOC's 8260b

Signature: Date: 12/14/2009
For Brent Eanes

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	11:00	3-40ml VOAs	None
RS03	10:30	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-18
Site Location: Hattiesburg, MS

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 165.31
Total Depth of Well (ft unknown
Approximate Depth of Water Column
(h= TD of well - water level [TOC]):
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft):
Groundwater Elevation AMSL 160.47

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:10	4.84
12/9/2009	10:38	4.20
12/9/2009	10:48	4.28
12/9/2009	10:57	4.28

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (ms/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 10:48	0.10	6.25	0.719	21.30	12.6	2.04	-39.1	Slightly Turbid
10:51	0.20	6.24	0.723	21.33	12.3	0.60	-42.6	Slightly Turbid
10:54	0.30	6.23	0.725	21.37	10.45	0.30	-44.5	Clear
10:57	0.40	6.23	0.724	21.13	7.81	0.19	-45.8	Clear
11:01	0.60	6.22	0.723	21.11	5.69	0.15	-48.9	Clear
11:04	0.70	6.22	0.723	21.12	5.61	0.13	-51.1	Clear
11:06	0.80	6.22	0.723	21.15	5.40	0.14	-52.3	Clear

Sample Identification: HER-MW18-120909

Weather Conditions During Sampling Clear, 58°F

Comments:
Analysis for Appendix IX VOC's 8260b

Signature: For Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	11:09	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-19
Site Location: Hattiesburg, MS.

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 172.25
Total Depth of Well (ft unknown
Approximate Depth of Water Column
(h= TD of well - water level [TOC]):
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft):
Groundwater Elevation AMSL 160.96

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:12	11.29
12/9/2009	11:13	11.03
12/9/2009	11:33	11.05
12/9/2009	11:41	11.05

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 11:25	0.20	7.02	0.430	23.08	10	0.39	-136.9	Clear
11:30	0.40	7.02	0.421	23.14	8.0	0.18	-142.9	Clear
11:35	0.60	7.02	0.413	23.04	7.3	0.14	-143.9	Clear
11:40	0.80	7.01	0.414	23.03	7.0	0.19	-142.2	Clear

Sample Identification: HER-MW19-120909

Other Conditions During Sampling Clear, 57°F

Comments: Sheen in bucket.

Laboratory Analysis for Appendix IX VOC's 8260b

Signature: For Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	11:45	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-7
Site Location: Hattiesburg, MS.

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 183.96
Total Depth of Well (ft 22.50
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 7.85
Calculated Well Volume ($V=6hd^2$)
(V = vol in gal; D = well diam. in ft): 1.28
Groundwater Elevation AMSL 169.31

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:19	14.65
12/9/2009	11:30	14.45
12/9/2009	11:36	14.45
12/9/2009	11:42	14.46

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 11:30	0.10	5.13	0.121	22.56	42.1	7.07	211.4	Turbid
11:35	0.30	4.93	0.122	23.08	31.6	5.59	230.3	Turbid
11:38	0.40	4.90	0.114	23.11	22.9	5.47	231.4	Turbid
11:40	0.50	4.89	0.116	23.11	21.9	5.23	232.5	Turbid
11:42	0.60	4.87	0.112	23.13	18.6	5.15	230.4	Slightly Turbid
11:46	0.70	4.87	0.111	23.17	16.3	4.90	226.9	Slightly Turbid
11:49	0.80	4.86	0.111	23.16	13.3	4.85	223.2	Slightly Turbid
11:52	1.00	4.84	0.111	23.14	9.91	4.82	224.5	Clear

Sample Identification: HER-MW07-120909 , HER-MW07-120909-MS
HER-MW07-120909-MSD
Other Conditions During Sampling Clear, 57°F

Comments: MS / MSD
Laboratory Analysis for Appendix IX VOC's 8260b
Signature: For Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	11:55	3-40ml VOAs	None
MS	11:55	3-40ml VOAs	None
MSD	11:55	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-16
Site Location: Hattiesburg, MS.

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 175.62
Total Depth of Well (ft 28.50
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 11.24
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 1.83
Groundwater Elevation AMSL 158.36

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:25	17.26
12/9/2009	12:15	17.34
12/9/2009	12:21	17.34
12/9/2009	12:29	17.35

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 12:20	0.20	6.96	0.940	21.97	21	0.43	-84.2	Turbid
12:24	0.40	6.99	0.940	21.90	16	0.24	-85.3	Slightly Turbid
12:27	0.60	7.01	0.938	21.81	15	0.16	-85.9	Slightly Turbid
12:31	0.80	7.02	0.939	21.97	11	0.12	-86.4	Slightly Turbid
12:35	1.00	7.03	0.940	21.99	11	0.12	-86.6	Slightly Turbid
12:39	1.20	7.06	0.943	22.18	40	0.10	-86.1	Turbid
12:42	1.40	7.04	0.943	22.15	20	0.08	-85.7	Turbid
12:45	1.60	7.06	0.941	22.12	29	0.09	-85.6	Turbid
12:48	1.80	7.06	0.942	22.12	15	0.07	-85.6	Slightly Turbid
12:50	2.00	7.06	0.942	22.12	11	0.07	-85.6	Slightly Turbid

Sample Identification: HER-MW16-120909

Weather Conditions During Sampling Clear, 56°F

Comments: Effervescence in VOAs as usual. Sheen in purge water.

Laboratory Analysis for Appendix IX VOC's 8260b

Signature: for Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	12:50	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-15
Site Location: Hattiesburg, MS.

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 172.21
Total Depth of Well (ft 26.50
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 6.76
Calculated Well Volume ($V=6hd^2$)
(V = vol in gal; D = well diam. in ft): 1.10
Groundwater Elevation AMSL 152.47

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:27	19.74
12/9/2009	12:22	18.23
12/9/2009	12:27	20.01
12/9/2009	12:32	20.07
12/9/2009	12:36	20.06
12/9/2009	12:42	20.07

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 12:28	0.10	6.39	1.045	22.24	10.60	6.39	-77.1	Clear
12:31	0.20	6.32	1.060	22.33	11.8	6.32	-72.2	Slightly Turbid
12:34	0.30	6.18	1.062	22.22	11.9	0.95	-60.6	Slightly Turbid
12:38	0.40	5.88	1.059	22.16	7.39	0.81	-46.0	Clear
12:42	0.50	5.90	1.057	22.15	5.55	0.65	-47.3	Clear
12:46	0.70	5.95	1.052	22.16	4.24	0.53	-48.1	Clear
12:50	0.80	5.98	1.049	22.11	3.56	0.52	-50.5	Clear
12:54	0.90	5.98	1.051	22.12	2.12	0.50	-50.4	Clear

Sample Identification: HER-MW15-120909

Other Conditions During Sampling Clear, 56°F

Comments: Effervescence in VOAs as usual. Sheen in purge water.

Laboratory Analysis for Appendix IX VOC's 8260b

Signature: Date: 12/14/2009

For Brent Eanes

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	12:58	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-14
Site Location: Hattiesburg, MS.

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump & Volume-Based
Well Diameter: 2"
T.O.C. Elev. AMSL 169.23
Total Depth of Well (ft 24.30
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 9.63
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 1.57
Groundwater Elevation AMSL 154.56

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:31	14.67
12/9/2009	13:11	14.23
12/9/2009	13:21	15.39
12/9/2009	13:29	16.57
12/9/2009	13:36	17.70

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 13:28	0.10	6.34	0.873	21.85	12.1	3.66	-78.2	Slightly Turbid
13:33	0.30	6.29	0.872	21.91	13.2	2.25	-77.2	Slightly Turbid
13:41	0.80	6.28	0.873	22.06	10.05	0.92	-80.3	Clear
13:44	0.90	6.30	0.874	22.09	9.82	0.64	-80.1	Clear
13:46	1.00	6.31	0.873	22.09	9.73	0.51	-79.6	Clear
13:49	1.10	6.31	0.872	22.05	9.51	0.48	-78.8	Clear

Sample Identification: HER-MW14-120909

Other Conditions During Sampling Clear, 56°F

Comments: Usual effervescence in sample

Laboratory Analysis for Appendix IX VOC's 8260b

Signature: Date: 12/14/2009

For Brent Eanes

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	13:53	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-13
Site Location: Hattiesburg, MS.

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 175.23
Total Depth of Well (ft 18.50
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 9.68
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 1.58
Groundwater Elevation AMSL 166.41

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:34	8.82
12/9/2009	13:44	7.34
12/9/2009	13:50	7.35
12/9/2009	13:55	7.35
12/9/2009	14:07	7.35

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/9/09 13:45	0.20	6.42	0.235	22.19	330	0.40	1.4	Turbid
13:49	0.40	6.26	0.215	22.32	60	0.20	-22.3	Turbid
13:52	0.60	6.20	0.210	22.15	21	0.16	-31.8	Slightly Turbid
13:56	0.80	6.18	0.210	22.15	16	0.16	-38.7	Slightly Turbid
13:59	1.00	6.20	0.215	22.23	12	0.16	-45.2	Slightly Turbid
14:03	1.20	6.24	0.223	22.27	12	0.11	-51.0	Slightly Turbid
14:05	1.40	6.30	0.238	22.26	12	0.11	-56.9	Slightly Turbid
14:07	1.50	6.34	0.246	22.36	13	0.09	-61.0	Slightly Turbid
14:10	1.60	6.40	0.266	22.16	13	0.08	-66.2	Slightly Turbid
14:13	1.70	6.46	0.284	22.31	12	0.09	-69.2	Slightly Turbid
14:15	1.80	6.49	0.304	22.30	12	0.10	-72.3	Slightly Turbid
14:17	2.00	6.54	0.314	22.24	16	0.08	-74.0	Slightly Turbid

Sample Identification: HER-MW13-120909 , HER-FD02-120909

Other Conditions During Sampling Clear, 56°F

Comments: Duplicate (FD02)

Laboratory Analysis for Appendix IX VOC's 8260b

Signature: For Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/9/2009	14:20	3-40ml VOAs	None
FD02	NA	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-9
Site Location: Hattiesburg, MS.

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 181.97
Total Depth of Well (ft 20.00
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 7.97
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 1.30
Groundwater Elevation AMSL 169.94

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:47	12.03
12/10/2009	9:00	11.47
12/10/2009	9:10	11.53
12/10/2009	9:17	11.54

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/10/09 9:07	0.20	7.14	0.517	16.08	12	0.64	-46.0	Slightly Turbid
9:11	0.40	7.02	0.341	17.02	15	0.36	-24.1	Slightly Turbid
9:16	0.60	6.79	0.263	17.38	13	0.32	-22.9	Slightly Turbid
9:20	0.80	6.65	0.252	17.32	12	0.27	-35.5	Slightly Turbid
9:24	1.00	6.58	0.254	18.16	10	0.22	-54.7	Clear
9:26	1.10	6.61	0.263	18.58	9.6	0.29	-63.9	Clear
9:28	1.20	6.57	0.269	18.92	8.3	0.21	-67.5	Clear
9:30	1.30	6.61	0.272	18.91	7.9	0.19	-72.2	Clear

Sample Identification: HER-MW09-121009

Weather Conditions During Sampling Clear, 38°F

Comments:
Laboratory Analysis for Appendix IX VOC's 8260b

Signature: Date: 12/14/2009
For B
Brent Eanes

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/10/2009	9:35	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-8
Site Location: Hattiesburg, MS.

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 179.99
Total Depth of Well (ft 18.50
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 3.25
Calculated Well Volume ($V=6hd^2$)
(V = vol in gal; D = well diam. in ft): 0.53
Groundwater Elevation AMSL 164.74

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:38	15.25
12/10/2009	8:10	15.17
12/10/2009	8:20	15.19

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/10/09 8:12	0.20	7.02	0.781	19.36	29.0	0.38	-96.5	Slightly Turbid
8:16	0.40	6.97	0.794	20.51	18.0	0.18	-102.4	Slightly Turbid
8:20	0.60	6.96	0.800	20.95	18.0	0.16	-100.4	Slightly Turbid
8:24	0.80	6.96	0.793	20.97	15.0	0.10	-102.3	Slightly Turbid
8:28	1.00	6.96	0.791	21.27	9.2	0.09	-103.3	Clear
8:31	1.10	6.96	0.787	21.27	8.8	0.08	-101.5	Clear

Sample Identification: HER-MW08-121009 , HER-RS04-121009

Weather Conditions During Sampling Clear, 35°F

Comments: Rinsate (RB04)

Laboratory Analysis for Appendix IX VOC's 8260b

Signature: Date: 12/14/2009

For Brent Eanes

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/10/2009	8:35	3-40ml VOAs	None
RS04	8:30	3-40ml VOAs	None

Eco-Systems, Inc.
Environmental Engineers and Scientists

Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER12029128
Boring ID: MW-17
Site Location: Hattiesburg, MS.

Start Date: 12/7/09 Finish Date: 12/10/09
Sample Technician: Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 186.13
Total Depth of Well (ft 22.70
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 4.41
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 0.72
Groundwater Elevation AMSL 167.84

Water Level Measurements		
Date	Time	B.T.O.C.
12/7/2009	17:44	18.29
12/10/2009	8:20	18.39
12/10/2009	8:26	18.42
12/10/2009	8:31	18.44

WELL DEVELOPMENT/PURGING DATA

Date/Time	Cumulative Volume (gal)	pH	Specific Conductivity (mS/cm)	Temperature (Celsius)	Turbidity (NTU)	D.O. (mg/l)	ORP (mv)	Comments
12/10/09 8:19	0.25	6.08	1.171	18.42	4.08	1.03	-77.3	Clear
8:26	0.50	6.07	1.237	19.37	2.81	4.53	-85.1	Clear
8:34	1.00	6.07	1.269	19.75	2.12	2.32	-88.7	Clear
8:38	1.20	6.07	1.282	19.90	2.15	2.01	-90.5	Clear
8:40	1.30	6.06	1.294	19.84	2.09	1.90	-91.9	Clear
8:43	1.40	6.06	1.296	19.88	1.32	1.77	-92.5	Clear
8:45	1.50	6.06	1.302	19.92	1.03	1.68	-93.6	Clear
8:48	1.60	6.06	1.311	19.89	0.96	1.21	-94.0	Clear
8:50	1.70	6.05	1.318	19.80	1.33	1.13	-94.6	Clear
8:52	1.80	6.05	1.323	19.75	1.25	0.97	-95.0	Clear
8:55	1.90	6.05	1.325	19.74	1.26	0.78	-95.4	Clear
8:59	2.10	6.04	1.321	19.70	1.09	0.80	-95.4	Clear

Sample Identification: HER-MW17-121009 , HER-FD03-121009

Weather Conditions During Sampling Clear, 33°F

Comments:
Laboratory Analysis for Appendix IX VOC's 8260b

Signature: For Brent Eanes Date: 12/14/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
12/10/2009	9:03	3-40ml VOAs	None
FD03	NA	3-40ml VOAs	None

APPENDIX B
LABORATORY ANALYTICAL RESULTS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 680-53419-1

SDG Number:

Job Description: Hercules Hattiesburg 4Q09 - DEC 2009

For:
Ashland Inc.
500 Hercules Road
Wilmington, DE 19894

Attention: Timothy Hassett

Lidya Gulizia

Approved for release.
Lidya Gulizia
Project Manager I
1/13/2010 10:06 AM

Lidya Gulizia
Project Manager I
lidya.gulizia@testamericainc.com
01/13/2010
Revision: 1

cc: Caleb Dana
Mr. Charlie Jordan
Mr. Chris Waters

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

TestAmerica Laboratories, Inc.
TestAmerica Savannah 5102 LaRoche Avenue, Savannah, GA 31404
Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Job Narrative
680-53419-1

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

GC/MS VOA
Method(s) 8260B: Surrogate recovery for the following sample(s) was outside the upper control limit: HER-FD02-120909 (680-53419-37). This sample was re-analyzed at dilution with passing surrogates.

Method(s) 8260B: 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 MS/MSD associated with batch 156021 has one analytes outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

Comments
No additional comments.

METHOD SUMMARY

Client: Ashland Inc.

Job Number: 680-53419-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (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: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Method	Analyst	Analyst ID
SW846 8260B	Bearden, Robert	RB

SAMPLE SUMMARY

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-53419-9	HER-CM01-120709	Water	12/07/2009 1525	12/11/2009 0945
680-53419-10	HER-CM02-120709	Water	12/07/2009 1510	12/11/2009 0945
680-53419-11	HER-CM03-120709	Water	12/07/2009 1455	12/11/2009 0945
680-53419-12	HER-CM04-120709	Water	12/07/2009 1440	12/11/2009 0945
680-53419-13	HER-CM05-120709	Water	12/07/2009 1830	12/11/2009 0945
680-53419-14	HER-MW02-120809	Water	12/08/2009 1100	12/11/2009 0945
680-53419-14MS	HER-MW02-120809	Water	12/08/2009 1100	12/11/2009 0945
680-53419-14MSD	HER-MW02-120809	Water	12/08/2009 1100	12/11/2009 0945
680-53419-15	HER-MW03-120809	Water	12/08/2009 1005	12/11/2009 0945
680-53419-16	HER-MW04-120909	Water	12/09/2009 0908	12/11/2009 0945
680-53419-17	HER-MW05-120909	Water	12/09/2009 1012	12/11/2009 0945
680-53419-18	HER-MW06-120909	Water	12/09/2009 1100	12/11/2009 0945
680-53419-19	HER-MW07-120909	Water	12/09/2009 1155	12/11/2009 0945
680-53419-19MS	HER-MW07-120909	Water	12/09/2009 1155	12/11/2009 0945
680-53419-19MSD	HER-MW07-120909	Water	12/09/2009 1155	12/11/2009 0945
680-53419-20	HER-MW08-121009	Water	12/10/2009 0835	12/11/2009 0945
680-53419-21	HER-MW09-121009	Water	12/10/2009 0935	12/11/2009 0945
680-53419-22	HER-MW10-120909	Water	12/09/2009 0850	12/11/2009 0945
680-53419-23	HER-MW11-120909	Water	12/09/2009 0826	12/11/2009 0945
680-53419-24	HER-MW12-120909	Water	12/09/2009 1000	12/11/2009 0945
680-53419-25	HER-MW13-120909	Water	12/09/2009 1420	12/11/2009 0945
680-53419-26	HER-MW14-120909	Water	12/09/2009 1353	12/11/2009 0945
680-53419-27	HER-MW15-120909	Water	12/09/2009 1258	12/11/2009 0945
680-53419-28	HER-MW16-120909	Water	12/09/2009 1250	12/11/2009 0945
680-53419-29	HER-MW17-121009	Water	12/10/2009 0903	12/11/2009 0945
680-53419-30	HER-MW18-120909	Water	12/09/2009 1109	12/11/2009 0945
680-53419-31	HER-MW19-120909	Water	12/09/2009 1145	12/11/2009 0945
680-53419-32	HER-RS01-120709	Water	12/07/2009 1540	12/11/2009 0945
680-53419-33	HER-CMOO-120709	Water	12/07/2009 1535	12/11/2009 0945
680-53419-34	HER-RS02-120809	Water	12/08/2009 1000	12/11/2009 0945
680-53419-35	HER-FD01-120909	Water	12/09/2009 0000	12/11/2009 0945
680-53419-36	HER-RS03-120909	Water	12/09/2009 1030	12/11/2009 0945
680-53419-37	HER-FD02-120909	Water	12/09/2009 0000	12/11/2009 0945
680-53419-38	HER-FD03-121009	Water	12/10/2009 0000	12/11/2009 0945
680-53419-39	HER-RS04-121009	Water	12/10/2009 0830	12/11/2009 0945
680-53419-40	Trip Blank	Water	12/10/2009 0000	12/11/2009 0945

SAMPLE RESULTS

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-CM01-120709

Lab Sample ID: 680-53419-9
Client Matrix: Water

Date Sampled: 12/07/2009 1525
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966		Instrument ID:	MSO2
Preparation:	5030B			Lab File ID:	o3666.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/11/2009 1528			Final Weight/Volume:	5 mL
Date Prepared:	12/11/2009 1528				

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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-CM01-120709

Lab Sample ID: 680-53419-9
Client Matrix: Water

Date Sampled: 12/07/2009 1525
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966		Instrument ID:	MSO2
Preparation:	5030B			Lab File ID:	o3666.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/11/2009 1528			Final Weight/Volume:	5 mL
Date Prepared:	12/11/2009 1528				

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	108		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surr)	105		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-CM02-120709

Lab Sample ID: 680-53419-10
Client Matrix: Water

Date Sampled: 12/07/2009 1510
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966		Instrument ID:	MSO2
Preparation:	5030B			Lab File ID:	o3668.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/11/2009 1557			Final Weight/Volume:	5 mL
Date Prepared:	12/11/2009 1557				

Analyte	Result (ug/L)	Qualifier	RL
Acetone	34		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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-CM02-120709

Lab Sample ID: 680-53419-10
Client Matrix: Water

Date Sampled: 12/07/2009 1510
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966	Instrument ID: MSO2
Preparation:	5030B		Lab File ID: o3668.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/11/2009 1557		Final Weight/Volume: 5 mL
Date Prepared:	12/11/2009 1557		

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	109		75 - 120
Dibromofluoromethane	104		75 - 121
Toluene-d8 (Surr)	105		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-CM03-120709

Lab Sample ID: 680-53419-11
Client Matrix: Water

Date Sampled: 12/07/2009 1455
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966		Instrument ID:	MSO2
Preparation:	5030B			Lab File ID:	o3670.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/11/2009 1626			Final Weight/Volume:	5 mL
Date Prepared:	12/11/2009 1626				

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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-CM03-120709

Lab Sample ID: 680-53419-11
Client Matrix: Water

Date Sampled: 12/07/2009 1455
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966		Instrument ID:	MSO2
Preparation:	5030B			Lab File ID:	o3670.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/11/2009 1626			Final Weight/Volume:	5 mL
Date Prepared:	12/11/2009 1626				

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	108		75 - 120
Dibromofluoromethane	104		75 - 121
Toluene-d8 (Surr)	106		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-CM04-120709

Lab Sample ID: 680-53419-12
Client Matrix: Water

Date Sampled: 12/07/2009 1440
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966		Instrument ID:	MSO2
Preparation:	5030B			Lab File ID:	o3672.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/11/2009 1655			Final Weight/Volume:	5 mL
Date Prepared:	12/11/2009 1655				

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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-CM04-120709

Lab Sample ID: 680-53419-12
Client Matrix: Water

Date Sampled: 12/07/2009 1440
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/11/2009 1655
Date Prepared: 12/11/2009 1655

Analysis Batch: 680-155966

Instrument ID: MSO2
Lab File ID: o3672.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	107		75 - 120
Dibromofluoromethane	103		75 - 121
Toluene-d8 (Surr)	104		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-CM05-120709

Lab Sample ID: 680-53419-13
Client Matrix: Water

Date Sampled: 12/07/2009 1830
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/11/2009 1724
Date Prepared: 12/11/2009 1724

Analysis Batch: 680-155966

Instrument ID: MSO2
Lab File ID: o3674.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	47		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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-CM05-120709

Lab Sample ID: 680-53419-13
Client Matrix: Water

Date Sampled: 12/07/2009 1830
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966	Instrument ID: MSO2
Preparation:	5030B		Lab File ID: o3674.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/11/2009 1724		Final Weight/Volume: 5 mL
Date Prepared:	12/11/2009 1724		

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	108		75 - 120
Dibromofluoromethane	102		75 - 121
Toluene-d8 (Surr)	108		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW02-120809

Lab Sample ID: 680-53419-14
Client Matrix: Water

Date Sampled: 12/08/2009 1100
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966		Instrument ID:	MSO2
Preparation:	5030B			Lab File ID:	o3676.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/11/2009 1753			Final Weight/Volume:	5 mL
Date Prepared:	12/11/2009 1753				

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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW02-120809

Lab Sample ID: 680-53419-14
Client Matrix: Water

Date Sampled: 12/08/2009 1100
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966		Instrument ID:	MSO2
Preparation:	5030B			Lab File ID:	o3676.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/11/2009 1753			Final Weight/Volume:	5 mL
Date Prepared:	12/11/2009 1753				

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	105		75 - 120
Dibromofluoromethane	100		75 - 121
Toluene-d8 (Surr)	106		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW03-120809

Lab Sample ID: 680-53419-15
Client Matrix: Water

Date Sampled: 12/08/2009 1005
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966		Instrument ID:	MSO2
Preparation:	5030B			Lab File ID:	o3678.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/11/2009 1822			Final Weight/Volume:	5 mL
Date Prepared:	12/11/2009 1822				

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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW03-120809

Lab Sample ID: 680-53419-15
Client Matrix: Water

Date Sampled: 12/08/2009 1005
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966	Instrument ID: MSO2
Preparation:	5030B		Lab File ID: o3678.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/11/2009 1822		Final Weight/Volume: 5 mL
Date Prepared:	12/11/2009 1822		

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	107		75 - 120
Dibromofluoromethane	102		75 - 121
Toluene-d8 (Surr)	105		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW04-120909

Lab Sample ID: 680-53419-16
Client Matrix: Water

Date Sampled: 12/09/2009 0908
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/11/2009 1851
Date Prepared: 12/11/2009 1851

Analysis Batch: 680-155966

Instrument ID: MSO2
Lab File ID: o3680.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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW04-120909

Lab Sample ID: 680-53419-16
Client Matrix: Water

Date Sampled: 12/09/2009 0908
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155966	Instrument ID: MSO2
Preparation:	5030B		Lab File ID: o3680.d
Dilution:	1.0		Initial Weight/Volume: 5 mL
Date Analyzed:	12/11/2009 1851		Final Weight/Volume: 5 mL
Date Prepared:	12/11/2009 1851		

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	105		75 - 120
Dibromofluoromethane	100		75 - 121
Toluene-d8 (Surr)	105		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW05-120909

Lab Sample ID: 680-53419-17
Client Matrix: Water

Date Sampled: 12/09/2009 1012
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-156021		Instrument ID:	MSO
Preparation:	5030B			Lab File ID:	o3687.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/12/2009 2115			Final Weight/Volume:	5 mL
Date Prepared:	12/12/2009 2115				

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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW05-120909

Lab Sample ID: 680-53419-17
Client Matrix: Water

Date Sampled: 12/09/2009 1012
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/12/2009 2115
Date Prepared: 12/12/2009 2115

Analysis Batch: 680-156021

Instrument ID: MSO
Lab File ID: o3687.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	107		75 - 120
Dibromofluoromethane	103		75 - 121
Toluene-d8 (Surr)	104		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW06-120909

Lab Sample ID: 680-53419-18
Client Matrix: Water

Date Sampled: 12/09/2009 1100
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-156021		Instrument ID:	MSO
Preparation:	5030B			Lab File ID:	o3689.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/12/2009 2143			Final Weight/Volume:	5 mL
Date Prepared:	12/12/2009 2143				

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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW06-120909

Lab Sample ID: 680-53419-18
Client Matrix: Water

Date Sampled: 12/09/2009 1100
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-156021		Instrument ID:	MSO
Preparation:	5030B			Lab File ID:	o3689.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/12/2009 2143			Final Weight/Volume:	5 mL
Date Prepared:	12/12/2009 2143				

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	110		75 - 120
Dibromofluoromethane	99		75 - 121
Toluene-d8 (Surr)	104		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW07-120909

Lab Sample ID: 680-53419-19
Client Matrix: Water

Date Sampled: 12/09/2009 1155
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-156021		Instrument ID:	MSO
Preparation:	5030B			Lab File ID:	o3691.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	12/12/2009 2212			Final Weight/Volume:	5 mL
Date Prepared:	12/12/2009 2212				

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
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<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
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-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
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW07-120909

Lab Sample ID: 680-53419-19
Client Matrix: Water

Date Sampled: 12/09/2009 1155
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/12/2009 2212
Date Prepared: 12/12/2009 2212

Analysis Batch: 680-156021

Instrument ID: MSO
Lab File ID: o3691.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
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	Qualifier	Acceptance Limits
4-Bromofluorobenzene	105		75 - 120
Dibromofluoromethane	100		75 - 121
Toluene-d8 (Surr)	103		75 - 120

Client: Ashland Inc.

Job Number: 680-53419-1
Sdg Number:

Client Sample ID: HER-MW08-121009

Lab Sample ID: 680-53419-20
Client Matrix: Water

Date Sampled: 12/10/2009 0835
Date Received: 12/11/2009 0945

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 25
Date Analyzed: 12/11/2009 1709
Date Prepared: 12/11/2009 1709

Analysis Batch: 680-155965

Instrument ID: MSO
Lab File ID: o3673.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<620		620
Acetonitrile	<1000		1000
Acrolein	<500		500
Acrylonitrile	<500		500
Benzene	4600		25
Dichlorobromomethane	<25		25
Bromoform	<25		25
Bromomethane	<25		25
2-Butanone (MEK)	<250		250
Carbon disulfide	<50		50
Carbon tetrachloride	2700		25
Chlorobenzene	180		25
2-Chloro-1,3-butadiene	<25		25
Chloroethane	<25		25
Chloroform	610		25
Chloromethane	<25		25
3-Chloro-1-propene	<25		25
Chlorodibromomethane	<25		25
1,2-Dibromo-3-Chloropropane	<25		25
Ethylene Dibromide	<25		25
Dibromomethane	<25		25
trans-1,4-Dichloro-2-butene	<50		50
Dichlorodifluoromethane	<25		25
1,1-Dichloroethane	<25		25
1,2-Dichloroethane	<25		25
cis-1,2-Dichloroethene	<25		25
trans-1,2-Dichloroethene	<25		25
1,1-Dichloroethene	<25		25
1,2-Dichloropropane	<25		25
cis-1,3-Dichloropropene	<25		25
trans-1,3-Dichloropropene	<25		25
Ethylbenzene	68		25
Ethyl methacrylate	<25		25
2-Hexanone	<250		250
Iodomethane	<120		120
Isobutyl alcohol	<1000		1000
Methacrylonitrile	<500		500
Methylene Chloride	380		120
Methyl methacrylate	<25		25
4-Methyl-2-pentanone (MIBK)	<250		250
Pentachloroethane	<120		120
Propionitrile	<500		500
Styrene	<25		25
1,1,1,2-Tetrachloroethane	<25		25
1,1,2,2-Tetrachloroethane	<25		25
Tetrachloroethene	<25		25