



Environment

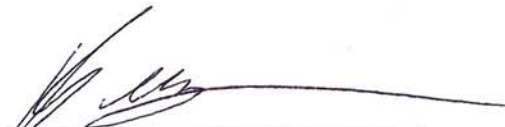
Prepared for:
CNA Holdings, Inc.

Prepared by:
AECOM
Atlanta, GA
60135440


Auriga Spartanburg Off-Site Direct Push Investigation January 2012



Auriga Spartanburg Off-Site Direct Push Investigation January 2012



Prepared By Bryon Dahlgren
Project Manager



Reviewed By Everett W. Glover, Jr. PE
Program Director

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1.0 Introduction and Summary of Work Completed

This report provides a summary of the off-site investigation activities, the results of the work and preliminary recommendations for additional activity.

A work plan for off-site investigation near the Auriga Spartanburg facility was submitted to South Carolina Department of Health and Environmental Control (DHEC) on September 23, 2011. The activities described in the plan were completed between October 10 and October 17, 2011. AECOM collected groundwater samples between October 10 and October 15. Surface water sample collection and site restoration was completed on October 17.

The work area is presented in Figure 1. The sample collection locations are also presented on Figure 1. Four direct push (DPT) locations were placed along the entrance driveway and near the front of the property facing the interstate. Two additional direct push locations were placed on each side of the facility parking lot. Lastly, two additional direct push locations were placed in the wooded area between the driveway and the creek. Surface water samples were collected at seven locations along the creek on the far side of the property.

As described in the work plan, groundwater samples were collected at two depths from each direct push location whenever possible. One sample was collected when groundwater was first encountered. When the DPT could advance at least ten feet beyond the first sample depth, a second sample was collected at refusal depth. Two samples were collected from all DPT locations with the exception of locations OSS-GW-1 and OSS-GW-2.

All groundwater and surface water samples were analyzed for volatile organics (including chloroform) as well as for 1,4-dioxane.

2.0 Results

A summary of analytical results is presented in Table 1. Only those parameters detected in at least one sample are included in Table 1. A complete copy of the analytical data report is included in Appendix A.

Only three compounds were detected in the samples. These compounds are acetone, 1,4-dioxane, and chloroform. The detections of acetone are several orders of magnitude below standards and are suspected to be laboratory contamination. 1,4-Dioxane was detected in one isolated groundwater sample and was also detected in surface water samples at concentrations ranging from 0.00261 to 0.00304 milligrams per liter (mg/L).

Chloroform results are presented on Figures 2 and 3. Based on historic investigations and observations of rock in the area, the refusal of the direct push operations was estimated to approximate the depth to rock for the area. Data collected above rock are presented in Figure 2. Data collected at the estimated bedrock depth are presented in Figure 3. Surface water data are included with the "above rock" data on Figure 2.

In groundwater above rock the detections of chloroform are limited to the central wooded area. Detections exceeding the Maximum Concentration Limit (MCL) are noted at OSS-GW4 and OSS-GW5. Concentrations at downgradient locations to the south and east at locations OSS-GW6 and OSS-GW7 were below the MCL. Chloroform was not detected at OSS-GW3 located to the west as well as at location OSS-GW8 located furthest to the east.

Detections of chloroform at bedrock included a larger area and higher concentrations. The highest concentrations were near the interstate and along the facility driveway at locations OSS-GW3 and OSS-GW4. The highest result was 2.14 milligrams per liter (mg/L) at location OSS-GW3. This location is interpreted to be approximate to the center line of the plume based on historic results from on site. This interpretation is supported by the declining concentrations noted to both the east and west of this location. The concentration of chloroform at approximate rock declined to below the MCL at location OSS-GW8 to the east (0.0236 mg/L). The concentration was also non-detect to the south at location OSS-GW6 (<0.005 mg/L). The concentration of chloroform to the west declines with distance from OSS-GW3, but remains above the MCL at OSS-GW1 (0.858 mg/L).

3.0 Plan Forward

Additional investigation and remediation will be planned for the off-site area. The details and schedule will depend on conversations and agreements with the property owners. Therefore specific details are not available at this time. Detailed recommendations will be submitted to DHEC for approval prior to implementation.

We plan to install a series of well pairs in this area. The well pairs will include bedrock and saprolite wells. The locations of the wells will be recommended to complete delineation of the existing plume and provide monitoring locations for future activities. We may potentially recommend additional direct push locations to help define well or remediation locations.

We plan to implement remediation of the chloroform in the area once we complete delineation and characterization. The highest concentration noted in the area is 2.14 mg/L. Previous efforts on site have effectively treated concentrations exceeding 15 mg/L, so we are optimistic about our ability to treat effectively with injection of sodium lactate as was used previously on site.

Details for additional investigation plans or an update on our communications will be provided to you no later than March 31, 2012.

Tables

Table 1
Summary of Groundwater and Surface Water Analytical Results
October 2011 Off Site Investigation
Auriga Spartanburg Facility
AECOM Project No. 60135440

Groundwater above interpreted rock		Groundwater location and depth below ground surface					
		OSS-GW-3	OSS-GW-4	OSS-GW-5	OSS-GW-6	OSS-GW-7	OSS-GW-8
MCL or RSL		39.5	49	29.5	9.5	44.5	49.5
1,4-dioxane	0.00067	ND	ND	ND	ND	ND	ND
chloroform	0.080	ND	0.195	0.234	0.0424	0.0588	ND
acetone	22	0.0544	ND	ND	ND	ND	0.0103

Groundwater at interpreted rock		Groundwater location and depth below ground surface								
		OSS-GW-1	OSS-GW-2	OSS-GW-3	OSS-GW-4	OSS-GW-4	OSS-GW-5	OSS-GW-6	OSS-GW-7	OSS-GW-8
MCL or RSL		24	44.5	74.5	64.5	64.5 (Dup)	46	22	53	69.5
1,4-dioxane	0.00067	ND	ND	ND	ND	ND	ND	ND	0.00664	ND
chloroform	0.080	0.858	1.39	2.14	0.737	0.907	0.397	ND	0.112	0.0236
acetone	22	0.020	0.0383	ND	0.0186	ND	ND	ND	ND	ND

Surface water		Surface water location						
		OSS-SW-1	OSS-SW-2	OSS-SW-3	OSS-SW-4	OSS-SW-5	OSS-SW-6	OSS-SW-7
MCL or RSL								
1,4-dioxane	0.00067	0.00304	0.00283	0.00284	0.00296	0.00288	0.00271	0.00261
chloroform	0.080	0.00585 J	ND	ND	ND	ND	ND	ND
acetone	22	ND	ND	ND	ND	ND	ND	ND

All Data in mg/L
MCL = Maximum Contaminant Level
RSL = Regional Screening Level
ND - Not Detected

Figures







LEGEND

● GROUNDWATER LOCATION

NOTES:
 LOCATIONS ARE APPROXIMATE.
 RESULTS IN mg/L
 ND = NOT DETECTED

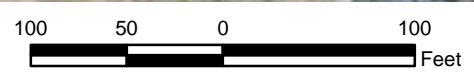


FIGURE 3
 Groundwater Results at
 Rock for Chloroform

Appendix A
Analytical Data

Report No.: AJ 2655

Project No.: _____

Project Name: Spartanburg

off site

Check List:

- Holding Times
- Laboratory Blanks
- Matrix Spikes
- Laboratory Control Samples
- Laboratory Duplicates
- Surrogate Recoveries

Comments:

WG 60698 14 Dioxane Surrogate

L11101315-01,05,06,07

L11101705-08,09 - Low

J Flag Hits

JJ Flag ND

WG 60678

VOCs

LCS

112 TCA

Low

12 DCA

UJ Flag ND

14 DCB

J Flag Hits

Benzene

Chlorobenzene

Chloroform

PCE

Toluene

TCE

xylene

L11101801-04

05

06

07

08

09 - TB

By:



Date:

11/3/11

DAVIS & FLOYD

LABORATORY ANALYSIS REPORT

November 02, 2011

BRYON DAHLGREN
AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076

Report ID : AJ2655
Page 1 of 92

Login Number :L11101315, L11101705, L11101804
Project Number :61576.07
Description :ARUGIA SPARTANBURG / OFFSITE DPT

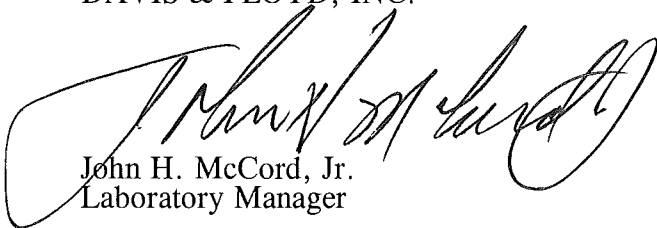
Dear Bryon Dahlgren:

We are pleased to provide the enclosed analytical results for the samples received by Davis & Floyd, Inc. on October 13, 2011 through October 18, 2011.

A formal Quality Assurance/Quality Control program is maintained by Davis & Floyd, which is designed to meet or exceed the EPA, NELAC or other appropriate regulatory requirements. All analytical analyses for this project met QA/QC criteria and the results are within the 99% confidence interval for each method unless otherwise stated in the footnotes. This report is to be reproduced only in full.

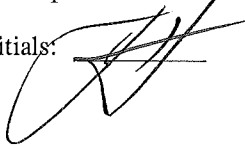
Feel free to contact our Client Services Representative at (864) 229-4413 if further explanation of the analysis is required. Unless other arrangements have been made, samples will be disposed of or returned 14 days from the date of the report. We appreciate the opportunity to provide services to your firm.

Sincerely,
DAVIS & FLOYD, INC.



John H. McCord, Jr.
Laboratory Manager

This report contains a TOTAL of 96 pages, including attachments.

Initials: 

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076

Project Number: 61576.07

Report Date : November 02, 2011

Contact : BRYON DAHLGREN

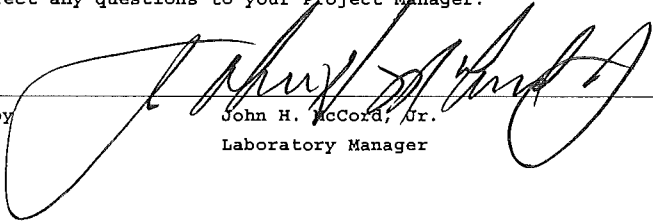
Page 2 of 92 Report ID: AJ2655

Certificate of Analysis Report

Sample ID	Client ID	Date Collected	Date Received
L11101315-01	OSS-GW-2-44.5	10/11/2011 0930	10/13/2011
L11101315-02	TRIP BLANK		10/13/2011
L11101315-03	OSS-GW-3-39.5	10/11/2011 1600	10/13/2011
L11101315-04	OSS-GW-3-39.5	10/12/2011 1000	10/13/2011
L11101315-05	OSS-GW-3-74.5	10/12/2011 1145	10/13/2011
L11101315-06	OSS-GW-4-49	10/12/2011 1300	10/13/2011
L11101315-07	OSS-GW-4-64.5	10/12/2011 1645	10/13/2011
L11101315-08	OSS-GW-4-64.5A	10/12/2011 1645	10/13/2011
L11101705-01	TRIP BLANK		10/17/2011
L11101705-02	OSS-GW-7-44.5 MS/MSD	10/13/2011 1130	10/17/2011
L11101705-03	OSS-GW-7-53	10/13/2011 1430	10/17/2011
L11101705-04	OSS-GW-1-24	10/13/2011 1530	10/17/2011
L11101705-05	OSS-GW-1-24	10/14/2011 0730	10/17/2011
L11101705-06	OSS-GW-8-49.5	10/14/2011 0900	10/17/2011
L11101705-07	OSS-GW-8-69.5	10/14/2011 1000	10/17/2011
L11101705-08	OSS-GW-5-29.5	10/14/2011 1445	10/17/2011
L11101705-09	OSS-GW-5-46	10/14/2011 1610	10/17/2011
L11101705-10	OSS-GW-6-22	10/14/2011 1740	10/17/2011
L11101804-01	OSS-GW-6-9.5	10/15/2011 0900	10/18/2011
L11101804-02	OSS-SW-7	10/17/2011 1315	10/18/2011
L11101804-03	OSS-SW-6	10/17/2011 1325	10/18/2011
L11101804-04	OSS-SW-5	10/17/2011 1330	10/18/2011
L11101804-05	OSS-SW-4	10/17/2011 1340	10/18/2011
L11101804-06	OSS-SW-3	10/17/2011 1345	10/18/2011
L11101804-07	OSS-SW-2	10/17/2011 1355	10/18/2011
L11101804-08	OSS-SW-1	10/17/2011 1400	10/18/2011
L11101804-09	TRIP BLANK		10/18/2011

This data report has been prepared and reviewed in accordance with standard operating procedures. Test results relate only to the sample tested. Please direct any questions to your Project Manager.

Reviewed by


John H. McCord, Jr.
Laboratory Manager

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
Page 3 of 92 Report ID: AJ2655

Certificate of Analysis

Client ID: **OSS-GW-2-44.5**
Sample ID: L11101315-01

Date Collected: 10/11/2011 0930
Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units	
Matrix : GW/ChemW					
Volatile Organics					
EPA 8260B SIM					
Date/Time: 10/20/2011 1010 Analyst: JLG Dilution: 1					
1,4-DIOXANE	<	2.00 U	2.00	ug/l	UJ
Surr: 1,4-DIOXANE-D8		56 % F	(70-130)		
SW846 8260B					
Date/Time: 10/17/2011 1553 Analyst: PAP Dilution: 1					
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l	
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l	
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l	
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l	
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l	
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l	
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l	
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l	
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l	
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l	
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l	
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l	
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l	
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l	
2-BUTANONE	<	10.0 U	10.0	ug/l	
2-HEXANONE	<	10.0 U	10.0	ug/l	
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l	
ACETONE		38.3	10.0	ug/l	
BENZENE	<	5.00 U	5.00	ug/l	
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l	
BROMOFORM	<	5.00 U	5.00	ug/l	
BROMOMETHANE	<	10.0 U	10.0	ug/l	
CARBON DISULFIDE	<	5.00 U	5.00	ug/l	
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l	
CHLOROBENZENE	<	5.00 U	5.00	ug/l	
CHLOROETHANE	<	10.0 U	10.0	ug/l	
CHLOROMETHANE	<	10.0 U	10.0	ug/l	
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l	
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
 Page 4 of 92 Report ID: AJ2655

Certificate of Analysis

Client ID: OSS-GW-2-44.5
 Sample ID: L11101315-01

Date Collected: 10/11/2011 0930
 Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	114	‡	(68-149)	
Surr: BROMOFLUOROBENZENE	118	‡	(81-134)	
Surr: TOLUENE-D8	110	‡	(72-148)	
Date/Time: 10/17/2011 1947 Analyst: PAP Dilution: 20				
CHLOROFORM	1390		100	ug/l
Surr: 1,2-DICHLOROETHANE-D4	115	‡	(68-149)	
Surr: BROMOFLUOROBENZENE	117	‡	(81-134)	
Surr: TOLUENE-D8	110	‡	(72-148)	

Sample Comments: L11101315-01

The surrogate recovery limit (70%-130%) for 1,4-Dioxane-d8 is advisory until sufficient data points are collected to establish in house limits.



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
 Page 5 of 92 Report ID: AJ2655

Certificate of Analysis

Client ID: TRIP BLANK
 Sample ID: L11101315-02

Date Collected:
 Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 0915 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		83 %	(70-130)	
SW846 8260B				
Date/Time: 10/17/2011 1501 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

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Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
Page 6 of 92 Report ID: AJ2655

Certificate of Analysis

Client ID: TRIP BLANK
Sample ID: L11101315-02

Date Collected:
Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	115	§	(68-149)	
Surr: BROMOFLUOROBENZENE	117	§	(81-134)	
Surr: TOLUENE-D8	110	§	(72-148)	



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Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
 Page 7 of 92 Report ID: AJ2655

Certificate of Analysis

Client ID: OSS-GW-3-39.5
 Sample ID: L11101315-03

Date Collected: 10/11/2011 1600
 Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 1333 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		75 %	(70-130)	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-3-39.5
 Sample ID: L11101315-04

Date Collected: 10/12/2011 1000
 Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
SW846 8260B				
Date/Time: 10/17/2011 1619 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	54.4	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-3-39.5
Sample ID: L11101315-04

Date Collected: 10/12/2011 1000
Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4		117 ‡	(68-149)	
Surr: BROMOFLUOROBENZENE		117 ‡	(81-134)	
Surr: TOLUENE-D8		112 ‡	(72-148)	

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
Page 10 of 92 Report ID: AJ2655

Certificate of Analysis

Client ID: OSS-GW-3-74.5
Sample ID: L11101315-05

Date Collected: 10/12/2011 1145
Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 1104 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l UJ
Surr: 1,4-DIOXANE-D8		52 % F	(70-130)	
SW846 8260B				
Date/Time: 10/17/2011 1527 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: **OSS-GW-3-74.5**
Sample ID: L11101315-05

Date Collected: 10/12/2011 1145
Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE		5.26	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4		113 %	(68-149)	
Surr: BROMOFLUOROBENZENE		115 %	(81-134)	
Surr: TOLUENE-D8		110 %	(72-148)	
Date/Time: 10/17/2011 2013 Analyst: PAP Dilution: 20				
CHLOROFORM		2140	100	ug/l
Surr: 1,2-DICHLOROETHANE-D4		116 %	(68-149)	
Surr: BROMOFLUOROBENZENE		115 %	(81-134)	
Surr: TOLUENE-D8		111 %	(72-148)	

Sample Comments: L11101315-05

The surrogate recovery limit (70%-130%) for 1,4-Dioxane-d8 is advisory until sufficient data points are collected to establish in house limits.



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-4-49
Sample ID: L11101315-06

Date Collected: 10/12/2011 1300
Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 1132 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l UJ
Surr: 1,4-DIOXANE-D8		60 % F	(70-130)	
SW846 8260B				
Date/Time: 10/17/2011 1645 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	195	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-4-49
Sample ID: L11101315-06

Date Collected: 10/12/2011 1300
Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	118	‡	(68-149)	
Surr: BROMOFLUOROBENZENE	119	‡	(81-134)	
Surr: TOLUENE-D8	112	‡	(72-148)	

Sample Comments: L11101315-06

The surrogate recovery limit (70%-130%) for 1,4-Dioxane-d8 is advisory until sufficient data points are collected to establish in house limits.



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-4-64.5
 Sample ID: L11101315-07

Date Collected: 10/12/2011 1645
 Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units	
Matrix : GW/ChemW					
Volatile Organics					
EPA 8260B SIM					
Date/Time: 10/20/2011 1159		Analyst: JLG		Dilution: 1	
1,4-DIOXANE	<	2.00 U	2.00	ug/l	UJ
Surr: 1,4-DIOXANE-D8		67 % F		(70-130)	
SW846 8260B					
Date/Time: 10/17/2011 1711		Analyst: PAP		Dilution: 1	
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l	
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l	
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l	
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l	
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l	
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l	
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l	
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l	
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l	
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l	
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l	
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l	
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l	
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l	
2-BUTANONE	<	10.0 U	10.0	ug/l	
2-HEXANONE	<	10.0 U	10.0	ug/l	
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l	
ACETONE	<	18.6	10.0	ug/l	
BENZENE	<	5.00 U	5.00	ug/l	
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l	
BROMOFORM	<	5.00 U	5.00	ug/l	
BROMOMETHANE	<	10.0 U	10.0	ug/l	
CARBON DISULFIDE	<	5.00 U	5.00	ug/l	
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l	
CHLOROBENZENE	<	5.00 U	5.00	ug/l	
CHLOROETHANE	<	10.0 U	10.0	ug/l	
CHLOROMETHANE	<	10.0 U	10.0	ug/l	
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l	
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l	

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011
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Certificate of Analysis

Client ID: **OSS-GW-4-64.5**
Sample ID: L11101315-07

Date Collected: 10/12/2011 1645
Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	7.56	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4		114 %	(68-149)	
Surr: BROMOFLUOROBENZENE		116 %	(81-134)	
Surr: TOLUENE-D8		110 %	(72-148)	
Date/Time: 10/18/2011 1442 Analyst: PAP Dilution: 10				
CHLOROFORM		737	50.0	ug/l
Surr: 1,2-DICHLOROETHANE-D4		116 %	(68-149)	
Surr: BROMOFLUOROBENZENE		114 %	(81-134)	
Surr: TOLUENE-D8		110 %	(72-148)	

Sample Comments: L11101315-07

The surrogate recovery limit (70%-130%) for 1,4-Dioxane-d8 is advisory until sufficient data points are collected to establish in house limits.

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: **OSS-GW-4-64.5A**
Sample ID: L11101315-08

Date Collected: 10/12/2011 1645
Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 1227 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		85 %	(70-130)	
SW846 8260B				
Date/Time: 10/17/2011 1737 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-4-64.5A
 Sample ID: L11101315-08

Date Collected: 10/12/2011 1645
 Date Received : 10/13/2011

Parameter	Result	Qual	RDL	Units
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODI FLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	114	%	(68-149)	
Surr: BROMOFLUOROBENZENE	117	%	(81-134)	
Surr: TOLUENE-D8	111	%	(72-148)	
Date/Time: 10/18/2011 1508 Analyst: PAP Dilution: 10				
CHLOROFORM	907		50.0	ug/l
Surr: 1,2-DICHLOROETHANE-D4	118	%	(68-149)	
Surr: BROMOFLUOROBENZENE	117	%	(81-134)	
Surr: TOLUENE-D8	112	%	(72-148)	

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: **TRIP BLANK**
Sample ID: L11101705-01

Date Collected:
Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 0942 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		91 %	(70-130)	
SW846 8260B				
Date/Time: 10/18/2011 0929 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: **TRIP BLANK**
 Sample ID: L11101705-01

Date Collected:
 Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	115	%	(68-149)	
Surr: BROMOFLUOROBENZENE	117	%	(81-134)	
Surr: TOLUENE-D8	111	%	(72-148)	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: **OSS-GW-7-44.5 MS/MSD**
 Sample ID: L11101705-02

Date Collected: 10/13/2011 1130

Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 1321 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		110 %	(70-130)	
SW846 8260B				
Date/Time: 10/18/2011 0955 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.88	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011
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Certificate of Analysis

Client ID: **OSS-GW-7-44.5 MS/MSD**
 Sample ID: L11101705-02

Date Collected: 10/13/2011 1130
 Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	116	%	(68-149)	
Surr: BROMOFLUOROBENZENE	115	%	(81-134)	
Surr: TOLUENE-D8	110	%	(72-148)	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-7-53
 Sample ID: L11101705-03

Date Collected: 10/13/2011 1430
 Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 1348 Analyst: JLG Dilution: 1				
1,4-DIOXANE	6.64		2.00	ug/l
Surr: 1,4-DIOXANE-D8	118 ±		(70-130)	
SW846 8260B				
Date/Time: 10/17/2011 1803 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM		112	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: **OSS-GW-7-53**
Sample ID: L11101705-03

Date Collected: 10/13/2011 1430
Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	116	¶	(68-149)	
Surr: BROMOFLUOROBENZENE	116	¶	(81-134)	
Surr: TOLUENE-D8	109	¶	(72-148)	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: **OSS-GW-1-24**
 Sample ID: L11101705-04

Date Collected: 10/13/2011 1530
 Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
SW846 8260B				
Date/Time: 10/17/2011 1829 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE		20.0	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: OSS-GW-1-24
Sample ID: L11101705-04

Date Collected: 10/13/2011 1530
Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	116	‡	(68-149)	
Surr: BROMOFLUOROBENZENE	117	‡	(81-134)	
Surr: TOLUENE-D8	111	‡	(72-148)	
Date/Time: 10/18/2011 1534 Analyst: PAP Dilution: 10				
CHLOROFORM	858		50.0	ug/l
Surr: 1,2-DICHLOROETHANE-D4	119	‡	(68-149)	
Surr: BROMOFLUOROBENZENE	118	‡	(81-134)	
Surr: TOLUENE-D8	112	‡	(72-148)	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-1-24
 Sample ID: L11101705-05

Date Collected: 10/14/2011 0730
 Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
<i>Matrix : GW/ChemW</i>				
Volatile Organics				
<i>EPA 8260B SIM</i>				
<i>Date/Time: 10/20/2011 1416 Analyst: JLG Dilution: 1</i>				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
<i>Surr: 1,4-DIOXANE-D8</i>		96 %	(70-130)	

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
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Certificate of Analysis

Client ID: OSS-GW-8-49.5
Sample ID: L11101705-06

Date Collected: 10/14/2011 0900
Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 1444 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		90 %	(70-130)	
SW846 8260B				
Date/Time: 10/17/2011 1855 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE		10.3	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-8-49.5
 Sample ID: L11101705-06

Date Collected: 10/14/2011 0900
 Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	113	*	(68-149)	
Surr: BROMOFLUOROBENZENE	115	*	(81-134)	
Surr: TOLUENE-D8	110	*	(72-148)	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-8-69.5
 Sample ID: L11101705-07

Date Collected: 10/14/2011 1000
 Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 1511 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		99 %	(70-130)	
SW846 8260B				
Date/Time: 10/17/2011 1921 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	23.6	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: OSS-GW-8-69.5

Date Collected: 10/14/2011 1000

Sample ID: L11101705-07

Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00	U	5.00 ug/l
CYCLOHEXANE	<	5.00	U	5.00 ug/l
DIBROMOCHLOROMETHANE	<	5.00	U	5.00 ug/l
DICHLORODIFLUOROMETHANE	<	5.00	U	5.00 ug/l
ETHYLBENZENE	<	5.00	U	5.00 ug/l
ISOPROPYL BENZENE	<	5.00	U	5.00 ug/l
METHYL ACETATE	<	10.0	U	10.0 ug/l
METHYL-TERT-BUTYL ETHER	<	5.00	U	5.00 ug/l
METHYLCYCLOHEXANE	<	5.00	U	5.00 ug/l
METHYLENE CHLORIDE	<	5.00	U	5.00 ug/l
STYRENE	<	5.00	U	5.00 ug/l
TETRACHLOROETHENE	<	5.00	U	5.00 ug/l
TOLUENE	<	5.00	U	5.00 ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00	U	5.00 ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00	U	5.00 ug/l
TRICHLOROETHENE	<	5.00	U	5.00 ug/l
TRICHLOROFLUOROMETHANE	<	5.00	U	5.00 ug/l
VINYL ACETATE	<	10.0	U	10.0 ug/l
VINYL CHLORIDE	<	10.0	U	10.0 ug/l
XYLENE (TOTAL)	<	5.00	U	5.00 ug/l
Surr: 1,2-DICHLOROETHANE-D4	115	%		(68-149)
Surr: BROMOFLUOROBENZENE	115	%		(81-134)
Surr: TOLUENE-D8	110	%		(72-148)



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-5-29.5
 Sample ID: L11101705-08

Date Collected: 10/14/2011 1445
 Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 1538 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		59 % F	(70-130)	UJ
SW846 8260B				
Date/Time: 10/18/2011 1324 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: **OSS-GW-5-29.5**
Sample ID: L11101705-08

Date Collected: 10/14/2011 1445
Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4		117 %	(68-149)	
Surr: BROMOFLUOROBENZENE		115 %	(81-134)	
Surr: TOLUENE-D8		109 %	(72-148)	
Date/Time: 10/18/2011 1810 Analyst: PAP Dilution: 2				
CHLOROFORM		234	10.0	ug/l
Surr: 1,2-DICHLOROETHANE-D4		116 %	(68-149)	
Surr: BROMOFLUOROBENZENE		115 %	(81-134)	
Surr: TOLUENE-D8		110 %	(72-148)	

Sample Comments: L11101705-08

The surrogate recovery limit (70%-130%) for 1,4-Dioxane-d8 is advisory until sufficient data points are collected to establish in house limits.

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

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Client ID: **OSS-GW-5-46**
Sample ID: L11101705-09

Date Collected: 10/14/2011 1610
Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 1606 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l UJ
Surr: 1,4-DIOXANE-D8		45 % F	(70-130)	
SW846 8260B				
Date/Time: 10/18/2011 1350 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: OSS-GW-5-46
Sample ID: L11101705-09

Date Collected: 10/14/2011 1610
Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
CYCLOHEXANE	<	5.00	U	5.00 ug/l
DIBROMOCHLOROMETHANE	<	5.00	U	5.00 ug/l
DICHLORODIFLUOROMETHANE	<	5.00	U	5.00 ug/l
ETHYLBENZENE	<	5.00	U	5.00 ug/l
ISOPROPYL BENZENE	<	5.00	U	5.00 ug/l
METHYL ACETATE	<	10.0	U	10.0 ug/l
METHYL-TERT-BUTYL ETHER	<	5.00	U	5.00 ug/l
METHYLCYCLOHEXANE	<	5.00	U	5.00 ug/l
METHYLENE CHLORIDE	<	5.00	U	5.00 ug/l
STYRENE	<	5.00	U	5.00 ug/l
TETRACHLOROETHENE	<	5.00	U	5.00 ug/l
TOLUENE	<	5.00	U	5.00 ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00	U	5.00 ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00	U	5.00 ug/l
TRICHLOROETHENE	<	5.00	U	5.00 ug/l
TRICHLOROFLUOROMETHANE	<	5.00	U	5.00 ug/l
VINYL ACETATE	<	10.0	U	10.0 ug/l
VINYL CHLORIDE	<	10.0	U	10.0 ug/l
XYLENE (TOTAL)	<	5.00	U	5.00 ug/l
Surr: 1,2-DICHLOROETHANE-D4		117 %		(68-149)
Surr: BROMOFLUOROBENZENE		115 %		(81-134)
Surr: TOLUENE-D8		112 %		(72-148)
Date/Time: 10/18/2011 1836 Analyst: PAP Dilution: 4				
CHLOROFORM		397		20.0 ug/l
Surr: 1,2-DICHLOROETHANE-D4		116 %		(68-149)
Surr: BROMOFLUOROBENZENE		115 %		(81-134)
Surr: TOLUENE-D8		109 %		(72-148)

Sample Comments: L11101705-09

The surrogate recovery limit (70%-130%) for 1,4-Dioxane-d8 is advisory until sufficient data points are collected to establish in house limits.



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-6-22
Sample ID: L11101705-10

Date Collected: 10/14/2011 1740
Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 1633 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		97 %	(70-130)	
SW846 8260B				
Date/Time: 10/18/2011 1416 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: **OSS-GW-6-22**
Sample ID: L11101705-10

Date Collected: 10/14/2011 1740
Date Received : 10/17/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	117	§	(68-149)	
Surr: BROMOFLUOROBENZENE	115	§	(81-134)	
Surr: TOLUENE-D8	110	§	(72-148)	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-GW-6-9.5
 Sample ID: L11101804-01

Date Collected: 10/15/2011 0900
 Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 1611 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		94 %	(70-130)	
SW846 8260B				
Date/Time: 10/18/2011 1652 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	42.4	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: **OSS-GW-6-9.5**
Sample ID: L11101804-01

Date Collected: 10/15/2011 0900
Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	116	§	(68-149)	
Surr: BROMOFLUOROBENZENE	116	§	(81-134)	
Surr: TOLUENE-D8	111	§	(72-148)	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: **OSS-SW-7**
 Sample ID: L11101804-02

Date Collected: 10/17/2011 1315
 Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 0950 Analyst: JLG Dilution: 1				
1,4-DIOXANE	2.61		2.00	ug/l
Surr: 1,4-DIOXANE-D8	92 %		(70-130)	
SW846 8260B				
Date/Time: 10/18/2011 1718 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011
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Certificate of Analysis

Client ID: **OSS-SW-7**
Sample ID: L11101804-02

Date Collected: 10/17/2011 1315
Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	116	§	(68-149)	
Surr: BROMOFLUOROBENZENE	116	§	(81-134)	
Surr: TOLUENE-D8	111	§	(72-148)	

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-SW-6
Sample ID: L11101804-03

Date Collected: 10/17/2011 1325
Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 1017 Analyst: JLG Dilution: 1				
1,4-DIOXANE	2.71		2.00	ug/l
Surr: 1,4-DIOXANE-D8	99 %		(70-130)	
SW846 8260B				
Date/Time: 10/18/2011 1744 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: **OSS-SW-6**
Sample ID: L11101804-03

Date Collected: 10/17/2011 1325

Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00	U	5.00 ug/l
CYCLOHEXANE	<	5.00	U	5.00 ug/l
DIBROMOCHLOROMETHANE	<	5.00	U	5.00 ug/l
DICHLORODIFLUOROMETHANE	<	5.00	U	5.00 ug/l
ETHYLBENZENE	<	5.00	U	5.00 ug/l
ISOPROPYL BENZENE	<	5.00	U	5.00 ug/l
METHYL ACETATE	<	10.0	U	10.0 ug/l
METHYL-TERT-BUTYL ETHER	<	5.00	U	5.00 ug/l
METHYLCYCLOHEXANE	<	5.00	U	5.00 ug/l
METHYLENE CHLORIDE	<	5.00	U	5.00 ug/l
STYRENE	<	5.00	U	5.00 ug/l
TETRACHLOROETHENE	<	5.00	U	5.00 ug/l
TOLUENE	<	5.00	U	5.00 ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00	U	5.00 ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00	U	5.00 ug/l
TRICHLOROETHENE	<	5.00	U	5.00 ug/l
TRICHLOROFLUOROMETHANE	<	5.00	U	5.00 ug/l
VINYL ACETATE	<	10.0	U	10.0 ug/l
VINYL CHLORIDE	<	10.0	U	10.0 ug/l
XYLENE (TOTAL)	<	5.00	U	5.00 ug/l
Surr: 1,2-DICHLOROETHANE-D4	116	‡		(68-149)
Surr: BROMOFLUOROBENZENE	116	‡		(81-134)
Surr: TOLUENE-D8	110	‡		(72-148)

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-SW-5
Sample ID: L11101804-04

Date Collected: 10/17/2011 1330
Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 1045 Analyst: JLG Dilution: 1				
1,4-DIOXANE	2.88		2.00	ug/l
Surr: 1,4-DIOXANE-D8	102 %		(70-130)	
SW846 8260B				
Date/Time: 10/19/2011 1426 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

UJ on
112TCA, 12DCA,
14DCB, Benzene,
Chlorobenzene, and
Chloroform

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: **OSS-SW-5**
Sample ID: L11101804-04

Date Collected: 10/17/2011 1330

Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units	
CIS-1,3-DICHLOROPROPENE	<	5.00	U	5.00	ug/l
CYCLOHEXANE	<	5.00	U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00	U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00	U	5.00	ug/l
ETHYLBENZENE	<	5.00	U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00	U	5.00	ug/l
METHYL ACETATE	<	10.0	U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00	U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00	U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00	U	5.00	ug/l
STYRENE	<	5.00	U	5.00	ug/l
TETRACHLOROETHENE	<	5.00	U	5.00	ug/l
TOLUENE	<	5.00	U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00	U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00	U	5.00	ug/l
TRICHLOROETHENE	<	5.00	U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00	U	5.00	ug/l
VINYL ACETATE	<	10.0	U	10.0	ug/l
VINYL CHLORIDE	<	10.0	U	10.0	ug/l
XYLENE (TOTAL)	<	5.00	U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	116	%		(68-149)	
Surr: BROMOFLUOROBENZENE	115	%		(81-134)	
Surr: TOLUENE-D8	110	%		(72-148)	

UJ on PCE, Toluene
TCE, and Xylenes



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-SW-4
 Sample ID: L11101804-05

Date Collected: 10/17/2011 1340
 Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 1112 Analyst: JLG Dilution: 1				
1,4-DIOXANE	2.96	U	2.00	ug/l
Surr: 1,4-DIOXANE-D8	105 %		(70-130)	
SW846 8260B				
Date/Time: 10/19/2011 1452 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

UJ on
 112TCA, 12DCA,
 14DCB, Benzene,
 Chlorobenzene, and
 Chloroform

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-SW-4
Sample ID: L11101804-05

Date Collected: 10/17/2011 1340
Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units	
CIS-1,3-DICHLOROPROPENE	<	5.00	U	5.00	ug/l
CYCLOHEXANE	<	5.00	U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00	U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00	U	5.00	ug/l
ETHYLBENZENE	<	5.00	U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00	U	5.00	ug/l
METHYL ACETATE	<	10.0	U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00	U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00	U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00	U	5.00	ug/l
STYRENE	<	5.00	U	5.00	ug/l
TETRACHLOROETHENE	<	5.00	U	5.00	ug/l
TOLUENE	<	5.00	U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00	U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00	U	5.00	ug/l
TRICHLOROETHENE	<	5.00	U	5.00	ug/l
TRICHLOROFUOROMETHANE	<	5.00	U	5.00	ug/l
VINYL ACETATE	<	10.0	U	10.0	ug/l
VINYL CHLORIDE	<	10.0	U	10.0	ug/l
XYLENE (TOTAL)	<	5.00	U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4		116	✱	(68-149)	
Surr: BROMOFLUOROBENZENE		115	✱	(81-134)	
Surr: TOLUENE-D8		111	✱	(72-148)	

UJ on PCE, Toluene,
TCE, and Xylenes

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-SW-3
Sample ID: L11101804-06

Date Collected: 10/17/2011 1345
Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 1140	Analyst: JLG		Dilution: 1	
1,4-DIOXANE	2.84		2.00	ug/l
Surr: 1,4-DIOXANE-D8	99 %		(70-130)	
SWB46 8260B				
Date/Time: 10/19/2011 1518	Analyst: PAP		Dilution: 1	
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

UJ on
112TCA, 12DCA,
14DCB, Benzene,
Chlorobenzene, and
Chloroform

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-SW-3
Sample ID: L11101804-06

Date Collected: 10/17/2011 1345
Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units	
CIS-1,3-DICHLOROPROPENE	<	5.00	U	5.00	ug/l
CYCLOHEXANE	<	5.00	U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00	U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00	U	5.00	ug/l
ETHYLBENZENE	<	5.00	U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00	U	5.00	ug/l
METHYL ACETATE	<	10.0	U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00	U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00	U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00	U	5.00	ug/l
STYRENE	<	5.00	U	5.00	ug/l
TETRACHLOROETHENE	<	5.00	U	5.00	ug/l
TOLUENE	<	5.00	U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00	U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00	U	5.00	ug/l
TRICHLOROETHENE	<	5.00	U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00	U	5.00	ug/l
VINYL ACETATE	<	10.0	U	10.0	ug/l
VINYL CHLORIDE	<	10.0	U	10.0	ug/l
XYLENE (TOTAL)	<	5.00	U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	115	%		(68-149)	
Surr: BROMOFLUOROBENZENE	115	%		(81-134)	
Surr: TOLUENE-D8	111	%		(72-148)	

UJ on PCE, Toluene,
TCE, and Xylenes

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: OSS-SW-2
Sample ID: L11101804-07

Date Collected: 10/17/2011 1355

Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 1211 Analyst: JLG Dilution: 1				
1,4-DIOXANE	2.83		2.00	ug/l
Surr: 1,4-DIOXANE-D8	87 %		(70-130)	
SW846 8260B				
Date/Time: 10/19/2011 1544 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

UJ on
112TCA, 12DCA,
14DCB, Benzene,
Chlorobenzene, and
Chloroform

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: **OSS-SW-2**
Sample ID: L11101804-07

Date Collected: 10/17/2011 1355

Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units	
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l	
CYCLOHEXANE	<	5.00 U	5.00	ug/l	
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l	
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l	
ETHYLBENZENE	<	5.00 U	5.00	ug/l	
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l	
METHYL ACETATE	<	10.0 U	10.0	ug/l	
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l	
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l	
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l	
STYRENE	<	5.00 U	5.00	ug/l	
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l	
TOLUENE	<	5.00 U	5.00	ug/l	
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l	
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l	
TRICHLOROETHENE	<	5.00 U	5.00	ug/l	
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l	
VINYL ACETATE	<	10.0 U	10.0	ug/l	
VINYL CHLORIDE	<	10.0 U	10.0	ug/l	
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l	
Surr: 1,2-DICHLOROETHANE-D4		116 *	(68-149)		
Surr: BROMOFLUOROBENZENE		116 *	(81-134)		
Surr: TOLUENE-D8		111 *	(72-148)		

UJ on PCE, Toluene,
TCE, and Xylenes

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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Certificate of Analysis

Client ID: OSS-SW-1
Sample ID: L11101804-08

Date Collected: 10/17/2011 1400
Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 1239 Analyst: JLG Dilution: 1				
1,4-DIOXANE	3.04	U	2.00	ug/l
Surr: 1,4-DIOXANE-D8	105 #		(70-130)	
SW846 8260B				
Date/Time: 10/19/2011 1610 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	5.85		5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

UJ on
112TCA, 12DCA,
14DCB, Benzene,
Chlorobenzene, and
J Flag Chloroform

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: **OSS-SW-1**
Sample ID: L11101804-08

Date Collected: 10/17/2011 1400

Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units	
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l	
CYCLOHEXANE	<	5.00 U	5.00	ug/l	
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l	
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l	UJ on PCE, Toluene,
ETHYLBENZENE	<	5.00 U	5.00	ug/l	TCE, and Xylenes
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l	
METHYL ACETATE	<	10.0 U	10.0	ug/l	
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l	
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l	
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l	
STYRENE	<	5.00 U	5.00	ug/l	
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l	
TOLUENE	<	5.00 U	5.00	ug/l	
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l	
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l	
TRICHLOROETHENE	<	5.00 U	5.00	ug/l	
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l	
VINYL ACETATE	<	10.0 U	10.0	ug/l	
VINYL CHLORIDE	<	10.0 U	10.0	ug/l	
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l	
Surr: 1,2-DICHLOROETHANE-D4	118	⊛	(68-149)		
Surr: BROMOFLUOROBENZENE	116	⊛	(81-134)		
Surr: TOLUENE-D8	110	⊛	(72-148)		



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011
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Certificate of Analysis

Client ID: TRIP BLANK
 Sample ID: L11101804-09

Date Collected:
 Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 0923 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		81 %	(70-130)	
SW846 8260B				
Date/Time: 10/19/2011 1400 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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Certificate of Analysis

Client ID: **TRIP BLANK**
Sample ID: L11101804-09

Date Collected:
Date Received : 10/18/2011

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	115	‡	(68-149)	
Surr: BROMOFLUOROBENZENE	115	‡	(81-134)	
Surr: TOLUENE-D8	112	‡	(72-148)	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

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1455 OLD ALABAMA RD.
SUITE 170
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QC Summary Data

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

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QC Batch Report - Batch Sample List

WorkGroup : **WG60698**
 Description: VO/DEO

Matrix : GW/ChemW
 Prep Method :
 Analytical Method: EPA 8260B SIM

Sample ID	Client ID	Run#	PREP	ANALYTICAL	Analyst	Dilution
			Date Time	Date Time		
L11101315-01	OSS-GW-2-44.5	1		10/20/2011 1010	JLG	1
L11101315-02	TRIP BLANK	1		10/20/2011 0915	JLG	1
L11101315-05	OSS-GW-3-74.5	1		10/20/2011 1104	JLG	1
L11101315-06	OSS-GW-4-49	1		10/20/2011 1132	JLG	1
L11101315-07	OSS-GW-4-64.5	1		10/20/2011 1159	JLG	1
L11101315-08	OSS-GW-4-64.5A	1		10/20/2011 1227	JLG	1
L11101705-01	TRIP BLANK	1		10/20/2011 0942	JLG	1
L11101705-02	OSS-GW-7-44.5 MS/MSD	1		10/20/2011 1321	JLG	1
L11101705-03	OSS-GW-7-53	1		10/20/2011 1348	JLG	1
L11101705-05	OSS-GW-1-24	1		10/20/2011 1416	JLG	1
L11101705-06	OSS-GW-8-49.5	1		10/20/2011 1444	JLG	1
L11101705-07	OSS-GW-8-69.5	1		10/20/2011 1511	JLG	1
L11101705-08	OSS-GW-5-29.5	1		10/20/2011 1538	JLG	1
L11101705-09	OSS-GW-5-46	1		10/20/2011 1606	JLG	1
L11101705-10	OSS-GW-6-22	1		10/20/2011 1633	JLG	1
MB60698:1	Method Blank	1		10/20/2011 0846	JLG	1
LCS60698:1	Laboratory Control Spike	1		10/20/2011 1755	JLG	1
MS11101705-02:60698	Matrix Spike	1		10/20/2011 1701	JLG	1
MSD11101705-02:60698	Matrix Spike Duplicate	1		10/20/2011 1728	JLG	1

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Surrogates % Recovery

WorkGroup: WG60698

Matrix : GW/ChemW

Prep Method :

Analytical Method: EPA 8260B SIM

SampleNumber	MeasureDate	DOXD8 70-130
L11101315-01	10/20/2011 1010	56 X
L11101315-02	10/20/2011 0915	83
L11101315-05	10/20/2011 1104	52 X
L11101315-06	10/20/2011 1132	60 X
L11101315-07	10/20/2011 1159	67 X
L11101315-08	10/20/2011 1227	85
L11101705-01	10/20/2011 0942	91
L11101705-02	10/20/2011 1321	110
L11101705-03	10/20/2011 1348	118
L11101705-05	10/20/2011 1416	96
L11101705-06	10/20/2011 1444	90
L11101705-07	10/20/2011 1511	99
L11101705-08	10/20/2011 1538	59 X
L11101705-09	10/20/2011 1606	45 X
L11101705-10	10/20/2011 1633	97
MB60698:1	10/20/2011 0846	80
LCS60698:1	10/20/2011 1755	97
MS11101705-02:60698	10/20/2011 1701	102
MSD11101705-02:60698	10/20/2011 1728	92

DOXD8 - 1,4-DIOXANE-D8

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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QC Batch Report - Method Blanks

WorkGroup: WG60698
Blank : MB60698:1

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/20/2011 0846 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		80 %	(70-130)	

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: **WG60698**
 MS/MSD : **MS11101705-02:60698**
MSD11101705-02:60698

Matrix : GW/ChemW
 Prep Method :
 Analytical Method: EPA 8260B SIM

Parameter	Spike Added	Sample Conc	MS Conc	Units	MS %REC	Limits %REC
1,4-DIOXANE	100.0	< 2.00	116.0	ug/l	116	60-141

Parameter	Spike Added	MSD Conc	MSD Units	MSD %REC	%RPD	Limits %RPD	%REC
1,4-DIOXANE	100.0	109.9	ug/l	110	5	29	60-141

NOTE: MS/MSD % recoveries are not evaluated if the sample concentration is greater than four times the spike added.

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

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QC Batch Report - Laboratory Control Standards and Duplicates

WorkGroup: WG60698
 LCS : LCS60698:1

Matrix : GW/ChemW
 Prep Method :
 Analytical Method: EPA 8260B SIM

Parameter	Spike Added	LCS Conc	Units	LCS %REC	Limits %REC
1,4-DIOXANE	100.0	113.9	ug/l	114	43-155



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

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QC Batch Report - Batch Sample List

WorkGroup : **WG60713**
 Description: **VO/DEO**

Matrix : **GW/ChemW**
 Prep Method :
 Analytical Method: **EPA 8260B SIM**

Sample ID	Client ID	Run#	PREP	ANALYTICAL	Analyst	Dilution
			Date Time	Date Time		
L11101315-03	OSS-GW-3-39.5	1		10/21/2011 1333	JLG	1
L11101804-01	OSS-GW-6-9.5	1		10/21/2011 1611	JLG	1
L11101804-02	OSS-SW-7	1		10/21/2011 0950	JLG	1
L11101804-03	OSS-SW-6	1		10/21/2011 1017	JLG	1
L11101804-04	OSS-SW-5	1		10/21/2011 1045	JLG	1
L11101804-05	OSS-SW-4	1		10/21/2011 1112	JLG	1
L11101804-06	OSS-SW-3	1		10/21/2011 1140	JLG	1
L11101804-07	OSS-SW-2	1		10/21/2011 1211	JLG	1
L11101804-08	OSS-SW-1	1		10/21/2011 1239	JLG	1
L11101804-09	TRIP BLANK	1		10/21/2011 0923	JLG	1
MB60713:1	Method Blank	1		10/21/2011 0854	JLG	1
LCS60713:1	Laboratory Control Spike	1		10/21/2011 1733	JLG	1
MS11101804-02:60713	Matrix Spike	1		10/21/2011 1639	JLG	1
MSD11101804-02:60713	Matrix Spike Duplicate	1		10/21/2011 1706	JLG	1



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
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QC Batch Report - Surrogates % Recovery

WorkGroup: WG60713

Matrix : GW/ChemW

Prep Method :

Analytical Method: EPA 8260B SIM

SampleNumber	MeasureDate	DOXD8
		70-130
L11101315-03	10/21/2011 1333	75
L11101804-01	10/21/2011 1611	94
L11101804-02	10/21/2011 0950	92
L11101804-03	10/21/2011 1017	99
L11101804-04	10/21/2011 1045	102
L11101804-05	10/21/2011 1112	105
L11101804-06	10/21/2011 1140	99
L11101804-07	10/21/2011 1211	87
L11101804-08	10/21/2011 1239	105
L11101804-09	10/21/2011 0923	81
MB60713:1	10/21/2011 0854	105
LC60713:1	10/21/2011 1733	95
MS11101804-02:60713	10/21/2011 1639	98
MSD11101804-02:60713	10/21/2011 1706	90

DOXD8 - 1,4-DIOXANE-D8

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Method Blanks

WorkGroup: WG60713
Blank : MB60713:1

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
EPA 8260B SIM				
Date/Time: 10/21/2011 0854 Analyst: JLG Dilution: 1				
1,4-DIOXANE	<	2.00 U	2.00	ug/l
Surr: 1,4-DIOXANE-D8		105 %	(70-130)	

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: WG60713
MS/MSD : MS11101804-02:60713
MSD11101804-02:60713

Matrix : GW/ChemW
Prep Method :
Analytical Method: EPA 8260B SIM

Parameter	Spike Added	Sample Conc	MS Conc	Units	MS %REC	Limits %REC
1,4-DIOXANE	100.0	2.61	103.0	ug/l	100	60-141

Parameter	Spike Added	MSD Conc	Units	MSD %REC	%RPD	Limits %RPD	%REC
1,4-DIOXANE	100.0	96.61	ug/l	94	6	29	60-141

NOTE: MS/MSD % recoveries are not evaluated if the sample concentration is greater than four times the spike added.

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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QC Batch Report - Laboratory Control Standards and Duplicates

WorkGroup: **WG60713**
LCS : **LCS60713:1**

Matrix : GW/ChemW
Prep Method :
Analytical Method: EPA 8260B SIM

Parameter	Spike Added	LCS Conc	Units	LCS %REC	Limits %REC
1,4-DIOXANE	100.0	99.55	ug/l	100	43-155



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07

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QC Batch Report - Batch Sample List

WorkGroup : **WG60650**
 Description: **VO/8260.TCL**

Matrix : **GW/ChemW**
 Prep Method :
 Analytical Method: **SW846 8260B**

Sample ID	Client ID	Run#	PREP	ANALYTICAL	Analyst	Dilution
			Date Time	Date Time		
L11101315-01	OSS-GW-2-44.5	1		10/17/2011 1553	PAP	1
L11101315-01	OSS-GW-2-44.5	2		10/17/2011 1947	PAP	20
L11101315-02	TRIP BLANK	1		10/17/2011 1501	PAP	1
L11101315-04	OSS-GW-3-39.5	1		10/17/2011 1619	PAP	1
L11101315-05	OSS-GW-3-74.5	1		10/17/2011 1527	PAP	1
L11101315-05	OSS-GW-3-74.5	2		10/17/2011 2013	PAP	20
L11101315-06	OSS-GW-4-49	1		10/17/2011 1645	PAP	1
L11101315-07	OSS-GW-4-64.5	1		10/17/2011 1711	PAP	1
L11101315-08	OSS-GW-4-64.5A	1		10/17/2011 1737	PAP	1
L11101705-03	OSS-GW-7-53	1		10/17/2011 1803	PAP	1
L11101705-04	OSS-GW-1-24	1		10/17/2011 1829	PAP	1
L11101705-06	OSS-GW-8-49.5	1		10/17/2011 1855	PAP	1
L11101705-07	OSS-GW-8-69.5	1		10/17/2011 1921	PAP	1
MB60650:1	Method Blank	1		10/17/2011 1435	PAP	1
LCS60650:1	Laboratory Control Spike	1		10/17/2011 2131	PAP	1
MS11101315-05:60650	Matrix Spike	1		10/17/2011 2039	PAP	20
MSD11101315-05:60650	Matrix Spike Duplicate	1		10/17/2011 2105	PAP	20

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
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QC Batch Report - Surrogates % Recovery

WorkGroup: **WG60650**

Matrix : GW/ChemW
 Prep Method :
 Analytical Method: SW846 8260B

SampleNumber	MeasureDate	DCA	BFB	TOL
		68-149	81-134	72-148
L11101315-01	10/17/2011 1553	114	118	110
L11101315-01	10/17/2011 1947	115	117	110
L11101315-02	10/17/2011 1501	115	117	110
L11101315-04	10/17/2011 1619	117	117	112
L11101315-05	10/17/2011 1527	113	115	110
L11101315-05	10/17/2011 2013	116	115	111
L11101315-06	10/17/2011 1645	118	119	112
L11101315-07	10/17/2011 1711	114	116	110
L11101315-08	10/17/2011 1737	114	117	111
L11101705-03	10/17/2011 1803	116	116	109
L11101705-04	10/17/2011 1829	116	117	111
L11101705-06	10/17/2011 1855	113	115	110
L11101705-07	10/17/2011 1921	115	115	110
MB60650:1	10/17/2011 1435	115	115	110
LCS60650:1	10/17/2011 2131	117	117	111
MS11101315-05:60650	10/17/2011 2039	116	116	110
MSD11101315-05:60650	10/17/2011 2105	118	114	110

DCA - 1,2-DICHLOROETHANE-D4

BFB - BROMOFLUOROBENZENE

TOL - TOLUENE-D8



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
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QC Batch Report - Method Blanks

WorkGroup: WG60650
 Blank : MB60650:1

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
SW846 8260B				
Date/Time: 10/17/2011 1435	Analyst: PAP		Dilution: 1	
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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QC Batch Report - Method Blanks

WorkGroup: WG60650
Blank : MB60650:1

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	115	‡	(68-149)	
Surr: BROMOFLUOROBENZENE	115	‡	(81-134)	
Surr: TOLUENE-D8	110	‡	(72-148)	



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: **WG60650**
 MS/MSD : **MS11101315-05:60650**
MSD11101315-05:60650

Matrix : **GW/ChemW**
 Prep Method :
 Analytical Method: **SW846 8260B**

Parameter	Spike Added	Sample Conc	MS Conc	Units	MS %REC	Limits %REC
1,1,1-TRICHLOROETHANE	1000	< 100.0	901.7	ug/l	90	78-124
1,1,2,2-TETRACHLOROETHANE	1000	< 100.0	932.8	ug/l	93	70-130
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1000	< 200.0	881.6	ug/l	88	70-130
1,1,2-TRICHLOROETHANE	1000	< 100.0	876.2	ug/l	88	85-125
1,1-DICHLOROETHANE	1000	< 100.0	872.2	ug/l	87	70-130
1,1-DICHLOROETHENE	1000	< 100.0	910.0	ug/l	91	74-122
1,2,3-TRICHLOROBENZENE	1000	< 100.0	893.5	ug/l	89	70-130
1,2,4-TRICHLOROBENZENE	1000	< 100.0	905.1	ug/l	91	70-130
1,2-DIBROMO-3-CHLOROPROPANE	1000	< 100.0	967.7	ug/l	97	70-130
1,2-DIBROMOETHANE	1000	< 100.0	924.3	ug/l	92	70-130
1,2-DICHLOROBENZENE	1000	< 100.0	880.0	ug/l	88	70-130
1,2-DICHLOROETHANE	1000	< 100.0	892.1	ug/l	89	80-137
1,2-DICHLOROPROPANE	1000	< 100.0	883.3	ug/l	88	81-122
1,3-DICHLOROBENZENE	1000	< 100.0	854.2	ug/l	85	70-130
1,4-DICHLOROBENZENE	1000	< 100.0	856.7	ug/l	86	86-118
2-BUTANONE	1000	< 200.0	904.1	ug/l	90	71-161
2-HEXANONE	1000	< 200.0	912.9	ug/l	91	70-130
4-METHYL-2-PENTANONE	1000	< 100.0	915.7	ug/l	92	70-130
ACETONE	1000	< 200.0	1025	ug/l	102	70-130
BENZENE	1000	< 100.0	881.6	ug/l	88	82-119
BROMODICHLOROMETHANE	1000	< 100.0	889.8	ug/l	89	70-130
BROMOFORM	1000	< 100.0	939.3	ug/l	94	70-130
BROMOMETHANE	1000	< 200.0	926.1	ug/l	93	70-130
CARBON DISULFIDE	1000	< 100.0	883.3	ug/l	88	70-130
CARBON TETRACHLORIDE	1000	< 100.0	885.0	ug/l	89	70-134
CHLOROBENZENE	1000	< 100.0	881.7	ug/l	88	85-118
CHLOROETHANE	1000	< 200.0	934.8	ug/l	93	70-130
CHLOROFORM	1000	2139	3109	ug/l	97	77-126
CHLOROMETHANE	1000	< 200.0	872.0	ug/l	87	70-130
CIS-1,2-DICHLOROETHENE	1000	< 100.0	848.5	ug/l	85	70-130
CIS-1,3-DICHLOROPROPENE	1000	< 100.0	940.1	ug/l	94	70-130
CYCLOHEXANE	1000	< 100.0	836.0	ug/l	84	70-130
DIBROMOCHLOROMETHANE	1000	< 100.0	915.7	ug/l	92	83-125
DICHLORODIFLUOROMETHANE	1000	< 100.0	1010	ug/l	101	70-130
ETHYLBENZENE	1000	< 100.0	880.8	ug/l	88	70-130
ISOPROPYL BENZENE	1000	< 100.0	877.8	ug/l	88	70-130
METHYL ACETATE	1000	< 200.0	861.7	ug/l	86	70-130
METHYL-TERT-BUTYL ETHER	1000	< 100.0	879.5	ug/l	88	79-139

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: **WG60650**
MS/MSD : **MS11101315-05:60650**
MSD11101315-05:60650

Matrix : **GW/ChemW**
Prep Method :
Analytical Method: **SW846 8260B**

Parameter	Spike Added	Sample Conc	MS Conc	Units	MS %REC	Limits %REC
METHYLCYCLOHEXANE	1000	< 100.0	861.2	ug/l	86	70-130
METHYLENE CHLORIDE	1000	< 100.0	903.7	ug/l	90	70-130
STYRENE	1000	< 100.0	899.8	ug/l	90	70-130
TETRACHLOROETHENE	1000	< 100.0	863.5	ug/l	86	81-118
TOLUENE	1000	< 100.0	875.9	ug/l	88	84-118
TRANS-1,2-DICHLOROETHENE	1000	< 100.0	904.2	ug/l	90	70-130
TRANS-1,3-DICHLOROPROPENE	1000	< 100.0	844.3	ug/l	84	70-130
TRICHLOROETHENE	1000	< 100.0	875.4	ug/l	88	79-121
TRICHLOROFLUOROMETHANE	1000	< 100.0	948.1	ug/l	95	70-130
VINYL ACETATE	1000	< 200.0	888.4	ug/l	89	70-130
VINYL CHLORIDE	1000	< 200.0	862.7	ug/l	86	64-119
XYLENE (TOTAL)	3000	< 100.0	2626	ug/l	88	85-124

Parameter	Spike Added	MSD Conc	Units	MSD %REC	%RPD	Limits %RPD	%REC
1,1,1-TRICHLOROETHANE	1000	1038	ug/l	104	14	10	78-124
1,1,2,2-TETRACHLOROETHANE	1000	1019	ug/l	102	9	20	70-130
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1000	996.2	ug/l	100	12	20	70-130
1,1,2-TRICHLOROETHANE	1000	971.3	ug/l	97	10	10	85-125
1,1-DICHLOROETHANE	1000	993.3	ug/l	99	13	20	70-130
1,1-DICHLOROETHENE	1000	1046	ug/l	105	14	13	74-122
1,2,3-TRICHLOROBENZENE	1000	1034	ug/l	103	15	20	70-130
1,2,4-TRICHLOROBENZENE	1000	1059	ug/l	106	16	20	70-130
1,2-DIBROMO-3-CHLOROPROPANE	1000	1062	ug/l	106	9	20	70-130
1,2-DIBROMOETHANE	1000	1010	ug/l	101	9	20	70-130
1,2-DICHLOROBENZENE	1000	1016	ug/l	102	14	20	70-130
1,2-DICHLOROETHANE	1000	1009	ug/l	101	12	10	80-137
1,2-DICHLOROPROPANE	1000	1010	ug/l	101	13	10	81-122
1,3-DICHLOROBENZENE	1000	967.8	ug/l	97	12	20	70-130
1,4-DICHLOROBENZENE	1000	989.4	ug/l	99	14	10	86-118
2-BUTANONE	1000	911.3	ug/l	91	1	20	71-161
2-HEXANONE	1000	920.2	ug/l	92	1	20	70-130
4-METHYL-2-PENTANONE	1000	934.6	ug/l	93	2	20	70-130
ACETONE	1000	1065	ug/l	106	4	20	70-130
BENZENE	1000	1005	ug/l	100	13	10	82-119
BROMODICHLOROMETHANE	1000	1025	ug/l	103	14	20	70-130
BROMOFORM	1000	1046	ug/l	105	11	20	70-130
BROMOMETHANE	1000	1082	ug/l	108	16	20	70-130

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: **WG60650**
MS/MSD : **MS11101315-05:60650**
MSD11101315-05:60650

Matrix : **GW/ChemW**
Prep Method :
Analytical Method: **SW846 8260B**

Parameter	Spike Added	MSD Conc	Units	MSD		Limits	
				%REC	%RPD	%RPD	%REC
CARBON DISULFIDE	1000	972.3	ug/l	97	10	20	70-130
CARBON TETRACHLORIDE	1000	1037	ug/l	104	16	10	70-134
CHLOROBENZENE	1000	1007	ug/l	101	13	10	85-118
CHLOROETHANE	1000	1063	ug/l	106	13	20	70-130
CHLOROFORM	1000	3307	ug/l	117	6	10	77-126
CHLOROMETHANE	1000	987.8	ug/l	99	12	20	70-130
CIS-1,2-DICHLOROETHENE	1000	969.0	ug/l	97	13	20	70-130
CIS-1,3-DICHLOROPROPENE	1000	1081	ug/l	108	14	20	70-130
CYCLOHEXANE	1000	967.9	ug/l	97	15	20	70-130
DIBROMOCHLOROMETHANE	1000	1043	ug/l	104	13	10	83-125
DICHLORODIFLUOROMETHANE	1000	1118	ug/l	112	10	20	70-130
ETHYLBENZENE	1000	1020	ug/l	102	15	20	70-130
ISOPROPYL BENZENE	1000	1020	ug/l	102	15	20	70-130
METHYL ACETATE	1000	946.0	ug/l	95	9	20	70-130
METHYL-TERT-BUTYL ETHER	1000	995.4	ug/l	100	12	11	79-139
METHYLCYCLOHEXANE	1000	978.4	ug/l	98	13	20	70-130
METHYLENE CHLORIDE	1000	1023	ug/l	102	12	20	70-130
STYRENE	1000	1031	ug/l	103	14	20	70-130
TETRACHLOROETHENE	1000	997.3	ug/l	100	14	10	81-118
TOLUENE	1000	1009	ug/l	101	14	10	84-118
TRANS-1,2-DICHLOROETHENE	1000	1051	ug/l	105	15	20	70-130
TRANS-1,3-DICHLOROPROPENE	1000	956.7	ug/l	96	12	20	70-130
TRICHLOROETHENE	1000	987.2	ug/l	99	12	10	79-121
TRICHLOROFLUOROMETHANE	1000	1070	ug/l	107	12	20	70-130
VINYL ACETATE	1000	908.2	ug/l	91	2	20	70-130
VINYL CHLORIDE	1000	985.1	ug/l	99	13	10	64-119
XYLENE (TOTAL)	3000	3022	ug/l	101	14	10	85-124

NOTE: MS/MSD % recoveries are not evaluated if the sample concentration is greater than four times the spike added.

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
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QC Batch Report - Laboratory Control Standards and Duplicates

WorkGroup: WG60650
LCS : LCS60650:1

Matrix : GW/ChemW
Prep Method :
Analytical Method: SW846 8260B

Parameter	Spike Added	LCS Conc	Units	LCS %REC	Limits %REC
1,1,1-TRICHLOROETHANE	50.00	46.18	ug/l	92	79-125
1,1,2,2-TETRACHLOROETHANE	50.00	49.02	ug/l	98	70-130
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	50.00	43.95	ug/l	88	70-130
1,1,2-TRICHLOROETHANE	50.00	45.62	ug/l	91	87-123
1,1-DICHLOROETHANE	50.00	44.55	ug/l	89	70-130
1,1-DICHLOROETHENE	50.00	45.63	ug/l	91	75-123
1,2,3-TRICHLOROBENZENE	50.00	47.56	ug/l	95	70-130
1,2,4-TRICHLOROBENZENE	50.00	48.01	ug/l	96	70-130
1,2-DIBROMO-3-CHLOROPROPANE	50.00	51.05	ug/l	102	70-130
1,2-DIBROMOETHANE	50.00	48.01	ug/l	96	70-130
1,2-DICHLOROBENZENE	50.00	46.73	ug/l	93	70-130
1,2-DICHLOROETHANE	50.00	44.95	ug/l	90	84-136
1,2-DICHLOROPROPANE	50.00	45.69	ug/l	91	83-123
1,3-DICHLOROBENZENE	50.00	45.00	ug/l	90	70-130
1,4-DICHLOROBENZENE	50.00	46.21	ug/l	92	86-118
2-BUTANONE	50.00	48.29	ug/l	97	74-157
2-HEXANONE	50.00	48.43	ug/l	97	70-130
4-METHYL-2-PENTANONE	50.00	48.61	ug/l	97	70-130
ACETONE	50.00	54.57	ug/l	109	70-130
BENZENE	50.00	45.84	ug/l	92	85-116
BROMODICHLOROMETHANE	50.00	47.01	ug/l	94	70-130
BROMOFORM	50.00	48.69	ug/l	97	70-130
BROMOMETHANE	50.00	47.62	ug/l	95	70-130
CARBON DISULFIDE	50.00	46.68	ug/l	93	70-130
CARBON TETRACHLORIDE	50.00	45.27	ug/l	91	77-127
CHLOROBENZENE	50.00	46.54	ug/l	93	87-117
CHLOROETHANE	50.00	46.44	ug/l	93	70-130
CHLOROFORM	50.00	44.82	ug/l	90	82-125
CHLOROMETHANE	50.00	42.97	ug/l	86	70-130
CIS-1,2-DICHLOROETHENE	50.00	43.36	ug/l	87	70-130
CIS-1,3-DICHLOROPROPENE	50.00	49.16	ug/l	98	70-130
CYCLOHEXANE	50.00	42.88	ug/l	86	70-130
DIBROMOCHLOROMETHANE	50.00	47.16	ug/l	94	85-125
DICHLORODIFLUOROMETHANE	50.00	49.41	ug/l	99	70-130
ETHYLBENZENE	50.00	47.09	ug/l	94	70-130
ISOPROPYL BENZENE	50.00	47.30	ug/l	95	70-130
METHYL ACETATE	50.00	46.05	ug/l	92	70-130
METHYL-TERT-BUTYL ETHER	50.00	44.84	ug/l	90	78-141

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Laboratory Control Standards and Duplicates

WorkGroup: WG60650
LCS : LCS60650:1

Matrix : GW/ChemW
Prep Method :
Analytical Method: SW846 8260B

Parameter	Spike Added	LCS Conc	Units	LCS %REC	Limits %REC
METHYLCYCLOHEXANE	50.00	44.04	ug/l	88	70-130
METHYLENE CHLORIDE	50.00	44.96	ug/l	90	70-130
STYRENE	50.00	47.94	ug/l	96	70-130
TETRACHLOROETHENE	50.00	45.74	ug/l	91	82-116
TOLUENE	50.00	45.59	ug/l	91	85-118
TRANS-1,2-DICHLOROETHENE	50.00	46.78	ug/l	94	70-130
TRANS-1,3-DICHLOROPROPENE	50.00	44.76	ug/l	90	70-130
TRICHLOROETHENE	50.00	44.80	ug/l	90	85-115
TRICHLOROFLUOROMETHANE	50.00	46.84	ug/l	94	70-130
VINYL ACETATE	50.00	49.31	ug/l	99	70-130
VINYL CHLORIDE	50.00	43.37	ug/l	87	68-117
XYLENE (TOTAL)	150.0	140.1	ug/l	93	89-123

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Batch Sample List

WorkGroup : WG60657
Description: VO/8260/TCL

Matrix : GW/ChemW
Prep Method :
Analytical Method: SW846 8260B

Sample ID	Client ID	Run#	PREP	ANALYTICAL	Analyst	Dilution
			Date Time	Date Time		
L11101315-07	OSS-GW-4-64.5	2		10/18/2011 1442	PAP	10
L11101315-08	OSS-GW-4-64.5A	2		10/18/2011 1508	PAP	10
L11101705-01	TRIP BLANK	1		10/18/2011 0929	PAP	1
L11101705-02	OSS-GW-7-44.5 MS/MSD	1		10/18/2011 0955	PAP	1
L11101705-04	OSS-GW-1-24	2		10/18/2011 1534	PAP	10
L11101705-08	OSS-GW-5-29.5	1		10/18/2011 1324	PAP	1
L11101705-08	OSS-GW-5-29.5	2		10/18/2011 1810	PAP	2
L11101705-09	OSS-GW-5-46	1		10/18/2011 1350	PAP	1
L11101705-09	OSS-GW-5-46	2		10/18/2011 1836	PAP	4
L11101705-10	OSS-GW-6-22	1		10/18/2011 1416	PAP	1
L11101804-01	OSS-GW-6-9.5	1		10/18/2011 1652	PAP	1
L11101804-02	OSS-SW-7	1		10/18/2011 1718	PAP	1
L11101804-03	OSS-SW-6	1		10/18/2011 1744	PAP	1
MB60657:1	Method Blank	1		10/18/2011 0837	PAP	1
LCS60657:1	Laboratory Control Spike	1		10/18/2011 1903	PAP	1
MS11101705-02:60657	Matrix Spike	1		10/18/2011 1600	PAP	1
MSD11101705-02:60657	Matrix Spike Duplicate	1		10/18/2011 1626	PAP	1

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

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QC Batch Report - Surrogates % Recovery

WorkGroup: WG60657

Matrix : GW/ChemW

Prep Method :

Analytical Method: SW846 8260B

SampleNumber	MeasureDate	DCA	BFB	TOL
		68-149	81-134	72-148
L11101315-07	10/18/2011 1442	116	114	110
L11101315-08	10/18/2011 1508	118	117	112
L11101705-01	10/18/2011 0929	115	117	111
L11101705-02	10/18/2011 0955	116	115	110
L11101705-04	10/18/2011 1534	119	118	112
L11101705-08	10/18/2011 1324	117	115	109
L11101705-08	10/18/2011 1810	116	115	110
L11101705-09	10/18/2011 1350	117	115	112
L11101705-09	10/18/2011 1836	116	115	109
L11101705-10	10/18/2011 1416	117	115	110
L11101804-01	10/18/2011 1652	116	116	111
L11101804-02	10/18/2011 1718	116	116	111
L11101804-03	10/18/2011 1744	116	116	110
MB60657:1	10/18/2011 0837	114	117	110
LCS60657:1	10/18/2011 1903	116	119	111
MS11101705-02:60657	10/18/2011 1600	117	116	111
MSD11101705-02:60657	10/18/2011 1626	115	118	110

DCA - 1,2-DICHLOROETHANE-D4

BFB - BROMOFLUOROBENZENE

TOL - TOLUENE-D8



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07
 Report Date : November 02, 2011
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QC Batch Report - Method Blanks

WorkGroup: WG60657
 Blank : MB60657:1

Parameter	Result	Qual	RDL	Units
Matrix : GW/ChemW				
Volatile Organics				
SW846 8260B				
Date/Time: 10/18/2011 0837 Analyst: PAP Dilution: 1				
1,1,1-TRICHLOROETHANE	<	2.00 U	2.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	2.00 U	2.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	2.00 U	2.00	ug/l
1,1,2-TRICHLOROETHANE	<	2.00 U	2.00	ug/l
1,1-DICHLOROETHANE	<	2.00 U	2.00	ug/l
1,1-DICHLOROETHENE	<	2.00 U	2.00	ug/l
1,2,3-TRICHLOROBENZENE	<	2.00 U	2.00	ug/l
1,2,4-TRICHLOROBENZENE	<	2.00 U	2.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	2.00 U	2.00	ug/l
1,2-DIBROMOETHANE	<	2.00 U	2.00	ug/l
1,2-DICHLOROBENZENE	<	2.00 U	2.00	ug/l
1,2-DICHLOROETHANE	<	2.00 U	2.00	ug/l
1,2-DICHLOROPROPANE	<	2.00 U	2.00	ug/l
1,3-DICHLOROBENZENE	<	2.00 U	2.00	ug/l
1,4-DICHLOROBENZENE	<	2.00 U	2.00	ug/l
2-BUTANONE	<	2.00 U	2.00	ug/l
2-HEXANONE	<	2.00 U	2.00	ug/l
4-METHYL-2-PENTANONE	<	2.00 U	2.00	ug/l
ACETONE	<	2.00 U	2.00	ug/l
BENZENE	<	2.00 U	2.00	ug/l
BROMODICHLOROMETHANE	<	2.00 U	2.00	ug/l
BROMOFORM	<	2.00 U	2.00	ug/l
BROMOMETHANE	<	2.00 U	2.00	ug/l
CARBON DISULFIDE	<	2.00 U	2.00	ug/l
CARBON TETRACHLORIDE	<	2.00 U	2.00	ug/l
CHLOROBENZENE	<	2.00 U	2.00	ug/l
CHLOROETHANE	<	2.00 U	2.00	ug/l
CHLOROFORM	<	2.00 U	2.00	ug/l
CHLOROMETHANE	<	2.00 U	2.00	ug/l
CIS-1,2-DICHLOROETHENE	<	2.00 U	2.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Method Blanks

WorkGroup: **WG60657**
Blank : **MB60657:1**

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	2.00 U	2.00	ug/l
CYCLOHEXANE	<	2.00 U	2.00	ug/l
DIBROMOCHLOROMETHANE	<	2.00 U	2.00	ug/l
DICHLORODIFLUOROMETHANE	<	2.00 U	2.00	ug/l
ETHYLBENZENE	<	2.00 U	2.00	ug/l
ISOPROPYL BENZENE	<	2.00 U	2.00	ug/l
METHYL ACETATE	<	2.00 U	2.00	ug/l
METHYL-TERT-BUTYL ETHER	<	2.00 U	2.00	ug/l
METHYLCYCLOHEXANE	<	2.00 U	2.00	ug/l
METHYLENE CHLORIDE	<	2.00 U	2.00	ug/l
STYRENE	<	2.00 U	2.00	ug/l
TETRACHLOROETHENE	<	2.00 U	2.00	ug/l
TOLUENE	<	2.00 U	2.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	2.00 U	2.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	2.00 U	2.00	ug/l
TRICHLOROETHENE	<	2.00 U	2.00	ug/l
TRICHLOROFLUOROMETHANE	<	2.00 U	2.00	ug/l
VINYL ACETATE	<	2.00 U	2.00	ug/l
VINYL CHLORIDE	<	2.00 U	2.00	ug/l
XYLENE (TOTAL)	<	2.00 U	2.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	114	%	(68-149)	
Surr: BROMOFLUOROBENZENE	117	%	(81-134)	
Surr: TOLUENE-D8	110	%	(72-148)	

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: WG60657
MS/MSD : MS11101705-02:60657
MSD11101705-02:60657

Matrix : GW/ChemW
Prep Method :
Analytical Method: SW846 8260B

Parameter	Spike Added	Sample Conc	MS Conc	Units	MS %RBC	Limits %RBC
1,1,1-TRICHLOROETHANE	50.00	< 5.00	45.70	ug/l	91	78-124
1,1,2,2-TETRACHLOROETHANE	50.00	< 5.00	46.62	ug/l	93	70-130
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	50.00	< 10.00	44.70	ug/l	89	70-130
1,1,2-TRICHLOROETHANE	50.00	< 5.00	45.27	ug/l	91	85-125
1,1-DICHLOROETHANE	50.00	< 5.00	44.09	ug/l	88	70-130
1,1-DICHLOROETHENE	50.00	< 5.00	44.78	ug/l	90	74-122
1,2,3-TRICHLOROBENZENE	50.00	< 5.00	46.57	ug/l	93	70-130
1,2,4-TRICHLOROBENZENE	50.00	< 5.00	47.26	ug/l	95	70-130
1,2-DIBROMO-3-CHLOROPROPANE	50.00	< 5.00	46.80	ug/l	94	70-130
1,2-DIBROMOETHANE	50.00	< 5.00	46.85	ug/l	94	70-130
1,2-DICHLOROBENZENE	50.00	< 5.00	46.02	ug/l	92	70-130
1,2-DICHLOROETHANE	50.00	< 5.00	45.61	ug/l	91	80-137
1,2-DICHLOROPROPANE	50.00	< 5.00	45.41	ug/l	91	81-122
1,3-DICHLOROBENZENE	50.00	< 5.00	43.78	ug/l	88	70-130
1,4-DICHLOROBENZENE	50.00	< 5.00	44.13	ug/l	88	86-118
2-BUTANONE	50.00	< 10.00	46.46	ug/l	93	71-161
2-HEXANONE	50.00	< 10.00	46.86	ug/l	94	70-130
4-METHYL-2-PENTANONE	50.00	< 5.00	47.27	ug/l	95	70-130
ACETONE	50.00	< 10.00	54.23	ug/l	108	70-130
BENZENE	50.00	< 5.00	44.75	ug/l	90	82-119
BROMODICHLOROMETHANE	50.00	< 5.00	46.65	ug/l	93	70-130
BROMOFORM	50.00	< 5.00	47.80	ug/l	96	70-130
BROMOMETHANE	50.00	< 10.00	43.03	ug/l	86	70-130
CARBON DISULFIDE	50.00	< 5.00	42.06	ug/l	84	70-130
CARBON TETRACHLORIDE	50.00	< 5.00	45.37	ug/l	91	70-134
CHLOROBENZENE	50.00	< 5.00	44.91	ug/l	90	85-118
CHLOROETHANE	50.00	< 10.00	44.52	ug/l	89	70-130
CHLOROFORM	50.00	5.88	51.98	ug/l	92	77-126
CHLOROMETHANE	50.00	< 10.00	40.30	ug/l	81	70-130
CIS-1,2-DICHLOROETHENE	50.00	< 5.00	43.09	ug/l	86	70-130
CIS-1,3-DICHLOROPROPENE	50.00	< 5.00	48.41	ug/l	97	70-130
CYCLOHEXANE	50.00	< 5.00	42.33	ug/l	85	70-130
DIBROMOCHLOROMETHANE	50.00	< 5.00	47.77	ug/l	96	83-125
DICHLORODIFLUOROMETHANE	50.00	< 5.00	50.46	ug/l	101	70-130
ETHYLBENZENE	50.00	< 5.00	45.53	ug/l	91	70-130
ISOPROPYL BENZENE	50.00	< 5.00	45.33	ug/l	91	70-130
METHYL ACETATE	50.00	< 10.00	43.31	ug/l	87	70-130
METHYL-TERT-BUTYL ETHER	50.00	< 5.00	45.13	ug/l	90	79-139

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: WG60657
MS/MSD : MS11101705-02:60657
MSD11101705-02:60657

Matrix : CW/ChemW
Prep Method :
Analytical Method: SW846 8260B

Parameter	Spike Added	Sample Conc	MS Conc	Units	MS %REC	Limits %REC
METHYLCYCLOHEXANE	50.00	< 5.00	43.47	ug/l	87	70-130
METHYLENE CHLORIDE	50.00	< 5.00	44.29	ug/l	89	70-130
STYRENE	50.00	< 5.00	46.60	ug/l	93	70-130
TETRACHLOROETHENE	50.00	< 5.00	43.95	ug/l	88	81-118
TOLUENE	50.00	< 5.00	45.02	ug/l	90	84-118
TRANS-1,2-DICHLOROETHENE	50.00	< 5.00	45.23	ug/l	90	70-130
TRANS-1,3-DICHLOROPROPENE	50.00	< 5.00	43.53	ug/l	87	70-130
TRICHLOROETHENE	50.00	< 5.00	44.57	ug/l	89	79-121
TRICHLOROFLUOROMETHANE	50.00	< 5.00	47.50	ug/l	95	70-130
VINYL ACETATE	50.00	< 10.00	46.62	ug/l	93	70-130
VINYL CHLORIDE	50.00	< 10.00	41.53	ug/l	83	64-119
XYLENE (TOTAL)	150.0	< 5.00	133.6	ug/l	89	85-124

Parameter	Spike Added	MSD Conc	Units	MSD %REC	%RPD	Limits %RPD	%REC
1,1,1-TRICHLOROETHANE	50.00	43.00	ug/l	86	6	10	78-124
1,1,2,2-TETRACHLOROETHANE	50.00	43.29	ug/l	87	7	20	70-130
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	50.00	40.92	ug/l	82	9	20	70-130
1,1,2-TRICHLOROETHANE	50.00	41.46	ug/l	83	9	10	85-125
1,1-DICHLOROETHANE	50.00	41.39	ug/l	83	6	20	70-130
1,1-DICHLOROETHENE	50.00	41.68	ug/l	83	7	13	74-122
1,2,3-TRICHLOROBENZENE	50.00	43.78	ug/l	88	6	20	70-130
1,2,4-TRICHLOROBENZENE	50.00	44.33	ug/l	89	6	20	70-130
1,2-DIBROMO-3-CHLOROPROPANE	50.00	45.01	ug/l	90	4	20	70-130
1,2-DIBROMOETHANE	50.00	42.15	ug/l	84	11	20	70-130
1,2-DICHLOROBENZENE	50.00	42.42	ug/l	85	8	20	70-130
1,2-DICHLOROETHANE	50.00	41.38	ug/l	83	10	10	80-137
1,2-DICHLOROPROPANE	50.00	42.41	ug/l	85	7	10	81-122
1,3-DICHLOROBENZENE	50.00	42.18	ug/l	84	4	20	70-130
1,4-DICHLOROBENZENE	50.00	41.66	ug/l	83	6	10	86-118
2-BUTANONE	50.00	45.27	ug/l	91	3	20	71-161
2-HEXANONE	50.00	45.30	ug/l	91	3	20	70-130
4-METHYL-2-PENTANONE	50.00	46.03	ug/l	92	3	20	70-130
ACETONE	50.00	54.31	ug/l	109	0	20	70-130
BENZENE	50.00	41.63	ug/l	83	7	10	82-119
BROMODICHLOROMETHANE	50.00	42.61	ug/l	85	9	20	70-130
BROMOFORM	50.00	44.56	ug/l	89	7	20	70-130
BROMOMETHANE	50.00	43.75	ug/l	88	2	20	70-130

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: **WG60657**
MS/MSD : **MS11101705-02:60657**
MSD11101705-02:60657

Matrix : GW/ChemW
Prep Method :
Analytical Method: SW846 8260B

Parameter	Spike Added	MSD Conc	Units	MSD		Limits	
				%REC	%RPD	%RPD	%REC
CARBON DISULFIDE	50.00	43.09	ug/l	86	2	20	70-130
CARBON TETRACHLORIDE	50.00	42.98	ug/l	86	5	10	70-134
CHLOROBENZENE	50.00	42.70	ug/l	85	5	10	85-118
CHLOROETHANE	50.00	42.12	ug/l	84	6	20	70-130
CHLOROFORM	50.00	48.37	ug/l	85	7	10	77-126
CHLOROMETHANE	50.00	39.10	ug/l	78	3	20	70-130
CIS-1,2-DICHLOROETHENE	50.00	40.20	ug/l	80	7	20	70-130
CIS-1,3-DICHLOROPROPENE	50.00	44.27	ug/l	89	9	20	70-130
CYCLOHEXANE	50.00	39.05	ug/l	78	8	20	70-130
DIBROMOCHLOROMETHANE	50.00	43.79	ug/l	88	9	10	83-125
DICHLORODIFLUOROMETHANE	50.00	45.56	ug/l	91	10	20	70-130
ETHYLBENZENE	50.00	43.26	ug/l	87	5	20	70-130
ISOPROPYL BENZENE	50.00	43.70	ug/l	87	4	20	70-130
METHYL ACETATE	50.00	40.03	ug/l	80	8	20	70-130
METHYL-TERT-BUTYL ETHER	50.00	41.20	ug/l	82	9	11	79-139
METHYLCYCLOHEXANE	50.00	40.12	ug/l	80	8	20	70-130
METHYLENE CHLORIDE	50.00	41.21	ug/l	82	7	20	70-130
STYRENE	50.00	43.72	ug/l	87	6	20	70-130
TETRACHLOROETHENE	50.00	42.06	ug/l	84	4	10	81-118
TOLUENE	50.00	41.95	ug/l	84	7	10	84-118
TRANS-1,2-DICHLOROETHENE	50.00	42.56	ug/l	85	6	20	70-130
TRANS-1,3-DICHLOROPROPENE	50.00	40.21	ug/l	80	8	20	70-130
TRICHLOROETHENE	50.00	41.29	ug/l	83	8	10	79-121
TRICHLOROFLUOROMETHANE	50.00	44.17	ug/l	88	7	20	70-130
VINYL ACETATE	50.00	47.02	ug/l	94	1	20	70-130
VINYL CHLORIDE	50.00	39.28	ug/l	79	6	10	64-119
XYLENE (TOTAL)	150.0	128.0	ug/l	85	4	10	85-124

NOTE: MS/MSD % recoveries are not evaluated if the sample concentration is greater than four times the spike added.

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Laboratory Control Standards and Duplicates

WorkGroup: **WG60657**
LCS : **LCS60657:1**

Matrix : GW/ChemW
Prep Method :
Analytical Method: SW846 8260B

Parameter	Spike Added	LCS Conc	Units	LCS %REC	Limits %REC
1,1,1-TRICHLOROETHANE	50.00	45.25	ug/l	91	79-125
1,1,2,2-TETRACHLOROETHANE	50.00	46.71	ug/l	93	70-130
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	50.00	40.94	ug/l	82	70-130
1,1,2-TRICHLOROETHANE	50.00	44.59	ug/l	89	87-123
1,1-DICHLOROETHANE	50.00	43.24	ug/l	86	70-130
1,1-DICHLOROETHENE	50.00	44.38	ug/l	89	75-123
1,2,3-TRICHLOROBENZENE	50.00	45.59	ug/l	91	70-130
1,2,4-TRICHLOROBENZENE	50.00	45.59	ug/l	91	70-130
1,2-DIBROMO-3-CHLOROPROPANE	50.00	45.43	ug/l	91	70-130
1,2-DIBROMOETHANE	50.00	46.02	ug/l	92	70-130
1,2-DICHLOROBENZENE	50.00	44.42	ug/l	89	70-130
1,2-DICHLOROETHANE	50.00	44.57	ug/l	89	84-136
1,2-DICHLOROPROPANE	50.00	44.80	ug/l	90	83-123
1,3-DICHLOROBENZENE	50.00	44.12	ug/l	88	70-130
1,4-DICHLOROBENZENE	50.00	43.40	ug/l	87	86-118
2-BUTANONE	50.00	44.00	ug/l	88	74-157
2-HEXANONE	50.00	44.65	ug/l	89	70-130
4-METHYL-2-PENTANONE	50.00	44.99	ug/l	90	70-130
ACETONE	50.00	50.39	ug/l	101	70-130
BENZENE	50.00	44.27	ug/l	89	85-116
BROMODICHLOROMETHANE	50.00	45.72	ug/l	91	70-130
BROMOFORM	50.00	47.56	ug/l	95	70-130
BROMOMETHANE	50.00	44.66	ug/l	89	70-130
CARBON DISULFIDE	50.00	40.77	ug/l	82	70-130
CARBON TETRACHLORIDE	50.00	44.62	ug/l	89	77-127
CHLOROBENZENE	50.00	44.94	ug/l	90	87-117
CHLOROETHANE	50.00	45.53	ug/l	91	70-130
CHLOROFORM	50.00	44.73	ug/l	89	82-125
CHLOROMETHANE	50.00	40.40	ug/l	81	70-130
CIS-1,2-DICHLOROETHENE	50.00	42.72	ug/l	85	70-130
CIS-1,3-DICHLOROPROPENE	50.00	47.65	ug/l	95	70-130
CYCLOHEXANE	50.00	38.90	ug/l	78	70-130
DIBROMOCHLOROMETHANE	50.00	47.14	ug/l	94	85-125
DICHLORODIFLUOROMETHANE	50.00	46.29	ug/l	93	70-130
ETHYLBENZENE	50.00	45.50	ug/l	91	70-130
ISOPROPYL BENZENE	50.00	45.48	ug/l	91	70-130
METHYL ACETATE	50.00	42.52	ug/l	85	70-130
METHYL-TERT-BUTYL ETHER	50.00	44.03	ug/l	88	78-141

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Laboratory Control Standards and Duplicates

WorkGroup: **WG60657**
 LCS : **LCS60657:1**

Matrix : GW/ChemW
 Prep Method :
 Analytical Method: SW846 8260B

Parameter	Spike Added	LCS Conc	Units	LCS %REC	Limits %REC
METHYLCYCLOHEXANE	50.00	39.48	ug/l	79	70-130
METHYLENE CHLORIDE	50.00	44.29	ug/l	89	70-130
STYRENE	50.00	46.72	ug/l	93	70-130
TETRACHLOROETHENE	50.00	44.33	ug/l	89	82-116
TOLUENE	50.00	44.73	ug/l	89	85-118
TRANS-1,2-DICHLOROETHENE	50.00	45.25	ug/l	91	70-130
TRANS-1,3-DICHLOROPROPENE	50.00	42.63	ug/l	85	70-130
TRICHLOROETHENE	50.00	43.63	ug/l	87	85-115
TRICHLOROFLUOROMETHANE	50.00	46.26	ug/l	93	70-130
VINYL ACETATE	50.00	43.72	ug/l	87	70-130
VINYL CHLORIDE	50.00	41.33	ug/l	83	68-117
XYLENE (TOTAL)	150.0	134.3	ug/l	90	89-123



LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
 1455 OLD ALABAMA RD.
 SUITE 170
 ROSWELL, GA 30076
 Contact : BRYON DAHLGREN

Project Number: 61576.07

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QC Batch Report - Batch Sample List

WorkGroup : WG60678
 Description: VO/8260/TCL

Matrix : GW/ChemW
 Prep Method :
 Analytical Method: SW846 8260B

Sample ID	Client ID	Run#	PREP	ANALYTICAL	Analyst	Dilution
			Date Time	Date Time		
L11101804-04	OSS-SW-5	1		10/19/2011 1426	PAP	1
L11101804-05	OSS-SW-4	1		10/19/2011 1452	PAP	1
L11101804-06	OSS-SW-3	1		10/19/2011 1518	PAP	1
L11101804-07	OSS-SW-2	1		10/19/2011 1544	PAP	1
L11101804-08	OSS-SW-1	1		10/19/2011 1610	PAP	1
L11101804-09	TRIP BLANK	1		10/19/2011 1400	PAP	1
MB60678:1	Method Blank	1		10/19/2011 1124	PAP	1
LCS60678:1	Laboratory Control Spike	1		10/19/2011 1939	PAP	1
MS11101804-04:60678	Matrix Spike	1		10/19/2011 1846	PAP	1
MSD11101804-04:60678	Matrix Spike Duplicate	1		10/19/2011 1912	PAP	1

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

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QC Batch Report - Surrogates % Recovery

WorkGroup: WG60678

Matrix : GW/ChemW

Prep Method :

Analytical Method: SW846 8260B

SampleNumber	MeasureDate	DCA	BFB	TOL
		68-149	81-134	72-148
L11101804-04	10/19/2011 1426	116	115	110
L11101804-05	10/19/2011 1452	116	115	111
L11101804-06	10/19/2011 1518	115	115	111
L11101804-07	10/19/2011 1544	116	116	111
L11101804-08	10/19/2011 1610	118	116	110
L11101804-09	10/19/2011 1400	115	115	112
MB60678:1	10/19/2011 1124	115	114	111
LCS60678:1	10/19/2011 1939	114	115	109
MS11101804-04:60678	10/19/2011 1846	118	116	110
MSD11101804-04:60678	10/19/2011 1912	116	116	110

DCA - 1,2-DICHLOROETHANE-D4

BFB - BROMOFLUOROBENZENE

TOL - TOLUENE-D8

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : **BRYON DAHLGREN**

Project Number: 61576.07

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QC Batch Report - Method Blanks

WorkGroup: **WG60678**
Blank : **MB60678:1**

Parameter	Result	Qual	RDL	Units
<i>Matrix : GW/ChemW</i>				
Volatile Organics				
<i>SW846 8260B</i>				
<i>Date/Time: 10/19/2011 1124 Analyst: PAP Dilution: 1</i>				
1,1,1-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2,2-TETRACHLOROETHANE	<	5.00 U	5.00	ug/l
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	<	10.0 U	10.0	ug/l
1,1,2-TRICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,1-DICHLOROETHENE	<	5.00 U	5.00	ug/l
1,2,3-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2,4-TRICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DIBROMO-3-CHLOROPROPANE	<	5.00 U	5.00	ug/l
1,2-DIBROMOETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,2-DICHLOROETHANE	<	5.00 U	5.00	ug/l
1,2-DICHLOROPROPANE	<	5.00 U	5.00	ug/l
1,3-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
1,4-DICHLOROBENZENE	<	5.00 U	5.00	ug/l
2-BUTANONE	<	10.0 U	10.0	ug/l
2-HEXANONE	<	10.0 U	10.0	ug/l
4-METHYL-2-PENTANONE	<	5.00 U	5.00	ug/l
ACETONE	<	10.0 U	10.0	ug/l
BENZENE	<	5.00 U	5.00	ug/l
BROMODICHLOROMETHANE	<	5.00 U	5.00	ug/l
BROMOFORM	<	5.00 U	5.00	ug/l
BROMOMETHANE	<	10.0 U	10.0	ug/l
CARBON DISULFIDE	<	5.00 U	5.00	ug/l
CARBON TETRACHLORIDE	<	5.00 U	5.00	ug/l
CHLOROBENZENE	<	5.00 U	5.00	ug/l
CHLOROETHANE	<	10.0 U	10.0	ug/l
CHLOROFORM	<	5.00 U	5.00	ug/l
CHLOROMETHANE	<	10.0 U	10.0	ug/l
CIS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

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QC Batch Report - Method Blanks

WorkGroup: **WG60678**
Blank : **MB60678:1**

Parameter	Result	Qual	RDL	Units
CIS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
CYCLOHEXANE	<	5.00 U	5.00	ug/l
DIBROMOCHLOROMETHANE	<	5.00 U	5.00	ug/l
DICHLORODIFLUOROMETHANE	<	5.00 U	5.00	ug/l
ETHYLBENZENE	<	5.00 U	5.00	ug/l
ISOPROPYL BENZENE	<	5.00 U	5.00	ug/l
METHYL ACETATE	<	10.0 U	10.0	ug/l
METHYL-TERT-BUTYL ETHER	<	5.00 U	5.00	ug/l
METHYLCYCLOHEXANE	<	5.00 U	5.00	ug/l
METHYLENE CHLORIDE	<	5.00 U	5.00	ug/l
STYRENE	<	5.00 U	5.00	ug/l
TETRACHLOROETHENE	<	5.00 U	5.00	ug/l
TOLUENE	<	5.00 U	5.00	ug/l
TRANS-1,2-DICHLOROETHENE	<	5.00 U	5.00	ug/l
TRANS-1,3-DICHLOROPROPENE	<	5.00 U	5.00	ug/l
TRICHLOROETHENE	<	5.00 U	5.00	ug/l
TRICHLOROFLUOROMETHANE	<	5.00 U	5.00	ug/l
VINYL ACETATE	<	10.0 U	10.0	ug/l
VINYL CHLORIDE	<	10.0 U	10.0	ug/l
XYLENE (TOTAL)	<	5.00 U	5.00	ug/l
Surr: 1,2-DICHLOROETHANE-D4	115	⊛	(68-149)	
Surr: BROMOFLUOROBENZENE	114	⊛	(81-134)	
Surr: TOLUENE-D8	111	⊛	(72-148)	

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07
Report Date : November 02, 2011
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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: **WG60678**
MS/MSD : **MS11101804-04:60678**
MSD11101804-04:60678

Matrix : **GW/ChemW**
Prep Method :
Analytical Method: **SW846 8260B**

Parameter	Spike Added	Sample Conc	MS Conc	Units	MS %REC	Limits %REC
1,1,1-TRICHLOROETHANE	50.00	< 5.00	45.21	ug/l	90	78-124
1,1,2,2-TETRACHLOROETHANE	50.00	< 5.00	47.24	ug/l	94	70-130
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	50.00	< 10.00	43.74	ug/l	87	70-130
1,1,2-TRICHLOROETHANE	50.00	< 5.00	43.27	ug/l	87	85-125
1,1-DICHLOROETHANE	50.00	< 5.00	42.99	ug/l	86	70-130
1,1-DICHLOROETHENE	50.00	< 5.00	44.82	ug/l	90	74-122
1,2,3-TRICHLOROBENZENE	50.00	< 5.00	45.55	ug/l	91	70-130
1,2,4-TRICHLOROBENZENE	50.00	< 5.00	45.86	ug/l	92	70-130
1,2-DIBROMO-3-CHLOROPROPANE	50.00	< 5.00	49.55	ug/l	99	70-130
1,2-DIBROMOETHANE	50.00	< 5.00	45.50	ug/l	91	70-130
1,2-DICHLOROBENZENE	50.00	< 5.00	44.31	ug/l	89	70-130
1,2-DICHLOROETHANE	50.00	< 5.00	44.40	ug/l	89	80-137
1,2-DICHLOROPROPANE	50.00	< 5.00	43.07	ug/l	86	81-122
1,3-DICHLOROBENZENE	50.00	< 5.00	43.61	ug/l	87	70-130
1,4-DICHLOROBENZENE	50.00	< 5.00	43.23	ug/l	86	86-118
2-BUTANONE	50.00	< 10.00	45.48	ug/l	91	71-161
2-HEXANONE	50.00	< 10.00	44.24	ug/l	88	70-130
4-METHYL-2-PENTANONE	50.00	< 5.00	44.40	ug/l	89	70-130
ACETONE	50.00	< 10.00	52.06	ug/l	104	70-130
BENZENE	50.00	< 5.00	42.60	ug/l	85	82-119
BROMODICHLOROMETHANE	50.00	< 5.00	44.30	ug/l	89	70-130
BROMOFORM	50.00	< 5.00	48.16	ug/l	96	70-130
BROMOMETHANE	50.00	< 10.00	44.50	ug/l	89	70-130
CARBON DISULFIDE	50.00	< 5.00	39.16	ug/l	78	70-130
CARBON TETRACHLORIDE	50.00	< 5.00	45.44	ug/l	91	70-134
CHLOROBENZENE	50.00	< 5.00	43.98	ug/l	88	85-118
CHLOROETHANE	50.00	< 10.00	44.60	ug/l	89	70-130
CHLOROFORM	50.00	< 5.00	45.21	ug/l	90	77-126
CHLOROMETHANE	50.00	< 10.00	39.72	ug/l	79	70-130
CIS-1,2-DICHLOROETHENE	50.00	< 5.00	42.47	ug/l	85	70-130
CIS-1,3-DICHLOROPROPENE	50.00	< 5.00	46.33	ug/l	93	70-130
CYCLOHEXANE	50.00	< 5.00	40.99	ug/l	82	70-130
DIBROMOCHLOROMETHANE	50.00	< 5.00	45.53	ug/l	91	83-125
DICHLORODIFLUOROMETHANE	50.00	< 5.00	48.58	ug/l	97	70-130
ETHYLBENZENE	50.00	< 5.00	44.58	ug/l	89	70-130
ISOPROPYL BENZENE	50.00	< 5.00	45.24	ug/l	90	70-130
METHYL ACETATE	50.00	< 10.00	45.08	ug/l	90	70-130
METHYL-TERT-BUTYL ETHER	50.00	< 5.00	44.11	ug/l	88	79-139

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: **WG60678**
MS/MSD : **MS11101804-04:60678**
MSD11101804-04:60678

Matrix : GW/ChemW
Prep Method :
Analytical Method: SW846 8260B

Parameter	Spike Added	Sample Conc	MS Conc	Units	MS %REC	Limits %REC
METHYLCYCLOHEXANE	50.00	< 5.00	40.95	ug/l	82	70-130
METHYLENE CHLORIDE	50.00	< 5.00	43.13	ug/l	86	70-130
STYRENE	50.00	< 5.00	45.15	ug/l	90	70-130
TETRACHLOROETHENE	50.00	< 5.00	43.35	ug/l	87	81-118
TOLUENE	50.00	< 5.00	43.42	ug/l	87	84-118
TRANS-1,2-DICHLOROETHENE	50.00	< 5.00	43.75	ug/l	88	70-130
TRANS-1,3-DICHLOROPROPENE	50.00	< 5.00	42.90	ug/l	86	70-130
TRICHLOROETHENE	50.00	< 5.00	42.53	ug/l	85	79-121
TRICHLOROFLUOROMETHANE	50.00	< 5.00	47.70	ug/l	95	70-130
VINYL ACETATE	50.00	< 10.00	40.90	ug/l	82	70-130
VINYL CHLORIDE	50.00	< 10.00	41.10	ug/l	82	64-119
XYLENE (TOTAL)	150.0	< 5.00	132.2	ug/l	88	85-124

Parameter	Spike Added	MSD Conc	Units	MSD %REC	%RPD	Limits %RPD	%REC
1,1,1-TRICHLOROETHANE	50.00	47.17	ug/l	94	4	10	78-124
1,1,2,2-TETRACHLOROETHANE	50.00	49.77	ug/l	100	5	20	70-130
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	50.00	45.91	ug/l	92	5	20	70-130
1,1,2-TRICHLOROETHANE	50.00	46.74	ug/l	93	8	10	85-125
1,1-DICHLOROETHANE	50.00	45.62	ug/l	91	6	20	70-130
1,1-DICHLOROETHENE	50.00	46.27	ug/l	93	3	13	74-122
1,2,3-TRICHLOROBENZENE	50.00	48.36	ug/l	97	6	20	70-130
1,2,4-TRICHLOROBENZENE	50.00	49.33	ug/l	99	7	20	70-130
1,2-DIBROMO-3-CHLOROPROPANE	50.00	50.96	ug/l	102	3	20	70-130
1,2-DIBROMOETHANE	50.00	48.91	ug/l	98	7	20	70-130
1,2-DICHLOROBENZENE	50.00	47.07	ug/l	94	6	20	70-130
1,2-DICHLOROETHANE	50.00	46.81	ug/l	94	5	10	80-137
1,2-DICHLOROPROPANE	50.00	46.16	ug/l	92	7	10	81-122
1,3-DICHLOROBENZENE	50.00	46.13	ug/l	92	6	20	70-130
1,4-DICHLOROBENZENE	50.00	46.39	ug/l	93	7	10	86-118
2-BUTANONE	50.00	47.60	ug/l	95	5	20	71-161
2-HEXANONE	50.00	48.19	ug/l	96	9	20	70-130
4-METHYL-2-PENTANONE	50.00	48.37	ug/l	97	9	20	70-130
ACETONE	50.00	53.97	ug/l	108	4	20	70-130
BENZENE	50.00	45.23	ug/l	90	6	10	82-119
BROMODICHLOROMETHANE	50.00	47.81	ug/l	96	8	20	70-130
BROMOFORM	50.00	50.67	ug/l	101	5	20	70-130
BROMOMETHANE	50.00	47.21	ug/l	94	6	20	70-130

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : **BRYON DAHLGREN**

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Matrix Spikes and Duplicates

WorkGroup: **WG60678**
MS/MSD : **MS11101804-04:60678**
MSD11101804-04:60678

Matrix : **GW/ChemW**
Prep Method :
Analytical Method: **SW846 8260B**

Parameter	Spike Added	MSD Conc	Units	MSD		Limits	
				%REC	%RPD	%RPD	%REC
CARBON DISULFIDE	50.00	42.71	ug/l	85	9	20	70-130
CARBON TETRACHLORIDE	50.00	47.04	ug/l	94	3	10	70-134
CHLOROBENZENE	50.00	46.44	ug/l	93	5	10	85-118
CHLOROETHANE	50.00	46.42	ug/l	93	4	20	70-130
CHLOROFORM	50.00	47.35	ug/l	95	5	10	77-126
CHLOROMETHANE	50.00	40.47	ug/l	81	2	20	70-130
CIS-1,2-DICHLOROETHENE	50.00	44.42	ug/l	89	4	20	70-130
CIS-1,3-DICHLOROPROPENE	50.00	49.30	ug/l	99	6	20	70-130
CYCLOHEXANE	50.00	42.54	ug/l	85	4	20	70-130
DIBROMOCHLOROMETHANE	50.00	49.03	ug/l	98	7	10	83-125
DICHLORODIFLUOROMETHANE	50.00	50.11	ug/l	100	3	20	70-130
ETHYLBENZENE	50.00	47.14	ug/l	94	6	20	70-130
ISOPROPYL BENZENE	50.00	47.54	ug/l	95	5	20	70-130
METHYL ACETATE	50.00	46.70	ug/l	93	4	20	70-130
METHYL-TERT-BUTYL ETHER	50.00	46.58	ug/l	93	5	11	79-139
METHYLCYCLOHEXANE	50.00	43.71	ug/l	87	7	20	70-130
METHYLENE CHLORIDE	50.00	45.82	ug/l	92	6	20	70-130
STYRENE	50.00	47.86	ug/l	96	6	20	70-130
TETRACHLOROETHENE	50.00	45.79	ug/l	92	5	10	81-118
TOLUENE	50.00	46.09	ug/l	92	6	10	84-118
TRANS-1,2-DICHLOROETHENE	50.00	45.96	ug/l	92	5	20	70-130
TRANS-1,3-DICHLOROPROPENE	50.00	45.33	ug/l	91	6	20	70-130
TRICHLOROETHENE	50.00	45.33	ug/l	91	6	10	79-121
TRICHLOROFLUOROMETHANE	50.00	48.94	ug/l	98	3	20	70-130
VINYL ACETATE	50.00	45.75	ug/l	92	11	20	70-130
VINYL CHLORIDE	50.00	43.31	ug/l	87	5	10	64-119
XYLENE (TOTAL)	150.0	139.6	ug/l	93	5	10	85-124

NOTE: MS/MSD % recoveries are not evaluated if the sample concentration is greater than four times the spike added.

SC Certification Number: 24110001

Client : **AECOM**
1455 OLD ALABAMA RD.
SUITE 170
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Contact : **BRYON DAHLGREN**

Project Number: 61576.07

Report Date : November 02, 2011

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QC Batch Report - Laboratory Control Standards and Duplicates

WorkGroup: **WG60678**
LCS : **LCS60678:1**

Matrix : GW/ChemW
Prep Method :
Analytical Method: SW846 8260B

Parameter	Spike Added	LCS Conc	Units	LCS %REC	Limits %REC
1,1,1-TRICHLOROETHANE	50.00	41.26	ug/l	83	79-125
1,1,2,2-TETRACHLOROETHANE	50.00	46.22	ug/l	92	70-130
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	50.00	40.03	ug/l	80	70-130
1,1,2-TRICHLOROETHANE	50.00	41.33	ug/l	83 X	87-123
1,1-DICHLOROETHANE	50.00	40.09	ug/l	80	70-130
1,1-DICHLOROETHENE	50.00	40.37	ug/l	81	75-123
1,2,3-TRICHLOROBENZENE	50.00	42.63	ug/l	85	70-130
1,2,4-TRICHLOROBENZENE	50.00	42.88	ug/l	86	70-130
1,2-DIBROMO-3-CHLOROPROPANE	50.00	48.71	ug/l	97	70-130
1,2-DIBROMOETHANE	50.00	43.59	ug/l	87	70-130
1,2-DICHLOROBENZENE	50.00	42.18	ug/l	84	70-130
1,2-DICHLOROETHANE	50.00	41.51	ug/l	83 X	84-136
1,2-DICHLOROPROPANE	50.00	41.50	ug/l	83	83-123
1,3-DICHLOROBENZENE	50.00	40.10	ug/l	80	70-130
1,4-DICHLOROBENZENE	50.00	40.77	ug/l	82 X	86-118
2-BUTANONE	50.00	45.60	ug/l	91	74-157
2-HEXANONE	50.00	45.13	ug/l	90	70-130
4-METHYL-2-PENTANONE	50.00	46.00	ug/l	92	70-130
ACETONE	50.00	49.38	ug/l	99	70-130
BENZENE	50.00	40.11	ug/l	80 X	85-116
BROMODICHLOROMETHANE	50.00	42.29	ug/l	85	70-130
BROMOFORM	50.00	45.65	ug/l	91	70-130
BROMOMETHANE	50.00	41.28	ug/l	83	70-130
CARBON DISULFIDE	50.00	37.53	ug/l	75	70-130
CARBON TETRACHLORIDE	50.00	41.12	ug/l	82	77-127
CHLOROBENZENE	50.00	40.74	ug/l	81 X	87-117
CHLOROETHANE	50.00	41.67	ug/l	83	70-130
CHLOROFORM	50.00	40.71	ug/l	81 X	82-125
CHLOROMETHANE	50.00	36.47	ug/l	73	70-130
CIS-1,2-DICHLOROETHENE	50.00	39.26	ug/l	79	70-130
CIS-1,3-DICHLOROPROPENE	50.00	44.62	ug/l	89	70-130
CYCLOHEXANE	50.00	36.73	ug/l	73	70-130
DIBROMOCHLOROMETHANE	50.00	43.53	ug/l	87	85-125
DICHLORODIFLUOROMETHANE	50.00	42.68	ug/l	85	70-130
ETHYLBENZENE	50.00	40.24	ug/l	80	70-130
ISOPROPYL BENZENE	50.00	40.82	ug/l	82	70-130
METHYL ACETATE	50.00	43.16	ug/l	86	70-130
METHYL-TERT-BUTYL ETHER	50.00	41.98	ug/l	84	78-141

LABORATORY ANALYSIS REPORT

SC Certification Number: 24110001

Client : AECOM
1455 OLD ALABAMA RD.
SUITE 170
ROSWELL, GA 30076
Contact : BRYON DAHLGREN

Project Number: 61576.07

Report Date : November 02, 2011
Page 92 of 92 Report ID: AJ2655

QC Batch Report - Laboratory Control Standards and Duplicates

WorkGroup: WG60678
LCS : LCS60678:1

Matrix : GW/ChemW
Prep Method :
Analytical Method: SW846 8260B

Parameter	Spike Added	LCS Conc	Units	LCS %REC	Limits %REC
METHYLCYCLOHEXANE	50.00	37.89	ug/l	76	70-130
METHYLENE CHLORIDE	50.00	40.78	ug/l	82	70-130
STYRENE	50.00	41.85	ug/l	84	70-130
TETRACHLOROETHENE	50.00	39.11	ug/l	78 X	82-116
TOLUENE	50.00	40.21	ug/l	80 X	85-118
TRANS-1,2-DICHLOROETHENE	50.00	41.19	ug/l	82	70-130
TRANS-1,3-DICHLOROPROPENE	50.00	40.40	ug/l	81	70-130
TRICHLOROETHENE	50.00	39.42	ug/l	79 X	85-115
TRICHLOROFLUOROMETHANE	50.00	42.40	ug/l	85	70-130
VINYL ACETATE	50.00	43.67	ug/l	87	70-130
VINYL CHLORIDE	50.00	37.25	ug/l	75	68-117
XYLENE (TOTAL)	150.0	121.5	ug/l	81 X	89-123

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RDL	Report Detection Limit	MDL	Method Detection Limit
PQL	Practical Quantitation Limit	DL	Detection Limit
LOQ	Limit of Quantitation	LOD	Limit of Detection
SQL	Sample Quantitation Limit	TIC	Tentatively Identified Compound
C	Degrees Centigrade	F	Degrees Fahrenheit
umhos/cm	micromhos/cm	meq	milliequivalents
su	Standard Units		

mg/l, mg/kg Units of concentration in milligrams per liter for liquids and milligrams per kilogram for solids. Also referred to as Parts Per Million or "ppm".

ug/l, ug/kg Units of concentration in micrograms per liter for liquids and micrograms per kilograms for solids. Also referred to as Parts Per Billion or "ppb".

< Less Than

> Greater Than

Solid samples (i.e. soil, sludge, and solid waste) are reported on an as received basis unless otherwise noted.

Data Qualifiers:

- B** Analyte also detected in the method blank.
- C** Amendable Cyanide is a negative value due to an unknown interference.
- J** The reported result is an estimated value (eg matrix interference observed or concentration outside the quantitation range).
- N** Non-target analyte. The analyte is TIC (using mass spectrometry).
- P** Concentration difference between primary and confirmation columns >40%.
- Q** One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV)
- U** Final concentration is below the detection limit.
- *** Defined in report comments.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or biological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of the material involved, the test results will be meaningless. If you have any questions regarding the proper techniques of collecting samples, please contact us. However, we cannot be held responsible for sample integrity unless sampling has been performed by a member of our staff.

REPRESENTATION AND LIMITATION OF LIABILITY – The accuracy of all analytical results for samples begins as it is received by the laboratory. Integrity of the sample begins at the time it is placed in the possession of authorized Davis & Floyd, Inc. Laboratories personnel. All other warranties, expressed or implied, are disclaimed. Liability is limited to the cost of the analysis.

Davis & Floyd, Inc.
AD07_05 (08/10)

L 11101315



Chain of Custody and Analytical Request

Page of
60135440.700
WBS Number:
Chain of Custody Number (1):
LIMS Number:

Facility / Air Force Base ID:

Project Name / Site Name: Auriga Spartanburg/Offsite DPT Investigation

Client Name: Celanese Corporation

Collected by: Mark Hartford

Field Sample ID (30 Characters Max)	ERPMIS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers				Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
								8260 VOC	1-40,000 NE SIM						
OSS-GW-2-44.5		10-20-2011	09:30	40.5-44.5	N		GW	6	X	X					
<i>inip blank</i>								6	X	X					
OSS-GW-3-39.5		10-20-11	1600	34.5-39.5	N		GW	3	X	X					
OSS-GW-3-39.5		10-22-11	1000	34.5-39.5	N		GW	3	X	X					
OSS-GW-3-74.5		10-22-11	1145	69.5-74.5	N		GW	6	X	X					
OSS-GW-4-49		10-22-11	1300	45-49	N		GW	6	X	X					
OSS-GW-4-64.5		10-22-11	1645	60.5-64.5	N		GW	6	X	X					
OSS-GW-4-64.5		10-22-11	1645	60.5-64.5	TD		GW	6	X	X					

Comments: "OSS" are letters -

Relinquished by (signed): <u>Mark Hartford</u> Date: <u>10-22-11</u> Time: <u>1720</u>	Custody Transfer: Prior to Receipt by Laboratory Received by (signed): _____ Date: _____ Time: _____
1. <u>TSAS, A/C call</u> 10.13.11 11:15 2. <u>TSAS, A/C call</u> 10.13.11 11:15 3. <u>TSAS, A/C call</u> 10.13.11 11:15	Sample Delivery Details / Laboratory Receipt Delivered Directly to Lab: _____ Shipped: _____ Method of Shipment: <u>FedEx</u> Airbill #: _____ Analytical Lab: <u>Davis and Eloyd</u> Location: _____ Date: _____ Time: _____ Lab Recipient: _____

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
 2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-) Sample, FD = Field Duplicate (-) Samples, FR = Field Replicate (-) Samples, EB = Equipment Blank (-) Samples, MS = Matrix Spike Samples, SD = Matrix Spike Duplicate Samples
 3.) Sample Number: Unique sample number collected from a particular location per day; (e.g. Groundwater sample collected from MW-1 on 10/1/099 = 01; if sampled again on 10/1/099 = 02, etc.)
 4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
 5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
 6.) Quality assurance samples are assigned by date (admin/y) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment Blank collected in association with MW-1 on 10/1/099 will be designated 10109901 in the Equipment Blank Lot Control Number field).

L 11101705

AECOM

Chain of Custody and Analytical Request

Page 60135440.MI of MI
 WBS Number: _____
 Chain of Custody Number (1): _____
 LIMS Number: _____

Facility / Air Force Base ID: _____ Sample Analysis Requested (9) _____ Quality Assurance Samples (9) _____

Project Name / Site Name: Aviation Spantanking/Offsite DPT

Client Name: Celanese Corporation

Collected by: Mark Hartford

Field Sample ID (30 Characters Max)	ERPMS LOCID (15 Characters Max)	Date Collected (dd-mm-yy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
<u>Trig Blank</u>		<u>10-13-11</u>						<u>6</u>				
<u>OSS-GW-7-44.5</u>		<u>10-13-11</u>	<u>1130</u>	<u>40.5-49.5</u>	<u>N</u>		<u>GW</u>	<u>6</u>	<u>X</u>	<u>X</u>		
<u>OSS-GW-7-44.5-MS</u>		<u>10-13-11</u>	<u>1130</u>	<u>40.5-49.5</u>	<u>MS</u>		<u>GW</u>	<u>6</u>	<u>X</u>	<u>X</u>		
<u>OSS-GW-7-44.5-MSD</u>		<u>10-13-11</u>	<u>1130</u>	<u>40.5-49.5</u>	<u>MSD</u>		<u>GW</u>	<u>6</u>	<u>X</u>	<u>X</u>		
<u>OSS-GW-7-53</u>		<u>10-13-11</u>	<u>1430</u>	<u>49.5-53</u>	<u>N</u>		<u>GW</u>	<u>6</u>	<u>X</u>	<u>X</u>		
<u>OSS-GW-1-24</u>		<u>10-13-11</u>	<u>1530</u>	<u>19.24</u>	<u>N</u>		<u>GW</u>	<u>3</u>	<u>X</u>			
<u>OSS-GW-1-24</u>		<u>10-14-11</u>	<u>0730</u>	<u>19.24</u>	<u>N</u>		<u>GW</u>	<u>3</u>	<u>X</u>			
<u>OSS-GW-8-49.5</u>		<u>10-14-11</u>	<u>900</u>	<u>49.5-49.5</u>			<u>GW</u>	<u>6</u>	<u>X</u>	<u>X</u>		
<u>OSS-GW-8-69.5</u>		<u>10-14-11</u>	<u>10:00</u>	<u>65.5-69.5</u>			<u>GW</u>	<u>6</u>	<u>X</u>	<u>X</u>		
<u>OSS-GW-5-29.5</u>		<u>10-14-11</u>	<u>1445</u>	<u>25.5-29.5</u>			<u>GW</u>	<u>6</u>	<u>X</u>	<u>X</u>		
<u>OSS-GW-5-46</u>		<u>10-14-11</u>	<u>1610</u>	<u>42.46</u>			<u>GW</u>	<u>6</u>	<u>X</u>	<u>X</u>		
<u>OSS-GW-6-22</u>		<u>10-14-11</u>	<u>1740</u>	<u>21.22</u>			<u>GW</u>	<u>6</u>	<u>X</u>	<u>X</u>		

Comments: "OSS" one 10 Hrs

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed) _____ Date _____ Time _____ <u>Mark Hartford 10/14/11 1820</u>	Received by (Signed) _____ Date _____ Time _____ <u>Theresa S. McGall 10-17-11 0745</u>
Delivered Directly to Lab: _____ Method of Shipment: <u>FedEx</u> Analytical Lab: <u>Douglas Field</u> Location: <u>Greenwood ISC</u> Lab Recipient: _____ Date: _____ Time: _____	Sample Delivery Details / Laboratory Receipt Shipped: _____ Airbill #: _____

- 1) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)
- 2) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-) Sample, FD = Field Duplicate (-) Samples, FR = Field Replicate (+) Samples, EB = Equipment Blank (-) Samples, MS = Matrix Spike Samples, SD = Matrix Spike Duplicate Samples
- 3) Sample Number: Unique sample number collected from a particular location per day; (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc)
- 4) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SF = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks
- 5) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
- 6) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control Number field).

L 11101804



Chain of Custody and Analytical Request

Page 60135440-700 of
 WBS Number:
 Chain of Custody Number (1):
 LIMS Number:

Facility / Air Force Base ID:

Project Name / Site Name: Auriga Spartaburg Offsite DOT

Client Name: Delaware

Collected by: Mark Hanford

Field Sample ID (30 Characters Max)	ERPIMS LOCID (15 Characters Max)	Date Collected (dd-mm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers		Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
OSS-GW-6-95		10-25-11	9:00	4.5-9.5		N	GW	6	X				
OSS-SW-7		10-17-11	1315	-		N	SW	6	X				
OSS-SW-6		10-17-11	1325	-		N	SW	6	X				
OSS-SW-5		10-17-11	1330	-		N	SW	6	X				
OSS-SW-4		10-17-11	1340	-		N	SW	6	X				
OSS-SW-3		10-17-11	1345	-		N	SW	6	X				
OSS-SW-2		10-17-11	1355	-		N	SW	6	X				
OSS-SW-1		10-17-11	1400	-		N	SW	6	X				
Trip Blank								6	X				

Comments: "OSS" are letters

Custody Transfers Prior to Receipt by Laboratory

Kept/Used By (Signed)	Date	Time	Received by (signed)	Date	Time	Sample Delivery Details / Laboratory Receipt
<u>Mark Hanford</u>	<u>10/17/11</u>	<u>1335</u>				Shipped: <u> </u> Method of Shipment: <u> </u> Analytical Lab: <u>DAVIS & FLOYD</u> Location: <u> </u> Date: <u> </u> Time: <u> </u>
<u> </u>						

- 1) Chain of Custody Number = date collected - custody number (e.g. 09-02-1999-01)
- 2) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-) Sample, FD = Field Duplicate (-d) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike Samples, SD = Matrix Spike Duplicate Samples
- 3) Sample Number: Unique sample number collected from a particular location per day; (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)
- 4) Matrix Codes: GS = Soil Gas; WG = Groundwater; WS = Surface Water; SO = Soil; SE = Sediment; SL = Sludge; SS = Surface Soil Samples; WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.); SQ = Soil Blanks
- 5) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
- 6) Quality assurance samples are assigned by date (admiralty) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control Number field).