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February 15, 2010

Mr. Kenneth Bardo - LU-9J
U.S. EPA Region V
Corrective Action Section
77 West Jackson Boulevard
Chicago, IL 60604-3507

VIA FEDEX

Re: Long-Term Monitoring Program
4th Quarter 2009 Data Report
Solutia Inc., W. G. Krummrich Plant, Sauget, IL

Dear Mr. Bardo:

Enclosed please find the Long-Term Monitoring Program 4th Quarter 2009 Data Report for Solutia Inc.'s W. G. Krummrich Plant, Sauget, IL.

If you have any questions or comments regarding this report, please contact me at (314) 674-3312 or gmrina@solutia.com

Sincerely,

Gerald M. Rinaldi
Manager, Remediation Services

Enclosure

cc: Distribution List

DISTRIBUTION LIST

Long-Term Monitoring Program
4th Quarter 2009 Data Report
Solutia Inc., W. G. Krummrich Plant, Sauget, IL

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4TH QUARTER 2009
DATA REPORT

LONG-TERM MONITORING PROGRAM

SOLUTIA INC.
W.G. KRUMMRICH FACILITY
SAUGET, ILLINOIS

Prepared for

Solutia Inc.
575 Maryville Centre Drive
St. Louis, Missouri 63141

February 2010

URS Corporation
1001 Highland Plaza Drive West, Suite 300
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Project # **21562154.00008**

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1.0 INTRODUCTION

This report presents the results of the 4th Quarter 2009 (4Q09) sampling event performed at the Solutia Inc. (Solutia) W.G. Krummrich (WGK) Facility located in Sauget, Illinois (Site). This sampling event was conducted in accordance with the Revised Long-Term Monitoring Program (LTMP) Work Plan (Solutia 2009). The Site location is presented in **Figure 1**.

The LTMP was designed to evaluate the effectiveness of monitored natural attenuation (MNA), including: 1) a clear and meaningful trend of decreasing contaminant mass; 2) data that indirectly demonstrate the types and rates of natural attenuation processes active at the site; and 3) data that directly demonstrate the occurrence of biodegradation processes at the site.

Groundwater Sampling Location and Frequency - As specified in the Revised LTMP Work Plan, groundwater samples will be collected for eight quarters from five monitoring wells downgradient of the Former Chlorobenzene Process Area (CPA-MW-1D through CPA-MW-5D) and five monitoring wells downgradient of the Former Benzene Storage Area (BSA-MW-1S and BSA-MW-2D through BSA-MW-5D) to assess attenuation processes in the American Bottoms aquifer, as impacted groundwater from these source areas migrates toward and discharges to the Mississippi River.

Monitoring wells BSA-MW-1S, 2D, 3D, 4D and 5D are located within the limiting flow lines downgradient of the Former Benzene Storage Area. Monitoring wells CPA-MW-1D, 2D, 3D, 4D and 5D are located within the limiting flow lines downgradient of the Former Chlorobenzene Process Area. Source areas and monitoring well locations are presented in **Figure 2**.

Quarterly sampling under the Long-Term Monitoring Program commenced 3Q08 and will continue for a total of eight quarters. At the end of eight quarters, groundwater quality and attenuation process data will be evaluated to determine if longer sampling intervals (e.g., semi-annual or annual) are appropriate.

Groundwater Sampling Parameters - During the 4Q09 groundwater sampling event, groundwater samples were analyzed for benzene, monochlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene using USEPA Method 8260B to demonstrate a trend of decreasing contaminant mass and/or concentrations over time.

MNA samples were collected from all ten long-term monitoring program wells. Evaluation of the types of active natural attenuation processes at the site is based on the following key geochemical parameters:

- Electron Donors: Organic Carbon (Total and Dissolved)
- Electron Acceptors: Iron (Total and Dissolved)
Manganese (Total and Dissolved)
Nitrate
Sulfate

- Biodegradation Byproducts: Carbon Dioxide
  Chloride
  Methane
- Biodegradation Indicators: Alkalinity

Direct demonstration of the occurrence of biodegradation processes is completed quarterly utilizing Microbial Insights (www.microbe.com) Bio-Trap® Samplers for Phospholipid Fatty Acid (PLFA) Analysis, along with Stable Isotope Probes (SIPs) for benzene or chlorobenzene detection in select wells.

2.0 FIELD PROCEDURES

URS Corporation (URS) conducted 4Q09 field activities from November13 through November 19, 2009, in accordance with procedures outlined in the Revised LTMP Work Plan, including the collection of appropriate quality assurance and quality control (QA/QC) samples. The following section summarizes field investigative procedures:

Groundwater Level Measurements – URS personnel used an electronic oil/water interface probe to measure depth to static groundwater levels and if present, the thickness of non-aqueous phase liquid (NAPL), to 0.01 feet. Depth to groundwater measurements were collected from accessible existing wells (i.e., GM-, K- , PSMW- and PMA-series) and piezometers clusters (installed for the Sauget Area 2 RI/FS and WGK CA-750 Environmental Indicator projects) specified in the Revised LTMP Work Plan **(Figure 3**). NAPL was not detected within any of the LTMP monitoring wells.

Well gauging information for the 4Q09 event is presented in **Table 1**. As the middle and deep hydrogeologic units are the primary migration pathway for constituents present in groundwater at the WGK Facility, a groundwater potentiometric surface map based on water level data from wells screened in the Middle Hydrogeologic Unit (MHU) and Deep Hydrogeologic Unit (DHU) is presented as **Figure 3**.

The Mississippi River elevation was approximately 15 feet higher than the 3Q09 event. Groundwater levels in monitoring wells near the river were as much as 9 feet higher during this event than the 3Q09 event. This resulted in relatively “flat” groundwater contours.

Groundwater Sampling - Low-flow sampling techniques were used for groundwater sample collection. At each monitoring well, disposable, low-density polyethylene tubing was attached to a submersible pump, which was then lowered into the well to the middle of the screened interval. Monitoring wells were purged at a rate of 200 to 300 mL/minute to minimize drawdown. If significant drawdown occurred, flow rates were reduced.

Drawdown was measured periodically throughout purging to ensure that it did not exceed 25% of the distance between the pump intake and the top of the screen. Once the flow rate and

drawdown were stable, field measurements were collected approximately every three to five minutes. Purging of a well was considered complete when the following water quality parameters remained stable over three consecutive flow-through cell volumes:

Parameter	Stabilization Guidelines
Dissolved Oxygen (DO)	+/- 10% or +/-0.2 mg/L, whichever is greatest
Oxidation-Reduction Potential (ORP)	+/- 20 mV
pH	+/- 0.2 units
Specific Conductivity	+/- 3%

Sampling commenced upon completion of purging. Prior to sample collection, the flow-through cell was bypassed to allow for collection of uncompromised groundwater. Samples were collected at a flow rate less than or equal to the rate at which stabilization was achieved. Sample containers were filled based on laboratory analysis to be performed, in the following order:

- Volatile Organic Compounds (VOCs)
- Gas Sensitive Parameters (e.g., methane, carbon dioxide)
- General Chemistry (i.e., alkalinity, chloride, total and dissolved iron, total and dissolved manganese, nitrate, sulfate, and total and dissolved organic carbon)
- Field Parameters (i.e., dissolved oxygen, ferrous iron, and oxidation-reduction potential).

Samples collected for ferrous iron, dissolved iron and dissolved manganese analysis were filtered in the field using in-line 0.2 micron disposable filters, represented by a notation of “F (0.2)” in the sample nomenclature.

Quality assurance/quality control (QA/QC) samples consisting of analytical duplicates (AD) and equipment blanks (EB) were collected at a rate of 10% and matrix spike/matrix spike duplicates (MS/MSD) were collected at a rate of 5%. In addition, trip blanks accompanied each shipment containing samples for VOC analysis.

Each investigative or QC sample was labeled immediately following collection. Each sample identification number consisted of the following nomenclature “AAAMW#-MMYY-QAC” where:

- “**AAA**” denotes "Chlorobenzene Process Area (CPA)" or "Benzene Storage Area (BSA)"and "**MW-#**” denotes "Monitoring Well Number":
- **MMYY –** Month and year of sampling quarter, e.g.: Fourth quarter (November) 2009, 1109
- **“QAC”** denotes QA/QC sample
  - **AD –** analytical duplicate
  - **EB –** equipment blank

- **MS or MSD –** Matrix Spike or Matrix Spike Duplicate

Upon collection and labeling, sample containers were immediately placed inside an iced cooler, packed in such a way as to help prevent breakage and maintain inside temperature at approximately 4°C. Field personnel recorded the project identification and number, sample description/location, required analysis, date and time of sample collection, type and matrix of sample, number of sample containers, preservative used (if applicable), analysis requested/comments, and sampler signature/date/time, with permanent ink on the chain-of-custody (COC). Prior to shipment, coolers were sealed between the lid and sides of the cooler with a custody seal, and then shipped to TestAmerica in Savannah, Georgia by means of an overnight delivery service. Field sampling data sheets are included in **Appendix A**, COCs are included in **Appendix B**.

Field personnel and equipment were decontaminated according to procedures specified in the Revised LTMP Work Plan to ensure the health and safety of those present, maintain sample integrity, and minimize movement of contamination between the work area and off-site locations. Equipment used on-site was decontaminated prior to beginning work, between sampling locations and/or uses, and prior to demobilizing from the site. Non-disposable purging and sampling equipment was decontaminated between each sample acquisition by washing with an Alconox® or equivalent detergent wash, a potable water rinse, and a distilled water rinse. Personnel and small equipment decontamination was performed at the sample locations. Disposable sampling equipment, such as gloves were collected and bagged on a daily basis and managed in accordance with Solutia procedures. Purge water was containerized and handled per Solutia procedures.

Biodegradation Evaluation Sampling - Bio-Trap® samplers and Stable Isotope Probes (SIPs), provided by Microbial Insights, Inc. (Rockford, TN), were utilized in the LTMP to provide information regarding biodegradation potential of the Shallow Hydrogeologic Unit (SHU), the MHU and the DHU. Bio-Trap® samplers are passive sampling tools which, over time, collect microbes across a membrane that serves as the sampling matrix. SIPs are similar passive sampling tools that are analyzed to measure the degradation of a specific contaminant (i.e., benzene and chlorobenzene).

On October 14, 2009, URS field personnel deployed Bio-Trap® samplers in each of the ten LTMP wells for PLFA analysis. A benzene SIP and a chlorobenzene SIP were placed in monitoring wells BSA-MW-2D and CPA-MW-3D, respectively. Bio-Trap® samplers and SIPs were tied to nylon line attached to the well cap and lowered to the middle of the well screen.

On November 13, 2009, the Bio-Trap® samplers and SIPs were retrieved from the wells, sealed in Ziploc® bags, labeled with the proper well identification and placed in an iced sample cooler with a signed COC. Sealed sample coolers were sent to Microbial Insights, Inc. for analysis.

3.0 LABORATORY PROCEDURES

Samples were analyzed by TestAmerica for VOCs, SVOCs and MNA parameters, using the following methodologies:

- VOCs, via USEPA SW-846 Method 8260B
- MNA parameters: alkalinity (310.1), carbon dioxide (310.1), chloride (325.2), total and dissolved iron (6010B), total and dissolved manganese (6010B), dissolved gases (RSK 175), nitrate (353.2), sulfate (375.4), and total and dissolved organic carbon (415.1).

Dichlorobenzenes were quantitated using Method 8260B because of potential volatilization losses associated with Method 8270C. Laboratory results were provided in electronic and hard copy formats.

4.0 QUALITY ASSURANCE

Analytical data were reviewed for quality and completeness, as described in the Revised Long Term Monitoring Work Plan. Data qualifiers were added, as appropriate, and are included on the data tables and the laboratory result pages. The Quality Assurance report is included as **Appendix C**. Laboratory reports, along with data validation review sheets, are included in **Appendix D**.

A total of 13 groundwater samples (10 investigative samples, 1 field duplicate, 1 MS/MSD pair and 1 equipment blank) were prepared and analyzed by TestAmerica for combinations of VOCs, dissolved gases, metals, and general chemistry. In addition, four trip blanks were included in the coolers that contained samples for VOC analysis and were analyzed for VOCs. The results for the various analyses were submitted as sample delivery group (SDG) KPS055. The samples contained in SDG KPS055 are listed below:

KPS055

BSA-MW-01S-1109	CPA-MW-01D-1109
BSA-MW-02D-1109	CPA-MW-02D-1109
BSA-MW-03D-1109	CPA-MW-02D-1109-AD
BSA-MW-03D-1109-EB	CPA-MW-03D-1109
BSA-MW-04D-1109	CPA-MW-04D-1109
BSA-MW-05D-1109	CPA-MW-05D-1109
4Q09 LTM Trip Blank #1	4Q09 LTM Trip Blank #3
4Q09 LTM Trip Blank #2	4Q09 LTM Trip Blank #4

Evaluation of the groundwater analytical data followed procedures outlined in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review (2008), the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (2004), and the Revised Long-Term Monitoring Program (LTMP) Work Plan (Solutia 2009).

Based on the above mentioned criteria, groundwater results reported for the analyses performed were accepted for their intended use. Acceptable levels of accuracy and precision, based on MS/MSD, laboratory control sample (LCS), surrogate and field duplicate data were achieved for these SDGs to meet the project objectives. Completeness which is defined to be the percentage of analytical results which are judged to be valid, including estimated detect/nondetect (**J/UJ**) data was 100 percent.

5.0 OBSERVATIONS

Groundwater analytical detections and MNA results for the 4Q09 LTMP sampling event are presented in **Tables 2** and **3,** respectively. Five constituents - benzene, chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene and 1,4-dichlorobenzene - were reported in samples collected from the ten LTMP wells during this sampling event. Each of these constituents is discussed below:

Benzene - Benzene was detected in collected samples at levels above the laboratory reporting limit in seven of the ten wells sampled in 4Q09, ranging from 18 µg/L (CPA-MW-5D) to 600,000 µg/L (BSA-MW-1S).

Downgradient of the Former Benzene Storage Area, benzene was detected in the DHU at concentrations of 69,000 µg/L (BSA-MW-2D) and 78 µg/L (BSA-MW-3D). Near the river north of the Sauget Area 2 Groundwater Migration Control System (SA2 GMCS), benzene was detected in the DHU at concentrations of 23 µg/L (BSA-MW-4D).

Benzene was detected at the Former Chlorobenzene Process Area at concentrations of 6,000 µg/L (CPA-MW-1D) and 710/770 µg/L (CPA-MW-2D and duplicate) at the North Tank Farm. Downgradient of the Former Chlorobenzene Storage Area, benzene was detected in the DHU near the river, north of the SA2 GMCS, in monitoring well CPA-MW-5D at a concentration of 18 µg/L.

Chlorobenzenes (Total) - Total chlorobenzenes (e.g., sum of chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4, dichlorobenzene) were detected at levels above the laboratory reporting limit in nine of the ten wells sampled in 4Q09, ranging from 553 µg/L (CPA-MW-3D) to 45,300 µg/L (CPA-MW-1D).

Downgradient of the Former Chlorobenzene Storage Area, total chlorobenzenes were detected in the DHU at concentrations of 553 µg/L (CPA-MW-3D) and 781 µg/L (CPA-MW-4D). Total chlorobenzenes were detected in the DHU near the river north of SA2 GMCS at a concentration of 1,900 µg/L (CPA-MW-5D).

Downgradient of the Former Benzene Storage Area, total chlorobenzenes were detected at concentrations of 2,600 µg/L (BSA-MW-2D) and 1,799 µg/L (BSA-MW-3D). North of the SA2

GMCS, near the river, total chlorobenzenes were detected in the DHU at concentrations of 2,506 µg/L (BSA-MW-4D) and 616 µg/L (BSA-MW-5D).

Figure 4 displays benzene and total chlorobenzenes results from the 4Q09 sampling event.

Monitored Natural Attenuation - The MNA results for this quarter are presented in **Table 3**. PLFA and SIP laboratory results are included in **Appendix E**. These data were compared to other quarterly sampling data in the first annual natural attenuation evaluation report submitted in October 2009 and will be compared again in the second such report following 2Q10 sampling.

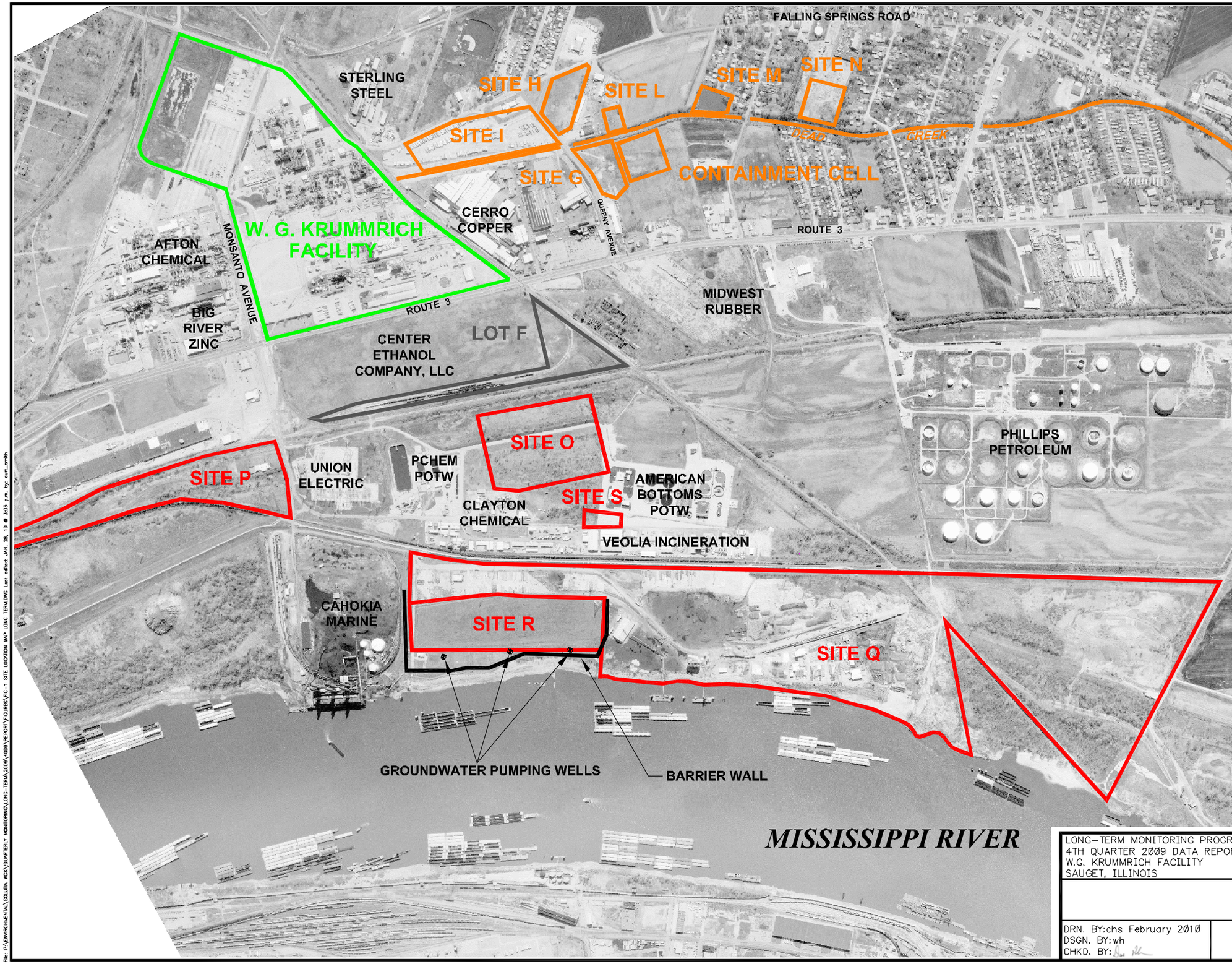
6.0 REFERENCES

Solutia Inc, 2009. Revised Long Term Monitoring Program, Solutia, Inc., W.G. Krummrich Facility, Sauget, Illinois, May 2009.

USEPA, 2004. Contract Laboratory Program National Functional Guidelines for Inorganic Data Review.

USEPA, 2008, National Functional Guidelines for Superfund Organic Methods Data Review

Figures



LEGEND

- W.G. KRUMMRICH FACILITY
- SAUGET AREA #1
- SAUGET AREA #2

0 1000

SCALE FEET

LONG-TERM MONITORING PROGRAM
4TH QUARTER 2009 DATA REPORT
W.G. KRUMMRICH FACILITY
SAUGET, ILLINOIS

PROJECT NO. 21562154

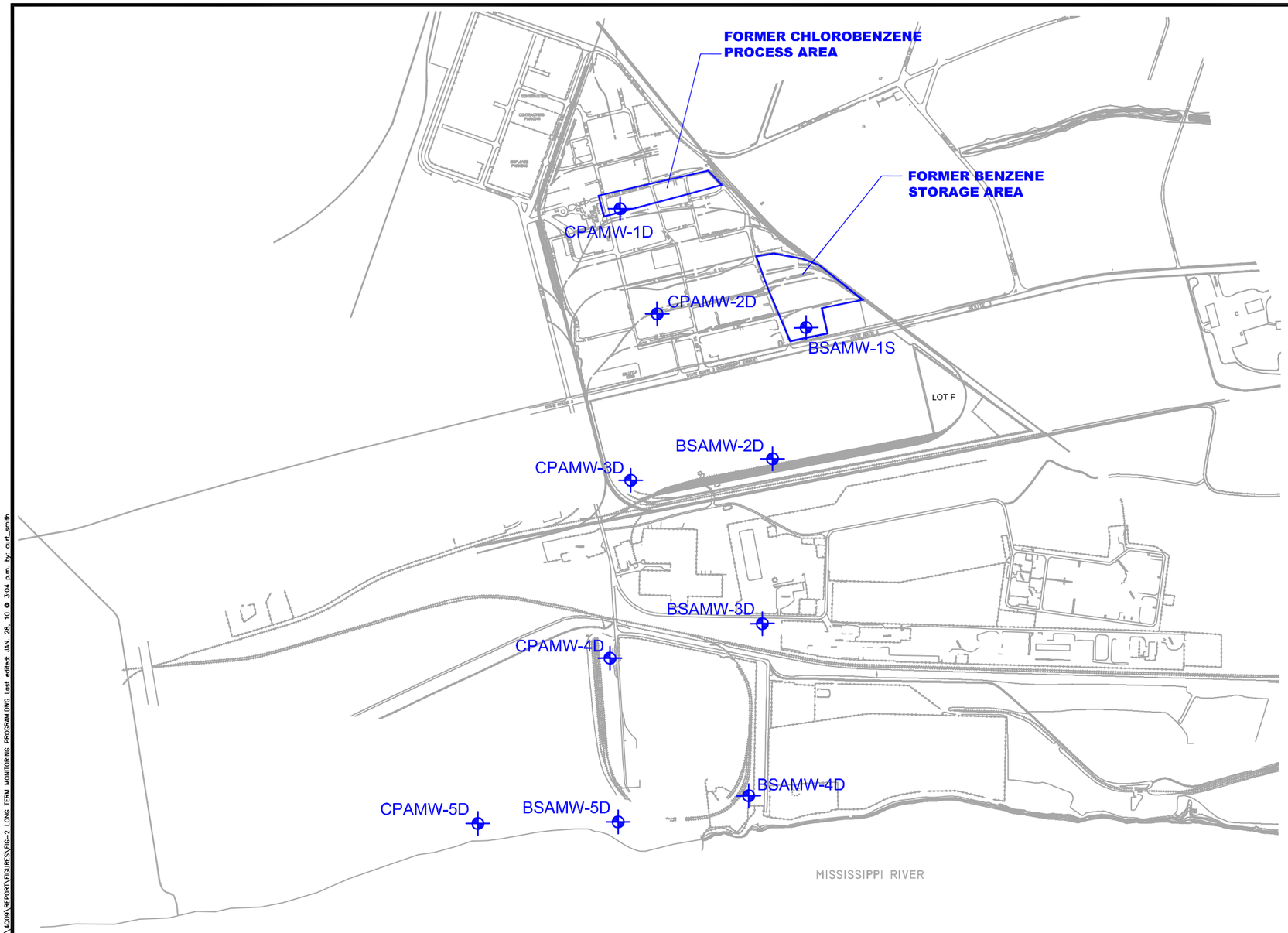
URS

DRN. BY: chs February 2010
DSGN. BY: wh
CHKD. BY:

Site Location Map

FIG. NO. 1

File: P:\ENVIRONMENTAL\SOLUTIA WGK\QUARTERLY MONITORING\LONG-TERM\2009\4Q09\REPORT\FIGURES\FIG-1 SITE LOCATION MAP LONG TERM.DWG Last edited JAN. 28, 10 @ 1:33 p.m. by: curt_smith



LEGEND

LONG-TERM MONITORING WELL LOCATION

NOTES:

1. LOCATIONS DEPICTED ARE THOSE USED TO DEVELOP GROUNDWATER CONTOUR MAPS FOR MHU/DHU.
2. REFER TO TABLE 1 FOR MONITORING WELL CONSTRUCTION INFORMATION.

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SCALE FEET

LONG-TERM MONITORING PROGRAM
4TH QUARTER 2009 DATA REPORT
W.G. KRUMMRICH FACILITY
SAUGET, ILLINOIS

PROJECT NO. 21562154

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Long-Term Monitoring Program Well Locations

FIG. NO. 2

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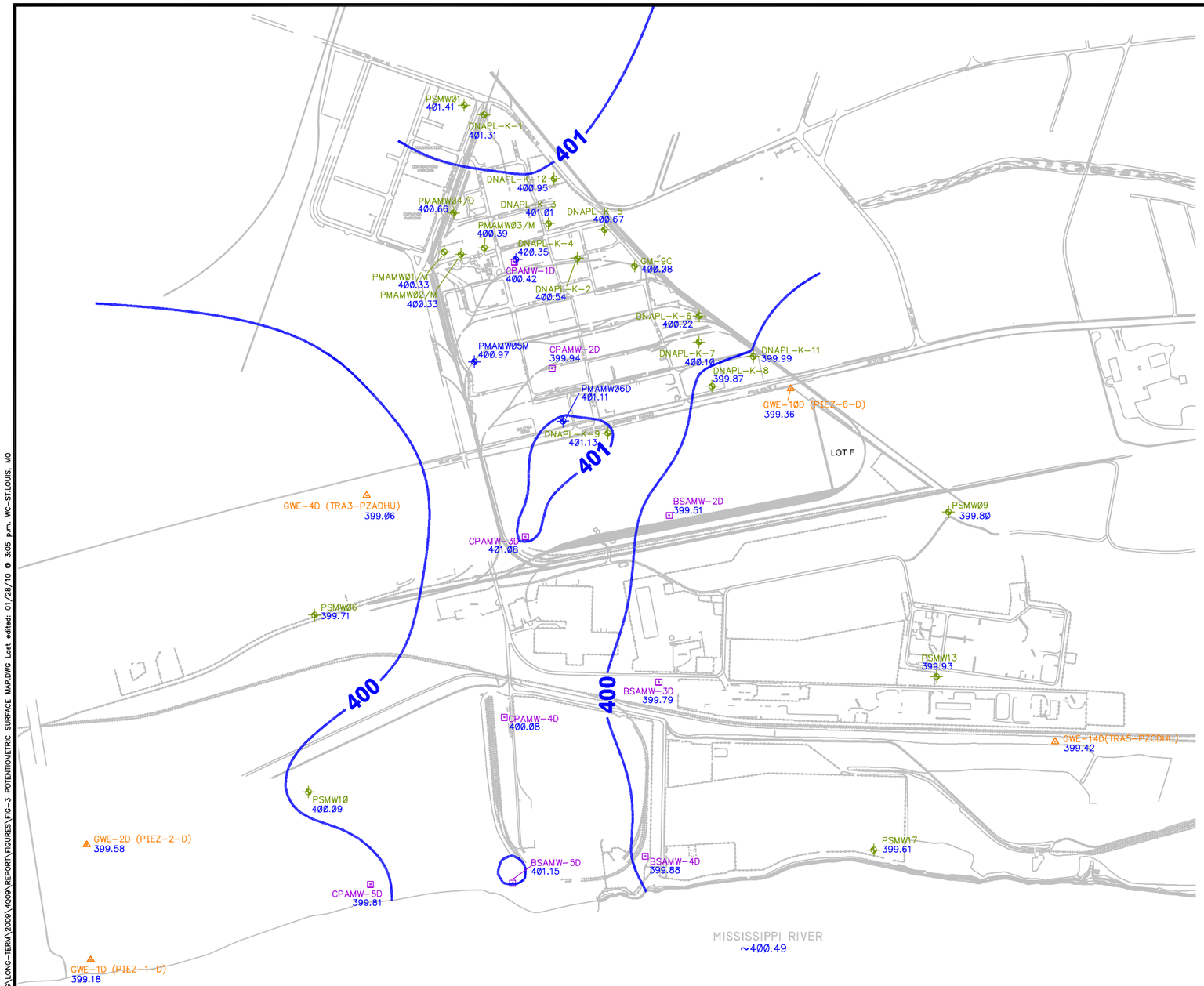

LEGEND

- LONG-TERM MONITORING WELL USED FOR GROUNDWATER CONTOURING
- OTHER MONITORING WELL USED FOR GROUNDWATER CONTOURING
- PIEZOMETER CLUSTER USED FOR GROUNDWATER CONTOURING
- —400— GROUNDWATER ELEVATION CONTOUR (FT NAVD)

NOTES:

1. GROUNDWATER LEVELS WERE MEASURED NOVEMBER 13, 2009.
2. CONTOURS GENERATED PRIMARILY USING SURFER SOFTWARE VERSION 8. SOME INTERPRETATION WAS DONE USING PROFESSIONAL JUDGMENT AND CONTOUR LINES WERE MODIFIED BY HAND.
3. THE MISSISSIPPI RIVER STAGE ELEVATION PRESENTED ON THE FIGURE IS AN AVERAGE ELEVATION FOR THE TIME OF THE GAUGING EVENT. THE INFORMATION WAS OBTAINED FROM THE SITE R BUBBLER.
4. LOCATIONS WITH WELLS SCREENED IN BOTH THE MHU AND DHU UTILIZED THE DHU WELL FOR DEVELOPMENT OF THE POTENTIOMETRIC SURFACE MAP.

N

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LONG-TERM MONITORING PROGRAM 4TH QUARTER 2009 DATA REPORT W.G. KRUMMRICH FACILITY SAUGET, ILLINOIS	PROJECT NO. 21562154
URS	
DRN. BY:chs February 2010 DSGN. BY:ekf CHKD. BY:	Potentiometric Surface Map Middle/Deep Hydrogeologic Unit
	FIG. NO. 3

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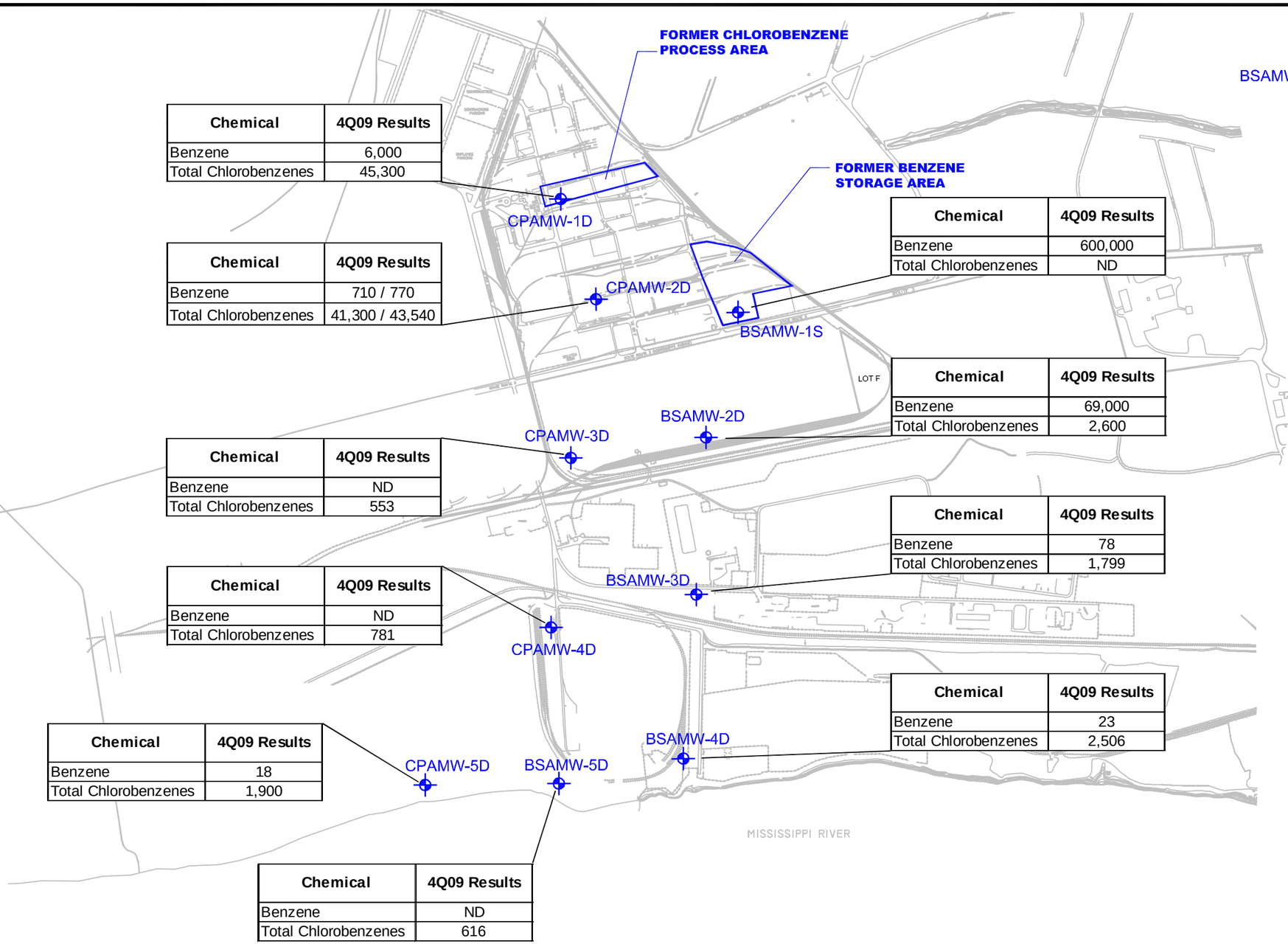

Chemical	4Q09 Results
Benzene	6,000
Total Chlorobenzenes	45,300

Chemical	4Q09 Results
Benzene	710 / 770
Total Chlorobenzenes	41,300 / 43,540

Chemical	4Q09 Results
Benzene	ND
Total Chlorobenzenes	553

Chemical	4Q09 Results
Benzene	ND
Total Chlorobenzenes	781

Chemical	4Q09 Results
Benzene	18
Total Chlorobenzenes	1,900

Chemical	4Q09 Results
Benzene	ND
Total Chlorobenzenes	616

Chemical	4Q09 Results
Benzene	600,000
Total Chlorobenzenes	ND

Chemical	4Q09 Results
Benzene	69,000
Total Chlorobenzenes	2,600

Chemical	4Q09 Results
Benzene	78
Total Chlorobenzenes	1,799

Chemical	4Q09 Results
Benzene	23
Total Chlorobenzenes	2,506

LEGEND

BSAMW-1D — LONG–TERM MONITORING WELL LOCATION

NOTES:

1. TOTAL CHLOROBENZENES RESULTS INCLUDE THE SUM OF MONOCHLOROBENZENE, 1,2–DICHLOROBENZENE, 1,3–DICHLOROBENZENE, AND 1,4–DICHLOROBENZENE.
2. RESULTS SHOWN ARE IN ug/L.
3. ND DENOTES ANALYTE OR ANALYTES NOT DETECTED.
4. MULTIPLE SAMPLE RESULTS INDICATE A DUPLICATE SAMPLE.
5. "D" DENOTES RESULTS FROM A DILUTED SAMPLE

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SCALE FEET

LONG–TERM MONITORING PROGRAM
4TH QUARTER 2009 DATA REPORT
W.G. KRUMMRICH FACILITY
SAUGET, ILLINOIS

PROJECT NO. 21562154

URS

DRN. BY:dab February 2010
DSGN. BY:EKF
CHKD. BY:

Benzene and Total Chlorobenzenes Results

FIG. NO. 4

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Tables

See last page of table for notes.

Table 1
Monitoring Well Gauging Information

Well ID	Construction Details						November 13, 2009		
	Ground Elevation* (feet)	Casing Elevation* (feet)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)	Top of Screen Elevation* (feet)	Bottom of Screen Elevation* (feet)	Depth to Water (feet btoc)	Product Thickness (feet)	Water Elevation* (feet)
Shallow Hydrogeologic Unit (SHU 395-380 feet NAVD 88)									
BSAMW-1S	409.49	412.31	19.68	24.68	389.81	384.81	12.57	--	399.74
Middle Hydrogeologic Unit (MHU 380-350 feet NAVD 88)									
PMAMW-1M	410.32	410.08	54.54	59.54	355.78	350.78	9.75	--	400.33
PMAMW-2M	412.26	411.93	56.87	61.87	355.39	350.39	11.60	--	400.33
PMAMW-3M	412.36	412.10	57.07	62.07	355.29	350.29	11.71	--	400.39
PMAMW-5M	411.27	410.97	52.17	57.17	359.10	354.10	10.00	--	400.97
PSMW-1	409.37	412.59	37.78	42.78	371.59	366.59	11.18	--	401.41
Deep Hydrogeologic Unit (DHU 350 feet NAVD 88 - Bedrock)									
BSAMW-2D	412.00	415.13	68.92	73.92	343.08	338.08	15.62	--	399.51
BSAMW-3D	412.91	415.74	107.02	112.02	305.89	300.89	15.95	--	399.79
BSAMW-4D	425.00	424.69	118.54	123.54	306.46	301.46	24.81	--	399.88
BSAMW-5D	420.80	420.49	115.85	120.85	304.95	299.95	19.34	--	401.15
CPAMW-1D	408.62	408.32	66.12	71.12	342.50	337.50	7.90	--	400.42
CPAMW-2D	408.51	408.20	99.96	104.96	308.55	303.55	8.26	--	399.94
CPAMW-3D	410.87	410.67	108.20	113.20	302.67	297.67	9.59	--	401.08
CPAMW-4D	421.57	421.20	116.44	121.44	305.13	300.13	21.12	--	400.08
CPAMW-5D	411.03	413.15	107.63	112.63	303.40	298.40	13.34	--	399.81
DNAPL-K-1	413.07	415.56	108.20	123.20	304.87	289.87	14.25	--	401.31
DNAPL-K-2	407.94	407.72	97.63	112.63	310.31	295.31	7.18	--	400.54
DNAPL-K-3	412.13	411.91	104.80	119.80	307.33	292.33	10.90	--	401.01
DNAPL-K-4	409.48	409.15	102.55	117.55	306.93	291.93	8.80	--	400.35
DNAPL-K-5	412.27	411.91	102.15	117.15	310.12	295.12	11.24	--	400.67
DNAPL-K-6	410.43	410.09	102.47	117.47	307.96	292.96	9.87	--	400.22
DNAPL-K-7	408.32	407.72	100.40	115.40	307.92	292.92	7.62	--	400.10
DNAPL-K-8	408.56	411.38	102.65	117.65	305.91	290.91	11.51	--	399.87
DNAPL-K-9	406.45	405.97	97.42	112.42	309.03	294.03	4.84	--	401.13
DNAPL-K-10	413.50	413.25	105.43	120.43	308.07	293.07	12.30	--	400.95
DNAPL-K-11	412.20	411.78	105.46	120.46	306.74	291.74	11.79	--	399.99
GM-9C	409.54	411.21	88.00	108.00	321.54	301.54	11.13	--	400.08

See last page of table for notes.

Table 1
Monitoring Well Gauging Information

Well ID	Construction Details						November 13, 2009		
	Ground Elevation* (feet)	Casing Elevation* (feet)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)	Top of Screen Elevation* (feet)	Bottom of Screen Elevation* (feet)	Depth to Water (feet btoc)	Product Thickness (feet)	Water Elevation* (feet)
Deep Hydrogeologic Unit (DHU 350 feet NAVD 88 - Bedrock) (continued)									
GWE-1D (PIEZ-1D)	412.80	415.60	117.00	127.00	295.80	285.80	16.42	--	399.18
GWE-2D (PIEZ-2D)	417.45	417.14	127.00	137.00	290.45	280.45	17.56	--	399.58
GWE-4D (TRA3-PZADHU)	406.05	405.74	74.00	80.00	332.05	326.05	6.68	--	399.06
GWE-10D (PIEZ-6D)	410.15	412.87	102.50	112.50	307.65	297.65	13.51	--	399.36
GWE-14D (TRA5-PZCDHU)	420.47	422.90	90.00	96.00	330.47	324.47	23.48	--	399.42
PMAMW-4D	411.22	410.88	68.84	73.84	342.38	337.38	10.22	--	400.66
PMAMW-6D	407.63	407.32	96.49	101.49	311.14	306.14	6.21	--	401.11
PSMW-6	404.11	406.63	99.80	104.80	304.31	299.31	6.92	--	399.71
PSMW-9	403.92	403.52	100.40	105.40	303.52	298.52	3.72	--	399.80
PSMW-10	409.63	412.18	101.23	106.23	308.40	303.40	12.09	--	400.09
PSMW-13	405.80	405.53	106.08	111.08	299.72	294.72	5.60	--	399.93
PSMW-17	420.22	423.26	121.25	126.25	298.97	293.97	23.65	--	399.61

Notes:
* - Elevation based upon North American Vertical Datum (NAVD) 88 datum
bgs - below ground surface
btoc - Below top of casing

Table 2
Groundwater Analytical Results

		VOC (µg/L)					SVOC (µg/L)			
Sample ID	**Sample Date**	**Benzene**	**Chlorobenzene**	**1,2-Dichlorobenzene**	**1,3-Dichlorobenzene**	**1,4-Dichlorobenzene**	**4-Chloroaniline**	**2-Chlorophenol**	**1,4-Dioxane**	**1,2,4-Trichlorobenzene**
BENZENE STORAGE AREA										
BSAMW-1S-1109	11/18/2009	**600,000**	<5,000	<5,000	<5,000	<5000	NA	*	NA	*
BSAMW-2D-1109	11/17/2009	**69,000**	**2,600**	<1,000	<1,000	<1,000	NA	*	*	*
BSAMW-3D-1109	11/17/2009	**78**	**1,300**	**39**	<10	**460**	NA	*	*	*
BSAMW-4D-1109	11/16/2009	**23**	**2,400**	**26**	<20	**80**	NA	*	*	*
BSAMW-5D-1109	11/16/2009	<5	**300**	**150**	**16**	**150**	NA	*	*	*
CHLOROBENZENE PROCESS AREA										
CPAMW-1D-1109	11/18/2009	**6,000**	**15,000**	**18,000**	**1,300**	**11,000**	NA	*	NA	*
CPAMW-2D-1109	11/18/2009	**710**	**26,000**	**1,800**	**500**	**13,000**	NA	*	NA	*
CPAMW-2D-1109-AD	11/18/2009	**770**	**28,000**	**2,000**	**540**	**13,000**	NA	*	NA	*
CPAMW-3D-1109	11/17/2009	<5	**520**	**13**	<5	**20**	*	*	NA	*
CPAMW-4D-1109	11/16/2009	<10	**750**	**12**	<10	**19**	*	*	NA	*
CPAMW-5D-1109	11/19/2009	**18**	**1,300**	**290**	**30**	**280**	*	*	NA	*

Notes:
µg/L = micrograms per liter
< = Result is non-detect, less than the reporting limit given.
* = Indicates samples that are collected semi-annually (1st and 3rd Quarter)
BOLD indicates concentration greater than reporting limit.
AD = Analytical Duplicate
NA = sample not analyzed for select analyte in accordance with Revised LTMP Work Plan

Table 3
Monitored Natural Attenuation Results Summary

Sample ID	Sample Date	Alkalinity (mg/L)	Carbon Dioxide (mg/L)	Chloride (mg/L)	Dissolved Oxygen (mg/L)	Ethane (ug/L)	Ethylene (ug/L)	Ferrous Iron (mg/L)	Iron (mg/L)	Iron, Dissolved (mg/L)	Manganese (mg/L)	Manganese, Dissolved (mg/L)	Methane (ug/L)	Nitrogen, Nitrate (mg/L)	Sulfate as SO4 (mg/L)	Dissolved Organic Carbon (mg/L)	Total Organic Carbon (mg/L)	ORP (mV)
Benzene Storage Area																		
BSA-MW-1S-1109	11/18/2009	790	27	99	1.57	<0.35	<0.33		2.2		0.41		15,000	<0.05	<5		6.5	-155.0
BSA-MW-1S-F(0.2)-1109	11/18/2009							2.07		1.7		0.38				5.8		
BSA-MW-2D-1109	11/17/2009	670	37	90	1.12	14	<0.33		1.8		0.31		15,000	<0.05	<5		5.1	-161.2
BSA-MW-2D-F(0.2)-1109	11/17/2009							1.64		1.8		0.32				4.5		
BSA-MW-3D-1109	11/17/2009	480	43	69	1.40	2.3	5.5		9.6		0.47		400	<0.05	240		8.1	-128.0
BSA-MW-3D-F(0.2)-1109	11/17/2009							>5		10		0.52				3		
BSA-MW-4D-1109	11/16/2009	600	58	110 J	1.19	6.1	<0.33		9.1		0.67		140	<0.05	100		4.7	-103.1
BSA-MW-4D-F(0.2)-1109	11/16/2009							>5		8.5		0.64				4.3		
BSA-MW-5D-1109	11/16/2009	760	67	290	1.13	23	0.62		16		0.47		12,000	<0.05	<5		5.3	-69.3
BSA-MW-5D-F(0.2)-1109	11/16/2009							>5		15		0.45				5		
Chlorobenzene Process Area																		
CPA-MW-1D-1109	11/18/2009	1,000	<5	120	0.62	72	<0.33		1.3		0.086		32,000	<0.05	7.7		17	-197.2
CPA-MW-1D-F(0-2)-1109	11/18/2009							0.87		1.2		0.078				11		
CPA-MW-2D-1109	11/18/2009	530	36	67	1.75	9.6	0.76		6.1		0.35		2,600	<0.05	<5		11	-125.6
CPA-MW-2D-F(0-2)-1109	11/18/2009							>5		5.7		0.34				11		
CPA-MW-3D-1109	11/17/2009	640	79	290	1.57	35	<0.33		16		0.76		36,000	<0.05	<5		8.5	-131.4
CPA-MW-3D-F(0.2)-1109	11/17/2009							4.56		16		0.75				8.2		
CPA-MW-4D-1109	11/16/2009	770	61	250	1.40	19	<0.33		10		0.25		5,100	<0.05	36		5.6	-168.4
CPA-MW-4D-F(0.2)-1109	11/16/2009							>5		10		0.25				5.4		
CPA-MW-5D-1109	11/19/2009	330	110	310	6.22	5	<0.33		82		2.8		27	<0.05	1600		3.5	-126.9
CPA-MW-5D-F(0.2)-1109	11/19/2009							>5		87		3				3.5		

Notes:
DO and ORP were measured in the field using YSI 6920 equipped with a flow-thru cell. Values presented represent final measurements before sampling
Ferrous Iron readings were measured in the field using a LaMotte Colorimeter after the groundwater passed through a 0.2 µm filter.
J = Estimated value
mg/L = milligrams per liter
ug/L = micrograms per liter
< = Result is non-detect, less than the reporting limit given.
A blank space indicates sample not analyzed for select analyte.
F(0.2) = Sample was filtered utilizing a 0.2 µm filter during sample collection.
mV = millivolts

Appendix A

Groundwater Purging and Sampling Forms

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: LTM Program
PROJECT NUMBER: 21562154.00004
FIELD PERSONNEL: Mike Corbett, Craig Williams
DATE: 11/18/09
WEATHER: cloudy/rain, 45°
MONITORING WELL ID: BSAMW01S
SAMPLE ID: BSAMW01S-1109

INITIAL DATA

Well Diameter: 2 in
Measured Well Depth (btoc): 27.33 ft
Constructed Well Depth (btoc): 27.50 ft
Depth to Water (btoc): 12.28 ft
Depth to LNAPL/DNAPL (btoc): —— ft
Depth to Top of Screen (btoc): 22.50 ft
Screen Length: 5 ft

Water Column Height (do not include LNAPL or DNAPL): 15.05 ft btoc
If Depth to Top of Screen is > Depth to Water AND Screen Lenth is (4 feet,
Place Pump at: Total Well Depth – 0.5 (Screen Length + DNAPL Column Height) = 25.00 ft btoc
If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are (4ft,
Place Pump at: Total Well Depth – (0.5 X Water Column Height + DNAPL Column Height) = —— ft btoc
If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = —— ft btoc

Volume of Flow Through Cell): 1,200 mL
Minimum Purge Volume =
(3 x Flow Through Cell Volume) 3,600 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 58.3 ppm

PURGE DATA

Pump Type: Stainless Steel Monsoon

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	0912	12.31	colorless	hydrocarbon	7.48	15.08	1.636	27.5	1.13	-145.6
1,200	0916	12.32	↓	↓	7.48	15.34	1.636	11.9	1.48	-151.5
2,400	0920	12.30			7.48	15.27	1.638	5.1	1.51	-154.0
3,600	0924	12.25			7.49	15.23	1.637	1.8	1.63	-155.2
4,800	0928	12.25			7.49	15.18	1.637	0.1	1.57	-155.0

Start Time: 0912
Stop Time: 0928
Elapsed Time: 16 min.
Average Purge Rate (mL/min): 300
Water Quality Meter ID: YSI 6920
Date Calibrated: 11/18/09

SAMPLING DATA

Sample Date: 11/18/09
Sample Method: Stainless Steel Monsoon
VOA Vials, No Headspace [X] Initials: MC
Sample Time: 0935
Sample Flow Rate: 300 mL/min.
Analysis: VOCs, Metals, MNA
QA/QC Samples: none

COMMENTS:

MNA – Alkalinity, CO_2, Chloride, Ferrous Iron, Methane, Nitrate, Sulfate, DOC, TOC

Ferrous Iron (Filtered 0.2 micron) = 2.07 ppm

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: LMT Program PROJECT NUMBER: 21562154.00004 FIELD PERSONNEL: Mike Corbett, Craig Williams
DATE: 11/17/09 WEATHER: rain/clouds, 45°
MONITORING WELL ID: BSAMW02D SAMPLE ID: BSAMW02D-1109

INITIAL DATA

Well Diameter: 2 in
Measured Well Depth (btoc): 77.10 ft
Constructed Well Depth (btoc): 77.05 ft
Depth to Water (btoc): 15.67 ft
Depth to LNAPL/DNAPL (btoc): — ft
Depth to Top of Screen (btoc): 72.05 ft
Screen Length: 5 ft

Water Column Height (do not include LNAPL or DNAPL): 61.43 ft btoc
If Depth to Top of Screen is > Depth to Water AND Screen Lenth is (4 feet,
Place Pump at: Total Well Depth – 0.5 (Screen Length + DNAPL Column Height) = 74.55 ft btoc
If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are (4ft,
Place Pump at: Total Well Depth – (0.5 X Water Column Height + DNAPL Column Height) = — ft btoc
If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = — ft btoc

Volume of Flow Through Cell): 1,200 mL
Minimum Purge Volume =
(3 x Flow Through Cell Volume) 3,600 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Monsoon

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	1124	15.67	colorless	hydrocarbon	7.21	14.87	1.393	0.1	1.51	-173.5
1,200	1128	↓	↓	↓	7.20	14.81	1.407	-0.9	1.12	-161.8
2,400	1132				7.20	15.09	1.400	-2.8	1.18	-160.6
3,600	1136				7.20	15.15	1.403	-1.9	1.01	-160.9
4,800	1140				7.19	15.19	1.401	1.5	1.12	-161.2

Start Time: 1124
Stop Time: 1140
Elapsed Time: 16 min
Average Purge Rate (mL/min): 300
Water Quality Meter ID: YSI 6920
Date Calibrated: 11/17/09

SAMPLING DATA

Sample Date: 11/17/09
Sample Method: Stainless Steel Monsoon
VOA Vials, No Headspace ☒ Initials: MC
Sample Time: 1145
Sample Flow Rate: 300
Analysis: VOCs, Metals, MNA
QA/QC Samples: none

COMMENTS:

MNA – Alkalinity, CO_2, Chloride, Ferrous Iron, Methane, Nitrate, Sulfate, DOC, TOC

Ferrous Iron (Filtered 0.2 micron) = 1.64 ppm

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: LTM Program PROJECT NUMBER: 21562154.00004 FIELD PERSONNEL: Mike Corbett, Craig Williams
DATE: 11/17/09 WEATHER: cloudy, rain 45°
MONITORING WELL ID: BSAMW03D SAMPLE ID: BSAMW03D-1109

INITIAL DATA

Well Diameter: 2 in
Measured Well Depth (btoc): 114.97 ft
Constructed Well Depth (btoc): 114.85 ft
Depth to Water (btoc): 15.98 ft
Depth to LNAPL/DNAPL (btoc): — ft
Depth to Top of Screen (btoc): 109.85 ft
Screen Length: 5 ft

Water Column Height (do not include LNAPL or DNAPL): 98.99 ft btoc
If Depth to Top of Screen is > Depth to Water AND Screen Lenth is <4 feet,
Place Pump at: Total Well Depth – 0.5 (Screen Length + DNAPL Column Height) = 112.35 ft btoc
If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are < 4ft,
Place Pump at: Total Well Depth – (0.5 X Water Column Height + DNAPL Column Height) = — ft btoc
If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = — ft btoc

Volume of Flow Through Cell): 1,200 mL
Minimum Purge Volume =
(3 x Flow Through Cell Volume) 3,600 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Monsoon

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	0930	15.98	colorless	hydrocarbon	6.99	14.84	1.470	-0.8	1.35	-126.1
1,200	0934	↓	↓	↓	7.00	14.85	1.472	-2.7	1.40	-126.5
2,400	0938				7.00	14.87	1.472	-4.0	1.40	-127.5
3,600	0942				7.01	14.81	1.472	-4.6	1.40	-128.0

Start Time: 0930
Stop Time: 0942
Elapsed Time: 12 min
Average Purge Rate (mL/min): 300
Water Quality Meter ID: YSI 6920
Date Calibrated: 11/17/09

SAMPLING DATA

Sample Date: 11/17/09
Sample Method: Stainless Steel Monsoon
VOA Vials, No Headspace [X] Initials: MC
Sample Time: 0950
Sample Flow Rate: 300
Analysis: VOCs, Metals, MNA
QA/QC Samples: EB before this well

COMMENTS:

MNA – Alkalinity, CO_2, Chloride, Ferrous Iron, Methane, Nitrate, Sulfate, DOC, TOC

Ferrous Iron (Filtered 0.2 micron) = Overrange.

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: LTM Program PROJECT NUMBER: 21562154.00004 FIELD PERSONNEL: Mike Corbett, Drew Brouk
DATE: 11/16/09 WEATHER: rain/clouds 50°F
MONITORING WELL ID: BSAMW04D SAMPLE ID: BSAMW04D-1109

INITIAL DATA

Well Diameter: 2 in
Measured Well Depth (btoc): 123.47 ft
Constructed Well Depth (btoc): 123.23 ft
Depth to Water (btoc): 26.01 ft
Depth to LNAPL/DNAPL (btoc): — ft
Depth to Top of Screen (btoc): 118.23 ft
Screen Length: 5 ft

Water Column Height (do not include LNAPL or DNAPL): 97.46 ft btoc
If Depth to Top of Screen is > Depth to Water AND Screen Lenth is <4 feet,
Place Pump at: Total Well Depth – 0.5 (Screen Length + DNAPL Column Height) = 120.73 ft btoc
If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are < 4ft,
Place Pump at: Total Well Depth – (0.5 X Water Column Height + DNAPL Column Height) = — ft btoc
If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = — ft btoc

Volume of Flow Through Cell): 1,200 mL
Minimum Purge Volume =
(3 x Flow Through Cell Volume) 3,600 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Monsoon

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	~~0935~~ 0935	26.01	colorless	hydrocarbon	6.98	14.17	1.220	-4.6	1.86	-91.4
1,200	~~0939~~ 0939	↓	↓	↓	6.98	14.36	1.225	-4.9	1.03	-98.0
2,400	~~0943~~ 0943	↓	↓	↓	6.97	14.55	1.229	-5.3	1.05	-100.6
3,600	~~0947~~ MC 0947	↓	↓	↓	6.97	14.50	1.226	-5.3	1.21	-103.4
4,800	0951	↓	↓	↓	6.97	14.49	1.225	-5.4	1.19	-103.1

Start Time: 0935
Stop Time: 0951
Elapsed Time: 16 min.
Average Purge Rate (mL/min): 300
Water Quality Meter ID: YSI 6920
Date Calibrated: 11/16/09

SAMPLING DATA

Sample Date: 11/16/09
Sample Method: Stainless Steel Monsoon
VOA Vials, No Headspace ☒ Initials: MC
Sample Time: 1000
Sample Flow Rate: 300
Analysis: VOCs, Metals, MNA
QA/QC Samples: —

COMMENTS:

MNA – Alkalinity, CO_2, Chloride, Ferrous Iron, Methane, Nitrate, Sulfate, DOC, TOC

Ferrous Iron (Filtered 0.2 micron) = overrange

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: LTM Program PROJECT NUMBER: 21562154.00004 FIELD PERSONNEL: Mike Corbett, Drew Brouk
DATE: 11/16/09 WEATHER: rain/clouds, 50°F
MONITORING WELL ID: BSAMW05D SAMPLE ID: BSAMW05D-1109, BSAMW05D-1109-MS, BSAMW05D-1109-MSD

INITIAL DATA

Well Diameter: 2 in
Measured Well Depth (btoc): 120.09 ft
Constructed Well Depth (btoc): 120.54 ft
Depth to Water (btoc): 20.67 ft
Depth to LNAPL/DNAPL (btoc): — ft
Depth to Top of Screen (btoc): ~~116.25~~ ft
Screen Length: 5 115.54 ft

Water Column Height (do not include LNAPL or DNAPL): 99.42 ft btoc
If Depth to Top of Screen is > Depth to Water AND Screen Lenth is <4 feet,
Place Pump at: Total Well Depth – 0.5 (Screen Length + DNAPL Column Height) = 118.04 ft btoc
If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are < 4ft,
Place Pump at: Total Well Depth – (0.5 X Water Column Height + DNAPL Column Height) = — ft btoc
If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = — ft btoc

Volume of Flow Through Cell): 1,200 mL
Minimum Purge Volume =
(3 x Flow Through Cell Volume) 3,600 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Monsoon

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	1204	20.67	colorless	hydrocarbon	6.99	15.65	2.094	-3.1	1.32	-113.8
1,200	1208	↓	↓	↓	7.00	15.90	2.143	-3.7	1.52	-117.0
2,400	1212				7.00	15.98	2.148	0.2	1.33	-115.8
3,600	1216				6.98	16.12	2.154	19.5	1.29	-55.3
4,800	1220				6.98	16.17	2.152	16.9	1.23	-59.4
6,000	1224				6.98	16.14	2.153	15.0	1.13	-49.9
7,200	1228				6.98	16.14	2.154	14.3	1.18	-63.8
8,400	1232				6.98	16.12	2.149	13.9	1.13	-73.5
9,600	1236				6.98	16.18	2.144	14.2	1.13	-66.9
10,800	1240				6.98	16.20	2.147	9.0	1.13	-69.3

Start Time: 1204
Stop Time: 1240
Elapsed Time: 36 min.
Average Purge Rate (mL/min): 300
Water Quality Meter ID: YSI 6920
Date Calibrated: 11/16/09

SAMPLING DATA

Sample Date: 11/16/09
Sample Method: Stainless Steel Monsoon
VOA Vials, No Headspace ☒ Initials: ML
Sample Time: 1250
Sample Flow Rate: 300
Analysis: VOCs, Metals, MNA
QA/QC Samples: MS/MSD

COMMENTS:

MNA – Alkalinity, CO_2, Chloride, Ferrous Iron, Methane, Nitrate, Sulfate, DOC, TOC
Ferrous Iron (Filtered 0.2 micron) = overrange

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: LTM Program PROJECT NUMBER: 21562154.00004 FIELD PERSONNEL: Mike Corbett, Craig Williams
DATE: 11/18/09 WEATHER: rain/clouds, 45°F
MONITORING WELL ID: ~~CPAMW02D~~ MC CPAMW01D SAMPLE ID: ~~CPAMW02D-1109~~ MC CPAMW01D-1109

INITIAL DATA

Well Diameter: 2 in
Measured Well Depth (btoc): 70.88 ft
Constructed Well Depth (btoc): 70.82 ft
Depth to Water (btoc): 7.53 ft
Depth to LNAPL/DNAPL (btoc): — ft
Depth to Top of Screen (btoc): ~~99.95~~ 65.32 ft
Screen Length: 5 ft

Water Column Height (do not include LNAPL or DNAPL): 63.35 ft btoc
If Depth to Top of Screen is > Depth to Water AND Screen Lenth is <4 feet,
Place Pump at: Total Well Depth – 0.5 (Screen Length + DNAPL Column Height) = 68.32 ft btoc
If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are < 4ft,
Place Pump at: Total Well Depth – (0.5 X Water Column Height + DNAPL Column Height) = — ft btoc
If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = — ft btoc

Volume of Flow Through Cell): 1,200 mL
Minimum Purge Volume =
(3 x Flow Through Cell Volume) 3,600 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Monsoon

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	1240	7.57	brown	hydrocarbon	9.35	16.17	1.738	13.7	0.79	-150.1
1,200	1244				9.31	16.09	1.799	8.2	1.07	-154.4
2,400	1248				9.31	15.98	1.851	5.2	0.61	-151.6
3,600	1252	7.56			9.32	16.01	1.883	2.9	0.43	-149.5
4,800	1256				9.34	15.99	1.931	4.1	0.54	-137.8
6,000	1300				9.37	16.40	1.949	1.9	0.51	-145.7
7,200	1304				9.40	16.46	1.976	1.4	0.25	-152.0
8,400	1308				9.42	16.43	2.001	2.2	0.67	-154.9
9,600	1312				9.43	16.40	2.018	3.0	0.95	-158.4
10,800	1316				9.44	16.58	2.027	3.2	1.00	-161.7
12,000	1320				9.44	16.60	2.033	2.0	0.58	-163.9
13,200	1324				9.46	16.61	2.048	2.1	0.65	-178.0
14,400	1328				9.47	16.63	2.066	2.3	0.71	-187.8
15,600	1332				9.47	16.66	2.075	4.8	0.80	-190.4
16,800	1336				9.47	16.66	2.076	3.5	0.62	-197.2

Start Time: 1240
Stop Time: 1336
Elapsed Time: 56 min
Average Purge Rate (mL/min): 300
Water Quality Meter ID: YSI 6920
Date Calibrated: 11/18/09

SAMPLING DATA

Sample Date: 11/18/09
Sample Time: 1340
Analysis: VOCs, Metals, MNA
Sample Method: Stainless Steel Monsoon
Sample Flow Rate: 300 mL/min.
QA/QC Samples: none
VOA Vials, No Headspace ☒ Initials: MC

COMMENTS:

MNA – Alkalinity, CO_2, Chloride, Ferrous Iron, Methane, Nitrate, Sulfate, DOC, TOC
Ferrous Iron (Filtered 0.2 micron) = 0.87 ppm

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: LTM Program PROJECT NUMBER: 21562154.00004 FIELD PERSONNEL: Mike Corbett, Craig Williams
DATE: 11/18/09 WEATHER: clouds, 45°, breezy
MONITORING WELL ID: CPAMW02D SAMPLE ID: CPAMW02D-1109, CPAMW02D-1109-AD

INITIAL DATA

Well Diameter: 2 in
Measured Well Depth (btoc): 104.80 ft
Constructed Well Depth (btoc): 104.65 ft
Depth to Water (btoc): 7.98 ft
Depth to LNAPL/DNAPL (btoc): ft
Depth to Top of Screen (btoc): ~~66.12~~ ft
Screen Length: 5 ~~99.65~~ ft

Water Column Height (do not include LNAPL or DNAPL): 96.82 ft btoc
If Depth to Top of Screen is > Depth to Water AND Screen Lenth is <4 feet,
Place Pump at: Total Well Depth – 0.5 (Screen Length + DNAPL Column Height) = 102.15 ft btoc
If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are < 4ft,
Place Pump at: Total Well Depth – (0.5 X Water Column Height + DNAPL Column Height) = — ft btoc
If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = — ft btoc

Volume of Flow Through Cell): 1,200 mL
Minimum Purge Volume =
(3 x Flow Through Cell Volume) 3,600 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Monsoon

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	1033	7.98	colorless	hydrocarbon	7.04	16.93	1.131	38.8	1.42	-121.3
1,200	1037	↓	↓	↓	7.04	16.94	1.170	30.3	1.62	-124.9
2,400	1041				7.04	16.93	1.209	22.9	1.62	-125.1
3,600	1045				7.05	16.92	1.216	16.7	1.60	-125.2
4,800	1049				7.05	16.91	1.224	5.0	1.63	-125.3
6,000	1053				7.05	16.89	1.230	1.6	1.75	-125.6

Start Time: 1033
Stop Time: 1053
Elapsed Time: 20 min
Average Purge Rate (mL/min): 300
Water Quality Meter ID: YSI 6920
Date Calibrated: 11/18/09

SAMPLING DATA

Sample Date: 11/18/09
Sample Method: Stainless Steel Monsoon
VOA Vials, No Headspace [X] Initials: MC
Sample Time: 1100
Sample Flow Rate: 300 mL/min
Analysis: VOCs, Metals, MNA
QA/QC Samples: Analytical Duplicate

COMMENTS:

MNA – Alkalinity, CO_2, Chloride, Ferrous Iron, Methane, Nitrate, Sulfate, DOC, TOC
Ferrous Iron (Filtered 0.2 micron) = Overrange

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: LTM Program PROJECT NUMBER: 21562154.00004 FIELD PERSONNEL: Mike Corbett, Craig Williams
DATE: 11/17/09 WEATHER: rain, 45°
MONITORING WELL ID: CPAMW03D SAMPLE ID: CPAMW03D-1109

INITIAL DATA

Well Diameter: 2 in
Measured Well Depth (btoc): 113.20 ft
Constructed Well Depth (btoc): 113.00 ft
Depth to Water (btoc): 9.60 ft
Depth to LNAPL/DNAPL (btoc): — ft
Depth to Top of Screen (btoc): 108.00 ft
Screen Length: 5 ft

Water Column Height (do not include LNAPL or DNAPL): 103.60 ft btoc
If Depth to Top of Screen is > Depth to Water AND Screen Lenth is <4 feet,
Place Pump at: Total Well Depth – 0.5 (Screen Length + DNAPL Column Height) = 110.50 ft btoc
If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are < 4ft,
Place Pump at: Total Well Depth – (0.5 X Water Column Height + DNAPL Column Height) = — ft btoc
If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = — ft btoc

Volume of Flow Through Cell): 1,200 mL
Minimum Purge Volume =
(3 x Flow Through Cell Volume) 3,600 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Monsoon

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	1323	9.60	~~9.60~~	hydrocarbon	6.89	15.73	1.937	50.3	1.44	-119.3
1,200	1327		colorless		6.85	15.68	1.999	29.2	1.57	-125.8
2,400	1331				6.85	15.64	2.009	67.2	1.60	-127.6
3,600	1335				6.85	15.60	2.015	30.1	1.64	-128.2
4,800	1339				6.85	15.61	1.994	22.6	1.68	-130.7
6,000	1343				6.85	15.59	1.975	24.9	1.53	-130.3
7,200	1347				6.85	15.61	1.973	26.7	1.57	-131.4

Start Time: 1323
Stop Time: 1347
Elapsed Time: 24 min.
Average Purge Rate (mL/min): 300
Water Quality Meter ID: YSI 6920
Date Calibrated: 11/17/09

SAMPLING DATA

Sample Date: 11/17/09
Sample Method: Stainless Steel Monsoon
VOA Vials, No Headspace ☒ Initials: MC
Sample Time: 1355
Sample Flow Rate: 300
Analysis: VOCs, Metals, MNA
QA/QC Samples: none

COMMENTS:

MNA – Alkalinity, CO_2, Chloride, Ferrous Iron, Methane, Nitrate, Sulfate, DOC, TOC

Ferrous Iron (Filtered 0.2 micron) = 4.56 ppm

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: LTM Program PROJECT NUMBER: 21562154.00004 FIELD PERSONNEL: Mike Corbett
DATE: 11/16/09 WEATHER: rain, clouds
MONITORING WELL ID: CPAMW04D SAMPLE ID: CPAMW04D-1109

INITIAL DATA

Well Diameter: 2 in
Measured Well Depth (btoc): 121.16 ft
Constructed Well Depth (btoc): 121.07 ft
Depth to Water (btoc): 21.94 ft
Depth to LNAPL/DNAPL (btoc): ____ ft
Depth to Top of Screen (btoc): 116.07 ft
Screen Length: 5 ft

Water Column Height (do not include LNAPL or DNAPL): 99.22 ft btoc
If Depth to Top of Screen is > Depth to Water AND Screen Lenth is <4 feet,
Place Pump at: Total Well Depth – 0.5 (Screen Length + DNAPL Column Height) = 118.57 ft btoc
If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are < 4ft,
Place Pump at: Total Well Depth – (0.5 X Water Column Height + DNAPL Column Height) = ____ ft btoc
If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = ____ ft btoc

Volume of Flow Through Cell): 1,200 mL
Minimum Purge Volume =
(3 x Flow Through Cell Volume) 3,600 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Monsoon

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	1427	21.94	colorless	hydrocarbon	7.05	15.44	2.155	-5.2	1.32	-168.3
1,200	1431	↓	↓	↓	7.04	15.46	2.150	-5.4	1.46	-168.2
2,400	1435				7.04	15.50	2.149	-5.5	1.33	-168.2
3,600	1439				7.04	15.55	2.144	-5.5	1.40	-168.4

Start Time: 1427
Stop Time: 1439
Elapsed Time: 12 min
Average Purge Rate (mL/min): 300
Water Quality Meter ID: YSI 6920
Date Calibrated: 11/16/09

SAMPLING DATA

Sample Date: 11/16/09
Sample Method: Stainless Steel Monsoon
VOA Vials, No Headspace ☒ Initials: MC
Sample Time: 1445
Sample Flow Rate: 300
Analysis: VOCs, Metals, MNA
QA/QC Samples: none

COMMENTS:

MNA – Alkalinity, CO_2, Chloride, Ferrous Iron, Methane, Nitrate, Sulfate, TOC
Ferrous Iron (Filtered 0.2 micron) = overrange

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: LTM Program PROJECT NUMBER: 21562154.00004 FIELD PERSONNEL: Mike Corbett, Craig Williams, Chris Deciaccio
DATE: 11/19/09 WEATHER: cloudy, 50°F
MONITORING WELL ID: CPAMW05D SAMPLE ID: CPAMW05D-1109

INITIAL DATA

Well Diameter: 2 in
Measured Well Depth (btoc): 114.81 ft
Constructed Well Depth (btoc): 114.75 ft
Depth to Water (btoc): 14.01 ft
Depth to LNAPL/DNAPL (btoc): — ft
Depth to Top of Screen (btoc): 109.75 ft
Screen Length: 5 ft

Water Column Height (do not include LNAPL or DNAPL): 100.80 ft btoc
If Depth to Top of Screen is > Depth to Water AND Screen Lenth is <4 feet,
Place Pump at: Total Well Depth – 0.5 (Screen Length + DNAPL Column Height) = 112.25 ft btoc
If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are < 4ft,
Place Pump at: Total Well Depth – (0.5 X Water Column Height + DNAPL Column Height) = — ft btoc
If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = — ft btoc

Volume of Flow Through Cell): 1,200 mL
Minimum Purge Volume =
(3 x Flow Through Cell Volume) 3,600 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Monsoon

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	1323	14.01	colorless	odorless	6.46	13.78	3.628	13.6	2.22	-121.4
1,200	1329	↓	↓	↓	6.46	13.68	3.700	7.0	2.51	-123.7
2,400	1335				6.46	13.71	3.700	4.5	3.17	-125.2
3,600	1341				6.47	13.74	3.695	3.2	5.18	-125.9
4,800	1347				6.47	13.76	3.693	1.8	5.20	-126.6
6,000	1353				6.47	13.76	3.686	1.0	5.49	-127.1
7,200	1359				6.47	13.72	3.682	0.7	5.70	-127.1
8,400	1405				6.47	13.69	3.679	0.5	5.95	-127.2
9,600	1411				6.47	13.69	3.675	0.4	6.02	-127.0
10,800	1417				6.47	13.70	3.671	0.3	6.22	-126.9

Start Time: 1323
Stop Time: 1417
Elapsed Time: 54 min.
Average Purge Rate (mL/min): 200
Water Quality Meter ID: YSI 6920
Date Calibrated: 11/19/09

SAMPLING DATA

Sample Date: 11/19/09
Sample Method: Stainless Steel Monsoon
VOA Vials, No Headspace ☒ Initials: MC
Sample Time: 1420
Sample Flow Rate: 200 mL/min.
Analysis: VOCs, Metals, MNA
QA/QC Samples: none

COMMENTS:

MNA – Alkalinity, CO_2, Chloride, Ferrous Iron, Methane, Nitrate, Sulfate, DOC, TOC
Ferrous Iron (Filtered 0.2 micron) = overrange

Appendix B

Chains-of-Custody

Savannah
5102 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jeff Adams	Site Contact: Mike Corbett	Date: 11/16/09	COC No:
URS Corporation	Tel/Fax: (314) 743-4228	Lab Contact: Lidya Gulizia	Carrier: FedEx	1 of 1 COCs
1001 Highlands Plaza Drive West, Suite 300	Analysis Turnaround Time			Job No. 21562154.00004
St. Louis, MO 63110	Calendar (C) or Work Days (W)			
(314) 429-0100 Phone	TAT if different from Below Standard			SDG No.
(314) 429-0462 FAX	☐ 2 weeks			
Project Name: 4Q09 LTM GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs by 8260	Total Fe/Mn by 6010B	Alk/CO2 by 310.1	Chloride by 325.2/Sulfate by 375.4	Methane by RSK 175	Nitrate by 353.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	Sample Specific Notes:
BSA-MW-04D-1109	11/16/09	1000	G	Water	12		3	1	1	1	3	2	1			
BSA-MW-04D-F(0.2)-1109		1000	G	Water	2	X								1	1	
BSA-MW-05D-1109		1250	G		12		3	1	1	1	3	2	1			
BSA-MW-05D-F(0.2)-1109		1250	G		2	X								1	1	
BSA-MW-05D-1109-MS		1250	G		3		3									
BSA-MW-05D-1109-MSD		1250	G		3		3									
CPA-MW-04D-1109		1445	G		12		3	1	1	1	3	2	1			
CPA-MW-04D-F(0.2)-1109		1445	G		2	X								1	1	
4Q09 LTM Trip Blank # 1	11/16/09	—	—	Water	3		3									
							2	1	4	1	1	1	3,1	2	4	2

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level 4 Data Package

1.4°C 680-52699

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	URS	11/16/09 1630	[signature]	TA	11/16/09 1630
[signature]	TA	11/16/09 1730			
			[signature]	TA SV	11/17/09 0956

Savannah
5102 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jeff Adams	Site Contact: Mike Corbett	Date: 11/17/09	COC No:
URS Corporation	Tel/Fax: (314) 743-4228	Lab Contact: Lidya Gulizia	Carrier: FedEx	1 of 1 COCs
1001 Highlands Plaza Drive West, Suite 300	Analysis Turnaround Time			Job No. 21562154.00004
St. Louis, MO 63110	Calendar (C) or Work Days (W)			
(314) 429-0100 Phone	TAT if different from Below Standard			SDG No.
(314) 429-0462 FAX	☐ 2 weeks			
Project Name: 4Q09 LTM GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs by 8260	Total Fe/Mn by 6010B	Alk/CO2 by 310.1	Chloride by 325.2/Sulfate by 375.4	Methane by RSK 175	Nitrate by 353.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	Sample Specific Notes:
BSA -MW-03D-1109	11/17/09	0950	G	Water	12		3	1	1	1	3	2	1			
BSA -MW-03D-F(0.2)-1109		0950	G	Water	2	X								1	1	
BSA-MW-03D-1109-EB		0920	G	Water	3		3									
BSA-MW-02D-1109		1145	G	Water	12		3	1	1	1	3	2	1			
BSA-MW-02D-F(0.2)-1109		1145	G	Water	2	X								1	1	
CPA-MW-03D-1109		1355	G	Water	12		3*	1	1	1	3	2	1			*without HCl
CPA-MW-03D-F(0.2)-1109	↓	1355	G	Water	2	X								1	1	preservative to
																minimize effervescence
																in VOC samples.
4Q09 LTM Trip Blank # 2	11/17/09	—	—	Water	2		2									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2	1	4	1	1	1	3,1	2	4	2

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level 4 Data Package

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Mike Corbett	URS	11/17/09 1630	M. Kalkighter	TA	11-18-09 09:33
Relinquished by:	Company:	Date/Time:	Received by: 680-52735	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by: TEMP 2.8	Company:	Date/Time:

Savannah
5102 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jeff Adams	Site Contact: Mike Corbett	Date: 11/18/09	COC No:
URS Corporation	Tel/Fax: (314) 743-4228	Lab Contact: Lidya Gulizia	Carrier: FedEx	1 of 1 COCs
1001 Highlands Plaza Drive West, Suite 300	Analysis Turnaround Time			Job No. 21562154.00004
St. Louis, MO 63110	Calendar (C) or Work Days (W)			
(314) 429-0100 Phone	TAT if different from Below Standard			SDG No.
(314) 429-0462 FAX	☐ 2 weeks			
Project Name: 4Q09 LTM GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs by 8260	Total Fe/Mn by 6010B	Alk/CO2 by 310.1	Chloride by 325.2/Sulfate by 375.4	Methane by RSK 175	Nitrate by 353.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	Sample Specific Notes:
BSA -MW-01S-1109	11/18/09	0935	G	Water	12		3	1	1	1	3	2	1			
BSA -MW-01S-F(0.2)-1109		0935	G	Water	2	X								1	1	
CPA-MW-02D-1109		1100	G	Water	12		3	1	1	1	3	2	1			
CPA-MW-02D-F(0.2)-1109		1100	G	Water	2	X								1	1	
CPA-MW-02D-1109-AD		1100	G	Water	3		3									
CPA-MW-01D-1109		1340	G	Water	12		3	1	1	1	3	2	1			
CPA-MW-01D-F(0.2)-1109	↓	1340	G	Water	2	X								1	1	
4Q09 LTM Trip Blank # 3	11/18/09			Water	2		2									
							2	1	4	1	1	1	3,1	2	4	2

EMPERATURE
4.6

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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level 4 Data Package

1680-52785

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	URS	11/18/09 1600	Beth a Daughtry	TA SAV	11-19-9 @ 0952
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Savannah
5102 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jeff Adams	Site Contact: Mike Corbett	Date: 11/19/09	COC No:
URS Corporation	Tel/Fax: (314) 743-4228	Lab Contact: Lidya Gulizia	Carrier: FedEx	1 of 1 COCs
1001 Highlands Plaza Drive West, Suite 300	Analysis Turnaround Time			Job No. 21562154.00004
St. Louis, MO 63110	Calendar (C) or Work Days (W) _____			
(314) 429-0100 Phone	TAT if different from Below Standard			SDG No.
(314) 429-0462 FAX	☐ 2 weeks			
Project Name: 4Q09 LTM GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs by 8260	Total Fe/Mn by 6010B	Alk/CO2 by 310.1	Chloride by 325.2/Sulfate by 375.4	Methane by RSK 175	Nitrate by 353.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	Sample Specific Notes:
CPA -MW-05D-1109	11/19/09	1420	G	Water	12		3	1	1	1	3	2	1			
CPA -MW-05D-F(0.2)-1109	11/19/09	1420	G	Water	2	X								1	1	
4Q09 LTM Trip Blank # 4				Water	3		3									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							2	1	4	1	1	1	3,1	2	4	2

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level 4 Data Package

3.6°C

~~680-52057~~
680-52871

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	URS	11/19/09 1600			
Relinquished by:	Company:	Date/Time:	Received by: [signature] 11/20/09	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by: [signature]	Company: TA SV	Date/Time: 11/20/09 0905

Appendix C

Quality Assurance Report

QUALITY ASSURANCE REPORT

Solutia Inc.
W.G. Krummrich Facility
Sauget, Illinois

Long-Term Monitoring Program
4th Quarter 2009 Data Report

Prepared for

Solutia Inc.
575 Maryville Centre Drive
St. Louis, MO 63141

February 2010

URS Corporation
1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
(314) 429-0100
Project # 21562154.00004

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1.0 INTRODUCTION

This Quality Assurance Report presents the findings of a review of analytical data for groundwater samples collected in November of 2009 at the Solutia W.G. Krummrich plant as part of the 4th Quarter 2009 Long-Term Monitoring Program. The samples were collected by URS Corporation personnel and analyzed by TestAmerica Laboratories located in Savannah, Georgia using USEPA methods, Standard methods and USEPA SW-846 methodologies. Groundwater samples were tested for volatile organic compounds (VOCs), metals, dissolved gases, and general chemistry.

One hundred percent of the data were subjected to a data quality review (Level III review). The Level III review was performed in order to confirm that the analytical data provided by Test America were acceptable in quality for their intended use.

A total of 13 groundwater samples (10 investigative samples, one field duplicate pair, one MS/MSD pair, and one equipment blank) were analyzed by Test America. In addition, four trip blank sets were included in the coolers that contained groundwater samples for VOC analysis and were analyzed for VOCs by USEPA SW-846 Method 8260B. These samples were analyzed as Sample Delivery Group (SDG) KPS055 utilizing the following USEPA SW-846 Methods:

- Method 8260B for VOCs (Benzene, Chlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene and 1,4-Dichlorobenzene)
- Method 6010B for total and dissolved iron and manganese

Samples were also analyzed for dissolved gases and general chemistry parameters by the following methods:

- Method RSK-175 for Dissolved Gasses (Ethane, Ethylene, and Methane)
- USEPA Method 310.1 for Alkalinity and Free Carbon Dioxide
- USEPA Method 325.2 for Chloride
- USEPA Method 353.2 for Nitrogen, Nitrate
- USEPA Method 375.4 for Sulfate
- USEPA Method 415.1 for Total and Dissolved Organic Carbon

Samples were reviewed following procedures outlined in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review (USEPA 2008), the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (USEPA 2004), and the Revised Long-Term Monitoring Program (LTMP) Work Plan (Solutia 2009).

The above guidelines provided the criteria to review the data. Additional quantitative criteria are given in the analytical methods. Qualifiers assigned by the data reviewer have been applied to the

laboratory reporting forms (Form-1s). The qualifiers indicate data that did not meet acceptance criteria and corrective actions were not successful or not performed. The various qualifiers are explained in **Tables 1** and **2** below:

TABLE 1 Laboratory Data Qualifiers

Lab Qualifier	Definition
U	Analyte was not detected at or above the reporting limit.
*****	LCS, LCSD, MS, MSD, MD or surrogate exceeds the control limits.
E	Result exceeded the calibration range, secondary dilution required.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Spike recovery exceeds upper or lower control limits.
F	MS, MSD or RPD exceeds upper or lower control limits.
P	The difference between the results of the two GC columns is greater than 40%
H	Sample was prepped or analyzed beyond the specified holding time.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

TABLE 2 URS Data Qualifiers

URS Qualifier	Definition
U	The analyte was analyzed for but was not detected.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Based on the criteria outlined, it is recommended that the results reported for these analyses are accepted for their intended use. Acceptable levels of accuracy, precision, and representativeness (based on MS/MSD, LCS, surrogate compounds and field duplicate results) were achieved for this data set, except where noted in this report. In addition, analytical completeness, defined as the percentage of analytical results that are judged to be valid, including estimated detect/nondetect (**J/UJ**) data was 100 percent, which meets the completeness goal of 95 percent.

The data review included evaluation of the following criteria:

Organics

- Receipt condition and sample holding times
- Laboratory method blanks, field equipment blanks and trip blank samples
- Surrogate spike recoveries
- Laboratory control sample (LCS) recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) sample recoveries and relative percent difference (RPD) values
- Field duplicate results
- Results reported from dilutions
- Internal standard responses

Inorganics/General chemistry

- Receipt condition and sample holding times
- Laboratory method blank and field equipment blank samples
- LCS recoveries
- MS/MSD sample recoveries and matrix duplicate RPD values
- Field duplicate and laboratory duplicate results
- Results reported from dilutions

The following sections present the results of the data review.

2.0 RECEIPT CONDITION AND SAMPLE HOLDING TIMES

Sample holding time requirements for the analyses performed are presented in the methods and/or in the data review guidelines. Review of the sample collection, extraction and analysis dates involved comparing the chain-of-custody and the laboratory data summary forms for accuracy, consistency, and holding time compliance.

Upon review of the KPS055 data, the chain-of-custody form indicated that effervescence was observed in sample CPA-MW-03D-1109 and therefore three unpreserved VOA vials were filled in the field. The unpreserved vials did not contain headspace and so were used in the analysis of sample CPA-MW-03D-1109. Sample CPA-MW-03D-1109 was analyzed for VOCs within 7 days of sample collection; therefore, no qualification of data was required. The laboratory incorrectly transcribed COC designated sample BSA-MW-03D-F(0.2)-1109, BSA-MW-02D-F(0.2)-1109, and CPA-MW-03D-F(0.2)-1109 by adding extra space(s) within the sample names.

The laboratory also incorrectly transcribed trip blank ID, 4Q09 LTM Trip Blank #2 by adding an extra zero to the sample name. Results were reported using the COC designated sample IDs.

3.0 TRIP BLANKS, LABORATORY METHOD BLANK AND EQUIPMENT BLANK SAMPLES

Trip blank samples are used to assess VOC cross contamination of samples during shipment to the laboratory. Trip blanks were submitted with each cooler shipped containing samples for VOC analyses for a total of four trip blank sample sets. All associated samples were nondetect; therefore, no qualification of data was required.

Laboratory method blank samples evaluate the existence and magnitude of contamination problems resulting from laboratory activities. All laboratory method blank samples were analyzed at the method prescribed frequencies. Method blank samples were nondetect; therefore, no qualification of data was required.

Equipment blank samples are used to assess the effectiveness of equipment decontamination procedures. Equipment blank samples were nondetect; therefore, no qualification of data was required.

4.0 SURROGATE SPIKE RECOVERIES

Surrogate compounds are used to evaluate overall laboratory performance for sample preparation efficiency on a per sample basis. Samples analyzed for VOCs were spiked with surrogate compounds during sample preparation. USEPA National Functional Guidelines for Organic Data Review state how data is qualified, if surrogate spike recoveries do not meet acceptance criteria.

Groundwater surrogate recoveries were within evaluation criteria. Surrogates that were associated with quality control samples or were diluted out and not recovered did not require qualification. No qualification of data was required.

5.0 LABORATORY CONTROL SAMPLE RECOVERIES

Groundwater laboratory control samples (LCS) are analyzed with each analytical batch to assess the accuracy of the analytical process. LCS recoveries were within evaluation criteria. No qualification of data was required.

6.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) SAMPLES

MS/MSD samples are analyzed to assess the accuracy and precision of the analytical process on an analytical sample in a particular matrix. MS/MSD samples were required to be collected at a frequency of one per 20 investigative samples in accordance with the work plan. URS

Corporation submitted one MS/MSD sample set for 10 investigative samples meeting the work plan frequency requirement.

No qualifications were made to the data if the MS/MSD percent RPD was the only factor out of criteria. Also, USEPA National Functional Guidelines for Organic Data Review (2008) states that organic data does not need to be qualified based on MS/MSD criteria alone. Therefore, if recoveries were outside evaluation criterion due to matrix interference or abundance of analytes, no qualifiers were assigned unless these analytes had other quality control criteria outside evaluation criteria.

Groundwater samples spiked and analyzed as DS/MSDs and their respective recoveries are discussed further in data reviews in Appendix E**.** Analytical data that required qualification based on MS/MSD recoveries are summarized in the following table:

MS/MSD ID	Parameter	Analyte	Qualification
BSA-MW-04D-1109	General Chemistry	Chloride	**J**

7.0 FIELD DUPLICATE RESULTS

Field duplicate results are used to evaluate precision of the entire data collection activity, including sampling, analysis and site heterogeneity. When results for both duplicate and sample values are greater than five times the practical quantitation limit (PQL), satisfactory precision is indicated by an RPD less than or equal to 25 percent for aqueous samples. Where one or both of the results of a field duplicate pair are reported at less than five times the PQL, satisfactory precision is indicated if the field duplicate results agree within 2 times the quantitation limit. Field duplicate results that do not meet these criteria may indicate unsatisfactory precision of the results.

One pair of field duplicate samples were collected for the 10 investigative groundwater samples. This satisfies the requirement in the work plan (one per 10 investigative samples or 10 percent). Groundwater field duplicate RPDs were within evaluation criteria.

8.0 INTERNAL STANDARD RESPONSES

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. IS areas must be within -50 percent to +100 percent for VOCs.

The internal standards area responses for VOCs were verified for the data review. VOC IS responses met the criteria as described above for all groundwater samples. No qualification of data was required.

9.0 RESULTS REPORTED FROM DILUTIONS

VOC, chloride, and sulfate results for groundwater samples were diluted when high levels of target analytes were present. The diluted sample results for these analytes were reported for the associated samples.

Appendix D

Groundwater Analytical Results (with Data Review Sheets)

SDG KPS055

Results of Samples from Monitoring Wells:

BSA-MW-1S
BSA-MW-2D
BSA-MW-3D
BSA-MW-4D
BSA-MW-5D
CPA-MW-1D
CPA-MW-2D
CPA-MW-3D
CPA-MW-4D
CPA-MW-5D

Solutia Krummrich Data Review
WGK LTM 4Q09

Laboratory SDG: KPS055

Reviewer: Susan Jansen

Date Reviewed: 1/19/2010

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2008.

USEPA National Functional Guidelines for Inorganic Data Review 2004.

Applicable Work Plan: Revised Long-Term Monitoring Program (LTMP) Work Plan (Solutia 2009)

Sample Identification	Sample Identification
BSA-MW-01S-1109	CPA-MW-01D-1109
BSA-MW-01S-F(0.2)-1109	CPA-MW-01D-F(0.2)-1109
BSA-MW-02D-1109	CPA-MW-02D-1109
BSA-MW-02D-F(0.2)-1109	CPA-MW-02D-1109-AD
BSA-MW-03D-1109	CPA-MW-02D-F(0.2)-1109
BSA-MW-03D-1109-EB	CPA-MW-03D-1109
BSA-MW-03D-F(0.2)-1109	CPA-MW-03D-F(0.2)-1109
BSA-MW-04D-1109	CPA-MW-04D-1109
BSA-MW-04D-F(0.2)-1109	CPA-MW-04D-F(0.2)-1109
BSA-MW-05D-1109	CPA-MW-05D-1109
BSA-MW-05D-F(0.2)-1109	CPA-MW-05D-F(0.2)-1109
4Q09 LTM Trip Blank #1	4Q09 LTM Trip Blank #3
4Q09 LTM Trip Blank #2	4Q09 LTM Trip Blank #4

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated that total and dissolved iron and sulfate MS/MSD recoveries could not be evaluated. Additionally, chloride MS recovery was outside evaluation criteria. Samples were diluted due to high levels of target analytes. These issues are addressed further in the appropriate sections below.

The cooler receipt indicated that three out of three VOA vials were received without preservation for sample CPA-MW-03D-1109. Sample CPA-MW-03D-1109 was not acid-preserved because of observed effervescence in the field; this sample was analyzed within 7 days of sampling; therefore, no qualification of data was required. The laboratory incorrectly transcribed COC designated sample BSA-MW-03D-F(0.2)-1109,

BSA-MW-02D-F(0.2)-1109, and CPA-MW-03D-F(0.2)-1109 by adding extra space(s) within the sample names. The laboratory also incorrectly transcribed COC designated trip blank ID, 4Q09 LTM Trip Blank #2 by adding an extra zero to the sample name. Results were reported using the COC designated sample IDs.

3.0 Holding Times

W*ere samples extracted/analyzed within applicable limits?*

Yes

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

Yes

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples collected as part of this SDG?

Yes, sample BSA-MW-05D-1109 was spiked and analyzed for VOCs. Sample BSA-MW-03D-1109 was spiked and analyzed for total and dissolved iron, and total and dissolved manganese. Sample BSA-MW-04D-1109 was spiked and analyzed for chloride and sulfate.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery	RPD	MS/MSD RPD Criteria
BSA-MW-04D-1109	General Chemistry	Chloride	**82/**89	2	85-115/30

Analytical data that required qualification based on MS/MSD data are included in the table below. Total and dissolved iron MS/MSD recoveries in sample BSA-MW-03D-1109 could not be evaluated because the sample concentrations were greater than four times (4X) the matrix spike concentration. Sulfate MS/MSD recoveries could not be evaluated in sample BSA-MW-04D-1109 because the sample concentrations were greater than four times (4X) the matrix spike concentration.

MS/MSD ID	Parameter	Analyte	Qualification
BSA-MW-04D-1109	General Chemistry	Chloride	**J**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples collected as part of this SDG?

Yes, sample CPA-MW-05D-1109 was duplicated and analyzed for chloride and sulfate. Sample CPA-MW-03D-F(0.2)-1109 was duplicated and analyzed for dissolved organic carbon.

Were laboratory duplicate sample relative percent differences (RPDs) within criteria?

Yes

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
CPA-MW-02D-1109	CPA-MW-02D-1109-AD

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

No

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 680-52699-1

SDG Number: KPS055

Job Description: WGK LTM 4Q09 - NOV 2009

For:
Solutia Inc.
575 Maryville Centre Dr.
Saint Louis, MO 63141

Attention: Mr. Jerry Rinaldi

Lidya Gulizia

Approved for release.
Lidya Gulizia
Project Manager I
12/24/2009 12:21 PM

Lidya Gulizia
Project Manager I
lidya.gulizia@testamericainc.com
12/24/2009

Reviewed on:
JAN 19 2010

cc: Mr. Thomas Adams
Mr. Bob Billman
Dave Palmer
Mr. Richard Williams

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

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

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

ACCREDITED IN ACCORDANCE WITH nelac

Job Narrative
680-52699-1 / SDG KPS055

Receipt
Method(s) 8260B: The following sample submitted for volatiles analysis was received with insufficient preservation (pH >2): CPA-MW-03D-1109 (680-52735-6).

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

GC/MS VOA
Method(s) 8260B: The surrogate Dibromofluoromethane recovered above quality control (QC) limits in the batch matrix spike (MS). The surrogate recoveries were within QC limits for both the native sample and the matrix spike dup (MSD) therefore the MS was not reanalyzed.

No other analytical or quality issues were noted.

GC VOA
No analytical or quality issues were noted.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 680-153854 were outside control limits for iron. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 6010B: The post digestion spike % recovery for iron was outside of control limits due to abundance.

Method(s) 6010B: Due to the high concentration of iron, the matrix spike / matrix spike duplicate (MS/MSD) for batch 680-155202 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry
Method(s) 325.2, SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 155684 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 353.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 154313 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 353.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 154340 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 375.4: Due to the high concentration of sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for batch 154298 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 375.4, 9038: Due to the high concentration of sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for batch 155685 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

Comments
No additional comments.

JAN 19 2010

METHOD SUMMARY

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL SAV	SW846 8260B	
Purge and Trap	TAL SAV		SW846 5030B
Dissolved Gases (GC)	TAL SAV	RSK RSK-175	
Metals (ICP)	TAL SAV	SW846 6010B	
Sample Filtration, Field	TAL SAV		FIELD_FLTRD
Preparation, Total Recoverable or Dissolved Metals	TAL SAV		SW846 3005A
Alkalinity	TAL SAV	MCAWW 310.1	
Chloride	TAL SAV	MCAWW 325.2	
Nitrogen, Nitrate-Nitrite	TAL PEN	MCAWW 353.2	
Nitrogen, Nitrate-Nitrite	TAL SAV	MCAWW 353.2	
Sulfate	TAL SAV	MCAWW 375.4	
TOC	TAL SAV	MCAWW 415.1	
DOC	TAL SAV	MCAWW 415.1	
Sample Filtration, Field	TAL SAV		FIELD_FLTRD

Lab References:

TAL PEN = TestAmerica Pensacola

TAL SAV = TestAmerica Savannah

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

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

JAN 19 2010

METHOD / ANALYST SUMMARY

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method	Analyst	Analyst ID
SW846 8260B	Bearden, Robert	RB
SW846 8260B	Cowart, Judson	WJC
SW846 8260B	Lanier, Carolyn	CL
RSK RSK-175	Moncrief, Amy	AEM
SW846 6010B	Bland, Brian	BCB
MCAWW 310.1	Vasquez, Juana	JV
MCAWW 325.2	Ross, Jon	JR
MCAWW 353.2	Gimlin, Wendy	WG
MCAWW 353.2	Ross, Jon	JR
MCAWW 375.4	Ross, Jon	JR
MCAWW 415.1	Blackshear, Kim	KB

JAN 19 2010

SAMPLE SUMMARY

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-52699-1	BSA-MW-04D-1109	Water	11/16/2009 1000	11/17/2009 1218
680-52699-2	BSA-MW-04D-F(0.2)-1109	Water	11/16/2009 1000	11/17/2009 1218
680-52699-3	BSA-MW-05D-1109	Water	11/16/2009 1250	11/17/2009 1218
680-52699-3MS	BSA-MW-05D-1109	Water	11/16/2009 1250	11/17/2009 1218
680-52699-3MSD	BSA-MW-05D-1109	Water	11/16/2009 1250	11/17/2009 1218
680-52699-4	BSA-MW-05D-F(0.2)-1109	Water	11/16/2009 1250	11/17/2009 1218
680-52699-5	CPA-MW-04D-1109	Water	11/16/2009 1445	11/17/2009 1218
680-52699-6	CPA-MW-04D-F(0.2)-1109	Water	11/16/2009 1445	11/17/2009 1218
680-52699-7TB	4Q09 LTM Trip Blank #1	Water	11/16/2009 0000	11/17/2009 1218
680-52735-1	BSA-MW-03D-1109	Water	11/17/2009 0950	11/18/2009 0933
680-52735-2	BSA-MW-03D-F(0.2) -1109	Water	11/17/2009 0950	11/18/2009 0933
680-52735-3EB	BSA-MW-03D-1109-EB	Water	11/17/2009 0920	11/18/2009 0933
680-52735-4	BSA-MW-02D-1109	Water	11/17/2009 1145	11/18/2009 0933
680-52735-5	BSA-MW-02D-F (0.2) -1109	Water	11/17/2009 1145	11/18/2009 0933
680-52735-6	CPA-MW-03D-1109	Water	11/17/2009 1355	11/18/2009 0933
680-52735-7	CPA-MW-03D-F (0.2) -1109	Water	11/17/2009 1355	11/18/2009 0933
680-52735-8TB	4Q009 LTM Trip Blank #2	Water	11/17/2009 0000	11/18/2009 0933
680-52785-1	BSA-MW-01S-1109	Water	11/18/2009 0935	11/19/2009 0952
680-52785-2	BSA-MW-01S-F(0.2)-1109	Water	11/18/2009 0935	11/19/2009 0952
680-52785-3	CPA-MW-02D-1109	Water	11/18/2009 1100	11/19/2009 0952
680-52785-4	CPA-MW-02D-F(0.2)-1109	Water	11/18/2009 1100	11/19/2009 0952
680-52785-5FD	CPA-MW-02D-1109-AD	Water	11/18/2009 1100	11/19/2009 0952
680-52785-6	CPA-MW-01D-1109	Water	11/18/2009 1340	11/19/2009 0952
680-52785-7	CPA-MW-01D-F(0.2)-1109	Water	11/18/2009 1340	11/19/2009 0952
680-52785-8TB	4Q09 LTM Trip Blank #3	Water	11/18/2009 0000	11/19/2009 0952
680-52871-1	CPA-MW-05D-1109	Water	11/19/2009 1420	11/20/2009 0905
680-52871-2	CPA-MW-05D-F(0.2)-1109	Water	11/19/2009 1420	11/20/2009 0905
680-52871-3	4Q09 LTM Trip Blank #4	Water	11/19/2009 0000	11/20/2009 0905

JAN 19 2010

SAMPLE RESULTS

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-04D-1109**

Lab Sample ID: 680-52699-1
Client Matrix: Water

Date Sampled: 11/16/2009 1000
Date Received: 11/17/2009 1218

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154778	Instrument ID:	MSO2
Preparation:	5030B		Lab File ID:	o3338.d
Dilution:	20		Initial Weight/Volume:	5 mL
Date Analyzed:	11/27/2009 1407		Final Weight/Volume:	5 mL
Date Prepared:	11/27/2009 1407			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	23		20
Chlorobenzene	2400		20
1,2-Dichlorobenzene	26		20
1,3-Dichlorobenzene	20	U	20
1,4-Dichlorobenzene	80		20

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	99		75 - 120
Dibromofluoromethane	108		75 - 121
Toluene-d8 (Surr)	103		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-05D-1109**

Lab Sample ID: 680-52699-3
Client Matrix: Water

Date Sampled: 11/16/2009 1250
Date Received: 11/17/2009 1218

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154766	Instrument ID:	MSO2
Preparation:	5030B		Lab File ID:	o3299.d
Dilution:	5.0		Initial Weight/Volume:	5 mL
Date Analyzed:	11/26/2009 1301		Final Weight/Volume:	5 mL
Date Prepared:	11/26/2009 1301			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	5.0	U	5.0
Chlorobenzene	300		5.0
1,2-Dichlorobenzene	150		5.0
1,3-Dichlorobenzene	16		5.0
1,4-Dichlorobenzene	150		5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		75 - 120
Dibromofluoromethane	100		75 - 121
Toluene-d8 (Surr)	97		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-04D-1109**

Lab Sample ID: 680-52699-5
Client Matrix: Water

Date Sampled: 11/16/2009 1445
Date Received: 11/17/2009 1218

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154766	Instrument ID:	MSO2
Preparation:	5030B		Lab File ID:	o3301.d
Dilution:	10		Initial Weight/Volume:	5 mL
Date Analyzed:	11/26/2009 1330		Final Weight/Volume:	5 mL
Date Prepared:	11/26/2009 1330			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	10	U	10
Chlorobenzene	750		10
1,2-Dichlorobenzene	12		10
1,3-Dichlorobenzene	10	U	10
1,4-Dichlorobenzene	19		10

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		75 - 120
Dibromofluoromethane	103		75 - 121
Toluene-d8 (Surr)	99		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **4Q09 LTM Trip Blank #1**

Lab Sample ID: 680-52699-7TB
Client Matrix: Water

Date Sampled: 11/16/2009 0000
Date Received: 11/17/2009 1218

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154766	Instrument ID:	MSO2
Preparation:	5030B		Lab File ID:	o3295.d
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	11/26/2009 1202		Final Weight/Volume:	5 mL
Date Prepared:	11/26/2009 1202			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	97		75 - 120
Dibromofluoromethane	104		75 - 121
Toluene-d8 (Surr)	98		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-03D-1109**

Lab Sample ID: 680-52735-1
Client Matrix: Water

Date Sampled: 11/17/2009 0950
Date Received: 11/18/2009 0933

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154374	Instrument ID:	MSP2
Preparation:	5030B		Lab File ID:	p212.d
Dilution:	10		Initial Weight/Volume:	5 mL
Date Analyzed:	11/23/2009 0500		Final Weight/Volume:	5 mL
Date Prepared:	11/23/2009 0500			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	78		10
Chlorobenzene	1300		10
1,2-Dichlorobenzene	39		10
1,3-Dichlorobenzene	10	U	10
1,4-Dichlorobenzene	460		10

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	103		75 - 120
Dibromofluoromethane	87		75 - 121
Toluene-d8 (Surr)	102		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-03D-1109-EB**

Lab Sample ID: 680-52735-3EB
Client Matrix: Water

Date Sampled: 11/17/2009 0920
Date Received: 11/18/2009 0933

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154269	Instrument ID:	MSP2
Preparation:	5030B		Lab File ID:	p192.d
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	11/22/2009 0341		Final Weight/Volume:	5 mL
Date Prepared:	11/22/2009 0341			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		75 - 120
Dibromofluoromethane	91		75 - 121
Toluene-d8 (Surr)	101		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-02D-1109**

Lab Sample ID: 680-52735-4
Client Matrix: Water

Date Sampled: 11/17/2009 1145
Date Received: 11/18/2009 0933

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154374	Instrument ID:	MSP2
Preparation:	5030B		Lab File ID:	p214.d
Dilution:	1000		Initial Weight/Volume:	5 mL
Date Analyzed:	11/23/2009 0529		Final Weight/Volume:	5 mL
Date Prepared:	11/23/2009 0529			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	69000		1000
Chlorobenzene	2600		1000
1,2-Dichlorobenzene	1000	U	1000
1,3-Dichlorobenzene	1000	U	1000
1,4-Dichlorobenzene	1000	U	1000

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		75 - 120
Dibromofluoromethane	90		75 - 121
Toluene-d8 (Surr)	100		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-03D-1109**

Lab Sample ID: 680-52735-6
Client Matrix: Water

Date Sampled: 11/17/2009 1355
Date Received: 11/18/2009 0933

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154495	Instrument ID:	MSP2
Preparation:	5030B		Lab File ID:	p236.d
Dilution:	5.0		Initial Weight/Volume:	5 mL
Date Analyzed:	11/23/2009 1938		Final Weight/Volume:	5 mL
Date Prepared:	11/23/2009 1938			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	5.0	U	5.0
Chlorobenzene	520		5.0
1,2-Dichlorobenzene	13		5.0
1,3-Dichlorobenzene	5.0	U	5.0
1,4-Dichlorobenzene	20		5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	102		75 - 120
Dibromofluoromethane	92		75 - 121
Toluene-d8 (Surr)	103		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **4Q009 LTM Trip Blank #2**

Lab Sample ID: 680-52735-8TB
Client Matrix: Water

Date Sampled: 11/17/2009 0000
Date Received: 11/18/2009 0933

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154269	Instrument ID:	MSP2
Preparation:	5030B		Lab File ID:	p190.d
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	11/22/2009 0319		Final Weight/Volume:	5 mL
Date Prepared:	11/22/2009 0319			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	96		75 - 120
Dibromofluoromethane	92		75 - 121
Toluene-d8 (Surr)	100		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-01S-1109**

Lab Sample ID: 680-52785-1
Client Matrix: Water

Date Sampled: 11/18/2009 0935
Date Received: 11/19/2009 0952

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154872	Instrument ID:	MSO
Preparation:	5030B		Lab File ID:	o3407.d
Dilution:	5000		Initial Weight/Volume:	5 mL
Date Analyzed:	11/30/2009 1740		Final Weight/Volume:	5 mL
Date Prepared:	11/30/2009 1740			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	600000		5000
Chlorobenzene	5000	U	5000
1,2-Dichlorobenzene	5000	U	5000
1,3-Dichlorobenzene	5000	U	5000
1,4-Dichlorobenzene	5000	U	5000

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	104		75 - 120
Dibromofluoromethane	104		75 - 121
Toluene-d8 (Surr)	100		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-02D-1109**

Lab Sample ID: 680-52785-3
Client Matrix: Water

Date Sampled: 11/18/2009 1100
Date Received: 11/19/2009 0952

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154872	Instrument ID:	MSO
Preparation:	5030B		Lab File ID:	o3409.d
Dilution:	200		Initial Weight/Volume:	5 mL
Date Analyzed:	11/30/2009 1810		Final Weight/Volume:	5 mL
Date Prepared:	11/30/2009 1810			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	710		200
Chlorobenzene	26000		200
1,2-Dichlorobenzene	1800		200
1,3-Dichlorobenzene	500		200
1,4-Dichlorobenzene	13000		200

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	104		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surr)	100		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-02D-1109-AD**

Lab Sample ID: 680-52785-5FD
Client Matrix: Water

Date Sampled: 11/18/2009 1100
Date Received: 11/19/2009 0952

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154872	Instrument ID:	MSO
Preparation:	5030B		Lab File ID:	o3411.d
Dilution:	200		Initial Weight/Volume:	5 mL
Date Analyzed:	11/30/2009 1839		Final Weight/Volume:	5 mL
Date Prepared:	11/30/2009 1839			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	770		200
Chlorobenzene	28000		200
1,2-Dichlorobenzene	2000		200
1,3-Dichlorobenzene	540		200
1,4-Dichlorobenzene	13000		200

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	102		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surr)	101		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-01D-1109**

Lab Sample ID: 680-52785-6
Client Matrix: Water

Date Sampled: 11/18/2009 1340
Date Received: 11/19/2009 0952

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154872	Instrument ID:	MSO
Preparation:	5030B		Lab File ID:	o3413.d
Dilution:	200		Initial Weight/Volume:	5 mL
Date Analyzed:	11/30/2009 1908		Final Weight/Volume:	5 mL
Date Prepared:	11/30/2009 1908			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	6000		200
Chlorobenzene	15000		200
1,2-Dichlorobenzene	18000		200
1,3-Dichlorobenzene	1300		200
1,4-Dichlorobenzene	11000		200

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	103		75 - 120
Dibromofluoromethane	102		75 - 121
Toluene-d8 (Surr)	100		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **4Q09 LTM Trip Blank #3**

Lab Sample ID: 680-52785-8TB
Client Matrix: Water

Date Sampled: 11/18/2009 0000
Date Received: 11/19/2009 0952

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-154872	Instrument ID:	MSO
Preparation:	5030B		Lab File ID:	o3405.d
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	11/30/2009 1711		Final Weight/Volume:	5 mL
Date Prepared:	11/30/2009 1711			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	103		75 - 120
Dibromofluoromethane	106		75 - 121
Toluene-d8 (Surr)	100		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-05D-1109**

Lab Sample ID: 680-52871-1
Client Matrix: Water

Date Sampled: 11/19/2009 1420
Date Received: 11/20/2009 0905

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155095	Instrument ID:	MSO
Preparation:	5030B		Lab File ID:	o3479.d
Dilution:	10		Initial Weight/Volume:	5 mL
Date Analyzed:	12/02/2009 1657 /		Final Weight/Volume:	5 mL
Date Prepared:	12/02/2009 1657			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	18		10
Chlorobenzene	1300		10
1,2-Dichlorobenzene	290		10
1,3-Dichlorobenzene	30		10
1,4-Dichlorobenzene	280		10

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		75 - 120
Dibromofluoromethane	108		75 - 121
Toluene-d8 (Surr)	99		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **4Q09 LTM Trip Blank #4**

Lab Sample ID: 680-52871-3
Client Matrix: Water

Date Sampled: 11/19/2009 0000
Date Received: 11/20/2009 0905

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-155095	Instrument ID:	MSO
Preparation:	5030B		Lab File ID:	o3463.d
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	12/02/2009 1301		Final Weight/Volume:	5 mL
Date Prepared:	12/02/2009 1301			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	103		75 - 120
Dibromofluoromethane	110		75 - 121
Toluene-d8 (Surr)	97		75 - 120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-04D-1109**

Lab Sample ID: 680-52699-1
Client Matrix: Water

Date Sampled: 11/16/2009 1000
Date Received: 11/17/2009 1218

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154421	Instrument ID:	VGUFID2
Preparation:	N/A		Lab File ID:	U112309.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1633		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Ethane	6.1		0.35
Ethylene	0.33	U	0.33
Methane	140		0.19

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-05D-1109**

Lab Sample ID: 680-52699-3
Client Matrix: Water

Date Sampled: 11/16/2009 1250
Date Received: 11/17/2009 1218

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154421	Instrument ID:	VGUFID2
Preparation:	N/A		Lab File ID:	U112310.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1646		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Ethane	23		0.35
Ethylene	0.62		0.33

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-05D-1109**

Lab Sample ID: 680-52699-3
Client Matrix: Water

Date Sampled: 11/16/2009 1250
Date Received: 11/17/2009 1218

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154423	Instrument ID:	VGUTCD1
Preparation:	N/A		Lab File ID:	U112310.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1646		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Methane	12000		0.19

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-04D-1109**

Lab Sample ID: 680-52699-5
Client Matrix: Water

Date Sampled: 11/16/2009 1445
Date Received: 11/17/2009 1218

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154421	Instrument ID:	VGUFID2
Preparation:	N/A		Lab File ID:	U112311.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1658		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Ethane	19		0.35
Ethylene	0.33	U	0.33

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-04D-1109**

Lab Sample ID: 680-52699-5
Client Matrix: Water

Date Sampled: 11/16/2009 1445
Date Received: 11/17/2009 1218

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154423	Instrument ID:	VGUTCD1
Preparation:	N/A		Lab File ID:	U112311.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1658		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Methane	5100		0.19

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-03D-1109**

Lab Sample ID: 680-52735-1
Client Matrix: Water

Date Sampled: 11/17/2009 0950
Date Received: 11/18/2009 0933

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154421	Instrument ID:	VGUFID2
Preparation:	N/A		Lab File ID:	U112312.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1711		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Ethane	2.3		0.35
Ethylene	5.5		0.33

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-03D-1109**

Lab Sample ID: 680-52735-1
Client Matrix: Water

Date Sampled: 11/17/2009 0950
Date Received: 11/18/2009 0933

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154423	Instrument ID:	VGUTCD1
Preparation:	N/A		Lab File ID:	U112312.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1711		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Methane	400		0.19

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-02D-1109**

Lab Sample ID: 680-52735-4
Client Matrix: Water

Date Sampled: 11/17/2009 1145
Date Received: 11/18/2009 0933

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154421	Instrument ID:	VGUFID2
Preparation:	N/A		Lab File ID:	U112313.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1724		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Ethane	14		0.35
Ethylene	0.33	U	0.33

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-02D-1109**

Lab Sample ID: 680-52735-4
Client Matrix: Water

Date Sampled: 11/17/2009 1145
Date Received: 11/18/2009 0933

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154423	Instrument ID:	VGUTCD1
Preparation:	N/A		Lab File ID:	U112313.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1724		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Methane	15000		0.19

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-03D-1109**

Lab Sample ID: 680-52735-6
Client Matrix: Water

Date Sampled: 11/17/2009 1355
Date Received: 11/18/2009 0933

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154421	Instrument ID:	VGUFID2
Preparation:	N/A		Lab File ID:	U112314.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1737		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Ethane	35		0.35
Ethylene	0.33	U	0.33

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-03D-1109**

Lab Sample ID: 680-52735-6
Client Matrix: Water

Date Sampled: 11/17/2009 1355
Date Received: 11/18/2009 0933

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154423	Instrument ID:	VGUTCD1
Preparation:	N/A		Lab File ID:	U112314.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1737		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Methane	36000		0.19

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-01S-1109**

Lab Sample ID: 680-52785-1
Client Matrix: Water

Date Sampled: 11/18/2009 0935
Date Received: 11/19/2009 0952

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154421	Instrument ID:	VGUFID2
Preparation:	N/A		Lab File ID:	U112315.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1750		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Ethane	0.35	U	0.35
Ethylene	0.33	U	0.33

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-01S-1109**

Lab Sample ID: 680-52785-1
Client Matrix: Water

Date Sampled: 11/18/2009 0935
Date Received: 11/19/2009 0952

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154423	Instrument ID:	VGUTCD1
Preparation:	N/A		Lab File ID:	U112315.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1750		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Methane	15000		0.19

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-02D-1109**

Lab Sample ID: 680-52785-3
Client Matrix: Water

Date Sampled: 11/18/2009 1100
Date Received: 11/19/2009 0952

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154421	Instrument ID:	VGUFID2
Preparation:	N/A		Lab File ID:	U112316.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1802		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Ethane	9.6		0.35
Ethylene	0.76		0.33

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-02D-1109**

Lab Sample ID: 680-52785-3
Client Matrix: Water

Date Sampled: 11/18/2009 1100
Date Received: 11/19/2009 0952

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154423	Instrument ID:	VGUTCD1
Preparation:	N/A		Lab File ID:	U112316.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1802		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Methane	2600		0.19

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-01D-1109**

Lab Sample ID: 680-52785-6
Client Matrix: Water

Date Sampled: 11/18/2009 1340
Date Received: 11/19/2009 0952

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154421	Instrument ID:	VGUFID2
Preparation:	N/A		Lab File ID:	U112317.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1815		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Ethane	72		0.35
Ethylene	0.33	U	0.33

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-01D-1109**

Lab Sample ID: 680-52785-6
Client Matrix: Water

Date Sampled: 11/18/2009 1340
Date Received: 11/19/2009 0952

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154423	Instrument ID:	VGUTCD1
Preparation:	N/A		Lab File ID:	U112317.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1815		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Methane	32000		0.19

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-05D-1109**

Lab Sample ID: 680-52871-1
Client Matrix: Water

Date Sampled: 11/19/2009 1420
Date Received: 11/20/2009 0905

RSK-175 Dissolved Gases (GC)

Method:	RSK-175	Analysis Batch: 680-154676	Instrument ID:	VGUFID2
Preparation:	N/A		Lab File ID:	U112502.D
Dilution:	1.0		Initial Weight/Volume:	17000 uL
Date Analyzed:	11/25/2009 1155		Final Weight/Volume:	17 mL
Date Prepared:			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	RL
Ethane	5.0		0.35
Ethylene	0.33	U	0.33
Methane	27		0.19

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-04D-1109**

Lab Sample ID: 680-52699-1
Client Matrix: Water

Date Sampled: 11/16/2009 1000
Date Received: 11/17/2009 1218

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 680-154024		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-153854		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	11/18/2009 2052			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2009 1226				

Analyte	Result (mg/L)	Qualifier	RL
Iron	9.1		0.050
Manganese	0.67		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-04D-F(0.2)-1109**

Lab Sample ID: 680-52699-2
Client Matrix: Water

Date Sampled: 11/16/2009 1000
Date Received: 11/17/2009 1218

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 680-154024		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-153854		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	11/18/2009 2108			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2009 1226				

Analyte	Result (mg/L)	Qualifier	RL
Iron, Dissolved	8.5		0.050
Manganese, Dissolved	0.64		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-05D-1109**

Lab Sample ID: 680-52699-3
Client Matrix: Water

Date Sampled: 11/16/2009 1250
Date Received: 11/17/2009 1218

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 680-154024		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-153854		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	11/18/2009 2114			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2009 1226				

Analyte	Result (mg/L)	Qualifier	RL
Iron	16		0.050
Manganese	0.47		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-05D-F(0.2)-1109**

Lab Sample ID: 680-52699-4
Client Matrix: Water

Date Sampled: 11/16/2009 1250
Date Received: 11/17/2009 1218

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 680-154024	Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-153854	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	11/18/2009 2119		Final Weight/Volume:	50 mL
Date Prepared:	11/18/2009 1226			

Analyte	Result (mg/L)	Qualifier	RL
Iron, Dissolved	15		0.050
Manganese, Dissolved	0.45		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-04D-1109**

Lab Sample ID: 680-52699-5
Client Matrix: Water

Date Sampled: 11/16/2009 1445
Date Received: 11/17/2009 1218

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 680-154024	Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-153854	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	11/18/2009 2124		Final Weight/Volume:	50 mL
Date Prepared:	11/18/2009 1226			

Analyte	Result (mg/L)	Qualifier	RL
Iron	10		0.050
Manganese	0.25		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-04D-F(0.2)-1109**

Lab Sample ID: 680-52699-6
Client Matrix: Water

Date Sampled: 11/16/2009 1445
Date Received: 11/17/2009 1218

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 680-154024	Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-153854	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	11/18/2009 2130		Final Weight/Volume:	50 mL
Date Prepared:	11/18/2009 1226			

Analyte	Result (mg/L)	Qualifier	RL
Iron, Dissolved	10		0.050
Manganese, Dissolved	0.25		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-03D-1109**

Lab Sample ID: 680-52735-1
Client Matrix: Water

Date Sampled: 11/17/2009 0950
Date Received: 11/18/2009 0933

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2134			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron	9.6		0.050
Manganese	0.47		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-03D-F(0.2)-1109**

Lab Sample ID: 680-52735-2
Client Matrix: Water

Date Sampled: 11/17/2009 0950
Date Received: 11/18/2009 0933

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 680-155356	Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2201		Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452			

Analyte	Result (mg/L)	Qualifier	RL
Iron, Dissolved	10		0.050
Manganese, Dissolved	0.52		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-02D-1109**

Lab Sample ID: 680-52735-4
Client Matrix: Water

Date Sampled: 11/17/2009 1145
Date Received: 11/18/2009 0933

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2206			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron	1.8		0.050
Manganese	0.31		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-02D-F (0.2)-1109**

Lab Sample ID: 680-52735-5
Client Matrix: Water

Date Sampled: 11/17/2009 1145
Date Received: 11/18/2009 0933

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2212			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron, Dissolved	1.8		0.050
Manganese, Dissolved	0.32		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-03D-1109**

Lab Sample ID: 680-52735-6
Client Matrix: Water

Date Sampled: 11/17/2009 1355
Date Received: 11/18/2009 0933

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2228			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron	16		0.050
Manganese	0.76		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-03D-F (0.2)-1109**

Lab Sample ID: 680-52735-7
Client Matrix: Water

Date Sampled: 11/17/2009 1355
Date Received: 11/18/2009 0933

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2233			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron, Dissolved	16		0.050
Manganese, Dissolved	0.75		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-01S-1109**

Lab Sample ID: 680-52785-1
Client Matrix: Water

Date Sampled: 11/18/2009 0935
Date Received: 11/19/2009 0952

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 680-155356	Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2239		Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452			

Analyte	Result (mg/L)	Qualifier	RL
Iron	2.2		0.050
Manganese	0.41		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **BSA-MW-01S-F(0.2)-1109**

Lab Sample ID: 680-52785-2
Client Matrix: Water

Date Sampled: 11/18/2009 0935
Date Received: 11/19/2009 0952

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2244			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron, Dissolved	1.7		0.050
Manganese, Dissolved	0.38		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-02D-1109**

Lab Sample ID: 680-52785-3
Client Matrix: Water

Date Sampled: 11/18/2009 1100
Date Received: 11/19/2009 0952

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2249			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron	6.1		0.050
Manganese	0.35		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-02D-F(0.2)-1109**

Lab Sample ID: 680-52785-4
Client Matrix: Water

Date Sampled: 11/18/2009 1100
Date Received: 11/19/2009 0952

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 680-155356	Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2255		Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452			

Analyte	Result (mg/L)	Qualifier	RL
Iron, Dissolved	5.7		0.050
Manganese, Dissolved	0.34		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-01D-1109**

Lab Sample ID: 680-52785-6
Client Matrix: Water

Date Sampled: 11/18/2009 1340
Date Received: 11/19/2009 0952

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2300			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron	1.3		0.050
Manganese	0.086		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-01D-F(0.2)-1109**

Lab Sample ID: 680-52785-7
Client Matrix: Water

Date Sampled: 11/18/2009 1340
Date Received: 11/19/2009 0952

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2305			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron, Dissolved	1.2		0.050
Manganese, Dissolved	0.078		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-05D-1109**

Lab Sample ID: 680-52871-1
Client Matrix: Water

Date Sampled: 11/19/2009 1420
Date Received: 11/20/2009 0905

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2311			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron	82		0.050
Manganese	2.8		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Client Sample ID: **CPA-MW-05D-F(0.2)-1109**

Lab Sample ID: 680-52871-2
Client Matrix: Water

Date Sampled: 11/19/2009 1420
Date Received: 11/20/2009 0905

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 680-155356		Instrument ID:	ICPD
Preparation:	3005A	Prep Batch: 680-155202		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	12/04/2009 2316			Final Weight/Volume:	50 mL
Date Prepared:	12/03/2009 1452				

Analyte	Result (mg/L)	Qualifier	RL
Iron, Dissolved	87		0.050
Manganese, Dissolved	3.0		0.010

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **BSA-MW-04D-1109**

Lab Sample ID: 680-52699-1
Client Matrix: Water

Date Sampled: 11/16/2009 1000
Date Received: 11/17/2009 1218

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	110	"J"	mg/L	2.0	2.0	325.2
Analysis Batch: 680-155684	Date Analyzed: 12/09/2009 1249 ✓					
Nitrate as N	0.050	U	mg/L	0.050	1.0	353.2
Analysis Batch: 680-154308	Date Analyzed: 11/17/2009 1948 ✓					
Sulfate	100		mg/L	50	10	375.4
Analysis Batch: 680-155685	Date Analyzed: 12/09/2009 1011 ✓					
Total Organic Carbon	4.7		mg/L	1.0	1.0	415.1
Analysis Batch: 680-155525	Date Analyzed: 12/07/2009 2117 ✓					

Analyte	Result	Qual	Units	RL	Dil	Method
Alkalinity	600		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0901 ✓					
Carbon Dioxide, Free	58		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0901 ✓					

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **BSA-MW-04D-F(0.2)-1109**

Lab Sample ID: 680-52699-2
Client Matrix: Water

Date Sampled: 11/16/2009 1000
Date Received: 11/17/2009 1218

Analyte	Result	Qual	Units	RL	Dil	Method
Dissolved Organic Carbon-Dissolved	4.3		mg/L	1.0	1.0	415.1

Analysis Batch: 680-155513 Date Analyzed: 11/24/2009 1057

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **BSA-MW-05D-1109**

Lab Sample ID: 680-52699-3
Client Matrix: Water

Date Sampled: 11/16/2009 1250
Date Received: 11/17/2009 1218

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	290		mg/L	5.0	5.0	325.2
Analysis Batch: 680-155684	Date Analyzed: 12/09/2009 1252					
Nitrate as N	0.050	U	mg/L	0.050	1.0	353.2
Analysis Batch: 680-154308	Date Analyzed: 11/17/2009 1948					
Sulfate	5.0	U	mg/L	5.0	1.0	375.4
Analysis Batch: 680-154298	Date Analyzed: 11/20/2009 1649					
Total Organic Carbon	5.3		mg/L	1.0	1.0	415.1
Analysis Batch: 680-155525	Date Analyzed: 12/07/2009 2133					

Analyte	Result	Qual	Units	RL	Dil	Method
Alkalinity	760		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0911					
Carbon Dioxide, Free	67		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0911					

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **BSA-MW-05D-F(0.2)-1109**

Lab Sample ID: 680-52699-4
Client Matrix: Water

Date Sampled: 11/16/2009 1250
Date Received: 11/17/2009 1218

Analyte	Result	Qual	Units	RL	Dil	Method
Dissolved Organic Carbon-Dissolved	5.0		mg/L	1.0	1.0	415.1

Analysis Batch: 680-155513 Date Analyzed: 11/24/2009 1057

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **CPA-MW-04D-1109**

Lab Sample ID: 680-52699-5
Client Matrix: Water

Date Sampled: 11/16/2009 1445
Date Received: 11/17/2009 1218

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	250		mg/L	5.0	5.0	325.2
Analysis Batch: 680-155684	Date Analyzed: 12/09/2009 1252					
Nitrate as N	0.050	U	mg/L	0.050	1.0	353.2
Analysis Batch: 680-154308	Date Analyzed: 11/17/2009 1948					
Sulfate	36		mg/L	25	5.0	375.4
Analysis Batch: 680-155685	Date Analyzed: 12/09/2009 1015					
Total Organic Carbon	5.6		mg/L	1.0	1.0	415.1
Analysis Batch: 680-155525	Date Analyzed: 12/07/2009 2150					

Analyte	Result	Qual	Units	RL	Dil	Method
Alkalinity	770		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0923					
Carbon Dioxide, Free	61		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0923					

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **CPA-MW-04D-F(0.2)-1109**

Lab Sample ID: 680-52699-6
Client Matrix: Water

Date Sampled: 11/16/2009 1445
Date Received: 11/17/2009 1218

Analyte	Result	Qual	Units	RL	Dil	Method
Dissolved Organic Carbon-Dissolved	5.4		mg/L	1.0	1.0	415.1

Analysis Batch: 680-155513 Date Analyzed: 11/24/2009 1057 ✓

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **BSA-MW-03D-1109**

Lab Sample ID: 680-52735-1
Client Matrix: Water

Date Sampled: 11/17/2009 0950
Date Received: 11/18/2009 0933

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	69		mg/L	1.0	1.0	325.2
Analysis Batch: 680-155684	Date Analyzed: 12/09/2009 1246					
Nitrate as N	0.050	U	mg/L	0.050	1.0	353.2
Analysis Batch: 680-154313	Date Analyzed: 11/18/2009 1602					
Sulfate	240		mg/L	50	10	375.4
Analysis Batch: 680-155685	Date Analyzed: 12/09/2009 1013					
Total Organic Carbon	8.1		mg/L	1.0	1.0	415.1
Analysis Batch: 680-155525	Date Analyzed: 12/07/2009 2204					

Analyte	Result	Qual	Units	RL	Dil	Method
Alkalinity	480		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0932					
Carbon Dioxide, Free	43		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0932					

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **BSA-MW-03D-F(0.2)-1109**

Lab Sample ID: 680-52735-2
Client Matrix: Water

Date Sampled: 11/17/2009 0950
Date Received: 11/18/2009 0933

Analyte	Result	Qual	Units	RL	Dil	Method
Dissolved Organic Carbon-Dissolved	3.0		mg/L	1.0	1.0	415.1

Analysis Batch: 680-155513 Date Analyzed: 11/24/2009 1057

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **BSA-MW-02D-1109**

Lab Sample ID: 680-52735-4
Client Matrix: Water

Date Sampled: 11/17/2009 1145
Date Received: 11/18/2009 0933

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	90		mg/L	1.0	1.0	325.2
Analysis Batch: 680-155684	Date Analyzed: 12/09/2009 1246					
Nitrate as N	0.050	U	mg/L	0.050	1.0	353.2
Analysis Batch: 680-154313	Date Analyzed: 11/18/2009 1602					
Sulfate	5.0	U	mg/L	5.0	1.0	375.4
Analysis Batch: 680-154298	Date Analyzed: 11/20/2009 1649					
Total Organic Carbon	5.1		mg/L	1.0	1.0	415.1
Analysis Batch: 680-155525	Date Analyzed: 12/07/2009 2219					

Analyte	Result	Qual	Units	RL	Dil	Method
Alkalinity	670		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0944					
Carbon Dioxide, Free	37		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0944					

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **BSA-MW-02D-F (0.2)-1109**

Lab Sample ID: 680-52735-5
Client Matrix: Water

Date Sampled: 11/17/2009 1145
Date Received: 11/18/2009 0933

Analyte	Result	Qual	Units	RL	Dil	Method
Dissolved Organic Carbon-Dissolved	4.5		mg/L	1.0	1.0	415.1

Analysis Batch: 680-155513 Date Analyzed: 11/24/2009 1057 ✓

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **CPA-MW-03D-1109**

Lab Sample ID: 680-52735-6
Client Matrix: Water

Date Sampled: 11/17/2009 1355
Date Received: 11/18/2009 0933

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	290		mg/L	5.0	5.0	325.2
Analysis Batch: 680-155684	Date Analyzed: 12/09/2009 1252					
Nitrate as N	0.050	U	mg/L	0.050	1.0	353.2
Analysis Batch: 680-154313	Date Analyzed: 11/18/2009 1602					
Sulfate	5.0	U	mg/L	5.0	1.0	375.4
Analysis Batch: 680-154298	Date Analyzed: 11/20/2009 1649					
Total Organic Carbon	8.5		mg/L	1.0	1.0	415.1
Analysis Batch: 680-155525	Date Analyzed: 12/07/2009 2316					

Analyte	Result	Qual	Units	RL	Dil	Method
Alkalinity	640		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0955					
Carbon Dioxide, Free	79		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154038	Date Analyzed: 11/19/2009 0955					

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **CPA-MW-03D-F (0.2)-1109**

Lab Sample ID: 680-52735-7
Client Matrix: Water

Date Sampled: 11/17/2009 1355
Date Received: 11/18/2009 0933

Analyte	Result	Qual	Units	RL	Dil	Method
Dissolved Organic Carbon-Dissolved	8.2		mg/L	1.0	1.0	415.1

Analysis Batch: 680-155513 Date Analyzed: 11/24/2009 1057

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **BSA-MW-01S-1109**

Lab Sample ID: 680-52785-1
Client Matrix: Water

Date Sampled: 11/18/2009 0935
Date Received: 11/19/2009 0952

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	99		mg/L	2.0	2.0	325.2
Analysis Batch: 680-155684	Date Analyzed: 12/09/2009 1249					
Nitrate as N	0.050	U	mg/L	0.050	1.0	353.2
Analysis Batch: 400-100814	Date Analyzed: 12/15/2009 1034					
Sulfate	5.0	U	mg/L	5.0	1.0	375.4
Analysis Batch: 680-154298	Date Analyzed: 11/20/2009 1649					
Total Organic Carbon	6.5		mg/L	1.0	1.0	415.1
Analysis Batch: 680-155525	Date Analyzed: 12/07/2009 2331					

Analyte	Result	Qual	Units	RL	Dil	Method
Alkalinity	790		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154151	Date Analyzed: 11/20/2009 1133					
Carbon Dioxide, Free	27		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154151	Date Analyzed: 11/20/2009 1133					

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **BSA-MW-01S-F(0.2)-1109**

Lab Sample ID: 680-52785-2
Client Matrix: Water

Date Sampled: 11/18/2009 0935
Date Received: 11/19/2009 0952

Analyte	Result	Qual	Units	RL	Dil	Method
Dissolved Organic Carbon-Dissolved	5.8		mg/L	1.0	1.0	415.1

Analysis Batch: 680-155513 Date Analyzed: 11/24/2009 1057

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **CPA-MW-02D-1109**

Lab Sample ID: 680-52785-3
Client Matrix: Water

Date Sampled: 11/18/2009 1100
Date Received: 11/19/2009 0952

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	67		mg/L	1.0	1.0	325.2
Analysis Batch: 680-155684	Date Analyzed: 12/09/2009 1246					
Nitrate as N	0.050	U	mg/L	0.050	1.0	353.2
Analysis Batch: 400-100433	Date Analyzed: 12/08/2009 1631					
Sulfate	5.0	U	mg/L	5.0	1.0	375.4
Analysis Batch: 680-154298	Date Analyzed: 11/20/2009 1651					
Total Organic Carbon	11		mg/L	1.0	1.0	415.1
Analysis Batch: 680-155525	Date Analyzed: 12/07/2009 2345					

Analyte	Result	Qual	Units	RL	Dil	Method
Alkalinity	530		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154151	Date Analyzed: 11/20/2009 1157					
Carbon Dioxide, Free	36		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154151	Date Analyzed: 11/20/2009 1157					

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **CPA-MW-02D-F(0.2)-1109**

Lab Sample ID: 680-52785-4
Client Matrix: Water

Date Sampled: 11/18/2009 1100
Date Received: 11/19/2009 0952

Analyte	Result	Qual	Units	RL	Dil	Method
Dissolved Organic Carbon-Dissolved	11		mg/L	1.0	1.0	415.1

Analysis Batch: 680-155513 Date Analyzed: 11/24/2009 1057 ✓

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **CPA-MW-01D-1109**

Lab Sample ID: 680-52785-6
Client Matrix: Water

Date Sampled: 11/18/2009 1340
Date Received: 11/19/2009 0952

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	120		mg/L	2.0	2.0	325.2
Analysis Batch: 680-155684	Date Analyzed: 12/09/2009 1252					
Nitrate as N	0.050	U	mg/L	0.050	1.0	353.2
Analysis Batch: 400-100433	Date Analyzed: 12/08/2009 1631					
Sulfate	7.7		mg/L	5.0	1.0	375.4
Analysis Batch: 680-154298	Date Analyzed: 11/20/2009 1651					
Total Organic Carbon	17		mg/L	1.0	1.0	415.1
Analysis Batch: 680-155525	Date Analyzed: 12/08/2009 0000					

Analyte	Result	Qual	Units	RL	Dil	Method
Alkalinity	1000		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154151	Date Analyzed: 11/20/2009 1147					
Carbon Dioxide, Free	5.0	U	mg/L	5.0	1.0	310.1
Analysis Batch: 680-154151	Date Analyzed: 11/20/2009 1147					

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **CPA-MW-01D-F(0.2)-1109**

Lab Sample ID: 680-52785-7
Client Matrix: Water

Date Sampled: 11/18/2009 1340
Date Received: 11/19/2009 0952

Analyte	Result	Qual	Units	RL	Dil	Method
Dissolved Organic Carbon-Dissolved	11		mg/L	1.0	1.0	415.1

Analysis Batch: 680-155513 Date Analyzed: 11/24/2009 1057

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **CPA-MW-05D-1109**

Lab Sample ID: 680-52871-1
Client Matrix: Water

Date Sampled: 11/19/2009 1420
Date Received: 11/20/2009 0905

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	310		mg/L	5.0	5.0	325.2
Analysis Batch: 680-155684	Date Analyzed: 12/09/2009 1257					
Nitrate as N	0.050	U	mg/L	0.050	1.0	353.2
Analysis Batch: 680-154340	Date Analyzed: 11/20/2009 1809					
Sulfate	1600		mg/L	500	100	375.4
Analysis Batch: 680-155685	Date Analyzed: 12/09/2009 1049					
Total Organic Carbon	3.5		mg/L	1.0	1.0	415.1
Analysis Batch: 680-155525	Date Analyzed: 12/08/2009 0014					

Analyte	Result	Qual	Units	RL	Dil	Method
Alkalinity	330		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154420	Date Analyzed: 11/23/2009 1352					
Carbon Dioxide, Free	110		mg/L	5.0	1.0	310.1
Analysis Batch: 680-154420	Date Analyzed: 11/23/2009 1352					

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

General Chemistry

Client Sample ID: **CPA-MW-05D-F(0.2)-1109**

Lab Sample ID: 680-52871-2
Client Matrix: Water

Date Sampled: 11/19/2009 1420
Date Received: 11/20/2009 0905

Analyte	Result	Qual	Units	RL	Dil	Method
Dissolved Organic Carbon-Dissolved	3.5		mg/L	1.0	1.0	415.1

Analysis Batch: 680-155513 Date Analyzed: 11/24/2009 1057

JAN 19 2010

DATA REPORTING QUALIFIERS

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Indicates the analyte was analyzed for but not detected.
GC VOA		
	U	Indicates the analyte was analyzed for but not detected.
Metals		
	U	Indicates the analyte was analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
General Chemistry		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

JAN 19 2010

QUALITY CONTROL RESULTS

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:680-154269					
LCS 680-154269/25	Lab Control Sample	T	Water	8260B	
LCSD 680-154269/26	Lab Control Sample Duplicate	T	Water	8260B	
MB 680-154269/28	Method Blank	T	Water	8260B	
680-52735-3EB	BSA-MW-03D-1109-EB	T	Water	8260B	
680-52735-8TB	4Q009 LTM Trip Blank #2	T	Water	8260B	
Analysis Batch:680-154374					
LCS 680-154374/11	Lab Control Sample	T	Water	8260B	
LCSD 680-154374/12	Lab Control Sample Duplicate	T	Water	8260B	
MB 680-154374/14	Method Blank	T	Water	8260B	
680-52735-1	BSA-MW-03D-1109	T	Water	8260B	
680-52735-4	BSA-MW-02D-1109	T	Water	8260B	
Analysis Batch:680-154495					
LCS 680-154495/8	Lab Control Sample	T	Water	8260B	
LCSD 680-154495/9	Lab Control Sample Duplicate	T	Water	8260B	
MB 680-154495/11	Method Blank	T	Water	8260B	
680-52735-6	CPA-MW-03D-1109	T	Water	8260B	
Analysis Batch:680-154766					
LCS 680-154766/17	Lab Control Sample	T	Water	8260B	
LCSD 680-154766/18	Lab Control Sample Duplicate	T	Water	8260B	
MB 680-154766/20	Method Blank	T	Water	8260B	
680-52699-3	BSA-MW-05D-1109	T	Water	8260B	
680-52699-3MS	Matrix Spike	T	Water	8260B	
680-52699-3MSD	Matrix Spike Duplicate	T	Water	8260B	
680-52699-5	CPA-MW-04D-1109	T	Water	8260B	
680-52699-7TB	4Q09 LTM Trip Blank #1	T	Water	8260B	
Analysis Batch:680-154778					
LCS 680-154778/20	Lab Control Sample	T	Water	8260B	
LCSD 680-154778/21	Lab Control Sample Duplicate	T	Water	8260B	
MB 680-154778/23	Method Blank	T	Water	8260B	
680-52699-1	BSA-MW-04D-1109	T	Water	8260B	
Analysis Batch:680-154872					
LCS 680-154872/6	Lab Control Sample	T	Water	8260B	
MB 680-154872/8	Method Blank	T	Water	8260B	
680-52785-1	BSA-MW-01S-1109	T	Water	8260B	
680-52785-3	CPA-MW-02D-1109	T	Water	8260B	
680-52785-5FD	CPA-MW-02D-1109-AD	T	Water	8260B	
680-52785-6	CPA-MW-01D-1109	T	Water	8260B	
680-52785-8TB	4Q09 LTM Trip Blank #3	T	Water	8260B	

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:680-155095					
LCS 680-155095/4	Lab Control Sample	T	Water	8260B	
LCSD 680-155095/5	Lab Control Sample Duplicate	T	Water	8260B	
MB 680-155095/8	Method Blank	T	Water	8260B	
680-52871-1	CPA-MW-05D-1109	T	Water	8260B	
680-52871-3	4Q09 LTM Trip Blank #4	T	Water	8260B	

Report Basis
T = Total

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC VOA					
Analysis Batch:680-154421					
LCS 680-154421/19	Lab Control Sample	T	Water	RSK-175	
LCSD 680-154421/20	Lab Control Sample Duplicate	T	Water	RSK-175	
MB 680-154421/21	Method Blank	T	Water	RSK-175	
680-52699-1	BSA-MW-04D-1109	T	Water	RSK-175	
680-52699-3	BSA-MW-05D-1109	T	Water	RSK-175	
680-52699-5	CPA-MW-04D-1109	T	Water	RSK-175	
680-52735-1	BSA-MW-03D-1109	T	Water	RSK-175	
680-52735-4	BSA-MW-02D-1109	T	Water	RSK-175	
680-52735-6	CPA-MW-03D-1109	T	Water	RSK-175	
680-52785-1	BSA-MW-01S-1109	T	Water	RSK-175	
680-52785-3	CPA-MW-02D-1109	T	Water	RSK-175	
680-52785-6	CPA-MW-01D-1109	T	Water	RSK-175	
Analysis Batch:680-154423					
LCS 680-154423/17	Lab Control Sample	T	Water	RSK-175	
LCSD 680-154423/18	Lab Control Sample Duplicate	T	Water	RSK-175	
MB 680-154423/19	Method Blank	T	Water	RSK-175	
680-52699-3	BSA-MW-05D-1109	T	Water	RSK-175	
680-52699-5	CPA-MW-04D-1109	T	Water	RSK-175	
680-52735-1	BSA-MW-03D-1109	T	Water	RSK-175	
680-52735-4	BSA-MW-02D-1109	T	Water	RSK-175	
680-52735-6	CPA-MW-03D-1109	T	Water	RSK-175	
680-52785-1	BSA-MW-01S-1109	T	Water	RSK-175	
680-52785-3	CPA-MW-02D-1109	T	Water	RSK-175	
680-52785-6	CPA-MW-01D-1109	T	Water	RSK-175	
Analysis Batch:680-154676					
LCS 680-154676/11	Lab Control Sample	T	Water	RSK-175	
LCSD 680-154676/12	Lab Control Sample Duplicate	T	Water	RSK-175	
MB 680-154676/13	Method Blank	T	Water	RSK-175	
680-52871-1	CPA-MW-05D-1109	T	Water	RSK-175	

Report Basis
T = Total

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 680-153854					
LCS 680-153854/16-A	Lab Control Sample	R	Water	3005A	
MB 680-153854/15-A	Method Blank	R	Water	3005A	
680-52699-1	BSA-MW-04D-1109	R	Water	3005A	
680-52699-2	BSA-MW-04D-F(0.2)-1109	D	Water	3005A	
680-52699-3	BSA-MW-05D-1109	R	Water	3005A	
680-52699-4	BSA-MW-05D-F(0.2)-1109	D	Water	3005A	
680-52699-5	CPA-MW-04D-1109	R	Water	3005A	
680-52699-6	CPA-MW-04D-F(0.2)-1109	D	Water	3005A	
Analysis Batch:680-154024					
LCS 680-153854/16-A	Lab Control Sample	R	Water	6010B	680-153854
MB 680-153854/15-A	Method Blank	R	Water	6010B	680-153854
680-52699-1	BSA-MW-04D-1109	R	Water	6010B	680-153854
680-52699-2	BSA-MW-04D-F(0.2)-1109	D	Water	6010B	680-153854
680-52699-3	BSA-MW-05D-1109	R	Water	6010B	680-153854
680-52699-4	BSA-MW-05D-F(0.2)-1109	D	Water	6010B	680-153854
680-52699-5	CPA-MW-04D-1109	R	Water	6010B	680-153854
680-52699-6	CPA-MW-04D-F(0.2)-1109	D	Water	6010B	680-153854
Prep Batch: 680-155202					
LCS 680-155202/16-A	Lab Control Sample	R	Water	3005A	
MB 680-155202/15-A	Method Blank	R	Water	3005A	
680-52735-1	BSA-MW-03D-1109	R	Water	3005A	
680-52735-1MS	Matrix Spike	R	Water	3005A	
680-52735-1MSD	Matrix Spike Duplicate	R	Water	3005A	
680-52735-2	BSA-MW-03D-F(0.2)-1109	D	Water	3005A	
680-52735-4	BSA-MW-02D-1109	R	Water	3005A	
680-52735-5	BSA-MW-02D-F (0.2)-1109	D	Water	3005A	
680-52735-6	CPA-MW-03D-1109	R	Water	3005A	
680-52735-7	CPA-MW-03D-F (0.2)-1109	D	Water	3005A	
680-52785-1	BSA-MW-01S-1109	R	Water	3005A	
680-52785-2	BSA-MW-01S-F(0.2)-1109	D	Water	3005A	
680-52785-3	CPA-MW-02D-1109	R	Water	3005A	
680-52785-4	CPA-MW-02D-F(0.2)-1109	D	Water	3005A	
680-52785-6	CPA-MW-01D-1109	R	Water	3005A	
680-52785-7	CPA-MW-01D-F(0.2)-1109	D	Water	3005A	
680-52871-1	CPA-MW-05D-1109	R	Water	3005A	
680-52871-2	CPA-MW-05D-F(0.2)-1109	D	Water	3005A	

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:680-155356					
LCS 680-155202/16-A	Lab Control Sample	R	Water	6010B	680-155202
MB 680-155202/15-A	Method Blank	R	Water	6010B	680-155202
680-52735-1	BSA-MW-03D-1109	R	Water	6010B	680-155202
680-52735-1MS	Matrix Spike	R	Water	6010B	680-155202
680-52735-1MSD	Matrix Spike Duplicate	R	Water	6010B	680-155202
680-52735-2	BSA-MW-03D-F(0.2)-1109	D	Water	6010B	680-155202
680-52735-4	BSA-MW-02D-1109	R	Water	6010B	680-155202
680-52735-5	BSA-MW-02D-F (0.2)-1109	D	Water	6010B	680-155202
680-52735-6	CPA-MW-03D-1109	R	Water	6010B	680-155202
680-52735-7	CPA-MW-03D-F (0.2)-1109	D	Water	6010B	680-155202
680-52785-1	BSA-MW-01S-1109	R	Water	6010B	680-155202
680-52785-2	BSA-MW-01S-F(0.2)-1109	D	Water	6010B	680-155202
680-52785-3	CPA-MW-02D-1109	R	Water	6010B	680-155202
680-52785-4	CPA-MW-02D-F(0.2)-1109	D	Water	6010B	680-155202
680-52785-6	CPA-MW-01D-1109	R	Water	6010B	680-155202
680-52785-7	CPA-MW-01D-F(0.2)-1109	D	Water	6010B	680-155202
680-52871-1	CPA-MW-05D-1109	R	Water	6010B	680-155202
680-52871-2	CPA-MW-05D-F(0.2)-1109	D	Water	6010B	680-155202

Report Basis
D = Dissolved
R = Total Recoverable

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:400-100433					
LCS 400-100433/2	Lab Control Sample	T	Water	353.2	
MB 400-100433/1	Method Blank	T	Water	353.2	
680-52785-3	CPA-MW-02D-1109	T	Water	353.2	
680-52785-6	CPA-MW-01D-1109	T	Water	353.2	
Analysis Batch:400-100814					
MB 400-100814/1	Method Blank	T	Water	353.2	
680-52785-1	BSA-MW-01S-1109	T	Water	353.2	
Analysis Batch:680-154038					
LCS 680-154038/6	Lab Control Sample	T	Water	310.1	
MB 680-154038/5	Method Blank	T	Water	310.1	
680-52699-1	BSA-MW-04D-1109	T	Water	310.1	
680-52699-3	BSA-MW-05D-1109	T	Water	310.1	
680-52699-5	CPA-MW-04D-1109	T	Water	310.1	
680-52735-1	BSA-MW-03D-1109	T	Water	310.1	
680-52735-4	BSA-MW-02D-1109	T	Water	310.1	
680-52735-6	CPA-MW-03D-1109	T	Water	310.1	
Analysis Batch:680-154151					
LCS 680-154151/6	Lab Control Sample	T	Water	310.1	
MB 680-154151/5	Method Blank	T	Water	310.1	
680-52785-1	BSA-MW-01S-1109	T	Water	310.1	
680-52785-3	CPA-MW-02D-1109	T	Water	310.1	
680-52785-6	CPA-MW-01D-1109	T	Water	310.1	
Analysis Batch:680-154298					
LCS 680-154298/2	Lab Control Sample	T	Water	375.4	
MB 680-154298/1	Method Blank	T	Water	375.4	
680-52699-3	BSA-MW-05D-1109	T	Water	375.4	
680-52735-4	BSA-MW-02D-1109	T	Water	375.4	
680-52735-6	CPA-MW-03D-1109	T	Water	375.4	
680-52785-1	BSA-MW-01S-1109	T	Water	375.4	
680-52785-3	CPA-MW-02D-1109	T	Water	375.4	
680-52785-6	CPA-MW-01D-1109	T	Water	375.4	
Analysis Batch:680-154308					
LCS 680-154308/2	Lab Control Sample	T	Water	353.2	
MB 680-154308/1	Method Blank	T	Water	353.2	
680-52699-1	BSA-MW-04D-1109	T	Water	353.2	
680-52699-3	BSA-MW-05D-1109	T	Water	353.2	
680-52699-5	CPA-MW-04D-1109	T	Water	353.2	

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:680-154313					
LCS 680-154313/2	Lab Control Sample	T	Water	353.2	
MB 680-154313/1	Method Blank	T	Water	353.2	
680-52735-1	BSA-MW-03D-1109	T	Water	353.2	
680-52735-4	BSA-MW-02D-1109	T	Water	353.2	
680-52735-6	CPA-MW-03D-1109	T	Water	353.2	
Analysis Batch:680-154340					
LCS 680-154340/2	Lab Control Sample	T	Water	353.2	
MB 680-154340/1	Method Blank	T	Water	353.2	
680-52871-1	CPA-MW-05D-1109	T	Water	353.2	
Analysis Batch:680-154420					
LCS 680-154420/3	Lab Control Sample	T	Water	310.1	
MB 680-154420/2	Method Blank	T	Water	310.1	
680-52871-1	CPA-MW-05D-1109	T	Water	310.1	
Analysis Batch:680-155513					
LCS 680-155513/2	Lab Control Sample	D	Water	415.1	
MB 680-155513/1	Method Blank	D	Water	415.1	
680-52699-2	BSA-MW-04D-F(0.2)-1109	D	Water	415.1	
680-52699-4	BSA-MW-05D-F(0.2)-1109	D	Water	415.1	
680-52699-6	CPA-MW-04D-F(0.2)-1109	D	Water	415.1	
680-52735-2	BSA-MW-03D-F(0.2)-1109	D	Water	415.1	
680-52735-5	BSA-MW-02D-F (0.2)-1109	D	Water	415.1	
680-52735-7	CPA-MW-03D-F (0.2)-1109	D	Water	415.1	
680-52735-7DU	Duplicate	D	Water	415.1	
680-52785-2	BSA-MW-01S-F(0.2)-1109	D	Water	415.1	
680-52785-4	CPA-MW-02D-F(0.2)-1109	D	Water	415.1	
680-52785-7	CPA-MW-01D-F(0.2)-1109	D	Water	415.1	
680-52871-2	CPA-MW-05D-F(0.2)-1109	D	Water	415.1	
Analysis Batch:680-155525					
LCS 680-155525/10	Lab Control Sample	T	Water	415.1	
MB 680-155525/2	Method Blank	T	Water	415.1	
680-52699-1	BSA-MW-04D-1109	T	Water	415.1	
680-52699-3	BSA-MW-05D-1109	T	Water	415.1	
680-52699-5	CPA-MW-04D-1109	T	Water	415.1	
680-52735-1	BSA-MW-03D-1109	T	Water	415.1	
680-52735-4	BSA-MW-02D-1109	T	Water	415.1	
680-52735-6	CPA-MW-03D-1109	T	Water	415.1	
680-52785-1	BSA-MW-01S-1109	T	Water	415.1	
680-52785-3	CPA-MW-02D-1109	T	Water	415.1	
680-52785-6	CPA-MW-01D-1109	T	Water	415.1	
680-52871-1	CPA-MW-05D-1109	T	Water	415.1	

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:680-155684					
LCS 680-155684/1	Lab Control Sample	T	Water	325.2	
MB 680-155684/17	Method Blank	T	Water	325.2	
680-52699-1	BSA-MW-04D-1109	T	Water	325.2	
680-52699-1MS	Matrix Spike	T	Water	325.2	
680-52699-1MSD	Matrix Spike Duplicate	T	Water	325.2	
680-52699-3	BSA-MW-05D-1109	T	Water	325.2	
680-52699-5	CPA-MW-04D-1109	T	Water	325.2	
680-52735-1	BSA-MW-03D-1109	T	Water	325.2	
680-52735-4	BSA-MW-02D-1109	T	Water	325.2	
680-52735-6	CPA-MW-03D-1109	T	Water	325.2	
680-52785-1	BSA-MW-01S-1109	T	Water	325.2	
680-52785-3	CPA-MW-02D-1109	T	Water	325.2	
680-52785-6	CPA-MW-01D-1109	T	Water	325.2	
680-52871-1	CPA-MW-05D-1109	T	Water	325.2	
680-52871-1DU	Duplicate	T	Water	325.2	
Analysis Batch:680-155685					
LCS 680-155685/2	Lab Control Sample	T	Water	375.4	
MB 680-155685/1	Method Blank	T	Water	375.4	
680-52699-1	BSA-MW-04D-1109	T	Water	375.4	
680-52699-1MS	Matrix Spike	T	Water	375.4	
680-52699-1MSD	Matrix Spike Duplicate	T	Water	375.4	
680-52699-5	CPA-MW-04D-1109	T	Water	375.4	
680-52735-1	BSA-MW-03D-1109	T	Water	375.4	
680-52871-1	CPA-MW-05D-1109	T	Water	375.4	
680-52871-1DU	Duplicate	T	Water	375.4	

Report Basis
D = Dissolved
T = Total

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec
680-52699-1	BSA-MW-04D-1109	99	108	103
680-52699-3	BSA-MW-05D-1109	98	100	97
680-52699-5	CPA-MW-04D-1109	98	103	99
680-52699-7	4Q09 LTM Trip Blank #1	97	104	98
680-52735-1	BSA-MW-03D-1109	103	87	102
680-52735-3	BSA-MW-03D-1109-EB	98	91	101
680-52735-4	BSA-MW-02D-1109	98	90	100
680-52735-6	CPA-MW-03D-1109	102	92	103
680-52735-8	4Q009 LTM Trip Blank #2	96	92	100
680-52785-1	BSA-MW-01S-1109	104	104	100
680-52785-3	CPA-MW-02D-1109	104	105	100
680-52785-5	CPA-MW-02D-1109-AD	102	105	101
680-52785-6	CPA-MW-01D-1109	103	102	100
680-52785-8	4Q09 LTM Trip Blank #3	103	106	100
680-52871-1	CPA-MW-05D-1109	101	108	99
680-52871-3	4Q09 LTM Trip Blank #4	103	110	97
MB 680-154269/28		99	97	100
MB 680-154374/14		99	93	96
MB 680-154495/11		100	98	101
MB 680-154766/20		98	104	100
MB 680-154778/23		99	109	96
MB 680-154872/8		105	108	100
MB 680-155095/8		104	111	98
LCS 680-154269/25		103	100	99
LCS 680-154374/11		105	95	98
LCS 680-154495/8		102	99	106

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	75-120
DBFM = Dibromofluoromethane	75-121
TOL = Toluene-d8 (Surr)	75-120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec
LCS 680-154766/17		109	112	105
LCS 680-154778/20		103	112	101
LCS 680-154872/6		100	110	100
LCS 680-155095/4		109	117	102
LCSD 680-154269/26		104	99	101
LCSD 680-154374/12		105	101	102
LCSD 680-154495/9		103	96	102
LCSD 680-154766/18		101	101	97
LCSD 680-154778/21		103	110	100
LCSD 680-155095/5		103	115	99
680-52699-3 MS	BSA-MW-05D-1109 MS	105	107	103
680-52699-3 MSD	BSA-MW-05D-1109 MSD	104	108	103

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	75-120
DBFM = Dibromofluoromethane	75-121
TOL = Toluene-d8 (Surr)	75-120

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154269

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 680-154269/28	Analysis Batch:	680-154269	Instrument ID:	GC/MS Volatiles - P C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	pq160.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/21/2009 1923			Final Weight/Volume:	5 mL
Date Prepared:	11/21/2009 1923				

Analyte	Result	Qual	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	99	75 - 120
Dibromofluoromethane	97	75 - 121
Toluene-d8 (Surr)	100	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-154269

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID:	LCS 680-154269/25	Analysis Batch:	680-154269	Instrument ID:	GC/MS Volatiles - P C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	pq152.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/21/2009 1724			Final Weight/Volume:	5 mL
Date Prepared:	11/21/2009 1724				

LCSD Lab Sample ID:	LCSD 680-154269/26	Analysis Batch:	680-154269	Instrument ID:	GC/MS Volatiles - P C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	pq154.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/21/2009 1754			Final Weight/Volume:	5 mL
Date Prepared:	11/21/2009 1754				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	106	107	77 - 119	1	30		
Chlorobenzene	102	104	85 - 116	1	30		
1,2-Dichlorobenzene	108	107	79 - 124	2	30		
1,3-Dichlorobenzene	110	109	78 - 125	1	30		
1,4-Dichlorobenzene	109	107	81 - 122	2	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	103	104	75 - 120
Dibromofluoromethane	100	99	75 - 121
Toluene-d8 (Surr)	99	101	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154374

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 680-154374/14	Analysis Batch:	680-154374	Instrument ID:	GC/MS Volatiles - P C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	pq174.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/22/2009 2351			Final Weight/Volume:	5 mL
Date Prepared:	11/22/2009 2351				

Analyte	Result	Qual	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	99	75 - 120
Dibromofluoromethane	93	75 - 121
Toluene-d8 (Surr)	96	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-154374

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID:	LCS 680-154374/11	Analysis Batch:	680-154374	Instrument ID:	GC/MS Volatiles - P C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	pq166.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/22/2009 2153			Final Weight/Volume:	5 mL
Date Prepared:	11/22/2009 2153				

LCSD Lab Sample ID:	LCSD 680-154374/12	Analysis Batch:	680-154374	Instrument ID:	GC/MS Volatiles - P C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	pq168.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/22/2009 2222			Final Weight/Volume:	5 mL
Date Prepared:	11/22/2009 2222				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	104	106	77 - 119	1	30		
Chlorobenzene	100	104	85 - 116	4	30		
1,2-Dichlorobenzene	105	108	79 - 124	3	30		
1,3-Dichlorobenzene	107	109	78 - 125	2	30		
1,4-Dichlorobenzene	105	107	81 - 122	2	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	105	105	75 - 120
Dibromofluoromethane	95	101	75 - 121
Toluene-d8 (Surr)	98	102	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154495

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 680-154495/11
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/23/2009 1619
Date Prepared: 11/23/2009 1619

Analysis Batch: 680-154495
Prep Batch: N/A
Units: ug/L

Instrument ID: GC/MS Volatiles - P C2
Lab File ID: pq188.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	100	75 - 120
Dibromofluoromethane	98	75 - 121
Toluene-d8 (Surr)	101	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Quality Control Results

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-154495

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID:	LCS 680-154495/8	Analysis Batch:	680-154495	Instrument ID:	GC/MS Volatiles - P C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	pq180.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/23/2009 1420			Final Weight/Volume:	5 mL
Date Prepared:	11/23/2009 1420				

LCSD Lab Sample ID:	LCSD 680-154495/9	Analysis Batch:	680-154495	Instrument ID:	GC/MS Volatiles - P C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	pq182.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/23/2009 1450			Final Weight/Volume:	5 mL
Date Prepared:	11/23/2009 1450				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	101	99	77 - 119	2	30		
Chlorobenzene	99	98	85 - 116	1	30		
1,2-Dichlorobenzene	105	107	79 - 124	2	30		
1,3-Dichlorobenzene	105	109	78 - 125	4	30		
1,4-Dichlorobenzene	104	107	81 - 122	3	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	102	103	75 - 120
Dibromofluoromethane	99	96	75 - 121
Toluene-d8 (Surr)	106	102	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010
BSD

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154766

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 680-154766/20	Analysis Batch:	680-154766	Instrument ID:	GC/MS Volatiles - O C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq448.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/26/2009 1133			Final Weight/Volume:	5 mL
Date Prepared:	11/26/2009 1133				

Analyte	Result	Qual	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	98	75 - 120
Dibromofluoromethane	104	75 - 121
Toluene-d8 (Surr)	100	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-154766

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID:	LCS 680-154766/17	Analysis Batch:	680-154766	Instrument ID:	GC/MS Volatiles - O C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq440.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/26/2009 0925			Final Weight/Volume:	5 mL
Date Prepared:	11/26/2009 0925				

LCSD Lab Sample ID:	LCSD 680-154766/18	Analysis Batch:	680-154766	Instrument ID:	GC/MS Volatiles - O C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq442.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/26/2009 0954			Final Weight/Volume:	5 mL
Date Prepared:	11/26/2009 0954				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	104	95	77 - 119	9	30		
Chlorobenzene	107	97	85 - 116	10	30		
1,2-Dichlorobenzene	109	100	79 - 124	9	30		
1,3-Dichlorobenzene	107	98	78 - 125	8	30		
1,4-Dichlorobenzene	108	99	81 - 122	9	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	109	101	75 - 120
Dibromofluoromethane	112	101	75 - 121
Toluene-d8 (Surr)	105	97	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Quality Control Results

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-154766

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	680-52699-3	Analysis Batch: 680-154766	Instrument ID: GC/MS Volatiles - O C2
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: o3323.d
Dilution:	5.0		Initial Weight/Volume: 5 mL
Date Analyzed:	11/26/2009 1850		Final Weight/Volume: 5 mL
Date Prepared:	11/26/2009 1850		

MSD Lab Sample ID:	680-52699-3	Analysis Batch: 680-154766	Instrument ID: GC/MS Volatiles - O C2
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: o3325.d
Dilution:	5.0		Initial Weight/Volume: 5 mL
Date Analyzed:	11/26/2009 1920		Final Weight/Volume: 5 mL
Date Prepared:	11/26/2009 1920		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	101	98	77 - 119	3	30		
Chlorobenzene	109	115	85 - 116	2	30		
1,2-Dichlorobenzene	104	111	79 - 124	4	30		
1,3-Dichlorobenzene	102	103	78 - 125	1	30		
1,4-Dichlorobenzene	101	107	81 - 122	4	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	105	104	75 - 120
Dibromofluoromethane	107	108	75 - 121
Toluene-d8 (Surr)	103	103	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154778

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 680-154778/23	Analysis Batch:	680-154778	Instrument ID:	GC/MS Volatiles - O C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq462.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/27/2009 1106			Final Weight/Volume:	5 mL
Date Prepared:	11/27/2009 1106				

Analyte	Result	Qual	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	99	75 - 120
Dibromofluoromethane	109	75 - 121
Toluene-d8 (Surr)	96	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-154778

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID:	LCS 680-154778/20	Analysis Batch:	680-154778	Instrument ID:	GC/MS Volatiles - O C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq454.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/27/2009 0910			Final Weight/Volume:	5 mL
Date Prepared:	11/27/2009 0910				

LCSD Lab Sample ID:	LCSD 680-154778/21	Analysis Batch:	680-154778	Instrument ID:	GC/MS Volatiles - O C2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq456.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/27/2009 0939			Final Weight/Volume:	5 mL
Date Prepared:	11/27/2009 0939				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	97	96	77 - 119	1	30		
Chlorobenzene	101	103	85 - 116	2	30		
1,2-Dichlorobenzene	102	104	79 - 124	2	30		
1,3-Dichlorobenzene	102	102	78 - 125	0	30		
1,4-Dichlorobenzene	101	101	81 - 122	0	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	103	103	75 - 120
Dibromofluoromethane	112	110	75 - 121
Toluene-d8 (Surr)	101	100	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154872

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 680-154872/8	Analysis Batch:	680-154872	Instrument ID:	GC/MS Volatiles - O
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq491.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/30/2009 1317			Final Weight/Volume:	5 mL
Date Prepared:	11/30/2009 1317				

Analyte	Result	Qual	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	105	75 - 120
Dibromofluoromethane	108	75 - 121
Toluene-d8 (Surr)	100	75 - 120

Lab Control Sample - Batch: 680-154872

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 680-154872/6	Analysis Batch:	680-154872	Instrument ID:	GC/MS Volatiles - O
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq483.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	11/30/2009 1115			Final Weight/Volume:	5 mL
Date Prepared:	11/30/2009 1115				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	50.0	48.0	96	77 - 119	
Chlorobenzene	50.0	49.7	99	85 - 116	
1,2-Dichlorobenzene	50.0	50.7	101	79 - 124	
1,3-Dichlorobenzene	50.0	50.5	101	78 - 125	
1,4-Dichlorobenzene	50.0	50.1	100	81 - 122	

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	100	75 - 120
Dibromofluoromethane	110	75 - 121
Toluene-d8 (Surr)	100	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Quality Control Results

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-155095

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 680-155095/8	Analysis Batch:	680-155095	Instrument ID:	GC/MS Volatiles - O
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq525.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	12/02/2009 1203			Final Weight/Volume:	5 mL
Date Prepared:	12/02/2009 1203				

Analyte	Result	Qual	RL
Benzene	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	104	75 - 120
Dibromofluoromethane	111	75 - 121
Toluene-d8 (Surr)	98	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Quality Control Results

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-155095

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID:	LCS 680-155095/4	Analysis Batch:	680-155095	Instrument ID:	GC/MS Volatiles - O
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq515.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	12/02/2009 0932			Final Weight/Volume:	5 mL
Date Prepared:	12/02/2009 0932				

LCSD Lab Sample ID:	LCSD 680-155095/5	Analysis Batch:	680-155095	Instrument ID:	GC/MS Volatiles - O
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	oq517.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	12/02/2009 1001			Final Weight/Volume:	5 mL
Date Prepared:	12/02/2009 1001				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	95	92	77 - 119	4	30		
Chlorobenzene	106	102	85 - 116	4	30		
1,2-Dichlorobenzene	109	105	79 - 124	3	30		
1,3-Dichlorobenzene	107	103	78 - 125	4	30		
1,4-Dichlorobenzene	106	104	81 - 122	2	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	109	103	75 - 120
Dibromofluoromethane	117	115	75 - 121
Toluene-d8 (Surr)	102	99	75 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154421

Method: RSK-175
Preparation: N/A

Lab Sample ID: MB 680-154421/21
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/23/2009 1436
Date Prepared: N/A

Analysis Batch: 680-154421
Prep Batch: N/A
Units: ug/L

Instrument ID: GC Volatiles - U FID
Lab File ID: UQ112308.D
Initial Weight/Volume: 17000 uL
Final Weight/Volume: 17 mL
Injection Volume: 1 uL

Analyte	Result	Qual	RL
Ethane	0.35	U	0.35
Ethylene	0.33	U	0.33
Methane	0.19	U	0.19

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-154421

Method: RSK-175
Preparation: N/A

LCS Lab Sample ID: LCS 680-154421/19
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/23/2009 1337
Date Prepared: N/A

Analysis Batch: 680-154421
Prep Batch: N/A
Units: ug/L

Instrument ID: GC Volatiles - U FID
Lab File ID: UQ112305.D
Initial Weight/Volume: 17000 uL
Final Weight/Volume: 17 mL
Injection Volume: 1 uL

LCSD Lab Sample ID: LCSD 680-154421/20
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/23/2009 1349
Date Prepared: N/A

Analysis Batch: 680-154421
Prep Batch: N/A
Units: ug/L

Instrument ID: GC Volatiles - U FID
Lab File ID: UQ112306.D
Initial Weight/Volume: 17000 uL
Final Weight/Volume: 17 mL
Injection Volume: 1 uL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Ethane	105	113	75 - 125	7	30		
Ethylene	111	118	75 - 125	6	30		
Methane	111	118	75 - 125	7	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154423

Method: RSK-175
Preparation: N/A

Lab Sample ID:	MB 680-154423/19	Analysis Batch:	680-154423	Instrument ID:	GC Volatiles - U TCD
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UQ112308.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1436			Final Weight/Volume:	17 mL
Date Prepared:	N/A			Injection Volume:	1 uL

Analyte	Result	Qual	RL
Methane	0.19	U	0.19

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-154423

Method: RSK-175
Preparation: N/A

LCS Lab Sample ID:	LCS 680-154423/17	Analysis Batch:	680-154423	Instrument ID:	GC Volatiles - U TCD
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UQ112302.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1258			Final Weight/Volume:	17 mL
Date Prepared:	N/A			Injection Volume:	1 uL

LCSD Lab Sample ID:	LCSD 680-154423/18	Analysis Batch:	680-154423	Instrument ID:	GC Volatiles - U TCD
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UQ112303.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	17000 uL
Date Analyzed:	11/23/2009 1311			Final Weight/Volume:	17 mL
Date Prepared:	N/A			Injection Volume:	1 uL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methane	118	117	75 - 125	1	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154676

Method: RSK-175
Preparation: N/A

Lab Sample ID:	MB 680-154676/13	Analysis Batch:	680-154676	Instrument ID:	GC Volatiles - U FID
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UQ112509.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	17000 uL
Date Analyzed:	11/25/2009 1129			Final Weight/Volume:	17 mL
Date Prepared:	N/A			Injection Volume:	1 uL

Analyte	Result	Qual	RL
Ethane	0.35	U	0.35
Ethylene	0.33	U	0.33
Methane	0.19	U	0.19

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-154676

Method: RSK-175
Preparation: N/A

LCS Lab Sample ID:	LCS 680-154676/11	Analysis Batch:	680-154676	Instrument ID:	GC Volatiles - U FID
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UQ112505.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	17000 uL
Date Analyzed:	11/25/2009 0908			Final Weight/Volume:	17 mL
Date Prepared:	N/A			Injection Volume:	1 uL

LCSD Lab Sample ID:	LCSD 680-154676/12	Analysis Batch:	680-154676	Instrument ID:	GC Volatiles - U FID
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UQ112506.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	17000 uL
Date Analyzed:	11/25/2009 0921			Final Weight/Volume:	17 mL
Date Prepared:	N/A			Injection Volume:	1 uL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Ethane	112	110	75 - 125	2	30		
Ethylene	117	116	75 - 125	1	30		
Methane	118	116	75 - 125	1	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-153854

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID: MB 680-153854/15-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/18/2009 1937
Date Prepared: 11/18/2009 1226

Analysis Batch: 680-154024
Prep Batch: 680-153854
Units: mg/L

Instrument ID: ICP/AES - D
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Iron	0.050	U	0.050
Iron, Dissolved	0.050	U	0.050
Manganese	0.010	U	0.010
Manganese, Dissolved	0.010	U	0.010

Lab Control Sample - Batch: 680-153854

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID: LCS 680-153854/16-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/18/2009 1943
Date Prepared: 11/18/2009 1226

Analysis Batch: 680-154024
Prep Batch: 680-153854
Units: mg/L

Instrument ID: ICP/AES - D
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Iron	1.00	1.02	102	75 - 125	
Iron, Dissolved	1.00	1.02	102	75 - 125	
Manganese	0.500	0.499	100	75 - 125	
Manganese, Dissolved	0.500	0.499	100	75 - 125	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-155202

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID: MB 680-155202/15-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/04/2009 2124
Date Prepared: 12/03/2009 1452

Analysis Batch: 680-155356
Prep Batch: 680-155202
Units: mg/L

Instrument ID: ICP/AES - D
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Iron	0.050	U	0.050
Iron, Dissolved	0.050	U	0.050
Manganese	0.010	U	0.010
Manganese, Dissolved	0.010	U	0.010

Lab Control Sample - Batch: 680-155202

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID: LCS 680-155202/16-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/04/2009 2129
Date Prepared: 12/03/2009 1452

Analysis Batch: 680-155356
Prep Batch: 680-155202
Units: mg/L

Instrument ID: ICP/AES - D
Lab File ID: N/A
Initial Weight/Volume: 50 ml
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Iron	1.00	1.01	101	75 - 125	
Iron, Dissolved	1.00	1.01	101	75 - 125	
Manganese	0.500	0.500	100	75 - 125	
Manganese, Dissolved	0.500	0.500	100	75 - 125	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-155202

Method: 6010B
Preparation: 3005A
Total Recoverable

MS Lab Sample ID:	680-52735-1	Analysis Batch: 680-155356	Instrument ID:	ICP/AES - D	
Client Matrix:	Water	Prep Batch: 680-155202	Lab File ID:	N/A	
Dilution:	1.0		Initial Weight/Volume:	50	mL
Date Analyzed:	12/04/2009 2150		Final Weight/Volume:	50	mL
Date Prepared:	12/03/2009 1452				

MSD Lab Sample ID:	680-52735-1	Analysis Batch: 680-155356	Instrument ID:	ICP/AES - D	
Client Matrix:	Water	Prep Batch: 680-155202	Lab File ID:	N/A	
Dilution:	1.0		Initial Weight/Volume:	50	mL
Date Analyzed:	12/04/2009 2156		Final Weight/Volume:	50	mL
Date Prepared:	12/03/2009 1452				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Iron	226	225	75 - 125	0	20	4	4
Iron, Dissolved	226	225	75 - 125	0	20	4	4
Manganese	113	113	75 - 125	0	20		
Manganese, Dissolved	113	113	75 - 125	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154038

Method: 310.1
Preparation: N/A

Lab Sample ID:	MB 680-154038/5	Analysis Batch:	680-154038	Instrument ID:	PC Titrate - Mantech1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	25 mL
Date Analyzed:	11/19/2009 0843			Final Weight/Volume:	25 mL
Date Prepared:	N/A				

Analyte	Result	Qual	RL
Alkalinity	5.0	U	5.0
Carbon Dioxide, Free	5.0	U	5.0

Lab Control Sample - Batch: 680-154038

Method: 310.1
Preparation: N/A

Lab Sample ID:	LCS 680-154038/6	Analysis Batch:	680-154038	Instrument ID:	PC Titrate - Mantech1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	25 mL
Date Analyzed:	11/19/2009 0850			Final Weight/Volume:	25 mL
Date Prepared:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity	236	222	94	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154151

Method: 310.1
Preparation: N/A

Lab Sample ID: MB 680-154151/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/20/2009 1101
Date Prepared: N/A

Analysis Batch: 680-154151
Prep Batch: N/A
Units: mg/L

Instrument ID: PC Titrate - Mantech1
Lab File ID: N/A
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	RL
Alkalinity	5.0	U	5.0
Carbon Dioxide, Free	5.0	U	5.0

Lab Control Sample - Batch: 680-154151

Method: 310.1
Preparation: N/A

Lab Sample ID: LCS 680-154151/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/20/2009 1108
Date Prepared: N/A

Analysis Batch: 680-154151
Prep Batch: N/A
Units: mg/L

Instrument ID: PC Titrate - Mantech1
Lab File ID: N/A
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity	236	225	95	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154420

Method: 310.1
Preparation: N/A

Lab Sample ID: MB 680-154420/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/23/2009 1308
Date Prepared: N/A

Analysis Batch: 680-154420
Prep Batch: N/A
Units: mg/L

Instrument ID: PC Titrate - Mantech1
Lab File ID: N/A
Initial Weight/Volume: 25 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Alkalinity	5.0	U	5.0
Carbon Dioxide, Free	5.0	U	5.0

Lab Control Sample - Batch: 680-154420

Method: 310.1
Preparation: N/A

Lab Sample ID: LCS 680-154420/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/23/2009 1314
Date Prepared: N/A

Analysis Batch: 680-154420
Prep Batch: N/A
Units: mg/L

Instrument ID: PC Titrate - Mantech1
Lab File ID: N/A
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity	236	213	90	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-155684

Method: 325.2
Preparation: N/A

Lab Sample ID:	MB 680-155684/17	Analysis Batch:	680-155684	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	12/09/2009 1259			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Result	Qual	RL
Chloride	1.0	U	1.0

Lab Control Sample - Batch: 680-155684

Method: 325.2
Preparation: N/A

Lab Sample ID:	LCS 680-155684/1	Analysis Batch:	680-155684	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	12/09/2009 1246			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride	50.0	51.4	103	85 - 115	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-155684

Method: 325.2
Preparation: N/A

MS Lab Sample ID:	680-52699-1	Analysis Batch:	680-155684	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	2.0			Initial Weight/Volume:	10 mL
Date Analyzed:	12/09/2009 1249			Final Weight/Volume:	10 mL
Date Prepared:	N/A				

MSD Lab Sample ID:	680-52699-1	Analysis Batch:	680-155684	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	2.0			Initial Weight/Volume:	10 mL
Date Analyzed:	12/09/2009 1249			Final Weight/Volume:	10 mL
Date Prepared:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Chloride	82	89	85 - 115	2	30	F	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Quality Control Results

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Duplicate - Batch: 680-155684

Method: 325.2
Preparation: N/A

Lab Sample ID:	680-52871-1	Analysis Batch:	680-155684	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	5.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	12/09/2009 1257			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride	310	312	0	30	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 400-100433

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 400-100433/1	Analysis Batch:	400-100433	Instrument ID:	Lachat 1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	1.0 mL
Date Analyzed:	12/08/2009 1631			Final Weight/Volume:	1.0 mL
Date Prepared:	N/A				

Analyte	Result	Qual	RL
Nitrate as N	0.050	U	0.050
Nitrate Nitrite as N	0.050	U	0.050

Lab Control Sample - Batch: 400-100433

Method: 353.2
Preparation: N/A

Lab Sample ID:	LCS 400-100433/2	Analysis Batch:	400-100433	Instrument ID:	Lachat 1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	1.0 mL
Date Analyzed:	12/08/2009 1631			Final Weight/Volume:	10 mL
Date Prepared:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N	0.500	0.495	99	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 400-100814

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 400-100814/1	Analysis Batch:	400-100814	Instrument ID:	Lachat 1
Client Matrix:	Water	Prep Batch: N/A		Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	1.0 mL
Date Analyzed:	12/15/2009 1034			Final Weight/Volume:	1.0 mL
Date Prepared:	N/A				

Analyte	Result	Qual	RL
Nitrate as N	0.050	U	0.050
Nitrate Nitrite as N	0.050	U	0.050

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154308

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 680-154308/1	Analysis Batch:	680-154308	Instrument ID:	KoneLab2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	11/17/2009 2059			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Result	Qual	RL
Nitrate as N	0.050	U	0.050
Nitrate Nitrite as N	0.050	U	0.050
Nitrite as N	0.050	U	0.050

Lab Control Sample - Batch: 680-154308

Method: 353.2
Preparation: N/A

Lab Sample ID:	LCS 680-154308/2	Analysis Batch:	680-154308	Instrument ID:	KoneLab2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	11/17/2009 2059			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	1.00	1.08	108	90 - 110	
Nitrate Nitrite as N	1.00	1.08	108	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154313

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 680-154313/1	Analysis Batch:	680-154313	Instrument ID:	KoneLab2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	11/18/2009 1715			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Result	Qual	RL
Nitrate as N	0.050	U	0.050
Nitrate Nitrite as N	0.050	U	0.050
Nitrite as N	0.050	U	0.050

Lab Control Sample - Batch: 680-154313

Method: 353.2
Preparation: N/A

Lab Sample ID:	LCS 680-154313/2	Analysis Batch:	680-154313	Instrument ID:	KoneLab2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	11/18/2009 1715			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	1.00	1.04	104	90 - 110	
Nitrate Nitrite as N	1.00	1.04	104	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154340

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 680-154340/1	Analysis Batch:	680-154340	Instrument ID:	KoneLab2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	11/20/2009 1648			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Result	Qual	RL
Nitrate as N	0.050	U	0.050
Nitrate Nitrite as N	0.050	U	0.050
Nitrite as N	0.050	U	0.050

Lab Control Sample - Batch: 680-154340

Method: 353.2
Preparation: N/A

Lab Sample ID:	LCS 680-154340/2	Analysis Batch:	680-154340	Instrument ID:	KoneLab2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	11/20/2009 1648			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	1.00	1.06	106	90 - 110	
Nitrate Nitrite as N	1.00	1.06	106	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-154298

Method: 375.4
Preparation: N/A

Lab Sample ID:	MB 680-154298/1	Analysis Batch:	680-154298	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	11/20/2009 1449			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Result	Qual	RL
Sulfate	5.0	U	5.0

Lab Control Sample - Batch: 680-154298

Method: 375.4
Preparation: N/A

Lab Sample ID:	LCS 680-154298/2	Analysis Batch:	680-154298	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	11/20/2009 1449			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfate	20.0	19.3	96	75 - 125	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-155685

Method: 375.4
Preparation: N/A

Lab Sample ID:	MB 680-155685/1	Analysis Batch:	680-155685	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	12/09/2009 0944			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Result	Qual	RL
Sulfate	5.0	U	5.0

Lab Control Sample - Batch: 680-155685

Method: 375.4
Preparation: N/A

Lab Sample ID:	LCS 680-155685/2	Analysis Batch:	680-155685	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	12/09/2009 0944			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfate	20.0	20.1	101	75 - 125	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-155685

Method: 375.4
Preparation: N/A

MS Lab Sample ID:	680-52699-1	Analysis Batch:	680-155685	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	10			Initial Weight/Volume:	10 mL
Date Analyzed:	12/09/2009 1011			Final Weight/Volume:	10 mL
Date Prepared:	N/A				

MSD Lab Sample ID:	680-52699-1	Analysis Batch:	680-155685	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	10			Initial Weight/Volume:	10 mL
Date Analyzed:	12/09/2009 1013			Final Weight/Volume:	10 mL
Date Prepared:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Sulfate	81	115	75 - 125	6	30	4	4

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Quality Control Results

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Duplicate - Batch: 680-155685

Method: 375.4
Preparation: N/A

Lab Sample ID:	680-52871-1	Analysis Batch:	680-155685	Instrument ID:	KoneLab1
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	100	Units:	mg/L	Initial Weight/Volume:	2 mL
Date Analyzed:	12/09/2009 1049			Final Weight/Volume:	2 mL
Date Prepared:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Sulfate	1600	1600	2	30	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-155513

Method: 415.1
Preparation: N/A

Lab Sample ID: MB 680-155513/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/24/2009 1057
Date Prepared: N/A

Analysis Batch: 680-155513
Prep Batch: N/A
Units: mg/L

Instrument ID: Total Organic Carbon Analyze
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 25 mL

Analyte	Result	Qual	RL
Dissolved Organic Carbon-Dissolved	1.0	U	1.0

Lab Control Sample - Batch: 680-155513

Method: 415.1
Preparation: N/A

Lab Sample ID: LCS 680-155513/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/24/2009 1057
Date Prepared: N/A

Analysis Batch: 680-155513
Prep Batch: N/A
Units: mg/L

Instrument ID: Total Organic Carbon Analyze
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dissolved Organic Carbon-Dissolved	20.0	19.8	99	80 - 120	

Duplicate - Batch: 680-155513

Method: 415.1
Preparation: N/A

Lab Sample ID: 680-52735-7
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/24/2009 1057
Date Prepared: N/A

Analysis Batch: 680-155513
Prep Batch: N/A
Units: mg/L

Instrument ID: Total Organic Carbon Analyze
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 25 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Dissolved Organic Carbon-Dissolved	8.2	8.30	1	30	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Client: Solutia Inc.

Job Number: 680-52699-1
Sdg Number: KPS055

Method Blank - Batch: 680-155525

Method: 415.1
Preparation: N/A

Lab Sample ID:	MB 680-155525/2	Analysis Batch:	680-155525	Instrument ID:	Total Organic Carbon Analyze
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	25 mL
Date Analyzed:	12/07/2009 1622			Final Weight/Volume:	25 mL
Date Prepared:	N/A				

Analyte	Result	Qual	RL
Total Organic Carbon	1.0	U	1.0

Lab Control Sample - Batch: 680-155525

Method: 415.1
Preparation: N/A

Lab Sample ID:	LCS 680-155525/10	Analysis Batch:	680-155525	Instrument ID:	Total Organic Carbon Analyze
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	25 mL
Date Analyzed:	12/07/2009 1851			Final Weight/Volume:	25 mL
Date Prepared:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Organic Carbon	20.0	20.6	103	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

JAN 19 2010

Savannah
5102 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jeff Adams	Site Contact: Mike Corbett	Date: 11/16/09	COC No:
URS Corporation	Tel/Fax: (314) 743-4228	Lab Contact: Lidya Gulizia	Carrier: FedEx	1 of 1 COCs
1001 Highlands Plaza Drive West, Suite 300	Analysis Turnaround Time			Job No. 21562154.00004
St. Louis, MO 63110	Calendar (C) or Work Days (W) _____			
(314) 429-0100 Phone	TAT if different from Below Standard			
(314) 429-0462 FAX	☐ 2 weeks			SDG No.
Project Name: 4Q09 LTM GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs by 8260	Total Fe/Mn by 6010B	Alk/CO2 by 310.1	Chloride by 325.2/Sulfate by 375.4	Methane by RSK 175	Nitrate by 353.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	Sample Specific Notes:
BSA-MW-04D-1109	11/16/09	1000	G	Water	12		3	1	1	1	3	2	1			
BSA-MW-04D-F(0.2)-1109		1000	G	Water	2	X								1	1	
BSA-MW-05D-1109		1250	G		12		3	1	1	1	3	2	1			
BSA-MW-05D-F(0.2)-1109		1250	G		2	X								1	1	
BSA-MW-05D-1109-MS		1250	G		3		3									
BSA-MW-05D-1109-MSD		1250	G		3		3									
CPA-MW-04D-1109		1445	G		12		3	1	1	1	3	2	1			
CPA-MW-04D-F(0.2)-1109		1445	G		2	X								1	1	
4Q09 LTM Trip Blank # 1	11/16/09	—	—	Water	3		3									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							2	1	4	1	1	1	3,1	2	4	2

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level 4 Data Package

1.4°C 680-52699

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	URS	11/16/09 1630	[signature]	TA	11/16/09 1630
[signature]	TA	11/16/09 1730			
			[signature]	TA SV	11/17/09 0956

JAN 19 2010

Savannah
5102 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jeff Adams	Site Contact: Mike Corbett	Date: 11/17/09	COC No:
URS Corporation	Tel/Fax: (314) 743-4228	Lab Contact: Lidya Gulizia	Carrier: FedEx	1 of 1 COCs
1001 Highlands Plaza Drive West, Suite 300	Analysis Turnaround Time			Job No.
St. Louis, MO 63110	Calendar (C) or Work Days (W)			21562154.00004
(314) 429-0100 Phone	TAT if different from Below Standard			
(314) 429-0462 FAX	☐ 2 weeks			SDG No.
Project Name: 4Q09 LTM GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs by 8260	Total Fe/Mn by 6010B	Alk/CO2 by 310.1	Chloride by 325.2/Sulfate by 375.4	Methane by RSK 175	Nitrate by 353.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	Sample Specific Notes:
BSA -MW-03D-1109	11/17/09	0950	G	Water	12		3	1	1	1	3	2	1			
BSA -MW-03D-F(0.2)-1109		0950	G	Water	2	X								1	1	
BSA-MW-03D-1109-EB		0920	G	Water	3		3									
BSA-MW-02D-1109		1145	G	Water	12		3	1	1	1	3	2	1			
BSA-MW-02D-F(0.2)-1109		1145	G	Water	2	X								1	1	
CPA-MW-03D-1109		1355	G	Water	12		3*	1	1	1	3	2	1			*without HCl preservative to minimize effervescence in VOC samples.
CPA-MW-03D-F(0.2)-1109	↓	1355	G	Water	2	X								1	1	
4Q09 LTM Trip Blank # 2	11/17/09	—	—	Water	2		2									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2	1	4	1	1	1	3,1	2	4	2

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level 4 Data Package

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	URS	11/17/09 1630	[signature]	TA	11-18-09 09:33
Relinquished by:	Company:	Date/Time:	Received by: 680-52735	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by: TEMP 2.8	Company:	Date/Time:

JAN 19 2010

Savannah
5102 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jeff Adams	Site Contact: Mike Corbett	Date: 11/18/09	COC No:
URS Corporation	Tel/Fax: (314) 743-4228	Lab Contact: Lidya Gulizia	Carrier: FedEx	1 of 1 COCs
1001 Highlands Plaza Drive West, Suite 300	Analysis Turnaround Time			Job No.
St. Louis, MO 63110	Calendar (C) or Work Days (W) _____			21562154.00004
(314) 429-0100 Phone	TAT if different from Below Standard			
(314) 429-0462 FAX	☐ 2 weeks			SDG No.
Project Name: 4Q09 LTM GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs by 8260	Total Fe/Mn by 6010B	Alk/CO2 by 310.1	Chloride by 325.2/Sulfate by 375.4	Methane by RSK 175	Nitrate by 353.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	Sample Specific Notes:
BSA -MW-01S-1109	11/18/09	0935	G	Water	12		3	1	1	1	3	2	1			
BSA -MW-01S-F(0.2)-1109		0935	G	Water	2	X								1	1	
CPA-MW-02D-1109		1100	G	Water	12		3	1	1	1	3	2	1			
CPA-MW-02D-F(0.2)-1109		1100	G	Water	2	X								1	1	
CPA-MW-02D-1109-AD		1100	G	Water	3		3									
CPA-MW-01D-1109		1340	G	Water	12		3	1	1	1	3	2	1			
CPA-MW-01D-F(0.2)-1109		1340	G	Water	2	X								1	1	
4Q09 LTM Trip Blank #3	11/18/09			Water	2		2									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							2	1	4	1	1	1	3,1	2	4	2

EMPERATURE
4.6

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level 4 Data Package

1080-52785

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	URS	11/18/09 1600	Beth a Daughtry	TA SAV	11-19-9 @ 0952
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

JAN 19 2010

Savannah
5102 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jeff Adams	Site Contact: Mike Corbett	Date: 11/19/09	COC No:
URS Corporation	Tel/Fax: (314) 743-4228	Lab Contact: Lidya Gulizia	Carrier: FedEx	1 of 1 COCs
1001 Highlands Plaza Drive West, Suite 300	Analysis Turnaround Time			Job No. 21562154.00004
St. Louis, MO 63110	Calendar (C) or Work Days (W) _____			SDG No.
(314) 429-0100 Phone	TAT if different from Below Standard			
(314) 429-0462 FAX	☐ 2 weeks			
Project Name: 4Q09 LTM GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs by 8260	Total Fe/Mn by 6010B	Alk/CO2 by 310.1	Chloride by 325.2/Sulfate by 375.4	Methane by RSK 175	Nitrate by 353.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	Sample Specific Notes:
CPA -MW-05D-1109	11/19/09	1420	G	Water	12		3	1	1	1	3	2	1			
CPA -MW-05D-F(0.2)-1109	11/19/09	1420	G	Water	2	X								1	1	
4Q09 LTM Trip Blank # 4				Water	3		3									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							2	1	4	1	1	1	3,1	2	4	2

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Level 4 Data Package

3.6°C

~~680-52057~~
680-52871

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Mike Corbett	URS	11/19/09 1600			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
			Greg 11/20/09		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
			George Kn	TA SV	11/20/09 0905

JAN 19 2010

Login Sample Receipt Check List

Client: URS Corporation

Job Number: 680-52699-1
SDG Number: KPS055

Login Number: 52699
Creator: Conner, Keaton
List Number: 1

List Source: TestAmerica Savannah

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	1 cooler rec'd on ice
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	N/A	
Sample Preservation Verified	True	

JAN 19 2010

Login Sample Receipt Check List

Client: URS Corporation

Job Number: 680-52699-1
SDG Number: KPS055

Login Number: 52735
Creator: Kicklighter, Marilyn
List Number: 1

List Source: TestAmerica Savannah

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	1 cooler rec'd on ice
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	MS/MSD received in first sample receipt for SDG KPS055
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

JAN 19 2010

Login Sample Receipt Check List

Client: URS Corporation

Job Number: 680-52699-1
SDG Number: KPS055

Login Number: 52785
Creator: Daughtry, Beth
List Number: 1

List Source: TestAmerica Savannah

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	1 cooler rec'd on ice
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.6 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	MS/MSD received in first SDG receipt.
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	False	
Sample Preservation Verified	True	

JAN 19 2010

Login Sample Receipt Check List

Client: URS Corporation

Job Number: 680-52699-1
SDG Number: KPS055

Login Number: 52785
Creator: Chea, Vanda
List Number: 1

List Source: TestAmerica Pensacola
List Creation: 12/08/09 03:25 PM

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	0.0°C
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	SX#1 was not rec'd
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

JAN 19 2010

Login Sample Receipt Check List

Client: URS Corporation

Job Number: 680-52699-1
SDG Number: KPS055

Login Number: 52785
Creator: Hedaria, Raven
List Number: 2

List Source: TestAmerica Pensacola
List Creation: 12/10/09 01:39 PM

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

JAN 19 2010

Login Sample Receipt Check List

Client: URS Corporation

Job Number: 680-52699-1
SDG Number: KPS055

Login Number: 52871
Creator: Conner, Keaton
List Number: 1

List Source: TestAmerica Savannah

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	MS/MSD requested in earlier sample receipt for SDG.
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	N/A	
Sample Preservation Verified	True	

JAN 19 2010

Appendix E

Microbial Insights Data Package

2340 Stock Creek Blvd.
Rockford TN 37853-3044
Phone: (865) 573-8188
Fax: (865) 573-8133
Email: info@microbe.com

Client: Dave Palmer
URS Corp
1001 Highlands Plaza Dr. West
Suite 300
St. Louis, MO 63110

Phone: (314) 743-4154

Fax: (314) 429-0462

Identifier: 037GK **Date Rec:** 11/14/2009 **Report Date:** 12/11/2009

Client Project #: 21562154.00004 **Client Project Name:** Solutia WG Krummrich Long Term Monit

Purchase Order #:

Analysis Requested: PLFA, PLFA+SIP

Reviewed By:

NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

MICROBIAL INSIGHTS, INC.

2340 Stock Creek Blvd. Rockford, TN 37853-3044
Tel. (865) 573-8188 Fax. (865) 573-8133

PLFA

Client: **URS Corp**
Project: Solutia WG Krummrich Long Term Monitoring

MI Project Number: **037GK**
Date Received: 11/14/2009

Sample Information

Sample Name:	**BSAMW01S-1109**	**BSAMW02D-1109**	**BSAMW03D-1109**	**BSAMW04D-1109**	**BSAMW05D-1109**
Sample Date:	11/13/2009	11/13/2009	11/13/2009	11/13/2009	11/13/2009
Sample Matrix:	beads	beads	beads	beads	beads
Analyst:	MG	MG	MG	MG	MG

Biomass Concentrations

Total Biomass (cells/bead)	**4.61E+05**	**6.79E+04**	**2.97E+04**	**8.64E+04**	**5.02E+04**

Community Structure (% total PLFA)

Firmicutes (TerBrSats)	**3.58**	**10.47**	**13.53**	**9.21**	**6.08**
Proteobacteria (Monos)	**68.51**	**55.02**	**40.76**	**57.59**	**55.99**
Anaerobic metal reducers (BrMonos)	**0.56**	**7.12**	**7.95**	**6.26**	**6.44**
SRB/Actinomycetes (MidBrSats)	**0.76**	**2.86**	**3.87**	**5.07**	**3.91**
General (Nsats)	**24.37**	**18.93**	**25.86**	**13.36**	**18.40**
Eukaryotes (polyenoics)	**2.21**	**5.61**	**8.04**	**8.52**	**9.19**

Physiological Status (Proteobacteria only)

Slowed Growth	**0.01**	**1.90**	**1.88**	**1.50**	**1.02**
Decreased Permeability	**0.36**	**0.52**	**0.40**	**0.51**	**0.35**

Legend:
NA = Not Analyzed NS = Not Sampled

MICROBIAL INSIGHTS, INC.

2340 Stock Creek Blvd. Rockford, TN 37853-3044
Tel. (865) 573-8188 Fax. (865) 573-8133

PLFA

Client: **URS Corp**
Project: Solutia WG Krummrich Long Term Monitoring

MI Project Number: **037GK**
Date Received: 11/14/2009

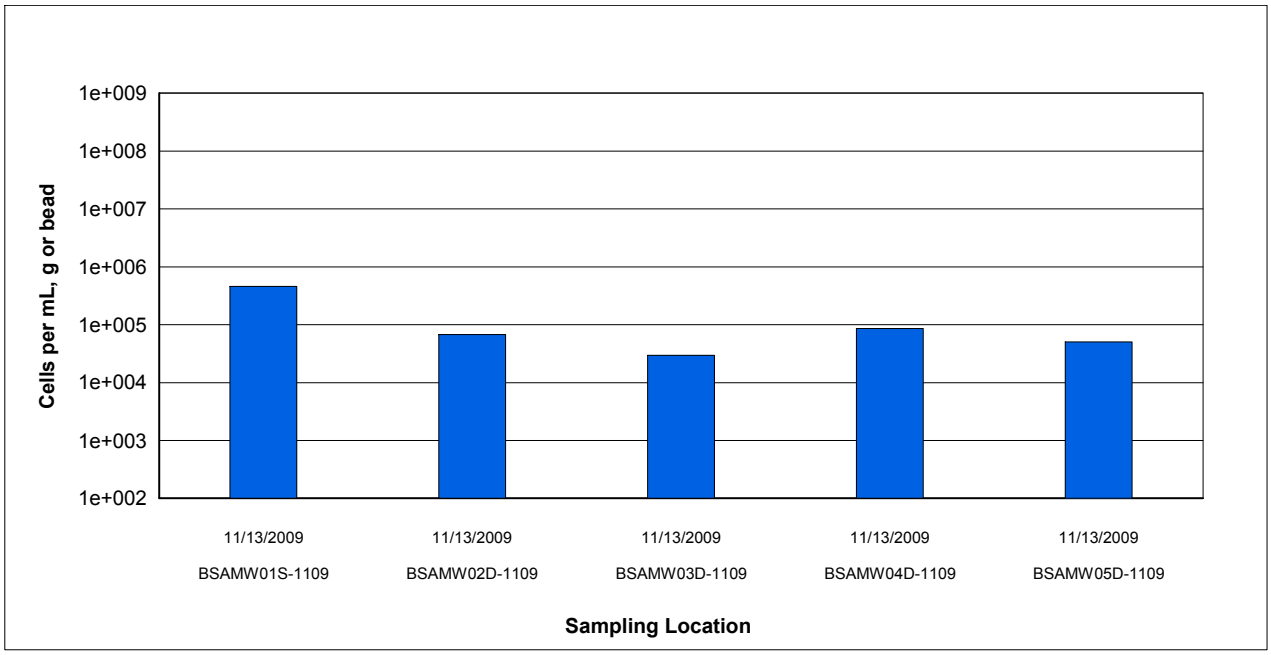

Figure 1. Biomass content is presented as a cell equivalent based on the total amount of phospholipid fatty acids (PLFA) extracted from a given sample. Total biomass is calculated based upon PLFA attributed to bacterial and eukaryotic biomass

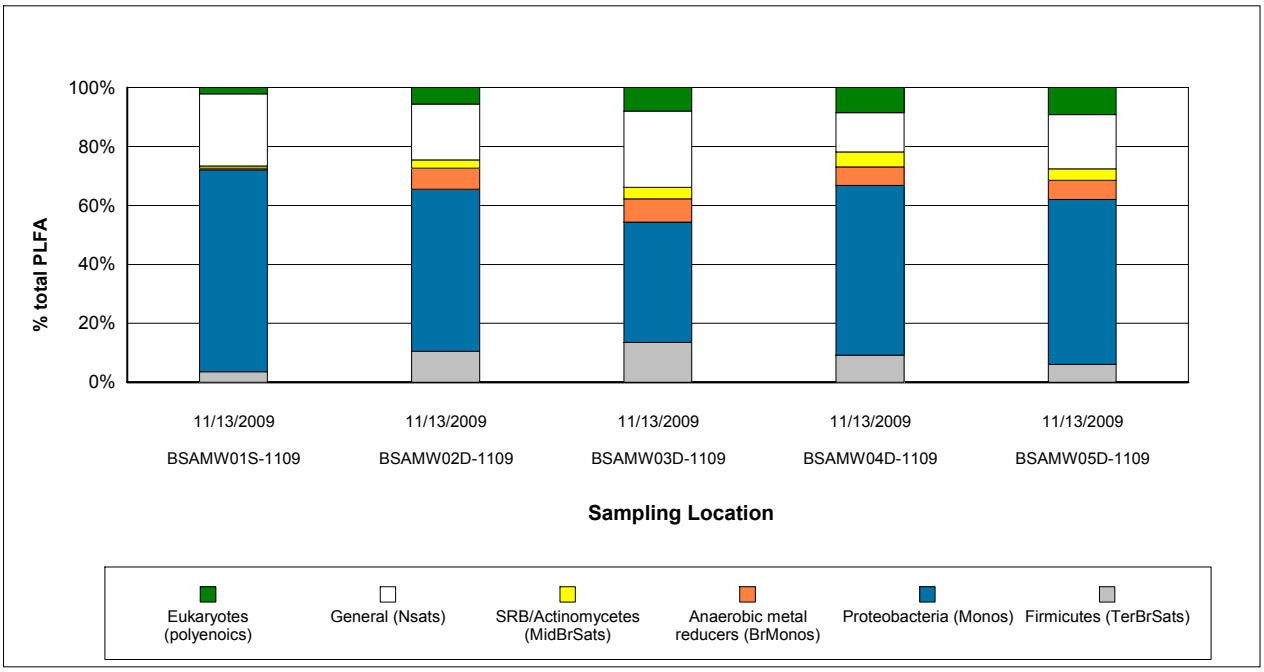

Figure 2. Relative percentages of total PLFA structural groups in the samples analyzed. Structural groups are assigned according to PLFA chemical structure, which is related to fatty acid biosynthesis.

MICROBIAL INSIGHTS, INC.

2340 Stock Creek Blvd. Rockford, TN 37853-3044
Tel. (865) 573-8188 Fax. (865) 573-8133

PLFA

Client: **URS Corp**
Project: Solutia WG Krummrich Long Term Monitoring

MI Project Number: **037GK**
Date Received: 11/14/2009

Sample Information

Sample Name:	**CPAMW01D-1109**	**CPAMW02D-1109**	**CPAMW03D-1109**	**CPAMW04D-1109**	**CPAMW05D-1109**
Sample Date:	11/13/2009	11/13/2009	11/13/2009	11/13/2009	11/13/2009
Sample Matrix:	beads	beads	beads	beads	beads
Analyst:	MG	MG	MG	MG	MG

Biomass Concentrations

Total Biomass (cells/bead)	**3.69E+04**	**2.46E+04**	**5.35E+04**	**2.83E+04**	**1.14E+05**

Community Structure (% total PLFA)

Firmicutes (TerBrSats)	**0.00**	**4.11**	**12.29**	**2.58**	**0.59**
Proteobacteria (Monos)	**51.03**	**43.59**	**54.46**	**62.59**	**75.20**
Anaerobic metal reducers (BrMonos)	**2.52**	**4.21**	**1.67**	**0.00**	**0.00**
SRB/Actinomycetes (MidBrSats)	**6.69**	**7.81**	**4.26**	**3.21**	**0.71**
General (Nsats)	**28.45**	**28.39**	**20.53**	**23.25**	**14.44**
Eukaryotes (polyenoics)	**11.32**	**11.91**	**6.77**	**8.37**	**9.05**

Physiological Status (Proteobacteria only)

Slowed Growth	**0.75**	**0.61**	**0.62**	**1.13**	**0.55**
Decreased Permeability	**0.46**	**0.66**	**0.10**	**0.33**	**0.53**

Legend:
NA = Not Analyzed NS = Not Sampled

MICROBIAL INSIGHTS, INC.

2340 Stock Creek Blvd. Rockford, TN 37853-3044
Tel. (865) 573-8188 Fax. (865) 573-8133

Client: **URS Corp**
Project: Solutia WG Krummrich Long Term Monitoring

MI Project Number: **037GK**
Date Received: 11/14/2009

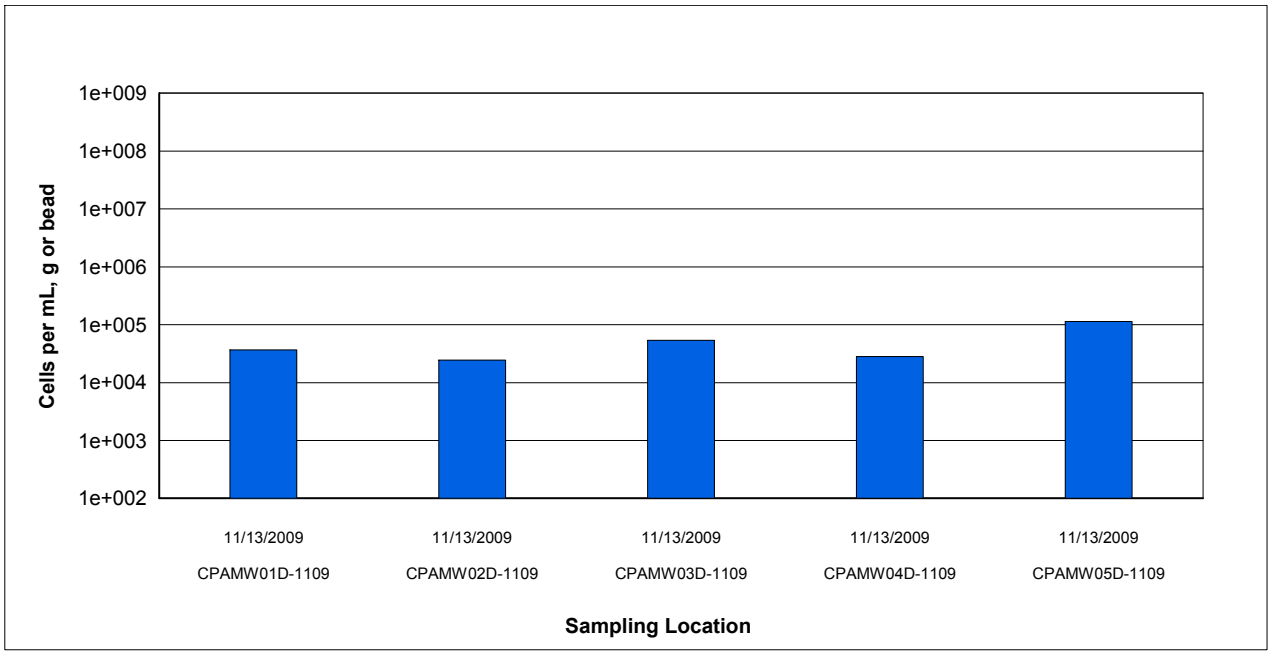

Figure 1. Biomass content is presented as a cell equivalent based on the total amount of phospholipid fatty acids (PLFA) extracted from a given sample. Total biomass is calculated based upon PLFA attributed to bacterial and eukaryotic biomass

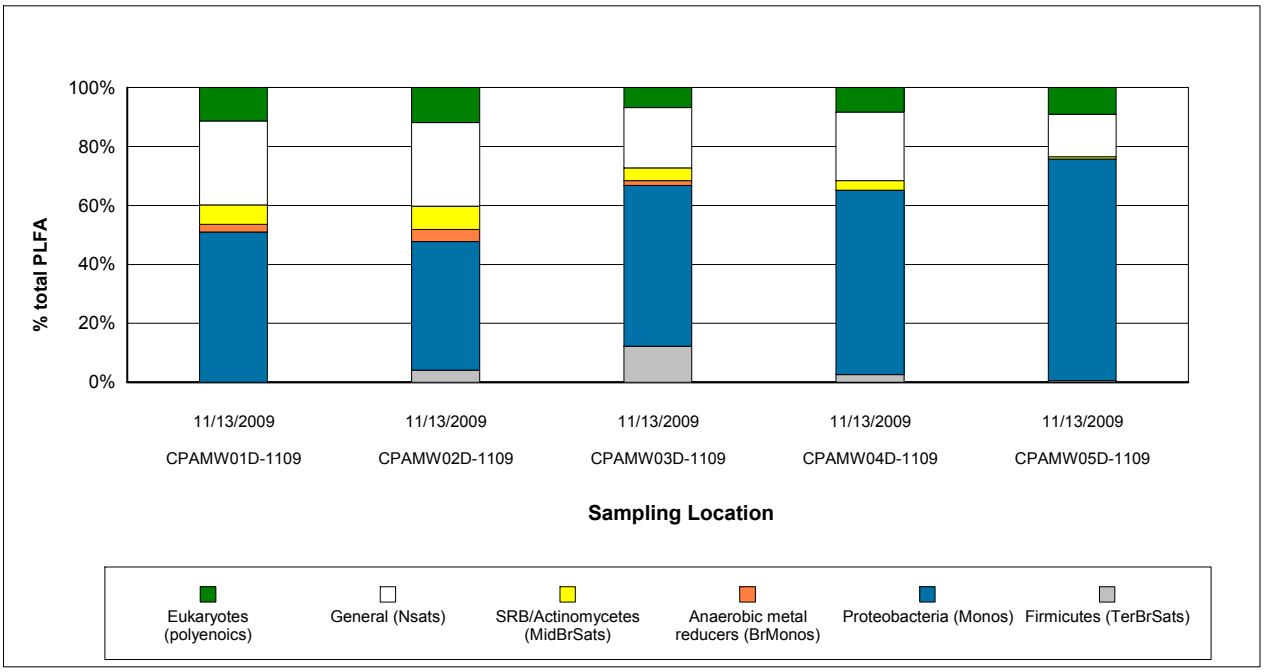

Figure 2. Relative percentages of total PLFA structural groups in the samples analyzed. Structural groups are assigned according to PLFA chemical structure, which is related to fatty acid biosynthesis.

2340 Stock Creek Blvd.
Rockford TN 37853-3044
Phone: (865) 573-8188
Fax: (865) 573-8133
Email: info@microbe.com

Identifier: 037GK **Date Rec:** 11/14/2009 **Report Date:** 12/11/2009

Client Project #: 21562154.00004 **Client Project Name:** Solutia WG Krummrich Long Term Monit

Purchase Order #:

Comments: All PLFA data did not meet QC requirements.

Total biomass for samples BSAMW03D-1109, CPAMW02D-1109 and CPAMW04D-1109 was below our PQL but above the LQL. Therefore, interpretation of these samples should be done with caution.

2340 Stock Creek Blvd.
Rockford, TN 37853-3044
Phone: 865.573.8188
Fax: 865.573.8133
Web: www.microbe.com

SITE LOGIC Report

Stable Isotope Probing (SIP) Study

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Comments:

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Executive Summary

Bio-Trap® samplers baited with ^{13}C labeled benzene or chlorobenzene were deployed for 30 days and then recovered for analysis. A complete summary of the results is provided in Table 1.

- A moderate level of biomass (~10^5 cells/bead) was detected in the ^{13}C chlorobenzene sampler. A low level (~10^4 cells/bead) was detected in the ^{13}C benzene sampler. This low level in the benzene sampler was below our practical quantitation limits; therefore, caution should be exercised when interpreting the PLFA data.
- Quantification of ^{13}C enriched biomass demonstrated utilization of the ^{13}C benzene in well BSAMW02D-1109. Although the del value obtained is considered to be in the "high" range indicating a substantial quantity of utilization, the incorporation was observed in a single fatty acid. Additionally, a low level of biomass was present in this well causing the percent incorporation to appear higher. There was no ^{13}C chlorobenzene incorporated into the biomass in well CPAMW03D-1109.
- Quantification of the ^{13}C dissolved inorganic carbon (DIC) showed a high level mineralization occurring in the ^{13}C benzene sampler. There was no evidence of mineralization occurring in the ^{13}C chlorobenzene sampler.
- Comparison of pre- and post-deployment concentrations of ^{13}C labeled benzene demonstrated no loss and the ^{13}C labeled chlorobenzene showed a 40% loss.

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Overview of Approach

Stable Isotope Probing (SIP)

Stable isotope probing (SIP) is an innovative method to track the environmental fate of a "labeled" contaminant of concern to unambiguously demonstrate biodegradation. Two stable carbon isotopes exist in nature – carbon 12 (^{12}C) which accounts for 99% of carbon and carbon 13 (^{13}C) which is considerably less abundant (~1%). With the SIP method, the Bio-Trap® sampler is baited with a specially synthesized form of the contaminant containing ^{13}C labeled carbon. Since ^{13}C is rare, the labeled compound can be readily differentiated from the contaminants present at the site. Following deployment, the Bio-Trap® is recovered and three approaches are used to conclusively demonstrate biodegradation of the contaminant of concern.

- The loss of the labeled compound provides an estimate of the degradation rate (% loss of ^{13}C).
- Quantification of ^{13}C enriched phospholipid fatty acids (PLFA) indicates incorporation into microbial biomass.
- Quantification of ^{13}C enriched dissolved inorganic carbon (DIC) indicates contaminant mineralization.

Phospholipid Fatty Acids (PLFA): PLFA are a primary component of the membrane of all living cells including bacteria. PLFA decomposes rapidly upon cell death (1, 2), so the total amount of PLFA present in a sample is indicative of the viable biomass. When combined with stable isotope probing (SIP), incorporation of ^{13}C into PLFA is a conclusive indicator of biodegradation.

Some organisms produce "signature" types of PLFA allowing quantification of important microbial functional groups (e.g. iron reducers, sulfate reducers, or fermenters). The relative proportions of the groups of PLFA provide a "fingerprint" of the microbial community. In addition, *Proteobacteria* modify specific PLFA during periods of slow growth or in response to environmental stress providing an index of their health and metabolic activity.

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Results

Table 1. Summary of the results obtained from the Bio-Trap® Units. Interpretation guidelines and definitions are found later in the document.

Sample Name	BSAMW02D-1109-^{13}C Benzene	CPAMW03D-1109-^{13}C Chlorobenzene
^{13}C Contaminant Loss		
Benzene Pre-deployment (mg/bd)	1.18	----
Benzene Post-deployment (mg/bd)	1.19	----
Chlorobenzene Pre-deployment (mg/bd)	----	0.34
Chlorobenzene Post-deployment (mg/bd)	----	0.20
% Loss	0%	40%
First Order Rate Constant (1/days)	0.000	0.017
Biomass & ^{13}C Incorporation		
Total Biomass (Cells/bd)	3.01E+04 (Q) (J)	1.52E+05 (Q)
^{13}C Enriched Biomass (Cells/bd)	1.60E+02	0.00E+00
% ^{13}C Incorporation	0.53%	0.00%
Average PLFA Del (‰)	1191	0
Maximum PLFA Del (‰)	1191	0
^{13}C Mineralization		
DIC Del (‰)	7093	-15
% 13C	8.30	1.09
Community Structure (% total PLFA)		
Firmicutes (TerBrSats)	0.0	10.8
Proteobacteria (Monos)	51.9	59.1
Anaerobic metal reducers (BrMonos)	0.0	0.0
Actinomycetes (MidBrSats)	0.0	7.5
General (Nsats)	14.6	10.1
Eukaryotes (Polyenoics)	33.5	12.6
Physiological Status (Proteobacteria only)		
Slowed Growth	0.36	1.13
Decreased Permeability	0.00	1.06

(Q) All PLFA data did not meet QC requirements

(J) Total biomass was below our PQL

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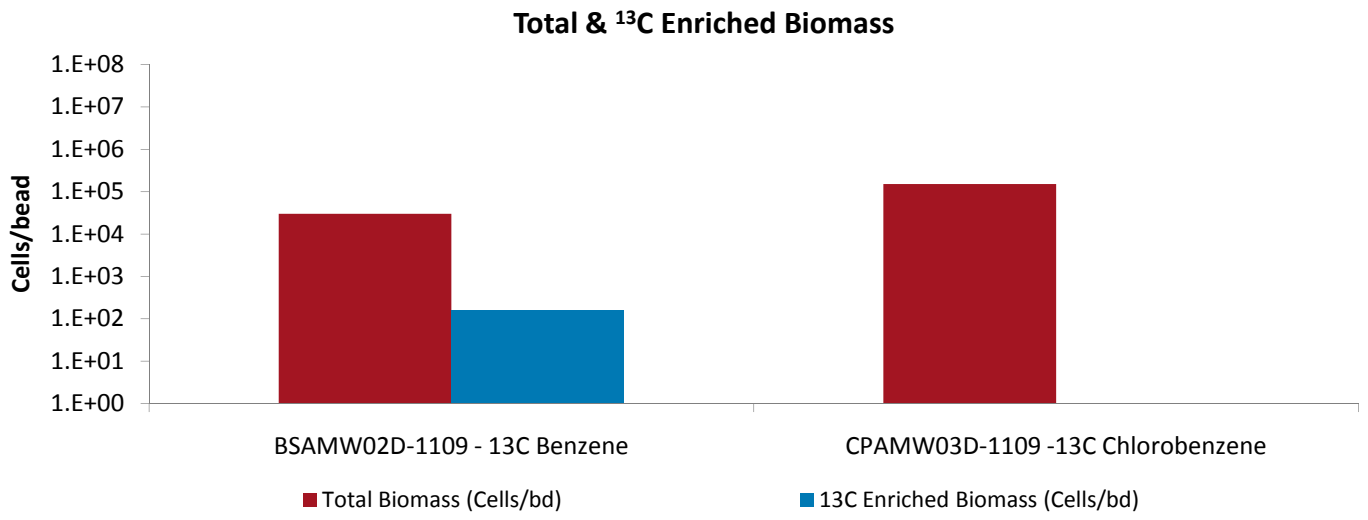

Figure 1. Biomass content is presented as a cell equivalent based on the total amount of phospholipid fatty acids (PLFA) extracted from a given sample. Total biomass is calculated based upon PLFA attributed to bacterial and eukaryotic biomass (associated with higher organisms).

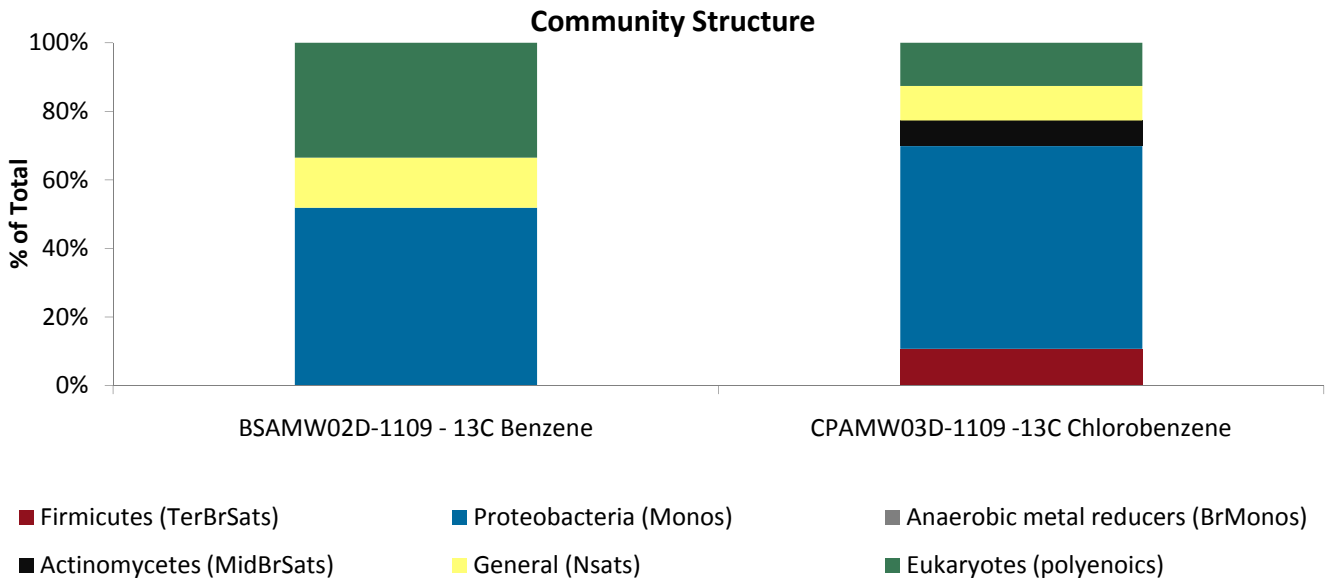

Figure 2. Relative percentages of total PLFA structural groups in the samples analyzed. Structural groups are assigned according to PLFA chemical structure, which is related to fatty acid biosynthesis. See the table in the interpretation section for detailed descriptions of the structural groups.

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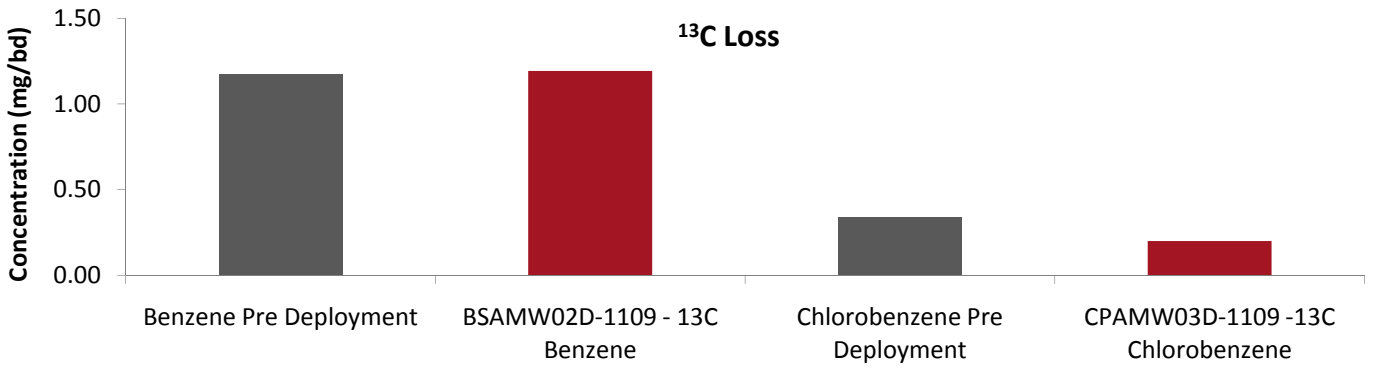

Figure 3. Comparison of Pre-deployment concentrations loaded on Bio-Sep beads to the concentrations detected after incubation.

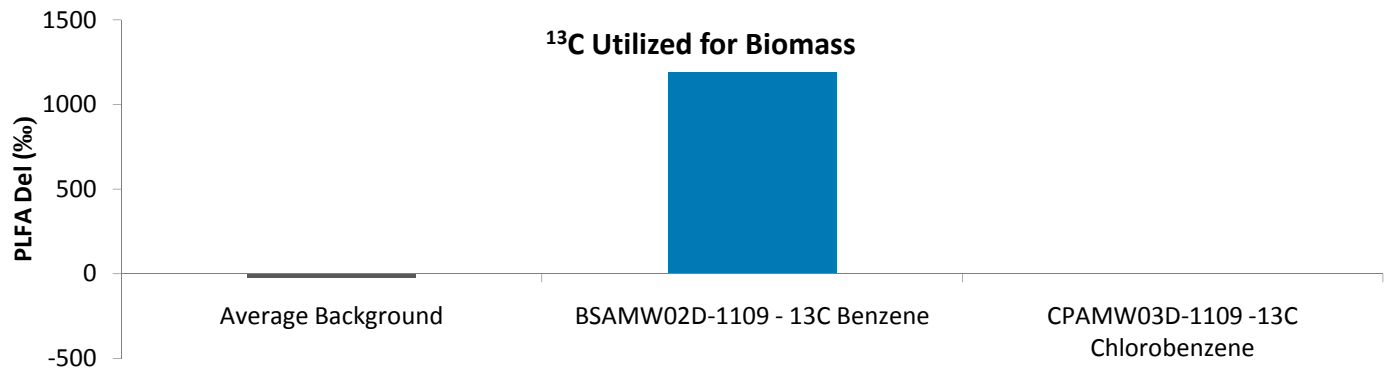

Figure 4. Comparison of the average Del value obtained from PLFA biomarkers from each Bio-Trap® unit to the average background Del observed in samples not exposed to ^{13}C enriched compounds.

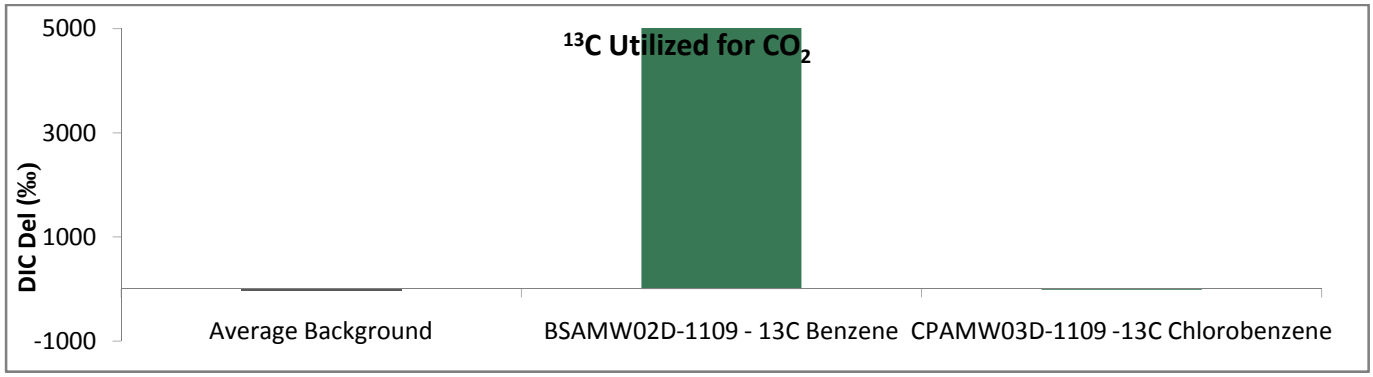

Figure 5. Comparison of the Del value obtained from DIC from each Bio-Trap® unit to the average background Del observed in samples not exposed to ^{13}C enriched compounds.

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Interpretation

Interpretation of the results of the SIP Bio-Trap® study must be performed with due consideration of site conditions, site activities, and the desired treatment mechanism. The following discussion describes interpretation of results in general terms and is meant to serve as a guide.

Contaminant Concentration: Bio-Traps® are baited with a ^{13}C labeled contaminant of concern and a pre-deployment concentration is determined prior to shipping. Following deployment, Bio-Traps® are recovered for analysis including measurement of the concentration of the ^{13}C labeled contaminant remaining. Pre- and post-deployment concentrations are used to calculate percent loss, to estimate the first order degradation rate constant (k), and to estimate the contaminant half life (Results Summary Table). For a description of how the first order rate constant is calculated, please see the glossary at the end of the report. The first order rate constant can be used to compare different wells or treatments depending on the design of the study. A higher value is indicative of a greater biodegradation rate.

Alternatively, the contaminant half life can be used to make the same types of comparisons between wells and treatments. By definition, half life is the amount of time required for the contaminant concentration to equal half of the initial concentration (see glossary for calculation).

Biomass Concentrations: PLFA analysis is one of the most reliable and accurate methods available for the determination of viable (live) biomass. Phospholipids break down rapidly upon cell death, so biomass calculations based on PLFA content do not include "fossil" lipids from dead cells. Total biomass (cells/bead) is calculated from total PLFA using a conversion factor of 20,000 cells/pmole of PLFA. When making comparisons between wells, treatments, or over time, differences of one order of magnitude or more are considered significant.

Total Biomass		
Low	**Moderate**	**High**
10^3 to 10^4 cells	10^5 to 10^6 cells	10^7 to 10^8 cells

For SIP studies, the ^{13}C enriched PLFA is also determined to conclusively demonstrate contaminant biodegradation and quantify incorporation into biomass as a result of the ^{13}C being used for cellular growth. The % ^{13}C incorporation (^{13}C enriched biomass/total biomass) is also provided in the data summary table, but the value must be interpreted carefully especially when comparing wells or treatments. Typically, biodegradation of a contaminant of concern is performed by a small subset of the total microbial community. For Bio-Traps® with large total biomass, the % ^{13}C incorporation value could be low despite significant ^{13}C labeled biomass and loss of the compound. The % ^{13}C incorporation should be viewed in light of total biomass, percent loss, and dissolved inorganic carbon (DIC) results.

^{13}C enrichment data is often reported as a del value. The del value is the difference between the isotopic ratio ($^{13}C/^{12}C$) of the sample (R_x) and a standard (R_{std}) normalized to the isotopic ratio of the standard (R_{std}) and multiplied by 1,000 (units are parts per thousand, denoted ‰).

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R_{std} is the naturally occurring isotopic ratio and is approximately 0.011180 (roughly 1% of naturally occurring carbon is ^{13}C). The isotopic ratio, R_x, of PLFA is typically less than the R_{std} under natural conditions, resulting in a del value between -20 and -30‰. For a SIP Bio-Trap® study, biodegradation and incorporation of the ^{13}C labeled compound into PLFA results in a larger $^{13}C/^{12}C$ ratio (R_x) and thus del values greater than under natural conditions. Typical PLFA del values are provided below.

PLFA Del (‰)		
Low	**Moderate**	**High**
0 to 100	100 to 1,000	>1,000

Dissolved Inorganic Carbon (DIC): Often, bacteria can utilize the ^{13}C labeled compound as both a carbon and energy source. The ^{13}C portion used as a carbon source for growth can be incorporated into PLFA as discussed above, while the ^{13}C used for energy is oxidized to $^{13}CO_2$ (mineralized).

^{13}C enriched CO_2 data is often reported as a del value as described above for PLFA. Under natural conditions, the R_x of CO_2 is approximately the same as R_{std} (0.01118 or about 1.1% ^{13}C). For an SIP Bio-Trap® study, mineralization of the ^{13}C labeled contaminant of concern would lead to a greater value of R_x (increased $^{13}CO_2$ production) and thus a positive del value. As with PLFA, del values between 0 and 100‰ are considered low, values between 100 and 1,000‰ are considered moderate, and values greater than 1,000‰ are considered high. Thus DIC %^{13}C are considered low if the value is less than 1.23%, moderate if between 1.23 and 2.24%, and high if greater than 2.24%.

Dissolved Inorganic Carbon (DIC) Del and % ^{13}C		
Low	**Moderate**	**High**
0 to 100	100 to 1,000	>1,000
1.11 to 1.23%	1.23 to 2.24 %	>2.24 %

Community Structure (% total PLFA): Community structure data is presented as a percentage of PLFA structural groups normalized to the total PLFA biomass. The relative proportions of the PLFA structural groups provide a "fingerprint" of the types of microbial groups (e.g. anaerobes, sulfate reducers, etc.) present and therefore offer insight into the dominant metabolic processes occurring at the sample location. Thorough interpretation of the PLFA structural groups depends in part on an understanding of site conditions and the desired microbial biodegradation pathways. For example, an increase in mid chain branched saturated PLFA (MidBrSats), indicative of sulfate reducing bacteria (SRB) and *Actinomycetes*, may be desirable at a site where anaerobic BTEX biodegradation is the treatment mechanism, but would not be desirable for a corrective action promoting aerobic BTEX or MTBE biodegradation. The following table provides a brief summary of each PLFA structural group and its potential relevance to bioremediation.

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Table 2. Description of PLFA structural groups.

PLFA Structural Group	General classification	Potential Relevance to Bioremediation Studies
Monoenoic (Monos)	Abundant in Proteobacteria (Gram negative bacteria), typically fast growing, utilize many carbon sources, and adapt quickly to a variety of environments.	Proteobacteria is one of the largest groups of bacteria and represents a wide variety of both aerobes and anaerobes. The majority of Hydrocarbon utilizing bacteria fall within the Proteobacteria
Terminally Branched Saturated (TerBrSats)	Characteristic of Firmicutes (Low G+C Gram-positive bacteria), and also found in Bacteriodes, and some Gram-negative bacteria (especially anaerobes).	Firmicutes are indicative of presence of anaerobic fermenting bacteria (mainly *Clostridia/Bacteriodes*-like), which produce the H_2 necessary for reductive dechlorination
Branched Monoenoic (BrMonos)	Found in the cell membranes of micro-aerophiles and anaerobes, such as sulfate- or iron-reducing bacteria	In contaminated environments high proportions are often associated with anaerobic sulfate and iron reducing bacteria
Mid-Chain Branched Saturated (MidBrSats)	Common in sulfate reducing bacteria and also Actinobacteria (High G+C Gram-positive bacteria).	In contaminated environments high proportions are often associated with anaerobic sulfate and iron reducing bacteria
Normal Saturated (Nsats)	Found in all organisms.	High proportions often indicate less diverse populations.
Polyenoic	Found in eukaryotes such as fungi, protozoa, algae, higher plants, and animals.	Eukaryotic scavengers will often rise up and prey on contaminant utilizing bacteria

Physiological Status (*Proteobacteria*): Some *Proteobacteria* modify specific PLFA as a strategy to adapt to stressful environmental conditions (3, 4). For example, *cis* monounsaturated fatty acids may be modified to cyclopropyl fatty acids during periods of slowed growth or modified to *trans* monounsaturated fatty acids to decrease membrane permeability in response to environmental stress. The ratio of product to substrate fatty acid thus provides an index of their health and metabolic activity. In general, status ratios greater than 0.25 indicate a response to unfavorable environmental conditions.

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Glossary

Del: A Del value is the difference between the isotopic ratio ($^{13}C/^{12}C$) of the sample (R_x) and a standard (R_{std}) normalized to the isotopic ratio of the standard (R_{std}) and multiplied by 1,000 (units are parts per thousand denoted ‰).

$$Del = (R_x - R_{std})/R_{std} \times 1000$$

First Order Rate Constant: The first order rate is expression is $C=C_o e^{-kt}$ where C is the post-deployment concentration (mg/bead), C_o is the pre-deployment concentration (mg/bead), k is the first order rate constant (1/days), and t is the deployment time (days). Upon rearrangement and using pre-and post-deployment concentrations, $k=-\ln(C/C_o)/t$.

Half Life: Half life is the amount of time required for the contaminant concentration to equal half of the initial concentration and is expressed as $C=C_o/2$. Substituting into the rate expression and solving for half life ($t_{1/2}$), $t_{1/2} = \ln(0.5)/-k$. As opposed to the rate constant, a higher half life ($t_{1/2}$) indicates a lower degradation rate.

References

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2. White, D.C. and D.B. Ringelberg. 1995. Utility of signature lipid biomarker analysis in determining in situ viable biomass. In P.S. Amy and D.L. Halderman (eds.) The microbiology of the terrestrial surface. CRC Press, Boca Raton.
3. Guckert, J.B., M.A. Hood, and D.C. White. 1986. Phospholipid ester-linked fatty acid profile changes during nutrient deprivation of *Vibrio chloerae*: increases in the trans/cis ratio and proportions of cyclopropyl fatty acids. Applied and Environmental Microbiology. 52:794-801.
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Project Name: Solutia WGK Long Term Monitoring
Project No.: 21562154.00004

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Sample Information / **CENSUS:** Please select the target organism/gene

MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	PLFA	VFA	ME/E	DGGE+3D	DGGE+5D		qDHC (Dehalococcoides)	DHC Functional genes	qDHB (Dehalobacter)	qDSM (Desulfuromonas)	qDSB (Desulfitobacterium)	qEBAC (Total)	qDSR (SRBs only)	qSRB/IRB	qMGN (methanogens)	qMOB (methanotrophs)	qDNF (Denitrifying)	qAOB (ammonia oxidizing)	qPM1 (MTBE aerobic)	qTOD (Intial PAHs aerobic)	qCAT (Intermediate PAHs aerobic)	qBSS (Toluen/Xylene Anaerobic)	qNAH (Napthalene aerobic)	add qPCR:	add qPCR:	add qPCR:	RNA (Expression Option)*	Other: Benzene SIP	Other: Chlorobenzene SIP	Other:	Other:
037GK 1	BSAMW01S-1109	11/13/09	0755	water	X																														
2,3	BSAMW02D-1109		1255		X																											X			
4	BSAMW03D-1109		1210		X																														
5	BSAMW04D-1109		1525		X																														
6	BSAMW05D-1109		1340		X																														
7	CPAMW01D-1109		0915		X																														
8	CPAMW02D-1109		1015		X																														
9,10	CPAMW03D-1109		1245		X																												X		
11	CPAMW04D-1109		1325		X																														
12	CPAMW05D-1109		1420		X																														

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