

US EPA ARCHIVE DOCUMENT



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

Tel: 314-674-3312
Fax: 314-674-8808

gmrina@solutia.com

May 4, 2012

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

VIA FEDEX

Re: Supplemental Groundwater Monitoring Program
1st Quarter 2012 Data Report
Solutia Inc., W. G. Krummrich Plant, Sauget, IL

Dear Mr. Bardo:

Enclosed please find the 1st Quarter 2012 Data Report for the Supplemental Groundwater Monitoring Program for Solutia Inc.'s W. G. Krummrich Plant, Sauget, IL. (The related Long-Term Monitoring Program report is being submitted separately.)

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Gerald M. Rinaldi".

Gerald M. Rinaldi
Manager, Remediation Services

Enclosure

cc: Distribution List

US EPA ARCHIVE DOCUMENT

DISTRIBUTION LIST

**Supplemental Groundwater Monitoring Program
1st Quarter 2012 Data Report
Solutia Inc., W. G. Krummrich Plant, Sauget, IL**

USEPA

Stephanie Linebaugh
USEPA Region 5 - SR6J, 77 West Jackson Boulevard, Chicago, IL 60604

Booz Allen Hamilton

Dan Briller
Booz Allen Hamilton, 8283 Greensboro Drive, McLean, VA 22102

Solutia

Brett Shank 500 Monsanto Avenue, Sauget, IL 62206-1198

**1ST QUARTER 2012
DATA REPORT**

**SUPPLEMENTAL
GROUNDWATER
MONITORING PROGRAM**

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

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

April 2012



URS Corporation
1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
(314) 429-0100
Project: 21562682.00006

1.0	INTRODUCTION.....	1
2.0	FIELD PROCEDURES	2
3.0	LABORATORY PROCEDURES	4
4.0	QUALITY ASSURANCE.....	4
5.0	OBSERVATIONS	5
6.0	REFERENCES.....	6

List of Figures

Figure 1	Site Location Map
Figure 2	Expanded Supplemental Groundwater Monitoring Program Well/Piezometer Locations
Figure 3	Potentiometric Surface Map Middle/Deep Hydrogeologic Unit
Figure 4	Benzene and Total Chlorobenzenes Results

List of Tables

Table 1	Monitoring Well Gauging Information
Table 2	Groundwater Analytical Results
Table 3	Monitored Natural Attenuation Results Summary

List of Appendices

Appendix A	Groundwater Purging and Sampling Forms
Appendix B	Chains-of-Custody
Appendix C	Quality Assurance Report
Appendix D	Groundwater Analytical Results (with Data Review Reports)

1.0 INTRODUCTION

This report presents the results of the 1st Quarter 2012 (1Q12) sampling event performed north of the Solutia Inc. (Solutia) W.G. Krummrich (WGK) Facility located in Sauget, Illinois (Site). This sampling event was conducted as an extension to, and in accordance with, procedures outlined in the Revised Long-Term Monitoring Program (LTMP) Work Plan (Solutia 2009). The scope of this Supplemental Groundwater Monitoring Program (SGMP) was outlined in Solutia correspondence to the United States Environmental Protection Agency Region 5 (USEPA) dated August 16, 2011, and a subsequent August 18, 2011 letter from USEPA. Beginning with the 1Q12 sampling event, additional piezometers were added to the SGMP beyond those outlined in the original 2011 correspondence to USEPA. As presented in the August 18, 2011 USEPA letter, the objective of this work is to collect monitoring and measurement data necessary to verify that the migration of contaminated groundwater from WGK is stable. The Site location is presented in **Figure 1**.

Groundwater Sampling Location and Frequency – Quarterly sampling of the SGMP well/piezometers commenced 3Q11, with an expected duration of four quarters, through 2Q12. For the 1Q12 groundwater sampling event, groundwater samples were collected from piezometers GWE-1D, GWE-2D, GWE-3D, GWE-3M, GWE-3S, GWE-4D, GWE-4M, GWE-4S, GWE-5M, and GWE-5S along with monitoring well GWE-5D, all located northwest of WGK in Sauget, Illinois. Monitoring well/piezometer locations are presented in **Figure 2**.

Groundwater Sampling Parameters – During the 1Q12 groundwater sampling event, groundwater samples were analyzed for benzene, chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene using USEPA Method 8260B.

Samples for analysis of Monitored Natural Attenuation (MNA) parameters were collected from eleven SGMP locations. 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

2.0 FIELD PROCEDURES

URS Corporation (URS) conducted 1Q12 sampling activities on February 20, 27 and 28, 2012. Sampling activities were completed 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, the thickness of non-aqueous phase liquid (NAPL) if present, and total well/piezometer depth to 0.01 feet. As part of the LTMP, depth to groundwater measurements were collected on February 9 and 10, 2012 from accessible existing WGK monitoring wells (i.e., BSA-, CPA-, GM-, K-, PS-MW- and PMA-series) and piezometer clusters (installed for the Sauget Area 2 RI/FS and WGK CA-750 Environmental Indicator projects) specified in the Revised LTMP Work Plan (Solutia 2009) (**Figure 3**). This group of wells and piezometers includes those that compose the SGMP. NAPL was not detected within any of the SGMP monitoring well/piezometers.

Well gauging information for the 1Q12 event is presented in **Table 1**. As the middle and deep hydrogeologic units are the primary migration pathway for constituents present in groundwater at, and in the vicinity of, the WGK Facility, a groundwater potentiometric surface map based on water level data from well/piezometers screened in the Middle Hydrogeologic Unit (MHU) and Deep Hydrogeologic Unit (DHU) is presented as **Figure 3**.

Groundwater Sampling – Low-flow sampling techniques were used for groundwater sample collection. At each monitoring well/piezometer, disposable, low-density polyethylene tubing was attached to a submersible pump (GWE-5D) or peristaltic pump (piezometers), and then lowered into the well/piezometer to the middle of the screened interval. Monitoring wells/piezometers were purged at a rate less than 500 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 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, total and dissolved organic carbon, and ferrous iron)

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 “GWE-MW#-MMYY-QAC” where:

- “**GWE**” denotes a Supplemental GWE-series well/piezometer and “**MW-#**” denotes the monitoring well/piezometer number
- “**MMYY**” – Month and year of sampling quarter, e.g.: February (1st quarter), 2012 (0212)
- “**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 or below 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). 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 forms are included in **Appendix A**, while copies of 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.

3.0 LABORATORY PROCEDURES

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

- VOCs, via USEPA SW-846 Method 8260B (dichlorobenzenes were quantitated using Method 8260B because of potential volatilization losses associated with Method 8270)
- 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).

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 Program Work Plan (Solutia 2009). 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**. The laboratory report along with data review and validation reports are included in **Appendix D**.

A total of 15 groundwater samples (eleven investigative samples, two field duplicates, one MS/MSD pair and one equipment blank) were prepared and analyzed by TestAmerica Savannah and TestAmerica St. Louis 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) KPS072 and KPS073. The samples contained in SDGs KPS072 and KPS073 are listed below:

KPS072	
GWE-1D-0212	GWE-5D-0212-AD
GWE-3D-0212	1Q12 SUPP Trip Blank #1
GWE-3D-0212-EB	1Q12 SUPP Trip Blank #2
GWE-5D-0212	

KPS073	
GWE-2D-0212	GWE-4S-0212
GWE-3M-0212	GWE-5M-0212
GWE-3S-0212	GWE-5S-0212
GWE-4D-0212	1Q12 SUPP Trip Blank #2
GWE-4D-0212-AD	1Q12 SUPP Trip Blank #3
GWE-4M-0212	

Evaluation of the groundwater analytical data followed procedures outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA 2008), USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Data Review (USEPA 2010), and the Revised Long-Term Monitoring Program 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 this SDG 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/non-detect (J/UJ) data was 100 percent.

5.0 OBSERVATIONS

Groundwater analytical detections and MNA results for the 1Q12 SGMP sampling event are presented in **Tables 2** and **3**, respectively. Benzene and chlorobenzenes were reported in samples collected from the SGMP piezometers and well during this sampling event. These constituents are discussed below:

Benzene – Of the samples collected, benzene was only detected in monitoring well GWE-5D during the 1Q12 sampling event. Benzene concentrations from this sample and the associated duplicate sample were 86 µg/L and 77 µg/L, respectively.

Chlorobenzenes (Total) – Total chlorobenzenes (i.e., sum of chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene) were detected in six of the eleven wells/piezometers sampled in 1Q12, at concentrations ranging from 5.3 µg/L (GWE-2D) to 2,030 µg/L (GWE-5D).

Figure 4 displays concentrations of benzene and total chlorobenzenes from the 1Q12 sampling event.

In accordance with the scope outlined for the SGMP, one groundwater sampling event (2nd Quarter 2012 (2Q12)) remains in the SGMP. During the 2Q12 event, groundwater samples will be collected from piezometers GWE-1D, -2D, -3D, -3M, -3S, -4D, -4M, -4S, -5M, and -5S, along with monitoring well GWE-5D.

6.0 REFERENCES

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

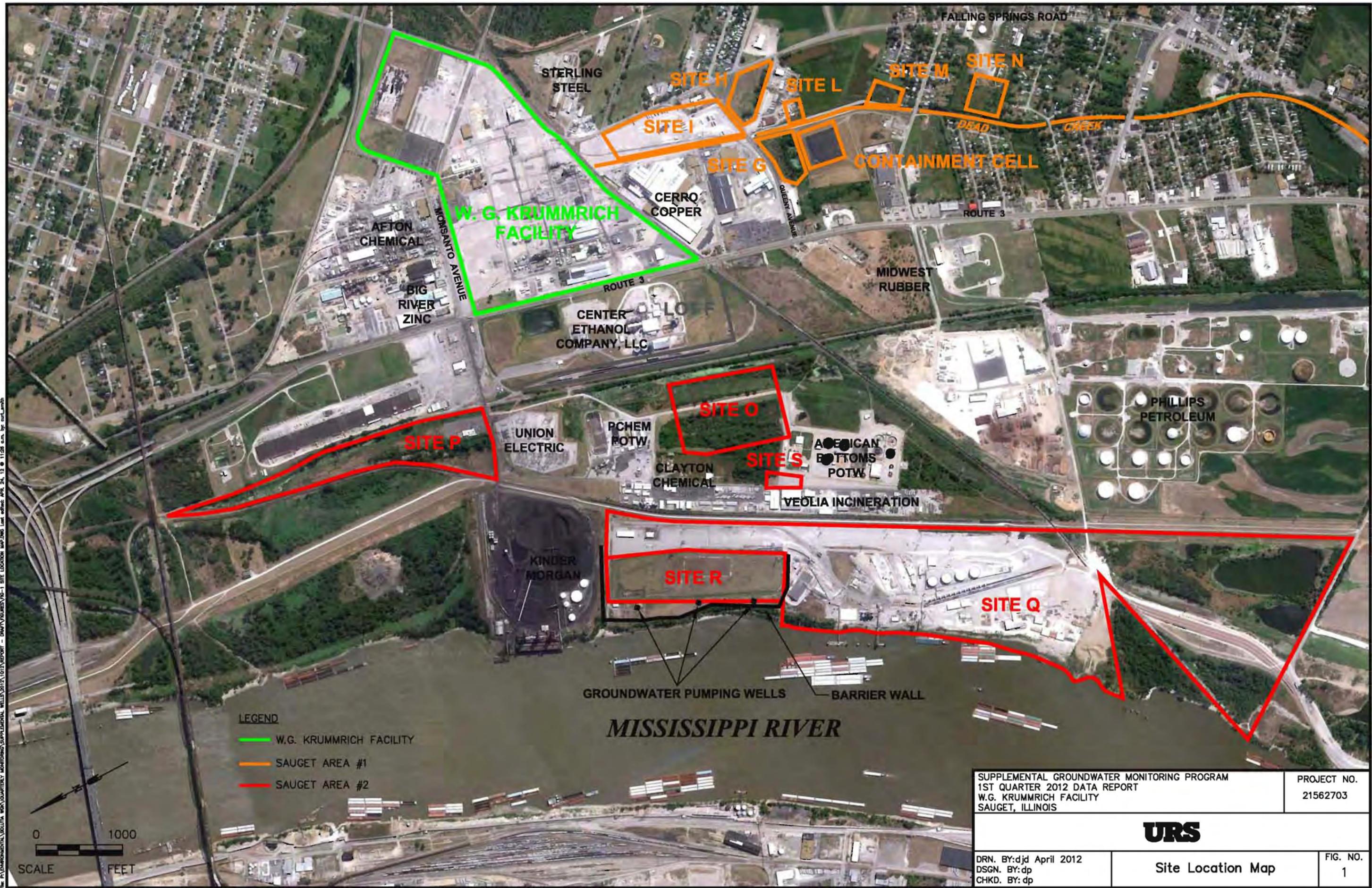
Solutia Inc, 2011. Supplemental Groundwater Monitoring Program, Solutia Inc., W.G. Krummrich Facility, Sauget, Illinois, August 2011.

USEPA, 2008. Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review

USEPA, 2010. Contract Laboratory Program National Functional Guidelines for Inorganic Data Review.

Figures

FILE: P:\COMMODITY\INDUSTRIAL MONITORING\SUPPLEMENTAL WELLS\2012\1Q12\REPORT - 09MAY12\FIGURE\FIG-1 SITE LOCATION MAP.DWG Last updated: APR. 26, 12 @ 11:28 a.m. by: rsl/Lamb

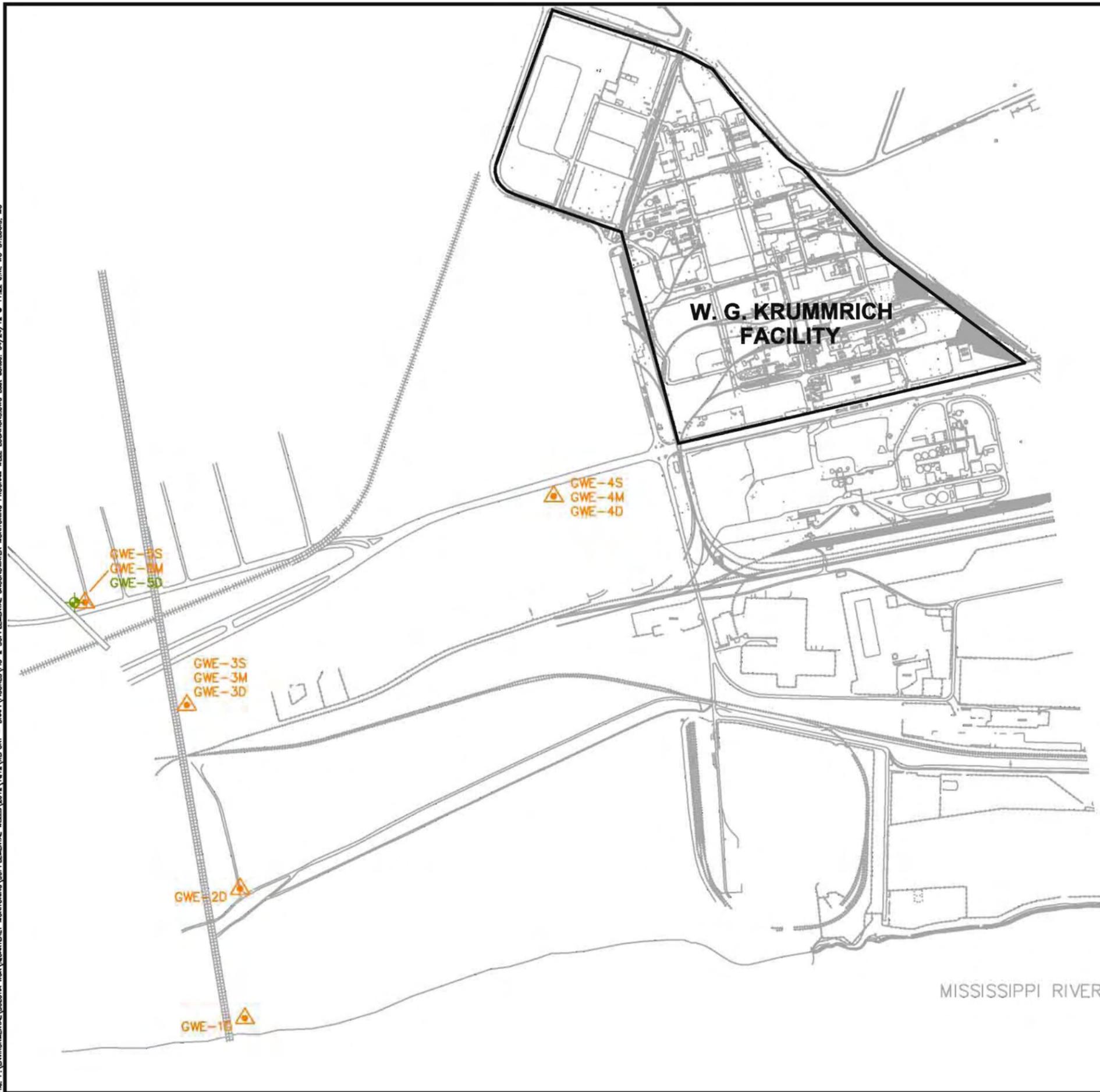


LEGEND

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

0 1000
SCALE FEET

SUPPLEMENTAL GROUNDWATER MONITORING PROGRAM 1ST QUARTER 2012 DATA REPORT W.G. KRUMMRICH FACILITY SAUGERT, ILLINOIS		PROJECT NO. 21562703
URS		FIG. NO. 1
DRN. BY: djd April 2012 DSGN. BY: dp CHKD. BY: dp	Site Location Map	

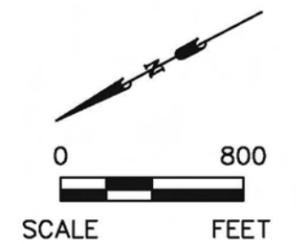


LEGEND

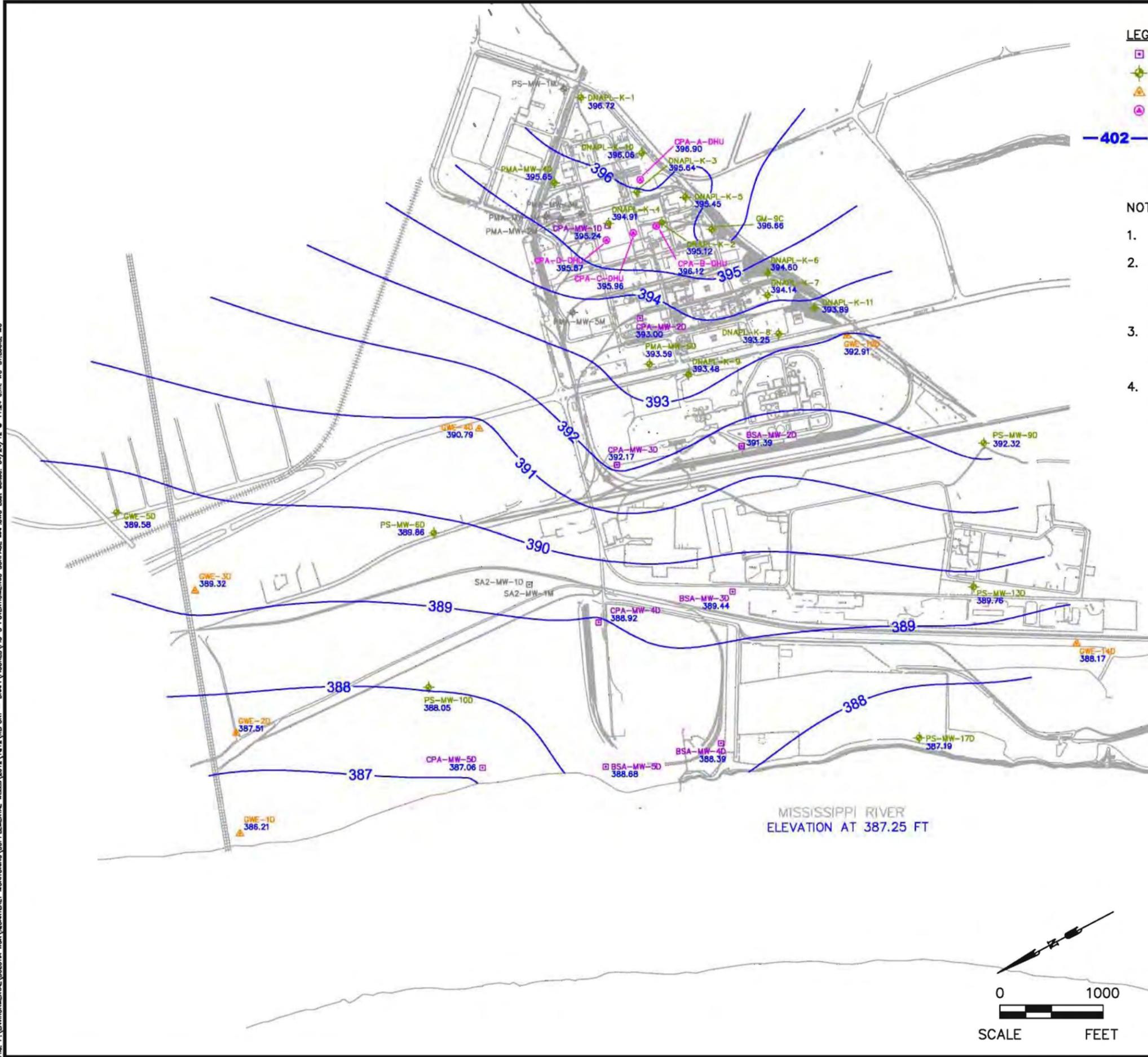
- GWE-3D  SUPPLEMENTAL GROUNDWATER PIEZOMETER LOCATION
- GWE-5D  SUPPLEMENTAL GROUNDWATER MONITORING WELL LOCATION

NOTE:

1. REFER TO TABLE 1 FOR WELL/PIEZOMETER CONSTRUCTION INFORMATION.



SUPPLEMENTAL GROUNDWATER MONITORING PROGRAM 1ST QUARTER 2012 DATA REPORT W.G. KRUMMRICH FACILITY SAUGET, ILLINOIS		PROJECT NO. 21562703
URS		
DRN. BY:djd April 2012 DSGN. BY:dp CHKD. BY:dp	Supplemental Groundwater Monitoring Program Well/Piezometer Locations	FIG. NO. 2



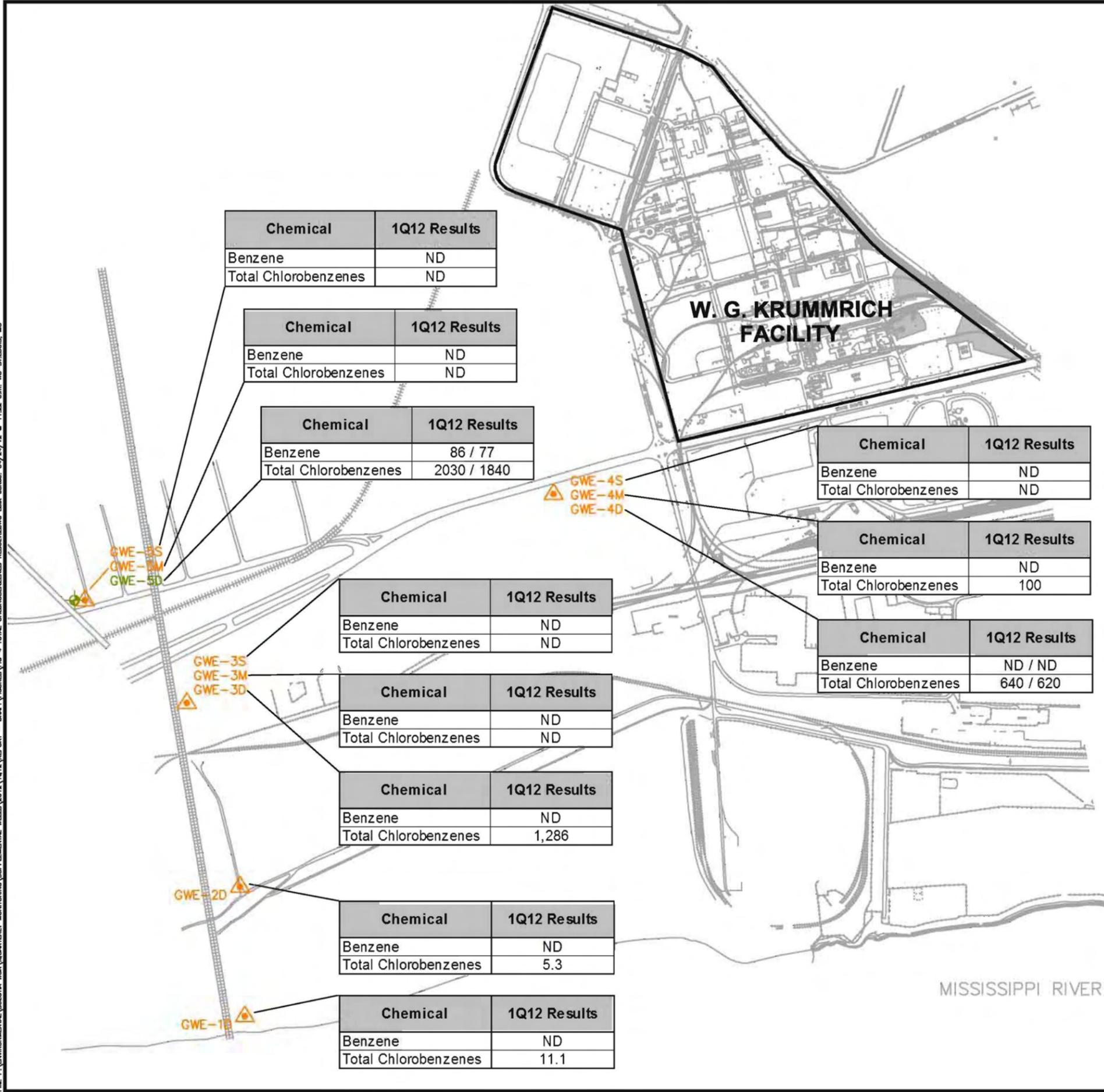
LEGEND

- LONG-TERM MONITORING WELL USED FOR GROUNDWATER CONTOURING
- ◆ OTHER MONITORING WELL USED FOR GROUNDWATER CONTOURING
- ▲ PIEZOMETER CLUSTER USED FOR GROUNDWATER CONTOURING
- ⊕ CPA MONITORING WELL USED FOR GROUNDWATER CONTOURING
- 402— GROUNDWATER ELEVATION CONTOUR (FT NAVD)

NOTES:

1. GROUNDWATER LEVELS WERE MEASURED FEBRUARY 9 & 10, 2012.
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.
4. LOCATIONS WITH WELLS SCREENED IN BOTH THE MHU AND DHU UTILIZED THE DHU WELL FOR DEVELOPMENT OF THE POTENTIOMETRIC SURFACE MAP.

SUPPLEMENTAL GROUNDWATER MONITORING PROGRAM 1ST QUARTER 2012 DATA REPORT W.G. KRUMMRICH FACILITY SAUGET, ILLINOIS		PROJECT NO. 21562703
URS		
DRN. BY:djd April 2012 DSGN. BY:dp CHKD. BY:dp	Potentiometric Surface Map Middle/Deep Hydrogeologic Unit	FIG. NO. 3

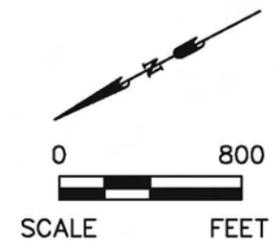


LEGEND

- GWE-3D SUPPLEMENTAL GROUNDWATER PIEZOMETER LOCATION
- GWE-5D SUPPLEMENTAL GROUNDWATER 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 = NOT DETECTED.
4. MULTIPLE SAMPLE RESULTS INDICATE A DUPLICATE SAMPLE.



SUPPLEMENTAL GROUNDWATER MONITORING PROGRAM 1ST QUARTER 2012 DATA REPORT W.G. KRUMMRICH FACILITY SAUGET, ILLINOIS		PROJECT NO. 21562703
URS		
DRN. BY:djd April 2012 DSGN. BY:dp CHKD. BY:dp	Benzene & Total Chlorobenzenes Results	FIG. NO. 4

Tables

See last page of table for notes.

**Table 1
Monitoring Well Gauging Information**

Well ID	Construction Details						February 9-10, 2012			
	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)	NAPL Thickness (feet)	Depth to Bottom (feet btoc)	Water Elevation* (feet)
Shallow Hydrogeologic Unit (SHU 395-380 feet NAVD 88)										
BSA-MW-1S	409.49	412.31	19.68	24.68	389.81	384.81	18.89	--	27.32	393.42
GWE-1S	413.83	416.54	13	23	403.54	393.54	dry	--	23.40	dry
GWE-2S	417.45	417.10	17	27	400.10	390.10	dry	--	26.46	dry
GWE-3S	415.03	417.01	25	35	392.01	382.01	28.63	--	38.25	388.38
GWE-4S	406.16	405.75	20	30	385.75	375.75	14.93	--	28.51	390.82
GWE-5S	408.47	408.05	17.91	27.91	390.56	380.56	18.38	--	27.99	389.67
PMA-MW-1S	410.30	410.06	20.18	25.18	390.12	385.12	14.41	--	25.02	395.65
PMA-MW-2S	412.27	411.66	22.94	27.94	389.33	384.33	16.55	--	27.43	395.11
PMA-MW-3S	412.37	412.06	22.71	27.71	389.66	384.66	16.70	--	27.40	395.36
PMA-MW-4S	411.09	410.43	20.99	25.99	390.10	385.10	14.66	--	25.45	395.77
SA2-MW-1S	403.43	406.01	13.55	23.55	392.46	382.46	dry	--	23.46	dry
Middle Hydrogeologic Unit (MHU 380-350 feet NAVD 88)										
GWE-1M	413.83	416.26	69.40	79.40	346.86	336.86	29.25	--	74.52	387.01
GWE-2M	417.82	417.57	67.80	77.80	349.77	339.77	29.71	--	77.30	387.86
GWE-3M	415.03	417.84	68.30	78.30	349.54	339.54	28.54	--	78.33	389.30
GWE-4M	406.11	405.86	43.76	49.76	362.10	356.10	14.85	--	48.12	391.01
GWE-5M	408.59	408.20	48.10	58.10	360.49	350.49	18.51	--	58.08	389.69
PMA-MW-1M	410.32	410.08	54.54	59.54	355.78	350.78	14.90	--	59.61	395.18
PMA-MW-2M	412.26	411.93	56.87	61.87	355.39	350.39	17.72	--	61.26	394.21
PMA-MW-3M	412.36	412.10	57.07	62.07	355.29	350.29	16.77	--	61.81	395.33
PMA-MW-5M	411.27	410.97	52.17	57.17	359.10	354.10	16.45	--	56.99	394.52
PS-MW-1M	409.37	412.59	37.78	42.78	371.59	366.59	15.75	--	46.06	396.84
SA2-MW-1M	403.55	406.13	53.26	63.26	352.87	342.87	25.20	--	53.11	380.93
Deep Hydrogeologic Unit (DHU 350 feet NAVD 88 - Bedrock)										
BSA-MW-2D	412.00	415.13	68.92	73.92	343.08	338.08	23.74	--	77.04	391.39
BSA-MW-3D	412.91	415.74	107.02	112.02	305.89	300.89	26.30	--	114.80	389.44
BSA-MW-4D	425.00	424.69	118.54	123.54	306.46	301.46	36.30	--	123.22	388.39
BSA-MW-5D	420.80	420.49	115.85	120.85	304.95	299.95	31.81	--	120.55	388.68
CPA-MW-1D	408.62	412.23	66.12	71.12	342.50	337.50	16.99	--	74.68	395.24
CPA-MW-2D	408.51	408.20	99.96	104.96	308.55	303.55	15.20	--	104.65	393.00
CPA-MW-3D	410.87	410.67	108.20	113.20	302.67	297.67	18.50	--	114.80	392.17
CPA-MW-4D	421.57	421.20	116.44	121.44	305.13	300.13	32.28	--	120.99	388.92
CPA-MW-5D	411.03	413.15	107.63	112.63	303.40	298.40	26.09	--	114.65	387.06

**Table 1
Monitoring Well Gauging Information**

Well ID	Construction Details						February 9-10, 2012			
	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)	NAPL Thickness (feet)	Depth to Bottom (feet btoc)	Water Elevation* (feet)
Deep Hydrogeologic Unit (DHU 350 feet NAVD 88 - Bedrock) (continued)										
DNAPL-K-1	413.07	415.56	108.20	123.20	304.87	289.87	18.84	--	123.15	396.72
DNAPL-K-2	407.94	407.72	97.63	112.63	310.31	295.31	12.60	--	112.35	395.12
DNAPL-K-3	412.13	415.91	104.80	119.80	307.33	292.33	20.27	--	123.28	395.64
DNAPL-K-4	409.48	412.53	102.55	117.55	306.93	291.93	17.62	--	118.91	394.91
DNAPL-K-5	412.27	411.91	102.15	117.15	310.12	295.12	16.46	--	116.50	395.45
DNAPL-K-6	410.43	410.09	102.47	117.47	307.96	292.96	15.49	--	116.90	394.60
DNAPL-K-7	408.32	407.72	100.40	115.40	307.92	292.92	13.58	--	115.43	394.14
DNAPL-K-8	408.56	411.38	102.65	117.65	305.91	290.91	18.13	--	117.57	393.25
DNAPL-K-9	406.45	405.97	97.42	112.42	309.03	294.03	12.49	--	111.21	393.48
DNAPL-K-10	413.50	413.25	105.43	120.43	308.07	293.07	17.19	--	120.20	396.06
DNAPL-K-11	412.20	411.78	105.46	120.46	306.74	291.74	17.89	--	120.20	393.89
GM-9C	409.54	411.21	88.00	108.00	321.54	301.54	14.55	--	23.22	396.66
GWE-1D	412.80	415.60	117.00	127.00	295.80	285.80	29.39	--	128.51	386.21
GWE-2D	417.45	417.14	127.00	137.00	290.45	280.45	29.63	--	137.26	387.51
GWE-3D	415.03	417.66	104.60	114.60	313.06	303.06	28.34	--	114.98	389.32
GWE-4D	406.05	405.74	74.00	80.00	332.05	326.05	14.95	--	78.78	390.79
GWE-5D	408.79	408.38	100.43	105.43	308.36	303.36	18.80	--	105.31	389.58
GWE-10D	410.15	412.87	102.50	112.50	307.65	297.65	19.96	--	114.88	392.91
GWE-14D	420.47	422.90	90.00	96.00	330.47	324.47	34.73	--	97.09	388.17
PMA-MW-4D	411.22	410.88	68.84	73.84	342.38	337.38	15.23	--	73.33	395.65
PMA-MW-6D	407.63	407.32	96.49	101.49	311.14	306.14	13.73	--	101.30	393.59
PS-MW-6	404.11	406.63	102.32	107.32	304.31	299.31	16.77	--	109.81	389.86
PS-MW-9D	403.92	403.52	100.40	105.40	303.52	298.52	11.20	--	105.15	392.32
PS-MW-10	409.63	412.18	103.78	108.78	308.40	303.40	24.13	--	111.28	388.05
PS-MW-13D	405.80	405.53	106.08	111.08	299.72	294.72	15.77	--	110.65	389.76
PS-MW-17D	420.22	423.26	121.25	126.25	298.97	293.97	36.07	--	135.90	387.19
SA2-MW-1D	403.79	406.03	105.01	115.01	301.02	291.02	25.16	--	102.40	380.87

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**

Sample ID	Sample Date	VOC (µg/L)				
		Benzene	Chlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene
Shallow Hydrogeologic Unit						
GWE-3S-0212	2/27/2012	<1	<1	<1	<1	<1
GWE-4S-0212	2/28/2012	<1	<1	<1	<1	<1
GWE-5S-0212	2/27/2012	<1	<1	<1	<1	<1
Middle Hydrogeologic Unit						
GWE-3M-0212	2/27/2012	<1	<1	<1	<1	<1
GWE-4M-0212	2/28/2012	<1	100	<1	<1	<1
GWE-5M-0212	2/27/2012	<1	<1	<1	<1	<1
Deep Hydrogeologic Unit						
GWE-1D-0212	2/20/2012	<1	4.3	2.6	<1	4.2
GWE-2D-0212	2/28/2012	<1	5.3	<1	<1	<1
GWE-3D-0212	2/20/2012	<10	1200	11	<10	75
GWE-4D-0212	2/28/2012	<10	640	<10	<10	<10
GWE-4D-0212-AD	2/28/2012	<10	620	<10	<10	<10
GWE-5D-0212	2/20/2012	86	1900	20	<20	110
GWE-5D-0212-AD	2/20/2012	77	1700	20	<20	120

Notes:

µg/L = micrograms per liter

< = Result is non-detect, less than the reporting limit given.

BOLD indicates concentration greater than reporting limit.

AD = Analytical Duplicate

**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)	Total Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)	ORP (mV)
Shallow Hydrogeologic Unit																		
GWE-3S-0212	2/27/2012	1100	110	65	-0.02	<1.1	<1		22		2.7		410	<0.05	<5	19		-79
GWE-3S-F(0.2)-0212	2/27/2012							>3.30		26		2.8					18	
GWE-4S-0212	2/28/2012	370	26	23	0.09	<1.1	<1		<0.05		0.65		3.1	<0.05	75	1		10
GWE-4S-F(0.2)-0212	2/28/2012							<0.03		<0.05		0.63					1.5 J	
GWE-5S-0212	2/27/2012	580	62	38	0.09	<1.1	<1		0.29		0.52		0.59	5.8	110	3		34.00
GWE-5S-F(0.2)-0212	2/27/2012							0.13		0.15		0.52					3.4	
Middle Hydrogeologic Unit																		
GWE-3M-0212	2/27/2012	700	78	150	0.00	<1.1	<1		34		1.6		41	<0.05	90	7.3		-63
GWE-3M-F(0.2)-0212	2/27/2012							>3.30		35		1.7					7.5	
GWE-4M-0212	2/28/2012	380	51	420	0.00	<1.1	<1		14		5.4		35	<0.05	610	2.1		-9
GWE-4M-F(0.2)-0212	2/28/2012							>3.30		14		5.5					2.4 J	
GWE-5M-0212	2/27/2012	460	41	84	-0.01	<1.1	<1		24		1.3		18	<0.05	130	2.3		-66.83
GWE-5M-F(0.2)-0212	2/27/2012							>3.30		24		1.3					2.5	
Deep Hydrogeologic Unit																		
GWE-1D-0212	2/20/2012	440	23	66	0.06	<1.1	<1		18		0.51		5.1	0.12	290	2.7		-132.03
GWE-1D-F(0.2)-0212	2/20/2012									18		0.52					2.7	
GWE-2D-0212	2/28/2012	440	18	96	0.28	<1.1	<1		19		0.48		1.3	<0.05	350	3.4		-61.06
GWE-2D-F(0.2)-0212	2/28/2012							>3.30		17		0.44					3.8 J	
GWE-3D-0212	2/20/2012	400	23	60	0.04	<1.1	<1		13		0.38		33	0.13	220	3		-87.12
GWE-3D-F(0.2)-0212	2/20/2012									13		0.38					3.3	
GWE-4D-0212	2/28/2012	400	93	170	0.01	<1.1	<1		14		6.5		1000	<0.05	830	5.1		21
GWE-4D-F(0.2)-0212	2/28/2012							3.12		14		6.6					5.5 J	
GWE-5D-0212	2/20/2012	400	26	96	0.00	<1.1	<1		14		0.42		230	<0.05	330	3.9		-191.35
GWE-5D-F(0.2)-0212	2/20/2012							>3.30		14		0.4					4.3	

Notes:

DO and ORP were measured in the field using a In-Situ Troll 9500 equipped with a flow-thru cell. Values presented represent final measurements before sampling.

Ferrous Iron readings were measured in the field using a Hach DR-890 Colorimeter after the groundwater passed through a 0.2 µm filter

F(0.2) = Sample was filtered utilizing a 0.2 µm filter during sample collection

J = Estimated value

mg/L = milligrams per liter

mV = millivolts

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

Appendix A
Groundwater Purging and Sampling Forms



Troll 9000
02/20/12

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name Ir dm
 Company Name URS Corporation
 Project Name Solutia WGK
 Site Name Quarterly Groundwater Sampling - Supplemental

Pump Information:

Pump Model/Type Peristaltic
 Tubing Type LDPE
 Tubing Diameter 0.19 [in]
 Tubing Length 130 [ft]
 Pump placement from TOC

Well Information:

Well Id GWE-1D
 Well diameter 1 [in]
 Well total depth 129.8 [ft]
 Depth to top of screen 119.8 [ft]
 Screen length 120 [in]
 Depth to Water

Pumping information:

Final pumping rate 120 [mL/min]
 Flowcell volume 1324.81 [mL]
 Calculated Sample Rate 663 [sec]
 Sample rate 663 [sec]
 Stabilized drawdown

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	10:16:03	53.35	6.92	1161.56	4.12	0.39	-123.49
	10:27:31	53.83	6.92	1190.94	4.81	0.22	-126.26
	10:38:59	54.70	6.92	1211.78	1.36	0.14	-128.38
	10:50:27	55.40	6.88	1226.48	1.85	0.11	-130.29
	11:01:55	55.54	6.92	1232.13	3.95	0.06	-132.03
Variance in last 3 readings	10:38:59	0.87	0.00	20.84	-3.46	-0.08	-2.12
	10:50:27	0.70	-0.04	14.70	0.49	-0.04	-1.91
	11:01:55	0.14	0.04	5.65	2.10	-0.04	-1.74

Notes:

US EPA ARCHIVE DOCUMENT



Troll 9000

02/28/12

Low-Flow System

ISI Low-Flow Log

Project Information:

Operator Name J Staetter
 Company Name URS Corporation
 Project Name Solutia WGK
 Site Name Quarterly Groundwater Sampling - Supplemental

Pump Information:

Pump Model/Type Peristaltic
 Tubing Type LDPE
 Tubing Diameter 0.19 [in]
 Tubing Length 140 [ft]
 Pump placement from TOC

Well Information:

Well Id GWE-2D
 Well diameter 1 [in]
 Well total depth 136.69 [ft]
 Depth to top of screen 126.69 [ft]
 Screen length 120 [in]
 Depth to Water 31.2 [ft]

Pumping information:

Final pumping rate 100 [mL/min]
 Flowcell volume 600 [mL]
 Calculated Sample Rate 360 [sec]
 Sample rate 360 [sec]
 Stabilized drawdown

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	15:19:34	61.65	6.83	4803.95	39.46	0.29	-48.60
	15:25:48	61.24	6.85	4931.50	40.14	0.29	-53.10
	15:32:02	61.29	6.85	5023.93	41.78	0.29	-56.02
	15:38:14	61.46	6.85	5095.53	46.42	0.29	-59.01
	15:44:28	61.43	6.85	5162.39	46.57	0.28	-61.06
Variance in last 3 readings	15:32:02	0.05	0.00	92.42	1.64	0.00	-2.92
	15:38:14	0.17	0.01	71.60	4.64	-0.01	-3.00
	15:44:28	-0.03	0.00	66.86	0.15	-0.01	-2.05

Notes:

US EPA ARCHIVE DOCUMENT

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

Supplemental
GW Monitoring
PROJECT NAME: Program PROJECT NUMBER: 21562682.00006 FIELD PERSONNEL: M. Corbett, J. Staetter
DATE: 2/27/12 WEATHER: Clear, 45F
MONITORING WELL ID: GWE-3S SAMPLE ID: GWE-3S-0212

INITIAL DATA

Well Diameter: 1 in Water Column Height (do not include LNAPL or DNAPL): 9.62 ft Volume of Flow Through Cell): 750 mL
Measured Well Depth (btoc): 38.25 ft If Depth to Top of Screen is > Depth to Water AND Screen Lenth is (4 feet, Minimum Purge Volume =
Constructed Well Depth (btoc): 36.98 ft Place Pump at: Total Well Depth - 0.5 (Screen Length + DNAPL Column Height) = _____ ft btoc (3 x Flow Through Cell Volume) 2,250 mL
Depth to Water (btoc): 28.63 ft If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are (< 4ft, Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): N/A ft Place Pump at: Total Well Depth - (0.5 X Water Column Height + DNAPL Column Height) = 33.44 ft btoc Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 26.98 ft If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = _____ ft btoc
Screen Length: 10 ft

PURGE DATA

Pump Type: Peristaltic

Purge Volume (mL)	Time	Depth to Water (ft)	±0.2 units	Temp (°F)	±3 %	Turbidity (NTUs)	±10 % or 0.2 mg/L	±20 mV
			pH		Cond. (us/cm)		DO (mg/l)	ORP (mv)
0	1005	28.63	6.88	58.29	2191	349.4	0.31	-9
1200	1009		6.83	58.57	2193	227.5	0.06	-27
2400	1013		6.83	58.77	2190	169.1	0.03	-41
3600	1017		6.83	58.58	2191	139.0	0.01	-50
4800	1021		6.83	58.48	2189	80.7	0.01	-58
6000	1025		6.83	58.15	2189	39.3	0.00	-66
7200	1029		6.84	58.20	2189	28.1	-0.01	-69
8400	1033		6.84	58.46	2190	18.9	-0.01	-73
9600	1037		6.84	58.51	2188	16.0	-0.01	-75
10800	1040		6.84	58.26	2192	14.4	-0.02	-79

Start Time: 1005 Elapsed Time: 35 MIN Water Quality Meter ID: In-Situ Troll 9500
Stop Time: 1040 Average Purge Rate (mL/min): 300 Date Calibrated: 2/27/12

SAMPLING DATA

Sample Date: 2/27/12 Sample Time: 1045 Analysis: VOC, MNA
Sample Method: Low Flow Sample Flow Rate: 300 mL/min QA/QC Samples: _____

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

**Supplemental
GW Monitoring**

PROJECT NAME: Program PROJECT NUMBER: 21562682.00006 FIELD PERSONNEL: M. Corbett, J. Staetter
 DATE: 2/27/12 WEATHER: Cloudy, 36F
 MONITORING WELL ID: GWE-3M SAMPLE ID: GWE-3M-0212

INITIAL DATA

Well Diameter: 1 in Water Column Height (do not include LNAPL or DNAPL): 49.79 ft Volume of Flow Through Cell): 750 mL
 Measured Well Depth (btoc): 78.33 ft If Depth to Top of Screen is > Depth to Water AND Screen Length is < 4 feet, Minimum Purge Volume =
 Constructed Well Depth (btoc): 81.11 ft Place Pump at: Total Well Depth - 0.5 (Screen Length + DNAPL Column Height) = 73.33 ft btoc (3 x Flow Through Cell Volume) 2,250 mL
 Depth to Water (btoc): 28.54 ft If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are < 4ft, Ambient PID/FID Reading: 0.0 ppm
 Depth to LNAPL/DNAPL (btoc): N/A ft Place Pump at: Total Well Depth - (0.5 X Water Column Height + DNAPL Column Height) = _____ ft btoc Wellbore PID/FID Reading: 0.0 ppm
 Depth to Top of Screen (btoc): 71.11 ft If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = _____ ft btoc
 Screen Length: 10 ft

PURGE DATA

Pump Type: Peristaltic

Purge Volume (mL)	Time	Depth to Water (ft)	±0.2 units	Temp (°F)	±3 %	Turbidity (NTUs)	±10 % or 0.2 mg/L	±20 mV
			pH		Cond. (us/cm)		DO (mg/l)	ORP (mv)
0	0910	28.54	6.69	57.65	1781	3.7	0.06	-32
1200	0914		6.69	57.48	1852	2.0	0.03	-45
2400	0918		6.70	57.63	1880	2.1	0.02	-53
3600	0922		6.72	57.78	1901	1.4	0.01	-58
4800	0926		6.72	57.79	1911	1.1	0.00	-61
60000	0930		6.73	57.81	1921	5.4	0.00	-63

Start Time: 0910 Elapsed Time: 20 MIN Water Quality Meter ID: In-Situ Troll 9500
 Stop Time: 0930 Average Purge Rate (mL/min): 300 Date Calibrated: 2/27/12

SAMPLING DATA

Sample Date: 2/27/12 Sample Time: 0935 Analysis: VOC, MNA
 Sample Method: Low Flow Sample Flow Rate: 300 mL/min QA/QC Samples: _____

COMMENTS:



Troll 9000
02/20/12

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name dm
 Company Name URS Corporation
 Project Name Solutia WGK
 Site Name Quarterly Groundwater Sampling - Supplemental

Pump Information:

Pump Model/Type Peristaltic
 Tubing Type LDPE
 Tubing Diameter 0.19 [in]
 Tubing Length 116 [ft]
 Pump placement from TOC

Well Information:

Well Id GWE-3D
 Well diameter 1 [in]
 Well total depth 117.23 [ft]
 Depth to top of screen 107.23 [ft]
 Screen length 120 [in]
 Depth to Water 28.9 [ft]

Pumping information:

Final pumping rate 240 [mL/min]
 Flowcell volume 1246.75 [mL]
 Calculated Sample Rate 312 [sec]
 Sample rate 312 [sec]
 Stabilized drawdown

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	14:56:41	58.90	6.94	1376.41	0.62	0.14	-57.61
	15:01:56	58.63	6.94	1393.90	29.08	0.09	-69.53
	15:07:09	58.64	6.94	1383.30	-0.13	0.07	-77.72
	15:12:23	58.70	6.94	1413.06	0.08	0.05	-83.17
	15:17:38	58.65	6.93	1418.95	-0.37	0.04	-87.12
Variance in last 3 readings	15:07:09	0.01	0.00	-10.60	-29.21	-0.03	-8.19
	15:12:23	0.06	0.00	29.76	0.21	-0.01	-5.45
	15:17:38	-0.05	-0.01	5.90	-0.45	-0.01	-3.94

Notes:

US EPA ARCHIVE DOCUMENT

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

Supplemental
GW Monitoring
PROJECT NAME: Program PROJECT NUMBER: 21562682.00006 FIELD PERSONNEL: M. Corbett, J. Staetter
DATE: 2/28/12 WEATHER: Clear, 45F
MONITORING WELL ID: GWE-4S SAMPLE ID: GWE-4S-0212

INITIAL DATA

Well Diameter: 1 in Water Column Height (do not include LNAPL or DNAPL): 13.58 ft Volume of Flow Through Cell): 750 mL
 Measured Well Depth (btoc): 28.51 ft If Depth to Top of Screen is > Depth to Water AND Screen Lenth is < 4 feet, Minimum Purge Volume =
 Constructed Well Depth (btoc): 29.59 ft Place Pump at: Total Well Depth - 0.5 (Screen Length + DNAPL Column Height) = 23.51 ft btoc (3 x Flow Through Cell Volume) 2,250 mL
 Depth to Water (btoc): 14.93 ft If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are < 4ft, Ambient PID/FID Reading: 0.0 ppm
 Depth to LNAPL/DNAPL (btoc): N/A ft Place Pump at: Total Well Depth - (0.5 X Water Column Height + DNAPL Column Height) = _____ ft btoc Wellbore PID/FID Reading: 0.0 ppm
 Depth to Top of Screen (btoc): 19.59 ft If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = _____ ft btoc
 Screen Length: 10 ft

PURGE DATA

Pump Type: Peristaltic

Purge Volume (mL)	Time	Depth to Water (ft)	±0.2 units	Temp (°F)	±3 %	Turbidity (NTUs)	±10 % or 0.2 mg/L	±20 mV
			pH		Cond. (us/cm)		DO (mg/l)	ORP (mv)
0	1218	14.93	7.06	62.26	3033	57.1	0.80	1
1200	1222		6.86	61.92	3096	21.4	0.32	6
2400	1226		6.82	61.86	3109	5.9	0.21	8
3600	1230		6.77	61.83	3119	7.5	0.14	9
5100	1235		6.75	61.83	3117	4.2	0.09	10

Start Time: 1218 Elapsed Time: 17 MIN Water Quality Meter ID: In-Situ Troll 9500
 Stop Time: 1235 Average Purge Rate (mL/min): 300 Date Calibrated: 2/28/12

SAMPLING DATA

Sample Date: 2/28/12 Sample Time: 1240 Analysis: VOC, MNA
 Sample Method: Low Flow Sample Flow Rate: 300 mL/min QA/QC Samples: _____

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

Supplemental
GW Monitoring

PROJECT NAME: Program PROJECT NUMBER: 21562682.00006 FIELD PERSONNEL: M. Corbett, J. Staetter
 DATE: 2/28/12 WEATHER: Clear, 45F
 MONITORING WELL ID: GWE-4M SAMPLE ID: GWE-4M-0212

INITIAL DATA

Well Diameter: 1 in Water Column Height (do not include LNAPL or DNAPL): 33.27 ft Volume of Flow Through Cell): 750 mL
 Measured Well Depth (btoc): 48.12 ft If Depth to Top of Screen is > Depth to Water AND Screen Lenth is (4 feet, Minimum Purge Volume =
 Constructed Well Depth (btoc): 49.51 ft Place Pump at: Total Well Depth - 0.5 (Screen Length + DNAPL Column Height) = 45.12 ft btoc (3 x Flow Through Cell Volume) 2,250 mL
 Depth to Water (btoc): 14.85 ft If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are (< 4ft, Ambient PID/FID Reading: 0.0 ppm
 Depth to LNAPL/DNAPL (btoc): N/A ft Place Pump at: Total Well Depth - (0.5 X Water Column Height + DNAPL Column Height) = _____ ft btoc Wellbore PID/FID Reading: 0.0 ppm
 Depth to Top of Screen (btoc): 43.51 ft If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = _____ ft btoc
 Screen Length: 6 ft

PURGE DATA

Pump Type: Peristaltic

±0.2 units

±3 %

±10 % or 0.2 mg/L

±20 mV

Purge Volume (mL)	Time	Depth to Water (ft)	pH	Temp (°F)	Cond. (ms/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	1125	14.85	6.62	61.81	7764	98.9	0.24	32
1200	1129		6.55	62.14	7760	64.7	0.09	21
2400	1133		6.54	62.20	7731	45.0	0.06	15
3600	1137		6.53	62.44	7726	43.6	0.03	8
4800	1141		6.53	62.61	7717	14.2	0.02	3
6000	1145		6.52	62.62	7704	53.9	0.01	-2
7500	1150		6.52	62.83	7695	30.8	0.00	-8
9000	1155		6.53	62.88	7700	10.7	0.00	-9

Start Time: 1125
 Stop Time: 1155

Elapsed Time: 30 MIN
 Average Purge Rate (mL/min): 300

Water Quality Meter ID: In-Situ Troll 9500
 Date Calibrated: 2/28/12

SAMPLING DATA

Sample Date: 2/28/12 Sample Time: 1200 Analysis: VOC, MNA
 Sample Method: Low Flow Sample Flow Rate: 300 mL/min QA/QC Samples: GWE-4M-0212-EB

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

Supplemental
GW Monitoring

PROJECT NAME: Program PROJECT NUMBER: 21562682.00006 FIELD PERSONNEL: M. Corbett, J. Staetter
 DATE: 2/28/12 WEATHER: Overcast, 44F
 MONITORING WELL ID: GWE-4D SAMPLE ID: GWE-4D-0212

INITIAL DATA

Well Diameter: 1 in Water Column Height (do not include LNAPL or DNAPL): 63.83 ft Volume of Flow Through Cell): 750 mL
 Measured Well Depth (btoc): 78.78 ft If Depth to Top of Screen is > Depth to Water AND Screen Lenth is (4 feet, Minimum Purge Volume =
 Constructed Well Depth (btoc): 79.69 ft Place Pump at: Total Well Depth - 0.5 (Screen Length + DNAPL Column Height) = 75.78 ft btoc (3 x Flow Through Cell Volume) 2,250 mL
 Depth to Water (btoc): 14.95 ft If Depth to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are (< 4ft, Ambient PID/FID Reading: 0.0 ppm
 Depth to LNAPL/DNAPL (btoc): N/A ft Place Pump at: Total Well Depth - (0.5 X Water Column Height + DNAPL Column Height) = _____ ft btoc Wellbore PID/FID Reading: 0.0 ppm
 Depth to Top of Screen (btoc): 73.69 ft If Screen Length and/or water column height is < 4 ft, Place Pump at: Total Well Depth - 2 ft = _____ ft btoc
 Screen Length: 6 ft

PURGE DATA

Pump Type: Peristaltic

±0.2 units

±3 %

±10 % or 0.2 mg/L

±20 mV

Purge Volume (mL)	Time	Depth to Water (ft)	pH	Temp (°F)	Cond. (us/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
0	1010	14.95	6.20	62.17	6515	30.1	0.06	78
1500	1015		6.21	62.13	6605	41.4	0.05	66
3000	1020		6.23	62.13	6643	36.1	0.04	49
4500	1025		6.23	62.15	6656	31.5	0.03	43
6000	1030		6.24	62.15	6650	20.6	0.03	39
7500	1035		6.25	62.07	6659	12.9	0.02	34
9000	1040		6.25	62.50	6675	23.7	0.02	25
10500	1045		6.26	62.62	6645	23.8	0.01	21

Start Time: 1010 Elapsed Time: 35 MIN Water Quality Meter ID: In-Situ Troll 9500
 Stop Time: 1045 Average Purge Rate (mL/min): 300 Date Calibrated: 2/28/12

SAMPLING DATA

Sample Date: 2/28/12 Sample Time: 1050 Analysis: VOC, MNA
 Sample Method: Low Flow Sample Flow Rate: 300 mL/min QA/QC Samples: GWE-4D-0212-AD

COMMENTS:



Troll 9000
02/27/12

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name J Staetter
 Company Name URS Corporation
 Project Name Solutia WGK
 Site Name Quarterly Groundwater Sampling - Supplemental

Pump Information:

Pump Model/Type Proactive SS Monsoon
 Tubing Type LDPE
 Tubing Diameter 0.19 [in]
 Tubing Length 31.99 [ft]
 Pump placement from TOC

Well Information:

Well Id GWE-5S
 Well diameter 2 [in]
 Well total depth 27.49 [ft]
 Depth to top of screen 17.49 [ft]
 Screen length 120 [in]
 Depth to Water 18.90 [ft]

Pumping information:

Final pumping rate 300 [mL/min]
 Flowcell volume 772.89 [mL]
 Calculated Sample Rate 180 [sec]
 Sample rate 180 [sec]
 Stabilized drawdown

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [mS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	14:43:00	63.50	6.68	1703.00	26.03	0.11	34.00
	14:46:00	63.43	6.68	1693.00	15.19	0.09	33.00
	14:49:00	63.45	6.67	1687.00	11.58	0.09	33.00
	14:52:00	63.47	6.68	1683.00	10.07	0.09	33.00
	14:55:00	63.46	6.67	1679.00	8.03	0.09	34.00
Variance in last 3 readings	14:49:00	0.02	-0.01	-6.00	-3.61	0.00	0.00
	14:52:00	0.02	0.01	-4.00	-1.51	0.00	0.00
	14:55:00	-0.01	-0.01	-4.00	-2.04	0.00	1.00

Notes:

US EPA ARCHIVE DOCUMENT



Troll 9000
02/27/12

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name J Staetter
 Company Name URS Corporation
 Project Name Solutia WGK
 Site Name Quarterly Groundwater Sampling - Supplemental

Pump Information:

Pump Model/Type Proactive SS Monsoon
 Tubing Type LDPE
 Tubing Diameter 0.19 [in]
 Tubing Length 56 [ft]
 Pump placement from TOC

Well Information:

Well Id GWE-5M
 Well diameter 2 [in]
 Well total depth 57.71 [ft]
 Depth to top of screen 47.71 [ft]
 Screen length 120 [in]
 Depth to Water 19.05 [ft]

Pumping information:

Final pumping rate 350 [mL/min]
 Flowcell volume 600 [mL]
 Calculated Sample Rate 103 [sec]
 Sample rate 103 [sec]
 Stabilized drawdown

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [mS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	12:59:49	61.50	6.93	1.71	25.04	0.01	-53.26
	13:01:32	61.48	6.93	1.72	18.46	0.00	-57.41
	13:03:16	61.45	6.93	1.72	13.89	0.00	-60.88
	13:05:00	61.40	6.93	1.73	10.13	0.00	-64.00
	13:06:43	61.44	6.93	1.73	9.48	-0.01	-66.83
Variance in last 3 readings	13:03:16	-0.03	0.00	0.00	-4.57	0.00	-3.47
	13:05:00	-0.05	0.00	0.01	-3.76	0.00	-3.12
	13:06:43	0.04	0.00	0.00	-0.65	-0.01	-2.83

Notes:

US EPA ARCHIVE DOCUMENT



Troll 9000
02/20/12

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name J Staetter
 Company Name URS Corporation
 Project Name Solutia WGK
 Site Name Quarterly Groundwater Sampling - Supplemental

Pump Information:

Pump Model/Type Proactive SS Monsoon
 Tubing Type LDPE
 Tubing Diameter 0.19 [in]
 Tubing Length 109 [ft]
 Pump placement from TOC

Well Information:

Well Id GWE-5D
 Well diameter 2 [in]
 Well total depth 105.02 [ft]
 Depth to top of screen 100.02 [ft]
 Screen length 60 [in]
 Depth to Water 19.2 [ft]

Pumping information:

Final pumping rate 300 [mL/min]
 Flowcell volume 600 [mL]
 Calculated Sample Rate 120 [sec]
 Sample rate 120 [sec]
 Stabilized drawdown

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	10:32:34	59.60	6.82	1422.45	19.76	0.01	-172.42
	10:34:35	59.69	6.84	1430.15	12.54	0.01	-178.70
	10:36:35	59.73	6.85	1434.80	11.02	0.00	-184.13
	10:38:37	59.71	6.86	1442.27	8.11	0.00	-188.36
	10:40:22	59.79	6.87	1450.19	7.92	0.00	-191.35
Variance in last 3 readings	10:36:35	0.04	0.01	4.65	-1.52	-0.01	-5.43
	10:38:37	-0.03	0.01	7.48	-2.91	0.00	-4.23
	10:40:22	0.08	0.01	7.92	-0.18	0.00	-2.99

Notes:

US EPA ARCHIVE DOCUMENT

Appendix B
Chains-of-Custody

Chain of Custody Record

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Dave Palmer		Site Contact: Michael Corbett		Date: 2/20/12		COC No:		
URS Corporation		Tel/Fax: (314) 743-4154		Lab Contact: Lidya Gulizia		Carrier: FedEx		1 of 1 COCs		
1001 Highlands Plaza Drive West, Suite 300		Analysis Turnaround Time		<input checked="" type="checkbox"/> Filtered Sample VOCs by 8260 SVOCs by 8270C* Total Fe/Mn by 6010B Al/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		Calendar (C) or Work Days (W) TAT if different from Below Standard <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Job No.		
St. Louis, MO 63110								680-77065		
(314) 429-0100 Phone								21562703.00004		
(314) 429-0462 FAX								SDG No.		
Project Name: 1Q12 Supplemental GW Sampling										
Site: Solutia WG Krummrich Facility										
PO#										
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Sample Specific Notes:			
GWE-1D-0212 ✓		2/20/12	1105	G	Water	14	3	2	1	*SVOCs per semi-annual list
GWE-1D-F(0.2)-0212 ✓		2/20/12	1105	G	Water	2	X			
GWE-2D-0212				G	Water	14	3	2	1	MC
GWE-2D-F(0.2)-0212				G	Water	2	X			MC
GWE-3D-0212 ✓		2/20/12	1525	G	Water	14	3	2	1	
GWE-3D-F(0.2)-0212 ✓		2/20/12	1525	G	Water	2	X			
GWE-3D-0212-MS ✓		2/20/12	1525	G	Water	5	3	2		
GWE-3D-0212-MSD		2/20/12	1525	G	Water	5	3	2		
GWE-0212-AD				G	Water	5	3	2		MC
GWE-3D-0212-EB ✓		2/20/12	1200	G	Water	5	3	2		
1Q12 SUPP Trip Blank # 1		2/20/12			Water	2	2	1	4	
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							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Turn To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Special Instructions/QC Requirements & Comments: Level 4 Data Package										
* SVOC analyses cancelled per URS e-mail from E. Kunkel on 2/21/12 // L. Gulizia 3/19/12 TA-SAV Temp 1.6°C, 0.4°C, 2.8°C										
Relinquished by: <i>[Signature]</i>		Company: URS		Date/Time: 2/20/12 1800		Received by: Beth a Daugherty		Company: TASAV		Date/Time: 02.21.12 0922
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:

Page 33 of 36

MAR 20 2012 *[Signature]*

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: Dave Palmer		Site Contact: Michael Corbett		Date: 2/20/12		COC No:											
URS Corporation		Tel/Fax: (314) 743-4154		Lab Contact: Lidya Guizia		Carrier: FedEx		1 of 1 COCs											
1001 Highlands Plaza Drive West, Suite 300		Analysis Turnaround Time		<input checked="" type="checkbox"/> * Filtered Sample VOCs by 8260 SVOCs by 8270C* Total Fe/Mn by 6010B Al/CO2 by 310.1 Chloride by 325.2/Sulfate by 375.4 Methane by RSK 175 Nitrate by 352.2 TOC by 415.1 Dissolved Fe/Mn by 6010B DOC by 415.1		Calendar (C) or Work Days (W)		Job No.											
St. Louis, MO 63110		TAT if different from Below Standard				680-77065													
(314) 429-0100 Phone		<input checked="" type="checkbox"/> 2 weeks				21562703.0000#													
(314) 429-0462 FAX		<input type="checkbox"/> 1 week				SDG No.													
Project Name: 1Q12 Supplemental GW Sampling		<input type="checkbox"/> 2 days		Sample Specific Notes:															
Site: Solutia WG Krummrich Facility		<input type="checkbox"/> 1 day																	
PO#																			
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs by 8260	SVOCs by 8270C*	Total Fe/Mn by 6010B	Al/CO2 by 310.1	Chloride by 325.2/Sulfate by 375.4	Methane by RSK 175	Nitrate by 352.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	Sample Specific Notes:		
GWE-5D-0212	2/20/12	1045	G	Water	14		3	2	1	1	1	3	2	1				*SVOCs per semi-annual list	
GWE-5D-F(0.2)-0212	2/20/12	1045	G	Water	2	X									1	1			
GWE-5D-0212-AD	2/20/12	1045	G	Water	5		3	2											
IQ12 SUPP Trip Blank # 2	2/20/12	-	-	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						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)													
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Turn To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months													
Special Instructions/QC Requirements & Comments: Level 4 Data Package																			
* SVOC analyses cancelled per URS e-mail from E. Kunkel on 2/21/12 // LGuizia 3/19/12 Temp 1.6°C, 0.4°C, 2.8°C																			
Relinquished by: [Signature]	Company: URS		Date/Time: 2/20/12 1800		Received by: [Signature]	Company: TASA		Date/Time: 02.21.12 0922											
Relinquished by:	Company:		Date/Time:		Received by:	Company:		Date/Time:											
Relinquished by:	Company:		Date/Time:		Received by:	Company:		Date/Time:											

Page 34 of 30

MAR 20 2012 [Signature]

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: Dave Palmer		Site Contact: Michael Corbett		Date: 2/27/12		COC No:										
URS Corporation		Tel/Fax: (314) 743-4154		Lab Contact: Lidya Gulizia		Carrier: FedEx		1 of 1 COCs										
1001 Highlands Plaza Drive West, Suite 300		Analysis Turnaround Time						Job No. 680-77213										
St. Louis, MO 63110		Calendar (C) or Work Days (W)						21562703.00004										
(314) 429-0100 Phone		TAT if different from Below Standard						SDG No.										
(314) 429-0462 FAX		<input checked="" type="checkbox"/> 2 weeks																
Project Name: 1Q12 Supplemental GW Sampling		<input type="checkbox"/> 1 week																
Site: Solutia WG Krummrich Facility		<input type="checkbox"/> 2 days																
PO#		<input type="checkbox"/> 1 day																
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample: VOCs by 8260	SVOCs by 8260	Total Fe/Mn by 6010B	AlR/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:	
GWE-3M -0212 ✓		2/27/12	0935	G	Water	12	X										*SVOCs per semi-annual list	
GWE-3M -F(0.2)-0212 ✓			0935	G	Water	2	X								1	1		
GWE-3S -0212 ✓			1045	G	Water	12	X											
GWE-3S -F(0.2)-0212 ✓			1045	G	Water	2	X								1	1		
GWE-5M -0212 ✓			1310	G	Water	12	X											
GWE-5M -F(0.2)-0212 ✓			1310	G	Water	2	X								1	1		
GWE-5S -0212 ✓			1500	G	Water	12	X											
GWE-5S -F(0.2)-0212 ✓			1500	G	Water	2	X								1	1		
IQ12 SUPP Trip Blank # 2 ✓		2/27/12			Water	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							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/>							<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Special Instructions/QC Requirements & Comments: Level 4 Data Package																		
Relinquished by: <i>[Signature]</i>		Company: URS		Date/Time: 2/27/12 1600		Received by: <i>[Signature]</i>		Company: TESTAMERICA		Date/Time: 02.28.12 c 0905		Temp 0.8°C, 2.6°C						
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:								
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:								

Page 75 of 79

APR 12 2012 2:21

Savannah
5142 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Dave Palmer		Site Contact: Michael Corbett		Date: 2/28/12		COC No:	
URS Corporation		Tel/Fax: (314) 743-4154		Lab Contact: Lidya Gullizia		Carrier: Fedex		1 of 1 COCs	
1001 Highlands Plaza Drive West, Suite 300		Analysis Turnaround Time		Calendar (C) or Work Days (W)		Job No.		68077254	
St. Louis, MO 63110		TAT if different from Below Standard		<input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		SDG No.		21562703.00004	
(314) 429-0100 Phone		Sample Date		Sample Time		Sample Type		Matrix	
(314) 429-0462 FAX		Sample Date		Sample Time		Sample Type		Matrix	
Project Name: 1Q12 Supplemental GW Sampling		Sample Date		Sample Time		Sample Type		Matrix	
Site: Solutia WG Krummrich Facility		Sample Date		Sample Time		Sample Type		Matrix	
PO#		Sample Date		Sample Time		Sample Type		Matrix	
Sample Identification		Sample Date		Sample Time		Sample Type		Matrix	
GWE-4D -0212		2/28/12		1050		G		Water	
GWE-4D -F(0.2)-0212		2/28/12		1050		G		Water	
GWE-4D-0212-AD		2/28/12		1050		G		Water	
GWE-4M-0212-EB		2/28/12		1110		G		Water	
GWE-4M-0212		2/28/12		1200		G		Water	
GWE-4M-F(0.2)-0212		2/28/12		1200		G		Water	
GWE-4S-0212		2/28/12		1240		G		Water	
GWE-4S-F(0.2)-0212		2/28/12		1240		G		Water	
GWE-2D-0212		2/28/12		1550		G		Water	
GWE-2D-F(0.2)-0212		2/28/12		1550		G		Water	
1Q12 SUPP Trip Blank # 3		2/28/12		-		-		Water	
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NuOH, 6= Other		2		1		4		1	
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client		Disposal By Lab		Archive For	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For		Months					
Special Instructions/QC Requirements & Comments: Level 4 Data Package									
Relinquished by: [Signature]		Company: URS		Date/Time: 2/28/12 1645		Received by: [Signature]		Company: TH	
Relinquished by: [Signature]		Company: TH		Date/Time: 2/28/12 1740		Received by: [Signature]		Company: TH SHV	
Relinquished by: [Signature]		Company: TH		Date/Time: 2/28/12 0957		Received by: [Signature]		Company: TH SHV	

Page 76 of 79

APR 12 2012

[Handwritten initials]

Temp 5.6°C

Appendix C
Quality Assurance Report

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

Supplemental Groundwater Monitoring
Program
1st Quarter 2012 Data Report

Prepared for

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

April 2012



URS Corporation
1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
(314) 429-0100
Project # 21562682

1.0	INTRODUCTION	1
2.0	RECEIPT CONDITION AND SAMPLE HOLDING TIMES.....	4
3.0	TRIP BLANKS, LABORATORY METHOD BLANK AND EQUIPMENT BLANK SAMPLES.	4
4.0	SURROGATE SPIKE RECOVERIES.....	5
5.0	LABORATORY CONTROL SAMPLE RECOVERIES	5
6.0	MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) SAMPLES.....	5
7.0	FIELD DUPLICATE RESULTS.....	5
8.0	INTERNAL STANDARD RESPONSES.....	6
9.0	RESULTS REPORTED FROM DILUTIONS	6

US EPA ARCHIVE DOCUMENT

1.0 INTRODUCTION

This Quality Assurance Report presents the findings of a review of analytical data for groundwater samples collected in February of 2012 from locations northwest of the Solutia W.G. Krummrich plant, as part of the 1st Quarter 2012 Supplemental Groundwater Monitoring Program. The samples were collected by URS Corporation personnel and analyzed by TestAmerica Laboratories located in Savannah, Georgia and St. Louis, Missouri using USEPA methods, Standard methods and USEPA SW-846 methodologies. Groundwater samples were tested for volatile organic compounds (VOCs), dissolved gasses, total and dissolved metals, and general chemistry (MNAs).

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

A total of 15 groundwater samples (eleven investigative samples, two field duplicate pairs, one MS/MSD pair, and one equipment blank) were analyzed by TestAmerica. 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 Groups (SDG) KPS072 and KPS073 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 gasses 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-Nitrite
- 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 Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA 2008) and USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Data

Review, (USEPA 2010) 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 report. 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/non-detect (**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 KPS072 data, the cooler receipt form indicated two of three coolers were received by the laboratory at 1.6°C and 0.4°C which was outside the 4°C ± 2°C criteria. The samples were received in good condition; therefore, no qualification of data was required.

Upon review of the KPS073 data, the cooler receipt form indicated one of two coolers were received by the laboratory at 0.8°C which is outside the 4°C ± 2°C criteria. The samples were received in good condition; therefore, no qualification of data was required.

Results reported for four dissolved organic carbon (DOC) samples were analyzed outside hold time. Due to instrument failure, TestAmerica Savannah could not reanalyze four samples for dissolved organic carbon (DOC). The original DOC results in these four samples did not correlate well with the total organic carbon (TOC) results. Samples GWE-4D-F(0.2)-0212, GWE-4M-F(0.2)-0212, GWE-4S-F(0.2)-0212, and GWE-2D-F(0.2)-0212 were sent to TestAmerica St. Louis for TOC and DOC analysis. There was good correlation between the TOC data reported by both labs and the DOC data reported by TestAmerica St. Louis did not show any disparity with the TOC results. Dissolved organic carbon (DOC) in samples GWE-4D-F(0.2)-0212, GWE-4M-F(0.2)-0212, GWE-4S-F(0.2)-0212 and GWE-2D-F(0.2)-0212 were analyzed by TestAmerica St. Louis 7 days outside of hold time for analysis (28 days). Professional judgment was used to not reject data; qualification is summarized in the table below:

Sample ID	Parameter	Analyte	Qualification
GWE-4D-F(0.2)-0212	General chemistry	DOC	J
GWE-4M-F(0.2)-0212	General chemistry	DOC	J
GWE-4S-F(0.2)-0212	General chemistry	DOC	J
GWE-2D-F(0.2)-02120212	General chemistry	DOC	J

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 non-detect; 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 non-detect.

Equipment blank samples are used to assess the effectiveness of equipment decontamination procedures. Equipment blank samples were non-detect.

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 Superfund Organic Methods Data Review state how data is qualified, if surrogate spike recoveries do not meet acceptance criteria.

Groundwater surrogate recoveries were within evaluation criteria; therefore, 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 11 investigative samples meeting the work plan frequency requirement.

No data qualifications were required if MS/MSD recoveries alone were outside evaluation criteria due to matrix interference or if sample concentrations were greater than four times (4X) the matrix spike concentrations.

Groundwater samples spiked and analyzed as MS/MSDs and their respective recoveries are discussed further in **Appendix D**. No qualification of data was required.

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.

Two pairs of field duplicate samples were collected for the eleven 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; therefore, no qualification of data was required.

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, nitrate 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 Reports)

Supplemental Groundwater Monitoring Program

1Q 2012 Data Review

Laboratory SDG: KPS072

Data Reviewer: Melissa Mansker

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 3/20/2012

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2008. USEPA National Functional Guidelines for Superfund Inorganic Data Review 2010

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

Sample Identification	
GWE-1D-0212	GWE-1D-F(0.2)-0212
GWE-3D-0212	GWE-3D-F(0.2)-0212
GWE-3D-0212-EB	1Q12 SUPP Trip Blank #1
GWE-5D-0212	GWE-5D-F(0.2)-0212
GWE-5D-0212-AD	1Q12 SUPP Trip Blank #2

1.0 Data Package Completeness

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

Yes, although the original COC requested SVOC analysis, URS contacted the laboratory on 2/21/2012 to cancel the inadvertently requested SVOC analysis. All other requested analyses were performed.

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 samples GWE-3D-0212, GWE-5D-0212, and GWE-5D-0212-AD were diluted due to high levels of target analytes. This issue is discussed further in the appropriate section below.

The cooler receipt form indicated two of three coolers were received by the laboratory at 1.6°C and 0.4°C which is outside the 4°C ± 2°C criteria. The samples were received in good condition; therefore, no qualification of data was required.

3.0 Holding Times

Were 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 analyzed as part of this SDG?

Yes, sample GWE-2D-0212 was spiked and analyzed for VOCs.

Were MS/MSD recoveries within evaluation criteria?

Yes

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
GWE-5D-0212	GWE-5D-0212-AD

Were field duplicate sample RPDs 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

SDG KPS072

Results of Sample from Monitoring Wells/Piezometers:

GWE-1D

GWE-3D

GWE-5D

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-77065-1
TestAmerica Sample Delivery Group: KPS072
Client Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

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

Attn: Mr. Jerry Rinaldi

Lidya Gulizia

Authorized for release by:
3/19/2012 5:05:48 PM

Lidya Gulizia
Project Manager II
lidya.gulizia@testamericainc.com

cc: Bob Billman

LINKS

Review your project
results through
Total Access

Have a Question?

**Ask
The
Expert**

Visit us at:
www.testamericainc.com

*Reviewed on
3/20/2012
MB*

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	6
Method Summary	7
Definitions	8
Detection Summary	9
Client Sample Results	11
Surrogate Summary	21
QC Sample Results	22
QC Association	28
Chronicle	30
Chain of Custody	33
Receipt Checklists	35
Certification Summary	36

MAR 20 2012


Case Narrative

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Job ID: 680-77065-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Solutia Inc.

Project: WGK Supplemental GW 1Q12 - FEB 2012

Report Number: 680-77065-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/21/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.6, 0.4, 2.8 C.

Following sample receipt, the semivolatiles samples were placed on hold and not analyzed per URS directive received on February 21, 2012.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GWE-1D-0212 (680-77065-1), GWE-3D-0212 (680-77065-3), GWE-3D-0212-EB (680-77065-5), 1Q12 SUPP Trip Blank #1 (680-77065-6), GWE-5D-0212 (680-77065-7), GWE-5D-0212-AD (680-77065-9) and 1Q12 SUPP Trip Blank #2 (680-77065-10) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/24/2012 and 02/27/2012.

Samples GWE-3D-0212 (680-77065-3)[10X], GWE-5D-0212 (680-77065-7)[20X] and GWE-5D-0212-AD (680-77065-9)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the volatiles analyses.

All quality control parameters were within the acceptance limits.

DISSOLVED GASES

Samples GWE-1D-0212 (680-77065-1), GWE-3D-0212 (680-77065-3) and GWE-5D-0212 (680-77065-7) were analyzed for dissolved gases in accordance with RSK-175. The samples were analyzed on 02/29/2012.

No difficulties were encountered during the dissolved gases analyses.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP)

Samples GWE-1D-F(0.2)-0212 (680-77065-2), GWE-3D-F(0.2)-0212 (680-77065-4) and GWE-5D-F(0.2)-0212 (680-77065-8) were analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 02/22/2012 and analyzed on 02/24/2012.

Case Narrative

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Job ID: 680-77065-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Manganese and Manganese, Dissolved exceeded the recovery criteria low for the MS of sample 680-77096-5 in batch 680-230032.

Refer to the QC report for details.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICP)

Samples GWE-1D-0212 (680-77065-1), GWE-3D-0212 (680-77065-3) and GWE-5D-0212 (680-77065-7) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 02/22/2012 and analyzed on 02/24/2012.

No difficulties were encountered during the metals analyses.

All quality control parameters were within the acceptance limits.

ALKALINITY

Samples GWE-1D-0212 (680-77065-1), GWE-3D-0212 (680-77065-3) and GWE-5D-0212 (680-77065-7) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 02/22/2012.

No difficulties were encountered during the alkalinity analyses.

All quality control parameters were within the acceptance limits.

CHLORIDE

Samples GWE-1D-0212 (680-77065-1), GWE-3D-0212 (680-77065-3) and GWE-5D-0212 (680-77065-7) were analyzed for Chloride in accordance with EPA Method 325.2. The samples were analyzed on 02/28/2012.

Sample GWE-5D-0212 (680-77065-7)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the Chloride analyses.

All other quality control parameters were within the acceptance limits.

NITRATE-NITRITE AS NITROGEN

Samples GWE-1D-0212 (680-77065-1), GWE-3D-0212 (680-77065-3) and GWE-5D-0212 (680-77065-7) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 02/21/2012.

No difficulties were encountered during the nitrate-nitrite analyses.

All quality control parameters were within the acceptance limits.

SULFATE

Samples GWE-1D-0212 (680-77065-1), GWE-3D-0212 (680-77065-3) and GWE-5D-0212 (680-77065-7) were analyzed for sulfate in accordance with EPA Method 375.4. The samples were analyzed on 03/01/2012.

Samples GWE-1D-0212 (680-77065-1)[10X], GWE-3D-0212 (680-77065-3)[10X] and GWE-5D-0212 (680-77065-7)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the sulfate analyses.

All quality control parameters were within the acceptance limits.

Case Narrative

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Job ID: 680-77065-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

TOTAL ORGANIC CARBON

Samples GWE-1D-0212 (680-77065-1), GWE-3D-0212 (680-77065-3) and GWE-5D-0212 (680-77065-7) were analyzed for total organic carbon in accordance with EPA Method 415.1. The samples were analyzed on 02/24/2012.

No difficulties were encountered during the TOC analyses.

All other quality control parameters were within the acceptance limits.

DISSOLVED ORGANIC CARBON (DOC)

Samples GWE-1D-F(0.2)-0212 (680-77065-2), GWE-3D-F(0.2)-0212 (680-77065-4) and GWE-5D-F(0.2)-0212 (680-77065-8) were analyzed for Dissolved Organic Carbon (DOC) in accordance with EPA Method 415.1. The samples were analyzed on 02/24/2012.

No difficulties were encountered during the Dissolved Organic Carbon (DOC) analyses.

All quality control parameters were within the acceptance limits.

MAR 20 2012
MM

Sample Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-77065-1	GWE-1D-0212 ✓	Water	02/20/12 11:05	02/21/12 09:22
680-77065-2	GWE-1D-F(0.2)-0212 ✓	Water	02/20/12 11:05	02/21/12 09:22
680-77065-3	GWE-3D-0212 ✓	Water	02/20/12 15:25	02/21/12 09:22
680-77065-4	GWE-3D-F(0.2)-0212 ✓	Water	02/20/12 15:25	02/21/12 09:22
680-77065-5	GWE-3D-0212-EB ✓	Water	02/20/12 12:00	02/21/12 09:22
680-77065-6	1Q12 SUPP Trip Blank #1 ✓	Water	02/20/12 00:00	02/21/12 09:22
680-77065-7	GWE-5D-0212 ✓	Water	02/20/12 10:45	02/21/12 09:22
680-77065-8	GWE-5D-F(0.2)-0212 ✓	Water	02/20/12 10:45	02/21/12 09:22
680-77065-9	GWE-5D-0212-AD ✓	Water	02/20/12 10:45	02/21/12 09:22
680-77065-10	1Q12 SUPP Trip Blank #2 ✓	Water	02/20/12 00:00	02/21/12 09:22

MAR 20 2012 MM

Method Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
6010B	Metals (ICP)	SW846	TAL SAV
310.1	Alkalinity	MCAWW	TAL SAV
325.2	Chloride	MCAWW	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SAV
375.4	Sulfate	MCAWW	TAL SAV
415.1	TOC	MCAWW	TAL SAV
415.1	DOC	MCAWW	TAL SAV

Protocol 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.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

MAR 20 2012
[Signature]

Definitions/Glossary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

MAR 20 2012
[Signature]

Detection Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Client Sample ID: GWE-1D-0212

Lab Sample ID: 680-77065-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	4.3		1.0		ug/L	1		8260B	Total/NA
1,2-Dichlorobenzene	2.6		1.0		ug/L	1		8260B	Total/NA
1,4-Dichlorobenzene	4.2		1.0		ug/L	1		8260B	Total/NA
Methane	5.1		0.58		ug/L	1		RSK-175	Total/NA
Iron	18		0.050		mg/L	1		6010B	Total Recovera
Manganese	0.51		0.010		mg/L	1		6010B	Total Recovera
Chloride	66		1.0		mg/L	1		325.2	Total/NA
Nitrate as N	0.12		0.050		mg/L	1		353.2	Total/NA
Sulfate	290		50		mg/L	10		375.4	Total/NA
Total Organic Carbon	2.7		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	440		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	23		5.0		mg/L	1		310.1	Total/NA

Client Sample ID: GWE-1D-F(0.2)-0212

Lab Sample ID: 680-77065-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Dissolved	18		0.050		mg/L	1		6010B	Dissolved
Manganese, Dissolved	0.52		0.010		mg/L	1		6010B	Dissolved
Dissolved Organic Carbon	2.7		1.0		mg/L	1		415.1	Dissolved

Client Sample ID: GWE-3D-0212

Lab Sample ID: 680-77065-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	1200		10		ug/L	10		8260B	Total/NA
1,2-Dichlorobenzene	11		10		ug/L	10		8260B	Total/NA
1,4-Dichlorobenzene	75		10		ug/L	10		8260B	Total/NA
Methane	33		0.58		ug/L	1		RSK-175	Total/NA
Iron	13		0.050		mg/L	1		6010B	Total Recovera
Manganese	0.38		0.010		mg/L	1		6010B	Total Recovera
Chloride	60		1.0		mg/L	1		325.2	Total/NA
Nitrate as N	0.13		0.050		mg/L	1		353.2	Total/NA
Sulfate	220		50		mg/L	10		375.4	Total/NA
Total Organic Carbon	3.0		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	400		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	23		5.0		mg/L	1		310.1	Total/NA

Client Sample ID: GWE-3D-F(0.2)-0212

Lab Sample ID: 680-77065-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Dissolved	13		0.050		mg/L	1		6010B	Dissolved
Manganese, Dissolved	0.38		0.010		mg/L	1		6010B	Dissolved
Dissolved Organic Carbon	3.3		1.0		mg/L	1		415.1	Dissolved

Client Sample ID: GWE-3D-0212-EB

Lab Sample ID: 680-77065-5

No Detections

Client Sample ID: 1Q12 SUPP Trip Blank #1

Lab Sample ID: 680-77065-6

No Detections

MAR 20 2012

Detection Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Client Sample ID: GWE-5D-0212

Lab Sample ID: 680-77065-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	86		20		ug/L	20		8260B	Total/NA
Chlorobenzene	1900		20		ug/L	20		8260B	Total/NA
1,2-Dichlorobenzene	20		20		ug/L	20		8260B	Total/NA
1,4-Dichlorobenzene	110		20		ug/L	20		8260B	Total/NA
Methane	230		0.58		ug/L	1		RSK-175	Total/NA
Iron	14		0.050		mg/L	1		6010B	Total Recovera
Manganese	0.42		0.010		mg/L	1		6010B	Total Recovera
Chloride	96		2.0		mg/L	2		325.2	Total/NA
Sulfate	330		50		mg/L	10		375.4	Total/NA
Total Organic Carbon	3.9		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	400		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	26		5.0		mg/L	1		310.1	Total/NA

Client Sample ID: GWE-5D-F(0.2)-0212

Lab Sample ID: 680-77065-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Dissolved	14		0.050		mg/L	1		6010B	Dissolved
Manganese, Dissolved	0.40		0.010		mg/L	1		6010B	Dissolved
Dissolved Organic Carbon	4.3		1.0		mg/L	1		415.1	Dissolved

Client Sample ID: GWE-5D-0212-AD

Lab Sample ID: 680-77065-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	77		20		ug/L	20		8260B	Total/NA
Chlorobenzene	1700		20		ug/L	20		8260B	Total/NA
1,2-Dichlorobenzene	20		20		ug/L	20		8260B	Total/NA
1,4-Dichlorobenzene	120		20		ug/L	20		8260B	Total/NA

Client Sample ID: 1Q12 SUPP Trip Blank #2

Lab Sample ID: 680-77065-10

No Detections

MAR 20 2012
AM

Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
 SDG: KPS072

Client Sample ID: GWE-1D-0212

Lab Sample ID: 680-77065-1

Date Collected: 02/20/12 11:05

Matrix: Water

Date Received: 02/21/12 09:22

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			02/24/12 18:03	1
Chlorobenzene	4.3		1.0		ug/L			02/24/12 18:03	1
1,2-Dichlorobenzene	2.6		1.0		ug/L			02/24/12 18:03	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 18:03	1
1,4-Dichlorobenzene	4.2		1.0		ug/L			02/24/12 18:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		70 - 130					02/24/12 18:03	1
Dibromofluoromethane	109		70 - 130					02/24/12 18:03	1
Toluene-d8 (Surr)	102		70 - 130					02/24/12 18:03	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			02/29/12 16:21	1
Ethylene	1.0	U	1.0		ug/L			02/29/12 16:21	1
Methane	5.1		0.58		ug/L			02/29/12 16:21	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	18		0.050		mg/L		02/22/12 15:49	02/24/12 21:24	1
Manganese	0.51		0.010		mg/L		02/22/12 15:49	02/24/12 21:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66		1.0		mg/L			02/28/12 09:37	1
Nitrate as N	0.12		0.050		mg/L			02/21/12 15:33	1
Sulfate	290		50		mg/L			03/01/12 12:56	10
Total Organic Carbon	2.7		1.0		mg/L			02/24/12 21:45	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	440		5.0		mg/L			02/22/12 22:02	1
Carbon Dioxide, Free	23		5.0		mg/L			02/22/12 22:02	1

MAR 20 2012


Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Client Sample ID: GWE-1D-F(0.2)-0212

Lab Sample ID: 680-77065-2

Date Collected: 02/20/12 11:05

Matrix: Water

Date Received: 02/21/12 09:22

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	18		0.050		mg/L		02/22/12 15:49	02/24/12 21:29	1
Manganese, Dissolved	0.52		0.010		mg/L		02/22/12 15:49	02/24/12 21:29	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	2.7		1.0		mg/L			02/24/12 14:40	1

US EPA ARCHIVE DOCUMENT

MAR 20 2012
[Signature]

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Client Sample ID: GWE-3D-0212

Lab Sample ID: 680-77065-3

Date Collected: 02/20/12 15:25

Matrix: Water

Date Received: 02/21/12 09:22

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	10	U	10		ug/L			02/24/12 21:01	10
Chlorobenzene	1200		10		ug/L			02/24/12 21:01	10
1,2-Dichlorobenzene	11		10		ug/L			02/24/12 21:01	10
1,3-Dichlorobenzene	10	U	10		ug/L			02/24/12 21:01	10
1,4-Dichlorobenzene	75		10		ug/L			02/24/12 21:01	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130					02/24/12 21:01	10
Dibromofluoromethane	105		70 - 130					02/24/12 21:01	10
Toluene-d8 (Surr)	101		70 - 130					02/24/12 21:01	10

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			02/29/12 15:56	1
Ethylene	1.0	U	1.0		ug/L			02/29/12 15:56	1
Methane	33		0.58		ug/L			02/29/12 15:56	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	13		0.050		mg/L		02/22/12 15:49	02/24/12 21:33	1
Manganese	0.38		0.010		mg/L		02/22/12 15:49	02/24/12 21:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60		1.0		mg/L			02/28/12 09:37	1
Nitrate as N	0.13		0.050		mg/L			02/21/12 15:32	1
Sulfate	220		50		mg/L			03/01/12 12:56	10
Total Organic Carbon	3.0		1.0		mg/L			02/24/12 22:00	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	400		5.0		mg/L			02/22/12 22:11	1
Carbon Dioxide, Free	23		5.0		mg/L			02/22/12 22:11	1

MAR 20 2012
[Signature]

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Client Sample ID: GWE-3D-F(0.2)-0212

Lab Sample ID: 680-77065-4

Date Collected: 02/20/12 15:25

Matrix: Water

Date Received: 02/21/12 09:22

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	13		0.050		mg/L		02/22/12 15:49	02/24/12 21:37	1
Manganese, Dissolved	0.38		0.010		mg/L		02/22/12 15:49	02/24/12 21:37	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	3.3		1.0		mg/L			02/24/12 14:40	1

MAR 20 2012 

Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
 SDG: KPS072

Client Sample ID: GWE-3D-0212-EB

Lab Sample ID: 680-77065-5

Date Collected: 02/20/12 12:00

Matrix: Water

Date Received: 02/21/12 09:22

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			02/24/12 17:04	1
Chlorobenzene	1.0	U	1.0		ug/L			02/24/12 17:04	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 17:04	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 17:04	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 17:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		70 - 130		02/24/12 17:04	1
Dibromofluoromethane	109		70 - 130		02/24/12 17:04	1
Toluene-d8 (Surr)	106		70 - 130		02/24/12 17:04	1

MAR 20 2012


Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Client Sample ID: 1Q12 SUPP Trip Blank #1

Lab Sample ID: 680-77065-6

Date Collected: 02/20/12 00:00

Matrix: Water

Date Received: 02/21/12 09:22

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			02/24/12 16:35	1
Chlorobenzene	1.0	U	1.0		ug/L			02/24/12 16:35	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 16:35	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 16:35	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		70 - 130		02/24/12 16:35	1
Dibromofluoromethane	109		70 - 130		02/24/12 16:35	1
Toluene-d8 (Surr)	102		70 - 130		02/24/12 16:35	1

US EPA ARCHIVE DOCUMENT

MAR 20 2012



Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
 SDG: KPS072

Client Sample ID: GWE-5D-0212

Lab Sample ID: 680-77065-7

Date Collected: 02/20/12 10:45

Matrix: Water

Date Received: 02/21/12 09:22

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	86		20		ug/L			02/24/12 20:02	20
Chlorobenzene	1900		20		ug/L			02/24/12 20:02	20
1,2-Dichlorobenzene	20		20		ug/L			02/24/12 20:02	20
1,3-Dichlorobenzene	20	U	20		ug/L			02/24/12 20:02	20
1,4-Dichlorobenzene	110		20		ug/L			02/24/12 20:02	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		70 - 130		02/24/12 20:02	20
Dibromofluoromethane	103		70 - 130		02/24/12 20:02	20
Toluene-d8 (Surr)	109		70 - 130		02/24/12 20:02	20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			02/29/12 16:09	1
Ethylene	1.0	U	1.0		ug/L			02/29/12 16:09	1
Methane	230		0.58		ug/L			02/29/12 16:09	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	14		0.050		mg/L		02/22/12 15:49	02/24/12 21:42	1
Manganese	0.42		0.010		mg/L		02/22/12 15:49	02/24/12 21:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96		2.0		mg/L			02/28/12 09:57	2
Nitrate as N	0.050	U	0.050		mg/L			02/21/12 15:34	1
Sulfate	330		50		mg/L			03/01/12 12:58	10
Total Organic Carbon	3.9		1.0		mg/L			02/24/12 22:14	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	400		5.0		mg/L			02/22/12 22:19	1
Carbon Dioxide, Free	26		5.0		mg/L			02/22/12 22:19	1

US EPA ARCHIVE DOCUMENT

MAR 20 2012


Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Client Sample ID: GWE-5D-F(0.2)-0212

Lab Sample ID: 680-77065-8

Date Collected: 02/20/12 10:45

Matrix: Water

Date Received: 02/21/12 09:22

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	14		0.050		mg/L		02/22/12 15:49	02/24/12 21:55	1
Manganese, Dissolved	0.40		0.010		mg/L		02/22/12 15:49	02/24/12 21:55	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	4.3		1.0		mg/L			02/24/12 14:40	1

MAR 20 2012


Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
 SDG: KPS072

Client Sample ID: GWE-5D-0212-AD

Lab Sample ID: 680-77065-9

Date Collected: 02/20/12 10:45

Matrix: Water

Date Received: 02/21/12 09:22

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	77		20		ug/L			02/27/12 16:09	20
Chlorobenzene	1700		20		ug/L			02/27/12 16:09	20
1,2-Dichlorobenzene	20		20		ug/L			02/27/12 16:09	20
1,3-Dichlorobenzene	20	U	20		ug/L			02/27/12 16:09	20
1,4-Dichlorobenzene	120		20		ug/L			02/27/12 16:09	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		70 - 130					02/27/12 16:09	20
Dibromofluoromethane	105		70 - 130					02/27/12 16:09	20
Toluene-d8 (Surr)	101		70 - 130					02/27/12 16:09	20

MAR 20 2012

MM

Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
 SDG: KPS072

Client Sample ID: 1Q12 SUPP Trip Blank #2

Lab Sample ID: 680-77065-10

Date Collected: 02/20/12 00:00

Matrix: Water

Date Received: 02/21/12 09:22

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			02/24/12 17:34	1
Chlorobenzene	1.0	U	1.0		ug/L			02/24/12 17:34	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 17:34	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 17:34	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 17:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	90		70 - 130					02/24/12 17:34	1
Dibromofluoromethane	109		70 - 130					02/24/12 17:34	1
Toluene-d8 (Surr)	102		70 - 130					02/24/12 17:34	1

MAR 20 2012


Surrogate Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	TOL
		(70-130)	(70-130)	(70-130)
680-77065-1	GWE-1D-0212	91	109	102
680-77065-3	GWE-3D-0212	100	105	101
680-77065-3 MS	GWE-3D-0212	96	104	105
680-77065-3 MSD	GWE-3D-0212	100	109	103
680-77065-5	GWE-3D-0212-EB	95	109	106
680-77065-6	1Q12 SUPP Trip Blank #1	96	109	102
680-77065-7	GWE-5D-0212	104	103	109
680-77065-9	GWE-5D-0212-AD	107	105	101
680-77065-10	1Q12 SUPP Trip Blank #2	90	109	102
LCS 680-229997/3	Lab Control Sample	96	110	105
LCS 680-230216/4	Lab Control Sample	102	114	101
LCSD 680-229997/4	Lab Control Sample Dup	95	107	105
LCSD 680-230216/6	Lab Control Sample Dup	95	107	98
MB 680-229997/7	Method Blank	101	107	102
MB 680-230216/7	Method Blank	103	107	100

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

MAR 20 2012



QC Sample Results

Client: Solutia Inc.
Project/Site: W GK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-229997/7

Matrix: Water

Analysis Batch: 229997

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	1.0	U	1.0		ug/L			02/24/12 14:36	1
Chlorobenzene	1.0	U	1.0		ug/L			02/24/12 14:36	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 14:36	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 14:36	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			02/24/12 14:36	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	101		70 - 130		02/24/12 14:36	1
Dibromofluoromethane	107		70 - 130		02/24/12 14:36	1
Toluene-d8 (Surr)	102		70 - 130		02/24/12 14:36	1

Lab Sample ID: LCS 680-229997/3

Matrix: Water

Analysis Batch: 229997

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	50.0	53.4		ug/L		107	70 - 130
Chlorobenzene	50.0	54.8		ug/L		110	70 - 130
1,2-Dichlorobenzene	50.0	50.7		ug/L		101	70 - 130
1,3-Dichlorobenzene	50.0	50.5		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	48.5		ug/L		97	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	96		70 - 130
Dibromofluoromethane	110		70 - 130
Toluene-d8 (Surr)	105		70 - 130

Lab Sample ID: LCSD 680-229997/4

Matrix: Water

Analysis Batch: 229997

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	Limit
		Result	Qualifier						
Benzene	50.0	53.7		ug/L		107	70 - 130	1	30
Chlorobenzene	50.0	53.6		ug/L		107	70 - 130	2	30
1,2-Dichlorobenzene	50.0	49.2		ug/L		98	70 - 130	3	30
1,3-Dichlorobenzene	50.0	49.0		ug/L		98	70 - 130	3	30
1,4-Dichlorobenzene	50.0	47.4		ug/L		95	70 - 130	2	30

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	95		70 - 130
Dibromofluoromethane	107		70 - 130
Toluene-d8 (Surr)	105		70 - 130

Lab Sample ID: 680-77065-3 MS

Matrix: Water

Analysis Batch: 229997

Client Sample ID: GWE-3D-0212

Prep Type: Total/NA

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Benzene	10	U	500	530		ug/L		104	70 - 130

US EPA ARCHIVE DOCUMENT

MAR 20 2012

QC Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-77065-3 MS

Client Sample ID: GWE-3D-0212

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 229997

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits	
	Result	Qualifier	Added	Result	Qualifier						
Chlorobenzene	1200		500	1700		ug/L		107	70 - 130		
1,2-Dichlorobenzene	11		500	496		ug/L		97	70 - 130		
1,3-Dichlorobenzene	10	U	500	494		ug/L		83	70 - 130		
1,4-Dichlorobenzene	75		500	554		ug/L		96	70 - 130		
MS MS											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene	96		70 - 130								
Dibromofluoromethane	104		70 - 130								
Toluene-d8 (Surr)	105		70 - 130								

Lab Sample ID: 680-77065-3 MSD

Client Sample ID: GWE-3D-0212

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 229997

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Benzene	10	U	500	530		ug/L		105	70 - 130	0	30	
Chlorobenzene	1200		500	1580		ug/L		84	70 - 130	7	30	
1,2-Dichlorobenzene	11		500	526		ug/L		103	70 - 130	6	30	
1,3-Dichlorobenzene	10	U	500	515		ug/L		87	70 - 130	4	30	
1,4-Dichlorobenzene	75		500	570		ug/L		99	70 - 130	3	30	
MSD MSD												
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene	100		70 - 130									
Dibromofluoromethane	109		70 - 130									
Toluene-d8 (Surr)	103		70 - 130									

Lab Sample ID: MB 680-230216/7

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 230216

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
	Result	Qualifier								
Benzene	1.0	U	1.0		ug/L			02/27/12 13:42	1	
Chlorobenzene	1.0	U	1.0		ug/L			02/27/12 13:42	1	
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			02/27/12 13:42	1	
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			02/27/12 13:42	1	
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			02/27/12 13:42	1	
MB MB										
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
4-Bromofluorobenzene	103		70 - 130		02/27/12 13:42	1				
Dibromofluoromethane	107		70 - 130		02/27/12 13:42	1				
Toluene-d8 (Surr)	100		70 - 130		02/27/12 13:42	1				

Lab Sample ID: LCS 680-230216/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 230216

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
Benzene	50.0	49.5		ug/L		99	70 - 130	
Chlorobenzene	50.0	52.7		ug/L		105	70 - 130	

MAR 20 2012 *MM*

QC Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-230216/4
Matrix: Water
Analysis Batch: 230216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,2-Dichlorobenzene	50.0	53.2		ug/L		106	70 - 130
1,3-Dichlorobenzene	50.0	55.1		ug/L		110	70 - 130
1,4-Dichlorobenzene	50.0	53.1		ug/L		106	70 - 130

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	102		70 - 130
Dibromofluoromethane	114		70 - 130
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCSD 680-230216/6
Matrix: Water
Analysis Batch: 230216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	50.0	48.6		ug/L		97	70 - 130	2	30
Chlorobenzene	50.0	49.6		ug/L		99	70 - 130	6	30
1,2-Dichlorobenzene	50.0	48.8		ug/L		98	70 - 130	9	30
1,3-Dichlorobenzene	50.0	51.3		ug/L		103	70 - 130	7	30
1,4-Dichlorobenzene	50.0	48.5		ug/L		97	70 - 130	9	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	95		70 - 130
Dibromofluoromethane	107		70 - 130
Toluene-d8 (Surr)	98		70 - 130

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-230383/3
Matrix: Water
Analysis Batch: 230383

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ethane	1.1	U	1.1		ug/L			02/29/12 11:10	1
Ethylene	1.0	U	1.0		ug/L			02/29/12 11:10	1
Methane	0.58	U	0.58		ug/L			02/29/12 11:10	1

Lab Sample ID: LCS 680-230383/2
Matrix: Water
Analysis Batch: 230383

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Ethane	282	340		ug/L		120	75 - 125
Ethylene	271	314		ug/L		116	75 - 125
Methane	153	179		ug/L		117	75 - 125

MAR 20 2012

QC Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCSD 680-230383/24
Matrix: Water
Analysis Batch: 230383

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Ethane	282	315		ug/L		111	75 - 125	8		30
Ethylene	271	285		ug/L		105	75 - 125	10		30
Methane	153	170		ug/L		111	75 - 125	5		30

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 680-229776/1-A
Matrix: Water
Analysis Batch: 230032

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 229776

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	0.050	U	0.050		mg/L		02/22/12 15:49	02/24/12 21:15	1
Iron, Dissolved	0.050	U	0.050		mg/L		02/22/12 15:49	02/24/12 21:15	1
Manganese	0.010	U	0.010		mg/L		02/22/12 15:49	02/24/12 21:15	1
Manganese, Dissolved	0.010	U	0.010		mg/L		02/22/12 15:49	02/24/12 21:15	1

Lab Sample ID: LCS 680-229776/2-A
Matrix: Water
Analysis Batch: 230032

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 229776

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Iron	1.00	1.01		mg/L		101	75 - 125	
Iron, Dissolved	1.00	1.01		mg/L		101	75 - 125	
Manganese	0.500	0.503		mg/L		101	75 - 125	
Manganese, Dissolved	0.500	0.503		mg/L		101	75 - 125	

Method: 310.1 - Alkalinity

Lab Sample ID: MB 680-229819/3
Matrix: Water
Analysis Batch: 229819

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Alkalinity	5.0	U	5.0		mg/L			02/22/12 21:40	1
Carbon Dioxide, Free	5.0	U	5.0		mg/L			02/22/12 21:40	1

Lab Sample ID: LCS 680-229819/4
Matrix: Water
Analysis Batch: 229819

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Alkalinity	250	248		mg/L		99	80 - 120	

Lab Sample ID: LCSD 680-229819/23
Matrix: Water
Analysis Batch: 229819

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Alkalinity	250	245		mg/L		98	80 - 120	1		30

MAR 20 2012
MM

QC Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Method: 325.2 - Chloride

Lab Sample ID: MB 680-230187/27
Matrix: Water
Analysis Batch: 230187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	1.0		mg/L			02/28/12 09:58	1

Lab Sample ID: LCS 680-230187/2
Matrix: Water
Analysis Batch: 230187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.0		mg/L		100	85 - 115

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 680-229649/14
Matrix: Water
Analysis Batch: 229649

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050		mg/L			02/21/12 15:26	1

Lab Sample ID: LCS 680-229649/15
Matrix: Water
Analysis Batch: 229649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.497	0.514		mg/L		104	90 - 110
Nitrate Nitrite as N	0.998	1.02		mg/L		103	90 - 110
Nitrite as N	0.502	0.510		mg/L		102	90 - 110

Method: 375.4 - Sulfate

Lab Sample ID: MB 680-230428/1
Matrix: Water
Analysis Batch: 230428

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	5.0	U	5.0		mg/L			03/01/12 10:42	1

Lab Sample ID: LCS 680-230428/2
Matrix: Water
Analysis Batch: 230428

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	19.2		mg/L		96	75 - 125

US EPA ARCHIVE DOCUMENT

MAR 20 2012
ML

QC Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
 SDG: KPS072

Method: 415.1 - DOC

Lab Sample ID: MB 680-230090/1
 Matrix: Water
 Analysis Batch: 230090

Client Sample ID: Method Blank
 Prep Type: Dissolved

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Dissolved Organic Carbon	1.0	U	1.0		mg/L			02/24/12 14:40	1

Lab Sample ID: LCS 680-230090/2
 Matrix: Water
 Analysis Batch: 230090

Client Sample ID: Lab Control Sample
 Prep Type: Dissolved

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Dissolved Organic Carbon	20.0	18.1		mg/L		90	80 - 120

Method: 415.1 - TOC

Lab Sample ID: MB 680-230075/2
 Matrix: Water
 Analysis Batch: 230075

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Organic Carbon	1.0	U	1.0		mg/L			02/24/12 14:50	1

Lab Sample ID: LCS 680-230075/4
 Matrix: Water
 Analysis Batch: 230075

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Total Organic Carbon	20.0	20.1		mg/L		100	80 - 120

MAR 20 2012

QC Association Summary

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
 SDG: KPS072

GC/MS VOA

Analysis Batch: 229997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-1	GWE-1D-0212	Total/NA	Water	8260B	
680-77065-3	GWE-3D-0212	Total/NA	Water	8260B	
680-77065-3 MS	GWE-3D-0212	Total/NA	Water	8260B	
680-77065-3 MSD	GWE-3D-0212	Total/NA	Water	8260B	
680-77065-5	GWE-3D-0212-EB	Total/NA	Water	8260B	
680-77065-6	1Q12 SUPP Trip Blank #1	Total/NA	Water	8260B	
680-77065-7	GWE-5D-0212	Total/NA	Water	8260B	
680-77065-10	1Q12 SUPP Trip Blank #2	Total/NA	Water	8260B	
LCS 680-229997/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-229997/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-229997/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 230216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-9	GWE-5D-0212-AD	Total/NA	Water	8260B	
LCS 680-230216/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-230216/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-230216/7	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 230383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-1	GWE-1D-0212	Total/NA	Water	RSK-175	
680-77065-3	GWE-3D-0212	Total/NA	Water	RSK-175	
680-77065-7	GWE-5D-0212	Total/NA	Water	RSK-175	
LCS 680-230383/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-230383/24	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 680-230383/3	Method Blank	Total/NA	Water	RSK-175	

Metals

Prep Batch: 229776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-1	GWE-1D-0212	Total Recoverable	Water	3005A	
680-77065-2	GWE-1D-F(0.2)-0212	Dissolved	Water	3005A	
680-77065-3	GWE-3D-0212	Total Recoverable	Water	3005A	
680-77065-4	GWE-3D-F(0.2)-0212	Dissolved	Water	3005A	
680-77065-7	GWE-5D-0212	Total Recoverable	Water	3005A	
680-77065-8	GWE-5D-F(0.2)-0212	Dissolved	Water	3005A	
LCS 680-229776/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-229776/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 230032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-1	GWE-1D-0212	Total Recoverable	Water	6010B	229776
680-77065-2	GWE-1D-F(0.2)-0212	Dissolved	Water	6010B	229776
680-77065-3	GWE-3D-0212	Total Recoverable	Water	6010B	229776
680-77065-4	GWE-3D-F(0.2)-0212	Dissolved	Water	6010B	229776
680-77065-7	GWE-5D-0212	Total Recoverable	Water	6010B	229776
680-77065-8	GWE-5D-F(0.2)-0212	Dissolved	Water	6010B	229776
LCS 680-229776/2-A	Lab Control Sample	Total Recoverable	Water	6010B	229776

US EPA ARCHIVE DOCUMENT

MAR 20 2012 *AM*

QC Association Summary

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
 SDG: KPS072

Metals (Continued)

Analysis Batch: 230032 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-229776/1-A	Method Blank	Total Recoverable	Water	6010B	229776

General Chemistry

Analysis Batch: 229649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-1	GWE-1D-0212	Total/NA	Water	353.2	
680-77065-3	GWE-3D-0212	Total/NA	Water	353.2	
680-77065-7	GWE-5D-0212	Total/NA	Water	353.2	
LCS 680-229649/15	Lab Control Sample	Total/NA	Water	353.2	
MB 680-229649/14	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 229819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-1	GWE-1D-0212	Total/NA	Water	310.1	
680-77065-3	GWE-3D-0212	Total/NA	Water	310.1	
680-77065-7	GWE-5D-0212	Total/NA	Water	310.1	
LCS 680-229819/4	Lab Control Sample	Total/NA	Water	310.1	
LCSD 680-229819/23	Lab Control Sample Dup	Total/NA	Water	310.1	
MB 680-229819/3	Method Blank	Total/NA	Water	310.1	

Analysis Batch: 230075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-1	GWE-1D-0212	Total/NA	Water	415.1	
680-77065-3	GWE-3D-0212	Total/NA	Water	415.1	
680-77065-7	GWE-5D-0212	Total/NA	Water	415.1	
LCS 680-230075/4	Lab Control Sample	Total/NA	Water	415.1	
MB 680-230075/2	Method Blank	Total/NA	Water	415.1	

Analysis Batch: 230090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-2	GWE-1D-F(0.2)-0212	Dissolved	Water	415.1	
680-77065-4	GWE-3D-F(0.2)-0212	Dissolved	Water	415.1	
680-77065-8	GWE-5D-F(0.2)-0212	Dissolved	Water	415.1	
LCS 680-230090/2	Lab Control Sample	Dissolved	Water	415.1	
MB 680-230090/1	Method Blank	Dissolved	Water	415.1	

Analysis Batch: 230187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-1	GWE-1D-0212	Total/NA	Water	325.2	
680-77065-3	GWE-3D-0212	Total/NA	Water	325.2	
680-77065-7	GWE-5D-0212	Total/NA	Water	325.2	
LCS 680-230187/2	Lab Control Sample	Total/NA	Water	325.2	
MB 680-230187/27	Method Blank	Total/NA	Water	325.2	

Analysis Batch: 230428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77065-1	GWE-1D-0212	Total/NA	Water	375.4	
680-77065-3	GWE-3D-0212	Total/NA	Water	375.4	
680-77065-7	GWE-5D-0212	Total/NA	Water	375.4	
LCS 680-230428/2	Lab Control Sample	Total/NA	Water	375.4	
MB 680-230428/1	Method Blank	Total/NA	Water	375.4	

Lab Chronicle

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Client Sample ID: GWE-1D-0212

Lab Sample ID: 680-77065-1

Date Collected: 02/20/12 11:05

Matrix: Water

Date Received: 02/21/12 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	229997	02/24/12 18:03	AJMC	TAL SAV
Total/NA	Analysis	RSK-175		1	230383	02/29/12 16:21	SMC	TAL SAV
Total Recoverable	Prep	3005A			229776	02/22/12 15:49	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230032	02/24/12 21:24	BCB	TAL SAV
Total/NA	Analysis	353.2		1	229649	02/21/12 15:33	JNC	TAL SAV
Total/NA	Analysis	310.1		1	229819	02/22/12 22:02	TH	TAL SAV
Total/NA	Analysis	415.1		1	230075	02/24/12 21:45	JR	TAL SAV
Total/NA	Analysis	325.2		1	230187	02/28/12 09:37	JR	TAL SAV
Total/NA	Analysis	375.4		10	230428	03/01/12 12:56	JR	TAL SAV

Client Sample ID: GWE-1D-F(0.2)-0212

Lab Sample ID: 680-77065-2

Date Collected: 02/20/12 11:05

Matrix: Water

Date Received: 02/21/12 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			229776	02/22/12 15:49	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230032	02/24/12 21:29	BCB	TAL SAV
Dissolved	Analysis	415.1		1	230090	02/24/12 14:40	JR	TAL SAV

Client Sample ID: GWE-3D-0212

Lab Sample ID: 680-77065-3

Date Collected: 02/20/12 15:25

Matrix: Water

Date Received: 02/21/12 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	229997	02/24/12 21:01	AJMC	TAL SAV
Total/NA	Analysis	RSK-175		1	230383	02/29/12 15:56	SMC	TAL SAV
Total Recoverable	Prep	3005A			229776	02/22/12 15:49	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230032	02/24/12 21:33	BCB	TAL SAV
Total/NA	Analysis	353.2		1	229649	02/21/12 15:32	JNC	TAL SAV
Total/NA	Analysis	310.1		1	229819	02/22/12 22:11	TH	TAL SAV
Total/NA	Analysis	415.1		1	230075	02/24/12 22:00	JR	TAL SAV
Total/NA	Analysis	325.2		1	230187	02/28/12 09:37	JR	TAL SAV
Total/NA	Analysis	375.4		10	230428	03/01/12 12:56	JR	TAL SAV

Client Sample ID: GWE-3D-F(0.2)-0212

Lab Sample ID: 680-77065-4

Date Collected: 02/20/12 15:25

Matrix: Water

Date Received: 02/21/12 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			229776	02/22/12 15:49	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230032	02/24/12 21:37	BCB	TAL SAV
Dissolved	Analysis	415.1		1	230090	02/24/12 14:40	JR	TAL SAV

MAR 20 2012

Lab Chronicle

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Client Sample ID: GWE-3D-0212-EB

Lab Sample ID: 680-77065-5

Date Collected: 02/20/12 12:00

Matrix: Water

Date Received: 02/21/12 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	229997	02/24/12 17:04	AJMC	TAL SAV

Client Sample ID: 1Q12 SUPP Trip Blank #1

Lab Sample ID: 680-77065-6

Date Collected: 02/20/12 00:00

Matrix: Water

Date Received: 02/21/12 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	229997	02/24/12 16:35	AJMC	TAL SAV

Client Sample ID: GWE-5D-0212

Lab Sample ID: 680-77065-7

Date Collected: 02/20/12 10:45

Matrix: Water

Date Received: 02/21/12 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	229997	02/24/12 20:02	AJMC	TAL SAV
Total/NA	Analysis	RSK-175		1	230383	02/29/12 16:09	SMC	TAL SAV
Total Recoverable	Prep	3005A			229776	02/22/12 15:49	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230032	02/24/12 21:42	BCB	TAL SAV
Total/NA	Analysis	353.2		1	229649	02/21/12 15:34	JNC	TAL SAV
Total/NA	Analysis	310.1		1	229819	02/22/12 22:19	TH	TAL SAV
Total/NA	Analysis	415.1		1	230075	02/24/12 22:14	JR	TAL SAV
Total/NA	Analysis	325.2		2	230187	02/28/12 09:57	JR	TAL SAV
Total/NA	Analysis	375.4		10	230428	03/01/12 12:58	JR	TAL SAV

Client Sample ID: GWE-5D-F(0.2)-0212

Lab Sample ID: 680-77065-8

Date Collected: 02/20/12 10:45

Matrix: Water

Date Received: 02/21/12 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			229776	02/22/12 15:49	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230032	02/24/12 21:55	BCB	TAL SAV
Dissolved	Analysis	415.1		1	230090	02/24/12 14:40	JR	TAL SAV

Client Sample ID: GWE-5D-0212-AD

Lab Sample ID: 680-77065-9

Date Collected: 02/20/12 10:45

Matrix: Water

Date Received: 02/21/12 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	230216	02/27/12 16:09	AJMC	TAL SAV

MAR 20 2012 *[Signature]*

Lab Chronicle

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
SDG: KPS072

Client Sample ID: 1Q12 SUPP Trip Blank #2

Lab Sample ID: 680-77065-10

Date Collected: 02/20/12 00:00

Matrix: Water

Date Received: 02/21/12 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	229997	02/24/12 17:34	AJMC	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

MAR 20 2012 *[Signature]*

Chain of Custody Record

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Dave Palmer		Site Contact: Michael Corbett		Date: 2/20/12		COC No:											
URS Corporation		Tel/Fax: (314) 743-4154		Lab Contact: Lidya Gulizia		Carrier: FedEx		1 of 1 COCs											
1001 Highlands Plaza Drive West, Suite 300		Analysis Turnaround Time		<input checked="" type="checkbox"/> Filtered Sample VOCs by 8260 SVOCs by 8270C* Total Fe/Mn by 6010B Al/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		Calendar (C) or Work Days (W) TAT if different from Below Standard <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Job No.											
St. Louis, MO 63110								680-77065											
(314) 429-0100 Phone								21562703.00004											
(314) 429-0462 FAX								SDG No.											
Project Name: 1Q12 Supplemental GW Sampling																			
Site: Solutia WG Krummrich Facility																			
PO#																			
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Sample Specific Notes:												
GWE-1D-0212 ✓		2/20/12	1105	G	Water	14	3	2	1	1	1	3	2	1					*SVOCs per semi-annual list
GWE-1D-F(0.2)-0212 ✓		2/20/12	1105	G	Water	2	X								1	1			
GWE-2D-0212				G	Water	14		3	2	1	1	1	3	2	1			MC	
GWE-2D-F(0.2)-0212				G	Water	2	X											MC	
GWE-3D-0212 ✓		2/20/12	1525	G	Water	14		3	2	1	1	1	3	2	1				
GWE-3D-F(0.2)-0212 ✓		2/20/12	1525	G	Water	2	X								1	1			
GWE-3D-0212-MS ✓		2/20/12	1525	G	Water	5		3	2										
GWE-3D-0212-MSD		2/20/12	1525	G	Water	5		3	2										
GWE-0212-AD				G	Water	5		3	2									MC	
GWE-3D-0212-EB ✓		2/20/12	1200	G	Water	5		3	2										
1Q12 SUPP Trip Blank # 1		2/20/12			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							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)												
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Turn To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months												
Special Instructions/QC Requirements & Comments: Level 4 Data Package										* SVOC analyses cancelled per URS e-mail from E. Kunkel on 2/21/12 // L. Gulizia 3/19/12 TA-SAV Temp 1.6°C, 0.4°C, 2.8°C									
Relinquished by: <i>[Signature]</i>		Company: URS		Date/Time: 2/20/12 1800		Received by: Beth A Daugherty		Company: TASAV		Date/Time: 02.21.12 0922									
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:									
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:									

Page 33 of 36

MAR 20 2012 *[Signature]*

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: Dave Palmer				Site Contact: Michael Corbett				Date: 2/20/12				COC No:			
URS Corporation		Tel/Fax: (314) 743-4154				Lab Contact: Lidya Guizia				Carrier: FedEx				1 of 1 COCs			
1001 Highlands Plaza Drive West, Suite 300		Analysis Turnaround Time				<input checked="" type="checkbox"/> * Filtered Sample VOCs by 8260 SVOCs by 8270C* Total Fe/Mn by 6010B Al/CO2 by 310.1 Chloride by 325.2/Sulfate by 375.4 Methane by RSK 175 Nitrate by 352.2 TOC by 415.1 Dissolved Fe/Mn by 6010B DOC by 415.1				Calendar (C) or Work Days (W)				Job No.			
St. Louis, MO 63110		TAT if different from Below Standard								21562703.0000#							
(314) 429-0100 Phone		<input checked="" type="checkbox"/> 2 weeks								SDG No.							
(314) 429-0462 FAX		<input type="checkbox"/> 1 week															
Project Name: 1Q12 Supplemental GW Sampling		<input type="checkbox"/> 2 days								Sample Specific Notes:							
Site: Solutia WG Krummrich Facility		<input type="checkbox"/> 1 day															
PO#																	
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs by 8260	SVOCs by 8270C*	Total Fe/Mn by 6010B	Al/CO2 by 310.1	Chloride by 325.2/Sulfate by 375.4	Methane by RSK 175	Nitrate by 352.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	
GWE-5D-0212	2/20/12	1045	G	Water	14		3	2	1	1	1	3	2	1			
GWE-5D-F(0.2)-0212	2/20/12	1045	G	Water	2	X									1	1	
GWE-5D-0212-AD	2/20/12	1045	G	Water	5		3	2									
IQ12 SUPP Trip Blank # 2	2/20/12			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						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Turn To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Special Instructions/QC Requirements & Comments: Level 4 Data Package																	
* SVOC analyses cancelled per URS e-mail from E. Konkel on 2/21/12 // LGuizia 3/19/12 Temp 1.6°C, 0.4°C, 2.8°C																	
Relinquished by: [Signature]	Company: URS		Date/Time: 2/20/12 1800		Received by: [Signature]	Company: TASA		Date/Time: 02.21.12 0922									
Relinquished by:	Company:		Date/Time:		Received by:	Company:		Date/Time:									
Relinquished by:	Company:		Date/Time:		Received by:	Company:		Date/Time:									

Page 34 of 30

MAR 20 2012 [Signature]

Login Sample Receipt Checklist

Client: Solutia Inc.

Job Number: 680-77065-1

SDG Number: KPS072

Login Number: 77065

List Source: TestAmerica Savannah

List Number: 1

Creator: Daughtry, Beth

Question	Answer	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	1.6, 0.4, 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	
Is the Field Sampler's name present on COC?	N/A	
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	
Sample Preservation Verified.	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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

MAR 20 2012



Certification Summary

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77065-1
 SDG: KPS072

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Savannah	A2LA	DoD ELAP		0399-01
TestAmerica Savannah	A2LA	ISO/IEC 17025		399.01
TestAmerica Savannah	Alabama	State Program	4	41450
TestAmerica Savannah	Arkansas	State Program	6	N/A
TestAmerica Savannah	Arkansas DEQ	State Program	6	88-0692
TestAmerica Savannah	California	NELAC	9	3217CA
TestAmerica Savannah	Colorado	State Program	8	N/A
TestAmerica Savannah	Connecticut	State Program	1	PH-0161
TestAmerica Savannah	Florida	NELAC	4	E87052
TestAmerica Savannah	GA Dept. of Agriculture	State Program	4	N/A
TestAmerica Savannah	Georgia	State Program	4	803
TestAmerica Savannah	Georgia	State Program	4	N/A
TestAmerica Savannah	Guam	State Program	9	09-005r
TestAmerica Savannah	Hawaii	State Program	9	N/A
TestAmerica Savannah	Illinois	NELAC	5	200022
TestAmerica Savannah	Indiana	State Program	5	N/A
TestAmerica Savannah	Iowa	State Program	7	353
TestAmerica Savannah	Kentucky	State Program	4	90084
TestAmerica Savannah	Kentucky (UST)	State Program	4	18
TestAmerica Savannah	Louisiana	NELAC	6	30690
TestAmerica Savannah	Louisiana	NELAC	6	LA100015
TestAmerica Savannah	Maine	State Program	1	GA00006
TestAmerica Savannah	Maryland	State Program	3	250
TestAmerica Savannah	Massachusetts	State Program	1	M-GA006
TestAmerica Savannah	Michigan	State Program	5	9925
TestAmerica Savannah	Mississippi	State Program	4	N/A
TestAmerica Savannah	Montana	State Program	8	CERT0081
TestAmerica Savannah	Nebraska	State Program	7	TestAmerica-Savannah
TestAmerica Savannah	New Jersey	NELAC	2	GA769
TestAmerica Savannah	New Mexico	State Program	6	N/A
TestAmerica Savannah	New York	NELAC	2	10842
TestAmerica Savannah	North Carolina DENR	State Program	4	269
TestAmerica Savannah	North Carolina DHHS	State Program	4	13701
TestAmerica Savannah	Oklahoma	State Program	6	9984
TestAmerica Savannah	Pennsylvania	NELAC	3	68-00474
TestAmerica Savannah	Puerto Rico	State Program	2	GA00006
TestAmerica Savannah	Rhode Island	State Program	1	LAO00244
TestAmerica Savannah	South Carolina	State Program	4	98001
TestAmerica Savannah	Tennessee	State Program	4	TN02961
TestAmerica Savannah	Texas	NELAC	6	T104704185-08-TX
TestAmerica Savannah	USDA	Federal		SAV 3-04
TestAmerica Savannah	Vermont	State Program	1	87052
TestAmerica Savannah	Virginia	NELAC	3	460161
TestAmerica Savannah	Washington	State Program	10	C1794
TestAmerica Savannah	West Virginia	State Program	3	9950C
TestAmerica Savannah	West Virginia DEP	State Program	3	94
TestAmerica Savannah	Wisconsin	State Program	5	999819810
TestAmerica Savannah	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

MAR 20 2012

MM

TestAmerica Savannah

US EPA ARCHIVE DOCUMENT

Supplemental Groundwater Monitoring Program

1Q 2012 Data Review

Laboratory SDG: KPS073

Data Reviewer: Elizabeth Kunkel

Peer Reviewer: Tony Sedlacek

Date Reviewed: 4/16/2012

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2008. USEPA National Functional Guidelines for Superfund Inorganic Data Review 2010

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

Sample Identification	
GWE-3M-0212	GWE-3M-F(0.2)-0212
GWE-3S-0212	GWE-3S-F(0.2)-0212
GWE-5M-0212	GWE-5M-F(0.2)-0212
GWE-5S-0212	GWE-5S-F(0.2)-0212
1Q12 SUPP Trip Blank #2	GWE-4D-0212
GWE-4D-F(0.2)-0212	GWE-4D-0212-AD
GWE-4M-0212-EB	GWE-4M-0212
GWE-4M-F(0.2)-0212	GWE-4S-0212
GWE-4S-F(0.2)-0212	GWE-2D-0212
GWE-2D-F(0.2)-0212	1Q12 SUPP Trip Blank #3

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 several samples were diluted due to high levels of target analytes. Iron and dissolved iron MS/MSD recoveries in sample GWE-3M-0212 could not be evaluated because the sample concentrations were greater than four times (4X) the matrix spike concentration. Dissolved organic carbon (DOC) samples GWE-4D-F(0.2)-0212, GWE-4M-F(0.2)-0212, GWE-4S-F(0.2)-0212 and GWE-2D-F(0.2)-0212 were analyzed 7 days outside of hold time for analysis (28 days). These issues are discussed further in the appropriate sections below.

The cooler receipt form indicated one of two coolers was received by the laboratory at 0.8°C which is outside the 4°C ± 2°C criteria. The samples were received in good

condition; therefore, no qualification of data was required.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Results reported for four dissolved organic carbon (DOC) samples were analyzed outside hold time. Due to instrument failure, TestAmerica Savannah could not reanalyze four samples for dissolved organic carbon (DOC). The original DOC results in these four samples did not correlate well with the total organic carbon (TOC) results. Samples GWE-4D-F(0.2)-0212, GWE-4M-F(0.2)-0212, GWE-4S-F(0.2)-0212, and GWE-2D-F(0.2)-0212 were sent to TestAmerica St. Louis for TOC and DOC analysis. There was good correlation between the TOC data reported by both labs and the DOC data reported by TestAmerica St. Louis did not show any disparity with the TOC results. Dissolved organic carbon (DOC) in samples GWE-4D-F(0.2)-0212, GWE-4M-F(0.2)-0212, GWE-4S-F(0.2)-0212 and GWE-2D-F(0.2)-0212 were analyzed by TestAmerica-St. Louis 7 days outside of hold time for analysis (28 days). Professional judgment was used to not reject data; qualification is summarized in the table below.

Sample ID	Parameter	Analyte	Qualification
GWE-4D-F(0.2)-0212	General chemistry	DOC	J
GWE-4M-F(0.2)-0212	General chemistry	DOC	J
GWE-4S-F(0.2)-0212	General chemistry	DOC	J
GWE-2D-F(0.2)-0212	General chemistry	DOC	J

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, although not requested for MS/MSD analyses, sample GWE-3M-0212 was spiked and analyzed for total and dissolved iron and manganese, and sample GWE-4D-0212 was spiked and analyzed for nitrate and nitrate-nitrite.

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

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery	RPD	MS/MSD/ RPD Criteria
GWE-3M-0212	Metals	Total iron	NA/NA	1	75-125/20
GWE-3M-0212	Metals	Dissolved iron	NA/NA	1	72-125/20

Iron and dissolved iron MS/MSD recoveries in sample GWE-3M-0212 could not be evaluated because the sample concentrations were greater than four times (4X) the matrix spike concentration. No qualification of data is required.

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

Yes, sample GWE-5S-0212 was duplicated and analyzed for alkalinity, sample GWE-5M-0212 was duplicated and analyzed for sulfate, and sample GWE-4M-F(0.2)-0212 was duplicated and analyzed for dissolved organic carbon.

Were laboratory duplicate sample 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
GWE-4D-0212	GWE-4D-0212-AD

Were field duplicate sample RPDs 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

SDG KPS073

Results of Samples from Piezometers:

GWE-2D

GWE-3S

GWE-3M

GWE-4S

GWE-4M

GWE-4D

GWE-5S

GWE-5M

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-77213-1
TestAmerica Sample Delivery Group: KPS073
Client Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

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

Attn: Mr. Jerry Rinaldi



Authorized for release by:
4/12/2012 1:47:31 PM

Lidya Gulizia
Project Manager II
lidya.gulizia@testamericainc.com

cc: Bob Billman

Reviewed
on
April 12, 2012
ERK

LINKS

Review your project
results through
Total Access

Have a Question?

 Ask
The
Expert

Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	6
Method Summary	7
Definitions	8
Detection Summary	9
Client Sample Results	13
Surrogate Summary	33
QC Sample Results	34
QC Association	42
Chronicle	46
Subcontract Data	51
Chain of Custody	75
Receipt Checklists	77
Certification Summary	79

APR 12 2012



Case Narrative

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Job ID: 680-77213-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Solutia Inc.

Project: WGK Supplemental GW 1Q12 - FEB 2012

Report Number: 680-77213-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/28/2012 and 02/29/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.8, 2.6, and 5.6 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS) VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GWE-3M-0212 (680-77213-1), GWE-3S-0212 (680-77213-3), GWE-5M-0212 (680-77213-5), GWE-5S-0212 (680-77213-7), 1Q12 SUPP Trip Blank #2 (680-77213-9), GWE-4D-0212 (680-77254-1), GWE-4D-0212-AD (680-77254-3), GWE-4M-0212-EB (680-77254-4), GWE-4M-0212 (680-77254-5), GWE-4S-0212 (680-77254-7), GWE-2D-0212 (680-77254-9) and 1Q12 SUPP Trip Blank #3 (680-77254-11) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/05/2012, 03/12/2012 and 03/13/2012.

Samples GWE-4D-0212 (680-77254-1)[10X] and GWE-4D-0212-AD (680-77254-3)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the volatiles analyses.

All quality control parameters were within the acceptance limits.

DISSOLVED GASES DISSOLVED GASES

Samples GWE-3M-0212 (680-77213-1), GWE-3S-0212 (680-77213-3), GWE-5M-0212 (680-77213-5) and GWE-5S-0212 (680-77213-7), GWE-4D-0212 (680-77254-1), GWE-4M-0212 (680-77254-5), GWE-4S-0212 (680-77254-7) and GWE-2D-0212 (680-77254-9) were analyzed for dissolved gases in accordance with RSK-175. The samples were analyzed on 03/07/2012.

Manual integration was performed on the following sample(s): GWE-5S-0212 (680-77213-7) and GWE-2D-0212 (680-77254-9).

No difficulties were encountered during the dissolved gases analyses.

All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICP)

Samples GWE-3M-F(0.2)-0212 (680-77213-2), GWE-3S-F(0.2)-0212 (680-77213-4), GWE-5M-F(0.2)-0212 (680-77213-6), GWE-5S-F(0.2)-0212 (680-77213-8), GWE-4D-F(0.2)-0212 (680-77254-2), GWE-4M-F(0.2)-0212 (680-77254-6), GWE-4S-F(0.2)-0212 (680-77254-8) and

Case Narrative

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Job ID: 680-77213-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

GWE-2D-F(0.2)-0212 (680-77254-10) were analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 02/29/2012 and analyzed on 03/02/2012.

Iron, Dissolved exceeded the recovery criteria low for the MS of sample GWE-3M-0212MS (680-77213-2) in batch 680-230557.

No difficulties were encountered during the metals analyses.

All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICP)

Samples GWE-3M-0212 (680-77213-1), GWE-3S-0212 (680-77213-3), GWE-5M-0212 (680-77213-5), GWE-5S-0212 (680-77213-7), GWE-4D-0212 (680-77254-1), GWE-4M-0212 (680-77254-5), GWE-4S-0212 (680-77254-7) and GWE-2D-0212 (680-77254-9) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 02/29/2012 and analyzed on 03/02/2012.

Iron exceeded the recovery criteria low for the MS of sample GWE-3M-0212MS (680-77213-1) in batch 680-230557.

Refer to the QC report for details.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

ALKALINITY

Samples GWE-3M-0212 (680-77213-1), GWE-3S-0212 (680-77213-3), GWE-5M-0212 (680-77213-5), GWE-5S-0212 (680-77213-7), GWE-4D-0212 (680-77254-1), GWE-4M-0212 (680-77254-5), GWE-4S-0212 (680-77254-7) and GWE-2D-0212 (680-77254-9) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 02/28/2012 and 03/02/2012.

No difficulties were encountered during the alkalinity analyses.

All quality control parameters were within the acceptance limits.

CHLORIDE

Samples GWE-3M-0212 (680-77213-1), GWE-3S-0212 (680-77213-3), GWE-5M-0212 (680-77213-5), GWE-5S-0212 (680-77213-7), GWE-4D-0212 (680-77254-1), GWE-4M-0212 (680-77254-5), GWE-4S-0212 (680-77254-7) and GWE-2D-0212 (680-77254-9) were analyzed for Chloride in accordance with EPA Method 325.2. The samples were analyzed on 03/06/2012.

Samples GWE-3M-0212 (680-77213-1)[2X], GWE-4D-0212 (680-77254-1)[2X] and GWE-4M-0212 (680-77254-5)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the Chloride analyses.

All quality control parameters were within the acceptance limits.

NITRATE-NITRITE AS NITROGEN

Samples GWE-3M-0212 (680-77213-1), GWE-3S-0212 (680-77213-3), GWE-5M-0212 (680-77213-5), GWE-5S-0212 (680-77213-7), GWE-4D-0212 (680-77254-1), GWE-4M-0212 (680-77254-5), GWE-4S-0212 (680-77254-7) and GWE-2D-0212 (680-77254-9) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 02/28/2012 and 02/29/2012.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Sample GWE-5S-0212 (680-77213-7)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Case Narrative

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Job ID: 680-77213-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

No other difficulties were encountered during the nitrate-nitrite analyses.

All other quality control parameters were within the acceptance limits.

SULFATE

Samples GWE-3M-0212 (680-77213-1), GWE-3S-0212 (680-77213-3), GWE-5M-0212 (680-77213-5), GWE-5S-0212 (680-77213-7), GWE-4D-0212 (680-77254-1), GWE-4M-0212 (680-77254-5), GWE-4S-0212 (680-77254-7) and GWE-2D-0212 (680-77254-9) were analyzed for sulfate in accordance with EPA Method 375.4. The samples were analyzed on 03/01/2012.

Samples GWE-3M-0212 (680-77213-1)[5X], GWE-4D-0212 (680-77254-1)[50X], GWE-4M-0212 (680-77254-5)[20X], GWE-5M-0212 (680-77213-5)[5X], GWE-5S-0212 (680-77213-7)[5X], GWE-4S-0212 (680-77254-7)[5X] and GWE-2D-0212 (680-77254-9)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the sulfate analyses.

All quality control parameters were within the acceptance limits.

TOTAL ORGANIC CARBON

Samples GWE-3M-0212 (680-77213-1), GWE-3S-0212 (680-77213-3), GWE-5M-0212 (680-77213-5), GWE-5S-0212 (680-77213-7), GWE-4D-0212 (680-77254-1), GWE-4M-0212 (680-77254-5), GWE-4S-0212 (680-77254-7) and GWE-2D-0212 (680-77254-9) were analyzed for total organic carbon in accordance with EPA Method 415.1. The samples were analyzed on 02/29/2012 and 03/02/2012.

The Total Organic Carbon (TOC) samples for GWE-4D-0212 (680-77254-1), GWE-4M-0212 (680-77254-5), GWE-4S-0212 (680-77254-7) and GWE-2D-0212 (680-77254-9) were subcontracted out for reanalysis outside of the holding time to TestAmerica St. Louis along with the Dissolved Organic Carbon (DOC) samples logged for samples GWE-4D-F(0.2)-0212 (680-77254-2), GWE-4M-F(0.2)-0212 (680-77254-6), GWE-4S-F(0.2)-0212 (680-77254-8) and GWE-2D-F(0.2)-0212 (680-77254-10). A disparity between the TOC and DOC results was noted for these sample pairs during data review, however, in-lab reanalysis at TestAmerica Savannah was not possible due to instrument failure. The results of the TOC samples between the two labs displayed a high level of correlation between results. Both sets of TOC results are reported, however, the original Savannah results were reported from analysis within the holding time and should be considered the primary results for TOC in these samples.

No other difficulties were encountered during the TOC analyses.

All quality control parameters were within the acceptance limits.

DISSOLVED ORGANIC CARBON (DOC)

Samples GWE-3M-F(0.2)-0212 (680-77213-2), GWE-3S-F(0.2)-0212 (680-77213-4), GWE-5M-F(0.2)-0212 (680-77213-6), GWE-5S-F(0.2)-0212 (680-77213-8), GWE-4D-F(0.2)-0212 (680-77254-2), GWE-4M-F(0.2)-0212 (680-77254-6), GWE-4S-F(0.2)-0212 (680-77254-8) and GWE-2D-F(0.2)-0212 (680-77254-10) were analyzed for Dissolved Organic Carbon (DOC) in accordance with EPA Method 415.1. The samples were analyzed on 02/29/2012 and 03/03/2012.

Refer to the discussion above under TOC for a summary of corrective action related to the TOC and DOC results. The DOC results from TestAmerica St. Louis correlate to the original and reanalysis TOC results for the noted samples in job series 680-77254 and essentially demonstrate that all of the organic carbon in these samples is in a dissolved state. The original DOC results were cancelled and DOC results from the St. Louis lab should be considered the primary result although analyzed outside of holding time.

No other difficulties were encountered during the Dissolved Organic Carbon (DOC) analyses.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: Solutia Inc.

TestAmerica Job ID: 680-77213-1

Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

SDG: KPS073

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-77213-1	GWE-3M-0212 ✓	Water	02/27/12 09:35	02/28/12 09:05
680-77213-2	GWE-3M-F(0.2)-0212 ✓	Water	02/27/12 09:35	02/28/12 09:05
680-77213-3	GWE-3S-0212 ✓	Water	02/27/12 10:45	02/28/12 09:05
680-77213-4	GWE-3S-F(0.2)-0212 ✓	Water	02/27/12 10:45	02/28/12 09:05
680-77213-5	GWE-5M-0212 ✓	Water	02/27/12 13:10	02/28/12 09:05
680-77213-6	GWE-5M-F(0.2)-0212 ✓	Water	02/27/12 13:10	02/28/12 09:05
680-77213-7	GWE-5S-0212 ✓	Water	02/27/12 15:00	02/28/12 09:05
680-77213-8	GWE-5S-F(0.2)-0212 ✓	Water	02/27/12 15:00	02/28/12 09:05
680-77213-9	1Q12 SUPP Trip Blank #2 ✓	Water	02/27/12 00:00	02/28/12 09:05
680-77254-1	GWE-4D-0212 ✓	Water	02/28/12 10:50	02/29/12 09:57
680-77254-2	GWE-4D-F(0.2)-0212 ✓	Water	02/28/12 10:50	02/29/12 09:57
680-77254-3	GWE-4D-0212-AD ✓	Water	02/28/12 10:50	02/29/12 09:57
680-77254-4	GWE-4M-0212-EB ✓	Water	02/28/12 11:10	02/29/12 09:57
680-77254-5	GWE-4M-0212 ✓	Water	02/28/12 12:00	02/29/12 09:57
680-77254-6	GWE-4M-F(0.2)-0212 ✓	Water	02/28/12 12:00	02/29/12 09:57
680-77254-7	GWE-4S-0212 ✓	Water	02/28/12 12:40	02/29/12 09:57
680-77254-8	GWE-4S-F(0.2)-0212 ✓	Water	02/28/12 12:40	02/29/12 09:57
680-77254-9	GWE-2D-0212 ✓	Water	02/28/12 15:50	02/29/12 09:57
680-77254-10	GWE-2D-F(0.2)-0212 ✓	Water	02/28/12 15:50	02/29/12 09:57
680-77254-11	1Q12 SUPP Trip Blank #3 ✓	Water	02/28/12 00:00	02/29/12 09:57

US EPA ARCHIVE DOCUMENT

APR 12 2012



TestAmerica Savannah

Method Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
6010B	Metals (ICP)	SW846	TAL SAV
310.1	Alkalinity	MCAWW	TAL SAV
325.2	Chloride	MCAWW	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SAV
375.4	Sulfate	MCAWW	TAL SAV
415.1	TOC	MCAWW	TAL SAV
415.1	DOC	MCAWW	TAL SAV

Protocol 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.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

US EPA ARCHIVE DOCUMENT

APR 12 2012

TestAmerica Savannah

Definitions/Glossary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
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.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-3M-0212

Lab Sample ID: 680-77213-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	41		0.58		ug/L	1		RSK-175	Total/NA
Iron	34		0.050		mg/L	1		6010B	Total Recovera
Manganese	1.6		0.010		mg/L	1		6010B	Total Recovera
Chloride	150		2.0		mg/L	2		325.2	Total/NA
Sulfate	90		25		mg/L	5		375.4	Total/NA
Total Organic Carbon	7.3		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	700		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	78		5.0		mg/L	1		310.1	Total/NA

Client Sample ID: GWE-3M-F(0.2)-0212

Lab Sample ID: 680-77213-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Dissolved	35		0.050		mg/L	1		6010B	Dissolved
Manganese, Dissolved	1.7		0.010		mg/L	1		6010B	Dissolved
Dissolved Organic Carbon	7.5		1.0		mg/L	1		415.1	Dissolved

Client Sample ID: GWE-3S-0212

Lab Sample ID: 680-77213-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	410		0.58		ug/L	1		RSK-175	Total/NA
Iron	22		0.050		mg/L	1		6010B	Total Recovera
Manganese	2.7		0.010		mg/L	1		6010B	Total Recovera
Chloride	65		1.0		mg/L	1		325.2	Total/NA
Total Organic Carbon	19		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	1100		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	110		5.0		mg/L	1		310.1	Total/NA

Client Sample ID: GWE-3S-F(0.2)-0212

Lab Sample ID: 680-77213-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Dissolved	26		0.050		mg/L	1		6010B	Dissolved
Manganese, Dissolved	2.8		0.010		mg/L	1		6010B	Dissolved
Dissolved Organic Carbon	18		1.0		mg/L	1		415.1	Dissolved

Client Sample ID: GWE-5M-0212

Lab Sample ID: 680-77213-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	18		0.58		ug/L	1		RSK-175	Total/NA
Iron	24		0.050		mg/L	1		6010B	Total Recovera
Manganese	1.3		0.010		mg/L	1		6010B	Total Recovera
Chloride	84		1.0		mg/L	1		325.2	Total/NA
Sulfate	130		25		mg/L	5		375.4	Total/NA
Total Organic Carbon	2.3		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	460		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	41		5.0		mg/L	1		310.1	Total/NA

Client Sample ID: GWE-5M-F(0.2)-0212

Lab Sample ID: 680-77213-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Dissolved	24		0.050		mg/L	1		6010B	Dissolved

Detection Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-5M-F(0.2)-0212 (Continued)

Lab Sample ID: 680-77213-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese, Dissolved	1.3		0.010		mg/L	1		6010B	Dissolved
Dissolved Organic Carbon	2.5		1.0		mg/L	1		415.1	Dissolved

Client Sample ID: GWE-5S-0212

Lab Sample ID: 680-77213-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.59		0.58		ug/L	1		RSK-175	Total/NA
Iron	0.29		0.050		mg/L	1		6010B	Total Recovera
Manganese	0.52		0.010		mg/L	1		6010B	Total Recovera
Chloride	38		1.0		mg/L	1		325.2	Total/NA
Nitrate as N	5.8		0.25		mg/L	5		353.2	Total/NA
Sulfate	110		25		mg/L	5		375.4	Total/NA
Total Organic Carbon	3.0		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	580		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	62		5.0		mg/L	1		310.1	Total/NA

Client Sample ID: GWE-5S-F(0.2)-0212

Lab Sample ID: 680-77213-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Dissolved	0.15		0.050		mg/L	1		6010B	Dissolved
Manganese, Dissolved	0.52		0.010		mg/L	1		6010B	Dissolved
Dissolved Organic Carbon	3.4		1.0		mg/L	1		415.1	Dissolved

Client Sample ID: 1Q12 SUPP Trip Blank #2

Lab Sample ID: 680-77213-9

No Detections

Client Sample ID: GWE-4D-0212

Lab Sample ID: 680-77254-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	640		10		ug/L	10		8260B	Total/NA
Methane	1000		0.58		ug/L	1		RSK-175	Total/NA
Iron	14		0.050		mg/L	1		6010B	Total Recovera
Manganese	6.5		0.010		mg/L	1		6010B	Total Recovera
Chloride	170		2.0		mg/L	2		325.2	Total/NA
Sulfate	830		250		mg/L	50		375.4	Total/NA
Total Organic Carbon	5.1		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	400		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	93		5.0		mg/L	1		310.1	Total/NA

Client Sample ID: GWE-4D-F(0.2)-0212

Lab Sample ID: 680-77254-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Dissolved	14		0.050		mg/L	1		6010B	Dissolved
Manganese, Dissolved	6.6		0.010		mg/L	1		6010B	Dissolved

Client Sample ID: GWE-4D-0212-AD

Lab Sample ID: 680-77254-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	620		10		ug/L	10		8260B	Total/NA

US EPA ARCHIVE DOCUMENT

Detection Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-4M-0212-EB

Lab Sample ID: 680-77254-4

No Detections

Client Sample ID: GWE-4M-0212

Lab Sample ID: 680-77254-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	100		1.0		ug/L	1		8260B	Total/NA
Methane	35		0.58		ug/L	1		RSK-175	Total/NA
Iron	14		0.050		mg/L	1		6010B	Total Recovera
Manganese	5.4		0.010		mg/L	1		6010B	Total Recovera
Chloride	420		5.0		mg/L	5		325.2	Total/NA
Sulfate	610		100		mg/L	20		375.4	Total/NA
Total Organic Carbon	2.1		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	380		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	51		5.0		mg/L	1		310.1	Total/NA

Client Sample ID: GWE-4M-F(0.2)-0212

Lab Sample ID: 680-77254-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Dissolved	14		0.050		mg/L	1		6010B	Dissolved
Manganese, Dissolved	5.5		0.010		mg/L	1		6010B	Dissolved

Client Sample ID: GWE-4S-0212

Lab Sample ID: 680-77254-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methane	3.1		0.58		ug/L	1		RSK-175	Total/NA
Manganese	0.65		0.010		mg/L	1		6010B	Total Recovera
Chloride	23		1.0		mg/L	1		325.2	Total/NA
Sulfate	75		25		mg/L	5		375.4	Total/NA
Total Organic Carbon	1.0		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	370		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	26		5.0		mg/L	1		310.1	Total/NA

Client Sample ID: GWE-4S-F(0.2)-0212

Lab Sample ID: 680-77254-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese, Dissolved	0.63		0.010		mg/L	1		6010B	Dissolved

Client Sample ID: GWE-2D-0212

Lab Sample ID: 680-77254-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	5.3		1.0		ug/L	1		8260B	Total/NA
Methane	1.3		0.58		ug/L	1		RSK-175	Total/NA
Iron	19		0.050		mg/L	1		6010B	Total Recovera
Manganese	0.48		0.010		mg/L	1		6010B	Total Recovera
Chloride	96		1.0		mg/L	1		325.2	Total/NA
Sulfate	350		50		mg/L	10		375.4	Total/NA
Total Organic Carbon	3.4		1.0		mg/L	1		415.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	440		5.0		mg/L	1		310.1	Total/NA
Carbon Dioxide, Free	18		5.0		mg/L	1		310.1	Total/NA

Detection Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-2D-F(0.2)-0212

Lab Sample ID: 680-77254-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Dissolved	17		0.050		mg/L	1		6010B	Dissolved
Manganese, Dissolved	0.44		0.010		mg/L	1		6010B	Dissolved

Client Sample ID: 1Q12 SUPP Trip Blank #3

Lab Sample ID: 680-77254-11

No Detections

US EPA ARCHIVE DOCUMENT

APR 12 2012 *SK* TestAmerica Savannah

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-3M-0212

Lab Sample ID: 680-77213-1

Date Collected: 02/27/12 09:35

Matrix: Water

Date Received: 02/28/12 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			03/05/12 19:58	1
Chlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:58	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:58	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:58	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		70 - 130		03/05/12 19:58	1
Dibromofluoromethane	91		70 - 130		03/05/12 19:58	1
Toluene-d8 (Surr)	92		70 - 130		03/05/12 19:58	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			03/07/12 15:15	1
Ethylene	1.0	U	1.0		ug/L			03/07/12 15:15	1
Methane	41		0.58		ug/L			03/07/12 15:15	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	34		0.050		mg/L		02/29/12 11:40	03/02/12 14:48	1
Manganese	1.6		0.010		mg/L		02/29/12 11:40	03/02/12 14:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		2.0		mg/L			03/06/12 15:15	2
Nitrate as N	0.050	U	0.050		mg/L			02/28/12 15:12	1
Sulfate	90		25		mg/L			03/01/12 12:15	5
Total Organic Carbon	7.3		1.0		mg/L			02/29/12 18:26	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	700		5.0		mg/L			02/28/12 17:17	1
Carbon Dioxide, Free	78		5.0		mg/L			02/28/12 17:17	1

APR 12 2012 *521*

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-3M-F(0.2)-0212

Lab Sample ID: 680-77213-2

Date Collected: 02/27/12 09:35

Matrix: Water

Date Received: 02/28/12 09:05

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	35		0.050		mg/L		02/29/12 11:40	03/02/12 15:21	1
Manganese, Dissolved	1.7		0.010		mg/L		02/29/12 11:40	03/02/12 15:21	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	7.5		1.0		mg/L			02/29/12 22:04	1

Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Client Sample ID: GWE-3S-0212

Lab Sample ID: 680-77213-3

Date Collected: 02/27/12 10:45

Matrix: Water

Date Received: 02/28/12 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			03/05/12 19:34	1
Chlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:34	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:34	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:34	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		70 - 130					03/05/12 19:34	1
Dibromofluoromethane	87		70 - 130					03/05/12 19:34	1
Toluene-d8 (Surr)	93		70 - 130					03/05/12 19:34	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			03/07/12 15:28	1
Ethylene	1.0	U	1.0		ug/L			03/07/12 15:28	1
Methane	410		0.58		ug/L			03/07/12 15:28	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	22		0.050		mg/L		02/29/12 11:40	03/02/12 15:26	1
Manganese	2.7		0.010		mg/L		02/29/12 11:40	03/02/12 15:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65		1.0		mg/L			03/06/12 14:53	1
Nitrate as N	0.050	U	0.050		mg/L			02/28/12 15:13	1
Sulfate	5.0	U	5.0		mg/L			03/01/12 10:47	1
Total Organic Carbon	19		1.0		mg/L			02/29/12 18:43	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1100		5.0		mg/L			02/28/12 17:32	1
Carbon Dioxide, Free	110		5.0		mg/L			02/28/12 17:32	1

APR 19 2012

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-3S-F(0.2)-0212

Lab Sample ID: 680-77213-4

Date Collected: 02/27/12 10:45

Matrix: Water

Date Received: 02/28/12 09:05

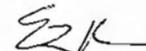
Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	26		0.050		mg/L		02/29/12 11:40	03/02/12 15:30	1
Manganese, Dissolved	2.8		0.010		mg/L		02/29/12 11:40	03/02/12 15:30	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	18		1.0		mg/L			02/29/12 22:56	1

US EPA ARCHIVE DOCUMENT

APR 12 2012 

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-5M-0212

Lab Sample ID: 680-77213-5

Date Collected: 02/27/12 13:10

Matrix: Water

Date Received: 02/28/12 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			03/05/12 19:12	1
Chlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:12	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:12	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:12	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 19:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	106		70 - 130		03/05/12 19:12	1
Dibromofluoromethane	90		70 - 130		03/05/12 19:12	1
Toluene-d8 (Surr)	93		70 - 130		03/05/12 19:12	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			03/07/12 15:41	1
Ethylene	1.0	U	1.0		ug/L			03/07/12 15:41	1
Methane	18		0.58		ug/L			03/07/12 15:41	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	24		0.050		mg/L		02/29/12 11:40	03/02/12 15:35	1
Manganese	1.3		0.010		mg/L		02/29/12 11:40	03/02/12 15:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84		1.0		mg/L			03/06/12 14:53	1
Nitrate as N	0.050	U	0.050		mg/L			02/28/12 16:41	1
Sulfate	130		25		mg/L			03/01/12 12:15	5
Total Organic Carbon	2.3		1.0		mg/L			02/29/12 18:59	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	460		5.0		mg/L			02/28/12 17:41	1
Carbon Dioxide, Free	41		5.0		mg/L			02/28/12 17:41	1

US EPA ARCHIVE DOCUMENT

APR 12 2012

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-5M-F(0.2)-0212

Lab Sample ID: 680-77213-6

Date Collected: 02/27/12 13:10

Matrix: Water

Date Received: 02/28/12 09:05

Method: 6010B - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	24		0.050		mg/L		02/29/12 11:40	03/02/12 15:40	1
Manganese, Dissolved	1.3		0.010		mg/L		02/29/12 11:40	03/02/12 15:40	1

General Chemistry - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	2.5		1.0		mg/L			02/29/12 23:12	1

US EPA ARCHIVE DOCUMENT

APR 12 2012 *EZU*

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-5S-0212

Lab Sample ID: 680-77213-7

Date Collected: 02/27/12 15:00

Matrix: Water

Date Received: 02/28/12 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			03/05/12 18:49	1
Chlorobenzene	1.0	U	1.0		ug/L			03/05/12 18:49	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 18:49	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 18:49	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 18:49	1

Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		70 - 130		03/05/12 18:49	1
Dibromofluoromethane	91		70 - 130		03/05/12 18:49	1
Toluene-d8 (Surr)	92		70 - 130		03/05/12 18:49	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			03/07/12 15:54	1
Ethylene	1.0	U	1.0		ug/L			03/07/12 15:54	1
Methane	0.59		0.58		ug/L			03/07/12 15:54	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.29		0.050		mg/L		02/29/12 11:40	03/02/12 15:44	1
Manganese	0.52		0.010		mg/L		02/29/12 11:40	03/02/12 15:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38		1.0		mg/L			03/06/12 14:53	1
Nitrate as N	5.8		0.25		mg/L			02/28/12 15:48	5
Sulfate	110		25		mg/L			03/01/12 12:19	5
Total Organic Carbon	3.0		1.0		mg/L			02/29/12 19:47	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	580		5.0		mg/L			02/28/12 17:51	1
Carbon Dioxide, Free	62		5.0		mg/L			02/28/12 17:51	1

APR 12 2012 *ERK*

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-5S-F(0.2)-0212

Lab Sample ID: 680-77213-8

Date Collected: 02/27/12 15:00

Matrix: Water

Date Received: 02/28/12 09:05

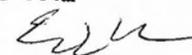
Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	0.15		0.050		mg/L		02/29/12 11:40	03/02/12 15:49	1
Manganese, Dissolved	0.52		0.010		mg/L		02/29/12 11:40	03/02/12 15:49	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	3.4		1.0		mg/L			02/29/12 23:29	1

APR 12 2012



Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Client Sample ID: 1Q12 SUPP Trip Blank #2

Lab Sample ID: 680-77213-9

Date Collected: 02/27/12 00:00

Matrix: Water

Date Received: 02/28/12 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			03/05/12 14:34	1
Chlorobenzene	1.0	U	1.0		ug/L			03/05/12 14:34	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 14:34	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 14:34	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 14:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	106		70 - 130					03/05/12 14:34	1
Dibromofluoromethane	89		70 - 130					03/05/12 14:34	1
Toluene-d8 (Surr)	94		70 - 130					03/05/12 14:34	1

APR 19 2012

[Handwritten Signature]

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-4D-0212

Lab Sample ID: 680-77254-1

Date Collected: 02/28/12 10:50

Matrix: Water

Date Received: 02/29/12 09:57

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	10	U	10		ug/L			03/13/12 12:59	10
Chlorobenzene	640		10		ug/L			03/13/12 12:59	10
1,2-Dichlorobenzene	10	U	10		ug/L			03/13/12 12:59	10
1,3-Dichlorobenzene	10	U	10		ug/L			03/13/12 12:59	10
1,4-Dichlorobenzene	10	U	10		ug/L			03/13/12 12:59	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		70 - 130					03/13/12 12:59	10
Dibromofluoromethane	90		70 - 130					03/13/12 12:59	10
Toluene-d8 (Surr)	103		70 - 130					03/13/12 12:59	10

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			03/07/12 16:07	1
Ethylene	1.0	U	1.0		ug/L			03/07/12 16:07	1
Methane	1000		0.58		ug/L			03/07/12 16:07	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	14		0.050		mg/L		02/29/12 14:53	03/02/12 16:03	1
Manganese	6.5		0.010		mg/L		02/29/12 14:53	03/02/12 16:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		2.0		mg/L			03/06/12 15:16	2
Nitrate as N	0.050	U	0.050		mg/L			02/29/12 15:05	1
Sulfate	830		250		mg/L			03/01/12 13:15	50
Total Organic Carbon	5.1		1.0		mg/L			03/02/12 14:27	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	400		5.0		mg/L			03/02/12 17:13	1
Carbon Dioxide, Free	93		5.0		mg/L			03/02/12 17:13	1

APR 12 2012

[Handwritten Signature]

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-4D-F(0.2)-0212

Lab Sample ID: 680-77254-2

Date Collected: 02/28/12 10:50

Matrix: Water

Date Received: 02/29/12 09:57

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	14		0.050		mg/L		02/29/12 14:53	03/02/12 16:08	1
Manganese, Dissolved	6.6		0.010		mg/L		02/29/12 14:53	03/02/12 16:08	1

APR 12 2012



Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Client Sample ID: GWE-4D-0212-AD

Lab Sample ID: 680-77254-3

Date Collected: 02/28/12 10:50

Matrix: Water

Date Received: 02/29/12 09:57

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	10	U	10		ug/L			03/13/12 13:19	10
Chlorobenzene	620		10		ug/L			03/13/12 13:19	10
1,2-Dichlorobenzene	10	U	10		ug/L			03/13/12 13:19	10
1,3-Dichlorobenzene	10	U	10		ug/L			03/13/12 13:19	10
1,4-Dichlorobenzene	10	U	10		ug/L			03/13/12 13:19	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		70 - 130					03/13/12 13:19	10
Dibromofluoromethane	92		70 - 130					03/13/12 13:19	10
Toluene-d8 (Surr)	104		70 - 130					03/13/12 13:19	10

APR 19 2012

[Handwritten Signature]

Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Client Sample ID: GWE-4M-0212-EB

Lab Sample ID: 680-77254-4

Date Collected: 02/28/12 11:10

Matrix: Water

Date Received: 02/29/12 09:57

Method: 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			03/12/12 16:35	1
Chlorobenzene	1.0	U	1.0		ug/L			03/12/12 16:35	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 16:35	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 16:35	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 16:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130					03/12/12 16:35	1
Dibromofluoromethane	95		70 - 130					03/12/12 16:35	1
Toluene-d8 (Surr)	100		70 - 130					03/12/12 16:35	1

APR 12 2012

Client Sample Results

Client: Solutia Inc.
Project/Site: W GK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-4M-0212

Lab Sample ID: 680-77254-5

Date Collected: 02/28/12 12:00

Matrix: Water

Date Received: 02/29/12 09:57

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			03/12/12 18:05	1
Chlorobenzene	100		1.0		ug/L			03/12/12 18:05	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 18:05	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 18:05	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 18:05	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130					03/12/12 18:05	1
Dibromofluoromethane	95		70 - 130					03/12/12 18:05	1
Toluene-d8 (Surr)	104		70 - 130					03/12/12 18:05	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			03/07/12 16:19	1
Ethylene	1.0	U	1.0		ug/L			03/07/12 16:19	1
Methane	35		0.58		ug/L			03/07/12 16:19	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	14		0.050		mg/L		02/29/12 14:53	03/02/12 16:12	1
Manganese	5.4		0.010		mg/L		02/29/12 14:53	03/02/12 16:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	420		5.0		mg/L			03/06/12 15:16	5
Nitrate as N	0.050	U	0.050		mg/L			02/29/12 15:09	1
Sulfate	610		100		mg/L			03/01/12 13:15	20
Total Organic Carbon	2.1		1.0		mg/L			03/02/12 14:41	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	380		5.0		mg/L			03/02/12 17:22	1
Carbon Dioxide, Free	51		5.0		mg/L			03/02/12 17:22	1

APR 12 2012

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-4M-F(0.2)-0212

Lab Sample ID: 680-77254-6

Date Collected: 02/28/12 12:00

Matrix: Water

Date Received: 02/29/12 09:57

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	14		0.050		mg/L		02/29/12 14:53	03/02/12 16:17	1
Manganese, Dissolved	5.5		0.010		mg/L		02/29/12 14:53	03/02/12 16:17	1

APR 12 2012


Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-4S-0212

Lab Sample ID: 680-77254-7

Date Collected: 02/28/12 12:40

Matrix: Water

Date Received: 02/29/12 09:57

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			03/13/12 12:38	1
Chlorobenzene	1.0	U	1.0		ug/L			03/13/12 12:38	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/13/12 12:38	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/13/12 12:38	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/13/12 12:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		70 - 130		03/13/12 12:38	1
Dibromofluoromethane	95		70 - 130		03/13/12 12:38	1
Toluene-d8 (Surr)	102		70 - 130		03/13/12 12:38	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			03/07/12 16:32	1
Ethylene	1.0	U	1.0		ug/L			03/07/12 16:32	1
Methane	3.1		0.58		ug/L			03/07/12 16:32	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.050	U	0.050		mg/L		02/29/12 14:53	03/02/12 16:22	1
Manganese	0.65		0.010		mg/L		02/29/12 14:53	03/02/12 16:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		1.0		mg/L			03/06/12 14:56	1
Nitrate as N	0.050	U	0.050		mg/L			02/29/12 15:10	1
Sulfate	75		25		mg/L			03/01/12 12:21	5
Total Organic Carbon	1.0		1.0		mg/L			03/02/12 14:59	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	370		5.0		mg/L			03/02/12 17:30	1
Carbon Dioxide, Free	26		5.0		mg/L			03/02/12 17:30	1

APR 18 2012


Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-4S-F(0.2)-0212

Lab Sample ID: 680-77254-8

Date Collected: 02/28/12 12:40

Matrix: Water

Date Received: 02/29/12 09:57

Method: 6010B - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	0.050	U	0.050		mg/L		02/29/12 14:53	03/02/12 16:26	1
Manganese, Dissolved	0.63		0.010		mg/L		02/29/12 14:53	03/02/12 16:26	1

APR 13 2012 *CJK*

Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Client Sample ID: GWE-2D-0212

Lab Sample ID: 680-77254-9

Date Collected: 02/28/12 15:50

Matrix: Water

Date Received: 02/29/12 09:57

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			03/12/12 18:50	1
Chlorobenzene	5.3		1.0		ug/L			03/12/12 18:50	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 18:50	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 18:50	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 18:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130		03/12/12 18:50	1
Dibromofluoromethane	95		70 - 130		03/12/12 18:50	1
Toluene-d8 (Surr)	102		70 - 130		03/12/12 18:50	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	1.1	U	1.1		ug/L			03/07/12 16:45	1
Ethylene	1.0	U	1.0		ug/L			03/07/12 16:45	1
Methane	1.3		0.58		ug/L			03/07/12 16:45	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	19		0.050		mg/L		02/29/12 14:53	03/02/12 16:36	1
Manganese	0.48		0.010		mg/L		02/29/12 14:53	03/02/12 16:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96		1.0		mg/L			03/06/12 14:56	1
Nitrate as N	0.050	U	0.050		mg/L			02/29/12 15:11	1
Sulfate	350		50		mg/L			03/01/12 12:58	10
Total Organic Carbon	3.4		1.0		mg/L			03/02/12 15:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	440		5.0		mg/L			03/02/12 17:40	1
Carbon Dioxide, Free	18		5.0		mg/L			03/02/12 17:40	1

APR 12 2012 

Client Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-2D-F(0.2)-0212

Lab Sample ID: 680-77254-10

Date Collected: 02/28/12 15:50

Matrix: Water

Date Received: 02/29/12 09:57

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	17		0.050		mg/L		02/29/12 14:53	03/02/12 16:40	1
Manganese, Dissolved	0.44		0.010		mg/L		02/29/12 14:53	03/02/12 16:40	1

APR 12 2012



Client Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Client Sample ID: 1Q12 SUPP Trip Blank #3

Lab Sample ID: 680-77254-11

Date Collected: 02/28/12 00:00

Matrix: Water

Date Received: 02/29/12 09:57

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			03/12/12 16:57	1
Chlorobenzene	1.0	U	1.0		ug/L			03/12/12 16:57	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 16:57	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 16:57	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 16:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130					03/12/12 16:57	1
Dibromofluoromethane	98		70 - 130					03/12/12 16:57	1
Toluene-d8 (Surr)	102		70 - 130					03/12/12 16:57	1

US EPA ARCHIVE DOCUMENT

APR 18 2012 

Surrogate Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	TOL
		(70-130)	(70-130)	(70-130)
680-77213-1	GWE-3M-0212	105	91	92
680-77213-3	GWE-3S-0212	105	87	93
680-77213-5	GWE-5M-0212	106	90	93
680-77213-7	GWE-5S-0212	107	91	92
680-77213-9	1Q12 SUPP Trip Blank #2	106	89	94
680-77254-1	GWE-4D-0212	104	90	103
680-77254-3	GWE-4D-0212-AD	102	92	104
680-77254-4	GWE-4M-0212-EB	99	95	100
680-77254-5	GWE-4M-0212	99	95	104
680-77254-7	GWE-4S-0212	102	95	102
680-77254-9	GWE-2D-0212	100	95	102
680-77254-11	1Q12 SUPP Trip Blank #3	100	98	102
LCS 680-230659/3	Lab Control Sample	106	96	97
LCS 680-231350/4	Lab Control Sample	100	97	93
LCS 680-231483/4	Lab Control Sample	100	105	103
LCSD 680-230659/4	Lab Control Sample Dup	107	98	100
LCSD 680-231350/5	Lab Control Sample Dup	109	106	103
LCSD 680-231483/5	Lab Control Sample Dup	99	107	104
MB 680-230659/6	Method Blank	104	91	93
MB 680-231350/7	Method Blank	102	98	103
MB 680-231483/7	Method Blank	103	103	103

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

APR 12 2012



US EPA ARCHIVE DOCUMENT

QC Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-230659/6
Matrix: Water
Analysis Batch: 230659

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	1.0	U	1.0		ug/L			03/05/12 12:55	1
Chlorobenzene	1.0	U	1.0		ug/L			03/05/12 12:55	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 12:55	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 12:55	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/05/12 12:55	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	104		70 - 130		03/05/12 12:55	1
Dibromofluoromethane	91		70 - 130		03/05/12 12:55	1
Toluene-d8 (Surr)	93		70 - 130		03/05/12 12:55	1

Lab Sample ID: LCS 680-230659/3
Matrix: Water
Analysis Batch: 230659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	50.0	48.8		ug/L		98	70 - 130
Chlorobenzene	50.0	54.9		ug/L		110	70 - 130
1,2-Dichlorobenzene	50.0	57.3		ug/L		115	70 - 130
1,3-Dichlorobenzene	50.0	57.1		ug/L		114	70 - 130
1,4-Dichlorobenzene	50.0	57.9		ug/L		116	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	106		70 - 130
Dibromofluoromethane	96		70 - 130
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: LCSD 680-230659/4
Matrix: Water
Analysis Batch: 230659

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	50.0	48.9		ug/L		98	70 - 130	0	30
Chlorobenzene	50.0	55.2		ug/L		110	70 - 130	1	30
1,2-Dichlorobenzene	50.0	57.9		ug/L		116	70 - 130	1	30
1,3-Dichlorobenzene	50.0	57.9		ug/L		116	70 - 130	1	30
1,4-Dichlorobenzene	50.0	58.8		ug/L		118	70 - 130	2	30

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	107		70 - 130
Dibromofluoromethane	98		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: MB 680-231350/7
Matrix: Water
Analysis Batch: 231350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	1.0	U	1.0		ug/L			03/12/12 12:07	1

QC Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-231350/7
Matrix: Water
Analysis Batch: 231350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chlorobenzene	1.0	U	1.0		ug/L			03/12/12 12:07	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 12:07	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 12:07	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/12/12 12:07	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	102		70 - 130		03/12/12 12:07	1
Dibromofluoromethane	98		70 - 130		03/12/12 12:07	1
Toluene-d8 (Surr)	103		70 - 130		03/12/12 12:07	1

Lab Sample ID: LCS 680-231350/4
Matrix: Water
Analysis Batch: 231350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	50.0	45.5		ug/L		91	70 - 130
Chlorobenzene	50.0	48.3		ug/L		97	70 - 130
1,2-Dichlorobenzene	50.0	49.4		ug/L		99	70 - 130
1,3-Dichlorobenzene	50.0	49.5		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	50.4		ug/L		101	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	100		70 - 130
Dibromofluoromethane	97		70 - 130
Toluene-d8 (Surr)	93		70 - 130

Lab Sample ID: LCSD 680-231350/5
Matrix: Water
Analysis Batch: 231350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	Limit
		Result	Qualifier						
Benzene	50.0	49.9		ug/L		100	70 - 130	9	30
Chlorobenzene	50.0	53.1		ug/L		106	70 - 130	9	30
1,2-Dichlorobenzene	50.0	54.8		ug/L		110	70 - 130	10	30
1,3-Dichlorobenzene	50.0	54.4		ug/L		109	70 - 130	9	30
1,4-Dichlorobenzene	50.0	54.8		ug/L		110	70 - 130	8	30

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	109		70 - 130
Dibromofluoromethane	106		70 - 130
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: MB 680-231483/7
Matrix: Water
Analysis Batch: 231483

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	1.0	U	1.0		ug/L			03/13/12 12:17	1
Chlorobenzene	1.0	U	1.0		ug/L			03/13/12 12:17	1

US EPA ARCHIVE DOCUMENT

QC Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-231483/7
Matrix: Water
Analysis Batch: 231483

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			03/13/12 12:17	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			03/13/12 12:17	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			03/13/12 12:17	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
4-Bromofluorobenzene	103		70 - 130					03/13/12 12:17	1
Dibromofluoromethane	103		70 - 130					03/13/12 12:17	1
Toluene-d8 (Surr)	103		70 - 130					03/13/12 12:17	1

Lab Sample ID: LCS 680-231483/4
Matrix: Water
Analysis Batch: 231483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	50.0	48.7		ug/L		97	70 - 130
Chlorobenzene	50.0	48.9		ug/L		98	70 - 130
1,2-Dichlorobenzene	50.0	46.3		ug/L		93	70 - 130
1,3-Dichlorobenzene	50.0	47.3		ug/L		95	70 - 130
1,4-Dichlorobenzene	50.0	47.3		ug/L		95	70 - 130
Surrogate	LCS LCS		Limits				%Rec. Limits
%Recovery	Qualifier						
4-Bromofluorobenzene	100		70 - 130				
Dibromofluoromethane	105		70 - 130				
Toluene-d8 (Surr)	103		70 - 130				

Lab Sample ID: LCSD 680-231483/5
Matrix: Water
Analysis Batch: 231483

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	50.0	49.0		ug/L		98	70 - 130	1	30
Chlorobenzene	50.0	48.5		ug/L		97	70 - 130	1	30
1,2-Dichlorobenzene	50.0	45.7		ug/L		91	70 - 130	1	30
1,3-Dichlorobenzene	50.0	46.6		ug/L		93	70 - 130	2	30
1,4-Dichlorobenzene	50.0	46.8		ug/L		94	70 - 130	1	30
Surrogate	LCSD LCSD		Limits				%Rec. Limits	RPD	
%Recovery	Qualifier	RPD						Limit	
4-Bromofluorobenzene	99		70 - 130						
Dibromofluoromethane	107		70 - 130						
Toluene-d8 (Surr)	104		70 - 130						

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-230861/4
Matrix: Water
Analysis Batch: 230861

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ethane	1.1	U	1.1		ug/L			03/07/12 12:49	1

US EPA ARCHIVE DOCUMENT

APR 12 2012 *CEK*

QC Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: MB 680-230861/4
Matrix: Water
Analysis Batch: 230861

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ethylene	1.0	U	1.0		ug/L			03/07/12 12:49	1
Methane	0.58	U	0.58		ug/L			03/07/12 12:49	1

Lab Sample ID: LCS 680-230861/2
Matrix: Water
Analysis Batch: 230861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Ethane	282	285		ug/L		101	75 - 125
Ethylene	271	255		ug/L		94	75 - 125
Methane	153	151		ug/L		99	75 - 125

Lab Sample ID: LCSD 680-230861/3
Matrix: Water
Analysis Batch: 230861

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
		Result	Qualifier						
Ethane	282	304		ug/L		108	75 - 125	6	30
Ethylene	271	279		ug/L		103	75 - 125	9	30
Methane	153	161		ug/L		105	75 - 125	6	30

Lab Sample ID: MB 680-230866/12
Matrix: Water
Analysis Batch: 230866

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methane	0.58	U	0.58		ug/L			03/07/12 12:49	1

Lab Sample ID: LCS 680-230866/2
Matrix: Water
Analysis Batch: 230866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Methane	1910	1800		ug/L		94	75 - 125

Lab Sample ID: LCSD 680-230866/3
Matrix: Water
Analysis Batch: 230866

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
		Result	Qualifier						
Methane	1910	1730		ug/L		90	75 - 125	4	30

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 680-230308/1-A
Matrix: Water
Analysis Batch: 230557

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 230308

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	0.050	U	0.050		mg/L		02/29/12 11:40	03/02/12 14:39	1
Iron, Dissolved	0.050	U	0.050		mg/L		02/29/12 11:40	03/02/12 14:39	1

APR 12 2012 *gjh*

QC Sample Results

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 680-230308/1-A
Matrix: Water
Analysis Batch: 230557

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 230308

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Manganese	0.010	U	0.010		mg/L		02/29/12 11:40	03/02/12 14:39	1
Manganese, Dissolved	0.010	U	0.010		mg/L		02/29/12 11:40	03/02/12 14:39	1

Lab Sample ID: LCS 680-230308/2-A
Matrix: Water
Analysis Batch: 230557

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 230308

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Iron	1.00	1.04		mg/L		104	75 - 125	
Iron, Dissolved	1.00	1.04		mg/L		104	75 - 125	
Manganese	0.500	0.549		mg/L		110	75 - 125	
Manganese, Dissolved	0.500	0.549		mg/L		110	75 - 125	

Lab Sample ID: 680-77213-1 MS
Matrix: Water
Analysis Batch: 230557

Client Sample ID: GWE-3M-0212
Prep Type: Total Recoverable
Prep Batch: 230308

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec.	
				Result	Qualifier				Limits	
Iron	34		1.00	34.3	4	mg/L		42	75 - 125	
Iron, Dissolved	34		1.00	34.3	4	mg/L		42	75 - 125	
Manganese	1.6		0.500	2.16		mg/L		105	75 - 125	
Manganese, Dissolved	1.6		0.500	2.16		mg/L		105	75 - 125	

Lab Sample ID: 680-77213-1 MSD
Matrix: Water
Analysis Batch: 230557

Client Sample ID: GWE-3M-0212
Prep Type: Total Recoverable
Prep Batch: 230308

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec.		RPD	
				Result	Qualifier				Limits		RPD	Limit
Iron	34		1.00	34.7	4	mg/L		77	75 - 125	1	20	
Iron, Dissolved	34		1.00	34.7	4	mg/L		77	75 - 125	1	20	
Manganese	1.6		0.500	2.18		mg/L		108	75 - 125	1	20	
Manganese, Dissolved	1.6		0.500	2.18		mg/L		108	75 - 125	1	20	

Method: 310.1 - Alkalinity

Lab Sample ID: MB 680-230258/5
Matrix: Water
Analysis Batch: 230258

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Alkalinity	5.0	U	5.0		mg/L			02/28/12 15:33	1
Carbon Dioxide, Free	5.0	U	5.0		mg/L			02/28/12 15:33	1

Lab Sample ID: LCS 680-230258/6
Matrix: Water
Analysis Batch: 230258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Alkalinity	250	245		mg/L		98	80 - 120	

QC Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Method: 310.1 - Alkalinity (Continued)

Lab Sample ID: LCSD 680-230258/27
 Matrix: Water
 Analysis Batch: 230258

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD
		Result	Qualifier				Limits	RPD	
Alkalinity	250	245		mg/L		98	80 - 120	0	30

Lab Sample ID: 680-77213-7 DU
 Matrix: Water
 Analysis Batch: 230258

Client Sample ID: GWE-5S-0212
 Prep Type: Total/NA

Analyte	Sample		DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Alkalinity	580		580		mg/L		0.3	30
Carbon Dioxide, Free	62		62.6		mg/L		0.3	30

Lab Sample ID: MB 680-230553/5
 Matrix: Water
 Analysis Batch: 230553

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB		RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Alkalinity	5.0	U	5.0		mg/L			03/02/12 16:43	1
Carbon Dioxide, Free	5.0	U	5.0		mg/L			03/02/12 16:43	1

Lab Sample ID: LCS 680-230553/6
 Matrix: Water
 Analysis Batch: 230553

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Alkalinity	250	246		mg/L		99	80 - 120	

Lab Sample ID: LCSD 680-230553/22
 Matrix: Water
 Analysis Batch: 230553

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD
		Result	Qualifier				Limits	RPD	
Alkalinity	250	245		mg/L		98	80 - 120	1	30

Method: 325.2 - Chloride

Lab Sample ID: MB 680-230782/27
 Matrix: Water
 Analysis Batch: 230782

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	1.0	U	1.0		mg/L			03/06/12 15:18	1

Lab Sample ID: LCS 680-230782/2
 Matrix: Water
 Analysis Batch: 230782

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Chloride	50.0	50.3		mg/L		101	85 - 115	

APR 12 2012

Walt

QC Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 680-230274/14
 Matrix: Water
 Analysis Batch: 230274

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050		mg/L			02/28/12 15:06	1

Lab Sample ID: LCS 680-230274/15
 Matrix: Water
 Analysis Batch: 230274

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.497	0.511		mg/L		103	90 - 110
Nitrate Nitrite as N	0.998	1.02		mg/L		102	90 - 110
Nitrite as N	0.502	0.507		mg/L		101	90 - 110

Lab Sample ID: MB 680-230343/14
 Matrix: Water
 Analysis Batch: 230343

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050		mg/L			02/29/12 15:03	1

Lab Sample ID: LCS 680-230343/15
 Matrix: Water
 Analysis Batch: 230343

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.497	0.502		mg/L		101	90 - 110
Nitrate Nitrite as N	0.998	1.02		mg/L		102	90 - 110
Nitrite as N	0.502	0.516		mg/L		103	90 - 110

Lab Sample ID: 680-77254-1 MS
 Matrix: Water
 Analysis Batch: 230343

Client Sample ID: GWE-4D-0212
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.050	U	0.497	0.486		mg/L		98	90 - 110
Nitrate Nitrite as N	0.050		0.998	1.00		mg/L		100	90 - 110
Nitrite as N	0.050		0.502	0.517		mg/L		103	90 - 110

Lab Sample ID: 680-77254-1 MSD
 Matrix: Water
 Analysis Batch: 230343

Client Sample ID: GWE-4D-0212
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.050	U	0.497	0.486		mg/L		98	90 - 110	0	10
Nitrate Nitrite as N	0.050		0.998	1.00		mg/L		101	90 - 110	0	10
Nitrite as N	0.050		0.502	0.518		mg/L		103	90 - 110	0	10

APR 12 2012

QC Sample Results

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Method: 375.4 - Sulfate

Lab Sample ID: MB 680-230428/1
 Matrix: Water
 Analysis Batch: 230428

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Sulfate	5.0	U	5.0		mg/L			03/01/12 10:42	1

Lab Sample ID: LCS 680-230428/2
 Matrix: Water
 Analysis Batch: 230428

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Result	Qualifier
Sulfate	20.0	19.2		mg/L		96	75 - 125	

Lab Sample ID: 680-77213-5 DU
 Matrix: Water
 Analysis Batch: 230428

Client Sample ID: GWE-5M-0212
 Prep Type: Total/NA

Analyte	Sample Sample		DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
	Result	Qualifier						
Sulfate	130		132		mg/L		2	30

Method: 415.1 - TOC

Lab Sample ID: MB 680-230367/2
 Matrix: Water
 Analysis Batch: 230367

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Organic Carbon	1.0	U	1.0		mg/L			02/29/12 16:18	1

Lab Sample ID: LCS 680-230367/4
 Matrix: Water
 Analysis Batch: 230367

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Result	Qualifier
Total Organic Carbon	20.0	19.7		mg/L		99	80 - 120	

Lab Sample ID: MB 680-230590/2
 Matrix: Water
 Analysis Batch: 230590

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Organic Carbon	1.0	U	1.0		mg/L			03/02/12 13:41	1

Lab Sample ID: LCS 680-230590/4
 Matrix: Water
 Analysis Batch: 230590

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Result	Qualifier
Total Organic Carbon	20.0	19.5		mg/L		97	80 - 120	

US EPA ARCHIVE DOCUMENT

APR 12 2012 *[Signature]*

QC Association Summary

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

GC/MS VOA

Analysis Batch: 230659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-1	GWE-3M-0212	Total/NA	Water	8260B	
680-77213-3	GWE-3S-0212	Total/NA	Water	8260B	
680-77213-5	GWE-5M-0212	Total/NA	Water	8260B	
680-77213-7	GWE-5S-0212	Total/NA	Water	8260B	
680-77213-9	1Q12 SUPP Trip Blank #2	Total/NA	Water	8260B	
LCS 680-230659/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-230659/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-230659/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 231350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77254-4	GWE-4M-0212-EB	Total/NA	Water	8260B	
680-77254-5	GWE-4M-0212	Total/NA	Water	8260B	
680-77254-9	GWE-2D-0212	Total/NA	Water	8260B	
680-77254-11	1Q12 SUPP Trip Blank #3	Total/NA	Water	8260B	
LCS 680-231350/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-231350/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-231350/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 231483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77254-1	GWE-4D-0212	Total/NA	Water	8260B	
680-77254-3	GWE-4D-0212-AD	Total/NA	Water	8260B	
680-77254-7	GWE-4S-0212	Total/NA	Water	8260B	
LCS 680-231483/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-231483/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-231483/7	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 230861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-1	GWE-3M-0212	Total/NA	Water	RSK-175	
680-77213-3	GWE-3S-0212	Total/NA	Water	RSK-175	
680-77213-5	GWE-5M-0212	Total/NA	Water	RSK-175	
680-77213-7	GWE-5S-0212	Total/NA	Water	RSK-175	
680-77254-1	GWE-4D-0212	Total/NA	Water	RSK-175	
680-77254-5	GWE-4M-0212	Total/NA	Water	RSK-175	
680-77254-7	GWE-4S-0212	Total/NA	Water	RSK-175	
680-77254-9	GWE-2D-0212	Total/NA	Water	RSK-175	
LCS 680-230861/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-230861/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 680-230861/4	Method Blank	Total/NA	Water	RSK-175	

Analysis Batch: 230866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-3	GWE-3S-0212	Total/NA	Water	RSK-175	
680-77254-1	GWE-4D-0212	Total/NA	Water	RSK-175	
LCS 680-230866/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-230866/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 680-230866/12	Method Blank	Total/NA	Water	RSK-175	

US EPA ARCHIVE DOCUMENT

APR 12 2012 *CLK*

QC Association Summary

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Metals

Prep Batch: 230308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-1	GWE-3M-0212	Total Recoverable	Water	3005A	
680-77213-1 MS	GWE-3M-0212	Total Recoverable	Water	3005A	
680-77213-1 MSD	GWE-3M-0212	Total Recoverable	Water	3005A	
680-77213-2	GWE-3M-F(0.2)-0212	Dissolved	Water	3005A	
680-77213-3	GWE-3S-0212	Total Recoverable	Water	3005A	
680-77213-4	GWE-3S-F(0.2)-0212	Dissolved	Water	3005A	
680-77213-5	GWE-5M-0212	Total Recoverable	Water	3005A	
680-77213-6	GWE-5M-F(0.2)-0212	Dissolved	Water	3005A	
680-77213-7	GWE-5S-0212	Total Recoverable	Water	3005A	
680-77213-8	GWE-5S-F(0.2)-0212	Dissolved	Water	3005A	
680-77254-1	GWE-4D-0212	Total Recoverable	Water	3005A	
680-77254-2	GWE-4D-F(0.2)-0212	Dissolved	Water	3005A	
680-77254-5	GWE-4M-0212	Total Recoverable	Water	3005A	
680-77254-6	GWE-4M-F(0.2)-0212	Dissolved	Water	3005A	
680-77254-7	GWE-4S-0212	Total Recoverable	Water	3005A	
680-77254-8	GWE-4S-F(0.2)-0212	Dissolved	Water	3005A	
680-77254-9	GWE-2D-0212	Total Recoverable	Water	3005A	
680-77254-10	GWE-2D-F(0.2)-0212	Dissolved	Water	3005A	
LCS 680-230308/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-230308/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 230557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-1	GWE-3M-0212	Total Recoverable	Water	6010B	230308
680-77213-1 MS	GWE-3M-0212	Total Recoverable	Water	6010B	230308
680-77213-1 MSD	GWE-3M-0212	Total Recoverable	Water	6010B	230308
680-77213-2	GWE-3M-F(0.2)-0212	Dissolved	Water	6010B	230308
680-77213-3	GWE-3S-0212	Total Recoverable	Water	6010B	230308
680-77213-4	GWE-3S-F(0.2)-0212	Dissolved	Water	6010B	230308
680-77213-5	GWE-5M-0212	Total Recoverable	Water	6010B	230308
680-77213-6	GWE-5M-F(0.2)-0212	Dissolved	Water	6010B	230308
680-77213-7	GWE-5S-0212	Total Recoverable	Water	6010B	230308
680-77213-8	GWE-5S-F(0.2)-0212	Dissolved	Water	6010B	230308
680-77254-1	GWE-4D-0212	Total Recoverable	Water	6010B	230308
680-77254-2	GWE-4D-F(0.2)-0212	Dissolved	Water	6010B	230308
680-77254-5	GWE-4M-0212	Total Recoverable	Water	6010B	230308
680-77254-6	GWE-4M-F(0.2)-0212	Dissolved	Water	6010B	230308
680-77254-7	GWE-4S-0212	Total Recoverable	Water	6010B	230308
680-77254-8	GWE-4S-F(0.2)-0212	Dissolved	Water	6010B	230308
680-77254-9	GWE-2D-0212	Total Recoverable	Water	6010B	230308
680-77254-10	GWE-2D-F(0.2)-0212	Dissolved	Water	6010B	230308
LCS 680-230308/2-A	Lab Control Sample	Total Recoverable	Water	6010B	230308
MB 680-230308/1-A	Method Blank	Total Recoverable	Water	6010B	230308

General Chemistry

Analysis Batch: 230258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-1	GWE-3M-0212	Total/NA	Water	310.1	
680-77213-3	GWE-3S-0212	Total/NA	Water	310.1	
680-77213-5	GWE-5M-0212	Total/NA	Water	310.1	
680-77213-7	GWE-5S-0212	Total/NA	Water	310.1	

US EPA ARCHIVE DOCUMENT

QC Association Summary

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

General Chemistry (Continued)

Analysis Batch: 230258 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-7 DU	GWE-5S-0212	Total/NA	Water	310.1	
LCS 680-230258/6	Lab Control Sample	Total/NA	Water	310.1	
LCS 680-230258/27	Lab Control Sample Dup	Total/NA	Water	310.1	
MB 680-230258/5	Method Blank	Total/NA	Water	310.1	

Analysis Batch: 230274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-1	GWE-3M-0212	Total/NA	Water	353.2	
680-77213-3	GWE-3S-0212	Total/NA	Water	353.2	
680-77213-5	GWE-5M-0212	Total/NA	Water	353.2	
680-77213-7	GWE-5S-0212	Total/NA	Water	353.2	
LCS 680-230274/15	Lab Control Sample	Total/NA	Water	353.2	
MB 680-230274/14	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 230343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77254-1	GWE-4D-0212	Total/NA	Water	353.2	
680-77254-1 MS	GWE-4D-0212	Total/NA	Water	353.2	
680-77254-1 MSD	GWE-4D-0212	Total/NA	Water	353.2	
680-77254-5	GWE-4M-0212	Total/NA	Water	353.2	
680-77254-7	GWE-4S-0212	Total/NA	Water	353.2	
680-77254-9	GWE-2D-0212	Total/NA	Water	353.2	
LCS 680-230343/15	Lab Control Sample	Total/NA	Water	353.2	
MB 680-230343/14	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 230367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-1	GWE-3M-0212	Total/NA	Water	415.1	
680-77213-3	GWE-3S-0212	Total/NA	Water	415.1	
680-77213-5	GWE-5M-0212	Total/NA	Water	415.1	
680-77213-7	GWE-5S-0212	Total/NA	Water	415.1	
LCS 680-230367/4	Lab Control Sample	Total/NA	Water	415.1	
MB 680-230367/2	Method Blank	Total/NA	Water	415.1	

Analysis Batch: 230396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-2	GWE-3M-F(0.2)-0212	Dissolved	Water	415.1	
680-77213-4	GWE-3S-F(0.2)-0212	Dissolved	Water	415.1	
680-77213-6	GWE-5M-F(0.2)-0212	Dissolved	Water	415.1	
680-77213-8	GWE-5S-F(0.2)-0212	Dissolved	Water	415.1	

Analysis Batch: 230428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-1	GWE-3M-0212	Total/NA	Water	375.4	
680-77213-3	GWE-3S-0212	Total/NA	Water	375.4	
680-77213-5	GWE-5M-0212	Total/NA	Water	375.4	
680-77213-5 DU	GWE-5M-0212	Total/NA	Water	375.4	
680-77213-7	GWE-5S-0212	Total/NA	Water	375.4	
680-77254-1	GWE-4D-0212	Total/NA	Water	375.4	
680-77254-5	GWE-4M-0212	Total/NA	Water	375.4	
680-77254-7	GWE-4S-0212	Total/NA	Water	375.4	
680-77254-9	GWE-2D-0212	Total/NA	Water	375.4	

QC Association Summary

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

General Chemistry (Continued)

Analysis Batch: 230428 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-230428/2	Lab Control Sample	Total/NA	Water	375.4	
MB 680-230428/1	Method Blank	Total/NA	Water	375.4	

Analysis Batch: 230553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77254-1	GWE-4D-0212	Total/NA	Water	310.1	
680-77254-5	GWE-4M-0212	Total/NA	Water	310.1	
680-77254-7	GWE-4S-0212	Total/NA	Water	310.1	
680-77254-9	GWE-2D-0212	Total/NA	Water	310.1	
LCS 680-230553/6	Lab Control Sample	Total/NA	Water	310.1	
LCSD 680-230553/22	Lab Control Sample Dup	Total/NA	Water	310.1	
MB 680-230553/5	Method Blank	Total/NA	Water	310.1	

Analysis Batch: 230590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77254-1	GWE-4D-0212	Total/NA	Water	415.1	
680-77254-5	GWE-4M-0212	Total/NA	Water	415.1	
680-77254-7	GWE-4S-0212	Total/NA	Water	415.1	
680-77254-9	GWE-2D-0212	Total/NA	Water	415.1	
LCS 680-230590/4	Lab Control Sample	Total/NA	Water	415.1	
MB 680-230590/2	Method Blank	Total/NA	Water	415.1	

Analysis Batch: 230782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-77213-1	GWE-3M-0212	Total/NA	Water	325.2	
680-77213-3	GWE-3S-0212	Total/NA	Water	325.2	
680-77213-5	GWE-5M-0212	Total/NA	Water	325.2	
680-77213-7	GWE-5S-0212	Total/NA	Water	325.2	
680-77254-1	GWE-4D-0212	Total/NA	Water	325.2	
680-77254-5	GWE-4M-0212	Total/NA	Water	325.2	
680-77254-7	GWE-4S-0212	Total/NA	Water	325.2	
680-77254-9	GWE-2D-0212	Total/NA	Water	325.2	
LCS 680-230782/2	Lab Control Sample	Total/NA	Water	325.2	
MB 680-230782/27	Method Blank	Total/NA	Water	325.2	

US EPA ARCHIVE DOCUMENT

APR 18 2012 

Lab Chronicle

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-3M-0212

Lab Sample ID: 680-77213-1

Date Collected: 02/27/12 09:35

Matrix: Water

Date Received: 02/28/12 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	230659	03/05/12 19:58	JG	TAL SAV
Total/NA	Analysis	RSK-175		1	230861	03/07/12 15:15	SMC	TAL SAV
Total Recoverable	Prep	3005A			230308	02/29/12 11:40	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230557	03/02/12 14:48	RAM	TAL SAV
Total/NA	Analysis	310.1		1	230258	02/28/12 17:17	TH	TAL SAV
Total/NA	Analysis	353.2		1	230274	02/28/12 15:12	JNC	TAL SAV
Total/NA	Analysis	415.1		1	230367	02/29/12 18:26	JR	TAL SAV
Total/NA	Analysis	375.4		5	230428	03/01/12 12:15	JR	TAL SAV
Total/NA	Analysis	325.2		2	230782	03/06/12 15:15	JR	TAL SAV

Client Sample ID: GWE-3M-F(0.2)-0212

Lab Sample ID: 680-77213-2

Date Collected: 02/27/12 09:35

Matrix: Water

Date Received: 02/28/12 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			230308	02/29/12 11:40	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230557	03/02/12 15:21	RAM	TAL SAV
Dissolved	Analysis	415.1		1	230396	02/29/12 22:04	JR	TAL SAV

Client Sample ID: GWE-3S-0212

Lab Sample ID: 680-77213-3

Date Collected: 02/27/12 10:45

Matrix: Water

Date Received: 02/28/12 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	230659	03/05/12 19:34	JG	TAL SAV
Total/NA	Analysis	RSK-175		1	230861	03/07/12 15:28	SMC	TAL SAV
Total/NA	Analysis	RSK-175		1	230866	03/07/12 15:28	AJMC	TAL SAV
Total Recoverable	Prep	3005A			230308	02/29/12 11:40	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230557	03/02/12 15:26	RAM	TAL SAV
Total/NA	Analysis	310.1		1	230258	02/28/12 17:32	TH	TAL SAV
Total/NA	Analysis	353.2		1	230274	02/28/12 15:13	JNC	TAL SAV
Total/NA	Analysis	415.1		1	230367	02/29/12 18:43	JR	TAL SAV
Total/NA	Analysis	375.4		1	230428	03/01/12 10:47	JR	TAL SAV
Total/NA	Analysis	325.2		1	230782	03/06/12 14:53	JR	TAL SAV

Client Sample ID: GWE-3S-F(0.2)-0212

Lab Sample ID: 680-77213-4

Date Collected: 02/27/12 10:45

Matrix: Water

Date Received: 02/28/12 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			230308	02/29/12 11:40	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230557	03/02/12 15:30	RAM	TAL SAV

US EPA ARCHIVE DOCUMENT

Lab Chronicle

Client: Solutia Inc.
Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
SDG: KPS073

Client Sample ID: GWE-3S-F(0.2)-0212

Lab Sample ID: 680-77213-4

Date Collected: 02/27/12 10:45

Matrix: Water

Date Received: 02/28/12 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	415.1		1	230396	02/29/12 22:56	JR	TAL SAV

Client Sample ID: GWE-5M-0212

Lab Sample ID: 680-77213-5

Date Collected: 02/27/12 13:10

Matrix: Water

Date Received: 02/28/12 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	230659	03/05/12 19:12	JG	TAL SAV
Total/NA	Analysis	RSK-175		1	230861	03/07/12 15:41	SMC	TAL SAV
Total Recoverable	Prep	3005A			230308	02/29/12 11:40	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230557	03/02/12 15:35	RAM	TAL SAV
Total/NA	Analysis	310.1		1	230258	02/28/12 17:41	TH	TAL SAV
Total/NA	Analysis	353.2		1	230274	02/28/12 16:41	JNC	TAL SAV
Total/NA	Analysis	415.1		1	230367	02/29/12 18:59	JR	TAL SAV
Total/NA	Analysis	375.4		5	230428	03/01/12 12:15	JR	TAL SAV
Total/NA	Analysis	325.2		1	230782	03/06/12 14:53	JR	TAL SAV

Client Sample ID: GWE-5M-F(0.2)-0212

Lab Sample ID: 680-77213-6

Date Collected: 02/27/12 13:10

Matrix: Water

Date Received: 02/28/12 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			230308	02/28/12 11:40	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230557	03/02/12 15:40	RAM	TAL SAV
Dissolved	Analysis	415.1		1	230396	02/29/12 23:12	JR	TAL SAV

Client Sample ID: GWE-5S-0212

Lab Sample ID: 680-77213-7

Date Collected: 02/27/12 15:00

Matrix: Water

Date Received: 02/28/12 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	230659	03/05/12 18:49	JG	TAL SAV
Total/NA	Analysis	RSK-175		1	230861	03/07/12 15:54	SMC	TAL SAV
Total Recoverable	Prep	3005A			230308	02/29/12 11:40	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230557	03/02/12 15:44	RAM	TAL SAV
Total/NA	Analysis	310.1		1	230258	02/28/12 17:51	TH	TAL SAV
Total/NA	Analysis	353.2		5	230274	02/28/12 15:48	JNC	TAL SAV
Total/NA	Analysis	415.1		1	230367	02/29/12 19:47	JR	TAL SAV
Total/NA	Analysis	375.4		5	230428	03/01/12 12:19	JR	TAL SAV
Total/NA	Analysis	325.2		1	230782	03/06/12 14:53	JR	TAL SAV

APR 12 2012

Lab Chronicle

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Client Sample ID: GWE-5S-F(0.2)-0212

Lab Sample ID: 680-77213-8

Date Collected: 02/27/12 15:00

Matrix: Water

Date Received: 02/28/12 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			230308	02/29/12 11:40	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230557	03/02/12 15:49	RAM	TAL SAV
Dissolved	Analysis	415.1		1	230396	02/29/12 23:29	JR	TAL SAV

Client Sample ID: 1Q12 SUPP Trip Blank #2

Lab Sample ID: 680-77213-9

Date Collected: 02/27/12 00:00

Matrix: Water

Date Received: 02/28/12 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	230659	03/05/12 14:34	JG	TAL SAV

Client Sample ID: GWE-4D-0212

Lab Sample ID: 680-77254-1

Date Collected: 02/28/12 10:50

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	231483	03/13/12 12:59	RB	TAL SAV
Total/NA	Analysis	RSK-175		1	230861	03/07/12 16:07	SMC	TAL SAV
Total/NA	Analysis	RSK-175		1	230866	03/07/12 16:07	AJMC	TAL SAV
Total Recoverable	Prep	3005A			230308	02/29/12 14:53	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230557	03/02/12 16:03	RAM	TAL SAV
Total/NA	Analysis	353.2		1	230343	02/29/12 15:05	JNC	TAL SAV
Total/NA	Analysis	375.4		50	230428	03/01/12 13:15	JR	TAL SAV
Total/NA	Analysis	310.1		1	230553	03/02/12 17:13	TH	TAL SAV
Total/NA	Analysis	415.1		1	230590	03/02/12 14:27	JR	TAL SAV
Total/NA	Analysis	325.2		2	230782	03/06/12 15:16	JR	TAL SAV

Client Sample ID: GWE-4D-F(0.2)-0212

Lab Sample ID: 680-77254-2

Date Collected: 02/28/12 10:50

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			230308	02/29/12 14:53	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230557	03/02/12 16:08	RAM	TAL SAV

Client Sample ID: GWE-4D-0212-AD

Lab Sample ID: 680-77254-3

Date Collected: 02/28/12 10:50

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	231483	03/13/12 13:19	RB	TAL SAV

Lab Chronicle

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Client Sample ID: GWE-4M-0212-EB

Lab Sample ID: 680-77254-4

Date Collected: 02/28/12 11:10

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	231350	03/12/12 16:35	RB	TAL SAV

Client Sample ID: GWE-4M-0212

Lab Sample ID: 680-77254-5

Date Collected: 02/28/12 12:00

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	231350	03/12/12 18:05	RB	TAL SAV
Total/NA	Analysis	RSK-175		1	230861	03/07/12 16:19	SMC	TAL SAV
Total Recoverable	Prep	3005A			230308	02/29/12 14:53	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230557	03/02/12 16:12	RAM	TAL SAV
Total/NA	Analysis	353.2		1	230343	02/29/12 15:09	JNC	TAL SAV
Total/NA	Analysis	375.4		20	230428	03/01/12 13:15	JR	TAL SAV
Total/NA	Analysis	310.1		1	230553	03/02/12 17:22	TH	TAL SAV
Total/NA	Analysis	415.1		1	230590	03/02/12 14:41	JR	TAL SAV
Total/NA	Analysis	325.2		5	230782	03/06/12 15:16	JR	TAL SAV

Client Sample ID: GWE-4M-F(0.2)-0212

Lab Sample ID: 680-77254-6

Date Collected: 02/28/12 12:00

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			230308	02/29/12 14:53	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230557	03/02/12 16:17	RAM	TAL SAV

Client Sample ID: GWE-4S-0212

Lab Sample ID: 680-77254-7

Date Collected: 02/28/12 12:40

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	231483	03/13/12 12:38	RB	TAL SAV
Total/NA	Analysis	RSK-175		1	230861	03/07/12 16:32	SMC	TAL SAV
Total Recoverable	Prep	3005A			230308	02/29/12 14:53	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230557	03/02/12 16:22	RAM	TAL SAV
Total/NA	Analysis	353.2		1	230343	02/29/12 15:10	JNC	TAL SAV
Total/NA	Analysis	375.4		5	230428	03/01/12 12:21	JR	TAL SAV
Total/NA	Analysis	310.1		1	230553	03/02/12 17:30	TH	TAL SAV
Total/NA	Analysis	415.1		1	230590	03/02/12 14:59	JR	TAL SAV
Total/NA	Analysis	325.2		1	230782	03/06/12 14:56	JR	TAL SAV

US EPA ARCHIVE DOCUMENT

APR 12 2012 *CDJ*

Lab Chronicle

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Client Sample ID: GWE-4S-F(0.2)-0212

Lab Sample ID: 680-77254-8

Date Collected: 02/28/12 12:40

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			230308	02/29/12 14:53	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230557	03/02/12 16:26	RAM	TAL SAV

Client Sample ID: GWE-2D-0212

Lab Sample ID: 680-77254-9

Date Collected: 02/28/12 15:50

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	231350	03/12/12 18:50	RB	TAL SAV
Total/NA	Analysis	RSK-175		1	230861	03/07/12 16:45	SMC	TAL SAV
Total Recoverable	Prep	3005A			230308	02/29/12 14:53	CDJ	TAL SAV
Total Recoverable	Analysis	6010B		1	230557	03/02/12 16:36	RAM	TAL SAV
Total/NA	Analysis	353.2		1	230343	02/29/12 15:11	JNC	TAL SAV
Total/NA	Analysis	375.4		10	230428	03/01/12 12:58	JR	TAL SAV
Total/NA	Analysis	310.1		1	230553	03/02/12 17:40	TH	TAL SAV
Total/NA	Analysis	415.1		1	230590	03/02/12 15:14	JR	TAL SAV
Total/NA	Analysis	325.2		1	230782	03/06/12 14:56	JR	TAL SAV

Client Sample ID: GWE-2D-F(0.2)-0212

Lab Sample ID: 680-77254-10

Date Collected: 02/28/12 15:50

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			230308	02/29/12 14:53	CDJ	TAL SAV
Dissolved	Analysis	6010B		1	230557	03/02/12 16:40	RAM	TAL SAV

Client Sample ID: 1Q12 SUPP Trip Blank #3

Lab Sample ID: 680-77254-11

Date Collected: 02/28/12 00:00

Matrix: Water

Date Received: 02/29/12 09:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	231350	03/12/12 16:57	RB	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

APR 12 2012

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. 680-77213-1

WGK Supplemental

Lot #: F2C300495

Lidya Gulizia

TestAmerica Savannah
5102 Laroche Avenue
Savannah, GA 31404

TESTAMERICA LABORATORIES, INC.



Lynn Fussner
Project Manager

April 4, 2012

APR 12 2012

CK 1 of 24

F2C300495

Case Narrative
LOT NUMBER: F2C300495

This report contains the analytical results for the eight samples received under chain of custody by TestAmerica St. Louis on March 30, 2012. These samples are associated with your WGK Supplemental project.

The analytical results included in this report meet all applicable quality control procedure requirements.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. **TestAmerica St. Louis' Florida certification number is E87689.** The case narrative is an integral part of this report.

This report shall not be reproduced, except in full, without the written approval of the laboratory.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

There were no other nonconformances or observations noted with any analysis on this lot.

APR 12 2012 

METHODS SUMMARY

F2C300495

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Dissolved Organic Carbon	MCAWW 415.1	MCAWW 415.1
Total Organic Carbon	MCAWW 415.1	MCAWW 415.1

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.

US EPA ARCHIVE DOCUMENT

APR 12 2012
GER

SAMPLE SUMMARY

F2C300495

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MRP57	001	GWE-4D-0212 (680-77254-1) ✓	02/28/12	10:50
MRP59	002	GWE-4D-F(0.2)-0212 (680-77254-2) ✓	02/28/12	10:50
MRP6A	003	GWE-4M-0212 (680-77254-5) ✓	02/28/12	12:00
MRP6C	004	GWE-4M-F(0.2)-0212 (680-77254-6) ✓	02/28/12	12:00
MRP6D	005	GWE-4S-0212 (680-77254-7) ✓	02/28/12	12:40
MRP6E	006	GWE-4S-F(0.2)0212 (680-77254-8) ✓	02/28/12	12:40
MRP6F	007	GWE-2D-0212 (680-77254-9) ✓	02/28/12	15:50
MRP6G	008	GWE-2D-F(0.2)-0212 (680-77254-10) ✓	02/28/12	15:50

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

APR 12 2012 *E2R*

Use TOC results that were analyzed within holding time criteria (analyzed 3/2/12).
TestAmerica Savannah

TestAmerica St. Louis

Client Sample ID: GWE-4D-0212 (680-77254-1)

General Chemistry

Lot-Sample #...: F2C300495-001 Work Order #...: MRP57 Matrix.....: WATER
Date Sampled...: 02/28/12 10:50 Date Received...: 03/30/12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Organic Carbon	5.2	1.0	mg/L	MCAWW 415.1	04/03/12	2093120

Dilution Factor: 1

Analysis Time...: 15:07

APR 12 2012 *CR*

TestAmerica Savannah

Client Sample ID: GWE-4D-F(0.2)-0212 (680-77254-2)

General Chemistry

Lot-Sample #...: F2C300495-002 Work Order #...: MRP59 Matrix.....: WATER
Date Sampled...: 02/28/12 10:50 Date Received...: 03/30/12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Dissolved Organic Carbon	5.5 J	1.0	mg/L	MCAWW 415.1	04/03/12	2093122

Dilution Factor: 1

Analysis Time...: 16:01

US EPA ARCHIVE DOCUMENT

APR 12 2012 *EdR*

Use TOC results that were analyzed within holding time criteria (analyzed 3/2/12).
TestAmerica Savannah
TestAmerica St. Louis

Client Sample ID: GWE-4M-0212 (680-77254-5)

General Chemistry

Lot-Sample #...: F2C300495-003 Work Order #...: MRP6A Matrix.....: WATER
Date Sampled...: 02/28/12 12:00 Date Received...: 03/30/12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	2.2	1.0	mg/L	MCAWW 415.1	04/03/12	2093120

Dilution Factor: 1 Analysis Time...: 15:12

APR 12 2012 *[Signature]*

TestAmerica Savannah

Client Sample ID: GWE-4M-F(0.2)-0212 (680-77254-6)

General Chemistry

Lot-Sample #...: F2C300495-004 Work Order #...: MRP6C Matrix.....: WATER
Date Sampled...: 02/28/12 12:00 Date Received...: 03/30/12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH. #
Dissolved Organic Carbon	2.4 J	1.0	mg/L	MCAWW 415.1	04/03/12	2093122
		Dilution Factor: 1		Analysis Time...: 16:06		

US EPA ARCHIVE DOCUMENT

APR 12 2012 *E2R*

Use TOC results that were analyzed within holding time criteria (analyzed 3/2/12).
TestAmerica Savannah

Client Sample ID: GWE-4S-0212 (680-77254-7)

General Chemistry

Lot-Sample #...: F2C300495-005 Work Order #...: MRP6D Matrix.....: WATER
Date Sampled...: 02/28/12 12:40 Date Received...: 03/30/12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Organic Carbon	1.3	1.0	mg/L	MCAWW 415.1	04/03/12	2093120
		Dilution Factor: 1		Analysis Time...: 15:27		

APR 12 2012 

TestAmerica Savannah

Client Sample ID: GWE-4S-F(0.2)0212 (680-77254-8)

General Chemistry

Lot-Sample #...: F2C300495-006 Work Order #...: MRP6E Matrix.....: WATER
Date Sampled...: 02/28/12 12:40 Date Received...: 03/30/12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Dissolved Organic Carbon	1.5 J	1.0	mg/L	MCAWW 415.1	04/03/12	2093122

Dilution Factor: 1 Analysis Time..: 16:22

APR 12 2012 *GR*

Use TOC results that were analyzed within holding time criteria (analyzed 3/2/12).
TestAmerica Savannah
TestAmerica St. Louis

Client Sample ID: GWE-2D-0212 (680-77254-9)

General Chemistry

Lot-Sample #...: F2C300495-007 Work Order #...: MRP6F Matrix.....: WATER
Date Sampled...: 02/28/12 15:50 Date Received...: 03/30/12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Organic Carbon	4.0	1.0	mg/L	MCAWW 415.1	04/03/12	2093120
		Dilution Factor: 1		Analysis Time...: 15:33		

APR 12 2012 *E2R*

TestAmerica Savannah

Client Sample ID: GWE-2D-F(0.2)-0212 (680-77254-10)

General Chemistry

Lot-Sample #...: F2C300495-008 Work Order #...: MRP6G Matrix.....: WATER
Date Sampled...: 02/28/12 15:50 Date Received..: 03/30/12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Dissolved Organic Carbon	3.8 J	1.0	mg/L	MCAWW 415.1	04/03/12	2093122
		Dilution Factor: 1		Analysis Time...: 16:27		

US EPA ARCHIVE DOCUMENT

APR 12 2012 *[Signature]*

METHOD BLANK REPORT

General Chemistry

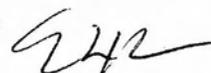
Client Lot #...: F2C300495

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	PREP
		LIMIT	UNITS		ANALYSIS DATE	BATCH #
Total Organic Carbon	ND	1.0	mg/L	MCAWW 415.1	04/03/12	2093120
		Work Order #: MRRJH1AA MB Lot-Sample #: F2D020000-120				
		Dilution Factor: 1				
		Analysis Time...: 14:58				

NOTE(S) :

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

APR 12 2012 

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F2C300495

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Dissolved Organic Carbon	ND	1.0	mg/L	MCAWW 415.1	04/03/12	2093122
		Work Order #: MRRJJ1AA		MB Lot-Sample #: F2D020000-122		
		Dilution Factor: 1		Analysis Time...: 14:58		

NOTE(S) :

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

US EPA ARCHIVE DOCUMENT

APR 12 2012 *EM*

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: F2C300495

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Organic Carbon	104	(90 - 110)	MCAWW 415.1 Dilution Factor: 1	04/03/12 Analysis Time...: 14:49	2093120
Work Order #: MRRJH1AC LCS Lot-Sample#: F2D020000-120					

NOTE(S) :

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

APR 12 2012



LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: F2C300495

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Dissolved Organic Carbon	104	(90 - 110)	MCAWW 415.1	04/03/12	2093122
		Dilution Factor: 1		Analysis Time...: 14:49	

Work Order #: MRRJJ1AC LCS Lot-Sample#: F2D020000-122

NOTE(S) :

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

APR 12 2012 

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: F2C300495

Matrix.....: WATER

Date Sampled...: 02/28/12 12:00 Date Received...: 03/30/12

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Dissolved Organic Carbon	88	(82 - 132)	MCAWW 415.1 Dilution Factor: 1	MS Lot-Sample #: 04/03/12 Analysis Time...: 16:06	F2C300495-004 2093122
Total Organic Carbon	87	(76 - 120)	MCAWW 415.1 Dilution Factor: 1	MS Lot-Sample #: 04/03/12 Analysis Time...: 15:12	F2C300495-003 2093120

NOTE (S) :

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

APR 12 2012



MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: F2C300495

Matrix.....: WATER

Date Sampled...: 02/28/12 12:00 Date Received...: 03/30/12

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Dissolved Organic Carbon	88	(82 - 132)	MCAWW 415.1	04/03/12	2093122
		Dilution Factor: 1		Analysis Time...: 16:06	
Total Organic Carbon	87	(76 - 120)	MCAWW 415.1	04/03/12	2093120
		Dilution Factor: 1		Analysis Time...: 15:12	

NOTE (S) :

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

APR 12 2012



SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F2C300495

Work Order #...: MRP6C-SMP
MRP6C-DUP

Matrix.....: WATER

Date Sampled...: 02/28/12 12:00

Date Received...: 03/30/12

PARAM RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Dissolved Organic Carbon	2.4	2.2	mg/L	11	(0-20) MCAWW 415.1	04/03/12	2093122
Dilution Factor: 1					Analysis Time...: 16:06		
SD Lot-Sample #: F2C300495-004							

US EPA ARCHIVE DOCUMENT

APR 12 2012 

F2C300495

CLIENT ANALYSIS SUMMARY

TestAmerica St. Louis
Storage Loc: 1-130

Project Manager: LMF Quote #: 90276 SDG: 680-77213-
Project: 680-77213-1 WGK Supplemental
PO#: SUB 680-77213-1 Report to: Lidya Gullzla
Client: 680 TestAmerica Savannah

Date Received: 2012-03-30
Analytical Due Date: 2012-04-05
Report Due Date: 2012-04-05
Report Type: B Standard Report
EDD Code: 00

RUSH

#SMPS in LOT: 8

Handwritten initials and marks on the right side of the page.

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	I	
1	GWE-4D-0212 (680-77254-1)			2012-02-28 / 1050	MRP57	WATER	
<u>SAMPLE COMMENTS:</u>							
XX	DA	MCAW 415.1 W	WATER, 415.1, Carbon, Total Organic *TOC	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01 STANDARD TEST SET	PROT: A WRK LOC 06
2	GWE-4D-F(0.2)-0212 (680-77254-2)			2012-02-28 / 1050	MRP59	WATER	
<u>SAMPLE COMMENTS:</u>							
XX	IC	MCAW 415.1 W	WATER, 415.1, Carbon, Dissolved Organic	87	FILTRATION (DISS)	01 STANDARD TEST SET	PROT: A WRK LOC 06
3	GWE-4M-0212 (680-77254-5)			2012-02-28 / 1200	MRP6A	WATER	
<u>SAMPLE COMMENTS:</u>							
XX	DA	MCAW 415.1 W	WATER, 415.1, Carbon, Total Organic *TOC	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01 STANDARD TEST SET	PROT: A WRK LOC 06
4	GWE-4M-F(0.2)-0212 (680-77254-)			2012-02-28 / 1200	MRP6C	WATER	
<u>SAMPLE COMMENTS:</u>							
XX	IC	MCAW 415.1 W	WATER, 415.1, Carbon, Dissolved Organic	87	FILTRATION (DISS)	01 STANDARD TEST SET	PROT: A WRK LOC 06
5	GWE-4S-0212 (680-77254-7)			2012-02-28 / 1240	MRP6D	WATER	
<u>SAMPLE COMMENTS:</u>							
XX	DA	MCAW 415.1 W	WATER, 415.1, Carbon, Total Organic *TOC	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01 STANDARD TEST SET	PROT: A WRK LOC 06
6	GWE-4S-F(0.2)0212 (680-77254-8)			2012-02-28 / 1240	MRP6E	WATER	
<u>SAMPLE COMMENTS:</u>							
XX	IC	MCAW 415.1 W	WATER, 415.1, Carbon, Dissolved Organic	87	FILTRATION (DISS)	01 STANDARD TEST SET	PROT: A WRK LOC 06
7	GWE-2D-0212 (680-77254-9)			2012-02-28 / 1550	MRP6F	WATER	
<u>SAMPLE COMMENTS:</u>							
XX	DA	MCAW 415.1 W	WATER, 415.1, Carbon, Total Organic *TOC	88	NO SAMPLE PREPARATION PERFORMED / DIRECT	01 STANDARD TEST SET	PROT: A WRK LOC 06
8	GWE-2D-F(0.2)-0212 (680-77254-1)			2012-02-28 / 1550	MRP6G	WATER	
<u>SAMPLE COMMENTS:</u>							
XX	IC	MCAW 415.1 W	WATER, 415.1, Carbon, Dissolved Organic	87	FILTRATION (DISS)	01 STANDARD TEST SET	PROT: A WRK LOC 06

APR 12 2012

F2C300495

CLIENT COMMENTS SUMMARY

Project Manager: LMF

Quote #: 90276 SDG: 680-77213-

Project: 680-77213-1

WGK Supplemental

PO#: SUB 680-77213-1

Report to: LIdya Gulizla

Client: 680 TestAmerica Savannah

RUSH

#SMPS In LOT: 8

TestAmerica St. Louis
Storage Loc: 1-130
Date Received: 2012-03-30
Analytical Due Date: 2012-04-05
Report Due Date: 2012-04-05
Report Type: B Standard Report
EDD Code: 00

US EPA ARCHIVE DOCUMENT

APR 12 2012 *[Signature]*

TestAmerica Savannah
 5102 LaRoche Avenue
 Savannah, GA 31404
 Phone (912) 354-7858 Fax (912) 352-0165

cul 359

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Sampler:		Lab PM: Gulfzja, Lidya		Carrier Tracking No(s):		COC No: 680-241606.1	
Client Contact Shipping/Receiving		Phone:		E-Mail: lidya.gulfzja@testamericainc.com				Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.						Analysis Requested		Job #: 680-77213-1	
Address: 13715 Rider Trail North,		Due Date Requested: 3/22/2012						Preservation Codes:	
City: Earth City		TAT Requested (days):						A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify)	
State, Zip: MO, 63045		PO #:						Other:	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)		WO #:							
Email:									
Project Name: WGK Supplemental GW 1Q12 - FEB 2012		Project #: 68001754							
Site:		SSOW#:							
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=overhead, ST=Time, A=Air)	Subcontract 1/415.1/ Total Organic Carbon	Subcontract 1/415.1/ Diss / Dissolved Organic Carbon	Total Number of Complaints	Special Instructions/Note:
GWE-4D-0212 (680-77254-1)		2/28/12	10:50 Eastern		Water	X			<i>1X120G</i>
GWE-4D-F(0.2)-0212 (680-77254-2)		2/28/12	10:50 Eastern		Water		X		
GWE-4M-0212 (680-77254-5)		2/28/12	12:00 Eastern		Water	X			
GWE-4M-F(0.2)-0212 (680-77254-6)		2/28/12	12:00 Eastern		Water		X		
GWE-4S-0212 (680-77254-7)		2/28/12	12:40 Eastern		Water	X			
GWE-4S-F(0.2)-0212 (680-77254-8)		2/28/12	12:40 Eastern		Water		X		
GWE-2D-0212 (680-77254-9)		2/28/12	15:50 Eastern		Water	X			
GWE-2D-F(0.2)-0212 (680-77254-10)		2/28/12	15:50 Eastern		Water		X		
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested: I, II, III, IV, Other (specify)					Special Instructions/QC Requirements:				
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: <i>[Signature]</i>		Date/Time: 2/28/12 1400		Company: <i>[Signature]</i>		Received by: <i>[Signature]</i>		Date/Time: 3/30/12 1015	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					

Page 73 of 79

APR 12 2012

Sax

TestAmerica St. Louis

CONDITION UPON RECEIPT FORM

Client: 7A SAVANNAH

Quote No: 90276

COC/RFA No: 680-241606



Initiated By: NVO Date: 3/30/12 Time: 1015

Shipping Information

Shipper: FedEx UPS DHL Courier Client Other: _____ Multiple Packages: Y N

Shipping # (s):*	Sample Temperature (s):**
1. <u>4598 9398 4764</u>	1. <u>2</u>
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____
7. _____	7. _____
8. _____	8. _____
9. _____	9. _____
10. _____	10. _____

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid; Rad tests- Liquid or Solids; Perchlorate

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on the cooler?	8. <input type="radio"/> Y <input checked="" type="radio"/> N	Are there custody seals present on bottles?
2. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?	9. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
3. <input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of cooler frisked after opening, but before unpacking?	10. <input type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH? (if not, make note below)
4. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?	11. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Containers for C-14, H-3 & I-129/131 marked with "Do Not Preserve" label?
5. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Does the Chain of Custody match sample ID's on the container(s)?	12. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?
6. <input type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	13. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (if Yes, note sample ID's below)
7. <input checked="" type="radio"/> Y <input type="radio"/> N	Is sample volume sufficient for analysis?	14. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was Internal COC/Workshare received?

¹ For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX, Oil & Grease and soils.

Notes:

Corrective Action:

Client Contact Name: _____ Informed by: _____

Sample(s) processed "as is"

Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: _____ Date: _____

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

US EPA ARCHIVE DOCUMENT

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: Dave Palmer		Site Contact: Michael Corbett		Date: 2/27/12		COC No:										
URS Corporation		Tel/Fax: (314) 743-4154		Lab Contact: Lidya Gulizia		Carrier: FedEx		1 of 1 COCs										
1001 Highlands Plaza Drive West, Suite 300		Analysis Turnaround Time						Job No. 680-77213										
St. Louis, MO 63110		Calendar (C) or Work Days (W)						21562703.00004										
(314) 429-0100 Phone		TAT if different from Below Standard						SDG No.										
(314) 429-0462 FAX		<input checked="" type="checkbox"/> 2 weeks																
Project Name: 1Q12 Supplemental GW Sampling		<input type="checkbox"/> 1 week																
Site: Solutia WG Krummrich Facility		<input type="checkbox"/> 2 days																
PO#		<input type="checkbox"/> 1 day																
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample: VOCs by 8260	SVOCs by 8260	Total Fe/Mn by 6010B	AlR/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:	
GWE-3M -0212 ✓		2/27/12	0935	G	Water	12	X										*SVOCs per semi-annual list	
GWE-3M -F(0.2)-0212 ✓			0935	G	Water	2	X											
GWE-3S -0212 ✓			1045	G	Water	12	X											
GWE-3S -F(0.2)-0212 ✓			1045	G	Water	2	X											
GWE-5M -0212 ✓			1310	G	Water	12	X											
GWE-5M -F(0.2)-0212 ✓			1310	G	Water	2	X											
GWE-5S -0212 ✓			1500	G	Water	12	X											
GWE-5S -F(0.2)-0212 ✓			1500	G	Water	2	X											
IQ12 SUPP Trip Blank # 2 ✓		2/27/12			Water	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							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/>							<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Special Instructions/QC Requirements & Comments: Level 4 Data Package																		
Relinquished by: <i>[Signature]</i>		Company: URS		Date/Time: 2/27/12 1600		Received by: <i>[Signature]</i>		Company: TESTAMERICA		Date/Time: 02.28.12 c 0905		Temp 0.8°C, 2.6°C						
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:								
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:								

Page 75 of 79

APR 12 2012 2:21

Savannah
5142 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Dave Palmer		Site Contact: Michael Corbett		Date: <u>2/28/12</u>		COC No:											
URS Corporation		Tel/Fax: (314) 743-4154		Lab Contact: Lidya Gullizia		Carrier: <u>Fedex</u>		1 of 1 COCs											
1001 Highlands Plaza Drive West, Suite 300		Analysis Turnaround Time						Job No. <u>08077254</u>											
St. Louis, MO 63110		Calendar (C) or Work Days (W)						21662703.00004											
(314) 429-0100 Phone		TAT if different from Below Standard						SDG No.											
(314) 429-0462 FAX		<input checked="" type="checkbox"/> 2 weeks																	
Project Name: 1Q12 Supplemental GW Sampling		<input type="checkbox"/> 1 week																	
Site: Solutia WG Krummrich Facility		<input type="checkbox"/> 2 days																	
PO#		<input type="checkbox"/> 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 RSN 175	Nitrate by 353.2	TOC by 415.1	Dissolved Fe/Mn by 6010B	DOC by 415.1	Sample Specific Notes:		
GWE-4D -0212	2/28/12	1050	G	Water	1	2	X										*SVOCs per semi-annual list		
GWE-4D -F(0.2)-0212		1050	G	Water	2	2	X												
GWE-4D-0212-AD		1050	G	Water	3	3													
GWE-4M-0212-EB		1110	G	Water	3	3													
GWE-4M-0212		1200	G	Water	12	3		1	1	1	3	2	1						
GWE-4M-F(0.2)-0212		1200	G	Water	2	2	X							1	1				
GWE-4S-0212		1240	G	Water	12	3		1	1	1	3	2	1						
GWE-4S-F(0.2)-0212		1240	G	Water	2	2	X							1	1				
GWE-2D-0212		1550	G	Water	12	3		1	1	1	3	2	1						
GWE-2D-F(0.2)-0212		1550	G	Water	2	2	X							1	1				
1Q12 SUPP Trip Blank # 3	2/28/12			Water	2	2		2											
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NuOH; 6= Other							2 1 4 1 1 1 3,1 2 4 2												
Possible Hazard Identification							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)												
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months												
Special Instructions/QC Requirements & Comments: Level 4 Data Package																			
Relinquished by: <u>[Signature]</u>		Company: URS		Date/Time: 2/28/12 1645		Received by: <u>[Signature]</u>		Company: TH		Date/Time: 2/28/12 1645		Temp 5.6°C							
Relinquished by: <u>[Signature]</u>		Company: TH		Date/Time: 2/28/12 1740		Received by: <u>[Signature]</u>		Company: TH SHV		Date/Time: 02.29.12 0957									
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:									

Page 76 of 79

APR 12 2012

[Signature]

Login Sample Receipt Checklist

Client: Solutia Inc.

Job Number: 680-77213-1

SDG Number: KPS073

Login Number: 77213

List Source: TestAmerica Savannah

List Number: 1

Creator: Daughtry, Beth

Question	Answer	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	0.8, 2.6 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	Insufficient volume received for MS/MSD.
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APR 12 2012



Login Sample Receipt Checklist

Client: Solutia Inc.

Job Number: 680-77213-1

SDG Number: KPS073

Login Number: 77254

List Source: TestAmerica Savannah

List Number: 1

Creator: Daughtry, Beth

Question	Answer	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	5.6 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	Insufficient volume received for MS/MSD.
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APR 12 2012 *SRK*

Certification Summary

Client: Solutia Inc.
 Project/Site: WGK Supplemental GW 1Q12 - FEB 2012

TestAmerica Job ID: 680-77213-1
 SDG: KPS073

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Savannah	A2LA	DoD ELAP		0399-01
TestAmerica Savannah	A2LA	ISO/IEC 17025		399.01
TestAmerica Savannah	Alabama	State Program	4	41450
TestAmerica Savannah	Arkansas	State Program	6	N/A
TestAmerica Savannah	Arkansas DEQ	State Program	6	88-0692
TestAmerica Savannah	California	NELAC	9	3217CA
TestAmerica Savannah	Colorado	State Program	8	N/A
TestAmerica Savannah	Connecticut	State Program	1	PH-0161
TestAmerica Savannah	Florida	NELAC	4	E87052
TestAmerica Savannah	GA Dept. of Agriculture	State Program	4	N/A
TestAmerica Savannah	Georgia	State Program	4	803
TestAmerica Savannah	Georgia	State Program	4	N/A
TestAmerica Savannah	Guam	State Program	9	09-005r
TestAmerica Savannah	Hawaii	State Program	9	N/A
TestAmerica Savannah	Illinois	NELAC	5	200022
TestAmerica Savannah	Indiana	State Program	5	N/A
TestAmerica Savannah	Iowa	State Program	7	353
TestAmerica Savannah	Kentucky	State Program	4	90084
TestAmerica Savannah	Kentucky (UST)	State Program	4	18
TestAmerica Savannah	Louisiana	NELAC	6	30690
TestAmerica Savannah	Louisiana	NELAC	6	LA100015
TestAmerica Savannah	Maine	State Program	1	GA00006
TestAmerica Savannah	Maryland	State Program	3	250
TestAmerica Savannah	Massachusetts	State Program	1	M-GA006
TestAmerica Savannah	Michigan	State Program	5	9925
TestAmerica Savannah	Mississippi	State Program	4	N/A
TestAmerica Savannah	Montana	State Program	8	CERT0081
TestAmerica Savannah	Nebraska	State Program	7	TestAmerica-Savannah
TestAmerica Savannah	New Jersey	NELAC	2	GA769
TestAmerica Savannah	New Mexico	State Program	6	N/A
TestAmerica Savannah	New York	NELAC	2	10842
TestAmerica Savannah	North Carolina DENR	State Program	4	269
TestAmerica Savannah	North Carolina DHHS	State Program	4	13701
TestAmerica Savannah	Oklahoma	State Program	6	9984
TestAmerica Savannah	Pennsylvania	NELAC	3	68-00474
TestAmerica Savannah	Puerto Rico	State Program	2	GA00006
TestAmerica Savannah	Rhode Island	State Program	1	LAO00244
TestAmerica Savannah	South Carolina	State Program	4	98001
TestAmerica Savannah	Tennessee	State Program	4	TN02961
TestAmerica Savannah	Texas	NELAC	6	T104704185-08-TX
TestAmerica Savannah	USDA	Federal		SAV 3-04
TestAmerica Savannah	Vermont	State Program	1	87052
TestAmerica Savannah	Virginia	NELAC	3	460161
TestAmerica Savannah	Washington	State Program	10	C1794
TestAmerica Savannah	West Virginia	State Program	3	9950C
TestAmerica Savannah	West Virginia DEP	State Program	3	94
TestAmerica Savannah	Wisconsin	State Program	5	999819810
TestAmerica Savannah	Wyoming	State Program	8	8TMS-Q

US EPA ARCHIVE DOCUMENT

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

APR 12 2012 