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February 7, 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: PCB Groundwater Quality Assessment Program
4th Quarter 2011 Data Report
Solutia Inc., W. G. Krummrich Plant, Sauget, IL

Dear Mr. Bardo:

Enclosed please find the PCB Groundwater Quality Assessment Program 4th Quarter 2011 Data Report for Solutia Inc.'s W. G. Krummrich Plant, Sauget, IL.

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

Sincerely,

Gerald M. Rinaldi
Manager, Remediation Services

Enclosure

cc: Distribution List

DISTRIBUTION LIST

PCB Groundwater Quality Assessment Program
4th Quarter 2011 Data Report
Solutia Inc., W. G. Krummrich Plant, Sauget, IL

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

4TH QUARTER 2011
DATA REPORT

PCB GROUNDWATER QUALITY ASSESSMENT PROGRAM

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

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

January 2012

URS Corporation
1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
(314) 429-0100
Project # **21562682.00004**

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1.0 INTRODUCTION

This report presents the results of the 4th Quarter 2011 (4Q11) sampling event performed at the Solutia Inc. (Solutia) W.G. Krummrich Facility located in Sauget, Illinois (Site). This sampling event was conducted in accordance with the Revised PCB Groundwater Quality Assessment Program Work Plan (Solutia 2009). The Site location map is presented in **Figure 1**.

The PCB Groundwater Quality Assessment Program well network consists of ten monitoring wells, as follows (**Figure 2**):

- Two source area wells, PMA-MW-4S and PMA-MW-4D, are screened in the Shallow Hydrogeologic Unit (SHU) (designated with an "S") and Deep Hydrogeologic Unit (DHU) (designated with a "D"), respectively.
- Three well clusters (PMA-MW-1S/M, PMA-MW-2S/M and PMA-MW-3S/M) are located down-gradient of the source area. These clusters include wells screened in the SHU and Middle Hydrogeologic Unit (MHU) (designated with an "M").
- Two individual wells designated PMA-MW-5M and PMA-MW-6D are located further down-gradient of the source area, with PMA-MW-5M screened in the MHU and PMA-MW-6D screened in the DHU.

Groundwater samples were collected from the ten monitoring wells during the 4Q11 sampling event.

Field sampling activities were conducted in accordance with the procedures outlined in the Revised PCB Groundwater Quality Assessment Program Work Plan, including the collection of appropriate quality assurance and quality control (QA/QC) samples. The following section summarizes the field investigative procedures.

2.0 FIELD PROCEDURES

URS Corporation (URS) conducted the 4Q11 PCB Groundwater Quality Assessment Program field activities between November 18 and November 21, 2011.

Groundwater Level Measurements – An oil/water interface probe was used to measure depth to static groundwater levels and determine the presence of non-aqueous phase liquids (NAPL) in the PCB Groundwater Quality Assessment Program well network. Depth to groundwater measurements were collected from accessible existing wells (i.e., BSA-, CPA-, GM-, K- , PSMW- and PMA-series) and piezometers clusters (installed for the Sauget Area 2 RI/FS and WGK CA-750 Environmental Indicator projects) specified in the Revised PCB Groundwater Quality Assessment Program Work Plan.

Well gauging information for the 4Q11 event is presented in **Table 1**. As the middle and deep hydrogeologic units are the primary migration pathway for constituents present in groundwater at the WGK Facility, a groundwater potentiometric surface map based on water level data from wells screened in the MHU and DHU is presented as **Figure 3**.

Groundwater Sampling - Low-flow sampling techniques were used for groundwater sample collection. At each monitoring well, disposable, low-density polyethylene tubing was attached to a submersible pump, which was then lowered into the well to the middle of the screened interval. Monitoring wells were purged at a rate no more 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 of a well was considered complete when the following water quality parameters remained stable over three consecutive flow-thru 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-thru cell was bypassed to allow for collection of uncompromised groundwater. Consistent with the work plan, samples were collected at a flow rate less than or equal to the rate at which stabilization was achieved.

Per the workplan, NAPL is to be sampled if present in a well. Since no wells had measurable NAPL, groundwater samples were collected at each well using the procedures described above.

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%, complying with the work plan. All samples were submitted to TestAmerica for PCB analysis.

Each sample was labeled immediately following collection. The sample identification system used for each sample involved the following nomenclature “PMA-MW#-MMYY-QAC” where:

- **PMA-MW#** – Monitoring Well Location (PCB Manufacturing Area (PMA)) and Number
- **MMYY** – Month and year of sampling quarter, e.g.: November (4th Quarter), 2011 (1111)

- **QAC** – denotes QA/QC samples (when applicable):
  - **EB** – equipment blank
  - **AD** – analytical duplicate
  - **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, analysis requested/comments, and sampler signature/date/time, with permanent ink on the chain-of-custody (COC). Prior to shipment, coolers were sealed between the lid and sides of the cooler with a custody seal, and then shipped to TestAmerica in Savannah, Georgia by means of overnight delivery service (FedEx). Field sampling data sheets are included in **Appendix A**, COC forms are included in **Appendix B**.

3.0 LABORATORY PROCEDURES

Samples were analyzed by TestAmerica for PCBs using Method 680. For presentation purposes in this report, results of the PCB isomer groups (e.g., monochlorobiphenyl, dichlorobiphenyl, etc.) are summed and presented as "total PCBs." 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 PCB Water Quality Assessment 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 13 samples (ten investigative groundwater samples, one field duplicate, one MS/MSD pair, and one equipment blank) were prepared and analyzed by TestAmerica Savannah for PCBs. Results for the various analyses were submitted as sample delivery group (SDG) KPM044.

The samples contained in SDG KPM044 are listed below:

KPM044	
PMA-MW-1S-1111	PMA-MW-3M-1111
PMA-MW-1M-1111	PMA-MW-3M-1111-EB
PMA-MW-2S-1111	PMA-MW-4S-1111
PMA-MW-2M-1111	PMA-MW-4D-1111
PMA-MW-2M-1111-AD	PMA-MW-5M-1111
PMA-MW-3S-1111	PMA-MW-6D-1111

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, (USEPA 2008) and the Revised PCB Water Quality Assessment Work Plan (Solutia 2009). Based on the above mentioned criteria, results reported for the analyses performed were accepted for their intended use. Acceptable levels of accuracy and precision, based on LCS, surrogate and field duplicate data were achieved for these SDGs to meet the project objectives. Completeness, which is defined to be the percentage of analytical results which are judged to be valid, including estimated (**J**/**UJ**) data was 100 percent.

5.0 OBSERVATIONS

This section presents a brief summary of the groundwater analytical results from the 4Q11 PCB Groundwater Quality Assessment sampling event. A summary of the laboratory results is provided in **Table 2** and the entire laboratory data package is provided in **Appendix D.**

Shallow Hydrogeologic Unit

Historically, measurable DNAPL has been periodically observed in the source area SHU monitoring well PMA-MW-4S during previous sampling events. DNAPL was not detected in PMA-MW-4S by the oil/water interface probe during the 4Q11 event. As a result, a water sample was collected, and total PCBs were detected at a concentration of 4,858 µg/L. PCBs were detected in one of the three down-gradient PCB Groundwater Quality Assessment Program SHU monitoring wells (PMAMW-3S) at a concentration of 0.46 µg/L. Such data indicate that PCBs in the SHU are attenuating over the 300 to 400 ft distance between PMA-MW-4S and the three downgradient monitoring wells. PCB sampling results for the SHU are presented on **Figure 4**.

Middle/Deep Hydrogeologic Unit

Laboratory analytical results for monitoring well PMA-MW-4D, located in the Former PCB Manufacturing Area, indicated a total PCB concentration of 0.54 µg/L for the 4Q11 sampling event. PCBs were also detected in all five downgradient monitoring wells at concentrations of 0.52 µg/L (PMA-MW-1M), an estimated 2.7 µg/L and estimated 4 µg/L (PMA-MW-2M and

duplicate), 0.92 µg/L (PMA-MW-3M), 0.82 µg/L (PMA-MW-5M) and 0.72 µg/L (PMA-MW-6D). **Figure 5** displays the 4Q11 PCB sampling results for the MHU/DHU.

The 4Q11 sampling event was the fourteenth event conducted under the PCB Groundwater Quality Assessment Program. Mann-Kendall trend analyses of total PCBs in unfiltered samples of groundwater from selected monitoring wells within (PMA-MW-4D) or downgradient of (PMA-MW-1M, -2M, -3S, -3M, and -6D) the former PCB Manufacturing Area are presented in **Table 3**. Similar to previous quarterly events, the data appear to exhibit an upward trend in concentrations at monitoring wells PMA-MW-1M, PMA-MW-2M and PMA-MW-4D at this time; concentrations are stable or exhibit no trends at the other wells.

6.0 REFERENCES

Solutia Inc, 2009. Revised PCB Groundwater Quality Assessment Program Work Plan, W.G. Krummrich Facility, Sauget, IL, Prepared by URS Corporation, May 2009.

U.S. Environmental Protection Agency (USEPA), 2008 Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review.

Figures

FALLING SPRINGS ROAD

STERLING STEEL

SITE H

SITE L

SITE M

SITE N

SITE I

DEAD CREEK

SITE G

CONTAINMENT CELL

CERRO COPPER

QUEENY AVENUE

ROUTE 3

AFTON CHEMICAL

MONSANTO AVENUE

W. G. KRUMMRICH FACILITY

BIG RIVER ZINC

ROUTE 3

CENTER ETHANOL COMPANY, LLC

LOT F

MIDWEST RUBBER

PHILLIPS PETROLEUM

SITE O

SITE P

UNION ELECTRIC

PCHEM POTW

CLAYTON CHEMICAL

SITE S

AMERICAN BOTTOMS POTW

VEOLIA INCINERATION

KINDER MORGAN

SITE R

SITE Q

GROUNDWATER PUMPING WELLS

BARRIER WALL

MISSISSIPPI RIVER

LEGEND

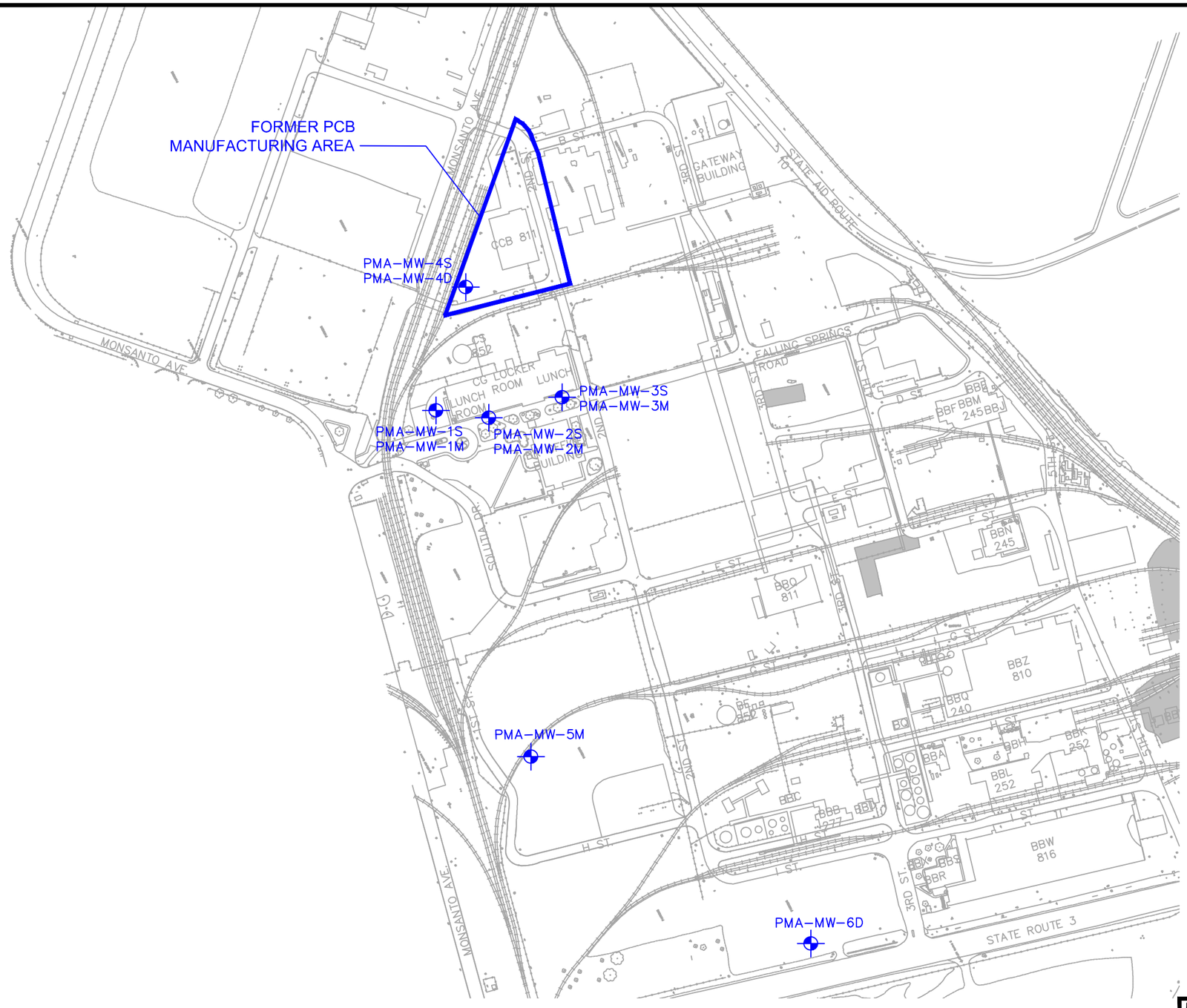
- W.G. KRUMMRICH FACILITY
- SAUGET AREA #1
- SAUGET AREA #2

0 1000

SCALE FEET

PCB GROUNDWATER QUALITY ASSESSMENT PROGRAM 4TH QUARTER 2011 DATA REPORT W.G. KRUMMRICH FACILITY SAUGET, ILLINOIS		PROJECT NO. 21562682
URS		
DRN. BY:chs January 2012 DSGN. BY:dp CHKD. BY:	Site Location Map	FIG. NO. 1

File: C:\DOCUMENTS AND SETTINGS\CURT_SMITH\MY DOCUMENTS\PROJECTS\ENVIRONMENTAL\SOLUTIA\QUARTERLY MONITORING\VOL11\FIGS\FIG-1 SITE LOCATION MAP.DWG Last edited: FEB. 06, 12 @ 9:44 p.m. by curt_smith



LEGEND

MONITORING WELL LOCATION

NOTES:

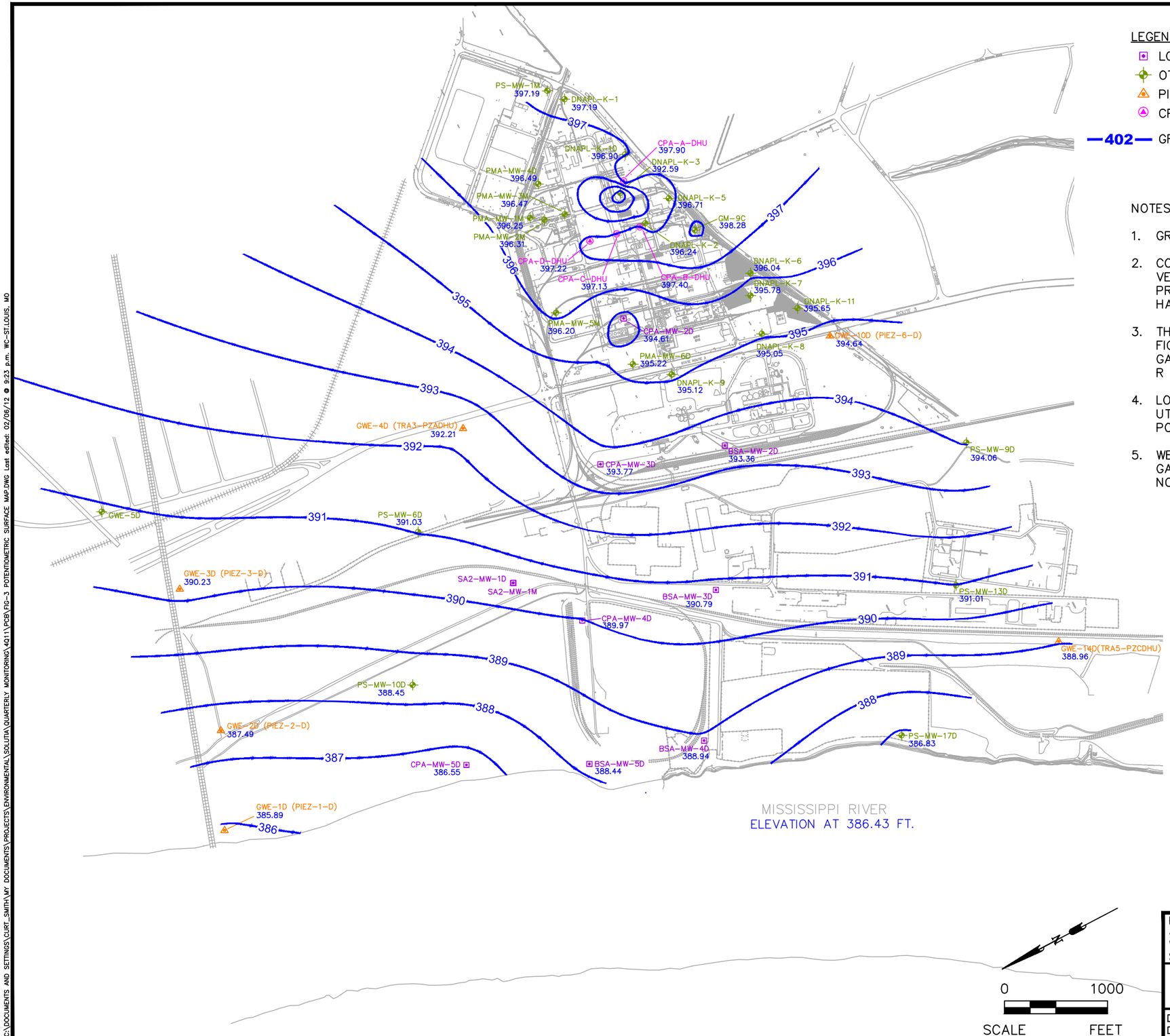
1. REFER TO TABLE 1 FOR MONITORING WELL CONSTRUCTION INFORMATION.

N W E S

0 300

SCALE FEET

PCB GROUNDWATER QUALITY ASSESSMENT PROGRAM 4TH QUARTER 2011 DATA REPORT W.G. KRUMMRICH FACILITY SAUGET, ILLINOIS	PROJECT NO. 21562682
URS	
DRN. BY: chs January 2012 DSGN. BY: dp CHKD. BY:	Former PCB Manufacturing Area Monitoring Well Locations
	FIG. NO. 2



LEGEND

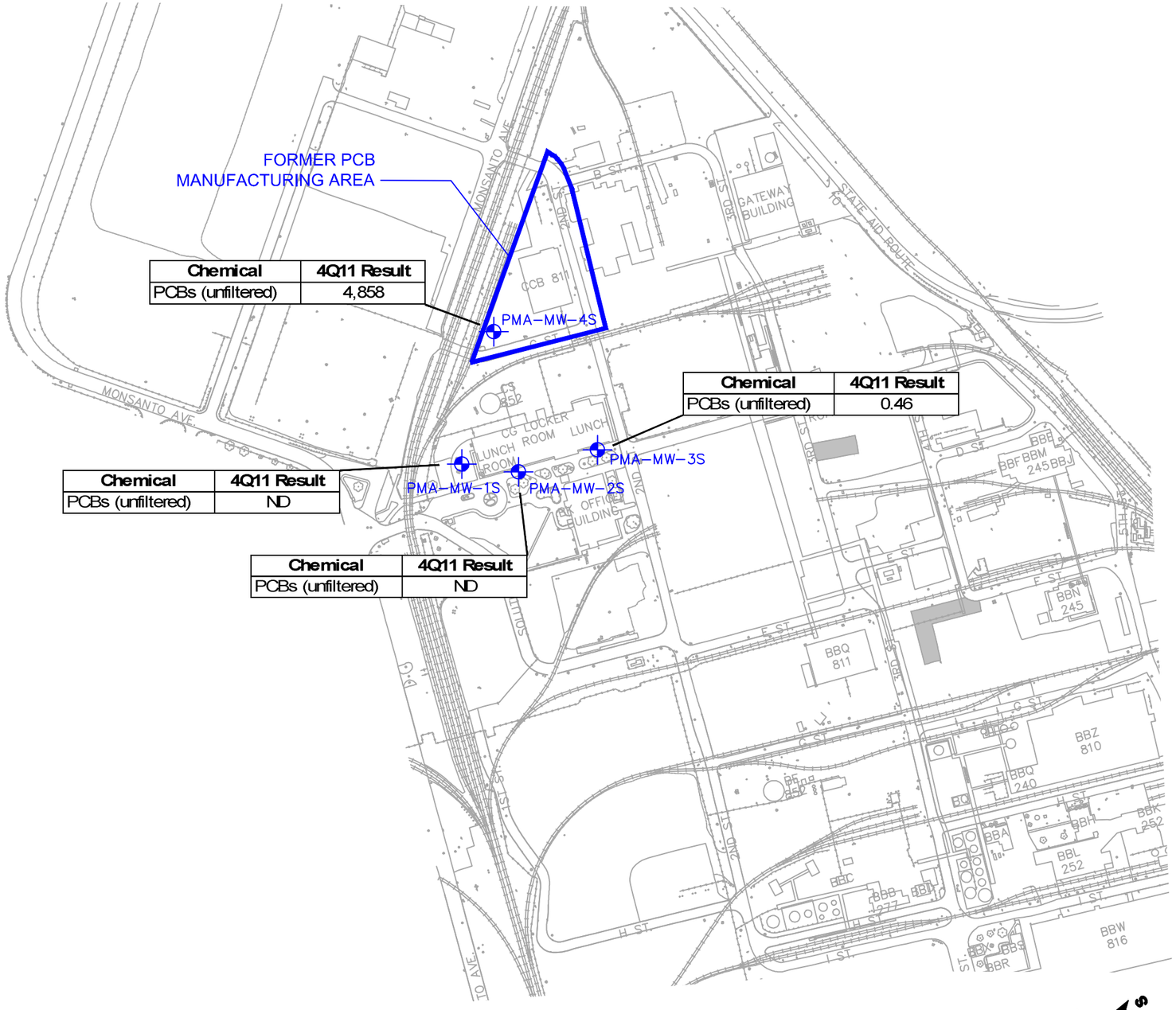
- LONG-TERM MONITORING WELL USED FOR GROUNDWATER CONTOURING
- OTHER MONITORING WELL USED FOR GROUNDWATER CONTOURING
- PIEZOMETER CLUSTER USED FOR GROUNDWATER CONTOURING
- CPA MONITORING WELL USED FOR GROUNDWATER CONTOURING
- —402— GROUNDWATER ELEVATION CONTOUR (FT NAVD)

NOTES:

1. GROUNDWATER LEVELS WERE MEASURED NOVEMBER 10, 2011.
2. CONTOURS GENERATED PRIMARILY USING SURFER SOFTWARE VERSION 8. SOME INTERPRETATION WAS DONE USING PROFESSIONAL JUDGMENT AND CONTOUR LINES WERE MODIFIED BY HAND.
3. THE MISSISSIPPI RIVER STAGE ELEVATION PRESENTED ON THE FIGURE IS AN AVERAGE ELEVATION FOR THE TIME OF THE GAUGING EVENT. THE INFORMATION WAS OBTAINED FROM THE SITE R BUBBLER.
4. LOCATIONS WITH WELLS SCREENED IN BOTH THE MHU AND DHU UTILIZED THE DHU WELL FOR DEVELOPMENT OF THE POTENTIOMETRIC SURFACE MAP.
5. WELL GWE-5D WAS NOT INCLUDED IN THE COMPREHENSIVE GAUGING EVENT BECAUSE IT WAS NOT COMPLETED UNTIL NOVEMBER 23, 2011.

PCB GROUNDWATER QUALITY ASSESSMENT PROGRAM 4TH QUARTER 2011 DATA REPORT W.G. KRUMMRICH FACILITY SAUGET, ILLINOIS	PROJECT NO. 21562682
URS	
DRN. BY:chs January 2012 DSGN. BY:dp CHKD. BY:	Potentiometric Surface Map Middle/Deep Hydrogeologic Unit
	FIG. NO. 3

File: C:\DOCUMENTS AND SETTINGS\CURT_SMITH\MY DOCUMENTS\PROJECTS\ENVIRONMENTAL\SOLUTIA QUARTERLY MONITORING\4Q11\PCB\FIG-3 POTENTIOMETRIC SURFACE MAP.DWG Last edited: 02/06/12 @ 9:23 p.m. WC-ST.LOUIS, MO



Chemical	4Q11 Result
PCBs (unfiltered)	4,858

Chemical	4Q11 Result
PCBs (unfiltered)	0.46

Chemical	4Q11 Result
PCBs (unfiltered)	ND

Chemical	4Q11 Result
PCBs (unfiltered)	ND

LEGEND

MONITORING WELL LOCATION

NOTES:

1. TOTAL PCB RESULTS INCLUDE THE SUM OF ALL METHOD 680 HOMOLOGS.
2. RESULTS ARE SHOWN IN ug/L.
3. ND = NOT DETECTED.

N E S W

0 300

SCALE FEET

PCB GROUNDWATER QUALITY ASSESSMENT PROGRAM
4TH QUARTER 2011 DATA REPORT
W.G. KRUMMRICH FACILITY
SAUGET, ILLINOIS

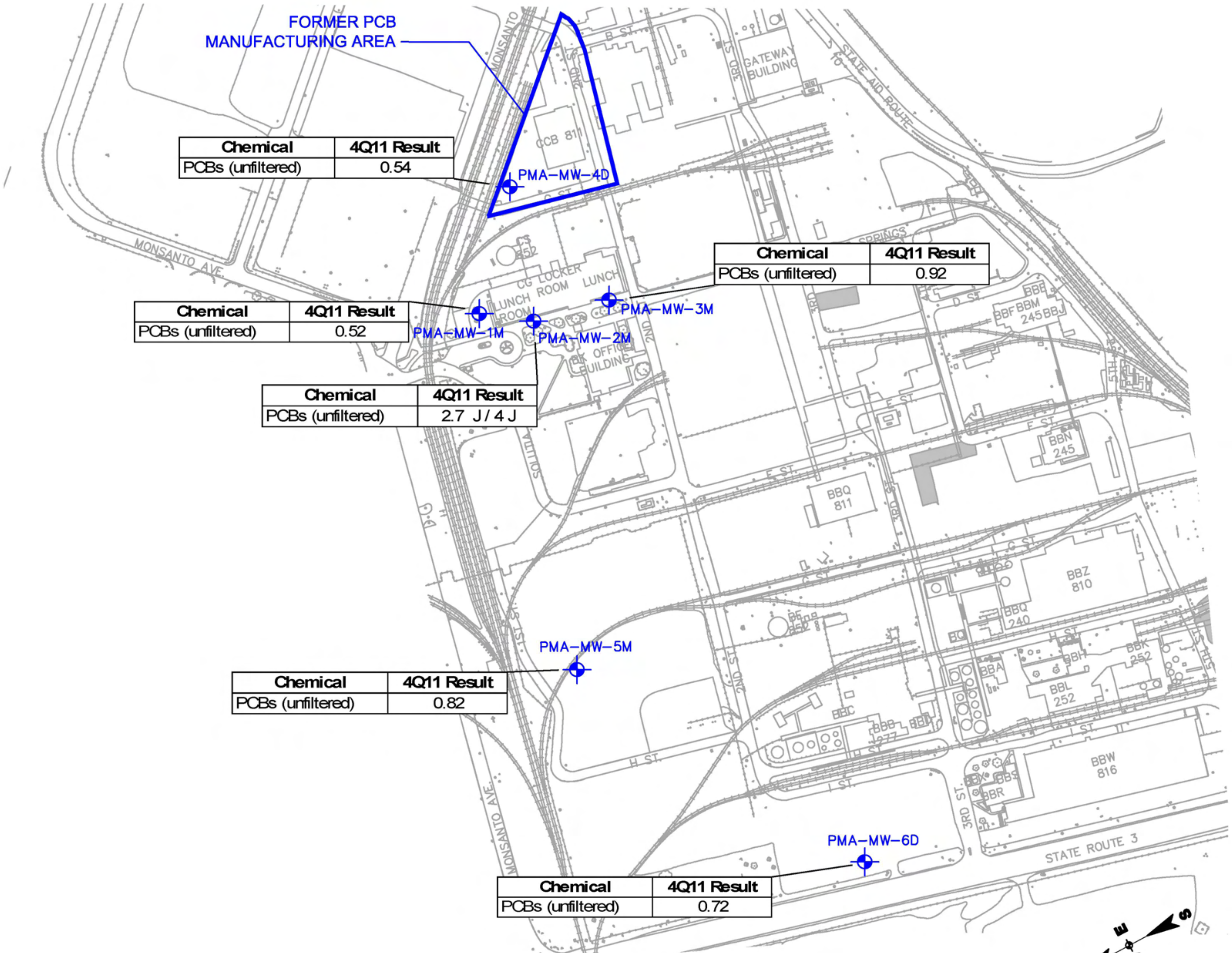
PROJECT NO. 21562682

URS

DRN. BY: chs January 2012
DSGN. BY: dp
CHKD. BY:

PCB Results – SHU Wells

FIG. NO. 4



Chemical	4Q11 Result
PCBs (unfiltered)	0.54

Chemical	4Q11 Result
PCBs (unfiltered)	0.52

Chemical	4Q11 Result
PCBs (unfiltered)	2.7 J / 4 J

Chemical	4Q11 Result
PCBs (unfiltered)	0.92

Chemical	4Q11 Result
PCBs (unfiltered)	0.82

Chemical	4Q11 Result
PCBs (unfiltered)	0.72

LEGEND

MONITORING WELL LOCATION

NOTES:

1. TOTAL PCB RESULTS INCLUDE THE SUM OF ALL METHOD 680 HOMOLOGS.
2. RESULTS ARE SHOWN IN ug/L.
3. ND = NOT DETECTED.
4. MULTIPLE SAMPLE RESULTS INDICATE A DUPLICATE SAMPLE

PCB GROUNDWATER QUALITY ASSESSMENT PROGRAM
4TH QUARTER 2011 DATA REPORT
W.G. KRUMMRICH FACILITY
SAUGET, ILLINOIS

PROJECT NO. 21562682

URS

DRN. BY: chs January 2012
DSGN. BY: dp
CHKD. BY:

PCB Results – MHU/DHU Wells

FIG. NO. 5

Tables

See last page of table for notes.

Table 1
Monitoring Well Gauging Information

Well ID	Construction Details						November 10, 2011		
	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)	DNAPL Thickness (feet)	Water Elevation* (feet)
Shallow Hydrogeologic Unit (SHU 395-380 feet NAVD 88)									
PMA-MW-1S	410.30	410.06	20.18	25.18	390.12	385.12	12.76	--	397.30
PMA-MW-2S	412.27	411.66	22.94	27.94	389.33	384.33	15.35	--	396.31
PMA-MW-3S	412.37	412.06	22.71	27.71	389.66	384.66	15.54	--	396.52
PMA-MW-4S	411.09	410.43	20.99	25.99	390.10	385.10	13.65	--	396.78
Middle Hydrogeologic Unit (MHU 380-350 feet NAVD 88)									
PMA-MW-1M	410.32	410.08	54.54	59.54	355.78	350.78	13.83	--	396.25
PMA-MW-2M	412.26	411.93	56.87	61.87	355.39	350.39	15.62	--	396.31
PMA-MW-3M	412.36	412.10	57.07	62.07	355.29	350.29	15.63	--	396.47
PMA-MW-5M	411.27	410.97	52.17	57.17	359.10	354.10	14.77	--	396.20
PS-MW-1M	409.37	412.59	37.78	42.78	371.59	366.59	15.40	--	397.19
Deep Hydrogeologic Unit (DHU 350 feet NAVD 88 - Bedrock)									
BSA-MW-2D	412.00	415.13	68.92	73.92	343.08	338.08	21.77	--	393.36
BSA-MW-3D	412.91	415.74	107.02	112.02	305.89	300.89	24.95	--	390.79
BSA-MW-4D	425.00	424.69	118.54	123.54	306.46	301.46	35.75	--	388.94
BSA-MW-5D	420.80	420.49	115.85	120.85	304.95	299.95	32.05	--	388.44
CPA-MW-1D	408.62	408.32	66.12	71.12	342.50	337.50	15.69	--	392.63
CPA-MW-2D	408.51	408.20	99.96	104.96	308.55	303.55	13.59	--	394.61
CPA-MW-3D	410.87	410.67	108.20	113.20	302.67	297.67	16.90	--	393.77
CPA-MW-4D	421.57	421.20	116.44	121.44	305.13	300.13	31.23	--	389.97
CPA-MW-5D	411.03	413.15	107.63	112.63	303.40	298.40	26.60	--	386.55
DNAPL-K-1	413.07	415.56	108.20	123.20	304.87	289.87	18.37	--	397.19
DNAPL-K-2	407.94	407.72	97.63	112.63	310.31	295.31	11.48	--	396.24
DNAPL-K-3	412.13	411.91	104.80	119.80	307.33	292.33	19.32	--	392.59
DNAPL-K-4	409.48	409.15	102.55	117.55	306.93	291.93	16.54	--	392.61
DNAPL-K-5	412.27	411.91	102.15	117.15	310.12	295.12	15.20	--	396.71
DNAPL-K-6	410.43	410.09	102.47	117.47	307.96	292.96	14.05	--	396.04
DNAPL-K-7	408.32	407.72	100.40	115.40	307.92	292.92	11.94	--	395.78
DNAPL-K-8	408.56	411.38	102.65	117.65	305.91	290.91	16.33	--	395.05

See last page of table for notes.

Table 1
Monitoring Well Gauging Information

Well ID	Construction Details						November 10, 2011		
	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)	DNAPL Thickness (feet)	Water Elevation* (feet)
Deep Hydrogeologic Unit (DHU 350 feet NAVD 88 - Bedrock) (continued)									
DNAPL-K-9	406.45	405.97	97.42	112.42	309.03	294.03	10.85	--	395.12
DNAPL-K-10	413.50	413.25	105.43	120.43	308.07	293.07	16.35	--	396.90
DNAPL-K-11	412.20	411.78	105.46	120.46	306.74	291.74	16.13	--	395.65
GM-9C	409.54	411.21	88.00	108.00	321.54	301.54	12.93	--	398.28
GWE-1D	412.80	415.60	117.00	127.00	295.80	285.80	29.71	--	385.89
GWE-2D	417.45	417.14	127.00	137.00	290.45	280.45	29.65	--	387.49
GWE-3D	415.03	417.66	104.60	114.60	313.06	303.06	27.43	--	390.23
GWE-4D	406.05	405.74	74.00	80.00	332.05	326.05	13.53	--	392.21
GWE-10D	410.15	412.87	102.50	112.50	307.65	297.65	18.23	--	394.64
GWE-14D	420.47	422.90	90.00	96.00	330.47	324.47	33.94	--	388.96
PMA-MW-4D	411.22	410.88	68.84	73.84	342.38	337.38	14.39	--	396.49
PMA-MW-6D	407.63	407.32	96.49	101.49	311.14	306.14	12.10	--	395.22
PS-MW-6D	404.11	406.63	102.32	107.32	304.31	299.31	15.60	--	391.03
PS-MW-9D	403.92	403.52	100.40	105.40	303.52	298.52	9.46	--	394.06
PS-MW-10	409.63	412.18	103.78	108.78	308.40	303.40	23.73	--	388.45
PS-MW-13D	405.80	405.53	106.08	111.08	299.72	294.72	14.52	--	391.01
PS-MW-17D	420.22	423.26	121.25	126.25	298.97	293.97	36.43	--	386.83

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

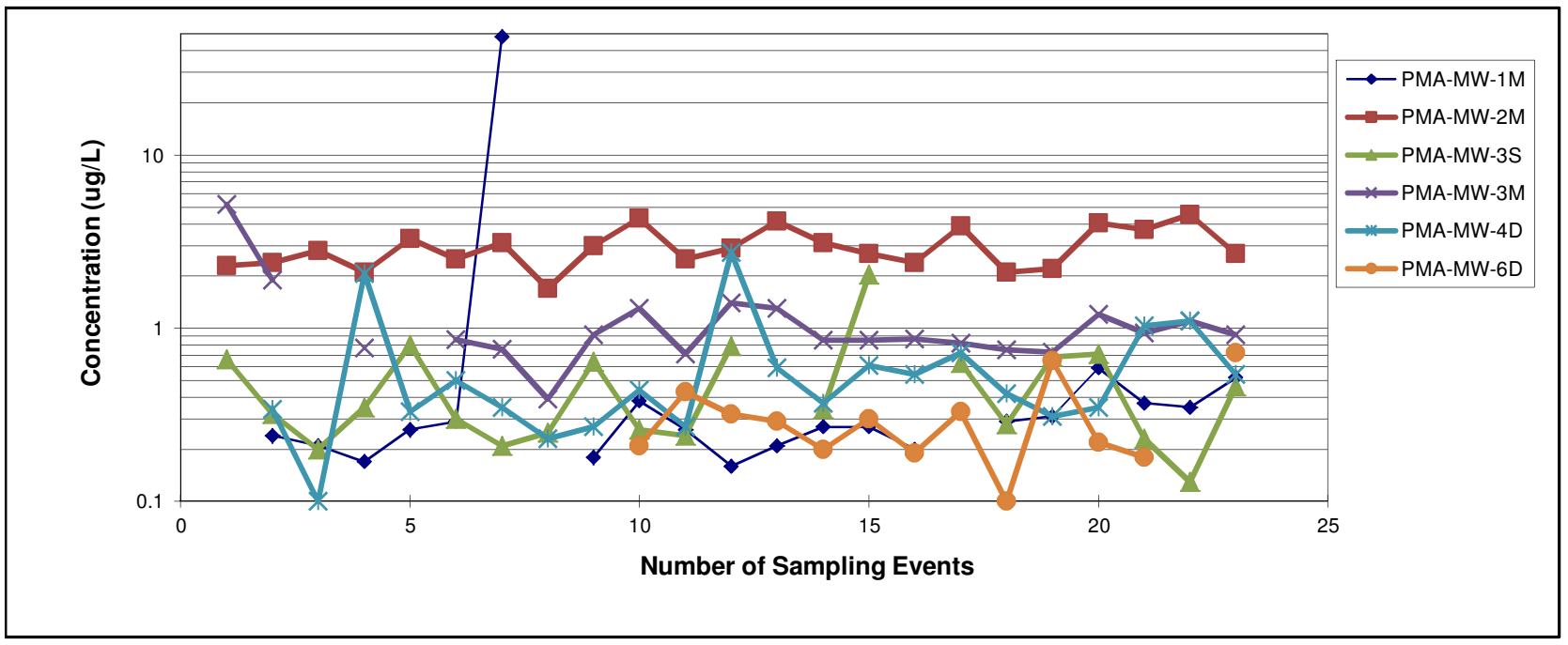
Table 2
Groundwater Analytical Detections

Sample ID	Sample Date	Units	Monochlorobiphenyl	Dichlorobiphenyl	Trichlorobiphenyl	Tetrachlorobiphenyl	Pentachlorobiphenyl	Hexachlorobiphenyl	Heptachlorobiphenyl	Octachlorobiphenyl	Nonachlorobiphenyl	Decachlorobiphenyl
Shallow Hydrologic Unit												
PMA-MW-1S-1111	11/18/2011	µg/L	<0.095	<0.095	<0.095	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47
PMA-MW-2S-1111	11/18/2011	µg/L	<0.095	<0.095	<0.095	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47
PMA-MW-3S-1111	11/18/2011	µg/L	**0.33**	**0.13**	<0.095	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47
PMA-MW-4S-1111	11/21/2011	µg/L	<9.4	**68**	**410**	**790**	**700**	**1,400**	**1,300**	**190**	<47	<47
Middle / Deep Hydrologic Unit												
PMA-MW-1M-1111	11/18/2011	µg/L	**0.52**	<0.094	<0.094	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47
PMA-MW-2M-1111	11/18/2011	µg/L	**2.7 J**	<0.094	<0.094	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47
PMA-MW-2M-1111-AD	11/18/2011	µg/L	**4 J**	<0.095	<0.095	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47
PMA-MW-3M-1111	11/21/2011	µg/L	**0.92**	<0.095	<0.095	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47
PMA-MW-4D-1111	11/21/2011	µg/L	**0.25**	**0.29**	<0.095	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47
PMA-MW-5M-1111	11/21/2011	µg/L	<0.094	<0.094	**0.25**	**0.26**	<0.19	**0.31**	<0.28	<0.28	<0.47	<0.47
PMA-MW-6D-1111	11/21/2011	µg/L	**0.2**	<0.094	**0.52**	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47

Notes:
µg/L = micrograms per liter
< = Result is non-detect, less than the reporting limit
AD = Analytical Duplicate
J = Estimated value
BOLD indicates concentration greater than the reporting limit

Table 3
Mann-Kendall Trend Analysis

Sampling Event	Quarter	TOTAL PCBs CONCENTRATION (ug/L)					
		PMA-MW-1M	PMA-MW-2M	PMA-MW-3S	PMA-MW-3M	PMA-MW-4D	PMA-MW-6D
1	2Q06	ND	2.3	0.66	5.18	NA	NA
2	3Q06	0.24	2.4	0.32	1.9	0.34	NA
3	4Q06	0.21	2.8	0.2	ND	0.1	NA
4	1Q07	0.17	2.1	0.35	0.77	2.07	NA
5	2Q07	0.26	3.3	0.8	ND	0.33	NA
6	3Q07	0.29	2.5	0.3	0.86	0.5	NA
7	4Q07	48	3.1	0.21	0.76	0.35	NA
8	1Q08	ND	1.7	0.25	0.39	0.23	NA
9	2Q08	0.18	3	0.64	0.92	0.27	NA
10	3Q08	0.38	4.3	0.26	1.3	0.44	0.21
11	4Q08	0.26	2.5	0.24	0.71	0.27	0.43
12	1Q09	0.16	2.9	0.79	1.4	2.73	0.32
13	2Q09	0.21	4.14	ND	1.3	0.59	0.29
14	3Q09	0.27	3.1	0.34	0.85	0.37	0.2
15	4Q09	0.27	2.7	2.03	0.85	0.61	0.3
16	1Q10	0.2	2.4	ND	0.87	0.54	0.19
17	2Q10	ND	3.9	0.63	0.82	0.72	0.33
18	3Q10	0.29	2.1	0.28	0.75	0.42	0.1
19	4Q10	0.31	2.199	0.68	0.73	0.31	0.65
20	1Q11	0.59	4.04	0.71	1.2	0.35	0.22
21	2Q11	0.37	3.7	0.23	0.94	1.03	0.18
22	3Q11	0.35	4.52	0.13	1.1	1.1	ND
23	4Q11	0.52	2.7	0.46	0.92	0.54	0.72
Coefficient of Variation:		3.99	0.27	0.82	0.83	0.97	0.58
Mann-Kendall Statistic (S):		72	54	2	-17	66	-2
Confidence in Trend:		99.0%	91.8%	51.2%	68.4%	96.7%	52.4%
Concentration Trend:		**Increasing**	Prob. Increasing	No Trend	Stable	**Increasing**	Stable



Notes:
1. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0).
   > 90% = Probably Increasing or Decreasing; >95% = Increasing or Decreasing
2. Values represent detected values. Values below the detection limit(s) are listed as non-detect (ND).
3. NA = Not Analyzed

Appendix A

Groundwater Purging and Sampling Forms

In-Situ Inc.

Troll 9000 | **Low-Flow System**
11/18/11 | **ISI Low-Flow Log**

Project Information:

Operator Name	Mike Corbett
Company Name	URS Corporation
Project Name	Solutia WGK
Site Name	Quarterly Groundwater Sampling - PCB

Pump Information:

Pump Model/Type	Proactive SS Monsoon
Tubing Type	LDPE
Tubing Diameter	0.19 [in]
Tubing Length	28.44 [ft]
Pump placement from TOC	0 [ft]

Well Information:

Well Id	PMA-MW-1S
Well diameter	2 [in]
Well total depth	24.94 [ft]
Depth to top of screen	19.94 [ft]
Screen length	60 [in]
Depth to Water	13.24 [ft]

Pumping information:

Final pumping rate	400 [mL/min]
Flowcell volume	758.57 [mL]
Calculated Sample Rate	114 [sec]
Sample rate	114 [sec]
Stabilized drawdown	0.4 [in]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm @25C]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
	0:00:00	0.00	0.00	0.00	0.00	0.00	0.00
	9:41:12	65.02	6.55	1371.49	1.61	0.45	218.39
Last 5 Readings	9:43:10	64.96	6.63	1381.43	1.02	0.18	216.26
	9:45:08	65.42	6.65	1401.24	0.68	0.10	214.59
	9:47:06	65.69	6.65	1409.21	0.19	0.07	212.97
	9:43:10	-0.06	0.07	9.94	-0.59	-0.27	-2.14
Variance in last 3 readings	9:45:08	0.45	0.02	19.81	-0.34	-0.08	-1.67
	9:47:06	0.27	0.01	7.97	-0.49	-0.03	-1.62

Notes:

In-Situ Inc.

Troll 9000 | **Low-Flow System**
11/18/11 | **ISI Low-Flow Log**

Project Information:

Operator Name	Mike Corbett
Company Name	URS Corporation
Project Name	Solutia WGK
Site Name	Quarterly Groundwater Sampling - PCB

Pump Information:

Pump Model/Type	Proactive SS Monsoon
Tubing Type	LDPE
Tubing Diameter	0.19 [in]
Tubing Length	62.8 [ft]
Pump placement from TOC	0 [ft]

Well Information:

Well Id	PMA-MW-1M
Well diameter	2 [in]
Well total depth	59.3 [ft]
Depth to top of screen	54.3 [ft]
Screen length	60 [in]
Depth to Water	14.15 [ft]

Pumping information:

Final pumping rate	400 [mL/min]
Flowcell volume	950.14 [mL]
Calculated Sample Rate	143 [sec]
Sample rate	143 [sec]
Stabilized drawdown	0.05 [in]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm @25C]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	10:26:29	64.29	6.80	2134.26	14.39	-0.02	27.42
	10:28:58	64.27	6.80	2155.12	12.49	-0.03	11.90
	10:31:26	64.30	6.80	2163.99	2.03	-0.04	0.48
	10:33:54	64.33	6.80	2180.55	7.09	-0.05	-8.28
	10:36:21	64.38	6.81	2167.30	4.47	-0.05	-15.55
Variance in last 3 readings	10:31:26	0.03	0.00	8.86	-10.46	-0.01	-11.42
	10:33:54	0.03	0.00	16.56	5.07	0.00	-8.76
	10:36:21	0.04	0.00	-13.25	-2.62	0.00	-7.27

Notes:

In-Situ Inc.

Troll 9000 | **Low-Flow System**
11/18/11 | **ISI Low-Flow Log**

Project Information:

Operator Name	Mike Corbett
Company Name	URS Corporation
Project Name	Solutia WGK
Site Name	Quarterly Groundwater Sampling - PCB

Pump Information:

Pump Model/Type	Proactive SS Monsoon
Tubing Type	LDPE
Tubing Diameter	0.19 [in]
Tubing Length	30.83 [ft]
Pump placement from TOC	0 [ft]

Well Information:

Well Id	PMA-MW-2S
Well diameter	2 [in]
Well total depth	27.33 [ft]
Depth to top of screen	22.33 [ft]
Screen length	60 [in]
Depth to Water	15.68 [ft]

Pumping information:

Final pumping rate	300 [mL/min]
Flowcell volume	771.89 [mL]
Calculated Sample Rate	155 [sec]
Sample rate	155 [sec]
Stabilized drawdown	0.07 [in]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm @25C]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	13:39:32	68.17	7.86	847.15	28.29	0.56	-14.32
	13:42:13	68.42	7.32	835.33	18.99	0.20	23.99
	13:44:52	68.63	7.14	832.13	10.91	0.16	38.27
	13:47:34	68.73	7.05	832.93	6.61	0.13	45.20
	13:50:14	68.93	7.00	833.10	3.92	0.08	48.58
Variance in last 3 readings	13:44:52	0.21	-0.18	-3.20	-8.08	-0.04	14.28
	13:47:34	0.10	-0.09	0.79	-4.30	-0.03	6.93
	13:50:14	0.20	-0.05	0.17	-2.69	-0.04	3.38

Notes:

In-Situ Inc.

Troll 9000 | **Low-Flow System**
11/18/11 | **ISI Low-Flow Log**

Project Information:

Operator Name	Mike Corbett
Company Name	URS Corporation
Project Name	Solutia WGK
Site Name	Quarterly Groundwater Sampling - PCB

Pump Information:

Pump Model/Type	Proactive SS Monsoon
Tubing Type	LDPE
Tubing Diameter	0.19 [in]
Tubing Length	65.04 [ft]
Pump placement from TOC	0 [ft]

Well Information:

Well Id	PMA-MW-2M
Well diameter	2 [in]
Well total depth	61.54 [ft]
Depth to top of screen	56.64 [ft]
Screen length	60 [in]
Depth to Water	15.85 [ft]

Pumping information:

Final pumping rate	400 [mL/min]
Flowcell volume	962.63 [mL]
Calculated Sample Rate	145 [sec]
Sample rate	145 [sec]
Stabilized drawdown	0.04 [in]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm @25C]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	12:51:38	66.32	7.35	2039.74	16.16	-0.04	16.30
	12:54:08	66.44	7.35	2042.74	13.50	-0.05	2.87
	12:56:38	66.56	7.35	2041.92	13.73	-0.05	-8.03
	12:59:08	66.32	7.35	2036.62	12.68	-0.06	-16.76
	13:01:39	66.59	7.35	2043.39	12.14	-0.06	-23.73
Variance in last 3 readings	12:56:38	0.12	0.00	-0.82	0.23	0.00	-10.91
	12:59:08	-0.24	0.00	-5.29	-1.05	0.00	-8.72
	13:01:39	0.27	-0.01	6.76	-0.54	0.00	-6.97

Notes:

In-Situ Inc.

Troll 9000 | **Low-Flow System**
11/18/11 | **ISI Low-Flow Log**

Project Information:

Operator Name	Mike Corbett
Company Name	URS Corporation
Project Name	Solutia WGK
Site Name	Quarterly Groundwater Sampling - PCB

Pump Information:

Pump Model/Type	Proactive SS Monsoon
Tubing Type	LDPE
Tubing Diameter	0.19 [in]
Tubing Length	30.9 [ft]
Pump placement from TOC	0 [ft]

Well Information:

Well Id	PMA-MW-3S
Well diameter	2 [in]
Well total depth	27.4 [ft]
Depth to top of screen	22.4 [ft]
Screen length	60 [in]
Depth to Water	15.83 [ft]

Pumping information:

Final pumping rate	300 [mL/min]
Flowcell volume	772.28 [mL]
Calculated Sample Rate	155 [sec]
Sample rate	155 [sec]
Stabilized drawdown	0 [in]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm @25C]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	14:43:41	67.25	6.71	3078.53	19.58	0.05	101.74
	14:46:22	67.23	6.71	3080.58	17.48	0.05	100.15
	14:49:02	67.36	6.71	3083.02	12.27	0.04	98.66
	14:51:43	67.39	6.71	3086.19	10.35	0.04	97.42
	14:54:23	67.34	6.71	3086.95	8.20	0.03	96.26
Variance in last 3 readings	14:49:02	0.13	0.00	2.44	-5.21	-0.01	-1.50
	14:51:43	0.03	0.00	3.17	-1.92	0.00	-1.24
	14:54:23	-0.05	0.00	0.76	-2.15	0.00	-1.16

Notes:

In-Situ Inc.

Troll 9000 | **Low-Flow System**
11/21/11 | **ISI Low-Flow Log**

Project Information:

Operator Name	Mike Corbett
Company Name	URS Corporation
Project Name	Solutia WGK
Site Name	Quarterly Groundwater Sampling - PCB

Pump Information:

Pump Model/Type	Proactive SS Monsoon
Tubing Type	LDPE
Tubing Diameter	0.19 [in]
Tubing Length	65.31 [ft]
Pump placement from TOC	0 [ft]

Well Information:

Well Id	PMA-MW-3M
Well diameter	2 [in]
Well total depth	61.81 [ft]
Depth to top of screen	56.81 [ft]
Screen length	60 [in]
Depth to Water	16.14 [ft]

Pumping information:

Final pumping rate	300 [mL/min]
Flowcell volume	964.13 [mL]
Calculated Sample Rate	193 [sec]
Sample rate	193 [sec]
Stabilized drawdown	0 [in]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm @25C]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	9:38:14	65.21	8.58	2505.81	11.69	-0.02	50.21
	9:41:34	65.24	8.60	2505.18	14.50	-0.03	36.44
	9:44:54	65.19	8.61	2503.95	2.46	-0.04	24.85
	9:48:14	65.19	8.62	2502.25	2.96	-0.06	14.93
	9:51:34	65.24	8.63	2502.35	3.25	-0.06	6.29
Variance in last 3 readings	9:44:54	-0.05	0.01	-1.23	-12.04	-0.01	-11.59
	9:48:14	0.00	0.01	-1.69	0.51	-0.02	-9.92
	9:51:34	0.05	0.01	0.10	0.29	-0.01	-8.64

Notes:

In-Situ Inc.

Troll 9000 | **Low-Flow System**
11/21/11 | **ISI Low-Flow Log**

Project Information:

Operator Name	Mike Corbett
Company Name	URS Corporation
Project Name	Solutia WGK
Site Name	Quarterly Groundwater Sampling - PCB

Pump Information:

Pump Model/Type	Proactive SS Monsoon
Tubing Type	LDPE
Tubing Diameter	0.19 [in]
Tubing Length	28.83 [ft]
Pump placement from TOC	0 [ft]

Well Information:

Well Id	PMA-MW-4S
Well diameter	2 [in]
Well total depth	25.33 [ft]
Depth to top of screen	20.33 [ft]
Screen length	60 [in]
Depth to Water	15.05 [ft]

Pumping information:

Final pumping rate	300 [mL/min]
Flowcell volume	760.74 [mL]
Calculated Sample Rate	153 [sec]
Sample rate	153 [sec]
Stabilized drawdown	0 [in]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm @25C]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	13:01:42	66.71	6.85	3623.01	23.06	0.03	9.55
	13:04:22	66.85	6.80	3591.79	16.43	0.01	-4.56
	13:06:59	66.91	6.77	3567.84	11.90	-0.01	-16.71
	13:09:38	66.94	6.75	3555.24	11.97	-0.02	-26.75
	13:12:17	66.92	6.74	3568.07	10.21	-0.03	-35.14
Variance in last 3 readings	13:06:59	0.06	-0.03	-23.94	-4.53	-0.01	-12.14
	13:09:38	0.03	-0.02	-12.60	0.08	-0.01	-10.05
	13:12:17	-0.02	-0.01	12.83	-1.77	-0.01	-8.38

Notes:

In-Situ Inc.

Troll 9000 | **Low-Flow System**
11/21/11 | **ISI Low-Flow Log**

Project Information:

Operator Name	Mike Corbett
Company Name	URS Corporation
Project Name	Solutia WGK
Site Name	Quarterly Groundwater Sampling - PCB

Pump Information:

Pump Model/Type	Proactive SS Monsoon
Tubing Type	LDPE
Tubing Diameter	0.19 [in]
Tubing Length	76 [ft]
Pump placement from TOC	0 [ft]

Well Information:

Well Id	PMA-MW-4D
Well diameter	2 [in]
Well total depth	73.5 [ft]
Depth to top of screen	68.5 [ft]
Screen length	60 [in]
Depth to Water	14.86 [ft]

Pumping information:

Final pumping rate	400 [mL/min]
Flowcell volume	1023.73 [mL]
Calculated Sample Rate	154 [sec]
Sample rate	154 [sec]
Stabilized drawdown	0.03 [in]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm @25C]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	10:38:22	64.58	6.74	2073.63	79.29	-0.04	-68.04
	10:41:01	64.58	6.73	2079.35	255.15	-0.05	-76.72
	10:43:40	64.51	6.72	2084.21	65.83	-0.04	-83.87
	10:46:20	64.51	6.71	2087.10	21.02	-0.06	-90.11
	10:49:00	64.46	6.71	2090.52	30.72	-0.06	-95.29
Variance in last 3 readings	10:43:40	-0.07	-0.01	4.86	-189.32	0.01	-7.14
	10:46:20	0.00	0.00	2.89	-44.81	-0.02	-6.25
	10:49:00	-0.05	-0.01	3.42	9.69	0.00	-5.18

Notes:

In-Situ Inc.

Troll 9000 | **Low-Flow System**
11/21/11 | **ISI Low-Flow Log**

Project Information:

Operator Name	Mike Corbett
Company Name	URS Corporation
Project Name	Solutia WGK
Site Name	Quarterly Groundwater Sampling - PCB

Pump Information:

Pump Model/Type	Proactive SS Monsoon
Tubing Type	LDPE
Tubing Diameter	0.19 [in]
Tubing Length	60.37 [ft]
Pump placement from TOC	0 [ft]

Well Information:

Well Id	PMA-MW-5M
Well diameter	2 [in]
Well total depth	56.87 [ft]
Depth to top of screen	51.87 [ft]
Screen length	60 [in]
Depth to Water	15.24 [ft]

Pumping information:

Final pumping rate	300 [mL/min]
Flowcell volume	936.59 [mL]
Calculated Sample Rate	188 [sec]
Sample rate	188 [sec]
Stabilized drawdown	0.01 [in]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm @25C]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
	0:00:00	0.00	0.00	0.00	0.00	0.00	0.00
	13:57:36	64.39	7.13	2276.23	1.61	0.25	-26.68
Last 5 Readings	14:00:51	64.75	7.06	2274.11	0.96	0.11	-28.02
	14:04:05	64.79	7.04	2278.19	1.85	0.06	-32.09
	14:07:20	64.89	7.03	2282.07	1.35	0.04	-36.32
	14:00:51	0.35	-0.08	-2.12	-0.65	-0.15	-1.33
Variance in last 3 readings	14:04:05	0.05	-0.02	4.08	0.89	-0.05	-4.07
	14:07:20	0.10	-0.01	3.88	-0.50	-0.02	-4.24

Notes:

In-Situ Inc.

Troll 9000 | **Low-Flow System**
11/21/11 | **ISI Low-Flow Log**

Project Information:

Operator Name	Mike Corbett
Company Name	URS Corporation
Project Name	Solutia WGK
Site Name	Quarterly Groundwater Sampling - PCB

Pump Information:

Pump Model/Type	Proactive SS Monsoon
Tubing Type	LDPE
Tubing Diameter	0.19 [in]
Tubing Length	104.68 [ft]
Pump placement from TOC	0 [ft]

Well Information:

Well Id	PMA-MW-6D
Well diameter	2 [in]
Well total depth	101.18 [ft]
Depth to top of screen	96.18 [ft]
Screen length	60 [in]
Depth to Water	12.5 [ft]

Pumping information:

Final pumping rate	300 [mL/min]
Flowcell volume	1183.64 [mL]
Calculated Sample Rate	237 [sec]
Sample rate	237 [sec]
Stabilized drawdown	0.02 [in]

Low-Flow Sampling Stabilization Summary

	Time	Temp [F]	pH [pH]	Cond [µS/cm @25C]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.2	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.2 +/-10 %	+/-20
Last 5 Readings	14:46:09	65.32	7.19	1225.90	18.19	0.10	-57.93
	14:50:15	65.45	7.11	1227.46	9.84	0.05	-75.63
	14:54:21	65.51	7.08	1225.82	6.66	0.02	-88.29
	14:58:28	65.58	7.06	1223.55	7.29	0.00	-97.87
	15:02:33	65.60	7.05	1221.98	7.83	-0.01	-105.48
Variance in last 3 readings	14:54:21	0.05	-0.03	-1.64	-3.18	-0.03	-12.66
	14:58:28	0.07	-0.02	-2.27	0.63	-0.02	-9.58
	15:02:33	0.03	-0.01	-1.57	0.54	-0.01	-7.61

Notes:

Appendix B

Chains-of-Custody

Savannah
5102 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Dave Palmer	Site Contact: Nathan McNurlen	Date: 11/18/11	COC No:
URS Corporation	Tel/Fax: (314) 743-4154	Lab Contact: Lidya Gulizia	Carrier: Fed Ex	1 of 1 COCs
1001 Highlands Plaza Drive West, Suite 300	Analysis Turnaround Time			Job No. 21562682.00004
St. Louis, MO 63110	Calendar (C) or Work Days (W) C			
(314) 429-0100 Phone	TAT if different from Below			SDG No.
(314) 429-0462 FAX	☒ 2 weeks			
Project Name: 4Q11 PCB GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Total PCBs by 680	Sample Specific Notes:
PMA-MW- 1S -1111	11/18/11	955	G	Water	2	2	
PMA-MW- 1S -1111-MS		955	G	Water	2	2	
PMA-MW- 1S -1111-MSD		955	G	Water	2	2	
PMA-MW- 1M -1111		1040	G	Water	2	2	
PMA-MW- 2M -1111		1310	G	Water	2	2	
PMA-MW- 2M -1111-AD		1310	G	Water	2	2	
PMA-MW- 2S -1111		1400	G	Water	2	2	
PMA-MW- 3S -1111	↓	1500	G	Water	2	2	
4Q11 PCB Trip Blank #___				Water			

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

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

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

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

680 — 74593 3.8°C / 4.3°C

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	URS	11/18/11 1630		TA	11/18/11 1630
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TA	11/18/11 1730			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
				TASAV	11/21/11 0919

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: Nathan McNurlen		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. 21562682.00004
St. Louis, MO 63110	Calendar (C) or Work Days (W) C			~~21562709.00003~~ no 680-74627
(314) 429-0100 Phone	TAT if different from Below ______			SOG No.
(314) 429-0462 FAX	☒ 2 weeks			
Project Name: 4Q11 PCB GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Total PCBs by 680	Sample Specific Notes:
PMA-MW-3M-1111 ✓	11/21/11	1000	G	Water	2		2	
PMA-MW-4D-1111 ✓	↓	1055	G	Water	2		2	
PMA-MW-4S-1111 ✓		1310	G	Water	2		2	
PMA-MW-5M-1111 ✓		1410	G	Water	2		2	
PMA-MW-6D-1111 ✓		1510	G	Water	2		2	
PMA-MW-3M-1111-EB ✓	↓	0820	G	Water	2		2	
4Q11 PCB Trip Blank #____				Water	2		2	

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

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

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

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

Temp 1.0°C, 2.0°C

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	URS	11/21/11 1630	[signature]	TA	11-21-11 1610
[signature]	TA	11/21/11 1830	Beth A Doughty	TA SAV	11-22-11 1137

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JAN 16 2012

Appendix C

Quality Assurance Report

QUALITY ASSURANCE REPORT

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

PCB Groundwater Quality Assessment Program
4th Quarter 2011 Data Report

Prepared for

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

January 2012

URS Corporation
1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
(314) 429-0100
Project # 21562682.00004

1.0 INTRODUCTION

This Quality Assurance Report presents the findings of a review of analytical data for groundwater samples collected in November of 2011 at the Solutia W.G. Krummrich plant as part of the 4th Quarter 2011 PCB Groundwater Quality Assessment Program. The samples were collected by URS Corporation personnel and analyzed by TestAmerica Laboratories located in Savannah, Georgia using USEPA methodologies. Samples were analyzed for polychlorinated biphenyls (PCBs).

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

A total of 13 samples (ten investigative groundwater samples, one field duplicate, one matrix spike and matrix spike duplicate (MS/MSD) pair, and one equipment blank were analyzed by TestAmerica. These samples were analyzed as part of Sample Delivery Group (SDG) KPM044 utilizing the following USEPA Method:

- Method 680 for PCBs

Samples were reviewed following procedures outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, (USEPA 2008) and the Revised PCB Groundwater Quality Assessment Work Plan, (Solutia 2009).

The above guidelines provided the criteria to review the data. Additional quantitative criteria are given in the analytical methods. Data was qualified based on the data quality review. Qualifiers assigned indicate data that did not meet acceptance criteria and for which 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.
N	MS, MSD: Spike recovery exceeds upper or lower control limits.
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 to be the percentage of analytical results which are judged to be valid, including estimated detect/nondetect (**J**/**UJ**) values 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, and field equipment 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

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.

The cooler receipt form indicated that one out of four coolers were received by the laboratory at 1.0°C which is outside the 4°C ± 2°C criteria. The samples were received in good condition; therefore no qualification of data was required. Additionally, although the cooler receipt form indicated insufficient sample volume was received for MS/MSD analysis, sample PMA-MW-1S-1111 contained sufficient sample volume to complete the requested analysis.

Additionally, the laboratory case narrative indicated the laboratory report was revised on 1/16/2012 to include the second page of the COC, which had previously been inadvertently omitted by the laboratory.

3.0 LABORATORY METHOD BLANK AND EQUIPMENT BLANK SAMPLES

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. No analytes were detected in the method blanks.

Equipment blank samples are used to assess the effectiveness of equipment decontamination procedures. No analytes were detected in the equipment blank sample.

4.0 SURROGATE SPIKE RECOVERIES

Surrogate compounds are used to evaluate overall laboratory performance for sample preparation efficiency on a per sample basis. All samples analyzed for PCBs 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 evaluation criteria. Surrogate recoveries were within evaluation criteria. Surrogates that were associated with quality control samples or were diluted out and not recovered did not require qualification. No qualification of data was required.

5.0 LABORATORY CONTROL SAMPLE RECOVERIES

Laboratory control samples (LCS) are analyzed with each analytical batch to assess the accuracy of the analytical process. All 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 ten investigative samples, meeting the work plan frequency requirement.

Sample PMA-MW-1S-1111 was spiked and analyzed as MS/MSDs and their respective recoveries were within evaluation criteria with the exception summarized in the following table:

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery	RPD	MS/MSD/RPD Criteria
PMA-MW-1S-1111-MS/MSD	PCBs	DCB Decachlorobiphenyl	NA/NA	2	26-115/40

PCB MS/MSD recoveries for DCB Decachlorobiphenyl exceeded calibration range in sample PMA-MW-1S-1111. USEPA National Functional Guidelines for Organic Data Review indicates that organic data does not require qualification based on MS/MSD data alone; LCS/LCSD recoveries were within evaluation criteria. 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.

One field duplicate sample was collected for the ten investigative samples. This satisfies the requirement in the work plan (one per 10 investigative samples or 10 percent). Field duplicate results were within evaluation criteria with the exception summarized in the following table:

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
PMA-MW-2M-1111	PMA-MW-2M-1111-AD	PCBs	Monochlorobiphenyl	**39**	**J/J**

8.0 INTERNAL STANDARD RESPONSES

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. For the PCBs (Method 680), the IS areas must be within +/- 30 percent of the preceding calibration verification (CV) IS value. Also, the IS retention times must be within 30 seconds of the preceding IS CV retention time. If the IS area count is outside criteria, Method 680 indicates the mean IS area obtained during the initial calibration (ICAL) (+/- 50 percent) should be used.

The internal standards area responses for PCBs were verified for the data review. IS responses met the criteria as described above with the exception summarized in the following table:

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
PMA-MW-6D-1111	PCBs	Phenanthrene-d_{10}	**164546**	86874-161337
PMA-MW-6D-1111	PCBs	Chrysene-d_{12}	**184316**	89760-166696

Internal standard areas for phenanthrene-d_{10} and chrysene-d_{12} were recovered within the initial calibration average internal standard areas; therefore, no qualification of data was required.

9.0 RESULTS REPORTED FROM DILUTIONS

Sample PMA-MW-4S-1111 was diluted due to high levels of PCBs in the sample. The diluted sample results for PCBs were reported at the lowest possible reporting limits.

Appendix D

Groundwater Analytical Results
(with Data Review Reports)

4Q 2011 PCB Data Review

Laboratory SDG: KPM044

Data Reviewer: Melissa Mansker

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 1/16/2012

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

Work Plan: Revised PCB Groundwater Quality Assessment (Solutia 2009)

Sample Identification	
PMA-MW-1S-1111	PMA-MW-1M-1111
PMA-MW-2M-1111	PMA-MW-2M-1111-AD
PMA-MW-2S-1111	PMA-MW-3S-1111
PMA-MW-3M-1111	PMA-MW-4D-1111
PMA-MW-4S-1111	PMA-MW-5M-1111
PMA-MW-6D-1111	PMA-MW-3M-1111-EB

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 PCB surrogates were diluted out and not recovered in sample PMA-MW-4S-1111. Sample PMA-MW-4S-1111 was diluted due to high levels of target analytes. Although not indicated in the laboratory case narrative, PCB MS/MSD recoveries for DCB Decachlorobiphenyl exceeded calibration range in sample PMA-MW-1S-1111. Internal standard area recoveries for sample PMA-MW-6D-1111 were outside evaluation criteria. Monochlorobiphenyl was qualified due to field duplicate RPD outside evaluation criteria in field duplicate pair, PMA-MW-2M-1111/PMA-MS-2M-1111-AD. Additionally, the laboratory case narrative indicated the laboratory report was revised on 1/16/2012 to include the second page of the COC, which had previously been inadvertently omitted by the laboratory. These issues are addressed further in the appropriate sections below.

The cooler receipt form indicated that one out of four coolers were received by the laboratory at 1.0℃ which is outside the 4℃ ± 2℃ criteria. The samples were received in good condition; therefore no qualification of data was required. Additionally, although the cooler receipt form indicated insufficient sample volume was received for MS/MSD analysis, sample PMA-MW-1S-1111 contained sufficient sample volume to complete the requested analysis.

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?

Surrogates were diluted out and not recovered in sample PMA-MW-4S-1111. No qualification of data is required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample PMA-MW-1S-1111 was spiked and analyzed for PCBs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery	RPD	MS/MSD/RPD Criteria
PMA-MW-1S-1111-MS/MSD	PCBs	DCB Decachlorobiphenyl	NA/NA	2	26-115/40

PCB MS/MSD recoveries for DCB Decachlorobiphenyl exceeded calibration range in sample PMA-MW-1S-1111. USEPA National Functional Guidelines for Organic Data Review indicates that organic data does not require qualification based on MS/MSD data alone; LCS/LCSD recoveries were within evaluation criteria. No qualification of data was required.

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
PMA-MW-6D-1111	PCBs	Phenanthrene-d_{10}	**164546**	86874-161337
PMA-MW-6D-1111	PCBs	Chrysene-d_{12}	**184316**	89760-166696

Internal standard areas for phenanthrene-d_{10} and chrysene-d_{12} were recovered within the

initial calibration average internal standard areas; therefore, no qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples performed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Sample ID	Field Duplicate ID
PMA-MW-2M-1111	PMA-MW-2M-1111-AD

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
PMA-MW-2M-1111	PMA-MW-2M-1111-AD	PCBs	Monochlorobiphenyl	**39**	**J/J**

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

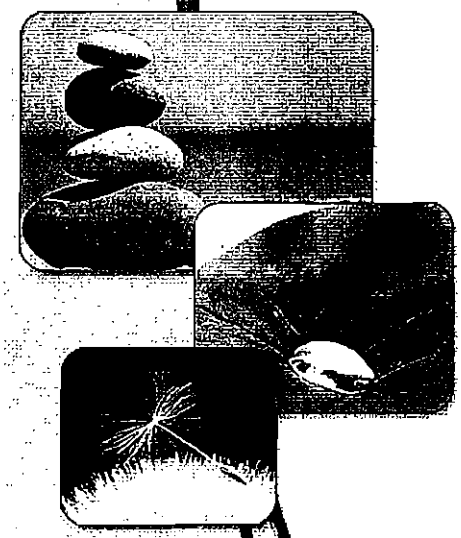
SDG KPM044

Results of Samples from Monitoring Wells:

PMA-MW-1S
PMA-MW-1M
PMA-MW-2S
PMA-MW-2M
PMA-MW-3S
PMA-MW-3M
PMA-MW-4S
PMA-MW-4D
PMA-MW-5M
PMA-MW-6D

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: 680-74593-1
TestAmerica Sample Delivery Group: KPM044
Client Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011
Revision: 1

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

Attn: Mr. Jerry Rinaldi

Lidya Gulizia

Authorized for release by:
1/16/2012 4:38:02 PM

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

cc: Bob Billman

Reviewed on 1/16/2012

Table of Contents

JAN 16 2012

Case Narrative

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Job ID: 680-74593-1

Laboratory: TestAmerica Savannah

Narrative

Job Narrative
680-74593-1 Revised

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

GC/MS Semi VOA
Method(s) 680: The following sample(s) was diluted due to abundance of target analytes : PMA-MW-4S-1111 (680-74627-3). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Comments
The report was revised on January 16, 2012 to correct the chain-of-custody (COC) section in the report and associated data package.

No additional comments.

JAN 16 2012

TestAmerica Savannah

Sample Summary

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-74593-1	PMA-MW-1S-1111	Water	11/18/11 09:55	11/21/11 09:19
680-74593-2	PMA-MW-1M-1111	Water	11/18/11 10:40	11/21/11 09:19
680-74593-3	PMA-MW-2M-1111	Water	11/18/11 13:10	11/21/11 09:19
680-74593-4	PMA-MW-2M-1111-AD	Water	11/18/11 13:10	11/21/11 09:19
680-74593-5	PMA-MW-2S-1111	Water	11/18/11 14:00	11/21/11 09:19
680-74593-6	PMA-MW-3S-1111	Water	11/18/11 15:00	11/21/11 09:19
680-74627-1	PMA-MW-3M-1111	Water	11/21/11 10:00	11/22/11 11:37
680-74627-2	PMA-MW-4D-1111	Water	11/21/11 10:55	11/22/11 11:37
680-74627-3	PMA-MW-4S-1111	Water	11/21/11 13:10	11/22/11 11:37
680-74627-4	PMA-MW-5M-1111	Water	11/21/11 14:01	11/22/11 11:37
680-74627-5	PMA-MW-6D-1111	Water	11/21/11 15:10	11/22/11 11:37
680-74627-6	PMA-MW-3M-1111-EB	Water	11/21/11 08:20	11/22/11 11:37

4

JAN 16 2012

TestAmerica Savannah

Method Summary

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Method	Method Description	Protocol	Laboratory
680	Polychlorinated Biphenyls (PCBs) (GC/MS)	EPA	TAL SAV

5

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

JAN 16 2012

TestAmerica Savannah

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
E	Result exceeded calibration range.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

6

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)

JAN 16 2012

TestAmerica Savannah

Detection Summary

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-1S-1111 — Lab Sample ID: 680-74593-1

No Detections

Client Sample ID: PMA-MW-1M-1111 — Lab Sample ID: 680-74593-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Monochlorobiphenyl	0.52		0.094		ug/L	1		680	Total/NA

Client Sample ID: PMA-MW-2M-1111 — Lab Sample ID: 680-74593-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Monochlorobiphenyl	2.7	J	0.094		ug/L	1		680	Total/NA

Client Sample ID: PMA-MW-2M-1111-AD — Lab Sample ID: 680-74593-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Monochlorobiphenyl	4.0	J	0.095		ug/L	1		680	Total/NA

Client Sample ID: PMA-MW-2S-1111 — Lab Sample ID: 680-74593-5

No Detections

Client Sample ID: PMA-MW-3S-1111 — Lab Sample ID: 680-74593-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Monochlorobiphenyl	0.33		0.095		ug/L	1		680	Total/NA
Dichlorobiphenyl	0.13		0.095		ug/L	1		680	Total/NA

Client Sample ID: PMA-MW-3M-1111 — Lab Sample ID: 680-74627-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Monochlorobiphenyl	0.92		0.095		ug/L	1		680	Total/NA

Client Sample ID: PMA-MW-4D-1111 — Lab Sample ID: 680-74627-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Monochlorobiphenyl	0.25		0.095		ug/L	1		680	Total/NA
Dichlorobiphenyl	0.29		0.095		ug/L	1		680	Total/NA

Client Sample ID: PMA-MW-4S-1111 — Lab Sample ID: 680-74627-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorobiphenyl	68		9.4		ug/L	100		680	Total/NA
Trichlorobiphenyl	410		9.4		ug/L	100		680	Total/NA
Tetrachlorobiphenyl	790		19		ug/L	100		680	Total/NA
Pentachlorobiphenyl	700		19		ug/L	100		680	Total/NA
Hexachlorobiphenyl	1400		19		ug/L	100		680	Total/NA
Heptachlorobiphenyl	1300		28		ug/L	100		680	Total/NA
Octachlorobiphenyl	190		28		ug/L	100		680	Total/NA

Client Sample ID: PMA-MW-5M-1111 — Lab Sample ID: 680-74627-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichlorobiphenyl	0.25		0.094		ug/L	1		680	Total/NA
Tetrachlorobiphenyl	0.26		0.19		ug/L	1		680	Total/NA
Hexachlorobiphenyl	0.31		0.19		ug/L	1		680	Total/NA

TestAmerica Savannah

JAN 16 2012

Detection Summary

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-6D-1111 — **Lab Sample ID: 680-74627-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Monochlorobiphenyl	0.20		0.094		ug/L	1		680	Total/NA
Trichlorobiphenyl	0.52		0.094		ug/L	1		680	Total/NA

Client Sample ID: PMA-MW-3M-1111-EB — **Lab Sample ID: 680-74627-6**

No Detections

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JAN 16 2012

TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-1S-1111
Date Collected: 11/18/11 09:55
Date Received: 11/21/11 09:19

Lab Sample ID: 680-74593-1
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 10:58	1
Dichlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 10:58	1
Trichlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 10:58	1
Tetrachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 10:58	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 10:58	1
Hexachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 10:58	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 10:58	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 10:58	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 10:58	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 10:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*66*		*25 - 113*	*11/23/11 14:16*	*11/29/11 10:58*	*1*

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JAN 16 2012

TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-1M-1111
Date Collected: 11/18/11 10:40
Date Received: 11/21/11 09:19

Lab Sample ID: 680-74593-2
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	0.52		0.094		ug/L		11/23/11 14:16	11/29/11 11:29	1
Dichlorobiphenyl	0.094	U	0.094		ug/L		11/23/11 14:16	11/29/11 11:29	1
Trichlorobiphenyl	0.094	U	0.094		ug/L		11/23/11 14:16	11/29/11 11:29	1
Tetrachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 11:29	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 11:29	1
Hexachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 11:29	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 11:29	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 11:29	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 11:29	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*59*		*25 - 113*	*11/23/11 14:16*	*11/29/11 11:29*	*1*

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JAN 16 2012
TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-2M-1111
Date Collected: 11/18/11 13:10
Date Received: 11/21/11 09:19

Lab Sample ID: 680-74593-3
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	2.7		0.094		ug/L		11/23/11 14:16	11/29/11 11:59	1
Dichlorobiphenyl	0.094	U	0.094		ug/L		11/23/11 14:16	11/29/11 11:59	1
Trichlorobiphenyl	0.094	U	0.094		ug/L		11/23/11 14:16	11/29/11 11:59	1
Tetrachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 11:59	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 11:59	1
Hexachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 11:59	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 11:59	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 11:59	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 11:59	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*46*		*25 - 113*	*11/23/11 14:16*	*11/29/11 11:59*	*1*

8

JAN 16 2012

TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-2M-1111-AD
Date Collected: 11/18/11 13:10
Date Received: 11/21/11 09:19

Lab Sample ID: 680-74593-4
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	4.0		0.095		ug/L		11/23/11 14:16	11/29/11 12:29	1
Dichlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 12:29	1
Trichlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 12:29	1
Tetrachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 12:29	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 12:29	1
Hexachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 12:29	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 12:29	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 12:29	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 12:29	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*49*		*25 - 113*	*11/23/11 14:16*	*11/29/11 12:29*	*1*

8

JAN 16 2012

TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-2S-1111
Date Collected: 11/18/11 14:00
Date Received: 11/21/11 09:19

Lab Sample ID: 680-74593-5
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 16:07	1
Dichlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 16:07	1
Trichlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 16:07	1
Tetrachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 16:07	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 16:07	1
Hexachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 16:07	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 16:07	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 16:07	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 16:07	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*63*		*25 - 113*	*11/23/11 14:16*	*11/29/11 16:07*	*1*

8

JAN 16 2012

TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-3S-1111
Date Collected: 11/18/11 15:00
Date Received: 11/21/11 09:19

Lab Sample ID: 680-74593-6
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	**0.33**		0.095		ug/L		11/23/11 14:16	11/29/11 16:38	1
Dichlorobiphenyl	**0.13**		0.095		ug/L		11/23/11 14:16	11/29/11 16:38	1
Trichlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 16:38	1
Tetrachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 16:38	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 16:38	1
Hexachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 16:38	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 16:38	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 16:38	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 16:38	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*71*		*25 - 113*	*11/23/11 14:16*	*11/29/11 16:38*	*1*

8

JAN 16 2012

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-3M-1111
Date Collected: 11/21/11 10:00
Date Received: 11/22/11 11:37

Lab Sample ID: 680-74627-1
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	0.92		0.095		ug/L		11/23/11 14:16	11/29/11 17:08	1
Dichlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 17:08	1
Trichlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 17:08	1
Tetrachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 17:08	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 17:08	1
Hexachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 17:08	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 17:08	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 17:08	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 17:08	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*63*		*25 - 113*	*11/23/11 14:16*	*11/29/11 17:08*	*1*

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JAN 16 2012

TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-4D-1111
Date Collected: 11/21/11 10:55
Date Received: 11/22/11 11:37

Lab Sample ID: 680-74627-2
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	0.25		0.095		ug/L		11/23/11 14:16	11/29/11 17:38	1
Dichlorobiphenyl	0.29		0.095		ug/L		11/23/11 14:16	11/29/11 17:38	1
Trichlorobiphenyl	0.095	U	0.095		ug/L		11/23/11 14:16	11/29/11 17:38	1
Tetrachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 17:38	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 17:38	1
Hexachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 17:38	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 17:38	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 17:38	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 17:38	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*56*		*25 - 113*	*11/23/11 14:16*	*11/29/11 17:38*	*1*

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JAN 16 2012

TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-4S-1111
Date Collected: 11/21/11 13:10
Date Received: 11/22/11 11:37

Lab Sample ID: 680-74627-3
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	9.4	U	9.4		ug/L		11/23/11 14:16	11/30/11 12:31	100
Dichlorobiphenyl	68		9.4		ug/L		11/23/11 14:16	11/30/11 12:31	100
Trichlorobiphenyl	410		9.4		ug/L		11/23/11 14:16	11/30/11 12:31	100
Tetrachlorobiphenyl	790		19		ug/L		11/23/11 14:16	11/30/11 12:31	100
Pentachlorobiphenyl	700		19		ug/L		11/23/11 14:16	11/30/11 12:31	100
Hexachlorobiphenyl	1400		19		ug/L		11/23/11 14:16	11/30/11 12:31	100
Heptachlorobiphenyl	1300		28		ug/L		11/23/11 14:16	11/30/11 12:31	100
Octachlorobiphenyl	190		28		ug/L		11/23/11 14:16	11/30/11 12:31	100
Nonachlorobiphenyl	47	U	47		ug/L		11/23/11 14:16	11/30/11 12:31	100
DCB Decachlorobiphenyl	47	U	47		ug/L		11/23/11 14:16	11/30/11 12:31	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12				*11/23/11 14:16*	*11/30/11 12:31*	*100*

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JAN 16 2012

TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-5M-1111
Date Collected: 11/21/11 14:01
Date Received: 11/22/11 11:37

Lab Sample ID: 680-74627-4
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	0.094	U	0.094		ug/L		11/23/11 14:16	11/29/11 18:39	1
Dichlorobiphenyl	0.094	U	0.094		ug/L		11/23/11 14:16	11/29/11 18:39	1
Trichlorobiphenyl	**0.25**		0.094		ug/L		11/23/11 14:16	11/29/11 18:39	1
Tetrachlorobiphenyl	**0.26**		0.19		ug/L		11/23/11 14:16	11/29/11 18:39	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/29/11 18:39	1
Hexachlorobiphenyl	**0.31**		0.19		ug/L		11/23/11 14:16	11/29/11 18:39	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 18:39	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/29/11 18:39	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 18:39	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/29/11 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*60*		*25 - 113*	*11/23/11 14:16*	*11/29/11 18:39*	*1*

8

JAN 16 2012

TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-6D-1111
Date Collected: 11/21/11 15:10
Date Received: 11/22/11 11:37

Lab Sample ID: 680-74627-5
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	0.20	J	0.094		ug/L		11/23/11 14:16	11/30/11 04:21	1
Dichlorobiphenyl	0.094	U	0.094		ug/L		11/23/11 14:16	11/30/11 04:21	1
Trichlorobiphenyl	0.52	J	0.094		ug/L		11/23/11 14:16	11/30/11 04:21	1
Tetrachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/30/11 04:21	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/30/11 04:21	1
Hexachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/30/11 04:21	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/30/11 04:21	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/30/11 04:21	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/30/11 04:21	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/30/11 04:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*60*		*25 - 113*	*11/23/11 14:16*	*11/30/11 04:21*	*1*

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JAN 16 2012
TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-3M-1111-EB
Date Collected: 11/21/11 08:20
Date Received: 11/22/11 11:37

Lab Sample ID: 680-74627-6
Matrix: Water

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	0.094	U	0.094		ug/L		11/23/11 14:16	11/30/11 04:52	1
Dichlorobiphenyl	0.094	U	0.094		ug/L		11/23/11 14:16	11/30/11 04:52	1
Trichlorobiphenyl	0.094	U	0.094		ug/L		11/23/11 14:16	11/30/11 04:52	1
Tetrachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/30/11 04:52	1
Pentachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/30/11 04:52	1
Hexachlorobiphenyl	0.19	U	0.19		ug/L		11/23/11 14:16	11/30/11 04:52	1
Heptachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/30/11 04:52	1
Octachlorobiphenyl	0.28	U	0.28		ug/L		11/23/11 14:16	11/30/11 04:52	1
Nonachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/30/11 04:52	1
DCB Decachlorobiphenyl	0.47	U	0.47		ug/L		11/23/11 14:16	11/30/11 04:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	72		*25 - 113*	*11/23/11 14:16*	*11/30/11 04:52*	*1*

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JAN 16 2012

TestAmerica Savannah

Surrogate Summary

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		13DCB
Lab Sample ID	Client Sample ID	(25-113)
680-74593-1	PMA-MW-1S-1111	66
680-74593-1 MS	PMA-MW-1S-1111	68
680-74593-1 MSD	PMA-MW-1S-1111	66
680-74593-2	PMA-MW-1M-1111	59
680-74593-3	PMA-MW-2M-1111	46
680-74593-4	PMA-MW-2M-1111-AD	49
680-74593-5	PMA-MW-2S-1111	63
680-74593-6	PMA-MW-3S-1111	71
680-74627-1	PMA-MW-3M-1111	63
680-74627-2	PMA-MW-4D-1111	56
680-74627-4	PMA-MW-5M-1111	60
680-74627-5	PMA-MW-6D-1111	60
680-74627-6	PMA-MW-3M-1111-EB	72
LCS 680-221734/14-A	Lab Control Sample	88
MB 680-221734/13-A	Method Blank	67

Surrogate Legend
13DCB = Decachlorobiphenyl-13C12

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		13DCB
Lab Sample ID	Client Sample ID	
680-74627-3	PMA-MW-4S-1111	

Surrogate Legend
13DCB = Decachlorobiphenyl-13C12

JAN 16 2012

TestAmerica Savannah

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS)

Lab Sample ID: MB 680-221734/13-A
Matrix: Water
Analysis Batch: 222528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 221734

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Monochlorobiphenyl	0.10	U	0.10		ug/L		11/23/11 14:16	11/29/11 15:36	1
Dichlorobiphenyl	0.10	U	0.10		ug/L		11/23/11 14:16	11/29/11 15:36	1
Trichlorobiphenyl	0.10	U	0.10		ug/L		11/23/11 14:16	11/29/11 15:36	1
Tetrachlorobiphenyl	0.20	U	0.20		ug/L		11/23/11 14:16	11/29/11 15:36	1
Pentachlorobiphenyl	0.20	U	0.20		ug/L		11/23/11 14:16	11/29/11 15:36	1
Hexachlorobiphenyl	0.20	U	0.20		ug/L		11/23/11 14:16	11/29/11 15:36	1
Heptachlorobiphenyl	0.30	U	0.30		ug/L		11/23/11 14:16	11/29/11 15:36	1
Octachlorobiphenyl	0.30	U	0.30		ug/L		11/23/11 14:16	11/29/11 15:36	1
Nonachlorobiphenyl	0.50	U	0.50		ug/L		11/23/11 14:16	11/29/11 15:36	1
DCB Decachlorobiphenyl	0.50	U	0.50		ug/L		11/23/11 14:16	11/29/11 15:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Decachlorobiphenyl-13C12	*67*		*25 - 113*	*11/23/11 14:16*	*11/29/11 15:36*	*1*

Lab Sample ID: LCS 680-221734/14-A
Matrix: Water
Analysis Batch: 222527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 221734

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Monochlorobiphenyl	2.00	1.25		ug/L		62	10 - 125
Dichlorobiphenyl	2.00	1.41		ug/L		70	10 - 110
Trichlorobiphenyl	2.00	1.49		ug/L		74	17 - 110
Tetrachlorobiphenyl	4.00	2.88		ug/L		72	18 - 110
Pentachlorobiphenyl	4.00	3.04		ug/L		76	34 - 110
Hexachlorobiphenyl	4.00	2.98		ug/L		74	31 - 110
Heptachlorobiphenyl	6.00	4.50		ug/L		75	33 - 110
Octachlorobiphenyl	6.00	4.38		ug/L		73	33 - 110
Nonachlorobiphenyl	10.0	10.5		ug/L		105	26 - 115
DCB Decachlorobiphenyl	10.0	6.57		ug/L		66	26 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Decachlorobiphenyl-13C12	*68*		*25 - 113*

Lab Sample ID: 680-74593-1 MS
Matrix: Water
Analysis Batch: 222576

Client Sample ID: PMA-MW-1S-1111
Prep Type: Total/NA
Prep Batch: 221734

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Monochlorobiphenyl	0.095	U	1.88	1.24		ug/L		66	10 - 125
Dichlorobiphenyl	0.095	U	1.88	1.31		ug/L		70	10 - 110
Trichlorobiphenyl	0.095	U	1.88	1.37		ug/L		73	17 - 110
Tetrachlorobiphenyl	0.19	U	3.76	2.68		ug/L		71	18 - 110
Pentachlorobiphenyl	0.19	U	3.76	2.89		ug/L		77	34 - 110
Hexachlorobiphenyl	0.19	U	3.76	2.83		ug/L		75	31 - 110
Heptachlorobiphenyl	0.28	U	5.64	4.40		ug/L		78	33 - 110
Octachlorobiphenyl	0.28	U	5.64	4.35		ug/L		77	33 - 110
Nonachlorobiphenyl	0.47	U	9.40	9.91		ug/L		105	28 - 115
DCB Decachlorobiphenyl	0.47	U	9.40	6.09	E	ug/L		65	26 - 115

JAN 16 2012

Method: 680 - Polychlorinated Biphenyls (PCBs) (GC/MS) (Continued)

Lab Sample ID: 680-74593-1 MS
Matrix: Water
Analysis Batch: 222576

Client Sample ID: PMA-MW-1S-1111
Prep Type: Total/NA
Prep Batch: 221734

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Decachlorobiphenyl-13C12	*68*		*25 - 113*

Lab Sample ID: 680-74593-1 MSD
Matrix: Water
Analysis Batch: 222576

Client Sample ID: PMA-MW-1S-1111
Prep Type: Total/NA
Prep Batch: 221734

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Monochlorobiphenyl	0.095	U	1.89	1.25		ug/L		66	10 - 125	0	40
Dichlorobiphenyl	0.095	U	1.89	1.32		ug/L		70	10 - 110	1	40
Trichlorobiphenyl	0.095	U	1.89	1.41		ug/L		75	17 - 110	2	40
Tetrachlorobiphenyl	0.19	U	3.77	2.72		ug/L		72	18 - 110	2	40
Pentachlorobiphenyl	0.19	U	3.77	2.85		ug/L		78	34 - 110	1	40
Hexachlorobiphenyl	0.19	U	3.77	2.88		ug/L		76	31 - 110	2	40
Heptachlorobiphenyl	0.28	U	5.66	4.28		ug/L		76	33 - 110	3	40
Octachlorobiphenyl	0.28	U	5.66	4.18		ug/L		74	33 - 110	4	40
Nonachlorobiphenyl	0.47	U	9.43	9.76		ug/L		104	26 - 115	2	40
DCB Decachlorobiphenyl	0.47	U	9.43	5.96	E	ug/L		63	26 - 115	2	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Decachlorobiphenyl-13C12	*66*		*25 - 113*

JAN 16 2012

TestAmerica Savannah

QC Association Summary

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

GC/MS Semi VOA

Prep Batch: 221734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-74593-1	PMA-MW-1S-1111	Total/NA	Water	680	
680-74593-1 MS	PMA-MW-1S-1111	Total/NA	Water	680	
680-74593-1 MSD	PMA-MW-1S-1111	Total/NA	Water	680	
680-74593-2	PMA-MW-1M-1111	Total/NA	Water	680	
680-74593-3	PMA-MW-2M-1111	Total/NA	Water	680	
680-74593-4	PMA-MW-2M-1111-AD	Total/NA	Water	680	
680-74593-5	PMA-MW-2S-1111	Total/NA	Water	880	
680-74593-6	PMA-MW-3S-1111	Total/NA	Water	680	
680-74627-1	PMA-MW-3M-1111	Total/NA	Water	680	
680-74627-2	PMA-MW-4D-1111	Total/NA	Water	680	
680-74627-3	PMA-MW-4S-1111	Total/NA	Water	680	
680-74627-4	PMA-MW-5M-1111	Total/NA	Water	680	
680-74627-5	PMA-MW-6D-1111	Total/NA	Water	680	
680-74627-6	PMA-MW-3M-1111-EB	Total/NA	Water	680	
LCS 680-221734/14-A	Lab Control Sample	Total/NA	Water	680	
MB 680-221734/13-A	Method Blank	Total/NA	Water	680	

Analysis Batch: 222527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-74593-1	PMA-MW-1S-1111	Total/NA	Water	680	221734
680-74593-2	PMA-MW-1M-1111	Total/NA	Water	680	221734
680-74593-3	PMA-MW-2M-1111	Total/NA	Water	680	221734
680-74593-4	PMA-MW-2M-1111-AD	Total/NA	Water	680	221734
LCS 680-221734/14-A	Lab Control Sample	Total/NA	Water	680	221734

Analysis Batch: 222528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-74593-5	PMA-MW-2S-1111	Total/NA	Water	680	221734
680-74593-6	PMA-MW-3S-1111	Total/NA	Water	680	221734
680-74627-1	PMA-MW-3M-1111	Total/NA	Water	680	221734
680-74627-2	PMA-MW-4D-1111	Total/NA	Water	680	221734
680-74627-4	PMA-MW-5M-1111	Total/NA	Water	680	221734
MB 680-221734/13-A	Method Blank	Total/NA	Water	680	221734

Analysis Batch: 222576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-74593-1 MS	PMA-MW-1S-1111	Total/NA	Water	680	221734
680-74593-1 MSD	PMA-MW-1S-1111	Total/NA	Water	680	221734
680-74627-3	PMA-MW-4S-1111	Total/NA	Water	680	221734
680-74627-5	PMA-MW-6D-1111	Total/NA	Water	680	221734
680-74627-6	PMA-MW-3M-1111-EB	Total/NA	Water	880	221734

JAN 16 2012

TestAmerica Savannah

Lab Chronicle

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-1S-1111

Lab Sample ID: 680-74593-1

Date Collected: 11/18/11 09:55
Date Received: 11/21/11 09:19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1057.7 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222527	11/29/11 10:58	ND	TAL SAV

Client Sample ID: PMA-MW-1M-1111

Lab Sample ID: 680-74593-2

Date Collected: 11/18/11 10:40
Date Received: 11/21/11 09:19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1064.1 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222527	11/29/11 11:29	ND	TAL SAV

Client Sample ID: PMA-MW-2M-1111

Lab Sample ID: 680-74593-3

Date Collected: 11/18/11 13:10
Date Received: 11/21/11 09:19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1059.4 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222527	11/29/11 11:59	ND	TAL SAV

Client Sample ID: PMA-MW-2M-1111-AD

Lab Sample ID: 680-74593-4

Date Collected: 11/18/11 13:10
Date Received: 11/21/11 09:19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1057.0 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222527	11/29/11 12:29	ND	TAL SAV

Client Sample ID: PMA-MW-2S-1111

Lab Sample ID: 680-74593-5

Date Collected: 11/18/11 14:00
Date Received: 11/21/11 09:19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1055.3 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222528	11/29/11 16:07	ND	TAL SAV

Client Sample ID: PMA-MW-3S-1111

Lab Sample ID: 680-74593-6

Date Collected: 11/18/11 15:00
Date Received: 11/21/11 09:19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1057.4 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222528	11/29/11 16:38	ND	TAL SAV

JAN 16 2012
TestAmerica Savannah

Lab Chronicle

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Client Sample ID: PMA-MW-3M-1111 — **Lab Sample ID: 680-74627-1**
Date Collected: 11/21/11 10:00 — Matrix: Water
Date Received: 11/22/11 11:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1055.4 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222528	11/29/11 17:08	ND	TAL SAV

Client Sample ID: PMA-MW-4D-1111 — **Lab Sample ID: 680-74627-2**
Date Collected: 11/21/11 10:55 — Matrix: Water
Date Received: 11/22/11 11:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1056.5 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222528	11/29/11 17:38	ND	TAL SAV

Client Sample ID: PMA-MW-4S-1111 — **Lab Sample ID: 680-74627-3**
Date Collected: 11/21/11 13:10 — Matrix: Water
Date Received: 11/22/11 11:37

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Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1059.1 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		100			222576	11/30/11 12:31	ND	TAL SAV

Client Sample ID: PMA-MW-5M-1111 — **Lab Sample ID: 680-74627-4**
Date Collected: 11/21/11 14:01 — Matrix: Water
Date Received: 11/22/11 11:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1064.1 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222528	11/29/11 18:39	ND	TAL SAV

Client Sample ID: PMA-MW-6D-1111 — **Lab Sample ID: 680-74627-5**
Date Collected: 11/21/11 15:10 — Matrix: Water
Date Received: 11/22/11 11:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1060.1 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222578	11/30/11 04:21	ND	TAL SAV

Client Sample ID: PMA-MW-3M-1111-EB — **Lab Sample ID: 680-74627-6**
Date Collected: 11/21/11 08:20 — Matrix: Water
Date Received: 11/22/11 11:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	680			1062.1 mL	1 mL	221734	11/23/11 14:16	SSP	TAL SAV
Total/NA	Analysis	680		1			222576	11/30/11 04:52	ND	TAL SAV

JAN 16 2012
TestAmerica Savannah

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

Laboratory References:

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

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JAN 16 2012

TestAmerica Savannah

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: Nathan McNurlen	Date: 11/18/11	COC No:
URS Corporation	Tel/Fax: (314) 743-4154	Lab Contact: Lidya Gulizia	Carrier: Fed Ex	1 of 1 COCs
1001 Highlands Plaza Drive West, Suite 300	Analysis Turnaround Time			Job No. 21562682.00004
St. Louis, MO 63110	Calendar (C) or Work Days (W) C			
(314) 429-0100 Phone	TAT if different from Below			SDG No.
(314) 429-0462 FAX	☒ 2 weeks			
Project Name: 4Q11 PCB GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Total PCBs by 680	Sample Specific Notes:
PMA-MW- 1S -1111	11/18/11	955	G	Water	2	2	
PMA-MW- 1S -1111-MS		955	G	Water	2	2	
PMA-MW- 1S -1111-MSD		955	G	Water	2	2	
PMA-MW- 1M -1111		1040	G	Water	2	2	
PMA-MW- 2M -1111		1310	G	Water	2	2	
PMA-MW- 2M -1111-AD		1310	G	Water	2	2	
PMA-MW- 2S -1111		1400	G	Water	2	2	
PMA-MW- 3S -1111	↓	1500	G	Water	2	2	
4Q11 PCB Trip Blank #___				Water			

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

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

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

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

680 — 74593 3.8°C / 4.3°C

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	URS	11/18/11 1630		TA	11/18/11 1630
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TA	11/18/11 1730			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
				TASAV	11/21/11 0919

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: Nathan McNurlen		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. 21562682.00004
St. Louis, MO 63110	Calendar (C) or Work Days (W) C			~~21562709.00003~~ 680-74627
(314) 429-0100 Phone	TAT if different from Below ______			SDG No.
(314) 429-0462 FAX	☒ 2 weeks			
Project Name: 4Q11 PCB GW Sampling	☐ 1 week			
Site: Solutia WG Krummrich Facility	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Total PCBs by 680	Sample Specific Notes:
PMA-MW-3M-1111	11/21/11	1000	G	Water	2		2	
PMA-MW-4D-1111	↓	1055	G	Water	2		2	
PMA-MW-4S-1111	↓	1310	G	Water	2		2	
PMA-MW-5M-1111	↓	1410	G	Water	2		2	
PMA-MW-6D-1111	↓	1510	G	Water	2		2	
PMA-MW-3M-1111-EB	↓	0820	G	Water	2		2	
4Q11 PCB Trip Blank #____				Water	2		2	

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

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

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

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

Temp 1.0°C, 2.0°C

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	URS	11/21/11 1630	[signature]	TA	11-21-11 1630
[signature]	TA	11/21/11 1830	Beth A Dougherty	TA SAV	11-22-11 1137

JAN 16 2012

Login Sample Receipt Checklist

Client: Solutia Inc.

Job Number: 680-74593-1
SDG Number: KPM044

Login Number: 74593
List Number: 1
Creator: Barnett, Eddie T

List Source: TestAmerica Savannah

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	3.8 and 4.3 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

JAN 16 2012

Login Sample Receipt Checklist

Client: Solutia Inc.

Job Number: 680-74593-1
SDG Number: KPM044

Login Number: 74627
List Number: 1
Creator: Daughtry, Beth

List Source: TestAmerica Savannah

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	1.0 and 2.0 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?	False	
There are no discrepancies between the sample IDs on the containers and the COC.	False	
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.	N/A	
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.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

JAN 16 2012

Certification Summary

Client: Solutia Inc.
Project/Site: WGK PCB GW Quality - 4Q11 - NOV 2011

TestAmerica Job ID: 680-74593-1
SDG: KPM044

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	Arkansas DOH	6	N/A
TestAmerica Savannah	Arkansas	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	Delaware	State Program	3	N/A
TestAmerica Savannah	Florida	NELAC	4	E87052
TestAmerica Savannah	Georgia	Georgia EPD	4	N/A
TestAmerica Savannah	Georgia	State Program	4	803
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	Kentucky UST	4	18
TestAmerica Savannah	Kentucky	State Program	4	90084
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	North Carolina DENR	4	269
TestAmerica Savannah	North Carolina	North Carolina PHL	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	TN02981
TestAmerica Savannah	Texas	NELAC	6	T104704185-08-TX
TestAmerica Savannah	USDA	USDA		SAV 3-04
TestAmerica Savannah	Vermont	State Program	1	87052
TestAmerica Savannah	Virginia	NELAC	3	460161
TestAmerica Savannah	Virginia	State Program	3	302
TestAmerica Savannah	Washington	State Program	10	C1794
TestAmerica Savannah	West Virginia	West Virginia DEP	3	94
TestAmerica Savannah	West Virginia	West Virginia DHHR (DW)	3	9950C
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.

JAN 16 2012

TestAmerica Savannah