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April 27, 2010

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

Re:

PCB Groundwater Quality Assessment Program

1st Quarter 2010 Data Report

Solutia Inc., W. G. Krummrich Plant, Sauget, IL

Dear Mr. Bardo:

Enclosed please find the PCB Groundwater Quality Assessment Program 1st Quarter 2010 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

4th Miles

Enclosure

cc: Distribution List

DISTRIBUTION LIST

PCB Groundwater Quality Assessment Program 1st Quarter 2010 Data Report Solutia Inc., W. G. Krummrich Plant, Sauget, IL

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1^{S T} QUARTER 2010 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

April 2010



URS Corporation 1001 Highland Plaza Drive West, Suite 300 St. Louis, MO 63110 (314) 429-0100 Project # **21562401.00002**

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Monitoring Well PMA MW-3M Mann-Kendall Trend Analysis Monitoring Well PMA MW-4D Mann-Kendall Trend Analysis

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i April 2010

1.0 INTRODUCTION

This report presents the results of the 1st Quarter 2010 (1Q10) 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 1Q10 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 1Q10 PCB Groundwater Quality Assessment Program field activities between February 12 and 23, 2010.

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., 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 1Q10 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 400 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
pН	+/- 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.

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.: February (first quarter), 2010 (0210)
- QAC denotes QA/QC samples (when applicable):
 - o **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.

4.0 QUALITY ASSURANCE

Analytical data were reviewed for quality and completeness, as described in the Revised PCB Groundwater 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**. Laboratory reports and data validation review sheets are included in **Appendix D**.

A total of 14 samples (ten investigative groundwater samples, one field duplicate, one MS/MSD pair, one equipment blank) were prepared and analyzed by TestAmerica for PCBs. Results for the various analyses were submitted as sample delivery group (SDG) KPM037.

The samples contained in SDG KPM037 are listed below:

KPM037

PMA-MW-1S-0210 PMA-MW-1M-0210 PMA-MW-2M-0210-AD PMA-MW-2S-0210-EB PMA-MW-2S-0210 PMA-MW-5M-0210 PMA-MW-6D-0210 PMA-MW-3S-0210 PMA-MW-3S-0210 PMA-MW-4D-0210 PMA-MW-4S-0210

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 Groundwater 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 MS/MSD, LCS, surrogate and field duplicate data were achieved for these SDGs to meet the project objectives. Completeness, which is defined to be the percentage of analytical results which are judged to be valid, including estimated detect/nondetect (J/UJ) data was 100 percent.

5.0 OBSERVATIONS

This section presents a brief summary of the groundwater analytical results from the 1Q10 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

PCBs were detected in the source area SHU monitoring well PMA-MW-4S, at an estimated concentration of 200.55 μ g/L. Historically, measurable DNAPL has been observed in PMA-MW-4S during previous sampling events.PCBs were not detected in the three down-gradient PCB Groundwater Quality Assessment Program SHU monitoring wells. 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 μ g/L for the 1Q10 sampling event. PCBs were also detected in four of the five downgradient monitoring wells at concentrations of 0.2 μ g/L (PMA-MW-1M), 2.4 μ g/L (PMA-MW-2M/duplicate), estimated 0.87 μ g/L (PMA-MW-3M), and 0.19 μ g/L (PMA-MW-6D). PCBs were not detected in the groundwater sample collected from monitoring well PMA-MW-5M. **Figure 5** displays the 1Q10 PCB sampling results for the MHU/DHU.

The 1Q10 sampling event was the seventh event conducted under the PCB Groundwater Quality Assessment Program. Mann-Kendall trend analyses of total PCBs in unfiltered samples of groundwater from 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 **Tables 3** through **8**. The data appear to exhibit an upward trend in concentrations at monitoring well PMA-MW-4D at this time, but no trends at any of the other wells.

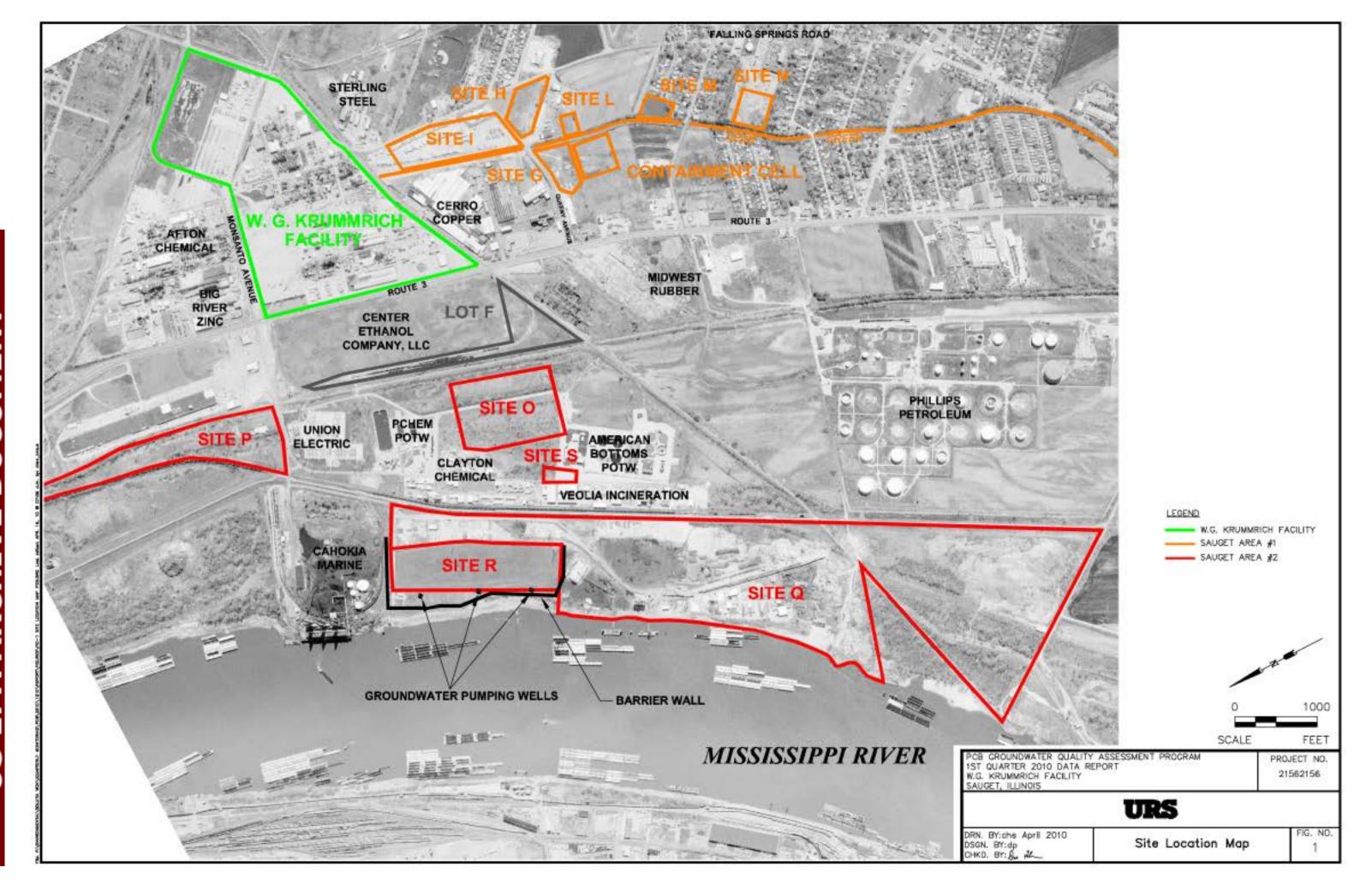
After eight quarters of sampling under the PCB Groundwater Quality Assessment Program, the Mann-Whitney U Test will be performed to determine whether or not concentrations in the second four quarters were higher or lower than the first four quarters. Linear regression analysis will be done for the eight quarters of data provided the data distribution allows the use of parametric statistical analysis.

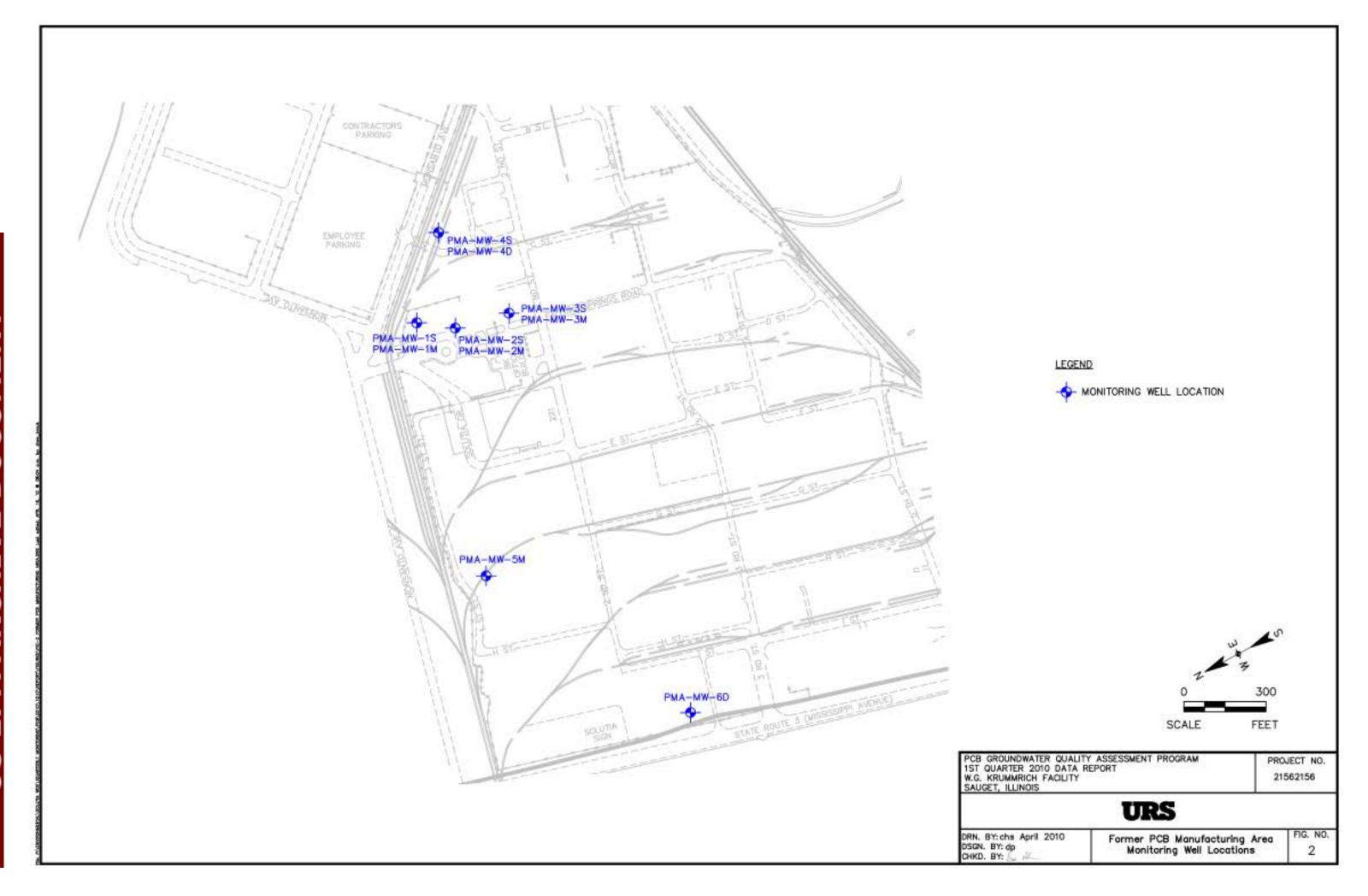
6.0 REFERENCES

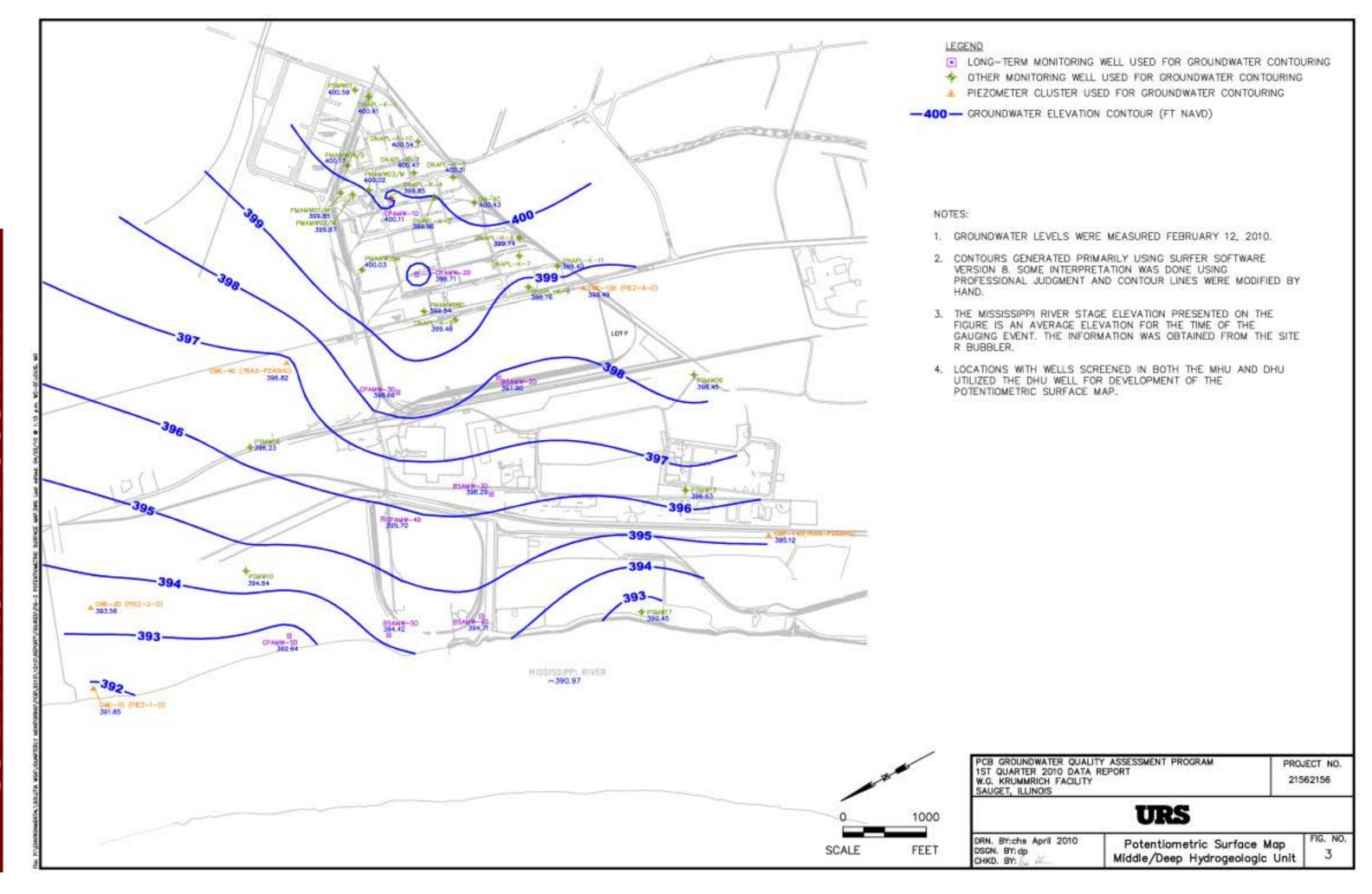
Solutia Inc, 2009. Revised PCB Groundwater Quality Assessment Program Work Plan, W.G. Krummrich Facility, Sauget, IL, Prepared by URS Corporation, May 2009.

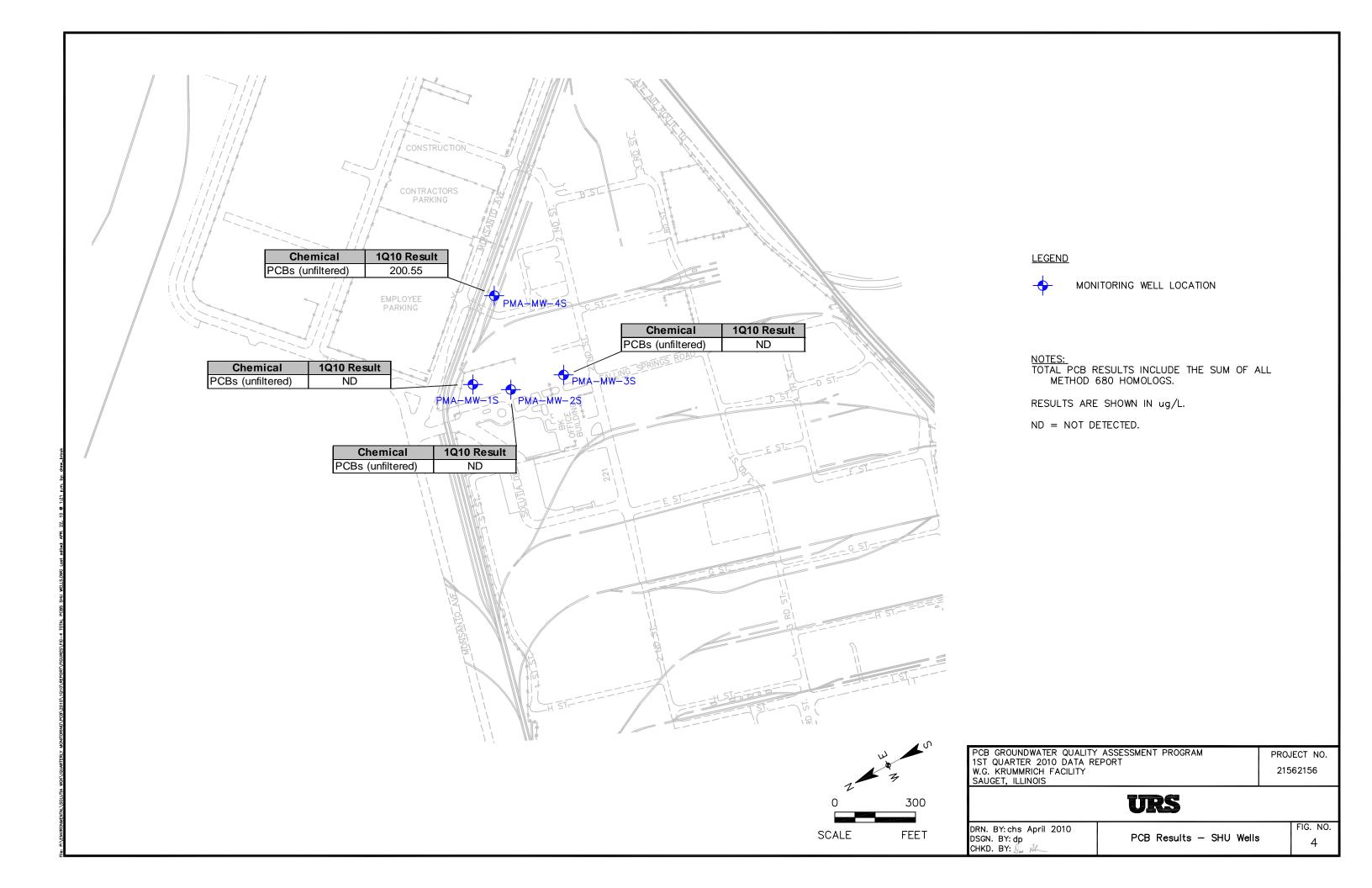
U.S. Environmental Protection Agency (USEPA), 2008 Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review.

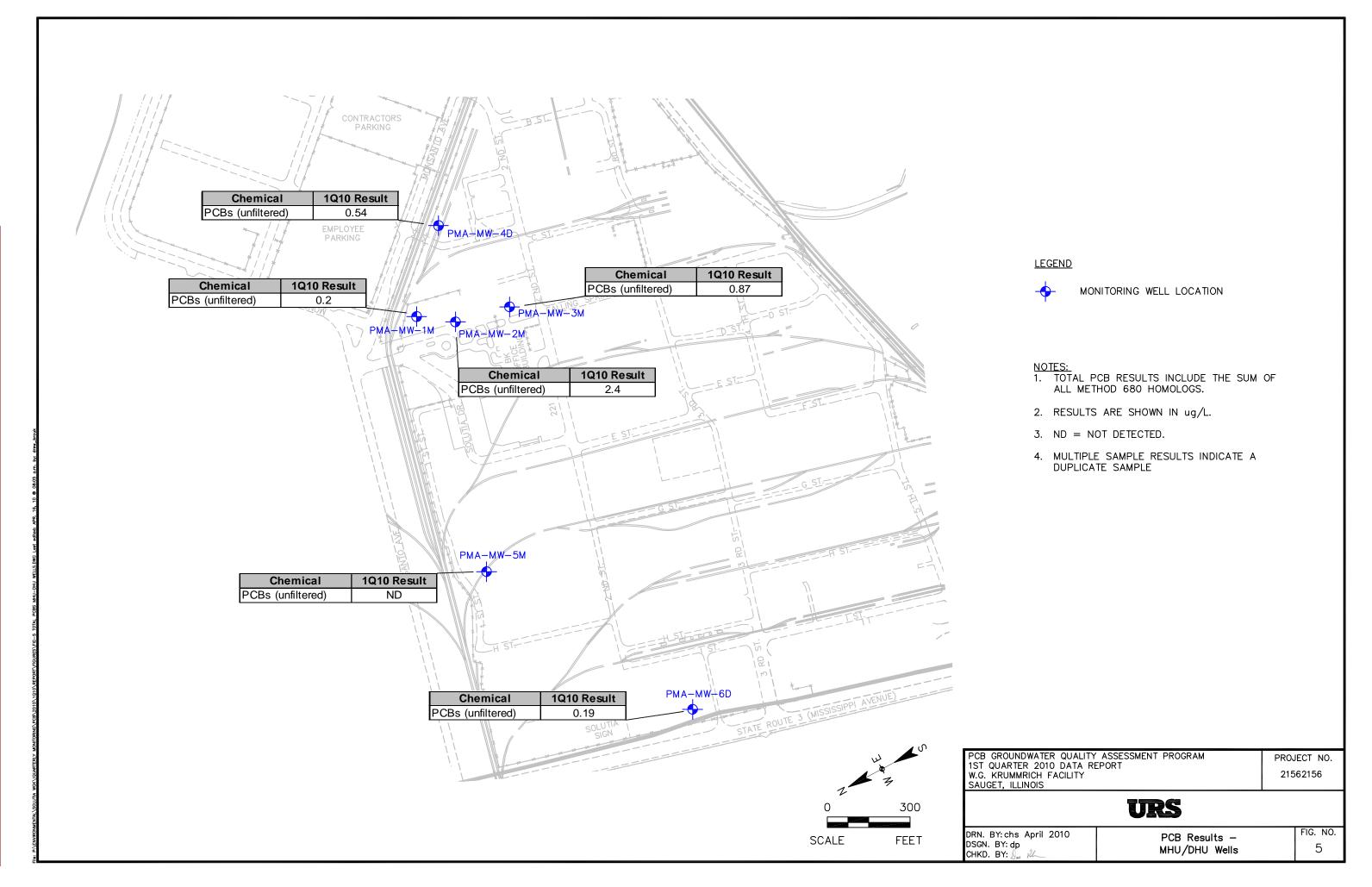
Figures











Tables

Table 1
Monitoring Well Gauging Information

			Construct	ion Details				February	/ 12, 2010	
Well ID	Ground Elevation (feet)*	Casing Elevation* (feet)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)	Top of Screen Elevation* (feet)	Bottom of Screen Elevation* (feet)	Depth to Water (feet btoc)	Product Thickness (feet)	Depth to Bottom (feet btoc)	Water Elevation* (feet)
Shallow Hydrogeologic U	Init (SHU 395-	-380 feet NAV								
PMA-MW-1S	410.30	410.06	20.18	25.18	390.12	385.12	9.85		24.91	400.21
PMA-MW-2S	412.27	411.66	22.94	27.94	389.33	384.33	11.78		27.33	399.88
PMA-MW-3S	412.37	412.06	22.71	27.71	389.66	384.66	12.02		27.38	400.04
PMA-MW-4S	411.09	410.43	20.99	25.99	390.10	385.10	10.35		25.35	400.08
Middle Hydrogeologic Un	nit (MHU 380-3	350 feet NAVE	88)							
PMA-MW-1M	410.32	410.08	54.54	59.54	355.78	350.78	10.23		59.61	399.85
PMA-MW-2M	412.26	411.93	56.87	61.87	355.39	350.39	12.06		61.53	399.87
PMA-MW-3M	412.36	412.10	57.07	62.07	355.29	350.29	12.08		61.80	400.02
PMA-MW-5M	411.27	410.97	52.17	57.17	359.10	354.10	10.94		56.97	400.03
PSMW-1	409.37	412.59	37.78	42.78	371.59	366.59	12.00		46.04	400.59
Deep Hydrogeologic Unit	(DHU 350 fee	et NAVD 88 - E	Bedrock)							
BSA-MW-2D	412.00	415.13	68.92	73.92	343.08	338.08	17.23	-	77.02	397.90
BSA-MW-3D	412.91	415.74	107.02	112.02	305.89	300.89	19.45		114.80	396.29
BSA-MW-4D	425.00	424.69	118.54	123.54	306.46	301.46	29.98		123.18	394.71
BSA-MW-5D	420.80	420.49	115.85	120.85	304.95	299.95	26.07		120.95	394.42
CPA-MW-1D	408.62	408.32	66.12	71.12	342.50	337.50	8.21		70.73	400.11
CPA-MW-2D	408.51	408.20	99.96	104.96	308.55	303.55	9.49		104.65	398.71
CPA-MW-3D	410.87	410.67	108.20	113.20	302.67	297.67	12.01		112.84	398.66
CPA-MW-4D	421.57	421.20	116.44	121.44	305.13	300.13	25.50		121.00	395.70
CPA-MW-5D	411.03	413.15	107.63	112.63	303.40	298.40	20.51		114.67	392.64
DNAPL-K-1	413.07	415.56	108.20	123.20	304.87	289.87	14.65		123.16	400.91
DNAPL-K-2	407.94	407.72	97.63	112.63	310.31	295.31	7.76		112.36	399.96
DNAPL-K-3	412.13	411.91	104.80	119.80	307.33	292.33	11.44		119.25	400.47
DNAPL-K-4	409.48	409.15	102.55	117.55	306.93	291.93	9.30		115.59	399.85
DNAPL-K-5	412.27	411.91	102.15	117.15	310.12	295.12	11.60		116.48	400.31
DNAPL-K-6	410.43	410.09	102.47	117.47	307.96	292.96	10.35		116.94	399.74
DNAPL-K-7	408.32	407.72	100.40	115.40	307.92	292.92	NG		NG	NG
DNAPL-K-8	408.56	411.38	102.65	117.65	305.91	290.91	12.62		117.59	398.76
DNAPL-K-9	406.45	405.97	97.42	112.42	309.03	294.03	6.49		111.23	399.48
DNAPL-K-10	413.50	413.25	105.43	120.43	308.07	293.07	12.71		120.27	400.54
DNAPL-K-11	412.20	411.78	105.46	120.46	306.74	291.74	12.38		120.25	399.40
GM-9C	409.54	411.21	88.00	108.00	321.54	301.54	10.78		23.75	400.43

W.G. Krummrich Facility - Sauget, Illinois PCB Groundwater Quality Assessment Program

Table 1
Monitoring Well Gauging Information

			Construct	ion Details				February	y 12, 2010	
Well ID	Ground Elevation (feet)*	Casing Elevation* (feet)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)	Top of Screen Elevation* (feet)	Bottom of Screen Elevation* (feet)	Depth to Water (feet btoc)	Product Thickness (feet)	Depth to Bottom (feet btoc)	Water Elevation* (feet)
Deep Hydrogeologic Unit	(DHU 350 fee	et NAVD 88 - E	Bedrock) (con	tinued)						
GWE-1D (PIEZ-1D)	412.80	415.60	117.00	127.00	295.80	285.80	23.75	-	128.53	391.85
GWE-2D (PIEZ-2D)	417.45	417.14	127.00	137.00	290.45	280.45	23.58	1	136.67	393.56
GWE-4D (TRA3-PZADHU)	406.05	405.74	74.00	80.00	332.05	326.05	8.92		78.78	396.82
GWE-10D (PIEZ-6D)	410.15	412.87	102.50	112.50	307.65	297.65	14.38	1	114.85	398.49
GWE-14D (TRA5-PZCDHU)	420.47	422.90	90.00	96.00	330.47	324.47	27.78	1	98.78	395.12
PMA-MW-4D	411.22	410.88	68.84	73.84	342.38	337.38	10.71		73.35	400.17
PMA-MW-6D	407.63	407.32	96.49	101.49	311.14	306.14	7.78	1	101.29	399.54
PSMW-6	404.11	406.63	99.80	104.80	304.31	299.31	10.40	1	109.85	396.23
PSMW-9	403.92	403.52	100.40	105.40	303.52	298.52	5.07	-	105.13	398.45
PSMW-10	409.63	412.18	101.23	106.23	308.40	303.40	17.54		111.28	394.64
PSMW-13	405.80	405.53	106.08	111.08	299.72	294.72	8.90	-	110.13	396.63
PSMW-17	420.22	423.26	121.25	126.25	298.97	293.97	30.81		134.84	392.45

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-0210	2/22/2010	μg/L	< 0.097	< 0.097	< 0.097	<0.19	<0.19	<0.19	<0.29	<0.29	< 0.49	< 0.49
PMA-MW-2S-0210	2/22/2010	μg/L	<0.095	< 0.095	< 0.095	<0.19	<0.19	<0.19	<0.29	<0.29	<0.48	<0.48
PMA-MW-3S-0210	2/23/2010	μg/L	<0.095	< 0.095	< 0.095	<0.19	<0.19	<0.19	<0.29	<0.29	<0.48	<0.48
PMA-MW-4S-0210	2/23/2010	μg/L	1.4 J	6.8 J	14 D J	52 J	34 J	49 D J	33 J	8.3 J	1.2 J	0.85 J
Middle / Deep Hydrologic U	Jnit											
PMA-MW-1M-0210	2/22/2010	μg/L	0.2	< 0.094	< 0.094	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	< 0.47
PMA-MW-2M-0210	2/22/2010	μg/L	2.4	< 0.094	< 0.094	<0.19	<0.19	<0.19	<0.28	<0.28	< 0.47	<0.47
PMA-MW-2M-0210-AD	2/22/2010	μg/L	2.4	< 0.095	< 0.095	<0.19	<0.19	<0.19	<0.29	<0.29	<0.48	<0.48
PMA-MW-3M-0210	2/23/2010	μg/L	0.87 J	<0.094	<0.094	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47
PMA-MW-4D-0210	2/23/2010	μg/L	0.26	0.28	<0.094	<0.19	<0.19	<0.19	<0.28	<0.28	<0.47	<0.47
PMA-MW-5M-0210	2/22/2010	μg/L	<0.095	<0.095	<0.095	<0.19	<0.19	<0.19	<0.29	<0.29	<0.48	<0.48
PMA-MW-6D-0210	2/23/2010	μg/L	0.19	<0.095	<0.095	<0.19	<0.19	<0.19	<0.29	<0.29	<0.48	<0.48

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
Monitoring Well PMA MW-1M Mann-Kendall Trend Analysis

			W.G.	Krummric	h Facility	PCB Mfg	. Area Mo	nitoring W	ell MW-1	M Mann-K	endall Tre	nd Analys	sis				
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8				Event 12			Event 15	Event 16	Row
	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09	4Q09	1Q10	Total
Total PCBs, µg/L	ND	0.24	0.21	0.17	0.26	0.29	48	ND	0.18	0.38	0.26	0.16	0.21	0.27	0.27	0.20	
Compare to Event 1		1	1	1	1	1	1	NA	1	1	1	1	1	1	1	1	14
Compare to Event 2			-1	-1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	0
Compare to Event 3		·		-1	1	1	1	-1	-1	1	1	-1	0	1	1	-1	2
Compare to Event 4			_		1	1	1	-1	1	1	1	-1	1	1	1	1	8
Compare to Event 5				•		1	1	-1	-1	1	0	-1	-1	1	1	-1	0
Compare to Event 6					·		1	-1	-1	1	-1	-1	-1	-1	-1	-1	-6
Compare to Event 7								-1	-1	-1	-1	-1	-1	-1	-1	-1	-9
Compare to Event 8									1	1	1	1	1	1	1	1	8
Compare to Event 9										1	1	-1	1	1	1	1	5
Compare to Event 10											-1	-1	-1	-1	-1	-1	-6
Compare to Event 11												-1	-1	1	1	-1	-1
Compare to Event 12													1	1	1	1	4
Compare to Event 13														1	1	-1	1
Compare to Event 14															0	-1	-1
Compare to Event 15															•	-1	-1

18

90 % Confidence Mann-Kendall Statistic

30

Table 4
Monitoring Well PMA MW-2M Mann-Kendall Trend Analysis

			W.G.	Krummric	h Facility	PCB Mfg	. Area Mo	nitoring W	ell MW-2	M Mann-K	endall Tre	nd Analys	sis				
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9			Event 12			Event 15		Row
	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09	4Q09	1Q10	Total
Total PCBs, µg/L	2.3	2.4	2.8	2.1	3.3	2.5	3.1	1.7	3.0	4.3	2.5	2.9	4.14	3.1	2.7	2.4	
Compare to Event 1		1	1	-1	1	1	1	-1	1	1	1	1	1	1	1	1	11
Compare to Event 2			1	-1	1	1	1	-1	1	1	1	1	1	1	1	0	9
Compare to Event 3				-1	1	-1	1	-1	1	1	-1	1	1	1	-1	-1	1
Compare to Event 4					1	1	1	-1	1	1	1	1	1	1	1	1	10
Compare to Event 5				•		-1	-1	-1	-1	1	-1	-1	1	-1	-1	-1	-7
Compare to Event 6							1	-1	1	1	0	1	1	1	1	-1	5
Compare to Event 7								-1	-1	1	-1	-1	1	0	-1	-1	-4
Compare to Event 8									1	1	1	1	1	1	1	1	8
Compare to Event 9										1	-1	-1	1	1	-1	-1	-1
Compare to Event 10											-1	-1	-1	-1	-1	-1	-6
Compare to Event 11												1	1	1	1	-1	3
Compare to Event 12													11	1	-1	-1	0
Compare to Event 13														-1	-1	-1	-3
Compare to Event 14															-1	-1	-2
Compare to Event 15																-1	-1

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90 % Confidence Mann-Kendall Statistic

30

Table 5
Monitoring Well PMA MW-3S Mann-Kendall Trend Analysis

			W.G.	Krummrio	h Facility	PCB Mfg	. Area Mo	nitoring W	/ell MW-3	S Mann-K	endall Tre	nd Analys	is				
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9		Event 11				1	Event 16	
	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09	4Q09	1Q10	Total
Total PCBs, µg/L	0.66	0.32	0.2	0.35	0.8	0.3	0.21	0.25	0.64	0.26	0.24	0.79	ND	0.34	2.0	ND	
Compare to Event 1		-1	-1	-1	1	-1	-1	-1	-1	-1	-1	1	-1	-1	1	-1	-9
Compare to Event 2			-1	1	1	-1	-1	-1	1	-1	-1	1	-1	1	1	-1	-2
Compare to Event 3				1	1	1	1	1	1	1	1	1	-1	1	1	-1	9
Compare to Event 4			•		1	-1	-1	-1	1	-1	-1	1	-1	-1	1	-1	-4
Compare to Event 5				·		-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1	-9
Compare to Event 6					·		-1	-1	1	-1	-1	1	-1	1	1	-1	-2
Compare to Event 7								1	1	1	1	1	-1	1	1	-1	5
Compare to Event 8									1	1	-1	1	-1	1	1	-1	2
Compare to Event 9										-1	-1	1	-1	-1	1	-1	-3
Compare to Event 10											-1	1	-1	1	1	-1	0
Compare to Event 11												1	-1	1	1	-1	1
Compare to Event 12													-1	-1	1	-1	-2
Compare to Event 13														1	1	NA	2
Compare to Event 14															1	-1	0
Compare to Event 15																-1	-1

-13

90 % Confidence Mann-Kendall Statistic

-30

Table 6
Monitoring Well PMA MW-3M Mann-Kendall Trend Analysis

			W.G.	Krummric	h Facility	PCB Mfg	. Area Mo	nitoring W	ell MW-3I	M Mann-K	endall Tre	nd Analys	sis				
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Event 11	Event 12	Event 13	Event 14	Event 15	Event 16	Row
	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09	4Q09	1Q10	Total
Total PCBs, µg/L	5.18	1.9	ND	0.77	ND	0.86	0.76	0.39	0.92	1.3	0.71	1.4	1.3	0.85	0.85	0.87	
Compare to Event 1		-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-15
Compare to Event 2			-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-14
Compare to Event 3				1	NA	1	1	1	1	1	1	1	1	1	1	-1	10
Compare to Event 4			•		-1	1	-1	-1	1	1	-1	1	1	1	1	1	4
Compare to Event 5				•		1	1	1	1	1	1	1	1	1	1	1	11
Compare to Event 6					·		-1	-1	1	1	-1	1	1	-1	-1	1	0
Compare to Event 7								-1	1	1	-1	1	1	1	1	1	5
Compare to Event 8									1	1	1	1	1	1	1	1	8
Compare to Event 9										1	-1	1	1	-1	-1	-1	-1
Compare to Event 10											-1	1	1	-1	-1	-1	-2
Compare to Event 11												1	1	1	1	1	5
Compare to Event 12													-1	-1	-1	-1	-4
Compare to Event 13														-1	-1	-1	-3
Compare to Event 14															0	1	1
Compare to Event 15																1	1

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90 % Confidence Mann-Kendall Statistic

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Table 7 Monitoring Well PMA MW-4D Mann-Kendall Trend Analysis

			W.G.Krur	nmrich Fa	cility PCE	Mfg. Are	a Monitor	ing Well N	IW-4D Ma	nn-Kenda	II Trend A	nalysis				
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Event 11	Event 12	Event 13	Event 14	Event 15	Row
	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	4Q08	1Q09	2Q09	3Q09	4Q09	1Q10	Total
Total PCBs, μg/L	0.34	0.10	2.07	0.33	0.50	0.35	0.23	0.27	0.44	0.27	2.73	0.59	0.37	0.61	0.54	
Compare to Event 1		-1	1	-1	1	1	-1	-1	1	-1	1	1	1	1	1	4
Compare to Event 2			1	1	1	1	1	1	1	1	1	1	1	1	1	13
Compare to Event 3		·		-1	-1	-1	-1	-1	-1	-1	1	-1	-1	-1	-1	-10
Compare to Event 4					1	1	-1	-1	1	-1	1	1	1	1	1	5
Compare to Event 5				·		-1	-1	-1	-1	-1	1	1	-1	1	1	-2
Compare to Event 6							-1	-1	1	-1	1	1	1	1	1	3
Compare to Event 7								1	1	1	1	1	1	1	1	8
Compare to Event 8									1	1	1	1	1	1	1	7
Compare to Event 9										-1	1	1	-1	1	1	2
Compare to Event 10											1	1	1	1	1	5
Compare to Event 11												-1	-1	-1	-1	-4
Compare to Event 12													-1	1	-1	-1
Compare to Event 13														1	1 1	2
Compare to Event 14															-1	-1

Mann-Kendall Statistic (S)

90 % Confidence Mann-Kendall Statistic

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Table 8
Monitoring Well PMA MW-6D Mann-Kendall Trend Analysis

W.G.I	Krummrich	Facility W	ell PMA MV	V-6D Mann	-Kendall Tr	end Analys	sis	
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Row
	3Q08	4Q08	1Q09	2Q09	3Q09	4Q09	1Q10	Total
Total PCBs, ug/L	0.21	0.43	0.32	0.29	0.20	0.30	0.19	
Compare to Event 1		1	1	1	-1	1	-1	2
Compare to Event 2			-1	-1	-1	-1	-1	-5
Compare to Event 3				-1	-1	-1	-1	-4
Compare to Event 4					-1	1	-1	-1
Compare to Event 5						1	-1	0
Compare to Event 6							-1	-1

90 % Confidence Mann-Kendall Statistic -11

Appendix A Groundwater Purging and Sampling Forms

POR GW Quarty PROJECT NAME: Assessment DAFF:2/2/2/10 MONITORING WELE IDPMAMUJO1M_	PROJECT NUMBER. 21562401 00001 WEATHER: 610 May 35 F		<u>Correst, Drew Browk</u>
Mrasured Well Denth (block, 59.64)* Constructed Well Dopth (block, 59.30), ft Depth to Water (block), ft Opph to LNARY (SNARY), ft	Water Column Height (comot include LNAP1 or DNAP1). If Capth in Jopial Screen is Y Denth to Water AND Screen Lenth is Place Pump at: Total Well Depth = 0.5 (Screen Length + 0.6 AP1) or Screen Screen is < Depth to Water AND Water Column Flace Pump at: Total Well Depth = (0.5 X Water Column fleight + 0 if Screen Length and/or water solumn height is < 4 ft, Place Pump	olumn Reight; 56.80 th bloc Reight and Screen Length are (45. CNAPL Cowmn Reight) the halo	Valume of Flow Through Cell (: 1, 150 m.) Winimum Purge Volume = 3, 150 m. (3 is Flow Through Cell Volume) 3, 150 m. Ambient P BiFID Resounce ppm Welbore PID/FID Reading: ppm
PURGE DATA Pump Type. Stanks Sicellian sond Purge Volume 17		19 2 units Temp Conn pH 201 (restor) 6 6 7 17, 80 3.06 14 33 3.15 10 14 12 3.17 10 19 18 3 17 11 15 90 2.16 11 12 3.166	2 7.7 0.56 -97.6
Start Time / [52. Stop Time] 207	Flapsed Time // S A-erage Purge Rate (mL/min)		Quality Weler ID
SAMPLING DATA Sample Cale: 2/22/20 Sample Volhod: Stainless Stee Monsport COMMENTS:	Sample Titre: // Sample Flow Rate /		sis: Tele:PCEs

PROJECT NAME: Assessment DATE: 3/>>//D MONITORING WELL ID: PMANWOIS	WEATHER:	<u>udy, 35</u> ₹ _{SAM}	PLC ID:	ELD PERSONNEL		er <u>bett, Drew</u> Mamwols-bal		
Well Diameter: 2 of Measured Well Diapht (bloc): 24.91 th Constructed Well Depth (bloc): 34.91 th Constructed Well Depth (bloc): 46.91 to Copin to Understated: 10.12 to Copin to LNAPL/DRAPL (bloc): 10.14 to Copin to Lope of Screen (bloc): 10.14 to Screen (bloc): 10.14 t	Water Column Height (do not): If Depth to Top of Screen is 5. Place Pump of: Total Well Sep If Depth to Top of Screen is 4. Place Pums of: Total Well Cap If Screen Leogth and/or water	iepih io Water AND Screet h = 0.5 (Screen Length + 0 Bepih io Water AND Water h = (0.5 X Water Column P	i Lenth is (4 feet, INPAL Gelumn Feigh Geiumn Reight and ! Jeight + ENAPL Cok-1	(= <i>라</i> 고·서부 Scient Length are (4:	- H Mac	Vetums of Flow Through 0 Min minn Purge Volume = (3 x Flow Through Cor V Anthwrit POINTO Reading) Wellhore PID/F & Reading	OLTO 3,450	
3400 <u>i 11,04</u> 3600 lioc	Tepth no Water (10 - 23 - colories 10 - 63 - colories 10 - 63 - colories	S Ayelecader	.070sts	15.08 15.09 15.09 14.93 14.93 14.93	13% Total	(animity (KTUs) 3.3 3.4 1.6 1.1 0.7	7:00: er.30: rg/l 00: (red): 6:45: 0:43: 0:49: ! 0:40: ! 0:40: !	-07 ORF provi -46-6 -47-7 -48-9 -50-4 -54-5
Slan Time: 1057 Stop Time: 1115		Capsed Time: Average Purge Rate (mL)	J8 min 400			Qus ity Weler ID	srengr O	
Sample Cale: 2 22 (C Sample Melhod: Stancess She Mosseco COMMENTS:		Sample Time: Sample Flow Rate:	1120 400 m/,	ข้า		is: Total PCBu Samples: MSMSD		

PCB GW Quality PROJECT NAME Asses <u>sment</u> DATE: <u>9/32/00</u> MONITORING WEEL ID PAYAMWOZM	PRÓJECT NUMBER. 21862401.00001 WEATHER. 41862401.00001		il: <u>MikeCorbett, D</u> WVic2N-0210	rew Browk
INITIAL DATA Well (Diameter 1) in Measured Well Dujoth (bood),	Water Column Reight fou not include LAAPL or DNA disciplinto Top all Scient is a Depth to Water AND Si Place Pump at Total Worl Ocoth – 0.5 (Screen Lengt hittophhilo Top all Scientis is a Depth to Water AND V Place Pump at Total Worl Depth – (0.5 X Water Column fi Schem Length and/or water oclumn height is < 4.6	crean Leith is: 4 feet. b + DNAPL Column Noight		h Gell Volumer 3, 450 n.
PURGE DATA Purpo Type: Statutes Sieu Monses Purge Volume mt.' lime 0 1343 200 1343 3400 1343 4800 1355	Death to Valer 1: Color Dring 13.50 Color Dring Color Dring Dring Dring	502,nos Temp 58 (C) 7.06 (5.67) 6.99 (5.68) 6.99 (6.00)	137 East Tursely Inistrial intros 3 048 14 G 3 137 75 8 3 135 6.4 2 135 4.0	10 8 9 C mys 10 m m m m m m m m m m m m m m m m m m
Start Trave: / 34/3 Stop Time 13 6%	Average Purge Rate	12 min. (-Limin): 400	Water Quality Master Dr. Date Cafforded	2/28/10
SAMPLING DATA Sample Date Sample Method Stanfass Steel Microson COMMENTS:	Sample Time Sample Flow Salo:	1400 	Analysis forzi Pülkr OAGC Samples: AC H	PMAMWO2M-0710-AD

PCB GW Quality PROJECT NAME: Assessment DATE 2/22/0 #SYNTOR NG WELL ID: PMAMW02	PROJECT NUMBER: 2:562401.00001 FIELD PERSONNEL: Mike Corbett, Drow Browk. WEATHER: Lloudy, 36 F SAMPLE ID. PMAMW025-0210
INITIAL DATA Wet Digmeror 2 Veasure: Well Depth (bloc) 27,33 ft Constructed Well Depth (bloc) 1233 ft Depth to Water (bloc): 12,23 ft Depth to Top of Sareer (bloc): 2233 ft Septen Leogth: 5	If Depth to Sopict Screen is 2 Pepth to Water AND Screen Length is 34 Feet. Place Principlan Total We'l Depth in Water AND Water Column Height and Screen Length is 640 Ambient PIDED Reading: ### Openh to Top of Screen is < Depth to Water AND Water Column Height and Screen Length are 640 Ambient PIDED Reading: ###################################
PURGE DATA Pumo Type: Staniess Regil N <u>ing</u>	
P. sgs Valum: (ntl) Time (Death to Death to
Start Time. 1430 Stop Time. 1442	Elepsed Time: 1/2 min Water Quality Mess: 65 YS 5973
SAMPLING DATA Sample Oxfor 2/22//0 Sample MethodExalless Siless MethodsComments:	Sample Time

LOW FLOW GROUNDWATE: ...MPLING DATA SHEET

PCB GW Quality PROJEC? NAME: Assessment DATE: 1/23//6 MONITORING WELL IO: PMAN' <u>MOSS</u>	PROJECT NUMBER: WEATHER:	21562401.00001 S <u>MMAY, 32 ° F</u> SAMPLE ID	FIELD PERSONNEL.	Mike Corbett , Dra	us B <u>rouk</u>
INITIAL CATA Well Diameter:2	Piace Purity al. Total Well Ce III Descrito Top of Scheen is K Place Purity al: Total Well Ce	Septh to Water AAD Screen Lenth pth = 0.5 (Screen Length + DNA2L (Cepth to Water AAD Water Column pth = (2.5 X Water Column Height +	Column Height) - 2-4, 90 In Height and Screen Length ere (44,	ft Volume of Flow Thisugh Celly Min reum Pungs Volume =h blee(3 x Flow? hreugh Cef Volume Anthent PI2/FID Reading: 1 stoc	
PURGE DATA Pump Type Pumpe Volume m_	Depit to Waste (th) 2 oct 2 - 50	hyderachro.	70 2 cm ls Temp PH	Cord (which y (bills) 2.621	00 02 mg/ 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Start Time: /2/0. Stop Time: /2/0. SAMPLING DATA		Elapsed Time	15 min 400	Water Quality Meter ID: YELFS Cate Calibrated:	//.e
Samo e Date: 2/33/16 Samo e Melhod: Slainless Sizes Monacon COMMENTS:		Samale Time: Samale Flow Rate:	1230 400 m L/mia	Analysis: Tota PCDs " CARDO Semples. A A A A A	

PROJECT NAME:	PCB GW Quality Assessment 43/10 D: PMA WWO4D	PROJECT NUMBER: Weather:	21562401.00001 1444, 32. F. SAN	FIELD FIELD.	D PERSONNEL:		ъ <u>ст, О</u> л	ew Brouk	
Will DATA Well D'ameter. 2 Messured Well Depth (Constructed Well Depth) Depth to Waler (Stock) Depth to ENAPLIDAPY Depth to Teplef Screen Screen Cangith. 3	blec): 73.35 h iblec)	II Depth to Top of Screen is Place Pump at: Yolo! Well G If Depth to Top of Screen is Place Pump at: Intal Well D	Kinclude LNAPL or DHAPL); > Cepih in Waler AND Screen epih = 0.5 (Screen Lengih + 0 < Depih in Water AND Water epih = (0.5 % Water Column F er column hwig 1519 K 4 ft Play	i Jenth is (4 feet, NAPL Column Reight) = Solumn Height and Sore eight + CNAPL Column H	laighti =	Minit h bled (3 x Ambi	re of Flow Through C rum Purge Volume = Flow Through Gelf V or PIE/FID Reading ore PIE/FID Reading	ئر <u>37</u> كريو (الاستان	/SD mL /80 mL
PURGE DATA Pomp Type Furge Volume (mill // 200 //	13.51 13.57 1400	Septrato (Solo	55byderærten	±H ±H ±C 20018	16.18 16.18 16.53 16.53	12% Gred (trisicm) 1-S14 1-S12 1-S13 1-S16	altadity (NTUs) (O-6 (O-8 (O-8 (O-8 (O-8 (O-8) (O-8 (O-8) (O	0.34 0.34 0.34 0.27 0.16	DR= [nv] -131.8 -/38.2 -/49.2 -/49.2
				·			<u></u>		
Start Time: Stop Time SAMPLING DATA Sample Date	135/ 1403 2/23/10		Etapsed Time. Average Purge Rata (mill) Sample Time:	12 min. mr:: 400	 :5`	Analysis:	d: 2/2.3/ cm PåSs	_	
Sample Melhad: Sig	o es Secila <u>dsec</u>		Samo e Flow Raile:	<u>=</u> 00.mL/m4	<u> </u>	QA'06 Sımpl			

PCB GW Quality PROJECT NAME: Assessmen DATE: P/P3/10 MONITORING WELL IN: PVAMW04S		21562401.0000: axay, 35° F SAMPLO		ONNEL: MAC CAM	Drews Browk	
INITIAL DASA Wall Discretar;	Place Pump et. Fotel Me. Dep * Capita to Top of Science is s Place Pump et: Total Well Dep	nclude INAPL or ONAPL). Depth to Water AND Screen Le th – 35 (Screen Length II DNA) Depth to Water AND Water Cultin – 10.5 X Water Column Heid column height is < 4 %, Place F	PL Column Neight) •	2.83f.Stos nare (4ftft.btos	Volume of Flow Through Cell). Minimum Parge Volume : ¡On Flow Through Cell Volum Ambrent PIO/FIC Reading: Wet bare PIO/FID Reading:	, _
PURGE DATA Purpatypor Signess Stee Morecoom Purpatypor Signess Stee Morecoom Purpatypor Illimo O 1949 L200 1955 3600 1955 3600 1950 1507 3900 1507 3900 1510 9100 1510 10800 1515 10800 1515 10800 1515 10800 1515	Death to Mater (*) Color	g. hydrecichoa.	6.68 17.	inisting	Innextry (NTUs) (NTUs)	8.0012my 22.00 50 GRP 10g/fl (+v) 0.28 -91.7 0.23 -96.9 2.19 -102.3 2.12 -101.0 2.09 -112.3 2.07 -112.3 2.07 -112.3 2.07 -114.2 2.07 -115.6 2.08 -116.1 2.08 -116.6
Slatt Traile: 149		Elapsec Time. Average Purge Rate imLimit.	36 <u>mi</u> n. : <u> </u>		Quality Meter (D: <u>YSTA7)</u> dibrated: A/)3/ //	
SAMPLING DATA Sample Date: 3/3/10 Sample Mellind Straightess Strai	e√ Mansoo⁄i	Samols Time: Samols Flow Raile	1530 400 mYmin.		is. Twa PCBs Samples: <u>noncu</u>	

PCB GW Quality PROJECT NAME. Assessment DATE: 2/22/// MONITORING WELL ID PMAMWOSY	PROJECT NUMBER:21562401.00001 	FTELO PERSONNEL: MIKE PMAMWGSW-0210	Corpett, Brown Brown
INITIAL DATA Well Diameter in Measured Well Depth (otder): 56,47 ft Constructed Well Depth (bloc): 66,57 ft Depth to Water (bloc): 12,56 ft Depth to LKAPL/DNAPL (bloc) ft Depth to Top of Screen (otder: 51,47 ft Screen Length: 6	Water Column Keight (do not include 19APL or CNAPL): 1 Depth to Top at Screen is 9 Depth to Water AND Screen Leigh is 9 Place Pump at: Total Well Depth - 0.2 (Screen Sength + DRAPL) Column Cepth to Top of Screen is < Depth to Water AND Water Column No Place Pump at: Total Well Depth - (0.5 X Water Column Height + UN) Il Screen Length and/or water occumn beight is < 4 tt, Place Pump at	imn Height) <u>54.37</u> * stoc. sight are Screen Length are (4ft, A-L Column Height) —	Volume of Flow Through Cell (; 1, 150
Purge volume (r1)	Septh to	1877 Cene (*6) (es*ten) 93 (6.57 9.347 45 (6.39 7.424 93 (6.13 3.44) 15 (6.13 3.44) 15 (6.13 3.44) 15 (6.13 3.44) 15 (6.13 3.44) 15 (6.13 3.44) 15 (6.13 3.44) 15 (6.13 3.44) 15 (6.13 3.44) 15 (6.13 3.44) 15 (6.13 3.44) 15 (6.13 3.44)	187 (376) -37 (29 m/) 197 (87 38) (21gd) (100) (87 38) (21gd) (100) (97 - 57 2 (97 - 57 2 (97 - 7
Stant Time: 1517 Stoot me: 1538 SAMPLING DATA Sample Date Sample Method: Stratess Other Victorian COMMENTS.	Average Purge Rate (mil/tin).	400 Date C	Ocality Meter ID: 18-6920 al Scaled

PCB GW Quality PROJECT NAME: Assessment CATS: 2/23/:0 WONTORING WELL ID: PMAMAGE	PROJECT NUMBER: WEATRER:	21562401.00001 5 445 47 25°F SAMPI		O PERSONNEL:	_	rbett, Done	Brook	
Well Diameter: in Measured Well Depth (back) Fot 29 ft Constructed Well Depth (back) 101 10 ft Depth to Water (stack) 8.53 ft Priph to UNAPLIDNAPL (blue): 101 10 ft Screen Length: 101 101 101 101 101 101 101 101 101 10	If Depth to Top of Screen is Place Pump at: 1 ctal We'l D If Depth to Top of Screen is Place Pump at: Total We'l D	of include LNAPL or DMAPL); > Depth to Water AND Screen usepch = 0.5 (Screen Length + 0.5) < Depth to Water AND Water Co epth = (0.5 X Water Column Hely er column height is < 4 ft Place	enthis (4 feet APL Column Height) ; okuns: Height and Scr ght + DAAPL Column	een Congth arek Aft. (leight) =	Mine h bosc ;3 x Amhi	the of Flow Through Col turn Purps Volume : : Flow Through Coll Vol. iers PIDFID Reading: tore PIDFID Reading:		<u>570</u> 7∟ } ppm
Pump Typo. States a Super Ventor (mt.) (ime	Depth to Water (t) Cok		6.81	Tenip (S. 92 (6.06 /6.23 /6.99	20nd. Inisign 154 155 168 170	Turtidity (NTUs) \$7.7 23.7 9.7 8.7	00 Serd empl 00 (ngf) 0.47 0.27 0.23 0.17	-36 to 2 ORF (ev) -77 2 - -732 - 7 -137 - 7 -744 - 4 -744 - 4
5ien Time		-	12 min		Water Guality	Weter ID: VSI	€20	
Stop Time		Average Purge Rate (mL)mi Sample Tima Sample Flow Rate:	10 20 400 ml	-/min	Pete Galibrate Analysis QAVQC Bergi	Fore! POBs	//0	

Appendix B

Chains-of-Custody

Savannah

S19Z LaRoche Averua

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL PROPERTY.

phone 912.354.7658 Tax 912.352 0 lb5																					Test	Americ	a Lab	eralaria	es. Inc.	
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St Laus, MO 63110	Calculate	1 C) or We	ark Doys (W	1		38	.		1	Н		1	1			Ш	-1				ı	7	18624	01 CO O	1#	
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314 429-0452 FAX		7	weeky			i e	Н		1	: 1		i	Н		1	Ш				1	SUE	No				
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Savannah

51.02 LaRoche Avenue

Chain of Custody Record

<u>TestAmerica</u>

TenAmerica Laboratorics, Inc.

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Severado, GA 31404

phone 912,354,7858, fax 912,352,0165

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Appendix C Quality Assurance Report

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

PCB Groundwater Quality Assessment Program 1st Quarter 2010 Data Report

Prepared for

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

April 2010



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

Project # 21562401

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1.0 INTRODUCTION

This Quality Assurance Report presents the findings of a review of analytical data for groundwater samples collected in February of 2010 at the Solutia W.G. Krummrich plant as part of the 1st Quarter 2010 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 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 14 samples (ten investigative groundwater samples, one field duplicate pair, 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) KPM037 utilizing the following USEPA Methods:

Method 680 for PCBs

Samples were reviewed following procedures outlined in the USEPA 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.
Н	Sample was prepped or analyzed beyond the specified holding time.
В	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.						
υJ	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. Upon review of SDG KPM037, sample PMA-MW-3S-



0210 was re-extracted approximately 23 days outside of holding time criteria (7 days) due to loss of internal standards from the original extract. Professional judgment was used to qualify, but not reject data, due to the stability of PCBs. Analytical data that required qualification based on holding time criteria are summarized in the following table:

Field ID	Parameter	Analyte	Qualification
PMA-MW-3S-0210	PCBs	Monochlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Dichlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Trichlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Tetrachlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Pentachlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Hexachlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Heptachlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Octachlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Nonachlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	DCB Decachlorobiphenyl	UJ

The cooler receipt form indicated that four out of five coolers were received by the laboratory at temperatures below the 4° C \pm 2° C criteria. Samples received were in good condition and not frozen; therefore, no qualification of data was required.

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 with the exception of those surrogates in data reviews discussed further in Appendix D. No qualifications of data were required due to surrogate recoveries.



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 (one per 20 investigative samples or 5%). URS Corporation submitted one MS/MSD sample set for ten investigative samples, meeting the work plan frequency requirement.

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

Sample PMA-MW-1S-0210 was spiked and analyzed for PCBs in SDG KPM037. All MS/MSD 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. No qualifications of data were required.



8.0 INTERNAL STANDARD RESPONSES

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. 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 reviews. IS responses met the criteria as described above, with the exception of the IS responses in the data reviews discussed further in Appendix D.

Analytical data that required qualification based on internal standard (IS) data are included in the table below. Analytical data reported as non-detect and associated with internal standard recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

Sample ID	Parameter	Analyte	Qualification
PMA-MW-3M-0210	PCBs	Monochlorobiphenyl	J
PMA-MW-1S-0210	PCBs	All PCB nondetects	UJ
PMA-MW-4S-0210	A-MW-4S-0210 PCBs Monochlorobip		J
PMA-MW-4S-0210	PCBs	Dichlorobiphenyl	J
PMA-MW-4S-0210 PCBs		Tetrachlorobiphenyl	J
PMA-MW-4S-0210	PCBs	Pentachlorobiphenyl	J
PMA-MW-4S-0210	PCBs	Heptachlorobiphenyl	J
PMA-MW-4S-0210	PCBs	Octachlorobiphenyl	J
PMA-MW-4S-0210	PCBs	Nonachlorobiphenyl	J
PMA-MW-4S-0210	PMA-MW-4S-0210 PCBs		J
PMA-MW-4S-0210-DL	PCBs	Trichlorobiphenyl	J
PMA-MW-4S-0210-DL	PCBs	Hexachlorobiphenyl	J

9.0 RESULTS REPORTED FROM DILUTIONS

Sample PMA-MW-4S-0210 was diluted due to abundance of target analytes. The diluted sample results for PCBs were reported at the lowest possible reporting limit.



Appendix D

Groundwater Analytical Results (with Data Review Sheets)

SDG KPM037

Results of Samples from Monitoring Wells:

PMA-MW-1M

PMA-MW-1S

PMA-MW-2M

PMA-MW-2S

PMA-MW-3M

PMA-MW-3N

PMA-MW-4D

PMA-MW-4S

PMA-MW-5M

PMA-MW-6D

Solutia Krummrich Data Review WGK PCB GW Quality 1Q10

Laboratory SDG: KPM037

Reviewer: Elizabeth Kunkel Date Reviewed: 4/15/2010

Guidance: USEPA National Functional Guidelines for Superfund Organic

Methods Data Review 2008

Applicable Work Plan: Revised PCB Groundwater Quality Assessment (Solutia

2009)

Sample Identification	Sample Identification
PMA-MW-1S-0210	PMA-MW-1M-0210
PMA-MW-2M-0210	PMA-MW-2M-0210-AD
PMA-MW-2S-0210-EB	PMA-MW-2S-0210
PMA-MW-5M-0210	PMA-MW-6D-0210
PMA-MW-3M-0210	PMA-MW-3S-0210
PMA-MW-4D-0210	PMA-MW-4S-0210

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated that PCB surrogates were diluted out and not recovered in sample PMA-MW-4S-0210. Sample PMA-MW-3S-0210 was reextracted outside holding time criteria. Additionally, PCB surrogates were outside evaluation criteria in sample PMA-MW-1S-0210 and the equipment blank. Internal standard recoveries were outside evaluation criteria in several samples. Sample PMA-MW-4S-0210 was diluted due to abundance of target analytes. These issues are addressed further in the appropriate sections below.

The cooler receipt form indicated that four out of five coolers were received by the laboratory at temperatures below the 4° C \pm 2° C criteria. Samples received were in good condition and not frozen; therefore, no qualification of data was required.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, sample PMA-MW-3S-0210 was re-extracted approximately 23 days outside holding time criteria (7 days) due to loss of internal standards from the original extract. Professional judgment was used to not reject data due to the stability of PCBs.

Qualifications due to hold time criteria are included in the table below:

Sample ID	Parameter	Analyte	Qualification
PMA-MW-3S-0210	PCBs	Monochlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Dichlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Trichlorobiphenyl	UJ
PMA-MW-3S-0210	PMA-MW-3S-0210 PCBs		UJ
PMA-MW-3S-0210	PCBs	Pentachlrobiphenyl	UJ
PMA-MW-3S-0210	PCBs	Hexachlrobiphenyl	UJ
PMA-MW-3S-0210	PMA-MW-3S-0210 PCBs		UJ
PMA-MW-3S-0210	PMA-MW-3S-0210 PCBs		UJ
PMA-MW-3S-0210	PCBs	Nonachlorobiphenyl	UJ
PMA-MW-3S-0210	PCBs	DCB Decachlorobiphenyl	UJ

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?

No, surrogates were diluted out and not recovered in sample PMA-MW-4S-0210-DL. No qualification of data was required.

Sample ID Parameter		Surrogate	Recovery	Criteria		
PMA-MW-1S-0210	PCBs	Decachlorobiphenyl-13C ₁₂	128	25-113		
PMA-MW-2S-0210-EB	PCBs	Decachlorobiphenyl-13C ₁₂	179	25-113		

Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria indicating a possible high bias did not require qualification. Equipment blank, PMA-MW-2S-0210-EB is a quality control sample and does not require qualification. No qualification of data was 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-0210 was spiked and analyzed for PCBs.

Were MS/MSD recoveries within evaluation criteria?

Yes

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?
No

Sample ID	Parameter	Analyte	IS Area Recovery	IS Criteria
MB 680-161622/17-A	PCBs	Phenanthrene-d ₁₀	5,149	8,678-12,397
LCS 680-161622/18-A	PCBs	Chrysene-d ₁₂	49,796	22,917-42,561
PMA-MW-6D-0210	PCBs	Chrysene-d ₁₂	54,072	22,917-42,561
PMA-MW-3M-0210	PCBs	Phenanthrene-d ₁₀	19,190	8,678-12,397
PMA-MW-3M-0210	PCBs	Chrysene-d ₁₂	87,871	22,917-42,561
PMA-MW-1S-0210	PCBs	Phenanthrene-d ₁₀	3,625	11,033-20,491
PMA-MW-1S-0210-MS	PCBs	Chrysene-d ₁₂	68,490	33,335-61,909
PMA-MW-2M-0210	PCBs	Chrysene-d ₁₂	72,314	33,335-61,909
PMA-MW-2M-0210-AD	PCBs	Phenanthrene-d ₁₀	10,393	11,033-20,491
PMA-MW-2S-0210-EB	PCBs	Phenanthrene-d ₁₀	3,787	11,033-20,491
PMA-MW-2S-0210	PCBs	Chrysene-d ₁₂	69,037	33,335-61,909
PMA-MW-5M-0210	PCBs	Chrysene-d ₁₂	65,494	33,335-61,909
PMA-MW-4D-0210	PCBs	Phenanthrene-d ₁₀	17,590	8,350-15,506
PMA-MW-4D-0210	PCBs	Chrysene-d ₁₂	75,665	31,603-58,691
PMA-MW-4S-0210	PCBs	Phenanthrene-d ₁₀	74,984	8,350-15,506
PMA-MW-4S-0210	PCBs	Chrysene-d ₁₂	84,222	31,603-58,691
PMA-MW-4S-0210-DL	PCBs	Phenanthrene-d ₁₀	36,001	11,910-22,118
PMA-MW-3S-0210	PCBs	Chrysene-d ₁₂	58,905	31,603-58,691
LCSD 680-163986/5-A	PCBs	Phenanthrene-d ₁₀	16,840	8,350-15,506
LCSD 680-163986/5-A	PCBs	Chrysene-d ₁₂	63,198	31,603-58,691

Analytical data that required qualification based on internal standard (IS) data are included in the table below. Analytical data reported as non-detect and associated with internal standard recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. MB 680-161622/17-A, LCS 680-161622/18-A, PMA-MW-1S-0210-MS, PMA-MW-2S-0210-EB, and LCSD 680-163986/5-A are quality control samples and do not require qualification. Internal standard areas for phenanthrene-d₁₀ and chrysene-d₁₂ recovered within the initial calibration average internal standard area in samples PMA-MW-6D-0210, PMA-MW-2M-0210, PMA-MW-2M-0210-AD, PMA-MW-2S-0210, PMA-MW-5M-0210, PMA-MW-4D-0210, and PMA-MW-3S-0210; therefore, no qualification of data was required. [Chrysene-d₁₂ was used in the calibration and quantification of the target compounds and surrogate].

Sample ID	Parameter	Analyte	Qualification
PMA-MW-3M-0210	PCBs	Monochlorobiphenyl	J
PMA-MW-1S-0210	PCBs	All PCB nondetects	UJ
PMA-MW-4S-0210	PCBs	Monochlorobiphenyl	J
PMA-MW-4S-0210	PCBs	Dichlorobiphenyl	J
PMA-MW-4S-0210	PCBs	Tetrachlorobiphenyl	J
PMA-MW-4S-0210	PCBs	Pentachlorobiphenyl	J
PMA-MW-4S-0210	PCBs	Heptachlorobiphenyl	J
PMA-MW-4S-0210	PCBs	Octachlorobiphenyl	J

Sample ID	Parameter	Analyte	Qualification
PMA-MW-4S-0210	PCBs	Nonachlorobiphenyl	J
PMA-MW-4S-0210	PCBs	DCB Decachlorobiphenyl	J
PMA-MW-4S-0210-DL	PCBs	Trichlorobiphenyl	J
PMA-MW-4S-0210-DL	PCBs	Hexachlorobiphenyl	J

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples collected as part of this SDG? No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
PMA-MW-2M-0210	PMA-MW-2M-0210-AD

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported? Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

No



ANALYTICAL REPORT

Job Number: 680-55249-1

SDG Number: KPM037

Job Description: WGK PCB GW Quality - 1Q10 - FEB 2010

For:

Solutia Inc. 575 Maryville Centre Dr.

Saint Louis, MO 63141

Attention: Mr. Jerry Rinaldi

Lidya Juliera

Reproved to Release Was Calenta Provide Marigan I Was Calenta (Child

Lidya Gulizia Project Manager I Iidya.gulizia@testamericainc.com 04/08/2010 Reviewed

OIG

cc: Mr. Thomas Adams Mr. Bob Billman Dave Palmer APR 13 2010 どスK

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

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TestAmenca Laboratories, Inc.

TeylAmenca Savannah i 51023 aRoche Avenue i Savannah GA i 31404 Tel 1912) 354-7856 i Fak (912) 352-0355 i www.teylot.co.jacchica.co.



Job Nerrative 660-55249-1 (SDG KPMC3)

Receipt

All samples were received in good condition within temperature requirements.

GC/MS Semi YOA

Methodis) 880, Sample PMA-MVI-4S-0210 (880-55283-5), was dicted due to abundance of target analytes . As such surrogate recoveries are not reported, and closeted reporting limits (RLs) are provided.

Methods) 680. Surrogate recovery for like following sample(s) was outside the upper curtial timit. PMA-MW 1S 0210 (690 55249.1). PMA-MW-25-0210-FB (650-55249-5). This sample circuit contain any target analysis; therefore, re-extraction and/or re-analysis was not performed.

Melhod(a) 680. The Internal standards in the original extract for PMA-MW-35-0210 (680-55280-3) were lost in the extraction and/or concentration process in the initial extraction and a valid always should not be obtained from this extract. The sample was re-extracted outside of holding time and successfully analyzed with ecceptable internal standard and eurogate recovery. The results for the extraction outside of holding time are prosected in the report.

No other analytical or quality issues were noted

Comments

No accisional comments.

APR 13 2010 ERIC

METHOD SUMMARY

Clent: Solutia Inc.

Job Number: 680-55249-1

5dg Number, KPM037

Description	Lab Location	Method	Preparation Method	
Mainx Water				
Polychlerogled Ripheryls (PCRs) (GC/MS)	1AU SAV	EPA 680		
Liquid-Liquid Extraction (Separatory Funder)	TAL SAV		EPA 680	

Lab References:

TAL SAV - TealAmenca Savernah

Method References:

EPA = US Environmental Protection Agency

METHOD/ANALYST SUMMARY

Chent. Solatis Inc.

Job Number. | 680-55249 (

Sdg Numser: KPM037

Method	Analyst	Analyst ID
EPA 860	 Cheimberan Kim	KAC

SAMPLE SUMMARY

Cherc Solubs Inc Job Number 680-55249-1 Sdg Number: KPM037

			DaterTime	Date/Time
Lab Sample ID	Client Sample ID	Client Matrix	Sampled	Received
G9D-55249-1	PMA MW 18 0210	Water	38/72/2018 1120	02/23/2010 0919
68G-55249-1MS	PMA-MW-1S-0710-MS	Water	02/22/2010 1120	02/23/2010 0919
690-55249-1MSO	PMA-MW-15-0210-MSD	Water	02/22/2018 1120	02/23/2010 0 9 19
G9D-55249-2	PMA MW IM 0210	Water	d3/72/9018 1210	02/23/2010 0919
680-55249-3	PMA-MW-2M-0210	Water	02/22/2018 1400	02/23/2010 0919
890-55 249 AFD	PMA-MW-2M-0210-AD	Water	02/22/2010 1400	02/23/2010 0919
G9D-55249-5HH	PMA MW 28 0210 EB 🗸	Water	02022/2010 1415	02/2/92010 0919
680-55249-5	PMA-MW-2S-0710 - 1	Water	02/22/2010 1446	02/23/2010 0919
680 55249-7	PMA-WW-5M-0210 🗹	Water	02/22/2010 1545	02/23/2010 0919
080 55283.1	2MA MW460 0210 <	Water	02/23/28:10 1028	02/24/2010/0919
680-55283-2	2 0150-MAY-3M-0210	Water	02/23/2010 1140	02/24/2010 0819
689-55283-3	PMA-MW-35-0210 <	Water	62/23/2010 1238	02/24/2010 0919
580 55280-4	PMA MW/40 02:0	Water	02/23/2810 1405	02)24/2010 (09 1 9)
680-55283-5	PMA 65/48-0210	Water	02/23/2010 1530	02/24/2010 0819

SAMPLE RESULTS

Job Number 880-55249-1

Sdg Number: KPM037

Client Sample ID:

PMA-MW-15-0210

Lab Sample ID Client Maire 580-56249-1

Water

Date Sampled | 02/22/2013 1129 | Date Rette ved. 02/20/2019 0919

Мефли	683	Analysis Datch 680-164088		Instrument (D:	MSY
Preparation	680	Prep Balch: 688-161622		Lab File ID:	N/A
Dilution	1.0			Initial Weight/Volume	1039 miL
Date Analyzee	03/31/2010 O156			Final Weight/Volume:	1 mL
Date Prepared	02/25/2010 1417			Injection Volume:	
Analyle		Resull (ug/L)	Qualifier	•	н
Mensichlerebigheit	<u> </u>	a :157	<u>. ПТ., </u>	"	0.097
Diminrohiphenyl		0.097	رونا ا		8.097
Trichlo-colphenyl		0.397	្មប្រើ		3 (97
Tetrachlorobipheny	·I	019	นเรี		3.19
Pentachlorob phon	yl	U 1Š	ំជំភ្ញី"		3.19
Hexachtorobipheny	·I	N 1Ş	'U.S.		0.19
Heptachlaroaiahen	y1	0.28	[u5]		0.25
Octachionob pheny	l	D 2!I	ំណូវ៉"		0.29
Nonachiorob pheny	1	049	้ นิว		0.49
DGB Decachloroby	phenyl	D 49	"u"		0 49
Surrogade		%Rec	Qualifier	/ //cceptan	ice Limits
Decachlorobipheny	413012	(128)	(X)	25 - 113	

Job Number | 680-55249-1

5dg Number, KPM037

Client Sample ID: PMA-MW-1M-0210

Lab Sample ID 680-55249-2

Client Solutia Inc.

Client Matrix. Water

Date Sampled | 02/22/2010 1210 | Date Received | 02/23/2010 0919

		650 Polychionnated Biphenyts (PCBs	(GC/MS)	
Methari	680	Analysis Balch 680-164866	Instrument ID	MSY
Preparation:	1990	Prep Daton: 680-181622	Lab File ID.	N/A
Dilutary	10		Initial Weight/Valume	1090 ml
Date Analyzes	00/31/2010 0328		Final Weight/Volume	7 roL
Date Preparen	02/25/2010 1417		Injection Volume:	

Aralyla	Result (uy/_t	Qualifier	R∟
Monophiorobiphetry/	ບ 2ບ		0.094
Lichlarobipherni	0.094	0	0.094
Trightorshiphenyl	0.094	J	0.094
l'etrachtorobiphenyl	D 19:	J	0.6
Pertachlorob phonyl	016	J	0.19
Renachtorubiphenyl	D 19	7	d 19
Heptachlorobiahernyl	0.58	J	0.26
Octachlorobipheryl	0.20	U	G 58
Nonarhiorob phenyl	0.47	U	0 47
DCB Decarthrombipmenyl	0.47	U	0.41
Surngale	%Rec	Qualifier	Acceptance Limits
Decachlorotiphonyl-13012	e7		25 1/2

APR 13 2010 &ZK

Client. Solubatho

- Jab Number: 680-55249 1

Sdg Number: KPM037

Cirent Sample (D):

PMA-9W-2M-0210

Lab Sample II) Client Matrio 680 55249 3

Water

Date Sampled: 02/22/2010 1400 Date Received: 02/23/2010 0919

680 Polychlorinated Biphenyls (PCBs) (GC/MS)				
Method.	680	Analysia Barch: 680-164886	ristioner(ID.	MSY
Proparation	880	Prep Batch 600 161622	Lab File (Ü.	N/A
Dilujion	10		Initial Woight/Volume:	1050 mL
Date Analyzed	04/01/2010 0359		Final Weight/Volume	1 mL
Date Preparet	02/85/2010 1417		Injection Volume	
Analyte		Result (cg/L)	Qualifier	н_
Monachlarohiphei	ryl	2.4		0.034
Dichlarobipheryl		0.094	U	0.094
Institutobjeneryl		0.094	Ŋ	0.094
Tetrach orobipher	nyl	0.0	u	0.19
Peniachlorobiphe	nyl	019	U	U.19
Hexachlom/typhos	ıyı	0.19	U	3 19
<u>Heplachlurobiole</u>	rnd	Ω 78	U	9.28
Ottashlaroopher	γl	0.28	U	0.28
Nonachlarobipher	γl	0.47	u	3.47
DOH Detachlorob	apheryl	0.47	U	0.47
Surugale		%Rec	Quantier Accepts	erce Limits
Occachicrobiphen	™ (2012	73 "	25 - 113	2

Client: Solutia Inc. Job Number: 680-55249-1

Sdg Number | KPM037

Glient Sample ID: PMA-MW-2M-0210-AD

 Light Sample: Ur
 880 55249 4FD
 Oate Sample: 02/22/2010 (400 Citer) Matrix:
 Water
 Up to Received: 02/23/2010 (9919 Citer) Matrix:

	550 Polychlorenated Siphenyls (PCBs) (GC/MS)				
Method: Preparation:	660 880	Analysis Batch 680-164686 Prep Saich, 680-161622	insjrumenj ID: Gab File ID.	MSY NA	
Divoon:	1.D	Prep Salak Cob-101022	ind al Weight/Volume		
Date Analyzed.	04/01/2010 0430		Final Weight/Volume		
Date Prepared:	N2/25/2010 1417		injection Volume.		
Analyte		Result (ug/Li	Gualifler	RL	
Monoch archipher		2.4		0.095	
Dichlorob phenyl		a asa	U	0.095	
Inchlorabiphenyl		0.395	U	0.095	
Teu aci Norobiphen	iyl	D 19	U	0.19	
Pertachlorobipher	nyl	019	υ	0.19	
Hexachicrobiphon	ıyl	910	U	0.19	
Heptachki:obiolei	rnd	0.79	V	0.29	
Octarchionsbipment	γl	0.29	U	0.29	
Numechitorob pher	•	D 48	U	0.48	
DDB Greachloreb	phenyl	048	U	048	
Surragate		%Rec	Quelifier Accep	cance Limijs	
Decachinrabighen	ryl 12012	76	25 - 1	13	

APR 13 2010 €2/K_

Client: Solutia Inc.

Job Number 680-55240-1

Sdg Number: KPM037

Ctient Sample ID

PMA-MW-28-0210-EB

Lab Gample IO.

680-55249-SEB

Client Matrix:

Water

Date Sampled | 02/22/2010 1415 | Date Received | 02/27/2010 0019

Method	68D	Analysis Balch/ G90-164886	Instrument	ID: MSY
Preparation	580	Prep Batch 680-161627	Lab File ID:	N/A
Dinien	1. C		Intial Weigh	itVolume. 1850 mL
Date Analyzed:	04/01/2010 0501		Final Weigh	MValumer 1 ml.
Date Prepared.	02/25/2010 1417		Injection Va	lume
Anglyle		Res:# (.kg4)	Qualifier	RL
Monachlarabipherry		0.0BF		690.0
Tachtoroblehenyl		D GHIS	П	0.096
Frish oxobiphenyl		0.095	U	0.396
fetrach probiphery)		C.19	և	910
Pentach probipheryl		0 19	IJ	0.15
lexach probliphenyl		a. 19	U	0 19
leptachloroblphenyl		RI 291	П	0.79
Actachilosophery)		0.29	U	0.26
Nonasztlorobiphony		0.48	П	HΔO
CB Decachlarobiph	emi	0.48	U	0.48
Burrogane		%Acc.	(Aus)her	Acceptance Limits
Decachtorub pheryl-	13012	(179)		25 - 113

Analytical Data

Client Solutia Inc Joo Number: 680-55248-1

Sdg Number KPM037

Client Sample ID:

PMA-MW-25-0210

Lab Sample 10.

680-55249-6

Cleal Mainx: Water

Date Sampled: 02/22/2010 1445 Date Received: 02/23/2010 0819

		680 Polychlorinated Biphonyls (PCBs) (GC/MS)			
Method:	680	Analysis Batch 680-164886	Instrument ID:	MSY	
Preparation:	680	Prep Balch, 680-161622	Lab File ID.	N/A	
Drugon:	. 0		Initial WeightVolun	ne 1050 ml.	
Dale Analyzed.	04/01/2010 0532		Final Weight/Volum	ne: 1 n/L	
Date Prepared.	02/25/2013 1417		Injection Votonie.		
Analyte		Result (ug/L)	Qualifier	RL	
Manochlorobipher	ıyl	0.965	ш	D 095	
Dich orchipheryl		0.896	II	0.085	
Trichtorabiphenyt		0.395	U	0.095	
Tetrachipropiphonyl		עו ט	J	្ 1ធ	
Pentachlorobipher	'ty	0 19	J	C.19	
Hexachloroniphen	Ņ	0 19	บ	C 19	
Heptach probipher	ryl	0.79	Ų	0.29	
Octachlorubiphens	y1	029	U	8.29	
Nonachtornbiphenyl		D 4H	u	0.45	
OCB Decachlerab	iphenyl	048	U	0.40	
Surrogate		%Hec	Qualifier Acco	eptance Limita	
Desacribioopheryl-13C12			25 ·	113	

Surrogate:

DecachlorobiphenyH13C12

Analytical Data

Client Solutia Inc Joo Number, 580-55249-1

Sdg Number, KPM037

Client Sample ID: PMA-MW-5M 0210

 Lab Sample (C)
 680-55749-7
 Date Sample (C)
 680-55749-7

 Client Mainx:
 Water
 Date Received 02/23/2010 0918

Method:	680	Analysis Datch, 680-164888		Instrument ID.	MSY
Preparation:	680	Prep Balch: 690-161622		Lab File ID:	NA
Dilution.	10	•		Initial Weight/Volume	1050 mL
Dago Analyzeri	D4819/2010 0903			Final WeightVolume.	. uıF
Date Prepared	02/25/2010 1417			Injection Volume:	
Angly1e		Result (ug/L)	Sualrie		RL
Monochlorobiphenyl		0.095	Ш		0.095
Dichlaroaphenyl		0.095	U		0.095
Trich crobiphenyl		a 1:95	Ш		3,095
Letrachlorobipheir	yl	019	U		0.19
Perilach orobipho	nyl	0.19	IJ		0.19
Hexachlorubiphen	γĺ	0.19	;I		J.U
Hepsachlorobiphenyl		0.29	J		0.29
Odasho:obpneryl		0.29	_		0.29
Nonathio to be prenyl		0.48	J		0.48
DCB Decachlorobiphenyl		o ze	J		0.48

Coarfier

Acceptance Limits

25 - 113

%Rec

27

APR 1\$ 2010 €.3/

Client: Soluçia Inc

Job Number 680-55249-1

Sdg Number, KPM037

Client Sample ID

PMA-MW-6D-0210

Lab Sample D: Cled Mainx: 680-55283-1

Water

Date Sampled: 02/23/2010 (02/2 Date Received: 02/24/2010 0919

		680 Paye	hlormated Biphenyls (PCBs) (GC/M:	5)	
Method	580	Analys	sis Ralch: 680-154880	ä	nstrument ID	MSY
Preparation.	880	Руер (3akon 680-181622	L	ati Fie ID	N/A
Dilulian:	1.Ĝ			Ir	nha Weight/Volume:	1050 ml
Date Analyzed:	03/31/2010 201 8			F	inel Weight/Volume	1 irL
Date Prepared.	02/25/2010 1417			Ir	njection Valuine.	
Analyte			Result (ug/L)	Qualifier		RL
Monosillorobiphen	yi	· · · · · · · -	0 19	•		D 0985
Dichlorop phenyl			D GRŞ	L		0.095
Trich crubipheny			0 095	l		0.098
Transchlerahiphery	4		6.19	П		0.18
PentacNorabiphen	n/l		C 19	U		0.19
Hexachloronishery	4		C. 19	П		ĎIЯ
Heptachlorobighen	iyl		R 29	II		0.29
Octach probipheny	1		3.29	U		0.29
Nonachi orobiphony	γt		11.48	11		0.49
DCS Decact Involu	ul:ernd		9.48	U		0.48
Surrogene			%-₹ec	Qualifier	Accepter	'ce umits
Decachbrobionerry	Decactionotipmenyl-13012		77		25 1:3	

Analytical Data

Client, Salulia Inc. Job Number: 580-55249-1

Sog Number, KPM037

Client Sample ID: PMA-MW-3M-0210

Client Matra:

Lab Sample ID. 686 55283-2

Water

Date Sampled: 02/23/2010 1140 Date Repowed: 02/24/2010 0915

680 Polychlorinated Biphenyls (PCBs) (GC/MS)						
Method	683	Apalysis Batch: 680-164986		Instrument ICI	MSY	
Preparation	680	Prep Betch 680-161622		Lab File ID.	N/A	
Dikijon	10			Initial Weight/volume:	106il: ml	
Date Analyzed	03/31/2010 2947			Final Weight/Volume	1 mL	
Liste Prepares	02/25/2010 1417			Injection Valume		
Analyte		Result (ug/L)	Qualifer	r	R_	
Menochlorob pher	<u>m/</u>	0.87	ጁ 3 ″ ା		0.094	
Distributionishenyl		11.094	Ū		0.094	
Inchlorobypheryl		5 094	U		0.09▲	
Tetrachlordt/phor	nyl	3.19	U		: IS	
Pentach probiptié	ηγl	319	U		2.19	
Hexachlorobipher	nyl	0.19	li .		11.19	
• leptachloropiohe	myl	0.28	L.		0.28	
Odachorobipher	yl	0.28	ե		0.28	
Nonachlorob phenyl		0.47	L		0.47	
DCB Decachlorus	aphenyl	0.47	l		0.47	
Sunagate		%Rec	Qualifier	r Acceptar	nce Limila	
Decacheratipheny-12C12		69		25 - 113		

Client Solutia Inc.

Decarbiorohiphenyl-13C12

Job Number: | 680 55249 7

Sag Number, KPM037

Client Sample ID:

PMA-MW-35-0210

Tab Sample 19:

680-55280-3

Client Malox.

Maler Water Date Received, 02/23/2010 1230 Date Received, 02/24/2010 0919

25 - 113

		680 Polychiormated Biphenyls (I	PCBs) (GCMS)		
Method. Proparation: Dilution: Date Analyzed: Date Prepared:	680 880 1 0 04/31/2018 1928 6/975/2018 1401	Analysis Batch, 660-164886 Prep Batch, 680-163998	histornerf, ID nab Hie ID In bal Weight/Volume Final Weight/Volume njection Volume		
Analyte		Result (ug/L)	Qualifier	н	
Menochlorohiphen		0.995	THE - 185	0.095	
Dignorobphenyl		0.095	.uπ ∿uJ°	0.095	
Trichlorabiphenyl.		0.095	Jun - U.S.	0.095	
Tenachlorouiphen	y.	D 15	James 4 (4.5)	0.19	
Penlachlorabiphen	ry	0.19	Jan - 1 3 3"	0.19	
Hesachlorobiohem	ý.	פו ט	Limb to take "	0.19	
Meptachtorobipher	γl	0.29	June 11 J	0.29	
Criachicrobipheny	ч	0.29	-40 T " LAUT"	0.29	
Norachtorobiphen	γl	D 48	TH. 102.	0.48	
DDB Decachlerata	phonyl	0.40	- 1444 - 14.3°	0.48	
Surrogate		%Rec	Quálifier Accep	lance Limits	

Clent Soluta Inc.

Job Number, 680-55249-1

Sdg Number KPM037

Chark Sample ID:

PMA-MW-4D-0210

Lab Sample ID:

68D 55283 4

Cleni Malrx.

Walar

Cate Sampled: 02/73/2810 1406 Pate Received: 02/24/2010 0919

		680 Polychlorinated Bipheryls (P	80 Polychlorinaled Bipheryls (PCBs) (GC/MS)				
Method. 680 Preparation: 680 Dispon: 1.0		Analysis Rarch; 680-164866 Prep Baich 680-161622	i	Instrument ID. Lab File ID:	MSY N/A		
Oate Analyzed. Date Arepared:	04/31/2010 1616 62/25/2010 1417		I	initial Weight/Volume Fina Weight/Volume Injection Volume	1050 mL 1 mL		
Analyte		Regul (Lg/L)	Qualifier		RL		
Manachiorphyben	yl	0.26			0.094		
Oichtorobphenyl		0.28			0.094		
Inchlorabipheny		0.094	U		D (1:14		
Telrachlorobiphen;	yı .	0.19	.1		G 19		
Perdackluratiphen	ry.	019	J		0.19		
Hexachloroblphcry	y.	Ø1.0	J		C 19		
Heplachtorobipher	·γl	0.76	J		0.28		
Gelachieretapheny	11	0.28	J		0.28		
Nonachterobiphenyl		0.47	Çl.		C.47		
DOM Decachlorate	phenyl	0.47	U		0.47		
Surogate		%Rec	Qualifier	Acceptai	ice um ts		
Decarblorohipmenyl-12C12		59		25 112			

* "Do not use this data. Use all other data."

Analytical Data

Client. Soluba Inc.

Jab Number: 660-55249-1

Sog Number: KPM037

Chent Sample ID:

PMA-MW-43-0210

Lab Sample ID

BRG-65283 5

Client Malnx. Water

Date Sampled: 02/23/2010 1530 Date Renewed: 02/24/2010 0919

		680 Polychlorinated Biphany	is (PCBs) (BC)	MSt	
Method Preparation: Dilation Date Arelyzed Date Prepared:	680 680 1-0 54/01/2010 1649 62/25/2010 1447	Analysis Batch, 880-1648 Prep Balch, 680-161622	86	Instrument ID: Lab File ID Initial Weight-Volume E nat Weight-Volume Injection Volume	MSY N/A 1030 mL 1 mL
Fralyle		Result (ug/L)	Qualifie		R.
Monochlorobipher	yl	14	~1.		0.097
Dictribrobiphernyl		6 B	-, Z		0.097
Excharabighonyi		21	— ∸		
Fetraul (crobiphen	yl	52	S. 3.		9.19
^a nclachtorobipher	191	34	5° 3"		0.49
lepachlaroblphon	y				0.19
leptack/orotopher	141	33	-3,"		0.29
Octach ambiphony	/ 1	8.3	"J"		0.29
Nonadilorobiphenyl		12	- 2,		349
BOS Decachlorobipheryl		D 85	()		0.49
Surrogate		%Rec	Outshiles	Anteoplar	ice Limils
Gecachlarohiphenyl-13G12		59		25 - 113	

APR 1 8 2010 8 - 1

ye i Use these results only. All other data was reported from the 1.0 × dilution analyssis.

Analytical Data

Client Solutia Inc.

Joh Number: 660-55249-1

Scg Number KPM037

Client Sample ID:

PMA-MW-45-0210

Lab Sample ID

Decachioratiphenyl-19C12

680-55283-5

Client Malron

VValer

Date Sampled, 02/23/2010 (530) Date Received: 62/24/2010 09:19

25 - 1;2

		880 Polychlorinated Biphenyls (PC)	BS)(GCIMS)	
Method	680	Analysis Batch, 680-164985	Instrument (C)	MSY
Preparation.	680	Prep Balch, 680-151622	Lab File ID	N/A
Ollulian	.0		Intial Weight/Volume:	10381 mL
Date Analyzed	04/05/2010 1715	Run Type - St	Final Whight/Volume	1 mL
Date Prepared	02/25/2010 14:7		Injestion Volume	
Analyte		Result (igit)	Qualife:	RL
Manachie depteryl		1.3		<u> 697 - </u>
€liosiomoshemi		_ 	- 	
Trichtorubiphenyl			<u> 46.√</u> 2	<u>0.97</u>
Instructional sphery.		43		. 1.0
Pentadas abiphany	· · · - · · - · · - · · · · · · · ·	····- 		
<u>Flexachlorobipheny</u>		· · 	<u>. 5 - 3</u> .4	1.9 . ~
Hebsecoptobolopach		42		2.0
Octoch or obspheringt		7.2		
Nanachlamb pharyt			• — ——	45
OCB Decathbrobiph	nistry#		u	₹.9 ·

APR 18 2010 27/

DATA REPORTING QUALIFIERS

Ctent Solutia Inc. Job Number: 890-55249-1

Stig Number, KPV037

Lab Section	Qualmer	Oescnption:
GCMS Semi VOA		
	U	Indicates the analyte was analyzed for out not estaded
	E	Result exceeded calibration range
	н	Sample was prepped or analyzed beyong the specified holding time
	x	Surrogate is outside control limits
	D	Surrogate or matrix scake recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D

QUALITY CONTROL RESULTS

Clent. Solutia Inc. Job Number: 680-55249-1
Sug Number: KPM037

QC Association Summary

GCMRS Semi VOA	Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Melhod	Prep Balch
CS 690-16182213 A	GC/MS Semi VOA					·
CS 690-16182213 A	Preo Barch 680-161622			•		
PMA_MV_1S_0210	CS 688-164622/18 A	Lab Control Sample	Т	Water	690	
Sec-55249-1MS	MB 680-161822/17-A	Malhod Blank	т	Water	690	
Manix Spike Duploate	5915-55249-1	PMA MW/ 15 0213	Т	Water	006	
Sec-55249-9	3BC-55249-1MS	Mainx Spike	1	Water	691:	
200 25249-3 PMA-MW-2M-0210 T	3914-55249 1MSD	Matrix Spike Duplicate	Т	Waler	69C	
Section Sect	58C-55249-2	PMA-MW-IM-0210	T	Water	GSE	
Sec SE249 SEB	380 55249-3	PMA-MW-2M-0210	т	Water	680	
\$80 55249 6 PMA MW 25 0210 T Water 630 580-55249-7 PMA-MW-SM-0210 T Water 630 580-55249-7 PMA-MW-SM-0210 T Water 630 580-55283-1 PMA-MW-SM-0210 T Water 630 580-55283-2 PMA-MW-ID-0210 T Water 690 580-55283-4 PMA-MW-ID-0210 T Water 690 580-55283-4 PMA-MW-ID-0210 T Water 690 580-55283-5 PMA-MW-ID-0210 T Water 680 580-55285-5 PMA-MW-ID-0210 FMA-MW-ID-0210 FMA-MW-ID	580-55249-4FD	PMA-MVV-2M-0210 AD	Т	Water	663	
\$80.55249-7 PMA-MV-SM-0210 T Water 680 \$80.55283-1 PMA-MV-SM-0210 T Water 680 \$80.55283-2 PMA-MV-MO-0210 T Water 680 \$80.55283-2 PMA-MV-MO-0210 T Water 680 \$80.55283-4 PMA-MV-MO-0210 T Water 680 \$80.55283-6 PMA-MV-MS-0210 T Water 680 \$80.55283-5 PMA-MV-MS-0210 T Water 680 \$80.55248-2 PMA-MV-MS-0210 T Water 680 \$80.55248-2 PMA-MV-MS-0210 T Water 680 \$80.55248-1 PMA-MV-MS-0210 T Water 680 \$80.55248-2 PMA-MV	380-55249-5EB	PMA-MV4-25-0210-FB	т	Vvalor	683	
\$80.55283-1 PMA-MV-60-0210 T Water 680 \$80.55283-1 PMA-MV-40-0210 T Water 680 \$80.55283-2 PMA-MV-40-0210 T Water 680 \$80.55283-4 PMA-MV-40-0210 T Water 680 \$80.55283-6 PMA-MV-45-0210 T Water 680 \$80.55283-6 PMA-MV-45-0210 T Water 680 \$80.55283-5 PMA-MV-05-0210 T Water 680 \$80.55283-3 PMA-MV-05-0210 T Water 680 \$80.55283-3 PMA-MV-05-0210 T Water 680 \$80.552-5 PMA-MV-05-0210 T Water 690 \$80.552-5 PMA-MV-05-	580 55249 B	PMA MW 28 0210	Т	Weter	630	
\$80.55283 4 PMA-MW-ID-0210 T Water 680 580.55283 4 PMA-MW-ID-0210 T Water 680 580.55283 4 PMA-MW-ID-0210 T Water 680 580.55283 5 PMA-MW-ID-0210 T Water 680 580 580.55283 5 PMA-MW-ID-0210 T Water 680 580 580.65295 1 PMA-MW-ID-0210 T Water 680 580 580.65283 PMA-MW-ID-0210 T Water 680 680.650.650.6528 5 PMA-MW-ID-0210 F Water 680 680.650.6528 5 PMA-MW-ID-0210 F Water 680 680.650.6528 5 PMA-MW-ID-0210 T Water 680 680 680.6528 5 PMA-MW-ID-0210 T Water 680 680 680.6528 5 PMA-MW-ID-0210 T Water 680 680 680.6528 5 PMA-MW-ID-0210 T Water 680 680 680.	383-552 4 9-7	PMA-MVV-SM-0Z10	-	Water	683	
\$80.55283 4 PMA-MW-ID-0210 T Water 680 580.55283 4 PMA-MW-ID-0210 T Water 680 580.55283 4 PMA-MW-ID-0210 T Water 680 580.55283 5 PMA-MW-ID-0210 T Water 680 580 580.55283 5 PMA-MW-ID-0210 T Water 680 580 580.65295 1 PMA-MW-ID-0210 T Water 680 580 580.65283 PMA-MW-ID-0210 T Water 680 680.650.650.6528 5 PMA-MW-ID-0210 F Water 680 680.650.6528 5 PMA-MW-ID-0210 F Water 680 680.650.6528 5 PMA-MW-ID-0210 T Water 680 680 680.6528 5 PMA-MW-ID-0210 T Water 680 680 680.6528 5 PMA-MW-ID-0210 T Water 680 680 680.6528 5 PMA-MW-ID-0210 T Water 680 680 680.	380 55283-1	PMA M/W-60-0210	-	Water	680	
Sign 55283 4						
Prep Batch: 680-163986 CS 880 163986 A				Water	680	
Prep Batch: 680-163986 CS 880 163986 A	580-55283-S	PMA-MW-48-0210	-	Water	Bea	
LGS 680 163986/4 A Lab Control Sample T Water 680 LGSD 680-163986/5-A Lab Control Sample Duplicate I Water 680 MS 600-163986/5-A Method Blank T Water 680 S60-45783-3 PM/A-MVV-93 3210 T Water 680 Analysis Barch-880-164886 LGS 580-161672/18-A Lab Control Sample I Water 580 S60-161622 MS 680-16162/17-A Method Blank T Water 680 680-161622 CS 580-163886/4-A Lab Control Sample T Water 680 680-161622 CS 580-163886/4-A Lab Control Sample T Water 680 680-161622 CS 980-163986/5-A Lab Control Sample T Water 680 680-163986 MS 093-163986/3-A Method Blank T Water 680 680-163986 S60-55249-1 PMA-MW-13-0210 I Water 680 680-163988 S60-55249-1 PMA-MW-13-0210 I Water 680 680-161622 S80-55249-1 MS Metric Spike T Water 680 660-161622 S80-55249-1 MS Metric Spike T Water 680 660-161622 S80-55249-1 MS Metric Spike Duplicate T Water 690 620-161622 S80-55249-2 PMA-MW-1M-0710 T Water 680 580-161522	380-55283-5DL	PMA-MVV-4S-3210	т	Wager	680	
LGS 680 163986/4 A Lab Control Sample T Water 680 LGSD 680-163986/5-A Lab Control Sample Duplicate I Water 680 MS 600-163986/5-A Method Blank T Water 680 S60-45783-3 PM/A-MVV-93 3210 T Water 680 Analysis Barch-880-164886 LGS 580-161672/18-A Lab Control Sample I Water 580 S60-161622 MS 680-16162/17-A Method Blank T Water 680 680-161622 CS 580-163886/4-A Lab Control Sample T Water 680 680-161622 CS 580-163886/4-A Lab Control Sample T Water 680 680-161622 CS 980-163986/5-A Lab Control Sample T Water 680 680-163986 MS 093-163986/3-A Method Blank T Water 680 680-163986 S60-55249-1 PMA-MW-13-0210 I Water 680 680-163988 S60-55249-1 PMA-MW-13-0210 I Water 680 680-161622 S80-55249-1 MS Metric Spike T Water 680 660-161622 S80-55249-1 MS Metric Spike T Water 680 660-161622 S80-55249-1 MS Metric Spike Duplicate T Water 690 620-161622 S80-55249-2 PMA-MW-1M-0710 T Water 680 580-161522	Preo Batch: 680-163586					
CSD 680-163986/6-A	•	Lab Control Samule	Т	Water	680	
MS 600-163908/3-A Method Blank T Water 680 360-45780-3 PM/A-MVV-93 0210 T Water 680 4 holyele Barch-880-164886 LCS 580-161672718-A Lab Control Sample I Water 580 580-161622 MS 680-181622/17-A Method Blank T Water 680 680-161622 CS 580-163886/4-A Lab Control Sample T Water 680 680-161622 CS 580-163886/4-A Lab Control Sample T Water 680 680-161622 CS 580-163886/4-A Lab Control Sample T Water 680 680-163886 MS 090-163986/3-A Method Blank T Water 680 680-163886 MS 090-163986/3-A Method Blank T Water 680 680-163988 S90-56749-1 PMA-MW-13-0210 I Water 680 580-161622 S80-56249-1 MS Method Method Diplicate T Water 680 680-161622 S80-56249-1 MS Method Diplicate T Water 690 680-161622 S80-56249-2 PMA-MW-1M-0710 T Water 680 580-161522	CSD 680-163986/5-A		i	Water	1980	
Analysis Bartch-880-164886 CS 580-161672718-A Lab Control Sample I Water S8D 580-161622 US 680-181622717-A Method Black T Water 680 680-161622 CS 580-1638864-A Lab Control Sample T Water 680 680-163586 CS 580-1638865-A Lab Control Sample I Water 680 680-163586 VB 090-1639865-A Lat Control Sample Displicate I Water 680 680-163586 VB 090-1639865-A Method Dlank T Water 680 680-163988 880-56749-1 PMA-VIV-15-0210 I Water 680 580-161622 880-56249-1 MS Metrix Spike T Water 680 660-161622 880-56249-1 MS Metrix Spike T Water 690 680-161622 880-56249-1 MSO Matrix Spike Duplicate T Water 690 680-161622	иь 600-183908/3-А		т	Water	680	
CS 580-161672718-A Lab Central Sample I Water 680 680-161672 MB 680-181622/17-A Method Black T Water 680 680-161622 CS 980-163868-A Lab Control Sample T Water 680 680-163986 CS 980-163866-A Lab Control Sample T Water 680 680-163986 CS 980-1639866-A Lat Control Sample T Water 680 680-163986 VB 090-1639866-A Mellod Dlank T Water 680 680-163988 880-55749-1 PMA-WATS-0210 I Water 680 680-161622 880-55249-1MS Melry Spike T Water 680 680-161622 880-55249-1 MSO Malry Spike Duplicate T Water 690 680-161622 880-55249-2 PMA-WAV-1M-0710 T Water 680 680	\$80-85 28 3-3	PMA-MVV.08 02:0	Т	Water	680	
WB 680-181622/17-A Method Blank T Valer 680 680-161622 CS 980-163886/4-A Lab Control Sample T Valer 680 680-163986 LCS 980-163896/5-A Lab Control Sample Displicate T Valer 680 680-163986 VB 090-163986/3-A Method Dlank T Valer 680 680-163988 880-55749-1 PMA-WW-1S-0210 I Valer 680 680-161622 880-55249-1MS Metrix Spike T Valer 680 680-161622 880-55249-1MSD Matrix Spike Duplicate T Valer 690 680-161622 880-55248-2 PMA-WW-1M-0710 T Valer 680 580-161522	Analysis Batch:880-1648	86-				
CS 980-163386A-A Lab Control Sample T Water 600 680 163986 LCSD 683-1639865-A Lat Control Sample Displicate L Water 680 680-163986 VB 093-1639863-A Method Diank T Water 680 680-163988 880-55749-1 PMA-MW-1S-0210 I Water 680 680-163988 380-55249-1 MS Metrix Spike T Water 680 680-161622 880-55249-1 MS Metrix Spike Displicate T Water 690 680-161622 880-55249-2 PMA-MW-1M-0210 T Water 690 580-161522	CS 580-161672718-A	Lab Centrol Sample	1	Viole*	HID	583-161522
LCSD 680-163986/5-4 Lat. Control Semple Displicate I Water 680 680-163986 v8 090 183986/3 A Mellod Dlank T Water 680 680-163988 680-58249-1 PMA-WW-1S-0210 I Water 680 680-161622 680-58249-1 Water 680 680-161622 680-58249-1 Water 680 680-161622 680-58249-1 Water 680 680-161622 680-58249-1 Water 690 680-161622 680-58249-2 PMA-WW-1M-0210 T Water 680 580-161522	MB 680-181622/17-A	Method Black	Т	Wigher	5 80	680-161622
VB 090 1609960 A Mellod Dlank T Valer 680 680 160988 580-55749-1 PMA-MW-15-0210 I Waler 680 580-1601622 580-55249-1MS Melry Spike T Waler 680 660-161622 580-55249-1MSD Malry Spike Duplicate T Waler 690 680-161622 580-55248-2 PMA-MW-1M-0710 T Waler 680 580-161522	QS 980/163986/4-A	Lab Control Sample	Т	Water	600	680 160986
580-55249-1 PMA-MW-15-0210 I Water 680 580-161622 580-55249-1MS Melry Spike T Water 680 660-161622 580-55249-1MSD Malry Spike Duplicate T Water 690 680-161622 180-55249-2 PMA-MW-1M-021D T Water 680 580-161522	.CSD 680-168986/5-4	Lab Control Semple Displicate	1	Water	68D	680-163986
\$80,55249-1MS Melr / Spike T Water 680 660-161622 \$80,55249-1MSD Mainx Spike Duplicate T Water 690 680-161622 \$80,55249-2 PMA-MW-1M-071D T Water 680 580-161522	78 093 163996/3 A	Method Blank	Т	Water	580	680 163988
580-55249 1MSD Mainx Spike Duplicate T Water 690 £20 161622 180-55249-2 PMA-MW-1M-071D T Water 680 580-161522	80-56749-1	PMA-MW-1S-0210	1	Water	680	580-161622
980-55248-2 PMA-MW-1M-071D T Water 688 580-161522	980 55249-1MS	Mair » Spike	т	Water	680	680-161622
····	80-55249 1MSD	Matrix Spike Duplicate	Т	Water	690	680 161622
IRD 55249 3 PMA MM-2M 0210 T Water 680 880 161522	180-55248-2	PMA-MW-1M-021D	T	Water	680	580-161522
	RD 55249 B	PMA MM/2M 0210	т	Water	680	680 161522
580-55249-4FD PMA-WW-2M-0210-A1) 1 Water 688 680-161622	i80-55249-4FD	PMA-MW-2M-0210-AD	1	Water	683	680-161622
380 \$5249-5ED PAIA-MW-28-0210-EB T Water 680 680-161622	i80 \$52 4 9-5∑D	PMA-MVV-28-0210-EB	т	Waler	680	680-161 5 22
580-557491-6 PMA MW 2S 0210 I Water 680 680-101522	j80-55249-6	PMA MW 28 0210	1	Water	683	680-101627
300 55249-7 PMA-MW-5M-0210 7 Water 680 550-161622	i00 55249-7	PMA-MW-5M-0210		Waler	683	580-161622
80-55283 (PWA MW 60-0210 T Water 680 880-161622	80-552 8 0 T	PWAIWW 60-0210	-	Water	680	88U 161 6 22
580-55283-2 PMA-MW-3M-0710 1 Walter 680 580-161622	i80-55283-2	PMA-MW-3M-0710	-	Water	680	580-161622
HD 55283 3 PMA MW 33-0210 T Water 680 680 163986		PMA MW 38-0210	т	Water	680	800 163906
68C-55283-4 FMV-MVV-4D-071D T Water 680 68D-161692	86-55283-4	FMA-MVV-4D-071D	т	Water	1880	680-161622
HID 55283-5 PMA MVV 4S 0210 T Water 680 680 161622	MD 22583-9	PMA MW 4S 0210	т	Waler	680	680 (81622
68C-55263-SDI FMA-MW-4S-0210 F Water 880 68D-161602	86-55283-5DI	FMA-MW-45-1910	r	Water	180	680-161622

TestAmenca Savannah

Chent Soluție Inc. Job Number: 690-55249-1

Sdg Number KPM037

QC Association Summary

Report

Lab Sample ID Client Sample ID Basis Client Matrix Method Prep Betch

Report Basis

T - Total

TestAmerica Savannah

Client Solutia Inc.

Job Number | \$80-55249-1 Sdg Number: KPM037

Surrogate Recovery Report

889 Polychlorinated Biohenvis (PCBs) (GC/NS)

Client Matrix: Weter

	rapde
Client Sample 10	56Rec
PMA MW 18 8210	$\bigcirc 128X$
PMA-MW-1M-0210	67
PMA-MW 2M 0210	73
РМА-МW-2M-((210-А П	76
PMA-MW-25-0210-E R	(179 X)
PMA-MW-25-0210	81
PMA MW 5M 8210	27
PM4-MW-6IN0210	77
PMA-MW 3M-0210	89
PMA-MW 3S-0218	73
PMA-MV-4D 3210	59
FMA-MW-4S-021II	68
PMA-MVV-45-0210 Du	
	104
	84
	70
	8▲
	70
PMA-MVV-1S-0210 MS	75
PMA MVV-IS 0210 MSD	707
	PMA-MW-1S-0210 PMA-MW-1N-0210 PMA-MW-2N-0210-A II PMA-MW-2S-0210-E R PMA-MW-2S-0210-E R PMA-MW-2S-0210 PMA-MW-3S-0210 PMA-MW-3N-0210 PMA-MW-4S-0210 PMA-MW-4S-0210 PMA-MW-4S-0210 D PMA-MW-4S-0210 D PMA-MW-4S-0210 D PMA-MW-1S-0210 D PMA-MW-1S-0210 D PMA-MW-1S-0210 D

Surrigate	Acceptance Limits
130C8 • Decachorcophenyl 13C12	25 - 13

APR 1 \$ 2010 &

Chent: Solidia Inc. Job Number: 680-55249-1 Seg Number: KPM037

Method Blank - Batch: 680-161622 Method: 680
Preparation: 680

Bate Analyzen | 53/31/7013 1914 Units light his weight Weight Worden. 1000 mb.

His Weight Worden. 1 ml

Analyta	Hesut	Qual	RE
Manach arebipheryl	ii.1a	<u>.</u>	0.0
Dich grobiphenyl	0 10	J	0.10
Trichlorobiphenyl	2.10	ل	0.10
Tetrachlorotsiphenyl	0.70	:1	9 20
Penlachlornbiphenyl	0.20	U	a 20
Hexachlorobiphenyl	0.20	ដ	0.20
(leptach dipophery)	0.30	,l	0.30
Oclachlorob phenyl	0.30	J	Q 3D
Nersachrorobiphenyl	0.50	Ü	0.50
DCB Decachlorobiphenyl	0.50	U	D 5U
Surrogate	% Rec		Acceptance Umits

Oesachloropipheryc-13C12 194 25 - 113

Lab Control Sample - Batch: 680-161622 Method: 680 Preparation: 680

 Lab Sample ID
 LCS 680-161622/18-A
 Avalysis Betch
 680-164886
 Instrument ID
 MSY

 Client Matrix
 Water
 Prep Baick
 680-161622
 Lab Cle : D
 N/A

 Distillen
 1.0
 Units: ugit.
 ohal Weight/folume
 1000 m);

 Date Analyzeo
 CS/31/2010 1945
 Finel Weight/Volume
 1 mL

Date Prepared | 02/25/2018 1417 | Injection Volume:

Analyte	Spike Aniioont	Resul	% Rec	<u>L</u> mt	Cua
Manachlorabiphenyl	2 00	0.649	32	10 · 125	
Dighlorobiphenyl	2 03	0.738	37	10 - 110	
Inchlorobiohenyl	2.00	0.792	40	17 - 110	
Telrachiprohiphony	4.00	164	41	15 116	
Pentachlurobipheny	4.00	212	53	34 - 110	
Hexachlarohiphenyl	4.00	2.06	<u>5</u> 1	31 116	
leptach/Grobipheryl	6.00	3.06	51	33 - 110	
[clackingshipheny]	800	3 4 4	57	35 113	
DCB Decapillorobioteny	11: 0	6.7H	53	26 - 115	
San ogste		los.	, AG	ceplanco Limils	
Decachigrabiphony'-(3G12	78			25 - 113	

Clert. Soluba Inc.

Job Number 680-55249-1 Sdg Number | K9M007

Method: 680 Matrix Spiker Matrix Spike Duplicate Recovery Report - Batch: 680-161622 Preparation: 680

WS Lab Sample ID: 680 55249-1 Analysis Balct: 680-164886 Instrument ID. MSY Chool Magnet Water Prep Baton: | 680-161622 Lab Fre (3) Inibal Weight/Volumo: Oioton. 10 1060 mL 04/01/2010 0227 Final Weight/Valaine. Dale Analyzed: 1 🗀 02/25/2010 1417 Dale Prepand: Injection Volume Analysis Balon: 690-164986 MSC Lab Sample ID: 680-55249-1 Instrument Or MSY Glert Matrix Water Prep Datch 680 161622 Lau Fle O. N/A Initial Weight/Volume: Dilution: 1050 m. 04/01/2010 0257 Final WeightVolume Date Analyzed 1 mL

82725/2019 1417 Date Prepared. Iraection Volume

	2	Rec					
Ana yie	MS	MSD	Limil	E 5Ü	RPD (inii)	MS Qual	MSO Qual
Manachlerotopheryl	11	55	10 - 125	30	40		
O ohtorabiphernyl	45	63	10 - 110	34	4 €		
Inchiaroa phenyl	aß	69	17 - 110	36	aC		
Tetrachiorob.phenyl	₫Ĕ	66	18 - 10	37	ΔÛ		
Hentarthlorobiphenyl	Se	79	34 10	36	40		
Hexachiorobiphonyl	54	76	21 110	35	43		
Haplachlerohipherry	55	77	טיו בנ	34	40		
Ogachlarobjoneryl	62	86	33 150	34	4/3		
DCB Desastr crob phenyl	68	95	28 115	34	40		
Surrogalo		MS % Hoc	MS0 %	Hec	Arco	glance Londs	
Decath prohiphenyl-13/112		75	507		25	5 - 113	

Clent. Soluta Inc. Joh Mumber | 680-55249-1

5dg Number: KPM037

Method: 680 Method Blank - Batch: 630-163986 Preparation: 680

Analysis Balch: 680-164986 Instaument Cr. MSY Lab Sample 10: MB 680-163986/3-A Client Mainx: Water Prep Eaton 680-163986 Lab Fée ID. ₩A

Gilation Units lugit. nitis Wegnt/Yourne: 1000 mL Date Analyzed. | 04/01/2010 1720 Final Weight/Volumer 10 mL

Cate Prepared. | 00/25/2010 1401 njecoch Volume.

Analyte	Result	Qual	RI
Manacharebiphenyl	010	L.	9.0
Circl grob phenyl	0.10	l	a.·o
Trick condulpheny!	alb	П	a ·a
Letrachlorobiphern/	0 20	U	9.20
Penjaghicrohiphony	0.20	Ц	0.20
Hexachloratiphern:	a 20	II	0.20
Hoptathkrobiphenyl	0.30	U	0.30
Octachrorotiphenyl	σáb	П	O 3D
Nr.nach orobiphenyl	0.50	U	0.50
DGB DecacNproblations/	U 50	П	Q 5D
Surogene	% Rec		Anceptance ! mvs
Tecachieratustumod 19C12	24		25 - 113

25 - 113 Decachierobiotiery/ 19C12

APR 13 2010 ZRKL

Ckent: Soluta Inc Job Number 680-56249-1 5dg Number: KPM037

Lab Control Sampi Lab Control Sampi	of e Duplicate Recovery Rep	port - Batch: 680-163986	W ethod: 880 Preparation: 680	
LCS Lab Sample ID	LCS 680-163986/4-A	Analysis Baton: 680-164886	Instrument ID* MSY	
Client Matrix	Water	Prep Batch 680-163986	Lab File ID N/A	7/1195 _1
Didino	1.0 04104-004B-4754	Units. ug/_	Initial Weight/Volume.	1900 mL
Date Analyzed	C4/01/2010 1751		Final Weighli/folume:	10 ML
Date Prepared.	03/25/2010 140		Injection Volume.	
LOSU Lat Sample IO.	LCSD 660-163688/5-A	Analysis Datch 660-164688	nstromert ID MSY	
Client Malro:	Water	Preo Halch: 600,103080	Lab File ID N/A	

EGCD DOC 1038007.	7110172200031 002 10-000	DIGITAL IFO	
Water	Prep Balch: SUD-103980	Lab File ID N/A	
10	Jrais* Jigit	dea Weighli/Volume:	1000 mi
34/01/2013 1822		Final Weight/Volume.	1.0 mL
33/25/2013 1401		Injection Volume:	
	Water 1.0 34/01/2013 1822	Water Prep Balch: 880-103980 1.0 Urals: ugit 34/01/2013 1822	Water Prep Batch: 880-103980 Lab File ID N/A 1.0 Justs: Jgit 06.4 Weight/Volume: 34/01/2013 1822 Final Weight/Volume.

	:	Ά θe:					
Analyte	.05	1020	Umt	759	RPD Lenk	108 Qual	LCSD Qua
Monochlorobiphenyl	<u> 57</u>	ŝ•	10 125	ß	40		
Dichlorobiohenyl	- ទំា	63	10 - 116	2	40		
Trichtorobspherryl	55	65	17 - 110	C C	43		
Tetraul/torobiphenyl	65	5 4	18 - 113	•	40		
Penjachiorotephonyl	73	72	34×113	2	40		
Hexachlorotyphenyl	71	69	31 113	3	40		
Heptachlarobioheryl	72	71	23 - 110	2	40		
Octachtorobiphenyl	75	71	33 - 113	8	40		
DCB Decachlorobipheny.	77	65	26 - 115	17	40		
Surregate	L	CS % Rec	LCSD %	Rec	Ассер	lance Limits	
Decachlomorpharyl-13f112	9	4	731		2	5 - 113	

Savannah

S19Z LaRoche Avenua

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL PROPERTY.

phone 912.354.7658 Tax 912.352 0 lb5																					TestAmerica La	berntaries.	Inc.
Clical Contact	Project Manager: Jeff Admits					Site Centary, Mike Certed							7	hade:	a	/a .	110	, 		CGC No			
LPG Corporation	Tel You (a	14) 743-473	B			La	b Car		T.Jely	i Gat	TEMP :		T) Marrie	г. Т	Ŧ	Τē	5				000s	
1001 Highlands Plaza Orive Weel, Suite 300		A sulyus Ti	ing a Lament	Tiles			П	Т	Т	П	op	Π		Т	Г	Π	T	Т	Τ	Г	Job No		
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(314) 429-0452 FAX		7	winder			ř.	П			: [i			1	$ \ $,	SDIS No		
Project Name 1010 PCB QW Sampling		ı	⇔o¢k.			R	i I		ì	ļţ	•	Ļ		ŀ		$ \ $	i	1.		ļ	l		
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Savannah

51.02 LaRoche Avenue

Chain of Custody Record

<u>TestAmerica</u>

TenAmerica Laboratorics, Inc.

THE CLASER IN CHEMOMORA OF THE HIS

Severado, GA 31404

phone 912,354,7858, fax 912,352,0165

Circui Culuiti	Intelligent to a confert titely worker						AND CORRECT STIKE COPERIO						UNIX: A/23//0)		COC No.		
VRS Corporation	Tel-Pau; (314) 743-4228				L	ab Conssei:			Lédya Collais				Cám	rier:	Fed Ex			:				
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Preservances Used: 1= ice, 2= HCl; 3= IMSO4; 4=HNO3; 5=Na	011: 6- OH	er					_				·			П				\Box		I		
Provible Hazard Identification Non-Hazard Fluxmoble Skin britant	Posso-	, J - I	Deletate					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return 7o Over! Disposal By Lab Archive For Months														
Special Instructions/QC Requirements & Community: Level 4 L							_									7	_					$\overline{}$
Special Indiana Community and an arrangement of the community of the commu		н-																				
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US EPA ARCHIVE DOCUMENT

Login Sample Receipt Check List

Client IIRS Corporation July Number, 893 55249 1
SUG Number KPM037

Login Number: 55249 List Source, TestAmerica Sayannah

Creetor, Conner, Kealon List Number: 1

Question	T/FINA	Comment
Radioactivity either was not measured by, *measured, 6 at by below background	N/A	
The cucler's custody again # present is inlact.	True	
The corder or samples do not appear to have been compromised or rempered with	True	
Samples were received on ico	True	3 poplers rec'd on ice
Conier 1 simperature is acceptable	Ir.ia	
Gooler Yemperature is recorded.	frue	26, 18 and 1.8 G
COC is present	Tiue	
COC is filled dut in the anti-legible	True	
COC is hilder ei≵ with all pertinent information	1 rue	
There are no discrepancies between the sample (Os on the containers and the COC.	True	
Samples are received within Holding Time	True	
Sample corrainers have legible labels	oe	
Containers are not broken or leaking	740	
Sample collection date/times are provided	1140	
Appropriate sample contamers are used.	True	
Sample bottles are completely filled	True	
There is sufficient vol. for all requested analyses, inc., any requested MSPMSDs	True	
VGA sample via sico nni have hoanspace or bubble is <©mm (*/47) in clameter	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	lr.in	
Multiphasic samples are not present.	NO	
Samples do not require splilling or compositing.	WA.	
Is the Field Sampler's name present on COC?	N/A	
Sample Preservation Verified	I rue:	

APR 1 9 2010 8214

Login Sample Receipt Check List

Caert, URS Carporation Joh Number, 680-55249-1 SDS Number: KPV007

List Source: TestAmerica Sevennah

Login Number: 55263 Greator: Conner, Keston

List Notifier: 1

Queeston	Y (F) NA	Comment	
Radioactivey either was not measured or, if measured, is at or below background.	N/A		
The cooler's qualitody scall, if present us infact	True		
The cooler or samples do not appear to have been compromised or lampered with	True		
Samples were received on ice.	True	2 codiera rec'd grince	
Coaler Temperature is acceptable.	True		
Cooler Temperature is recorded	1rue	1.D and D 9 C	
GOC is present	True		
COO is filled out in link and legitile.	True		
COC is fitted out with all perment information.	Tr,ie		
There are no discrepancies between the sample IDs on the containers and the COC.	nur		
Samples are received within Holding 3 me	True		
Sample containers have legicle labels.	Tioe		
Containers are not broken or leaking.	Tr. e		
Sample catedion deletimes are provided	ein 1		
Appropriate sample containers are used	l une		
Sampto bottles are completely files	True		
There is sufficient vol. for all requested analyses, incl. sury requested MOMMSUS	Tige		
VOA sample vials do not have treadspace or 6000le is <6mm (1.4f) in diameter.	N/A		
If necessary, staff have been informed of any short hold lime or quick TAT needs	True		
Multipliarsic samples are not present	N/A		
Samples do not zecure splitting or compassing.	N/A		
Is the Field Sampres's traine dieseril on CCC?	N/A		
Sample Preservation Verified	True		

APR 18 2018 & 7/-