APPENDIX D

C_{free} Calculation Reports

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Certificate of Analysis
Concentrations of Freely-dissolved Polychlorinated Biphenyls (PCBs) Measured via SP3ME™ Passive Samplers

Client: Lower Duwamish Waterway Group

Project: Enhanced Natural Recovery / Activated Carbon Pilot Study

Final Report Issued: March 22, 2017

Client Project No: HE1508-01

Study Dates: July 25 to September 9, 2016

Introduction

This report presents the *in situ* field study results for 15 SP3ME™ passive samplers including 3 trip blanks (not exposed to sediment) and 12 samples exposed to surface sediment in Lower Duwamish Waterway, Seattle, Washington, USA. The trip blanks were collected on July 25 and July 27, 2016. The sediment-exposed samplers were exposed *in situ* to sediment during the timeframe of July 25, 2016 to September 9, 2016 with individual sampler exposure duration averaging at 39 days (ranging from 32 to 45 days). Extracts for the composite samples were shipped to Frontier Analytical Laboratory for measurement of polychlorinated biphenyl (PCB) congeners to calculate the freely-dissolved concentrations (C_{free}) of PCBs in sediment porewater as shown in Table 1 and described below. The data analysis steps are provided in Attachment A and the analytical reports are provided in Attachment C of the Data Report.

Sample Summary

Customer Sample ID	Sample Type	Earliest Sampler Deployment Date	Latest Sampler Retrieval Date	Average Sampler Exposure Duration (days)	Analysis
LDW-BA-SC-ENR+AC-CA-S010	Sediment-Exposed Sample	7/27/2016	9/5/2016	37	PCB Congeners (1668C)
LDW-BA-SC-ENR+AC-CB-S010	Sediment-Exposed Sample	7/27/2016	9/3/2016	37	PCB Congeners (1668C)
LDW-BA-SC-ENR+AC-CC-S010	Sediment-Exposed Sample	7/27/2016	9/5/2016	37	PCB Congeners (1668C)
LDW-BA-SC-ENR-CA-S010	Sediment-Exposed Sample	7/26/2016	9/1/2016	34	PCB Congeners (1668C)
LDW-BA-SC-ENR-CB-S010	Sediment-Exposed Sample	7/26/2016	9/1/2016	34	PCB Congeners (1668C)

Customer Sample ID	Sample Type	Earliest Sampler Deployment Date	Latest Sampler Retrieval Date	Average Sampler Exposure Duration (days)	Analysis
LDW-BA-SC-ENR-CC-S010	Sediment-Exposed Sample	7/26/2016	9/1/2016	33	PCB Congeners (1668C)
LDW-BA-IN-ENR+AC-CA-S010	Sediment-Exposed Sample	7/26/2016	9/9/2016	44	PCB Congeners (1668C)
LDW-BA-IN-ENR+AC-CB-S010	Sediment-Exposed Sample	7/26/2016	9/8/2016	43	PCB Congeners (1668C)
LDW-BA-IN-ENR+AC-CC-S010	Sediment-Exposed Sample	7/26/2016	9/8/2016	43	PCB Congeners (1668C)
LDW-BA-IN-ENR-CA-S010	Sediment-Exposed Sample	7/25/2016	9/9/2016	42	PCB Congeners (1668C)
LDW-BA-IN-ENR-CB-S010	Sediment-Exposed Sample	7/25/2016	9/9/2016	43	PCB Congeners (1668C)
LDW-BA-IN-ENR-CC-S010	Sediment-Exposed Sample	7/25/2016	9/9/2016	42	PCB Congeners (1668C)
LDW-BA-SC-S010-PW-TB	Trip Blank	7/27/2016	7/27/2016	0	PCB Congeners (1668C)
LDW-BA-SU-S010-PW-TB	Trip Blank	7/27/2016	7/27/2016	0	PCB Congeners (1668C)
LDW-BA-IN-S010-PW-TB	Trip Blank	7/25/2016	7/25/2016	0	PCB Congeners (1668C)

Sampler Design, Deployment, and Chemical Analysis

The SP3ME™ sampler design for this project consisted of a 10-centimeter (cm) length of solid phase microextraction (SPME) fiber with 10-micrometer (µm) thick polydimethylsiloxane (PDMS) on a 2000-µm diameter silica core (0.631 microliter [µL] PDMS per cm SPME). Each SPME fiber was housed in a stainless steel mesh envelope attached to a steel support bar. SPMEs were spiked with the Performance Reference Compounds (PRCs) consisting of rare PCBs congeners assumed to: 1) not be present in the media in which the samplers were deployed, or 2) present at concentrations so low as to be inconsequential, not affect calculations involving PRCs, and insignificant compared to the concentration of other freely-dissolved PCBs in the media sampled. The PRCs used for this project were: PCB-14, PCB-36, PCB-78, PCB-104, PCB-121, PCB-142, PCB-155, PCB-184, PCB-192, and PCB-204[1]. Samplers were produced by SiREM (http://siremlab.com/).

The trip blanks were exposed to ambient field conditions for 5 minutes (each trip blank was a composite of 6 samplers for a total SPME fiber length of 60 cm). The sediment-exposed samples consisting of 5 or 6 samplers (50 or 60 cm of SPME fiber total) depending on recovery were exposed *in situ* to sediment in the Lower Duwamish Waterway, Seattle, California, USA for an average of 39 days (ranging from 32 to 45 days for an individual sampler).

Processing of the samplers at an environmental laboratory included removal of the fiber from the stainless steel mesh envelope, wiping any visible sediment from the fiber using a moist tissue, placing the fiber in an amber glass vial, and adding hexane to extract PCBs from the PDMS. Vials with hexane and fibers were shipped to Frontier Analytical Laboratory, whereupon hexane was removed from the vials and analyzed for PCB congeners via USEPA Method 1668C. The analytical laboratory reported the total mass of PCBs in each hexane extract (analytical report and electronic data deliverable are provided in Attachment C of the Data Report).

Results

Total PCB congeners C_{free} results are reported in Table 1 (attached).

Samples included in Frontier Analytical Laboratory report 10071 dated October 12, 2016 and report 10146 dated October 3, 2016 were received in good condition and at 0 degrees Celsius (° C) which is outside method recommended sample receipt temperature range. This is not expected to result in poor analytical quality since PCBs are not expected to degrade in hexane over the timescale of shipment (1 day).

[1] PCB shorthand nomenclature used in this report follows the Chemical Abstract Service (CAS) nomenclature used by USEPA (2003): United States Environmental Protection Agency (USEPA). 2003. Table of PCB Species by Congener Number.

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TABLE 1

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010			LDW-BA-SC-ENR+AC-CB-S010			LDW-BA-SC-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono			U	13		U	18	90		8.2
PCB-2	Mono			U	6.9		U	5		U	12
PCB-3	Mono			U	6.7		U	5		U	11
PCB-4	Di		38		1.9	190		1.8	170		4.1
PCB-5	Di		44		1	90		1.1	270		2.4
PCB-6	Di		69		1	90		1.1	290		2.4
PCB-7	Di		9.6		1	17		1.1	55		2.4
PCB-8	Di		140		1	230		1.1	1100		2.4
PCB-9	Di		11		1	17		1.1	76		2.4
PCB-10	Di		28		1.9	31		1.8	120		4.1
PCB-11	Di			U	3.7		U	3.6	16	L	1.4
PCB-12	Di		13		0.6	21		0.69	74	L	1.4
PCB-13	Di			U	3.7		U	4		U L	6.5
PCB-14	Di	PRC									
PCB-15	Di		18		0.6	27		0.69	81	L	1.4
PCB-16	Tri		150		0.61	200		0.7	810	L	1.5
PCB-17	Tri		170		0.61	340		0.7	1200	L	1.5
PCB-18	Tri		390		0.61	700		0.7	2700	L	1.5
PCB-19	Tri		64		0.89	110		0.95	430		2.1
PCB-20	Tri		110	C	0.43	240	C	0.53	820	C L	1
PCB-21	Tri			C020			C020			C020	
PCB-22	Tri		63		0.43	120		0.53	420	L	1
PCB-23	Tri			U	2.6		U	3.4		U L	4.7
PCB-24	Tri		16		0.61	24		0.7	66	L	1.5
PCB-25	Tri		31		0.43	46		0.53	130	L	1
PCB-26	Tri		55		0.43	78		0.53	260	L	1
PCB-27	Tri		22		0.61	48		0.7	170	L	1.5
PCB-28	Tri		220		0.43	390		0.53	1200	L	1
PCB-29	Tri			U	3		U	4	13	L	1
PCB-30	Tri			U	1.5		U	3.5		U L	2.7
PCB-31	Tri		170		0.43	300		0.53	1000	L	1
PCB-32	Tri		120		0.61	230		0.7	760	L	1.5
PCB-33	Tri			C020			C020			C020	
PCB-34	Tri			U	3.8		U	4.2	13	L	1
PCB-35	Tri			U	2.8		U	3.4		U L	5
PCB-36	Tri	PRC									
PCB-37	Tri		14		0.31	25		0.41	81	L	0.75
PCB-38	Tri			U	2.1		U	3.3		U L	3.9
PCB-39	Tri			U	2.4		U	3.2		U L	4.4
PCB-40	Tetra		26		0.27	69		0.37	140	L	0.65
PCB-41	Tetra		100	C	0.25	290	C	0.35	550	C L	0.61

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010			LDW-BA-SC-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono			U	6.6		U	13		U	11
PCB-2	Mono			U	3.2		U	5.5		U	4.7
PCB-3	Mono			U	3.1		U	5.6		U	4.5
PCB-4	Di		26		1.5	35		1.7	30		1.5
PCB-5	Di		12		0.81	28		0.97	12		0.79
PCB-6	Di		16		0.81	35		0.97	14		0.79
PCB-7	Di			U	3.5		U	5.8		U	3.4
PCB-8	Di		30		0.81	36		0.97	15		0.79
PCB-9	Di			U	3.9		U	7.5		U	3.8
PCB-10	Di			U	7.3		U	12		U	7.6
PCB-11	Di			U	2.6		U	4.3		U	2.5
PCB-12	Di			U	2.3		U	3.9	2.4	J	0.43
PCB-13	Di			U	2.6		U	4.7		U	2.4
PCB-14	Di	PRC									
PCB-15	Di		5.8		0.46		U	5	3.7	J	0.43
PCB-16	Tri		27		0.47	33		0.56	29		0.44
PCB-17	Tri		48		0.47	63		0.56	41		0.44
PCB-18	Tri		110		0.47	130		0.56	84		0.44
PCB-19	Tri		19		0.69	27		0.82	16		0.66
PCB-20	Tri		34	C	0.33	43	C	0.4	27	C	0.3
PCB-21	Tri			C020			C020			C020	
PCB-22	Tri		22		0.33	28		0.4	16		0.3
PCB-23	Tri			U	1		U	2.8		U	1.6
PCB-24	Tri		3.1	J	0.47	7.8		0.56	7.4		0.44
PCB-25	Tri		11		0.33	13		0.4	8.3		0.3
PCB-26	Tri		19		0.33	21		0.4	13		0.3
PCB-27	Tri		11		0.47	10		0.56	7.6		0.44
PCB-28	Tri		78		0.33	94		0.4	57		0.3
PCB-29	Tri			U	1.2		U	3.3		U	1.9
PCB-30	Tri			U	1		U	2.8		U	0.82
PCB-31	Tri		57		0.33	56		0.4	40		0.3
PCB-32	Tri		39		0.47	48		0.56	26		0.44
PCB-33	Tri			C020			C020			C020	
PCB-34	Tri			U	1.5		U	3.5		U	2.4
PCB-35	Tri			U	1.1		U	2.6		U	1.7
PCB-36	Tri	PRC									
PCB-37	Tri		5.9		0.23	8.8		0.28	3.6		0.22
PCB-38	Tri			U	0.85		U	2.5		U	1.3
PCB-39	Tri			U	0.96		U	2.5		U	1.5
PCB-40	Tetra		11		0.2	15		0.24	8.3		0.19
PCB-41	Tetra		47	C	0.19	66	C	0.23	37	C	0.18

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono		100		4	610		4	93		3.2
PCB-2	Mono			U	4.9		U	4.5		U	3.2
PCB-3	Mono			U	5	10	J	1.1		U	3
PCB-4	Di		380		1.7	170		1.7	210		1.3
PCB-5	Di		330		0.89	230		0.95	92		0.73
PCB-6	Di		520		0.89	880		0.95	180		0.73
PCB-7	Di		52		0.89	72		0.95	17		0.73
PCB-8	Di		300		0.89	280		0.95	130		0.73
PCB-9	Di		49		0.89	66		0.95	22		0.73
PCB-10	Di		74		1.7	120		1.7	22		1.3
PCB-11	Di			U	2.8		U	3.9	4.8		0.44
PCB-12	Di		80		0.51	62		0.55	19		0.44
PCB-13	Di			U	3	6.9		0.55		U	3.6
PCB-14	Di	PRC									
PCB-15	Di		60		0.51	53		0.55	20		0.44
PCB-16	Tri		630		0.52	900		0.56	240		0.45
PCB-17	Tri		1100		0.52	1100		0.56	430		0.45
PCB-18	Tri		2700		0.52	3000		0.56	1100		0.45
PCB-19	Tri		310		0.76	380		0.81	130		0.63
PCB-20	Tri		570	C	0.37	470	C	0.4	230	C	0.33
PCB-21	Tri			C020			C020			C020	
PCB-22	Tri		260		0.37	260		0.4	120		0.33
PCB-23	Tri		4		0.37	2.7	J	0.4	2.4	J	0.33
PCB-24	Tri		68		0.52	79		0.56	29		0.45
PCB-25	Tri		520		0.37	500		0.4	190		0.33
PCB-26	Tri		1800		0.37	1500		0.4	610		0.33
PCB-27	Tri		100		0.52	82		0.56	46		0.45
PCB-28	Tri		810		0.37	800		0.4	370		0.33
PCB-29	Tri		6		0.37	3.4	J	0.4	2.5	J	0.33
PCB-30	Tri			U	2.1		U	1.2		U	1.1
PCB-31	Tri		890		0.37	860		0.4	380		0.33
PCB-32	Tri		640		0.52	740		0.56	280		0.45
PCB-33	Tri			C020			C020			C020	
PCB-34	Tri		19		0.37	17		0.4	8.3		0.33
PCB-35	Tri			U	1.8		U	1.4		U	1.4
PCB-36	Tri	PRC									
PCB-37	Tri		47		0.27	37		0.29	21		0.26
PCB-38	Tri			U	1.7		U	1.1		U	1.1
PCB-39	Tri			U	1.7		U	1.3		U	1.2
PCB-40	Tetra		250		0.23	170		0.25	110		0.23
PCB-41	Tetra		1200	C	0.22	740	C	0.24	520	C	0.22

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CA-S010			LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono		350		4.1	540		7.9	590		4
PCB-2	Mono			U	5.7		U	11		U	4.1
PCB-3	Mono		7	J	1.3	25	J	2.9	15		1.2
PCB-4	Di		320		1.9	940		4.1	350		1.8
PCB-5	Di		130		1.1	640		2.5	170		1
PCB-6	Di		220		1.1	1400		2.5	190		1
PCB-7	Di		30		1.1	120		2.5	42		1
PCB-8	Di		270		1.1	760		2.5	230		1
PCB-9	Di		38		1.1	120		2.5	31		1
PCB-10	Di		56		1.9	260		4.1	75		1.8
PCB-11	Di			U	5		U	13		U	4.3
PCB-12	Di		32		0.7	110		1.6	22		0.59
PCB-13	Di			U	5		U	13		U	4.2
PCB-14	Di	PRC									
PCB-15	Di		48		0.7	100		1.6	30		0.59
PCB-16	Tri		360		0.71	1600		1.6	240		0.6
PCB-17	Tri		580		0.71	2500		1.6	450		0.6
PCB-18	Tri		1400		0.71	6600		1.6	1100		0.6
PCB-19	Tri		200		0.96	790		2.2	160		0.86
PCB-20	Tri		390	C	0.54	1300	C L	1.2	240	C	0.44
PCB-21	Tri			C020			C020			C020	
PCB-22	Tri		180		0.54	660	L	1.2	120		0.44
PCB-23	Tri			U	3.2	12	L	1.2		U	2.8
PCB-24	Tri		69		0.71	260		1.6	39		0.6
PCB-25	Tri		270		0.54	1200	L	1.2	150		0.44
PCB-26	Tri		710		0.54	3100	L	1.2	360		0.44
PCB-27	Tri		72		0.71	200		1.6	45		0.6
PCB-28	Tri		680		0.54	2300	L	1.2	360		0.44
PCB-29	Tri			U	3.7	12	L	1.2		U	3.2
PCB-30	Tri			U	1.5		U	3.4		U	2.3
PCB-31	Tri		570		0.54	2400	L	1.2	370		0.44
PCB-32	Tri		370		0.71	1600		1.6	310		0.6
PCB-33	Tri			C020			C020			C020	
PCB-34	Tri		12		0.54	35	L	1.2	9.1		0.44
PCB-35	Tri			U	3.7		U L	7.1		U	3.1
PCB-36	Tri	PRC									
PCB-37	Tri		38		0.41	110	L	0.86	18		0.32
PCB-38	Tri			U	2.9		U L	5.6		U	2.4
PCB-39	Tri			U	3.3		U L	6.3		U	2.7
PCB-40	Tetra		160		0.37	500	L	0.76	87		0.28
PCB-41	Tetra		690	C	0.36	2100	C L	0.72	400	C	0.27

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010			LDW-BA-SC-ENR+AC-CB-S010			LDW-BA-SC-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-42	Tetra		50	C	0.27	140	C	0.37	260	C L	0.65
PCB-43	Tetra		150	C	0.27	370	C	0.37	680	C L	0.65
PCB-44	Tetra		130		0.27	360		0.37	680	L	0.65
PCB-45	Tetra		44		0.35	110		0.45	280	L	0.84
PCB-46	Tetra		18		0.35	50		0.45	120	L	0.84
PCB-47	Tetra		44		0.27	110		0.37	190	L	0.65
PCB-48	Tetra		35	C	0.27	100	C	0.37	190	C L	0.65
PCB-49	Tetra			C043			C043			C043	
PCB-50	Tetra			U	1.5	5.2		0.45	8.9	L	0.84
PCB-51	Tetra		16		0.35	40		0.45	84	L	0.84
PCB-52	Tetra		190	C	0.27	480	C	0.37	820	C L	0.65
PCB-53	Tetra		51		0.35	120		0.45	280	L	0.84
PCB-54	Tetra			U	1.1	3.7	J	0.43	5.4	J L	0.79
PCB-55	Tetra		3.6		0.21	5		0.31	9.6	L	0.51
PCB-56	Tetra		39	C	0.21	110	C	0.31	200	C L	0.51
PCB-57	Tetra			U	0.75	3.8		0.31		U L	2.8
PCB-58	Tetra			U	0.77		U	2.3		U L	2.9
PCB-59	Tetra			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056	
PCB-61	Tetra		77	C	0.21	220	C	0.31	360	C L	0.51
PCB-62	Tetra			U	1		U	2.7		U L	3.8
PCB-63	Tetra		3.2		0.21	10		0.31	16	L	0.51
PCB-64	Tetra			C041			C041			C041	
PCB-65	Tetra			U	0.98		U	2.6		U L	3.7
PCB-66	Tetra		74	C	0.21	200	C	0.31	340	C L	0.51
PCB-67	Tetra		2.5		0.21	8.5		0.31	16	L	0.51
PCB-68	Tetra		2.1		0.21	5		0.31	6.7	L	0.51
PCB-69	Tetra			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041	
PCB-73	Tetra			U	0.97		U	2.7		U L	3.6
PCB-74	Tetra		33		0.21	91		0.31	160	L	0.51
PCB-75	Tetra			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066	
PCB-77	Tetra		3.6		0.16	9	L	0.26	12	L	0.39
PCB-78	Tetra	PRC									
PCB-79	Tetra			U	1.4		U L	1.8	3.8	J L	0.39
PCB-80	Tetra			U	0.5		U L	1.6		U L	1.9
PCB-81	Tetra		4.7		0.16	9.4	L	0.26	13	L	0.39
PCB-82	Penta		6.7		0.13	21	L	0.21	27	L	0.31

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010			LDW-BA-SC-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-42	Tetra		21	C	0.2	32	C	0.24	17	C	0.19
PCB-43	Tetra		71	C	0.2	97	C	0.24	57	C	0.19
PCB-44	Tetra		57		0.2	81		0.24	45		0.19
PCB-45	Tetra		16		0.26	24		0.32	13		0.24
PCB-46	Tetra		7.5		0.26	10		0.32	6		0.24
PCB-47	Tetra		21		0.2	29		0.24	17		0.19
PCB-48	Tetra		14	C	0.2	22	C	0.24	11	C	0.19
PCB-49	Tetra			C043			C043			C043	
PCB-50	Tetra			U	0.68		U	2.5		U	0.85
PCB-51	Tetra		7.5		0.26	11		0.32	6		0.24
PCB-52	Tetra		89	C	0.2	130	C	0.24	69	C	0.19
PCB-53	Tetra		22		0.26	32		0.32	19		0.24
PCB-54	Tetra			U	0.47		U	1.8		U	0.58
PCB-55	Tetra		2.3		0.16	1.8		0.19	1.2		0.15
PCB-56	Tetra		17	C	0.16	22	C	0.19	13	C	0.15
PCB-57	Tetra			U	0.33		U	1.4		U	0.43
PCB-58	Tetra			U	0.34		U	1.3		U	0.44
PCB-59	Tetra			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056	
PCB-61	Tetra		38	C	0.16	49	C	0.19	29	C	0.15
PCB-62	Tetra			U	0.45		U	1.7		U	0.56
PCB-63	Tetra		1.5	J	0.16	2.4		0.19	1.3	J	0.15
PCB-64	Tetra			C041			C041			C041	
PCB-65	Tetra			U	0.44		U	1.6		U	0.55
PCB-66	Tetra		39	C	0.16	50	C	0.19	31	C	0.15
PCB-67	Tetra		1.3	J	0.16	1.9		0.19	1.1	J	0.15
PCB-68	Tetra		1	J	0.16		U	1.2	1	J	0.15
PCB-69	Tetra			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041	
PCB-73	Tetra			U	0.43		U	1.6		U	0.54
PCB-74	Tetra		16		0.16	21		0.19	12		0.15
PCB-75	Tetra			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066	
PCB-77	Tetra		1.8		0.12		U	1.5	1.7		0.12
PCB-78	Tetra	PRC									
PCB-79	Tetra			U	0.62		U	1.3		U	1.1
PCB-80	Tetra			U	0.23		U	0.88		U	0.29
PCB-81	Tetra		2		0.12		U	1.2		U	1
PCB-82	Penta		3.8		0.097	5.5		0.12	3.6		0.097

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-42	Tetra		690	C	0.23	370	C	0.25	260	C	0.23
PCB-43	Tetra		3200	C	0.23	1700	C	0.25	1200	C	0.23
PCB-44	Tetra		2600		0.23	1500		0.25	980		0.23
PCB-45	Tetra		390		0.3	300		0.32	170		0.28
PCB-46	Tetra		180		0.3	120		0.32	70		0.28
PCB-47	Tetra		570		0.23	290		0.25	220		0.23
PCB-48	Tetra		290	C	0.23	180	C	0.25	130	C	0.23
PCB-49	Tetra			C043			C043			C043	
PCB-50	Tetra		16		0.3	9.4		0.32	6.3		0.28
PCB-51	Tetra		120		0.3	78		0.32	50		0.28
PCB-52	Tetra		5800	C	0.23	2900	C	0.25	2000	C	0.23
PCB-53	Tetra		450		0.3	320		0.32	190		0.28
PCB-54	Tetra		6.5		0.28	6.2		0.3	3.3		0.27
PCB-55	Tetra		51		0.19	24		0.2	17		0.19
PCB-56	Tetra		200	C	0.19	130	C	0.2	98	C	0.19
PCB-57	Tetra		67		0.19	27		0.2	19		0.19
PCB-58	Tetra		140		0.19	12		0.2	11		0.19
PCB-59	Tetra			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056	
PCB-61	Tetra		730	C	0.19	400	C	0.2	330	C	0.19
PCB-62	Tetra			U	1.5		U	0.81		U	1.6
PCB-63	Tetra		58		0.19	31		0.2	21		0.19
PCB-64	Tetra			C041			C041			C041	
PCB-65	Tetra			U	1.4		U	0.79		U	1.5
PCB-66	Tetra		660	C	0.19	380	C	0.2	310	C	0.19
PCB-67	Tetra			U	1.1	52		0.2	38		0.19
PCB-68	Tetra		27		0.19	13		0.2	12		0.19
PCB-69	Tetra			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041	
PCB-73	Tetra			U	1.4		U	0.78		U	1.5
PCB-74	Tetra		280		0.19	160		0.2	130		0.19
PCB-75	Tetra			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066	
PCB-77	Tetra		25		0.15	13		0.16	13		0.16
PCB-78	Tetra	PRC									
PCB-79	Tetra		15		0.15	7.4		0.16	5.7		0.16
PCB-80	Tetra			U	0.82		U	0.43		U	0.93
PCB-81	Tetra		27		0.15	14		0.16	16		0.16
PCB-82	Penta		130		0.12	72		0.13	73		0.14

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CA-S010			LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-42	Tetra		340	C	0.37	1100	C L	0.76	200	C	0.28
PCB-43	Tetra		1500	C	0.37	4500	C L	0.76	870	C	0.28
PCB-44	Tetra		1300		0.37	4100	L	0.76	720		0.28
PCB-45	Tetra		230		0.45	850	L	0.95	140		0.36
PCB-46	Tetra		100		0.45	350	L	0.95	58		0.36
PCB-47	Tetra		290		0.37	890	L	0.76	170		0.28
PCB-48	Tetra		180	C	0.37	490	C L	0.76	120	C	0.28
PCB-49	Tetra			C043			C043			C043	
PCB-50	Tetra		8.1		0.45	27	L	0.95	5.4		0.36
PCB-51	Tetra		67		0.45	210	L	0.95	41		0.36
PCB-52	Tetra		2600	C	0.37	7600	C L	0.76	1400	C	0.28
PCB-53	Tetra		280		0.45	890	L	0.95	170		0.36
PCB-54	Tetra		4.8		0.43	15	L	0.9	3.8		0.34
PCB-55	Tetra		18		0.31	77	L	0.6	10		0.23
PCB-56	Tetra		160	C	0.31	390	C L	0.6	91	C	0.23
PCB-57	Tetra		13		0.31	64	L	0.6	10		0.23
PCB-58	Tetra			U	2.5		U L	2.7		U	1.5
PCB-59	Tetra			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056	
PCB-61	Tetra		550	C	0.31	1100	C L	0.6	280	C	0.23
PCB-62	Tetra			U	3.1		U L	3.4		U	1.9
PCB-63	Tetra		24		0.31	72	L	0.6	14		0.23
PCB-64	Tetra			C041			C041			C041	
PCB-65	Tetra			U	3		U L	3.3		U	1.9
PCB-66	Tetra		460	C	0.31	1100	C L	0.6	260	C	0.23
PCB-67	Tetra		40		0.31	170	L	0.6	20		0.23
PCB-68	Tetra		12		0.31	35	L	0.6	9.2		0.23
PCB-69	Tetra			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041	
PCB-73	Tetra			U	3		U L	3.3		U	1.9
PCB-74	Tetra		180		0.31	480	L	0.6	97		0.23
PCB-75	Tetra			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066	
PCB-77	Tetra		20		0.26	41	L	0.48	12		0.18
PCB-78	Tetra	PRC									
PCB-79	Tetra		6.7		0.26		U L	2.8	3.6		0.18
PCB-80	Tetra			U	1.8		U L	1.8		U	1
PCB-81	Tetra		14		0.26	36	L	0.48	12		0.18
PCB-82	Penta		100	L	0.22	240	L	0.38	51		0.15

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010			LDW-BA-SC-ENR+AC-CB-S010			LDW-BA-SC-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-83	Penta		3.3	C	0.13	10	C L	0.21	12	C L	0.31
PCB-84	Penta		44	C	0.14	120	C L	0.23	150	C L	0.34
PCB-85	Penta		11	C	0.13	27	C L	0.21	39	C L	0.31
PCB-86	Penta			U	1.1		U L	1.3		U L	2.1
PCB-87	Penta		24	C	0.13	70	C L	0.21	85	C L	0.31
PCB-88	Penta			UC	0.59	51	C L	0.25		UC L	1.3
PCB-89	Penta		1.3	J	0.15	5.1	L	0.25	6.8	L	0.37
PCB-90	Penta		82	C	0.13	230	C L	0.21	280	C L	0.31
PCB-91	Penta			C088			C088			U,C088	
PCB-92	Penta			C084			C084			C084	
PCB-93	Penta			U	0.61		U L	1.7		U L	1.3
PCB-94	Penta			U	0.63	3.1	L	0.25	3.1	J L	0.37
PCB-95	Penta		120		0.15	340	L	0.25	420	L	0.37
PCB-96	Penta		1.4		0.14	5.4	L	0.23	5.5	L	0.34
PCB-97	Penta		17		0.13	48	L	0.21	61	L	0.31
PCB-98	Penta			UC	0.49		UC L	1.4		UC L	1
PCB-99	Penta		32		0.13	87	L	0.21	110	L	0.31
PCB-100	Penta		1.6		0.15	5	L	0.25	5.6	L	0.37
PCB-101	Penta			C090			C090			C090	
PCB-102	Penta			C098			U,C098			U,C098	
PCB-103	Penta		3.1		0.15	8.1	L	0.25	9.2	L	0.37
PCB-104	Penta	PRC									
PCB-105	Penta		10		0.1	33	L	0.19	38	L	0.25
PCB-106	Penta		30	C	0.1	86	C L	0.19	100	C L	0.25
PCB-107	Penta		2.3	C	0.1	8	C L	0.19	7.6	C L	0.25
PCB-108	Penta			C107			C107			C107	
PCB-109	Penta			U	0.77		U L	1		U L	1.5
PCB-110	Penta		62		0.13	160	L	0.21	210	L	0.31
PCB-111	Penta		6.9	C	0.11	3.8	C L	0.2	3.1	C L	0.28
PCB-112	Penta			C083			C083			C083	
PCB-113	Penta			U	0.84		U L	1.1		U L	1.6
PCB-114	Penta		1.1		0.1	2	L	0.19	3.2	L	0.25
PCB-115	Penta			C111			C111			C111	
PCB-116	Penta			C085			C085			C085	
PCB-117	Penta			C087			C087			C087	
PCB-118	Penta			C106			C106			C106	
PCB-119	Penta		2.2		0.13	6.1	L	0.21	7.5	L	0.31
PCB-120	Penta			U	0.63		U L	0.9		U L	1.2
PCB-121	Penta	PRC									
PCB-122	Penta			U	0.33	2.9	L	0.19	1.6	J L	0.25
PCB-123	Penta		0.57	J	0.1	1.9	L	0.19	2	J L	0.25

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010			LDW-BA-SC-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-83	Penta		2.2	C	0.097	2.4	C	0.12	1.7	C	0.097
PCB-84	Penta		25	C	0.11	30	C	0.13	21	C	0.11
PCB-85	Penta		6	C	0.097	6.4	C	0.12	5.1	C	0.097
PCB-86	Penta			U	0.63		U	0.62		U	0.48
PCB-87	Penta		13	C	0.097	17	C	0.12	12	C	0.097
PCB-88	Penta			UC	0.44	19	C	0.14		UC	0.38
PCB-89	Penta		0.71	J	0.12	0.94	J	0.14	0.8	J	0.12
PCB-90	Penta		47	C	0.097	58	C	0.12	41	C	0.097
PCB-91	Penta			U,C088			C088			U,C088	
PCB-92	Penta			C084			C084			C084	
PCB-93	Penta			U	0.46		U	1.2		U	0.4
PCB-94	Penta			U	0.47		U	1.2		U	0.41
PCB-95	Penta		71		0.12	88		0.14	57		0.12
PCB-96	Penta		0.75	J	0.11	1.2	J	0.13	0.63	J	0.11
PCB-97	Penta		9.9		0.097	12		0.12	8.7		0.097
PCB-98	Penta			UC	0.37		UC	0.96		UC	0.32
PCB-99	Penta		19		0.097	23		0.12	17		0.097
PCB-100	Penta		1.3		0.12	2		0.14	1.1	J	0.12
PCB-101	Penta			C090			C090			C090	
PCB-102	Penta			U,C098			U,C098			U,C098	
PCB-103	Penta		1.7		0.12	2.8		0.14	1.4		0.12
PCB-104	Penta	PRC									
PCB-105	Penta		6.6		0.08	8.2		0.094	5.1		0.082
PCB-106	Penta		18	C	0.08	22	C	0.094	15	C	0.082
PCB-107	Penta		1.3	C	0.08	2	C	0.094	1.2	C	0.082
PCB-108	Penta			C107			C107			C107	
PCB-109	Penta			U	0.45		U	0.51		U	0.34
PCB-110	Penta		34		0.097	41		0.12	31		0.097
PCB-111	Penta		0.55	C,J	0.088	0.8	C,J	0.1	0.79	C,J	0.089
PCB-112	Penta			C083			C083			C083	
PCB-113	Penta			U	0.49		U	0.54		U	0.37
PCB-114	Penta		0.5	J	0.08		U	0.58	0.46	J	0.082
PCB-115	Penta			C111,J			C111,J			C111,J	
PCB-116	Penta			C085			C085			C085	
PCB-117	Penta			C087			C087			C087	
PCB-118	Penta			C106			C106			C106	
PCB-119	Penta		1.4		0.097	1.9		0.12	1.4		0.097
PCB-120	Penta			U	0.37		U	0.41		U	0.29
PCB-121	Penta	PRC									
PCB-122	Penta			U	0.18		U	0.58		U	0.19
PCB-123	Penta		0.33	J	0.08		U	0.49	0.45	J	0.082

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-83	Penta		100	C	0.12	47	C	0.13	46	C	0.14
PCB-84	Penta		980	C	0.13	530	C	0.14	510	C	0.15
PCB-85	Penta		170	C	0.12	98	C	0.13	100	C	0.14
PCB-86	Penta			U	1.1		U	1.1		U	0.95
PCB-87	Penta		530	C	0.12	280	C	0.13	280	C	0.14
PCB-88	Penta		330	C	0.14	130	C	0.15	160	C	0.16
PCB-89	Penta		29		0.14	17		0.15	17		0.16
PCB-90	Penta		1300	C	0.12	700	C	0.13	730	C	0.14
PCB-91	Penta			C088			C088			C088	
PCB-92	Penta			C084			C084			C084	
PCB-93	Penta			U	1		U	0.72		U	0.61
PCB-94	Penta		14		0.14	7.7		0.15	6.9		0.16
PCB-95	Penta		2500		0.14	1300		0.15	1200		0.16
PCB-96	Penta		20		0.13	12		0.14	10		0.15
PCB-97	Penta		310		0.12	170		0.13	170		0.14
PCB-98	Penta			UC	0.87		UC	0.57		UC	0.48
PCB-99	Penta		530		0.12	300		0.13	310		0.14
PCB-100	Penta		14		0.14	6.9		0.15	7.1		0.16
PCB-101	Penta			C090			C090			C090	
PCB-102	Penta			U,C098			U,C098			U,C098	
PCB-103	Penta		39		0.14	18		0.15	17		0.16
PCB-104	Penta	PRC									
PCB-105	Penta		140		0.1	64		0.11	75	L	0.12
PCB-106	Penta		480	C	0.1	230	C	0.11	240	C L	0.12
PCB-107	Penta		42	C	0.1	21	C	0.11	21	C L	0.12
PCB-108	Penta			C107			C107			C107	
PCB-109	Penta			U	0.91		U	0.81		U	0.68
PCB-110	Penta		1300		0.12	720		0.13	710		0.14
PCB-111	Penta		17	C	0.11	5.1	C	0.12	8.4	C L	0.13
PCB-112	Penta			C083			C083			C083	
PCB-113	Penta			U	0.97		U	0.88		U	0.74
PCB-114	Penta		14		0.1	4.8		0.11	5.5	L	0.12
PCB-115	Penta			C111			C111			C111	
PCB-116	Penta			C085			C085			C085	
PCB-117	Penta			C087			C087			C087	
PCB-118	Penta			C106			C106			C106	
PCB-119	Penta		52		0.12	26		0.13	24		0.14
PCB-120	Penta			U	0.76		U	0.68		U L	0.6
PCB-121	Penta	PRC									
PCB-122	Penta		8		0.1	3.5		0.11	3.3	L	0.12
PCB-123	Penta		10		0.1	6		0.11	4.9	L	0.12

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CA-S010			LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-83	Penta		65	C L	0.22	140	C L	0.38	33	C	0.15
PCB-84	Penta		730	C L	0.23	1600	C L	0.42	340	C	0.16
PCB-85	Penta		150	C L	0.22	310	C L	0.38	72	C	0.15
PCB-86	Penta			U L	1.8		U L	2.8		U	0.97
PCB-87	Penta		400	C L	0.22	910	C L	0.38	190	C	0.15
PCB-88	Penta		220	C L	0.25	470	C L	0.46	110	C	0.18
PCB-89	Penta		24	L	0.25	52	L	0.46	12		0.18
PCB-90	Penta		1200	C L	0.22	2200	C L	0.38	540	C	0.15
PCB-91	Penta			C088			C088			C088	
PCB-92	Penta			C084			C084			C084	
PCB-93	Penta			U L	1.2		U L	1.9		U	0.84
PCB-94	Penta		11	L	0.25	25	L	0.46	5.6		0.18
PCB-95	Penta		1700	L	0.25	3900	L	0.46	920		0.18
PCB-96	Penta		14	L	0.23	35	L	0.42	7.6		0.16
PCB-97	Penta		270	L	0.22	530	L	0.38	120		0.15
PCB-98	Penta			UC L	0.92		UC L	1.5		UC	0.67
PCB-99	Penta		460	L	0.22	910	L	0.38	220		0.15
PCB-100	Penta		9.6	L	0.25	22	L	0.46	7.1		0.18
PCB-101	Penta			C090			C090			C090	
PCB-102	Penta			U,C098			U,C098			U,C098	
PCB-103	Penta		21	L	0.25	49	L	0.46	14		0.18
PCB-104	Penta	PRC									
PCB-105	Penta		120	L	0.19	230	L	0.32	56		0.13
PCB-106	Penta		370	C L	0.19	690	C L	0.32	180	C	0.13
PCB-107	Penta		30	C L	0.19	62	C L	0.32	17	C	0.13
PCB-108	Penta			C107			C107			C107	
PCB-109	Penta			U L	1.3		U L	2		U	0.7
PCB-110	Penta		1100	L	0.22	2300	L	0.38	490		0.15
PCB-111	Penta		12	C L	0.2	23	C L	0.35	3.8	C	0.14
PCB-112	Penta			C083			C083			C083	
PCB-113	Penta			U L	1.4		U L	2.2	220		0.15
PCB-114	Penta		8.8	L	0.19	14	L	0.32	5		0.13
PCB-115	Penta			C111			C111			C111	
PCB-116	Penta			C085			C085			C085	
PCB-117	Penta			C087			C087			C087	
PCB-118	Penta			C106			C106			C106	
PCB-119	Penta		35	L	0.22	70	L	0.38	17		0.15
PCB-120	Penta			U L	1.1		U L	1.6		U	0.59
PCB-121	Penta	PRC									
PCB-122	Penta		5.4	L	0.19	7.7	L	0.32	2.7		0.13
PCB-123	Penta		6.1	L	0.19	10	L	0.32	3.2		0.13

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010			LDW-BA-SC-ENR+AC-CB-S010			LDW-BA-SC-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-124	Penta		1.6		0.1	4.4	L	0.19	5.6	L	0.25
PCB-125	Penta			C087			C087			C087	
PCB-126	Penta			U L	0.39		U L	1		U L	0.77
PCB-127	Penta			U L	0.31		U L	0.74		U L	0.61
PCB-128	Hexa		2.8	C L	0.058	9.6	C L	0.12	8.2	C L	0.14
PCB-129	Hexa		1.2	L	0.063	3.6	L	0.13	3.3	L	0.15
PCB-130	Hexa		1.5	L	0.063	5.9	L	0.13	4.7	L	0.15
PCB-131	Hexa		0.83	C L	0.068	3	C L	0.14	2.1	C L	0.16
PCB-132	Hexa		8.7	C L	0.068	31	C L	0.14	27	C L	0.16
PCB-133	Hexa			C131			C131			C131	
PCB-134	Hexa		1.9	C L	0.074	7	C L	0.15	6.2	C L	0.18
PCB-135	Hexa		6.4	L	0.074	20	L	0.15	19	L	0.18
PCB-136	Hexa		8.2	L	0.064	27	L	0.13	24	L	0.15
PCB-137	Hexa		0.96	L	0.063	2.9	L	0.13	2.8	L	0.15
PCB-138	Hexa		22	C L	0.063	73	C L	0.13	69	C L	0.15
PCB-139	Hexa		35	C L	0.074	110	C L	0.15	110	C L	0.18
PCB-140	Hexa			U L	0.3		U L	1.1		U L	0.54
PCB-141	Hexa		4.7	L	0.063	16	L	0.13	15	L	0.15
PCB-142	Hexa	PRC									
PCB-143	Hexa			C134			C134			C134	
PCB-144	Hexa		1.8	L	0.074	6.7	L	0.15	6.1	L	0.18
PCB-145	Hexa			U L	0.18		U L	0.55		U L	0.43
PCB-146	Hexa		4.7	C L	0.063	16	C L	0.13	14	C L	0.15
PCB-147	Hexa		0.69	J L	0.074	2.4	L	0.15	2.3	L	0.18
PCB-148	Hexa			U L	0.26	37	L	0.15		U L	0.63
PCB-149	Hexa			C139			C139			C139	
PCB-150	Hexa			U L	0.18		U L	0.53		U L	0.42
PCB-151	Hexa		11	L	0.074	36	L	0.15	35	L	0.18
PCB-152	Hexa			U L	0.18		U L	0.54		U L	0.43
PCB-153	Hexa		28	L	0.063	89	L	0.13	86	L	0.15
PCB-154	Hexa		1.6	L	0.074	4.2	L	0.15	4.8	L	0.18
PCB-155	Hexa	PRC									
PCB-156	Hexa		1.2	L	0.054	4.8	L	0.12	4	L	0.13
PCB-157	Hexa			U L	0.19	1.3	L	0.12	0.83	J L	0.13
PCB-158	Hexa		2.5	C L	0.063	9.1	C L	0.13	8.1	C L	0.15
PCB-159	Hexa		0.38	J L	0.054		U L	0.7	0.94	J L	0.13
PCB-160	Hexa			C158			C158			C158	
PCB-161	Hexa			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138	

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010			LDW-BA-SC-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-124	Penta		0.7	J	0.08	1.1		0.094	0.74	J	0.082
PCB-125	Penta			C087			C087			C087	
PCB-126	Penta			U	0.23		U	0.69		U	0.24
PCB-127	Penta			U	0.17		U	0.52		U	0.19
PCB-128	Hexa		1.7	C	0.047	2.1	C L	0.054	1.7	C	0.052
PCB-129	Hexa		0.69		0.05	0.83	L	0.058	0.69		0.056
PCB-130	Hexa		0.95		0.05	1.3	L	0.058	1.2		0.056
PCB-131	Hexa		0.57	C	0.054	0.67	C L	0.063	0.5	C,J	0.059
PCB-132	Hexa		5.8	C	0.054	6.6	C L	0.063	5.4	C	0.059
PCB-133	Hexa			C131			C131			C131,J	
PCB-134	Hexa		1.1	C	0.058	1.6	C L	0.068	1	C	0.063
PCB-135	Hexa		3.5		0.058	4.7	L	0.068	3.2		0.063
PCB-136	Hexa		5.4		0.051	6	L	0.059	4.7		0.056
PCB-137	Hexa		0.44	J	0.05	0.74	L	0.058	0.51	J	0.056
PCB-138	Hexa		14	C	0.05	17	C L	0.058	13	C	0.056
PCB-139	Hexa		22	C	0.058	25	C L	0.068	19	C	0.063
PCB-140	Hexa			U	0.2		U L	0.44		U	0.2
PCB-141	Hexa		2.8		0.05	3.2	L	0.058	2.7		0.056
PCB-142	Hexa	PRC									
PCB-143	Hexa			C134			C134			C134	
PCB-144	Hexa		1.3		0.058	3.7	L	0.068	1.1		0.063
PCB-145	Hexa			U	0.14		U L	0.19		U	0.15
PCB-146	Hexa		3.3	C	0.05	4	C L	0.058	2.9	C	0.056
PCB-147	Hexa		0.56	J	0.058	0.88	L	0.068	0.4	J	0.063
PCB-148	Hexa			U	0.2		U L	0.28		U	0.22
PCB-149	Hexa			C139			C139			C139	
PCB-150	Hexa			U	0.13		U L	0.18		U	0.15
PCB-151	Hexa		6.8		0.058	8.3	L	0.068	5.7		0.063
PCB-152	Hexa			U	0.14		U L	0.19		U	0.15
PCB-153	Hexa		18		0.05	21	L	0.058	16		0.056
PCB-154	Hexa		1.3		0.058	1.6	L	0.068	1.1		0.063
PCB-155	Hexa	PRC									
PCB-156	Hexa		0.74	L	0.043	0.94	L	0.049	0.88		0.049
PCB-157	Hexa			U L	0.13		U L	0.26		U	0.14
PCB-158	Hexa		1.8	C	0.05	2.1	C L	0.058	1.6	C	0.056
PCB-159	Hexa		0.23	J L	0.043		U L	0.26		U	0.13
PCB-160	Hexa			C158			C158			C158	
PCB-161	Hexa			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138	

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-124	Penta		23		0.1	11		0.11	11	L	0.12
PCB-125	Penta			C087			C087			C087	
PCB-126	Penta			U	0.79		U	0.45		U L	0.56
PCB-127	Penta			U	0.58		U	0.34		U L	0.42
PCB-128	Hexa		51	C L	0.063	22	C L	0.066	28	C L	0.088
PCB-129	Hexa		19	L	0.067	9	L	0.071	11	L	0.092
PCB-130	Hexa		31	L	0.067	14	L	0.071	15	L	0.092
PCB-131	Hexa		14	C	0.071	7.2	C L	0.076	7.6	C L	0.096
PCB-132	Hexa		150	C	0.071	61	C L	0.076	77	C L	0.096
PCB-133	Hexa			C131			C131			C131	
PCB-134	Hexa		34	C	0.076	16	C L	0.081	19	C L	0.1
PCB-135	Hexa		76		0.076	38	L	0.081	48	L	0.1
PCB-136	Hexa		93	L	0.068	48	L	0.072	60	L	0.093
PCB-137	Hexa		17	L	0.067	9	L	0.071	12	L	0.092
PCB-138	Hexa		280	C L	0.067	130	C L	0.071	160	C L	0.092
PCB-139	Hexa		360	C	0.076	170	C L	0.081	210	C L	0.1
PCB-140	Hexa		4.2		0.076	3	L	0.081	3.4	L	0.1
PCB-141	Hexa		53	L	0.067	25	L	0.071	33	L	0.092
PCB-142	Hexa	PRC									
PCB-143	Hexa			C134			C134			C134	
PCB-144	Hexa		21		0.076	8.6	L	0.081	9.9	L	0.1
PCB-145	Hexa		0.44	J L	0.068		U L	0.24		U L	0.29
PCB-146	Hexa		43	C L	0.067	20	C L	0.071	27	C L	0.092
PCB-147	Hexa		14		0.076	5.6	L	0.081	7.4	L	0.1
PCB-148	Hexa			U	0.31		U L	0.35		U L	0.4
PCB-149	Hexa			C139			C139			C139	
PCB-150	Hexa		1.2	L	0.068	0.69	J L	0.072	0.97	L	0.093
PCB-151	Hexa		91		0.076	45	L	0.081	59	L	0.1
PCB-152	Hexa		0.94	L	0.068	0.6	J L	0.072	0.71	J L	0.093
PCB-153	Hexa		250	L	0.067	120	L	0.071	160	L	0.092
PCB-154	Hexa		8		0.076	4.5	L	0.081	5.4	L	0.1
PCB-155	Hexa	PRC									
PCB-156	Hexa		19	L	0.059	8.1	L	0.062	11	L	0.083
PCB-157	Hexa		4.5	L	0.059	2	L	0.062	2.7	L	0.083
PCB-158	Hexa		39	C L	0.067	17	C L	0.071	23	C L	0.092
PCB-159	Hexa		1.2	L	0.059	0.6	J L	0.062	0.75	J L	0.083
PCB-160	Hexa			C158			C158			C158	
PCB-161	Hexa			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138	

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CA-S010			LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-124	Penta		17	L	0.19	34	L	0.32	8.1		0.13
PCB-125	Penta			C087			C087			C087	
PCB-126	Penta			U L	1.2		U L	1.7		U L	0.51
PCB-127	Penta			U L	0.83		U L	1.3		U L	0.4
PCB-128	Hexa		39	C L	0.13	74	C L	0.19	20	C L	0.079
PCB-129	Hexa		17	L	0.14	29	L	0.2	8.5	L	0.085
PCB-130	Hexa		26	L	0.14	42	L	0.2	11	L	0.085
PCB-131	Hexa		9.6	C L	0.14	17	C L	0.22	5.6	C L	0.09
PCB-132	Hexa		110	C L	0.14	200	C L	0.22	56	C L	0.09
PCB-133	Hexa			C131			C131			C131	
PCB-134	Hexa		27	C L	0.15	51	C L	0.23	12	C L	0.096
PCB-135	Hexa		62	L	0.15	110	L	0.23	34	L	0.096
PCB-136	Hexa		82	L	0.14	150	L	0.21	42	L	0.086
PCB-137	Hexa		14	L	0.14	30	L	0.2	8.9	L	0.085
PCB-138	Hexa		240	C L	0.14	420	C L	0.2	120	C L	0.085
PCB-139	Hexa		300	C L	0.15	530	C L	0.23	160	C L	0.096
PCB-140	Hexa		4.6	L	0.15	7.2	L	0.23		U L	0.53
PCB-141	Hexa		46	L	0.14	81	L	0.2	23	L	0.085
PCB-142	Hexa	PRC									
PCB-143	Hexa			C134			C134			C134	
PCB-144	Hexa		17	L	0.15	34	L	0.23	8.2	L	0.096
PCB-145	Hexa			U L	0.42		U L	0.64		U L	0.34
PCB-146	Hexa		38	C L	0.14	63	C L	0.2	20	C L	0.085
PCB-147	Hexa		10	L	0.15	18	L	0.23	5.2	L	0.096
PCB-148	Hexa		110	L	0.15		U L	0.92	57	L	0.096
PCB-149	Hexa			C139			C139			C139	
PCB-150	Hexa		1.2	J L	0.14	2.5	L	0.21		U L	0.34
PCB-151	Hexa		81	L	0.15	150	L	0.23	45	L	0.096
PCB-152	Hexa		0.9	J L	0.14	1.6	J L	0.21		U L	0.35
PCB-153	Hexa		230	L	0.14	390	L	0.2	120	L	0.085
PCB-154	Hexa		7.3	L	0.15	13	L	0.23	4.6	L	0.096
PCB-155	Hexa	PRC									
PCB-156	Hexa		16	L	0.12	29	L	0.18	7.8	L	0.074
PCB-157	Hexa		4.1	L	0.12	8.2	L	0.18	2.2	L	0.074
PCB-158	Hexa		34	C L	0.14	60	C L	0.2	18	C L	0.085
PCB-159	Hexa		1.1	J L	0.12	2	L	0.18	0.75	L	0.074
PCB-160	Hexa			C158			C158			C158	
PCB-161	Hexa			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138	

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010			LDW-BA-SC-ENR+AC-CB-S010			LDW-BA-SC-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-165	Hexa			C146			C146			C146	
PCB-166	Hexa			U L	0.23		U L	0.84		U L	0.4
PCB-167	Hexa		0.58	L	0.054	2.2	L	0.12	2.1	L	0.13
PCB-168	Hexa			U L	0.21		U L	0.79		U L	0.38
PCB-169	Hexa			U L	0.16		U L	0.76		U L	0.31
PCB-170	Hepta		2.3	L	0.033	8.5	L	0.083	6.3	L	0.076
PCB-171	Hepta		0.95	L	0.038	3.8	L	0.091	3	L	0.088
PCB-172	Hepta		0.16	L	0.033	1.8	L	0.083	0.86	L	0.076
PCB-173	Hepta			U L	0.13		U L	0.69		U L	0.29
PCB-174	Hepta		3.3	L	0.038	13	L	0.091	10	L	0.088
PCB-175	Hepta			U L	0.11	0.56	J L	0.091		U L	0.25
PCB-176	Hepta		0.46	L	0.032	2.6	L	0.081	1.7	L	0.074
PCB-177	Hepta		2.3	L	0.038	8.1	L	0.091	7.3	L	0.088
PCB-178	Hepta		0.88	L	0.038	3.7	L	0.091	2.9	L	0.088
PCB-179	Hepta		1.7	L	0.032	7.4	L	0.081	5.4	L	0.074
PCB-180	Hepta		5	L	0.033	18	L	0.083	14	L	0.076

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010			LDW-BA-SC-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-165	Hexa			C146			C146			C146	
PCB-166	Hexa			U	0.15		U L	0.32		U	0.16
PCB-167	Hexa		0.38	J L	0.043		U L	0.28	0.41	J	0.049
PCB-168	Hexa			U	0.14		U L	0.31		U	0.15
PCB-169	Hexa			U L	0.12		U L	0.26		U L	0.13
PCB-170	Hepta		1.6	L	0.027	1.7	L	0.03	1.6	L	0.033
PCB-171	Hepta		0.57	L	0.031	0.88	L	0.035	0.67	L	0.037
PCB-172	Hepta		0.058	L	0.027	0.34	L	0.03	0.15	L	0.033
PCB-173	Hepta			U L	0.094		U L	0.26		U L	0.13
PCB-174	Hepta		2.1	L	0.031	2.6	L	0.035	2.3	L	0.037
PCB-175	Hepta			U L	0.08		U L	0.23		U L	0.11
PCB-176	Hepta		0.32	L	0.026	0.5	L	0.03	0.4	L	0.033
PCB-177	Hepta		1.5	L	0.031	1.8	L	0.035	1.6	L	0.037
PCB-178	Hepta		0.51	L	0.031	0.83	L	0.035	0.5	L	0.037
PCB-179	Hepta		1.2	L	0.026	1.5	L	0.03	1.2	L	0.033
PCB-180	Hepta		3.4	L	0.027	4	L	0.03	3.7	L	0.033

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-165	Hexa			C146			C146			C146	
PCB-166	Hexa		1.8	L	0.067	0.61	J L	0.071	0.85	J L	0.092
PCB-167	Hexa		9	L	0.059	4	L	0.062	5.3	L	0.083
PCB-168	Hexa			U L	0.35		U L	0.43		U L	0.44
PCB-169	Hexa			U L	0.31		U L	0.36		U L	0.39
PCB-170	Hepta		15	L	0.039	6.4	L	0.041	11	L	0.063
PCB-171	Hepta		5.9	L	0.044	2.7	L	0.046	4.5	L	0.068
PCB-172	Hepta		2.5	L	0.039	1.1	L	0.041	1.9	L	0.063
PCB-173	Hepta		0.64	L	0.044		U L	0.28		U L	0.24
PCB-174	Hepta		19	L	0.044	9.6	L	0.046	15	L	0.068
PCB-175	Hepta		0.94	L	0.044	0.46	L	0.046	0.83	L	0.068
PCB-176	Hepta		3	L	0.038	1.6	L	0.04	2.3	L	0.062
PCB-177	Hepta		13	L	0.044	6	L	0.046	11	L	0.068
PCB-178	Hepta		4.8	L	0.044	2.5	L	0.046	4.3	L	0.068
PCB-179	Hepta		9.9	L	0.038	4.8	L	0.04	8.4	L	0.062
PCB-180	Hepta		25	L	0.039	13	L	0.041	21	L	0.063

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CA-S010			LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-165	Hexa			C146			C146			C146	
PCB-166	Hexa		1.5	L	0.14	2.4	L	0.2	0.68	J L	0.085
PCB-167	Hexa		6.9	L	0.12	14	L	0.18	4.2	L	0.074
PCB-168	Hexa			U L	1.1		U L	1.5		U L	0.39
PCB-169	Hexa			U L	1		U L	1.2		U L	0.32
PCB-170	Hepta		14	L	0.089	23	L	0.11	7.3	L	0.05
PCB-171	Hepta		5.9	L	0.097	8.9	L	0.13	3.6	L	0.056
PCB-172	Hepta		2.2	L	0.089	4.6	L	0.11	2.3	L	0.05
PCB-173	Hepta			U L	0.53	1.3	L	0.13		U L	0.4
PCB-174	Hepta		18	L	0.097	31	L	0.13	11	L	0.056
PCB-175	Hepta		0.96	J L	0.097	1.3	L	0.13	0.52	J L	0.056
PCB-176	Hepta		3.5	L	0.087	4.7	L	0.11	1.9	L	0.049
PCB-177	Hepta		13	L	0.097	20	L	0.13	7.7	L	0.056
PCB-178	Hepta		4.9	L	0.097	6.9	L	0.13	2.8	L	0.056
PCB-179	Hepta		11	L	0.087	16	L	0.11	5.9	L	0.049
PCB-180	Hepta		28	L	0.089	40	L	0.11	15	L	0.05

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010 [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	LDW-BA-SC-ENR+AC-CB-S010 [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	LDW-BA-SC-ENR+AC-CC-S010 [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-181	Hepta			U L	0.12		U L	0.62		U L	0.27
PCB-182	Hepta		4.9	C L	0.038	18	C L	0.091	14	C L	0.088
PCB-183	Hepta		2.1	L	0.038	8.1	L	0.091	6.8	L	0.088
PCB-184	Hepta	PRC									
PCB-185	Hepta		0.43	L	0.038	1.7	L	0.091	1.4	L	0.088
PCB-186	Hepta			U L	0.069		U L	0.4		U L	0.15
PCB-187	Hepta			C182			C182			C182	
PCB-188	Hepta			U L	0.072	1	L	0.081		U L	0.15
PCB-189	Hepta			U L	0.063		U L	0.41		U L	0.14
PCB-190	Hepta		0.57	L	0.033	2.2	L	0.083	1.5	L	0.076
PCB-191	Hepta			U L	0.082		U L	0.45		U L	0.18
PCB-192	Hepta	PRC									
PCB-193	Hepta		0.44	L	0.033	1.7	L	0.083	1.3	L	0.076
PCB-194	Octa		0.32	L	0.017	1.7	L	0.052	0.89	L	0.039
PCB-195	Octa		0.18	J L	0.019	1	L	0.057	0.55	L	0.044
PCB-196	Octa		0.57	C L	0.019	2.8	C L	0.057	1.8	C L	0.044
PCB-197	Octa		0.037	L	0.016	0.25	L	0.05	0.053	L	0.036
PCB-198	Octa			U L	0.084		U L	0.31		U L	0.19
PCB-199	Octa		0.53	L	0.016	2.2	L	0.05	1.4	L	0.036
PCB-200	Octa			U L	0.049	0.54	L	0.05	0.35	J L	0.036
PCB-201	Octa			U L	0.056		U L	0.2		U L	0.13
PCB-202	Octa			U L	0.047	0.67	L	0.05	0.33	J L	0.036
PCB-203	Octa			C196			C196			C196	
PCB-204	Octa	PRC									
PCB-205	Octa			U L	0.032	0.32	J L	0.052		U L	0.099
PCB-206	Nona			U L	0.05	0.48	L	0.037	0.13	J L	0.023
PCB-207	Nona		0.015	L	0.0086	0.15	L	0.032	0.01	L	0.019
PCB-208	Nona			U L	0.026	0.18	J L	0.032		U L	0.037
PCB-209	Deca		0.0057	L	0.0045	0.17	L	0.02	0.018	L	0.0094
Total Detected PCB Congeners			**3700**			**8400**			**20000**		

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010			LDW-BA-SC-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-181	Hepta			U L	0.085		U L	0.23		U L	0.12
PCB-182	Hepta		3.2	C L	0.031	3.8	C L	0.035	3.3	C L	0.037
PCB-183	Hepta		1.5	L	0.031	1.8	L	0.035	1.5	L	0.037
PCB-184	Hepta	PRC									
PCB-185	Hepta		0.33	L	0.031		U L	0.23	0.28	J L	0.037
PCB-186	Hepta			U L	0.05		U L	0.15		U L	0.072
PCB-187	Hepta			C182			C182			C182	
PCB-188	Hepta			U L	0.047		U L	0.15		U L	0.068
PCB-189	Hepta			U L	0.052		U L	0.13		U L	0.075
PCB-190	Hepta		0.36	L	0.027	0.4	L	0.03	0.39	L	0.033
PCB-191	Hepta			U L	0.059		U L	0.16		U L	0.085
PCB-192	Hepta	PRC									
PCB-193	Hepta		0.26	J L	0.027	0.43	L	0.03	0.3	J L	0.033
PCB-194	Octa		0.24	L	0.015	0.29	L	0.016	0.26	L	0.021
PCB-195	Octa		0.14	J L	0.017	0.14	J L	0.018	0.18	J L	0.022
PCB-196	Octa		0.42	C L	0.017	0.52	C L	0.018	0.5	C L	0.022
PCB-197	Octa		0.025	L	0.014	0.059	L	0.015	0.069	L	0.02
PCB-198	Octa			U L	0.093		U L	0.11		U L	0.11
PCB-199	Octa		0.35	L	0.014	0.4	L	0.015	0.48	L	0.02
PCB-200	Octa			U L	0.055		U L	0.06		U L	0.067
PCB-201	Octa			U L	0.062		U L	0.069		U L	0.074
PCB-202	Octa			U L	0.053	0.14	J L	0.015		U L	0.065
PCB-203	Octa			C196			C196			C196	
PCB-204	Octa	PRC									
PCB-205	Octa			U L	0.034		U L	0.05		U L	0.055
PCB-206	Nona			U L	0.039	0.076	J L	0.0097	0.066	J L	0.014
PCB-207	Nona		0.0058	L	0.0078	0.0094	L	0.008	0.013	L	0.012
PCB-208	Nona			U L	0.022		U L	0.014		U L	0.036
PCB-209	Deca		0.0086	L	0.0043	0.023	L	0.0043	0.015	L	0.0077
Total Detected PCB Congeners			**1400**			**1900**			**1200**		

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-181	Hepta			U L	0.2		U L	0.25		U L	0.21
PCB-182	Hepta		22	C L	0.044	12	C L	0.046	19	C L	0.068
PCB-183	Hepta		11	L	0.044	5.5	L	0.046	8.7	L	0.068
PCB-184	Hepta	PRC									
PCB-185	Hepta		1.8	L	0.044	1	L	0.046	1.8	L	0.068
PCB-186	Hepta			U L	0.13		U L	0.15		U L	0.13
PCB-187	Hepta			C182			C182			C182	
PCB-188	Hepta		0.26	J L	0.038		U L	0.15		U L	0.14
PCB-189	Hepta		0.57	L	0.035		U L	0.15	0.4	J L	0.058
PCB-190	Hepta		2.8	L	0.039	1.4	L	0.041	2.4	L	0.063
PCB-191	Hepta		0.76	L	0.039	0.42	L	0.041	0.66	L	0.063
PCB-192	Hepta	PRC									
PCB-193	Hepta		1.8	L	0.039	1	L	0.041	1.7	L	0.063
PCB-194	Octa		1.6	L	0.023	0.74	L	0.024	1.5	L	0.043
PCB-195	Octa		0.78	L	0.025	0.36	L	0.026	0.85	L	0.046
PCB-196	Octa		2.5	C L	0.025	1.4	C L	0.026	2.7	C L	0.046
PCB-197	Octa		0.16	L	0.022	0.029	L	0.022	0.35	L	0.042
PCB-198	Octa			U L	0.092		U L	0.16		U L	0.25
PCB-199	Octa		2.1	L	0.022	1.3	L	0.022	2.7	L	0.042
PCB-200	Octa		0.34	L	0.022		U L	0.098	0.37	J L	0.042
PCB-201	Octa		0.39	L	0.025		U L	0.11	0.44	J L	0.046
PCB-202	Octa		0.53	L	0.022	0.44	L	0.022	0.77	L	0.042
PCB-203	Octa			C196			C196			C196	
PCB-204	Octa	PRC									
PCB-205	Octa			U L	0.09		U L	0.077		U L	0.13
PCB-206	Nona		0.28	L	0.015	0.17	L	0.015	0.42	L	0.033
PCB-207	Nona		0.034	L	0.013	0.015	L	0.013	0.11	L	0.029
PCB-208	Nona		0.079	J L	0.013		U L	0.044		U L	0.13
PCB-209	Deca		0.04	L	0.008	0.044	L	0.0077	0.069	L	0.021
Total Detected PCB Congeners			**41000**			**29000**			**18000**		

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CA-S010			LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-181	Hepta			U L	0.48		U L	0.51		U L	0.36
PCB-182	Hepta		25	C L	0.097	37	C L	0.13	15	C L	0.056
PCB-183	Hepta		11	L	0.097	19	L	0.13	6.4	L	0.056
PCB-184	Hepta	PRC									
PCB-185	Hepta		1.8	L	0.097	3.6	L	0.13	1.1	L	0.056
PCB-186	Hepta			U L	0.29		U L	0.3		U L	0.22
PCB-187	Hepta			C182			C182			C182	
PCB-188	Hepta		0.49	J L	0.087		U L	0.54		U L	0.23
PCB-189	Hepta			U L	0.32		U L	0.31		U L	0.2
PCB-190	Hepta		2.8	L	0.089	4.7	L	0.11	1.5	L	0.05
PCB-191	Hepta			U L	0.34	1.4	L	0.11	0.58	L	0.05
PCB-192	Hepta	PRC									
PCB-193	Hepta		2.2	L	0.089	3.1	L	0.11	1.3	L	0.05
PCB-194	Octa		1.7	L	0.058	2.1	L	0.061	1	L	0.03
PCB-195	Octa		1	L	0.063	1.1	L	0.068	0.58	L	0.033
PCB-196	Octa		3.8	C L	0.063	4.5	C L	0.068	2.1	C L	0.033
PCB-197	Octa		0.28	L	0.056	0.37	L	0.057	0.19	L	0.028
PCB-198	Octa			U L	0.47		U L	0.41		U L	0.26
PCB-199	Octa		3	L	0.056	3.9	L	0.057	1.6	L	0.028
PCB-200	Octa			U L	0.29		U L	0.24		U L	0.16
PCB-201	Octa			U L	0.31		U L	0.27		U L	0.18
PCB-202	Octa		0.86	L	0.056	1	L	0.057	0.54	L	0.028
PCB-203	Octa			C196			C196			C196	
PCB-204	Octa	PRC									
PCB-205	Octa			U L	0.22		U L	0.18		U L	0.092
PCB-206	Nona		0.37	J L	0.042	0.47	L	0.037	0.19	J L	0.02
PCB-207	Nona		0.057	L	0.037	0.13	L	0.031	0.061	L	0.017
PCB-208	Nona			U L	0.16		U L	0.13		U L	0.066
PCB-209	Deca		0.059	L	0.024	0.11	L	0.017	0.052	L	0.01
Total Detected PCB Congeners			**25000**			**75000**			**15000**		

Notes

C: Coelution with one or more PCB congeners; the numerical value indicates the lower congener co-eluter. For example, PCB-20 co-elutes with PCB-21 and PCB-33

J: Analyte concentration is below calibration range

L: Percent to steady state less than 20%

PCB: Polychlorinated biphenyl

pg/L: picogram per liter

PRC: Performance Reference Compound

U: Not detected at the Method Detection Limit (MDL) shown in the second column for each sample.

Geosyntec consultants

ATTACHMENT A: DATA ANALYSIS METHODS

Attachment A: Data Analysis Methods
Concentrations of Freely-Dissolved Polychlorinated Biphenyls (PCBs) Measured via SP3ME™ Passive Samplers

Information about the SPME fiber and exposure duration for the samples reported in this document are provided in Table A1. The exposure duration as shown in Table A1 was calculated as the average exposure duration of each fiber in the composite sample. The deployment and retrieval dates and exposure duration of each composited fiber are shown in Table A2. The mass of PCB congeners in the extracts (Table A3) obtained from Frontier Analytical Laboratory report (Attachment C of the Data Report) were used in a multi-step data process to calculate C_{free} PCBs as described below.

Step 1:

The concentration of PCB analytes in the PDMS phase of the sampler was calculated as the mass of each PCB analyte (as reported by the laboratory, Table A3) divided by the volume PDMS. Volume of PDMS is shown in Table A2 and is based on the measured mass of the SPME fiber prior to compositing the fibers, the conversion factor of 0.069 gram per cm, 0.631 µL per cm, and density of PDMS (0.965 kilogram per liter [kg/L]).

The concentration of the PRCs in PDMS [$PDMS_t$] was used to calculate the elimination rate (k_e) values for the PRCs in each sample using the following equation (Lohmann, 2012):

$$PRC\ k_e = \ln\left(\frac{[PDMS_{t=0}]}{[PDMS_{t=final}]}\right) \div t_{final}$$

where:

$PDMS_{t=0}$ = the average concentration of the PRC in the PDMS at the beginning of the deployment (obtained from an average measurement of the Trip Blanks);

$PDMS_{t=final}$ = the concentration of the PRC in the PDMS after the deployment (obtained from each sample); and

t_{final} = the deployment time (in days).

k_e = the elimination rate (in $days^{-1}$)

PRC k_e values for the PRCs in the sediment-deployed sample are shown in Table A4. The values are also expressed as a percentage of steady state (concentration at equilibrium). A number of PRC k_e values were not calculated and were treated as outliers because $PDMS_{t=final}$ values were equal to or greater than $PDMS_{t=0}$ values.

Step 2:

The second step was to estimate k_e values for the non-PRC PCBs (primary analyte PCBs) in the sample. This was accomplished by developing a linear regression model using PRC k_e values (dependent variable, from Table A4) and PDMS-water partition coefficients (K_{PDMS}) for each PCB. K_{PDMS} values were the independent variable and were obtained from Smedes et al. (2009) and provided in Table A5. Note, regressions were specific to each sample (i.e. not global to the whole deployment) as local geologic and hydrodynamic can vary greatly within a site.

Values were $\log_{10}$-transformed per Tomaszewski and Luthy (2008). Models were developed for each sample. By entering the PCB-specific K_{PDMS} into the linear regression model developed for each sample, k_e values for each of the primary analyte PCBs for each sample were calculated. The p-value and r^2 for each sample-specific model is provided in Table A4 as measures of how well the linear PRC model performed.

Step 3:

Concentrations of some primary analyte PCBs in PDMS (derived from the PCB masses in Table A3 and PDMS masses in Table A1) were corrected for trace levels of primary analyte PCBs present in the Trip Blanks (due to trace levels present in the PRC spiking solutions). Using the sample specific k_e values, the expected amount of these trace primary analyte PCBs present in the sample at the end of deployment ($Trace\ PCB_{t = final}$) was calculated via the following equation:

$$[Trace\ \ PCB_{t = final}] = \frac{[Trace\ \ PCB_{t = 0}]}{e^{k_e \times t_{final}}}$$

where:

$Trace\ PCB_{t = final}$ = the expected concentration of trace PCBs remaining in the sample at the end of the deployment;

$Trace\ PCB_{t = 0}$ = the average concentration of the trace PCB in the PDMS at the beginning of the deployment (obtained from an average measurement of the trace PCBs in the Trip Blanks);

k_e = the elimination rate value predicted by the sampler-specific regression model (in $days^{-1}$); and

t_{final} = the deployment time (in days).

Concentrations of $Trace\ PCB_{t = final}$ values were then subtracted from the measured concentrations of primary analyte PCBs in PDMS (derived from the PCB masses in Table A3 and PDMS masses in Table A1).

Step 4:

This step describes the calculation of sampling rate correction factor (*CF*) for each primary analyte PCB in each sample. The following equation is used, as adapted from Lohmann (2012):

$$CF = \frac{1}{1 - e^{-k_e \times t_{final}}}$$

where:

k_e = the elimination rate value predicted by the sample-specific regression model (in days^{-1}); and

t_{final} = the deployment time (in days).

Step 5:

The concentration of PCBs in the PDMS of each sample (derived from the PCB masses in Table A3 and PDMS masses in Table A1, or values corrected for *Trace PCB*$_{t=final}$) were multiplied by the *CF* values to calculate the steady-state concentration of PCBs.

Step 6:

In the final step, the steady-state concentrations are divided by K_{PDMS} values (Smedes et al., 2009) to obtain the concentrations of C_{free} PCBs. These are reported in Table 1. C_{free} Method Detection Limits (MDLs) were calculated in the approach described above by dividing the estimated MDL concentration in sample extracts, as reported by Frontier Analytical Laboratory and shown in Table A3, by the mass of PDMS extracted in each sample, as shown in Table A1. The estimated detection limit (EDL) was used for non-detected results and the minimum level of quantitation (ML) was used for detected results. Cases in which the percentage of steady state was indicated to be less than 20% for a primary analyte PCB, a qualifier, "L", was noted[2]. All other qualifiers, as reported in the original analytical results for PCB masses of each congener in each sampler extract (Attachment C of the Data Report), are carried through and reported in the C_{free} results. Table 1 also reports the sum of the detected C_{free} PCB congeners.

An uncertainty analysis was conducted to evaluate the uncertainty in the estimation of CF values for each of the primary analytes. From the linear regression model using PRC k_e values (dependent variable, from Table A4) and PRC K_{PDMS} values (Step 2), upper and lower bound estimates for k_e values were obtained for each PCB analyte in each sample by calculating the lower and upper 80% confidence level (CL) model predictions for predicted k_e (Sokal and Rohlf, 1999). These 80% lower and upper CL k_e values were then used to calculate lower and upper CL CF values that were applied to calculate upper and lower CL values for Cfree for each PCB congener in each sample (Steps 4 and 5). These lower and upper CL Cfree values are shown in Table A6. Via summing the lower CL values for Cfree for the PCB congeners, a lower CL value

[2] Differences in t=0 and t=final concentrations of less than 10-20% may be within measurement error, as determined by general variability in PRCs in Trip Blank measurements. When a PCB reaches less than 10-20% of steady state in a sampler, C_{free} calculations are potentially affected by measurement uncertainty.

for the Cfree total PCBs were calculated (Table A6). Via summing the upper CL values for Cfree for the PCB congeners, an upper CL value for the Cfree total PCBs were calculated (Table A6). The range between the lower and upper CL Cfree values represents the range of values that would contain approximately 80% of possible Cfree estimates calculated via the above approach. Expressed alternatively, there is 80% confidence the Cfree value lies within that range.

References Cited

Lohmann, R. 2012. Critical review of low-density polyethylene's partitioning and diffusion coefficients for trace organic contaminants and implications for its use as a passive sampler. Environ. Sci. Technol.: 46:606-618.

Smedes, P., Geerstma, R. W., van der Zande, T., and Booij, K. 2009. Polymer-water partition coefficients of hydrophobic compounds for passive sampling: Application of cosolvent models for validation. Environ. Sci. Technol. 43:7047-7054.

Sokal R.R., Rohlf, F.J. 1999. *Biometry*. New York (NY): W.H. Freeman.

Tomaszewski, J.E., and Luthy, R.G. 2008. Field deployment of polyethylene devices to measure PCB concentrations in pore water of contaminated sediment. Environ. Sci. Technol. 42:6086-6091.

United States Environmental Protection Agency (USEPA). 2003. Table of PCB Species by Congener Number.

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TABLE A1

Table A1. Fiber Details.

Sample ID	Sample Type	Mass of Vial, Empty (g)	Mass of Vial, with Fiber (g)	Mass of Fiber (g)	Length of Fiber, based on mass (cm)	Number of Fibers Included	Length of Fiber, Nominal (cm)	Recovery (%)	Volume of PDMS (µL)	Mass of PDMS (g)	Earliest Sampler Deployment Date	Latest Sampler Retrieval Date	Average Exposure Duration (days)
LDW-BA-SC-ENR+AC-CA-S010	Sample	10.01166	14.15272	4.1411	60.0154	6	60	100%	37.9	0.037	7/27/2016	9/5/2016	37
LDW-BA-SC-ENR+AC-CB-S010	Sample	10.08098	14.16051	4.0795	59.1236	6	60	99%	37.3	0.036	7/27/2016	9/3/2016	37
LDW-BA-SC-ENR+AC-CC-S010	Sample	10.04683	14.22807	4.1812	60.5977	6	60	101%	38.2	0.037	7/27/2016	9/5/2016	37
LDW-BA-SC-ENR-CA-S010	Sample	10.06821	14.22052	4.1523	60.1784	6	60	100%	38.0	0.037	7/26/2016	9/1/2016	34
LDW-BA-SC-ENR-CB-S010	Sample	10.23795	14.39193	4.1540	60.2026	6	60	100%	38.0	0.037	7/26/2016	9/1/2016	34
LDW-BA-SC-ENR-CC-S010	Sample	10.06361	13.52806	3.4645	50.2094	5	50	100%	31.7	0.031	7/26/2016	9/1/2016	33
LDW-BA-IN-ENR+AC-CA-S010	Sample	10.25924	13.70429	3.4451	49.9283	5	50	100%	31.5	0.030	7/26/2016	9/9/2016	44
LDW-BA-IN-ENR+AC-CB-S010	Sample	10.01774	13.48910	3.4714	50.3096	5	50	101%	31.7	0.031	7/26/2016	9/8/2016	43
LDW-BA-IN-ENR+AC-CC-S010	Sample	9.98313	14.12785	4.1447	60.0684	6	60	100%	37.9	0.037	7/26/2016	9/8/2016	43
LDW-BA-IN-ENR-CA-S010	Sample	10.02636	13.48315	3.4568	50.0984	5	50	100%	31.6	0.031	7/25/2016	9/9/2016	42
LDW-BA-IN-ENR-CB-S010	Sample	10.09756	13.56606	3.4685	50.2681	5	50	101%	31.7	0.031	7/25/2016	9/9/2016	43
LDW-BA-IN-ENR-CC-S010	Sample	10.05695	13.53905	3.4821	50.4652	5	50	101%	31.8	0.031	7/25/2016	9/9/2016	42
LDW-BA-SC-S010-PW-TB	Trip Blank	10.19409	14.34920	4.1551	60.2190	6	60	100%	38.0	0.037	7/27/2016	7/27/2016	0
LDW-BA-SU-S010-PW-TB	Trip Blank	10.01794	14.17457	4.1566	60.2410	6	60	100%	38.0	0.037	7/27/2016	7/27/2016	0
LDW-BA-IN-S010-PW-TB	Trip Blank	10.22604	14.39741	4.1714	60.4546	6	60	101%	38.1	0.037	7/25/2016	7/25/2016	0

Notes
%: percent
g: gram
µL: microliter
cm: centimeter

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TABLE A2

Table A2. Exposure Duration.

SPME Sample ID	Composite Sample ID	Deployment Date	Retrieval Date	Composited	Days	Average Days
LDW-BA-SC-ENR+AC-1-A-S010-SPME	LDW-BA-SC-ENR+AC-CA-S010	7/29/2016	9/2/2016	Yes	35	37
LDW-BA-SC-ENR+AC-2-A-S010-SPME	LDW-BA-SC-ENR+AC-CA-S010	7/29/2016	9/2/2016	Yes	35	
LDW-BA-SC-ENR+AC-3-A-S010-SPME	LDW-BA-SC-ENR+AC-CA-S010	7/27/2016	9/5/2016	Yes	40	
LDW-BA-SC-ENR+AC-4-A-S010-SPME	LDW-BA-SC-ENR+AC-CA-S010	7/28/2016	9/2/2016	Yes	36	
LDW-BA-SC-ENR+AC-5-A-S010-SPME	LDW-BA-SC-ENR+AC-CA-S010	7/27/2016	9/3/2016	Yes	38	
LDW-BA-SC-ENR+AC-6-A-S010-SPME	LDW-BA-SC-ENR+AC-CA-S010	7/27/2016	9/1/2016	Yes	36	
LDW-BA-SC-ENR+AC-1-B-S010-SPME	LDW-BA-SC-ENR+AC-CB-S010	7/29/2016	9/3/2016	Yes	36	37
LDW-BA-SC-ENR+AC-2-B-S010-SPME	LDW-BA-SC-ENR+AC-CB-S010	7/29/2016	9/2/2016	Yes	35	
LDW-BA-SC-ENR+AC-3-B-S010-SPME	LDW-BA-SC-ENR+AC-CB-S010	7/27/2016	9/3/2016	Yes	38	
LDW-BA-SC-ENR+AC-4-B-S010-SPME	LDW-BA-SC-ENR+AC-CB-S010	7/28/2016	9/2/2016	Yes	36	
LDW-BA-SC-ENR+AC-5-B-S010-SPME	LDW-BA-SC-ENR+AC-CB-S010	7/27/2016	9/3/2016	Yes	38	
LDW-BA-SC-ENR+AC-6-B-S010-SPME	LDW-BA-SC-ENR+AC-CB-S010	7/27/2016	9/1/2016	Yes	36	
LDW-BA-SC-ENR+AC-1-C-S010-SPME	LDW-BA-SC-ENR+AC-CC-S010	7/29/2016	9/3/2016	Yes	36	37
LDW-BA-SC-ENR+AC-2-C-S010-SPME	LDW-BA-SC-ENR+AC-CC-S010	7/29/2016	9/2/2016	Yes	35	
LDW-BA-SC-ENR+AC-3-C-S010-SPME	LDW-BA-SC-ENR+AC-CC-S010	7/27/2016	9/5/2016	Yes	40	
LDW-BA-SC-ENR+AC-4-C-S010-SPME	LDW-BA-SC-ENR+AC-CC-S010	7/28/2016	9/2/2016	Yes	36	
LDW-BA-SC-ENR+AC-5-C-S010-SPME	LDW-BA-SC-ENR+AC-CC-S010	7/27/2016	9/3/2016	Yes	38	
LDW-BA-SC-ENR+AC-6-C-S010-SPME	LDW-BA-SC-ENR+AC-CC-S010	7/27/2016	9/1/2016	Yes	36	
LDW-BA-SC-ENR-1-A-S010-SPME	LDW-BA-SC-ENR-CA-S010	7/29/2016	8/31/2016	Yes	33	34
LDW-BA-SC-ENR-2-A-S010-SPME	LDW-BA-SC-ENR-CA-S010	7/29/2016	8/30/2016	Yes	32	
LDW-BA-SC-ENR-3-A-S010-SPME	LDW-BA-SC-ENR-CA-S010	7/29/2016	8/31/2016	Yes	33	
LDW-BA-SC-ENR-4-A-S010-SPME	LDW-BA-SC-ENR-CA-S010	7/29/2016	8/31/2016	Yes	33	
LDW-BA-SC-ENR-5-A-S010-SPME	LDW-BA-SC-ENR-CA-S010	7/26/2016	9/1/2016	Yes	37	
LDW-BA-SC-ENR-6-A-S010-SPME	LDW-BA-SC-ENR-CA-S010	7/26/2016	8/29/2016	Yes	34	
LDW-BA-SC-ENR-1-B-S010-SPME	LDW-BA-SC-ENR-CB-S010	7/29/2016	8/31/2016	Yes	33	34
LDW-BA-SC-ENR-2-B-S010-SPME	LDW-BA-SC-ENR-CB-S010	7/29/2016	8/30/2016	Yes	32	
LDW-BA-SC-ENR-3-B-S010-SPME	LDW-BA-SC-ENR-CB-S010	7/29/2016	9/1/2016	Yes	34	
LDW-BA-SC-ENR-4-B-S010-SPME	LDW-BA-SC-ENR-CB-S010	7/29/2016	8/30/2016	Yes	32	
LDW-BA-SC-ENR-5-B-S010-SPME	LDW-BA-SC-ENR-CB-S010	7/26/2016	9/1/2016	Yes	37	
LDW-BA-SC-ENR-6-B-S010-SPME	LDW-BA-SC-ENR-CB-S010	7/26/2016	8/29/2016	Yes	34	
LDW-BA-SC-ENR-1-C-S010-SPME	LDW-BA-SC-ENR-CC-S010	7/29/2016	8/31/2016	Yes	33	33
LDW-BA-SC-ENR-2-C-S010-SPME	LDW-BA-SC-ENR-CC-S010	7/29/2016	8/31/2016	Yes	33	
LDW-BA-SC-ENR-3-C-S010-SPME	LDW-BA-SC-ENR-CC-S010	7/29/2016	9/1/2016	Yes	34	
LDW-BA-SC-ENR-4-C-S010-SPME	LDW-BA-SC-ENR-CC-S010	7/29/2016	8/31/2016	Yes	33	
LDW-BA-SC-ENR-5-C-S010-SPME	LDW-BA-SC-ENR-CC-S010	7/26/2016	Not recovered	No	--	
LDW-BA-SC-ENR-6-C-S010-SPME	LDW-BA-SC-ENR-CC-S010	7/26/2016	8/29/2016	Yes	34	

Table A2. Exposure Duration.

SPME Sample ID	Composite Sample ID	Deployment Date	Retrieval Date	Composited	Days	Average Days
LDW-BA-IN-ENR+AC-1-A-S010-SPME	LDW-BA-IN-ENR+AC-CA-S010	7/26/2016	9/9/2016	Yes	45	44
LDW-BA-IN-ENR+AC-2-A-S010-SPME	LDW-BA-IN-ENR+AC-CA-S010	7/26/2016	9/8/2016	Yes	44	
LDW-BA-IN-ENR+AC-3-A-S010-SPME	LDW-BA-IN-ENR+AC-CA-S010	7/26/2016	9/8/2016	Yes	44	
LDW-BA-IN-ENR+AC-4-A-S010-SPME	LDW-BA-IN-ENR+AC-CA-S010	7/26/2016	Not recovered	No	--	
LDW-BA-IN-ENR+AC-5-A-S010-SPME	LDW-BA-IN-ENR+AC-CA-S010	7/26/2016	9/8/2016	Yes	44	
LDW-BA-IN-ENR+AC-6-A-S010-SPME	LDW-BA-IN-ENR+AC-CA-S010	7/26/2016	9/6/2016	Yes	42	
LDW-BA-IN-ENR+AC-1-B-S010-SPME	LDW-BA-IN-ENR+AC-CB-S010	7/26/2016	9/8/2016	Yes	44	43
LDW-BA-IN-ENR+AC-2-B-S010-SPME	LDW-BA-IN-ENR+AC-CB-S010	7/26/2016	Not usable [1]	No	--	
LDW-BA-IN-ENR+AC-3-B-S010-SPME	LDW-BA-IN-ENR+AC-CB-S010	7/26/2016	9/8/2016	Yes	44	
LDW-BA-IN-ENR+AC-4-B-S010-SPME	LDW-BA-IN-ENR+AC-CB-S010	7/26/2016	9/7/2016	Yes	43	
LDW-BA-IN-ENR+AC-5-B-S010-SPME	LDW-BA-IN-ENR+AC-CB-S010	7/26/2016	9/8/2016	Yes	44	
LDW-BA-IN-ENR+AC-6-B-S010-SPME	LDW-BA-IN-ENR+AC-CB-S010	7/26/2016	9/6/2016	Yes	42	
LDW-BA-IN-ENR+AC-1-C-S010-SPME	LDW-BA-IN-ENR+AC-CC-S010	7/26/2016	9/7/2016	Yes	43	43
LDW-BA-IN-ENR+AC-2-C-S010-SPME	LDW-BA-IN-ENR+AC-CC-S010	7/26/2016	9/8/2016	Yes	44	
LDW-BA-IN-ENR+AC-3-C-S010-SPME	LDW-BA-IN-ENR+AC-CC-S010	7/26/2016	9/8/2016	Yes	44	
LDW-BA-IN-ENR+AC-4-C-S010-SPME	LDW-BA-IN-ENR+AC-CC-S010	7/26/2016	9/7/2016	Yes	43	
LDW-BA-IN-ENR+AC-5-C-S010-SPME	LDW-BA-IN-ENR+AC-CC-S010	7/26/2016	9/8/2016	Yes	44	
LDW-BA-IN-ENR+AC-6-C-S010-SPME	LDW-BA-IN-ENR+AC-CC-S010	7/26/2016	9/6/2016	Yes	42	
LDW-BA-IN-ENR-1-A-S010-SPME	LDW-BA-IN-ENR-CA-S010	7/26/2016	9/6/2016	Yes	42	42
LDW-BA-IN-ENR-2-A-S010-SPME	LDW-BA-IN-ENR-CA-S010	7/26/2016	9/9/2016	Yes	45	
LDW-BA-IN-ENR-3-A-S010-SPME	LDW-BA-IN-ENR-CA-S010	7/25/2016	Not recovered	No	--	
LDW-BA-IN-ENR-4-A-S010-SPME	LDW-BA-IN-ENR-CA-S010	7/25/2016	9/5/2016	Yes	42	
LDW-BA-IN-ENR-5-A-S010-SPME	LDW-BA-IN-ENR-CA-S010	7/25/2016	9/5/2016	Yes	42	
LDW-BA-IN-ENR-6-A-S010-SPME	LDW-BA-IN-ENR-CA-S010	7/25/2016	9/4/2016	Yes	41	
LDW-BA-IN-ENR-1-B-S010-SPME	LDW-BA-IN-ENR-CB-S010	7/25/2016	9/6/2016	Yes	43	43
LDW-BA-IN-ENR-2-B-S010-SPME	LDW-BA-IN-ENR-CB-S010	7/26/2016	9/9/2016	Yes	45	
LDW-BA-IN-ENR-3-B-S010-SPME	LDW-BA-IN-ENR-CB-S010	7/25/2016	Not usable [2]	No	--	
LDW-BA-IN-ENR-4-B-S010-SPME	LDW-BA-IN-ENR-CB-S010	7/25/2016	9/5/2016	Yes	42	
LDW-BA-IN-ENR-5-B-S010-SPME	LDW-BA-IN-ENR-CB-S010	7/25/2016	9/5/2016	Yes	42	
LDW-BA-IN-ENR-6-B-S010-SPME	LDW-BA-IN-ENR-CB-S010	7/25/2016	9/4/2016	Yes	41	

Table A2. Exposure Duration.

SPME Sample ID	Composite Sample ID	Deployment Date	Retrieval Date	Composited	Days	Average Days
LDW-BA-IN-ENR-1-C-S010-SPME	LDW-BA-IN-ENR-CC-S010	7/25/2016	9/5/2016	Yes	42	42
LDW-BA-IN-ENR-2-C-S010-SPME	LDW-BA-IN-ENR-CC-S010	7/26/2016	9/9/2016	Yes	45	
LDW-BA-IN-ENR-3-C-S010-SPME	LDW-BA-IN-ENR-CC-S010	7/25/2016	9/4/2016	Yes	41	
LDW-BA-IN-ENR-4-C-S010-SPME	LDW-BA-IN-ENR-CC-S010	7/25/2016	Not recovered	No	--	
LDW-BA-IN-ENR-5-C-S010-SPME	LDW-BA-IN-ENR-CC-S010	7/25/2016	9/5/2016	Yes	42	
LDW-BA-IN-ENR-6-C-S010-SPME	LDW-BA-IN-ENR-CC-S010	7/25/2016	9/4/2016	Yes	41	

Note
1.) SPME was unusable. SPME was buried under silty material and only portion of sampler visible was 2 inches of polyline.
2.) SPME was unusable. Sampler was laying at a very steep angle, also entirely out of the sediment.

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TABLE A3

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010			LDW-BA-SC-ENR+AC-CB-S010			LDW-BA-SC-ENR+AC-CC-S010			LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-1	Mono			U	6.46		U	9.56	22		2		U	3.85		U	6.92
PCB-2	Mono			U	11.3	8.1	U	8.1		U	8.44		U	6.65		U	9.73
PCB-3	Mono			U	10.9		U	8.13		U	7.59		U	6.4		U	9.95
PCB-4	Di		40.6		2	213		2	82.2		2	35.5		2	41.1		2
PCB-5	Di		83.6		2	166		2	223		2	29.8		2	57.7		2
PCB-6	Di		132		2	167		2	242		2	39.9		2	73.2		2
PCB-7	Di		18.3		2	32.2		2	45.5		2		U	8.66		U	12
PCB-8	Di		270		2	420		2	931		2	74.1		2	74.3		2
PCB-9	Di		20.5		2	31.4		2	62.6		2		U	9.64		U	15.5
PCB-10	Di		30.1		2	35.1		2	59.9		2		U	9.85		U	13.9
PCB-11	Di			U	12.3		U	10.5	21.5		2		U	11.4		U	15.5
PCB-12	Di		41.8		2	60.5		2	102		2		U	10.1		U	14.1
PCB-13	Di			U	12.1		U	11.6		U	9.01		U	11.3		U	17.1
PCB-14	Di	PRC	98.2		2	142		2	303		2	54.5		2	99.7		2
PCB-15	Di		58.5		2	76.8		2	112		2	25.2		2		U	18
PCB-16	Tri		476		2	569		2	1100		2	117		2	116		2
PCB-17	Tri		549		2	978		2	1610		2	207		2	222		2
PCB-18	Tri		1260		2	2000		2	3730		2	450		2	471		2
PCB-19	Tri		142		2	231		2	410		2	55		2	65.6		2
PCB-20	Tri		523	C	2	890	C	2	1570	C	2	207	C	2	217	C	2
PCB-21	Tri			C020			C020	2		C020	2		C020	2		C020	2
PCB-22	Tri		290		2	464		2	795		2	136		2	141		2
PCB-23	Tri			U	12		U	12.7		U	8.89		U	6.25		U	14.2
PCB-24	Tri		51.8		2	68.9		2	89.8		2	13.1	J	2	27.7		2
PCB-25	Tri		144		2	171		2	239		2	64.2		2	65.8		2
PCB-26	Tri		253		2	292		2	487		2	117		2	107		2
PCB-27	Tri		71.3		2	136		2	235		2	45.7		2	35.5		2
PCB-28	Tri		1030		2	1450		2	2370		2	477		2	475		2
PCB-29	Tri			U	13.8		U	15	24.4		2		U	7.2		U	16.8
PCB-30	Tri			U	4.78		U	9.86		U	3.61		U	4.4		U	10.1
PCB-31	Tri		773		2	1110		2	1930		2	346		2	284		2
PCB-32	Tri		393		2	649		2	1030		2	166		2	169		2
PCB-33	Tri			C020			C020	2		C020	2		C020	2		C020	2
PCB-34	Tri			U	17.6		U	15.7	24.5		2		U	9.21		U	17.6
PCB-35	Tri			U	17.9		U	16.4		U	13.3		U	9.37		U	18.3
PCB-36	Tri	PRC	878		2	948		2	1410		2	737		2	824		2
PCB-37	Tri		91.7		2	121		2	216		2	50.9		2	62.4		2
PCB-38	Tri			U	13.9		U	15.9		U	10.4		U	7.28		U	17.8
PCB-39	Tri			U	15.8		U	15.5		U	11.8		U	8.27		U	17.4
PCB-40	Tetra		196		2	373		2	425		2	111		2	122		2
PCB-41	Tetra		834	C	2	1650	C	2	1810	C	2	496	C	2	576	C	2
PCB-42	Tetra		377	C	2	765	C	2	797	C	2	207	C	2	264	C	2
PCB-43	Tetra		1100	C	2	2000	C	2	2100	C	2	702	C	2	795	C	2
PCB-44	Tetra		998		2	1950		2	2100		2	561		2	666		2
PCB-45	Tetra		253		2	505		2	672		2	124		2	150		2
PCB-46	Tetra		105		2	222		2	275		2	57.3		2	64.6		2
PCB-47	Tetra		330		2	612		2	582		2	213		2	236		2
PCB-48	Tetra		260	C	2	557	C	2	585	C	2	136	C	2	182	C	2
PCB-49	Tetra			C043			C043	2		C043	2		C043	2		C043	2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CC-S010			LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010			LDW-BA-IN-ENR-CA-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-1	Mono			U	5.77	52.4		2	306		2	57.6		2	173		2
PCB-2	Mono			U	10		U	9.23		U	8.06		U	7.43		U	9.04
PCB-3	Mono			U	9.58		U	9.44	18.5	J	2		U	7.02	11	J	2
PCB-4	Di		39.2		2	452		2	194		2	317		2	344		2
PCB-5	Di		31.1		2	733		2	482		2	251		2	237		2
PCB-6	Di		35.5		2	1170		2	1850		2	500		2	395		2
PCB-7	Di			U	8.67	116		2	150		2	47.3		2	54.6		2
PCB-8	Di		37.5		2	676		2	581		2	351		2	481		2
PCB-9	Di			U	9.66	109		2	139		2	60.7		2	69.1		2
PCB-10	Di			U	9.87	89.4		2	142		2	32.9		2	60		2
PCB-11	Di			U	11.4		U	10.8		U	14	21.6		2		U	14.4
PCB-12	Di		11	J	2	312		2	225		2	87.4		2	92.1		2
PCB-13	Di			U	11.3		U	11.9	25.2		2		U	16.5		U	14.3
PCB-14	Di	PRC	29.8		2	87.4		2	96.9		2	93.9		2	117		2
PCB-15	Di		17.1	J	2	236		2	193		2	89		2	139		2
PCB-16	Tri		134		2	2440		2	3210		2	1090		2	1030		2
PCB-17	Tri		185		2	4070		2	3900		2	1930		2	1650		2
PCB-18	Tri		382		2	10600		2	10800		2	5010		2	3920		2
PCB-19	Tri		49.1		2	828		2	941		2	410		2	413		2
PCB-20	Tri		179	C	2	3070	C	2	2360	C	2	1370	C	2	1450	C	2
PCB-21	Tri			C020	2		C020	2		C020	2		C020	2		C020	2
PCB-22	Tri		102		2	1430		2	1290		2	706		2	667		2
PCB-23	Tri			U	10.6	21.9		2	13.7	J	2	14.3	J	2		U	12.1
PCB-24	Tri		33.7		2	261		2	282		2	128		2	197		2
PCB-25	Tri		54.4		2	2800		2	2500		2	1110		2	998		2
PCB-26	Tri		88		2	9770		2	7380		2	3630		2	2640		2
PCB-27	Tri		34.8		2	394		2	291		2	206		2	204		2
PCB-28	Tri		375		2	4380		2	3980		2	2240		2	2550		2
PCB-29	Tri			U	12.2	32.7		2	16.8	J	2	15.2	J	2		U	13.9
PCB-30	Tri			U	3.74		U	8.28		U	4.15		U	4.88		U	4.28
PCB-31	Tri		261		2	4810		2	4300		2	2260		2	2140		2
PCB-32	Tri		117		2	2450		2	2650		2	1260		2	1060		2
PCB-33	Tri			C020	2		C020	2		C020	2		C020	2		C020	2
PCB-34	Tri			U	15.6	101		2	85.5		2	49.9		2	43.5		2
PCB-35	Tri			U	15.8		U	13.3		U	9.91		U	11		U	18.1
PCB-36	Tri	PRC	561		2	513		2	697		2	788		2	947		2
PCB-37	Tri		32.7		2	353		2	257		2	166		2	184		2
PCB-38	Tri			U	12.3		U	12.9		U	7.7		U	8.55		U	14.1
PCB-39	Tri			U	14		U	12.6		U	8.74		U	9.7		U	16
PCB-40	Tetra		87		2	2110		2	1340		2	992		2	857		2
PCB-41	Tetra		413	C	2	10900	C	2	6160	C	2	4730	C	2	3860	C	2
PCB-42	Tetra		179	C	2	5910	C	2	2900	C	2	2210	C	2	1800	C	2
PCB-43	Tetra		603	C	2	27300	C	2	13200	C	2	10200	C	2	7840	C	2
PCB-44	Tetra		470		2	22400		2	11500		2	8460		2	7080		2
PCB-45	Tetra		111		2	2660		2	1890		2	1240		2	1020		2
PCB-46	Tetra		49		2	1200		2	767		2	503		2	448		2
PCB-47	Tetra		175		2	4840		2	2310		2	1880		2	1540		2
PCB-48	Tetra		121	C	2	2480	C	2	1440	C	2	1120	C	2	985	C	2
PCB-49	Tetra			C043	2		C043	2		C043	2		C043	2		C043	2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010			LDW-BA-SC-S010-PW-TB			LDW-BA-SU-S010-PW-TB			LDW-BA-IN-S010-PW-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-1	Mono		136		2	292		2		U	5.16		U	4.45		U	5.82
PCB-2	Mono			U	7.83		U	6.96		U	8.15		U	6.65		U	8.73
PCB-3	Mono		17	J	2	25.1		2		U	9.54		U	7.45		U	9.87
PCB-4	Di		455		2	392		2		U	4.62		U	5.3		U	5.2
PCB-5	Di		504		2	331		2		U	6.12		U	6.43		U	6.51
PCB-6	Di		1140		2	379		2		U	6.34		U	6.66		U	6.75
PCB-7	Di		94.5		2	84.4		2		U	6.26		U	6.57		U	6.66
PCB-8	Di		601		2	459		2		U	6.12		U	6.43		U	7.15
PCB-9	Di		92.7		2	62.9		2		U	6.22		U	6.53		U	6.62
PCB-10	Di		127		2	84.6		2		U	6.61		U	6.94		U	7.03
PCB-11	Di			U	17		U	14.4		U	7.32		U	7.69		U	7.79
PCB-12	Di		136		2	74.2		2		U	6.65		U	6.98		U	7.08
PCB-13	Di			U	16.9		U	14.2		U	7.62		U	8.01		U	8.11
PCB-14	Di	PRC	173		2	97.6		2	338		2	210		2	168		2
PCB-15	Di		132		2	103		2		U	9.26		U	9.3		U	9.44
PCB-16	Tri		1980		2	805		2		U	5.55		U	4.11		U	4.4
PCB-17	Tri		3170		2	1500		2		U	5.81		U	4.3		U	4.61
PCB-18	Tri		8290		2	3660		2		U	6.31		U	4.67		U	5.01
PCB-19	Tri		717		2	371		2		U	6.06		U	4.49		U	4.81
PCB-20	Tri		2290	C	2	1080	C	2		UC	2		UC	2		UC	2
PCB-21	Tri			C020	2		C020	2		U,C020	2		U,C020	2		U,C020	2
PCB-22	Tri		1130		2	545		2		U	7.49		U	8.64		U	7.46
PCB-23	Tri		20.9		2		U	12.8		U	7.29		U	8.41		U	7.26
PCB-24	Tri		326		2	131		2		U	4.4		U	3.25		U	3.49
PCB-25	Tri		2110		2	698		2		U	6.19		U	7.14		U	6.17
PCB-26	Tri		5370		2	1650		2		U	7.27		U	8.39		U	7.25
PCB-27	Tri		248		2	150		2		U	4.44		U	3.29		U	3.52
PCB-28	Tri		3880		2	1650		2		U	6.12		U	7.06		U	6.1
PCB-29	Tri		20.3		2		U	14.7		U	7.21		U	8.32		U	7.19
PCB-30	Tri			U	4.29		U	7.79		U	4.31		U	3.19		U	3.42
PCB-31	Tri		4140		2	1710		2		U	7.78		U	8.98		U	7.76
PCB-32	Tri		2040		2	1020		2		U	4.8		U	3.55		U	3.81
PCB-33	Tri			C020	2		C020	2		U,C020	2		U,C020	2		U,C020	2
PCB-34	Tri		60.3		2	41.6		2		U	7.47		U	8.62		U	7.45
PCB-35	Tri			U	16.5		U	19.2		U	8.19		U	9.45		U	8.16
PCB-36	Tri	PRC	943		2	887		2	1910		2	1710		2	1540		2
PCB-37	Tri		253		2	110		2		U	7.05		U	8.14		U	7.03
PCB-38	Tri			U	12.9		U	14.9		U	7.32		U	8.44		U	7.29
PCB-39	Tri			U	14.6		U	16.9		U	7.56		U	8.72		U	7.54
PCB-40	Tetra		1330		2	617		2		U	7.84		U	6.81		U	6.34
PCB-41	Tetra		5830	C	2	2950	C	2		UC	2		UC	2		UC	2
PCB-42	Tetra		2890	C	2	1410	C	2		UC	2		UC	2		UC	2
PCB-43	Tetra		11800	C	2	6150	C	2		UC	2		UC	2		UC	2
PCB-44	Tetra		10700		2	5100		2		U	6.58		U	5.72		U	5.32
PCB-45	Tetra		1790		2	801		2		U	6.66		U	5.79		U	5.39
PCB-46	Tetra		740		2	329		2		U	6.78		U	5.89		U	5.48
PCB-47	Tetra		2350		2	1190		2		U	4.48		U	3.89		U	3.62
PCB-48	Tetra		1300	C	2	849	C	2		UC	2		UC	2		UC	2
PCB-49	Tetra			C043	2		C043	2		U,C043	2		U,C043	2		U,C043	2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010			LDW-BA-SC-ENR+AC-CB-S010			LDW-BA-SC-ENR+AC-CC-S010			LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-50	Tetra			U	8.91	23.2		2	21.2		2		U	5.23		U	16.1
PCB-51	Tetra		89.8		2	178		2	201		2	57.6		2	71.8		2
PCB-52	Tetra		1410	C	2	2590	C	2	2530	C	2	881	C	2	1040	C	2
PCB-53	Tetra		295		2	529		2	667		2	172		2	203		2
PCB-54	Tetra			U	6.54	17.1	J	2	13.8	J	2		U	3.84		U	11.9
PCB-55	Tetra		59.9		2	60.1		2	69.3		2	50.7		2	42.4		2
PCB-56	Tetra		375	C	2	691	C	2	795	C	2	220	C	2	235	C	2
PCB-57	Tetra			U	7.24	24.6		2		U	11.1		U	4.26		U	14.3
PCB-58	Tetra			U	7.4		U	14.7		U	11.4		U	4.35		U	13.7
PCB-59	Tetra			C042			C042	2		C042	2		C042	2		C042	2
PCB-60	Tetra			C056			C056	2		C056	2		C056	2		C056	2
PCB-61	Tetra		744	C	2	1410	C	2	1440	C	2	484	C	2	522	C	2
PCB-62	Tetra			U	7.53		U	14.6		U	11.6		U	4.43		U	13.6
PCB-63	Tetra		31		2	67.2		2	63.2		2	19.4	J	2	25.2		2
PCB-64	Tetra			C041			C041	2		C041	2		C041	2		C041	2
PCB-65	Tetra			U	7.35		U	13.9		U	11.3		U	4.32		U	12.9
PCB-66	Tetra		717	C	2	1280	C	2	1360	C	2	492	C	2	528	C	2
PCB-67	Tetra		23.9		2	55.5		2	64.5		2	16.7	J	2	20.5		2
PCB-68	Tetra		20.1		2	32.6		2	26.7		2	12.8	J	2		U	12.6
PCB-69	Tetra			C052			C052	2		C052	2		C052	2		C052	2
PCB-70	Tetra			C061			C061	2		C061	2		C061	2		C061	2
PCB-71	Tetra			C041			C041	2		C041	2		C041	2		C041	2
PCB-72	Tetra			C041			C041	2		C041	2		C041	2		C041	2
PCB-73	Tetra			U	7.27		U	14.5		U	11.2		U	4.27		U	13.5
PCB-74	Tetra		319		2	595		2	648		2	207		2	226		2
PCB-75	Tetra			C048			C048	2		C048	2		C048	2		C048	2
PCB-76	Tetra			C066			C066	2		C066	2		C066	2		C066	2
PCB-77	Tetra		44.7		2	70.6		2	60.9		2	28.9		2		U	19.9
PCB-78	Tetra	PRC	1830		2	2060		2	2070		2	1560		2	2030		2
PCB-79	Tetra			U	16.8		U	14.3	19.4	J	2		U	10		U	17.1
PCB-80	Tetra			U	6.26		U	12.8		U	9.63		U	3.68		U	11.9
PCB-81	Tetra		58.6		2	73.3		2	67.9		2	31.9		2		U	16
PCB-82	Penta		106		2	197		2	174		2	78.6		2	95.6		2
PCB-83	Penta		52.3	C	2	93.4	C	2	79.8	C	2	44.6	C	2	41.2	C	2
PCB-84	Penta		629	C	2	1020	C	2	889	C	2	461	C	2	474	C	2
PCB-85	Penta		174	C	2	252	C	2	258	C	2	124	C	2	112	C	2
PCB-86	Penta			U	17.2		U	12		U	13.7		U	13		U	10.8
PCB-87	Penta		386	C	2	652	C	2	555	C	2	271	C	2	287	C	2
PCB-88	Penta			UC	2	415	C	2		UC	2		UC	2	269	C	2
PCB-89	Penta		16.5	J	2	41.2		2	36.3		2	12	J	2	13.4	J	2
PCB-90	Penta		1310	C	2	2150	C	2	1820	C	2	963	C	2	1000	C	2
PCB-91	Penta			C088			C088	2		U,C088	2		U,C088	2		C088	2
PCB-92	Penta			C084			C084	2		C084	2		C084	2		C084	2
PCB-93	Penta			U	7.92		U	13.8		U	6.92		U	7.79		U	16.6
PCB-94	Penta			U	8.15	24.9		2	16.7	J	2		U	8.02		U	17
PCB-95	Penta		1560		2	2720		2	2250		2	1200		2	1250		2
PCB-96	Penta		20.9		2	47.6		2	32.5		2	14.1	J	2	19.2	J	2
PCB-97	Penta		276		2	452		2	398		2	205		2	213		2
PCB-98	Penta			UC	2		UC	2		UC	2		UC	2		UC	2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CC-S010			LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010			LDW-BA-IN-ENR-CA-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-50	Tetra			U	6.98	111		2	58.3		2	44.7		2	36		2
PCB-51	Tetra		49.7		2	816		2	482		2	355		2	297		2
PCB-52	Tetra		730	C	2	49200	C	2	22700	C	2	17600	C	2	13800	C	2
PCB-53	Tetra		153		2	3000		2	1970		2	1380		2	1260		2
PCB-54	Tetra			U	5.12	46.5		2	40.9		2	25.1		2	22.6		2
PCB-55	Tetra		30.4		2	569		2	255		2	197		2	137		2
PCB-56	Tetra		170	C	2	2200	C	2	1250	C	2	1010	C	2	1040	C	2
PCB-57	Tetra			U	5.67	718		2	264		2	196		2	82.9		2
PCB-58	Tetra			U	5.8	1480		2	116		2	111		2		U	16.4
PCB-59	Tetra			C042	2		C042	2		C042	2		C042	2		C042	2
PCB-60	Tetra			C056	2		C056	2		C056	2		C056	2		C056	2
PCB-61	Tetra		390	C	2	7860	C	2	3960	C	2	3420	C	2	3550	C	2
PCB-62	Tetra			U	5.9		U	12.5		U	6.38		U	13.7		U	16.7
PCB-63	Tetra		17.3	J	2	620		2	304		2	213		2	152		2
PCB-64	Tetra			C041	2		C041	2		C041	2		C041	2		C041	2
PCB-65	Tetra			U	5.75		U	11.9		U	6.23		U	13.3		U	16.3
PCB-66	Tetra		409	C	2	7140	C	2	3820	C	2	3160	C	2	2960	C	2
PCB-67	Tetra		14.8	J	2		U	12.3	515		2	390		2	256		2
PCB-68	Tetra		13.4	J	2	292		2	128		2	122		2	76.1		2
PCB-69	Tetra			C052	2		C052	2		C052	2		C052	2		C052	2
PCB-70	Tetra			C061	2		C061	2		C061	2		C061	2		C061	2
PCB-71	Tetra			C041	2		C041	2		C041	2		C041	2		C041	2
PCB-72	Tetra			C041	2		C041	2		C041	2		C041	2		C041	2
PCB-73	Tetra			U	5.69		U	12.4		U	6.16		U	13.2		U	16.1
PCB-74	Tetra		166		2	3030		2	1630		2	1390		2	1170		2
PCB-75	Tetra			C048	2		C048	2		C048	2		C048	2		C048	2
PCB-76	Tetra			C066	2		C066	2		C066	2		C066	2		C066	2
PCB-77	Tetra		28.1		2	335		2	162		2	155		2	154		2
PCB-78	Tetra	PRC	1160		2	1060		2	1020		2	1660		2	991		2
PCB-79	Tetra			U	18.8	196		2	92		2	70		2	51.5		2
PCB-80	Tetra			U	4.9		U	11		U	5.31		U	11.4		U	13.9
PCB-81	Tetra			U	17.2	364		2	171		2	197		2	109		2
PCB-82	Penta		73.9		2	2120		2	1120		2	1050		2	958		2
PCB-83	Penta		35.7	C	2	1660	C	2	724	C	2	662	C	2	594	C	2
PCB-84	Penta		389	C	2	15000	C	2	7470	C	2	6840	C	2	6180	C	2
PCB-85	Penta		104	C	2	2820	C	2	1520	C	2	1460	C	2	1410	C	2
PCB-86	Penta			U	9.79		U	18.5		U	17.7		U	13.6		U	16.1
PCB-87	Penta		250	C	2	8760	C	2	4280	C	2	4000	C	2	3690	C	2
PCB-88	Penta			UC	2	4640	C	2	1680	C	2	2010	C	2	1730	C	2
PCB-89	Penta		13.8	J	2	410		2	226		2	208		2	193		2
PCB-90	Penta		838	C	2	21100	C	2	10900	C	2	10500	C	2	10500	C	2
PCB-91	Penta			U,C088	2		C088	2		C088	2		C088	2		C088	2
PCB-92	Penta			C084	2		C084	2		C084	2		C084	2		C084	2
PCB-93	Penta			U	6.85		U	14.7		U	9.28		U	7.63		U	9.18
PCB-94	Penta			U	7.04	195		2	100		2	86.2		2	83.6		2
PCB-95	Penta		995		2	35100		2	16800		2	15300		2	13700		2
PCB-96	Penta		12	J	2	313		2	167		2	140		2	123		2
PCB-97	Penta		178		2	5120		2	2630		2	2390		2	2470		2
PCB-98	Penta			UC	2		UC	2		UC	2		UC	2		UC	2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010			LDW-BA-SC-S010-PW-TB			LDW-BA-SU-S010-PW-TB			LDW-BA-IN-S010-PW-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-50	Tetra		55.8		2	30.4		2		U	5.89		U	5.12		U	4.77
PCB-51	Tetra		450		2	232		2		U	5.8		U	5.04		U	4.69
PCB-52	Tetra		20000	C	2	9790	C	2		UC	2		UC	2		UC	2
PCB-53	Tetra		1860		2	956		2		U	5.83		U	5.07		U	4.71
PCB-54	Tetra		33.6		2	22.4		2		U	4.26		U	3.7		U	3.44
PCB-55	Tetra		281		2	110		2	34.8		2	35.5		2	36.8		2
PCB-56	Tetra		1280	C	2	797	C	2		UC	2		UC	2		UC	2
PCB-57	Tetra		213		2	88.5		2		U	4.59		U	3.99		U	3.71
PCB-58	Tetra			U	8.82		U	13.4		U	4.64		U	4.04		U	3.76
PCB-59	Tetra			C042	2		C042	2		U,C042	2		U,C042	2		U,C042	2
PCB-60	Tetra			C056	2		C056	2		U,C056	2		U,C056	2		U,C056	2
PCB-61	Tetra		3650	C	2	2450	C	2		UC	2		UC	2		UC	2
PCB-62	Tetra			U	8.97		U	13.6		U	4.49		U	3.91		U	3.63
PCB-63	Tetra		238		2	124		2		U	4.49		U	3.9		U	3.63
PCB-64	Tetra			C041	2		C041	2		U,C041	2		U,C041	2		U,C041	2
PCB-65	Tetra			U	8.75		U	13.3		U	4.81		U	4.18		U	3.89
PCB-66	Tetra		3810	C	2	2260	C	2		UC	2		UC	2		UC	2
PCB-67	Tetra		574		2	179		2		U	4.54		U	3.94		U	3.67
PCB-68	Tetra		116		2	80.4		2		U	4.23		U	3.67		U	3.42
PCB-69	Tetra			C052	2		C052	2		U,C052	2		U,C052	2		U,C052	2
PCB-70	Tetra			C061	2		C061	2		U,C061	2		U,C061	2		U,C061	2
PCB-71	Tetra			C041	2		C041	2		U,C041	2		U,C041	2		U,C041	2
PCB-72	Tetra			C041	2		C041	2		U,C041	2		U,C041	2		U,C041	2
PCB-73	Tetra			U	8.66		U	13.1	9.61	J	2	10.5	J	2	8.46	J	2
PCB-74	Tetra		1600		2	850		2		U	4.3		U	3.74		U	3.48
PCB-75	Tetra			C048	2		C048	2		U,C048	2		U,C048	2		U,C048	2
PCB-76	Tetra			C066	2		C066	2		U,C066	2		U,C066	2		U,C066	2
PCB-77	Tetra		171		2	127		2		U	8.29		U	9.6		U	7.62
PCB-78	Tetra	PRC	1190		2	1220		2	2880		2	2810		2	2530		2
PCB-79	Tetra			U	11.8	39.4		2		U	7.5		U	8.65		U	6.78
PCB-80	Tetra			U	7.46		U	11.3		U	3.99		U	3.47		U	3.23
PCB-81	Tetra		148		2	134		2		U	6.87		U	7.89		U	6.09
PCB-82	Penta		1270		2	681		2		U	9.59		U	8.27		U	9.66
PCB-83	Penta		741	C	2	438	C	2		UC	2		UC	2		UC	2
PCB-84	Penta		7590	C	2	4150	C	2		UC	2		UC	2		UC	2
PCB-85	Penta		1640	C	2	957	C	2		UC	2		UC	2		UC	2
PCB-86	Penta			U	14.5		U	13		U	7.31		U	6.3		U	7.37
PCB-87	Penta		4750	C	2	2500	C	2		UC	2		UC	2		UC	2
PCB-88	Penta		2040	C	2	1190	C	2		UC	2		UC	2		UC	2
PCB-89	Penta		226		2	133		2		U	7.67		U	6.62		U	7.74
PCB-90	Penta		11400	C	2	7170	C	2		UC	2		UC	2		UC	2
PCB-91	Penta			C088	2		C088	2		U,C088	2		U,C088	2		U,C088	2
PCB-92	Penta			C084	2		C084	2		U,C084	2		U,C084	2		U,C084	2
PCB-93	Penta			U	8.11		U	9.49		U	8.89		U	7.49		U	6.9
PCB-94	Penta		107		2	63		2		U	8.39		U	7.07		U	6.52
PCB-95	Penta		17100		2	10400		2		U	8.26		U	6.96		U	6.42
PCB-96	Penta		166		2	94.3		2		U	5.75		U	4.85		U	4.47
PCB-97	Penta		2770		2	1630		2		U	6.39		U	5.51		U	6.44
PCB-98	Penta			UC	2		UC	2		UC	2		UC	2		UC	2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010			LDW-BA-SC-ENR+AC-CB-S010			LDW-BA-SC-ENR+AC-CC-S010			LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-99	Penta		510		2	812		2	705		2	398		2	400		2
PCB-100	Penta		20.2		2	40.7		2	30.1		2	22.5		2	28.7		2
PCB-101	Penta			C090			C090	2		C090	2		C090	2		C090	2
PCB-102	Penta			C098			U,C098	2		U,C098	2		U,C098	2		U,C098	2
PCB-103	Penta		40.9		2	65.5		2	49.3		2	29.2		2	39.7		2
PCB-104	Penta	PRC	1960		2	2020		2	2190		2	1850		2	1830		2
PCB-105	Penta		199		2	356		2	307		2	166		2	173		2
PCB-106	Penta		574	C	2	924	C	2	810	C	2	458	C	2	463	C	2
PCB-107	Penta		45.6	C	2	85.9	C	2	61.1	C	2	32.7	C	2	42.8	C	2
PCB-108	Penta			C107			C107	2		C107	2		C107	2		C107	2
PCB-109	Penta			U	12.3		U	9.78		U	9.82		U	9.29		U	8.79
PCB-110	Penta		986		2	1520		2	1380		2	703		2	717		2
PCB-111	Penta		121	C	2	37.9	C	2	22.4	C	2	12.5	C,J	2	15.4	C,J	2
PCB-112	Penta			C083			C083	2		C083	2		C083	2		C083	2
PCB-113	Penta			U	13.4		U	10.5		U	10.6		U	10.1		U	9.41
PCB-114	Penta		20.5		2	21.1		2	25.8		2	12.4	J	2		U	12.3
PCB-115	Penta			C111			C111	2		C111	2		C111,J	2		C111,J	2
PCB-116	Penta			C085			C085	2		C085	2		C085	2		C085	2
PCB-117	Penta			C087			C087	2		C087	2		C087	2		C087	2
PCB-118	Penta			C106			C106	2		C106	2		C106	2		C106	2
PCB-119	Penta		34.9		2	56.9		2	49.3		2	28.4		2	33.6		2
PCB-120	Penta			U	12.2		U	9.75		U	9.74		U	9.21		U	8.76
PCB-121	Penta	PRC	2790		2	2900		2	3170		2	2680		2	2630		2
PCB-122	Penta			U	6.31	31		2	12.5	J	2		U	4.51		U	12.2
PCB-123	Penta		11	J	2	20.4		2	16.1	J	2	8.19	J	2		U	10.4
PCB-124	Penta		31.5		2	47.7		2	45.3		2	17.6	J	2	22.5		2
PCB-125	Penta			C087			C087	2		C087	2		C087	2		C087	2
PCB-126	Penta			U	9.3		U	13		U	7.59		U	6.8		U	17.7
PCB-127	Penta			U	7.37		U	9.22		U	5.97		U	5.27		U	13.4
PCB-128	Hexa		97.4	C	2	155	C	2	118	C	2	71.2	C	2	79.7	C	2
PCB-129	Hexa		37.7		2	54.5		2	44		2	27.3		2	28.6		2
PCB-130	Hexa		48.1		2	90.5		2	61.6		2	37.7		2	43.8		2
PCB-131	Hexa		24.2	C	2	43.7	C	2	26.2	C	2	21.1	C	2	21.5	C	2
PCB-132	Hexa		254	C	2	441	C	2	325	C	2	213	C	2	211	C	2
PCB-133	Hexa			C131			C131	2		C131	2		C131	2		C131	2
PCB-134	Hexa		50.3	C	2	95.6	C	2	70.2	C	2	38.8	C	2	46.1	C	2
PCB-135	Hexa		173		2	277		2	220		2	121		2	140		2
PCB-136	Hexa		255		2	408		2	315		2	212		2	204		2
PCB-137	Hexa		30.3		2	43.6		2	36.4		2	17.3	J	2	25.4		2
PCB-138	Hexa		707	C	2	1110	C	2	916	C	2	557	C	2	568	C	2
PCB-139	Hexa		944	C	2	1540	C	2	1210	C	2	769	C	2	751	C	2
PCB-140	Hexa			U	8.14		U	15.1		U	6.13		U	6.89		U	13.1
PCB-141	Hexa		148		2	241		2	195		2	110		2	110		2
PCB-142	Hexa	PRC	2850		2	3070		2	2940		2	2550		2	2820		2
PCB-143	Hexa			C134			C134	2		C134	2		C134	2		C134	2
PCB-144	Hexa		48.7		2	92.4		2	69		2	43.4		2	108		2
PCB-145	Hexa			U	5.54		U	8.25		U	5.54		U	5.32		U	6.41
PCB-146	Hexa		148	C	2	247	C	2	182	C	2	132	C	2	136	C	2
PCB-147	Hexa		18.8	J	2	32.6		2	25.9		2	19.2	J	2	26		2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CC-S010			LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010			LDW-BA-IN-ENR-CA-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-99	Penta		343		2	8920		2	4630		2	4390		2	4240		2
PCB-100	Penta		18.5	J	2	195		2	89.8		2	88.9		2	76.6		2
PCB-101	Penta			C090	2		C090	2		C090	2		C090	2		C090	2
PCB-102	Penta			U,C098	2		U,C098	2		U,C098	2		U,C098	2		U,C098	2
PCB-103	Penta		24.4		2	549		2	229		2	217		2	168		2
PCB-104	Penta	PRC	1290		2	1290		2	1400		2	1950		2	1740		2
PCB-105	Penta		123		2	2850		2	1180		2	1220		2	1270		2
PCB-106	Penta		366	C	2	9600	C	2	4180	C	2	3820	C	2	3920	C	2
PCB-107	Penta		28.7	C	2	837	C	2	384	C	2	337	C	2	317	C	2
PCB-108	Penta			C107	2		C107	2		C107	2		C107	2		C107	2
PCB-109	Penta			U	7.01		U	15.1		U	12.6		U	9.76		U	11.5
PCB-110	Penta		646		2	22100		2	11100		2	10200		2	9720		2
PCB-111	Penta		17.7	C,J	2	314	C	2	86.3	C	2	128	C	2	113	C	2
PCB-112	Penta			C083	2		C083	2		C083	2		C083	2		C083	2
PCB-113	Penta			U	7.59		U	16.1		U	13.7		U	10.6		U	12.5
PCB-114	Penta		11.2	J	2	276		2	88.7		2	88.9		2	92.3		2
PCB-115	Penta			C111,J	2		C111	2		C111	2		C111	2		C111	2
PCB-116	Penta			C085	2		C085	2		C085	2		C085	2		C085	2
PCB-117	Penta			C087	2		C087	2		C087	2		C087	2		C087	2
PCB-118	Penta			C106	2		C106	2		C106	2		C106	2		C106	2
PCB-119	Penta		28		2	862		2	397		2	350		2	322		2
PCB-120	Penta			U	6.95		U	15		U	12.5		U	9.68		U	11.4
PCB-121	Penta	PRC	2030		2	2280		2	2420		2	2870		2	2530		2
PCB-122	Penta			U	4.56	158		2	65.2		2	53.7		2	56.1		2
PCB-123	Penta		10.9	J	2	207		2	110		2	79.1		2	64.1		2
PCB-124	Penta		17.9	J	2	458		2	202		2	179		2	182		2
PCB-125	Penta			C087	2		C087	2		C087	2		C087	2		C087	2
PCB-126	Penta			U	6.8		U	18.6		U	9.78		U	10.2		U	14.2
PCB-127	Penta			U	5.32		U	13.5		U	7.39		U	7.67		U	9.9
PCB-128	Hexa		65.7	C	2	1620	C	2	649	C	2	635	C	2	603	C	2
PCB-129	Hexa		24.7		2	573		2	252		2	247		2	247		2
PCB-130	Hexa		43.1		2	924		2	380		2	316		2	373		2
PCB-131	Hexa		16.8	C,J	2	382	C	2	189	C	2	159	C	2	133	C	2
PCB-132	Hexa		183	C	2	4110	C	2	1610	C	2	1610	C	2	1550	C	2
PCB-133	Hexa			C131,J	2		C131	2		C131	2		C131	2		C131	2
PCB-134	Hexa		32.8	C	2	905	C	2	384	C	2	381	C	2	348	C	2
PCB-135	Hexa		103		2	1990		2	929		2	951		2	812		2
PCB-136	Hexa		167		2	2750		2	1320		2	1290		2	1180		2
PCB-137	Hexa		18.4	J	2	513		2	252		2	254		2	204		2
PCB-138	Hexa		482	C	2	8200	C	2	3580	C	2	3540	C	2	3480	C	2
PCB-139	Hexa		603	C	2	9360	C	2	4180	C	2	4150	C	2	3920	C	2
PCB-140	Hexa			U	6.42	111		2	73.8		2	68.6		2	60.9		2
PCB-141	Hexa		97.7		2	1590		2	692		2	716		2	665		2
PCB-142	Hexa	PRC	2010		2	2200		2	2000		2	2630		2	2250		2
PCB-143	Hexa			C134	2		C134	2		C134	2		C134	2		C134	2
PCB-144	Hexa		35.8		2	557		2	212		2	196		2	229		2
PCB-145	Hexa			U	5.42	12.9	J	2		U	6.72		U	6.24		U	5.98
PCB-146	Hexa		106	C	2	1270	C	2	569	C	2	583	C	2	554	C	2
PCB-147	Hexa		12.9	J	2	374		2	138		2	147		2	137		2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010			LDW-BA-SC-S010-PW-TB			LDW-BA-SU-S010-PW-TB			LDW-BA-IN-S010-PW-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-99	Penta		4770		2	2950		2		U	6.98		U	6.02		U	7.03
PCB-100	Penta		94.2		2	80.1		2		U	6.95		U	5.86		U	5.4
PCB-101	Penta			C090	2		C090	2		U,C090	2		U,C090	2		U,C090	2
PCB-102	Penta			U,C098	2		U,C098	2		U,C098	2		U,C098	2		U,C098	2
PCB-103	Penta		214		2	156		2		U	6.86		U	5.78		U	5.33
PCB-104	Penta	PRC	1890		2	1980		2	2310		2	2380		2	2170		2
PCB-105	Penta		1450		2	888		2		U	4.91		U	4.2		U	4.35
PCB-106	Penta		4320	C	2	2770	C	2		UC	2		UC	2		UC	2
PCB-107	Penta		388	C	2	275	C	2		UC	2		UC	2		UC	2
PCB-108	Penta			C107	2		C107	2		U,C107	2		U,C107	2		U,C107	2
PCB-109	Penta			U	10.4		U	9.32		U	5.63		U	4.86		U	5.68
PCB-110	Penta		12100		2	6540		2		U	5.29		U	4.57		U	5.34
PCB-111	Penta		134	C	2	55.1	C	2		UC	2		UC	2		UC	2
PCB-112	Penta			C083	2		C083	2		U,C083	2		U,C083	2		U,C083	2
PCB-113	Penta			U	11.3	2930		2		U	5.45		U	4.7		U	5.49
PCB-114	Penta		85.8		2	79.7		2		U	4.26		U	3.42		U	4.05
PCB-115	Penta			C111	2		C111	2		U,C111	2		U,C111	2		U,C111	2
PCB-116	Penta			C085	2		C085	2		U,C085	2		U,C085	2		U,C085	2
PCB-117	Penta			C087	2		C087	2		U,C087	2		U,C087	2		U,C087	2
PCB-118	Penta			C106	2		C106	2		UC106	2		UC106	2		UC106	2
PCB-119	Penta		365		2	226		2		U	5.2		U	4.48		U	5.24
PCB-120	Penta			U	10.3		U	9.25		U	5.03		U	4.34		U	5.07
PCB-121	Penta	PRC	2830		2	2880		2	3340		2	3320		2	3160		2
PCB-122	Penta		48.1		2	42.9		2		U	5		U	3.91		U	4.65
PCB-123	Penta		63.1		2	50.6		2		U	4.09		U	3.06		U	3.77
PCB-124	Penta		210		2	128		2		U	4.7		U	3.68		U	4.37
PCB-125	Penta			C087	2		C087	2		U,C087	2		U,C087	2		U,C087	2
PCB-126	Penta			U	12.5		U	9.55		U	7.42		U	5.46		U	6.71
PCB-127	Penta			U	10.1		U	7.53		U	5.29		U	4.14		U	4.92
PCB-128	Hexa		787	C	2	504	C	2		UC	2		UC	2		UC	2
PCB-129	Hexa		286		2	199		2		U	5.8		U	4.23		U	5.38
PCB-130	Hexa		408		2	266		2		U	5.26		U	3.84		U	4.89
PCB-131	Hexa		156	C	2	124	C	2		UC	2		UC	2		UC	2
PCB-132	Hexa		1820	C	2	1230	C	2		UC	2		UC	2		UC	2
PCB-133	Hexa			C131	2		C131	2		U,C131	2		U,C131	2		U,C131	2
PCB-134	Hexa		432	C	2	251	C	2		UC	2		UC	2		UC	2
PCB-135	Hexa		944		2	703		2		U	4.88		U	3.56		U	4.53
PCB-136	Hexa		1430		2	984		2		U	3.06		U	3.96		U	3.61
PCB-137	Hexa		293		2	210		2		U	5.24		U	3.83		U	4.87
PCB-138	Hexa		4090	C	2	2850	C	2		UC	2		UC	2		UC	2
PCB-139	Hexa		4530	C	2	3240	C	2		UC	2		UC	2		UC	2
PCB-140	Hexa		61.6		2		U	11.1		U	4.55		U	3.32		U	4.23
PCB-141	Hexa		798		2	552		2		U	4.88		U	3.56		U	4.53
PCB-142	Hexa	PRC	2250		2	2500		2	3370		2	3420		2	3370		2
PCB-143	Hexa			C134	2		C134	2		U,C134	2		U,C134	2		U,C134	2
PCB-144	Hexa		290		2	171		2		U	4.61		U	3.37		U	4.28
PCB-145	Hexa			U	6.14		U	8		U	3.17		U	4.1		U	3.74
PCB-146	Hexa		613	C	2	472	C	2		UC	2		UC	2		UC	2
PCB-147	Hexa		150		2	108		2		U	4.27		U	3.12		U	3.96

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010			LDW-BA-SC-ENR+AC-CB-S010			LDW-BA-SC-ENR+AC-CC-S010			LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-148	Hexa			U	7.1	503		2		U	7.1		U	6.81		U	8.13
PCB-149	Hexa			C139			C139	2		C139	2		C139	2		C139	2
PCB-150	Hexa			U	5.48		U	8.04		U	5.48		U	5.25		U	6.24
PCB-151	Hexa		306		2	496		2	395		2	234		2	245		2
PCB-152	Hexa			U	5.58		U	8.08		U	5.58		U	5.36		U	6.28
PCB-153	Hexa		944		2	1420		2	1200		2	756		2	793		2
PCB-154	Hexa		44.7		2	57.2		2	54.8		2	45.6		2	48.1		2
PCB-155	Hexa	PRC	3060		2	3280		2	3330		2	3090		2	2880		2
PCB-156	Hexa		44		2	82.7		2	63.5		2	34.4		2	37.9		2
PCB-157	Hexa			U	6.95	21.7		2	13	J	2		U	6.17		U	10.4
PCB-158	Hexa		80.3	C	2	139	C	2	107	C	2	72.2	C	2	72.1	C	2
PCB-159	Hexa		14	J	2		U	12	14.7	J	2	10.5	J	2		U	10.5
PCB-160	Hexa			C158			C158	2		C158	2		C158	2		C158	2
PCB-161	Hexa			C132			C132	2		C132	2		C132	2		C132	2
PCB-162	Hexa			C128			C128	2		C128	2		C128	2		C128	2
PCB-163	Hexa			C138			C138	2		C138	2		C138	2		C138	2
PCB-164	Hexa			C138			C138	2		C138	2		C138	2		C138	2
PCB-165	Hexa			C146			C146	2		C146	2		C146	2		C146	2
PCB-166	Hexa			U	7.1		U	12.8		U	5.35		U	6.01		U	11.1
PCB-167	Hexa		21.7		2	37		2	32.6		2	17.5	J	2		U	11.4
PCB-168	Hexa			U	6.67		U	12.1		U	5.03		U	5.65		U	10.5
PCB-169	Hexa			U	7.16		U	14.7		U	5.78		U	6.58		U	12.6
PCB-170	Hepta		142		2	206		2	165		2	117		2	111		2
PCB-171	Hepta		50.7		2	83		2	68		2	36.8		2	50.7		2
PCB-172	Hepta		106		2	146		2	127		2	98.1		2	118		2
PCB-173	Hepta			U	7.01		U	15.3		U	6.67		U	6.11		U	15.1
PCB-174	Hepta		173		2	296		2	236		2	136		2	149		2
PCB-175	Hepta			U	5.94	12.4	J	2		U	5.66		U	5.19		U	13.2
PCB-176	Hepta		28.6		2	63.1		2	46		2	24.2		2	33.7		2
PCB-177	Hepta		120		2	179		2	167		2	94.7		2	103		2
PCB-178	Hepta		46.7		2	80.8		2	65.2		2	33.1		2	48.1		2
PCB-179	Hepta		109		2	183		2	145		2	90.3		2	101		2
PCB-180	Hepta		301		2	425		2	372		2	251		2	263		2
PCB-181	Hepta			U	6.35		U	13.7		U	6.05		U	5.54		U	13.5
PCB-182	Hepta		259	C	2	388	C	2	326	C	2	207	C	2	222	C	2
PCB-183	Hepta		114		2	178		2	154		2	96.6		2	104		2
PCB-184	Hepta	PRC	3890		2	4150		2	4080		2	3710		2	3770		2
PCB-185	Hepta		22.8		2	38.3		2	31.4		2	21.1		2		U	13.3
PCB-186	Hepta			U	4.34		U	10		U	4.14		U	3.79		U	9.86
PCB-187	Hepta			C182			C182	2		C182	2		C182	2		C182	2
PCB-188	Hepta			U	4.51	24.8		2		U	4.17		U	3.52		U	10.4
PCB-189	Hepta			U	4.46		U	10.9		U	4.4		U	4.4		U	10.1
PCB-190	Hepta		34.5		2	52.5		2	39.8		2	26.7		2	26.3		2
PCB-191	Hepta			U	5.01		U	11		U	4.77		U	4.37		U	10.8
PCB-192	Hepta	PRC	2700		2	2930		2	3080		2	2590		2	2730		2
PCB-193	Hepta		26.6		2	40.2		2	33.7		2	19.3	J	2	28.3		2
PCB-194	Octa		37.5		2	66.1		2	46.1		2	32.8		2	36.7		2
PCB-195	Octa		18.6	J	2	35.2		2	25		2	16.8	J	2	15.6	J	2
PCB-196	Octa		58.5	C	2	97.9	C	2	83.6	C	2	50.3	C	2	57.7	C	2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CC-S010			LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010			LDW-BA-IN-ENR-CA-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-148	Hexa			U	6.94		U	8.17		U	8.6		U	7.99	1420		2
PCB-149	Hexa			C139	2		C139	2		C139	2		C139	2		C139	2
PCB-150	Hexa			U	5.36	36.5		2	19.1	J	2	20.9		2	17.8	J	2
PCB-151	Hexa		181		2	2390		2	1100		2	1180		2	1060		2
PCB-152	Hexa			U	5.46	27.6		2	16.5	J	2	15.4	J	2	12.9	J	2
PCB-153	Hexa		625		2	7370		2	3500		2	3490		2	3330		2
PCB-154	Hexa		35.3		2	209		2	110		2	107		2	95.9		2
PCB-155	Hexa	PRC	2240		2	2410		2	2430		2	3090		2	2780		2
PCB-156	Hexa		36		2	649		2	262		2	264		2	256		2
PCB-157	Hexa			U	5.63	154		2	64.4		2	65		2	66.1		2
PCB-158	Hexa		59.2	C	2	1150	C	2	490	C	2	505	C	2	496	C	2
PCB-159	Hexa			U	5.14	40.1		2	19.3	J	2	18.1	J	2	17.6	J	2
PCB-160	Hexa			C158	2		C158	2		C158	2		C158	2		C158	2
PCB-161	Hexa			C132	2		C132	2		C132	2		C132	2		C132	2
PCB-162	Hexa			C128	2		C128	2		C128	2		C128	2		C128	2
PCB-163	Hexa			C138	2		C138	2		C138	2		C138	2		C138	2
PCB-164	Hexa			C138	2		C138	2		C138	2		C138	2		C138	2
PCB-165	Hexa			C146	2		C146	2		C146	2		C146	2		C146	2
PCB-166	Hexa			U	5.6	54		2	17	J	2	18.4	J	2	22.1		2
PCB-167	Hexa		17	J	2	306		2	129		2	126		2	112		2
PCB-168	Hexa			U	5.27		U	10.5		U	12.2		U	9.67		U	15.8
PCB-169	Hexa			U	6.25		U	12.1		U	13.5		U	10.3		U	18.6
PCB-170	Hepta		98.6		2	746		2	314		2	345		2	320		2
PCB-171	Hepta		36.1		2	270		2	118		2	134		2	121		2
PCB-172	Hepta		87.5		2	210		2	137		2	162		2	136		2
PCB-173	Hepta			U	7.1	29.4		2		U	12.3		U	6.97		U	10.8
PCB-174	Hepta		125		2	863		2	420		2	443		2	377		2
PCB-175	Hepta			U	6.02	43.2		2	20.1		2	24.6		2	19.8	J	2
PCB-176	Hepta		24.3		2	156		2	78.8		2	75.3		2	80.3		2
PCB-177	Hepta		85.3		2	577		2	265		2	316		2	263		2
PCB-178	Hepta		26.9		2	220		2	109		2	127		2	100		2
PCB-179	Hepta		72.8		2	517		2	241		2	273		2	244		2
PCB-180	Hepta		220		2	1260		2	621		2	672		2	620		2
PCB-181	Hepta			U	6.44		U	9.25		U	11.1		U	6.32		U	9.78
PCB-182	Hepta		180	C	2	1020	C	2	511	C	2	573	C	2	512	C	2
PCB-183	Hepta		82.9		2	497		2	243		2	256		2	234		2
PCB-184	Hepta	PRC	3110		2	3210		2	3110		2	4010		2	3490		2
PCB-185	Hepta		15.2	J	2	83.1		2	44.9		2	53		2	36		2
PCB-186	Hepta			U	4.4		U	6.78		U	7.6		U	4.32		U	6.69
PCB-187	Hepta			C182	2		C182	2		C182	2		C182	2		C182	2
PCB-188	Hepta			U	4.14	13.8	J	2		U	7.54		U	4.48	11.1	J	2
PCB-189	Hepta			U	5.03	33.1		2		U	8.22	14	J	2		U	7.83
PCB-190	Hepta		23.1		2	144		2	66.4		2	75.1		2	62.3		2
PCB-191	Hepta			U	5.08	38.8		2	20.8		2	20.9		2		U	7.72
PCB-192	Hepta	PRC	2290		2	2270		2	2300		2	3040		2	2390		2
PCB-193	Hepta		18.2	J	2	93.3		2	51.1		2	54.4		2	48.7		2
PCB-194	Octa		25.3		2	139		2	62.3		2	70.2		2	57.3		2
PCB-195	Octa		16.1	J	2	61.5		2	27.5		2	36.6		2	32.8		2
PCB-196	Octa		44.4	C	2	198	C	2	106	C	2	116	C	2	122	C	2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010			LDW-BA-SC-S010-PW-TB			LDW-BA-SU-S010-PW-TB			LDW-BA-IN-S010-PW-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-148	Hexa			U	7.87	1180		2		U	4.45		U	5.77		U	5.25
PCB-149	Hexa			C139	2		C139	2		U,C139	2		U,C139	2		U,C139	2
PCB-150	Hexa		24.5		2		U	7.9		U	3.09		U	4		U	3.65
PCB-151	Hexa		1240		2	944		2		U	4.87		U	3.55		U	4.52
PCB-152	Hexa		15.7	J	2		U	8.06		U	3.15		U	4.08		U	3.72
PCB-153	Hexa		3850		2	2970		2	71.7		2	69.8		2	69.4		2
PCB-154	Hexa		114		2	96.3		2		U	3.68		U	4.77		U	4.34
PCB-155	Hexa	PRC	2910		2	3150		2	3420		2	3710		2	3660		2
PCB-156	Hexa		335		2	209		2		U	3.58		U	2.64		U	3.54
PCB-157	Hexa		93.6		2	59.4		2		U	4.01		U	2.88		U	3.66
PCB-158	Hexa		589	C	2	414	C	2		UC	2		UC	2		UC	2
PCB-159	Hexa		23.1		2	20.2		2		U	3.63		U	2.65		U	3.37
PCB-160	Hexa			C158	2		C158	2		U,C158	2		U,C158	2		U,C158	2
PCB-161	Hexa			C132	2		C132	2		U,C132	2		U,C132	2		U,C132	2
PCB-162	Hexa			C128	2		C128	2		U,C128	2		U,C128	2		U,C128	2
PCB-163	Hexa			C138	2		C138	2		U,C138	2		U,C138	2		U,C138	2
PCB-164	Hexa			C138	2		C138	2		U,C138	2		U,C138	2		U,C138	2
PCB-165	Hexa			C146	2		C146	2		U,C146	2		U,C146	2		U,C146	2
PCB-166	Hexa		23.2		2	16.1	J	2		U	3.86		U	2.82		U	3.58
PCB-167	Hexa		159		2	114		2		U	3.91		U	2.95		U	3.72
PCB-168	Hexa			U	14.3		U	9.11		U	3.71		U	2.71		U	3.45
PCB-169	Hexa			U	15.6		U	9.75		U	4.7		U	3.35		U	4.09
PCB-170	Hepta		409		2	291		2		U	5.48		U	6.12		U	6.07
PCB-171	Hepta		142		2	129		2		U	4.67		U	5.2		U	5.17
PCB-172	Hepta		170		2	174		2	116		2	97.7		2	115		2
PCB-173	Hepta		20.2		2		U	14.2		U	5.14		U	5.74		U	5.7
PCB-174	Hepta		487		2	396		2		U	4.22		U	4.71		U	4.68
PCB-175	Hepta		20		2	18.8	J	2		U	4.32		U	4.82		U	4.79
PCB-176	Hepta		87.8		2	78.2		2		U	3.29		U	3.67		U	3.64
PCB-177	Hepta		319		2	275		2		U	4.83		U	5.39		U	5.35
PCB-178	Hepta		110		2	102		2		U	4.6		U	5.13		U	5.1
PCB-179	Hepta		300		2	243		2		U	3.11		U	3.47		U	3.45
PCB-180	Hepta		725		2	605		2		U	3.82		U	4.26		U	4.23
PCB-181	Hepta			U	8.11		U	12.9		U	4.95		U	5.52		U	5.48
PCB-182	Hepta		592	C	2	534	C	2		UC	2		UC	2		UC	2
PCB-183	Hepta		300		2	229		2		U	4.13		U	4.61		U	4.57
PCB-184	Hepta	PRC	3670		2	3900		2	4560		2	4460		2	4770		2
PCB-185	Hepta		56.8		2	39.5		2		U	4.6		U	5.13		U	5.09
PCB-186	Hepta			U	5.55		U	8.82		U	3.2		U	3.57		U	3.54
PCB-187	Hepta			C182	2		C182	2		U,C182	2		U,C182	2		U,C182	2
PCB-188	Hepta			U	10		U	9.25		U	3.2		U	3.64		U	3.63
PCB-189	Hepta			U	6.35		U	8.97		U	3.58		U	3.9		U	3.86
PCB-190	Hepta		84.7		2	61.4		2		U	3.95		U	4.41		U	4.38
PCB-191	Hepta		26.1		2	23		2		U	3.58		U	4		U	3.97
PCB-192	Hepta	PRC	2750		2	2640		2	3210		2	2920		2	3250		2
PCB-193	Hepta		56.5		2	50.9		2		U	3.48		U	3.88		U	3.85
PCB-194	Octa		70.2		2	68.3		2		U	3.58		U	3.85		U	4.18
PCB-195	Octa		31.9		2	35.7		2		U	3.85		U	4.14		U	4.5
PCB-196	Octa		134	C	2	129	C	2		UC	2		UC	2		UC	2

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010			LDW-BA-SC-ENR+AC-CB-S010			LDW-BA-SC-ENR+AC-CC-S010			LDW-BA-SC-ENR-CA-S010			LDW-BA-SC-ENR-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-197	Octa		47.9		2	55.3		2	48.8		2	46.5		2	51		2
PCB-198	Octa			U	8.68		U	10.8		U	8.84		U	11.2		U	11.7
PCB-199	Octa		65.1		2	85.7		2	78.4		2	49.7		2	53		2
PCB-200	Octa			U	6.03	21.4		2	19	J	2		U	7.76		U	7.89
PCB-201	Octa			U	5.78		U	7.09		U	5.89		U	7.44		U	7.71
PCB-202	Octa			U	5.82	26.5		2	18.3	J	2		U	7.5	18	J	2
PCB-203	Octa			C196			C196	2		C196	2		C196	2		C196	2
PCB-204	Octa	PRC	5220		2	5710		2	6070		2	5180		2	5300		2
PCB-205	Octa			U	3.68	12.2	J	2		U	5.13		U	4.57		U	6.2
PCB-206	Nona			U	9.72	26.1		2	11.9	J	2		U	8.41	15.8	J	2
PCB-207	Nona		27.8		2	34.3		2	26.5		2	25.8		2	26.7		2
PCB-208	Nona			U	6.14	11.4	J	2		U	3.95		U	5.53		U	3.45
PCB-209	Deca		24.8		2	39.4		2	26.8		2	26.3		2	33.2		2
Total Detected PCB Congeners			**54039**			**76493**			**81880**			**42261**			**44660**		

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CC-S010			LDW-BA-IN-ENR+AC-CA-S010			LDW-BA-IN-ENR+AC-CB-S010			LDW-BA-IN-ENR+AC-CC-S010			LDW-BA-IN-ENR-CA-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-197	Octa		43.4		2	50.5		2	39.4		2	62.4		2	48.2		2
PCB-198	Octa			U	9.88		U	7.21		U	12.5		U	10.9		U	14.9
PCB-199	Octa		48.5		2	189		2	114		2	127		2	107		2
PCB-200	Octa			U	6.86	30.3		2		U	8.71	17.8	J	2		U	10.4
PCB-201	Octa			U	6.58	30.8		2		U	8.35	18.9	J	2		U	9.93
PCB-202	Octa			U	6.62	48.3		2	38.7		2	36.7		2	30.7		2
PCB-203	Octa			C196	2		C196	2		C196	2		C196	2		C196	2
PCB-204	Octa	PRC	4490		2	4550		2	4670		2	6110		2	4770		2
PCB-205	Octa			U	5.38		U	7.77		U	6.56		U	5.76		U	7.7
PCB-206	Nona		9.41	J	2	36		2	21.9		2	25.7		2	17.9	J	2
PCB-207	Nona		22.7		2	25.6		2	22.9		2	32.7		2	24.3		2
PCB-208	Nona			U	5.92	12	J	2		U	6.72		U	8.69		U	8.79
PCB-209	Deca		22.8		2	28.7		2	30.3		2	29.7		2	24		2
Total Detected PCB Congeners			**34588**			**429262**			**243352**			**202067**			**181016**		

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CB-S010			LDW-BA-IN-ENR-CC-S010			LDW-BA-SC-S010-PW-TB			LDW-BA-SU-S010-PW-TB			LDW-BA-IN-S010-PW-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-197	Octa		51.4		2	50.7		2	48.1		2	42.7		2	51.2		2
PCB-198	Octa			U	12.2		U	16.1		U	4.77		U	4.39		U	4.37
PCB-199	Octa		137		2	116		2		U	5.23		U	4.8		U	4.78
PCB-200	Octa			U	8.47		U	11.2		U	3.61		U	3.32		U	3.3
PCB-201	Octa			U	8.12		U	10.7		U	3.42		U	3.14		U	3.13
PCB-202	Octa		35.6		2	38.3		2		U	3.37		U	3.09		U	3.08
PCB-203	Octa			C196	2		C196	2		U,C196	2		U,C196	2		U,C196	2
PCB-204	Octa	PRC	5320		2	5750		2	6070		2	5100		2	6280		2
PCB-205	Octa			U	5.96		U	6.19		U	2.63		U	2.83		U	3.08
PCB-206	Nona		25		2	19.1	J	2		U	4.71		U	3.68		U	4.01
PCB-207	Nona		29.8		2	28.1		2	26.5		2	23		2	28.2		2
PCB-208	Nona			U	8.23		U	7.68		U	3.07		U	2.58		U	2.77
PCB-209	Deca		32		2	29.2		2	24.3		2	18.7	J	2	26.8		2
Total Detected PCB Congeners			**238668**			**148308**			**31739**			**30338**			**31234**		

Notes

C: Coelution with one or more PCB congeners; the numerical value indicates the lower congener co-eluter. For example, PCB-20 co-elutes with PCB-21 and PCB-33.
J: Analyte concentration is below calibration range
PCB: Polychlorinated biphenyl
pg: picogram
PRC: Performance Reference Compound
U: Not detected at the Method Detection Limit (MDL) shown in the second column for each sample.

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TABLE A4

Table A4. Elimination Rates (ke) and Percentage to Steady State Reached by Performance Reference Compounds (PRCs) During Deployment, and Resulting Statistics for the PRC Regression Models.

PCB PRC	Homolog Group	LDW-BA-SC-ENR+AC-CA-S010		LDW-BA-SC-ENR+AC-CB-S010		LDW-BA-SC-ENR+AC-CC-S010		LDW-BA-SC-ENR-CA-S010		LDW-BA-SC-ENR-CB-S010	
		k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %
PCB-14	Di	0.024100	59%	0.013695	39%	OUTLIER		0.043817	77%	0.025889	58%
PCB-36	Tri	0.018212	49%	0.015783	44%	0.005531	18%	0.025115	57%	0.021812	52%
PCB-78	Tetra	0.010880	33%	0.007276	23%	0.007747	25%	0.016671	43%	0.008861	26%
PCB-104	Penta	0.004075	14%	0.002857	10%	0.001306	5%	0.006234	19%	0.006569	20%
PCB-121	Penta	0.004227	14%	0.002777	10%	0.001004	4%	0.005879	18%	0.006451	20%
PCB-142	Hexa	0.004574	15%	0.002148	8%	0.003972	14%	0.008366	25%	0.005389	17%
PCB-155	Hexa	0.004275	15%	0.001982	7%	0.002222	8%	0.004447	14%	0.006549	20%
PCB-184	Hepta	0.004420	15%	0.002257	8%	0.003367	12%	0.006302	19%	0.005837	18%
PCB-192	Hepta	0.003869	13%	0.001237	4%	0.000539	2%	0.005530	17%	0.003978	13%
PCB-204	Octa	0.002818	10%	OUTLIER		OUTLIER		0.003378	11%	0.002710	9%
PRC Model	p-value	0.0015		0.0010		0.27		0.0011		0.00013	
	r^2	0.74		0.81		0.19		0.75		0.85	

Table A4. Elimination Rates (ke) and Percentage to Steady State Reached by Performance Reference Compounds (PRCs) During Deployment, and Resulting Statistics for the PRC Regression Models.

PCB PRC	Homolog Group	LDW-BA-SC-ENR-CC-S010		LDW-BA-IN-ENR+AC-CA-S010		LDW-BA-IN-ENR+AC-CB-S010		LDW-BA-IN-ENR+AC-CC-S010		LDW-BA-IN-ENR-CA-S010	
		k_e	Steady State	k_e	Steady State	k_e	Steady State	k_e	Steady State	k_e	Steady State
		(d^{-1})	%	(d^{-1})	%	(d^{-1})	%	(d^{-1})	%	(d^{-1})	%
PCB-14	Di	0.056819	85%	0.018634	56%	0.016603	51%	0.021446	61%	0.012450	41%
PCB-36	Tri	0.028063	61%	0.023313	64%	0.016641	51%	0.017926	54%	0.009705	34%
PCB-78	Tetra	0.020252	49%	0.017374	53%	0.018595	55%	0.011476	39%	0.019615	56%
PCB-104	Penta	0.011656	32%	0.008760	32%	0.007131	27%	0.003586	14%	0.002072	8%
PCB-121	Penta	0.008821	26%	0.003946	16%	0.002785	11%	0.002945	12%	0.001703	7%
PCB-142	Hexa	0.010135	29%	0.005538	22%	0.007961	29%	0.005745	22%	0.005271	20%
PCB-155	Hexa	0.008692	25%	0.004829	19%	0.004859	19%	0.003413	14%	0.001701	7%
PCB-184	Hepta	0.006211	19%	0.003886	16%	0.004826	19%	0.003059	12%	0.002122	9%
PCB-192	Hepta	0.003837	12%	0.002998	12%	0.002899	12%	0.000557	2%	0.001963	8%
PCB-204	Octa	0.002263	7%	0.001294	6%	0.000882	4%	OUTLIER		0.000304	1%
PRC Model	p-value	0.0000045		0.00022		0.0028		0.0042		0.0057	
	r^2	0.94		0.83		0.69		0.71		0.64	

Table A4. Elimination Rates (ke) and Percentage to Steady State Reached by Performance Reference Compounds (PRCs) During Deployment, and Resulting Statistics for the PRC Regression Models.

PCB PRC	Homolog Group	LDW-BA-IN-ENR-CB-S010		LDW-BA-IN-ENR-CC-S010	
		k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %
PCB-14	Di	0.003290	13%	0.016978	51%
PCB-36	Tri	0.009838	34%	0.011475	38%
PCB-78	Tetra	0.015307	48%	0.014954	47%
PCB-104	Penta	0.000200	1%	OUTLIER	
PCB-121	Penta	OUTLIER		OUTLIER	
PCB-142	Hexa	0.005326	20%	0.002972	12%
PCB-155	Hexa	0.000699	3%	OUTLIER	
PCB-184	Hepta	0.001011	4%	OUTLIER	
PCB-192	Hepta	OUTLIER		OUTLIER	
PCB-204	Octa	OUTLIER		OUTLIER	
PRC Model	p-value	0.39		0.17	
	r^2	0.15		0.69	

Notes

%: percent

d: day

PCB: Polychlorinated biphenyl

The PRCs noted "OUTLIER" were removed from the calculations. See text for further details.

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TABLE A5

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-1	Mono	4.23
PCB-2	Mono	4.87
PCB-3	Mono	4.87
PCB-4	Di	4.64
PCB-5	Di	4.96
PCB-6	Di	4.96
PCB-7	Di	4.96
PCB-8	Di	4.96
PCB-9	Di	4.96
PCB-10	Di	4.64
PCB-11	Di	5.28
PCB-12	Di	5.28
PCB-13	Di	5.28
PCB-14	Di	5.28
PCB-15	Di	5.28
PCB-16	Tri	5.27
PCB-17	Tri	5.27
PCB-18	Tri	5.27
PCB-19	Tri	5.05
PCB-20	Tri	5.48
PCB-21	Tri	C020
PCB-22	Tri	5.48
PCB-23	Tri	5.48
PCB-24	Tri	5.27
PCB-25	Tri	5.48
PCB-26	Tri	5.48
PCB-27	Tri	5.27
PCB-28	Tri	5.48
PCB-29	Tri	5.48
PCB-30	Tri	5.27
PCB-31	Tri	5.48
PCB-32	Tri	5.27
PCB-33	Tri	C020
PCB-34	Tri	5.48
PCB-35	Tri	5.69
PCB-36	Tri	5.69
PCB-37	Tri	5.69
PCB-38	Tri	5.69
PCB-39	Tri	5.69
PCB-40	Tetra	5.78
PCB-41	Tetra	5.82
PCB-42	Tetra	5.78
PCB-43	Tetra	5.78
PCB-44	Tetra	5.78
PCB-45	Tetra	5.62
PCB-46	Tetra	5.62
PCB-47	Tetra	5.78
PCB-48	Tetra	5.78
PCB-49	Tetra	C043
PCB-50	Tetra	5.62
PCB-51	Tetra	5.62
PCB-52	Tetra	5.78

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-53	Tetra	5.62
PCB-54	Tetra	5.66
PCB-55	Tetra	5.94
PCB-56	Tetra	5.94
PCB-57	Tetra	5.94
PCB-58	Tetra	5.94
PCB-59	Tetra	C042
PCB-60	Tetra	C056
PCB-61	Tetra	5.94
PCB-62	Tetra	5.78
PCB-63	Tetra	5.94
PCB-64	Tetra	C041
PCB-65	Tetra	5.78
PCB-66	Tetra	5.94
PCB-67	Tetra	5.94
PCB-68	Tetra	5.94
PCB-69	Tetra	C052
PCB-70	Tetra	C061
PCB-71	Tetra	C041
PCB-72	Tetra	C041
PCB-73	Tetra	5.78
PCB-74	Tetra	5.94
PCB-75	Tetra	C048
PCB-76	Tetra	C066
PCB-77	Tetra	6.1
PCB-78	Tetra	6.1
PCB-79	Tetra	6.1
PCB-80	Tetra	6.1
PCB-81	Tetra	6.1
PCB-82	Penta	6.26
PCB-83	Penta	6.26
PCB-84	Penta	6.195
PCB-85	Penta	6.26
PCB-86	Penta	6.26
PCB-87	Penta	6.26
PCB-88	Penta	6.13
PCB-89	Penta	6.13
PCB-90	Penta	6.26
PCB-91	Penta	C088
PCB-92	Penta	C084
PCB-93	Penta	6.13
PCB-94	Penta	6.13
PCB-95	Penta	6.13
PCB-96	Penta	6.2
PCB-97	Penta	6.26
PCB-98	Penta	6.13
PCB-99	Penta	6.26
PCB-100	Penta	6.13
PCB-101	Penta	C090
PCB-102	Penta	C098
PCB-103	Penta	6.13
PCB-104	Penta	6.2

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-105	Penta	6.39
PCB-106	Penta	6.39
PCB-107	Penta	6.39
PCB-108	Penta	C107
PCB-109	Penta	6.26
PCB-110	Penta	6.26
PCB-111	Penta	6.325
PCB-112	Penta	C083
PCB-113	Penta	6.26
PCB-114	Penta	6.39
PCB-115	Penta	C111
PCB-116	Penta	C085
PCB-117	Penta	C087
PCB-118	Penta	C106
PCB-119	Penta	6.26
PCB-120	Penta	6.39
PCB-121	Penta	6.26
PCB-122	Penta	6.39
PCB-123	Penta	6.39
PCB-124	Penta	6.39
PCB-125	Penta	C087
PCB-126	Penta	6.52
PCB-127	Penta	6.52
PCB-128	Hexa	6.765
PCB-129	Hexa	6.71
PCB-130	Hexa	6.71
PCB-131	Hexa	6.66
PCB-132	Hexa	6.66
PCB-133	Hexa	C131
PCB-134	Hexa	6.61
PCB-135	Hexa	6.61
PCB-136	Hexa	6.7
PCB-137	Hexa	6.71
PCB-138	Hexa	6.71
PCB-139	Hexa	6.61
PCB-140	Hexa	6.61
PCB-141	Hexa	6.71
PCB-142	Hexa	6.61
PCB-143	Hexa	C134
PCB-144	Hexa	6.61
PCB-145	Hexa	6.7
PCB-146	Hexa	6.71
PCB-147	Hexa	6.61
PCB-148	Hexa	6.61
PCB-149	Hexa	C139
PCB-150	Hexa	6.7
PCB-151	Hexa	6.61
PCB-152	Hexa	6.7
PCB-153	Hexa	6.71
PCB-154	Hexa	6.61
PCB-155	Hexa	6.7
PCB-156	Hexa	6.82

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-157	Hexa	6.82
PCB-158	Hexa	6.71
PCB-159	Hexa	6.82
PCB-160	Hexa	C158
PCB-161	Hexa	C132
PCB-162	Hexa	C128
PCB-163	Hexa	C138
PCB-164	Hexa	C138
PCB-165	Hexa	C146
PCB-166	Hexa	6.71
PCB-167	Hexa	6.82
PCB-168	Hexa	6.71
PCB-169	Hexa	6.93
PCB-170	Hepta	7.15
PCB-171	Hepta	7.06
PCB-172	Hepta	7.15
PCB-173	Hepta	7.06
PCB-174	Hepta	7.06
PCB-175	Hepta	7.06
PCB-176	Hepta	7.17
PCB-177	Hepta	7.06
PCB-178	Hepta	7.06
PCB-179	Hepta	7.17
PCB-180	Hepta	7.15
PCB-181	Hepta	7.06
PCB-182	Hepta	7.06
PCB-183	Hepta	7.06
PCB-184	Hepta	7.17
PCB-185	Hepta	7.06
PCB-186	Hepta	7.17
PCB-187	Hepta	C182
PCB-188	Hepta	7.17
PCB-189	Hepta	7.25
PCB-190	Hepta	7.15
PCB-191	Hepta	7.15
PCB-192	Hepta	7.15
PCB-193	Hepta	7.15
PCB-194	Octa	7.59
PCB-195	Octa	7.51
PCB-196	Octa	7.51
PCB-197	Octa	7.63
PCB-198	Octa	7.51
PCB-199	Octa	7.63
PCB-200	Octa	7.63
PCB-201	Octa	7.51
PCB-202	Octa	7.63
PCB-203	Octa	C196
PCB-204	Octa	7.63
PCB-205	Octa	7.59
PCB-206	Nona	7.94
PCB-207	Nona	8.07
PCB-208	Nona	8.07

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-209	Deca	8.51

Notes

kg: kilogram

L: liter

PCB: Polychlorinated biphenyl

Log K_{PDMS} was referenced from Smedes et al. (2009). For co-eluters, log KPDMS was obtained by averaging the KPDMS values for each individual congener. Log K_{PDMS} is shown as the lower congener co-eluter for the higher congener co-eluters in the coelution. For example, PCB-20 co-elutes with PCB-21 and PCB-33; therefore, the KPDMS value for PCB-21 is shown as the average KPDMS for PCB-21 and PCB-33, while the KPDMS for PCB-33 is shown as "C021".

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TABLE A6

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010					LDW-BA-SC-ENR+AC-CB-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono					U	13				U	18
PCB-2	Mono					U	6.9				U	5
PCB-3	Mono					U	6.7				U	5
PCB-4	Di		38	30	52		1.9	190	150	270		1.8
PCB-5	Di		44	34	59		1	90	68	130		1.1
PCB-6	Di		69	54	93		1	90	68	130		1.1
PCB-7	Di		9.6	7.5	13		1	17	13	25		1.1
PCB-8	Di		140	110	190		1	230	170	330		1.1
PCB-9	Di		11	8.4	14		1	17	13	24		1.1
PCB-10	Di		28	22	38		1.9	31	25	45		1.8
PCB-11	Di					U	3.7				U	3.6
PCB-12	Di		13	10	17		0.6	21	16	29		0.69
PCB-13	Di					U	3.7				U	4
PCB-14	Di	PRC										
PCB-15	Di		18	14	23		0.6	27	20	37		0.69
PCB-16	Tri		150	120	190		0.61	200	150	280		0.7
PCB-17	Tri		170	130	220		0.61	340	260	480		0.7
PCB-18	Tri		390	310	510		0.61	700	530	970		0.7
PCB-19	Tri		64	50	85		0.89	110	82	160		0.95
PCB-20	Tri		110	91	140	C	0.43	240	180	320	C	0.53
PCB-21	Tri					C020					C020	
PCB-22	Tri		63	50	80		0.43	120	94	170		0.53
PCB-23	Tri					U	2.6				U	3.4
PCB-24	Tri		16	13	21		0.61	24	18	34		0.7
PCB-25	Tri		31	25	40		0.43	46	35	61		0.53
PCB-26	Tri		55	44	70		0.43	78	59	100		0.53
PCB-27	Tri		22	17	29		0.61	48	36	66		0.7
PCB-28	Tri		220	180	290		0.43	390	300	520		0.53
PCB-29	Tri					U	3				U	4
PCB-30	Tri					U	1.5				U	3.5
PCB-31	Tri		170	130	210		0.43	300	230	400		0.53
PCB-32	Tri		120	95	160		0.61	230	170	320		0.7
PCB-33	Tri					C020					C020	
PCB-34	Tri					U	3.8				U	4.2
PCB-35	Tri					U	2.8				U	3.4
PCB-36	Tri	PRC										
PCB-37	Tri		14	12	18		0.31	25	19	32		0.41
PCB-38	Tri					U	2.1				U	3.3
PCB-39	Tri					U	2.4				U	3.2
PCB-40	Tetra		26	21	32		0.27	69	55	88		0.37
PCB-41	Tetra		100	86	130	C	0.25	290	230	370	C	0.35
PCB-42	Tetra		50	41	62	C	0.27	140	110	180	C	0.37
PCB-43	Tetra		150	120	180	C	0.27	370	290	470	C	0.37
PCB-44	Tetra		130	110	160		0.27	360	290	460		0.37
PCB-45	Tetra		44	35	55		0.35	110	88	150		0.45
PCB-46	Tetra		18	15	23		0.35	50	39	65		0.45
PCB-47	Tetra		44	36	54		0.27	110	90	140		0.37
PCB-48	Tetra		35	28	43	C	0.27	100	82	130	C	0.37
PCB-49	Tetra					C043					C043	
PCB-50	Tetra					U	1.5	5.2	4	6.8		0.45

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SC-ENR+AC-CC-S010					LDW-BA-SC-ENR-CA-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono		90	36	620		8.2				U	6.6
PCB-2	Mono					U	12				U	3.2
PCB-3	Mono					U	11				U	3.1
PCB-4	Di		170	58	850		4.1	26	23	34		1.5
PCB-5	Di		270	93	1100		2.4	12	10	16		0.81
PCB-6	Di		290	100	1200		2.4	16	14	21		0.81
PCB-7	Di		55	19	220		2.4				U	3.5
PCB-8	Di		1100	390	4500		2.4	30	25	39		0.81
PCB-9	Di		76	26	300		2.4				U	3.9
PCB-10	Di		120	42	620		4.1				U	7.3
PCB-11	Di		16	5.9	48	L	1.4				U	2.6
PCB-12	Di		74	28	230	L	1.4				U	2.3
PCB-13	Di					U L	6.5				U	2.6
PCB-14	Di	PRC										
PCB-15	Di		81	31	250	L	1.4	5.8	4.7	7.4		0.46
PCB-16	Tri		810	310	2500	L	1.5	27	22	35		0.47
PCB-17	Tri		1200	450	3700	L	1.5	48	40	62		0.47
PCB-18	Tri		2700	1000	8500	L	1.5	110	86	140		0.47
PCB-19	Tri		430	150	1600		2.1	19	16	25		0.69
PCB-20	Tri		820	340	2200	C L	1	34	28	43	C	0.33
PCB-21	Tri					C020					C020	
PCB-22	Tri		420	170	1100	L	1	22	18	28		0.33
PCB-23	Tri					U L	4.7				U	1
PCB-24	Tri		66	25	210	L	1.5	3.1	2.5	3.9	J	0.47
PCB-25	Tri		130	52	330	L	1	11	8.6	13		0.33
PCB-26	Tri		260	110	680	L	1	19	16	24		0.33
PCB-27	Tri		170	65	540	L	1.5	11	8.7	14		0.47
PCB-28	Tri		1200	520	3300	L	1	78	64	99		0.33
PCB-29	Tri		13	5.3	34	L	1				U	1.2
PCB-30	Tri					U L	2.7				U	1
PCB-31	Tri		1000	420	2700	L	1	57	46	72		0.33
PCB-32	Tri		760	290	2400	L	1.5	39	32	50		0.47
PCB-33	Tri					C020					C020	
PCB-34	Tri		13	5.4	34	L	1				U	1.5
PCB-35	Tri					U L	5				U	1.1
PCB-36	Tri	PRC										
PCB-37	Tri		81	38	180	L	0.75	5.9	4.9	7.4		0.23
PCB-38	Tri					U L	3.9				U	0.85
PCB-39	Tri					U L	4.4				U	0.96
PCB-40	Tetra		140	68	290	L	0.65	11	9.2	14		0.2
PCB-41	Tetra		550	280	1100	C L	0.61	47	39	58	C	0.19
PCB-42	Tetra		260	130	550	C L	0.65	21	17	26	C	0.2
PCB-43	Tetra		680	340	1400	C L	0.65	71	58	87	C	0.2
PCB-44	Tetra		680	340	1400	L	0.65	57	47	70		0.2
PCB-45	Tetra		280	130	670	L	0.84	16	13	20		0.26
PCB-46	Tetra		120	52	270	L	0.84	7.5	6.1	9.3		0.26
PCB-47	Tetra		190	93	400	L	0.65	21	18	26		0.2
PCB-48	Tetra		190	94	400	C L	0.65	14	11	17	C	0.2
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		8.9	4	21	L	0.84				U	0.68

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SC-ENR-CB-S010					LDW-BA-SC-ENR-CC-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono					U	13				U	11
PCB-2	Mono					U	5.5				U	4.7
PCB-3	Mono					U	5.6				U	4.5
PCB-4	Di		35	31	43		1.7	30	30	32		1.5
PCB-5	Di		28	24	34		0.97	12	12	13		0.79
PCB-6	Di		35	30	43		0.97	14	13	15		0.79
PCB-7	Di					U	5.8				U	3.4
PCB-8	Di		36	30	44		0.97	15	14	16		0.79
PCB-9	Di					U	7.5				U	3.8
PCB-10	Di					U	12				U	7.6
PCB-11	Di					U	4.3				U	2.5
PCB-12	Di					U	3.9	2.4	2.2	2.6	J	0.43
PCB-13	Di					U	4.7				U	2.4
PCB-14	Di	PRC										
PCB-15	Di					U	5	3.7	3.4	4.1	J	0.43
PCB-16	Tri		33	28	39		0.56	29	27	32		0.44
PCB-17	Tri		63	53	75		0.56	41	37	45		0.44
PCB-18	Tri		130	110	160		0.56	84	77	93		0.44
PCB-19	Tri		27	23	33		0.82	16	15	18		0.66
PCB-20	Tri		43	37	51	C	0.4	27	25	30	C	0.3
PCB-21	Tri					C020					C020	
PCB-22	Tri		28	24	33		0.4	16	14	17		0.3
PCB-23	Tri					U	2.8				U	1.6
PCB-24	Tri		7.8	6.6	9.4		0.56	7.4	6.8	8.2		0.44
PCB-25	Tri		13	11	15		0.4	8.3	7.6	9.2		0.3
PCB-26	Tri		21	18	25		0.4	13	12	15		0.3
PCB-27	Tri		10	8.5	12		0.56	7.6	7	8.4		0.44
PCB-28	Tri		94	81	110		0.4	57	52	64		0.3
PCB-29	Tri					U	3.3				U	1.9
PCB-30	Tri					U	2.8				U	0.82
PCB-31	Tri		56	48	67		0.4	40	36	44		0.3
PCB-32	Tri		48	41	57		0.56	26	24	28		0.44
PCB-33	Tri					C020					C020	
PCB-34	Tri					U	3.5				U	2.4
PCB-35	Tri					U	2.6				U	1.7
PCB-36	Tri	PRC										
PCB-37	Tri		8.8	7.6	10		0.28	3.6	3.2	4		0.22
PCB-38	Tri					U	2.5				U	1.3
PCB-39	Tri					U	2.5				U	1.5
PCB-40	Tetra		15	13	17		0.24	8.3	7.5	9.2		0.19
PCB-41	Tetra		66	58	76	C	0.23	37	34	41	C	0.18
PCB-42	Tetra		32	28	37	C	0.24	17	15	19	C	0.19
PCB-43	Tetra		97	85	110	C	0.24	57	52	64	C	0.19
PCB-44	Tetra		81	71	94		0.24	45	41	50		0.19
PCB-45	Tetra		24	20	28		0.32	13	12	15		0.24
PCB-46	Tetra		10	8.8	12		0.32	6	5.4	6.6		0.24
PCB-47	Tetra		29	25	33		0.24	17	15	18		0.19
PCB-48	Tetra		22	19	26	C	0.24	11	10	13	C	0.19
PCB-49	Tetra					C043					C043	
PCB-50	Tetra					U	2.5				U	0.85

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-IN-ENR+AC-CA-S010					LDW-BA-IN-ENR+AC-CB-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono		100	100	120		4	610	590	800		4
PCB-2	Mono					U	4.9				U	4.5
PCB-3	Mono					U	5	10	8.6	15	J	1.1
PCB-4	Di		380	350	450		1.7	170	150	230		1.7
PCB-5	Di		330	290	400		0.89	230	190	330		0.95
PCB-6	Di		520	460	640		0.89	880	720	1200		0.95
PCB-7	Di		52	45	64		0.89	72	58	100		0.95
PCB-8	Di		300	270	370		0.89	280	230	390		0.95
PCB-9	Di		49	43	60		0.89	66	54	94		0.95
PCB-10	Di		74	69	88		1.7	120	110	170		1.7
PCB-11	Di					U	2.8				U	3.9
PCB-12	Di		80	67	98		0.51	62	48	87		0.55
PCB-13	Di					U	3	6.9	5.4	9.7		0.55
PCB-14	Di	PRC										
PCB-15	Di		60	51	75		0.51	53	41	75		0.55
PCB-16	Tri		630	540	780		0.52	900	700	1300		0.56
PCB-17	Tri		1100	890	1300		0.52	1100	850	1500		0.56
PCB-18	Tri		2700	2300	3400		0.52	3000	2400	4200		0.56
PCB-19	Tri		310	270	390		0.76	380	310	540		0.81
PCB-20	Tri		570	470	700	C	0.37	470	360	650	C	0.4
PCB-21	Tri					C020					C020	
PCB-22	Tri		260	220	320		0.37	260	200	350		0.4
PCB-23	Tri		4	3.4	5		0.37	2.7	2.1	3.8	J	0.4
PCB-24	Tri		68	57	84		0.52	79	61	110		0.56
PCB-25	Tri		520	430	640		0.37	500	380	690		0.4
PCB-26	Tri		1800	1500	2200		0.37	1500	1100	2000		0.4
PCB-27	Tri		100	86	130		0.52	82	63	110		0.56
PCB-28	Tri		810	680	990		0.37	800	610	1100		0.4
PCB-29	Tri		6	5.1	7.4		0.37	3.4	2.6	4.6	J	0.4
PCB-30	Tri					U	2.1				U	1.2
PCB-31	Tri		890	740	1100		0.37	860	660	1200		0.4
PCB-32	Tri		640	540	790		0.52	740	580	1000		0.56
PCB-33	Tri					C020					C020	
PCB-34	Tri		19	16	23		0.37	17	13	24		0.4
PCB-35	Tri					U	1.8				U	1.4
PCB-36	Tri	PRC										
PCB-37	Tri		47	40	57		0.27	37	29	50		0.29
PCB-38	Tri					U	1.7				U	1.1
PCB-39	Tri					U	1.7				U	1.3
PCB-40	Tetra		250	210	300		0.23	170	130	230		0.25
PCB-41	Tetra		1200	1000	1400	C	0.22	740	580	970	C	0.24
PCB-42	Tetra		690	580	830	C	0.23	370	290	490	C	0.25
PCB-43	Tetra		3200	2700	3900	C	0.23	1700	1300	2200	C	0.25
PCB-44	Tetra		2600	2200	3200		0.23	1500	1100	1900		0.25
PCB-45	Tetra		390	330	480		0.3	300	240	410		0.32
PCB-46	Tetra		180	150	220		0.3	120	95	170		0.32
PCB-47	Tetra		570	480	680		0.23	290	230	390		0.25
PCB-48	Tetra		290	240	350	C	0.23	180	140	240	C	0.25
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		16	14	20		0.3	9.4	7.3	13		0.32

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-IN-ENR+AC-CC-S010					LDW-BA-IN-ENR-CA-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono		93	93	110		3.2	350	330	580		4.1
PCB-2	Mono					U	3.2				U	5.7
PCB-3	Mono					U	3	7	5.1	13	J	1.3
PCB-4	Di		210	200	300		1.3	320	260	570		1.9
PCB-5	Di		92	77	140		0.73	130	93	230		1.1
PCB-6	Di		180	150	280		0.73	220	160	390		1.1
PCB-7	Di		17	15	26		0.73	30	21	54		1.1
PCB-8	Di		130	110	190		0.73	270	190	480		1.1
PCB-9	Di		22	19	33		0.73	38	27	68		1.1
PCB-10	Di		22	21	31		1.3	56	46	100		1.9
PCB-11	Di		4.8	3.6	7.2		0.44				U	5
PCB-12	Di		19	15	29		0.44	32	21	55		0.7
PCB-13	Di					U	3.6				U	5
PCB-14	Di	PRC										
PCB-15	Di		20	15	30		0.44	48	32	83		0.7
PCB-16	Tri		240	180	370		0.45	360	240	630		0.71
PCB-17	Tri		430	330	650		0.45	580	390	1000		0.71
PCB-18	Tri		1100	850	1700		0.45	1400	920	2400		0.71
PCB-19	Tri		130	100	200		0.63	200	140	350		0.96
PCB-20	Tri		230	170	340	C	0.33	390	250	640	C	0.54
PCB-21	Tri					C020					C020	
PCB-22	Tri		120	87	170		0.33	180	120	300		0.54
PCB-23	Tri		2.4	1.8	3.5	J	0.33				U	3.2
PCB-24	Tri		29	22	43		0.45	69	46	120		0.71
PCB-25	Tri		190	140	270		0.33	270	180	440		0.54
PCB-26	Tri		610	450	900		0.33	710	460	1200		0.54
PCB-27	Tri		46	35	70		0.45	72	48	120		0.71
PCB-28	Tri		370	270	550		0.33	680	450	1100		0.54
PCB-29	Tri		2.5	1.9	3.8	J	0.33				U	3.7
PCB-30	Tri					U	1.1				U	1.5
PCB-31	Tri		380	280	560		0.33	570	380	950		0.54
PCB-32	Tri		280	210	430		0.45	370	250	650		0.71
PCB-33	Tri					C020					C020	
PCB-34	Tri		8.3	6.1	12		0.33	12	7.6	19		0.54
PCB-35	Tri					U	1.4				U	3.7
PCB-36	Tri	PRC										
PCB-37	Tri		21	16	31		0.26	38	25	60		0.41
PCB-38	Tri					U	1.1				U	2.9
PCB-39	Tri					U	1.2				U	3.3
PCB-40	Tetra		110	85	160		0.23	160	110	250		0.37
PCB-41	Tetra		520	390	730	C	0.22	690	470	1000	C	0.36
PCB-42	Tetra		260	190	360	C	0.23	340	230	520	C	0.37
PCB-43	Tetra		1200	870	1700	C	0.23	1500	980	2200	C	0.37
PCB-44	Tetra		980	720	1400		0.23	1300	890	2000		0.37
PCB-45	Tetra		170	130	250		0.28	230	150	370		0.45
PCB-46	Tetra		70	51	100		0.28	100	67	160		0.45
PCB-47	Tetra		220	160	310		0.23	290	190	440		0.37
PCB-48	Tetra		130	96	180	C	0.23	180	120	280	C	0.37
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		6.3	4.6	9.1		0.28	8.1	5.4	13		0.45

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CB-S010					LDW-BA-IN-ENR-CC-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono		540	260	9100		7.9	590	560	1500		4
PCB-2	Mono					U	11				U	4.1
PCB-3	Mono		25	7.8	190	J	2.9	15	11	33		1.2
PCB-4	Di		940	340	9800		4.1	350	290	830		1.8
PCB-5	Di		640	190	4500		2.5	170	120	360		1
PCB-6	Di		1400	440	10000		2.5	190	140	410		1
PCB-7	Di		120	36	850		2.5	42	31	91		1
PCB-8	Di		760	230	5400		2.5	230	170	490		1
PCB-9	Di		120	35	830		2.5	31	23	68		1
PCB-10	Di		260	95	2700		4.1	75	63	180		1.8
PCB-11	Di					U	13				U	4.3
PCB-12	Di		110	32	520		1.6	22	15	41		0.59
PCB-13	Di					U	13				U	4.2
PCB-14	Di	PRC										
PCB-15	Di		100	31	500		1.6	30	20	57		0.59
PCB-16	Tri		1600	470	7800		1.6	240	160	450		0.6
PCB-17	Tri		2500	750	12000		1.6	450	300	850		0.6
PCB-18	Tri		6600	2000	33000		1.6	1100	730	2100		0.6
PCB-19	Tri		790	230	5000		2.2	160	110	330		0.86
PCB-20	Tri		1300	430	5200	C L	1.2	240	160	400	C	0.44
PCB-21	Tri					C020					C020	
PCB-22	Tri		660	210	2600	L	1.2	120	79	200		0.44
PCB-23	Tri		12	3.9	48	L	1.2				U	2.8
PCB-24	Tri		260	77	1300		1.6	39	26	74		0.6
PCB-25	Tri		1200	390	4800	L	1.2	150	100	260		0.44
PCB-26	Tri		3100	1000	12000	L	1.2	360	240	620		0.44
PCB-27	Tri		200	58	970		1.6	45	30	85		0.6
PCB-28	Tri		2300	720	8900	L	1.2	360	240	620		0.44
PCB-29	Tri		12	3.8	46	L	1.2				U	3.2
PCB-30	Tri					U	3.4				U	2.3
PCB-31	Tri		2400	770	9500	L	1.2	370	250	640		0.44
PCB-32	Tri		1600	480	8000		1.6	310	200	580		0.6
PCB-33	Tri					C020					C020	
PCB-34	Tri		35	11	140	L	1.2	9.1	6	16		0.44
PCB-35	Tri					U L	7.1				U	3.1
PCB-36	Tri	PRC										
PCB-37	Tri		110	39	340	L	0.86	18	12	28		0.32
PCB-38	Tri					U L	5.6				U	2.4
PCB-39	Tri					U L	6.3				U	2.7
PCB-40	Tetra		500	190	1500	L	0.76	87	60	140		0.28
PCB-41	Tetra		2100	810	5900	C L	0.72	400	270	610	C	0.27
PCB-42	Tetra		1100	410	3200	C L	0.76	200	140	310	C	0.28
PCB-43	Tetra		4500	1700	13000	C L	0.76	870	590	1400	C	0.28
PCB-44	Tetra		4100	1500	12000	L	0.76	720	490	1100		0.28
PCB-45	Tetra		850	290	2900	L	0.95	140	96	230		0.36
PCB-46	Tetra		350	120	1200	L	0.95	58	39	95		0.36
PCB-47	Tetra		890	340	2600	L	0.76	170	110	260		0.28
PCB-48	Tetra		490	190	1400	C L	0.76	120	82	190	C	0.28
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		27	9.2	90	L	0.95	5.4	3.6	8.8		0.36

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010					LDW-BA-SC-ENR+AC-CB-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-51	Tetra		16	13	19		0.35	40	31	52		0.45
PCB-52	Tetra		190	150	230	C	0.27	480	380	610	C	0.37
PCB-53	Tetra		51	41	64		0.35	120	92	160		0.45
PCB-54	Tetra					U	1.1	3.7	2.8	4.8	J	0.43
PCB-55	Tetra		3.6	3	4.4		0.21	5	4	6.2		0.31
PCB-56	Tetra		39	32	47	C	0.21	110	86	130	C	0.31
PCB-57	Tetra					U	0.75	3.8	3.1	4.7		0.31
PCB-58	Tetra					U	0.77				U	2.3
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		77	64	93	C	0.21	220	170	270	C	0.31
PCB-62	Tetra					U	1				U	2.7
PCB-63	Tetra		3.2	2.7	3.9		0.21	10	8.3	13		0.31
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	0.98				U	2.6
PCB-66	Tetra		74	62	90	C	0.21	200	160	240	C	0.31
PCB-67	Tetra		2.5	2.1	3		0.21	8.5	6.9	11		0.31
PCB-68	Tetra		2.1	1.7	2.5		0.21	5	4	6.2		0.31
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U	0.97				U	2.7
PCB-74	Tetra		33	28	40		0.21	91	74	110		0.31
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		3.6	3	4.3		0.16	9	7.4	11	L	0.26
PCB-78	Tetra	PRC										
PCB-79	Tetra					U	1.4				U L	1.8
PCB-80	Tetra					U	0.5				U L	1.6
PCB-81	Tetra		4.7	4	5.6		0.16	9.4	7.7	11	L	0.26
PCB-82	Penta		6.7	5.7	7.8		0.13	21	17	25	L	0.21
PCB-83	Penta		3.3	2.8	3.9	C	0.13	10	8.3	12	C L	0.21
PCB-84	Penta		44	37	52	C	0.14	120	97	140	C L	0.23
PCB-85	Penta		11	9.3	13	C	0.13	27	22	32	C L	0.21
PCB-86	Penta					U	1.1				U L	1.3
PCB-87	Penta		24	21	29	C	0.13	70	58	84	C L	0.21
PCB-88	Penta					UC	0.59	51	42	62	C L	0.25
PCB-89	Penta		1.3	1.1	1.5	J	0.15	5.1	4.2	6.2	L	0.25
PCB-90	Penta		82	70	97	C	0.13	230	190	280	C L	0.21
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U	0.61				U L	1.7
PCB-94	Penta					U	0.63	3.1	2.5	3.7	L	0.25
PCB-95	Penta		120	100	140		0.15	340	280	410	L	0.25
PCB-96	Penta		1.4	1.2	1.7		0.14	5.4	4.5	6.6	L	0.23
PCB-97	Penta		17	15	20		0.13	48	40	58	L	0.21
PCB-98	Penta					UC	0.49				UC L	1.4
PCB-99	Penta		32	27	38		0.13	87	72	100	L	0.21
PCB-100	Penta		1.6	1.3	1.8		0.15	5	4.2	6.1	L	0.25

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SC-ENR+AC-CC-S010					LDW-BA-SC-ENR-CA-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-51	Tetra		84	38	200	L	0.84	7.5	6.1	9.4		0.26
PCB-52	Tetra		820	410	1700	C L	0.65	89	73	110	C	0.2
PCB-53	Tetra		280	130	670	L	0.84	22	18	28		0.26
PCB-54	Tetra		5.4	2.5	13	J L	0.79				U	0.47
PCB-55	Tetra		9.6	5.2	18	L	0.51	2.3	1.9	2.8		0.16
PCB-56	Tetra		200	110	380	C L	0.51	17	14	21	C	0.16
PCB-57	Tetra					U L	2.8				U	0.33
PCB-58	Tetra					U L	2.9				U	0.34
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		360	200	690	C L	0.51	38	32	46	C	0.16
PCB-62	Tetra					U L	3.8				U	0.45
PCB-63	Tetra		16	8.6	30	L	0.51	1.5	1.3	1.8	J	0.16
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U L	3.7				U	0.44
PCB-66	Tetra		340	190	650	C L	0.51	39	32	47	C	0.16
PCB-67	Tetra		16	8.8	31	L	0.51	1.3	1.1	1.6	J	0.16
PCB-68	Tetra		6.7	3.7	13	L	0.51	1	0.84	1.2	J	0.16
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U L	3.6				U	0.43
PCB-74	Tetra		160	89	310	L	0.51	16	14	20		0.16
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		12	7	21	L	0.39	1.8	1.5	2.1		0.12
PCB-78	Tetra	PRC										
PCB-79	Tetra		3.8	2.2	6.6	J L	0.39				U	0.62
PCB-80	Tetra					U L	1.9				U	0.23
PCB-81	Tetra		13	7.9	23	L	0.39	2	1.7	2.3		0.12
PCB-82	Penta		27	17	43	L	0.31	3.8	3.2	4.5		0.097
PCB-83	Penta		12	7.7	20	C L	0.31	2.2	1.8	2.6	C	0.097
PCB-84	Penta		150	92	250	C L	0.34	25	21	29	C	0.11
PCB-85	Penta		39	25	63	C L	0.31	6	5.1	7.1	C	0.097
PCB-86	Penta					U L	2.1				U	0.63
PCB-87	Penta		85	53	140	C L	0.31	13	11	16	C	0.097
PCB-88	Penta					UC L	1.3				UC	0.44
PCB-89	Penta		6.8	4.1	12	L	0.37	0.71	0.6	0.84	J	0.12
PCB-90	Penta		280	170	450	C L	0.31	47	40	55	C	0.097
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U L	1.3				U	0.46
PCB-94	Penta		3.1	1.9	5.3	J L	0.37				U	0.47
PCB-95	Penta		420	250	720	L	0.37	71	60	84		0.12
PCB-96	Penta		5.5	3.4	9	L	0.34	0.75	0.63	0.89	J	0.11
PCB-97	Penta		61	38	98	L	0.31	9.9	8.4	12		0.097
PCB-98	Penta					UC L	1				UC	0.37
PCB-99	Penta		110	68	170	L	0.31	19	16	23		0.097
PCB-100	Penta		5.6	3.4	9.6	L	0.37	1.3	1.1	1.6		0.12

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SC-ENR-CB-S010					LDW-BA-SC-ENR-CC-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-51	Tetra		11	9.8	13		0.32	6	5.5	6.7		0.24
PCB-52	Tetra		130	110	150	C	0.24	69	63	77	C	0.19
PCB-53	Tetra		32	28	37		0.32	19	17	21		0.24
PCB-54	Tetra					U	1.8				U	0.58
PCB-55	Tetra		1.8	1.5	2		0.19	1.2	1.1	1.3		0.15
PCB-56	Tetra		22	20	25	C	0.19	13	12	14	C	0.15
PCB-57	Tetra					U	1.4				U	0.43
PCB-58	Tetra					U	1.3				U	0.44
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		49	44	56	C	0.19	29	27	32	C	0.15
PCB-62	Tetra					U	1.7				U	0.56
PCB-63	Tetra		2.4	2.1	2.7		0.19	1.3	1.2	1.4	J	0.15
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	1.6				U	0.55
PCB-66	Tetra		50	44	57	C	0.19	31	28	34	C	0.15
PCB-67	Tetra		1.9	1.7	2.2		0.19	1.1	1	1.2	J	0.15
PCB-68	Tetra					U	1.2	1	0.92	1.1	J	0.15
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U	1.6				U	0.54
PCB-74	Tetra		21	19	24		0.19	12	11	14		0.15
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra					U	1.5	1.7	1.5	1.9		0.12
PCB-78	Tetra	PRC										
PCB-79	Tetra					U	1.3				U	1.1
PCB-80	Tetra					U	0.88				U	0.29
PCB-81	Tetra					U	1.2				U	1
PCB-82	Penta		5.5	4.9	6.2		0.12	3.6	3.3	3.9		0.097
PCB-83	Penta		2.4	2.1	2.7	C	0.12	1.7	1.6	1.9	C	0.097
PCB-84	Penta		30	27	34	C	0.13	21	19	23	C	0.11
PCB-85	Penta		6.4	5.8	7.2	C	0.12	5.1	4.6	5.6	C	0.097
PCB-86	Penta					U	0.62				U	0.48
PCB-87	Penta		17	15	18	C	0.12	12	11	13	C	0.097
PCB-88	Penta		19	17	21	C	0.14				UC	0.38
PCB-89	Penta		0.94	0.84	1.1	J	0.14	0.8	0.73	0.88	J	0.12
PCB-90	Penta		58	52	64	C	0.12	41	37	45	C	0.097
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U	1.2				U	0.4
PCB-94	Penta					U	1.2				U	0.41
PCB-95	Penta		88	78	99		0.14	57	52	63		0.12
PCB-96	Penta		1.2	1.1	1.4	J	0.13	0.63	0.58	0.69	J	0.11
PCB-97	Penta		12	11	14		0.12	8.7	7.9	9.5		0.097
PCB-98	Penta					UC	0.96				UC	0.32
PCB-99	Penta		23	21	26		0.12	17	15	18		0.097
PCB-100	Penta		2	1.8	2.3		0.14	1.1	0.98	1.2	J	0.12

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CA-S010					LDW-BA-IN-ENR+AC-CB-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-51	Tetra		120	100	150		0.3	78	60	110		0.32
PCB-52	Tetra		5800	4800	6900	C	0.23	2900	2200	3800	C	0.25
PCB-53	Tetra		450	370	540		0.3	320	240	430		0.32
PCB-54	Tetra		6.5	5.4	7.9		0.28	6.2	4.8	8.4		0.3
PCB-55	Tetra		51	43	61		0.19	24	19	31		0.2
PCB-56	Tetra		200	170	240	C	0.19	130	99	160	C	0.2
PCB-57	Tetra		67	57	80		0.19	27	21	34		0.2
PCB-58	Tetra		140	120	160		0.19	12	9.2	15		0.2
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		730	620	870	C	0.19	400	310	520	C	0.2
PCB-62	Tetra					U	1.5				U	0.81
PCB-63	Tetra		58	49	69		0.19	31	24	40		0.2
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	1.4				U	0.79
PCB-66	Tetra		660	560	790	C	0.19	380	300	500	C	0.2
PCB-67	Tetra					U	1.1	52	41	67		0.2
PCB-68	Tetra		27	23	32		0.19	13	10	17		0.2
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U	1.4				U	0.78
PCB-74	Tetra		280	240	340		0.19	160	130	210		0.2
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		25	21	29		0.15	13	10	17		0.16
PCB-78	Tetra	PRC										
PCB-79	Tetra		15	12	17		0.15	7.4	5.9	9.4		0.16
PCB-80	Tetra					U	0.82				U	0.43
PCB-81	Tetra		27	23	32		0.15	14	11	17		0.16
PCB-82	Penta		130	110	150		0.12	72	58	91		0.13
PCB-83	Penta		100	86	120	C	0.12	47	38	59	C	0.13
PCB-84	Penta		980	840	1100	C	0.13	530	420	660	C	0.14
PCB-85	Penta		170	150	200	C	0.12	98	79	120	C	0.13
PCB-86	Penta					U	1.1				U	1.1
PCB-87	Penta		530	450	610	C	0.12	280	220	350	C	0.13
PCB-88	Penta		330	280	390	C	0.14	130	100	160	C	0.15
PCB-89	Penta		29	25	34		0.14	17	14	22		0.15
PCB-90	Penta		1300	1100	1500	C	0.12	700	570	880	C	0.13
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U	1				U	0.72
PCB-94	Penta		14	12	16		0.14	7.7	6.2	9.8		0.15
PCB-95	Penta		2500	2100	2900		0.14	1300	1000	1600		0.15
PCB-96	Penta		20	17	24		0.13	12	9.4	15		0.14
PCB-97	Penta		310	260	360		0.12	170	140	210		0.13
PCB-98	Penta					UC	0.87				UC	0.57
PCB-99	Penta		530	460	620		0.12	300	240	380		0.13
PCB-100	Penta		14	12	16		0.14	6.9	5.5	8.8		0.15

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CC-S010					LDW-BA-IN-ENR-CA-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-51	Tetra		50	36	72		0.28	67	44	110		0.45
PCB-52	Tetra		2000	1500	2900	C	0.23	2600	1700	4000	C	0.37
PCB-53	Tetra		190	140	280		0.28	280	190	450		0.45
PCB-54	Tetra		3.3	2.4	4.8		0.27	4.8	3.2	7.7		0.43
PCB-55	Tetra		17	13	23		0.19	18	12	26		0.31
PCB-56	Tetra		98	73	130	C	0.19	160	110	240	C	0.31
PCB-57	Tetra		19	14	26		0.19	13	8.9	19		0.31
PCB-58	Tetra		11	8.1	15		0.19				U	2.5
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		330	250	450	C	0.19	550	380	820	C	0.31
PCB-62	Tetra					U	1.6				U	3.1
PCB-63	Tetra		21	15	28		0.19	24	16	35		0.31
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	1.5				U	3
PCB-66	Tetra		310	230	420	C	0.19	460	320	680	C	0.31
PCB-67	Tetra		38	28	52		0.19	40	27	59		0.31
PCB-68	Tetra		12	8.9	16		0.19	12	8.2	18		0.31
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U	1.5				U	3
PCB-74	Tetra		130	100	180		0.19	180	130	270		0.31
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		13	9.7	17		0.16	20	14	29		0.26
PCB-78	Tetra	PRC										
PCB-79	Tetra		5.7	4.4	7.6		0.16	6.7	4.7	9.6		0.26
PCB-80	Tetra					U	0.93				U	1.8
PCB-81	Tetra		16	12	22		0.16	14	10	20		0.26
PCB-82	Penta		73	56	97		0.14	100	76	150	L	0.22
PCB-83	Penta		46	35	61	C	0.14	65	47	91	C L	0.22
PCB-84	Penta		510	390	670	C	0.15	730	520	1000	C L	0.23
PCB-85	Penta		100	78	130	C	0.14	150	110	220	C L	0.22
PCB-86	Penta					U	0.95				U L	1.8
PCB-87	Penta		280	210	370	C	0.14	400	290	570	C L	0.22
PCB-88	Penta		160	120	210	C	0.16	220	150	310	C L	0.25
PCB-89	Penta		17	13	22		0.16	24	17	35	L	0.25
PCB-90	Penta		730	560	970	C	0.14	1200	830	1600	C L	0.22
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U	0.61				U L	1.2
PCB-94	Penta		6.9	5.2	9.1		0.16	11	7.5	15	L	0.25
PCB-95	Penta		1200	930	1600		0.16	1700	1200	2500	L	0.25
PCB-96	Penta		10	7.9	14		0.15	14	10	20	L	0.23
PCB-97	Penta		170	130	220		0.14	270	200	380	L	0.22
PCB-98	Penta					UC	0.48				UC L	0.92
PCB-99	Penta		310	240	400		0.14	460	340	650	L	0.22
PCB-100	Penta		7.1	5.4	9.4		0.16	9.6	6.9	14	L	0.25

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CB-S010					LDW-BA-IN-ENR-CC-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-51	Tetra		210	74	730	L	0.95	41	28	67		0.36
PCB-52	Tetra		7600	2900	22000	C L	0.76	1400	940	2200	C	0.28
PCB-53	Tetra		890	310	3000	L	0.95	170	110	280		0.36
PCB-54	Tetra		15	5.3	49	L	0.9	3.8	2.5	6		0.34
PCB-55	Tetra		77	32	200	L	0.6	10	6.9	16		0.23
PCB-56	Tetra		390	160	1000	C L	0.6	91	61	140	C	0.23
PCB-57	Tetra		64	27	170	L	0.6	10	6.8	16		0.23
PCB-58	Tetra					U L	2.7				U	1.5
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		1100	450	2800	C L	0.6	280	190	430	C	0.23
PCB-62	Tetra					U L	3.4				U	1.9
PCB-63	Tetra		72	30	190	L	0.6	14	9.5	22		0.23
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U L	3.3				U	1.9
PCB-66	Tetra		1100	470	3000	C L	0.6	260	170	400	C	0.23
PCB-67	Tetra		170	71	450	L	0.6	20	14	32		0.23
PCB-68	Tetra		35	14	90	L	0.6	9.2	6.2	14		0.23
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U L	3.3				U	1.9
PCB-74	Tetra		480	200	1200	L	0.6	97	65	150		0.23
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		41	18	98	L	0.48	12	7.5	19		0.18
PCB-78	Tetra	PRC										
PCB-79	Tetra					U L	2.8	3.6	2.3	5.9		0.18
PCB-80	Tetra					U L	1.8				U	1
PCB-81	Tetra		36	16	85	L	0.48	12	8	20		0.18
PCB-82	Penta		240	110	570	L	0.38	51	30	90		0.15
PCB-83	Penta		140	63	330	C L	0.38	33	20	58	C	0.15
PCB-84	Penta		1600	710	3700	C L	0.42	340	210	570	C	0.16
PCB-85	Penta		310	140	740	C L	0.38	72	43	130	C	0.15
PCB-86	Penta					U L	2.8				U	0.97
PCB-87	Penta		910	400	2100	C L	0.38	190	110	330	C	0.15
PCB-88	Penta		470	210	1100	C L	0.46	110	67	170	C	0.18
PCB-89	Penta		52	23	120	L	0.46	12	7.5	19		0.18
PCB-90	Penta		2200	970	5100	C L	0.38	540	320	940	C	0.15
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U L	1.9				U	0.84
PCB-94	Penta		25	11	58	L	0.46	5.6	3.6	9.2		0.18
PCB-95	Penta		3900	1700	9300	L	0.46	920	590	1500		0.18
PCB-96	Penta		35	15	81	L	0.42	7.6	4.7	13		0.16
PCB-97	Penta		530	240	1200	L	0.38	120	73	210		0.15
PCB-98	Penta					UC L	1.5				UC	0.67
PCB-99	Penta		910	410	2100	L	0.38	220	130	390		0.15
PCB-100	Penta		22	9.6	51	L	0.46	7.1	4.5	12		0.18

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010					LDW-BA-SC-ENR+AC-CB-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		3.1	2.7	3.7		0.15	8.1	6.7	9.8	L	0.25
PCB-104	Penta	PRC										
PCB-105	Penta		10	8.8	12		0.1	33	27	40	L	0.19
PCB-106	Penta		30	25	35	C	0.1	86	71	100	C L	0.19
PCB-107	Penta		2.3	2	2.8	C	0.1	8	6.6	9.6	C L	0.19
PCB-108	Penta					C107					C107	
PCB-109	Penta					U	0.77				U L	1
PCB-110	Penta		62	53	73		0.13	160	130	200	L	0.21
PCB-111	Penta		6.9	5.9	8.1	C	0.11	3.8	3.1	4.5	C L	0.2
PCB-112	Penta					C083					C083	
PCB-113	Penta					U	0.84				U L	1.1
PCB-114	Penta		1.1	0.9	1.2		0.1	2	1.6	2.4	L	0.19
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		2.2	1.9	2.6		0.13	6.1	5.1	7.3	L	0.21
PCB-120	Penta					U	0.63				U L	0.9
PCB-121	Penta	PRC										
PCB-122	Penta					U	0.33	2.9	2.4	3.5	L	0.19
PCB-123	Penta		0.57	0.49	0.66	J	0.1	1.9	1.6	2.3	L	0.19
PCB-124	Penta		1.6	1.4	1.9		0.1	4.4	3.7	5.3	L	0.19
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	0.39				U L	1
PCB-127	Penta					U L	0.31				U L	0.74
PCB-128	Hexa		2.8	2.4	3.4	C L	0.058	9.6	7.6	12	C L	0.12
PCB-129	Hexa		1.2	1	1.4	L	0.063	3.6	2.9	4.5	L	0.13
PCB-130	Hexa		1.5	1.3	1.8	L	0.063	5.9	4.8	7.4	L	0.13
PCB-131	Hexa		0.83	0.7	0.98	C L	0.068	3	2.4	3.7	C L	0.14
PCB-132	Hexa		8.7	7.4	10	C L	0.068	31	25	38	C L	0.14
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		1.9	1.6	2.2	C L	0.074	7	5.7	8.6	C L	0.15
PCB-135	Hexa		6.4	5.4	7.5	L	0.074	20	16	25	L	0.15
PCB-136	Hexa		8.2	6.9	9.7	L	0.064	27	22	34	L	0.13
PCB-137	Hexa		0.96	0.81	1.1	L	0.063	2.9	2.3	3.6	L	0.13
PCB-138	Hexa		22	19	27	C L	0.063	73	58	91	C L	0.13
PCB-139	Hexa		35	30	41	C L	0.074	110	92	140	C L	0.15
PCB-140	Hexa					U L	0.3				U L	1.1
PCB-141	Hexa		4.7	4	5.6	L	0.063	16	13	20	L	0.13
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		1.8	1.5	2.1	L	0.074	6.7	5.5	8.3	L	0.15
PCB-145	Hexa					U L	0.18				U L	0.55
PCB-146	Hexa		4.7	4	5.6	C L	0.063	16	13	20	C L	0.13
PCB-147	Hexa		0.69	0.59	0.82	J L	0.074	2.4	1.9	2.9	L	0.15
PCB-148	Hexa					U L	0.26	37	30	45	L	0.15
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.18				U L	0.53

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SC-ENR+AC-CC-S010					LDW-BA-SC-ENR-CA-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		9.2	5.5	16	L	0.37	1.7	1.5	2.1		0.12
PCB-104	Penta	PRC										
PCB-105	Penta		38	25	59	L	0.25	6.6	5.7	7.8		0.08
PCB-106	Penta		100	66	160	C L	0.25	18	16	22	C	0.08
PCB-107	Penta		7.6	4.9	12	C L	0.25	1.3	1.1	1.5	C	0.08
PCB-108	Penta					C107					C107	
PCB-109	Penta					U L	1.5				U	0.45
PCB-110	Penta		210	130	340	L	0.31	34	29	40		0.097
PCB-111	Penta		3.1	2	4.9	C L	0.28	0.55	0.47	0.65	C,J	0.088
PCB-112	Penta					C083					C083	
PCB-113	Penta					U L	1.6				U	0.49
PCB-114	Penta		3.2	2.1	5	L	0.25	0.5	0.42	0.59	J	0.08
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		7.5	4.7	12	L	0.31	1.4	1.2	1.6		0.097
PCB-120	Penta					U L	1.2				U	0.37
PCB-121	Penta	PRC										
PCB-122	Penta		1.6	1	2.4	J L	0.25				U	0.18
PCB-123	Penta		2	1.3	3.1	J L	0.25	0.33	0.28	0.39	J	0.08
PCB-124	Penta		5.6	3.7	8.8	L	0.25	0.7	0.6	0.83	J	0.08
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	0.77				U	0.23
PCB-127	Penta					U L	0.61				U	0.17
PCB-128	Hexa		8.2	5	14	C L	0.14	1.7	1.4	2	C	0.047
PCB-129	Hexa		3.3	2.1	5.4	L	0.15	0.69	0.58	0.83		0.05
PCB-130	Hexa		4.7	2.9	7.5	L	0.15	0.95	0.8	1.1		0.05
PCB-131	Hexa		2.1	1.4	3.4	C L	0.16	0.57	0.48	0.68	C	0.054
PCB-132	Hexa		27	17	42	C L	0.16	5.8	4.9	6.9	C	0.054
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		6.2	4	9.7	C L	0.18	1.1	0.95	1.3	C	0.058
PCB-135	Hexa		19	13	30	L	0.18	3.5	3	4.2		0.058
PCB-136	Hexa		24	15	39	L	0.15	5.4	4.6	6.5		0.051
PCB-137	Hexa		2.8	1.7	4.5	L	0.15	0.44	0.37	0.52	J	0.05
PCB-138	Hexa		69	43	110	C L	0.15	14	12	17	C	0.05
PCB-139	Hexa		110	69	170	C L	0.18	22	19	27	C	0.058
PCB-140	Hexa					U L	0.54				U	0.2
PCB-141	Hexa		15	9.2	24	L	0.15	2.8	2.3	3.3		0.05
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		6.1	3.9	9.6	L	0.18	1.3	1.1	1.5		0.058
PCB-145	Hexa					U L	0.43				U	0.14
PCB-146	Hexa		14	8.6	22	C L	0.15	3.3	2.8	4	C	0.05
PCB-147	Hexa		2.3	1.5	3.6	L	0.18	0.56	0.47	0.66	J	0.058
PCB-148	Hexa					U L	0.63				U	0.2
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.42				U	0.13

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CB-S010					LDW-BA-SC-ENR-CC-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		2.8	2.5	3.1		0.14	1.4	1.3	1.6		0.12
PCB-104	Penta	PRC										
PCB-105	Penta		8.2	7.3	9.1		0.094	5.1	4.6	5.6		0.082
PCB-106	Penta		22	20	24	C	0.094	15	14	17	C	0.082
PCB-107	Penta		2	1.8	2.3	C	0.094	1.2	1.1	1.3	C	0.082
PCB-108	Penta					C107					C107	
PCB-109	Penta					U	0.51				U	0.34
PCB-110	Penta		41	37	46		0.12	31	29	34		0.097
PCB-111	Penta		0.8	0.72	0.9	C,J	0.1	0.79	0.72	0.87	C,J	0.089
PCB-112	Penta					C083					C083	
PCB-113	Penta					U	0.54				U	0.37
PCB-114	Penta					U	0.58	0.46	0.42	0.51	J	0.082
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		1.9	1.7	2.2		0.12	1.4	1.2	1.5		0.097
PCB-120	Penta					U	0.41				U	0.29
PCB-121	Penta	PRC										
PCB-122	Penta					U	0.58				U	0.19
PCB-123	Penta					U	0.49	0.45	0.41	0.49	J	0.082
PCB-124	Penta		1.1	0.95	1.2		0.094	0.74	0.67	0.81	J	0.082
PCB-125	Penta					C087					C087	
PCB-126	Penta					U	0.69				U	0.24
PCB-127	Penta					U	0.52				U	0.19
PCB-128	Hexa		2.1	1.9	2.4	C L	0.054	1.7	1.5	1.9	C	0.052
PCB-129	Hexa		0.83	0.74	0.94	L	0.058	0.69	0.62	0.76		0.056
PCB-130	Hexa		1.3	1.1	1.4	L	0.058	1.2	1.1	1.3		0.056
PCB-131	Hexa		0.67	0.6	0.76	C L	0.063	0.5	0.45	0.55	C,J	0.059
PCB-132	Hexa		6.6	5.9	7.4	C L	0.063	5.4	4.9	6	C	0.059
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		1.6	1.4	1.7	C L	0.068	1	0.93	1.1	C	0.063
PCB-135	Hexa		4.7	4.2	5.3	L	0.068	3.2	2.9	3.6		0.063
PCB-136	Hexa		6	5.4	6.8	L	0.059	4.7	4.2	5.2		0.056
PCB-137	Hexa		0.74	0.66	0.83	L	0.058	0.51	0.46	0.57	J	0.056
PCB-138	Hexa		17	15	19	C L	0.058	13	12	15	C	0.056
PCB-139	Hexa		25	23	28	C L	0.068	19	17	21	C	0.063
PCB-140	Hexa					U L	0.44				U	0.2
PCB-141	Hexa		3.2	2.8	3.6	L	0.058	2.7	2.5	3		0.056
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		3.7	3.3	4.1	L	0.068	1.1	1	1.2		0.063
PCB-145	Hexa					U L	0.19				U	0.15
PCB-146	Hexa		4	3.5	4.5	C L	0.058	2.9	2.7	3.3	C	0.056
PCB-147	Hexa		0.88	0.79	0.99	L	0.068	0.4	0.37	0.45	J	0.063
PCB-148	Hexa					U L	0.28				U	0.22
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.18				U	0.15

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CA-S010					LDW-BA-IN-ENR+AC-CB-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		39	34	46		0.14	18	14	22		0.15
PCB-104	Penta	PRC										
PCB-105	Penta		140	120	170		0.1	64	52	80		0.11
PCB-106	Penta		480	420	570	C	0.1	230	180	280	C	0.11
PCB-107	Penta		42	36	49	C	0.1	21	17	26	C	0.11
PCB-108	Penta					C107					C107	
PCB-109	Penta					U	0.91				U	0.81
PCB-110	Penta		1300	1100	1500		0.12	720	580	900		0.13
PCB-111	Penta		17	15	20	C	0.11	5.1	4.1	6.4	C	0.12
PCB-112	Penta					C083					C083	
PCB-113	Penta					U	0.97				U	0.88
PCB-114	Penta		14	12	16		0.1	4.8	3.9	6		0.11
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		52	44	60		0.12	26	21	32		0.13
PCB-120	Penta					U	0.76				U	0.68
PCB-121	Penta	PRC										
PCB-122	Penta		8	6.9	9.3		0.1	3.5	2.9	4.4		0.11
PCB-123	Penta		10	9	12		0.1	6	4.8	7.4		0.11
PCB-124	Penta		23	20	27		0.1	11	8.8	14		0.11
PCB-125	Penta					C087					C087	
PCB-126	Penta					U	0.79				U	0.45
PCB-127	Penta					U	0.58				U	0.34
PCB-128	Hexa		51	43	60	C L	0.063	22	17	28	C L	0.066
PCB-129	Hexa		19	16	23	L	0.067	9	7.1	11	L	0.071
PCB-130	Hexa		31	26	37	L	0.067	14	11	17	L	0.071
PCB-131	Hexa		14	12	16	C	0.071	7.2	5.7	9.1	C L	0.076
PCB-132	Hexa		150	130	170	C	0.071	61	49	77	C L	0.076
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		34	29	40	C	0.076	16	12	20	C L	0.081
PCB-135	Hexa		76	65	89		0.076	38	30	47	L	0.081
PCB-136	Hexa		93	79	110	L	0.068	48	38	61	L	0.072
PCB-137	Hexa		17	15	20	L	0.067	9	7.1	11	L	0.071
PCB-138	Hexa		280	230	330	C L	0.067	130	100	160	C L	0.071
PCB-139	Hexa		360	300	420	C	0.076	170	140	210	C L	0.081
PCB-140	Hexa		4.2	3.6	5		0.076	3	2.4	3.8	L	0.081
PCB-141	Hexa		53	45	63	L	0.067	25	19	31	L	0.071
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		21	18	25		0.076	8.6	6.9	11	L	0.081
PCB-145	Hexa		0.44	0.37	0.52	J L	0.068				U L	0.24
PCB-146	Hexa		43	36	50	C L	0.067	20	16	26	C L	0.071
PCB-147	Hexa		14	12	17		0.076	5.6	4.5	7	L	0.081
PCB-148	Hexa					U	0.31				U L	0.35
PCB-149	Hexa					C139					C139	
PCB-150	Hexa		1.2	1.1	1.5	L	0.068	0.69	0.55	0.88	J L	0.072

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CC-S010					LDW-BA-IN-ENR-CA-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		17	13	23		0.16	21	15	30	L	0.25
PCB-104	Penta	PRC										
PCB-105	Penta		75	57	99	L	0.12	120	88	170	L	0.19
PCB-106	Penta		240	180	310	C L	0.12	370	270	520	C L	0.19
PCB-107	Penta		21	16	27	C L	0.12	30	22	42	C L	0.19
PCB-108	Penta					C107					C107	
PCB-109	Penta					U	0.68				U L	1.3
PCB-110	Penta		710	550	940		0.14	1100	770	1500	L	0.22
PCB-111	Penta		8.4	6.4	11	C L	0.13	12	8.4	16	C L	0.2
PCB-112	Penta					C083					C083	
PCB-113	Penta					U	0.74				U L	1.4
PCB-114	Penta		5.5	4.2	7.2	L	0.12	8.8	6.4	12	L	0.19
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		24	19	32		0.14	35	25	49	L	0.22
PCB-120	Penta					U L	0.6				U L	1.1
PCB-121	Penta	PRC										
PCB-122	Penta		3.3	2.5	4.4	L	0.12	5.4	3.9	7.4	L	0.19
PCB-123	Penta		4.9	3.7	6.4	L	0.12	6.1	4.5	8.5	L	0.19
PCB-124	Penta		11	8.4	15	L	0.12	17	13	24	L	0.19
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	0.56				U L	1.2
PCB-127	Penta					U L	0.42				U L	0.83
PCB-128	Hexa		28	20	40	C L	0.088	39	28	56	C L	0.13
PCB-129	Hexa		11	8.2	16	L	0.092	17	12	24	L	0.14
PCB-130	Hexa		15	10	20	L	0.092	26	18	37	L	0.14
PCB-131	Hexa		7.6	5.6	11	C L	0.096	9.6	6.9	14	C L	0.14
PCB-132	Hexa		77	56	110	C L	0.096	110	80	160	C L	0.14
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		19	14	26	C L	0.1	27	19	37	C L	0.15
PCB-135	Hexa		48	35	65	L	0.1	62	44	87	L	0.15
PCB-136	Hexa		60	43	83	L	0.093	82	58	120	L	0.14
PCB-137	Hexa		12	8.4	16	L	0.092	14	10	20	L	0.14
PCB-138	Hexa		160	120	230	C L	0.092	240	170	340	C L	0.14
PCB-139	Hexa		210	150	280	C L	0.1	300	210	420	C L	0.15
PCB-140	Hexa		3.4	2.5	4.7	L	0.1	4.6	3.3	6.5	L	0.15
PCB-141	Hexa		33	24	46	L	0.092	46	32	65	L	0.14
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		9.9	7.3	13	L	0.1	17	13	24	L	0.15
PCB-145	Hexa					U L	0.29				U L	0.42
PCB-146	Hexa		27	19	38	C L	0.092	38	27	54	C L	0.14
PCB-147	Hexa		7.4	5.5	10	L	0.1	10	7.5	15	L	0.15
PCB-148	Hexa					U L	0.4	110	78	150	L	0.15
PCB-149	Hexa					C139					C139	
PCB-150	Hexa		0.97	0.7	1.4	L	0.093	1.2	0.88	1.8	J L	0.14

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-IN-ENR-CB-S010					LDW-BA-IN-ENR-CC-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		49	22	120	L	0.46	14	8.8	23		0.18
PCB-104	Penta	PRC										
PCB-105	Penta		230	100	560	L	0.32	56	31	110		0.13
PCB-106	Penta		690	300	1700	C L	0.32	180	96	340	C	0.13
PCB-107	Penta		62	27	150	C L	0.32	17	9.6	34	C	0.13
PCB-108	Penta					C107					C107	
PCB-109	Penta					U L	2				U	0.7
PCB-110	Penta		2300	1000	5400	L	0.38	490	290	860		0.15
PCB-111	Penta		23	10	55	C L	0.35	3.8	2.2	7	C	0.14
PCB-112	Penta					C083					C083	
PCB-113	Penta					U L	2.2	220	130	390		0.15
PCB-114	Penta		14	5.9	33	L	0.32	5	2.8	9.7		0.13
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		70	31	160	L	0.38	17	10	30		0.15
PCB-120	Penta					U L	1.6				U	0.59
PCB-121	Penta	PRC										
PCB-122	Penta		7.7	3.3	18	L	0.32	2.7	1.5	5.2		0.13
PCB-123	Penta		10	4.3	24	L	0.32	3.2	1.8	6.2		0.13
PCB-124	Penta		34	14	81	L	0.32	8.1	4.5	16		0.13
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	1.7				U L	0.51
PCB-127	Penta					U L	1.3				U L	0.4
PCB-128	Hexa		74	25	230	C L	0.19	20	8.2	53	C L	0.079
PCB-129	Hexa		29	10	87	L	0.2	8.5	3.6	21	L	0.085
PCB-130	Hexa		42	15	120	L	0.2	11	4.8	29	L	0.085
PCB-131	Hexa		17	6.2	49	C L	0.22	5.6	2.5	14	C L	0.09
PCB-132	Hexa		200	73	570	C L	0.22	56	25	130	C L	0.09
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		51	19	140	C L	0.23	12	5.6	28	C L	0.096
PCB-135	Hexa		110	42	300	L	0.23	34	16	78	L	0.096
PCB-136	Hexa		150	52	440	L	0.21	42	18	110	L	0.086
PCB-137	Hexa		30	10	89	L	0.2	8.9	3.8	23	L	0.085
PCB-138	Hexa		420	150	1200	C L	0.2	120	52	310	C L	0.085
PCB-139	Hexa		530	200	1500	C L	0.23	160	72	360	C L	0.096
PCB-140	Hexa		7.2	2.8	20	L	0.23				U L	0.53
PCB-141	Hexa		81	29	240	L	0.2	23	10	59	L	0.085
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		34	13	93	L	0.23	8.2	3.8	19	L	0.096
PCB-145	Hexa					U L	0.64				U L	0.34
PCB-146	Hexa		63	22	190	C L	0.2	20	8.6	51	C L	0.085
PCB-147	Hexa		18	6.7	48	L	0.23	5.2	2.4	12	L	0.096
PCB-148	Hexa					U L	0.92	57	26	130	L	0.096
PCB-149	Hexa					C139					C139	
PCB-150	Hexa		2.5	0.9	7.5	L	0.21				U L	0.34

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010					LDW-BA-SC-ENR+AC-CB-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-151	Hexa		11	9.6	13	L	0.074	36	29	45	L	0.15
PCB-152	Hexa					U L	0.18				U L	0.54
PCB-153	Hexa		28	24	33	L	0.063	89	71	110	L	0.13
PCB-154	Hexa		1.6	1.4	1.9	L	0.074	4.2	3.4	5.1	L	0.15
PCB-155	Hexa	PRC										
PCB-156	Hexa		1.2	0.99	1.4	L	0.054	4.8	3.8	6.2	L	0.12
PCB-157	Hexa					U L	0.19	1.3	0.99	1.6	L	0.12
PCB-158	Hexa		2.5	2.2	3	C L	0.063	9.1	7.3	11	C L	0.13
PCB-159	Hexa		0.38	0.31	0.45	J L	0.054				U L	0.7
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	
PCB-166	Hexa					U L	0.23				U L	0.84
PCB-167	Hexa		0.58	0.49	0.7	L	0.054	2.2	1.7	2.8	L	0.12
PCB-168	Hexa					U L	0.21				U L	0.79
PCB-169	Hexa					U L	0.16				U L	0.76
PCB-170	Hepta		2.3	1.9	2.9	L	0.033	8.5	6.1	12	L	0.083
PCB-171	Hepta		0.95	0.77	1.2	L	0.038	3.8	2.8	5.1	L	0.091
PCB-172	Hepta		0.16	0.13	0.2	L	0.033	1.8	1.3	2.5	L	0.083
PCB-173	Hepta					U L	0.13				U L	0.69
PCB-174	Hepta		3.3	2.6	4	L	0.038	13	9.9	18	L	0.091
PCB-175	Hepta					U L	0.11	0.56	0.42	0.76	J L	0.091
PCB-176	Hepta		0.46	0.36	0.58	L	0.032	2.6	1.8	3.6	L	0.081
PCB-177	Hepta		2.3	1.8	2.8	L	0.038	8.1	6	11	L	0.091
PCB-178	Hepta		0.88	0.71	1.1	L	0.038	3.7	2.7	5	L	0.091
PCB-179	Hepta		1.7	1.4	2.2	L	0.032	7.4	5.3	10	L	0.081
PCB-180	Hepta		5	3.9	6.3	L	0.033	18	13	24	L	0.083
PCB-181	Hepta					U L	0.12				U L	0.62
PCB-182	Hepta		4.9	3.9	6	C L	0.038	18	13	24	C L	0.091
PCB-183	Hepta		2.1	1.7	2.7	L	0.038	8.1	6	11	L	0.091
PCB-184	Hepta	PRC										
PCB-185	Hepta		0.43	0.35	0.53	L	0.038	1.7	1.3	2.4	L	0.091
PCB-186	Hepta					U L	0.069				U L	0.4
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.072	1	0.72	1.4	L	0.081
PCB-189	Hepta					U L	0.063				U L	0.41
PCB-190	Hepta		0.57	0.45	0.72	L	0.033	2.2	1.6	3	L	0.083
PCB-191	Hepta					U L	0.082				U L	0.45
PCB-192	Hepta	PRC										
PCB-193	Hepta		0.44	0.35	0.55	L	0.033	1.7	1.2	2.3	L	0.083
PCB-194	Octa		0.32	0.23	0.45	L	0.017	1.7	1.1	2.7	L	0.052
PCB-195	Octa		0.18	0.13	0.24	J L	0.019	1	0.65	1.5	L	0.057
PCB-196	Octa		0.57	0.42	0.77	C L	0.019	2.8	1.8	4.3	C L	0.057
PCB-197	Octa		0.037	0.026	0.051	L	0.016	0.25	0.16	0.41	L	0.05
PCB-198	Octa					U L	0.084				U L	0.31
PCB-199	Octa		0.53	0.38	0.74	L	0.016	2.2	1.4	3.4	L	0.05
PCB-200	Octa					U L	0.049	0.54	0.34	0.86	L	0.05

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CC-S010					LDW-BA-SC-ENR-CA-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-151	Hexa		35	22	55	L	0.18	6.8	5.8	8.1		0.058
PCB-152	Hexa					U L	0.43				U	0.14
PCB-153	Hexa		86	54	140	L	0.15	18	15	21		0.05
PCB-154	Hexa		4.8	3.1	7.6	L	0.18	1.3	1.1	1.6		0.058
PCB-155	Hexa	PRC										
PCB-156	Hexa		4	2.4	6.9	L	0.13	0.74	0.61	0.9	L	0.043
PCB-157	Hexa		0.83	0.49	1.4	J L	0.13				U L	0.13
PCB-158	Hexa		8.1	5	13	C L	0.15	1.8	1.5	2.2	C	0.05
PCB-159	Hexa		0.94	0.56	1.6	J L	0.13	0.23	0.19	0.28	J L	0.043
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	
PCB-166	Hexa					U L	0.4				U	0.15
PCB-167	Hexa		2.1	1.2	3.5	L	0.13	0.38	0.31	0.46	J L	0.043
PCB-168	Hexa					U L	0.38				U	0.14
PCB-169	Hexa					U L	0.31				U L	0.12
PCB-170	Hepta		6.3	3	13	L	0.076	1.6	1.2	2	L	0.027
PCB-171	Hepta		3	1.5	5.9	L	0.088	0.57	0.45	0.72	L	0.031
PCB-172	Hepta		0.86	0.41	1.8	L	0.076	0.058	0.046	0.075	L	0.027
PCB-173	Hepta					U L	0.29				U L	0.094
PCB-174	Hepta		10	5.3	21	L	0.088	2.1	1.7	2.6	L	0.031
PCB-175	Hepta					U L	0.25				U L	0.08
PCB-176	Hepta		1.7	0.81	3.7	L	0.074	0.32	0.25	0.41	L	0.026
PCB-177	Hepta		7.3	3.8	15	L	0.088	1.5	1.2	1.8	L	0.031
PCB-178	Hepta		2.9	1.5	5.7	L	0.088	0.51	0.41	0.64	L	0.031
PCB-179	Hepta		5.4	2.5	12	L	0.074	1.2	0.93	1.5	L	0.026
PCB-180	Hepta		14	6.8	30	L	0.076	3.4	2.7	4.4	L	0.027
PCB-181	Hepta					U L	0.27				U L	0.085
PCB-182	Hepta		14	7.3	28	C L	0.088	3.2	2.5	4	C L	0.031
PCB-183	Hepta		6.8	3.5	13	L	0.088	1.5	1.2	1.9	L	0.031
PCB-184	Hepta	PRC										
PCB-185	Hepta		1.4	0.71	2.7	L	0.088	0.33	0.26	0.41	L	0.031
PCB-186	Hepta					U L	0.15				U L	0.05
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.15				U L	0.047
PCB-189	Hepta					U L	0.14				U L	0.052
PCB-190	Hepta		1.5	0.73	3.2	L	0.076	0.36	0.28	0.47	L	0.027
PCB-191	Hepta					U L	0.18				U L	0.059
PCB-192	Hepta	PRC										
PCB-193	Hepta		1.3	0.62	2.7	L	0.076	0.26	0.21	0.34	J L	0.027
PCB-194	Octa		0.89	0.3	2.7	L	0.039	0.24	0.17	0.35	L	0.015
PCB-195	Octa		0.55	0.2	1.5	L	0.044	0.14	0.1	0.19	J L	0.017
PCB-196	Octa		1.8	0.66	5.2	C L	0.044	0.42	0.3	0.58	C L	0.017
PCB-197	Octa		0.053	0.017	0.16	L	0.036	0.025	0.018	0.036	L	0.014
PCB-198	Octa					U L	0.19				U L	0.093
PCB-199	Octa		1.4	0.47	4.5	L	0.036	0.35	0.25	0.5	L	0.014
PCB-200	Octa		0.35	0.11	1.1	J L	0.036				U L	0.055

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SC-ENR-CB-S010					LDW-BA-SC-ENR-CC-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-151	Hexa		8.3	7.4	9.3	L	0.068	5.7	5.2	6.3		0.063
PCB-152	Hexa					U L	0.19				U	0.15
PCB-153	Hexa		21	19	24	L	0.058	16	15	18		0.056
PCB-154	Hexa		1.6	1.5	1.8	L	0.068	1.1	1	1.2		0.063
PCB-155	Hexa	PRC										
PCB-156	Hexa		0.94	0.83	1.1	L	0.049	0.88	0.79	0.98		0.049
PCB-157	Hexa					U L	0.26				U	0.14
PCB-158	Hexa		2.1	1.9	2.4	C L	0.058	1.6	1.5	1.8	C	0.056
PCB-159	Hexa					U L	0.26				U	0.13
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	
PCB-166	Hexa					U L	0.32				U	0.16
PCB-167	Hexa					U L	0.28	0.41	0.37	0.46	J	0.049
PCB-168	Hexa					U L	0.31				U	0.15
PCB-169	Hexa					U L	0.26				U L	0.13
PCB-170	Hepta		1.7	1.4	2	L	0.03	1.6	1.4	1.9	L	0.033
PCB-171	Hepta		0.88	0.76	1	L	0.035	0.67	0.58	0.76	L	0.037
PCB-172	Hepta		0.34	0.29	0.4	L	0.03	0.15	0.13	0.17	L	0.033
PCB-173	Hepta					U L	0.26				U L	0.13
PCB-174	Hepta		2.6	2.2	3	L	0.035	2.3	2	2.6	L	0.037
PCB-175	Hepta					U L	0.23				U L	0.11
PCB-176	Hepta		0.5	0.42	0.59	L	0.03	0.4	0.34	0.46	L	0.033
PCB-177	Hepta		1.8	1.5	2.1	L	0.035	1.6	1.4	1.8	L	0.037
PCB-178	Hepta		0.83	0.72	0.97	L	0.035	0.5	0.44	0.57	L	0.037
PCB-179	Hepta		1.5	1.3	1.8	L	0.03	1.2	1	1.4	L	0.033
PCB-180	Hepta		4	3.4	4.7	L	0.03	3.7	3.2	4.2	L	0.033
PCB-181	Hepta					U L	0.23				U L	0.12
PCB-182	Hepta		3.8	3.3	4.5	C L	0.035	3.3	2.9	3.8	C L	0.037
PCB-183	Hepta		1.8	1.6	2.1	L	0.035	1.5	1.3	1.8	L	0.037
PCB-184	Hepta	PRC										
PCB-185	Hepta					U L	0.23	0.28	0.25	0.32	J L	0.037
PCB-186	Hepta					U L	0.15				U L	0.072
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.15				U L	0.068
PCB-189	Hepta					U L	0.13				U L	0.075
PCB-190	Hepta		0.4	0.34	0.47	L	0.03	0.39	0.33	0.45	L	0.033
PCB-191	Hepta					U L	0.16				U L	0.085
PCB-192	Hepta	PRC										
PCB-193	Hepta		0.43	0.37	0.51	L	0.03	0.3	0.26	0.35	J L	0.033
PCB-194	Octa		0.29	0.23	0.37	L	0.016	0.26	0.21	0.32	L	0.021
PCB-195	Octa		0.14	0.11	0.17	J L	0.018	0.18	0.15	0.22	J L	0.022
PCB-196	Octa		0.52	0.42	0.64	C L	0.018	0.5	0.41	0.6	C L	0.022
PCB-197	Octa		0.059	0.046	0.074	L	0.015	0.069	0.056	0.086	L	0.02
PCB-198	Octa					U L	0.11				U L	0.11
PCB-199	Octa		0.4	0.32	0.51	L	0.015	0.48	0.39	0.59	L	0.02
PCB-200	Octa					U L	0.06				U L	0.067

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CA-S010					LDW-BA-IN-ENR+AC-CB-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-151	Hexa		91	78	110		0.076	45	36	56	L	0.081
PCB-152	Hexa		0.94	0.8	1.1	L	0.068	0.6	0.47	0.76	J L	0.072
PCB-153	Hexa		250	210	290	L	0.067	120	97	160	L	0.071
PCB-154	Hexa		8	6.8	9.3		0.076	4.5	3.6	5.6	L	0.081
PCB-155	Hexa	PRC										
PCB-156	Hexa		19	16	23	L	0.059	8.1	6.3	10	L	0.062
PCB-157	Hexa		4.5	3.8	5.4	L	0.059	2	1.5	2.6	L	0.062
PCB-158	Hexa		39	33	46	C L	0.067	17	14	22	C L	0.071
PCB-159	Hexa		1.2	0.98	1.4	L	0.059	0.6	0.46	0.77	J L	0.062
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	
PCB-166	Hexa		1.8	1.5	2.1	L	0.067	0.61	0.48	0.77	J L	0.071
PCB-167	Hexa		9	7.5	11	L	0.059	4	3.1	5.2	L	0.062
PCB-168	Hexa					U L	0.35				U L	0.43
PCB-169	Hexa					U L	0.31				U L	0.36
PCB-170	Hepta		15	12	18	L	0.039	6.4	4.6	8.9	L	0.041
PCB-171	Hepta		5.9	4.8	7.3	L	0.044	2.7	2	3.7	L	0.046
PCB-172	Hepta		2.5	2	3.2	L	0.039	1.1	0.82	1.6	L	0.041
PCB-173	Hepta		0.64	0.52	0.8	L	0.044				U L	0.28
PCB-174	Hepta		19	15	23	L	0.044	9.6	7.1	13	L	0.046
PCB-175	Hepta		0.94	0.76	1.2	L	0.044	0.46	0.34	0.62	L	0.046
PCB-176	Hepta		3	2.4	3.8	L	0.038	1.6	1.1	2.2	L	0.04
PCB-177	Hepta		13	10	16	L	0.044	6	4.5	8.2	L	0.046
PCB-178	Hepta		4.8	3.9	6	L	0.044	2.5	1.8	3.4	L	0.046
PCB-179	Hepta		9.9	7.8	13	L	0.038	4.8	3.4	6.7	L	0.04
PCB-180	Hepta		25	20	31	L	0.039	13	9.1	18	L	0.041
PCB-181	Hepta					U L	0.2				U L	0.25
PCB-182	Hepta		22	18	28	C L	0.044	12	8.6	16	C L	0.046
PCB-183	Hepta		11	8.8	13	L	0.044	5.5	4.1	7.6	L	0.046
PCB-184	Hepta	PRC										
PCB-185	Hepta		1.8	1.5	2.3	L	0.044	1	0.76	1.4	L	0.046
PCB-186	Hepta					U L	0.13				U L	0.15
PCB-187	Hepta					C182					C182	
PCB-188	Hepta		0.26	0.21	0.33	J L	0.038				U L	0.15
PCB-189	Hepta		0.57	0.45	0.74	L	0.035				U L	0.15
PCB-190	Hepta		2.8	2.2	3.6	L	0.039	1.4	0.98	1.9	L	0.041
PCB-191	Hepta		0.76	0.6	0.96	L	0.039	0.42	0.31	0.59	L	0.041
PCB-192	Hepta	PRC										
PCB-193	Hepta		1.8	1.5	2.3	L	0.039	1	0.75	1.5	L	0.041
PCB-194	Octa		1.6	1.2	2.2	L	0.023	0.74	0.47	1.2	L	0.024
PCB-195	Octa		0.78	0.58	1.1	L	0.025	0.36	0.23	0.56	L	0.026
PCB-196	Octa		2.5	1.9	3.4	C L	0.025	1.4	0.9	2.1	C L	0.026
PCB-197	Octa		0.16	0.11	0.22	L	0.022	0.029	0.018	0.047	L	0.022
PCB-198	Octa					U L	0.092				U L	0.16
PCB-199	Octa		2.1	1.5	2.9	L	0.022	1.3	0.8	2.1	L	0.022
PCB-200	Octa		0.34	0.24	0.47	L	0.022				U L	0.098

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CC-S010					LDW-BA-IN-ENR-CA-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-151	Hexa		59	44	81	L	0.1	81	58	110	L	0.15
PCB-152	Hexa		0.71	0.52	1	J L	0.093	0.9	0.64	1.3	J L	0.14
PCB-153	Hexa		160	110	220	L	0.092	230	160	320	L	0.14
PCB-154	Hexa		5.4	4	7.3	L	0.1	7.3	5.3	10	L	0.15
PCB-155	Hexa	PRC										
PCB-156	Hexa		11	7.7	16	L	0.083	16	11	23	L	0.12
PCB-157	Hexa		2.7	1.9	3.9	L	0.083	4.1	2.8	5.9	L	0.12
PCB-158	Hexa		23	17	32	C L	0.092	34	24	49	C L	0.14
PCB-159	Hexa		0.75	0.53	1.1	J L	0.083	1.1	0.75	1.6	J L	0.12
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	
PCB-166	Hexa		0.85	0.61	1.2	J L	0.092	1.5	1.1	2.2	L	0.14
PCB-167	Hexa		5.3	3.7	7.6	L	0.083	6.9	4.8	10	L	0.12
PCB-168	Hexa					U L	0.44				U L	1.1
PCB-169	Hexa					U L	0.39				U L	1
PCB-170	Hepta		11	6.6	18	L	0.063	14	8.9	23	L	0.089
PCB-171	Hepta		4.5	2.9	7.2	L	0.068	5.9	3.8	9.2	L	0.097
PCB-172	Hepta		1.9	1.1	3.1	L	0.063	2.2	1.4	3.6	L	0.089
PCB-173	Hepta					U L	0.24				U L	0.53
PCB-174	Hepta		15	9.6	24	L	0.068	18	12	29	L	0.097
PCB-175	Hepta		0.83	0.53	1.3	L	0.068	0.96	0.62	1.5	J L	0.097
PCB-176	Hepta		2.3	1.4	3.8	L	0.062	3.5	2.2	5.7	L	0.087
PCB-177	Hepta		11	6.8	17	L	0.068	13	8.3	20	L	0.097
PCB-178	Hepta		4.3	2.7	6.8	L	0.068	4.9	3.1	7.6	L	0.097
PCB-179	Hepta		8.4	5.1	14	L	0.062	11	6.6	17	L	0.087
PCB-180	Hepta		21	13	35	L	0.063	28	17	44	L	0.089
PCB-181	Hepta					U L	0.21				U L	0.48
PCB-182	Hepta		19	12	31	C L	0.068	25	16	39	C L	0.097
PCB-183	Hepta		8.7	5.5	14	L	0.068	11	7.3	18	L	0.097
PCB-184	Hepta	PRC										
PCB-185	Hepta		1.8	1.1	2.8	L	0.068	1.8	1.1	2.7	L	0.097
PCB-186	Hepta					U L	0.13				U L	0.29
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.14	0.49	0.3	0.79	J L	0.087
PCB-189	Hepta		0.4	0.24	0.69	J L	0.058				U L	0.32
PCB-190	Hepta		2.4	1.4	3.9	L	0.063	2.8	1.7	4.5	L	0.089
PCB-191	Hepta		0.66	0.4	1.1	L	0.063				U L	0.34
PCB-192	Hepta	PRC										
PCB-193	Hepta		1.7	1	2.8	L	0.063	2.2	1.4	3.5	L	0.089
PCB-194	Octa		1.5	0.77	3	L	0.043	1.7	0.87	3.2	L	0.058
PCB-195	Octa		0.85	0.44	1.6	L	0.046	1	0.56	1.9	L	0.063
PCB-196	Octa		2.7	1.4	5.2	C L	0.046	3.8	2.1	7.1	C L	0.063
PCB-197	Octa		0.35	0.17	0.71	L	0.042	0.28	0.14	0.55	L	0.056
PCB-198	Octa					U L	0.25				U L	0.47
PCB-199	Octa		2.7	1.3	5.4	L	0.042	3	1.5	5.9	L	0.056
PCB-200	Octa		0.37	0.18	0.76	J L	0.042				U L	0.29

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CB-S010					LDW-BA-IN-ENR-CC-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-151	Hexa		150	55	400	L	0.23	45	21	100	L	0.096
PCB-152	Hexa		1.6	0.58	4.8	J L	0.21				U L	0.35
PCB-153	Hexa		390	140	1200	L	0.2	120	53	310	L	0.085
PCB-154	Hexa		13	5.1	37	L	0.23	4.6	2.2	11	L	0.096
PCB-155	Hexa	PRC										
PCB-156	Hexa		29	9.3	97	L	0.18	7.8	3	22	L	0.074
PCB-157	Hexa		8.2	2.6	27	L	0.18	2.2	0.86	6.2	L	0.074
PCB-158	Hexa		60	21	180	C L	0.2	18	7.5	44	C L	0.085
PCB-159	Hexa		2	0.64	6.7	L	0.18	0.75	0.29	2.1	L	0.074
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	
PCB-166	Hexa		2.4	0.83	7.1	L	0.2	0.68	0.29	1.7	J L	0.085
PCB-167	Hexa		14	4.4	46	L	0.18	4.2	1.6	12	L	0.074
PCB-168	Hexa					U L	1.5				U L	0.39
PCB-169	Hexa					U L	1.2				U L	0.32
PCB-170	Hepta		23	5	110	L	0.11	7.3	2.1	28	L	0.05
PCB-171	Hepta		8.9	2.2	39	L	0.13	3.6	1.1	13	L	0.056
PCB-172	Hepta		4.6	1	22	L	0.11	2.3	0.65	8.8	L	0.05
PCB-173	Hepta		1.3	0.31	5.5	L	0.13				U L	0.4
PCB-174	Hepta		31	7.5	130	L	0.13	11	3.4	39	L	0.056
PCB-175	Hepta		1.3	0.31	5.5	L	0.13	0.52	0.16	1.9	J L	0.056
PCB-176	Hepta		4.7	1	24	L	0.11	1.9	0.54	7.5	L	0.049
PCB-177	Hepta		20	4.9	87	L	0.13	7.7	2.4	27	L	0.056
PCB-178	Hepta		6.9	1.7	30	L	0.13	2.8	0.89	10	L	0.056
PCB-179	Hepta		16	3.5	81	L	0.11	5.9	1.7	23	L	0.049
PCB-180	Hepta		40	8.8	200	L	0.11	15	4.3	59	L	0.05
PCB-181	Hepta					U L	0.51				U L	0.36
PCB-182	Hepta		37	9.1	160	C L	0.13	15	4.6	53	C L	0.056
PCB-183	Hepta		19	4.6	82	L	0.13	6.4	2	23	L	0.056
PCB-184	Hepta	PRC										
PCB-185	Hepta		3.6	0.87	16	L	0.13	1.1	0.34	3.9	L	0.056
PCB-186	Hepta					U L	0.3				U L	0.22
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.54				U L	0.23
PCB-189	Hepta					U L	0.31				U L	0.2
PCB-190	Hepta		4.7	1	23	L	0.11	1.5	0.44	5.9	L	0.05
PCB-191	Hepta		1.4	0.32	7	L	0.11	0.58	0.16	2.2	L	0.05
PCB-192	Hepta	PRC										
PCB-193	Hepta		3.1	0.69	15	L	0.11	1.3	0.36	4.9	L	0.05
PCB-194	Octa		2.1	0.27	18	L	0.061	1	0.19	6.2	L	0.03
PCB-195	Octa		1.1	0.15	8.4	L	0.068	0.58	0.12	3.3	L	0.033
PCB-196	Octa		4.5	0.64	35	C L	0.068	2.1	0.43	12	C L	0.033
PCB-197	Octa		0.37	0.045	3.4	L	0.057	0.19	0.034	1.2	L	0.028
PCB-198	Octa					U L	0.41				U L	0.26
PCB-199	Octa		3.9	0.47	36	L	0.057	1.6	0.3	10	L	0.028
PCB-200	Octa					U L	0.24				U L	0.16

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CA-S010 [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	LDW-BA-SC-ENR+AC-CB-S010 [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-201	Octa					U L	0.056				U L	0.2
PCB-202	Octa					U L	0.047	0.67	0.42	1.1	L	0.05
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.032	0.32	0.2	0.5	J L	0.052
PCB-206	Nona					U L	0.05	0.48	0.27	0.84	L	0.037
PCB-207	Nona		0.015	0.0095	0.023	L	0.0086	0.15	0.081	0.27	L	0.032
PCB-208	Nona					U L	0.026	0.18	0.1	0.33	J L	0.032
PCB-209	Deca		0.0057	0.0033	0.0098	L	0.0045	0.17	0.081	0.36	L	0.02
Total Detected PCB Congeners			**3700**	**3000**	**4700**			**8400**	**6600**	**11000**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR+AC-CC-S010					LDW-BA-SC-ENR-CA-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-201	Octa					U L	0.13				U L	0.062
PCB-202	Octa		0.33	0.11	1	J L	0.036				U L	0.053
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.099				U L	0.034
PCB-206	Nona		0.13	0.034	0.55	J L	0.023				U L	0.039
PCB-207	Nona		0.01	0.0024	0.048	L	0.019	0.0058	0.0037	0.0094	L	0.0078
PCB-208	Nona					U L	0.037				U L	0.022
PCB-209	Deca		0.018	0.0028	0.12	L	0.0094	0.0086	0.0048	0.016	L	0.0043
Total Detected PCB Congeners			**20000**	**8800**	**55000**			**1400**	**1200**	**1800**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SC-ENR-CB-S010					LDW-BA-SC-ENR-CC-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-201	Octa					U L	0.069				U L	0.074
PCB-202	Octa		0.14	0.11	0.17	J L	0.015				U L	0.065
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.05				U L	0.055
PCB-206	Nona		0.076	0.058	0.1	J L	0.0097	0.066	0.051	0.086	J L	0.014
PCB-207	Nona		0.0094	0.0069	0.013	L	0.008	0.013	0.0099	0.017	L	0.012
PCB-208	Nona					U L	0.014				U L	0.036
PCB-209	Deca		0.023	0.016	0.034	L	0.0043	0.015	0.011	0.021	L	0.0077
Total Detected PCB Congeners			**1900**	**1600**	**2200**			**1200**	**1100**	**1300**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CA-S010					LDW-BA-IN-ENR+AC-CB-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-201	Octa		0.39	0.29	0.53	L	0.025				U L	0.11
PCB-202	Octa		0.53	0.38	0.75	L	0.022	0.44	0.27	0.7	L	0.022
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.09				U L	0.077
PCB-206	Nona		0.28	0.19	0.42	L	0.015	0.17	0.095	0.3	L	0.015
PCB-207	Nona		0.034	0.022	0.052	L	0.013	0.015	0.0079	0.027	L	0.013
PCB-208	Nona		0.079	0.051	0.12	J L	0.013				U L	0.044
PCB-209	Deca		0.04	0.023	0.068	L	0.008	0.044	0.02	0.096	L	0.0077
Total Detected PCB Congeners			**41000**	**35000**	**50000**			**29000**	**23000**	**39000**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR+AC-CC-S010					LDW-BA-IN-ENR-CA-S010				
			[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-201	Octa		0.44	0.23	0.84	J L	0.046				U L	0.31
PCB-202	Octa		0.77	0.38	1.6	L	0.042	0.86	0.44	1.7	L	0.056
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.13				U L	0.22
PCB-206	Nona		0.42	0.18	0.99	L	0.033	0.37	0.17	0.84	J L	0.042
PCB-207	Nona		0.11	0.043	0.27	L	0.029	0.057	0.024	0.14	L	0.037
PCB-208	Nona					U L	0.13				U L	0.16
PCB-209	Deca		0.069	0.022	0.22	L	0.021	0.059	0.02	0.17	L	0.024
Total Detected PCB Congeners			**18000**	**13000**	**25000**			**25000**	**18000**	**39000**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-IN-ENR-CB-S010 [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	LDW-BA-IN-ENR-CC-S010 [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] (pg/L)	Upper CL [PCB Cfree] (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-201	Octa					U L	0.27				U L	0.18
PCB-202	Octa		1	0.12	9.3	L	0.057	0.54	0.097	3.4	L	0.028
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.18				U L	0.092
PCB-206	Nona		0.47	0.037	6.6	L	0.037	0.19	0.025	1.6	J L	0.02
PCB-207	Nona		0.13	0.0091	2.3	L	0.031	0.061	0.007	0.61	L	0.017
PCB-208	Nona					U L	0.13				U L	0.066
PCB-209	Deca		0.11	0.0041	3.5	L	0.017	0.052	0.0038	0.82	L	0.01
Total Detected PCB Congeners			**75000**	**27000**	**280000**			**15000**	**10000**	**28000**		

Notes

C: Coelution with one or more PCB congeners; the numerical value indicates the lower congener co-eluter. For example, PCB-20 co-elutes with PCB-21 and PCB-33

J: Analyte concentration is below calibration range

L: Percent to steady state less than 20%

PCB: Polychlorinated biphenyl

pg/L: picogram per liter

PRC: Performance Reference Compound

U: Not detected at the Method Detection Limit (MDL) shown in the second column for each sample.

CL: confidence level

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Certificate of Analysis
Concentrations of Freely-dissolved Polychlorinated Biphenyls (PCBs) Measured via SP3ME™ Passive Samplers

Client: Lower Duwamish Waterway Group

Project: Enhanced Natural Recovery / Activated Carbon Pilot Study

Client Project No: HE1508-01

Final Report Issued: March 22, 2017

Study Dates: November 28, 2016 to January 18, 2017

Introduction

This report presents the *ex situ* lab study results for 14 SP3ME™ passive samplers including 10 samples exposed to surface sediment collected from Lower Duwamish Waterway, Seattle, Washington, USA, 1 laboratory water control blank, and 3 trip blanks (not exposed to sediment). The trip blanks were exposed on December 1, 2016 and extracted on December 6, 2016. The sediment-exposed samplers were exposed *ex situ* to sediment (in cores) during the timeframe of November 28, 2016 to January 18, 2017 with individual sampler exposure duration of 51 days.

Ten of the extracts were shipped to Frontier Analytical Laboratory for measurement of polychlorinated biphenyl (PCB) congeners to calculate the freely-dissolved concentrations (C_{free}) of PCBs in sediment porewater as shown in Table 1 and described below. The extracts from the 3 trip blank samples were analyzed by Frontier Analytical Laboratory on January 6, 2017, whereas 7 extracts of samplers exposed to sediment and the laboratory water control blank were analyzed on January 31, 2017.

The data analysis steps are provided in Attachment A and the analytical reports are provided in Attachment C of the Data Report.

Sample Summary

Customer Sample ID	Sample Type	Sampler Exposure Start Date	Sampler Exposure End Date	Sampler Exposure Duration (days)	Analysis
LDW-BA-SU-ENR+AC-CA-S010	Sediment-Exposed Sample	11/28/16	1/18/17	51	PCB Congeners (1668C)
LDW-BA-SU-ENR+AC-CB-S010	Sediment-Exposed Sample	11/28/16	1/18/17	51	PCB Congeners (1668C)
LDW-BA-SU-ENR+AC-CC-S010	Sediment-Exposed Sample	11/28/16	1/18/17	51	PCB Congeners (1668C)

Customer Sample ID	Sample Type	Sampler Exposure Start Date	Sampler Exposure End Date	Sampler Exposure Duration (days)	Analysis
LDW-BA-SU-ENR+AC-CD-S010	Sediment-Exposed Sample	11/28/16	1/18/17	51	PCB Congeners (1668C)
LDW-BA-SU-ENR+AC-CE-S010	Sediment-Exposed Sample	11/28/16	1/18/17	51	PCB Congeners (1668C)
LDW-BA-SU-ENR-CA-S010	Sediment-Exposed Sample	11/28/16	1/18/17	51	PCB Congeners (1668C)
LDW-BA-SU-ENR-CB-S010	Sediment-Exposed Sample	11/28/16	1/18/17	51	PCB Congeners (1668C)
LDW-BA-SU-ENR-CC-S010	Sediment-Exposed Sample	11/28/16	1/18/17	51	PCB Congeners (1668C)
LDW-BA-SU-ENR-CD-S010	Sediment-Exposed Sample	11/28/16	1/18/17	51	PCB Congeners (1668C)
LDW-BA-SU-ENR-CE-S010	Sediment-Exposed Sample	11/28/16	1/18/17	51	PCB Congeners (1668C)
LDW-BA-SU-S010-PW-TB	Trip Blank	12/1/16	12/1/16	0	PCB Congeners (1668C)
LDW-BA-SU-S010-PW-TB	Trip Blank	12/1/16	12/1/16	0	PCB Congeners (1668C)
LDW-BA-SU-S010-PW-TB	Trip Blank	12/1/16	12/1/16	0	PCB Congeners (1668C)
LDW-BA-SU-S010-LCB-EXSITU	Lab Control Blank	11/28/16	1/18/17	51	PCB Congeners (1668C)

Sampler Design, Deployment, and Chemical Analysis

The SP3ME™ sampler design for this project consisted of a 10-centimeter (cm) length of solid phase microextraction (SPME) fiber with 10-micrometer (µm) thick polydimethylsiloxane (PDMS) on a 2000-µm diameter silica core (0.631 microliter [µL] PDMS per cm SPME). Each SPME fiber was housed in a stainless steel mesh envelope attached to a steel support bar. SPMEs were spiked with the Performance Reference Compounds (PRCs) consisting of rare PCBs congeners assumed to: 1) not be present in the media in which the samplers were deployed, or 2) be present at concentrations so low as to be inconsequential, not affect calculations involving PRCs, and insignificant compared to the concentration of other freely-dissolved PCBs in the media sampled. The PRCs used for this project were: PCB-14, PCB-36, PCB-78, PCB-104, PCB-121, PCB-142, PCB-155, PCB-184, PCB-192, and PCB-204[1]. Samplers were produced by SiREM (http://siremlab.com/).

Trip blank SPMEs were exposed to ambient field conditions for 5 minutes (each trip blank was a composite of 6 samplers for a total SPME fiber length of 60 cm). The sediment-exposed samples consisting of 6 samplers (60 cm of SPME fiber total) were exposed *ex situ* to sediment collected from the Lower Duwamish Waterway, Seattle, Washington, USA for 51 days in the EcoAnalysts laboratory in Port Gamble, WA. Samplers were maintained at ambient room temperature.

Processing of the samplers at an environmental laboratory included removal of the fiber from the stainless steel mesh envelope, wiping any visible sediment from the fiber using a moist tissue, placing the fiber in an amber glass vial, and adding hexane to extract PCBs from the PDMS. Vials with hexane and fibers were shipped to Frontier Analytical Laboratory, whereupon hexane was removed from the vials and analyzed for PCB congeners via USEPA Method 1668C. The analytical laboratory reported the total mass of PCBs in each hexane extract (analytical report and electronic data deliverable are provided in Attachment C of the Data Report).

Results

Total PCB congeners C_{free} results are reported in Table 1 (attached).

Samples included in Frontier Analytical Laboratory report 10322 dated January 12, 2017 and report 10398 dated February 24, 2017 were received in good condition and at 1 and 0.5 degrees Celsius (° C), respectively, which is outside method recommended sample receipt temperature range. This is not expected to result in poor analytical quality since PCBs are not expected to degrade in hexane over the timescale of shipment (1 day).

During the ex situ experiment, there were a total of 8 cores tubes containing sediment that lost some of the overlying water from the core tube, and this was not discovered by EcoAnalysts laboratory staff until the termination of the SPME exposure period. The sediment inside the cores remained covered with a layer of overlying water and/or remained sufficiently wet to allow

[1] PCB shorthand nomenclature used in this report follows the Chemical Abstract Service (CAS) nomenclature used by USEPA (2003): United States Environmental Protection Agency (USEPA). 2003. Table of PCB Species by Congener Number.

full contact between sediment porewater and the SPME fibers during the exposure. These include the following cores:

- LDW-BA-SU-ENR+AC-3-A-CORE
- LDW-BA-SU-ENR+AC-6-A-CORE
- LDW-BA-SU-ENR+AC-5-B-CORE
- LDW-BA-SU-ENR+AC-2-C-CORE
- LDW-BA-SU-ENR+AC-5-C-CORE
- LDW-BA-SU-ENR-5-C-CORE
- LDW-BA-SU-ENR-6-D-CORE
- LDW-BA-SU-ENR-1-E-CORE

SPMEs obtained from these cores were included in the compositing for their relevant samples since they remained sufficiently moist to ensure sediment porewater contact with the SPME fibers. Evaluation of the available PRC and data from these samples that included these SPMEs (i.e., SU-ENR+AC-A, SU-ENR+AC-B, and SU-ENR+AC-C, and SU-ENR-5-C) did not indicate differences from other samples composited from SPMEs that were exposed to sediment cores that did not suffer leakage of the overlying water.

Additionally, 4 of the 6 cores containing the laboratory water control blank (LDW-BA-SU-S010-LCB-EXSITU: Cores 2, 3, 4, and 5) suffered significant water loss such that these SPMEs were partially dry at the end of the exposure. This was not discovered by EcoAnalysts laboratory staff until the termination of the SPME exposure period. These SPMEs were not included in the composite sample for the laboratory water control blank. Only SPMEs exposed to cores 1 and 6, which remained completely submerged, were composited to create the LDW-BA-SU-S010-LCB-EXSITU sample.

An analytical anomaly was observed in the data obtained this experiment. Concentrations of PRCs in the SPMEs exposed to the sediment and laboratory control water were much higher than expected. For 7 of the 10 PRCs, average concentrations of PRCs in the SPMEs exposed to the sediment and laboratory control water were higher than the concentrations in the trip blank PRCs. This implies a negative PRC depletion rate, a highly unlikely phenomenon. A negative PRC depletion rate precludes the direct application of the procedures outlined in Appendix A to calculate C_{free} results.

As detailed in Appendix A, concentrations of PRCs in the exposed SPMEs and trip blank SPMEs are used to estimate a compound-specific mass transport rate for each SPME. For example, if 100 ng/g of a PRC is present in a trip blank and 50 ng/g of the same PRC is present in a SPME following retrieval, the date indicate that the PRC is at 50% of its equilibrium concentration upon retrieval. With several different PRC depletion values, a predictive model can be constructed to estimate target compound fractional equilibrium, as described in greater detail in Attachment A.

The concentration of a PRC in a trip blank SPME can exceed the concentration of a PRC in an exposed SPME only under one of three conditions: (1) the PRC exists in sediment porewater at sufficiently high concentrations to reverse the normal concentration gradient between porewater and PDMS sorbent of the SPME; (2) experimental variability due to spiking or extraction of the

samplers; or (3) analytical variability due to analytical processing and analytical chromatography results.

- Condition 1 is unlikely, as the PCB congeners selected as PRCs are environmentally rare and are only present in site sediments at concentrations orders of magnitude lower than required accumulate in the sampler to the degree detectable by this procedure. This condition has been confirmed by examining the concentrations of the PCBs measured in sediment obtained from the areas used to provide sediment for this study. For example, the highest concentration of PCB-204 (one of the PRCs used in this study) in sediment was found to be approximately 0.002 µg/kg sediment, dry weight. PCB-204 in sediment would result in an inconsequential accumulation of sediment-derived PCB-204 into the sampler (i.e., < 0.5% of the concentration of the PCB-204 in the trip blank) and not affect desorption of the PCB-204 spiked into the sampler.

- Condition 2 was evaluated via confirmation of procedures and laboratory records with SiREM, EcoAnalysts, and Geosyntec staff. Noting could be identified that would result in the anomaly. Table A1 indicated no errors or unexpected values with regards to measurements of mass of the fiber extracted, and results are consistent with previous composite samples composed of 60 cm of SPME fiber. As reported by the laboratory, all the SPME extract vials arrived at the Frontier Analytical Laboratory with the approximate 5-6 mL of extract solvent present. Spiking of the PRCs into the batch of SPMEs used in this experiment was also evaluated. As measured in the trip blanks, which represented fibers randomly selected from the batch of fibers used in this experiment, the coefficient of variation in the concentrations of the 10 PRCs was < 10%, indicating precision in the preparation of the SPME fiber by SiREM. This variability reflects the within-batch PRC spiking variability and analytical variability, and the < 10% value is consistent with variability in trip blank PRC concentrations from other SPME and polyethylene passive sampler experiments. Additionally, the concentrations of PRCs measured in trip blanks this experiment were within 15% agreement on average of concentrations of PRCs measured in SPME trip blanks from previous deployments (i.e., from the *in situ* SPME deployment from mid-2016).

- Condition 3 was evaluated via review of the procedures conducted by Frontier Analytical Laboratory, as well as a full data validation of the PCB extract mass results (Table A3). Nothing could be identified that would result in the anomaly.

The most likely explanation for the anomaly may be an unmeasured or unreportable variation in analytical steps or measurement. The result is a net positive bias in the PCB results for the sediment- and laboratory water control blank-exposed SPMEs. As noted above, the extracts from the 3 trip blank samples were analyzed by Frontier Analytical Laboratory on January 6, 2017, whereas 7 extracts of samplers exposed to sediment and the laboratory water control blank were analyzed on January 31, 2017. A positive bias is apparent in the results analyzed on January 31, 2017.

To address this bias, PRC PCB-204 concentrations were used to establish an adjustment factor for the PCB extract masses reported for the samplers exposed to sediment and the laboratory

water control blank (analyzed January 31, 2017). Mass transport of PCB-204, the most hydrophobic of the PRCs, is insignificant during a static exposure in sediment within the time span used for the ex situ experiment. In previous a deployment using this SPME material under stagnant conditions (mid-2016), PCB-204 depletion averaged 10% or less, indicating negligible or insignificant loss. If it is assumed that the concentrations of PCB-204 in the SPME remains constant, an adjustment factor can be established to adjust the high bias in the PCB extract masses (and therefore concentrations of PCBs absorbed into the PDMS coating of the SPME fiber) measured in the SPMEs exposed to the sediment and the laboratory water control blank. The adjustment factor was calculated for each of the SPMEs exposed to the sediment and the laboratory water control blanks as follows:

$$AF_i = \frac{[PRC_{PCB-204}]_i}{[PRC_{PCB-204,t=0}]_{mean}}$$

where:

AF_i = the sample-specific adjustment factor for sample i;

$PRC_{PCB-204}$ = the concentration of PCB-204 in the PDMS after the deployment (obtained from each sample); and

$PRC_{PCB-204, t=0}$ = the concentration of PCB-204 in the PDMS before the deployment (obtained from the average of the three trip blanks).

Sample-specific adjustment factors for each of the SPMEs exposed to the sediment and the laboratory water control blanks are displayed in the below table.

	LDW-BA-SU-ENR+AC-CA-S010	LDW-BA-SU-ENR+AC-CB-S010	LDW-BA-SU-ENR+AC-CC-S010	LDW-BA-SU-ENR-CA-S010	LDW-BA-SU-ENR-CB-S010	LDW-BA-SU-ENR-CC-S010	LDW-BA-SU-S010-TB-EXSITU1	LDW-BA-SU-S010-TB-EXSITU1	LDW-BA-SU-S010-TB-EXSITU1
PCB-204 (ng/g$_{PDMS}$)	235.0	207.3	270.9	301.7	263.3	285.6	192.9	178.4	217.9
							Trip Blank Average: 196.4		
AF	1.20	1.06	1.38	1.54	1.34	1.45	**Not Applicable**		

For example, for sample LDW-BA-SU-ENR+AC-CA-S010, the concentration of PCB-204 in the PDMS coating of the SPME, as indicated by the analytical laboratory was 235 ng/g PDMS.

This is higher than the average value for the trip blanks (196.4 ng/g). Dividing 235 by 196.4 yields an adjustment factor of 1.2 for LDW-BA-SU-ENR+AC-CA-S010, as indicated in the table.

The sample-specific adjustment factor is applied to each analyte to yield a corrected concentration as follows:

$$[PCB_{adjusted}]_i = \frac{[PCB_{raw}]_i}{AF_i}$$

where:

AF_i = the sample-specific adjustment factor for sample *i*;

$PCB_{adjusted}$ = the adjusted PCB (PRC or trace PCB) concentration; and

PCB_{raw} = the PCB (PRC or trace PCB) concentration as received from the analytical laboratory.

For example, all PCB measurements for LDW-BA-SU-ENR+AC-CA-S010 were reduced by a factor of 1.2 (above adjustment factor table) prior to calculation of C_{free} values. As shown in Table A3, the mass of PCB-40 reported by the analytical laboratory was 1840 ng. After application of the adjustment factor, this value was 1533 ng. The 1533 ng value was then used in all subsequent calculations.

This analytical adjustment approach resulted in data that could be used successfully to calculate C_{free} values using the SPMEs exposed to the sediment and the laboratory water control blank. The resulting PRC elimination (k_e) values indicated average values of approximately 0.004 d^{-1}, which is in the range observed previously for this SPME fiber deployed in static sediment deployments. Thus, indicating acceptable sampling conditions and performance of the method after the application of the adjustment factors.

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TABLE 1

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	Coeluter	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010		
				[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono			540	L	220	1600	L	640	580	L	350
PCB-2	Mono				U L	14		U L	29		U L	23
PCB-3	Mono			37	J L	51	49	J L	110	30	J L	73
PCB-4	Di			4300	L	85	11000	L	210	7300	L	130
PCB-5	Di			980	L	41		U L	41		U L	17
PCB-6	Di			1800	L	41	4700	L	87	2700	L	59
PCB-7	Di			250	L	41	530	L	87	400	L	59
PCB-8	Di			3600	L	41	11000	L	87	7200	L	59
PCB-9	Di			290	L	41	610	L	87	420	L	59
PCB-10	Di			920	L	85	1700	L	210	1100	L	130
PCB-11	Di			60	L	20	81	L	36	47	L	27
PCB-12	Di			55	L	20	76	L	36	38	L	27
PCB-13	Di			65	L	20	120	L	36	84	L	27
PCB-14	Di	PRC										
PCB-15	Di			430	L	20	670	L	36	500	L	27
PCB-16	Tri			2400	L	20	4900	L	37	3600	L	28
PCB-17	Tri			4700	L	20	9600	L	37	6500	L	28
PCB-18	Tri			11000	L	20	23000	L	37	16000	L	28
PCB-19	Tri			1700	L	34	3600	L	68	2500	L	47
PCB-20	Tri			2500	C L	13	4100	C L	21	2700	C L	17
PCB-21	Tri		Not Reported		C020			C020			C020	
PCB-22	Tri			1300	L	13	2400	L	21	1500	L	17
PCB-23	Tri				U L	6	19	J L	21	15	L	17
PCB-24	Tri			440	L	20	710	L	37	450	L	28
PCB-25	Tri			920	L	13	1000	L	21	580	L	17
PCB-26	Tri			1800	L	13	2500	L	21	1400	L	17
PCB-27	Tri			330	L	20	920	L	37	660	L	28
PCB-28	Tri			4400	L	13	7600	L	21	4400	L	17
PCB-29	Tri			35	L	13	64	L	21	43	L	17
PCB-30	Tri				U L	3.9		U L	6.9		U L	6
PCB-31	Tri			4300	L	13	7800	L	21	5700	L	17
PCB-32	Tri			3300	L	20	6700	L	37	4400	L	28
PCB-33	Tri		Not Reported		C020			C020			C020	
PCB-34	Tri			75	L	13	130	L	21	74	L	17
PCB-35	Tri			15	L	7.8	24	L	12	21	L	9.9
PCB-36	Tri	PRC										
PCB-37	Tri			250	L	7.8	380	L	12	260	L	9.9
PCB-38	Tri			21	L	7.8	37	L	12	20	L	9.9
PCB-39	Tri			5.4	J L	7.8		U L	5.6		U L	6.4
PCB-40	Tetra			490	L	6.4	790	L	9.3	510	L	8

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010			LDW-BA-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono		470	L	230	740	L	370	74		71
PCB-2	Mono		12	J L	50		U L	17		U	5.3
PCB-3	Mono		17	J L	50	57	L	74		U	5.2
PCB-4	Di		2600	L	87	4800	L	130	1100		31
PCB-5	Di			U L	29		U L	45		U	12
PCB-6	Di		650	L	41	1200	L	59	360		16
PCB-7	Di		92	L	41	190	L	59	64		16
PCB-8	Di		1800	L	41	4000	L	59	1400		16
PCB-9	Di		110	L	41	180	L	59	71		16
PCB-10	Di		320	L	87	560	L	130	190		31
PCB-11	Di		24	L	19	41	L	27	11		8.7
PCB-12	Di		17	L	19	35	L	27	11		8.7
PCB-13	Di		16	L	19	27	L	27	12		8.7
PCB-14	Di	PRC									
PCB-15	Di		110	L	19	260	L	27	150		8.7
PCB-16	Tri		910	L	19	1900	L	27	920		8.8
PCB-17	Tri		1600	L	19	3200	L	27	1700		8.8
PCB-18	Tri		3700	L	19	7600	L	27	3600		8.8
PCB-19	Tri		730	L	33	1300	L	47	490		14
PCB-20	Tri		580	C L	12	1400	C L	16	1000	C	5.8
PCB-21	Tri			C020			C020			C020	
PCB-22	Tri		330	L	12	800	L	16	640		5.8
PCB-23	Tri			U L	8.2		U L	7		U	4.2
PCB-24	Tri		170	L	19	280	L	27	150		8.8
PCB-25	Tri		150	L	12	260	L	16	170		5.8
PCB-26	Tri		380	L	12	630	L	16	420		5.8
PCB-27	Tri		140	L	19	280	L	27	120		8.8
PCB-28	Tri		1000	L	12	2400	L	16	2000		5.8
PCB-29	Tri		9	L	12	26	L	16	16		5.8
PCB-30	Tri			U L	3.3		U L	4.2		U	1.5
PCB-31	Tri		1000	L	12	2600	L	16	2000		5.8
PCB-32	Tri		1000	L	19	2100	L	27	1200		8.8
PCB-33	Tri			C020			C020			C020	
PCB-34	Tri		20	L	12	39	L	16	24		5.8
PCB-35	Tri		6.3	L	7.1	14	L	9.5	7.1		3.8
PCB-36	Tri	PRC									
PCB-37	Tri		60	L	7.1	160	L	9.5	140		3.8
PCB-38	Tri		8.7	L	7.1	12	L	9.5	9.7		3.8
PCB-39	Tri			U L	5.8		U L	4.8		U	3.2
PCB-40	Tetra		130	L	5.7	270	L	7.6	210		3.2

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-S010-LCB-EXSITU [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono			U L	4400
PCB-2	Mono			U L	540
PCB-3	Mono			U L	530
PCB-4	Di			U L	3900
PCB-5	Di			U L	970
PCB-6	Di			U L	1000
PCB-7	Di			U L	980
PCB-8	Di			U L	1100
PCB-9	Di			U L	1000
PCB-10	Di			U L	3400
PCB-11	Di			U L	370
PCB-12	Di			U L	350
PCB-13	Di			U L	370
PCB-14	Di	PRC			
PCB-15	Di			U L	360
PCB-16	Tri			U L	190
PCB-17	Tri			U L	200
PCB-18	Tri			U L	220
PCB-19	Tri			U L	470
PCB-20	Tri			UC L	70
PCB-21	Tri			C020	
PCB-22	Tri			U L	71
PCB-23	Tri			U L	67
PCB-24	Tri			U L	150
PCB-25	Tri			U L	61
PCB-26	Tri			U L	75
PCB-27	Tri			U L	160
PCB-28	Tri			U L	62
PCB-29	Tri			U L	74
PCB-30	Tri			U L	150
PCB-31	Tri			U L	73
PCB-32	Tri			U L	170
PCB-33	Tri			C020	
PCB-34	Tri			U L	85
PCB-35	Tri			U L	41
PCB-36	Tri	PRC			
PCB-37	Tri			U L	35
PCB-38	Tri			U L	36
PCB-39	Tri			U L	37
PCB-40	Tetra			U L	69

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	Coeluter	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010		
				[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-41	Tetra			1800	C L	5.8	3200	C L	8.3	2000	C L	7.2
PCB-42	Tetra			960	C L	6.4	1600	C L	9.3	930	C L	8
PCB-43	Tetra			3000	C L	6.4	4800	C L	9.3	3100	C L	8
PCB-44	Tetra			2700	L	6.4	4600	L	9.3	2900	L	8
PCB-45	Tetra			920	L	9.2	1700	L	14	1100	L	12
PCB-46	Tetra			380	L	9.2	680	L	14	450	L	12
PCB-47	Tetra			710	L	6.4	1200	L	9.3	680	L	8
PCB-48	Tetra			600	C L	6.4	1100	C L	9.3	700	C L	8
PCB-49	Tetra		Not Reported		C043			C043			C043	
PCB-50	Tetra			29	L	9.2	48	L	14	32	L	12
PCB-51	Tetra			270	L	9.2	510	L	14	310	L	12
PCB-52	Tetra			3300	C L	6.4	5800	C L	9.3	3800	C L	8
PCB-53	Tetra			920	L	9.2	1600	L	14	1100	L	12
PCB-54	Tetra			18	L	8.4	30	L	13	23	L	11
PCB-55	Tetra			24	L	4.4	58	L	6	20	L	5.4
PCB-56	Tetra			450	C L	4.4	870	C L	6	530	C L	5.4
PCB-57	Tetra			17	L	4.4	24	L	6	12	L	5.4
PCB-58	Tetra			13	L	4.4	13	L	6	12	L	5.4
PCB-59	Tetra		Not Reported		C042			C042			C042	
PCB-60	Tetra		Not Reported		C056			C056			C056	
PCB-61	Tetra			1000	C L	4.4	2000	C L	6	1200	C L	5.4
PCB-62	Tetra				U L	3.1		U L	5.4		U L	4
PCB-63	Tetra			62	L	4.4	110	L	6	65	L	5.4
PCB-64	Tetra		Not Reported		C041			C041			C041	
PCB-65	Tetra				U L	2.8		U L	4.8		U L	3.6
PCB-66	Tetra			980	C L	4.4	1700	C L	6	1100	C L	5.4
PCB-67	Tetra			46	L	4.4	90	L	6	51	L	5.4
PCB-68	Tetra			20	L	4.4	27	L	6	18	L	5.4
PCB-69	Tetra		Not Reported		C052			C052			C052	
PCB-70	Tetra		Not Reported		C061			C061			C061	
PCB-71	Tetra		Not Reported		C041			C041			C041	
PCB-72	Tetra		Not Reported		C041			C041			C041	
PCB-73	Tetra				U L	3.1		U L	5.3		U L	4
PCB-74	Tetra			510	L	4.4	920	L	6	570	L	5.4
PCB-75	Tetra		Not Reported		C048			C048			C048	
PCB-76	Tetra		Not Reported		C066			C066			C066	
PCB-77	Tetra			25	L	3.1	46	L	3.9	32	L	3.7
PCB-78	Tetra	PRC										
PCB-79	Tetra			8.9	L	3.1	12	L	3.9	8.7	L	3.7
PCB-80	Tetra				U L	1.2		U L	1.8		U L	1.4

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010			LDW-BA-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-41	Tetra		510	C L	5.2	1100	C L	6.9	890	C	3
PCB-42	Tetra		240	C L	5.7	490	C L	7.6	400	C	3.2
PCB-43	Tetra		1000	C L	5.7	1700	C L	7.6	1200	C	3.2
PCB-44	Tetra		770	L	5.7	1600	L	7.6	1200		3.2
PCB-45	Tetra		260	L	8.4	540	L	11	330		4.4
PCB-46	Tetra		110	L	8.4	210	L	11	130		4.4
PCB-47	Tetra		230	L	5.7	380	L	7.6	310		3.2
PCB-48	Tetra		170	C L	5.7	360	C L	7.6	290	C	3.2
PCB-49	Tetra			C043			C043			C043	
PCB-50	Tetra		11	L	8.4	17	L	11	10		4.4
PCB-51	Tetra		100	L	8.4	160	L	11	110		4.4
PCB-52	Tetra		1200	C L	5.7	2000	C L	7.6	1600	C	3.2
PCB-53	Tetra		340	L	8.4	520	L	11	350		4.4
PCB-54	Tetra		7.9	L	7.6	11	L	10	6.4		4.1
PCB-55	Tetra		11	L	3.9	16	L	5.1	15		2.3
PCB-56	Tetra		130	C L	3.9	310	C L	5.1	350	C	2.3
PCB-57	Tetra		4.4	L	3.9	6.9	L	5.1	6.3		2.3
PCB-58	Tetra		3.6	L	3.9	4.2	L	5.1	3.3		2.3
PCB-59	Tetra			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056	
PCB-61	Tetra		320	C L	3.9	700	C L	5.1	710	C	2.3
PCB-62	Tetra			U L	3		U L	4.4		U	1.3
PCB-63	Tetra		18	L	3.9	35	L	5.1	34		2.3
PCB-64	Tetra			C041			C041			C041	
PCB-65	Tetra			U L	2.7		U L	3.9		U	1.2
PCB-66	Tetra		290	C L	3.9	600	C L	5.1	570	C	2.3
PCB-67	Tetra		14	L	3.9	30	L	5.1	28		2.3
PCB-68	Tetra		8.7	L	3.9	11	L	5.1	6.5		2.3
PCB-69	Tetra			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041	
PCB-73	Tetra			U L	3		U L	4.3		U	1.3
PCB-74	Tetra		150	L	3.9	330	L	5.1	320		2.3
PCB-75	Tetra			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066	
PCB-77	Tetra		8.1	L	2.6	18	L	3.4	21		1.7
PCB-78	Tetra	PRC									
PCB-79	Tetra		3.7	L	2.6	5.2	L	3.4	4.4		1.7
PCB-80	Tetra			U L	1.1		U L	1.6		U	0.55

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-S010-LCB-EXSITU [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-41	Tetra			UC L	36
PCB-42	Tetra			UC L	44
PCB-43	Tetra			UC L	54
PCB-44	Tetra			U L	60
PCB-45	Tetra			U L	100
PCB-46	Tetra			U L	110
PCB-47	Tetra			U L	42
PCB-48	Tetra			UC L	43
PCB-49	Tetra			C043	
PCB-50	Tetra			U L	92
PCB-51	Tetra			U L	90
PCB-52	Tetra			UC L	40
PCB-53	Tetra			U L	92
PCB-54	Tetra			U L	59
PCB-55	Tetra			U L	23
PCB-56	Tetra			UC L	15
PCB-57	Tetra			U L	23
PCB-58	Tetra			U L	22
PCB-59	Tetra			C042	
PCB-60	Tetra			C056	
PCB-61	Tetra			UC L	21
PCB-62	Tetra			U L	46
PCB-63	Tetra			U L	23
PCB-64	Tetra			C041	
PCB-65	Tetra			U L	41
PCB-66	Tetra			UC L	22
PCB-67	Tetra			U L	25
PCB-68	Tetra			U L	22
PCB-69	Tetra			C052	
PCB-70	Tetra			C061	
PCB-71	Tetra			C041	
PCB-72	Tetra			C041	
PCB-73	Tetra			U L	45
PCB-74	Tetra			U L	22
PCB-75	Tetra			C048	
PCB-76	Tetra			C066	
PCB-77	Tetra			U L	9.4
PCB-78	Tetra	PRC			
PCB-79	Tetra			U L	8.1
PCB-80	Tetra			U L	12

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	Coeluter	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010		
				[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-81	Tetra			6.9	L	3.1	23	L	3.9	16	L	3.7
PCB-82	Penta			53	L	2.1	98	L	2.5	64	L	2.5
PCB-83	Penta			33	C L	2.1	50	C L	2.5	35	C L	2.5
PCB-84	Penta			360	C L	2.5	550	C L	3	370	C L	2.9
PCB-85	Penta			65	C L	2.1	120	C L	2.5	82	C L	2.5
PCB-86	Penta				U L	0.91		U L	1.5		U L	1.6
PCB-87	Penta			160	C L	2.1	290	C L	2.5	200	C L	2.5
PCB-88	Penta			150	C L	2.9	250	C L	3.6	150	C L	3.4
PCB-89	Penta			14	L	2.9	24	L	3.6	15	L	3.4
PCB-90	Penta			600	C L	2.1	950	C L	2.5	700	C L	2.5
PCB-91	Penta		Not Reported		C088			C088			C088	
PCB-92	Penta		Not Reported		C084			C084			C084	
PCB-93	Penta				U L	1.1		U L	1.4		U L	1.3
PCB-94	Penta			7.2	L	2.9	13	L	3.6	8.4	L	3.4
PCB-95	Penta			990	L	2.9	1700	L	3.6	1100	L	3.4
PCB-96	Penta			12	L	2.4	16	L	3	12	L	2.9
PCB-97	Penta			140	L	2.1	230	L	2.5	160	L	2.5
PCB-98	Penta				UC L	0.87		UC L	1.1		UC L	1.1
PCB-99	Penta			260	L	2.1	400	L	2.5	290	L	2.5
PCB-100	Penta			7.1	L	2.9	9	L	3.6	7.9	L	3.4
PCB-101	Penta		Not Reported		C090			C090			C090	
PCB-102	Penta		Not Reported		C098			C098			C098	
PCB-103	Penta			21	L	2.9	28	L	3.6	23	L	3.4
PCB-104	Penta	PRC										
PCB-105	Penta			61	L	1.6	110	L	1.8	74	L	1.8
PCB-106	Penta			190	C L	1.6	320	C L	1.8	250	C L	1.8
PCB-107	Penta			19	C L	1.6	29	C L	1.8	21	C L	1.8
PCB-108	Penta		Not Reported		C107			C107			C107	
PCB-109	Penta				U L	0.74		U L	1.2		U L	1.3
PCB-110	Penta			510	L	2.1	820	L	2.5	580	L	2.5
PCB-111	Penta			5	C L	1.8	12	C L	2.1	6.5	C L	2.1
PCB-112	Penta		Not Reported		C083			C083			C083	
PCB-113	Penta				U L	0.74		U L	1.2		U L	1.3
PCB-114	Penta			4.4	L	1.6	8.3	L	1.8	6.3	L	1.8
PCB-115	Penta		Not Reported		C111			C111			C111	
PCB-116	Penta		Not Reported		C085			C085			C085	
PCB-117	Penta		Not Reported		C087			C087			C087	
PCB-118	Penta		Not Reported		C106			C106			C106	
PCB-119	Penta			19	L	2.1	25	L	2.5	18	L	2.5
PCB-120	Penta				U L	0.5		U L	0.76		U L	0.85

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010			LDW-BA-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-81	Tetra		5.8	L	2.6	10	L	3.4	9.6		1.7
PCB-82	Penta		19	L	1.8	35	L	2.3	42		1.2
PCB-83	Penta		13	C L	1.8	20	C L	2.3	20	C	1.2
PCB-84	Penta		140	C L	2.1	210	C L	2.7	210	C	1.4
PCB-85	Penta		26	C L	1.8	45	C L	2.3	51	C	1.2
PCB-86	Penta			U L	0.66		U L	0.88		U	0.64
PCB-87	Penta		59	C L	1.8	110	C L	2.3	130	C	1.2
PCB-88	Penta		46	C L	2.5	61	C L	3.2	88	C	1.6
PCB-89	Penta		5.6	L	2.5	8.5	L	3.2	7.5		1.6
PCB-90	Penta		240	C L	1.8	380	C L	2.3	410	C	1.2
PCB-91	Penta			C088			C088			C088	
PCB-92	Penta			C084			C084			C084	
PCB-93	Penta			U L	0.87		U L	0.89		U	0.54
PCB-94	Penta		2.9	L	2.5	5	L	3.2	4.1		1.6
PCB-95	Penta		440	L	2.5	670	L	3.2	630		1.6
PCB-96	Penta		5	L	2.1	6.7	L	2.7	6.2		1.4
PCB-97	Penta		51	L	1.8	87	L	2.3	98		1.2
PCB-98	Penta			UC L	0.7		UC L	0.72		UC	0.43
PCB-99	Penta		110	L	1.8	160	L	2.3	150		1.2
PCB-100	Penta		4.3	L	2.5	5.6	L	3.2	3.5		1.6
PCB-101	Penta			C090			C090			C090	
PCB-102	Penta			C098			C098			C098	
PCB-103	Penta		12	L	2.5	13	L	3.2	8.7		1.6
PCB-104	Penta	PRC									
PCB-105	Penta		25	L	1.3	39	L	1.7	54		0.97
PCB-106	Penta		76	C L	1.3	130	C L	1.7	160	C	0.97
PCB-107	Penta		8.3	C L	1.3	12	C L	1.7	13	C	0.97
PCB-108	Penta			C107			C107			C107	
PCB-109	Penta			U L	0.54		U L	0.71		U	0.52
PCB-110	Penta		200	L	1.8	320	L	2.3	340		1.2
PCB-111	Penta		2.6	C L	1.5	3.6	C L	2	4.9	C	1.1
PCB-112	Penta			C083			C083			C083	
PCB-113	Penta			U L	0.54		U L	0.71		U	0.52
PCB-114	Penta		1.9	L	1.3	3.3	L	1.7	4.6		0.97
PCB-115	Penta			C111			C111			C111	
PCB-116	Penta			C085			C085			C085	
PCB-117	Penta			C087			C087			C087	
PCB-118	Penta			C106			C106			C106	
PCB-119	Penta		9.5	L	1.8	11	L	2.3	8.1		1.2
PCB-120	Penta			U L	0.36		U L	0.46		U	0.36

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-S010-LCB-EXSITU		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-81	Tetra			U L	7.8
PCB-82	Penta			U L	8.5
PCB-83	Penta			UC L	6.4
PCB-84	Penta			UC L	8.5
PCB-85	Penta			UC L	6
PCB-86	Penta			U L	6.6
PCB-87	Penta			UC L	5.6
PCB-88	Penta			UC L	7.2
PCB-89	Penta			U L	12
PCB-90	Penta			UC L	6.3
PCB-91	Penta			C088	
PCB-92	Penta			C084	
PCB-93	Penta			U L	8.2
PCB-94	Penta			U L	8.3
PCB-95	Penta			U L	7.7
PCB-96	Penta			U L	4.5
PCB-97	Penta			U L	5.8
PCB-98	Penta			UC L	6.5
PCB-99	Penta			U L	6.1
PCB-100	Penta			U L	6.9
PCB-101	Penta			C090	
PCB-102	Penta			C098	
PCB-103	Penta			U L	6.9
PCB-104	Penta	PRC			
PCB-105	Penta			U L	2.8
PCB-106	Penta			UC L	2.9
PCB-107	Penta			UC L	2.8
PCB-108	Penta			C107	
PCB-109	Penta			U L	5.3
PCB-110	Penta			U L	5
PCB-111	Penta			UC L	3.7
PCB-112	Penta			C083	
PCB-113	Penta			U L	5.3
PCB-114	Penta			U L	2.5
PCB-115	Penta			C111	
PCB-116	Penta			C085	
PCB-117	Penta			C087	
PCB-118	Penta			C106	
PCB-119	Penta			U L	5
PCB-120	Penta			U L	3

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	Coeluter	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010		
				[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-121	Penta	PRC										
PCB-122	Penta			2.6	L	1.6	4.7	L	1.8	3.7	L	1.8
PCB-123	Penta			2.5	L	1.6	4.3	L	1.8	3	L	1.8
PCB-124	Penta			7.4	L	1.6	14	L	1.8	10	L	1.8
PCB-125	Penta		Not Reported		C087			C087			C087	
PCB-126	Penta				U L	0.83	1.1	J L	1.2		U L	0.74
PCB-127	Penta				U L	0.73		U L	0.71		U L	0.67
PCB-128	Hexa			9.7	C L	0.68	15	C L	0.64	11	C L	0.73
PCB-129	Hexa			4.1	L	0.77	6.8	L	0.74	5.3	L	0.83
PCB-130	Hexa			7.6	L	0.77	11	L	0.74	9.2	L	0.83
PCB-131	Hexa			3.5	C L	0.86	4.5	C L	0.85	4.3	C L	0.94
PCB-132	Hexa			36	C L	0.86	51	C L	0.85	38	C L	0.94
PCB-133	Hexa		Not Reported		C131			C131			C131	
PCB-134	Hexa			8.6	C L	0.96	12	C L	0.97	10	C L	1.1
PCB-135	Hexa			25	L	0.96	31	L	0.97	25	L	1.1
PCB-136	Hexa			26	L	0.78	38	L	0.76	31	L	0.85
PCB-137	Hexa			3	L	0.77	4.6	L	0.74	3.9	L	0.83
PCB-138	Hexa			75	C L	0.77	110	C L	0.74	86	C L	0.83
PCB-139	Hexa			120	C L	0.96	180	C L	0.97	140	C L	1.1
PCB-140	Hexa			1.5	L	0.96	2.2	L	0.97	1.5	L	1.1
PCB-141	Hexa			15	L	0.77	24	L	0.74	18	L	0.83
PCB-142	Hexa	PRC										
PCB-143	Hexa		Not Reported		C134			C134			C134	
PCB-144	Hexa			6.8	L	0.96	14	L	0.97	8.3	L	1.1
PCB-145	Hexa				U L	0.21		U L	0.23		U L	0.29
PCB-146	Hexa			15	C L	0.77	20	C L	0.74	17	C L	0.83
PCB-147	Hexa			2.8	L	0.96	4	L	0.97	3.2	L	1.1
PCB-148	Hexa				U L	0.36		U L	0.41		U L	0.49
PCB-149	Hexa		Not Reported		C139			C139			C139	
PCB-150	Hexa				U L	0.21		U L	0.22	0.56	J L	0.85
PCB-151	Hexa			40	L	0.96	56	L	0.97	43	L	1.1
PCB-152	Hexa				U L	0.21		U L	0.23		U L	0.28
PCB-153	Hexa			94	L	0.77	130	L	0.74	110	L	0.83
PCB-154	Hexa			4.1	L	0.96	5	L	0.97	4.3	L	1.1
PCB-155	Hexa	PRC										
PCB-156	Hexa			4.2	L	0.6	7.1	L	0.55	5.4	L	0.64
PCB-157	Hexa			0.94	L	0.6	1.4	L	0.55	1	L	0.64
PCB-158	Hexa			8.8	C L	0.77	14	C L	0.74	11	C L	0.83
PCB-159	Hexa			0.41	J L	0.6	0.83	L	0.55	0.6	L	0.64
PCB-160	Hexa		Not Reported		C158			C158			C158	

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010			LDW-BA-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-121	Penta	PRC									
PCB-122	Penta		1.1	L	1.3	1.8	L	1.7	2.4		0.97
PCB-123	Penta		1.1	L	1.3	1.7	L	1.7	2.8		0.97
PCB-124	Penta		3.2	L	1.3	5.6	L	1.7	7.1		0.97
PCB-125	Penta			C087			C087			C087	
PCB-126	Penta			U L	0.46		U L	0.51	0.39	J	0.75
PCB-127	Penta			U L	0.42		U L	0.48		U	0.36
PCB-128	Hexa		3.7	C L	0.54	5.8	C L	0.65	8.5	C	0.46
PCB-129	Hexa		1.4	L	0.61	2.5	L	0.75	3.7		0.52
PCB-130	Hexa		2.9	L	0.61	3.9	L	0.75	6.5		0.52
PCB-131	Hexa		1.6	C L	0.69	1.9	C L	0.85	2.4	C	0.57
PCB-132	Hexa		14	C L	0.69	19	C L	0.85	25	C	0.57
PCB-133	Hexa			C131			C131			C131	
PCB-134	Hexa		3.7	C L	0.78	5.4	C L	0.96	6.6	C	0.63
PCB-135	Hexa		11	L	0.78	14	L	0.96	17		0.63
PCB-136	Hexa		12	L	0.63	16	L	0.77	19		0.53
PCB-137	Hexa		1.5	L	0.61	2.2	L	0.75	2.5		0.52
PCB-138	Hexa		30	C L	0.61	43	C L	0.75	59	C	0.52
PCB-139	Hexa		53	C L	0.78	72	C L	0.96	87	C	0.63
PCB-140	Hexa		0.91	L	0.78	0.7	L	0.96	0.7		0.63
PCB-141	Hexa		5.8	L	0.61	9.3	L	0.75	13		0.52
PCB-142	Hexa	PRC									
PCB-143	Hexa			C134			C134			C134	
PCB-144	Hexa		2.7	L	0.78	4.1	L	0.96	5.4		0.63
PCB-145	Hexa			U L	0.19		U L	0.14		U	0.13
PCB-146	Hexa		7.8	C L	0.61	9.3	C L	0.75	10	C	0.52
PCB-147	Hexa		1.1	L	0.78	1.7	L	0.96	2.1		0.63
PCB-148	Hexa			U L	0.33		U L	0.24		U	0.21
PCB-149	Hexa			C139			C139			C139	
PCB-150	Hexa			U L	0.19		U L	0.14	0.29	J	0.53
PCB-151	Hexa		17	L	0.78	23	L	0.96	26		0.63
PCB-152	Hexa			U L	0.19		U L	0.14		U	0.12
PCB-153	Hexa		41	L	0.61	57	L	0.75	69		0.52
PCB-154	Hexa		2.8	L	0.78	2.9	L	0.96	2.1		0.63
PCB-155	Hexa	PRC									
PCB-156	Hexa		1.6	L	0.47	2.6	L	0.57	4	L	0.42
PCB-157	Hexa		0.34	L	0.47	0.5	L	0.57	0.78	L	0.42
PCB-158	Hexa		3.5	C L	0.61	5.4	C L	0.75	7.6	C	0.52
PCB-159	Hexa		0.28	J L	0.47	0.39	J L	0.57	0.34	L	0.42
PCB-160	Hexa			C158			C158			C158	

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-S010-LCB-EXSITU		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-121	Penta	PRC			
PCB-122	Penta			U L	2.9
PCB-123	Penta			U L	2.2
PCB-124	Penta			U L	2.6
PCB-125	Penta			C087	
PCB-126	Penta			U L	2.2
PCB-127	Penta			U L	1.9
PCB-128	Hexa			UC L	0.53
PCB-129	Hexa			U L	0.85
PCB-130	Hexa			U L	0.91
PCB-131	Hexa			UC L	0.82
PCB-132	Hexa			UC L	0.72
PCB-133	Hexa			C131	
PCB-134	Hexa			UC L	1
PCB-135	Hexa			U L	1
PCB-136	Hexa			U L	0.67
PCB-137	Hexa			U L	0.65
PCB-138	Hexa			UC L	0.54
PCB-139	Hexa			UC L	0.91
PCB-140	Hexa			U L	0.92
PCB-141	Hexa			U L	0.7
PCB-142	Hexa	PRC			
PCB-143	Hexa			C134	
PCB-144	Hexa			U L	0.98
PCB-145	Hexa			U L	0.71
PCB-146	Hexa			UC L	0.59
PCB-147	Hexa			U L	0.88
PCB-148	Hexa			U L	1.3
PCB-149	Hexa			C139	
PCB-150	Hexa			U L	0.69
PCB-151	Hexa			U L	1
PCB-152	Hexa			U L	0.69
PCB-153	Hexa		3.4	L	3.2
PCB-154	Hexa			U L	1.1
PCB-155	Hexa	PRC			
PCB-156	Hexa			U L	0.4
PCB-157	Hexa			U L	0.43
PCB-158	Hexa			UC L	0.54
PCB-159	Hexa			U L	0.38
PCB-160	Hexa			C158	

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	Coeluter	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010		
				[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-161	Hexa		Not Reported		C132			C132			C132	
PCB-162	Hexa		Not Reported		C128			C128			C128	
PCB-163	Hexa		Not Reported		C138			C138			C138	
PCB-164	Hexa		Not Reported		C138			C138			C138	
PCB-165	Hexa		Not Reported		C146			C146			C146	
PCB-166	Hexa				U L	0.35		U L	0.36	0.45	J L	0.83
PCB-167	Hexa			1.7	L	0.6	2.7	L	0.55	2.3	L	0.64
PCB-168	Hexa				U L	0.34		U L	0.35		U L	0.41
PCB-169	Hexa				U L	0.25		U L	0.24		U L	0.29
PCB-170	Hepta			3.8	L	0.28	5.5	L	0.22	4.4	L	0.29
PCB-171	Hepta			1.6	L	0.35	2.5	L	0.29	1.8	L	0.35
PCB-172	Hepta			0.42	L	0.28	0.99	L	0.22	0.55	L	0.29
PCB-173	Hepta				U L	0.15		U L	0.12		U L	0.15
PCB-174	Hepta			5.9	L	0.35	8.9	L	0.29	6.5	L	0.35
PCB-175	Hepta			0.31	L	0.35	0.39	L	0.29	0.36	L	0.35
PCB-176	Hepta			1	L	0.27	1.3	L	0.21	0.98	L	0.27
PCB-177	Hepta			4	L	0.35	5.8	L	0.29	4.3	L	0.35
PCB-178	Hepta			1.6	L	0.35	2.1	L	0.29	1.8	L	0.35
PCB-179	Hepta			3.2	L	0.27	4.1	L	0.21	3.4	L	0.27
PCB-180	Hepta			8.1	L	0.28	11	L	0.22	8.5	L	0.29

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010			LDW-BA-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-161	Hexa			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138	
PCB-165	Hexa			C146			C146			C146	
PCB-166	Hexa			U L	0.24		U L	0.2	0.29	J	0.52
PCB-167	Hexa		0.66	L	0.47	1.1	L	0.57	1.6	L	0.42
PCB-168	Hexa			U L	0.23		U L	0.2		U	0.28
PCB-169	Hexa			U L	0.16		U L	0.13		U L	0.21
PCB-170	Hepta		1.3	L	0.21	1.9	L	0.25	3.1	L	0.22
PCB-171	Hepta		0.68	L	0.27	0.95	L	0.31	1.4	L	0.26
PCB-172	Hepta		0.17	L	0.21	0.31	L	0.25	0.42	L	0.22
PCB-173	Hepta			U L	0.097		U L	0.072		U L	0.086
PCB-174	Hepta		2.5	L	0.27	3.2	L	0.31	4.7	L	0.26
PCB-175	Hepta		0.11	J L	0.27	0.19	J L	0.31	0.19	L	0.26
PCB-176	Hepta		0.35	L	0.2	0.53	L	0.24	0.75	L	0.21
PCB-177	Hepta		1.7	L	0.27	2.1	L	0.31	3.1	L	0.26
PCB-178	Hepta		0.67	L	0.27	0.95	L	0.31	1.2	L	0.26
PCB-179	Hepta		1.4	L	0.2	1.7	L	0.24	2.5	L	0.21
PCB-180	Hepta		3.3	L	0.21	4.4	L	0.25	6.4	L	0.22

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-S010-LCB-EXSITU		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-161	Hexa			C132	
PCB-162	Hexa			C128	
PCB-163	Hexa			C138	
PCB-164	Hexa			C138	
PCB-165	Hexa			C146	
PCB-166	Hexa			U L	0.55
PCB-167	Hexa			U L	0.41
PCB-168	Hexa			U L	0.54
PCB-169	Hexa			U L	0.31
PCB-170	Hepta			U L	0.17
PCB-171	Hepta			U L	0.2
PCB-172	Hepta			L	0.7
PCB-173	Hepta			U L	0.22
PCB-174	Hepta			U L	0.17
PCB-175	Hepta			U L	0.19
PCB-176	Hepta			U L	0.098
PCB-177	Hepta			U L	0.21
PCB-178	Hepta			U L	0.2
PCB-179	Hepta			U L	0.094
PCB-180	Hepta			U L	0.12

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	Coeluter	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010		
				[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-181	Hepta				U L	0.15		U L	0.12		U L	0.15
PCB-182	Hepta			8.7	C L	0.35	12	C L	0.29	9.4	C L	0.35
PCB-183	Hepta			3.8	L	0.35	5.7	L	0.29	4.4	L	0.35
PCB-184	Hepta	PRC										
PCB-185	Hepta			0.76	L	0.35	1.1	L	0.29	0.96	L	0.35
PCB-186	Hepta				U L	0.074		U L	0.057		U L	0.075
PCB-187	Hepta		Not Reported		C182			C182			C182	
PCB-188	Hepta				U L	0.081		U L	0.063		U L	0.081
PCB-189	Hepta			0.12	J L	0.22	0.16	J L	0.17	0.13	J L	0.22
PCB-190	Hepta			0.88	L	0.28	1.2	L	0.22	0.84	L	0.29
PCB-191	Hepta			0.29	L	0.28	0.27	L	0.22	0.2	J L	0.29
PCB-192	Hepta	PRC										
PCB-193	Hepta			0.62	L	0.28	0.83	L	0.22	0.63	L	0.29
PCB-194	Octa			0.37	L	0.1	0.46		0.068	0.36	L	0.098
PCB-195	Octa			0.21	L	0.12	0.29	L	0.085	0.21	L	0.12
PCB-196	Octa			0.73	C L	0.12	0.98	C L	0.085	0.76	C L	0.12
PCB-197	Octa			0.05	L	0.094	0.088		0.061	0.04	L	0.089
PCB-198	Octa				U L	0.053		U L	0.036		U L	0.052
PCB-199	Octa			0.5	L	0.094	0.63		0.061	0.5	L	0.089
PCB-200	Octa			0.11	L	0.094	0.11		0.061	0.089	L	0.089
PCB-201	Octa				U L	0.032	0.11	L	0.085	0.1	L	0.12
PCB-202	Octa			0.14	L	0.094	0.17		0.061	0.12	L	0.089
PCB-203	Octa		Not Reported		C196			C196			C196	
PCB-204	Octa	PRC										
PCB-205	Octa				U L	0.035		U	0.026		U L	0.033
PCB-206	Nona			0.053	L	0.047	0.044		0.027	0.042	L	0.042
PCB-207	Nona				L	0.035	0.0058		0.019		L	0.031
PCB-208	Nona			0.015	J L	0.035	0.012	J	0.019	0.012	L	0.031
PCB-209	Deca			0.0051	L	0.013	0.0044		0.0058	0.0074	L	0.01
Total Detected PCB Congeners				**76000**			**150000**			**97000**		

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010			LDW-BA-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-181	Hepta			U L	0.098		U L	0.073		U L	0.088
PCB-182	Hepta		3.8	C L	0.27	4.9	C L	0.31	6.6	C L	0.26
PCB-183	Hepta		1.6	L	0.27	2.2	L	0.31	3.1	L	0.26
PCB-184	Hepta	PRC									
PCB-185	Hepta		0.25	L	0.27	0.38	L	0.31	0.67	L	0.26
PCB-186	Hepta			U L	0.048		U L	0.036		U L	0.045
PCB-187	Hepta			C182			C182			C182	
PCB-188	Hepta			U L	0.056		U L	0.04		U L	0.05
PCB-189	Hepta		0.056	J L	0.17		U L	0.029	0.083	J L	0.18
PCB-190	Hepta		0.28	L	0.21	0.38	L	0.25	0.61	L	0.22
PCB-191	Hepta		0.12	J L	0.21	0.092	J L	0.25	0.18	L	0.22
PCB-192	Hepta	PRC									
PCB-193	Hepta		0.28	L	0.21	0.33	L	0.25	0.56	L	0.22
PCB-194	Octa		0.14	L	0.075	0.18	L	0.083	0.3	L	0.093
PCB-195	Octa		0.081	L	0.091	0.098	L	0.1	0.19	L	0.11
PCB-196	Octa		0.31	C L	0.091	0.39	C L	0.1	0.67	C L	0.11
PCB-197	Octa		0.038	L	0.068	0.039	L	0.075	0.034	L	0.086
PCB-198	Octa			U L	0.034		U L	0.033		U L	0.041
PCB-199	Octa		0.2	L	0.068	0.25	L	0.075	0.5	L	0.086
PCB-200	Octa		0.04	J L	0.068		U L	0.015	0.097	L	0.086
PCB-201	Octa			U L	0.02		U L	0.02		U L	0.024
PCB-202	Octa		0.042	J L	0.068	0.066	L	0.075	0.11	L	0.086
PCB-203	Octa			C196			C196			C196	
PCB-204	Octa	PRC									
PCB-205	Octa			U L	0.013		U L	0.013		U L	0.023
PCB-206	Nona		0.017	J	0.032	0.022	J L	0.035	0.038	L	0.047
PCB-207	Nona				0.024	0.0014	L	0.025		L	0.036
PCB-208	Nona		0.005	J	0.024		U L	0.0068		U L	0.0091
PCB-209	Deca		0.002		0.0083	0.0029	L	0.0084	0.00047	L	0.016
Total Detected PCB Congeners			**26000**			**51000**			**30000**		

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-S010-LCB-EXSITU [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-181	Hepta			U L	0.22
PCB-182	Hepta			UC L	0.18
PCB-183	Hepta			U L	0.18
PCB-184	Hepta	PRC			
PCB-185	Hepta			U L	0.19
PCB-186	Hepta			U L	0.098
PCB-187	Hepta			C182	
PCB-188	Hepta			U L	0.11
PCB-189	Hepta			U L	0.071
PCB-190	Hepta			U L	0.12
PCB-191	Hepta			U L	0.12
PCB-192	Hepta	PRC			
PCB-193	Hepta			U L	0.11
PCB-194	Octa			U	0.057
PCB-195	Octa			U	0.08
PCB-196	Octa			UC	0.057
PCB-197	Octa			U	0.028
PCB-198	Octa			U	0.068
PCB-199	Octa			U	0.037
PCB-200	Octa			U	0.029
PCB-201	Octa			U	0.041
PCB-202	Octa			U	0.028
PCB-203	Octa			C196	
PCB-204	Octa	PRC			
PCB-205	Octa			U	0.044
PCB-206	Nona			U	0.025
PCB-207	Nona		0.0043	J	0.032
PCB-208	Nona			U	0.013
PCB-209	Deca			U	0.0042
Total Detected PCB Congeners			**3.4**		

Notes

C: Coelution with one or more PCB congeners; the numerical value indicates the lower congener co-eluter. For example, PCB-20 co-elutes with PCB-21 and PCB-33

J: Analyte concentration is below calibration range

L: Percent to steady state less than 20%

PCB: Polychlorinated biphenyl

pg/L: picogram per liter

PRC: Performance Reference Compound

U: Not detected at the Method Detection Limit (MDL) shown in the second column for each sample.

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ATTACHMENT A: DATA ANALYSIS METHODS

Attachment A: Data Analysis Methods
Concentrations of Freely-Dissolved Polychlorinated Biphenyls (PCBs) Measured via SP3ME™ Passive Samplers

Information about the SPME fiber and exposure duration for the samples reported in this document are provided in Table A1. The exposure duration as shown in Table A1 was calculated as the average exposure duration of each fiber in the composite sample. The deployment and retrieval dates and exposure duration of each composited fiber are shown in Table A2. The mass of PCB congeners in the extracts (Table A3) obtained from Frontier Analytical Laboratory report (Attachment C of the Data Report) were used in a multi-step data process to calculate C_{free} PCBs as described below.

Step 1:

The concentration of PCB analytes in the PDMS phase of the sampler was calculated as the mass of each PCB analyte (as reported by the laboratory, Table A3) divided by the volume PDMS. Volume of PDMS is shown in Table A2 and is based on the measured mass of the SPME fiber prior to compositing the fibers, the conversion factor of 0.069 gram per cm, 0.631 µL per cm, and density of PDMS (0.965 kilogram per liter [kg/L]).

The concentration of the PRCs in PDMS [$PDMS_t$] was used to calculate the elimination rate (k_e) values for the PRCs in each sample using the following equation (Lohmann, 2012):

$$PRC\ k_e = \ln\left(\frac{[PDMS_{t=0}]}{[PDMS_{t=final}]}\right) \div t_{final}$$

where:

$PDMS_{t=0}$ = the average concentration of the PRC in the PDMS at the beginning of the deployment (obtained from an average measurement of the Trip Blanks);

$PDMS_{t=final}$ = the concentration of the PRC in the PDMS after the deployment (obtained from each sample); and

t_{final} = the deployment time (in days).

k_e = the elimination rate (in $days^{-1}$)

PRC k_e values for the PRCs in the sediment-deployed sample are shown in Table A4. The values are also expressed as a percentage of steady state (concentration at equilibrium). A number of PRC k_e values were not calculated and were treated as outliers because $PDMS_{t=final}$ values were equal to or greater than $PDMS_{t=0}$ values.

Step 2:

The second step was to estimate k_e values for the non-PRC PCBs (primary analyte PCBs) in the sample. This was accomplished by developing a linear regression model using PRC k_e values (dependent variable, from Table A4) and PDMS-water partition coefficients (K_{PDMS}) for each PCB. K_{PDMS} values were the dependent variable and were obtained from Smedes et al. (2009) and provided in Table A5. Note, regressions were specific to each sample (i.e. not global to the whole deployment) as local geologic and hydrodynamic can vary greatly within a site.

Values were $\log_{10}$-transformed per Tomaszewski and Luthy (2008). Models were developed for each sample. By entering the PCB-specific K_{PDMS} into the linear regression model developed for each sample, k_e values for each of the primary analyte PCBs for each sample were calculated. The p-value and r^2 for each sample-specific model is provided in Table A4 as measures of how well the linear PRC model performed.

Step 3:

Concentrations of some primary analyte PCBs in PDMS (derived from the PCB masses in Table A3 and PDMS masses in Table A1) were corrected for trace levels of primary analyte PCBs present in the Trip Blanks (due to trace levels present in the PRC spiking solutions). Using the sample specific k_e values, the expected amount of these trace primary analyte PCBs present in the sample at the end of deployment ($Trace\ PCB_{t = final}$) was calculated via the following equation:

$$[Trace\ \ PCB_{t = final}] = \frac{[Trace\ \ PCB_{t = 0}]}{e^{k_e \times t_{final}}}$$

where:

$Trace\ PCB_{t = final}$ = the expected concentration of trace PCBs remaining in the sample at the end of the deployment;

$Trace\ PCB_{t = 0}$ = the average concentration of the trace PCB in the PDMS at the beginning of the deployment (obtained from an average measurement of the trace PCBs in the Trip Blanks);

k_e = the elimination rate value predicted by the sampler-specific regression model (in $days^{-1}$); and

t_{final} = the deployment time (in days).

Concentrations of $Trace\ PCB_{t = final}$ values were then subtracted from the measured concentrations of primary analyte PCBs in PDMS (derived from the PCB masses in Table A3 and PDMS masses in Table A1).

Step 4:

This step describes the calculation of sampling rate correction factor (*CF*) for each primary analyte PCB in each sample. The following equation is used, as adapted from Lohmann (2012):

$$CF = \frac{1}{1 - e^{-k_e \times t_{final}}}$$

where:

k_e = the elimination rate value predicted by the sample-specific regression model (in days^{-1}); and

t_{final} = the deployment time (in days).

Step 5:

The concentration of PCBs in the PDMS of each sample (derived from the PCB masses in Table A3 and PDMS masses in Table A1, or values corrected for *Trace PCB*$_{t=final}$) were multiplied by the *CF* values to calculate the steady-state concentration of PCBs.

Step 6:

In the final step, the steady-state concentrations are divided by K_{PDMS} values (Smedes et al., 2009) to obtain the concentrations of C_{free} PCBs. These are reported in Table 1. C_{free} Method Detection Limits (MDLs) were calculated in the approach described above by dividing the estimated MDL concentration in sample extracts, as reported by Frontier Analytical Laboratory and shown in Table A3, by the mass of PDMS extracted in each sample, as shown in Table A1. The estimated detection limit (EDL) was used for non-detected results and the minimum level of quantitation (ML) was used for detected results. Cases in which the percentage of steady state was indicated to be less than 20% for a primary analyte PCB, a qualifier, "L", was noted[2]. All other qualifiers, as reported in the original analytical results for PCB masses of each congener in each sampler extract (Attachment C of the Data Report), are carried through and reported in the C_{free} results. Table 1 also reports the sum of the detected C_{free} PCB congeners.

An uncertainty analysis was conducted to evaluate the uncertainty in the estimation of CF values for each of the primary analytes. From the linear regression model using PRC k_e values (dependent variable, from Table A4) and PRC K_{PDMS} values (Step 2), upper and lower bound estimates for k_e values were obtained for each PCB analyte in each sample by calculating the lower and upper 80% confidence level (CL) model predictions for predicted k_e (Sokal and Rohlf, 1999). These 80% lower and upper CL k_e values were then used to calculate lower and upper CL CF values that were applied to calculate upper and lower CL values for Cfree for each PCB congener in each sample (Steps 4 and 5). These lower and upper CL Cfree values are shown in Table A6. Via summing the lower CL values for Cfree for the PCB congeners, a lower CL value

[2] Differences in t=0 and t=final concentrations of less than 10-20% may be within measurement error, as determined by general variability in PRCs in Trip Blank measurements. When a PCB reaches less than 10-20% of steady state in a sampler, C_{free} calculations are potentially affected by measurement uncertainty.

for the Cfree total PCBs were calculated (Table A6). Via summing the upper CL values for Cfree for the PCB congeners, an upper CL value for the Cfree total PCBs were calculated (Table A6). The range between the lower and upper CL Cfree values represents the range of values that would contain approximately 80% of possible Cfree estimates calculated via the above approach. Expressed alternatively, there is 80% confidence the Cfree value lies within that range.

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TABLE A1

Table A1. Fiber Details.

Sample ID	Sample Type	Mass of Vial, Empty (g)	Mass of Vial, with Fiber (g)	Mass of Fiber (g)	Length of Fiber, based on mass (cm)	Number of Fibers Included	Length of Fiber, Nominal (cm)	Recovery (%)	Volume of PDMS (µL)	Mass of PDMS (g)	Earliest Sampler Deployment Date	Latest Sampler Retrieval Date	Average Exposure Duration (days)	Notes
LDW-BA-SU-ENR+AC-CA-S010	Sample	10.22644	14.36434	4.1379	59.9696	6	60	100%	37.8	0.037	11/28/2016	1/18/2017	51	Extracted on 1/18/17
LDW-BA-SU-ENR+AC-CB-S010	Sample	10.29636	14.45548	4.1591	60.2771	6	60	100%	38.0	0.037	11/28/2016	1/18/2017	51	Extracted on 1/18/17
LDW-BA-SU-ENR+AC-CC-S010	Sample	10.20756	14.38706	4.1795	60.5725	6	60	101%	38.2	0.037	11/28/2016	1/18/2017	51	Extracted on 1/18/17
LDW-BA-SU-ENR-CA-S010	Sample	10.09305	14.03626	3.9432	57.1480	6	60	95%	36.1	0.035	11/28/2016	1/18/2017	51	Extracted on 1/18/17
LDW-BA-SU-ENR-CB-S010	Sample	10.23966	14.41352	4.1739	60.4907	6	60	101%	38.2	0.037	11/28/2016	1/18/2017	51	Extracted on 1/18/17
LDW-BA-SU-ENR-CC-S010	Sample	10.15931	14.32546	4.1662	60.3790	6	60	101%	38.1	0.037	11/28/2016	1/18/2017	51	Extracted on 1/18/17
LDW-BA-SU-S010-LCB-EXSITU	Lab Control Blank	10.12061	11.49296	1.3724	19.8891	2	20	99%	12.6	0.012	11/28/2016	1/18/2017	51	Extracted on 1/18/17. 4 fibers were not included because sodium azide solution leaked from bottom of the cores.
LDW-BA-SU-S010-TB-EXSITU1	Trip Blank	10.29143	14.43932	4.1479	60.1143	6	60	100%	37.9	0.037	12/1/2016	12/1/2016	0	Extracted on 12/6/17
LDW-BA-SU-S010-TB-EXSITU2	Trip Blank	10.27268	14.01448	3.7418	54.2290	6	60	90%	34.2	0.033	12/1/2016	12/1/2016	0	Extracted on 12/6/17
LDW-BA-SU-S010-TB-EXSITU3	Trip Blank	10.24461	14.42126	4.1767	60.5312	6	60	101%	38.2	0.037	12/1/2016	12/1/2016	0	Extracted on 12/6/17

Notes
%: percent
g: gram
µL: microliter
cm: centimeter

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TABLE A2

Table A2. Exposure Duration.

SPME Sample ID	Composite Sample ID	Deployment Date	Retrieval Date	Composited	Days	Average Days
LDW-BA-SU-ENR+AC-1-A-S010-SPME	LDW-BA-SU-ENR+AC-CA-S010	11/28/2016	1/18/2017	Yes	51	51
LDW-BA-SU-ENR+AC-2-A-S010-SPME	LDW-BA-SU-ENR+AC-CA-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-3-A-S010-SPME	LDW-BA-SU-ENR+AC-CA-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-4-A-S010-SPME	LDW-BA-SU-ENR+AC-CA-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-5-A-S010-SPME	LDW-BA-SU-ENR+AC-CA-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-6-A-S010-SPME	LDW-BA-SU-ENR+AC-CA-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-1-B-S010-SPME	LDW-BA-SU-ENR+AC-CB-S010	11/28/2016	1/18/2017	Yes	51	51
LDW-BA-SU-ENR+AC-2-B-S010-SPME	LDW-BA-SU-ENR+AC-CB-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-3-B-S010-SPME	LDW-BA-SU-ENR+AC-CB-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-4-B-S010-SPME	LDW-BA-SU-ENR+AC-CB-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-5-B-S010-SPME	LDW-BA-SU-ENR+AC-CB-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-6-B-S010-SPME	LDW-BA-SU-ENR+AC-CB-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-1-C-S010-SPME	LDW-BA-SU-ENR+AC-CC-S010	11/28/2016	1/18/2017	Yes	51	51
LDW-BA-SU-ENR+AC-2-C-S010-SPME	LDW-BA-SU-ENR+AC-CC-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-3-C-S010-SPME	LDW-BA-SU-ENR+AC-CC-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-4-C-S010-SPME	LDW-BA-SU-ENR+AC-CC-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-5-C-S010-SPME	LDW-BA-SU-ENR+AC-CC-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR+AC-6-C-S010-SPME	LDW-BA-Su-ENR+AC-CC-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-1-A-S010-SPME	LDW-BA-SU-ENR-CA-S010	11/28/2016	1/18/2017	Yes	51	51
LDW-BA-SU-ENR-2-A-S010-SPME	LDW-BA-SU-ENR-CA-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-3-A-S010-SPME	LDW-BA-SU-ENR-CA-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-4-A-S010-SPME	LDW-BA-SU-ENR-CA-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-5-A-S010-SPME	LDW-BA-SU-ENR-CA-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-6-A-S010-SPME	LDW-BA-SU-ENR-CA-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-1-B-S010-SPME	LDW-BA-SU-ENR-CB-S010	11/28/2016	1/18/2017	Yes	51	51
LDW-BA-SU-ENR-2-B-S010-SPME	LDW-BA-SU-ENR-CB-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-3-B-S010-SPME	LDW-BA-SU-ENR-CB-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-4-B-S010-SPME	LDW-BA-SU-ENR-CB-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-5-B-S010-SPME	LDW-BA-SU-ENR-CB-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-6-B-S010-SPME	LDW-BA-SU-ENR-CB-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-1-C-S010-SPME	LDW-BA-SU-ENR-CC-S010	11/28/2016	1/18/2017	Yes	51	51
LDW-BA-SU-ENR-2-C-S010-SPME	LDW-BA-SU-ENR-CC-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-3-C-S010-SPME	LDW-BA-SU-ENR-CC-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-4-C-S010-SPME	LDW-BA-SU-ENR-CC-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-5-C-S010-SPME	LDW-BA-SU-ENR-CC-S010	11/28/2016	1/18/2017	Yes	51	
LDW-BA-SU-ENR-6-C-S010-SPME	LDW-BA-SU-ENR-CC-S010	11/28/2016	1/18/2017	Yes	51	

Table A2. Exposure Duration.

SPME Sample ID	Composite Sample ID	Deployment Date	Retrieval Date	Composited	Days	Average Days
LDW-BA-SU-1-S010-SPME-LCB-EXSITU	LDW-BA-SU-S010-LCB-EXSITU	11/28/2016	1/18/2017	Yes	51	51
LDW-BA-SU-2-S010-SPME-LCB-EXSITU	LDW-BA-SU-S010-LCB-EXSITU	11/28/2016	Not usable [1]	No	--	
LDW-BA-SU-3-S010-SPME-LCB-EXSITU	LDW-BA-SU-S010-LCB-EXSITU	11/28/2016	Not usable [1]	No	--	
LDW-BA-SU-4-S010-SPME-LCB-EXSITU	LDW-BA-SU-S010-LCB-EXSITU	11/28/2016	Not usable [1]	No	--	
LDW-BA-SU-5-S010-SPME-LCB-EXSITU	LDW-BA-SU-S010-LCB-EXSITU	11/28/2016	Not usable [1]	No	--	
LDW-BA-SU-6-S010-SPME-LCB-EXSITU	LDW-BA-SU-S010-LCB-EXSITU	11/28/2016	1/18/2017	Yes	51	

Note
1.) SPME was unusable. SPME dried out due to loss of water from the core tube.

Geosyntec consultants

TABLE A3

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010			LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-1	Mono		59.2		20	52.3		20	46.4		20	62.1		20	54.1		20
PCB-2	Mono			U	5.65		U	5.2		U	6.22	7.39	J	20		U	4.65
PCB-3	Mono		17.4	J	20	9.35	J	20	11.3	J	20	10.5	J	20	20.8		20
PCB-4	Di		1210		20	1120		20	1570		20	928		20	970		20
PCB-5	Di		569		20		U	9.47		U	5.94		U	14.4		U	15.1
PCB-6	Di		1030		20	1150		20	1280		20	489		20	537		20
PCB-7	Di		146		20	129		20	189		20	69.8		20	86		20
PCB-8	Di		2090		20	2630		20	3390		20	1350		20	1800		20
PCB-9	Di		167		20	148		20	199		20	83		20	83.1		20
PCB-10	Di		258		20	174		20	229		20	114		20	113		20
PCB-11	Di		71.9		20	47.2		20	48.5		20	39.8		20	40.9		20
PCB-12	Di		65.8		20	44.3		20	39.4		20	27.6		20	35		20
PCB-13	Di		77.9		20	70.8		20	85.8		20	26.8		20	27.5		20
PCB-14	Di	PRC	135		20	86.7		20	211		20	243		20	256		20
PCB-15	Di		514		20	389		20	514		20	181		20	259		20
PCB-16	Tri		2780		20	2810		20	3580		20	1450		20	1900		20
PCB-17	Tri		5560		20	5460		20	6520		20	2480		20	3180		20
PCB-18	Tri		12400		20	12900		20	15600		20	5940		20	7460		20
PCB-19	Tri		1190		20	1120		20	1480		20	690		20	744		20
PCB-20	Tri		4650	C	20	4150	C	20	4490	C	20	1530	C	20	2370	C	20
PCB-21	Tri			C020			C020			C020			C020			C020	
PCB-22	Tri		2500		20	2380		20	2560		20	861		20	1330		20
PCB-23	Tri			U	9.52	18.7	J	20	24.3		20		U	14		U	8.67
PCB-24	Tri		520		20	403		20	454		20	272		20	272		20
PCB-25	Tri		1750		20	1030		20	968		20	407		20	439		20
PCB-26	Tri		3490		20	2500		20	2410		20	996		20	1050		20
PCB-27	Tri		390		20	525		20	662		20	219		20	273		20
PCB-28	Tri		8320		20	7620		20	7280		20	2710		20	3940		20
PCB-29	Tri		65.5		20	64.5		20	71.8		20	23.6		20	42.7		20
PCB-30	Tri			U	3.82		U	3.72		U	4.36		U	3.37		U	3.11
PCB-31	Tri		8190		20	7860		20	9470		20	2730		20	4260		20
PCB-32	Tri		3930		20	3790		20	4400		20	1630		20	2070		20
PCB-33	Tri			C020			C020			C020			C020			C020	
PCB-34	Tri		143		20	130		20	123		20	53.4		20	64.7		20
PCB-35	Tri		47.4		20	43.3		20	58.4		20	27.3		20	40.1		20
PCB-36	Tri	PRC	1020		20	756		20	1250		20	1350		20	1270		20
PCB-37	Tri		780		20	677		20	730		20	263		20	436		20
PCB-38	Tri		63.5		20	65.8		20	56.5		20	38		20	33.1		20
PCB-39	Tri		16.6	J	20		U	9.48		U	12.9		U	16.3		U	10
PCB-40	Tetra		1840		20	1810		20	1770		20	704		20	959		20
PCB-41	Tetra		7580	C	20	8100	C	20	7770	C	20	3030	C	20	4180	C	20
PCB-42	Tetra		3620	C	20	3540	C	20	3220	C	20	1310	C	20	1740	C	20
PCB-43	Tetra		11100	C	20	10900	C	20	10600	C	20	5430	C	20	5840	C	20
PCB-44	Tetra		10300		20	10400		20	10000		20	4140		20	5470		20
PCB-45	Tetra		2390		20	2440		20	2580		20	946		20	1280		20
PCB-46	Tetra		985		20	1000		20	1050		20	391		20	492		20
PCB-47	Tetra		2680		20	2680		20	2340		20	1220		20	1330		20
PCB-48	Tetra		2260	C	20	2450	C	20	2420	C	20	921	C	20	1280	C	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CC-S010			LDW-BA-SU-S010-LCB-EXSITU			LDW-BA-SU-S010-TB-EXSITU1			LDW-BA-SU-S010-TB-EXSITU2			LDW-BA-SU-S010-TB-EXSITU3		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-1	Mono		30.4		20		U	4.06		U	6.69		U	7.85		U	8.4
PCB-2	Mono			U	5.44		U	4.95		U	7.43		U	8.8		U	9.54
PCB-3	Mono			U	5.27		U	4.78		U	7.39		U	8.82		U	9.67
PCB-4	Di		1010		20		U	15.5		U	11.8		U	12.6		U	15.3
PCB-5	Di			U	15.2		U	12.1		U	10		U	11.1		U	13.6
PCB-6	Di		631		20		U	12.6		U	9.47		U	10.5		U	12.9
PCB-7	Di		113		20		U	12.3		U	9.46		U	10.5		U	12.8
PCB-8	Di		2500		20		U	14		U	9.66		U	10.7		U	13.1
PCB-9	Di		127		20		U	13.1		U	9.8		U	10.9		U	13.3
PCB-10	Di		182		20		U	13.8		U	10.7		U	11.9		U	14.6
PCB-11	Di		37.7		20		U	14.3		U	10.1		U	11.2		U	13.8
PCB-12	Di		35.6		20		U	13.7		U	10.4		U	11.5		U	14.1
PCB-13	Di		41.4		20		U	14.4		U	10.1		U	11.2		U	13.8
PCB-14	Di	PRC	187		20	141		20	86.4		20	49.9		20	109		20
PCB-15	Di		520		20		U	14		U	9.56		U	11		U	13.5
PCB-16	Tri		3030		20		U	7.01		U	6.5		U	7.59		U	8.28
PCB-17	Tri		5490		20		U	7.52		U	6.43		U	7.51		U	8.19
PCB-18	Tri		11900		20		U	8.18		U	6.95		U	8.12		U	8.86
PCB-19	Tri		1040		20		U	8.08		U	6.99		U	8.16		U	8.91
PCB-20	Tri		5100	C	20		UC	20		UC	20		UC	20		UC	20
PCB-21	Tri			C020			C020			C020			C020			U,C020	20
PCB-22	Tri		3190		20		U	5.67		U	6.93		U	7.38		U	7.5
PCB-23	Tri			U	14.5		U	5.32		U	6.93		U	7.39		U	7.51
PCB-24	Tri		499		20		U	5.75		U	4.85		U	5.66		U	6.18
PCB-25	Tri		864		20		U	4.85		U	6.12		U	6.53		U	6.63
PCB-26	Tri		2080		20		U	5.96		U	7.08		U	7.54		U	7.66
PCB-27	Tri		411		20		U	5.91		U	5		U	5.84		U	6.37
PCB-28	Tri		9760		20		U	4.92		U	6.05		U	6.45		U	6.56
PCB-29	Tri		79		20		U	5.88		U	6.83		U	7.29		U	7.4
PCB-30	Tri			U	3.35		U	5.68		U	4.89		U	5.71		U	6.22
PCB-31	Tri		10000		20		U	5.85		U	7.02		U	7.48		U	7.61
PCB-32	Tri		3970		20		U	6.45		U	5.13		U	5.99		U	6.53
PCB-33	Tri			C020			C020			C020			C020			U,C020	20
PCB-34	Tri		118		20		U	6.75		U	7.86		U	8.38		U	8.52
PCB-35	Tri		54		20		U	6.83		U	7.6		U	8.1		U	8.23
PCB-36	Tri	PRC	1120		20	639		20	1110		20	943		20	1090		20
PCB-37	Tri		1090		20		U	5.8		U	6.71		U	7.16		U	7.27
PCB-38	Tri		73.6		20		U	6.05		U	7.16		U	7.64		U	7.76
PCB-39	Tri			U	16.8		U	6.17		U	7.22		U	7.7		U	7.83
PCB-40	Tetra		1920		20		U	16		U	8.35		U	7.03		U	7.41
PCB-41	Tetra		8720	C	20		UC	20		UC	20		UC	20		UC	20
PCB-42	Tetra		3590	C	20		UC	20		UC	20		UC	20		UC	20
PCB-43	Tetra		11100	C	20		UC	20		UC	20		UC	20		UC	20
PCB-44	Tetra		11000		20		U	13.9		U	7.07		U	5.95		U	6.27
PCB-45	Tetra		2180		20		U	13.7		U	7.18		U	6.05		U	6.38
PCB-46	Tetra		845		20		U	14.4		U	7.56		U	6.37		U	6.71
PCB-47	Tetra		2770		20		U	9.74		U	5.13		U	4.32		U	4.55
PCB-48	Tetra		2600	C	20		UC	20		UC	20		UC	20		UC	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010			LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-49	Tetra			C043			C043			C043			C043			C043	
PCB-50	Tetra		75.1		20	71.2		20	76.1		20	41.4		20	39.2		20
PCB-51	Tetra		717		20	753		20	722		20	374		20	371		20
PCB-52	Tetra		12300	C	20	13200	C	20	13000	C	20	6300	C	20	6990	C	20
PCB-53	Tetra		2390		20	2420		20	2650		20	1240		20	1230		20
PCB-54	Tetra		52.4		20	49.4		20	58.2		20	31.8		20	28.8		20
PCB-55	Tetra		163		20	234		20	139		20	125		20	123		20
PCB-56	Tetra		2410	C	20	3070	C	20	2710	C	20	1040	C	20	1610	C	20
PCB-57	Tetra		89.5		20	83.1		20	63.8		20	35.2		20	36.3		20
PCB-58	Tetra		67.6		20	46.1		20	63.5		20	28.8		20	22.2		20
PCB-59	Tetra			C042			C042			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056			C056			C056	
PCB-61	Tetra		5460	C	20	7010	C	20	6220	C	20	2510	C	20	3660	C	20
PCB-62	Tetra			U	9.73		U	11.6		U	10		U	10.7		U	11.5
PCB-63	Tetra		335		20	378		20	332		20	141		20	183		20
PCB-64	Tetra			C041			C041			C041			C041			C041	
PCB-65	Tetra			U	8.67		U	10.3		U	8.95		U	9.52		U	10.2
PCB-66	Tetra		5290	C	20	5990	C	20	5420	C	20	2330	C	20	3160	C	20
PCB-67	Tetra		246		20	318		20	260		20	110		20	156		20
PCB-68	Tetra		106		20	93.8		20	94.3		20	68.5		20	59.2		20
PCB-69	Tetra			C052			C052			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041			C041			C041	
PCB-73	Tetra			U	9.68		U	11.5		U	9.99		U	10.6		U	11.4
PCB-74	Tetra		2770		20	3240		20	2930		20	1150		20	1730		20
PCB-75	Tetra			C048			C048			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066			C066			C066	
PCB-77	Tetra		192		20	249		20	240		20	94.6		20	143		20
PCB-78	Tetra	PRC	2230		20	1870		20	2600		20	2640		20	2480		20
PCB-79	Tetra		69.4		20	67		20	65.2		20	43.4		20	40.7		20
PCB-80	Tetra			U	7.67		U	9.15		U	7.92		U	8.42		U	9.06
PCB-81	Tetra		53.7		20	125		20	121		20	67.7		20	79.8		20
PCB-82	Penta		590		20	822		20	715		20	327		20	410		20
PCB-83	Penta		373	C	20	418	C	20	389	C	20	215	C	20	232	C	20
PCB-84	Penta		3550	C	20	3910	C	20	3630	C	20	2150	C	20	2170	C	20
PCB-85	Penta		725	C	20	993	C	20	914	C	20	439	C	20	522	C	20
PCB-86	Penta			U	8.55		U	11.8		U	12.8		U	7.35		U	7.65
PCB-87	Penta		1770	C	20	2460	C	20	2260	C	20	1010	C	20	1310	C	20
PCB-88	Penta		1270	C	20	1490	C	20	1220	C	20	580	C	20	514	C	20
PCB-89	Penta		120		20	144		20	125		20	70.4		20	71.4		20
PCB-90	Penta		6670	C	20	7990	C	20	7790	C	20	4120	C	20	4440	C	20
PCB-91	Penta			C088			C088			C088			C088			C088	
PCB-92	Penta			C084			C084			C084			C084			C084	
PCB-93	Penta			U	7.57		U	7.99		U	7.85		U	7.08		U	5.61
PCB-94	Penta		60.3		20	77.5		20	67.8		20	36.8		20	42		20
PCB-95	Penta		8280		20	9960		20	9140		20	5440		20	5680		20
PCB-96	Penta		117		20	118		20	119		20	74.3		20	67.2		20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CC-S010			LDW-BA-SU-S010-LCB-EXSITU			LDW-BA-SU-S010-TB-EXSITU1			LDW-BA-SU-S010-TB-EXSITU2			LDW-BA-SU-S010-TB-EXSITU3		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-49	Tetra			C043			C043			C043			C043			U,C043	20
PCB-50	Tetra		65.9		20		U	12.1		U	6.36		U	5.36		U	5.65
PCB-51	Tetra		693		20		U	11.8		U	6.22		U	5.24		U	5.52
PCB-52	Tetra		14200	C	20		UC	20		UC	20		UC	20		UC	20
PCB-53	Tetra		2280		20		U	12.1		U	6.41		U	5.39		U	5.69
PCB-54	Tetra		45.6		20		U	8.97		U	4.92		U	4.14		U	4.36
PCB-55	Tetra		223		20		U	9.22	30		20	27.7		20	33.6		20
PCB-56	Tetra		4340	C	20		UC	20		UC	20		UC	20		UC	20
PCB-57	Tetra		78.8		20		U	9.48		U	4.86		U	4.09		U	4.31
PCB-58	Tetra		40.8		20		U	9.01		U	4.73		U	3.98		U	4.2
PCB-59	Tetra			C042			C042			C042			C042			U,C042	20
PCB-60	Tetra			C056			C056			C056			C056			U,C056	20
PCB-61	Tetra		8760	C	20		UC	20		UC	20		UC	20		UC	20
PCB-62	Tetra			U	8.09		U	10.6		U	5.02		U	4.22		U	4.45
PCB-63	Tetra		422		20		U	9.37		U	4.72		U	3.97		U	4.19
PCB-64	Tetra			C041			C041			C041			C041			U,C041	20
PCB-65	Tetra			U	7.21		U	9.4		U	5.19		U	4.37		U	4.61
PCB-66	Tetra		7100	C	20		UC	20		UC	20		UC	20		UC	20
PCB-67	Tetra		347		20		U	10.3		U	4.92		U	4.14		U	4.37
PCB-68	Tetra		80.1		20		U	8.95		U	4.56		U	3.84		U	4.05
PCB-69	Tetra			C052			C052			C052			C052			U,C052	20
PCB-70	Tetra			C061			C061			C061			C061			U,C061	20
PCB-71	Tetra			C041			C041			C041			C041			U,C041	20
PCB-72	Tetra			C041			C041			C041			C041			U,C041	20
PCB-73	Tetra			U	8.05		U	10.5		U	4.47		U	3.77		U	3.97
PCB-74	Tetra		3990		20		U	9.14		U	4.59		U	3.86		U	4.07
PCB-75	Tetra			C048			C048			C048			C048			U,C048	20
PCB-76	Tetra			C066			C066			C066			C066			U,C066	20
PCB-77	Tetra		358		20		U	6.72		U	6.48		U	6.67		U	7.93
PCB-78	Tetra	PRC	2470		20	1110		20	2560		20	2430		20	2970		20
PCB-79	Tetra		74.7		20		U	5.82		U	6.06		U	6.4		U	7.53
PCB-80	Tetra			U	6.38		U	8.32		U	4.17		U	3.52		U	3.71
PCB-81	Tetra		163		20		U	5.62		U	5.67		U	6.16		U	7.17
PCB-82	Penta		969		20		U	10.8		U	11.9		U	9.79		U	12.5
PCB-83	Penta		468	C	20		UC	20		UC	20		UC	20		UC	20
PCB-84	Penta		4370	C	20		UC	20	63.7	C	20	50.6	C	20	62.8	C	20
PCB-85	Penta		1180	C	20		UC	20		UC	20		UC	20		UC	20
PCB-86	Penta			U	10.3		U	8.3		U	10		U	8.29		U	10.6
PCB-87	Penta		3130	C	20		UC	20		UC	20		UC	20		UC	20
PCB-88	Penta		1590	C	20		UC	20		UC	20		UC	20		UC	20
PCB-89	Penta		135		20		U	9.34		U	10.6		U	8.75		U	11.2
PCB-90	Penta		9590	C	20		UC	20		UC	20		UC	20		UC	20
PCB-91	Penta			C088			C088			C088			C088			U,C088	20
PCB-92	Penta			C084			C084			C084			C084			C084	20
PCB-93	Penta			U	6.64		U	6.51		U	9.33		U	6.74		U	7.58
PCB-94	Penta		73.3		20		U	6.63		U	8.74		U	6.31		U	7.1
PCB-95	Penta		11300		20		U	6.16		U	9.31		U	6.73		U	7.56
PCB-96	Penta		129		20		U	4.59		U	6.31		U	4.56		U	5.12

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010			LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-97	Penta		1520		20	1930		20	1810		20	873		20	1020		20
PCB-98	Penta			UC	20		UC	20		UC	20		UC	20		UC	20
PCB-99	Penta		2950		20	3340		20	3190		20	1890		20	1870		20
PCB-100	Penta		59.3		20	53		20	64		20	54		20	47.5		20
PCB-101	Penta			C090			C090			C090			C090			C090	
PCB-102	Penta			C098			C098			C098			C098			C098	
PCB-103	Penta		179		20	168		20	185		20	155		20	112		20
PCB-104	Penta	PRC	2160		20	2010		20	2540		20	2370		20	2280		20
PCB-105	Penta		920		20	1360		20	1130		20	570		20	634		20
PCB-106	Penta		2880	C	20	3850	C	20	3790	C	20	1760	C	20	2090	C	20
PCB-107	Penta		290	C	20	353	C	20	318	C	20	194	C	20	194	C	20
PCB-108	Penta			C107			C107			C107			C107			C107	
PCB-109	Penta			U	6.89		U	9.54		U	10.3		U	5.93		U	6.16
PCB-110	Penta		5680		20	6920		20	6430		20	3370		20	3700		20
PCB-111	Penta		64.6	C	20	120	C	20	84.7	C	20	52.5	C	20	49.9	C	20
PCB-112	Penta			C083			C083			C083			C083			C083	
PCB-113	Penta			U	6.94		U	9.61		U	10.4		U	5.97		U	6.21
PCB-114	Penta		66.8		20	99.6		20	96.2		20	44.1		20	53.5		20
PCB-115	Penta			C111			C111			C111			C111			C111	
PCB-116	Penta			C085			C085			C085			C085			C085	
PCB-117	Penta			C087			C087			C087			C087			C087	
PCB-118	Penta			C106			C106			C106			C106			C106	
PCB-119	Penta		218		20	207		20	204		20	161		20	132		20
PCB-120	Penta			U	6.25		U	8.65		U	9.38		U	5.38		U	5.59
PCB-121	Penta	PRC	3640		20	3380		20	4350		20	4440		20	4410		20
PCB-122	Penta		39.9		20	56.6		20	56.5		20	26.7		20	29.6		20
PCB-123	Penta		38.3		20	52		20	46.5		20	24.9		20	27.7		20
PCB-124	Penta		112		20	169		20	154		20	75.2		20	91.2		20
PCB-125	Penta			C087			C087			C087			C087			C087	
PCB-126	Penta			U	14	19.1	J	20		U	11.3		U	9.45		U	8.51
PCB-127	Penta			U	12.3		U	11.5		U	10.2		U	8.63		U	7.96
PCB-128	Hexa		344	C	20	484	C	20	435	C	20	210	C	20	240	C	20
PCB-129	Hexa		127		20	195		20	175		20	71.3		20	88.7		20
PCB-130	Hexa		237		20	326		20	304		20	145		20	141		20
PCB-131	Hexa		96.7	C	20	112	C	20	127	C	20	69.4	C	20	60.4	C	20
PCB-132	Hexa		991	C	20	1260	C	20	1110	C	20	640	C	20	617	C	20
PCB-133	Hexa			C131			C131			C131			C131			C131	
PCB-134	Hexa		213	C	20	270	C	20	264	C	20	147	C	20	152	C	20
PCB-135	Hexa		612		20	668		20	663		20	427		20	381		20
PCB-136	Hexa		781		20	1060		20	997		20	595		20	577		20
PCB-137	Hexa		93		20	130		20	129		20	77.5		20	78		20
PCB-138	Hexa		2330	C	20	3170	C	20	2840	C	20	1480	C	20	1550	C	20
PCB-139	Hexa		3080	C	20	3830	C	20	3600	C	20	2090	C	20	2010	C	20
PCB-140	Hexa		37.6		20	47.4		20	40		20	36		20	19.6		20
PCB-141	Hexa		473		20	676		20	610		20	291		20	334		20
PCB-142	Hexa	PRC	3800		20	3450		20	4320		20	4180		20	4010		20
PCB-143	Hexa			C134			C134			C134			C134			C134	
PCB-144	Hexa		170		20	308		20	216		20	108		20	115		20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CC-S010			LDW-BA-SU-S010-LCB-EXSITU			LDW-BA-SU-S010-TB-EXSITU1			LDW-BA-SU-S010-TB-EXSITU2			LDW-BA-SU-S010-TB-EXSITU3		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-97	Penta		2280		20		U	7.35		U	8.38		U	6.92		U	8.86
PCB-98	Penta			UC	20		UC	20		UC	20		UC	20		UC	20
PCB-99	Penta		3580		20		U	7.68		U	8.07		U	6.66		U	8.53
PCB-100	Penta		63.4		20		U	5.54		U	7.43		U	5.37		U	6.03
PCB-101	Penta			C090			C090			C090			C090			U,C090	20
PCB-102	Penta			C098			C098			C098			C098			U,C098	20
PCB-103	Penta		157		20		U	5.51		U	7.31		U	5.28		U	5.94
PCB-104	Penta	PRC	2180		20	947		20	1960		20	1600		20	1910		20
PCB-105	Penta		1620		20		U	5.52		U	6.13		U	5.57		U	5.77
PCB-106	Penta		4730	C	20		UC	20		UC	20		UC	20		UC	20
PCB-107	Penta		384	C	20		UC	20		UC	20		UC	20		UC	20
PCB-108	Penta			C107			C107			C107			C107			U,C107	20
PCB-109	Penta			U	8.32		U	6.69		U	7.66		U	6.33		U	8.11
PCB-110	Penta		7910		20		U	6.35		U	7.05		U	5.82		U	7.45
PCB-111	Penta		131	C	20		UC	20		UC	20		UC	20		UC	20
PCB-112	Penta			C083			C083			C083			C083			U,C083	20
PCB-113	Penta			U	8.38		U	6.74		U	8.29		U	6.84		U	8.76
PCB-114	Penta		137		20		U	5.06		U	5.22		U	5.5		U	4.79
PCB-115	Penta			C111			C111			C111			C111			U,C111	20
PCB-116	Penta			C085			C085			C085			C085			U,C085	20
PCB-117	Penta			C087			C087			C087			C087			U,C087	20
PCB-118	Penta			C106			C106			C106			C106			UC106	20
PCB-119	Penta		188		20		U	6.27		U	7.02		U	5.8		U	7.42
PCB-120	Penta			U	7.54		U	6.07		U	6.69		U	5.52		U	7.08
PCB-121	Penta	PRC	4140		20	1490		20	3350		20	2940		20	3590		20
PCB-122	Penta		72.4		20		U	5.7		U	5.83		U	5.7		U	5.48
PCB-123	Penta		83.6		20		U	4.35		U	4.94		U	5.07		U	4.52
PCB-124	Penta		215		20		U	5.25		U	5.69		U	5.56		U	5.34
PCB-125	Penta			C087			C087			C087			C087			U,C087	20
PCB-126	Penta		15.1	J	20		U	6.93		U	6.36		U	6.24		U	6.36
PCB-127	Penta			U	9.71		U	6.15		U	6.06		U	5.92		U	5.69
PCB-128	Hexa		531	C	20		UC	20		UC	20		UC	20		UC	20
PCB-129	Hexa		208		20		U	5.21		U	8.2		U	6.68		U	7.75
PCB-130	Hexa		365		20		U	5.62		U	6.97		U	5.68		U	6.59
PCB-131	Hexa		125	C	20		UC	20		UC	20		UC	20		UC	20
PCB-132	Hexa		1290	C	20		UC	20		UC	20		UC	20		UC	20
PCB-133	Hexa			C131			C131			C131			C131			U,C131	20
PCB-134	Hexa		307	C	20		UC	20		UC	20		UC	20		UC	20
PCB-135	Hexa		767		20		U	4.5		U	6.89		U	5.61		U	6.51
PCB-136	Hexa		1030		20		U	4.01		U	4.44		U	4.14		U	3.7
PCB-137	Hexa		141		20		U	3.99		U	7.61		U	6.2		U	7.19
PCB-138	Hexa		3300	C	20		UC	20		UC	20		UC	20		UC	20
PCB-139	Hexa		4050	C	20		UC	20		UC	20		UC	20		UC	20
PCB-140	Hexa		32.5		20		U	3.98		U	6.41		U	5.23		U	6.06
PCB-141	Hexa		733		20		U	4.3		U	6.68		U	5.45		U	6.32
PCB-142	Hexa	PRC	4240		20	1430		20	3780		20	3340		20	4290		20
PCB-143	Hexa			C134			C134			C134			C134			U,C134	20
PCB-144	Hexa		248		20		U	4.24		U	6.82		U	5.56		U	6.44

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010			LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-145	Hexa			U	5.39		U	6.08		U	6.71		U	6.18		U	3.63
PCB-146	Hexa		479	C	20	566	C	20	555	C	20	388	C	20	334	C	20
PCB-147	Hexa		69.2		20	87.6		20	84.2		20	44.5		20	46.7		20
PCB-148	Hexa			U	7.45		U	8.4		U	9.27		U	8.54		U	5.02
PCB-149	Hexa			C139			C139			C139			C139			C139	
PCB-150	Hexa			U	5.25		U	5.92	18.1	J	20		U	6.02		U	3.54
PCB-151	Hexa		997		20	1210		20	1130		20	678		20	645		20
PCB-152	Hexa			U	5.32		U	6		U	6.62		U	6.1		U	3.58
PCB-153	Hexa		2940		20	3760		20	3590		20	2040		20	2060		20
PCB-154	Hexa		103		20	108		20	112		20	112		20	81.7		20
PCB-155	Hexa	PRC	4140		20	4190		20	5020		20	4870		20	4820		20
PCB-156	Hexa		169		20	272		20	235		20	106		20	122		20
PCB-157	Hexa		37.5		20	54		20	45.3		20	22.1		20	23.5		20
PCB-158	Hexa		276	C	20	401	C	20	369	C	20	174	C	20	195	C	20
PCB-159	Hexa		16.3	J	20	32		20	26.1		20	18.4	J	20	18.4	J	20
PCB-160	Hexa			C158			C158			C158			C158			C158	
PCB-161	Hexa			C132			C132			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138			C138			C138	
PCB-165	Hexa			C146			C146			C146			C146			C146	
PCB-166	Hexa			U	9.04		U	9.66	14.8	J	20		U	7.78		U	5.45
PCB-167	Hexa		67.8		20	103		20	98.5		20	42.7		20	53.4		20
PCB-168	Hexa			U	8.81		U	9.43		U	9.94		U	7.59		U	5.32
PCB-169	Hexa			U	10.8		U	11.6		U	11.9		U	9.06		U	6.19
PCB-170	Hepta		322		20	519		20	424		20	188		20	203		20
PCB-171	Hepta		112		20	187		20	141		20	78.2		20	81.4		20
PCB-172	Hepta		148		20	189		20	185		20	154		20	158		20
PCB-173	Hepta			U	8.47		U	8.27		U	8.52		U	7.28		U	4.6
PCB-174	Hepta		409		20	655		20	502		20	285		20	272		20
PCB-175	Hepta		21.7		20	29		20	27.9		20	12.3	J	20	16.1	J	20
PCB-176	Hepta		89.9		20	126		20	100		20	52.8		20	60.4		20
PCB-177	Hepta		279		20	424		20	337		20	200		20	177		20
PCB-178	Hepta		114		20	153		20	137		20	77.9		20	81.9		20
PCB-179	Hepta		289		20	410		20	341		20	214		20	193		20
PCB-180	Hepta		690		20	1080		20	820		20	478		20	473		20
PCB-181	Hepta			U	8.59		U	8.4		U	8.65		U	7.39		U	4.67
PCB-182	Hepta		604	C	20	852	C	20	734	C	20	440	C	20	422	C	20
PCB-183	Hepta		263		20	422		20	343		20	183		20	185		20
PCB-184	Hepta	PRC	5480		20	5160		20	6370		20	6420		20	6050		20
PCB-185	Hepta		52.7		20	83.6		20	74.9		20	28.5		20	32.8		20
PCB-186	Hepta			U	5.51		U	5.39		U	5.55		U	4.74		U	3
PCB-187	Hepta			C182			C182			C182			C182			C182	
PCB-188	Hepta			U	6.03		U	5.96		U	5.96		U	5.47		U	3.37
PCB-189	Hepta		12.5	J	20	19.2	J	20	15.8	J	20	10.2	J	20		U	2.98
PCB-190	Hepta		75		20	111		20	81.5		20	40.8		20	40.7		20
PCB-191	Hepta		24.7		20	25.6		20	19.3	J	20	17.3	J	20	9.94	J	20
PCB-192	Hepta	PRC	4020		20	3590		20	4660		20	4800		20	4500		20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CC-S010			LDW-BA-SU-S010-LCB-EXSITU			LDW-BA-SU-S010-TB-EXSITU1			LDW-BA-SU-S010-TB-EXSITU2			LDW-BA-SU-S010-TB-EXSITU3		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-145	Hexa			U	4.82		U	4.19		U	4.61		U	4.3		U	3.84
PCB-146	Hexa		569	C	20		UC	20		UC	20		UC	20		UC	20
PCB-147	Hexa		96.3		20		U	3.83		U	6.22		U	5.07		U	5.88
PCB-148	Hexa			U	6.66		U	5.79		U	6.34		U	5.92		U	5.29
PCB-149	Hexa			C139			C139			C139			C139			U,C139	20
PCB-150	Hexa		15.8	J	20		U	4.08		U	4.54		U	4.24		U	3.78
PCB-151	Hexa		1210		20		U	4.45		U	6.86		U	5.59		U	6.48
PCB-152	Hexa			U	4.75		U	4.13		U	4.59		U	4.29		U	3.82
PCB-153	Hexa		3890		20	28.6		20		U	5.59		U	4.56		U	5.28
PCB-154	Hexa		95.5		20		U	4.77		U	5.12		U	4.78		U	4.26
PCB-155	Hexa	PRC	4760		20	1590		20	4120		20	3350		20	4060		20
PCB-156	Hexa		282		20		U	3.61		U	5.17		U	4.31		U	4.88
PCB-157	Hexa		54.8		20		U	3.9		U	5.79		U	4.45		U	5.45
PCB-158	Hexa		431	C	20		UC	20		UC	20		UC	20		UC	20
PCB-159	Hexa		24		20		U	3.4		U	4.99		U	4.07		U	4.72
PCB-160	Hexa			C158			C158			C158			C158			U,C158	20
PCB-161	Hexa			C132			C132			C132			C132			U,C132	20
PCB-162	Hexa			C128			C128			C128			C128			U,C128	20
PCB-163	Hexa			C138			C138			C138			C138			U,C138	20
PCB-164	Hexa			C138			C138			C138			C138			U,C138	20
PCB-165	Hexa			C146			C146			C146			C146			U,C146	20
PCB-166	Hexa		16.6	J	20		U	3.39		U	5.37		U	4.37		U	5.07
PCB-167	Hexa		115		20		U	3.73		U	5.62		U	4.37		U	5.18
PCB-168	Hexa			U	10.7		U	3.3	65.1		20		U	4.29	74.5		20
PCB-169	Hexa			U	12.5		U	4.05		U	5		U	4.49		U	4.89
PCB-170	Hepta		408		20		U	4.83		U	7.1		U	6.11		U	6.86
PCB-171	Hepta		160		20		U	4.17		U	6.39		U	5.49		U	6.17
PCB-172	Hepta		188		20	36.9		20	106		20	95.5		20	117		20
PCB-173	Hepta			U	6.63		U	4.59		U	6.93		U	5.96		U	6.69
PCB-174	Hepta		520		20		U	3.62		U	6.38		U	5.49		U	6.16
PCB-175	Hepta		20.8		20		U	3.88		U	6.06		U	5.21		U	5.85
PCB-176	Hepta		104		20		U	3		U	4.67		U	4.02		U	4.51
PCB-177	Hepta		346		20		U	4.4		U	6.64		U	5.71		U	6.42
PCB-178	Hepta		134		20		U	4.11		U	6.43		U	5.53		U	6.21
PCB-179	Hepta		352		20		U	2.88		U	4.54		U	3.9		U	4.39
PCB-180	Hepta		859		20		U	3.49		U	5.14		U	4.42		U	4.97
PCB-181	Hepta			U	6.73		U	4.66		U	5.95		U	5.12		U	5.75
PCB-182	Hepta		739	C	20		UC	20		UC	20		UC	20		UC	20
PCB-183	Hepta		347		20		U	3.68		U	5.75		U	4.95		U	5.56
PCB-184	Hepta	PRC	6550		20	1990		20	5630		20	4590		20	6020		20
PCB-185	Hepta		75		20		U	3.99		U	6.21		U	5.34		U	6
PCB-186	Hepta			U	4.32		U	2.99		U	4.73		U	4.07		U	4.57
PCB-187	Hepta			C182			C182			C182			C182			U,C182	20
PCB-188	Hepta			U	4.73		U	3.46		U	4.79		U	4.32		U	4.76
PCB-189	Hepta		13.4	J	20		U	2.85		U	4.62		U	3.75		U	4.32
PCB-190	Hepta		80.8		20		U	3.54		U	5.1		U	4.39		U	4.93
PCB-191	Hepta		23.7		20		U	3.31		U	4.89		U	4.21		U	4.73
PCB-192	Hepta	PRC	4740		20	1540		20	3890		20	3190		20	4330		20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR+AC-CA-S010			LDW-BA-SU-ENR+AC-CB-S010			LDW-BA-SU-ENR+AC-CC-S010			LDW-BA-SU-ENR-CA-S010			LDW-BA-SU-ENR-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-193	Hepta		52.8		20	78.4		20	60.7		20	40.1		20	35.8		20
PCB-194	Octa		85.6		20	141		20	102		20	58.2		20	58.5		20
PCB-195	Octa		39.9		20	71.1		20	48.1		20	27.3		20	26		20
PCB-196	Octa		141	C	20	243	C	20	177	C	20	105	C	20	104	C	20
PCB-197	Octa		73.2		20	79.2		20	82.2		20	85.9		20	79.4		20
PCB-198	Octa			U	8.6		U	8.57		U	8.83		U	7.55		U	6.51
PCB-199	Octa		126		20	215		20	154		20	91.9		20	88		20
PCB-200	Octa		27.3		20	37.8		20	27.5		20	18.1	J	20		U	4.12
PCB-201	Octa			U	5.14	27.5		20	24		20		U	4.51		U	3.89
PCB-202	Octa		35.8		20	57.2		20	38		20	19.1	J	20	23.7		20
PCB-203	Octa			C196			C196			C196			C196			C196	
PCB-204	Octa	PRC	8580		20	7610		20	9990		20	10500		20	9700		20
PCB-205	Octa			U	6.73		U	7.67		U	6.7		U	3.49		U	3.03
PCB-206	Nona		27.1		20	35.2		20	27.9		20	16.6	J	20	17.1	J	20
PCB-207	Nona		40.8		20	38.3		20	46.9		20	45.9		20	45.4		20
PCB-208	Nona		10.4	J	20	13.2	J	20	10.9		20	6.5	J	20		U	5.38
PCB-209	Deca		42.7		20	40		20	56.7		20	43.9		20	43.6		20
Total Detected PCB Congeners			**231301**			**244904**			**253623**			**138090**			**154321**		

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CC-S010			LDW-BA-SU-S010-LCB-EXSITU			LDW-BA-SU-S010-TB-EXSITU1			LDW-BA-SU-S010-TB-EXSITU2			LDW-BA-SU-S010-TB-EXSITU3		
			PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass MDL (pg)
PCB-193	Hepta		74.3		20		U	3.17		U	4.67		U	4.02		U	4.51
PCB-194	Octa		94.3		20		U	7.33		U	4.27		U	4.77		U	5.04
PCB-195	Octa		52.1		20		U	7.8		U	4.56		U	5.1		U	5.39
PCB-196	Octa		180	C	20		UC	20		UC	20		UC	20		UC	20
PCB-197	Octa		84.4		20		U	4.07	59.4		20	44.9		20	67		20
PCB-198	Octa			U	7.55		U	6.69		U	5.81		U	6.74		U	6.67
PCB-199	Octa		169		20		U	5.47		U	5.69		U	6.61		U	6.54
PCB-200	Octa		33		20		U	4.23		U	4.22		U	4.9		U	4.85
PCB-201	Octa			U	4.51		U	4		U	4.21		U	4.89		U	4.84
PCB-202	Octa		36.5		20		U	4.15		U	4.29		U	4.97		U	4.92
PCB-203	Octa			C196			C196			C196			C196			U,C196	20
PCB-204	Octa	PRC	10500		20	3210		20	7060		20	5890		20	8030		20
PCB-205	Octa			U	4.93		U	5.69		U	3.32		U	3.71		U	3.92
PCB-206	Nona		23.5		20		U	10.1		U	3.94		U	4.6		U	4.31
PCB-207	Nona		47.2		20	13.6	J	20	40		20	33.1		20	43.1		20
PCB-208	Nona			U	4.98		U	7.98		U	2.59		U	3		U	2.89
PCB-209	Deca		42.5		20		U	10.6	29.9		20	27.5		20	35.7		20
Total Detected PCB Congeners			**272486**			**14166**			**33941**			**28602**			**36833**		

Notes

C: Coelution with one or more PCB congeners; the numerical value indicates the lower congener co-eluter. For example, PCB-20 co-elutes with PCB-21 and PCB-33.
J: Analyte concentration is below calibration range
PCB: Polychlorinated biphenyl
pg: picogram
PRC: Performance Reference Compound
U: Not detected at the Method Detection Limit (MDL) shown in the second column for each sample.

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TABLE A4

Table A4. Elimination Rates (ke) and Percentage to Steady State Reached by Performance Reference Compounds (PRCs) During Deployment, and Resulting Statistics for the PRC Regression Models.

PCB PRC	Homolog Group	LDW-BA-SU-ENR+AC-CA-S010		LDW-BA-SU-ENR+AC-CB-S010		LDW-BA-SU-ENR+AC-CC-S010		LDW-BA-SU-ENR-CA-S010		LDW-BA-SU-ENR-CB-S010		LDW-BA-SU-ENR-CC-S010		LDW-BA-SU-S010-LCB-EXSITU	
		k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %
PCB-14	Di	OUTLIER		0.000339	2%	OUTLIER		OUTLIER		OUTLIER		OUTLIER		OUTLIER	
PCB-36	Tri	0.004579	21%	0.008099	34%	0.003575	17%	0.003042	14%	0.002686	13%	0.006705	29%	OUTLIER	
PCB-78	Tetra	0.007469	32%	0.008569	35%	0.007443	32%	0.008120	34%	0.007792	33%	0.009425	38%	0.001871	9%
PCB-104	Penta	0.000716	4%	OUTLIER		0.000521	3%	0.002856	14%	0.002061	10%	0.004495	20%	OUTLIER	
PCB-121	Penta	0.002084	10%	0.001185	6%	0.001574	8%	0.002148	10%	0.000727	4%	0.003520	16%	0.000320	2%
PCB-142	Hexa	0.004052	19%	0.003594	17%	0.004521	21%	0.006143	27%	0.005403	24%	0.005864	26%	0.003938	18%
PCB-155	Hexa	0.002576	12%	OUTLIER		0.001780	9%	0.003351	16%	0.001999	10%	0.003799	18%	0.002062	10%
PCB-184	Hepta	0.003775	18%	0.002602	12%	0.003807	18%	0.004630	21%	0.004240	19%	0.004237	19%	0.004359	20%
PCB-192	Hepta	0.002921	14%	0.002787	13%	0.003008	14%	0.003404	16%	0.003115	15%	0.003650	17%	0.002457	12%
PCB-204	Octa	OUTLIER	0%	OUTLIER	0%	OUTLIER		OUTLIER	0%	OUTLIER	0%	OUTLIER	0%	OUTLIER	0%
PRC	p-value	0.96		0.54		0.84		0.78		0.72		0.13		0.22	
Model	r^2	0.00		0.08		0.01		0.01		0.02		0.33		0.35	

Notes

%: percent

d: day

PCB: Polychlorinated biphenyl

The PRCs noted "OUTLIER" were removed from the calculations. See text for further details.

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TABLE A5

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-1	Mono	4.23
PCB-2	Mono	4.87
PCB-3	Mono	4.87
PCB-4	Di	4.64
PCB-5	Di	4.96
PCB-6	Di	4.96
PCB-7	Di	4.96
PCB-8	Di	4.96
PCB-9	Di	4.96
PCB-10	Di	4.64
PCB-11	Di	5.28
PCB-12	Di	5.28
PCB-13	Di	5.28
PCB-14	Di	5.28
PCB-15	Di	5.28
PCB-16	Tri	5.27
PCB-17	Tri	5.27
PCB-18	Tri	5.27
PCB-19	Tri	5.05
PCB-20	Tri	5.48
PCB-21	Tri	C020
PCB-22	Tri	5.48
PCB-23	Tri	5.48
PCB-24	Tri	5.27
PCB-25	Tri	5.48
PCB-26	Tri	5.48
PCB-27	Tri	5.27
PCB-28	Tri	5.48
PCB-29	Tri	5.48
PCB-30	Tri	5.27
PCB-31	Tri	5.48
PCB-32	Tri	5.27
PCB-33	Tri	C020
PCB-34	Tri	5.48
PCB-35	Tri	5.69
PCB-36	Tri	5.69
PCB-37	Tri	5.69
PCB-38	Tri	5.69
PCB-39	Tri	5.69
PCB-40	Tetra	5.78
PCB-41	Tetra	5.82
PCB-42	Tetra	5.78
PCB-43	Tetra	5.78
PCB-44	Tetra	5.78
PCB-45	Tetra	5.62
PCB-46	Tetra	5.62
PCB-47	Tetra	5.78
PCB-48	Tetra	5.78
PCB-49	Tetra	C043
PCB-50	Tetra	5.62
PCB-51	Tetra	5.62
PCB-52	Tetra	5.78

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-53	Tetra	5.62
PCB-54	Tetra	5.66
PCB-55	Tetra	5.94
PCB-56	Tetra	5.94
PCB-57	Tetra	5.94
PCB-58	Tetra	5.94
PCB-59	Tetra	C042
PCB-60	Tetra	C056
PCB-61	Tetra	5.94
PCB-62	Tetra	5.78
PCB-63	Tetra	5.94
PCB-64	Tetra	C041
PCB-65	Tetra	5.78
PCB-66	Tetra	5.94
PCB-67	Tetra	5.94
PCB-68	Tetra	5.94
PCB-69	Tetra	C052
PCB-70	Tetra	C061
PCB-71	Tetra	C041
PCB-72	Tetra	C041
PCB-73	Tetra	5.78
PCB-74	Tetra	5.94
PCB-75	Tetra	C048
PCB-76	Tetra	C066
PCB-77	Tetra	6.1
PCB-78	Tetra	6.1
PCB-79	Tetra	6.1
PCB-80	Tetra	6.1
PCB-81	Tetra	6.1
PCB-82	Penta	6.26
PCB-83	Penta	6.26
PCB-84	Penta	6.195
PCB-85	Penta	6.26
PCB-86	Penta	6.26
PCB-87	Penta	6.26
PCB-88	Penta	6.13
PCB-89	Penta	6.13
PCB-90	Penta	6.26
PCB-91	Penta	C088
PCB-92	Penta	C084
PCB-93	Penta	6.13
PCB-94	Penta	6.13
PCB-95	Penta	6.13
PCB-96	Penta	6.2
PCB-97	Penta	6.26
PCB-98	Penta	6.13
PCB-99	Penta	6.26
PCB-100	Penta	6.13
PCB-101	Penta	C090
PCB-102	Penta	C098
PCB-103	Penta	6.13
PCB-104	Penta	6.2

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-105	Penta	6.39
PCB-106	Penta	6.39
PCB-107	Penta	6.39
PCB-108	Penta	C107
PCB-109	Penta	6.26
PCB-110	Penta	6.26
PCB-111	Penta	6.325
PCB-112	Penta	C083
PCB-113	Penta	6.26
PCB-114	Penta	6.39
PCB-115	Penta	C111
PCB-116	Penta	C085
PCB-117	Penta	C087
PCB-118	Penta	C106
PCB-119	Penta	6.26
PCB-120	Penta	6.39
PCB-121	Penta	6.26
PCB-122	Penta	6.39
PCB-123	Penta	6.39
PCB-124	Penta	6.39
PCB-125	Penta	C087
PCB-126	Penta	6.52
PCB-127	Penta	6.52
PCB-128	Hexa	6.765
PCB-129	Hexa	6.71
PCB-130	Hexa	6.71
PCB-131	Hexa	6.66
PCB-132	Hexa	6.66
PCB-133	Hexa	C131
PCB-134	Hexa	6.61
PCB-135	Hexa	6.61
PCB-136	Hexa	6.7
PCB-137	Hexa	6.71
PCB-138	Hexa	6.71
PCB-139	Hexa	6.61
PCB-140	Hexa	6.61
PCB-141	Hexa	6.71
PCB-142	Hexa	6.61
PCB-143	Hexa	C134
PCB-144	Hexa	6.61
PCB-145	Hexa	6.7
PCB-146	Hexa	6.71
PCB-147	Hexa	6.61
PCB-148	Hexa	6.61
PCB-149	Hexa	C139
PCB-150	Hexa	6.7
PCB-151	Hexa	6.61
PCB-152	Hexa	6.7
PCB-153	Hexa	6.71
PCB-154	Hexa	6.61
PCB-155	Hexa	6.7
PCB-156	Hexa	6.82

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-157	Hexa	6.82
PCB-158	Hexa	6.71
PCB-159	Hexa	6.82
PCB-160	Hexa	C158
PCB-161	Hexa	C132
PCB-162	Hexa	C128
PCB-163	Hexa	C138
PCB-164	Hexa	C138
PCB-165	Hexa	C146
PCB-166	Hexa	6.71
PCB-167	Hexa	6.82
PCB-168	Hexa	6.71
PCB-169	Hexa	6.93
PCB-170	Hepta	7.15
PCB-171	Hepta	7.06
PCB-172	Hepta	7.15
PCB-173	Hepta	7.06
PCB-174	Hepta	7.06
PCB-175	Hepta	7.06
PCB-176	Hepta	7.17
PCB-177	Hepta	7.06
PCB-178	Hepta	7.06
PCB-179	Hepta	7.17
PCB-180	Hepta	7.15
PCB-181	Hepta	7.06
PCB-182	Hepta	7.06
PCB-183	Hepta	7.06
PCB-184	Hepta	7.17
PCB-185	Hepta	7.06
PCB-186	Hepta	7.17
PCB-187	Hepta	C182
PCB-188	Hepta	7.17
PCB-189	Hepta	7.25
PCB-190	Hepta	7.15
PCB-191	Hepta	7.15
PCB-192	Hepta	7.15
PCB-193	Hepta	7.15
PCB-194	Octa	7.59
PCB-195	Octa	7.51
PCB-196	Octa	7.51
PCB-197	Octa	7.63
PCB-198	Octa	7.51
PCB-199	Octa	7.63
PCB-200	Octa	7.63
PCB-201	Octa	7.51
PCB-202	Octa	7.63
PCB-203	Octa	C196
PCB-204	Octa	7.63
PCB-205	Octa	7.59
PCB-206	Nona	7.94
PCB-207	Nona	8.07
PCB-208	Nona	8.07

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-209	Deca	8.51

Notes

kg: kilogram

L: liter

PCB: Polychlorinated biphenyl

Log K_{PDMS} was referenced from Smedes et al. (2009). For co-eluters, log KPDMS was obtained by averaging the KPDMS values for each individual congener. Log K_{PDMS} is shown as the lower congener co-eluter for the higher congener co-eluters in the coelution. For example, PCB-20 co-elutes with PCB-21 and PCB-33; therefore, the KPDMS value for PCB-21 is shown as the average KPDMS for PCB-21 and PCB-33, while the KPDMS for PCB-33 is shown as "C021".

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TABLE A6

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR+AC-CA-S010					LDW-BA-SU-ENR+AC-CB-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono		540	80	3100	L	220	1600	79	14000	L	640
PCB-2	Mono					U L	14				U L	29
PCB-3	Mono		37	12	130	J L	51	49	11	240	J L	110
PCB-4	Di		4300	1200	18000	L	85	11000	2100	66000	L	210
PCB-5	Di		980	340	3300	L	41				U L	41
PCB-6	Di		1800	610	5900	L	41	4700	1200	21000	L	87
PCB-7	Di		250	86	840	L	41	530	130	2300	L	87
PCB-8	Di		3600	1200	12000	L	41	11000	2700	48000	L	87
PCB-9	Di		290	99	960	L	41	610	150	2700	L	87
PCB-10	Di		920	270	3900	L	85	1700	330	10000	L	210
PCB-11	Di		60	25	160	L	20	81	26	270	L	36
PCB-12	Di		55	23	140	L	20	76	24	250	L	36
PCB-13	Di		65	27	170	L	20	120	39	410	L	36
PCB-14	Di	PRC										
PCB-15	Di		430	180	1100	L	20	670	210	2200	L	36
PCB-16	Tri		2400	970	6300	L	20	4900	1600	17000	L	37
PCB-17	Tri		4700	1900	13000	L	20	9600	3100	32000	L	37
PCB-18	Tri		11000	4300	28000	L	20	23000	7200	77000	L	37
PCB-19	Tri		1700	600	5200	L	34	3600	960	15000	L	68
PCB-20	Tri		2500	1100	5600	C L	13	4100	1500	12000	C L	21
PCB-21	Tri					C020					C020	
PCB-22	Tri		1300	610	3000	L	13	2400	880	6700	L	21
PCB-23	Tri					U L	6	19	6.9	53	J L	21
PCB-24	Tri		440	180	1200	L	20	710	230	2400	L	37
PCB-25	Tri		920	430	2100	L	13	1000	380	2900	L	21
PCB-26	Tri		1800	850	4200	L	13	2500	920	7000	L	21
PCB-27	Tri		330	140	880	L	20	920	290	3100	L	37
PCB-28	Tri		4400	2000	10000	L	13	7600	2800	21000	L	21
PCB-29	Tri		35	16	79	L	13	64	24	180	L	21
PCB-30	Tri					U L	3.9				U L	6.9
PCB-31	Tri		4300	2000	9900	L	13	7800	2900	22000	L	21
PCB-32	Tri		3300	1400	8900	L	20	6700	2100	23000	L	37
PCB-33	Tri					C020					C020	
PCB-34	Tri		75	35	170	L	13	130	48	370	L	21
PCB-35	Tri		15	8.1	31	L	7.8	24	10	59	L	12
PCB-36	Tri	PRC										
PCB-37	Tri		250	130	510	L	7.8	380	160	920	L	12
PCB-38	Tri		21	11	41	L	7.8	37	16	89	L	12
PCB-39	Tri		5.4	2.8	11	J L	7.8				U L	5.6
PCB-40	Tetra		490	270	920	L	6.4	790	360	1800	L	9.3
PCB-41	Tetra		1800	1000	3400	C L	5.8	3200	1500	7100	C L	8.3
PCB-42	Tetra		960	530	1800	C L	6.4	1600	710	3500	C L	9.3
PCB-43	Tetra		3000	1600	5600	C L	6.4	4800	2200	11000	C L	9.3
PCB-44	Tetra		2700	1500	5200	L	6.4	4600	2100	10000	L	9.3
PCB-45	Tetra		920	460	1900	L	9.2	1700	680	4200	L	14
PCB-46	Tetra		380	190	790	L	9.2	680	280	1700	L	14
PCB-47	Tetra		710	390	1300	L	6.4	1200	530	2700	L	9.3
PCB-48	Tetra		600	330	1100	C L	6.4	1100	490	2500	C L	9.3
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		29	14	60	L	9.2	48	20	120	L	14

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR+AC-CC-S010					LDW-BA-SU-ENR-CA-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono		580	54	4700	L	350	470	68	1400	L	230
PCB-2	Mono					U L	23	12	5.9	26	J L	50
PCB-3	Mono		30	7.6	140	J L	73	17	8.3	38	J L	50
PCB-4	Di		7300	1600	40000	L	130	2600	1200	6400	L	87
PCB-5	Di					U L	17				U L	29
PCB-6	Di		2700	740	11000	L	59	650	320	1400	L	41
PCB-7	Di		400	110	1700	L	59	92	46	190	L	41
PCB-8	Di		7200	2000	30000	L	59	1800	900	3700	L	41
PCB-9	Di		420	110	1800	L	59	110	55	230	L	41
PCB-10	Di		1100	230	5900	L	130	320	140	790	L	87
PCB-11	Di		47	16	150	L	27	24	14	44	L	19
PCB-12	Di		38	13	120	L	27	17	9.6	31	L	19
PCB-13	Di		84	29	270	L	27	16	9.4	30	L	19
PCB-14	Di	PRC										
PCB-15	Di		500	170	1600	L	27	110	63	200	L	19
PCB-16	Tri		3600	1200	11000	L	28	910	520	1700	L	19
PCB-17	Tri		6500	2200	21000	L	28	1600	880	2800	L	19
PCB-18	Tri		16000	5300	50000	L	28	3700	2100	6800	L	19
PCB-19	Tri		2500	730	9800	L	47	730	380	1500	L	33
PCB-20	Tri		2700	1100	7200	C L	17	580	360	970	C L	12
PCB-21	Tri					C020					C020	
PCB-22	Tri		1500	610	4100	L	17	330	200	540	L	12
PCB-23	Tri		15	5.8	39	L	17				U L	8.2
PCB-24	Tri		450	150	1500	L	28	170	97	310	L	19
PCB-25	Tri		580	230	1600	L	17	150	95	260	L	12
PCB-26	Tri		1400	570	3900	L	17	380	230	630	L	12
PCB-27	Tri		660	220	2100	L	28	140	78	250	L	19
PCB-28	Tri		4400	1700	12000	L	17	1000	630	1700	L	12
PCB-29	Tri		43	17	120	L	17	9	5.5	15	L	12
PCB-30	Tri					U L	6				U L	3.3
PCB-31	Tri		5700	2200	15000	L	17	1000	640	1700	L	12
PCB-32	Tri		4400	1500	14000	L	28	1000	580	1900	L	19
PCB-33	Tri					C020					C020	
PCB-34	Tri		74	29	200	L	17	20	12	34	L	12
PCB-35	Tri		21	9.6	48	L	9.9	6.3	4.2	9.6	L	7.1
PCB-36	Tri	PRC										
PCB-37	Tri		260	120	600	L	9.9	60	40	92	L	7.1
PCB-38	Tri		20	9.3	46	L	9.9	8.7	5.8	13	L	7.1
PCB-39	Tri					U L	6.4				U L	5.8
PCB-40	Tetra		510	250	1100	L	8	130	90	190	L	5.7
PCB-41	Tetra		2000	1000	4200	C L	7.2	510	360	740	C L	5.2
PCB-42	Tetra		930	450	2000	C L	8	240	170	360	C L	5.7
PCB-43	Tetra		3100	1500	6500	C L	8	1000	690	1500	C L	5.7
PCB-44	Tetra		2900	1400	6100	L	8	770	530	1100	L	5.7
PCB-45	Tetra		1100	480	2600	L	12	260	170	400	L	8.4
PCB-46	Tetra		450	200	1100	L	12	110	69	170	L	8.4
PCB-47	Tetra		680	330	1400	L	8	230	160	330	L	5.7
PCB-48	Tetra		700	340	1500	C L	8	170	120	250	C L	5.7
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		32	14	78	L	12	11	7.3	18	L	8.4

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR-CB-S010					LDW-BA-SU-ENR-CC-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono		740	64	4600	L	370	74	33	130		71
PCB-2	Mono					U L	17				U	5.3
PCB-3	Mono		57	17	220	L	74				U	5.2
PCB-4	Di		4800	1200	22000	L	130	1100	710	1800		31
PCB-5	Di					U L	45				U	12
PCB-6	Di		1200	370	4200	L	59	360	240	550		16
PCB-7	Di		190	59	670	L	59	64	44	98		16
PCB-8	Di		4000	1200	14000	L	59	1400	960	2200		16
PCB-9	Di		180	57	650	L	59	71	49	110		16
PCB-10	Di		560	140	2500	L	130	190	130	320		31
PCB-11	Di		41	16	110	L	27	11	8.1	16		8.7
PCB-12	Di		35	13	96	L	27	11	7.7	15		8.7
PCB-13	Di		27	11	76	L	27	12	8.9	18		8.7
PCB-14	Di	PRC										
PCB-15	Di		260	99	710	L	27	150	110	220		8.7
PCB-16	Tri		1900	740	5400	L	27	920	660	1300		8.8
PCB-17	Tri		3200	1200	9000	L	27	1700	1200	2400		8.8
PCB-18	Tri		7600	2900	21000	L	27	3600	2600	5200		8.8
PCB-19	Tri		1300	430	4300	L	47	490	340	740		14
PCB-20	Tri		1400	630	3400	C L	16	1000	770	1400	C	5.8
PCB-21	Tri					C020					C020	
PCB-22	Tri		800	350	1900	L	16	640	480	870		5.8
PCB-23	Tri					U L	7				U	4.2
PCB-24	Tri		280	110	770	L	27	150	110	220		8.8
PCB-25	Tri		260	120	630	L	16	170	130	230		5.8
PCB-26	Tri		630	280	1500	L	16	420	310	570		5.8
PCB-27	Tri		280	110	770	L	27	120	90	180		8.8
PCB-28	Tri		2400	1000	5700	L	16	2000	1500	2700		5.8
PCB-29	Tri		26	11	61	L	16	16	12	21		5.8
PCB-30	Tri					U L	4.2				U	1.5
PCB-31	Tri		2600	1100	6100	L	16	2000	1500	2700		5.8
PCB-32	Tri		2100	810	5900	L	27	1200	870	1700		8.8
PCB-33	Tri					C020					C020	
PCB-34	Tri		39	17	93	L	16	24	18	32		5.8
PCB-35	Tri		14	7.2	29	L	9.5	7.1	5.6	9.2		3.8
PCB-36	Tri	PRC										
PCB-37	Tri		160	78	320	L	9.5	140	110	190		3.8
PCB-38	Tri		12	5.9	24	L	9.5	9.7	7.6	13		3.8
PCB-39	Tri					U L	4.8				U	3.2
PCB-40	Tetra		270	140	530	L	7.6	210	170	270		3.2
PCB-41	Tetra		1100	580	2000	C L	6.9	890	720	1100	C	3
PCB-42	Tetra		490	260	960	C L	7.6	400	320	500	C	3.2
PCB-43	Tetra		1700	880	3200	C L	7.6	1200	980	1600	C	3.2
PCB-44	Tetra		1600	820	3000	L	7.6	1200	970	1500		3.2
PCB-45	Tetra		540	260	1200	L	11	330	260	430		4.4
PCB-46	Tetra		210	100	450	L	11	130	99	170		4.4
PCB-47	Tetra		380	200	730	L	7.6	310	240	390		3.2
PCB-48	Tetra		360	190	710	C L	7.6	290	230	360	C	3.2
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		17	8	36	L	11	10	7.7	13		4.4

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-S010-LCB-EXSITU				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-1	Mono					U L	4400
PCB-2	Mono					U L	540
PCB-3	Mono					U L	530
PCB-4	Di					U L	3900
PCB-5	Di					U L	970
PCB-6	Di					U L	1000
PCB-7	Di					U L	980
PCB-8	Di					U L	1100
PCB-9	Di					U L	1000
PCB-10	Di					U L	3400
PCB-11	Di					U L	370
PCB-12	Di					U L	350
PCB-13	Di					U L	370
PCB-14	Di	PRC					
PCB-15	Di					U L	360
PCB-16	Tri					U L	190
PCB-17	Tri					U L	200
PCB-18	Tri					U L	220
PCB-19	Tri					U L	470
PCB-20	Tri					UC L	70
PCB-21	Tri					C020	
PCB-22	Tri					U L	71
PCB-23	Tri					U L	67
PCB-24	Tri					U L	150
PCB-25	Tri					U L	61
PCB-26	Tri					U L	75
PCB-27	Tri					U L	160
PCB-28	Tri					U L	62
PCB-29	Tri					U L	74
PCB-30	Tri					U L	150
PCB-31	Tri					U L	73
PCB-32	Tri					U L	170
PCB-33	Tri					C020	
PCB-34	Tri					U L	85
PCB-35	Tri					U L	41
PCB-36	Tri	PRC					
PCB-37	Tri					U L	35
PCB-38	Tri					U L	36
PCB-39	Tri					U L	37
PCB-40	Tetra					U L	69
PCB-41	Tetra					UC L	36
PCB-42	Tetra					UC L	44
PCB-43	Tetra					UC L	54
PCB-44	Tetra					U L	60
PCB-45	Tetra					U L	100
PCB-46	Tetra					U L	110
PCB-47	Tetra					U L	42
PCB-48	Tetra					UC L	43
PCB-49	Tetra					C043	
PCB-50	Tetra					U L	92

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR+AC-CA-S010					LDW-BA-SU-ENR+AC-CB-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-51	Tetra		270	140	570	L	9.2	510	210	1300	L	14
PCB-52	Tetra		3300	1800	6200	C L	6.4	5800	2600	13000	C L	9.3
PCB-53	Tetra		920	460	1900	L	9.2	1600	670	4200	L	14
PCB-54	Tetra		18	9.4	37	L	8.4	30	13	74	L	13
PCB-55	Tetra		24	14	42	L	4.4	58	29	120	L	6
PCB-56	Tetra		450	270	770	C L	4.4	870	430	1800	C L	6
PCB-57	Tetra		17	9.9	28	L	4.4	24	12	49	L	6
PCB-58	Tetra		13	7.5	21	L	4.4	13	6.5	27	L	6
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		1000	600	1700	C L	4.4	2000	990	4100	C L	6
PCB-62	Tetra					U L	3.1				U L	5.4
PCB-63	Tetra		62	37	110	L	4.4	110	53	220	L	6
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U L	2.8				U L	4.8
PCB-66	Tetra		980	580	1700	C L	4.4	1700	840	3500	C L	6
PCB-67	Tetra		46	27	78	L	4.4	90	45	190	L	6
PCB-68	Tetra		20	12	34	L	4.4	27	13	55	L	6
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U L	3.1				U L	5.3
PCB-74	Tetra		510	310	880	L	4.4	920	460	1900	L	6
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		25	16	39	L	3.1	46	24	89	L	3.9
PCB-78	Tetra	PRC										
PCB-79	Tetra		8.9	5.7	14	L	3.1	12	6.5	24	L	3.9
PCB-80	Tetra					U L	1.2				U L	1.8
PCB-81	Tetra		6.9	4.4	11	L	3.1	23	12	45	L	3.9
PCB-82	Penta		53	36	78	L	2.1	98	53	180	L	2.5
PCB-83	Penta		33	23	49	C L	2.1	50	27	93	C L	2.5
PCB-84	Penta		360	240	550	C L	2.5	550	300	1000	C L	3
PCB-85	Penta		65	44	96	C L	2.1	120	64	220	C L	2.5
PCB-86	Penta					U L	0.91				U L	1.5
PCB-87	Penta		160	110	230	C L	2.1	290	160	550	C L	2.5
PCB-88	Penta		150	99	240	C L	2.9	250	130	490	C L	3.6
PCB-89	Penta		14	9.4	22	L	2.9	24	13	47	L	3.6
PCB-90	Penta		600	410	880	C L	2.1	950	520	1800	C L	2.5
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U L	1.1				U L	1.4
PCB-94	Penta		7.2	4.7	11	L	2.9	13	7	25	L	3.6
PCB-95	Penta		990	650	1500	L	2.9	1700	900	3300	L	3.6
PCB-96	Penta		12	8	18	L	2.4	16	8.9	31	L	3
PCB-97	Penta		140	93	200	L	2.1	230	130	430	L	2.5
PCB-98	Penta					UC L	0.87				UC L	1.1
PCB-99	Penta		260	180	390	L	2.1	400	220	750	L	2.5
PCB-100	Penta		7.1	4.6	11	L	2.9	9	4.8	17	L	3.6

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR+AC-CC-S010					LDW-BA-SU-ENR-CA-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-51	Tetra		310	130	740	L	12	100	66	160	L	8.4
PCB-52	Tetra		3800	1800	8000	C L	8	1200	800	1700	C L	5.7
PCB-53	Tetra		1100	490	2700	L	12	340	220	530	L	8.4
PCB-54	Tetra		23	10	53	L	11	7.9	5.2	12	L	7.6
PCB-55	Tetra		20	11	37	L	5.4	11	8	15	L	3.9
PCB-56	Tetra		530	290	1000	C L	5.4	130	95	180	C L	3.9
PCB-57	Tetra		12	6.8	24	L	5.4	4.4	3.2	6.2	L	3.9
PCB-58	Tetra		12	6.7	24	L	5.4	3.6	2.6	5.1	L	3.9
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		1200	660	2300	C L	5.4	320	230	440	C L	3.9
PCB-62	Tetra					U L	4				U L	3
PCB-63	Tetra		65	35	120	L	5.4	18	13	25	L	3.9
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U L	3.6				U L	2.7
PCB-66	Tetra		1100	570	2000	C L	5.4	290	210	410	C L	3.9
PCB-67	Tetra		51	28	97	L	5.4	14	10	19	L	3.9
PCB-68	Tetra		18	10	35	L	5.4	8.7	6.3	12	L	3.9
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U L	4				U L	3
PCB-74	Tetra		570	310	1100	L	5.4	150	110	200	L	3.9
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		32	19	55	L	3.7	8.1	6.2	11	L	2.6
PCB-78	Tetra	PRC										
PCB-79	Tetra		8.7	5.1	15	L	3.7	3.7	2.8	4.9	L	2.6
PCB-80	Tetra					U L	1.4				U L	1.1
PCB-81	Tetra		16	9.5	28	L	3.7	5.8	4.4	7.7	L	2.6
PCB-82	Penta		64	41	100	L	2.5	19	15	24	L	1.8
PCB-83	Penta		35	22	56	C L	2.5	13	10	16	C L	1.8
PCB-84	Penta		370	230	610	C L	2.9	140	110	180	C L	2.1
PCB-85	Penta		82	52	130	C L	2.5	26	20	33	C L	1.8
PCB-86	Penta					U L	1.6				U L	0.66
PCB-87	Penta		200	130	320	C L	2.5	59	47	75	C L	1.8
PCB-88	Penta		150	91	250	C L	3.4	46	36	61	C L	2.5
PCB-89	Penta		15	9.3	26	L	3.4	5.6	4.3	7.4	L	2.5
PCB-90	Penta		700	450	1100	C L	2.5	240	190	310	C L	1.8
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U L	1.3				U L	0.87
PCB-94	Penta		8.4	5	14	L	3.4	2.9	2.3	3.9	L	2.5
PCB-95	Penta		1100	680	1900	L	3.4	440	340	570	L	2.5
PCB-96	Penta		12	7.7	20	L	2.9	5	3.9	6.5	L	2.1
PCB-97	Penta		160	100	260	L	2.5	51	41	65	L	1.8
PCB-98	Penta					UC L	1.1				UC L	0.7
PCB-99	Penta		290	180	460	L	2.5	110	88	140	L	1.8
PCB-100	Penta		7.9	4.7	13	L	3.4	4.3	3.3	5.7	L	2.5

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR-CB-S010					LDW-BA-SU-ENR-CC-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-51	Tetra		160	76	340	L	11	110	81	140		4.4
PCB-52	Tetra		2000	1100	3900	C L	7.6	1600	1300	2000	C	3.2
PCB-53	Tetra		520	250	1100	L	11	350	270	450		4.4
PCB-54	Tetra		11	5.4	23	L	10	6.4	5	8.3		4.1
PCB-55	Tetra		16	9.5	29	L	5.1	15	13	19		2.3
PCB-56	Tetra		310	180	540	C L	5.1	350	290	430	C	2.3
PCB-57	Tetra		6.9	4	12	L	5.1	6.3	5.2	7.8		2.3
PCB-58	Tetra		4.2	2.5	7.4	L	5.1	3.3	2.7	4		2.3
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		700	410	1200	C L	5.1	710	580	870	C	2.3
PCB-62	Tetra					U L	4.4				U	1.3
PCB-63	Tetra		35	20	61	L	5.1	34	28	42		2.3
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U L	3.9				U	1.2
PCB-66	Tetra		600	350	1100	C L	5.1	570	470	700	C	2.3
PCB-67	Tetra		30	17	52	L	5.1	28	23	34		2.3
PCB-68	Tetra		11	6.6	20	L	5.1	6.5	5.3	7.9		2.3
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U L	4.3				U	1.3
PCB-74	Tetra		330	190	580	L	5.1	320	260	390		2.3
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		18	12	29	L	3.4	21	18	25		1.7
PCB-78	Tetra	PRC										
PCB-79	Tetra		5.2	3.3	8.4	L	3.4	4.4	3.7	5.2		1.7
PCB-80	Tetra					U L	1.6				U	0.55
PCB-81	Tetra		10	6.4	16	L	3.4	9.6	8.1	11		1.7
PCB-82	Penta		35	24	53	L	2.3	42	36	48		1.2
PCB-83	Penta		20	13	30	C L	2.3	20	17	23	C	1.2
PCB-84	Penta		210	140	330	C L	2.7	210	180	250	C	1.4
PCB-85	Penta		45	30	67	C L	2.3	51	44	59	C	1.2
PCB-86	Penta					U L	0.88				U	0.64
PCB-87	Penta		110	75	170	C L	2.3	130	120	160	C	1.2
PCB-88	Penta		61	39	97	C L	3.2	88	75	100	C	1.6
PCB-89	Penta		8.5	5.4	13	L	3.2	7.5	6.3	8.9		1.6
PCB-90	Penta		380	260	570	C L	2.3	410	350	480	C	1.2
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U L	0.89				U	0.54
PCB-94	Penta		5	3.2	7.9	L	3.2	4.1	3.4	4.8		1.6
PCB-95	Penta		670	430	1100	L	3.2	630	530	740		1.6
PCB-96	Penta		6.7	4.4	10	L	2.7	6.2	5.3	7.3		1.4
PCB-97	Penta		87	59	130	L	2.3	98	84	110		1.2
PCB-98	Penta					UC L	0.72				UC	0.43
PCB-99	Penta		160	110	240	L	2.3	150	130	180		1.2
PCB-100	Penta		5.6	3.6	8.9	L	3.2	3.5	3	4.2		1.6

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-S010-LCB-EXSITU				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-51	Tetra					U L	90
PCB-52	Tetra					UC L	40
PCB-53	Tetra					U L	92
PCB-54	Tetra					U L	59
PCB-55	Tetra					U L	23
PCB-56	Tetra					UC L	15
PCB-57	Tetra					U L	23
PCB-58	Tetra					U L	22
PCB-59	Tetra					C042	
PCB-60	Tetra					C056	
PCB-61	Tetra					UC L	21
PCB-62	Tetra					U L	46
PCB-63	Tetra					U L	23
PCB-64	Tetra					C041	
PCB-65	Tetra					U L	41
PCB-66	Tetra					UC L	22
PCB-67	Tetra					U L	25
PCB-68	Tetra					U L	22
PCB-69	Tetra					C052	
PCB-70	Tetra					C061	
PCB-71	Tetra					C041	
PCB-72	Tetra					C041	
PCB-73	Tetra					U L	45
PCB-74	Tetra					U L	22
PCB-75	Tetra					C048	
PCB-76	Tetra					C066	
PCB-77	Tetra					U L	9.4
PCB-78	Tetra	PRC					
PCB-79	Tetra					U L	8.1
PCB-80	Tetra					U L	12
PCB-81	Tetra					U L	7.8
PCB-82	Penta					U L	8.5
PCB-83	Penta					UC L	6.4
PCB-84	Penta					UC L	8.5
PCB-85	Penta					UC L	6
PCB-86	Penta					U L	6.6
PCB-87	Penta					UC L	5.6
PCB-88	Penta					UC L	7.2
PCB-89	Penta					U L	12
PCB-90	Penta					UC L	6.3
PCB-91	Penta					C088	
PCB-92	Penta					C084	
PCB-93	Penta					U L	8.2
PCB-94	Penta					U L	8.3
PCB-95	Penta					U L	7.7
PCB-96	Penta					U L	4.5
PCB-97	Penta					U L	5.8
PCB-98	Penta					UC L	6.5
PCB-99	Penta					U L	6.1
PCB-100	Penta					U L	6.9

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR+AC-CA-S010					LDW-BA-SU-ENR+AC-CB-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		21	14	33	L	2.9	28	15	55	L	3.6
PCB-104	Penta	PRC										
PCB-105	Penta		61	43	88	L	1.6	110	62	210	L	1.8
PCB-106	Penta		190	130	280	C L	1.6	320	180	600	C L	1.8
PCB-107	Penta		19	14	28	C L	1.6	29	16	55	C L	1.8
PCB-108	Penta					C107					C107	
PCB-109	Penta					U L	0.74				U L	1.2
PCB-110	Penta		510	350	750	L	2.1	820	450	1500	L	2.5
PCB-111	Penta		5	3.5	7.2	C L	1.8	12	6.6	22	C L	2.1
PCB-112	Penta					C083					C083	
PCB-113	Penta					U L	0.74				U L	1.2
PCB-114	Penta		4.4	3.1	6.4	L	1.6	8.3	4.6	16	L	1.8
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		19	13	29	L	2.1	25	13	46	L	2.5
PCB-120	Penta					U L	0.5				U L	0.76
PCB-121	Penta	PRC										
PCB-122	Penta		2.6	1.9	3.8	L	1.6	4.7	2.6	8.9	L	1.8
PCB-123	Penta		2.5	1.8	3.7	L	1.6	4.3	2.4	8.2	L	1.8
PCB-124	Penta		7.4	5.2	11	L	1.6	14	7.7	26	L	1.8
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	0.83	1.1	0.6	2.2	J L	1.2
PCB-127	Penta					U L	0.73				U L	0.71
PCB-128	Hexa		9.7	6.5	15	C L	0.68	15	7.2	31	C L	0.64
PCB-129	Hexa		4.1	2.8	6	L	0.77	6.8	3.5	14	L	0.74
PCB-130	Hexa		7.6	5.2	11	L	0.77	11	5.8	24	L	0.74
PCB-131	Hexa		3.5	2.4	5.1	C L	0.86	4.5	2.3	9.1	C L	0.85
PCB-132	Hexa		36	25	52	C L	0.86	51	26	100	C L	0.85
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		8.6	6	12	C L	0.96	12	6.5	25	C L	0.97
PCB-135	Hexa		25	17	36	L	0.96	31	16	61	L	0.97
PCB-136	Hexa		26	18	38	L	0.78	38	19	78	L	0.76
PCB-137	Hexa		3	2	4.4	L	0.77	4.6	2.3	9.4	L	0.74
PCB-138	Hexa		75	51	110	C L	0.77	110	56	230	C L	0.74
PCB-139	Hexa		120	87	180	C L	0.96	180	92	350	C L	0.97
PCB-140	Hexa		1.5	1.1	2.2	L	0.96	2.2	1.1	4.3	L	0.97
PCB-141	Hexa		15	10	22	L	0.77	24	12	49	L	0.74
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		6.8	4.8	9.9	L	0.96	14	7.4	28	L	0.97
PCB-145	Hexa					U L	0.21				U L	0.23
PCB-146	Hexa		15	10	23	C L	0.77	20	10	41	C L	0.74
PCB-147	Hexa		2.8	1.9	4	L	0.96	4	2.1	8	L	0.97
PCB-148	Hexa					U L	0.36				U L	0.41
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.21				U L	0.22

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR+AC-CC-S010					LDW-BA-SU-ENR-CA-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		23	14	39	L	3.4	12	9.5	16	L	2.5
PCB-104	Penta	PRC										
PCB-105	Penta		74	49	110	L	1.8	25	20	31	L	1.3
PCB-106	Penta		250	160	380	C L	1.8	76	61	95	C L	1.3
PCB-107	Penta		21	14	32	C L	1.8	8.3	6.7	10	C L	1.3
PCB-108	Penta					C107					C107	
PCB-109	Penta					U L	1.3				U L	0.54
PCB-110	Penta		580	370	920	L	2.5	200	160	250	L	1.8
PCB-111	Penta		6.5	4.2	10	C L	2.1	2.6	2.1	3.3	C L	1.5
PCB-112	Penta					C083					C083	
PCB-113	Penta					U L	1.3				U L	0.54
PCB-114	Penta		6.3	4.1	9.7	L	1.8	1.9	1.5	2.4	L	1.3
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		18	12	29	L	2.5	9.5	7.5	12	L	1.8
PCB-120	Penta					U L	0.85				U L	0.36
PCB-121	Penta	PRC										
PCB-122	Penta		3.7	2.4	5.7	L	1.8	1.1	0.92	1.4	L	1.3
PCB-123	Penta		3	2	4.7	L	1.8	1.1	0.86	1.3	L	1.3
PCB-124	Penta		10	6.6	16	L	1.8	3.2	2.6	4	L	1.3
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	0.74				U L	0.46
PCB-127	Penta					U L	0.67				U L	0.42
PCB-128	Hexa		11	7.2	19	C L	0.73	3.7	2.9	4.7	C L	0.54
PCB-129	Hexa		5.3	3.4	8.4	L	0.83	1.4	1.1	1.8	L	0.61
PCB-130	Hexa		9.2	5.8	15	L	0.83	2.9	2.3	3.7	L	0.61
PCB-131	Hexa		4.3	2.8	6.8	C L	0.94	1.6	1.2	2	C L	0.69
PCB-132	Hexa		38	24	59	C L	0.94	14	12	18	C L	0.69
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		10	6.6	16	C L	1.1	3.7	3	4.7	C L	0.78
PCB-135	Hexa		25	17	39	L	1.1	11	8.7	14	L	0.78
PCB-136	Hexa		31	20	49	L	0.85	12	9.7	15	L	0.63
PCB-137	Hexa		3.9	2.5	6.2	L	0.83	1.5	1.2	2	L	0.61
PCB-138	Hexa		86	55	140	C L	0.83	30	23	38	C L	0.61
PCB-139	Hexa		140	91	210	C L	1.1	53	43	66	C L	0.78
PCB-140	Hexa		1.5	1	2.4	L	1.1	0.91	0.73	1.1	L	0.78
PCB-141	Hexa		18	12	29	L	0.83	5.8	4.6	7.4	L	0.61
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		8.3	5.4	13	L	1.1	2.7	2.2	3.4	L	0.78
PCB-145	Hexa					U L	0.29				U L	0.19
PCB-146	Hexa		17	11	27	C L	0.83	7.8	6.1	9.9	C L	0.61
PCB-147	Hexa		3.2	2.1	5	L	1.1	1.1	0.91	1.4	L	0.78
PCB-148	Hexa					U L	0.49				U L	0.33
PCB-149	Hexa					C139					C139	
PCB-150	Hexa		0.56	0.36	0.89	J L	0.85				U L	0.19

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR-CB-S010					LDW-BA-SU-ENR-CC-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		13	8.5	21	L	3.2	8.7	7.4	10		1.6
PCB-104	Penta	PRC										
PCB-105	Penta		39	27	57	L	1.7	54	47	62		0.97
PCB-106	Penta		130	90	190	C L	1.7	160	140	180	C	0.97
PCB-107	Penta		12	8.3	18	C L	1.7	13	11	15	C	0.97
PCB-108	Penta					C107					C107	
PCB-109	Penta					U L	0.71				U	0.52
PCB-110	Penta		320	210	480	L	2.3	340	290	390		1.2
PCB-111	Penta		3.6	2.5	5.4	C L	2	4.9	4.3	5.7	C	1.1
PCB-112	Penta					C083					C083	
PCB-113	Penta					U L	0.71				U	0.52
PCB-114	Penta		3.3	2.3	4.8	L	1.7	4.6	4	5.2		0.97
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		11	7.6	17	L	2.3	8.1	7	9.4		1.2
PCB-120	Penta					U L	0.46				U	0.36
PCB-121	Penta	PRC										
PCB-122	Penta		1.8	1.3	2.7	L	1.7	2.4	2.1	2.8		0.97
PCB-123	Penta		1.7	1.2	2.5	L	1.7	2.8	2.4	3.2		0.97
PCB-124	Penta		5.6	3.9	8.2	L	1.7	7.1	6.2	8.2		0.97
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	0.51	0.39	0.34	0.45	J	0.75
PCB-127	Penta					U L	0.48				U	0.36
PCB-128	Hexa		5.8	3.9	8.9	C L	0.65	8.5	7.2	10	C	0.46
PCB-129	Hexa		2.5	1.7	3.7	L	0.75	3.7	3.2	4.3		0.52
PCB-130	Hexa		3.9	2.6	5.9	L	0.75	6.5	5.6	7.6		0.52
PCB-131	Hexa		1.9	1.3	2.8	C L	0.85	2.4	2.1	2.8	C	0.57
PCB-132	Hexa		19	13	29	C L	0.85	25	22	29	C	0.57
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		5.4	3.7	8	C L	0.96	6.6	5.8	7.7	C	0.63
PCB-135	Hexa		14	9.4	20	L	0.96	17	14	19		0.63
PCB-136	Hexa		16	11	25	L	0.77	19	16	22		0.53
PCB-137	Hexa		2.2	1.5	3.3	L	0.75	2.5	2.1	2.9		0.52
PCB-138	Hexa		43	29	65	C L	0.75	59	50	68	C	0.52
PCB-139	Hexa		72	50	110	C L	0.96	87	76	100	C	0.63
PCB-140	Hexa		0.7	0.48	1	L	0.96	0.7	0.61	0.81		0.63
PCB-141	Hexa		9.3	6.3	14	L	0.75	13	11	15		0.52
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		4.1	2.8	6	L	0.96	5.4	4.6	6.2		0.63
PCB-145	Hexa					U L	0.14				U	0.13
PCB-146	Hexa		9.3	6.3	14	C L	0.75	10	8.7	12	C	0.52
PCB-147	Hexa		1.7	1.2	2.4	L	0.96	2.1	1.8	2.4		0.63
PCB-148	Hexa					U L	0.24				U	0.21
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.14	0.29	0.25	0.33	J	0.53

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-S010-LCB-EXSITU				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-101	Penta					C090	
PCB-102	Penta					C098	
PCB-103	Penta					U L	6.9
PCB-104	Penta	PRC					
PCB-105	Penta					U L	2.8
PCB-106	Penta					UC L	2.9
PCB-107	Penta					UC L	2.8
PCB-108	Penta					C107	
PCB-109	Penta					U L	5.3
PCB-110	Penta					U L	5
PCB-111	Penta					UC L	3.7
PCB-112	Penta					C083	
PCB-113	Penta					U L	5.3
PCB-114	Penta					U L	2.5
PCB-115	Penta					C111	
PCB-116	Penta					C085	
PCB-117	Penta					C087	
PCB-118	Penta					C106	
PCB-119	Penta					U L	5
PCB-120	Penta					U L	3
PCB-121	Penta	PRC					
PCB-122	Penta					U L	2.9
PCB-123	Penta					U L	2.2
PCB-124	Penta					U L	2.6
PCB-125	Penta					C087	
PCB-126	Penta					U L	2.2
PCB-127	Penta					U L	1.9
PCB-128	Hexa					UC L	0.53
PCB-129	Hexa					U L	0.85
PCB-130	Hexa					U L	0.91
PCB-131	Hexa					UC L	0.82
PCB-132	Hexa					UC L	0.72
PCB-133	Hexa					C131	
PCB-134	Hexa					UC L	1
PCB-135	Hexa					U L	1
PCB-136	Hexa					U L	0.67
PCB-137	Hexa					U L	0.65
PCB-138	Hexa					UC L	0.54
PCB-139	Hexa					UC L	0.91
PCB-140	Hexa					U L	0.92
PCB-141	Hexa					U L	0.7
PCB-142	Hexa	PRC					
PCB-143	Hexa					C134	
PCB-144	Hexa					U L	0.98
PCB-145	Hexa					U L	0.71
PCB-146	Hexa					UC L	0.59
PCB-147	Hexa					U L	0.88
PCB-148	Hexa					U L	1.3
PCB-149	Hexa					C139	
PCB-150	Hexa					U L	0.69

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR+AC-CA-S010					LDW-BA-SU-ENR+AC-CB-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-151	Hexa		40	28	58	L	0.96	56	29	110	L	0.97
PCB-152	Hexa					U L	0.21				U L	0.23
PCB-153	Hexa		94	64	140	L	0.77	130	67	270	L	0.74
PCB-154	Hexa		4.1	2.9	6	L	0.96	5	2.6	9.8	L	0.97
PCB-155	Hexa	PRC										
PCB-156	Hexa		4.2	2.8	6.5	L	0.6	7.1	3.4	15	L	0.55
PCB-157	Hexa		0.94	0.61	1.4	L	0.6	1.4	0.68	3.1	L	0.55
PCB-158	Hexa		8.8	6	13	C L	0.77	14	7.1	29	C L	0.74
PCB-159	Hexa		0.41	0.27	0.63	J L	0.6	0.83	0.4	1.8	L	0.55
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	
PCB-166	Hexa					U L	0.35				U L	0.36
PCB-167	Hexa		1.7	1.1	2.6	L	0.6	2.7	1.3	5.8	L	0.55
PCB-168	Hexa					U L	0.34				U L	0.35
PCB-169	Hexa					U L	0.25				U L	0.24
PCB-170	Hepta		3.8	2.1	7	L	0.28	5.5	2.3	15	L	0.22
PCB-171	Hepta		1.6	0.95	2.8	L	0.35	2.5	1.1	6.5	L	0.29
PCB-172	Hepta		0.42	0.23	0.77	L	0.28	0.99	0.41	2.7	L	0.22
PCB-173	Hepta					U L	0.15				U L	0.12
PCB-174	Hepta		5.9	3.5	10	L	0.35	8.9	3.8	23	L	0.29
PCB-175	Hepta		0.31	0.18	0.55	L	0.35	0.39	0.17	1	L	0.29
PCB-176	Hepta		1	0.56	1.9	L	0.27	1.3	0.51	3.5	L	0.21
PCB-177	Hepta		4	2.4	7	L	0.35	5.8	2.5	15	L	0.29
PCB-178	Hepta		1.6	0.97	2.9	L	0.35	2.1	0.89	5.3	L	0.29
PCB-179	Hepta		3.2	1.8	6.1	L	0.27	4.1	1.7	11	L	0.21
PCB-180	Hepta		8.1	4.5	15	L	0.28	11	4.7	31	L	0.22
PCB-181	Hepta					U L	0.15				U L	0.12
PCB-182	Hepta		8.7	5.1	15	C L	0.35	12	5	29	C L	0.29
PCB-183	Hepta		3.8	2.2	6.6	L	0.35	5.7	2.5	15	L	0.29
PCB-184	Hepta	PRC										
PCB-185	Hepta		0.76	0.45	1.3	L	0.35	1.1	0.49	2.9	L	0.29
PCB-186	Hepta					U L	0.074				U L	0.057
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.081				U L	0.063
PCB-189	Hepta		0.12	0.062	0.23	J L	0.22	0.16	0.061	0.46	J L	0.17
PCB-190	Hepta		0.88	0.49	1.6	L	0.28	1.2	0.48	3.2	L	0.22
PCB-191	Hepta		0.29	0.16	0.54	L	0.28	0.27	0.11	0.74	L	0.22
PCB-192	Hepta	PRC										
PCB-193	Hepta		0.62	0.35	1.1	L	0.28	0.83	0.34	2.3	L	0.22
PCB-194	Octa		0.37	0.16	0.91	L	0.1	0.46	0.15	1.8		0.068
PCB-195	Octa		0.21	0.094	0.48	L	0.12	0.29	0.098	1	L	0.085
PCB-196	Octa		0.73	0.33	1.7	C L	0.12	0.98	0.34	3.5	C L	0.085
PCB-197	Octa		0.05	0.021	0.13	L	0.094	0.088	0.029	0.35		0.061
PCB-198	Octa					U L	0.053				U L	0.036
PCB-199	Octa		0.5	0.21	1.3	L	0.094	0.63	0.2	2.5		0.061
PCB-200	Octa		0.11	0.046	0.27	L	0.094	0.11	0.036	0.44		0.061

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR+AC-CC-S010					LDW-BA-SU-ENR-CA-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-151	Hexa		43	28	67	L	1.1	17	14	22	L	0.78
PCB-152	Hexa					U L	0.28				U L	0.19
PCB-153	Hexa		110	69	170	L	0.83	41	32	52	L	0.61
PCB-154	Hexa		4.3	2.8	6.7	L	1.1	2.8	2.3	3.6	L	0.78
PCB-155	Hexa	PRC										
PCB-156	Hexa		5.4	3.3	9.1	L	0.64	1.6	1.3	2.1	L	0.47
PCB-157	Hexa		1	0.64	1.7	L	0.64	0.34	0.26	0.44	L	0.47
PCB-158	Hexa		11	7.1	18	C L	0.83	3.5	2.8	4.4	C L	0.61
PCB-159	Hexa		0.6	0.37	1	L	0.64	0.28	0.22	0.37	J L	0.47
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	
PCB-166	Hexa		0.45	0.28	0.71	J L	0.83				U L	0.24
PCB-167	Hexa		2.3	1.4	3.8	L	0.64	0.66	0.51	0.85	L	0.47
PCB-168	Hexa					U L	0.41				U L	0.23
PCB-169	Hexa					U L	0.29				U L	0.16
PCB-170	Hepta		4.4	2.2	9	L	0.29	1.3	0.92	1.9	L	0.21
PCB-171	Hepta		1.8	0.97	3.5	L	0.35	0.68	0.49	0.95	L	0.27
PCB-172	Hepta		0.55	0.28	1.1	L	0.29	0.17	0.12	0.25	L	0.21
PCB-173	Hepta					U L	0.15				U L	0.097
PCB-174	Hepta		6.5	3.5	12	L	0.35	2.5	1.8	3.5	L	0.27
PCB-175	Hepta		0.36	0.19	0.69	L	0.35	0.11	0.077	0.15	J L	0.27
PCB-176	Hepta		0.98	0.49	2.1	L	0.27	0.35	0.25	0.51	L	0.2
PCB-177	Hepta		4.3	2.3	8.4	L	0.35	1.7	1.3	2.4	L	0.27
PCB-178	Hepta		1.8	0.94	3.4	L	0.35	0.67	0.49	0.94	L	0.27
PCB-179	Hepta		3.4	1.7	7	L	0.27	1.4	0.99	2.1	L	0.2
PCB-180	Hepta		8.5	4.3	17	L	0.29	3.3	2.3	4.8	L	0.21
PCB-181	Hepta					U L	0.15				U L	0.098
PCB-182	Hepta		9.4	5.1	18	C L	0.35	3.8	2.8	5.3	C L	0.27
PCB-183	Hepta		4.4	2.4	8.5	L	0.35	1.6	1.1	2.2	L	0.27
PCB-184	Hepta	PRC										
PCB-185	Hepta		0.96	0.52	1.9	L	0.35	0.25	0.18	0.35	L	0.27
PCB-186	Hepta					U L	0.075				U L	0.048
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.081				U L	0.056
PCB-189	Hepta		0.13	0.061	0.28	J L	0.22	0.056	0.038	0.084	J L	0.17
PCB-190	Hepta		0.84	0.43	1.7	L	0.29	0.28	0.2	0.41	L	0.21
PCB-191	Hepta		0.2	0.1	0.41	J L	0.29	0.12	0.085	0.17	J L	0.21
PCB-192	Hepta	PRC										
PCB-193	Hepta		0.63	0.32	1.3	L	0.29	0.28	0.2	0.4	L	0.21
PCB-194	Octa		0.36	0.14	1	L	0.098	0.14	0.085	0.24	L	0.075
PCB-195	Octa		0.21	0.083	0.56	L	0.12	0.081	0.05	0.13	L	0.091
PCB-196	Octa		0.76	0.31	2.1	C L	0.12	0.31	0.19	0.52	C L	0.091
PCB-197	Octa		0.04	0.015	0.12	L	0.089	0.038	0.023	0.067	L	0.068
PCB-198	Octa					U L	0.052				U L	0.034
PCB-199	Octa		0.5	0.18	1.5	L	0.089	0.2	0.12	0.36	L	0.068
PCB-200	Octa		0.089	0.033	0.26	L	0.089	0.04	0.024	0.07	J L	0.068

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-ENR-CB-S010					LDW-BA-SU-ENR-CC-S010				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-151	Hexa		23	16	34	L	0.96	26	23	30		0.63
PCB-152	Hexa					U L	0.14				U	0.12
PCB-153	Hexa		57	39	86	L	0.75	69	59	81		0.52
PCB-154	Hexa		2.9	2	4.3	L	0.96	2.1	1.8	2.4		0.63
PCB-155	Hexa	PRC										
PCB-156	Hexa		2.6	1.7	4	L	0.57	4	3.4	4.8	L	0.42
PCB-157	Hexa		0.5	0.32	0.78	L	0.57	0.78	0.66	0.93	L	0.42
PCB-158	Hexa		5.4	3.7	8.2	C L	0.75	7.6	6.6	8.9	C	0.52
PCB-159	Hexa		0.39	0.25	0.61	J L	0.57	0.34	0.29	0.41	L	0.42
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	
PCB-166	Hexa					U L	0.2	0.29	0.25	0.34	J	0.52
PCB-167	Hexa		1.1	0.73	1.8	L	0.57	1.6	1.4	2	L	0.42
PCB-168	Hexa					U L	0.2				U	0.28
PCB-169	Hexa					U L	0.13				U L	0.21
PCB-170	Hepta		1.9	1	3.5	L	0.25	3.1	2.4	3.9	L	0.22
PCB-171	Hepta		0.95	0.55	1.7	L	0.31	1.4	1.2	1.8	L	0.26
PCB-172	Hepta		0.31	0.17	0.58	L	0.25	0.42	0.33	0.54	L	0.22
PCB-173	Hepta					U L	0.072				U L	0.086
PCB-174	Hepta		3.2	1.8	5.6	L	0.31	4.7	3.8	5.8	L	0.26
PCB-175	Hepta		0.19	0.11	0.33	J L	0.31	0.19	0.15	0.23	L	0.26
PCB-176	Hepta		0.53	0.29	1	L	0.24	0.75	0.59	0.96	L	0.21
PCB-177	Hepta		2.1	1.2	3.7	L	0.31	3.1	2.5	3.9	L	0.26
PCB-178	Hepta		0.95	0.55	1.7	L	0.31	1.2	0.97	1.5	L	0.26
PCB-179	Hepta		1.7	0.93	3.2	L	0.24	2.5	2	3.3	L	0.21
PCB-180	Hepta		4.4	2.4	8.2	L	0.25	6.4	5.1	8.2	L	0.22
PCB-181	Hepta					U L	0.073				U L	0.088
PCB-182	Hepta		4.9	2.8	8.7	C L	0.31	6.6	5.3	8.2	C L	0.26
PCB-183	Hepta		2.2	1.2	3.8	L	0.31	3.1	2.5	3.9	L	0.26
PCB-184	Hepta	PRC										
PCB-185	Hepta		0.38	0.22	0.68	L	0.31	0.67	0.54	0.84	L	0.26
PCB-186	Hepta					U L	0.036				U L	0.045
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.04				U L	0.05
PCB-189	Hepta					U L	0.029	0.083	0.064	0.11	J L	0.18
PCB-190	Hepta		0.38	0.21	0.71	L	0.25	0.61	0.48	0.77	L	0.22
PCB-191	Hepta		0.092	0.051	0.17	J L	0.25	0.18	0.14	0.23	L	0.22
PCB-192	Hepta	PRC										
PCB-193	Hepta		0.33	0.18	0.62	L	0.25	0.56	0.44	0.71	L	0.22
PCB-194	Octa		0.18	0.079	0.46	L	0.083	0.3	0.21	0.43	L	0.093
PCB-195	Octa		0.098	0.045	0.23	L	0.1	0.19	0.14	0.27	L	0.11
PCB-196	Octa		0.39	0.18	0.94	C L	0.1	0.67	0.48	0.94	C L	0.11
PCB-197	Octa		0.039	0.016	0.1	L	0.075	0.034	0.024	0.05	L	0.086
PCB-198	Octa					U L	0.033				U L	0.041
PCB-199	Octa		0.25	0.1	0.64	L	0.075	0.5	0.35	0.72	L	0.086
PCB-200	Octa					U L	0.015	0.097	0.068	0.14	L	0.086

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

			LDW-BA-SU-S010-LCB-EXSITU				
PCB	Homolog Group	PRC	[PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-151	Hexa					U L	1
PCB-152	Hexa					U L	0.69
PCB-153	Hexa		3.4	2.1	5.8	L	3.2
PCB-154	Hexa					U L	1.1
PCB-155	Hexa	PRC					
PCB-156	Hexa					U L	0.4
PCB-157	Hexa					U L	0.43
PCB-158	Hexa					UC L	0.54
PCB-159	Hexa					U L	0.38
PCB-160	Hexa					C158	
PCB-161	Hexa					C132	
PCB-162	Hexa					C128	
PCB-163	Hexa					C138	
PCB-164	Hexa					C138	
PCB-165	Hexa					C146	
PCB-166	Hexa					U L	0.55
PCB-167	Hexa					U L	0.41
PCB-168	Hexa					U L	0.54
PCB-169	Hexa					U L	0.31
PCB-170	Hepta					U L	0.17
PCB-171	Hepta					U L	0.2
PCB-172	Hepta					L	0.7
PCB-173	Hepta					U L	0.22
PCB-174	Hepta					U L	0.17
PCB-175	Hepta					U L	0.19
PCB-176	Hepta					U L	0.098
PCB-177	Hepta					U L	0.21
PCB-178	Hepta					U L	0.2
PCB-179	Hepta					U L	0.094
PCB-180	Hepta					U L	0.12
PCB-181	Hepta					U L	0.22
PCB-182	Hepta					UC L	0.18
PCB-183	Hepta					U L	0.18
PCB-184	Hepta	PRC					
PCB-185	Hepta					U L	0.19
PCB-186	Hepta					U L	0.098
PCB-187	Hepta					C182	
PCB-188	Hepta					U L	0.11
PCB-189	Hepta					U L	0.071
PCB-190	Hepta					U L	0.12
PCB-191	Hepta					U L	0.12
PCB-192	Hepta	PRC					
PCB-193	Hepta					U L	0.11
PCB-194	Octa					U	0.057
PCB-195	Octa					U	0.08
PCB-196	Octa					UC	0.057
PCB-197	Octa					U	0.028
PCB-198	Octa					U	0.068
PCB-199	Octa					U	0.037
PCB-200	Octa					U	0.029

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR+AC-CA-S010 [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	LDW-BA-SU-ENR+AC-CB-S010 [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-201	Octa					U L	0.032	0.11	0.038	0.4	L	0.085
PCB-202	Octa		0.14	0.06	0.36	L	0.094	0.17	0.054	0.66		0.061
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.035				U	0.026
PCB-206	Nona		0.053	0.019	0.17	L	0.047	0.044	0.013	0.23		0.027
PCB-207	Nona					L	0.035	0.0058	0.0017	0.034		0.019
PCB-208	Nona		0.015	0.0049	0.053	J L	0.035	0.012	0.0034	0.068	J	0.019
PCB-209	Deca		0.0051	0.0013	0.025	L	0.013	0.0044	0.0013	0.037		0.0058
Total Detected PCB Congeners			**76000**	**34000**	**190000**			**150000**	**51000**	**500000**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR+AC-CC-S010 [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	LDW-BA-SU-ENR-CA-S010 [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-201	Octa		0.1	0.042	0.28	L	0.12				U L	0.02
PCB-202	Octa		0.12	0.046	0.36	L	0.089	0.042	0.025	0.074	J L	0.068
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.033				U L	0.013
PCB-206	Nona		0.042	0.013	0.16	L	0.042	0.017	0.0093	0.035	J	0.032
PCB-207	Nona					L	0.031					0.024
PCB-208	Nona		0.012	0.0034	0.052	L	0.031	0.005	0.0026	0.011	J	0.024
PCB-209	Deca		0.0074	0.0017	0.047	L	0.01	0.002	0.00086	0.005		0.0083
Total Detected PCB Congeners			**97000**	**36000**	**310000**			**26000**	**15000**	**47000**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-ENR-CB-S010 [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)	LDW-BA-SU-ENR-CC-S010 [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-201	Octa					U L	0.02				U L	0.024
PCB-202	Octa		0.066	0.028	0.17	L	0.075	0.11	0.075	0.16	L	0.086
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.013				U L	0.023
PCB-206	Nona		0.022	0.008	0.072	J L	0.035	0.038	0.024	0.06	L	0.047
PCB-207	Nona		0.0014	0.00049	0.0051	L	0.025				L	0.036
PCB-208	Nona					U L	0.0068				U L	0.0091
PCB-209	Deca		0.0029	0.00081	0.014	L	0.0084	0.00047	0.00026	0.0009	L	0.016
Total Detected PCB Congeners			**51000**	**21000**	**140000**			**30000**	**23000**	**41000**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-BA-SU-S010-LCB-EXSITU [PCB Cfree] Result (pg/L)	Lower CL [PCB Cfree] Result (pg/L)	Upper CL [PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] MDL (pg/L)
PCB-201	Octa					U	0.041
PCB-202	Octa					U	0.028
PCB-203	Octa					C196	
PCB-204	Octa	PRC					
PCB-205	Octa					U	0.044
PCB-206	Nona					U	0.025
PCB-207	Nona		0.0043	0.0019	0.024	J	0.032
PCB-208	Nona					U	0.013
PCB-209	Deca					U	0.0042
Total Detected PCB Congeners			**3.4**	**2.1**	**5.8**		

Notes

C: Coelution with one or more PCB congeners; the numerical value indicates the lower cor
co-eluter. For example, PCB-20 co-elutes with PCB-21 and PCB-33
J: Analyte concentration is below calibration range
L: Percent to steady state less than 20%
PCB: Polychlorinated biphenyl
pg/L: picogram per liter
PRC: Performance Reference Compound
U: Not detected at the Method Detection Limit (MDL) shown in the second column for each
CL: confidence level

YEAR 1

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Certificate of Analysis
Concentrations of Freely-dissolved Polychlorinated Biphenyls (PCBs) Measured via SPME Passive Samplers

Client: Lower Duwamish Waterway Group

Project: Enhanced Natural Recovery / Activated Carbon Pilot Study

Final Report Issued: September 7, 2018

Client Project No: HE1508-01

Study Dates: May 14 to June 26, 2018

Introduction

This report presents the results for 22 SP3ME^{TM} passive samplers that were exposed to surface sediment in Lower Duwamish Waterway, Seattle, Washington, USA (12 samplers deployed *in situ* field study), surface sediment collected from Lower Duwamish Waterway, Seattle, Washington, USA (6 samplers deployed in sediment cores in an *ex situ* laboratory study), to laboratory water control blank in the *ex situ* laboratory study (1 sampler), and 3 trip blanks (not exposed to sediment). The *in situ* sediment-exposed samplers were deployed from May 14 to May 17, 2018, and were retrieved during June 24 to June 30, 2018, with individual sampler exposure durations averaging at 42 days. Samplers that were exposed *ex situ* to sediment cores within the laboratory mesocosms were deployed on May 3 and May 4, 2018 and retrieved on June 30, 2018 with individual sampler exposure duration at 57 to 58 days. The trip blanks were collected on May 14 and May 16, 2018.

Extracts for the samplers were shipped to Frontier Analytical Laboratory for measurement of polychlorinated biphenyl (PCB) congeners to calculate the freely-dissolved concentrations (C_{free}) of PCBs in sediment porewater as shown in Table 1 and the Summary Table below. The data analysis steps are provided in Attachment A and the analytical reports are provided as an attachment to the Data Report (to which this Certificate of Analysis is attached).

Sample Summary

Customer Sample ID	Sample Type	Earliest Sampler Deployment Date	Latest Sampler Retrieval Date	Average Sampler Exposure Duration (days)	Analysis
LDW-Y1-SC-ENR+AC-CA-S010	*In situ* Sediment-Exposed	5/15/2018	6/28/2018	43	PCB Congeners (1668C)
LDW-Y1-SC-ENR+AC-CB-S010	*In situ* Sediment-Exposed	5/15/2018	6/27/2018	43	PCB Congeners (1668C)
LDW-Y1-SC-ENR+AC-CC-S010	*In situ* Sediment-Exposed	5/15/2018	6/27/2018	42	PCB Congeners (1668C)
LDW-Y1-SC-ENR-CA-S010	*In situ* Sediment-Exposed	5/14/2018	6/26/2018	42	PCB Congeners (1668C)
LDW-Y1-SC-ENR-CB-S010	*In situ* Sediment-Exposed	5/14/2018	6/26/2018	42	PCB Congeners (1668C)
LDW-Y1-SC-ENR-CC-S010	*In situ* Sediment-Exposed	5/14/2018	6/26/2018	42	PCB Congeners (1668C)
LDW-Y1-SU-ENR+AC-CA-S010	*Ex situ* Sediment-Exposed	5/3/2018	6/30/2018	58	PCB Congeners (1668C)
LDW-Y1-SU-ENR+AC-CB-S010	*Ex situ* Sediment-Exposed	5/3/2018	6/30/2018	58	PCB Congeners (1668C)
LDW-Y1-SU-ENR+AC-CC-S010	*Ex situ* Sediment-Exposed	5/3/2018	6/30/2018	58	PCB Congeners (1668C)
LDW-Y1-SU-ENR-CA-S010	*Ex situ* Sediment-Exposed	5/3/2018	6/30/2018	58	PCB Congeners (1668C)
LDW-Y1-SU-ENR-CB-S010	*Ex situ* Sediment-Exposed	5/3/2018	6/30/2018	58	PCB Congeners (1668C)
LDW-Y1-SU-ENR-CC-S010	*Ex situ* Sediment-Exposed	5/3/2018	6/30/2018	58	PCB Congeners (1668C)
LDW-Y1-SU-S010-LCB	*Ex situ* Lab Control Water Blank	5/4/2018	6/30/2018	57	PCB Congeners (1668C)
LDW-Y1-IN-ENR+AC-CA-S010	*In situ* Sediment-Exposed	5/17/2018	6/29/2018	42	PCB Congeners (1668C)
LDW-Y1-IN-ENR+AC-CB-S010	*In situ* Sediment-Exposed	5/17/2018	6/29/2018	43	PCB Congeners (1668C)

Customer Sample ID	Sample Type	Earliest Sampler Deployment Date	Latest Sampler Retrieval Date	Average Sampler Exposure Duration (days)	Analysis
LDW-Y1-IN-ENR+AC-CC-S010	*In situ* Sediment-Exposed	5/17/2018	6/29/2018	42	PCB Congeners (1668C)
LDW-Y1-IN-ENR-CA-S010	*In situ* Sediment-Exposed	5/16/2018	6/29/2018	43	PCB Congeners (1668C)
LDW-Y1-IN-ENR-CB-S010	*In situ* Sediment-Exposed	5/16/2018	6/29/2018	43	PCB Congeners (1668C)
LDW-Y1-IN-ENR-CC-S010	*In situ* Sediment-Exposed	5/16/2018	6/29/2018	44	PCB Congeners (1668C)
LDW-Y1-SC-S010-TB	Trip Blank	5/16/2018	5/16/2018	0	PCB Congeners (1668C)
LDW-Y1-SU-S010-TB	Trip Blank	5/14/2018	5/14/2018	0	PCB Congeners (1668C)
LDW-Y1-IN-S010-TB	Trip Blank	5/16/2018	5/16/2018	0	PCB Congeners (1668C)

Sampler Design, Deployment, and Chemical Analysis

The SP3ME™ sampler design for this project consisted of a 10-centimeter (cm) length of solid phase microextraction (SPME) fiber with 10-micrometer (µm) thick polydimethylsiloxane (PDMS) on a 2000-µm diameter silica core (0.631 microliter [µL] PDMS per cm SPME). Each SPME fiber was housed in a stainless-steel mesh envelope attached to a steel support bar. SPMEs were spiked with the Performance Reference Compounds (PRCs) consisting of rare PCBs congeners assumed to: 1) not be present in the media in which the samplers were deployed, or 2) present at concentrations so low as to be inconsequential, not affect calculations involving PRCs, and insignificant compared to the concentration of other freely-dissolved PCBs in the media sampled. The PRCs used for this project were: PCB-14, PCB-36, PCB-78, PCB-104, PCB-121, PCB-142, PCB-155, PCB-184, PCB-192, and PCB-204[1]. Samplers were produced by SiREM (http://siremlab.com/). It should be noted that each of the samplers was composed of up to 6 individual SPME fibers that were composited together for analysis, as described below.

The trip blanks were exposed to ambient field conditions for 5 minutes (each trip blank was a composite of 6 samplers for a total SPME fiber length of 60 cm). The *in situ* sediment-exposed samples consisting of 4 or 6 SPME fibers (i.e., 40 to 60 cm of SPME fiber total), depending on recovery, were exposed *in situ* to sediment in the Lower Duwamish Waterway, Seattle, USA for an average of 42 days (ranging from 41 to 44 days for all the individual SPME fibers). The *ex situ* sediment-exposed samples consisting of 6 SPME fibers (60 cm of SPME fiber total) were exposed *ex situ* to sediment collected from the Lower Duwamish Waterway, Seattle, Washington, USA for 58 days in the EcoAnalysts laboratory in Port Gamble, WA. Samplers in the *ex situ* study were maintained at ambient room temperature.

Processing of the samplers at an environmental laboratory included removal of the fiber from the stainless-steel mesh envelope and wiping any visible sediment from the fiber using a moist tissue, placing the fiber in a pre-weighed amber glass vial, weighing the vial to determine the mass of fiber present, and adding hexane to extract PCBs from the PDMS. Vials with hexane and fibers were shipped to Frontier Analytical Laboratory, whereupon hexane was removed from the vials and analyzed for PCB congeners via USEPA Method 1668C. The analytical laboratory reported the total mass of PCBs in each hexane extract (analytical report and electronic data deliverable are provided as an attachment to the Data Report (to which this Certificate of Analysis is attached).

Processing of some of the SPME fibers deployed *in situ* required an extra step prior to placing the fibers into the vial. During the retrieval of the SPME fibers deployed *in situ*, SCUBA divers performing the retrievals observed that the uppermost portions of some individual SPME fibers were not fully submerged in sediment such that a portion of the SPME fiber was exposed to the surface water overlying the sediment-surface water interface. Divers estimated the lengths of the SPME fibers that were exposed to the overlying water, and this was recorded by field staff in the field notes. For individual SPME fibers that were observed to be exposed to more than

[1] PCB shorthand nomenclature used in this report follows the Chemical Abstract Service (CAS) nomenclature used by USEPA (2003): United States Environmental Protection Agency (USEPA). 2003. Table of PCB Species by Congener Number.

approximately 2.5 cm (or more) of overlying water during the *in situ* exposures (i.e., only the lower 7.5 cm of the fiber was found to be full inserted within the sediment at the time of retrieval), the portion of the fiber exposed to the overlying water (rounded up to the nearest cm) was removed and excluded prior to compositing the remainder (lower portion) of the fiber into the extraction vial. The amounts of fiber trimmed in this manner are noted for the samples in Attachment A, Table A1.

Results

Total PCB congeners C_{free} results are reported in Table 1 (attached).

Samples included in Frontier Analytical Laboratory report 11704 dated August 1, 2018 and report 11703 dated August 2, 2018 were received in good condition and at 1 degrees Celsius (° C) which is outside method recommended sample temperature range for storage (less than -10°C), but within the range for sample transport (less than 6°C). This is not expected to result in poor analytical quality since PCBs are not expected to degrade in hexane over the timescale of shipment (1 day).

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TABLE 1

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010			LDW-Y1-SC-ENR+AC-CB-S010			LDW-Y1-SC-ENR+AC-CC-S010			LDW-Y1-SC-ENR-CA-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-1	Mono			U	8.9		U	6.8		U	11		U	7.3
PCB-2	Mono			U	2.9		U	2.2		U	3.8		U	2.3
PCB-3	Mono			U	2.8		U	2		U	3.6		U	2.1
PCB-4	Di			U	6.1		U	4		U	7.3		U	4.7
PCB-5	Di			U	3.1		U	2.1		U	4		U	2.3
PCB-6	Di			U	3.2		U	2.1		U	4	13		10
PCB-7	Di			U	3		U	2		U	3.8		U	2.2
PCB-8	Di		14	J	14	14		10	31		17	32		10
PCB-9	Di			U	3		U	2		U	3.8		U	2.2
PCB-10	Di			U	6.4		U	4.2		U	7.6		U	4.8
PCB-11	Di			UB J	7.8		UB	6.1		UB	10		UB	5.6
PCB-12	Di			U	1.8		U	1.3		U	2.5		U	1.3
PCB-13	Di			U	1.8		U	1.3		U	2.5		U	1.3
PCB-14	Di	PRC												
PCB-15	Di		4.3	J	7.8	3.4	J	6.1	11		10	7.6		5.6
PCB-16	Tri		7.6	J	7.9	17		6.2	18		11	19		5.7
PCB-17	Tri		13		7.9	18		6.2	31		11	27		5.7
PCB-18	Tri		26		7.9	35		6.2	62		11	60		5.7
PCB-19	Tri		5.9	J	12	7.1	J	8.6	12	J	15	14		8.6
PCB-20	Tri		10	C	5.5	16	C	4.6	25	C	7.8	21	C	4
PCB-21	Tri			C020			C020			C020			C020	
PCB-22	Tri		6.4		5.5	10		4.6	16		7.8	13		4
PCB-23	Tri			U	1.2		U	1		U	2		U	1.4
PCB-24	Tri			U	1.4	3.2	J	6.2	3	J	11	2.3	J	5.7
PCB-25	Tri		2.6	J	5.5	3.6	J	4.6	5.7	J	7.8	6.1		4
PCB-26	Tri		5.6		5.5	7.7		4.6	14		7.8	11		4
PCB-27	Tri		3.1	J	7.9	2.1	J	6.2	6.9	J	11	8.5		5.7
PCB-28	Tri		20		5.5	30		4.6	50		7.8	47		4
PCB-29	Tri			U	1.2		U	1		U	2		U	1.4
PCB-30	Tri			U	1.5		U	1.3		U	1.2		U	1.3
PCB-31	Tri		21		5.5	30		4.6	44		7.8	38		4
PCB-32	Tri		11		7.9	11		6.2	26		11	27		5.7
PCB-33	Tri			C020			C020			C020			C020	
PCB-34	Tri			U	1.3		U	1.1		U	2.2		U	1.5
PCB-35	Tri			U	0.88		U	0.81		U	1.6		U	1
PCB-36	Tri	PRC												
PCB-37	Tri		3.4	J	3.9	5		3.5	7.3		5.9	5.6		2.8
PCB-38	Tri			U	0.85		U	0.78		U	1.5		U	0.98
PCB-39	Tri			U	0.82		U	0.76		U	1.5		U	0.95
PCB-40	Tetra		4.7		3.3	7.4		3.2	11		5.3	9.5		2.4
PCB-41	Tetra		19	C	3.1	31	C	3	44	C	5	36	C	2.2

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010			LDW-Y1-SC-ENR-CC-S010			LDW-Y1-SU-ENR+AC-CA-S010			LDW-Y1-SU-ENR+AC-CB-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-1	Mono			U	6.9		U	6	170		33		U	5.6
PCB-2	Mono			U	1.9		U	1.8		U	2.2		U	1.8
PCB-3	Mono			U	1.8		U	1.8	5.1	J	8.3		U	1.8
PCB-4	Di		27		16	42		15	140		13	30		14
PCB-5	Di			U	2		U	1.9	8.1		7	7.4	J	7.8
PCB-6	Di		17		8.1	21		7.9	54		7	23		7.8
PCB-7	Di			U	1.9		U	1.9	18		7	5.5	J	7.8
PCB-8	Di		33		8.1	43		7.9	150		7	47		7.8
PCB-9	Di			U	1.9		U	1.9	16		7	4.9	J	7.8
PCB-10	Di			U	4.4		U	4.1	19		13	6.6	J	14
PCB-11	Di		3.4		5.1	2.7		4.4		UB	3.9		UB	4.8
PCB-12	Di			U	1.3		U	1.1	3.4	J	3.9		U	0.85
PCB-13	Di			U	1.3		U	1.1		U	1.1		U	0.84
PCB-14	Di	PRC												
PCB-15	Di		9.7		5.1	8.1		4.4	11		3.9	8.3		4.8
PCB-16	Tri		18		5.2	21		4.5	88		3.9	50		4.9
PCB-17	Tri		28		5.2	34		4.5	150		3.9	91		4.9
PCB-18	Tri		62		5.2	73		4.5	330		3.9	200		4.9
PCB-19	Tri		12		7	14		6.7	49		5.9	28		6.7
PCB-20	Tri		27	C	4.4	27	C	3.1	88	C	2.7	64	C	3.7
PCB-21	Tri			C020			C020			C020			C020	
PCB-22	Tri		17		4.4	16		3.1	49		2.7	37		3.7
PCB-23	Tri			U	1.5		U	0.59		U	0.5		U	0.74
PCB-24	Tri		4.4	J	5.2	3.8	J	4.5	13		3.9	8.3		4.9
PCB-25	Tri		7.2		4.4	6.7		3.1	20		2.7	14		3.7
PCB-26	Tri		15		4.4	14		3.1	47		2.7	36		3.7
PCB-27	Tri		5.5		5.2	7		4.5	16		3.9	11		4.9
PCB-28	Tri		53		4.4	51		3.1	140		2.7	110		3.7
PCB-29	Tri			U	1.5		U	0.56	1.5	J	2.7	1.2	J	3.7
PCB-30	Tri			U	1.2		U	0.49		U	0.5		U	1.3
PCB-31	Tri		53		4.4	52		3.1	170		2.7	120		3.7
PCB-32	Tri		28		5.2	29		4.5	100		3.9	69		4.9
PCB-33	Tri			C020			C020			C020			C020	
PCB-34	Tri			U	1.6		U	0.63	2.2	J	2.7	1.5	J	3.7
PCB-35	Tri			U	1.4		U	0.43	1.3	J	1.9	1.7	J	2.9
PCB-36	Tri	PRC												
PCB-37	Tri		8.5		4	6.9		2.2	13		1.9	12		2.9
PCB-38	Tri			U	1.4		U	0.41	1.1	J	1.9	1.2	J	2.9
PCB-39	Tri			U	1.3		U	0.4		U	0.34		U	0.55
PCB-40	Tetra		16		3.9	9.9		1.9	30		1.7	30		2.6
PCB-41	Tetra		60	C	3.9	40	C	1.8	130	C	1.6	130	C	2.5

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010			LDW-Y1-SU-ENR-CA-S010			LDW-Y1-SU-ENR-CB-S010			LDW-Y1-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-1	Mono		13	J	33	13	J	34	11	J	32	20	J	32
PCB-2	Mono			U	1.9		U	1.4		U	1.2		U	2
PCB-3	Mono			U	1.8		U	1.4	3	J	9.9		U	1.9
PCB-4	Di		50		14	140		15	110		14	110		13
PCB-5	Di		4.1	J	7.7	3.8	J	8.1	15		9	9.8		7.4
PCB-6	Di		31		7.7	69		8.1	60		9	49		7.4
PCB-7	Di		5.2	J	7.7	13		8.1	6.6	J	9	11		7.4
PCB-8	Di		85		7.7	200		8.1	170		9	140		7.4
PCB-9	Di		7.4	J	7.7	9.7		8.1	11		9	12		7.4
PCB-10	Di		12	J	14	12	J	15	10	J	14	13	J	13
PCB-11	Di			UB	4.4		UB	4.8		UB	7.1		UB	4.6
PCB-12	Di		2.8	J	4.4	1.5	J	4.8	3.4	J	7.1		U	1.8
PCB-13	Di			U	1.2	5.3		4.8	8.2		7.1		U	0.71
PCB-14	Di	PRC												
PCB-15	Di		14		4.4	30		4.8	38		7.1	25		4.6
PCB-16	Tri		71		4.5	180		4.9	160		7.1	100		4.7
PCB-17	Tri		130		4.5	280		4.9	280		7.1	210		4.7
PCB-18	Tri		290		4.5	580		4.9	630		7.1	460		4.7
PCB-19	Tri		42		6.6	77		7	74		8.3	59		6.4
PCB-20	Tri		84	C	3.2	200	C	3.6	250	C	6.5	170	C	3.6
PCB-21	Tri			C020			C020			C020			C020	
PCB-22	Tri		50		3.2	120		3.6	150		6.5	100		3.6
PCB-23	Tri			U	0.35	0.75	J	3.6		U	0.73	1.1	J	3.6
PCB-24	Tri		12		4.5	20		4.9	29		7.1	20		4.7
PCB-25	Tri		20		3.2	44		3.6	55		6.5	32		3.6
PCB-26	Tri		48		3.2	100		3.6	120		6.5	74		3.6
PCB-27	Tri		13		4.5	33		4.9	29		7.1	22		4.7
PCB-28	Tri		160		3.2	360		3.6	440		6.5	280		3.6
PCB-29	Tri		1.5	J	3.2	3.2	J	3.6	3.8	J	6.5	2.6	J	3.6
PCB-30	Tri			U	1.5		U	0.7		U	1.2		U	1.1
PCB-31	Tri		160		3.2	370		3.6	500		6.5	290		3.6
PCB-32	Tri		97		4.5	180		4.9	210		7.1	170		4.7
PCB-33	Tri			C020			C020			C020			C020	
PCB-34	Tri		2.3	J	3.2	4.3		3.6	5.1	J	6.5	3.5	J	3.6
PCB-35	Tri		1.7	J	2.3	2.5	J	2.7	5.8	J L	6.2	2.9		2.9
PCB-36	Tri	PRC												
PCB-37	Tri		15		2.3	35		2.7	60	L	6.2	29		2.9
PCB-38	Tri		1.4	J	2.3	2.5	J	2.7	4.7	J L	6.2	2.3	J	2.9
PCB-39	Tri			U	0.24		U	0.28		U L	0.72		U	0.34
PCB-40	Tetra		31		2	63		2.4	110	L	6.1	56		2.6
PCB-41	Tetra		130	C	1.9	270	C	2.2	490	C L	6.1	240	C	2.5

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB			LDW-Y1-IN-ENR+AC-CA-S010			LDW-Y1-IN-ENR+AC-CB-S010			LDW-Y1-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-1	Mono			U	5.7		U	4.5		U	4.6		U	4.4
PCB-2	Mono			U	1.6		U	1.1		U	1.2		U	1.2
PCB-3	Mono			U	1.5		U	1.1		U	1.2		U	1.2
PCB-4	Di			U	2.2	14		12		U	3.6	11	J	13
PCB-5	Di			U	0.95		U	0.74		U	1.4		U	1.5
PCB-6	Di			U	1	5.9	J	6	7.4		6	5.1	J	6.5
PCB-7	Di			U	1		U	0.81		U	1.5		U	1.6
PCB-8	Di			U	1.1	14		6	7.7		6	11		6.5
PCB-9	Di			U	1		U	0.83		U	1.5		U	1.7
PCB-10	Di			U	2		U	2		U	3.7		U	3.9
PCB-11	Di			UB	5.7	1.8		3.1		UB	3.2		UB	3.5
PCB-12	Di			U	0.68		U	0.42		U	0.78		U	0.88
PCB-13	Di			U	0.71		U	0.43		U	0.8		U	0.9
PCB-14	Di	PRC												
PCB-15	Di			U	0.68	4		3.1		U	0.78		U	0.87
PCB-16	Tri		2.5	J	5.8	7.3		3.2	4.8		3.3	3.4	J	3.5
PCB-17	Tri		1.8	J	5.8	11		3.2	6.6		3.3	6		3.5
PCB-18	Tri		3.8	J	5.8	26		3.2	17		3.3	14		3.5
PCB-19	Tri		1.4	J	7.4	4.5	J	4.9	4.5	J	5	3.3	J	5.4
PCB-20	Tri		0.57	C,J	4.9	11	C	2.3	4.1	C	2.4	3.3	C	2.4
PCB-21	Tri			C020			C020			C020			C020	
PCB-22	Tri		0.91	J	4.9	5.2		2.3	2.4		2.4	1.9	J	2.4
PCB-23	Tri			U	0.54		U	0.56		U	0.66		U	0.59
PCB-24	Tri			U	0.52	1.3	J	3.2	1.1	J	3.3	0.84	J	3.5
PCB-25	Tri			U	0.46	3.3		2.3	3.3		2.4	2.4	J	2.4
PCB-26	Tri			U	0.57	7.3		2.3	6.9		2.4	5.2		2.4
PCB-27	Tri			U	0.55	2.1	J	3.2	1.4	J	3.3	1.4	J	3.5
PCB-28	Tri		0.85	J	4.9	17		2.3	8.7		2.4	7.5		2.4
PCB-29	Tri			U	0.54		U	0.59		U	0.69		U	0.63
PCB-30	Tri			U	0.54		U	0.4		U	0.4		U	0.43
PCB-31	Tri		0.61	J	4.9	17		2.3	11		2.4	8		2.4
PCB-32	Tri		0.78	J	5.8	4.2		3.2	2.5	J	3.3	3.2	J	3.5
PCB-33	Tri			C020			C020			C020			C020	
PCB-34	Tri			U	0.6		U	0.67		U	0.79		U	0.71
PCB-35	Tri			U	0.51		U	0.48		U	0.58		U	0.46
PCB-36	Tri	PRC												
PCB-37	Tri			U	0.43	1.9		1.8	1.1	J	1.9	0.83	J	1.7
PCB-38	Tri			U	0.47		U	0.46		U	0.55		U	0.43
PCB-39	Tri			U	0.48		U	0.46		U	0.55		U	0.43
PCB-40	Tetra			U	0.65	2.8		1.7	1.5	J	1.8	0.95	J	1.5
PCB-41	Tetra		0.99	C,J	4.2	12	C	1.6	7.7	C	1.7	5.4	C	1.4

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010			LDW-Y1-IN-ENR-CB-S010			LDW-Y1-IN-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-1	Mono			U	9.1		U	2.9		U	7.2
PCB-2	Mono			U	2.7		U	0.81		U	2.3
PCB-3	Mono			U	2.6	1.9	J	8.4		U	2.2
PCB-4	Di		48		20	33		13	32		18
PCB-5	Di			U	2.7		U	1.3		U	2.3
PCB-6	Di		15		12	12		7.1	13		10
PCB-7	Di			U	2.7		U	1.3		U	2.3
PCB-8	Di		22		12	18		7.1	26		10
PCB-9	Di			U	2.7		U	1.3		U	2.3
PCB-10	Di			U	5.4		U	2.7		U	4.6
PCB-11	Di			UB	7.2		UB	4.1		UB	6.2
PCB-12	Di			U	1.8		U	0.76		U	1.5
PCB-13	Di			U	1.8		U	0.77		U	1.5
PCB-14	Di	PRC									
PCB-15	Di		8		7.2	6.7		4.1	9.4		6.2
PCB-16	Tri		8.7		7.3	8.3		4.2	12		6.3
PCB-17	Tri		21		7.3	14		4.2	23		6.3
PCB-18	Tri		52		7.3	34		4.2	56		6.3
PCB-19	Tri		12		10	9.9		6	13		8.8
PCB-20	Tri		11	C	5.6	6.3	C	3	11	C	4.7
PCB-21	Tri			C020			C020			C020	
PCB-22	Tri		8.3		5.6	4.3		3	7.9		4.7
PCB-23	Tri			U	1.2		U	0.71		U	1.4
PCB-24	Tri		4.3	J	7.3	4.2		4.2	4.8	J	6.3
PCB-25	Tri		9.4		5.6	6		3	9		4.7
PCB-26	Tri		24		5.6	16		3	22		4.7
PCB-27	Tri		5.4	J	7.3	2.9	J	4.2	6.4		6.3
PCB-28	Tri		31		5.6	18		3	30		4.7
PCB-29	Tri			U	1.2		U	0.71		U	1.4
PCB-30	Tri			U	1.6		U	0.68		U	1.2
PCB-31	Tri		33		5.6	22		3	34		4.7
PCB-32	Tri		11		7.3	7.2		4.2	15		6.3
PCB-33	Tri			C020			C020			C020	
PCB-34	Tri			U	1.3		U	0.77		U	1.5
PCB-35	Tri			U	1.1		U	0.6		U	1.2
PCB-36	Tri	PRC									
PCB-37	Tri		3.6	J	4.5	2.1	J	2.3	3.5		3.5
PCB-38	Tri			U	0.99		U	0.54		U	1.1
PCB-39	Tri			U	1		U	0.55		U	1.1
PCB-40	Tetra		6.3		4.1	3.7		2	7.1		3.1
PCB-41	Tetra		27	C	3.9	17	C	1.9	27	C	3

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010			LDW-Y1-SC-ENR+AC-CB-S010			LDW-Y1-SC-ENR+AC-CC-S010			LDW-Y1-SC-ENR-CA-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-42	Tetra		8.8	C	3.3	14	C	3.2	22	C	5.3	17	C	2.4
PCB-43	Tetra		28	C	3.3	46	C	3.2	65	C	5.3	55	C	2.4
PCB-44	Tetra		23		3.3	37		3.2	53		5.3	43		2.4
PCB-45	Tetra		6.8		4.3	10		3.9	16		6.5	16		3.1
PCB-46	Tetra		2.7	J	4.3	4.5		3.9	6.6		6.5	6.2		3.1
PCB-47	Tetra		9.6		3.3	14		3.2	21		5.3	18		2.4
PCB-48	Tetra		5.3	C	3.3	9	C	3.2	12	C	5.3	11	C	2.4
PCB-49	Tetra			C043			C043			C043			C043	
PCB-50	Tetra			U	1.1		U	0.89		U	1.7		U	0.92
PCB-51	Tetra		2.9	J	4.3	4.7		3.9	6.8		6.5	6.9		3.1
PCB-52	Tetra		35	C	3.3	56	C	3.2	82	C	5.3	67	C	2.4
PCB-53	Tetra		8.5		4.3	13		3.9	18		6.5	20		3.1
PCB-54	Tetra			U	0.8		U	0.64		U	1.2		U	0.64
PCB-55	Tetra		1.1		2.6	1.3		2.6	2.1		4.3	1.7		1.8
PCB-56	Tetra		8.4	C	2.6	15	C	2.6	20	C	4.3	14	C	1.8
PCB-57	Tetra			U	0.56		U	0.5		U	0.92		U	0.44
PCB-58	Tetra			U	0.57		U	0.51		U	0.94		U	0.45
PCB-59	Tetra			C042			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056			C056	
PCB-61	Tetra		16	C	2.6	29	C	2.6	40	C	4.3	28	C	1.8
PCB-62	Tetra			U	0.72		U	0.61		U	1.1		U	0.58
PCB-63	Tetra		0.91	J	2.6	1.6	J	2.6	2	J	4.3	1.4	J	1.8
PCB-64	Tetra			C041			C041			C041			C041	
PCB-65	Tetra			U	0.69		U	0.58		U	1.1		U	0.55
PCB-66	Tetra		17	C	2.6	28	C	2.6	38	C	4.3	28	C	1.8
PCB-67	Tetra		0.91	J	2.6	1.1	J	2.6	2.1	J	4.3	1.2	J	1.8
PCB-68	Tetra			U	0.5	0.45	J	2.6	0.94	J	4.3	0.63	J	1.8
PCB-69	Tetra			C052			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041			C041	
PCB-73	Tetra			U	0.71		U	0.6		U	1.1		U	0.57
PCB-74	Tetra		7.3		2.6	12		2.6	18		4.3	13		1.8
PCB-75	Tetra			C048			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066			C066	
PCB-77	Tetra		1.2	J	2	1.4	J	2.2	2.6	J	3.5	1.7		1.4
PCB-78	Tetra	PRC												
PCB-79	Tetra			U	0.55	0.7	J	2.2	0.86	J	3.5	0.54	J	1.4
PCB-80	Tetra			U	0.37		U	0.36	0.78	J	3.5		U	0.29
PCB-81	Tetra		1.1	J	2	2.2	J	2.2	2.2	J	3.5	1.1	J	1.4
PCB-82	Penta		2.7		1.6	4		1.9	5.9	L	2.9	3.3		1.1
PCB-83	Penta		1.1	C,J	1.6	1.9	C	1.9	2.4	C,J L	2.9	1.7	C	1.1
PCB-84	Penta		11	C	1.7	18	C	2	24	C	3.2	17	C	1.2
PCB-85	Penta		3.3	C	1.6	5.6	C	1.9	6.9	C L	2.9	4.4	C	1.1
PCB-86	Penta			U	0.37		U	0.51		U L	0.64		U	0.26

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010			LDW-Y1-SC-ENR-CC-S010			LDW-Y1-SU-ENR+AC-CA-S010			LDW-Y1-SU-ENR+AC-CB-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-42	Tetra		29	C	3.9	18	C	1.9	60	C	1.7	57	C	2.6
PCB-43	Tetra		85	C	3.9	58	C	1.9	190	C	1.7	170	C	2.6
PCB-44	Tetra		68		3.9	48		1.9	180		1.7	160		2.6
PCB-45	Tetra		20		4.1	16		2.5	48		2.2	40		3.1
PCB-46	Tetra		8.8		4.1	6.1		2.5	19		2.2	16		3.1
PCB-47	Tetra		26		3.9	19		1.9	51		1.7	49		2.6
PCB-48	Tetra		18	C	3.9	11	C	1.9	46	C	1.7	39	C	2.6
PCB-49	Tetra			C043			C043			C043			C043	
PCB-50	Tetra		1	J	4.1		U	0.52	1.7	J	2.2	1.6	J	3.1
PCB-51	Tetra		8.9		4.1	6.6		2.5	16		2.2	14		3.1
PCB-52	Tetra		110	C	3.9	72	C	1.9	250	C	1.7	210	C	2.6
PCB-53	Tetra		25		4.1	19		2.5	51		2.2	41		3.1
PCB-54	Tetra		1.2	J	4		U	0.36	1.1	J	2	1.1	J	3
PCB-55	Tetra		2.3		3.9	1.7		1.5	3.5		1.3	3.9		2.2
PCB-56	Tetra		29	C	3.9	17	C	1.5	49	C	1.3	51	C	2.2
PCB-57	Tetra		1.1	J	3.9		U	0.26	1.2	J	1.3	1.2	J	2.2
PCB-58	Tetra			U	0.94		U	0.26	0.64	J	1.3	0.74	J	2.2
PCB-59	Tetra			C042			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056			C056	
PCB-61	Tetra		55	C	3.9	33	C	1.5	110	C	1.3	110	C	2.2
PCB-62	Tetra			U	0.93		U	0.33		U	0.39		U	0.61
PCB-63	Tetra		2.9	J	3.9	1.4	J	1.5	5		1.3	5.5		2.2
PCB-64	Tetra			C041			C041			C041			C041	
PCB-65	Tetra			U	0.89		U	0.32		U	0.37		U	0.58
PCB-66	Tetra		59	C	3.9	32	C	1.5	90	C	1.3	92	C	2.2
PCB-67	Tetra		2.4	J	3.9	1.4	J	1.5	3.9		1.3		U	0.48
PCB-68	Tetra		1.4	J	3.9	0.77	J	1.5	1.7		1.3	2.1		2.2
PCB-69	Tetra			C052			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041			C041	
PCB-73	Tetra			U	0.92		U	0.33		U	0.38		U	0.6
PCB-74	Tetra		27		3.9	14		1.5	46		1.3	47		2.2
PCB-75	Tetra			C048			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066			C066	
PCB-77	Tetra		4.1	L	3.9	1.7		1.2	4		1.1	5.1		1.9
PCB-78	Tetra	PRC												
PCB-79	Tetra		1.5	J L	3.9	0.55	J	1.2	1.5		1.1	1.6	J	1.9
PCB-80	Tetra		0.39	J L	3.9	0.54	J	1.2	1.1		1.1		U	0.37
PCB-81	Tetra		4.4	L	3.9	1.8		1.2	2.6		1.1	4		1.9
PCB-82	Penta		12	L	3.9	4		0.94	12		0.84	16	L	1.6
PCB-83	Penta		6.3	C L	3.9	1.7	C	0.94	6.1	C	0.84	7.1	C L	1.6
PCB-84	Penta		52	C L	3.9	19	C	1	61	C	0.92	69	C	1.7
PCB-85	Penta		14	C L	3.9	5.1	C	0.94	15	C	0.84	18	C L	1.6
PCB-86	Penta			U L	1.4		U	0.31		U	0.25		U L	0.47

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010			LDW-Y1-SU-ENR-CA-S010			LDW-Y1-SU-ENR-CB-S010			LDW-Y1-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-42	Tetra		59	C	2	120	C	2.4	210	C L	6.1	110	C	2.6
PCB-43	Tetra		190	C	2	370	C	2.4	650	C L	6.1	320	C	2.6
PCB-44	Tetra		180		2	340		2.4	590	L	6.1	280		2.6
PCB-45	Tetra		48		2.6	92		2.9	140		6.3	78		3.1
PCB-46	Tetra		17		2.6	36		2.9	53		6.3	30		3.1
PCB-47	Tetra		54		2	98		2.4	150	L	6.1	86		2.6
PCB-48	Tetra		42	C	2	92	C	2.4	170	C L	6.1	77	C	2.6
PCB-49	Tetra			C043			C043			C043			C043	
PCB-50	Tetra		1.6	J	2.6	2.7		2.9	3.7	J	6.3	2.5	J	3.1
PCB-51	Tetra		15		2.6	32		2.9	46		6.3	27		3.1
PCB-52	Tetra		240	C	2	470	C	2.4	830	C L	6.1	410	C	2.6
PCB-53	Tetra		48		2.6	97		2.9	140		6.3	80		3.1
PCB-54	Tetra		1.1	J	2.4	2.1	J	2.8	3.3	J L	6.3	1.9	J	3
PCB-55	Tetra		3.2		1.6	3.8		1.9	13	L	6	4.9		2.3
PCB-56	Tetra		50	C	1.6	120	C	1.9	240	C L	6	110	C	2.3
PCB-57	Tetra		1.2	J	1.6	2.3		1.9	4.6	J L	6	1.6	J	2.3
PCB-58	Tetra		0.61	J	1.6	0.98	J	1.9	2.4	J L	6	1	J	2.3
PCB-59	Tetra			C042			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056			C056	
PCB-61	Tetra		120	C	1.6	220	C	1.9	470	C L	6	210	C	2.3
PCB-62	Tetra			U	0.4		U	0.39		U L	1.4		U	0.49
PCB-63	Tetra		5.3		1.6	11		1.9	24	L	6	10		2.3
PCB-64	Tetra			C041			C041			C041			C041	
PCB-65	Tetra			U	0.38		U	0.41		U L	1.4	1.1	J	2.6
PCB-66	Tetra		95	C	1.6	190	C	1.9	410	C L	6	180	C	2.3
PCB-67	Tetra		4.2		1.6	8.9		1.9	19	L	6	8		2.3
PCB-68	Tetra		2		1.6	3.4		1.9	8.6	L	6	2.4		2.3
PCB-69	Tetra			C052			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041			C041	
PCB-73	Tetra			U	0.39		U	0.38		U L	1.3		U	0.48
PCB-74	Tetra		48		1.6	110		1.9	220	L	6	99		2.3
PCB-75	Tetra			C048			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066			C066	
PCB-77	Tetra		4.2		1.3	8.7		1.6	25	L	6	9.7		2
PCB-78	Tetra	PRC												
PCB-79	Tetra		1.7		1.3	2.7		1.6	6.8	L	6	2.9		2
PCB-80	Tetra		1.8		1.3		U	0.23	2.4	J L	6		U	0.33
PCB-81	Tetra		3.2		1.3	4.6		1.6	14	L	6	4.7		2
PCB-82	Penta		13		1	25		1.3	79	L	5.9	28	L	1.7
PCB-83	Penta		5.7	C	1	11	C	1.3	35	C L	5.9	12	C L	1.7
PCB-84	Penta		58	C	1.1	110	C	1.4	340	C L	6	120	C L	1.8
PCB-85	Penta		15	C	1	33	C	1.3	100	C L	5.9	34	C L	1.7
PCB-86	Penta			U	0.25		U	0.28		U L	1.5		U L	0.69

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB			LDW-Y1-IN-ENR+AC-CA-S010			LDW-Y1-IN-ENR+AC-CB-S010			LDW-Y1-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-42	Tetra		0.86	C,J	4.3	5.8	C	1.7	3.2	C	1.8	2.3	C	1.5
PCB-43	Tetra		1.1	C,J	4.3	25	C	1.7	16	C	1.8	11	C	1.5
PCB-44	Tetra		1.3	J	4.3	20		1.7	10		1.8	8.3		1.5
PCB-45	Tetra			U	0.64	3.8		1.9	2.1		2	1.8	J	1.9
PCB-46	Tetra			U	0.65	1.7	J	1.9	1.2	J	2	0.68	J	1.9
PCB-47	Tetra		1.8	J	4.3	6		1.7	3.9		1.8	2.9		1.5
PCB-48	Tetra		0.9	C,J	4.3	3.8	C	1.7	1.9	C	1.8	1.7	C	1.5
PCB-49	Tetra			C043			C043			C043			C043	
PCB-50	Tetra		0.71	J	4.6	0.36	J	1.9	0.39	J	2	0.18	J	1.9
PCB-51	Tetra		1.1	J	4.6	1.4	J	1.9	1.1	J	2	0.86	J	1.9
PCB-52	Tetra		2.6	C	4.3	35	C	1.7	22	C	1.8	17	C	1.5
PCB-53	Tetra		0.78	J	4.6	5.6		1.9	3.7		2	3.3		1.9
PCB-54	Tetra			U	0.42	0.28	J	1.8		U	0.19		U	0.19
PCB-55	Tetra		0.21	L	4.1	1.4		1.5	1		1.6	1		1.1
PCB-56	Tetra			UC L	0.99	5.1	C	1.5	3.8	C	1.6	2	C	1.1
PCB-57	Tetra			U L	0.38	0.27	J	1.5		U	0.15		U	0.12
PCB-58	Tetra			U L	0.38	0.21	J	1.5		U	0.16		U	0.12
PCB-59	Tetra			C042			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056			C056	
PCB-61	Tetra		0.023	C,J L	4.1	9.9	C	1.5	6.9	C	1.6	4.4	C	1.1
PCB-62	Tetra			U	0.42		U	0.15		U	0.16		U	0.15
PCB-63	Tetra			U L	0.37	0.47	J	1.5	0.41	J	1.6		U	0.11
PCB-64	Tetra			C041			C041			C041			C041	
PCB-65	Tetra			U	0.42		U	0.17		U	0.19		U	0.17
PCB-66	Tetra		0.037	C,J L	4.1	10	C	1.5	6.6	C	1.6	3.8	C	1.1
PCB-67	Tetra			U L	0.37	0.36	J	1.5	0.4	J	1.6	0.21	J	1.1
PCB-68	Tetra		0.29	J L	4.1	0.37	J	1.5	0.29	J	1.6	0.12	J	1.1
PCB-69	Tetra			C052			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041			C041	
PCB-73	Tetra		0.29	J	4.3		U	0.18		U	0.2		U	0.18
PCB-74	Tetra			UB J L	4.1	3.5		1.5	2.7		1.6	1.6		1.1
PCB-75	Tetra			C048			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066			C066	
PCB-77	Tetra			U L	1	1	J	1.4	0.9	J	1.5	0.43	J	0.89
PCB-78	Tetra	PRC												
PCB-79	Tetra			U L	0.97	0.66	J	1.4	0.42	J	1.5	0.21	J	0.89
PCB-80	Tetra			UB J L	3.9		UB J	1.4		UB J	1.5		UB J	0.89
PCB-81	Tetra			U L	0.93	1.1	J	1.4	1.3	J	1.5	0.23	J	0.89
PCB-82	Penta			U L	0.34	5.7		1.3	3.5		1.5	1.3		0.71
PCB-83	Penta			UC L	0.25	3.1	C	1.3	2	C	1.5	0.76	C	0.71
PCB-84	Penta		1.9	C L	3.9	33	C	1.4	19	C	1.5	8.9	C	0.78
PCB-85	Penta			UC L	0.23	7.9	C	1.3	5	C	1.5	1.8	C	0.71
PCB-86	Penta			U L	0.26		U	0.55		U	0.26		U	0.12

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010			LDW-Y1-IN-ENR-CB-S010			LDW-Y1-IN-ENR-CC-S010		
			[PCB Cfree] Result		[PCB Cfree] DL	[PCB Cfree] Result		[PCB Cfree] DL	[PCB Cfree] Result		[PCB Cfree] DL
			(pg/L)	Qualifier	(pg/L)	(pg/L)	Qualifier	(pg/L)	(pg/L)	Qualifier	(pg/L)
PCB-42	Tetra		13	C	4.1	9.5	C	2	15	C	3.1
PCB-43	Tetra		61	C	4.1	44	C	2	59	C	3.1
PCB-44	Tetra		44		4.1	30		2	41		3.1
PCB-45	Tetra		8.3		4.8	6.6		2.5	10		3.9
PCB-46	Tetra		3.5	J	4.8	2.4	J	2.5	4		3.9
PCB-47	Tetra		15		4.1	11		2	16		3.1
PCB-48	Tetra		7.7	C	4.1	4.4	C	2	7.3	C	3.1
PCB-49	Tetra			C043			C043			C043	
PCB-50	Tetra			U	1.1		U	0.47	1.1	J	3.9
PCB-51	Tetra		3.7	J	4.8	2.6		2.5	4.5		3.9
PCB-52	Tetra		110	C	4.1	76	C	2	96	C	3.1
PCB-53	Tetra		16		4.8	13		2.5	17		3.9
PCB-54	Tetra			U	0.83		U	0.33		U	0.56
PCB-55	Tetra		1.2		3.5	0.88		1.6	1.7		2.6
PCB-56	Tetra		10	C	3.5	5.9	C	1.6	9.4	C	2.6
PCB-57	Tetra			U	0.66		U	0.24	0.67	J	2.6
PCB-58	Tetra			U	0.64		U	0.23		U	0.4
PCB-59	Tetra			C042			C042			C042	
PCB-60	Tetra			C056			C056			C056	
PCB-61	Tetra		24	C	3.5	14	C	1.6	20	C	2.6
PCB-62	Tetra			U	0.76		U	0.3		U	0.5
PCB-63	Tetra			U	0.66	0.68	J	1.6	1.1	J	2.6
PCB-64	Tetra			C041			C041			C041	
PCB-65	Tetra			U	0.8		U	0.31		U	0.52
PCB-66	Tetra		22	C	3.5	14	C	1.6	22	C	2.6
PCB-67	Tetra		1.7	J	3.5	0.81	J	1.6	1.3	J	2.6
PCB-68	Tetra		1.1	J	3.5	0.52	J	1.6	0.8	J	2.6
PCB-69	Tetra			C052			C052			C052	
PCB-70	Tetra			C061			C061			C061	
PCB-71	Tetra			C041			C041			C041	
PCB-72	Tetra			C041			C041			C041	
PCB-73	Tetra			U	0.74		U	0.29		U	0.48
PCB-74	Tetra		10		3.5	5.4		1.6	9.2		2.6
PCB-75	Tetra			C048			C048			C048	
PCB-76	Tetra			C066			C066			C066	
PCB-77	Tetra		1.7	J	3.1	0.99	J	1.4	1.2	J	2.1
PCB-78	Tetra	PRC									
PCB-79	Tetra		0.84	J	3.1	0.42	J	1.4	0.8	J	2.1
PCB-80	Tetra			U	0.5	0.087	J	1.4	0.39	J	2.1
PCB-81	Tetra		2.9	J	3.1	1.5		1.4	2.1	J	2.1
PCB-82	Penta		6.1	L	2.7	3.6		1.1	4.2		1.8
PCB-83	Penta		4	C L	2.7	2.2	C	1.1	3.1	C	1.8
PCB-84	Penta		36	C L	2.8	25	C	1.2	29	C	1.9
PCB-85	Penta		8.7	C L	2.7	5.7	C	1.1	6.1	C	1.8
PCB-86	Penta			U L	0.53		U	0.32		U	0.29

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010			LDW-Y1-SC-ENR+AC-CB-S010			LDW-Y1-SC-ENR+AC-CC-S010			LDW-Y1-SC-ENR-CA-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-87	Penta		7.5	C	1.6	13	C	1.9	17	C L	2.9	10	C	1.1
PCB-88	Penta			UC	0.46		UC	0.45		UC	0.9		UC	0.25
PCB-89	Penta			U	0.48	0.99	J	2.1	1	J	3.4	0.8	J	1.3
PCB-90	Penta		24	C	1.6	43	C	1.9	57	C L	2.9	36	C	1.1
PCB-91	Penta			C088			C088			C088			C088	
PCB-92	Penta			C084			C084			C084			C084	
PCB-93	Penta			U	0.51		U	0.5		U	1		U	0.28
PCB-94	Penta			U	0.5		U	0.49		U	0.99		U	0.28
PCB-95	Penta		32		1.9	57		2.1	75		3.4	54		1.3
PCB-96	Penta			U	0.33	0.96	J	2		U	0.67	0.82	J	1.2
PCB-97	Penta		5.6		1.6	9.1		1.9	11	L	2.9	7.2		1.1
PCB-98	Penta			UC	0.42		UC	0.41		UC	0.82		UC	0.23
PCB-99	Penta		9.5		1.6	16		1.9	21	L	2.9	13		1.1
PCB-100	Penta			U	0.43	1.5	J	2.1		U	0.84	1.1	J	1.3
PCB-101	Penta			C090			C090			C090			C090	
PCB-102	Penta			C098			C098			C098			C098	
PCB-103	Penta			U	0.43	1.6	J	2.1	2.6	J	3.4	1.3	J	1.3
PCB-104	Penta	PRC												
PCB-105	Penta		3.8		1.3	7	L	1.6	8.7	L	2.5	5.5		0.87
PCB-106	Penta		10	C	1.3	20	C L	1.6	25	C L	2.5	15	C	0.87
PCB-107	Penta		0.91	C,J	1.3	1.7	C L	1.6	2.1	C,J L	2.5	1.2	C	0.87
PCB-108	Penta			C107			C107			C107			C107	
PCB-109	Penta			U	0.29		U	0.39		U L	0.49		U	0.2
PCB-110	Penta		19		1.6	32		1.9	43	L	2.9	28		1.1
PCB-111	Penta			UC	0.23	0.56	C,J L	1.7		UC L	0.4	0.37	C,J	0.97
PCB-112	Penta			C083			C083			C083			C083	
PCB-113	Penta			U	0.33		U	0.45		U L	0.56		U	0.23
PCB-114	Penta		0.34	J	1.3		U L	0.45	0.75	J L	2.5	0.48	J	0.87
PCB-115	Penta			C111			C111			C111			C111	
PCB-116	Penta			C085			C085			C085			C085	
PCB-117	Penta			C087			C087			C087			C087	
PCB-118	Penta			C106			C106			C106			C106	
PCB-119	Penta		0.77	J	1.6	1.5	J	1.9	1.7	J L	2.9	1.2		1.1
PCB-120	Penta			U	0.23		U L	0.33		U L	0.41		U	0.16
PCB-121	Penta	PRC												
PCB-122	Penta			U	0.17		U L	0.48		U L	0.46	0.25	J	0.87
PCB-123	Penta		0.26	J	1.3		U L	0.39	0.79	J L	2.5	0.26	J	0.87
PCB-124	Penta		0.45	J	1.3	0.99	J L	1.6	2	J L	2.5	0.73	J	0.87
PCB-125	Penta			C087			C087			C087			C087	
PCB-126	Penta			U	0.16		U L	0.46		U L	0.46		U	0.13
PCB-127	Penta			U	0.16		U L	0.48		U L	0.45		U	0.14
PCB-128	Hexa		1.2	C	0.74	2	C L	1.1	3	C L	1.6	1.3	C	0.49
PCB-129	Hexa		0.43	J	0.81	0.82	J L	1.2	1.6	J L	1.7	0.56		0.53
PCB-130	Hexa		0.83		0.81	1.6	L	1.2	1.9	L	1.7	0.88		0.53
PCB-131	Hexa			UC	0.32	0.54	C,J L	1.3	0.78	C,J L	1.8	0.37	C,J	0.57

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010			LDW-Y1-SC-ENR-CC-S010			LDW-Y1-SU-ENR+AC-CA-S010			LDW-Y1-SU-ENR+AC-CB-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-87	Penta		35	C L	3.9	13	C	0.94	38	C	0.84	47	C L	1.6
PCB-88	Penta			UC L	0.65		UC	0.23	17	C	1	20	C	1.8
PCB-89	Penta		2.1	J L	3.9	0.87	J	1.1	2.5		1	2.8		1.8
PCB-90	Penta		120	C L	3.9	42	C	0.94	120	C	0.84	140	C L	1.6
PCB-91	Penta			C088			C088			C088			C088	
PCB-92	Penta			C084			C084			C084			C084	
PCB-93	Penta			U L	0.72		U	0.25		U	0.25		U	0.42
PCB-94	Penta			U L	0.72		U	0.25	1.1		1	1.3	J	1.8
PCB-95	Penta		140	L	3.9	59		1.1	150		1	170		1.8
PCB-96	Penta		1.9	J L	3.9	0.79	J	1	2.2		0.91	2.8		1.7
PCB-97	Penta		25	L	3.9	8.4		0.94	28		0.84	33	L	1.6
PCB-98	Penta			UC L	0.59		UC	0.21		UC	0.2		UC	0.34
PCB-99	Penta		46	L	3.9	16		0.94	44		0.84	53	L	1.6
PCB-100	Penta		3	J L	3.9	1.1	J	1.1	1.4		1	2.3		1.8
PCB-101	Penta			C090			C090			C090			C090	
PCB-102	Penta			C098			C098			C098			C098	
PCB-103	Penta		4.2	L	3.9	1.7		1.1	2.8		1	3		1.8
PCB-104	Penta	PRC												
PCB-105	Penta		20	L	4	6.3		0.78	18		0.7	24	L	1.4
PCB-106	Penta		60	C L	4	17	C	0.78	51	C	0.7	65	C L	1.4
PCB-107	Penta		5.3	C L	4	1.4	C	0.78	4.5	C	0.7	5.6	C L	1.4
PCB-108	Penta			C107			C107			C107			C107	
PCB-109	Penta			U L	1		U	0.24		U	0.19		U L	0.36
PCB-110	Penta		91	L	3.9	32		0.94	96		0.84	110	L	1.6
PCB-111	Penta		2.7	C,J L	4	0.46	C,J	0.86	1.8	C	0.77	1.8	C L	1.5
PCB-112	Penta			C083			C083			C083			C083	
PCB-113	Penta			U L	1.2		U	0.27		U	0.22		U L	0.41
PCB-114	Penta		1.9	J L	4	0.56	J	0.78	1.6		0.7	2.2	L	1.4
PCB-115	Penta			C111			C111			C111			C111	
PCB-116	Penta			C085			C085			C085			C085	
PCB-117	Penta			C087			C087			C087			C087	
PCB-118	Penta			C106			C106			C106			C106	
PCB-119	Penta		3.8	J L	3.9	1.1		0.94	2.9		0.84	3.7	L	1.6
PCB-120	Penta			U L	1		U	0.19	0.26	J	0.7	0.57	J L	1.4
PCB-121	Penta	PRC												
PCB-122	Penta		0.95	J L	4	0.31	J	0.78	0.7		0.7	1.1	J L	1.4
PCB-123	Penta		1.2	J L	4	0.4	J	0.78	0.77		0.7	1.2	J L	1.4
PCB-124	Penta		3.5	J L	4	0.9		0.78	2.7		0.7	3.8	L	1.4
PCB-125	Penta			C087			C087			C087			C087	
PCB-126	Penta			U L	0.53		U	0.087		U	0.22		U L	0.45
PCB-127	Penta			U L	0.49		U	0.079		U	0.21		U L	0.44
PCB-128	Hexa		8.4	C L	4.3	1.7	C	0.47	5.3	C	0.43	8.8	C L	1
PCB-129	Hexa		5.3	L	4.2	0.76		0.51	2.1		0.46	3.3	L	1.1
PCB-130	Hexa			U L	1.1	1		0.51	2.9		0.46	4.8	L	1.1
PCB-131	Hexa		2.3	C,J L	4.2	0.54	C,J	0.54	1.4	C	0.49	1.8	C L	1.1

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010			LDW-Y1-SU-ENR-CA-S010			LDW-Y1-SU-ENR-CB-S010			LDW-Y1-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-87	Penta		37	C	1	81	C	1.3	250	C L	5.9	88	C L	1.7
PCB-88	Penta		10	C	1.2	32	C	1.5	59	C L	6	37	C	1.9
PCB-89	Penta		2.3		1.2	4.5		1.5	13	L	6	5.1		1.9
PCB-90	Penta		110	C	1	230	C	1.3	720	C L	5.9	260	C L	1.7
PCB-91	Penta			C088			C088			C088			C088	
PCB-92	Penta			C084			C084			C084			C084	
PCB-93	Penta			U	0.27		U	0.31		U L	1.3		U	0.43
PCB-94	Penta		1.1	j	1.2	2.2		1.5	5.9	J L	6	2.6		1.9
PCB-95	Penta		150		1.2	250		1.5	650	L	6	250		1.9
PCB-96	Penta		2.3		1.1	4		1.4	11	L	6	3.6	L	1.8
PCB-97	Penta		26		1	56		1.3	180	L	5.9	59	L	1.7
PCB-98	Penta			UC	0.22		UC	0.56		UC L	2.4		UC	0.79
PCB-99	Penta		43		1	95		1.3	300	L	5.9	100	L	1.7
PCB-100	Penta		1.5		1.2	2.6		1.5	7.4	L	6	2.8		1.9
PCB-101	Penta			C090			C090			C090			C090	
PCB-102	Penta			C098			C098			C098			C098	
PCB-103	Penta		2.9		1.2	5		1.5	13	L	6	5.1		1.9
PCB-104	Penta	PRC												
PCB-105	Penta		18		0.87	41		1.1	150	L	5.9	50	L	1.6
PCB-106	Penta		49	C	0.87	100	C	1.1	350	C L	5.9	120	C L	1.6
PCB-107	Penta		3.9	C	0.87	8.8	C	1.1	30	C L	5.9	9.9	C L	1.6
PCB-108	Penta			C107			C107			C107			C107	
PCB-109	Penta			U	0.2		U	0.24		U L	1.3		U L	0.59
PCB-110	Penta		91		1	170		1.3	540	L	5.9	190	L	1.7
PCB-111	Penta		1.9	C	0.95	2.8	C	1.2	10	C L	5.9	2.9	C L	1.6
PCB-112	Penta			C083			C083			C083			C083	
PCB-113	Penta			U	0.22		U	0.26		U L	1.4		U L	0.64
PCB-114	Penta		1.6		0.87	2.7		1.1	11	L	5.9	4	L	1.6
PCB-115	Penta			C111			C111			C111			C111	
PCB-116	Penta			C085			C085			C085			C085	
PCB-117	Penta			C087			C087			C087			C087	
PCB-118	Penta			C106			C106			C106			C106	
PCB-119	Penta		2.9		1	5.5		1.3	20	L	5.9	6.1	L	1.7
PCB-120	Penta			U	0.16		U	0.21		U L	1.3		U L	0.54
PCB-121	Penta	PRC												
PCB-122	Penta		0.94		0.87	1.6		1.1	4.5	J L	5.9	2.2	L	1.6
PCB-123	Penta		0.77	J	0.87	2.2		1.1	8.5	L	5.9	2	L	1.6
PCB-124	Penta		2.8		0.87	6		1.1	19	L	5.9	7.8	L	1.6
PCB-125	Penta			C087			C087			C087			C087	
PCB-126	Penta			U	0.21	0.37	J L	0.94		U L	1.8	0.61	J L	1.4
PCB-127	Penta			U	0.21		U L	0.15		U L	1.7		U L	0.3
PCB-128	Hexa		4.6	C L	0.53	12	C L	0.71	60	C L	6	18	C L	1.2
PCB-129	Hexa		2	L	0.57	5	L	0.75	21	L	6	7	L	1.2
PCB-130	Hexa		2.5	L	0.57	7.1	L	0.75	30	L	6	10	L	1.2
PCB-131	Hexa		1.2	C L	0.61	3.1	C L	0.8	13	C L	6	4.6	C L	1.3

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB			LDW-Y1-IN-ENR+AC-CA-S010			LDW-Y1-IN-ENR+AC-CB-S010			LDW-Y1-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-87	Penta		1.2	C,J L	3.8	20	C	1.3	12	C	1.5	4.8	C	0.71
PCB-88	Penta			UC L	0.67		UC	0.15		UC	0.12		UC	0.1
PCB-89	Penta			U L	0.3	0.8	J	1.4	0.49	J	1.5	0.36	J	0.85
PCB-90	Penta		0.47	C,J L	3.8	58	C	1.3	35	C	1.5	15	C	0.71
PCB-91	Penta			C088			C088			C088			C088	
PCB-92	Penta			C084			C084			C084			C084	
PCB-93	Penta			U L	0.74		U	0.17		U	0.13		U	0.12
PCB-94	Penta			U L	0.75	0.44	J	1.4	0.28	J	1.5		U	0.12
PCB-95	Penta		2.7	L	3.9	60		1.4	34		1.5	17		0.85
PCB-96	Penta			U L	0.56	0.6	J	1.4	0.36	J	1.5	0.19	J	0.77
PCB-97	Penta			U L	0.23	14		1.3	7.6		1.5	3.1		0.71
PCB-98	Penta			UC L	0.64		UC	0.13		UC	0.1		UC	0.092
PCB-99	Penta		1.1	J L	3.8	23		1.3	15		1.5	5.8		0.71
PCB-100	Penta			U L	0.64	0.8	J	1.4	0.77	J	1.5	0.34	J	0.85
PCB-101	Penta			C090			C090			C090			C090	
PCB-102	Penta			C098			C098			C098			C098	
PCB-103	Penta			U L	0.65	0.97	J	1.4	0.56	J	1.5	0.31	J	0.85
PCB-104	Penta	PRC												
PCB-105	Penta			U L	0.32	7.3	L	1.3	5.3	L	1.4	1.7		0.59
PCB-106	Penta		1.2	C,J L	3.7	23	C L	1.3	16	C L	1.4	5.2	C	0.59
PCB-107	Penta			UC L	0.31	2.4	C L	1.3	1.4	C L	1.4	0.52	C,J	0.59
PCB-108	Penta			C107			C107			C107			C107	
PCB-109	Penta			U L	0.21		U	0.45		U	0.21		U	0.093
PCB-110	Penta		0.34	J L	3.8	52		1.3	31		1.5	13		0.71
PCB-111	Penta			UC L	0.18		UC L	0.39		UC L	0.19		UC	0.075
PCB-112	Penta			C083			C083			C083			C083	
PCB-113	Penta			U L	0.23		U	0.53		U	0.25		U	0.11
PCB-114	Penta			U L	0.29	0.48	J L	1.3	0.52	J L	1.4	0.19	J	0.59
PCB-115	Penta			C111			C111			C111			C111	
PCB-116	Penta			C085			C085			C085			C085	
PCB-117	Penta			C087			C087			C087			C087	
PCB-118	Penta			C106			C106			C106			C106	
PCB-119	Penta			U L	0.2	1.6		1.3	1.1	J	1.5	0.45	J	0.71
PCB-120	Penta			U L	0.19		U L	0.41		U L	0.19		U	0.073
PCB-121	Penta	PRC												
PCB-122	Penta			U L	0.29	0.37	J L	1.3	0.28	J L	1.4		U	0.091
PCB-123	Penta			U L	0.25	0.47	J L	1.3	0.18	J L	1.4	0.15	J	0.59
PCB-124	Penta			U L	0.29	1.3	J L	1.3	1.1	J L	1.4	0.3	J	0.59
PCB-125	Penta			C087			C087			C087			C087	
PCB-126	Penta			U L	0.32		U L	0.24		U L	0.14		U	0.086
PCB-127	Penta			U L	0.32		U L	0.23		U L	0.13		U	0.088
PCB-128	Hexa			UC L	0.69	4.4	C L	1.3	3	C L	1.4	0.71	C	0.36
PCB-129	Hexa			U L	0.93	1.4	L	1.3	1.3	J L	1.4	0.26	J	0.38
PCB-130	Hexa			U L	0.87	2.5	L	1.3	2	L	1.4	0.36	J	0.38
PCB-131	Hexa			UC L	0.78	0.91	C,J L	1.3	0.62	C,J L	1.4	0.18	C,J	0.41

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010			LDW-Y1-IN-ENR-CB-S010			LDW-Y1-IN-ENR-CC-S010		
			[PCB Cfree] Result		[PCB Cfree] DL	[PCB Cfree] Result		[PCB Cfree] DL	[PCB Cfree] Result		[PCB Cfree] DL
			(pg/L)	Qualifier	(pg/L)	(pg/L)	Qualifier	(pg/L)	(pg/L)	Qualifier	(pg/L)
PCB-87	Penta		24	C L	2.7	14	C	1.1	15	C	1.8
PCB-88	Penta			UC	0.66	6.5	C	1.3	4.2	C	2
PCB-89	Penta			U	0.72		U	0.45		U	0.4
PCB-90	Penta		63	C L	2.7	39	C	1.1	45	C	1.8
PCB-91	Penta			C088			C088			C088	
PCB-92	Penta			C084			C084			C084	
PCB-93	Penta			U	0.7		U	0.22		U	0.42
PCB-94	Penta			U	0.77		U	0.24		U	0.46
PCB-95	Penta		77		3	62		1.3	63		2
PCB-96	Penta			U L	0.53		U	0.16		U	0.31
PCB-97	Penta		16	L	2.7	9.9		1.1	11		1.8
PCB-98	Penta			UC	1.3		UC	0.4		UC	0.76
PCB-99	Penta		28	L	2.7	18		1.1	21		1.8
PCB-100	Penta			U	0.65	0.88	J	1.3		U	0.38
PCB-101	Penta			C090			C090			C090	
PCB-102	Penta			C098			C098			C098	
PCB-103	Penta		2.3	J	3	1.2	J	1.3	1.7	J	2
PCB-104	Penta	PRC									
PCB-105	Penta		9.9	L	2.4	5.6		0.98	6.3	L	1.5
PCB-106	Penta		31	C L	2.4	17	C	0.98	19	C L	1.5
PCB-107	Penta		3	C L	2.4	1.7	C	0.98	1.9	C L	1.5
PCB-108	Penta			C107			C107			C107	
PCB-109	Penta			U L	0.46		U	0.27		U	0.25
PCB-110	Penta		55	L	2.7	35		1.1	38		1.8
PCB-111	Penta		0.95	C,J L	2.5	0.32	C,J	1	0.63	C,J L	1.6
PCB-112	Penta			C083			C083			C083	
PCB-113	Penta			U L	0.49		U	0.29		U	0.26
PCB-114	Penta		0.49	J L	2.4	0.47	J	0.98	0.46	J L	1.5
PCB-115	Penta			C111			C111			C111	
PCB-116	Penta			C085			C085			C085	
PCB-117	Penta			C087			C087			C087	
PCB-118	Penta			C106			C106			C106	
PCB-119	Penta		2.2	J L	2.7	1.6		1.1	1.8		1.8
PCB-120	Penta			U L	0.41		U	0.24		U L	0.21
PCB-121	Penta	PRC									
PCB-122	Penta		0.7	J L	2.4	0.27	J	0.98		U L	0.27
PCB-123	Penta		0.84	J L	2.4	0.49	J	0.98	0.43	J L	1.5
PCB-124	Penta		2	J L	2.4	1.1		0.98	1.3	J L	1.5
PCB-125	Penta			C087			C087			C087	
PCB-126	Penta			U L	0.28		U L	0.16		U L	0.28
PCB-127	Penta			U L	0.28		U L	0.15		U L	0.26
PCB-128	Hexa		4.4	C L	1.8	2	C L	0.66	2.2	C L	1
PCB-129	Hexa		1.6	J L	1.9	0.88	L	0.7	0.88	J L	1.1
PCB-130	Hexa		2.5	L	1.9	1.4	L	0.7	1.7	L	1.1
PCB-131	Hexa		1.3	C,J L	2	0.58	C,J L	0.73	0.62	C,J L	1.1

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010			LDW-Y1-SC-ENR+AC-CB-S010			LDW-Y1-SC-ENR+AC-CC-S010			LDW-Y1-SC-ENR-CA-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-132	Hexa		4	C	0.87	7.8	C L	1.3	9	C L	1.8	4.6	C	0.57
PCB-133	Hexa			C131			C131			C131			C131	
PCB-134	Hexa		0.76	C,J	0.93	1.8	C L	1.3	1.7	C,J L	1.9	0.77	C	0.62
PCB-135	Hexa		2.4		0.93	4.3	L	1.3	5.3	L	1.9	2.8		0.62
PCB-136	Hexa		3		0.82	6.5	L	1.2	7.4	L	1.8	3.9		0.54
PCB-137	Hexa			U	0.32	0.78	J L	1.2		U L	0.54	0.54		0.53
PCB-138	Hexa		9.7	C	0.81	19	C L	1.2	22	C L	1.7	11	C	0.53
PCB-139	Hexa		15	C	0.93	28	C L	1.3	34	C L	1.9	17	C	0.62
PCB-140	Hexa			U	0.33		U L	0.38		U L	0.54	0.28	J	0.62
PCB-141	Hexa		2.3		0.81	3.6	L	1.2	5	L	1.7	2.5		0.53
PCB-142	Hexa	PRC												
PCB-143	Hexa			C134			C134			C134			C134	
PCB-144	Hexa		1.3		0.93	1.9	L	1.3	2.8	L	1.9	1.4		0.62
PCB-145	Hexa			U	0.16		U L	0.21		U L	0.37		U	0.091
PCB-146	Hexa		2.3	C	0.81	4	C L	1.2	5.3	C L	1.7	2.4	C	0.53
PCB-147	Hexa			U	0.34	0.7	J L	1.3	0.78	J L	1.9	0.5	J	0.62
PCB-148	Hexa			U	0.22		U L	0.27		U L	0.49		U	0.13
PCB-149	Hexa			C139			C139			C139			C139	
PCB-150	Hexa			U	0.15		U L	0.2		U L	0.36		U	0.088
PCB-151	Hexa		4.4		0.93	8.5	L	1.3	11	L	1.9	5.5		0.62
PCB-152	Hexa			U	0.16		U L	0.21		U L	0.38		U	0.093
PCB-153	Hexa		12		0.81	23	L	1.2	28	L	1.7	14		0.53
PCB-154	Hexa		0.64	J	0.93	1	L	1.3	1.4	J L	1.9	0.52		0.62
PCB-155	Hexa	PRC												
PCB-156	Hexa		0.49	J	0.69	1.1	L	1.1	1.6	L	1.5	0.48		0.45
PCB-157	Hexa			U	0.2		U L	0.26		U L	0.35		U	0.1
PCB-158	Hexa		1.1	C	0.81	2	C L	1.2	2.6	C L	1.7	1.3	C	0.53
PCB-159	Hexa			U	0.19		U L	0.25		U L	0.34	0.18	J	0.45
PCB-160	Hexa			C158			C158			C158			C158	
PCB-161	Hexa			C132			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138			C138	
PCB-165	Hexa			C146			C146			C146			C146	
PCB-166	Hexa			U	0.24		U L	0.3		U L	0.41		U	0.13
PCB-167	Hexa		0.34	J	0.69	0.65	J L	1.1	0.72	J L	1.5	0.36	J	0.45
PCB-168	Hexa			U	0.23		U L	0.29		U L	0.4		U	0.12
PCB-169	Hexa			U L	0.18		U L	0.25		U L	0.3		U	0.083
PCB-170	Hepta		1.1	L	0.43	2.4	L	0.79	2.1	L	1.1	1	L	0.27
PCB-171	Hepta		0.44	J L	0.49	0.95	L	0.86	1.1	J L	1.2	0.46	L	0.31
PCB-172	Hepta			UB L	0.43	0.026	L	0.79		UB L	1.1	0.079	L	0.27
PCB-173	Hepta			U L	0.13		U L	0.23		U L	0.3		U L	0.076
PCB-174	Hepta		1.5	L	0.49	3.3	L	0.86	3.6	L	1.2	1.6	L	0.31
PCB-175	Hepta			U L	0.12		U L	0.21		U L	0.28		U L	0.071
PCB-176	Hepta		0.31	J L	0.42	0.63	J L	0.77	1	J L	1	0.29	L	0.26

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010			LDW-Y1-SC-ENR-CC-S010			LDW-Y1-SU-ENR+AC-CA-S010			LDW-Y1-SU-ENR+AC-CB-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-132	Hexa		30	C L	4.2	6.4	C	0.54	15	C	0.49	26	C L	1.1
PCB-133	Hexa			C131			C131			C131			C131	
PCB-134	Hexa		6.1	C L	4.2	1.2	C	0.58	3.4	C	0.52	5.2	C L	1.2
PCB-135	Hexa		14	L	4.2	3.4		0.58	8.8		0.52	13	L	1.2
PCB-136	Hexa		25	L	4.2	5		0.51	12		0.47	17	L	1.1
PCB-137	Hexa		2.6	J L	4.2	0.62		0.51	2.3		0.46	2.9	L	1.1
PCB-138	Hexa		75	C L	4.2	14	C	0.51	37	C	0.46	61	C L	1.1
PCB-139	Hexa		100	C L	4.2	23	C	0.58	52	C	0.52	78	C L	1.2
PCB-140	Hexa			U L	0.87		U	0.12		U	0.14		U L	0.47
PCB-141	Hexa		16	L	4.2	3.4		0.51	8.2		0.46	13	L	1.1
PCB-142	Hexa	PRC												
PCB-143	Hexa			C134			C134			C134			C134	
PCB-144	Hexa		6.6	L	4.2	1.6		0.58	3.2		0.52	5.7	L	1.2
PCB-145	Hexa			U L	0.7		U	0.086		U	0.095		U L	0.18
PCB-146	Hexa		18	C L	4.2	3.3	C	0.51	7.3	C	0.46	12	C L	1.1
PCB-147	Hexa		2.1	J L	4.2	0.43	J	0.58	1.3		0.52	2.1	L	1.2
PCB-148	Hexa			U L	0.83		U	0.12		U	0.13		U L	0.23
PCB-149	Hexa			C139			C139			C139			C139	
PCB-150	Hexa			U L	0.68		U	0.083	0.2	J	0.47		U L	0.17
PCB-151	Hexa		35	L	4.2	6.9		0.58	15		0.52	23	L	1.2
PCB-152	Hexa			U L	0.72		U	0.088		U	0.097		U L	0.18
PCB-153	Hexa		95	L	4.2	18		0.51	42		0.46	69	L	1.1
PCB-154	Hexa		3.1	L	4.2	0.57		0.58	1.1		0.52	1.9	L	1.2
PCB-155	Hexa	PRC												
PCB-156	Hexa		5.7	L	4.3	0.77		0.44	2.6		0.4	4.3	L	0.98
PCB-157	Hexa		1.5	J L	4.3	0.14	J	0.44	0.55		0.4	0.82	J L	0.98
PCB-158	Hexa		8.6	C L	4.2	1.7	C	0.51	4.6	C	0.46	7.4	C L	1.1
PCB-159	Hexa			U L	0.72	0.16	J	0.44	0.36	J	0.4	0.72	J L	0.98
PCB-160	Hexa			C158			C158			C158			C158	
PCB-161	Hexa			C132			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138			C138	
PCB-165	Hexa			C146			C146			C146			C146	
PCB-166	Hexa			U L	0.77		U	0.088		U	0.11		U L	0.37
PCB-167	Hexa		2.5	J L	4.3	0.36	J	0.44	1.1		0.4	2.1	L	0.98
PCB-168	Hexa			U L	0.73		U	0.084	0.14	J	0.46		U L	0.35
PCB-169	Hexa			U L	0.77		U L	0.063		U L	0.08		U L	0.28
PCB-170	Hepta		13	L	4.7	1.4	L	0.29	3.8	L	0.26	7.9	L	0.75
PCB-171	Hepta		5.2	L	4.6	0.59	L	0.32	1.4	L	0.3	2.7	L	0.8
PCB-172	Hepta			UB L	4.7	0.15	L	0.29	0.52	L	0.26	0.96	L	0.75
PCB-173	Hepta			U L	1.3		U L	0.081		U L	0.093		U L	0.22
PCB-174	Hepta		20	L	4.6	2.3	L	0.32	5.9	L	0.3	13	L	0.8
PCB-175	Hepta			U L	1.2		U L	0.075	0.23	J L	0.3	0.45	J L	0.8
PCB-176	Hepta		4.4	J L	4.7	0.38	L	0.28	0.95	L	0.26	1.8	L	0.73

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010			LDW-Y1-SU-ENR-CA-S010			LDW-Y1-SU-ENR-CB-S010			LDW-Y1-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-132	Hexa		15	C L	0.61	32	C L	0.8	160	C L	6	47	C L	1.3
PCB-133	Hexa			C131			C131			C131			C131	
PCB-134	Hexa		3.3	C	0.65	7.1	C L	0.84	30	C L	6	9	C L	1.3
PCB-135	Hexa		7.6		0.65	19	L	0.84	89	L	6	26	L	1.3
PCB-136	Hexa		11	L	0.58	21	L	0.76	100	L	6	31	L	1.2
PCB-137	Hexa		1.6	L	0.57	3.5	L	0.75	19	L	6	5.1	L	1.2
PCB-138	Hexa		33	C L	0.57	79	C L	0.75	380	C L	6	120	C L	1.2
PCB-139	Hexa		45	C	0.65	100	C L	0.84	450	C L	6	150	C L	1.3
PCB-140	Hexa		0.61	J	0.65	1.4	L	0.84		U L	1.5	1.5	L	1.3
PCB-141	Hexa		7.1	L	0.57	18	L	0.75	85	L	6	27	L	1.2
PCB-142	Hexa	PRC												
PCB-143	Hexa			C134			C134			C134			C134	
PCB-144	Hexa		3.3		0.65	7.9	L	0.84	28	L	6	11	L	1.3
PCB-145	Hexa			U L	0.11		U L	0.13		U L	0.87		U L	0.33
PCB-146	Hexa		6.8	C L	0.57	15	C L	0.75	74	C L	6	23	C L	1.2
PCB-147	Hexa		1.3		0.65	2.5	L	0.84	13	L	6	3.4	L	1.3
PCB-148	Hexa			U	0.15		U L	0.19		U L	1.1		U L	0.46
PCB-149	Hexa			C139			C139			C139			C139	
PCB-150	Hexa			U L	0.11		U L	0.13		U L	0.85		U L	0.32
PCB-151	Hexa		14		0.65	32	L	0.84	150	L	6	47	L	1.3
PCB-152	Hexa			U L	0.11		U L	0.14		U L	0.9		U L	0.34
PCB-153	Hexa		36	L	0.57	91	L	0.75	430	L	6	130	L	1.2
PCB-154	Hexa		1.1		0.65	2.6	L	0.84	10	L	6	3	L	1.3
PCB-155	Hexa	PRC												
PCB-156	Hexa		2	L	0.49	5.9	L	0.66	31	L	6	9	L	1.1
PCB-157	Hexa		0.47	J L	0.49	1.1	L	0.66	7.3	L	6	1.6	L	1.1
PCB-158	Hexa		3.9	C L	0.57	9.8	C L	0.75	46	C L	6	15	C L	1.2
PCB-159	Hexa		0.42	J L	0.49	0.83	L	0.66	5.7	J L	6	1.5	L	1.1
PCB-160	Hexa			C158			C158			C158			C158	
PCB-161	Hexa			C132			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138			C138	
PCB-165	Hexa			C146			C146			C146			C146	
PCB-166	Hexa			U L	0.17		U L	0.15		U L	1.4		U L	0.29
PCB-167	Hexa		0.92	L	0.49	2.3	L	0.66	11	L	6	4.1	L	1.1
PCB-168	Hexa			U L	0.16		U L	0.14		U L	1.3		U L	0.27
PCB-169	Hexa			U L	0.13		U L	0.11		U L	1.3		U L	0.24
PCB-170	Hepta		2.7	L	0.33	9.4	L	0.46	65	L	6.1	18	L	0.9
PCB-171	Hepta		1.2	L	0.37	3.6	L	0.51	25	L	6	6.9	L	0.96
PCB-172	Hepta		0.33	L	0.33	1.6	L	0.46	19	L	6.1	3.8	L	0.9
PCB-173	Hepta			U L	0.094		U L	0.15		U L	2.1	0.86	J L	0.96
PCB-174	Hepta		4.7	L	0.37	14	L	0.51	91	L	6	25	L	0.96
PCB-175	Hepta		0.26	J L	0.37	0.67	L	0.51		U L	1.9	1	L	0.96
PCB-176	Hepta		0.74	L	0.32	2.3	L	0.45	16	L	6.1	4.2	L	0.89

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB			LDW-Y1-IN-ENR+AC-CA-S010			LDW-Y1-IN-ENR+AC-CB-S010			LDW-Y1-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-132	Hexa		2.5	C,J L	3.6	12	C L	1.3	8.5	C L	1.4	1.8	C	0.41
PCB-133	Hexa			C131			C131			C131			C131	
PCB-134	Hexa			UC L	0.8	2.5	C L	1.3	1.7	C L	1.4	0.45	C	0.44
PCB-135	Hexa			U L	0.77	5.8	L	1.3	3.7	L	1.4	1		0.44
PCB-136	Hexa			U L	0.64	8.5	L	1.3	4.9	L	1.4	1.3		0.39
PCB-137	Hexa			U L	0.8	1.8	L	1.3	1.3	J L	1.4	0.27	J	0.38
PCB-138	Hexa			UC L	0.59	26	C L	1.3	20	C L	1.4	4.3	C	0.38
PCB-139	Hexa			UC L	0.73	31	C L	1.3	22	C L	1.4	5.4	C	0.44
PCB-140	Hexa			U L	0.75		U L	0.31		U L	0.28		U	0.075
PCB-141	Hexa			U L	0.77	5	L	1.3	3.9	L	1.4	0.68		0.38
PCB-142	Hexa	PRC												
PCB-143	Hexa			C134			C134			C134			C134	
PCB-144	Hexa			U L	0.8	1.8	L	1.3	1.4	L	1.4	0.3	J	0.44
PCB-145	Hexa			U L	0.6		U L	0.15		U L	0.13		U	0.044
PCB-146	Hexa			UC L	0.65	5.7	C L	1.3	4.7	C L	1.4	1	C	0.38
PCB-147	Hexa			U L	0.73	1.1	J L	1.3	0.61	J L	1.4	0.17	J	0.44
PCB-148	Hexa			U L	0.76		U L	0.19		U L	0.17		U	0.061
PCB-149	Hexa			C139			C139			C139			C139	
PCB-150	Hexa			U L	0.59		U L	0.15		U L	0.13		U	0.043
PCB-151	Hexa			U L	0.81	8.7	L	1.3	6.3	L	1.4	1.5		0.44
PCB-152	Hexa			U L	0.61		U L	0.15		U L	0.14		U	0.045
PCB-153	Hexa			UB L	3.6	27	L	1.3	20	L	1.4	4.4		0.38
PCB-154	Hexa		0.47	J L	3.7	0.93	L	1.3	0.67	J L	1.4	0.24	J	0.44
PCB-155	Hexa	PRC												
PCB-156	Hexa			U L	0.64	1.6	L	1.3	1.5	L	1.4	0.32	J	0.33
PCB-157	Hexa			U L	0.62	0.5	J L	1.3	0.45	J L	1.4	0.079	J	0.33
PCB-158	Hexa			UC L	0.58	3.1	C L	1.3	2.4	C L	1.4	0.46	C	0.38
PCB-159	Hexa			U L	0.58	0.41	J L	1.3	0.56	J L	1.4	0.083	J	0.33
PCB-160	Hexa			C158			C158			C158			C158	
PCB-161	Hexa			C132			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138			C138	
PCB-165	Hexa			C146			C146			C146			C146	
PCB-166	Hexa			U L	0.62		U L	0.25		U L	0.23		U	0.054
PCB-167	Hexa			U L	0.61	0.63	J L	1.3	0.83	J L	1.4	0.17	J	0.33
PCB-168	Hexa			U L	0.6		U L	0.24		U L	0.22		U	0.052
PCB-169	Hexa			U L	0.56		U L	0.24		U L	0.23		U	0.037
PCB-170	Hepta			U L	0.64	3.1	L	1.3	2.5	L	1.4	0.37	L	0.22
PCB-171	Hepta			U L	0.61	1.2	J L	1.3	1.1	J L	1.4	0.17	J L	0.25
PCB-172	Hepta		1.2	L	3.5	1.8	L	1.3		UB L	1.4		UB L	0.22
PCB-173	Hepta			U L	0.63		U L	0.23		U L	0.24		U L	0.032
PCB-174	Hepta			U L	0.59	5.1	L	1.3	4	L	1.4	0.59	L	0.25
PCB-175	Hepta			U L	0.58	0.36	J L	1.3		U L	0.22		U L	0.029
PCB-176	Hepta			U L	0.45	0.98	J L	1.3	0.8	J L	1.4	0.088	J L	0.21

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010			LDW-Y1-IN-ENR-CB-S010			LDW-Y1-IN-ENR-CC-S010		
			[PCB Cfree] Result		[PCB Cfree] DL	[PCB Cfree] Result		[PCB Cfree] DL	[PCB Cfree] Result		[PCB Cfree] DL
			(pg/L)	Qualifier	(pg/L)	(pg/L)	Qualifier	(pg/L)	(pg/L)	Qualifier	(pg/L)
PCB-132	Hexa		11	C L	2	6.7	C L	0.73	7.2	C L	1.1
PCB-133	Hexa			C131			C131			C131	
PCB-134	Hexa		2.4	C L	2	1.5	C L	0.77	1.7	C L	1.2
PCB-135	Hexa		7.3	L	2	3.9	L	0.77	4.4	L	1.2
PCB-136	Hexa		6.5	L	1.9	3.8	L	0.7	4.5	L	1.1
PCB-137	Hexa		1.4	J L	1.9	0.75	L	0.7	0.91	J L	1.1
PCB-138	Hexa		25	C L	1.9	14	C L	0.7	16	C L	1.1
PCB-139	Hexa		31	C L	2	18	C L	0.77	22	C L	1.2
PCB-140	Hexa			U L	0.53		U L	0.19	0.33	J L	1.2
PCB-141	Hexa		4.7	L	1.9	2.6	L	0.7	2.9	L	1.1
PCB-142	Hexa	PRC									
PCB-143	Hexa			C134			C134			C134	
PCB-144	Hexa		1.4	J L	2	1.1	L	0.77	1.3	L	1.2
PCB-145	Hexa			U L	0.25		U L	0.088		U L	0.14
PCB-146	Hexa		6.8	C L	1.9	3.3	C L	0.7	4.5	C L	1.1
PCB-147	Hexa		1.2	J L	2	0.51	J L	0.77	0.79	J L	1.2
PCB-148	Hexa			U L	0.36		U L	0.13		U L	0.21
PCB-149	Hexa			C139			C139			C139	
PCB-150	Hexa			U L	0.25		U L	0.087		U L	0.14
PCB-151	Hexa		9.7	L	2	5.5	L	0.77	7.1	L	1.2
PCB-152	Hexa			U L	0.26		U L	0.092		U L	0.15
PCB-153	Hexa		28	L	1.9	15	L	0.7	18	L	1.1
PCB-154	Hexa		1.1	J L	2	0.69	L	0.77	0.67	J L	1.2
PCB-155	Hexa	PRC									
PCB-156	Hexa		1.8	L	1.7	0.91	L	0.62	1	L	0.94
PCB-157	Hexa			U L	0.39	0.23	J L	0.62		U L	0.2
PCB-158	Hexa		3.3	C L	1.9	1.5	C L	0.7	2	C L	1.1
PCB-159	Hexa			U L	0.36		U L	0.12		U L	0.19
PCB-160	Hexa			C158			C158			C158	
PCB-161	Hexa			C132			C132			C132	
PCB-162	Hexa			C128			C128			C128	
PCB-163	Hexa			C138			C138			C138	
PCB-164	Hexa			C138			C138			C138	
PCB-165	Hexa			C146			C146			C146	
PCB-166	Hexa			U L	0.43		U L	0.15		U L	0.23
PCB-167	Hexa		1	J L	1.7	0.41	J L	0.62	0.52	J L	0.94
PCB-168	Hexa			U L	0.4		U L	0.14		U L	0.22
PCB-169	Hexa			U L	0.35		U L	0.12		U L	0.17
PCB-170	Hepta		2.3	L	1.4	0.9	L	0.45	1.1	L	0.66
PCB-171	Hepta			U L	0.3	0.34	J L	0.49	0.67	J L	0.73
PCB-172	Hepta		0.48	L	1.4		UB L	0.45	0.18	L	0.66
PCB-173	Hepta			U L	0.32		U L	0.093		U L	0.19
PCB-174	Hepta		3.2	L	1.5	1.5	L	0.49	1.6	L	0.73
PCB-175	Hepta			U L	0.29		U L	0.085		U L	0.17
PCB-176	Hepta			U L	0.21	0.28	J L	0.44	0.48	J L	0.65

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010			LDW-Y1-SC-ENR+AC-CB-S010			LDW-Y1-SC-ENR+AC-CC-S010			LDW-Y1-SC-ENR-CA-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-177	Hepta		0.95	L	0.49	2.2	L	0.86	2.4	L	1.2	0.87	L	0.31
PCB-178	Hepta		0.47	J L	0.49	1.1	L	0.86	1.3	L	1.2	0.48	L	0.31
PCB-179	Hepta		0.88	L	0.42	2.1	L	0.77	2.4	L	1	0.83	L	0.26
PCB-180	Hepta		2.4	L	0.43	5.1	L	0.79	5.4	L	1.1	2	L	0.27
PCB-181	Hepta			U L	0.11		U L	0.2		U L	0.26		U L	0.065
PCB-182	Hepta		1.9	C L	0.49	5.2	C L	0.86	5.3	C L	1.2	2	C L	0.31
PCB-183	Hepta		1.2	L	0.49	2.6	L	0.86	2.6	L	1.2	1	L	0.31
PCB-184	Hepta	PRC												
PCB-185	Hepta			U L	0.12	0.53	J L	0.86		U L	0.27	0.21	J L	0.31
PCB-186	Hepta			U L	0.079		U L	0.14		U L	0.19		U L	0.044
PCB-187	Hepta			C182			C182			C182			C182	
PCB-188	Hepta			U L	0.08		U L	0.15		U L	0.18		U L	0.045
PCB-189	Hepta			U L	0.067		U L	0.12		U L	0.17		U L	0.038
PCB-190	Hepta		0.24	J L	0.43	0.69	J L	0.79		U L	0.21	0.21	J L	0.27
PCB-191	Hepta			U L	0.088		U L	0.16		U L	0.21		U L	0.05
PCB-192	Hepta	PRC												
PCB-193	Hepta			U L	0.082	0.42	J L	0.79	0.55	J L	1.1	0.19	J L	0.27
PCB-194	Octa		0.21	J L	0.23	0.48	J L	0.53	0.54	J L	0.66	0.16	L	0.14
PCB-195	Octa		0.11	J L	0.26	0.29	J L	0.57	0.26	J L	0.72	0.096	J L	0.16
PCB-196	Octa		0.26	C L	0.26	0.85	C L	0.57	0.86	C L	0.72	0.26	C L	0.16
PCB-197	Octa		0.0037	L	0.22	0.039	L	0.51		UB L	0.63		UB L	0.13
PCB-198	Octa			U L	0.068		U L	0.13		U L	0.16		U L	0.038
PCB-199	Octa		0.22	L	0.22	0.69	L	0.51	0.69	L	0.63	0.18	L	0.13
PCB-200	Octa			U L	0.041		U L	0.086		U L	0.1		U L	0.023
PCB-201	Octa			U L	0.05		U L	0.098		U L	0.12		U L	0.028
PCB-202	Octa			U L	0.04		U L	0.084		U L	0.099		U L	0.022
PCB-203	Octa			C196			C196			C196			C196	
PCB-204	Octa	PRC												
PCB-205	Octa			U L	0.028		U L	0.07		U L	0.077		U L	0.016
PCB-206	Nona			U L	0.0094		U L	0.062		U L	0.075	0.03	J L	0.084
PCB-207	Nona			UB J L	0.12		UB L	0.34		UB J L	0.4		UB L	0.07
PCB-208	Nona			U L	0.006		U L	0.043		U L	0.047	0.016	J L	0.07
PCB-209	Deca			UB L	0.065		UB L	0.23	0.024	L	0.25		UB L	0.037
Total Detected PCB Congeners			**570**			**940**			**1300**			**1000**		

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010			LDW-Y1-SC-ENR-CC-S010			LDW-Y1-SU-ENR+AC-CA-S010			LDW-Y1-SU-ENR+AC-CB-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-177	Hepta		10	L	4.6	1.3	L	0.32	3.5	L	0.3	6.8	L	0.8
PCB-178	Hepta		5.5	L	4.6	0.63	L	0.32	1.6	L	0.3	2.8	L	0.8
PCB-179	Hepta		13	L	4.7	1.2	L	0.28	3	L	0.26	6.3	L	0.73
PCB-180	Hepta		30	L	4.7	2.8	L	0.29	7.5	L	0.26	15	L	0.75
PCB-181	Hepta			U L	1.1		U L	0.069		U L	0.079		U L	0.19
PCB-182	Hepta		26	C L	4.6	2.8	C L	0.32	7.2	C L	0.3	14	C L	0.8
PCB-183	Hepta		15	L	4.6	1.4	L	0.32	3.5	L	0.3	7	L	0.8
PCB-184	Hepta	PRC												
PCB-185	Hepta			U L	1.1	0.3	J L	0.32	0.67	L	0.3	1.4	L	0.8
PCB-186	Hepta			U L	0.91		U L	0.049		U L	0.056		U L	0.14
PCB-187	Hepta			C182			C182			C182			C182	
PCB-188	Hepta			U L	0.92		U L	0.049		U L	0.058		U L	0.14
PCB-189	Hepta			U L	0.89		U L	0.043		U L	0.047		U L	0.12
PCB-190	Hepta		3.2	J L	4.7	0.31	L	0.29	0.78	L	0.26	1.6	L	0.75
PCB-191	Hepta			U L	0.98		U L	0.054	0.25	J L	0.26		U L	0.15
PCB-192	Hepta	PRC												
PCB-193	Hepta		5.4	L	4.7	0.29	L	0.29	0.58	L	0.26	1.3	L	0.75
PCB-194	Octa		4.6	J L	5.2	0.26	L	0.17	0.92	L	0.15	2.6	L	0.52
PCB-195	Octa		2	J L	5.1	0.15	J L	0.18	0.4	L	0.17	1.1	L	0.56
PCB-196	Octa		6.5	C L	5.1	0.38	C L	0.18	1.4	C L	0.17	3.4	C L	0.56
PCB-197	Octa			UB L	5.3		UB L	0.16	0.051	L	0.15		UB L	0.5
PCB-198	Octa			U L	0.97		U L	0.039		U L	0.049		U L	0.15
PCB-199	Octa		6.6	L	5.3	0.32	L	0.16	1.1	L	0.15	3	L	0.5
PCB-200	Octa			U L	0.72		U L	0.024	0.17	L	0.15	0.5	J L	0.5
PCB-201	Octa			U L	0.71		U L	0.028		U L	0.036		U L	0.11
PCB-202	Octa			U L	0.7		U L	0.023	0.23	L	0.15	0.75	L	0.5
PCB-203	Octa			C196			C196			C196			C196	
PCB-204	Octa	PRC												
PCB-205	Octa			U L	0.67		U L	0.022	0.053	J L	0.15	0.16	J L	0.52
PCB-206	Nona			U L	1.5	0.052	J L	0.11	0.17	L	0.1	0.58	L	0.39
PCB-207	Nona			UB L	5.9	0.012	L	0.092	0.02	L	0.087	0.081	L	0.36
PCB-208	Nona			U L	1.1	0.02	J L	0.092	0.052	J L	0.087	0.2	J L	0.36
PCB-209	Deca		0.83	L	6.6		UB L	0.054	0.01	L	0.052	0.12	L	0.25
Total Detected PCB Congeners			**2400**			**1200**			**4200**			**3500**		

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010			LDW-Y1-SU-ENR-CA-S010			LDW-Y1-SU-ENR-CB-S010			LDW-Y1-SU-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-177	Hepta		2.7	L	0.37	8.6	L	0.51	57	L	6	16	L	0.96
PCB-178	Hepta		1	L	0.37	3.5	L	0.51	23	L	6	5.7	L	0.96
PCB-179	Hepta		2.4	L	0.32	7.5	L	0.45	55	L	6.1	13	L	0.89
PCB-180	Hepta		5.7	L	0.33	18	L	0.46	150	L	6.1	36	L	0.9
PCB-181	Hepta			U L	0.079		U L	0.13		U L	1.9		U L	0.27
PCB-182	Hepta		5.7	C L	0.37	17	C L	0.51	120	C L	6	31	C L	0.96
PCB-183	Hepta		3	L	0.37	8.6	L	0.51	59	L	6	16	L	0.96
PCB-184	Hepta	PRC												
PCB-185	Hepta		0.57	L	0.37	1.4	L	0.51	11	L	6	2.8	L	0.96
PCB-186	Hepta			U L	0.056		U L	0.09		U L	1.4		U L	0.19
PCB-187	Hepta			C182			C182			C182			C182	
PCB-188	Hepta			U L	0.058		U L	0.099		U L	1.4		U L	0.21
PCB-189	Hepta			U L	0.047	0.24	J L	0.41		U L	1.5	0.56	J L	0.84
PCB-190	Hepta		0.68	L	0.33	1.9	L	0.46	15	L	6.1	3.7	L	0.9
PCB-191	Hepta			U L	0.063	0.45	J L	0.46	5.1	J L	6.1	1.1	L	0.9
PCB-192	Hepta	PRC												
PCB-193	Hepta		0.58	L	0.33	1.3	L	0.46	15	L	6.1	2.9	L	0.9
PCB-194	Octa		0.53	L	0.19	2.1	L	0.28	25	L	6.2	5.1	L	0.67
PCB-195	Octa		0.23	L	0.21	1.2	L	0.31	12	L	6.1	2.6	L	0.71
PCB-196	Octa		0.87	C L	0.21	3.1	C L	0.31	37	C L	6.1	7	C L	0.71
PCB-197	Octa			UB L	0.18	0.13	L	0.27	4.5	L	6.2	0.052	L	0.65
PCB-198	Octa			U L	0.06	0.19	J L	0.31		U L	1.3		U L	0.19
PCB-199	Octa		0.63	L	0.18	2.6	L	0.27	34	L	6.2	5.5	L	0.65
PCB-200	Octa			U L	0.037	0.51	L	0.27	6.1	J L	6.2	0.85	L	0.65
PCB-201	Octa			U L	0.044		U L	0.056		U L	0.94	0.98	L	0.71
PCB-202	Octa		0.19	L	0.18	0.65	L	0.27	8	L	6.2	1.3	L	0.65
PCB-203	Octa			C196			C196			C196			C196	
PCB-204	Octa	PRC												
PCB-205	Octa		0.042	J L	0.19	0.12	J L	0.28	2.1	J L	6.2	0.28	J L	0.67
PCB-206	Nona		0.09	J L	0.12	0.43	L	0.19	8.4	L	6.3	1.1	L	0.53
PCB-207	Nona		0.0077	L	0.11	0.049	L	0.17	3.3	L	6.3	0.19	L	0.49
PCB-208	Nona		0.029	J L	0.11	0.12	J L	0.17	2.7	J L	6.3	0.31	J L	0.49
PCB-209	Deca		0.011	L	0.063	0.051	L	0.1	4.9	L	6.4	0.21	L	0.37
Total Detected PCB Congeners			**3700**			**7700**			**16000**			**7200**		

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB			LDW-Y1-IN-ENR+AC-CA-S010			LDW-Y1-IN-ENR+AC-CB-S010			LDW-Y1-IN-ENR+AC-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-177	Hepta			U L	0.62	2.5	L	1.3	2.2	L	1.4	0.35	L	0.25
PCB-178	Hepta			U L	0.61	1.4	L	1.3	1.3	J L	1.4	0.15	J L	0.25
PCB-179	Hepta			U L	0.44	2.7	L	1.3	2.4	L	1.4	0.32	L	0.21
PCB-180	Hepta			U L	0.46	7.1	L	1.3	6.7	L	1.4	0.78	L	0.22
PCB-181	Hepta			U L	0.54		U L	0.19		U L	0.2		U L	0.026
PCB-182	Hepta			UC L	0.52	6.1	C L	1.3	5.4	C L	1.4	0.73	C L	0.25
PCB-183	Hepta			U L	0.55	2.9	L	1.3	2.7	L	1.4	0.41	L	0.25
PCB-184	Hepta	PRC												
PCB-185	Hepta			U L	0.56	0.58	J L	1.3	0.59	J L	1.4		U L	0.028
PCB-186	Hepta			U L	0.43		U L	0.15		U L	0.16		U L	0.019
PCB-187	Hepta			C182			C182			C182			C182	
PCB-188	Hepta			U L	0.42		U L	0.16		U L	0.16	0.036	J L	0.21
PCB-189	Hepta			U L	0.41		U L	0.16		U L	0.16		U L	0.016
PCB-190	Hepta			U L	0.45	0.7	J L	1.3	0.52	J L	1.4	0.087	J L	0.22
PCB-191	Hepta			U L	0.45		U L	0.16		U L	0.17		U L	0.02
PCB-192	Hepta	PRC												
PCB-193	Hepta			U L	0.43	0.63	J L	1.3	0.69	J L	1.4	0.097	J L	0.22
PCB-194	Octa			U L	0.57	1.1	J L	1.3	1.1	J L	1.4	0.077	J L	0.13
PCB-195	Octa			U L	0.59	0.57	J L	1.3	0.52	J L	1.4	0.05	J L	0.14
PCB-196	Octa			UC L	0.49	1.7	C L	1.3	1.6	C L	1.4	0.14	C,J L	0.14
PCB-197	Octa			UB L	3.5		UB L	1.3		UB L	1.4		UB L	0.12
PCB-198	Octa			U L	0.59		U L	0.24		U L	0.22		U L	0.018
PCB-199	Octa			U L	0.49	1.7	L	1.3	1.5	L	1.4	0.11	J L	0.12
PCB-200	Octa			U L	0.42		U L	0.16		U L	0.15		U L	0.011
PCB-201	Octa			U L	0.41		U L	0.16		U L	0.15		U L	0.012
PCB-202	Octa			U L	0.41	0.63	J L	1.3	0.51	J L	1.4	0.038	J L	0.12
PCB-203	Octa			C196			C196			C196			C196	
PCB-204	Octa	PRC												
PCB-205	Octa			U L	0.43		U L	0.29		U L	0.26		U L	0.015
PCB-206	Nona			U L	0.31	0.64	J L	1.3	0.48	J L	1.4	0.022	J L	0.086
PCB-207	Nona		0.13	L	3.4	0.66	L	1.3	0.2	L	1.4		UB L	0.074
PCB-208	Nona			U L	0.25	0.27	J L	1.3	0.27	J L	1.4	0.011	J L	0.074
PCB-209	Deca		0.45	L	3.3	0.9	L	1.4	0.36	L	1.4		UB L	0.044
Total Detected PCB Congeners			**40**			**830**			**530**			**270**		

Notes

C: Coelution with one or more PCB congeners; the numerical value indicates the lower congener co-eluter. For example, PCB-20 co-elutes with PCB-21 and PCB-33

J: Analyte concentration is below calibration range

L: Percent to steady state less than 20%

PCB: Polychlorinated biphenyl

pg/L: picogram per liter

PRC: Performance Reference Compound

U: Not detected at the Detection Limit (DL) shown in the second column for each sample.

UB: Background concentration exceeds detected concentration

Table 1. Concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010			LDW-Y1-IN-ENR-CB-S010			LDW-Y1-IN-ENR-CC-S010		
			[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)	[PCB Cfree] Result (pg/L)	Qualifier	[PCB Cfree] DL (pg/L)
PCB-177	Hepta		1.9	L	1.5	0.87	L	0.49	1.2	L	0.73
PCB-178	Hepta			U L	0.31	0.54	L	0.49	0.95	L	0.73
PCB-179	Hepta		1.5	L	1.4	0.92	L	0.44	1.3	L	0.65
PCB-180	Hepta		5	L	1.4	2.3	L	0.45	3	L	0.66
PCB-181	Hepta			U L	0.28		U L	0.083		U L	0.17
PCB-182	Hepta		4.2	C L	1.5	2.1	C L	0.49	2.7	C L	0.73
PCB-183	Hepta		2.4	L	1.5	1.2	L	0.49	1.6	L	0.73
PCB-184	Hepta	PRC									
PCB-185	Hepta			U L	0.29		U L	0.085		U L	0.17
PCB-186	Hepta			U L	0.2		U L	0.056		U L	0.11
PCB-187	Hepta			C182			C182			C182	
PCB-188	Hepta			U L	0.22		U L	0.055		U L	0.11
PCB-189	Hepta			U L	0.17		U L	0.054		U L	0.11
PCB-190	Hepta			U L	0.22	0.28	J L	0.45	0.31	J L	0.66
PCB-191	Hepta			U L	0.22		U L	0.063		U L	0.13
PCB-192	Hepta	PRC									
PCB-193	Hepta			U L	0.21	0.36	J L	0.45		U L	0.12
PCB-194	Octa		0.57	J L	1	0.18	J L	0.29	0.28	J L	0.42
PCB-195	Octa			U L	0.26		U L	0.062		U L	0.13
PCB-196	Octa		0.84	C,J L	1.1	0.24	C,J L	0.32	0.41	C,J L	0.45
PCB-197	Octa			UB L	0.98		UB L	0.28	0.072	L	0.4
PCB-198	Octa			U L	0.27		U L	0.062		U L	0.11
PCB-199	Octa			U L	0.22	0.29	L	0.28	0.29	J L	0.4
PCB-200	Octa			U L	0.18		U L	0.041		U L	0.071
PCB-201	Octa			U L	0.2		U L	0.045		U L	0.079
PCB-202	Octa			U L	0.18		U L	0.04		U L	0.069
PCB-203	Octa			C196			C196			C196	
PCB-204	Octa	PRC									
PCB-205	Octa			U L	0.16		U L	0.038		U L	0.082
PCB-206	Nona			U L	0.12		U L	0.042		U L	0.06
PCB-207	Nona		0.043	L	0.73		UB L	0.19		UB L	0.26
PCB-208	Nona			U L	0.08		U L	0.027		U L	0.036
PCB-209	Deca		0.06	L	0.54	0.0059	L	0.12		UB L	0.16
Total Detected PCB Congeners			**1300**			**840**			**1100**		

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ATTACHMENT A: DATA ANALYSIS METHODS

Attachment A: Data Analysis Methods
Concentrations of Freely-Dissolved Polychlorinated Biphenyls (PCBs) Measured via SP3ME™ Passive Samplers

Information about the SPME fiber and exposure duration for the samples reported in this document are provided in Table A1. The exposure duration as shown in Table A1 was calculated as the average exposure duration of each fiber in the composite sample. The deployment and retrieval dates and exposure duration of each composited fiber are shown in Table A2. The mass of PCB congeners in the extracts (Table A3) obtained from Frontier Analytical Laboratory report (Attachment C of the Data Report) were used in a multi-step data process to calculate C_{free} PCBs as described below.

Step 1:

The concentration of PCB analytes in the PDMS phase of the sampler was calculated as the mass of each PCB analyte (as reported by the laboratory, Table A3) divided by the volume PDMS. Volume of PDMS is shown in Table A2 and is based on the measured mass of the SPME fiber prior to compositing the fibers, the conversion factor of 0.069 gram per cm, 0.631 µL per cm, and density of PDMS (0.965 kilogram per liter [kg/L]).

The concentration of the PRCs in PDMS [$PDMS_t$] was used to calculate the elimination rate (k_e) values for the PRCs in each sample using the following equation (Lohmann, 2012):

$$PRC\ k_e = \ln\left(\frac{[PDMS_{t=0}]}{[PDMS_{t=final}]}\right) \div t_{final}$$

where:

$PDMS_{t=0}$ = the average concentration of the PRC in the PDMS at the beginning of the deployment (obtained from an average measurement of the Trip Blanks);

$PDMS_{t=final}$ = the concentration of the PRC in the PDMS after the deployment (obtained from each sample); and

t_{final} = the deployment time (in days).

k_e = the elimination rate (in $days^{-1}$)

PRC k_e values for the PRCs in the sediment-deployed sample are shown in Table A4. The values are also expressed as a percentage of steady state (concentration at equilibrium). A number of PRC k_e values were not calculated and were treated as outliers because $PDMS_{t=final}$ values were equal to or greater than $PDMS_{t=0}$ values.

Step 2:

The second step was to estimate k_e values for the non-PRC PCBs (primary analyte PCBs) in the sample. This was accomplished by developing a linear regression model using PRC k_e values (dependent variable, from Table A4) and PDMS-water partition coefficients (K_{PDMS}) for each PCB. K_{PDMS} values were the independent variable and were obtained from Smedes et al. (2009) and provided in Table A5. Note, regressions were specific to each sample (i.e. not global to the whole deployment) as local geologic and hydrodynamic can vary greatly within a site.

Values were $\log_{10}$-transformed per Tomaszewski and Luthy (2008). Models were developed for each sample. By entering the PCB-specific K_{PDMS} into the linear regression model developed for each sample, k_e values for each of the primary analyte PCBs for each sample were calculated. The p-value and r^2 for each sample-specific model is provided in Table A4 as measures of how well the linear PRC model performed.

Step 3:

Concentrations of some primary analyte PCBs in PDMS (derived from the PCB masses in Table A3 and PDMS masses in Table A1) were corrected for trace levels of primary analyte PCBs present in the Trip Blanks (due to trace levels present in the PRC spiking solutions). Using the sample specific k_e values, the expected amount of these trace primary analyte PCBs present in the sample at the end of deployment ($Trace\ PCB_{t = final}$) were calculated via the following equation:

$$[Trace\ \ PCB_{t = final}] = \frac{[Trace\ \ PCB_{t = 0}]}{e^{k_e \times t_{final}}}$$

where:

$Trace\ PCB_{t = final}$ = the expected concentration of trace PCBs remaining in the sample at the end of the deployment;

$Trace\ PCB_{t = 0}$ = the average concentration of the trace PCB in the PDMS at the beginning of the deployment;

k_e = the elimination rate value predicted by the sampler-specific regression model (in $days^{-1}$); and

t_{final} = the deployment time (in days).

$Trace\ PCB_{t = 0}$ values were obtained from an average measurement of the trace PCBs in the Trip Blanks. The concentrations of Trace PCBs in Trip Blanks were assumed to be zero when Trace PCBs were not detected.

Concentrations of *Trace PCB* $_{t = final}$ values were then subtracted from the measured concentrations of primary analyte PCBs in PDMS (derived from the PCB masses in Table A3 and PDMS masses in Table A1).

Step 4:

This step describes the calculation of sampling rate correction factor (*CF*) for each primary analyte PCB in each sample. The following equation is used, as adapted from Lohmann (2012):

$$CF = \frac{1}{1 - e^{-k_e \times t_{final}}}$$

where:

k_e = the elimination rate value predicted by the sample-specific regression model (in days^{-1}); and

t_{final} = the deployment time (in days).

Step 5:

The concentration of PCBs in the PDMS of each sample (derived from the PCB masses in Table A3 and PDMS masses in Table A1, or values corrected for *Trace PCB*$_{t=final}$) were multiplied by the *CF* values to calculate the steady-state concentration of PCBs.

Step 6:

In the final step, the steady-state concentrations are divided by K_{PDMS} values (Smedes et al., 2009) to obtain the concentrations of C_{free} PCBs. These are reported in Table 1. C_{free} Detection Limits (DLs) were calculated in the approach described above by dividing the estimated DL concentration in sample extracts, as reported by Frontier Analytical Laboratory and shown in Table A3, by the mass of PDMS extracted in each sample, as shown in Table A1.

The estimated detection limit (EDL) was used for non-detected results and the minimum level of quantitation (ML) was used for detected results. Cases in which the percentage of steady state was indicated to be less than 20% for a primary analyte PCB, a qualifier, "L", was noted[2]. All other qualifiers, as reported in the original analytical results for PCB masses of each congener in each sampler extract (Attachment C of the Data Report), are carried through and reported in the C_{free} results. Table 1 also reports the sum of the detected C_{free} PCB congeners.

An uncertainty analysis was conducted to evaluate the uncertainty in the estimation of CF values for each of the primary analytes. From the linear regression model using PRC k_e values (dependent variable, from Table A4) and PRC K_{PDMS} values (Step 2), upper and lower bound estimates for k_e values were obtained for each PCB analyte in each sample by calculating the

[2] Differences in t=0 and t=final concentrations of less than 10-20% may be within measurement error, as determined by general variability in PRCs in Trip Blank measurements. When a PCB reaches less than 10-20% of steady state in a sampler, C_{free} calculations are potentially affected by measurement uncertainty.

lower and upper 80% confidence level (CL) model predictions for predicted k_e (Sokal and Rohlf, 1999). These 80% lower and upper CL k_e values were then used to calculate lower and upper CL CF values that were applied to calculate upper and lower CL values for C_{free} for each PCB congener in each sample (Steps 4 and 5). These lower and upper CL C_{free} values are shown in Table A6. Via summing the lower CL values for C_{free} for the PCB congeners, a lower CL value for the C_{free} total PCBs were calculated (Table A6). Via summing the upper CL values for C_{free} for the PCB congeners, an upper CL value for the C_{free} total PCBs were calculated (Table A6). The range between the lower and upper CL C_{free} values represents the range of values that would contain approximately 80% of possible C_{free} estimates calculated via the above approach. Expressed alternatively, there is 80% confidence the C_{free} value lies within that range.

References Cited

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Tomaszewski, J.E., and Luthy, R.G. 2008. Field deployment of polyethylene devices to measure PCB concentrations in pore water of contaminated sediment. Environ. Sci. Technol. 42:6086-6091.

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TABLE A1

Table A1. Fiber Details.

Sample ID	Sample Type	Mass of Vial, Empty (g)	Mass of Vial, with Fiber (g)	Mass of Fiber (g)	Length of Fiber, based on mass (cm)	Number of Fibers Included	Length of Fiber Trimmed [1] (cm)	Length of Fiber, Nominal (cm)	Recovery (%)	Volume of PDMS (µL)	Mass of PDMS (g)	Earliest Sampler Deployment Date	Latest Sampler Retrieval Date	Average Exposure Duration (days)
LDW-Y1-SC-ENR+AC-CA-S010	Sample	8.36986	10.72589	2.3560	34.1454	4	6	34	100%	21.5	0.021	5/16/2018	6/28/2018	43
LDW-Y1-SC-ENR+AC-CB-S010	Sample	8.25820	11.48871	3.2305	46.8190	5	3	47	100%	29.5	0.029	5/16/2018	6/28/2018	43
LDW-Y1-SC-ENR+AC-CC-S010	Sample	8.31159	10.51188	2.2003	31.8883	4	6	34	94%	20.1	0.019	5/16/2018	6/27/2018	42
LDW-Y1-SC-ENR-CA-S010	Sample	8.29763	11.53741	3.2398	46.9533	5	3	47	100%	29.6	0.029	5/16/2018	6/28/2018	42
LDW-Y1-SC-ENR-CB-S010	Sample	8.36742	11.59991	3.2325	46.8477	5	3	47	100%	29.6	0.029	5/16/2018	6/28/2018	42
LDW-Y1-SC-ENR-CC-S010	Sample	8.48599	12.15314	3.6672	53.1471	6	4	56	95%	33.5	0.032	5/16/2018	6/28/2018	42
LDW-Y1-SU-ENR+AC-CA-S010	Sample	8.49847	12.62909	4.1306	59.8641	6	0	60	100%	37.8	0.036	5/15/2018	6/27/2018	58
LDW-Y1-SU-ENR+AC-CB-S010	Sample	8.37012	12.51584	4.1457	60.0829	6	0	60	100%	37.9	0.037	5/15/2018	6/27/2018	58
LDW-Y1-SU-ENR+AC-CC-S010	Sample	8.42104	12.55820	4.1372	59.9588	6	0	60	100%	37.8	0.037	5/15/2018	6/27/2018	58
LDW-Y1-SU-ENR-CA-S010	Sample	8.31935	12.43884	4.1195	59.7028	6	0	60	100%	37.7	0.036	5/15/2018	6/27/2018	58
LDW-Y1-SU-ENR-CB-S010	Sample	8.36982	12.53569	4.1659	60.3749	6	0	60	101%	38.1	0.037	5/15/2018	6/27/2018	58
LDW-Y1-SU-ENR-CC-S010	Sample	8.40148	12.55766	4.1562	60.2345	6	0	60	100%	38.0	0.037	5/15/2018	6/27/2018	45
LDW-Y1-SU-S010-LCB	Sample	8.32740	11.80249	3.4751	50.3636	5	0	50	101%	31.8	0.031	5/15/2018	6/27/2018	57
LDW-Y1-IN-ENR+AC-CA-S010	Sample	8.39102	12.55615	4.1651	60.3642	6	0	60	101%	38.1	0.037	5/15/2018	6/27/2018	42
LDW-Y1-IN-ENR+AC-CB-S010	Sample	8.36537	12.51053	4.1452	60.0748	6	0	60	100%	37.9	0.037	5/14/2018	6/27/2018	43
LDW-Y1-IN-ENR+AC-CC-S010	Sample	8.34666	12.49536	4.1487	60.1261	6	0	60	100%	37.9	0.037	5/14/2018	6/27/2018	43
LDW-Y1-IN-ENR-CA-S010	Sample	8.32738	11.06151	2.7341	39.6251	4	0	40	99%	25.0	0.024	5/14/2018	6/26/2018	43
LDW-Y1-IN-ENR-CB-S010	Sample	8.35108	12.46453	4.1135	59.6152	6	0	60	99%	37.6	0.036	5/14/2018	6/26/2018	43
LDW-Y1-IN-ENR-CC-S010	Sample	8.46657	11.92750	3.4609	50.1584	5	0	50	100%	31.6	0.031	5/14/2018	6/26/2018	43
LDW-Y1-SC-S010-TB	Trip Blank	8.35244	12.50629	4.1539	60.2007	6	0	60	100%	38.0	0.037	5/16/2018	5/16/2018	0
LDW-Y1-SU-S010-TB	Trip Blank	8.36249	12.48852	4.1260	59.7975	6	0	60	100%	37.7	0.036	5/14/2018	5/14/2018	0
LDW-Y1-IN-S010-TB	Trip Blank	8.49966	12.63823	4.1386	59.9793	6	0	60	100%	37.8	0.037	5/16/2018	5/16/2018	0

Notes

[1]: For fibers that were observed to be exposed to more than approximately 2.5 cm (or more) of overlying water during the *in situ* exposures (i.e., only the lower 7.5 cm of the fiber was found to be full inserted within the sediment at the time of retrieval), the portion of the fiber exposed to the overlying water (rounded up to the nearest cm) was removed and excluded prior to compositing the lower portion of the fiber into the extraction vial.

%: percent

g: gram

µL: microliter

cm: centimeter

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TABLE A2

Table A2. Exposure Duration

Sample ID	Composite Sample ID	Deployment Date	Retrieval Date	Composited	Days	Average days
LDW-Y1-SC-ENR+AC-1-A-S010-SPME	LDW-Y1-SC-ENR+AC-CA-S010	5/16/2018	6/28/2018	Yes	43	43
LDW-Y1-SC-ENR+AC-2-A-S010-SPME	LDW-Y1-SC-ENR+AC-CA-S010	5/16/2018	Not retrieved	No		
LDW-Y1-SC-ENR+AC-3-A-S010-SPME	LDW-Y1-SC-ENR+AC-CA-S010	5/16/2018	6/27/2018	Yes	42	
LDW-Y1-SC-ENR+AC-4-A-S010-SPME	LDW-Y1-SC-ENR+AC-CA-S010	5/16/2018	6/28/2018	Yes	43	
LDW-Y1-SC-ENR+AC-5-A-S010-SPME	LDW-Y1-SC-ENR+AC-CA-S010	5/15/2018	6/27/2018	Yes	43	
LDW-Y1-SC-ENR+AC-6-A-S010-SPME	LDW-Y1-SC-ENR+AC-CA-S010	5/15/2018	6/27/2018	Yes	43	
LDW-Y1-SC-ENR-1-A-S010-SPME	LDW-Y1-SC-ENR-CA-S010	5/14/2018	Not retrieved	No		42
LDW-Y1-SC-ENR-2-A-S010-SPME	LDW-Y1-SC-ENR-CA-S010	5/14/2018	6/25/2018	Yes	42	
LDW-Y1-SC-ENR-3-A-S010-SPME	LDW-Y1-SC-ENR-CA-S010	5/15/2018	6/26/2018	Yes	42	
LDW-Y1-SC-ENR-4-A-S010-SPME	LDW-Y1-SC-ENR-CA-S010	5/14/2018	6/25/2018	Yes	42	
LDW-Y1-SC-ENR-5-A-S010-SPME	LDW-Y1-SC-ENR-CA-S010	5/15/2018	6/25/2018	Yes	41	
LDW-Y1-SC-ENR-6-A-S010-SPME	LDW-Y1-SC-ENR-CA-S010	5/14/2018	6/25/2018	Yes	42	
LDW-Y1-SU-ENR+AC-1-A-S010-SPME	LDW-Y1-SU-ENR+AC-CA-S010	5/3/2018	6/30/2018	Yes	58	58
LDW-Y1-SU-ENR+AC-2-A-S010-SPME	LDW-Y1-SU-ENR+AC-CA-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-3-A-S010-SPME	LDW-Y1-SU-ENR+AC-CA-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-4-A-S010-SPME	LDW-Y1-SU-ENR+AC-CA-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-5-A-S010-SPME	LDW-Y1-SU-ENR+AC-CA-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-6-A-S010-SPME	LDW-Y1-SU-ENR+AC-CA-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-1-A-S010-SPME	LDW-Y1-SU-ENR-CA-S010	5/3/2018	6/30/2018	Yes	58	58
LDW-Y1-SU-ENR-2-A-S010-SPME	LDW-Y1-SU-ENR-CA-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-3-A-S010-SPME	LDW-Y1-SU-ENR-CA-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-4-A-S010-SPME	LDW-Y1-SU-ENR-CA-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-5-A-S010-SPME	LDW-Y1-SU-ENR-CA-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-6-A-S010-SPME	LDW-Y1-SU-ENR-CA-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-IN-ENR+AC-1-A-S010-SPME	LDW-Y1-IN-ENR+AC-CA-S010	5/17/2018	6/28/2018	Yes	42	42
LDW-Y1-IN-ENR+AC-2-A-S010-SPME	LDW-Y1-IN-ENR+AC-CA-S010	5/17/2018	6/28/2018	Yes	42	
LDW-Y1-IN-ENR+AC-3-A-S010-SPME	LDW-Y1-IN-ENR+AC-CA-S010	5/17/2018	6/28/2018	Yes	42	
LDW-Y1-IN-ENR+AC-4-A-S010-SPME	LDW-Y1-IN-ENR+AC-CA-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR+AC-5-A-S010-SPME	LDW-Y1-IN-ENR+AC-CA-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR+AC-6-A-S010-SPME	LDW-Y1-IN-ENR+AC-CA-S010	5/17/2018	6/28/2018	Yes	42	
LDW-Y1-IN-ENR-1-A-S010-SPME	LDW-Y1-IN-ENR-CA-S010	5/16/2018	6/29/2018	Yes	44	43
LDW-Y1-IN-ENR-2-A-S010-SPME	LDW-Y1-IN-ENR-CA-S010	5/16/2018	6/29/2018	Yes	44	
LDW-Y1-IN-ENR-3-A-S010-SPME	LDW-Y1-IN-ENR-CA-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR-4-A-S010-SPME	LDW-Y1-IN-ENR-CA-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR-5-A-S010-SPME	LDW-Y1-IN-ENR-CA-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR-6-A-S010-SPME	LDW-Y1-IN-ENR-CA-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-SC-ENR+AC-1-B-S010-SPME	LDW-Y1-SC-ENR+AC-CB-S010	5/16/2018	6/28/2018	Yes	43	43
LDW-Y1-SC-ENR+AC-2-B-S010-SPME	LDW-Y1-SC-ENR+AC-CB-S010	5/16/2018	6/28/2018	Yes	43	
LDW-Y1-SC-ENR+AC-3-B-S010-SPME	LDW-Y1-SC-ENR+AC-CB-S010	5/16/2018	6/27/2018	Yes	42	
LDW-Y1-SC-ENR+AC-4-B-S010-SPME	LDW-Y1-SC-ENR+AC-CB-S010	5/16/2018	Not retrieved	No		
LDW-Y1-SC-ENR+AC-5-B-S010-SPME	LDW-Y1-SC-ENR+AC-CB-S010	5/15/2018	6/27/2018	Yes	43	
LDW-Y1-SC-ENR+AC-6-B-S010-SPME	LDW-Y1-SC-ENR+AC-CB-S010	5/15/2018	6/26/2018	Yes	42	

Table A2. Exposure Duration

Sample ID	Composite Sample ID	Deployment Date	Retrieval Date	Composited	Days	Average days
LDW-Y1-SC-ENR-1-B-S010-SPME	LDW-Y1-SC-ENR-CB-S010	5/14/2018	6/26/2018	Yes	43	42
LDW-Y1-SC-ENR-2-B-S010-SPME	LDW-Y1-SC-ENR-CB-S010	5/14/2018	6/24/2018	Yes	41	
LDW-Y1-SC-ENR-3-B-S010-SPME	LDW-Y1-SC-ENR-CB-S010	5/15/2018	6/26/2018	Yes	42	
LDW-Y1-SC-ENR-4-B-S010-SPME	LDW-Y1-SC-ENR-CB-S010	5/14/2018	6/25/2018	Yes	42	
LDW-Y1-SC-ENR-5-B-S010-SPME	LDW-Y1-SC-ENR-CB-S010	5/15/2018	Not retrieved	No		
LDW-Y1-SC-ENR-6-B-S010-SPME	LDW-Y1-SC-ENR-CB-S010	5/15/2018	6/25/2018	Yes	41	
LDW-Y1-SU-ENR+AC-1-B-S010-SPME	LDW-Y1-SU-ENR+AC-CB-S010	5/3/2018	6/30/2018	Yes	58	58
LDW-Y1-SU-ENR+AC-2-B-S010-SPME	LDW-Y1-SU-ENR+AC-CB-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-3-B-S010-SPME	LDW-Y1-SU-ENR+AC-CB-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-4-B-S010-SPME	LDW-Y1-SU-ENR+AC-CB-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-5-B-S010-SPME	LDW-Y1-SU-ENR+AC-CB-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-6-B-S010-SPME	LDW-Y1-SU-ENR+AC-CB-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-1-B-S010-SPME	LDW-Y1-SU-ENR-CB-S010	5/3/2018	6/30/2018	Yes	58	58
LDW-Y1-SU-ENR-2-B-S010-SPME	LDW-Y1-SU-ENR-CB-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-3-B-S010-SPME	LDW-Y1-SU-ENR-CB-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-4-B-S010-SPME	LDW-Y1-SU-ENR-CB-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-5-B-S010-SPME	LDW-Y1-SU-ENR-CB-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-6-B-S010-SPME	LDW-Y1-SU-ENR-CB-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-IN-ENR+AC-1-B-S010-SPME	LDW-Y1-IN-ENR+AC-CB-S010	5/17/2018	6/28/2018	Yes	42	43
LDW-Y1-IN-ENR+AC-2-B-S010-SPME	LDW-Y1-IN-ENR+AC-CB-S010	5/17/2018	6/28/2018	Yes	42	
LDW-Y1-IN-ENR+AC-3-B-S010-SPME	LDW-Y1-IN-ENR+AC-CB-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR+AC-4-B-S010-SPME	LDW-Y1-IN-ENR+AC-CB-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR+AC-5-B-S010-SPME	LDW-Y1-IN-ENR+AC-CB-S010	5/17/2018	6/28/2018	Yes	42	
LDW-Y1-IN-ENR+AC-6-B-S010-SPME	LDW-Y1-IN-ENR+AC-CB-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR-1-B-S010-SPME	LDW-Y1-IN-ENR-CB-S010	5/17/2018	6/29/2018	Yes	43	43
LDW-Y1-IN-ENR-2-B-S010-SPME	LDW-Y1-IN-ENR-CB-S010	5/16/2018	6/29/2018	Yes	44	
LDW-Y1-IN-ENR-3-B-S010-SPME	LDW-Y1-IN-ENR-CB-S010	5/16/2018	6/29/2018	Yes	44	
LDW-Y1-IN-ENR-4-B-S010-SPME	LDW-Y1-IN-ENR-CB-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR-5-B-S010-SPME	LDW-Y1-IN-ENR-CB-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR-6-B-S010-SPME	LDW-Y1-IN-ENR-CB-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-SC-ENR+AC-1-C-S010-SPME	LDW-Y1-SC-ENR+AC-CC-S010	5/16/2018	6/28/2018	Yes	43	42
LDW-Y1-SC-ENR+AC-2-C-S010-SPME	LDW-Y1-SC-ENR+AC-CC-S010	5/16/2018	6/26/2018	Yes	41	
LDW-Y1-SC-ENR+AC-3-C-S010-SPME	LDW-Y1-SC-ENR+AC-CC-S010	5/16/2018	Not retrieved	No		
LDW-Y1-SC-ENR+AC-4-C-S010-SPME	LDW-Y1-SC-ENR+AC-CC-S010	5/16/2018	6/27/2018	Yes	42	
LDW-Y1-SC-ENR+AC-5-C-S010-SPME	LDW-Y1-SC-ENR+AC-CC-S010	5/15/2018	Not retrieved	No		
LDW-Y1-SC-ENR+AC-6-C-S010-SPME	LDW-Y1-SC-ENR+AC-CC-S010	5/15/2018	6/27/2018	Yes	43	
LDW-Y1-SC-ENR-1-C-S010-SPME	LDW-Y1-SC-ENR-CC-S010	5/14/2018	6/25/2018	Yes	42	42
LDW-Y1-SC-ENR-2-C-S010-SPME	LDW-Y1-SC-ENR-CC-S010	5/14/2018	6/24/2018	Yes	41	
LDW-Y1-SC-ENR-3-C-S010-SPME	LDW-Y1-SC-ENR-CC-S010	5/15/2018	6/26/2018	Yes	42	
LDW-Y1-SC-ENR-4-C-S010-SPME	LDW-Y1-SC-ENR-CC-S010	5/14/2018	6/24/2018	Yes	41	
LDW-Y1-SC-ENR-5-C-S010-SPME	LDW-Y1-SC-ENR-CC-S010	5/15/2018	6/26/2018	Yes	42	
LDW-Y1-SC-ENR-6-C-S010-SPME	LDW-Y1-SC-ENR-CC-S010	5/14/2018	6/25/2018	Yes	42	

Table A2. Exposure Duration

Sample ID	Composite Sample ID	Deployment Date	Retrieval Date	Composited	Days	Average days
LDW-Y1-SU-ENR+AC-1-C-S010-SPME	LDW-Y1-SU-ENR+AC-CC-S010	5/3/2018	6/30/2018	Yes	58	58
LDW-Y1-SU-ENR+AC-2-C-S010-SPME	LDW-Y1-SU-ENR+AC-CC-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-3-C-S010-SPME	LDW-Y1-SU-ENR+AC-CC-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-4-C-S010-SPME	LDW-Y1-SU-ENR+AC-CC-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-5-C-S010-SPME	LDW-Y1-SU-ENR+AC-CC-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR+AC-6-C-S010-SPME	LDW-Y1-SU-ENR+AC-CC-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-1-C-S010-SPME	LDW-Y1-SU-ENR-CC-S010	5/3/2018	6/30/2018	Yes	58	45
LDW-Y1-SU-ENR-2-C-S010-SPME	LDW-Y1-SU-ENR-CC-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-3-C-S010-SPME	LDW-Y1-SU-ENR-CC-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-4-C-S010-SPME	LDW-Y1-SU-ENR-CC-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-5-C-S010-SPME	LDW-Y1-SU-ENR-CC-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-SU-ENR-6-C-S010-SPME	LDW-Y1-SU-ENR-CC-S010	5/3/2018	6/30/2018	Yes	58	
LDW-Y1-IN-ENR+AC-1-C-S010-SPME	LDW-Y1-IN-ENR+AC-CC-S010	5/17/2018	6/28/2018	Yes	42	43
LDW-Y1-IN-ENR+AC-2-C-S010-SPME	LDW-Y1-IN-ENR+AC-CC-S010	5/17/2018	6/28/2018	Yes	42	
LDW-Y1-IN-ENR+AC-3-C-S010-SPME	LDW-Y1-IN-ENR+AC-CC-S010	5/17/2018	6/28/2018	Yes	42	
LDW-Y1-IN-ENR+AC-4-C-S010-SPME	LDW-Y1-IN-ENR+AC-CC-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR+AC-5-C-S010-SPME	LDW-Y1-IN-ENR+AC-CC-S010	5/17/2018	6/28/2018	Yes	42	
LDW-Y1-IN-ENR+AC-6-C-S010-SPME	LDW-Y1-IN-ENR+AC-CC-S010	5/17/2018	6/28/2018	Yes	42	
LDW-Y1-IN-ENR-1-C-S010-SPME	LDW-Y1-IN-ENR-CC-S010	5/16/2018	6/29/2018	Yes	44	43
LDW-Y1-IN-ENR-2-C-S010-SPME	LDW-Y1-IN-ENR-CC-S010	5/16/2018	6/29/2018	Yes	44	
LDW-Y1-IN-ENR-3-C-S010-SPME	LDW-Y1-IN-ENR-CC-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR-4-C-S010-SPME	LDW-Y1-IN-ENR-CC-S010	5/17/2018	Not retrieved	No		
LDW-Y1-IN-ENR-5-C-S010-SPME	LDW-Y1-IN-ENR-CC-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-IN-ENR-6-C-S010-SPME	LDW-Y1-IN-ENR-CC-S010	5/17/2018	6/29/2018	Yes	43	
LDW-Y1-SU-1-S010-SPME-LCB	LDW-Y1-SU-S010-LCB	5/4/2018	6/30/2018	Yes	57	57
LDW-Y1-SU-2-S010-SPME-LCB	LDW-Y1-SU-S010-LCB	5/4/2018	6/30/2018	Yes	57	
LDW-Y1-SU-3-S010-SPME-LCB	LDW-Y1-SU-S010-LCB	5/4/2018	6/30/2018	Yes	57	
LDW-Y1-SU-4-S010-SPME-LCB	LDW-Y1-SU-S010-LCB	5/4/2018	6/30/2018	Yes	57	
LDW-Y1-SU-5-S010-SPME-LCB	LDW-Y1-SU-S010-LCB	5/4/2018	6/30/2018	Yes	57	
LDW-Y1-SU-6-S010-SPME-LCB	LDW-Y1-SU-S010-LCB	5/4/2018	Not retrieved	No		

Geosyntec consultants

TABLE A3

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010			LDW-Y1-SC-ENR+AC-CB-S010			LDW-Y1-SC-ENR+AC-CC-S010			LDW-Y1-SC-ENR-CA-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-1	Mono			U	2.97		U	3.25		U	3.28		U	3.29
PCB-2	Mono			U	3.56		U	3.72		U	3.88		U	3.76
PCB-3	Mono			U	3.42		U	3.45		U	3.7		U	3.46
PCB-4	Di			U	4.73		U	4.51		U	4.98		U	4.99
PCB-5	Di			U	4.49		U	4.21		U	4.67		U	4.49
PCB-6	Di			U	4.56		U	4.28		U	4.74	26		20
PCB-7	Di			U	4.34		U	4.07		U	4.51		U	4.35
PCB-8	Di		19.9	J	20	28.7		20	35.9		20	63		20
PCB-9	Di			U	4.32		U	4.06		U	4.5		U	4.33
PCB-10	Di			U	5		U	4.69		U	5.2		U	5.01
PCB-11	Di		19.7	J	20	39.2		20	42.1		20	49		20
PCB-12	Di			U	4.67		U	4.39		U	4.86		U	4.68
PCB-13	Di			U	4.6		U	4.32		U	4.78		U	4.61
PCB-14	Di	PRC	109		20	255		20	163		20	191		20
PCB-15	Di		11	J	20	11.2	J	20	20.8		20	27		20
PCB-16	Tri		19.7	J	20	54.3		20	33.9		20	64.9		20
PCB-17	Tri		34.6		20	58.3		20	59.1		20	94.7		20
PCB-18	Tri		68.6		20	119		20	121		20	212		20
PCB-19	Tri		10	J	20	16.5	J	20	15.8	J	20	33.3		20
PCB-20	Tri		39.3	C	20	76	C	20	67	C	20	109	C	20
PCB-21	Tri			C020			C020	20		C020	20		C020	20
PCB-22	Tri		24		20	45.8		20	40.3		20	68.4		20
PCB-23	Tri			U	4.45		U	4.49		U	5.18		U	7.24
PCB-24	Tri			U	3.61	10.4	J	20	5.67	J	20	7.91	J	20
PCB-25	Tri		9.44	J	20	15.5	J	20	14.6	J	20	31		20
PCB-26	Tri		20.5		20	33.3		20	36.6		20	55.1		20
PCB-27	Tri		7.79	J	20	6.68	J	20	13.1	J	20	29.6		20
PCB-28	Tri		75		20	137		20	132		20	241		20
PCB-29	Tri			U	4.27		U	4.32		U	4.98		U	6.96
PCB-30	Tri			U	3.75		U	4.35		U	2.36		U	4.6
PCB-31	Tri		80.1		20	138		20	118		20	198		20
PCB-32	Tri		28		20	34.9		20	49.2		20	93.9		20
PCB-33	Tri			C020			C020	20		C020	20		C020	20
PCB-34	Tri			U	4.76		U	4.81		U	5.55		U	7.75
PCB-35	Tri			U	4.54		U	4.58		U	5.29		U	7.39
PCB-36	Tri	PRC	291		20	566		20	362		20	421		20
PCB-37	Tri		17.5	J	20	28.5		20	24.7		20	40.8		20
PCB-38	Tri			U	4.37		U	4.42		U	5.1		U	7.12
PCB-39	Tri			U	4.22		U	4.27		U	4.92		U	6.87
PCB-40	Tetra		28.4		20	46.7		20	42.4		20	80.4		20
PCB-41	Tetra		125	C	20	209	C	20	179	C	20	332	C	20
PCB-42	Tetra		53	C	20	91.5	C	20	83.6	C	20	146	C	20
PCB-43	Tetra		172	C	20	296	C	20	252	C	20	469	C	20
PCB-44	Tetra		140		20	238		20	206		20	372		20
PCB-45	Tetra		31.3		20	53.2		20	47.8		20	104		20
PCB-46	Tetra		12.3	J	20	23.2		20	20.2		20	40		20
PCB-47	Tetra		60.5		20	91		20	83.4		20	152		20
PCB-48	Tetra		31.8	C	20	56.6	C	20	46.9	C	20	90.1	C	20
PCB-49	Tetra			C043			C043	20		C043	20		C043	20
PCB-50	Tetra			U	5.21		U	4.61		U	5.19		U	5.91
PCB-51	Tetra		14.7	J	20	26.4		20	22.7		20	46.3		20
PCB-52	Tetra		215	C	20	363	C	20	318	C	20	577	C	20
PCB-53	Tetra		39.2		20	67.9		20	56.5		20	130		20
PCB-54	Tetra			U	3.92		U	3.46		U	3.9		U	4.45
PCB-55	Tetra		23.2		20	33.8		20	26.8		20	38		20
PCB-56	Tetra		65.2	C	20	114	C	20	92.7	C	20	156	C	20
PCB-57	Tetra			U	4.29		U	3.79		U	4.28		U	4.87
PCB-58	Tetra			U	4.4		U	3.89		U	4.38		U	4.99
PCB-59	Tetra			C042			C042	20		C042	20		C042	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010			LDW-Y1-SC-ENR-CC-S010			LDW-Y1-SU-ENR+AC-CA-S010			LDW-Y1-SU-ENR+AC-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-1	Mono			U	3.34		U	3.28	104		20		U	3.41
PCB-2	Mono			U	3.96		U	3.91		U	5.22		U	4.08
PCB-3	Mono			U	3.78		U	3.75	12.3	J	20		U	3.92
PCB-4	Di		33.2		20	55.7		20	213		20	43.9		20
PCB-5	Di			U	4.89		U	4.89	23.3		20	19.1	J	20
PCB-6	Di		41.2		20	53.8		20	155		20	59.6		20
PCB-7	Di			U	4.73		U	4.72	51.1		20	14.2	J	20
PCB-8	Di		80		20	108		20	431		20	120		20
PCB-9	Di			U	4.71		U	4.71	44.6		20	12.6	J	20
PCB-10	Di			U	5.45		U	5.44	28		20	9.57	J	20
PCB-11	Di		83.4		20	85.7		20	39.3		20	52.1		20
PCB-12	Di			U	5.09		U	5.09	17.7	J	20		U	3.54
PCB-13	Di			U	5.01		U	5.01		U	5.53		U	3.49
PCB-14	Di	PRC	300		20	254		20	206		20	357		20
PCB-15	Di		37.8		20	37.1		20	57.4		20	34.6		20
PCB-16	Tri		70.2		20	96.3		20	450		20	205		20
PCB-17	Tri		109		20	152		20	757		20	373		20
PCB-18	Tri		245		20	330		20	1700		20	830		20
PCB-19	Tri		35.5		20	43		20	167		20	83.6		20
PCB-20	Tri		128	C	20	181	C	20	647	C	20	353	C	20
PCB-21	Tri			C020	20		C020	20		C020	20		C020	20
PCB-22	Tri		79.3		20	107		20	358		20	201		20
PCB-23	Tri			U	7.07		U	3.78		U	3.68		U	3.98
PCB-24	Tri		17	J	20	17.2	J	20	65.5		20	34.2		20
PCB-25	Tri		32.8		20	42.9		20	144		20	76.6		20
PCB-26	Tri		66.7		20	92.8		20	346		20	195		20
PCB-27	Tri		21.4		20	31.3		20	79.7		20	44.7		20
PCB-28	Tri		250		20	331		20	1020		20	593		20
PCB-29	Tri			U	6.79		U	3.63	11.3	J	20	6.56	J	20
PCB-30	Tri			U	4.5		U	2.2		U	2.54		U	5.49
PCB-31	Tri		251		20	343		20	1260		20	661		20
PCB-32	Tri		108		20	131		20	522		20	283		20
PCB-33	Tri			C020	20		C020	20		C020	20		C020	20
PCB-34	Tri			U	7.56		U	4.05	16.4	J	20	8.23	J	20
PCB-35	Tri			U	7.21		U	3.86	13.1	J	20	11.5	J	20
PCB-36	Tri	PRC	598		20	483		20	457		20	693		20
PCB-37	Tri		42.8		20	62.9		20	136		20	85.3		20
PCB-38	Tri			U	6.95		U	3.72	11.6	J	20	8.36	J	20
PCB-39	Tri			U	6.71		U	3.59		U	3.49		U	3.78
PCB-40	Tetra		79.5		20	104		20	353		20	228		20
PCB-41	Tetra		314	C	20	448	C	20	1620	C	20	1020	C	20
PCB-42	Tetra		148	C	20	194	C	20	716	C	20	433	C	20
PCB-43	Tetra		443	C	20	609	C	20	2280	C	20	1300	C	20
PCB-44	Tetra		355		20	508		20	2090		20	1210		20
PCB-45	Tetra		97.7		20	127		20	439		20	258		20
PCB-46	Tetra		43		20	49.6		20	179		20	102		20
PCB-47	Tetra		139		20	205		20	604		20	383		20
PCB-48	Tetra		93.1	C	20	112	C	20	538	C	20	298	C	20
PCB-49	Tetra			C043	20		C043	20		C043	20		C043	20
PCB-50	Tetra		7.14	J	20		U	4.19	17.3	J	20	12.7	J	20
PCB-51	Tetra		45.9		20	55.6		20	152		20	93.2		20
PCB-52	Tetra		559	C	20	758	C	20	2930	C	20	1630	C	20
PCB-53	Tetra		121		20	152		20	467		20	259		20
PCB-54	Tetra		6	J	20		U	3.15	11	J	20	7.34	J	20
PCB-55	Tetra		39.1		20	43.2		20	75.2		20	66.8		20
PCB-56	Tetra		151	C	20	232	C	20	742	C	20	461	C	20
PCB-57	Tetra		5.51	J	20		U	3.45	18.7	J	20	10.4	J	20
PCB-58	Tetra			U	4.87		U	3.54	9.7	J	20	6.68	J	20
PCB-59	Tetra			C042	20		C042	20		C042	20		C042	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010			LDW-Y1-SU-ENR-CA-S010			LDW-Y1-SU-ENR-CB-S010			LDW-Y1-SU-ENR-CC-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-1	Mono		7.52	J	20	7.9	J	20	6.63	J	20	12.3	J	20
PCB-2	Mono			U	4.21		U	3.04		U	2.48		U	4.52
PCB-3	Mono			U	4.02		U	2.92	5.96	J	20		U	4.34
PCB-4	Di		70.4		20	190		20	157		20	161		20
PCB-5	Di		10.7	J	20	9.24	J	20	34.2		20	26.4		20
PCB-6	Di		79.6		20	171		20	133		20	133		20
PCB-7	Di		13.4	J	20	31		20	14.7	J	20	29.3		20
PCB-8	Di		220		20	492		20	375		20	378		20
PCB-9	Di		19.1	J	20	23.9		20	24.7		20	32.8		20
PCB-10	Di		17.2	J	20	16.4	J	20	14.9	J	20	19.9	J	20
PCB-11	Di		58.8		20	60.8		20	96.3		20	77.4		20
PCB-12	Di		12.6	J	20	6.28	J	20	9.53	J	20		U	7.77
PCB-13	Di			U	5.23	22.1		20	23.1		20		U	3.1
PCB-14	Di	PRC	320		20	521		20	873		20	593		20
PCB-15	Di		61.6		20	125		20	106		20	109		20
PCB-16	Tri		316		20	724		20	462		20	436		20
PCB-17	Tri		579		20	1130		20	786		20	891		20
PCB-18	Tri		1270		20	2380		20	1770		20	1960		20
PCB-19	Tri		128		20	220		20	179		20	185		20
PCB-20	Tri		527	C	20	1100	C	20	779	C	20	933	C	20
PCB-21	Tri			C020	20		C020	20		C020	20		C020	20
PCB-22	Tri		314		20	652		20	471		20	554		20
PCB-23	Tri			U	2.15	4.21	J	20		U	2.23	6.1	J	20
PCB-24	Tri		54.3		20	82.9		20	82.1		20	86		20
PCB-25	Tri		122		20	245		20	169		20	178		20
PCB-26	Tri		299		20	558		20	381		20	410		20
PCB-27	Tri		59.5		20	134		20	81.4		20	92.3		20
PCB-28	Tri		979		20	2000		20	1350		20	1580		20
PCB-29	Tri		9.52	J	20	17.6	J	20	11.5	J	20	14.5	J	20
PCB-30	Tri			U	6.64		U	2.84		U	3.46		U	4.66
PCB-31	Tri		1020		20	2060		20	1530		20	1620		20
PCB-32	Tri		432		20	742		20	599		20	744		20
PCB-33	Tri			C020	20		C020	20		C020	20		C020	20
PCB-34	Tri		14.6	J	20	24		20	15.6	J	20	19.4	J	20
PCB-35	Tri		15	J	20	18.6	J	20	18.7	J	20	20.2		20
PCB-36	Tri	PRC	616		20	760		20	1160		20	838		20
PCB-37	Tri		130		20	259		20	193		20	205		20
PCB-38	Tri		12.1	J	20	19.1	J	20	15.1	J	20	15.8	J	20
PCB-39	Tri			U	2.04		U	2.11		U	2.31		U	2.34
PCB-40	Tetra		307		20	536		20	368		20	424		20
PCB-41	Tetra		1400	C	20	2400	C	20	1620	C	20	1890	C	20
PCB-42	Tetra		586	C	20	1030	C	20	689	C	20	806	C	20
PCB-43	Tetra		1880	C	20	3170	C	20	2130	C	20	2420	C	20
PCB-44	Tetra		1740		20	2850		20	1920		20	2180		20
PCB-45	Tetra		371		20	628		20	458		20	503		20
PCB-46	Tetra		133		20	243		20	168		20	195		20
PCB-47	Tetra		535		20	835		20	511		20	659		20
PCB-48	Tetra		417	C	20	779	C	20	543	C	20	588	C	20
PCB-49	Tetra			C043	20		C043	20		C043	20		C043	20
PCB-50	Tetra		14.6	J	20	21.3		20	15.7	J	20	18.9	J	20
PCB-51	Tetra		119		20	219		20	149		20	177		20
PCB-52	Tetra		2380	C	20	4020	C	20	2740	C	20	3120	C	20
PCB-53	Tetra		368		20	662		20	457		20	518		20
PCB-54	Tetra		9.14	J	20	14.8	J	20	10.7	J	20	12.9	J	20
PCB-55	Tetra		66.8		20	69.7		20	81.9		20	75.7		20
PCB-56	Tetra		626	C	20	1210	C	20	799	C	20	1010	C	20
PCB-57	Tetra		14.4	J	20	24.1		20	15.3	J	20	14.4	J	20
PCB-58	Tetra		7.59	J	20	10.3	J	20	7.92	J	20	9.13	J	20
PCB-59	Tetra			C042	20		C042	20		C042	20		C042	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB			LDW-Y1-IN-ENR+AC-CA-S010			LDW-Y1-IN-ENR+AC-CB-S010			LDW-Y1-IN-ENR+AC-CC-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-1	Mono			U	2.97		U	2.78		U	2.86		U	2.75
PCB-2	Mono			U	3.29		U	3.11		U	3.25		U	3.09
PCB-3	Mono			U	3.1		U	3.11		U	3.3		U	3.1
PCB-4	Di			U	2.93	22.8		20		U	5.75	17.7	J	20
PCB-5	Di			U	2.26		U	2.48		U	4.47		U	4.64
PCB-6	Di			U	2.38	19.6	J	20	24.5		20	15.6	J	20
PCB-7	Di			U	2.37		U	2.7		U	4.87		U	5.05
PCB-8	Di			U	2.53	47.1		20	25.4		20	33.3		20
PCB-9	Di			U	2.39		U	2.77		U	4.98		U	5.17
PCB-10	Di			U	2.66		U	3.27		U	5.89		U	6.11
PCB-11	Di		75.5		20	37.1		20	26.6		20	23.3		20
PCB-12	Di			U	2.37		U	2.72		U	4.9		U	5.09
PCB-13	Di			U	2.48		U	2.78		U	5.01		U	5.2
PCB-14	Di	PRC	417		20	134		20	95.8		20	61.2		20
PCB-15	Di			U	2.38	25.5		20		U	4.91		U	5.05
PCB-16	Tri		9.24	J	20	46.7		20	30		20	19.5	J	20
PCB-17	Tri		7.02	J	20	72.2		20	40.6		20	34.3		20
PCB-18	Tri		19.2	J	20	166		20	105		20	81.7		20
PCB-19	Tri		3.65	J	20	18.2	J	20	18	J	20	12.2	J	20
PCB-20	Tri		8.34	C,J	20	98.5	C	20	37.1	C	20	30.6	C	20
PCB-21	Tri			C020,J	20		C020	20		C020	20		C020	20
PCB-22	Tri		4.94	J	20	46.7		20	20.9		20	16.5	J	20
PCB-23	Tri			U	2.18		U	4.94		U	5.5		U	4.93
PCB-24	Tri			U	1.8	7.99	J	20	6.61	J	20	4.74	J	20
PCB-25	Tri			U	1.86	29.3		20	27.3		20	19.7	J	20
PCB-26	Tri			U	2.3	64.1		20	57.6		20	43		20
PCB-27	Tri			U	1.9	13.2	J	20	8.87	J	20	8.19	J	20
PCB-28	Tri		10.7	J	20	154		20	76.8		20	65.8		20
PCB-29	Tri			U	2.2		U	5.24		U	5.83		U	5.24
PCB-30	Tri			U	1.86		U	2.52		U	2.49		U	2.44
PCB-31	Tri		10.1	J	20	157		20	93.8		20	70.7		20
PCB-32	Tri		3.32	J	20	27		20	15.8	J	20	18.2	J	20
PCB-33	Tri			C020,J	20		C020	20		C020	20		C020	20
PCB-34	Tri			U	2.45		U	5.94		U	6.6		U	5.93
PCB-35	Tri			U	2.32		U	5.4		U	6.01		U	5.4
PCB-36	Tri	PRC	853		20	497		20	517		20	339		20
PCB-37	Tri			U	1.95	21.7		20	11	J	20	9.86	J	20
PCB-38	Tri			U	2.15		U	5.1		U	5.68		U	5.1
PCB-39	Tri			U	2.19		U	5.13		U	5.71		U	5.12
PCB-40	Tetra			U	3.05	33.5		20	16.7	J	20	13	J	20
PCB-41	Tetra		11.6	C,J	20	153	C	20	93.3	C	20	82.6	C	20
PCB-42	Tetra		5.16	C,J	20	70.6	C	20	36.4	C	20	32.2	C	20
PCB-43	Tetra		13	C,J	20	300	C	20	182	C	20	158	C	20
PCB-44	Tetra		14.8	J	20	246		20	122		20	119		20
PCB-45	Tetra			U	2.8	39.9		20	20.7		20	18.9	J	20
PCB-46	Tetra			U	2.87	17.7	J	20	11.8	J	20	7.23	J	20
PCB-47	Tetra		14.5	J	20	76.6		20	48.5		20	42.9		20
PCB-48	Tetra		4.24	C,J	20	45.1	C	20	21	C	20	24	C	20
PCB-49	Tetra			C043,J	20		C043	20		C043	20		C043	20
PCB-50	Tetra		5.78	J	20	5.3	J	20	5.57	J	20	3.39	J	20
PCB-51	Tetra		7.4	J	20	16.3	J	20	12.3	J	20	10.6	J	20
PCB-52	Tetra		26.6	C	20	435	C	20	261	C	20	242	C	20
PCB-53	Tetra		3.41	J	20	58		20	36.4		20	35		20
PCB-54	Tetra			U	1.89	3.06	J	20		U	1.93		U	2.18
PCB-55	Tetra		31.3		20	44.3		20	39.9		20	37.5		20
PCB-56	Tetra			UC	20	67.3	C	20	46	C	20	35	C	20
PCB-57	Tetra			U	1.89	3.54	J	20		U	1.82		U	2.06
PCB-58	Tetra			U	1.87	2.82	J	20		U	1.9		U	2.15
PCB-59	Tetra			C042,J	20		C042	20		C042	20		C042	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010			LDW-Y1-IN-ENR-CB-S010			LDW-Y1-IN-ENR-CC-S010			LDW-Y1-SC-S010-TB			LDW-Y1-SU-S010-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-1	Mono			U	3.7		U	1.77		U	3.56		U	4.26		U	5.31
PCB-2	Mono			U	4.03		U	1.93		U	3.87		U	4.77		U	5.92
PCB-3	Mono			U	3.82	4.54	J	20		U	3.67		U	4.65		U	5.73
PCB-4	Di		47.1		20	49.9		20	36		20		U	4.21		U	6.65
PCB-5	Di			U	4.72		U	3.59		U	4.56		U	3.64		U	5.61
PCB-6	Di		25.8		20	33.4		20	25.6		20		U	3.69		U	5.68
PCB-7	Di			U	4.68		U	3.57		U	4.53		U	3.61		U	5.57
PCB-8	Di		38.8		20	50.3		20	51.3		20		U	3.67		U	5.66
PCB-9	Di			U	4.76		U	3.63		U	4.6		U	3.67		U	5.66
PCB-10	Di			U	5.31		U	4.05		U	5.14		U	4.1		U	6.32
PCB-11	Di		44.6		20	42.9		20	38.3		20	384		20	296		20
PCB-12	Di			U	4.86		U	3.7		U	4.7		U	3.75		U	5.78
PCB-13	Di			U	4.92		U	3.75		U	4.76		U	3.8		U	5.85
PCB-14	Di	PRC	132		20	138		20	114		20	1520		20	1540		20
PCB-15	Di		22.2		20	32.6		20	30.5		20		U	3.86		U	5.83
PCB-16	Tri		24.2		20	40.4		20	39.1		20	5.98	J	20		U	6.63
PCB-17	Tri		58.7		20	69		20	75.7		20	7.39	J	20		U	7.3
PCB-18	Tri		147		20	168		20	184		20	19.1	J	20	17.5	J	20
PCB-19	Tri		24.1		20	32.7		20	28.7		20		U	3.59		U	7.49
PCB-20	Tri		42.6	C	20	46.4	C	20	52.6	C	20	11.8	C,J	20	14.4	C,J	20
PCB-21	Tri			C020	20		C020	20		C020	20		C020,J	20		C020,J	20
PCB-22	Tri		30.3		20	29.3		20	35.3		20	7.82	J	20		U	6.22
PCB-23	Tri			U	4.38		U	4.72		U	6		U	3.86		U	6.18
PCB-24	Tri		11.7	J	20	20.2		20	15.3	J	20		U	2.7		U	5.63
PCB-25	Tri		33.3		20	39.9		20	38.7		20		U	3.28		U	5.27
PCB-26	Tri		83.3		20	105		20	95.5		20		U	4.05		U	6.5
PCB-27	Tri		14.7	J	20	13.8	J	20	20.4		20		U	2.76		U	5.76
PCB-28	Tri		115		20	126		20	136		20	15	J	20	15.5	J	20
PCB-29	Tri			U	4.38		U	4.72		U	6		U	3.85		U	6.18
PCB-30	Tri			U	4.32		U	3.28		U	3.9		U	2.67		U	5.56
PCB-31	Tri		121		20	149		20	152		20	15.6	J	20	16.8	J	20
PCB-32	Tri		31.4		20	35		20	47.5		20	5.65	J	20		U	6.56
PCB-33	Tri			C020	20		C020	20		C020	20		C020,J	20		C020,J	20
PCB-34	Tri			U	4.73		U	5.1		U	6.47		U	4.77		U	6.67
PCB-35	Tri			U	4.94		U	5.33		U	6.77		U	4.35		U	6.98
PCB-36	Tri	PRC	409		20	512		20	450		20	1420		20	1300		20
PCB-37	Tri		15.9	J	20	19	J	20	20.1		20		U	3.68		U	5.9
PCB-38	Tri			U	4.41		U	4.76		U	6.04		U	3.88		U	6.23
PCB-39	Tri			U	4.54		U	4.9		U	6.22		U	4		U	6.41
PCB-40	Tetra		30.7		20	36.5		20	45		20		U	3.37		U	5.48
PCB-41	Tetra		140	C	20	189	C	20	189	C	20	10.9	C,J	20	11.1	C,J	20
PCB-42	Tetra		65.1	C	20	95.8	C	20	94.1	C	20	5.33	C,J	20		UC	20
PCB-43	Tetra		302	C	20	447	C	20	381	C	20	10.2	C,J	20	14.7	C,J	20
PCB-44	Tetra		218		20	308		20	268		20	11.9	J	20	14.1	J	20
PCB-45	Tetra		34.2		20	53		20	51.6		20		U	3.03		U	4.93
PCB-46	Tetra		14.3	J	20	19.4	J	20	20.7		20		U	3.1		U	5.05
PCB-47	Tetra		78.4		20	118		20	110		20	10.7	J	20	9.05	J	20
PCB-48	Tetra		37.7	C	20	43.9	C	20	46.7	C	20		UC	20		UC	20
PCB-49	Tetra			C043	20		C043	20		C043	20		C043,J	20		C043,J	20
PCB-50	Tetra			U	4.75		U	3.78	8.12	J	20	7.68	J	20		U	4.32
PCB-51	Tetra		17.4	J	20	23		20	25.9		20	8.35	J	20		U	4.18
PCB-52	Tetra		525	C	20	774	C	20	624	C	20	22.2	C	20	24.2	C	20
PCB-53	Tetra		66.8		20	107		20	89.6		20		U	2.61		U	4.25
PCB-54	Tetra			U	3.57		U	2.83		U	3.05		U	1.99		U	3.24
PCB-55	Tetra		28.4		20	37.7		20	39.6		20	48		20	41.9		20
PCB-56	Tetra		58.8	C	20	72	C	20	72.9	C	20		UC	20		UC	20
PCB-57	Tetra			U	3.76		U	2.98	5.18	J	20		U	2.1		U	3.41
PCB-58	Tetra			U	3.6		U	2.86		U	3.08		U	2.01		U	3.27
PCB-59	Tetra			C042	20		C042	20		C042	20		C042,J	20		U,C042	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-IN-S010-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-1	Mono			U	3.77
PCB-2	Mono			U	4.13
PCB-3	Mono			U	3.94
PCB-4	Di			U	4.7
PCB-5	Di			U	4.09
PCB-6	Di			U	4.14
PCB-7	Di			U	4.06
PCB-8	Di			U	4.12
PCB-9	Di			U	4.13
PCB-10	Di			U	4.61
PCB-11	Di		279		20
PCB-12	Di			U	4.22
PCB-13	Di			U	4.27
PCB-14	Di	PRC	1410		20
PCB-15	Di			U	4.35
PCB-16	Tri			U	4.79
PCB-17	Tri			U	5.26
PCB-18	Tri		16.8	J	20
PCB-19	Tri			U	5.4
PCB-20	Tri		12.1	C,J	20
PCB-21	Tri			C020,J	20
PCB-22	Tri			U	5.03
PCB-23	Tri			U	4.99
PCB-24	Tri			U	4.06
PCB-25	Tri			U	4.25
PCB-26	Tri			U	5.25
PCB-27	Tri			U	4.16
PCB-28	Tri		15.5	J	20
PCB-29	Tri			U	4.99
PCB-30	Tri			U	4.01
PCB-31	Tri		16.1	J	20
PCB-32	Tri			U	4.73
PCB-33	Tri			C020,J	20
PCB-34	Tri			U	5.39
PCB-35	Tri			U	5.64
PCB-36	Tri	PRC	1340		20
PCB-37	Tri			U	4.77
PCB-38	Tri			U	5.03
PCB-39	Tri			U	5.18
PCB-40	Tetra			U	3.85
PCB-41	Tetra		10.3	C,J	20
PCB-42	Tetra			UC	20
PCB-43	Tetra		13	C,J	20
PCB-44	Tetra		15	J	20
PCB-45	Tetra			U	3.46
PCB-46	Tetra			U	3.54
PCB-47	Tetra		8.73	J	20
PCB-48	Tetra			UC	20
PCB-49	Tetra			C043,J	20
PCB-50	Tetra		6.8	J	20
PCB-51	Tetra		6.85	J	20
PCB-52	Tetra		23.2	C	20
PCB-53	Tetra			U	2.98
PCB-54	Tetra			U	2.27
PCB-55	Tetra		42.7		20
PCB-56	Tetra			UC	20
PCB-57	Tetra			U	2.39
PCB-58	Tetra			U	2.3
PCB-59	Tetra			U,C042	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010			LDW-Y1-SC-ENR+AC-CB-S010			LDW-Y1-SC-ENR+AC-CC-S010			LDW-Y1-SC-ENR-CA-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-60	Tetra			C056			C056	20		C056	20		C056	20
PCB-61	Tetra		127	C	20	226	C	20	192	C	20	315	C	20
PCB-62	Tetra			U	4.31		U	3.81		U	4.29		U	4.89
PCB-63	Tetra		7	J	20	12.3	J	20	9.45	J	20	15.5	J	20
PCB-64	Tetra			C041			C041	20		C041	20		C041	20
PCB-65	Tetra			U	4.11		U	3.63		U	4.09		U	4.66
PCB-66	Tetra		132	C	20	220	C	20	181	C	20	315	C	20
PCB-67	Tetra		7.07	J	20	8.51	J	20	9.61	J	20	13.5	J	20
PCB-68	Tetra			U	3.87	8.39	J	20	7.86	J	20	10.9	J	20
PCB-69	Tetra			C052			C052	20		C052	20		C052	20
PCB-70	Tetra			C061			C061	20		C061	20		C061	20
PCB-71	Tetra			C041			C041	20		C041	20		C041	20
PCB-72	Tetra			C041			C041	20		C041	20		C041	20
PCB-73	Tetra			U	4.25		U	3.76		U	4.24		U	4.82
PCB-74	Tetra		58.2		20	94.4		20	86		20	150		20
PCB-75	Tetra			C048			C048	20		C048	20		C048	20
PCB-76	Tetra			C066			C066	20		C066	20		C066	20
PCB-77	Tetra		12	J	20	12.2	J	20	14.6	J	20	23.8		20
PCB-78	Tetra	PRC	1080		20	1930		20	1250		20	1460		20
PCB-79	Tetra			U	5.44	6.29	J	20	4.87	J	20	7.75	J	20
PCB-80	Tetra			U	3.68		U	3.25	7.66	J	20		U	4.17
PCB-81	Tetra		10.8	J	20	19.6	J	20	12.2	J	20	16.4	J	20
PCB-82	Penta		34.9		20	42.9		20	40.3		20	61.8		20
PCB-83	Penta		13.9	C,J	20	20.6	C	20	16.1	C,J	20	31	C	20
PCB-84	Penta		151	C	20	223	C	20	181	C	20	324	C	20
PCB-85	Penta		42	C	20	59.5	C	20	47.1	C	20	82.1	C	20
PCB-86	Penta			U	4.74		U	5.48		U	4.39		U	4.87
PCB-87	Penta		95.2	C	20	135	C	20	117	C	20	195	C	20
PCB-88	Penta			UC	20		UC	20		UC	20		UC	20
PCB-89	Penta			U	5	9.25	J	20	5.92	J	20	12.1	J	20
PCB-90	Penta		315	C	20	470	C	20	396	C	20	686	C	20
PCB-91	Penta			C088			U,C088	20		U,C088	20		U,C088	20
PCB-92	Penta			C084			C084	20		C084	20		C084	20
PCB-93	Penta			U	5.27		U	4.64		U	5.85		U	4.21
PCB-94	Penta			U	5.22		U	4.6		U	5.8		U	4.17
PCB-95	Penta		340		20	551		20	454		20	836		20
PCB-96	Penta			U	3.86	9.69	J	20		U	4.29	13.9	J	20
PCB-97	Penta		71.2		20	96.8		20	76.6		20	134		20
PCB-98	Penta			UC	20		UC	20		UC	20		UC	20
PCB-99	Penta		120		20	174		20	141		20	250		20
PCB-100	Penta			U	4.43	13.6	J	20		U	4.92	16	J	20
PCB-101	Penta			C090			C090	20		C090	20		C090	20
PCB-102	Penta			C098			U,C098	20		U,C098	20		U,C098	20
PCB-103	Penta			U	4.43	14.6	J	20	15.2	J	20	19.6	J	20
PCB-104	Penta	PRC	1010		20	1700		20	1030		20	1310		20
PCB-105	Penta		58		20	85		20	69.3		20	126		20
PCB-106	Penta		162	C	20	244	C	20	198	C	20	336	C	20
PCB-107	Penta		14	C,J	20	21	C	20	16.5	C,J	20	26.4	C	20
PCB-108	Penta			C107			C107	20		C107,J	20		C107	20
PCB-109	Penta			U	3.65		U	4.21		U	3.38		U	3.75
PCB-110	Penta		242		20	351		20	302		20	531		20
PCB-111	Penta			UC	20	6.39	C,J	20		UC	20	7.58	C,J	20
PCB-112	Penta			C083			C083	20		C083,J	20		C083	20
PCB-113	Penta			U	4.17		U	4.81		U	3.86		U	4.28
PCB-114	Penta		5.31	J	20		U	5.5	6.01	J	20	11	J	20
PCB-115	Penta			C111			C111,J	20		U,C111	20		C111,J	20
PCB-116	Penta			C085			C085	20		C085	20		C085	20
PCB-117	Penta			C087			C087	20		C087	20		C087	20
PCB-118	Penta			C106			C106	20		C106	20		C106	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010			LDW-Y1-SC-ENR-CC-S010			LDW-Y1-SU-ENR+AC-CA-S010			LDW-Y1-SU-ENR+AC-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-60	Tetra			C056	20		C056	20		C056	20		C056	20
PCB-61	Tetra		293	C	20	441	C	20	1620	C	20	993	C	20
PCB-62	Tetra			U	4.76		U	3.46		U	4.6		U	4.65
PCB-63	Tetra		15.1	J	20	19	J	20	75.7		20	49.6		20
PCB-64	Tetra			C041	20		C041	20		C041	20		C041	20
PCB-65	Tetra			U	4.54		U	3.3		U	4.38		U	4.43
PCB-66	Tetra		313	C	20	428	C	20	1360	C	20	841	C	20
PCB-67	Tetra		12.4	J	20	18.6	J	20	58.7		20		U	4.31
PCB-68	Tetra		13	J	20	14.6	J	20	31.1		20	25.9		20
PCB-69	Tetra			C052	20		C052	20		C052	20		C052	20
PCB-70	Tetra			C061	20		C061	20		C061	20		C061	20
PCB-71	Tetra			C041	20		C041	20		C041	20		C041	20
PCB-72	Tetra			C041	20		C041	20		C041	20		C041	20
PCB-73	Tetra			U	4.7		U	3.42		U	4.54		U	4.59
PCB-74	Tetra		142		20	195		20	702		20	426		20
PCB-75	Tetra			C048	20		C048	20		C048	20		C048	20
PCB-76	Tetra			C066	20		C066	20		C066	20		C066	20
PCB-77	Tetra		21		20	28.5		20	75.5		20	53.8		20
PCB-78	Tetra	PRC	2010		20	1750		20	1690		20	2220		20
PCB-79	Tetra		7.76	J	20	9.32	J	20	27.7		20	17	J	20
PCB-80	Tetra		7.32	J	20	13.3	J	20	26.3		20		U	3.97
PCB-81	Tetra		23		20	29.9		20	50.3		20	42.6		20
PCB-82	Penta		59.3		20	85.6		20	285		20	194		20
PCB-83	Penta		32.4	C	20	36.1	C	20	144	C	20	87.8	C	20
PCB-84	Penta		317	C	20	414	C	20	1370	C	20	855	C	20
PCB-85	Penta		72.5	C	20	108	C	20	345	C	20	222	C	20
PCB-86	Penta			U	6.95		U	6.65		U	5.93		U	5.81
PCB-87	Penta		181	C	20	273	C	20	900	C	20	580	C	20
PCB-88	Penta			UC	20		UC	20	338	C	20	217	C	20
PCB-89	Penta		10.8	J	20	15.3	J	20	49.2		20	30.7		20
PCB-90	Penta		622	C	20	896	C	20	2840	C	20	1740	C	20
PCB-91	Penta			U,C088	20		U,C088	20		C088	20		C088	20
PCB-92	Penta			C084	20		C084	20		C084	20		C084	20
PCB-93	Penta			U	3.73		U	4.47		U	4.89		U	4.55
PCB-94	Penta			U	3.7		U	4.43	21.6		20	14.5	J	20
PCB-95	Penta		753		20	1060		20	3080		20	1860		20
PCB-96	Penta		9.99	J	20	15.5	J	20	48.5		20	32.4		20
PCB-97	Penta		128		20	178		20	658		20	407		20
PCB-98	Penta			UC	20		UC	20		UC	20		UC	20
PCB-99	Penta		236		20	336		20	1040		20	657		20
PCB-100	Penta		15.5	J	20	19.9	J	20	27.9		20	24.8		20
PCB-101	Penta			C090	20		C090	20		C090	20		C090	20
PCB-102	Penta			U,C098	20		U,C098	20		U,C098	20		U,C098	20
PCB-103	Penta		21.8		20	29.5		20	55		20	32.3		20
PCB-104	Penta	PRC	1490		20	1150		20	1660		20	1980		20
PCB-105	Penta		98.8		20	161		20	505		20	329		20
PCB-106	Penta		299	C	20	440	C	20	1460	C	20	901	C	20
PCB-107	Penta		26.4	C	20	34.9	C	20	127	C	20	77.7	C	20
PCB-108	Penta			C107	20		C107	20		C107	20		C107	20
PCB-109	Penta			U	5.35		U	5.11		U	4.56		U	4.47
PCB-110	Penta		473		20	687		20	2300		20	1380		20
PCB-111	Penta		13.8	C,J	20	10.7	C,J	20	47.6	C	20	24.2	C	20
PCB-112	Penta			C083	20		C083	20		C083	20		C083	20
PCB-113	Penta			U	6.11		U	5.84		U	5.21		U	5.1
PCB-114	Penta		9.76	J	20	14.2	J	20	46.6		20	30.7		20
PCB-115	Penta			C111,J	20		C111,J	20		C111	20		C111	20
PCB-116	Penta			C085	20		C085	20		C085	20		C085	20
PCB-117	Penta			C087	20		C087	20		C087	20		C087	20
PCB-118	Penta			C106	20		C106	20		C106	20		C106	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010			LDW-Y1-SU-ENR-CA-S010			LDW-Y1-SU-ENR-CB-S010			LDW-Y1-SU-ENR-CC-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-60	Tetra			C056	20		C056	20		C056	20		C056	20
PCB-61	Tetra		1440	C	20	2360	C	20	1580	C	20	1880	C	20
PCB-62	Tetra			U	3.91		U	3.29		U	4.41		U	3.77
PCB-63	Tetra		65.4		20	117		20	78.4		20	89.3		20
PCB-64	Tetra			C041	20		C041	20		C041	20		C041	20
PCB-65	Tetra			U	3.72		U	3.45		U	4.62	8.69	J	20
PCB-66	Tetra		1190	C	20	2010	C	20	1380	C	20	1600	C	20
PCB-67	Tetra		52		20	93.4		20	62.7		20	70.8		20
PCB-68	Tetra		30.7		20	41.7		20	36.6		20	27.5		20
PCB-69	Tetra			C052	20		C052	20		C052	20		C052	20
PCB-70	Tetra			C061	20		C061	20		C061	20		C061	20
PCB-71	Tetra			C041	20		C041	20		C041	20		C041	20
PCB-72	Tetra			C041	20		C041	20		C041	20		C041	20
PCB-73	Tetra			U	3.86		U	3.18		U	4.25		U	3.64
PCB-74	Tetra		596		20	1110		20	739		20	882		20
PCB-75	Tetra			C048	20		C048	20		C048	20		C048	20
PCB-76	Tetra			C066	20		C066	20		C066	20		C066	20
PCB-77	Tetra		64.7		20	111		20	83.3		20	99		20
PCB-78	Tetra	PRC	1970		20	2220		20	3030		20	2370		20
PCB-79	Tetra		27.2		20	35.2		20	22.6		20	29.9		20
PCB-80	Tetra		33		20		U	2.91	15.3	J	20		U	3.33
PCB-81	Tetra		49.9		20	58.6		20	46.9		20	48.3		20
PCB-82	Penta		244		20	384		20	267		20	327		20
PCB-83	Penta		110	C	20	169	C	20	119	C	20	139	C	20
PCB-84	Penta		1070	C	20	1710	C	20	1210	C	20	1390	C	20
PCB-85	Penta		290	C	20	508	C	20	345	C	20	398	C	20
PCB-86	Penta			U	4.93		U	4.42		U	5.2		U	8.05
PCB-87	Penta		725	C	20	1260	C	20	856	C	20	1020	C	20
PCB-88	Penta		170	C	20	430	C	20	198	C	20	390	C	20
PCB-89	Penta		36.8		20	60.4		20	43.4		20	53.6		20
PCB-90	Penta		2210	C	20	3680	C	20	2450	C	20	3000	C	20
PCB-91	Penta			C088	20		C088	20		C088	20		C088	20
PCB-92	Penta			C084	20		C084	20		C084	20		C084	20
PCB-93	Penta			U	4.33		U	4.11		U	4.37		U	4.51
PCB-94	Penta		17.9	j	20	29.6		20	19.8	J	20	26.9		20
PCB-95	Penta		2440		20	3350		20	2190		20	2680		20
PCB-96	Penta		41.3		20	57.5		20	37.2		20	40.1		20
PCB-97	Penta		502		20	875		20	595		20	690		20
PCB-98	Penta			UC	20		UC	20		UC	20		UC	20
PCB-99	Penta		829		20	1480		20	1020		20	1160		20
PCB-100	Penta		25		20	34.6		20	24.9		20	28.9		20
PCB-101	Penta			C090	20		C090	20		C090	20		C090	20
PCB-102	Penta			U,C098	20		U,C098	20		U,C098	20		U,C098	20
PCB-103	Penta		46.6		20	67.2		20	45.1		20	52.9		20
PCB-104	Penta	PRC	1720		20	1630		20	2110		20	1710		20
PCB-105	Penta		414		20	748		20	488		20	638		20
PCB-106	Penta		1120	C	20	1860	C	20	1190	C	20	1590	C	20
PCB-107	Penta		89.8	C	20	161	C	20	101	C	20	127	C	20
PCB-108	Penta			C107	20		C107	20		C107	20		C107	20
PCB-109	Penta			U	3.79		U	3.79		U	4.46		U	6.9
PCB-110	Penta		1780		20	2720		20	1820		20	2160		20
PCB-111	Penta		39.8	C	20	46.7	C	20	34	C	20	35.9	C	20
PCB-112	Penta			C083	20		C083	20		C083	20		C083	20
PCB-113	Penta			U	4.33		U	4.05		U	4.77		U	7.38
PCB-114	Penta		36.9		20	48.7		20	36		20	50.9		20
PCB-115	Penta			C111	20		C111	20		C111	20		C111	20
PCB-116	Penta			C085	20		C085	20		C085	20		C085	20
PCB-117	Penta			C087	20		C087	20		C087	20		C087	20
PCB-118	Penta			C106	20		C106	20		C106	20		C106	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB			LDW-Y1-IN-ENR+AC-CA-S010			LDW-Y1-IN-ENR+AC-CB-S010			LDW-Y1-IN-ENR+AC-CC-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-60	Tetra			U,C056	20		C056	20		C056	20		C056	20
PCB-61	Tetra		8.65	C,J	20	139	C	20	92.2	C	20	83.7	C	20
PCB-62	Tetra			U	1.95		U	1.82		U	1.8		U	2.04
PCB-63	Tetra			U	1.81	6.27	J	20	5.07	J	20		U	2.01
PCB-64	Tetra			C041,J	20		C041	20		C041	20		C041	20
PCB-65	Tetra			U	1.95		U	2.1		U	2.07		U	2.35
PCB-66	Tetra		6.04	C,J	20	140	C	20	85.5	C	20	71.5	C	20
PCB-67	Tetra			U	1.8	4.76	J	20	4.93	J	20	3.68	J	20
PCB-68	Tetra		7.66	J	20	10.3	J	20	9.2	J	20	6.19	J	20
PCB-69	Tetra			C052	20		C052	20		C052	20		C052	20
PCB-70	Tetra			C061,J	20		C061	20		C061	20		C061	20
PCB-71	Tetra			C041,J	20		C041	20		C041	20		C041	20
PCB-72	Tetra			C041,J	20		C041	20		C041	20		C041	20
PCB-73	Tetra		11.4	J	20		U	2.2		U	2.18		U	2.47
PCB-74	Tetra		3.69	J	20	49.7		20	36.6		20	30.4		20
PCB-75	Tetra			C048,J	20		C048	20		C048	20		C048	20
PCB-76	Tetra			C066,J	20		C066	20		C066	20		C066	20
PCB-77	Tetra			U	5.1	14.2	J	20	11.7	J	20	9.67	J	20
PCB-78	Tetra	PRC	2510		20	2290		20	2140		20	1650		20
PCB-79	Tetra			U	4.93	9.43	J	20	5.52	J	20	4.72	J	20
PCB-80	Tetra		5.01	J	20	3.55	J	20	4.39	J	20	3.71	J	20
PCB-81	Tetra			U	4.76	16.1	J	20	17.5	J	20	5.23	J	20
PCB-82	Penta			U	1.77	84.7		20	47		20	37.5		20
PCB-83	Penta			UC	20	46.8	C	20	27.7	C	20	21.6	C	20
PCB-84	Penta		61.4	C	20	529	C	20	307	C	20	268	C	20
PCB-85	Penta			UC	20	118	C	20	67.7	C	20	52.1	C	20
PCB-86	Penta			U	1.37		U	8.22		U	3.57		U	3.26
PCB-87	Penta		6.32	C,J	20	293	C	20	158	C	20	137	C	20
PCB-88	Penta			UC	20		UC	20		UC	20		UC	20
PCB-89	Penta			U	1.53	11.5	J	20	6.5	J	20	8.52	J	20
PCB-90	Penta		16.1	C,J	20	882	C	20	492	C	20	421	C	20
PCB-91	Penta			U,C088	20		U,C088	20		U,C088	20		U,C088	20
PCB-92	Penta			C084	20		C084	20		C084	20		C084	20
PCB-93	Penta			U	3.8		U	2.46		U	1.77		U	2.79
PCB-94	Penta			U	3.87	6.29	J	20	3.7	J	20		U	2.71
PCB-95	Penta		36.1		20	886		20	474		20	409		20
PCB-96	Penta			U	2.89	8.85	J	20	4.86	J	20	4.98	J	20
PCB-97	Penta			U	1.2	208		20	104		20	87.6		20
PCB-98	Penta			UC	20		UC	20		UC	20		UC	20
PCB-99	Penta		5.79	J	20	337		20	198		20	163		20
PCB-100	Penta			U	3.31	11.5	J	20	10.2	J	20	7.96	J	20
PCB-101	Penta			C090,J	20		C090	20		C090	20		C090	20
PCB-102	Penta			U,C098	20		U,C098	20		U,C098	20		U,C098	20
PCB-103	Penta			U	3.36	13.9	J	20	7.41	J	20	7.25	J	20
PCB-104	Penta	PRC	1700		20	1660		20	1820		20	1540		20
PCB-105	Penta			U	1.7	111		20	73.4		20	56.4		20
PCB-106	Penta		6.31	C,J	20	356	C	20	229	C	20	176	C	20
PCB-107	Penta			UC	20	35.9	C	20	20.2	C	20	17.8	C,J	20
PCB-108	Penta			U,C107	20		C107	20		C107	20		C107,J	20
PCB-109	Penta			U	1.09		U	6.65		U	2.88		U	2.63
PCB-110	Penta		11.1	J	20	780		20	437		20	363		20
PCB-111	Penta			UC	20		UC	20		UC	20		UC	20
PCB-112	Penta			U,C083	20		C083	20		C083	20		C083	20
PCB-113	Penta			U	1.23		U	7.92		U	3.44		U	3.14
PCB-114	Penta			U	1.53	7.38	J	20	7.23	J	20	6.49	J	20
PCB-115	Penta			U,C111	20		U,C111	20		U,C111	20		U,C111	20
PCB-116	Penta			U,C085	20		C085	20		C085	20		C085	20
PCB-117	Penta			C087,J	20		C087	20		C087	20		C087	20
PCB-118	Penta			C106,J	20		C106	20		C106	20		C106	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010			LDW-Y1-IN-ENR-CB-S010			LDW-Y1-IN-ENR-CC-S010			LDW-Y1-SC-S010-TB			LDW-Y1-SU-S010-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-60	Tetra			C056	20		C056	20		C056	20		U,C056	20		U,C056	20
PCB-61	Tetra		144	C	20	173	C	20	162	C	20	13.6	C,J	20	11.8	C,J	20
PCB-62	Tetra			U	3.71		U	2.95		U	3.17		U	2.07		U	3.37
PCB-63	Tetra			U	3.75	8.32	J	20	8.8	J	20		U	2.09		U	3.41
PCB-64	Tetra			C041	20		C041	20		C041	20		C041,J	20		C041,J	20
PCB-65	Tetra			U	3.89		U	3.09		U	3.32		U	2.17		U	3.53
PCB-66	Tetra		128	C	20	173	C	20	175	C	20	9.2	C,J	20	8.69	C,J	20
PCB-67	Tetra		9.39	J	20	9.89	J	20	10	J	20		U	2.13		U	3.46
PCB-68	Tetra		10.8	J	20	11.9	J	20	11.6	J	20	9.62	J	20	9.67	J	20
PCB-69	Tetra			C052	20		C052	20		C052	20		C052	20		C052	20
PCB-70	Tetra			C061	20		C061	20		C061	20		C061,J	20		C061,J	20
PCB-71	Tetra			C041	20		C041	20		C041	20		C041,J	20		C041,J	20
PCB-72	Tetra			C041	20		C041	20		C041	20		C041,J	20		C041,J	20
PCB-73	Tetra			U	3.59		U	2.85		U	3.06	16.8	J	20	16.2	J	20
PCB-74	Tetra		60.2		20	69.9		20	75.1		20	4.61	J	20	6.54	J	20
PCB-75	Tetra			C048	20		C048	20		C048	20		U,C048	20		U,C048	20
PCB-76	Tetra			C066	20		C066	20		C066	20		C066,J	20		C066,J	20
PCB-77	Tetra		10.9	J	20	14.6	J	20	11	J	20		U	6.47		U	6.65
PCB-78	Tetra	PRC	1670		20	2170		20	1950		20	3630		20	3260		20
PCB-79	Tetra		5.49	J	20	6.24	J	20	7.5	J	20		U	6.24		U	6.33
PCB-80	Tetra			U	3.28	6.62	J	20	8.65	J	20	6.15	J	20	8.84	J	20
PCB-81	Tetra		19.1	J	20	22.2		20	19.8	J	20		U	6.14		U	6.14
PCB-82	Penta		45.7		20	63.9		20	47.6		20		U	7.21		U	11
PCB-83	Penta		29.8	C	20	38.2	C	20	35.7	C	20		UC	20		UC	20
PCB-84	Penta		293	C	20	457	C	20	351	C	20	71.8	C	20	69.1	C	20
PCB-85	Penta		65.3	C	20	102	C	20	69.7	C	20		UC	20		UC	20
PCB-86	Penta			U	3.97		U	5.64		U	3.26		U	5.11		U	7.81
PCB-87	Penta		182	C	20	255	C	20	171	C	20		UC	20		UC	20
PCB-88	Penta			UC	20	99.8	C	20	41.2	C	20		UC	20		UC	20
PCB-89	Penta			U	4.8		U	6.83		U	3.95		U	6.19		U	9.47
PCB-90	Penta		480	C	20	714	C	20	527	C	20	16	C,J	20	18.9	C,J	20
PCB-91	Penta			U,C088	20		C088	20		C088	20		U,C088	20		U,C088	20
PCB-92	Penta			C084	20		C084	20		C084	20		C084	20		C084	20
PCB-93	Penta			U	4.71		U	3.37		U	4.1		U	4.55		U	4.8
PCB-94	Penta			U	5.16		U	3.69		U	4.49		U	4.98		U	5.25
PCB-95	Penta		535		20	966		20	635		20	36.7		20	40.7		20
PCB-96	Penta			U	3.8		U	2.71		U	3.3		U	3.66		U	3.86
PCB-97	Penta		116		20	175		20	125		20		U	4.94		U	7.56
PCB-98	Penta			UC	20		UC	20		UC	20		UC	20		UC	20
PCB-99	Penta		208		20	311		20	241		20		U	4.81		U	7.36
PCB-100	Penta			U	4.33	13.5	J	20		U	3.76		U	4.18		U	4.4
PCB-101	Penta			C090	20		C090	20		C090	20		C090,J	20		C090,J	20
PCB-102	Penta			U,C098	20		U,C098	20		U,C098	20		U,C098	20		U,C098	20
PCB-103	Penta		15.6	J	20	18.2	J	20	16.6	J	20		U	4.28		U	4.51
PCB-104	Penta	PRC	1090		20	1580		20	1580		20	2230		20	2220		20
PCB-105	Penta		81.7		20	115		20	83.7		20		U	5.28		U	6.23
PCB-106	Penta		258	C	20	340	C	20	257	C	20		UC	20		UC	20
PCB-107	Penta		25	C	20	35.1	C	20	24.9	C	20		UC	20		UC	20
PCB-108	Penta			C107	20		C107	20		C107	20		U,C107	20		U,C107	20
PCB-109	Penta			U	3.4		U	4.84		U	2.8		U	4.38		U	6.7
PCB-110	Penta		415		20	623		20	444		20	11.6	J	20	14.8	J	20
PCB-111	Penta		7.48	C,J	20	6.06	C,J	20	7.69	C,J	20		UC	20		UC	20
PCB-112	Penta			C083	20		C083	20		C083	20		U,C083	20		U,C083	20
PCB-113	Penta			U	3.64		U	5.17		U	2.99		U	4.68		U	7.16
PCB-114	Penta		4.07	J	20	9.65	J	20	6.07	J	20		U	5.13		U	6.33
PCB-115	Penta			C111,J	20		C111,J	20		C111,J	20		U,C111	20		U,C111	20
PCB-116	Penta			C085	20		C085	20		C085	20		U,C085	20		U,C085	20
PCB-117	Penta			C087	20		C087	20		C087	20		U,C087	20		U,C087	20
PCB-118	Penta			C106	20		C106	20		C106	20		UC106	20		UC106	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-IN-S010-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-60	Tetra			U,C056	20
PCB-61	Tetra		12	C,J	20
PCB-62	Tetra			U	2.36
PCB-63	Tetra			U	2.39
PCB-64	Tetra			C041,J	20
PCB-65	Tetra			U	2.48
PCB-66	Tetra		7.77	C,J	20
PCB-67	Tetra			U	2.43
PCB-68	Tetra		8.09	J	20
PCB-69	Tetra			C052	20
PCB-70	Tetra			C061,J	20
PCB-71	Tetra			C041,J	20
PCB-72	Tetra			C041,J	20
PCB-73	Tetra		15	J	20
PCB-74	Tetra		5.85	J	20
PCB-75	Tetra			U,C048	20
PCB-76	Tetra			C066,J	20
PCB-77	Tetra			U	6.57
PCB-78	Tetra	PRC	3430		20
PCB-79	Tetra			U	6.24
PCB-80	Tetra		8.8	J	20
PCB-81	Tetra			U	6.04
PCB-82	Penta			U	7.76
PCB-83	Penta			UC	20
PCB-84	Penta		65.8	C	20
PCB-85	Penta			UC	20
PCB-86	Penta			U	5.5
PCB-87	Penta			UC	20
PCB-88	Penta			UC	20
PCB-89	Penta			U	6.66
PCB-90	Penta		18.8	C,J	20
PCB-91	Penta			U,C088	20
PCB-92	Penta			C084	20
PCB-93	Penta		25.8		20
PCB-94	Penta			U	4.34
PCB-95	Penta		13.9	J	20
PCB-96	Penta			U	3.19
PCB-97	Penta			U	5.32
PCB-98	Penta			UC	20
PCB-99	Penta			U	5.18
PCB-100	Penta			U	3.64
PCB-101	Penta			C090,J	20
PCB-102	Penta			U,C098	20
PCB-103	Penta			U	3.73
PCB-104	Penta	PRC	2090		20
PCB-105	Penta			U	4.58
PCB-106	Penta			UC	20
PCB-107	Penta			UC	20
PCB-108	Penta			U,C107	20
PCB-109	Penta			U	4.72
PCB-110	Penta		10.3	J	20
PCB-111	Penta			UC	20
PCB-112	Penta			U,C083	20
PCB-113	Penta			U	5.04
PCB-114	Penta			U	4.74
PCB-115	Penta			U,C111	20
PCB-116	Penta			U,C085	20
PCB-117	Penta			U,C087	20
PCB-118	Penta			UC106	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010			LDW-Y1-SC-ENR+AC-CB-S010			LDW-Y1-SC-ENR+AC-CC-S010			LDW-Y1-SC-ENR-CA-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-119	Penta		9.73	J	20	15.8	J	20	11.6	J	20	22		20
PCB-120	Penta			U	3.48		U	4.02		U	3.23		U	3.58
PCB-121	Penta	PRC	1980		20	3340		20	2090		20	2590		20
PCB-122	Penta			U	2.59		U	5.85		U	3.64	5.61	J	20
PCB-123	Penta		3.95	J	20		U	4.75	6.26	J	20	5.84	J	20
PCB-124	Penta		6.94	J	20	12.1	J	20	16	J	20	16.6	J	20
PCB-125	Penta			C087			C087	20		C087	20		C087	20
PCB-126	Penta			U	3.03		U	6.36		U	4.29		U	3.75
PCB-127	Penta			U	2.93		U	6.63		U	4.13		U	3.81
PCB-128	Hexa		32.2	C	20	35	C	20	36.1	C	20	52.7	C	20
PCB-129	Hexa		10.6	J	20	13.8	J	20	18.4	J	20	21.2		20
PCB-130	Hexa		20.5		20	26		20	22		20	33.1		20
PCB-131	Hexa			UC	20	8.69	C,J	20	8.43	C,J	20	13	C,J	20
PCB-132	Hexa		92.4	C	20	124	C	20	98.1	C	20	162	C	20
PCB-133	Hexa			C131			C131,J	20		C131,J	20		C131,J	20
PCB-134	Hexa		16.2	C,J	20	27.3	C	20	17.5	C,J	20	24.8	C	20
PCB-135	Hexa		52.2		20	65.2		20	53.9		20	91.5		20
PCB-136	Hexa		72.7		20	108		20	84.5		20	144		20
PCB-137	Hexa			U	7.85	13.1	J	20		U	6.15	20.3		20
PCB-138	Hexa		240	C	20	318	C	20	254	C	20	421	C	20
PCB-139	Hexa		312	C	20	428	C	20	353	C	20	562	C	20
PCB-140	Hexa			U	7.04		U	5.82		U	5.52	8.95	J	20
PCB-141	Hexa		55.9		20	60.9		20	57		20	93.9		20
PCB-142	Hexa	PRC	3110		20	4730		20	3230		20	4050		20
PCB-143	Hexa			C134			C134	20		C134,J	20		C134	20
PCB-144	Hexa		28.7		20	29.6		20	28.8		20	45.5		20
PCB-145	Hexa			U	3.9		U	3.41		U	4.17		U	3.39
PCB-146	Hexa		56.6	C	20	67.2	C	20	60.8	C	20	90.7	C	20
PCB-147	Hexa			U	7.23	10.6	J	20	7.97	J	20	16.2	J	20
PCB-148	Hexa			U	4.7		U	4.11		U	5.03		U	4.09
PCB-149	Hexa			C139			C139	20		C139	20		C139	20
PCB-150	Hexa			U	3.77		U	3.29		U	4.04		U	3.28
PCB-151	Hexa		94.6		20	129		20	112		20	179		20
PCB-152	Hexa			U	3.99		U	3.48		U	4.27		U	3.47
PCB-153	Hexa		333		20	448		20	356		20	567		20
PCB-154	Hexa		17.6	J	20	22.1		20	18.5	J	20	22		20
PCB-155	Hexa	PRC	1990		20	3110		20	2090		20	2700		20
PCB-156	Hexa		14.4	J	20	21.4		20	20.5		20	21.4		20
PCB-157	Hexa			U	5.78		U	4.78		U	4.58		U	4.67
PCB-158	Hexa		27	C	20	33.1	C	20	29.7	C	20	47.8	C	20
PCB-159	Hexa			U	5.58		U	4.61		U	4.37	8.11	J	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010			LDW-Y1-SC-ENR-CC-S010			LDW-Y1-SU-ENR+AC-CA-S010			LDW-Y1-SU-ENR+AC-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-119	Penta		19.5	J	20	23.3		20	68.2		20	46.3		20
PCB-120	Penta			U	5.11		U	4.88	7.35	J	20	7.96	J	20
PCB-121	Penta	PRC	3190		20	2800		20	3360		20	4020		20
PCB-122	Penta		4.74	J	20	7.96	J	20	20		20	16	J	20
PCB-123	Penta		5.9	J	20	10.2	J	20	22		20	16.8	J	20
PCB-124	Penta		17.6	J	20	23.1		20	77.1		20	52.6		20
PCB-125	Penta			C087	20		C087	20		C087	20		C087	20
PCB-126	Penta			U	2.6		U	2.66		U	7.29		U	7.08
PCB-127	Penta			U	2.38		U	2.42		U	7.16		U	6.9
PCB-128	Hexa		39.3	C	20	72.2	C	20	248	C	20	170	C	20
PCB-129	Hexa		25.2		20	29.9		20	92.9		20	60.6		20
PCB-130	Hexa			U	4.97	41.2		20	124		20	88.7		20
PCB-131	Hexa		10.8	C,J	20	19.9	C,J	20	58.2	C	20	32.1	C	20
PCB-132	Hexa		142	C	20	235	C	20	627	C	20	463	C	20
PCB-133	Hexa			C131,J	20		C131,J	20		C131	20		C131	20
PCB-134	Hexa		29.5	C	20	40.6	C	20	131	C	20	88.1	C	20
PCB-135	Hexa		67.1		20	117		20	337		20	217		20
PCB-136	Hexa		116		20	193		20	511		20	319		20
PCB-137	Hexa		12.3	J	20	24.5		20	98.5		20	54.4		20
PCB-138	Hexa		353	C	20	563	C	20	1610	C	20	1120	C	20
PCB-139	Hexa		501	C	20	780	C	20	1980	C	20	1330	C	20
PCB-140	Hexa			U	4.2		U	4		U	5.4		U	7.9
PCB-141	Hexa		75.3		20	134		20	355		20	246		20
PCB-142	Hexa	PRC	5190		20	4820		20	5200		20	6020		20
PCB-143	Hexa			C134	20		C134	20		C134	20		C134	20
PCB-144	Hexa		31.6		20	56		20	122		20	97.4		20
PCB-145	Hexa			U	3.31		U	3.34		U	4.08		U	3.22
PCB-146	Hexa		86	C	20	129	C	20	315	C	20	221	C	20
PCB-147	Hexa		10.2	J	20	14.9	J	20	48.1		20	35.2		20
PCB-148	Hexa			U	3.99		U	4.03		U	4.92		U	3.88
PCB-149	Hexa			C139	20		C139	20		C139	20		C139	20
PCB-150	Hexa			U	3.2		U	3.23	8.62	J	20		U	3.11
PCB-151	Hexa		168		20	236		20	569		20	386		20
PCB-152	Hexa			U	3.39		U	3.42		U	4.17		U	3.29
PCB-153	Hexa		508		20	771		20	1890		20	1340		20
PCB-154	Hexa		21.7		20	25.7		20	49.2		20	40.9		20
PCB-155	Hexa	PRC	3120		20	2700		20	3280		20	3800		20
PCB-156	Hexa		26.2		20	35.1		20	128		20	86.4		20
PCB-157	Hexa		6.83	J	20	6.35	J	20	27.4		20	16.6	J	20
PCB-158	Hexa		40.5	C	20	66.7	C	20	198	C	20	137	C	20
PCB-159	Hexa			U	3.32	7.47	J	20	18	J	20	14.7	J	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010			LDW-Y1-SU-ENR-CA-S010			LDW-Y1-SU-ENR-CB-S010			LDW-Y1-SU-ENR-CC-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-119	Penta		55.7		20	85.8		20	65.6		20	70.3		20
PCB-120	Penta			U	3.62		U	3.83		U	4.5		U	6.97
PCB-121	Penta	PRC	3590		20	3830		20	4840		20	3990		20
PCB-122	Penta		21.8		20	28.5		20	15	J	20	28.8		20
PCB-123	Penta		17.7	J	20	40		20	28.6		20	25.3		20
PCB-124	Penta		64.9		20	109		20	64.6		20	99.8		20
PCB-125	Penta			C087	20		C087	20		C087	20		C087	20
PCB-126	Penta			U	5.87	7.81	J	20		U	5.93	8.64	J	20
PCB-127	Penta			U	5.8		U	3.23		U	5.81		U	4.21
PCB-128	Hexa		174	C	20	332	C	20	200	C	20	301	C	20
PCB-129	Hexa		69.9		20	134		20	70.1		20	114		20
PCB-130	Hexa		88.3		20	189		20	100		20	167		20
PCB-131	Hexa		40.8	C	20	77.8	C	20	44.6	C	20	72.8	C	20
PCB-132	Hexa		487	C	20	803	C	20	543	C	20	740	C	20
PCB-133	Hexa			C131	20		C131	20		C131	20		C131	20
PCB-134	Hexa		101	C	20	168	C	20	101	C	20	136	C	20
PCB-135	Hexa		233		20	453		20	300		20	401		20
PCB-136	Hexa		366		20	553		20	346		20	502		20
PCB-137	Hexa		54.6		20	92.5		20	64		20	82.7		20
PCB-138	Hexa		1150	C	20	2090	C	20	1280	C	20	1910	C	20
PCB-139	Hexa		1390	C	20	2440	C	20	1510	C	20	2210	C	20
PCB-140	Hexa		18.7	J	20	33.2		20		U	5.18	23.2		20
PCB-141	Hexa		249		20	466		20	284		20	440		20
PCB-142	Hexa	PRC	5430		20	5640		20	6970		20	5930		20
PCB-143	Hexa			C134	20		C134	20		C134	20		C134	20
PCB-144	Hexa		101		20	187		20	94.2		20	162		20
PCB-145	Hexa			U	3.78		U	3.51		U	2.91		U	5.28
PCB-146	Hexa		240	C	20	390	C	20	248	C	20	373	C	20
PCB-147	Hexa		41.6		20	60.1		20	42.5		20	51.2		20
PCB-148	Hexa			U	4.56		U	4.61		U	3.82		U	6.94
PCB-149	Hexa			C139	20		C139	20		C139	20		C139	20
PCB-150	Hexa			U	3.66		U	3.43		U	2.85		U	5.17
PCB-151	Hexa		437		20	769		20	498		20	714		20
PCB-152	Hexa			U	3.87		U	3.66		U	3.03		U	5.51
PCB-153	Hexa		1340		20	2480		20	1520		20	2230		20
PCB-154	Hexa		40.5		20	69.6		20	42.9		20	54.1		20
PCB-155	Hexa	PRC	3480		20	3350		20	4110		20	3630		20
PCB-156	Hexa		82.4		20	179		20	102		20	159		20
PCB-157	Hexa		18.8	J	20	32.4		20	24.3		20	28.1		20
PCB-158	Hexa		137	C	20	261	C	20	154	C	20	240	C	20
PCB-159	Hexa		16.9	J	20	25.2		20	18.9	J	20	25.6		20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB			LDW-Y1-IN-ENR+AC-CA-S010			LDW-Y1-IN-ENR+AC-CB-S010			LDW-Y1-IN-ENR+AC-CC-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-119	Penta			U	1.06	24.1		20	15.3	J	20	12.8	J	20
PCB-120	Penta			U	1.01		U	6.24		U	2.71		U	2.47
PCB-121	Penta	PRC	3170		20	3390		20	3510		20	2950		20
PCB-122	Penta			U	1.56	5.7	J	20	3.92	J	20		U	3.1
PCB-123	Penta			U	1.36	7.2	J	20	2.46	J	20	5.18	J	20
PCB-124	Penta			U	1.57	19.2	J	20	14.8	J	20	10.2	J	20
PCB-125	Penta			C087,J	20		C087	20		C087	20		C087	20
PCB-126	Penta			U	1.73		U	3.75		U	1.99		U	3.47
PCB-127	Penta			U	1.73		U	3.61		U	1.83		U	3.57
PCB-128	Hexa			UC	20	69.4	C	20	43.5	C	20	39.6	C	20
PCB-129	Hexa			U	5.11	21.5		20	18.2	J	20	13.3	J	20
PCB-130	Hexa			U	4.78	40		20	28.8		20	18.6	J	20
PCB-131	Hexa			UC	20	14.2	C,J	20	8.82	C,J	20	8.7	C,J	20
PCB-132	Hexa		13.8	C,J	20	185	C	20	122	C	20	87.5	C	20
PCB-133	Hexa			U,C131	20		C131,J	20		C131,J	20		C131,J	20
PCB-134	Hexa			UC	20	39.7	C	20	24.9	C	20	20.6	C	20
PCB-135	Hexa			U	4.22	90.3		20	53.3		20	46.1		20
PCB-136	Hexa			U	3.52	133		20	70.7		20	68		20
PCB-137	Hexa			U	4.43	28.6		20	19	J	20	14.3	J	20
PCB-138	Hexa			UC	20	409	C	20	281	C	20	222	C	20
PCB-139	Hexa			UC	20	482	C	20	317	C	20	245	C	20
PCB-140	Hexa			U	4.07		U	4.82		U	4.05		U	3.42
PCB-141	Hexa			U	4.23	79.1		20	55.4		20	35.4		20
PCB-142	Hexa	PRC	5210		20	5990		20	5890		20	4980		20
PCB-143	Hexa			U,C134	20		C134	20		C134	20		C134	20
PCB-144	Hexa			U	4.37	27.6		20	20.5		20	13.8	J	20
PCB-145	Hexa			U	3.29		U	2.34		U	1.9		U	2.26
PCB-146	Hexa			UC	20	90.2	C	20	67.9	C	20	52.8	C	20
PCB-147	Hexa			U	3.99	17.3	J	20	8.77	J	20	7.8	J	20
PCB-148	Hexa			U	4.17		U	2.92		U	2.36		U	2.81
PCB-149	Hexa			U,C139	20		C139	20		C139	20		C139	20
PCB-150	Hexa			U	3.22		U	2.29		U	1.86		U	2.21
PCB-151	Hexa			U	4.42	136		20	89.9		20	69.2		20
PCB-152	Hexa			U	3.35		U	2.41		U	1.95		U	2.32
PCB-153	Hexa		57.2		20	490		20	362		20	289		20
PCB-154	Hexa		9.98	J	20	22.9		20	18	J	20	17.4	J	20
PCB-155	Hexa	PRC	3340		20	3830		20	3980		20	3530		20
PCB-156	Hexa			U	3.53	25.5		20	21.6		20	19.2	J	20
PCB-157	Hexa			U	3.45	7.84	J	20	6.51	J	20	4.73	J	20
PCB-158	Hexa			UC	20	49.3	C	20	34.9	C	20	23.9	C	20
PCB-159	Hexa			U	3.24	6.46	J	20	8.02	J	20	5.01	J	20

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010			LDW-Y1-IN-ENR-CB-S010			LDW-Y1-IN-ENR-CC-S010			LDW-Y1-SC-S010-TB			LDW-Y1-SU-S010-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-119	Penta		16.5	J	20	27.7		20	20.1		20		U	4.42		U	6.75
PCB-120	Penta			U	3.43		U	4.88		U	2.82		U	4.42		U	6.77
PCB-121	Penta	PRC	2760		20	3800		20	3390		20	4530		20	4230		20
PCB-122	Penta		5.79	J	20	5.5	J	20		U	3.6		U	5.03		U	6.19
PCB-123	Penta		6.95	J	20	10	J	20	5.64	J	20		U	4.55		U	5.72
PCB-124	Penta		16.5	J	20	22.8		20	17.4	J	20		U	6.1		U	7.51
PCB-125	Penta			C087	20		C087	20		C087	20		U,C087	20		U,C087	20
PCB-126	Penta			U	2.6		U	3.88		U	4.21		U	5.93		U	7.22
PCB-127	Penta			U	2.54		U	3.45		U	4		U	5.59		U	6.88
PCB-128	Hexa		48.5	C	20	59.5	C	20	44.1	C	20		UC	20		UC	20
PCB-129	Hexa		17.2	J	20	25.3		20	16.6	J	20		U	6.43		U	6.95
PCB-130	Hexa		26.5		20	40.8		20	31.3		20		U	6.5		U	7.03
PCB-131	Hexa		13.7	C,J	20	15.9	C,J	20	11.1	C,J	20		UC	20		UC	20
PCB-132	Hexa		109	C	20	182	C	20	128	C	20		UC	20		UC	20
PCB-133	Hexa			C131,J	20		C131,J	20		C131,J	20		U,C131	20		U,C131	20
PCB-134	Hexa		23.6	C	20	39.7	C	20	28.8	C	20		UC	20		UC	20
PCB-135	Hexa		71.7		20	100		20	74.2		20		U	6		U	6.49
PCB-136	Hexa		68.4		20	109		20	83.1		20		U	3.47		U	3.14
PCB-137	Hexa		14.8	J	20	21.6		20	17.2	J	20		U	5.47		U	5.92
PCB-138	Hexa		269	C	20	403	C	20	300	C	20		UC	20		UC	20
PCB-139	Hexa		303	C	20	477	C	20	374	C	20		UC	20		UC	20
PCB-140	Hexa			U	5.18		U	4.92	5.58	J	20		U	5.17		U	5.6
PCB-141	Hexa		49.8		20	74		20	54.6		20		U	5.55		U	6.01
PCB-142	Hexa	PRC	4370		20	6240		20	5440		20	7110		20	6760		20
PCB-143	Hexa			C134	20		C134	20		C134	20		U,C134	20		U,C134	20
PCB-144	Hexa		14.1	J	20	27.7		20	21.3		20		U	5.3		U	5.74
PCB-145	Hexa			U	2.67		U	2.52		U	2.64		U	3.33		U	3.01
PCB-146	Hexa		71.8	C	20	95.3	C	20	84.4	C	20		UC	20		UC	20
PCB-147	Hexa		11.6	J	20	13.2	J	20	13.3	J	20		U	5.35		U	5.78
PCB-148	Hexa			U	3.51		U	3.31		U	3.47		U	4.37		U	3.96
PCB-149	Hexa			C139	20		C139	20		C139	20		U,C139	20		U,C139	20
PCB-150	Hexa			U	2.61		U	2.47		U	2.59		U	3.26		U	2.95
PCB-151	Hexa		95.3		20	142		20	119		20		U	5.81		U	6.29
PCB-152	Hexa			U	2.78		U	2.63		U	2.75		U	3.47		U	3.14
PCB-153	Hexa		348		20	509		20	405		20	78.5		20	85.3		20
PCB-154	Hexa		16.3	J	20	25.4		20	18	J	20	14.6	J	20		U	3.41
PCB-155	Hexa	PRC	2450		20	3480		20	3210		20	4110		20	4070		20
PCB-156	Hexa		21		20	29.3		20	22.1		20		U	4.46		U	5.09
PCB-157	Hexa			U	4.47	7.39	J	20		U	4.24		U	4.37		U	4.64
PCB-158	Hexa		35	C	20	44.4	C	20	38.2	C	20		UC	20		UC	20
PCB-159	Hexa			U	4.14		U	3.93		U	3.94		U	4.14		U	4.47

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-IN-S010-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-119	Penta			U	4.75
PCB-120	Penta			U	4.76
PCB-121	Penta	PRC	4230		20
PCB-122	Penta			U	4.42
PCB-123	Penta			U	3.87
PCB-124	Penta			U	5.35
PCB-125	Penta			U,C087	20
PCB-126	Penta			U	5.24
PCB-127	Penta			U	4.91
PCB-128	Hexa			UC	20
PCB-129	Hexa			U	5.99
PCB-130	Hexa			U	6.06
PCB-131	Hexa			UC	20
PCB-132	Hexa			UC	20
PCB-133	Hexa			U,C131	20
PCB-134	Hexa			UC	20
PCB-135	Hexa			U	5.59
PCB-136	Hexa			U	3.01
PCB-137	Hexa			U	5.1
PCB-138	Hexa			UC	20
PCB-139	Hexa			UC	20
PCB-140	Hexa			U	4.82
PCB-141	Hexa			U	5.17
PCB-142	Hexa	PRC	6520		20
PCB-143	Hexa			U,C134	20
PCB-144	Hexa			U	4.94
PCB-145	Hexa			U	2.89
PCB-146	Hexa			UC	20
PCB-147	Hexa			U	4.98
PCB-148	Hexa			U	3.79
PCB-149	Hexa			U,C139	20
PCB-150	Hexa			U	2.83
PCB-151	Hexa			U	5.42
PCB-152	Hexa			U	3.01
PCB-153	Hexa		75.6		20
PCB-154	Hexa		13.2	J	20
PCB-155	Hexa	PRC	3990		20
PCB-156	Hexa			U	4.2
PCB-157	Hexa			U	4
PCB-158	Hexa			UC	20
PCB-159	Hexa			U	3.85

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010			LDW-Y1-SC-ENR+AC-CB-S010			LDW-Y1-SC-ENR+AC-CC-S010			LDW-Y1-SC-ENR-CA-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-160	Hexa			C158			C158	20		C158	20		C158	20
PCB-161	Hexa			C132			C132	20		C132	20		C132	20
PCB-162	Hexa			C128			C128	20		C128	20		C128	20
PCB-163	Hexa			C138			C138	20		C138	20		C138	20
PCB-164	Hexa			C138			C138	20		C138	20		C138	20
PCB-165	Hexa			C146			C146	20		C146	20		C146	20
PCB-166	Hexa			U	6.07		U	5.02		U	4.76		U	4.8
PCB-167	Hexa		9.95	J	20	12.2	J	20	9.31	J	20	15.9	J	20
PCB-168	Hexa			U	5.79		U	4.79		U	4.54		U	4.58
PCB-169	Hexa			U	6.2		U	5.17		U	4.48		U	4.37
PCB-170	Hepta		51.9		20	61.7		20	38.9		20	73.5		20
PCB-171	Hepta		18.2	J	20	22.3		20	18.8	J	20	29.9		20
PCB-172	Hepta		72.5		20	114		20	70		20	105		20
PCB-173	Hepta			U	5.51		U	5.39		U	5.17		U	4.9
PCB-174	Hepta		61.7		20	77.3		20	61.8		20	101		20
PCB-175	Hepta			U	5.1		U	4.98		U	4.78		U	4.54
PCB-176	Hepta		14.7	J	20	16.4	J	20	19.9	J	20	21.8		20
PCB-177	Hepta		39.1		20	51		20	41.2		20	56.1		20
PCB-178	Hepta		19.4	J	20	24.8		20	22.3		20	30.8		20
PCB-179	Hepta		42.5		20	55.5		20	45.9		20	62.8		20
PCB-180	Hepta		112		20	130		20	102		20	149		20
PCB-181	Hepta			U	4.67		U	4.57		U	4.38		U	4.16
PCB-182	Hepta		79.9	C	20	121	C	20	89.6	C	20	130	C	20
PCB-183	Hepta		48.1		20	61.2		20	44.6		20	64.1		20
PCB-184	Hepta	PRC	2280		20	3420		20	2320		20	2960		20
PCB-185	Hepta			U	4.9	12.4	J	20		U	4.6	13.7	J	20
PCB-186	Hepta			U	3.79		U	3.71		U	3.56		U	3.37
PCB-187	Hepta			C182			C182	20		C182	20		C182	20
PCB-188	Hepta			U	3.86		U	3.83		U	3.54		U	3.39
PCB-189	Hepta			U	3.59		U	3.47		U	3.47		U	3.26
PCB-190	Hepta		11	J	20	17.5	J	20		U	3.98	15.5	J	20
PCB-191	Hepta			U	4.11		U	4.02		U	3.86		U	3.66
PCB-192	Hepta	PRC	1560		20	2550		20	1710		20	2120		20
PCB-193	Hepta			U	3.85	10.7	J	20	10.3	J	20	14.2	J	20
PCB-194	Octa		18.3	J	20	18.4	J	20	16.3	J	20	22.2		20
PCB-195	Octa		8.5	J	20	10.1	J	20	7.25	J	20	12.1	J	20
PCB-196	Octa		20.1	C	20	30.1	C	20	23.7	C	20	32.6	C	20
PCB-197	Octa		31.4		20	47.5		20	26.7		20	34.6		20
PCB-198	Octa			U	5.24		U	4.73		U	4.47		U	4.82
PCB-199	Octa		20.2		20	27.2		20	21.8		20	26.6		20
PCB-200	Octa			U	3.76		U	3.4		U	3.21		U	3.46
PCB-201	Octa			U	3.86		U	3.48		U	3.29		U	3.55
PCB-202	Octa			U	3.65		U	3.3		U	3.11		U	3.36
PCB-203	Octa			C196			C196	20		C196	20		C196	20
PCB-204	Octa	PRC	4770		20	7380		20	4930		20	6500		20
PCB-205	Octa			U	2.41		U	2.67		U	2.34		U	2.23
PCB-206	Nona			U	1.32		U	3.23		U	3.28	7.05	J	20
PCB-207	Nona		18.3	J	20	25.2		20	18.2	J	20	25		20
PCB-208	Nona			U	1		U	2.52		U	2.36	4.47	J	20
PCB-209	Deca		22.2		20	31.4		20	23.7		20	28.2		20
Total Detected PCB Congeners			**23912**			**37674**			**26473**			**36819**		

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010			LDW-Y1-SC-ENR-CC-S010			LDW-Y1-SU-ENR+AC-CA-S010			LDW-Y1-SU-ENR+AC-CB-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-160	Hexa			C158	20		C158	20		C158	20		C158	20
PCB-161	Hexa			C132	20		C132	20		C132	20		C132	20
PCB-162	Hexa			C128	20		C128	20		C128	20		C128	20
PCB-163	Hexa			C138	20		C138	20		C138	20		C138	20
PCB-164	Hexa			C138	20		C138	20		C138	20		C138	20
PCB-165	Hexa			C146	20		C146	20		C146	20		C146	20
PCB-166	Hexa			U	3.62		U	3.45		U	4.66		U	6.81
PCB-167	Hexa		11.6	J	20	16.3	J	20	56.3		20	42.7		20
PCB-168	Hexa			U	3.45		U	3.29	6.12	J	20		U	6.5
PCB-169	Hexa			U	3.47		U	3.31		U	4.62		U	6.31
PCB-170	Hepta		54.1		20	95		20	284		20	212		20
PCB-171	Hepta		22.7		20	36.6		20	92.6		20	67.8		20
PCB-172	Hepta		118		20	127		20	171		20	173		20
PCB-173	Hepta			U	5.61		U	5.05		U	6.27		U	5.45
PCB-174	Hepta		88		20	144		20	397		20	313		20
PCB-175	Hepta			U	5.19		U	4.67	15.8	J	20	11.3	J	20
PCB-176	Hepta		18.8	J	20	27.4		20	73.6		20	48.7		20
PCB-177	Hepta		44		20	81.6		20	234		20	168		20
PCB-178	Hepta		24		20	38.9		20	105		20	69.4		20
PCB-179	Hepta		55.8		20	85.6		20	233		20	171		20
PCB-180	Hepta		127		20	196		20	570		20	409		20
PCB-181	Hepta			U	4.76		U	4.28		U	5.32		U	4.62
PCB-182	Hepta		115	C	20	175	C	20	489	C	20	347	C	20
PCB-183	Hepta		64.5		20	88		20	240		20	174		20
PCB-184	Hepta	PRC	3690		20	3580		20	3950		20	4440		20
PCB-185	Hepta			U	4.99	18.4	J	20	45.1		20	34.5		20
PCB-186	Hepta			U	3.86		U	3.47		U	4.31		U	3.75
PCB-187	Hepta			C182	20		C182	20		C182	20		C182	20
PCB-188	Hepta			U	3.9		U	3.48		U	4.49		U	3.91
PCB-189	Hepta			U	3.7		U	3.36		U	4		U	3.46
PCB-190	Hepta		13.7	J	20	21.4		20	59.1		20	43.5		20
PCB-191	Hepta			U	4.19		U	3.77	18.7	J	20		U	4.07
PCB-192	Hepta	PRC	2810		20	2700		20	2940		20	3250		20
PCB-193	Hepta		23.2		20	20.2		20	43.9		20	34.3		20
PCB-194	Octa		17.5	J	20	31.9		20	119		20	98.2		20
PCB-195	Octa		7.95	J	20	16.2	J	20	47.5		20	40		20
PCB-196	Octa		25.4	C	20	41.8	C	20	160	C	20	123	C	20
PCB-197	Octa		46.4		20	47.5		20	62.3		20	58		20
PCB-198	Octa			U	3.78		U	4.23		U	5.79		U	5.24
PCB-199	Octa		25		20	41.2		20	143		20	118		20
PCB-200	Octa			U	2.72		U	3.04	23		20	19.8	J	20
PCB-201	Octa			U	2.78		U	3.11		U	4.26		U	3.86
PCB-202	Octa			U	2.64		U	2.95	31		20	29.8		20
PCB-203	Octa			C196	20		C196	20		C196	20		C196	20
PCB-204	Octa	PRC	7970		20	7920		20	9010		20	9870		20
PCB-205	Octa			U	2.55		U	2.63	6.86	J	20	6	J	20
PCB-206	Nona			U	5.16	9.64	J	20	34		20	29.6		20
PCB-207	Nona		29.7		20	34.9		20	41.1		20	42.7		20
PCB-208	Nona			U	3.63	4.37	J	20	11.9	J	20	11	J	20
PCB-209	Deca		34.9		20	35		20	43.9		20	50.9		20
Total Detected PCB Congeners			**42260**			**45165**			**87190**			**70644**		

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010			LDW-Y1-SU-ENR-CA-S010			LDW-Y1-SU-ENR-CB-S010			LDW-Y1-SU-ENR-CC-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-160	Hexa			C158	20		C158	20		C158	20		C158	20
PCB-161	Hexa			C132	20		C132	20		C132	20		C132	20
PCB-162	Hexa			C128	20		C128	20		C128	20		C128	20
PCB-163	Hexa			C138	20		C138	20		C138	20		C138	20
PCB-164	Hexa			C138	20		C138	20		C138	20		C138	20
PCB-165	Hexa			C146	20		C146	20		C146	20		C146	20
PCB-166	Hexa			U	6.05		U	3.91		U	4.58		U	4.71
PCB-167	Hexa		37.1		20	69.6		20	38.3		20	72.5		20
PCB-168	Hexa			U	5.77		U	3.66		U	4.28		U	4.41
PCB-169	Hexa			U	5.9		U	3.69		U	4.44		U	4.52
PCB-170	Hepta		164		20	410		20	216		20	402		20
PCB-171	Hepta		67.8		20	144		20	82.2		20	145		20
PCB-172	Hepta		157		20	211		20	219		20	233		20
PCB-173	Hepta			U	5.13		U	5.99		U	7.09	18	J	20
PCB-174	Hepta		258		20	551		20	302		20	529		20
PCB-175	Hepta		14.5	J	20	26.6		20		U	6.44	20.8		20
PCB-176	Hepta		46.6		20	104		20	51.7		20	93.7		20
PCB-177	Hepta		146		20	339		20	190		20	334		20
PCB-178	Hepta		57.2		20	139		20	76.6		20	118		20
PCB-179	Hepta		148		20	334		20	181		20	295		20
PCB-180	Hepta		352		20	766		20	490		20	804		20
PCB-181	Hepta			U	4.35		U	5.31		U	6.29		U	5.56
PCB-182	Hepta		314	C	20	683	C	20	391	C	20	641	C	20
PCB-183	Hepta		162		20	340		20	194		20	326		20
PCB-184	Hepta	PRC	4190		20	4340		20	5330		20	4630		20
PCB-185	Hepta		31		20	56		20	35.2		20	58.1		20
PCB-186	Hepta			U	3.53		U	4.03		U	4.78		U	4.23
PCB-187	Hepta			C182	20		C182	20		C182	20		C182	20
PCB-188	Hepta			U	3.67		U	4.41		U	4.61		U	4.62
PCB-189	Hepta			U	3.28	11.6	J	20		U	4.99	13.3	J	20
PCB-190	Hepta		41.8		20	84.2		20	49.7		20	82		20
PCB-191	Hepta			U	3.83	19.6	J	20	16.7	J	20	24.8		20
PCB-192	Hepta	PRC	3100		20	3200		20	4170		20	3440		20
PCB-193	Hepta		35.3		20	56.2		20	49.2		20	65		20
PCB-194	Octa		55.4		20	149		20	82.6		20	152		20
PCB-195	Octa		22.3		20	76		20	38.5		20	73.8		20
PCB-196	Octa		82.6	C	20	203	C	20	119	C	20	197	C	20
PCB-197	Octa		56.1		20	67.6		20	75.8		20	61.5		20
PCB-198	Octa			U	5.72	12.6	J	20		U	4.2		U	5.4
PCB-199	Octa		69.3		20	190		20	109		20	170		20
PCB-200	Octa			U	4.11	37.5		20	19.7	J	20	25.9		20
PCB-201	Octa			U	4.21		U	3.62		U	3.05	27.8		20
PCB-202	Octa		21.2		20	48.3		20	25.9		20	39.3		20
PCB-203	Octa			C196	20		C196	20		C196	20		C196	20
PCB-204	Octa	PRC	9090		20	9610		20	11900		20	10200		20
PCB-205	Octa		4.42	J	20	8.74	J	20	6.88	J	20	8.21	J	20
PCB-206	Nona		14.5	J	20	45.1		20	27		20	40.8		20
PCB-207	Nona		38.3		20	43.1		20	49.3		20	46.3		20
PCB-208	Nona		5.43	J	20	14.2	J	20	8.43	J	20	12.5	J	20
PCB-209	Deca		43.7		20	50.4		20	57		20	52.8		20
Total Detected PCB Congeners			**76603**			**110812**			**95168**			**100168**		

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB			LDW-Y1-IN-ENR+AC-CA-S010			LDW-Y1-IN-ENR+AC-CB-S010			LDW-Y1-IN-ENR+AC-CC-S010		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-160	Hexa			U,C158	20		C158	20		C158	20		C158	20
PCB-161	Hexa			C132,J	20		C132	20		C132	20		C132	20
PCB-162	Hexa			U,C128	20		C128	20		C128	20		C128	20
PCB-163	Hexa			U,C138	20		C138	20		C138	20		C138	20
PCB-164	Hexa			U,C138	20		C138	20		C138	20		C138	20
PCB-165	Hexa			U,C146	20		C146	20		C146	20		C146	20
PCB-166	Hexa			U	3.44		U	3.94		U	3.32		U	2.8
PCB-167	Hexa			U	3.38	9.92	J	20	12	J	20	9.92	J	20
PCB-168	Hexa			U	3.29		U	3.8		U	3.19		U	2.7
PCB-169	Hexa			U	3.15		U	3.76		U	3.29		U	2.53
PCB-170	Hepta			U	3.64	49		20	36.5		20	34		20
PCB-171	Hepta			U	3.42	19.4	J	20	15.3	J	20	14.1	J	20
PCB-172	Hepta		135		20	180		20	143		20	126		20
PCB-173	Hepta			U	3.55		U	3.63		U	3.45		U	2.57
PCB-174	Hepta			U	3.32	80.3		20	58.2		20	48.2		20
PCB-175	Hepta			U	3.29	5.74	J	20		U	3.17		U	2.36
PCB-176	Hepta			U	2.55	15.4	J	20	11.6	J	20	8.16	J	20
PCB-177	Hepta			U	3.51	40		20	32.2		20	28.4		20
PCB-178	Hepta			U	3.46	22.3		20	19.1	J	20	12	J	20
PCB-179	Hepta			U	2.48	43.2		20	35.3		20	29.5		20
PCB-180	Hepta			U	2.61	112		20	96.7		20	70.9		20
PCB-181	Hepta			U	3.07		U	3.02		U	2.87		U	2.14
PCB-182	Hepta			UC	20	95.7	C	20	77.7	C	20	59	C	20
PCB-183	Hepta			U	3.09	46.3		20	38.9		20	33.2		20
PCB-184	Hepta	PRC	4020		20	4730		20	4520		20	3780		20
PCB-185	Hepta			U	3.17	9.16	J	20	8.55	J	20		U	2.28
PCB-186	Hepta			U	2.43		U	2.44		U	2.32		U	1.73
PCB-187	Hepta			U,C182	20		C182	20		C182	20		C182	20
PCB-188	Hepta			U	2.4		U	2.45		U	2.32	3.38	J	20
PCB-189	Hepta			U	2.32		U	2.51		U	2.38		U	1.64
PCB-190	Hepta			U	2.56	11.1	J	20	7.53	J	20	7.87	J	20
PCB-191	Hepta			U	2.55		U	2.59		U	2.45		U	1.83
PCB-192	Hepta	PRC	3050		20	3600		20	3450		20	2880		20
PCB-193	Hepta			U	2.45	9.86	J	20	9.95	J	20	8.8	J	20
PCB-194	Octa			U	3.28	17	J	20	16.3	J	20	11.9	J	20
PCB-195	Octa			U	3.41	8.88	J	20	7.53	J	20	6.98	J	20
PCB-196	Octa			UC	20	26.8	C	20	22.8	C	20	19.7	C,J	20
PCB-197	Octa		42.8		20	58.6		20	54.6		20	44.4		20
PCB-198	Octa			U	3.39		U	3.78		U	3.15		U	2.56
PCB-199	Octa			U	2.82	25.8		20	21.1		20	18.5	J	20
PCB-200	Octa			U	2.45		U	2.53		U	2.11		U	1.71
PCB-201	Octa			U	2.39		U	2.52		U	2.1		U	1.7
PCB-202	Octa			U	2.37	9.77	J	20	7.25	J	20	6.18	J	20
PCB-203	Octa			U,C196	20		C196	20		C196	20		C196,J	20
PCB-204	Octa	PRC	8870		20	11000		20	10200		20	8290		20
PCB-205	Octa			U	2.46		U	4.56		U	3.67		U	2.39
PCB-206	Nona			U	1.84	9.76	J	20	6.81	J	20	5.05	J	20
PCB-207	Nona		33.1		20	48.6		20	41.3		20	30.4		20
PCB-208	Nona			U	1.45	4.12	J	20	3.73	J	20	3.08	J	20
PCB-209	Deca		37.5		20	55		20	46.4		20	36.1		20
Total Detected PCB Congeners			**33945**			**48469**			**43197**			**35876**		

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010			LDW-Y1-IN-ENR-CB-S010			LDW-Y1-IN-ENR-CC-S010			LDW-Y1-SC-S010-TB			LDW-Y1-SU-S010-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)	PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-160	Hexa			C158	20		C158	20		C158	20		U,C158	20		U,C158	20
PCB-161	Hexa			C132	20		C132	20		C132	20		U,C132	20		U,C132	20
PCB-162	Hexa			C128	20		C128	20		C128	20		U,C128	20		U,C128	20
PCB-163	Hexa			C138	20		C138	20		C138	20		U,C138	20		U,C138	20
PCB-164	Hexa			C138	20		C138	20		C138	20		U,C138	20		U,C138	20
PCB-165	Hexa			C146	20		C146	20		C146	20		U,C146	20		U,C146	20
PCB-166	Hexa			U	4.57		U	4.34		U	4.35		U	4.57		U	4.94
PCB-167	Hexa		11.7	J	20	13.3	J	20	11	J	20		U	4.89		U	4.93
PCB-168	Hexa			U	4.28		U	4.06		U	4.07		U	4.27		U	4.62
PCB-169	Hexa			U	4.31		U	4.2		U	4.06		U	4.36		U	4.89
PCB-170	Hepta		32.9		20	40.2		20	33.7		20		U	5.36		U	6.34
PCB-171	Hepta			U	4.08	13.9	J	20	18.4	J	20		U	4.87		U	5.75
PCB-172	Hepta		105		20	133		20	126		20	148		20	161		20
PCB-173	Hepta			U	4.34		U	3.82		U	5.18		U	5.18		U	6.12
PCB-174	Hepta		43.2		20	61.4		20	44.2		20		U	4.66		U	5.51
PCB-175	Hepta			U	3.94		U	3.46		U	4.7		U	4.7		U	5.56
PCB-176	Hepta			U	3.06	12.8	J	20	14.9	J	20		U	3.65		U	4.31
PCB-177	Hepta		26.6		20	35.6		20	33.6		20		U	5.24		U	6.2
PCB-178	Hepta			U	4.21	22.3		20	26		20		U	5.03		U	5.94
PCB-179	Hepta		21.6		20	41.9		20	39.6		20		U	3.6		U	4.26
PCB-180	Hepta		73.5		20	105		20	89.6		20		U	3.8		U	4.5
PCB-181	Hepta			U	3.85		U	3.39		U	4.6		U	4.59		U	5.43
PCB-182	Hepta		57	C	20	86.5	C	20	74	C	20		UC	20		UC	20
PCB-183	Hepta		33.4		20	47.1		20	43.7		20		U	4.45		U	5.27
PCB-184	Hepta	PRC	3050		20	4440		20	3720		20	4880		20	4810		20
PCB-185	Hepta			U	3.93		U	3.46		U	4.7		U	4.7		U	5.55
PCB-186	Hepta			U	2.92		U	2.57		U	3.49		U	3.49		U	4.13
PCB-187	Hepta			C182	20		C182	20		C182	20		U,C182	20		U,C182	20
PCB-188	Hepta			U	3.18		U	2.5		U	3.47		U	3.33		U	4.16
PCB-189	Hepta			U	2.65		U	2.68		U	3.53		U	3.69		U	4.1
PCB-190	Hepta			U	3.2	12.6	J	20	9.26	J	20		U	3.81		U	4.51
PCB-191	Hepta			U	3.22		U	2.83		U	3.84		U	3.84		U	4.54
PCB-192	Hepta	PRC	2370		20	3200		20	2690		20	3630		20	3460		20
PCB-193	Hepta			U	3	16.1	J	20		U	3.58		U	3.58		U	4.23
PCB-194	Octa		11.3	J	20	12.6	J	20	13.3	J	20		U	5.15		U	5.76
PCB-195	Octa			U	4.91		U	3.93		U	5.92		U	5.77		U	6.46
PCB-196	Octa		15.8	C,J	20	15	C,J	20	18.1	C,J	20		UC	20		UC	20
PCB-197	Octa		35.9		20	45.1		20	52.5		20	55.2		20	70.6		20
PCB-198	Octa			U	5.04		U	3.94		U	4.79		U	4.82		U	7.48
PCB-199	Octa			U	4.48	20.7		20	14.3	J	20		U	4.29		U	6.66
PCB-200	Octa			U	3.72		U	2.91		U	3.54		U	3.57		U	5.53
PCB-201	Octa			U	3.66		U	2.86		U	3.48		U	3.5		U	5.43
PCB-202	Octa			U	3.62		U	2.83		U	3.45		U	3.47		U	5.38
PCB-203	Octa			C196,J	20		C196,J	20		C196,J	20		U,C196	20		U,C196	20
PCB-204	Octa	PRC	6300		20	8890		20	7270		20	10000		20	10200		20
PCB-205	Octa			U	3.24		U	2.59		U	3.9		U	3.81		U	4.26
PCB-206	Nona			U	3.01		U	4		U	4.09		U	3.13		U	3.42
PCB-207	Nona		26.4		20	32.2		20	25.3		20	42.2		20	35.4		20
PCB-208	Nona			U	2.19		U	2.9		U	2.85		U	2.13		U	2.54
PCB-209	Deca		29.5		20	41.6		20	33.3		20	38.3		20	44.7		20
Total Detected PCB Congeners			**32497**			**46036**			**39235**			**44240**			**42927**		

Notes

C: Coelution with one or more PCB congeners; the numerical value indicates the lower congener co-eluter. For example, PCB-20 co-elutes with PCB-21 and PCB-33.
J: Analyte concentration is below calibration range
PCB: Polychlorinated biphenyl
pg: picogram
PRC: Performance Reference Compound
U: Not detected at the Method Detection Limit (DL) shown in the second column for each sample.

Table A3. Mass of PCB Congeners in Extracts.

PCB	Homolog Group	PRC	LDW-Y1-IN-S010-TB		
			PCB Mass Result (pg)	Qualifier	PCB Mass DL (pg)
PCB-160	Hexa			U,C158	20
PCB-161	Hexa			U,C132	20
PCB-162	Hexa			U,C128	20
PCB-163	Hexa			U,C138	20
PCB-164	Hexa			U,C138	20
PCB-165	Hexa			U,C146	20
PCB-166	Hexa			U	4.26
PCB-167	Hexa			U	4.47
PCB-168	Hexa			U	3.98
PCB-169	Hexa			U	4.18
PCB-170	Hepta			U	5.12
PCB-171	Hepta			U	4.64
PCB-172	Hepta		156		20
PCB-173	Hepta			U	4.94
PCB-174	Hepta			U	4.44
PCB-175	Hepta			U	4.48
PCB-176	Hepta			U	3.48
PCB-177	Hepta			U	5
PCB-178	Hepta			U	4.79
PCB-179	Hepta			U	3.44
PCB-180	Hepta			U	3.62
PCB-181	Hepta			U	4.38
PCB-182	Hepta			UC	20
PCB-183	Hepta			U	4.25
PCB-184	Hepta	PRC	4870		20
PCB-185	Hepta			U	4.48
PCB-186	Hepta			U	3.33
PCB-187	Hepta			U,C182	20
PCB-188	Hepta			U	3.26
PCB-189	Hepta			U	3.42
PCB-190	Hepta			U	3.64
PCB-191	Hepta			U	3.66
PCB-192	Hepta	PRC	3500		20
PCB-193	Hepta			U	3.41
PCB-194	Octa			U	4.27
PCB-195	Octa			U	4.79
PCB-196	Octa			UC	20
PCB-197	Octa		56.7		20
PCB-198	Octa			U	4.76
PCB-199	Octa			U	4.24
PCB-200	Octa			U	3.52
PCB-201	Octa			U	3.46
PCB-202	Octa			U	3.42
PCB-203	Octa			U,C196	20
PCB-204	Octa	PRC	10100		20
PCB-205	Octa			U	3.16
PCB-206	Nona			U	2.63
PCB-207	Nona		38.1		20
PCB-208	Nona			U	1.99
PCB-209	Deca		41.4		20
Total Detected PCB Congeners			**42519**		

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TABLE A4

Table A4. Elimination Rates (ke) and Percentage to Steady State Reached by Performance Reference Compounds (PRCs) During Deployment, and Resulting Statistics for the PRC Regression Models.

PCB PRC	Homolog Group	LDW-Y1-SC-ENR+AC-CA-S010		LDW-Y1-SC-ENR+AC-CB-S010		LDW-Y1-SC-ENR+AC-CC-S010		LDW-Y1-SC-ENR-CA-S010		LDW-Y1-SC-ENR-CB-S010	
		k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %
PCB-14	Di	0.047935	87%	0.035619	78%	0.037416	79%	0.043283	84%	0.032427	74%
PCB-36	Tri	0.022741	62%	0.014641	46%	0.016251	50%	0.022070	60%	0.013620	43%
PCB-78	Tetra	0.013897	45%	0.007744	28%	0.009000	32%	0.014638	46%	0.006936	25%
PCB-104	Penta	0.004808	19%	OUTLIER		0.002788	11%	0.006321	23%	0.003187	12%
PCB-121	Penta	0.005112	20%	OUTLIER		0.002280	9%	0.006430	24%	0.001391	6%
PCB-142	Hexa	0.005097	20%	0.002688	11%	0.002649	11%	0.006521	24%	0.000534	2%
PCB-155	Hexa	0.003473	14%	0.000418	2%	0.000739	3%	0.003877	15%	0.000364	2%
PCB-184	Hepta	0.004483	17%	0.002396	10%	0.002511	10%	0.005967	22%	0.000639	3%
PCB-192	Hepta	0.005911	22%	0.001813	7%	0.002196	9%	0.006334	23%	OUTLIER	
PCB-204	Octa	0.004360	17%	0.001546	6%	0.002018	8%	0.004682	18%	OUTLIER	
PRC Model	p-value	0.0053		0.0153		0.0086		0.0030		0.0011	
	r^2	0.64		0.65		0.60		0.69		0.85	
	Slope	-0.42		-0.62		-0.54		-0.38		-1.11	
	Y-intercept	0.60		1.60		1.10		0.42		4.34	

Table A4. Elimination Rates (ke) and Percentage to Steady State Reached by Performance Reference Compounds (PRCs) During Deployment, and Resulting Statistics for the PRC Regression Models.

PCB PRC	Homolog Group	LDW-Y1-SC-ENR-CC-S010		LDW-Y1-SU-ENR+AC-CA-S010		LDW-Y1-SU-ENR+AC-CB-S010		LDW-Y1-SU-ENR+AC-CC-S010		LDW-Y1-SU-ENR-CA-S010	
		k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %
PCB-14	Di	0.039553	81%	0.034078	86%	0.024661	76%	0.026511	79%	0.018034	65%
PCB-36	Tri	0.021817	60%	0.018679	66%	0.011564	49%	0.013559	54%	0.009863	44%
PCB-78	Tetra	0.013310	43%	0.012215	51%	0.007575	36%	0.009599	43%	0.007466	35%
PCB-104	Penta	0.012442	40%	0.004661	24%	0.001685	9%	0.004077	21%	0.004929	25%
PCB-121	Penta	0.007553	27%	0.004335	22%	0.001305	7%	0.003220	17%	0.002031	11%
PCB-142	Hexa	0.005339	20%	0.004579	23%	0.002117	12%	0.003860	20%	0.003132	17%
PCB-155	Hexa	0.006863	25%	0.003627	19%	0.001153	6%	0.002634	14%	0.003216	17%
PCB-184	Hepta	0.004395	17%	0.003514	18%	0.001560	9%	0.002524	14%	0.001844	10%
PCB-192	Hepta	0.003524	14%	0.003115	17%	0.001450	8%	0.002229	12%	0.001608	9%
PCB-204	Octa	0.002928	11%	0.001933	11%	0.000424	2%	0.001807	10%	0.000774	4%
PRC Model	p-value	0.0000		0.0002		0.0007		0.0002		0.0000	
	r^2	0.94		0.85		0.78		0.84		0.89	
	Slope	-0.49		-0.50		-0.66		-0.49		-0.54	
	Y-intercept	1.08		1.02		1.67		0.84		1.05	

Table A4. Elimination Rates (ke) and Percentage to Steady State Reached by Performance Reference Compounds (PRCs) During Deployment, and Resulting Statistics for the PRC Regression Models.

PCB PRC	Homolog Group	LDW-Y1-SU-ENR-CB-S010		LDW-Y1-SU-ENR-CC-S010		LDW-Y1-SU-S010-LCB		LDW-Y1-IN-ENR+AC-CA-S010		LDW-Y1-IN-ENR+AC-CB-S010	
		k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %	k_e (d^{-1})	Steady State %
PCB-14	Di	0.009327	42%	0.020640	60%	0.019272	67%	0.057045	91%	0.064604	94%
PCB-36	Tri	0.002766	15%	0.010779	38%	0.005027	25%	0.023807	63%	0.022672	62%
PCB-78	Tetra	0.002296	12%	0.008398	31%	0.002458	13%	0.009756	34%	0.011198	38%
PCB-104	Penta	0.000672	4%	0.005506	22%	0.001294	7%	0.006583	24%	0.004279	17%
PCB-121	Penta	OUTLIER		0.001912	8%	0.002400	13%	0.005925	22%	0.004971	19%
PCB-142	Hexa	OUTLIER		0.003131	13%	0.001594	9%	0.003129	12%	0.003400	13%
PCB-155	Hexa	OUTLIER		0.002568	11%	0.000341	2%	0.001504	6%	0.000481	2%
PCB-184	Hepta	OUTLIER		0.001140	5%	0.000236	1%	0.000754	3%	0.001706	7%
PCB-192	Hepta	OUTLIER		0.000665	3%	OUTLIER		OUTLIER		0.000571	2%
PCB-204	Octa	OUTLIER		OUTLIER		OUTLIER		OUTLIER		OUTLIER	
PRC Model	p-value	0.0823		0.0002		0.0003		0.0000		0.0005	
	r^2	0.84		0.88		0.91		0.99		0.84	
	Slope	-1.02		-0.72		-0.98		-1.02		-1.02	
	Y-intercept	3.33		2.13		3.39		4.19		4.11	

Table A4. Elimination Rates (ke) and Percentage to Steady State Reached by Performance Reference Compounds (PRCs) During Deployment, and Resulting Statistics for the PRC Regression Models.

PCB PRC	Homolog Group	LDW-Y1-IN-ENR+AC-CC-S010		LDW-Y1-IN-ENR-CA-S010		LDW-Y1-IN-ENR-CB-S010		LDW-Y1-IN-ENR-CC-S010	
		k_e	Steady State	k_e	Steady State	k_e	Steady State	k_e	Steady State
		(d^{-1})	%	(d^{-1})	%	(d^{-1})	%	(d^{-1})	%
PCB-14	Di	0.073864	96%	0.046361	87%	0.054761	91%	0.055099	91%
PCB-36	Tri	0.032057	75%	0.018041	54%	0.022283	62%	0.021243	60%
PCB-78	Tetra	0.017036	52%	0.007103	26%	0.010484	37%	0.008952	32%
PCB-104	Penta	0.008087	30%	0.006424	24%	0.007283	27%	0.003292	13%
PCB-121	Penta	0.008923	32%	0.000819	3%	0.002866	12%	0.001512	6%
PCB-142	Hexa	0.007241	27%	0.000620	3%	0.001825	8%	0.001004	4%
PCB-155	Hexa	0.003267	13%	0.002066	9%	0.003393	14%	0.001268	5%
PCB-184	Hepta	0.005830	22%	0.001148	5%	0.001908	8%	0.002002	8%
PCB-192	Hepta	0.004756	19%	OUTLIER		0.002118	9%	0.002135	9%
PCB-204	Octa	0.004618	18%	0.001321	6%	0.002800	11%	0.003451	14%
PRC Model	p-value	0.0010		0.0118		0.0014		0.0217	
	r^2	0.76		0.62		0.74		0.50	
	Slope	-0.51		-0.71		-0.60		-0.56	
	Y-intercept	1.31		2.07		1.63		1.23	

Notes

%: percent

d: day

PCB: Polychlorinated biphenyl

The PRCs noted "OUTLIER" were removed from the calculations. See text for further details.

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TABLE A5

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-1	Mono	4.23
PCB-2	Mono	4.87
PCB-3	Mono	4.87
PCB-4	Di	4.64
PCB-5	Di	4.96
PCB-6	Di	4.96
PCB-7	Di	4.96
PCB-8	Di	4.96
PCB-9	Di	4.96
PCB-10	Di	4.64
PCB-11	Di	5.28
PCB-12	Di	5.28
PCB-13	Di	5.28
PCB-14	Di	5.28
PCB-15	Di	5.28
PCB-16	Tri	5.27
PCB-17	Tri	5.27
PCB-18	Tri	5.27
PCB-19	Tri	5.05
PCB-20	Tri	5.48
PCB-21	Tri	C020
PCB-22	Tri	5.48
PCB-23	Tri	5.48
PCB-24	Tri	5.27
PCB-25	Tri	5.48
PCB-26	Tri	5.48
PCB-27	Tri	5.27
PCB-28	Tri	5.48
PCB-29	Tri	5.48
PCB-30	Tri	5.27
PCB-31	Tri	5.48
PCB-32	Tri	5.27
PCB-33	Tri	C020
PCB-34	Tri	5.48
PCB-35	Tri	5.69
PCB-36	Tri	5.69
PCB-37	Tri	5.69
PCB-38	Tri	5.69
PCB-39	Tri	5.69
PCB-40	Tetra	5.78
PCB-41	Tetra	5.82
PCB-42	Tetra	5.78
PCB-43	Tetra	5.78
PCB-44	Tetra	5.78
PCB-45	Tetra	5.62
PCB-46	Tetra	5.62
PCB-47	Tetra	5.78
PCB-48	Tetra	5.78
PCB-49	Tetra	C043
PCB-50	Tetra	5.62
PCB-51	Tetra	5.62
PCB-52	Tetra	5.78
PCB-53	Tetra	5.62
PCB-54	Tetra	5.66
PCB-55	Tetra	5.94
PCB-56	Tetra	5.94
PCB-57	Tetra	5.94
PCB-58	Tetra	5.94

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-59	Tetra	C042
PCB-60	Tetra	C056
PCB-61	Tetra	5.94
PCB-62	Tetra	5.78
PCB-63	Tetra	5.94
PCB-64	Tetra	C041
PCB-65	Tetra	5.78
PCB-66	Tetra	5.94
PCB-67	Tetra	5.94
PCB-68	Tetra	5.94
PCB-69	Tetra	C052
PCB-70	Tetra	C061
PCB-71	Tetra	C041
PCB-72	Tetra	C041
PCB-73	Tetra	5.78
PCB-74	Tetra	5.94
PCB-75	Tetra	C048
PCB-76	Tetra	C066
PCB-77	Tetra	6.1
PCB-78	Tetra	6.1
PCB-79	Tetra	6.1
PCB-80	Tetra	6.1
PCB-81	Tetra	6.1
PCB-82	Penta	6.26
PCB-83	Penta	6.26
PCB-84	Penta	6.195
PCB-85	Penta	6.26
PCB-86	Penta	6.26
PCB-87	Penta	6.26
PCB-88	Penta	6.13
PCB-89	Penta	6.13
PCB-90	Penta	6.26
PCB-91	Penta	C088
PCB-92	Penta	C084
PCB-93	Penta	6.13
PCB-94	Penta	6.13
PCB-95	Penta	6.13
PCB-96	Penta	6.2
PCB-97	Penta	6.26
PCB-98	Penta	6.13
PCB-99	Penta	6.26
PCB-100	Penta	6.13
PCB-101	Penta	C090
PCB-102	Penta	C098
PCB-103	Penta	6.13
PCB-104	Penta	6.2
PCB-105	Penta	6.39
PCB-106	Penta	6.39
PCB-107	Penta	6.39
PCB-108	Penta	C107
PCB-109	Penta	6.26
PCB-110	Penta	6.26
PCB-111	Penta	6.325
PCB-112	Penta	C083
PCB-113	Penta	6.26
PCB-114	Penta	6.39
PCB-115	Penta	C111
PCB-116	Penta	C085

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-117	Penta	C087
PCB-118	Penta	C106
PCB-119	Penta	6.26
PCB-120	Penta	6.39
PCB-121	Penta	6.26
PCB-122	Penta	6.39
PCB-123	Penta	6.39
PCB-124	Penta	6.39
PCB-125	Penta	C087
PCB-126	Penta	6.52
PCB-127	Penta	6.52
PCB-128	Hexa	6.765
PCB-129	Hexa	6.71
PCB-130	Hexa	6.71
PCB-131	Hexa	6.66
PCB-132	Hexa	6.66
PCB-133	Hexa	C131
PCB-134	Hexa	6.61
PCB-135	Hexa	6.61
PCB-136	Hexa	6.7
PCB-137	Hexa	6.71
PCB-138	Hexa	6.71
PCB-139	Hexa	6.61
PCB-140	Hexa	6.61
PCB-141	Hexa	6.71
PCB-142	Hexa	6.61
PCB-143	Hexa	C134
PCB-144	Hexa	6.61
PCB-145	Hexa	6.7
PCB-146	Hexa	6.71
PCB-147	Hexa	6.61
PCB-148	Hexa	6.61
PCB-149	Hexa	C139
PCB-150	Hexa	6.7
PCB-151	Hexa	6.61
PCB-152	Hexa	6.7
PCB-153	Hexa	6.71
PCB-154	Hexa	6.61
PCB-155	Hexa	6.7
PCB-156	Hexa	6.82
PCB-157	Hexa	6.82
PCB-158	Hexa	6.71
PCB-159	Hexa	6.82
PCB-160	Hexa	C158
PCB-161	Hexa	C132
PCB-162	Hexa	C128
PCB-163	Hexa	C138
PCB-164	Hexa	C138
PCB-165	Hexa	C146
PCB-166	Hexa	6.71
PCB-167	Hexa	6.82
PCB-168	Hexa	6.71
PCB-169	Hexa	6.93
PCB-170	Hepta	7.15
PCB-171	Hepta	7.06
PCB-172	Hepta	7.15
PCB-173	Hepta	7.06
PCB-174	Hepta	7.06

Table A5. Log K_{PDMS} used in Calculation of Cfree.

PCB	Homolog Group	Log K_{PDMS} (L/kg)
PCB-175	Hepta	7.06
PCB-176	Hepta	7.17
PCB-177	Hepta	7.06
PCB-178	Hepta	7.06
PCB-179	Hepta	7.17
PCB-180	Hepta	7.15
PCB-181	Hepta	7.06
PCB-182	Hepta	7.06
PCB-183	Hepta	7.06
PCB-184	Hepta	7.17
PCB-185	Hepta	7.06
PCB-186	Hepta	7.17
PCB-187	Hepta	C182
PCB-188	Hepta	7.17
PCB-189	Hepta	7.25
PCB-190	Hepta	7.15
PCB-191	Hepta	7.15
PCB-192	Hepta	7.15
PCB-193	Hepta	7.15
PCB-194	Octa	7.59
PCB-195	Octa	7.51
PCB-196	Octa	7.51
PCB-197	Octa	7.63
PCB-198	Octa	7.51
PCB-199	Octa	7.63
PCB-200	Octa	7.63
PCB-201	Octa	7.51
PCB-202	Octa	7.63
PCB-203	Octa	C196
PCB-204	Octa	7.63
PCB-205	Octa	7.59
PCB-206	Nona	7.94
PCB-207	Nona	8.07
PCB-208	Nona	8.07
PCB-209	Deca	8.51

Notes

kg: kilogram

L: liter

PCB: Polychlorinated biphenyl

Log K_{PDMS} was referenced from Smedes et al. (2009). For co-eluters, log KPDMS was obtained by averaging the KPDMS values for each individual congener. Log K_{PDMS} is shown as the lower congener co-eluter for the higher congener co-eluters in the coelution. For example, PCB-20 co-elutes with PCB-21 and PCB-33; therefore, the KPDMS value for PCB-21 is shown as the average KPDMS for PCB-21 and PCB-33, while the KPDMS for PCB-33 is shown as "C021".

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TABLE A6

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010					LDW-Y1-SC-ENR+AC-CB-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-1	Mono					U	8.9				U	6.8
PCB-2	Mono					U	2.9				U	2.2
PCB-3	Mono					U	2.8				U	2
PCB-4	Di					U	6.1				U	4
PCB-5	Di					U	3.1				U	2.1
PCB-6	Di					U	3.2				U	2.1
PCB-7	Di					U	3				U	2
PCB-8	Di		14	11	19	J	14	14	11	28		10
PCB-9	Di					U	3				U	2
PCB-10	Di					U	6.4				U	4.2
PCB-11	Di					UB J	7.8				UB	6.1
PCB-12	Di					U	1.8				U	1.3
PCB-13	Di					U	1.8				U	1.3
PCB-14	Di	PRC										
PCB-15	Di		4.3	3.4	5.8	J	7.8	3.4	2.3	6.5	J	6.1
PCB-16	Tri		7.6	6	10	J	7.9	17	11	32		6.2
PCB-17	Tri		13	11	18		7.9	18	12	34		6.2
PCB-18	Tri		26	20	35		7.9	35	24	67		6.2
PCB-19	Tri		5.9	4.8	8.1	J	12	7.1	5.3	14	J	8.6
PCB-20	Tri		10	7.8	13	C	5.5	16	10	30	C	4.6
PCB-21	Tri					C020					C020	
PCB-22	Tri		6.4	5.1	8.6		5.5	10	6.6	19		4.6
PCB-23	Tri					U	1.2				U	1
PCB-24	Tri					U	1.4	3.2	2.2	6.2	J	6.2
PCB-25	Tri		2.6	2	3.5	J	5.5	3.6	2.3	6.6	J	4.6
PCB-26	Tri		5.6	4.4	7.6		5.5	7.7	4.9	14		4.6
PCB-27	Tri		3.1	2.4	4.2	J	7.9	2.1	1.4	4	J	6.2
PCB-28	Tri		20	15	26		5.5	30	19	56		4.6
PCB-29	Tri					U	1.2				U	1
PCB-30	Tri					U	1.5				U	1.3
PCB-31	Tri		21	16	28		5.5	30	19	56		4.6
PCB-32	Tri		11	8.7	15		7.9	11	7.2	20		6.2
PCB-33	Tri					C020					C020	
PCB-34	Tri					U	1.3				U	1.1
PCB-35	Tri					U	0.88				U	0.81
PCB-36	Tri	PRC										
PCB-37	Tri		3.4	2.7	4.4	J	3.9	5	3.2	8.9		3.5
PCB-38	Tri					U	0.85				U	0.78
PCB-39	Tri					U	0.82				U	0.76
PCB-40	Tetra		4.7	3.8	6.2		3.3	7.4	4.7	13		3.2
PCB-41	Tetra		19	15	25	C	3.1	31	19	53	C	3
PCB-42	Tetra		8.8	7	11	C	3.3	14	9	25	C	3.2
PCB-43	Tetra		28	22	37	C	3.3	46	29	80	C	3.2
PCB-44	Tetra		23	18	29		3.3	37	23	64		3.2
PCB-45	Tetra		6.8	5.4	9		4.3	10	6.5	18		3.9
PCB-46	Tetra		2.7	2.1	3.5	J	4.3	4.5	2.8	8		3.9
PCB-47	Tetra		9.6	7.7	13		3.3	14	8.6	24		3.2
PCB-48	Tetra		5.3	4.2	6.9	C	3.3	9	5.7	16	C	3.2
PCB-49	Tetra					C043					C043	
PCB-50	Tetra					U	1.1				U	0.89
PCB-51	Tetra		2.9	2.3	3.8	J	4.3	4.7	2.9	8.4		3.9
PCB-52	Tetra		35	28	45	C	3.3	56	35	97	C	3.2
PCB-53	Tetra		8.5	6.7	11		4.3	13	8.2	24		3.9
PCB-54	Tetra					U	0.8				U	0.64
PCB-55	Tetra		1.1	0.91	1.4		2.6	1.3	0.83	2.2		2.6
PCB-56	Tetra		8.4	6.8	11	C	2.6	15	9.6	25	C	2.6
PCB-57	Tetra					U	0.56				U	0.5
PCB-58	Tetra					U	0.57				U	0.51

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CC-S010					LDW-Y1-SC-ENR-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-1	Mono					U	11				U	7.3
PCB-2	Mono					U	3.8				U	2.3
PCB-3	Mono					U	3.6				U	2.1
PCB-4	Di					U	7.3				U	4.7
PCB-5	Di					U	4				U	2.3
PCB-6	Di					U	4	13	11	17		10
PCB-7	Di					U	3.8				U	2.2
PCB-8	Di		31	22	54		17	32	27	42		10
PCB-9	Di					U	3.8				U	2.2
PCB-10	Di					U	7.6				U	4.8
PCB-11	Di					UB	10				UB	5.6
PCB-12	Di					U	2.5				U	1.3
PCB-13	Di					U	2.5				U	1.3
PCB-14	Di	PRC										
PCB-15	Di		11	7.3	18		10	7.6	6.2	9.8		5.6
PCB-16	Tri		18	12	30		11	19	15	24		5.7
PCB-17	Tri		31	21	53		11	27	22	35		5.7
PCB-18	Tri		62	42	100		11	60	49	77		5.7
PCB-19	Tri		12	8.2	20	J	15	14	12	19		8.6
PCB-20	Tri		25	17	40	C	7.8	21	17	26	C	4
PCB-21	Tri					C020					C020	
PCB-22	Tri		16	10	25		7.8	13	11	17		4
PCB-23	Tri					U	2				U	1.4
PCB-24	Tri		3	2	5.1	J	11	2.3	1.9	2.9	J	5.7
PCB-25	Tri		5.7	3.8	9.4	J	7.8	6.1	5	7.8		4
PCB-26	Tri		14	9.6	23		7.8	11	8.9	14		4
PCB-27	Tri		6.9	4.7	12	J	11	8.5	7	11		5.7
PCB-28	Tri		50	33	82		7.8	47	38	59		4
PCB-29	Tri					U	2				U	1.4
PCB-30	Tri					U	1.2				U	1.3
PCB-31	Tri		44	30	72		7.8	38	31	48		4
PCB-32	Tri		26	17	44		11	27	22	35		5.7
PCB-33	Tri					C020					C020	
PCB-34	Tri					U	2.2				U	1.5
PCB-35	Tri					U	1.6				U	1
PCB-36	Tri	PRC										
PCB-37	Tri		7.3	5	11		5.9	5.6	4.6	7		2.8
PCB-38	Tri					U	1.5				U	0.98
PCB-39	Tri					U	1.5				U	0.95
PCB-40	Tetra		11	7.7	17		5.3	9.5	7.9	12		2.4
PCB-41	Tetra		44	30	66	C	5	36	30	45	C	2.2
PCB-42	Tetra		22	15	33	C	5.3	17	14	21	C	2.4
PCB-43	Tetra		65	45	99	C	5.3	55	45	68	C	2.4
PCB-44	Tetra		53	36	81		5.3	43	36	53		2.4
PCB-45	Tetra		16	10	25		6.5	16	13	20		3.1
PCB-46	Tetra		6.6	4.4	10		6.5	6.2	5.1	7.8		3.1
PCB-47	Tetra		21	14	32		5.3	18	14	22		2.4
PCB-48	Tetra		12	8.5	19	C	5.3	11	8.8	13	C	2.4
PCB-49	Tetra					C043					C043	
PCB-50	Tetra					U	1.7				U	0.92
PCB-51	Tetra		6.8	4.6	11		6.5	6.9	5.7	8.7		3.1
PCB-52	Tetra		82	56	120	C	5.3	67	56	83	C	2.4
PCB-53	Tetra		18	12	29		6.5	20	17	25		3.1
PCB-54	Tetra					U	1.2				U	0.64
PCB-55	Tetra		2.1	1.5	3.1		4.3	1.7	1.4	2.1		1.8
PCB-56	Tetra		20	14	29	C	4.3	14	12	17	C	1.8
PCB-57	Tetra					U	0.92				U	0.44
PCB-58	Tetra					U	0.94				U	0.45

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010					LDW-Y1-SC-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-1	Mono					U	6.9				U	6
PCB-2	Mono					U	1.9				U	1.8
PCB-3	Mono					U	1.8				U	1.8
PCB-4	Di		27	27	30		16	42	41	45		15
PCB-5	Di					U	2				U	1.9
PCB-6	Di		17	16	23		8.1	21	20	23		7.9
PCB-7	Di					U	1.9				U	1.9
PCB-8	Di		33	31	44		8.1	43	40	47		7.9
PCB-9	Di					U	1.9				U	1.9
PCB-10	Di					U	4.4				U	4.1
PCB-11	Di		3.4	2.6	5.2		5.1	2.7	2.5	2.9		4.4
PCB-12	Di					U	1.3				U	1.1
PCB-13	Di					U	1.3				U	1.1
PCB-14	Di	PRC										
PCB-15	Di		9.7	7.5	15		5.1	8.1	7.5	8.9		4.4
PCB-16	Tri		18	14	28		5.2	21	20	24		4.5
PCB-17	Tri		28	22	43		5.2	34	31	37		4.5
PCB-18	Tri		62	49	96		5.2	73	67	80		4.5
PCB-19	Tri		12	11	18		7	14	13	16		6.7
PCB-20	Tri		27	19	42	C	4.4	27	25	30	C	3.1
PCB-21	Tri					C020					C020	
PCB-22	Tri		17	12	27		4.4	16	15	18		3.1
PCB-23	Tri					U	1.5				U	0.59
PCB-24	Tri		4.4	3.4	6.7	J	5.2	3.8	3.5	4.2	J	4.5
PCB-25	Tri		7.2	5.1	11		4.4	6.7	6.1	7.3		3.1
PCB-26	Tri		15	10	23		4.4	14	13	16		3.1
PCB-27	Tri		5.5	4.3	8.5		5.2	7	6.4	7.7		4.5
PCB-28	Tri		53	38	83		4.4	51	46	56		3.1
PCB-29	Tri					U	1.5				U	0.56
PCB-30	Tri					U	1.2				U	0.49
PCB-31	Tri		53	38	83		4.4	52	48	58		3.1
PCB-32	Tri		28	22	43		5.2	29	27	32		4.5
PCB-33	Tri					C020					C020	
PCB-34	Tri					U	1.6				U	0.63
PCB-35	Tri					U	1.4				U	0.43
PCB-36	Tri	PRC										
PCB-37	Tri		8.5	5.9	13		4	6.9	6.3	7.6		2.2
PCB-38	Tri					U	1.4				U	0.41
PCB-39	Tri					U	1.3				U	0.4
PCB-40	Tetra		16	11	23		3.9	9.9	9.1	11		1.9
PCB-41	Tetra		60	42	88	C	3.9	40	37	44	C	1.8
PCB-42	Tetra		29	20	43	C	3.9	18	17	20	C	1.9
PCB-43	Tetra		85	59	130	C	3.9	58	53	63	C	1.9
PCB-44	Tetra		68	47	100		3.9	48	44	53		1.9
PCB-45	Tetra		20	14	30		4.1	16	14	17		2.5
PCB-46	Tetra		8.8	6.1	13		4.1	6.1	5.6	6.7		2.5
PCB-47	Tetra		26	18	39		3.9	19	18	21		1.9
PCB-48	Tetra		18	13	27	C	3.9	11	9.8	12	C	1.9
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		1	0.7	1.5	J	4.1				U	0.52
PCB-51	Tetra		8.9	6.2	14		4.1	6.6	6.1	7.3		2.5
PCB-52	Tetra		110	75	160	C	3.9	72	66	78	C	1.9
PCB-53	Tetra		25	17	38		4.1	19	17	21		2.5
PCB-54	Tetra		1.2	0.84	1.8	J	4				U	0.36
PCB-55	Tetra		2.3	1.6	3.3		3.9	1.7	1.6	1.8		1.5
PCB-56	Tetra		29	21	42	C	3.9	17	16	19	C	1.5
PCB-57	Tetra		1.1	0.75	1.5	J	3.9				U	0.26
PCB-58	Tetra					U	0.94				U	0.26

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CA-S010					LDW-Y1-SU-ENR+AC-CB-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-1	Mono		170	170	180		33				U	5.6
PCB-2	Mono					U	2.2				U	1.8
PCB-3	Mono		5.1	4.7	5.9	J	8.3				U	1.8
PCB-4	Di		140	140	160		13	30	28	41		14
PCB-5	Di		8.1	7.4	9.5		7	7.4	6.1	11	J	7.8
PCB-6	Di		54	49	63		7	23	19	34		7.8
PCB-7	Di		18	16	21		7	5.5	4.5	8	J	7.8
PCB-8	Di		150	140	180		7	47	38	67		7.8
PCB-9	Di		16	14	18		7	4.9	4	7.1	J	7.8
PCB-10	Di		19	18	21		13	6.6	6	9	J	14
PCB-11	Di					UB	3.9				UB	4.8
PCB-12	Di		3.4	3	4.1	J	3.9				U	0.85
PCB-13	Di					U	1.1				U	0.84
PCB-14	Di	PRC										
PCB-15	Di		11	9.7	13		3.9	8.3	6.3	12		4.8
PCB-16	Tri		88	77	100		3.9	50	38	73		4.9
PCB-17	Tri		150	130	180		3.9	91	68	130		4.9
PCB-18	Tri		330	290	400		3.9	200	150	290		4.9
PCB-19	Tri		49	44	58		5.9	28	22	41		6.7
PCB-20	Tri		88	76	100	C	2.7	64	47	92	C	3.7
PCB-21	Tri					C020					C020	
PCB-22	Tri		49	42	58		2.7	37	27	53		3.7
PCB-23	Tri					U	0.5				U	0.74
PCB-24	Tri		13	11	15		3.9	8.3	6.3	12		4.9
PCB-25	Tri		20	17	23		2.7	14	10	20		3.7
PCB-26	Tri		47	41	56		2.7	36	27	52		3.7
PCB-27	Tri		16	14	19		3.9	11	8.2	16		4.9
PCB-28	Tri		140	120	170		2.7	110	80	160		3.7
PCB-29	Tri		1.5	1.3	1.8	J	2.7	1.2	0.9	1.7	J	3.7
PCB-30	Tri					U	0.5				U	1.3
PCB-31	Tri		170	150	200		2.7	120	89	170		3.7
PCB-32	Tri		100	90	120		3.9	69	52	100		4.9
PCB-33	Tri					C020					C020	
PCB-34	Tri		2.2	1.9	2.7	J	2.7	1.5	1.1	2.2	J	3.7
PCB-35	Tri		1.3	1.1	1.5	J	1.9	1.7	1.2	2.3	J	2.9
PCB-36	Tri	PRC										
PCB-37	Tri		13	11	16		1.9	12	9.1	17		2.9
PCB-38	Tri		1.1	0.97	1.3	J	1.9	1.2	0.9	1.7	J	2.9
PCB-39	Tri					U	0.34				U	0.55
PCB-40	Tetra		30	26	35		1.7	30	22	41		2.6
PCB-41	Tetra		130	110	150	C	1.6	130	95	170	C	2.5
PCB-42	Tetra		60	52	71	C	1.7	57	42	78	C	2.6
PCB-43	Tetra		190	170	230	C	1.7	170	130	230	C	2.6
PCB-44	Tetra		180	150	210		1.7	160	120	220		2.6
PCB-45	Tetra		48	41	57		2.2	40	30	57		3.1
PCB-46	Tetra		19	17	23		2.2	16	12	23		3.1
PCB-47	Tetra		51	44	60		1.7	49	37	68		2.6
PCB-48	Tetra		46	39	54	C	1.7	39	29	54	C	2.6
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		1.7	1.4	2	J	2.2	1.6	1.1	2.2	J	3.1
PCB-51	Tetra		16	14	19		2.2	14	10	20		3.1
PCB-52	Tetra		250	210	290	C	1.7	210	160	290	C	2.6
PCB-53	Tetra		51	44	60		2.2	41	30	57		3.1
PCB-54	Tetra		1.1	0.97	1.3	J	2	1.1	0.81	1.5	J	3
PCB-55	Tetra		3.5	3	4		1.3	3.9	2.9	5.2		2.2
PCB-56	Tetra		49	43	58	C	1.3	51	39	69	C	2.2
PCB-57	Tetra		1.2	1.1	1.5	J	1.3	1.2	0.87	1.6	J	2.2
PCB-58	Tetra		0.64	0.56	0.75	J	1.3	0.74	0.56	1	J	2.2

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010					LDW-Y1-SU-ENR-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-1	Mono		13	12	14	J	33	13	13	15	J	34
PCB-2	Mono					U	1.9				U	1.4
PCB-3	Mono					U	1.8				U	1.4
PCB-4	Di		50	46	60		14	140	130	160		15
PCB-5	Di		4.1	3.6	5.1	J	7.7	3.8	3.3	4.5	J	8.1
PCB-6	Di		31	27	38		7.7	69	60	84		8.1
PCB-7	Di		5.2	4.5	6.4	J	7.7	13	11	15		8.1
PCB-8	Di		85	74	100		7.7	200	170	240		8.1
PCB-9	Di		7.4	6.4	9.1	J	7.7	9.7	8.4	12		8.1
PCB-10	Di		12	11	15	J	14	12	11	14	J	15
PCB-11	Di					UB	4.4				UB	4.8
PCB-12	Di		2.8	2.4	3.4	J	4.4	1.5	1.3	1.8	J	4.8
PCB-13	Di					U	1.2	5.3	4.5	6.5		4.8
PCB-14	Di	PRC										
PCB-15	Di		14	12	17		4.4	30	26	37		4.8
PCB-16	Tri		71	60	88		4.5	180	150	220		4.9
PCB-17	Tri		130	110	160		4.5	280	230	340		4.9
PCB-18	Tri		290	240	350		4.5	580	490	710		4.9
PCB-19	Tri		42	36	52		6.6	77	66	93		7
PCB-20	Tri		84	70	100	C	3.2	200	170	240	C	3.6
PCB-21	Tri					C020					C020	
PCB-22	Tri		50	42	61		3.2	120	99	140		3.6
PCB-23	Tri					U	0.35	0.75	0.64	0.91	J	3.6
PCB-24	Tri		12	10	15		4.5	20	17	25		4.9
PCB-25	Tri		20	16	24		3.2	44	37	53		3.6
PCB-26	Tri		48	40	59		3.2	100	84	120		3.6
PCB-27	Tri		13	11	17		4.5	33	28	40		4.9
PCB-28	Tri		160	130	190		3.2	360	300	430		3.6
PCB-29	Tri		1.5	1.3	1.9	J	3.2	3.2	2.7	3.8	J	3.6
PCB-30	Tri					U	1.5				U	0.7
PCB-31	Tri		160	140	200		3.2	370	310	440		3.6
PCB-32	Tri		97	82	120		4.5	180	150	220		4.9
PCB-33	Tri					C020					C020	
PCB-34	Tri		2.3	2	2.9	J	3.2	4.3	3.6	5.2		3.6
PCB-35	Tri		1.7	1.5	2.1	J	2.3	2.5	2.1	2.9	J	2.7
PCB-36	Tri	PRC										
PCB-37	Tri		15	13	18		2.3	35	29	41		2.7
PCB-38	Tri		1.4	1.2	1.7	J	2.3	2.5	2.2	3	J	2.7
PCB-39	Tri					U	0.24				U	0.28
PCB-40	Tetra		31	26	37		2	63	54	75		2.4
PCB-41	Tetra		130	110	160	C	1.9	270	230	310	C	2.2
PCB-42	Tetra		59	50	71	C	2	120	100	140	C	2.4
PCB-43	Tetra		190	160	230	C	2	370	320	440	C	2.4
PCB-44	Tetra		180	150	210		2	340	290	400		2.4
PCB-45	Tetra		48	40	58		2.6	92	78	110		2.9
PCB-46	Tetra		17	14	21		2.6	36	30	43		2.9
PCB-47	Tetra		54	46	64		2	98	84	120		2.4
PCB-48	Tetra		42	36	51	C	2	92	79	110	C	2.4
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		1.6	1.3	1.9	J	2.6	2.7	2.3	3.3		2.9
PCB-51	Tetra		15	13	18		2.6	32	27	38		2.9
PCB-52	Tetra		240	200	290	C	2	470	400	560	C	2.4
PCB-53	Tetra		48	40	58		2.6	97	82	120		2.9
PCB-54	Tetra		1.1	0.94	1.3	J	2.4	2.1	1.7	2.4	J	2.8
PCB-55	Tetra		3.2	2.7	3.8		1.6	3.8	3.3	4.5		1.9
PCB-56	Tetra		50	43	60	C	1.6	120	100	130	C	1.9
PCB-57	Tetra		1.2	0.99	1.4	J	1.6	2.3	2	2.7		1.9
PCB-58	Tetra		0.61	0.52	0.72	J	1.6	0.98	0.85	1.1	J	1.9

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR-CB-S010					LDW-Y1-SU-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-1	Mono		11	11	22	J	32	20	20	21	J	32
PCB-2	Mono					U	1.2				U	2
PCB-3	Mono		3	2.2	7.6	J	9.9				U	1.9
PCB-4	Di		110	98	280		14	110	100	130		13
PCB-5	Di		15	10	38		9	9.8	8.5	12		7.4
PCB-6	Di		60	41	150		9	49	43	62		7.4
PCB-7	Di		6.6	4.5	17	J	9	11	9.4	14		7.4
PCB-8	Di		170	110	420		9	140	120	180		7.4
PCB-9	Di		11	7.5	28		9	12	11	15		7.4
PCB-10	Di		10	9.3	26	J	14	13	13	16	J	13
PCB-11	Di					UB	7.1				UB	4.6
PCB-12	Di		3.4	1.9	7.1	J	7.1				U	1.8
PCB-13	Di		8.2	4.6	17		7.1				U	0.71
PCB-14	Di	PRC										
PCB-15	Di		38	21	79		7.1	25	20	33		4.6
PCB-16	Tri		160	93	350		7.1	100	83	130		4.7
PCB-17	Tri		280	160	590		7.1	210	170	270		4.7
PCB-18	Tri		630	360	1300		7.1	460	370	590		4.7
PCB-19	Tri		74	46	180		8.3	59	50	76		6.4
PCB-20	Tri		250	150	460	C	6.5	170	130	210	C	3.6
PCB-21	Tri					C020					C020	
PCB-22	Tri		150	90	280		6.5	100	80	130		3.6
PCB-23	Tri					U	0.73	1.1	0.88	1.4	J	3.6
PCB-24	Tri		29	17	62		7.1	20	16	26		4.7
PCB-25	Tri		55	33	100		6.5	32	26	41		3.6
PCB-26	Tri		120	73	230		6.5	74	59	95		3.6
PCB-27	Tri		29	16	61		7.1	22	18	28		4.7
PCB-28	Tri		440	260	800		6.5	280	230	360		3.6
PCB-29	Tri		3.8	2.2	6.8	J	6.5	2.6	2.1	3.3	J	3.6
PCB-30	Tri					U	1.2				U	1.1
PCB-31	Tri		500	290	900		6.5	290	230	370		3.6
PCB-32	Tri		210	120	450		7.1	170	140	220		4.7
PCB-33	Tri					C020					C020	
PCB-34	Tri		5.1	3	9.3	J	6.5	3.5	2.8	4.5	J	3.6
PCB-35	Tri		5.8	3.7	9.4	J L	6.2	2.9	2.3	3.6		2.9
PCB-36	Tri	PRC										
PCB-37	Tri		60	38	98	L	6.2	29	24	37		2.9
PCB-38	Tri		4.7	3	7.6	J L	6.2	2.3	1.8	2.8	J	2.9
PCB-39	Tri					U L	0.72				U	0.34
PCB-40	Tetra		110	72	180	L	6.1	56	45	69		2.6
PCB-41	Tetra		490	310	780	C L	6.1	240	190	290	C	2.5
PCB-42	Tetra		210	130	340	C L	6.1	110	86	130	C	2.6
PCB-43	Tetra		650	420	1000	C L	6.1	320	260	390	C	2.6
PCB-44	Tetra		590	370	930	L	6.1	280	230	350		2.6
PCB-45	Tetra		140	90	240		6.3	78	63	98		3.1
PCB-46	Tetra		53	33	89		6.3	30	24	38		3.1
PCB-47	Tetra		150	99	250	L	6.1	86	70	110		2.6
PCB-48	Tetra		170	110	270	C L	6.1	77	63	96	C	2.6
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		3.7	2.3	6.3	J	6.3	2.5	2	3.1	J	3.1
PCB-51	Tetra		46	28	76		6.3	27	22	34		3.1
PCB-52	Tetra		830	530	1300	C L	6.1	410	330	510	C	2.6
PCB-53	Tetra		140	89	240		6.3	80	64	100		3.1
PCB-54	Tetra		3.3	2.1	5.5	J L	6.3	1.9	1.5	2.4	J	3
PCB-55	Tetra		13	7.8	21	L	6	4.9	4.1	6		2.3
PCB-56	Tetra		240	150	400	C L	6	110	94	140	C	2.3
PCB-57	Tetra		4.6	2.8	7.6	J L	6	1.6	1.3	2	J	2.3
PCB-58	Tetra		2.4	1.5	3.9	J L	6	1	0.85	1.3	J	2.3

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB					LDW-Y1-IN-ENR+AC-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-1	Mono					U	5.7				U	4.5
PCB-2	Mono					U	1.6				U	1.1
PCB-3	Mono					U	1.5				U	1.1
PCB-4	Di					U	2.2	14	14	14		12
PCB-5	Di					U	0.95				U	0.74
PCB-6	Di					U	1	5.9	5.9	5.9	J	6
PCB-7	Di					U	1				U	0.81
PCB-8	Di					U	1.1	14	14	14		6
PCB-9	Di					U	1				U	0.83
PCB-10	Di					U	2				U	2
PCB-11	Di					UB	5.7	1.8	1.8	1.9		3.1
PCB-12	Di					U	0.68				U	0.42
PCB-13	Di					U	0.71				U	0.43
PCB-14	Di	PRC										
PCB-15	Di					U	0.68	4	3.8	4.1		3.1
PCB-16	Tri		2.5	1.9	3.4	J	5.8	7.3	7.1	7.7		3.2
PCB-17	Tri		1.8	1.4	2.5	J	5.8	11	11	12		3.2
PCB-18	Tri		3.8	3	5.3	J	5.8	26	25	27		3.2
PCB-19	Tri		1.4	1.1	1.8	J	7.4	4.5	4.4	4.5	J	4.9
PCB-20	Tri		0.57	0.43	0.78	C,J	4.9	11	10	12	C	2.3
PCB-21	Tri					C020					C020	
PCB-22	Tri		0.91	0.69	1.3	J	4.9	5.2	4.9	5.6		2.3
PCB-23	Tri					U	0.54				U	0.56
PCB-24	Tri					U	0.52	1.3	1.2	1.3	J	3.2
PCB-25	Tri					U	0.46	3.3	3.1	3.5		2.3
PCB-26	Tri					U	0.57	7.3	6.9	7.8		2.3
PCB-27	Tri					U	0.55	2.1	2	2.2	J	3.2
PCB-28	Tri		0.85	0.65	1.2	J	4.9	17	16	18		2.3
PCB-29	Tri					U	0.54				U	0.59
PCB-30	Tri					U	0.54				U	0.4
PCB-31	Tri		0.61	0.46	0.84	J	4.9	17	16	19		2.3
PCB-32	Tri		0.78	0.61	1.1	J	5.8	4.2	4.1	4.4		3.2
PCB-33	Tri					C020					C020	
PCB-34	Tri					U	0.6				U	0.67
PCB-35	Tri					U	0.51				U	0.48
PCB-36	Tri	PRC										
PCB-37	Tri					U	0.43	1.9	1.8	2.1		1.8
PCB-38	Tri					U	0.47				U	0.46
PCB-39	Tri					U	0.48				U	0.46
PCB-40	Tetra					U	0.65	2.8	2.6	3		1.7
PCB-41	Tetra		0.99	0.76	1.3	C,J	4.2	12	11	13	C	1.6
PCB-42	Tetra		0.86	0.67	1.1	C,J	4.3	5.8	5.4	6.3	C	1.7
PCB-43	Tetra		1.1	0.84	1.4	C,J	4.3	25	23	26	C	1.7
PCB-44	Tetra		1.3	1	1.7	J	4.3	20	19	22		1.7
PCB-45	Tetra					U	0.64	3.8	3.6	4.1		1.9
PCB-46	Tetra					U	0.65	1.7	1.6	1.8	J	1.9
PCB-47	Tetra		1.8	1.4	2.4	J	4.3	6	5.6	6.5		1.7
PCB-48	Tetra		0.9	0.7	1.2	C,J	4.3	3.8	3.5	4.1	C	1.7
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		0.71	0.54	0.96	J	4.6	0.36	0.34	0.39	J	1.9
PCB-51	Tetra		1.1	0.8	1.4	J	4.6	1.4	1.3	1.5	J	1.9
PCB-52	Tetra		2.6	2	3.4	C	4.3	35	33	38	C	1.7
PCB-53	Tetra		0.78	0.59	1	J	4.6	5.6	5.2	6		1.9
PCB-54	Tetra					U	0.42	0.28	0.26	0.3	J	1.8
PCB-55	Tetra		0.21	0.17	0.27	L	4.1	1.4	1.3	1.5		1.5
PCB-56	Tetra					UC L	0.99	5.1	4.7	5.5	C	1.5
PCB-57	Tetra					U L	0.38	0.27	0.25	0.29	J	1.5
PCB-58	Tetra					U L	0.38	0.21	0.2	0.23	J	1.5

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR+AC-CB-S010					LDW-Y1-IN-ENR+AC-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-1	Mono					U	4.6				U	4.4
PCB-2	Mono					U	1.2				U	1.2
PCB-3	Mono					U	1.2				U	1.2
PCB-4	Di					U	3.6	11	11	13	J	13
PCB-5	Di					U	1.4				U	1.5
PCB-6	Di		7.4	7.3	8.4		6	5.1	4.7	6	J	6.5
PCB-7	Di					U	1.5				U	1.6
PCB-8	Di		7.7	7.6	8.7		6	11	10	13		6.5
PCB-9	Di					U	1.5				U	1.7
PCB-10	Di					U	3.7				U	3.9
PCB-11	Di					UB	3.2				UB	3.5
PCB-12	Di					U	0.78				U	0.88
PCB-13	Di					U	0.8				U	0.9
PCB-14	Di	PRC										
PCB-15	Di					U	0.78				U	0.87
PCB-16	Tri		4.8	4.4	6.3		3.3	3.4	3	4.1	J	3.5
PCB-17	Tri		6.6	6	8.5		3.3	6	5.3	7.3		3.5
PCB-18	Tri		17	15	22		3.3	14	12	17		3.5
PCB-19	Tri		4.5	4.4	5.3	J	5	3.3	3	4	J	5.4
PCB-20	Tri		4.1	3.3	5.6	C	2.4	3.3	2.8	4.1	C	2.4
PCB-21	Tri					C020					C020	
PCB-22	Tri		2.4	2	3.3		2.4	1.9	1.6	2.4	J	2.4
PCB-23	Tri					U	0.66				U	0.59
PCB-24	Tri		1.1	0.98	1.4	J	3.3	0.84	0.74	1	J	3.5
PCB-25	Tri		3.3	2.7	4.5		2.4	2.4	2	2.9	J	2.4
PCB-26	Tri		6.9	5.7	9.5		2.4	5.2	4.5	6.4		2.4
PCB-27	Tri		1.4	1.3	1.9	J	3.3	1.4	1.3	1.8	J	3.5
PCB-28	Tri		8.7	7.2	12		2.4	7.5	6.4	9.2		2.4
PCB-29	Tri					U	0.69				U	0.63
PCB-30	Tri					U	0.4				U	0.43
PCB-31	Tri		11	8.8	15		2.4	8	6.9	9.9		2.4
PCB-32	Tri		2.5	2.3	3.3	J	3.3	3.2	2.8	3.9	J	3.5
PCB-33	Tri					C020					C020	
PCB-34	Tri					U	0.79				U	0.71
PCB-35	Tri					U	0.58				U	0.46
PCB-36	Tri	PRC										
PCB-37	Tri		1.1	0.81	1.5	J	1.9	0.83	0.7	1	J	1.7
PCB-38	Tri					U	0.55				U	0.43
PCB-39	Tri					U	0.55				U	0.43
PCB-40	Tetra		1.5	1.1	2.1	J	1.8	0.95	0.8	1.2	J	1.5
PCB-41	Tetra		7.7	5.8	11	C	1.7	5.4	4.5	6.5	C	1.4
PCB-42	Tetra		3.2	2.4	4.5	C	1.8	2.3	1.9	2.8	C	1.5
PCB-43	Tetra		16	12	22	C	1.8	11	9.4	14	C	1.5
PCB-44	Tetra		10	7.8	14		1.8	8.3	7	10		1.5
PCB-45	Tetra		2.1	1.7	3		2	1.8	1.5	2.2	J	1.9
PCB-46	Tetra		1.2	0.94	1.7	J	2	0.68	0.58	0.84	J	1.9
PCB-47	Tetra		3.9	3	5.5		1.8	2.9	2.4	3.5		1.5
PCB-48	Tetra		1.9	1.4	2.6	C	1.8	1.7	1.5	2.1	C	1.5
PCB-49	Tetra					C043					C043	
PCB-50	Tetra		0.39	0.31	0.55	J	2	0.18	0.15	0.22	J	1.9
PCB-51	Tetra		1.1	0.84	1.5	J	2	0.86	0.73	1.1	J	1.9
PCB-52	Tetra		22	17	31	C	1.8	17	14	21	C	1.5
PCB-53	Tetra		3.7	2.9	5.2		2	3.3	2.8	4.1		1.9
PCB-54	Tetra					U	0.19				U	0.19
PCB-55	Tetra		1	0.77	1.4		1.6	1	0.85	1.2		1.1
PCB-56	Tetra		3.8	2.8	5.2	C	1.6	2	1.7	2.4	C	1.1
PCB-57	Tetra					U	0.15				U	0.12
PCB-58	Tetra					U	0.16				U	0.12

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010					LDW-Y1-IN-ENR-CB-S010					LDW-Y1-IN-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-1	Mono					U	9.1				U	2.9				U	7.2
PCB-2	Mono					U	2.7				U	0.81				U	2.3
PCB-3	Mono					U	2.6	1.9	1.7	2.6	J	8.4				U	2.2
PCB-4	Di		48	45	87		20	33	32	43		13	32	27	65		18
PCB-5	Di					U	2.7				U	1.3				U	2.3
PCB-6	Di		15	12	29		12	12	10	16		7.1	13	9.5	26		10
PCB-7	Di					U	2.7				U	1.3				U	2.3
PCB-8	Di		22	18	43		12	18	16	25		7.1	26	19	53		10
PCB-9	Di					U	2.7				U	1.3				U	2.3
PCB-10	Di					U	5.4				U	2.7				U	4.6
PCB-11	Di					UB	7.2				UB	4.1				UB	6.2
PCB-12	Di					U	1.8				U	0.76				U	1.5
PCB-13	Di					U	1.8				U	0.77				U	1.5
PCB-14	Di	PRC															
PCB-15	Di		8	5.4	15		7.2	6.7	5.3	9.4		4.1	9.4	6.1	18		6.2
PCB-16	Tri		8.7	5.9	17		7.3	8.3	6.6	12		4.2	12	7.8	23		6.3
PCB-17	Tri		21	14	41		7.3	14	11	20		4.2	23	15	46		6.3
PCB-18	Tri		52	35	100		7.3	34	27	48		4.2	56	36	110		6.3
PCB-19	Tri		12	9.1	23		10	9.9	8.4	14		6	13	8.8	25		8.8
PCB-20	Tri		11	6.8	20	C	5.6	6.3	4.8	8.8	C	3	11	6.9	20	C	4.7
PCB-21	Tri					C020					C020					C020	
PCB-22	Tri		8.3	5.3	15		5.6	4.3	3.3	6		3	7.9	5	15		4.7
PCB-23	Tri					U	1.2				U	0.71				U	1.4
PCB-24	Tri		4.3	2.9	8.2	J	7.3	4.2	3.4	5.9		4.2	4.8	3.1	9.3	J	6.3
PCB-25	Tri		9.4	6	17		5.6	6	4.7	8.4		3	9	5.7	17		4.7
PCB-26	Tri		24	15	44		5.6	16	12	22		3	22	14	41		4.7
PCB-27	Tri		5.4	3.6	10	J	7.3	2.9	2.3	4.1	J	4.2	6.4	4.2	12		6.3
PCB-28	Tri		31	20	57		5.6	18	14	25		3	30	19	55		4.7
PCB-29	Tri					U	1.2				U	0.71				U	1.4
PCB-30	Tri					U	1.6				U	0.68				U	1.2
PCB-31	Tri		33	21	60		5.6	22	17	30		3	34	21	62		4.7
PCB-32	Tri		11	7.6	22		7.3	7.2	5.8	10		4.2	15	9.5	28		6.3
PCB-33	Tri					C020					C020					C020	
PCB-34	Tri					U	1.3				U	0.77				U	1.5
PCB-35	Tri					U	1.1				U	0.6				U	1.2
PCB-36	Tri	PRC															
PCB-37	Tri		3.6	2.2	6.3	J	4.5	2.1	1.6	2.9	J	2.3	3.5	2.2	6.1		3.5
PCB-38	Tri					U	0.99				U	0.54				U	1.1
PCB-39	Tri					U	1				U	0.55				U	1.1
PCB-40	Tetra		6.3	3.9	11		4.1	3.7	2.8	5		2	7.1	4.5	12		3.1
PCB-41	Tetra		27	17	45	C	3.9	17	13	24	C	1.9	27	17	46	C	3
PCB-42	Tetra		13	8.3	23	C	4.1	9.5	7.3	13	C	2	15	9.3	25	C	3.1
PCB-43	Tetra		61	38	100	C	4.1	44	34	60	C	2	59	37	99	C	3.1
PCB-44	Tetra		44	27	75		4.1	30	23	41		2	41	26	69		3.1
PCB-45	Tetra		8.3	5.2	15		4.8	6.6	5	9.1		2.5	10	6.2	18		3.9
PCB-46	Tetra		3.5	2.2	6.2	J	4.8	2.4	1.8	3.3	J	2.5	4	2.5	7.1		3.9
PCB-47	Tetra		15	9.5	26		4.1	11	8.7	15		2	16	10	28		3.1
PCB-48	Tetra		7.7	4.8	13	C	4.1	4.4	3.4	6	C	2	7.3	4.6	12	C	3.1
PCB-49	Tetra					C043					C043					C043	
PCB-50	Tetra					U	1.1				U	0.47	1.1	0.69	2	J	3.9
PCB-51	Tetra		3.7	2.3	6.7	J	4.8	2.6	2	3.5		2.5	4.5	2.8	8		3.9
PCB-52	Tetra		110	66	180	C	4.1	76	58	100	C	2	96	61	160	C	3.1
PCB-53	Tetra		16	10	29		4.8	13	10	18		2.5	17	11	31		3.9
PCB-54	Tetra					U	0.83				U	0.33				U	0.56
PCB-55	Tetra		1.2	0.8	2.1		3.5	0.88	0.68	1.2		1.6	1.7	1.1	2.8		2.6
PCB-56	Tetra		10	6.6	17	C	3.5	5.9	4.5	7.9	C	1.6	9.4	6.1	15	C	2.6
PCB-57	Tetra					U	0.66				U	0.24	0.67	0.43	1.1	J	2.6
PCB-58	Tetra					U	0.64				U	0.23				U	0.4

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010					LDW-Y1-SC-ENR+AC-CB-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		16	13	20	C	2.6	29	18	48	C	2.6
PCB-62	Tetra					U	0.72				U	0.61
PCB-63	Tetra		0.91	0.73	1.2	J	2.6	1.6	1	2.7	J	2.6
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	0.69				U	0.58
PCB-66	Tetra		17	13	21	C	2.6	28	18	47	C	2.6
PCB-67	Tetra		0.91	0.73	1.2	J	2.6	1.1	0.71	1.9	J	2.6
PCB-68	Tetra					U	0.5	0.45	0.29	0.76	J	2.6
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U	0.71				U	0.6
PCB-74	Tetra		7.3	5.9	9.3		2.6	12	7.7	20		2.6
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		1.2	0.98	1.5	J	2	1.4	0.87	2.2	J	2.2
PCB-78	Tetra	PRC										
PCB-79	Tetra					U	0.55	0.7	0.45	1.1	J	2.2
PCB-80	Tetra					U	0.37				U	0.36
PCB-81	Tetra		1.1	0.88	1.4	J	2	2.2	1.4	3.5	J	2.2
PCB-82	Penta		2.7	2.3	3.4		1.6	4	2.6	6.3		1.9
PCB-83	Penta		1.1	0.9	1.4	C,J	1.6	1.9	1.3	3	C	1.9
PCB-84	Penta		11	8.9	14	C	1.7	18	12	29	C	2
PCB-85	Penta		3.3	2.7	4.1	C	1.6	5.6	3.7	8.7	C	1.9
PCB-86	Penta					U	0.37				U	0.51
PCB-87	Penta		7.5	6.1	9.3	C	1.6	13	8.3	20	C	1.9
PCB-88	Penta					UC	0.46				UC	0.45
PCB-89	Penta					U	0.48	0.99	0.64	1.6	J	2.1
PCB-90	Penta		24	20	30	C	1.6	43	28	67	C	1.9
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U	0.51				U	0.5
PCB-94	Penta					U	0.5				U	0.49
PCB-95	Penta		32	26	39		1.9	57	37	91		2.1
PCB-96	Penta					U	0.33	0.96	0.63	1.5	J	2
PCB-97	Penta		5.6	4.6	6.9		1.6	9.1	6	14		1.9
PCB-98	Penta					UC	0.42				UC	0.41
PCB-99	Penta		9.5	7.7	12		1.6	16	11	25		1.9
PCB-100	Penta					U	0.43	1.5	0.95	2.3	J	2.1
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta					U	0.43	1.6	1	2.5	J	2.1
PCB-104	Penta	PRC										
PCB-105	Penta		3.8	3.1	4.6		1.3	7	4.6	11	L	1.6
PCB-106	Penta		10	8.6	13	C	1.3	20	13	31	C L	1.6
PCB-107	Penta		0.91	0.74	1.1	C,J	1.3	1.7	1.1	2.6	C L	1.6
PCB-108	Penta					C107					C107	
PCB-109	Penta					U	0.29				U	0.39
PCB-110	Penta		19	15	23		1.6	32	21	50		1.9
PCB-111	Penta					UC	0.23	0.56	0.37	0.86	C,J L	1.7
PCB-112	Penta					C083					C083	
PCB-113	Penta					U	0.33				U	0.45
PCB-114	Penta		0.34	0.28	0.42	J	1.3				U L	0.45
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CC-S010					LDW-Y1-SC-ENR-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		40	28	59	C	4.3	28	23	34	C	1.8
PCB-62	Tetra					U	1.1				U	0.58
PCB-63	Tetra		2	1.4	3	J	4.3	1.4	1.2	1.7	J	1.8
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	1.1				U	0.55
PCB-66	Tetra		38	27	56	C	4.3	28	24	34	C	1.8
PCB-67	Tetra		2.1	1.4	3	J	4.3	1.2	1	1.5	J	1.8
PCB-68	Tetra		0.94	0.65	1.4	J	4.3	0.63	0.52	0.76	J	1.8
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U	1.1				U	0.57
PCB-74	Tetra		18	13	27		4.3	13	11	16		1.8
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		2.6	1.9	3.7	J	3.5	1.7	1.4	2		1.4
PCB-78	Tetra	PRC										
PCB-79	Tetra		0.86	0.62	1.2	J	3.5	0.54	0.46	0.65	J	1.4
PCB-80	Tetra		0.78	0.56	1.1	J	3.5				U	0.29
PCB-81	Tetra		2.2	1.5	3.1	J	3.5	1.1	0.96	1.4	J	1.4
PCB-82	Penta		5.9	4.3	8.2	L	2.9	3.3	2.8	3.9		1.1
PCB-83	Penta		2.4	1.7	3.3	C,J L	2.9	1.7	1.4	2	C	1.1
PCB-84	Penta		24	17	34	C	3.2	17	15	21	C	1.2
PCB-85	Penta		6.9	5	9.6	C L	2.9	4.4	3.8	5.2	C	1.1
PCB-86	Penta					U L	0.64				U	0.26
PCB-87	Penta		17	12	24	C L	2.9	10	8.9	12	C	1.1
PCB-88	Penta					UC	0.9				UC	0.25
PCB-89	Penta		1	0.73	1.4	J	3.4	0.8	0.68	0.96	J	1.3
PCB-90	Penta		57	41	79	C L	2.9	36	31	43	C	1.1
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U	1				U	0.28
PCB-94	Penta					U	0.99				U	0.28
PCB-95	Penta		75	54	110		3.4	54	46	65		1.3
PCB-96	Penta					U	0.67	0.82	0.7	0.98	J	1.2
PCB-97	Penta		11	8.2	16	L	2.9	7.2	6.1	8.6		1.1
PCB-98	Penta					UC	0.82				UC	0.23
PCB-99	Penta		21	15	29	L	2.9	13	11	16		1.1
PCB-100	Penta					U	0.84	1.1	0.9	1.3	J	1.3
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		2.6	1.9	3.7	J	3.4	1.3	1.1	1.6	J	1.3
PCB-104	Penta	PRC										
PCB-105	Penta		8.7	6.4	12	L	2.5	5.5	4.7	6.5		0.87
PCB-106	Penta		25	18	34	C L	2.5	15	13	17	C	0.87
PCB-107	Penta		2.1	1.5	2.9	C,J L	2.5	1.2	0.98	1.4	C	0.87
PCB-108	Penta					C107					C107	
PCB-109	Penta					U L	0.49				U	0.2
PCB-110	Penta		43	32	60	L	2.9	28	24	33		1.1
PCB-111	Penta					UC L	0.4	0.37	0.31	0.44	C,J	0.97
PCB-112	Penta					C083					C083	
PCB-113	Penta					U L	0.56				U	0.23
PCB-114	Penta		0.75	0.55	1	J L	2.5	0.48	0.41	0.57	J	0.87
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010					LDW-Y1-SC-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		55	39	79	C	3.9	33	30	36	C	1.5
PCB-62	Tetra					U	0.93				U	0.33
PCB-63	Tetra		2.9	2.1	4.2	J	3.9	1.4	1.3	1.6	J	1.5
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	0.89				U	0.32
PCB-66	Tetra		59	42	85	C	3.9	32	29	35	C	1.5
PCB-67	Tetra		2.4	1.7	3.4	J	3.9	1.4	1.3	1.5	J	1.5
PCB-68	Tetra		1.4	1	2	J	3.9	0.77	0.71	0.84	J	1.5
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U	0.92				U	0.33
PCB-74	Tetra		27	19	38		3.9	14	13	16		1.5
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		4.1	2.9	5.7	L	3.9	1.7	1.6	1.8		1.2
PCB-78	Tetra	PRC										
PCB-79	Tetra		1.5	1.1	2.1	J L	3.9	0.55	0.51	0.6	J	1.2
PCB-80	Tetra		0.39	0.28	0.55	J L	3.9	0.54	0.5	0.59	J	1.2
PCB-81	Tetra		4.4	3.2	6.2	L	3.9	1.8	1.6	1.9		1.2
PCB-82	Penta		12	8.4	16	L	3.9	4	3.7	4.4		0.94
PCB-83	Penta		6.3	4.6	8.8	C L	3.9	1.7	1.6	1.8	C	0.94
PCB-84	Penta		52	38	73	C L	3.9	19	18	21	C	1
PCB-85	Penta		14	10	20	C L	3.9	5.1	4.7	5.5	C	0.94
PCB-86	Penta					U L	1.4				U	0.31
PCB-87	Penta		35	26	49	C L	3.9	13	12	14	C	0.94
PCB-88	Penta					UC L	0.65				UC	0.23
PCB-89	Penta		2.1	1.5	2.9	J L	3.9	0.87	0.8	0.94	J	1.1
PCB-90	Penta		120	86	170	C L	3.9	42	39	45	C	0.94
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U L	0.72				U	0.25
PCB-94	Penta					U L	0.72				U	0.25
PCB-95	Penta		140	100	200	L	3.9	59	55	64		1.1
PCB-96	Penta		1.9	1.4	2.7	J L	3.9	0.79	0.73	0.86	J	1
PCB-97	Penta		25	18	35	L	3.9	8.4	7.7	9		0.94
PCB-98	Penta					UC L	0.59				UC	0.21
PCB-99	Penta		46	33	64	L	3.9	16	15	17		0.94
PCB-100	Penta		3	2.2	4.2	J L	3.9	1.1	1	1.2	J	1.1
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		4.2	3	5.9	L	3.9	1.7	1.5	1.8		1.1
PCB-104	Penta	PRC										
PCB-105	Penta		20	14	28	L	4	6.3	5.8	6.8		0.78
PCB-106	Penta		60	42	84	C L	4	17	16	19	C	0.78
PCB-107	Penta		5.3	3.7	7.4	C L	4	1.4	1.3	1.5	C	0.78
PCB-108	Penta					C107					C107	
PCB-109	Penta					U L	1				U	0.24
PCB-110	Penta		91	66	130	L	3.9	32	30	35		0.94
PCB-111	Penta		2.7	2	3.8	C,J L	4	0.46	0.42	0.5	C,J	0.86
PCB-112	Penta					C083					C083	
PCB-113	Penta					U L	1.2				U	0.27
PCB-114	Penta		1.9	1.4	2.8	J L	4	0.56	0.52	0.6	J	0.78
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CA-S010					LDW-Y1-SU-ENR+AC-CB-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		110	93	130	C	1.3	110	82	150	C	2.2
PCB-62	Tetra					U	0.39				U	0.61
PCB-63	Tetra		5	4.4	5.9		1.3	5.5	4.1	7.4		2.2
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	0.37				U	0.58
PCB-66	Tetra		90	78	110	C	1.3	92	70	120	C	2.2
PCB-67	Tetra		3.9	3.4	4.6		1.3				U	0.48
PCB-68	Tetra		1.7	1.5	2		1.3	2.1	1.6	2.9		2.2
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U	0.38				U	0.6
PCB-74	Tetra		46	40	54		1.3	47	35	63		2.2
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		4	3.5	4.6		1.1	5.1	3.9	6.7		1.9
PCB-78	Tetra	PRC										
PCB-79	Tetra		1.5	1.3	1.7		1.1	1.6	1.2	2.1	J	1.9
PCB-80	Tetra		1.1	0.99	1.3		1.1				U	0.37
PCB-81	Tetra		2.6	2.3	3.1		1.1	4	3.1	5.3		1.9
PCB-82	Penta		12	10	14		0.84	16	12	20	L	1.6
PCB-83	Penta		6.1	5.3	7	C	0.84	7.1	5.5	9.2	C L	1.6
PCB-84	Penta		61	53	70	C	0.92	69	53	90	C	1.7
PCB-85	Penta		15	13	17	C	0.84	18	14	23	C L	1.6
PCB-86	Penta					U	0.25				U L	0.47
PCB-87	Penta		38	33	44	C	0.84	47	37	61	C L	1.6
PCB-88	Penta		17	15	20	C	1	20	15	26	C	1.8
PCB-89	Penta		2.5	2.2	2.9		1	2.8	2.2	3.7		1.8
PCB-90	Penta		120	100	140	C	0.84	140	110	180	C L	1.6
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U	0.25				U	0.42
PCB-94	Penta		1.1	0.95	1.3		1	1.3	1	1.7	J	1.8
PCB-95	Penta		150	130	180		1	170	130	220		1.8
PCB-96	Penta		2.2	1.9	2.6		0.91	2.8	2.1	3.6		1.7
PCB-97	Penta		28	24	32		0.84	33	26	43	L	1.6
PCB-98	Penta					UC	0.2				UC	0.34
PCB-99	Penta		44	38	50		0.84	53	41	69	L	1.6
PCB-100	Penta		1.4	1.2	1.6		1	2.3	1.7	3		1.8
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		2.8	2.4	3.2		1	3	2.3	3.9		1.8
PCB-104	Penta	PRC										
PCB-105	Penta		18	16	20		0.7	24	18	30	L	1.4
PCB-106	Penta		51	45	59	C	0.7	65	51	83	C L	1.4
PCB-107	Penta		4.5	3.9	5.1	C	0.7	5.6	4.4	7.2	C L	1.4
PCB-108	Penta					C107					C107	
PCB-109	Penta					U	0.19				U L	0.36
PCB-110	Penta		96	84	110		0.84	110	86	140	L	1.6
PCB-111	Penta		1.8	1.6	2.1	C	0.77	1.8	1.4	2.4	C L	1.5
PCB-112	Penta					C083					C083	
PCB-113	Penta					U	0.22				U L	0.41
PCB-114	Penta		1.6	1.4	1.9		0.7	2.2	1.7	2.8	L	1.4
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010					LDW-Y1-SU-ENR-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		120	99	140	C	1.6	220	190	260	C	1.9
PCB-62	Tetra					U	0.4				U	0.39
PCB-63	Tetra		5.3	4.5	6.2		1.6	11	9.6	13		1.9
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	0.38				U	0.41
PCB-66	Tetra		95	82	110	C	1.6	190	170	220	C	1.9
PCB-67	Tetra		4.2	3.6	4.9		1.6	8.9	7.7	10		1.9
PCB-68	Tetra		2	1.7	2.4		1.6	3.4	2.9	4		1.9
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U	0.39				U	0.38
PCB-74	Tetra		48	41	56		1.6	110	91	120		1.9
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		4.2	3.6	4.9		1.3	8.7	7.5	10		1.6
PCB-78	Tetra	PRC										
PCB-79	Tetra		1.7	1.5	2		1.3	2.7	2.4	3.2		1.6
PCB-80	Tetra		1.8	1.5	2.1		1.3				U	0.23
PCB-81	Tetra		3.2	2.8	3.7		1.3	4.6	4	5.3		1.6
PCB-82	Penta		13	11	15		1	25	22	28		1.3
PCB-83	Penta		5.7	4.9	6.6	C	1	11	9.5	12	C	1.3
PCB-84	Penta		58	50	67	C	1.1	110	100	130	C	1.4
PCB-85	Penta		15	13	17	C	1	33	28	37	C	1.3
PCB-86	Penta					U	0.25				U	0.28
PCB-87	Penta		37	32	43	C	1	81	71	92	C	1.3
PCB-88	Penta		10	9	12	C	1.2	32	28	37	C	1.5
PCB-89	Penta		2.3	2	2.6		1.2	4.5	4	5.2		1.5
PCB-90	Penta		110	98	130	C	1	230	210	270	C	1.3
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U	0.27				U	0.31
PCB-94	Penta		1.1	0.95	1.3	j	1.2	2.2	1.9	2.6		1.5
PCB-95	Penta		150	130	170		1.2	250	220	290		1.5
PCB-96	Penta		2.3	2	2.7		1.1	4	3.5	4.5		1.4
PCB-97	Penta		26	22	30		1	56	49	64		1.3
PCB-98	Penta					UC	0.22				UC	0.56
PCB-99	Penta		43	37	50		1	95	83	110		1.3
PCB-100	Penta		1.5	1.3	1.8		1.2	2.6	2.3	3		1.5
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		2.9	2.5	3.3		1.2	5	4.4	5.8		1.5
PCB-104	Penta	PRC										
PCB-105	Penta		18	16	21		0.87	41	36	47		1.1
PCB-106	Penta		49	42	56	C	0.87	100	89	120	C	1.1
PCB-107	Penta		3.9	3.4	4.5	C	0.87	8.8	7.7	10	C	1.1
PCB-108	Penta					C107					C107	
PCB-109	Penta					U	0.2				U	0.24
PCB-110	Penta		91	79	110		1	170	150	200		1.3
PCB-111	Penta		1.9	1.6	2.2	C	0.95	2.8	2.4	3.2	C	1.2
PCB-112	Penta					C083					C083	
PCB-113	Penta					U	0.22				U	0.26
PCB-114	Penta		1.6	1.4	1.8		0.87	2.7	2.3	3		1.1
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR-CB-S010					LDW-Y1-SU-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		470	290	780	C L	6	210	170	260	C	2.3
PCB-62	Tetra					U L	1.4				U	0.49
PCB-63	Tetra		24	15	39	L	6	10	8.3	12		2.3
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U L	1.4	1.1	0.93	1.4	J	2.6
PCB-66	Tetra		410	250	680	C L	6	180	150	220	C	2.3
PCB-67	Tetra		19	12	31	L	6	8	6.6	9.8		2.3
PCB-68	Tetra		8.6	5.3	14	L	6	2.4	1.9	2.9		2.3
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U L	1.3				U	0.48
PCB-74	Tetra		220	140	360	L	6	99	82	120		2.3
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		25	14	46	L	6	9.7	8.1	12		2
PCB-78	Tetra	PRC										
PCB-79	Tetra		6.8	3.7	12	L	6	2.9	2.5	3.5		2
PCB-80	Tetra		2.4	1.3	4.3	J L	6				U	0.33
PCB-81	Tetra		14	7.7	26	L	6	4.7	4	5.7		2
PCB-82	Penta		79	38	170	L	5.9	28	24	34	L	1.7
PCB-83	Penta		35	17	76	C L	5.9	12	10	14	C L	1.7
PCB-84	Penta		340	170	680	C L	6	120	100	140	C L	1.8
PCB-85	Penta		100	49	220	C L	5.9	34	29	41	C L	1.7
PCB-86	Penta					U L	1.5				U L	0.69
PCB-87	Penta		250	120	550	C L	5.9	88	74	100	C L	1.7
PCB-88	Penta		59	32	110	C L	6	37	31	45	C	1.9
PCB-89	Penta		13	7	24	L	6	5.1	4.3	6.2		1.9
PCB-90	Penta		720	340	1600	C L	5.9	260	220	310	C L	1.7
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U L	1.3				U	0.43
PCB-94	Penta		5.9	3.2	11	J L	6	2.6	2.2	3.1		1.9
PCB-95	Penta		650	350	1200	L	6	250	210	310		1.9
PCB-96	Penta		11	5.6	22	L	6	3.6	3	4.3	L	1.8
PCB-97	Penta		180	84	380	L	5.9	59	50	71	L	1.7
PCB-98	Penta					UC L	2.4				UC	0.79
PCB-99	Penta		300	140	650	L	5.9	100	84	120	L	1.7
PCB-100	Penta		7.4	4	14	L	6	2.8	2.3	3.3		1.9
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		13	7.2	25	L	6	5.1	4.2	6.1		1.9
PCB-104	Penta	PRC										
PCB-105	Penta		150	59	360	L	5.9	50	42	59	L	1.6
PCB-106	Penta		350	150	880	C L	5.9	120	100	150	C L	1.6
PCB-107	Penta		30	12	74	C L	5.9	9.9	8.3	12	C L	1.6
PCB-108	Penta					C107					C107	
PCB-109	Penta					U L	1.3				U L	0.59
PCB-110	Penta		540	250	1200	L	5.9	190	160	220	L	1.7
PCB-111	Penta		10	4.5	23	C L	5.9	2.9	2.5	3.5	C L	1.6
PCB-112	Penta					C083					C083	
PCB-113	Penta					U L	1.4				U L	0.64
PCB-114	Penta		11	4.4	27	L	5.9	4	3.3	4.7	L	1.6
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB					LDW-Y1-IN-ENR+AC-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		0.023	0.018	0.03	C,J L	4.1	9.9	9.2	11	C	1.5
PCB-62	Tetra					U	0.42				U	0.15
PCB-63	Tetra					U L	0.37	0.47	0.44	0.51	J	1.5
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	0.42				U	0.17
PCB-66	Tetra		0.037	0.029	0.048	C,J L	4.1	10	9.4	11	C	1.5
PCB-67	Tetra					U L	0.37	0.36	0.33	0.39	J	1.5
PCB-68	Tetra		0.29	0.23	0.37	J L	4.1	0.37	0.34	0.4	J	1.5
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra		0.29	0.23	0.38	J	4.3				U	0.18
PCB-74	Tetra					UB J L	4.1	3.5	3.2	3.8		1.5
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra					U L	1	1	0.93	1.1	J	1.4
PCB-78	Tetra	PRC										
PCB-79	Tetra					U L	0.97	0.66	0.62	0.72	J	1.4
PCB-80	Tetra					UB J L	3.9				UB J	1.4
PCB-81	Tetra					U L	0.93	1.1	1.1	1.2	J	1.4
PCB-82	Penta					U L	0.34	5.7	5.3	6.1		1.3
PCB-83	Penta					UC L	0.25	3.1	2.9	3.4	C	1.3
PCB-84	Penta		1.9	1.5	2.4	C L	3.9	33	30	35	C	1.4
PCB-85	Penta					UC L	0.23	7.9	7.4	8.6	C	1.3
PCB-86	Penta					U L	0.26				U	0.55
PCB-87	Penta		1.2	0.96	1.5	C,J L	3.8	20	18	21	C	1.3
PCB-88	Penta					UC L	0.67				UC	0.15
PCB-89	Penta					U L	0.3	0.8	0.74	0.86	J	1.4
PCB-90	Penta		0.47	0.38	0.59	C,J L	3.8	58	54	63	C	1.3
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U L	0.74				U	0.17
PCB-94	Penta					U L	0.75	0.44	0.41	0.47	J	1.4
PCB-95	Penta		2.7	2.1	3.4	L	3.9	60	56	65		1.4
PCB-96	Penta					U L	0.56	0.6	0.56	0.65	J	1.4
PCB-97	Penta					U L	0.23	14	13	15		1.3
PCB-98	Penta					UC L	0.64				UC	0.13
PCB-99	Penta		1.1	0.88	1.4	J L	3.8	23	21	24		1.3
PCB-100	Penta					U L	0.64	0.8	0.74	0.86	J	1.4
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta					U L	0.65	0.97	0.9	1	J	1.4
PCB-104	Penta	PRC										
PCB-105	Penta					U L	0.32	7.3	6.7	7.9	L	1.3
PCB-106	Penta		1.2	0.94	1.5	C,J L	3.7	23	22	25	C L	1.3
PCB-107	Penta					UC L	0.31	2.4	2.2	2.6	C L	1.3
PCB-108	Penta					C107					C107	
PCB-109	Penta					U L	0.21				U	0.45
PCB-110	Penta		0.34	0.27	0.43	J L	3.8	52	48	56		1.3
PCB-111	Penta					UC L	0.18				UC L	0.39
PCB-112	Penta					C083					C083	
PCB-113	Penta					U L	0.23				U	0.53
PCB-114	Penta					U L	0.29	0.48	0.45	0.53	J L	1.3
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR+AC-CB-S010					LDW-Y1-IN-ENR+AC-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-59	Tetra					C042					C042	
PCB-60	Tetra					C056					C056	
PCB-61	Tetra		6.9	5.2	9.5	C	1.6	4.4	3.7	5.4	C	1.1
PCB-62	Tetra					U	0.16				U	0.15
PCB-63	Tetra		0.41	0.31	0.57	J	1.6				U	0.11
PCB-64	Tetra					C041					C041	
PCB-65	Tetra					U	0.19				U	0.17
PCB-66	Tetra		6.6	4.9	9.1	C	1.6	3.8	3.2	4.7	C	1.1
PCB-67	Tetra		0.4	0.3	0.56	J	1.6	0.21	0.18	0.25	J	1.1
PCB-68	Tetra		0.29	0.22	0.4	J	1.6	0.12	0.1	0.15	J	1.1
PCB-69	Tetra					C052					C052	
PCB-70	Tetra					C061					C061	
PCB-71	Tetra					C041					C041	
PCB-72	Tetra					C041					C041	
PCB-73	Tetra					U	0.2				U	0.18
PCB-74	Tetra		2.7	2	3.7		1.6	1.6	1.3	1.9		1.1
PCB-75	Tetra					C048					C048	
PCB-76	Tetra					C066					C066	
PCB-77	Tetra		0.9	0.67	1.2	J	1.5	0.43	0.36	0.52	J	0.89
PCB-78	Tetra	PRC										
PCB-79	Tetra		0.42	0.32	0.58	J	1.5	0.21	0.18	0.25	J	0.89
PCB-80	Tetra					UB J	1.5				UB J	0.89
PCB-81	Tetra		1.3	1	1.8	J	1.5	0.23	0.2	0.28	J	0.89
PCB-82	Penta		3.5	2.6	4.7		1.5	1.3	1.1	1.6		0.71
PCB-83	Penta		2	1.5	2.7	C	1.5	0.76	0.65	0.91	C	0.71
PCB-84	Penta		19	14	26	C	1.5	8.9	7.5	11	C	0.78
PCB-85	Penta		5	3.7	6.7	C	1.5	1.8	1.6	2.2	C	0.71
PCB-86	Penta					U	0.26				U	0.12
PCB-87	Penta		12	8.7	16	C	1.5	4.8	4.1	5.8	C	0.71
PCB-88	Penta					UC	0.12				UC	0.1
PCB-89	Penta		0.49	0.37	0.67	J	1.5	0.36	0.31	0.44	J	0.85
PCB-90	Penta		35	26	47	C	1.5	15	12	17	C	0.71
PCB-91	Penta					C088					C088	
PCB-92	Penta					C084					C084	
PCB-93	Penta					U	0.13				U	0.12
PCB-94	Penta		0.28	0.21	0.38	J	1.5				U	0.12
PCB-95	Penta		34	26	47		1.5	17	14	20		0.85
PCB-96	Penta		0.36	0.27	0.49	J	1.5	0.19	0.16	0.23	J	0.77
PCB-97	Penta		7.6	5.7	10		1.5	3.1	2.6	3.7		0.71
PCB-98	Penta					UC	0.1				UC	0.092
PCB-99	Penta		15	11	20		1.5	5.8	4.9	6.9		0.71
PCB-100	Penta		0.77	0.58	1.1	J	1.5	0.34	0.29	0.41	J	0.85
PCB-101	Penta					C090					C090	
PCB-102	Penta					C098					C098	
PCB-103	Penta		0.56	0.42	0.76	J	1.5	0.31	0.26	0.37	J	0.85
PCB-104	Penta	PRC										
PCB-105	Penta		5.3	3.9	7.1	L	1.4	1.7	1.4	2		0.59
PCB-106	Penta		16	12	22	C L	1.4	5.2	4.4	6.2	C	0.59
PCB-107	Penta		1.4	1.1	2	C L	1.4	0.52	0.44	0.63	C,J	0.59
PCB-108	Penta					C107					C107	
PCB-109	Penta					U	0.21				U	0.093
PCB-110	Penta		31	24	42		1.5	13	11	15		0.71
PCB-111	Penta					UC L	0.19				UC	0.075
PCB-112	Penta					C083					C083	
PCB-113	Penta					U	0.25				U	0.11
PCB-114	Penta		0.52	0.39	0.7	J L	1.4	0.19	0.16	0.23	J	0.59
PCB-115	Penta					C111					C111	
PCB-116	Penta					C085					C085	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010					LDW-Y1-IN-ENR-CB-S010					LDW-Y1-IN-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-59	Tetra					C042					C042					C042	
PCB-60	Tetra					C056					C056					C056	
PCB-61	Tetra		24	15	40	C	3.5	14	10	18	C	1.6	20	13	32	C	2.6
PCB-62	Tetra					U	0.76				U	0.3				U	0.5
PCB-63	Tetra					U	0.66	0.68	0.53	0.91	J	1.6	1.1	0.73	1.8	J	2.6
PCB-64	Tetra					C041					C041					C041	
PCB-65	Tetra					U	0.8				U	0.31				U	0.52
PCB-66	Tetra		22	14	36	C	3.5	14	11	18	C	1.6	22	14	35	C	2.6
PCB-67	Tetra		1.7	1.1	2.7	J	3.5	0.81	0.62	1.1	J	1.6	1.3	0.83	2.1	J	2.6
PCB-68	Tetra		1.1	0.72	1.9	J	3.5	0.52	0.4	0.69	J	1.6	0.8	0.52	1.3	J	2.6
PCB-69	Tetra					C052					C052					C052	
PCB-70	Tetra					C061					C061					C061	
PCB-71	Tetra					C041					C041					C041	
PCB-72	Tetra					C041					C041					C041	
PCB-73	Tetra					U	0.74				U	0.29				U	0.48
PCB-74	Tetra		10	6.5	17		3.5	5.4	4.2	7.2		1.6	9.2	6	15		2.6
PCB-75	Tetra					C048					C048					C048	
PCB-76	Tetra					C066					C066					C066	
PCB-77	Tetra		1.7	1.1	2.6	J	3.1	0.99	0.77	1.3	J	1.4	1.2	0.77	1.8	J	2.1
PCB-78	Tetra	PRC															
PCB-79	Tetra		0.84	0.55	1.3	J	3.1	0.42	0.33	0.55	J	1.4	0.8	0.53	1.2	J	2.1
PCB-80	Tetra					U	0.5	0.087	0.068	0.11	J	1.4	0.39	0.26	0.6	J	2.1
PCB-81	Tetra		2.9	1.9	4.6	J	3.1	1.5	1.2	2		1.4	2.1	1.4	3.3	J	2.1
PCB-82	Penta		6.1	4	9.5	L	2.7	3.6	2.8	4.6		1.1	4.2	2.8	6.3		1.8
PCB-83	Penta		4	2.6	6.2	C L	2.7	2.2	1.7	2.8	C	1.1	3.1	2.1	4.8	C	1.8
PCB-84	Penta		36	24	57	C L	2.8	25	19	32	C	1.2	29	19	44	C	1.9
PCB-85	Penta		8.7	5.7	14	C L	2.7	5.7	4.5	7.4	C	1.1	6.1	4.1	9.3	C	1.8
PCB-86	Penta					U L	0.53				U	0.32				U	0.29
PCB-87	Penta		24	16	38	C L	2.7	14	11	19	C	1.1	15	10	23	C	1.8
PCB-88	Penta					UC	0.66	6.5	5.1	8.5	C	1.3	4.2	2.8	6.5	C	2
PCB-89	Penta					U	0.72				U	0.45				U	0.4
PCB-90	Penta		63	41	98	C L	2.7	39	31	51	C	1.1	45	31	69	C	1.8
PCB-91	Penta					C088					C088					C088	
PCB-92	Penta					C084					C084					C084	
PCB-93	Penta					U	0.7				U	0.22				U	0.42
PCB-94	Penta					U	0.77				U	0.24				U	0.46
PCB-95	Penta		77	50	120		3	62	48	80		1.3	63	42	97		2
PCB-96	Penta					U L	0.53				U	0.16				U	0.31
PCB-97	Penta		16	10	24	L	2.7	9.9	7.7	13		1.1	11	7.4	17		1.8
PCB-98	Penta					UC	1.3				UC	0.4				UC	0.76
PCB-99	Penta		28	18	43	L	2.7	18	14	23		1.1	21	14	32		1.8
PCB-100	Penta					U	0.65	0.88	0.69	1.1	J	1.3				U	0.38
PCB-101	Penta					C090					C090					C090	
PCB-102	Penta					C098					C098					C098	
PCB-103	Penta		2.3	1.5	3.7	J	3	1.2	0.93	1.5	J	1.3	1.7	1.1	2.6	J	2
PCB-104	Penta	PRC															
PCB-105	Penta		9.9	6.5	15	L	2.4	5.6	4.4	7.2		0.98	6.3	4.3	9.5	L	1.5
PCB-106	Penta		31	20	48	C L	2.4	17	13	21	C	0.98	19	13	29	C L	1.5
PCB-107	Penta		3	2	4.7	C L	2.4	1.7	1.3	2.2	C	0.98	1.9	1.3	2.8	C L	1.5
PCB-108	Penta					C107					C107					C107	
PCB-109	Penta					U L	0.46				U	0.27				U	0.25
PCB-110	Penta		55	36	85	L	2.7	35	27	45		1.1	38	26	58		1.8
PCB-111	Penta		0.95	0.62	1.5	C,J L	2.5	0.32	0.25	0.41	C,J	1	0.63	0.43	0.94	C,J L	1.6
PCB-112	Penta					C083					C083					C083	
PCB-113	Penta					U L	0.49				U	0.29				U	0.26
PCB-114	Penta		0.49	0.32	0.76	J L	2.4	0.47	0.37	0.6	J	0.98	0.46	0.31	0.69	J L	1.5
PCB-115	Penta					C111					C111					C111	
PCB-116	Penta					C085					C085					C085	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010					LDW-Y1-SC-ENR+AC-CB-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		0.77	0.63	0.95	J	1.6	1.5	0.97	2.3	J	1.9
PCB-120	Penta					U	0.23				U L	0.33
PCB-121	Penta	PRC										
PCB-122	Penta					U	0.17				U L	0.48
PCB-123	Penta		0.26	0.21	0.31	J	1.3				U L	0.39
PCB-124	Penta		0.45	0.37	0.55	J	1.3	0.99	0.66	1.5	J L	1.6
PCB-125	Penta					C087					C087	
PCB-126	Penta					U	0.16				U L	0.46
PCB-127	Penta					U	0.16				U L	0.48
PCB-128	Hexa		1.2	0.95	1.5	C	0.74	2	1.3	3.1	C L	1.1
PCB-129	Hexa		0.43	0.34	0.54	J	0.81	0.82	0.53	1.3	J L	1.2
PCB-130	Hexa		0.83	0.66	1		0.81	1.6	1	2.4	L	1.2
PCB-131	Hexa					UC	0.32	0.54	0.36	0.84	C,J L	1.3
PCB-132	Hexa		4	3.2	5	C	0.87	7.8	5.1	12	C L	1.3
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		0.76	0.61	0.94	C,J	0.93	1.8	1.2	2.8	C L	1.3
PCB-135	Hexa		2.4	2	3		0.93	4.3	2.8	6.6	L	1.3
PCB-136	Hexa		3	2.4	3.7		0.82	6.5	4.2	10	L	1.2
PCB-137	Hexa					U	0.32	0.78	0.51	1.2	J L	1.2
PCB-138	Hexa		9.7	7.8	12	C	0.81	19	12	30	C L	1.2
PCB-139	Hexa		15	12	18	C	0.93	28	19	43	C L	1.3
PCB-140	Hexa					U	0.33				U L	0.38
PCB-141	Hexa		2.3	1.8	2.8		0.81	3.6	2.4	5.7	L	1.2
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		1.3	1.1	1.7		0.93	1.9	1.3	3	L	1.3
PCB-145	Hexa					U	0.16				U L	0.21
PCB-146	Hexa		2.3	1.8	2.9	C	0.81	4	2.6	6.3	C L	1.2
PCB-147	Hexa					U	0.34	0.7	0.46	1.1	J L	1.3
PCB-148	Hexa					U	0.22				U L	0.27
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U	0.15				U L	0.2
PCB-151	Hexa		4.4	3.6	5.5		0.93	8.5	5.6	13	L	1.3
PCB-152	Hexa					U	0.16				U L	0.21
PCB-153	Hexa		12	9.7	15		0.81	23	15	37	L	1.2
PCB-154	Hexa		0.64	0.52	0.79	J	0.93	1	0.68	1.6	L	1.3
PCB-155	Hexa	PRC										
PCB-156	Hexa		0.49	0.39	0.63	J	0.69	1.1	0.73	1.8	L	1.1
PCB-157	Hexa					U	0.2				U L	0.26
PCB-158	Hexa		1.1	0.87	1.4	C	0.81	2	1.3	3.1	C L	1.2
PCB-159	Hexa					U	0.19				U L	0.25
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CC-S010					LDW-Y1-SC-ENR-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		1.7	1.2	2.4	J L	2.9	1.2	1	1.4		1.1
PCB-120	Penta					U L	0.41				U	0.16
PCB-121	Penta	PRC										
PCB-122	Penta					U L	0.46	0.25	0.21	0.29	J	0.87
PCB-123	Penta		0.79	0.58	1.1	J L	2.5	0.26	0.22	0.3	J	0.87
PCB-124	Penta		2	1.5	2.8	J L	2.5	0.73	0.62	0.86	J	0.87
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	0.46				U	0.13
PCB-127	Penta					U L	0.45				U	0.14
PCB-128	Hexa		3	2.1	4.2	C L	1.6	1.3	1.1	1.6	C	0.49
PCB-129	Hexa		1.6	1.1	2.3	J L	1.7	0.56	0.47	0.68		0.53
PCB-130	Hexa		1.9	1.4	2.7	L	1.7	0.88	0.73	1.1		0.53
PCB-131	Hexa		0.78	0.56	1.1	C,J L	1.8	0.37	0.31	0.45	C,J	0.57
PCB-132	Hexa		9	6.5	13	C L	1.8	4.6	3.9	5.6	C	0.57
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		1.7	1.2	2.4	C,J L	1.9	0.77	0.65	0.92	C	0.62
PCB-135	Hexa		5.3	3.8	7.3	L	1.9	2.8	2.4	3.4		0.62
PCB-136	Hexa		7.4	5.3	10	L	1.8	3.9	3.2	4.7		0.54
PCB-137	Hexa					U L	0.54	0.54	0.45	0.65		0.53
PCB-138	Hexa		22	16	31	C L	1.7	11	9.3	13	C	0.53
PCB-139	Hexa		34	25	48	C L	1.9	17	15	21	C	0.62
PCB-140	Hexa					U L	0.54	0.28	0.23	0.33	J	0.62
PCB-141	Hexa		5	3.5	7	L	1.7	2.5	2.1	3		0.53
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		2.8	2	3.9	L	1.9	1.4	1.2	1.7		0.62
PCB-145	Hexa					U L	0.37				U	0.091
PCB-146	Hexa		5.3	3.8	7.5	C L	1.7	2.4	2	2.9	C	0.53
PCB-147	Hexa		0.78	0.56	1.1	J L	1.9	0.5	0.42	0.6	J	0.62
PCB-148	Hexa					U L	0.49				U	0.13
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.36				U	0.088
PCB-151	Hexa		11	7.9	15	L	1.9	5.5	4.7	6.6		0.62
PCB-152	Hexa					U L	0.38				U	0.093
PCB-153	Hexa		28	20	39	L	1.7	14	12	17		0.53
PCB-154	Hexa		1.4	1	1.9	J L	1.9	0.52	0.44	0.62		0.62
PCB-155	Hexa	PRC										
PCB-156	Hexa		1.6	1.1	2.3	L	1.5	0.48	0.4	0.58		0.45
PCB-157	Hexa					U L	0.35				U	0.1
PCB-158	Hexa		2.6	1.8	3.7	C L	1.7	1.3	1.1	1.5	C	0.53
PCB-159	Hexa					U L	0.34	0.18	0.15	0.22	J	0.45
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010					LDW-Y1-SC-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		3.8	2.8	5.3	J L	3.9	1.1	1	1.2		0.94
PCB-120	Penta					U L	1				U	0.19
PCB-121	Penta	PRC										
PCB-122	Penta		0.95	0.67	1.3	J L	4	0.31	0.29	0.34	J	0.78
PCB-123	Penta		1.2	0.84	1.7	J L	4	0.4	0.37	0.43	J	0.78
PCB-124	Penta		3.5	2.5	5	J L	4	0.9	0.84	0.98		0.78
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	0.53				U	0.087
PCB-127	Penta					U L	0.49				U	0.079
PCB-128	Hexa		8.4	5.3	13	C L	4.3	1.7	1.6	1.9	C	0.47
PCB-129	Hexa		5.3	3.4	8.3	L	4.2	0.76	0.7	0.83		0.51
PCB-130	Hexa					U L	1.1	1	0.96	1.1		0.51
PCB-131	Hexa		2.3	1.5	3.5	C,J L	4.2	0.54	0.5	0.59	C,J	0.54
PCB-132	Hexa		30	20	46	C L	4.2	6.4	5.9	6.9	C	0.54
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		6.1	4.1	9.2	C L	4.2	1.2	1.1	1.3	C	0.58
PCB-135	Hexa		14	9.3	21	L	4.2	3.4	3.1	3.7		0.58
PCB-136	Hexa		25	16	38	L	4.2	5	4.6	5.4		0.51
PCB-137	Hexa		2.6	1.7	4.1	J L	4.2	0.62	0.57	0.68		0.51
PCB-138	Hexa		75	48	120	C L	4.2	14	13	16	C	0.51
PCB-139	Hexa		100	70	160	C L	4.2	23	21	25	C	0.58
PCB-140	Hexa					U L	0.87				U	0.12
PCB-141	Hexa		16	10	25	L	4.2	3.4	3.1	3.7		0.51
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		6.6	4.4	9.8	L	4.2	1.6	1.5	1.8		0.58
PCB-145	Hexa					U L	0.7				U	0.086
PCB-146	Hexa		18	12	28	C L	4.2	3.3	3	3.6	C	0.51
PCB-147	Hexa		2.1	1.4	3.2	J L	4.2	0.43	0.4	0.47	J	0.58
PCB-148	Hexa					U L	0.83				U	0.12
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.68				U	0.083
PCB-151	Hexa		35	23	52	L	4.2	6.9	6.3	7.4		0.58
PCB-152	Hexa					U L	0.72				U	0.088
PCB-153	Hexa		95	61	150	L	4.2	18	17	20		0.51
PCB-154	Hexa		3.1	2.1	4.6	L	4.2	0.57	0.53	0.62		0.58
PCB-155	Hexa	PRC										
PCB-156	Hexa		5.7	3.5	9.3	L	4.3	0.77	0.7	0.85		0.44
PCB-157	Hexa		1.5	0.91	2.4	J L	4.3	0.14	0.13	0.15	J	0.44
PCB-158	Hexa		8.6	5.5	13	C L	4.2	1.7	1.6	1.8	C	0.51
PCB-159	Hexa					U L	0.72	0.16	0.15	0.18	J	0.44
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CA-S010					LDW-Y1-SU-ENR+AC-CB-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		2.9	2.5	3.3		0.84	3.7	2.9	4.9	L	1.6
PCB-120	Penta		0.26	0.23	0.3	J	0.7	0.57	0.45	0.74	J L	1.4
PCB-121	Penta	PRC										
PCB-122	Penta		0.7	0.62	0.81		0.7	1.1	0.9	1.5	J L	1.4
PCB-123	Penta		0.77	0.68	0.89		0.7	1.2	0.94	1.6	J L	1.4
PCB-124	Penta		2.7	2.4	3.1		0.7	3.8	2.9	4.9	L	1.4
PCB-125	Penta					C087					C087	
PCB-126	Penta					U	0.22				U L	0.45
PCB-127	Penta					U	0.21				U L	0.44
PCB-128	Hexa		5.3	4.6	6.2	C	0.43	8.8	6.6	12	C L	1
PCB-129	Hexa		2.1	1.8	2.5		0.46	3.3	2.5	4.3	L	1.1
PCB-130	Hexa		2.9	2.5	3.3		0.46	4.8	3.7	6.3	L	1.1
PCB-131	Hexa		1.4	1.2	1.7	C	0.49	1.8	1.4	2.4	C L	1.1
PCB-132	Hexa		15	13	18	C	0.49	26	20	34	C L	1.1
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		3.4	3	4	C	0.52	5.2	4	6.7	C L	1.2
PCB-135	Hexa		8.8	7.7	10		0.52	13	9.9	17	L	1.2
PCB-136	Hexa		12	10	14		0.47	17	13	23	L	1.1
PCB-137	Hexa		2.3	2	2.6		0.46	2.9	2.2	3.9	L	1.1
PCB-138	Hexa		37	32	43	C	0.46	61	46	80	C L	1.1
PCB-139	Hexa		52	45	60	C	0.52	78	61	100	C L	1.2
PCB-140	Hexa					U	0.14				U L	0.47
PCB-141	Hexa		8.2	7	9.5		0.46	13	10	17	L	1.1
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		3.2	2.8	3.7		0.52	5.7	4.4	7.5	L	1.2
PCB-145	Hexa					U	0.095				U L	0.18
PCB-146	Hexa		7.3	6.2	8.5	C	0.46	12	9.1	16	C L	1.1
PCB-147	Hexa		1.3	1.1	1.5		0.52	2.1	1.6	2.7	L	1.2
PCB-148	Hexa					U	0.13				U L	0.23
PCB-149	Hexa					C139					C139	
PCB-150	Hexa		0.2	0.17	0.23	J	0.47				U L	0.17
PCB-151	Hexa		15	13	17		0.52	23	18	30	L	1.2
PCB-152	Hexa					U	0.097				U L	0.18
PCB-153	Hexa		42	36	49		0.46	69	52	90	L	1.1
PCB-154	Hexa		1.1	0.96	1.3		0.52	1.9	1.5	2.5	L	1.2
PCB-155	Hexa	PRC										
PCB-156	Hexa		2.6	2.2	3		0.4	4.3	3.2	5.7	L	0.98
PCB-157	Hexa		0.55	0.47	0.65		0.4	0.82	0.61	1.1	J L	0.98
PCB-158	Hexa		4.6	3.9	5.3	C	0.46	7.4	5.7	9.7	C L	1.1
PCB-159	Hexa		0.36	0.31	0.42	J	0.4	0.72	0.54	0.97	J L	0.98
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010					LDW-Y1-SU-ENR-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		2.9	2.5	3.3		1	5.5	4.8	6.3		1.3
PCB-120	Penta					U	0.16				U	0.21
PCB-121	Penta	PRC										
PCB-122	Penta		0.94	0.82	1.1		0.87	1.6	1.4	1.8		1.1
PCB-123	Penta		0.77	0.67	0.89	J	0.87	2.2	1.9	2.5		1.1
PCB-124	Penta		2.8	2.4	3.2		0.87	6	5.2	6.8		1.1
PCB-125	Penta					C087					C087	
PCB-126	Penta					U	0.21	0.37	0.32	0.42	J L	0.94
PCB-127	Penta					U	0.21				U L	0.15
PCB-128	Hexa		4.6	3.9	5.4	C L	0.53	12	10	14	C L	0.71
PCB-129	Hexa		2	1.7	2.3	L	0.57	5	4.4	5.8	L	0.75
PCB-130	Hexa		2.5	2.2	2.9	L	0.57	7.1	6.2	8.2	L	0.75
PCB-131	Hexa		1.2	1.1	1.4	C L	0.61	3.1	2.7	3.6	C L	0.8
PCB-132	Hexa		15	13	17	C L	0.61	32	28	37	C L	0.8
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		3.3	2.8	3.8	C	0.65	7.1	6.2	8.1	C L	0.84
PCB-135	Hexa		7.6	6.5	8.8		0.65	19	17	22	L	0.84
PCB-136	Hexa		11	9.1	12	L	0.58	21	18	24	L	0.76
PCB-137	Hexa		1.6	1.3	1.8	L	0.57	3.5	3	4	L	0.75
PCB-138	Hexa		33	28	38	C L	0.57	79	68	91	C L	0.75
PCB-139	Hexa		45	39	52	C	0.65	100	90	120	C L	0.84
PCB-140	Hexa		0.61	0.52	0.7	J	0.65	1.4	1.2	1.6	L	0.84
PCB-141	Hexa		7.1	6.1	8.3	L	0.57	18	15	20	L	0.75
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		3.3	2.8	3.8		0.65	7.9	6.9	9	L	0.84
PCB-145	Hexa					U L	0.11				U L	0.13
PCB-146	Hexa		6.8	5.9	8	C L	0.57	15	13	17	C L	0.75
PCB-147	Hexa		1.3	1.2	1.6		0.65	2.5	2.2	2.9	L	0.84
PCB-148	Hexa					U	0.15				U L	0.19
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.11				U L	0.13
PCB-151	Hexa		14	12	16		0.65	32	28	37	L	0.84
PCB-152	Hexa					U L	0.11				U L	0.14
PCB-153	Hexa		36	31	43	L	0.57	91	79	100	L	0.75
PCB-154	Hexa		1.1	0.93	1.2		0.65	2.6	2.3	3	L	0.84
PCB-155	Hexa	PRC										
PCB-156	Hexa		2	1.7	2.4	L	0.49	5.9	5.1	6.9	L	0.66
PCB-157	Hexa		0.47	0.39	0.55	J L	0.49	1.1	0.92	1.3	L	0.66
PCB-158	Hexa		3.9	3.3	4.6	C L	0.57	9.8	8.5	11	C L	0.75
PCB-159	Hexa		0.42	0.35	0.49	J L	0.49	0.83	0.72	0.97	L	0.66
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR-CB-S010					LDW-Y1-SU-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		20	9.2	42	L	5.9	6.1	5.1	7.2	L	1.7
PCB-120	Penta					U L	1.3				U L	0.54
PCB-121	Penta	PRC										
PCB-122	Penta		4.5	1.8	11	J L	5.9	2.2	1.9	2.7	L	1.6
PCB-123	Penta		8.5	3.5	21	L	5.9	2	1.7	2.4	L	1.6
PCB-124	Penta		19	7.9	48	L	5.9	7.8	6.5	9.3	L	1.6
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	1.8	0.61	0.51	0.73	J L	1.4
PCB-127	Penta					U L	1.7				U L	0.3
PCB-128	Hexa		60	15	240	C L	6	18	14	22	C L	1.2
PCB-129	Hexa		21	5.8	77	L	6	7	5.7	8.7	L	1.2
PCB-130	Hexa		30	8.3	110	L	6	10	8.3	13	L	1.2
PCB-131	Hexa		13	3.9	46	C L	6	4.6	3.8	5.7	C L	1.3
PCB-132	Hexa		160	48	560	C L	6	47	38	58	C L	1.3
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		30	9.5	97	C L	6	9	7.4	11	C L	1.3
PCB-135	Hexa		89	28	290	L	6	26	22	32	L	1.3
PCB-136	Hexa		100	29	370	L	6	31	25	38	L	1.2
PCB-137	Hexa		19	5.3	70	L	6	5.1	4.1	6.3	L	1.2
PCB-138	Hexa		380	110	1400	C L	6	120	95	140	C L	1.2
PCB-139	Hexa		450	140	1500	C L	6	150	120	180	C L	1.3
PCB-140	Hexa					U L	1.5	1.5	1.3	1.9	L	1.3
PCB-141	Hexa		85	24	310	L	6	27	22	33	L	1.2
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		28	8.8	91	L	6	11	8.8	13	L	1.3
PCB-145	Hexa					U L	0.87				U L	0.33
PCB-146	Hexa		74	21	270	C L	6	23	18	28	C L	1.2
PCB-147	Hexa		13	4	41	L	6	3.4	2.8	4.1	L	1.3
PCB-148	Hexa					U L	1.1				U L	0.46
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.85				U L	0.32
PCB-151	Hexa		150	47	480	L	6	47	39	57	L	1.3
PCB-152	Hexa					U L	0.9				U L	0.34
PCB-153	Hexa		430	120	1600	L	6	130	110	160	L	1.2
PCB-154	Hexa		10	3.2	33	L	6	3	2.5	3.7	L	1.3
PCB-155	Hexa	PRC										
PCB-156	Hexa		31	7.4	130	L	6	9	7.1	11	L	1.1
PCB-157	Hexa		7.3	1.8	31	L	6	1.6	1.3	2	L	1.1
PCB-158	Hexa		46	13	170	C L	6	15	12	18	C L	1.2
PCB-159	Hexa		5.7	1.4	24	J L	6	1.5	1.1	1.8	L	1.1
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB					LDW-Y1-IN-ENR+AC-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta					U L	0.2	1.6	1.5	1.7		1.3
PCB-120	Penta					U L	0.19				U L	0.41
PCB-121	Penta	PRC										
PCB-122	Penta					U L	0.29	0.37	0.34	0.41	J L	1.3
PCB-123	Penta					U L	0.25	0.47	0.44	0.51	J L	1.3
PCB-124	Penta					U L	0.29	1.3	1.2	1.4	J L	1.3
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	0.32				U L	0.24
PCB-127	Penta					U L	0.32				U L	0.23
PCB-128	Hexa					UC L	0.69	4.4	3.9	4.9	C L	1.3
PCB-129	Hexa					U L	0.93	1.4	1.2	1.5	L	1.3
PCB-130	Hexa					U L	0.87	2.5	2.3	2.8	L	1.3
PCB-131	Hexa					UC L	0.78	0.91	0.82	1	C,J L	1.3
PCB-132	Hexa		2.5	1.9	3.4	C,J L	3.6	12	11	13	C L	1.3
PCB-133	Hexa					C131					C131	
PCB-134	Hexa					UC L	0.8	2.5	2.3	2.8	C L	1.3
PCB-135	Hexa					U L	0.77	5.8	5.2	6.4	L	1.3
PCB-136	Hexa					U L	0.64	8.5	7.6	9.4	L	1.3
PCB-137	Hexa					U L	0.8	1.8	1.6	2	L	1.3
PCB-138	Hexa					UC L	0.59	26	23	29	C L	1.3
PCB-139	Hexa					UC L	0.73	31	28	34	C L	1.3
PCB-140	Hexa					U L	0.75				U L	0.31
PCB-141	Hexa					U L	0.77	5	4.5	5.6	L	1.3
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa					U L	0.8	1.8	1.6	1.9	L	1.3
PCB-145	Hexa					U L	0.6				U L	0.15
PCB-146	Hexa					UC L	0.65	5.7	5.2	6.4	C L	1.3
PCB-147	Hexa					U L	0.73	1.1	1	1.2	J L	1.3
PCB-148	Hexa					U L	0.76				U L	0.19
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.59				U L	0.15
PCB-151	Hexa					U L	0.81	8.7	7.9	9.6	L	1.3
PCB-152	Hexa					U L	0.61				U L	0.15
PCB-153	Hexa					UB L	3.6	27	24	30	L	1.3
PCB-154	Hexa		0.47	0.36	0.62	J L	3.7	0.93	0.85	1	L	1.3
PCB-155	Hexa	PRC										
PCB-156	Hexa					U L	0.64	1.6	1.4	1.8	L	1.3
PCB-157	Hexa					U L	0.62	0.5	0.44	0.56	J L	1.3
PCB-158	Hexa					UC L	0.58	3.1	2.8	3.5	C L	1.3
PCB-159	Hexa					U L	0.58	0.41	0.36	0.46	J L	1.3
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR+AC-CB-S010					LDW-Y1-IN-ENR+AC-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-117	Penta					C087					C087	
PCB-118	Penta					C106					C106	
PCB-119	Penta		1.1	0.84	1.5	J	1.5	0.45	0.38	0.54	J	0.71
PCB-120	Penta					U L	0.19				U	0.073
PCB-121	Penta	PRC										
PCB-122	Penta		0.28	0.21	0.38	J L	1.4				U	0.091
PCB-123	Penta		0.18	0.13	0.24	J L	1.4	0.15	0.13	0.18	J	0.59
PCB-124	Penta		1.1	0.79	1.4	J L	1.4	0.3	0.25	0.36	J	0.59
PCB-125	Penta					C087					C087	
PCB-126	Penta					U L	0.14				U	0.086
PCB-127	Penta					U L	0.13				U	0.088
PCB-128	Hexa		3	2.1	4.4	C L	1.4	0.71	0.58	0.87	C	0.36
PCB-129	Hexa		1.3	0.88	1.8	J L	1.4	0.26	0.21	0.31	J	0.38
PCB-130	Hexa		2	1.4	2.9	L	1.4	0.36	0.29	0.44	J	0.38
PCB-131	Hexa		0.62	0.43	0.88	C,J L	1.4	0.18	0.15	0.22	C,J	0.41
PCB-132	Hexa		8.5	6	12	C L	1.4	1.8	1.5	2.2	C	0.41
PCB-133	Hexa					C131					C131	
PCB-134	Hexa		1.7	1.2	2.5	C L	1.4	0.45	0.38	0.55	C	0.44
PCB-135	Hexa		3.7	2.7	5.3	L	1.4	1	0.84	1.2		0.44
PCB-136	Hexa		4.9	3.4	7.1	L	1.4	1.3	1.1	1.6		0.39
PCB-137	Hexa		1.3	0.92	1.9	J L	1.4	0.27	0.23	0.34	J	0.38
PCB-138	Hexa		20	14	28	C L	1.4	4.3	3.5	5.2	C	0.38
PCB-139	Hexa		22	16	31	C L	1.4	5.4	4.5	6.5	C	0.44
PCB-140	Hexa					U L	0.28				U	0.075
PCB-141	Hexa		3.9	2.7	5.6	L	1.4	0.68	0.56	0.83		0.38
PCB-142	Hexa	PRC										
PCB-143	Hexa					C134					C134	
PCB-144	Hexa		1.4	1	2	L	1.4	0.3	0.25	0.37	J	0.44
PCB-145	Hexa					U L	0.13				U	0.044
PCB-146	Hexa		4.7	3.3	6.8	C L	1.4	1	0.83	1.2	C	0.38
PCB-147	Hexa		0.61	0.44	0.86	J L	1.4	0.17	0.14	0.21	J	0.44
PCB-148	Hexa					U L	0.17				U	0.061
PCB-149	Hexa					C139					C139	
PCB-150	Hexa					U L	0.13				U	0.043
PCB-151	Hexa		6.3	4.5	8.9	L	1.4	1.5	1.3	1.8		0.44
PCB-152	Hexa					U L	0.14				U	0.045
PCB-153	Hexa		20	14	29	L	1.4	4.4	3.7	5.4		0.38
PCB-154	Hexa		0.67	0.48	0.95	J L	1.4	0.24	0.2	0.29	J	0.44
PCB-155	Hexa	PRC										
PCB-156	Hexa		1.5	1	2.2	L	1.4	0.32	0.26	0.4	J	0.33
PCB-157	Hexa		0.45	0.3	0.68	J L	1.4	0.079	0.064	0.098	J	0.33
PCB-158	Hexa		2.4	1.7	3.5	C L	1.4	0.46	0.38	0.56	C	0.38
PCB-159	Hexa		0.56	0.37	0.83	J L	1.4	0.083	0.068	0.1	J	0.33
PCB-160	Hexa					C158					C158	
PCB-161	Hexa					C132					C132	
PCB-162	Hexa					C128					C128	
PCB-163	Hexa					C138					C138	
PCB-164	Hexa					C138					C138	
PCB-165	Hexa					C146					C146	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010					LDW-Y1-IN-ENR-CB-S010					LDW-Y1-IN-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-117	Penta					C087					C087					C087	
PCB-118	Penta					C106					C106					C106	
PCB-119	Penta		2.2	1.5	3.4	J L	2.7	1.6	1.2	2		1.1	1.8	1.2	2.7		1.8
PCB-120	Penta					U L	0.41				U	0.24				U L	0.21
PCB-121	Penta	PRC															
PCB-122	Penta		0.7	0.46	1.1	J L	2.4	0.27	0.21	0.34	J	0.98				U L	0.27
PCB-123	Penta		0.84	0.55	1.3	J L	2.4	0.49	0.38	0.63	J	0.98	0.43	0.29	0.64	J L	1.5
PCB-124	Penta		2	1.3	3.1	J L	2.4	1.1	0.87	1.4		0.98	1.3	0.9	2	J L	1.5
PCB-125	Penta					C087					C087					C087	
PCB-126	Penta					U L	0.28				U L	0.16				U L	0.28
PCB-127	Penta					U L	0.28				U L	0.15				U L	0.26
PCB-128	Hexa		4.4	2.7	7.3	C L	1.8	2	1.5	2.6	C L	0.66	2.2	1.4	3.5	C L	1
PCB-129	Hexa		1.6	1	2.7	J L	1.9	0.88	0.67	1.2	L	0.7	0.88	0.58	1.4	J L	1.1
PCB-130	Hexa		2.5	1.5	4.1	L	1.9	1.4	1.1	1.9	L	0.7	1.7	1.1	2.6	L	1.1
PCB-131	Hexa		1.3	0.84	2.2	C,J L	2	0.58	0.45	0.76	C,J L	0.73	0.62	0.41	0.95	C,J L	1.1
PCB-132	Hexa		11	6.7	17	C L	2	6.7	5.1	8.7	C L	0.73	7.2	4.8	11	C L	1.1
PCB-133	Hexa					C131					C131					C131	
PCB-134	Hexa		2.4	1.5	3.8	C L	2	1.5	1.2	2	C L	0.77	1.7	1.1	2.6	C L	1.2
PCB-135	Hexa		7.3	4.6	12	L	2	3.9	3	5	L	0.77	4.4	2.9	6.7	L	1.2
PCB-136	Hexa		6.5	4	11	L	1.9	3.8	2.9	5	L	0.7	4.5	2.9	6.9	L	1.1
PCB-137	Hexa		1.4	0.86	2.3	J L	1.9	0.75	0.58	0.99	L	0.7	0.91	0.6	1.4	J L	1.1
PCB-138	Hexa		25	16	41	C L	1.9	14	11	18	C L	0.7	16	10	25	C L	1.1
PCB-139	Hexa		31	20	49	C L	2	18	14	24	C L	0.77	22	15	34	C L	1.2
PCB-140	Hexa					U L	0.53				U L	0.19	0.33	0.22	0.5	J L	1.2
PCB-141	Hexa		4.7	2.9	7.7	L	1.9	2.6	2	3.4	L	0.7	2.9	1.9	4.5	L	1.1
PCB-142	Hexa	PRC															
PCB-143	Hexa					C134					C134					C134	
PCB-144	Hexa		1.4	0.91	2.3	J L	2	1.1	0.83	1.4	L	0.77	1.3	0.85	1.9	L	1.2
PCB-145	Hexa					U L	0.25				U L	0.088				U L	0.14
PCB-146	Hexa		6.8	4.2	11	C L	1.9	3.3	2.5	4.3	C L	0.7	4.5	2.9	6.9	C L	1.1
PCB-147	Hexa		1.2	0.75	1.9	J L	2	0.51	0.4	0.66	J L	0.77	0.79	0.53	1.2	J L	1.2
PCB-148	Hexa					U L	0.36				U L	0.13				U L	0.21
PCB-149	Hexa					C139					C139					C139	
PCB-150	Hexa					U L	0.25				U L	0.087				U L	0.14
PCB-151	Hexa		9.7	6.2	15	L	2	5.5	4.3	7.1	L	0.77	7.1	4.7	11	L	1.2
PCB-152	Hexa					U L	0.26				U L	0.092				U L	0.15
PCB-153	Hexa		28	18	46	L	1.9	15	12	20	L	0.7	18	12	28	L	1.1
PCB-154	Hexa		1.1	0.7	1.7	J L	2	0.69	0.53	0.89	L	0.77	0.67	0.45	1	J L	1.2
PCB-155	Hexa	PRC															
PCB-156	Hexa		1.8	1.1	3.1	L	1.7	0.91	0.68	1.2	L	0.62	1	0.66	1.7	L	0.94
PCB-157	Hexa					U L	0.39	0.23	0.17	0.31	J L	0.62				U L	0.2
PCB-158	Hexa		3.3	2	5.4	C L	1.9	1.5	1.2	2	C L	0.7	2	1.3	3.1	C L	1.1
PCB-159	Hexa					U L	0.36				U L	0.12				U L	0.19
PCB-160	Hexa					C158					C158					C158	
PCB-161	Hexa					C132					C132					C132	
PCB-162	Hexa					C128					C128					C128	
PCB-163	Hexa					C138					C138					C138	
PCB-164	Hexa					C138					C138					C138	
PCB-165	Hexa					C146					C146					C146	

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CA-S010					LDW-Y1-SC-ENR+AC-CB-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-166	Hexa					U	0.24				U L	0.3
PCB-167	Hexa		0.34	0.27	0.44	J	0.69	0.65	0.42	1	J L	1.1
PCB-168	Hexa					U	0.23				U L	0.29
PCB-169	Hexa					U L	0.18				U L	0.25
PCB-170	Hepta		1.1	0.82	1.5	L	0.43	2.4	1.4	4.3	L	0.79
PCB-171	Hepta		0.44	0.33	0.59	J L	0.49	0.95	0.56	1.6	L	0.86
PCB-172	Hepta					UB L	0.43	0.026	0.015	0.046	L	0.79
PCB-173	Hepta					U L	0.13				U L	0.23
PCB-174	Hepta		1.5	1.1	2	L	0.49	3.3	1.9	5.7	L	0.86
PCB-175	Hepta					U L	0.12				U L	0.21
PCB-176	Hepta		0.31	0.22	0.42	J L	0.42	0.63	0.36	1.1	J L	0.77
PCB-177	Hepta		0.95	0.72	1.3	L	0.49	2.2	1.3	3.7	L	0.86
PCB-178	Hepta		0.47	0.36	0.63	J L	0.49	1.1	0.63	1.8	L	0.86
PCB-179	Hepta		0.88	0.65	1.2	L	0.42	2.1	1.2	3.8	L	0.77
PCB-180	Hepta		2.4	1.8	3.3	L	0.43	5.1	2.9	9.1	L	0.79
PCB-181	Hepta					U L	0.11				U L	0.2
PCB-182	Hepta		1.9	1.5	2.6	C L	0.49	5.2	3.1	8.9	C L	0.86
PCB-183	Hepta		1.2	0.88	1.6	L	0.49	2.6	1.5	4.5	L	0.86
PCB-184	Hepta	PRC										
PCB-185	Hepta					U L	0.12	0.53	0.31	0.91	J L	0.86
PCB-186	Hepta					U L	0.079				U L	0.14
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.08				U L	0.15
PCB-189	Hepta					U L	0.067				U L	0.12
PCB-190	Hepta		0.24	0.17	0.32	J L	0.43	0.69	0.39	1.2	J L	0.79
PCB-191	Hepta					U L	0.088				U L	0.16
PCB-192	Hepta	PRC										
PCB-193	Hepta					U L	0.082	0.42	0.24	0.75	J L	0.79
PCB-194	Octa		0.21	0.14	0.33	J L	0.23	0.48	0.23	1	J L	0.53
PCB-195	Octa		0.11	0.073	0.17	J L	0.26	0.29	0.14	0.6	J L	0.57
PCB-196	Octa		0.26	0.17	0.39	C L	0.26	0.85	0.41	1.8	C L	0.57
PCB-197	Octa		0.0037	0.0024	0.0059	L	0.22	0.039	0.018	0.087	L	0.51
PCB-198	Octa					U L	0.068				U L	0.13
PCB-199	Octa		0.22	0.14	0.35	L	0.22	0.69	0.31	1.5	L	0.51
PCB-200	Octa					U L	0.041				U L	0.086
PCB-201	Octa					U L	0.05				U L	0.098
PCB-202	Octa					U L	0.04				U L	0.084
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.028				U L	0.07
PCB-206	Nona					U L	0.0094				U L	0.062
PCB-207	Nona					UB J L	0.12				UB L	0.34
PCB-208	Nona					U L	0.006				U L	0.043
PCB-209	Deca					UB L	0.065				UB L	0.23
Total Detected PCB Congeners			**570**	**450**	**730**			**940**	**610**	**1600**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR+AC-CC-S010					LDW-Y1-SC-ENR-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-166	Hexa					U L	0.41				U	0.13
PCB-167	Hexa		0.72	0.5	1	J L	1.5	0.36	0.29	0.43	J	0.45
PCB-168	Hexa					U L	0.4				U	0.12
PCB-169	Hexa					U L	0.3				U	0.083
PCB-170	Hepta		2.1	1.3	3.3	L	1.1	1	0.78	1.3	L	0.27
PCB-171	Hepta		1.1	0.72	1.7	J L	1.2	0.46	0.37	0.59	L	0.31
PCB-172	Hepta					UB L	1.1	0.079	0.062	0.1	L	0.27
PCB-173	Hepta					U L	0.3				U L	0.076
PCB-174	Hepta		3.6	2.4	5.6	L	1.2	1.6	1.2	2	L	0.31
PCB-175	Hepta					U L	0.28				U L	0.071
PCB-176	Hepta		1	0.65	1.7	J L	1	0.29	0.22	0.37	L	0.26
PCB-177	Hepta		2.4	1.6	3.8	L	1.2	0.87	0.69	1.1	L	0.31
PCB-178	Hepta		1.3	0.85	2	L	1.2	0.48	0.38	0.61	L	0.31
PCB-179	Hepta		2.4	1.5	3.9	L	1	0.83	0.64	1.1	L	0.26
PCB-180	Hepta		5.4	3.4	8.7	L	1.1	2	1.6	2.6	L	0.27
PCB-181	Hepta					U L	0.26				U L	0.065
PCB-182	Hepta		5.3	3.4	8.2	C L	1.2	2	1.6	2.6	C L	0.31
PCB-183	Hepta		2.6	1.7	4.1	L	1.2	1	0.79	1.3	L	0.31
PCB-184	Hepta	PRC										
PCB-185	Hepta					U L	0.27	0.21	0.17	0.27	J L	0.31
PCB-186	Hepta					U L	0.19				U L	0.044
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.18				U L	0.045
PCB-189	Hepta					U L	0.17				U L	0.038
PCB-190	Hepta					U L	0.21	0.21	0.16	0.27	J L	0.27
PCB-191	Hepta					U L	0.21				U L	0.05
PCB-192	Hepta	PRC										
PCB-193	Hepta		0.55	0.35	0.88	J L	1.1	0.19	0.15	0.25	J L	0.27
PCB-194	Octa		0.54	0.28	1	J L	0.66	0.16	0.11	0.22	L	0.14
PCB-195	Octa		0.26	0.14	0.48	J L	0.72	0.096	0.069	0.13	J L	0.16
PCB-196	Octa		0.86	0.47	1.6	C L	0.72	0.26	0.19	0.36	C L	0.16
PCB-197	Octa					UB L	0.63				UB L	0.13
PCB-198	Octa					U L	0.16				U L	0.038
PCB-199	Octa		0.69	0.36	1.3	L	0.63	0.18	0.12	0.26	L	0.13
PCB-200	Octa					U L	0.1				U L	0.023
PCB-201	Octa					U L	0.12				U L	0.028
PCB-202	Octa					U L	0.099				U L	0.022
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.077				U L	0.016
PCB-206	Nona					U L	0.075	0.03	0.019	0.047	J L	0.084
PCB-207	Nona					UB J L	0.4				UB L	0.07
PCB-208	Nona					U L	0.047	0.016	0.0096	0.025	J L	0.07
PCB-209	Deca		0.024	0.0082	0.071	L	0.25				UB L	0.037
Total Detected PCB Congeners			**1300**	**930**	**2000**			**1000**	**860**	**1300**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SC-ENR-CB-S010					LDW-Y1-SC-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-166	Hexa					U L	0.77				U	0.088
PCB-167	Hexa		2.5	1.5	4.1	J L	4.3	0.36	0.33	0.39	J	0.44
PCB-168	Hexa					U L	0.73				U	0.084
PCB-169	Hexa					U L	0.77				U L	0.063
PCB-170	Hepta		13	6.6	24	L	4.7	1.4	1.2	1.5	L	0.29
PCB-171	Hepta		5.2	2.8	9.6	L	4.6	0.59	0.53	0.66	L	0.32
PCB-172	Hepta					UB L	4.7	0.15	0.13	0.17	L	0.29
PCB-173	Hepta					U L	1.3				U L	0.081
PCB-174	Hepta		20	11	37	L	4.6	2.3	2.1	2.6	L	0.32
PCB-175	Hepta					U L	1.2				U L	0.075
PCB-176	Hepta		4.4	2.3	8.6	J L	4.7	0.38	0.34	0.43	L	0.28
PCB-177	Hepta		10	5.5	19	L	4.6	1.3	1.2	1.5	L	0.32
PCB-178	Hepta		5.5	3	10	L	4.6	0.63	0.56	0.7	L	0.32
PCB-179	Hepta		13	6.8	26	L	4.7	1.2	1.1	1.4	L	0.28
PCB-180	Hepta		30	15	57	L	4.7	2.8	2.5	3.2	L	0.29
PCB-181	Hepta					U L	1.1				U L	0.069
PCB-182	Hepta		26	14	49	C L	4.6	2.8	2.5	3.2	C L	0.32
PCB-183	Hepta		15	8.1	27	L	4.6	1.4	1.3	1.6	L	0.32
PCB-184	Hepta	PRC										
PCB-185	Hepta					U L	1.1	0.3	0.27	0.33	J L	0.32
PCB-186	Hepta					U L	0.91				U L	0.049
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.92				U L	0.049
PCB-189	Hepta					U L	0.89				U L	0.043
PCB-190	Hepta		3.2	1.7	6.2	J L	4.7	0.31	0.27	0.35	L	0.29
PCB-191	Hepta					U L	0.98				U L	0.054
PCB-192	Hepta	PRC										
PCB-193	Hepta		5.4	2.8	11	L	4.7	0.29	0.26	0.33	L	0.29
PCB-194	Octa		4.6	1.9	11	J L	5.2	0.26	0.22	0.31	L	0.17
PCB-195	Octa		2	0.87	4.8	J L	5.1	0.15	0.13	0.17	J L	0.18
PCB-196	Octa		6.5	2.8	15	C L	5.1	0.38	0.33	0.45	C L	0.18
PCB-197	Octa					UB L	5.3				UB L	0.16
PCB-198	Octa					U L	0.97				U L	0.039
PCB-199	Octa		6.6	2.6	17	L	5.3	0.32	0.27	0.39	L	0.16
PCB-200	Octa					U L	0.72				U L	0.024
PCB-201	Octa					U L	0.71				U L	0.028
PCB-202	Octa					U L	0.7				U L	0.023
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.67				U L	0.022
PCB-206	Nona					U L	1.5	0.052	0.042	0.064	J L	0.11
PCB-207	Nona					UB L	5.9	0.012	0.0098	0.016	L	0.092
PCB-208	Nona					U L	1.1	0.02	0.016	0.025	J L	0.092
PCB-209	Deca		0.83	0.19	3.6	L	6.6				UB L	0.054
Total Detected PCB Congeners			**2400**	**1700**	**3600**			**1200**	**1200**	**1400**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CA-S010					LDW-Y1-SU-ENR+AC-CB-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-166	Hexa					U	0.11				U L	0.37
PCB-167	Hexa		1.1	0.96	1.3		0.4	2.1	1.6	2.8	L	0.98
PCB-168	Hexa		0.14	0.12	0.16	J	0.46				U L	0.35
PCB-169	Hexa					U L	0.08				U L	0.28
PCB-170	Hepta		3.8	3	4.7	L	0.26	7.9	5.5	11	L	0.75
PCB-171	Hepta		1.4	1.1	1.7	L	0.3	2.7	1.9	3.9	L	0.8
PCB-172	Hepta		0.52	0.42	0.64	L	0.26	0.96	0.67	1.4	L	0.75
PCB-173	Hepta					U L	0.093				U L	0.22
PCB-174	Hepta		5.9	4.8	7.2	L	0.3	13	8.9	18	L	0.8
PCB-175	Hepta		0.23	0.19	0.29	J L	0.3	0.45	0.32	0.64	J L	0.8
PCB-176	Hepta		0.95	0.77	1.2	L	0.26	1.8	1.2	2.6	L	0.73
PCB-177	Hepta		3.5	2.8	4.2	L	0.3	6.8	4.8	9.6	L	0.8
PCB-178	Hepta		1.6	1.3	1.9	L	0.3	2.8	2	3.9	L	0.8
PCB-179	Hepta		3	2.4	3.7	L	0.26	6.3	4.3	9.2	L	0.73
PCB-180	Hepta		7.5	6.1	9.3	L	0.26	15	11	22	L	0.75
PCB-181	Hepta					U L	0.079				U L	0.19
PCB-182	Hepta		7.2	5.9	8.8	C L	0.3	14	9.9	20	C L	0.8
PCB-183	Hepta		3.5	2.9	4.3	L	0.3	7	5	9.9	L	0.8
PCB-184	Hepta	PRC										
PCB-185	Hepta		0.67	0.55	0.81	L	0.3	1.4	0.99	2	L	0.8
PCB-186	Hepta					U L	0.056				U L	0.14
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.058				U L	0.14
PCB-189	Hepta					U L	0.047				U L	0.12
PCB-190	Hepta		0.78	0.63	0.97	L	0.26	1.6	1.1	2.4	L	0.75
PCB-191	Hepta		0.25	0.2	0.31	J L	0.26				U L	0.15
PCB-192	Hepta	PRC										
PCB-193	Hepta		0.58	0.47	0.72	L	0.26	1.3	0.89	1.9	L	0.75
PCB-194	Octa		0.92	0.68	1.2	L	0.15	2.6	1.5	4.3	L	0.52
PCB-195	Octa		0.4	0.31	0.54	L	0.17	1.1	0.69	1.8	L	0.56
PCB-196	Octa		1.4	1	1.8	C L	0.17	3.4	2.1	5.6	C L	0.56
PCB-197	Octa		0.051	0.037	0.069	L	0.15				UB L	0.5
PCB-198	Octa					U L	0.049				U L	0.15
PCB-199	Octa		1.1	0.78	1.4	L	0.15	3	1.8	5	L	0.5
PCB-200	Octa		0.17	0.12	0.23	L	0.15	0.5	0.3	0.85	J L	0.5
PCB-201	Octa					U L	0.036				U L	0.11
PCB-202	Octa		0.23	0.17	0.31	L	0.15	0.75	0.45	1.3	L	0.5
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa		0.053	0.039	0.072	J L	0.15	0.16	0.094	0.26	J L	0.52
PCB-206	Nona		0.17	0.12	0.25	L	0.1	0.58	0.31	1.1	L	0.39
PCB-207	Nona		0.02	0.014	0.031	L	0.087	0.081	0.041	0.16	L	0.36
PCB-208	Nona		0.052	0.035	0.078	J L	0.087	0.2	0.099	0.39	J L	0.36
PCB-209	Deca		0.01	0.0061	0.017	L	0.052	0.12	0.052	0.28	L	0.25
Total Detected PCB Congeners			**4200**	**3700**	**4900**			**3500**	**2700**	**4800**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR+AC-CC-S010					LDW-Y1-SU-ENR-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-166	Hexa					U L	0.17				U L	0.15
PCB-167	Hexa		0.92	0.78	1.1	L	0.49	2.3	2	2.7	L	0.66
PCB-168	Hexa					U L	0.16				U L	0.14
PCB-169	Hexa					U L	0.13				U L	0.11
PCB-170	Hepta		2.7	2.2	3.3	L	0.33	9.4	7.7	11	L	0.46
PCB-171	Hepta		1.2	1	1.5	L	0.37	3.6	3	4.4	L	0.51
PCB-172	Hepta		0.33	0.27	0.42	L	0.33	1.6	1.3	1.9	L	0.46
PCB-173	Hepta					U L	0.094				U L	0.15
PCB-174	Hepta		4.7	3.9	5.8	L	0.37	14	12	17	L	0.51
PCB-175	Hepta		0.26	0.22	0.32	J L	0.37	0.67	0.56	0.81	L	0.51
PCB-176	Hepta		0.74	0.6	0.93	L	0.32	2.3	1.9	2.8	L	0.45
PCB-177	Hepta		2.7	2.2	3.3	L	0.37	8.6	7.1	10	L	0.51
PCB-178	Hepta		1	0.86	1.3	L	0.37	3.5	2.9	4.2	L	0.51
PCB-179	Hepta		2.4	1.9	2.9	L	0.32	7.5	6.1	9.1	L	0.45
PCB-180	Hepta		5.7	4.6	7.1	L	0.33	18	14	21	L	0.46
PCB-181	Hepta					U L	0.079				U L	0.13
PCB-182	Hepta		5.7	4.7	7	C L	0.37	17	14	21	C L	0.51
PCB-183	Hepta		3	2.4	3.6	L	0.37	8.6	7.2	10	L	0.51
PCB-184	Hepta	PRC										
PCB-185	Hepta		0.57	0.46	0.69	L	0.37	1.4	1.2	1.7	L	0.51
PCB-186	Hepta					U L	0.056				U L	0.09
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.058				U L	0.099
PCB-189	Hepta					U L	0.047	0.24	0.19	0.29	J L	0.41
PCB-190	Hepta		0.68	0.55	0.85	L	0.33	1.9	1.6	2.3	L	0.46
PCB-191	Hepta					U L	0.063	0.45	0.37	0.54	J L	0.46
PCB-192	Hepta	PRC										
PCB-193	Hepta		0.58	0.47	0.72	L	0.33	1.3	1.1	1.6	L	0.46
PCB-194	Octa		0.53	0.39	0.71	L	0.19	2.1	1.6	2.8	L	0.28
PCB-195	Octa		0.23	0.18	0.31	L	0.21	1.2	0.9	1.5	L	0.31
PCB-196	Octa		0.87	0.65	1.2	C L	0.21	3.1	2.4	4	C L	0.31
PCB-197	Octa					UB L	0.18	0.13	0.1	0.18	L	0.27
PCB-198	Octa					U L	0.06	0.19	0.15	0.25	J L	0.31
PCB-199	Octa		0.63	0.46	0.86	L	0.18	2.6	1.9	3.4	L	0.27
PCB-200	Octa					U L	0.037	0.51	0.38	0.67	L	0.27
PCB-201	Octa					U L	0.044				U L	0.056
PCB-202	Octa		0.19	0.14	0.26	L	0.18	0.65	0.49	0.86	L	0.27
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa		0.042	0.031	0.057	J L	0.19	0.12	0.094	0.16	J L	0.28
PCB-206	Nona		0.09	0.062	0.13	J L	0.12	0.43	0.31	0.61	L	0.19
PCB-207	Nona		0.0077	0.0051	0.012	L	0.11	0.049	0.034	0.07	L	0.17
PCB-208	Nona		0.029	0.019	0.044	J L	0.11	0.12	0.083	0.17	J L	0.17
PCB-209	Deca		0.011	0.0064	0.018	L	0.063	0.051	0.033	0.081	L	0.1
Total Detected PCB Congeners			**3700**	**3200**	**4400**			**7700**	**6600**	**9100**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-ENR-CB-S010					LDW-Y1-SU-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-166	Hexa					U L	1.4				U L	0.29
PCB-167	Hexa		11	2.8	48	L	6	4.1	3.3	5.2	L	1.1
PCB-168	Hexa					U L	1.3				U L	0.27
PCB-169	Hexa					U L	1.3				U L	0.24
PCB-170	Hepta		65	10	420	L	6.1	18	13	25	L	0.9
PCB-171	Hepta		25	4.4	140	L	6	6.9	5.2	9.3	L	0.96
PCB-172	Hepta		19	3	130	L	6.1	3.8	2.8	5.2	L	0.9
PCB-173	Hepta					U L	2.1	0.86	0.65	1.2	J L	0.96
PCB-174	Hepta		91	16	530	L	6	25	19	34	L	0.96
PCB-175	Hepta					U L	1.9	1	0.75	1.3	L	0.96
PCB-176	Hepta		16	2.4	100	L	6.1	4.2	3	5.7	L	0.89
PCB-177	Hepta		57	10	330	L	6	16	12	21	L	0.96
PCB-178	Hepta		23	4.1	130	L	6	5.7	4.2	7.6	L	0.96
PCB-179	Hepta		55	8.4	360	L	6.1	13	9.5	18	L	0.89
PCB-180	Hepta		150	23	960	L	6.1	36	27	50	L	0.9
PCB-181	Hepta					U L	1.9				U L	0.27
PCB-182	Hepta		120	21	680	C L	6	31	23	41	C L	0.96
PCB-183	Hepta		59	10	340	L	6	16	12	21	L	0.96
PCB-184	Hepta	PRC										
PCB-185	Hepta		11	1.9	61	L	6	2.8	2.1	3.7	L	0.96
PCB-186	Hepta					U L	1.4				U L	0.19
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	1.4				U L	0.21
PCB-189	Hepta					U L	1.5	0.56	0.4	0.79	J L	0.84
PCB-190	Hepta		15	2.4	98	L	6.1	3.7	2.7	5.1	L	0.9
PCB-191	Hepta		5.1	0.79	33	J L	6.1	1.1	0.82	1.5	L	0.9
PCB-192	Hepta	PRC										
PCB-193	Hepta		15	2.3	97	L	6.1	2.9	2.1	4	L	0.9
PCB-194	Octa		25	2.2	300	L	6.2	5.1	3.3	7.9	L	0.67
PCB-195	Octa		12	1.1	120	L	6.1	2.6	1.7	3.9	L	0.71
PCB-196	Octa		37	3.5	380	C L	6.1	7	4.6	11	C L	0.71
PCB-197	Octa		4.5	0.37	55	L	6.2	0.052	0.033	0.082	L	0.65
PCB-198	Octa					U L	1.3				U L	0.19
PCB-199	Octa		34	2.8	410	L	6.2	5.5	3.5	8.7	L	0.65
PCB-200	Octa		6.1	0.5	74	J L	6.2	0.85	0.54	1.3	L	0.65
PCB-201	Octa					U L	0.94	0.98	0.65	1.5	L	0.71
PCB-202	Octa		8	0.66	98	L	6.2	1.3	0.82	2	L	0.65
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa		2.1	0.18	25	J L	6.2	0.28	0.18	0.43	J L	0.67
PCB-206	Nona		8.4	0.46	160	L	6.3	1.1	0.63	1.9	L	0.53
PCB-207	Nona		3.3	0.15	73	L	6.3	0.19	0.11	0.35	L	0.49
PCB-208	Nona		2.7	0.12	58	J L	6.3	0.31	0.17	0.55	J L	0.49
PCB-209	Deca		4.9	0.12	190	L	6.4	0.21	0.1	0.43	L	0.37
Total Detected PCB Congeners			**16000**	**7900**	**38000**			**7200**	**5900**	**8900**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-SU-S010-LCB					LDW-Y1-IN-ENR+AC-CA-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-166	Hexa					U L	0.62				U L	0.25
PCB-167	Hexa					U L	0.61	0.63	0.56	0.71	J L	1.3
PCB-168	Hexa					U L	0.6				U L	0.24
PCB-169	Hexa					U L	0.56				U L	0.24
PCB-170	Hepta					U L	0.64	3.1	2.6	3.7	L	1.3
PCB-171	Hepta					U L	0.61	1.2	1.1	1.4	J L	1.3
PCB-172	Hepta		1.2	0.74	1.8	L	3.5	1.8	1.6	2.1	L	1.3
PCB-173	Hepta					U L	0.63				U L	0.23
PCB-174	Hepta					U L	0.59	5.1	4.4	5.9	L	1.3
PCB-175	Hepta					U L	0.58	0.36	0.31	0.42	J L	1.3
PCB-176	Hepta					U L	0.45	0.98	0.83	1.2	J L	1.3
PCB-177	Hepta					U L	0.62	2.5	2.2	2.9	L	1.3
PCB-178	Hepta					U L	0.61	1.4	1.2	1.6	L	1.3
PCB-179	Hepta					U L	0.44	2.7	2.3	3.2	L	1.3
PCB-180	Hepta					U L	0.46	7.1	6	8.4	L	1.3
PCB-181	Hepta					U L	0.54				U L	0.19
PCB-182	Hepta					UC L	0.52	6.1	5.2	7.1	C L	1.3
PCB-183	Hepta					U L	0.55	2.9	2.5	3.4	L	1.3
PCB-184	Hepta	PRC										
PCB-185	Hepta					U L	0.56	0.58	0.5	0.67	J L	1.3
PCB-186	Hepta					U L	0.43				U L	0.15
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.42				U L	0.16
PCB-189	Hepta					U L	0.41				U L	0.16
PCB-190	Hepta					U L	0.45	0.7	0.6	0.83	J L	1.3
PCB-191	Hepta					U L	0.45				U L	0.16
PCB-192	Hepta	PRC										
PCB-193	Hepta					U L	0.43	0.63	0.53	0.74	J L	1.3
PCB-194	Octa					U L	0.57	1.1	0.88	1.4	J L	1.3
PCB-195	Octa					U L	0.59	0.57	0.46	0.71	J L	1.3
PCB-196	Octa					UC L	0.49	1.7	1.4	2.1	C L	1.3
PCB-197	Octa					UB L	3.5				UB L	1.3
PCB-198	Octa					U L	0.59				U L	0.24
PCB-199	Octa					U L	0.49	1.7	1.3	2.1	L	1.3
PCB-200	Octa					U L	0.42				U L	0.16
PCB-201	Octa					U L	0.41				U L	0.16
PCB-202	Octa					U L	0.41	0.63	0.5	0.79	J L	1.3
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.43				U L	0.29
PCB-206	Nona					U L	0.31	0.64	0.49	0.84	J L	1.3
PCB-207	Nona		0.13	0.059	0.3	L	3.4	0.66	0.49	0.88	L	1.3
PCB-208	Nona					U L	0.25	0.27	0.2	0.37	J L	1.3
PCB-209	Deca		0.45	0.17	1.2	L	3.3	0.9	0.63	1.3	L	1.4
Total Detected PCB Congeners			**40**	**31**	**54**			**830**	**770**	**900**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR+AC-CB-S010					LDW-Y1-IN-ENR+AC-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-166	Hexa					U L	0.23				U	0.054
PCB-167	Hexa		0.83	0.56	1.2	J L	1.4	0.17	0.13	0.21	J	0.33
PCB-168	Hexa					U L	0.22				U	0.052
PCB-169	Hexa					U L	0.23				U	0.037
PCB-170	Hepta		2.5	1.5	4.3	L	1.4	0.37	0.28	0.5	L	0.22
PCB-171	Hepta		1.1	0.64	1.7	J L	1.4	0.17	0.13	0.23	J L	0.25
PCB-172	Hepta					UB L	1.4				UB L	0.22
PCB-173	Hepta					U L	0.24				U L	0.032
PCB-174	Hepta		4	2.4	6.6	L	1.4	0.59	0.46	0.77	L	0.25
PCB-175	Hepta					U L	0.22				U L	0.029
PCB-176	Hepta		0.8	0.46	1.4	J L	1.4	0.088	0.066	0.12	J L	0.21
PCB-177	Hepta		2.2	1.4	3.7	L	1.4	0.35	0.27	0.46	L	0.25
PCB-178	Hepta		1.3	0.8	2.2	J L	1.4	0.15	0.11	0.19	J L	0.25
PCB-179	Hepta		2.4	1.4	4.2	L	1.4	0.32	0.24	0.42	L	0.21
PCB-180	Hepta		6.7	3.9	11	L	1.4	0.78	0.59	1	L	0.22
PCB-181	Hepta					U L	0.2				U L	0.026
PCB-182	Hepta		5.4	3.3	8.9	C L	1.4	0.73	0.56	0.95	C L	0.25
PCB-183	Hepta		2.7	1.6	4.4	L	1.4	0.41	0.32	0.53	L	0.25
PCB-184	Hepta	PRC										
PCB-185	Hepta		0.59	0.36	0.98	J L	1.4				U L	0.028
PCB-186	Hepta					U L	0.16				U L	0.019
PCB-187	Hepta					C182					C182	
PCB-188	Hepta					U L	0.16	0.036	0.027	0.048	J L	0.21
PCB-189	Hepta					U L	0.16				U L	0.016
PCB-190	Hepta		0.52	0.3	0.9	J L	1.4	0.087	0.066	0.12	J L	0.22
PCB-191	Hepta					U L	0.17				U L	0.02
PCB-192	Hepta	PRC										
PCB-193	Hepta		0.69	0.4	1.2	J L	1.4	0.097	0.073	0.13	J L	0.22
PCB-194	Octa		1.1	0.54	2.4	J L	1.4	0.077	0.052	0.12	J L	0.13
PCB-195	Octa		0.52	0.26	1.1	J L	1.4	0.05	0.034	0.073	J L	0.14
PCB-196	Octa		1.6	0.78	3.2	C L	1.4	0.14	0.096	0.2	C,J L	0.14
PCB-197	Octa					UB L	1.4				UB L	0.12
PCB-198	Octa					U L	0.22				U L	0.018
PCB-199	Octa		1.5	0.68	3.2	L	1.4	0.11	0.076	0.17	J L	0.12
PCB-200	Octa					U L	0.15				U L	0.011
PCB-201	Octa					U L	0.15				U L	0.012
PCB-202	Octa		0.51	0.23	1.1	J L	1.4	0.038	0.025	0.058	J L	0.12
PCB-203	Octa					C196					C196	
PCB-204	Octa	PRC										
PCB-205	Octa					U L	0.26				U L	0.015
PCB-206	Nona		0.48	0.19	1.2	J L	1.4	0.022	0.013	0.036	J L	0.086
PCB-207	Nona		0.2	0.074	0.54	L	1.4				UB L	0.074
PCB-208	Nona		0.27	0.098	0.72	J L	1.4	0.011	0.0066	0.02	J L	0.074
PCB-209	Deca		0.36	0.1	1.2	L	1.4				UB L	0.044
Total Detected PCB Congeners			**530**	**400**	**740**			**270**	**230**	**330**		

Table A6. Uncertainty analysis of concentration of freely-dissolved (Cfree) PCB congeners.

PCB	Homolog Group	PRC	LDW-Y1-IN-ENR-CA-S010					LDW-Y1-IN-ENR-CB-S010					LDW-Y1-IN-ENR-CC-S010				
			[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL	[PCB Cfree] Result	Lower CL [PCB Cfree] Result	Upper CL [PCB Cfree] Result	Qualifier	[PCB Cfree] DL
			(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)	(pg/L)	(pg/L)	(pg/L)		(pg/L)
PCB-166	Hexa					U L	0.43				U L	0.15				U L	0.23
PCB-167	Hexa		1	0.61	1.7	J L	1.7	0.41	0.31	0.55	J L	0.62	0.52	0.33	0.82	J L	0.94
PCB-168	Hexa					U L	0.4				U L	0.14				U L	0.22
PCB-169	Hexa					U L	0.35				U L	0.12				U L	0.17
PCB-170	Hepta		2.3	1.2	4.4	L	1.4	0.9	0.62	1.3	L	0.45	1.1	0.63	2	L	0.66
PCB-171	Hepta					U L	0.3	0.34	0.24	0.48	J L	0.49	0.67	0.39	1.2	J L	0.73
PCB-172	Hepta		0.48	0.25	0.95	L	1.4				UB L	0.45	0.18	0.1	0.33	L	0.66
PCB-173	Hepta					U L	0.32				U L	0.093				U L	0.19
PCB-174	Hepta		3.2	1.7	6	L	1.5	1.5	1.1	2.1	L	0.49	1.6	0.94	2.8	L	0.73
PCB-175	Hepta					U L	0.29				U L	0.085				U L	0.17
PCB-176	Hepta					U L	0.21	0.28	0.19	0.41	J L	0.44	0.48	0.27	0.88	J L	0.65
PCB-177	Hepta		1.9	1	3.7	L	1.5	0.87	0.62	1.2	L	0.49	1.2	0.72	2.1	L	0.73
PCB-178	Hepta					U L	0.31	0.54	0.39	0.77	L	0.49	0.95	0.55	1.6	L	0.73
PCB-179	Hepta		1.5	0.74	2.9	L	1.4	0.92	0.63	1.3	L	0.44	1.3	0.72	2.3	L	0.65
PCB-180	Hepta		5	2.6	9.9	L	1.4	2.3	1.6	3.4	L	0.45	3	1.7	5.4	L	0.66
PCB-181	Hepta					U L	0.28				U L	0.083				U L	0.17
PCB-182	Hepta		4.2	2.2	7.9	C L	1.5	2.1	1.5	3	C L	0.49	2.7	1.6	4.7	C L	0.73
PCB-183	Hepta		2.4	1.3	4.6	L	1.5	1.2	0.82	1.6	L	0.49	1.6	0.93	2.8	L	0.73
PCB-184	Hepta	PRC															
PCB-185	Hepta					U L	0.29				U L	0.085				U L	0.17
PCB-186	Hepta					U L	0.2				U L	0.056				U L	0.11
PCB-187	Hepta					C182					C182					C182	
PCB-188	Hepta					U L	0.22				U L	0.055				U L	0.11
PCB-189	Hepta					U L	0.17				U L	0.054				U L	0.11
PCB-190	Hepta					U L	0.22	0.28	0.19	0.41	J L	0.45	0.31	0.17	0.55	J L	0.66
PCB-191	Hepta					U L	0.22				U L	0.063				U L	0.13
PCB-192	Hepta	PRC															
PCB-193	Hepta					U L	0.21	0.36	0.25	0.52	J L	0.45				U L	0.12
PCB-194	Octa		0.57	0.23	1.4	J L	1	0.18	0.11	0.31	J L	0.29	0.28	0.12	0.63	J L	0.42
PCB-195	Octa					U L	0.26				U L	0.062				U L	0.13
PCB-196	Octa		0.84	0.35	2	C,J L	1.1	0.24	0.15	0.39	C,J L	0.32	0.41	0.19	0.89	C,J L	0.45
PCB-197	Octa					UB L	0.98				UB L	0.28	0.072	0.031	0.17	L	0.4
PCB-198	Octa					U L	0.27				U L	0.062				U L	0.11
PCB-199	Octa					U L	0.22	0.29	0.17	0.5	L	0.28	0.29	0.13	0.66	J L	0.4
PCB-200	Octa					U L	0.18				U L	0.041				U L	0.071
PCB-201	Octa					U L	0.2				U L	0.045				U L	0.079
PCB-202	Octa					U L	0.18				U L	0.04				U L	0.069
PCB-203	Octa					C196					C196					C196	
PCB-204	Octa	PRC															
PCB-205	Octa					U L	0.16				U L	0.038				U L	0.082
PCB-206	Nona					U L	0.12				U L	0.042				U L	0.06
PCB-207	Nona		0.043	0.013	0.15	L	0.73				UB L	0.19				UB L	0.26
PCB-208	Nona					U L	0.08				U L	0.027				U L	0.036
PCB-209	Deca		0.06	0.013	0.27	L	0.54	0.0059	0.0025	0.014	L	0.12				UB L	0.16
Total Detected PCB Congeners			**1300**	**830**	**2100**			**840**	**660**	**1100**			**1100**	**720**	**1900**		

Notes

C: Coelution with one or more PCB congeners; the numerical value indicates the lower congener co-eluter. For example, PCB-20 co-elutes with PCB-21 and PCB-33

J: Analyte concentration is below calibration range

L: Percent to steady state less than 20%

PCB: Polychlorinated biphenyl

pg/L: picogram per liter

PRC: Performance Reference Compound

U: Not detected at the Method Detection Limit (DL) shown in the second column for each sample.

UB: Background concentration exceeds detected concentration

CL: confidence level