

November 19, 2013

FAL Project ID: 8156

Mr. Mark Katchen
Phylmar Group
2342 Manning Avenue
Los Angeles, CA 90064

Dear Mr. Katchen,

Attached are the results for Frontier Analytical Laboratory project **8156**. This corresponds to your project number **365-001A** and project name **MHS/Cabrillo Monitoring**. Fifteen wipe samples were received on 11/5/2013 in good condition. All fifteen wipe samples were extracted and analyzed by EPA Method 1668C for all 209 polychlorinated biphenyls (PCBs). In addition, the total PCB concentration is listed in the upper right hand portion of page one of each sample data page. **Please note the results are reported in pg/sample**. The results have not been adjusted for the surface area of the wipe sample. The Phylmar Group requested a turnaround time of ten business days for project **8156**.

The following report consists of an Analytical Data section and a Sample Receipt section. The Analytical Data section contains our project-sample tracking log and the analytical results. The Sample Receipt section contains your chain of custody, our sample login form and the sample photo. The attached results are specifically for the samples referenced in this report only. These results shall not be reproduced except in full. Frontier Analytical Laboratory's NELAP Certificate number is 02113CA. This report has been emailed to you as a PDF file. A hardcopy will not be sent to you unless specifically requested.

If you have any questions regarding project **8156**, please contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,



Bradley B. Silverbush
Director of Operations

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **8156**

Received on: **11/05/2013**

Project Due: **11/20/2013**

Storage: **R2**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
8156-001-SA	0	365-001A	HC20131102-W-6A	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-002-SA	0	365-001A	HC20131102-W-6B	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-003-SA	0	365-001A	HC20131102-W-6C	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-004-SA	0	365-001A	HC20131102-W-7A	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-005-SA	0	365-001A	HC20131102-W-7B	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-006-SA	0	365-001A	HC20131102-W-7C	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-007-SA	0	365-001A	HC20131102-W-8A	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-008-SA	0	365-001A	HC20131102-W-8B	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-009-SA	0	365-001A	HC20131102-W-8C	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-010-SA	0	365-001A	HC20131102-W-9A	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-011-SA	0	365-001A	HC20131102-W-9B	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-012-SA	0	365-001A	HC20131102-W-9C	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-013-SA	0	365-001A	HC20131102-W-10A	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-014-SA	0	365-001A	HC20131102-W-10B	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014
8156-015-SA	0	365-001A	HC20131102-W-10C	EPA 1668 PCB	Wipe	11/02/2013	NP	11/02/2014

EPA Modified Method 1668 PCBs



FAL ID: 8156-001-MB
Client ID: Method Blank
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: NA
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013
Total Conc: 16.2

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	ND	2.82			PCB-51	ND	5.03		
PCB-2	ND	3.83			PCB-52	ND	3.88	C	69
PCB-3	ND	3.05			PCB-53	ND	5.24		
PCB-4	ND	4.22			PCB-54	ND	2.72		
PCB-5	ND	4.05			PCB-55	ND	3.69		
PCB-6	ND	3.36			PCB-56	ND	6.46	C	60
PCB-7	ND	4.02			PCB-57	ND	3.58		
PCB-8	ND	3.93			PCB-58	ND	4.01		
PCB-9	ND	3.80			PCB-59	-	-	C042	42
PCB-10	ND	4.20			PCB-60	-	-	C056	56
PCB-11	16.2	-	J		PCB-61	ND	3.88	C	70
PCB-12	ND	3.95			PCB-62	ND	4.34		
PCB-13	ND	4.22			PCB-63	ND	3.66		
PCB-14	ND	3.96			PCB-64	-	-	C041	41/71/72
PCB-15	ND	3.05			PCB-65	ND	3.72		
PCB-16	ND	2.96			PCB-66	ND	3.45	C	76
PCB-17	ND	3.63			PCB-67	ND	3.44		
PCB-18	ND	4.05			PCB-68	ND	3.49		
PCB-19	ND	2.91			PCB-69	-	-	C052	52
PCB-20	ND	3.13	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	ND	3.37			PCB-72	-	-	C041	41/64/71
PCB-23	ND	3.97			PCB-73	ND	4.37		
PCB-24	ND	2.83			PCB-74	ND	2.67		
PCB-25	ND	3.25			PCB-75	-	-	C048	48
PCB-26	ND	3.62			PCB-76	-	-	C066	66
PCB-27	ND	2.55			PCB-77	ND	5.37		
PCB-28	ND	2.99			PCB-78	ND	6.80		
PCB-29	ND	3.54			PCB-79	ND	6.60		
PCB-30	ND	2.53			PCB-80	ND	3.10		
PCB-31	ND	3.14			PCB-81	ND	6.27		
PCB-32	ND	2.75			PCB-82	ND	8.39		
PCB-33	-	-	C020	20/21	PCB-83	ND	5.84	C	112
PCB-34	ND	3.52			PCB-84	ND	6.84	C	92
PCB-35	ND	3.48			PCB-85	ND	5.68	C	116
PCB-36	ND	3.37			PCB-86	ND	5.12		
PCB-37	ND	2.54			PCB-87	ND	5.13	C	117/125
PCB-38	ND	3.23			PCB-88	ND	4.65	C	91
PCB-39	ND	3.59			PCB-89	ND	7.37		
PCB-40	ND	6.53			PCB-90	ND	6.20	C	101
PCB-41	ND	3.81	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	ND	4.20	C	59	PCB-92	-	-	C084	84
PCB-43	ND	4.21	C	49	PCB-93	ND	4.42		
PCB-44	ND	4.44			PCB-94	ND	5.33		
PCB-45	ND	5.57			PCB-95	ND	4.28		
PCB-46	ND	5.78			PCB-96	ND	3.42		
PCB-47	ND	4.46			PCB-97	ND	6.49		
PCB-48	ND	4.08	C	75	PCB-98	ND	4.15	C	102
PCB-49	-	-	C043	43	PCB-99	ND	6.25		
PCB-50	ND	4.88			PCB-100	ND	4.42		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-001-MB
Client ID: Method Blank
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: NA
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	ND	7.41		
PCB-102	-	-	C098	98	PCB-152	ND	3.37		
PCB-103	ND	4.08			PCB-153	ND	5.90		
PCB-104	ND	2.52			PCB-154	ND	3.86		
PCB-105	ND	5.89			PCB-155	ND	2.45		
PCB-106	ND	6.53	C	118	PCB-156	ND	5.39		
PCB-107	ND	6.16	C	108	PCB-157	ND	5.85		
PCB-108	-	-	C107	107	PCB-158	ND	5.23	C	160
PCB-109	ND	5.36			PCB-159	ND	5.08		
PCB-110	ND	3.70			PCB-160	-	-	C158	158
PCB-111	ND	4.50	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	4.99			PCB-163	-	-	C138	138/164
PCB-114	ND	5.49			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	ND	5.47		
PCB-117	-	-	C087	87/125	PCB-167	ND	5.34		
PCB-118	-	6.53	C106	106	PCB-168	ND	5.51		
PCB-119	ND	4.56			PCB-169	ND	7.97		
PCB-120	ND	4.23			PCB-170	ND	8.16		
PCB-121	ND	3.77			PCB-171	ND	6.98		
PCB-122	ND	6.02			PCB-172	ND	7.48		
PCB-123	ND	5.50			PCB-173	ND	7.98		
PCB-124	ND	5.82			PCB-174	ND	7.49		
PCB-125	-	-	C087	87/117	PCB-175	ND	6.95		
PCB-126	ND	5.10			PCB-176	ND	5.02		
PCB-127	ND	6.10			PCB-177	ND	7.73		
PCB-128	ND	6.53	C	162	PCB-178	ND	7.22		
PCB-129	ND	7.88			PCB-179	ND	4.93		
PCB-130	ND	8.59			PCB-180	ND	6.58		
PCB-131	ND	7.03	C	133	PCB-181	ND	7.05		
PCB-132	ND	6.11	C	161	PCB-182	ND	6.46	C	187
PCB-133	-	-	C131	131	PCB-183	ND	6.31		
PCB-134	ND	7.18	C	143	PCB-184	ND	5.00		
PCB-135	ND	7.38			PCB-185	ND	7.25		
PCB-136	ND	3.55			PCB-186	ND	5.38		
PCB-137	ND	7.08			PCB-187	-	-	C182	182
PCB-138	ND	4.85	C	163/164	PCB-188	ND	4.28		
PCB-139	ND	6.88	C	149	PCB-189	ND	3.73		
PCB-140	ND	6.62			PCB-190	ND	5.91		
PCB-141	ND	7.01			PCB-191	ND	5.35		
PCB-142	ND	7.80			PCB-192	ND	6.09		
PCB-143	-	-	C134	134	PCB-193	ND	5.31		
PCB-144	ND	6.72			PCB-194	ND	6.25		
PCB-145	ND	3.55			PCB-195	ND	7.37		
PCB-146	ND	5.69	C	165	PCB-196	ND	6.76	C	203
PCB-147	ND	6.63			PCB-197	ND	5.09		
PCB-148	ND	4.35			PCB-198	ND	6.83		
PCB-149	-	-	C139	139	PCB-199	ND	7.75		
PCB-150	ND	3.59			PCB-200	ND	4.85		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-001-MB
Client ID: Method Blank
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: NA
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	ND	4.81		
PCB-202	ND	3.74		
PCB-203	-	-	C196	196
PCB-204	ND	4.94		
PCB-205	ND	3.61		
PCB-206	ND	5.17		
PCB-207	ND	5.41		
PCB-208	ND	4.41		
PCB-209	ND	5.22		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	94.6	5.00 - 145	
13C-PCB-3	90.4	5.00 - 145	
13C-PCB-4	93.5	5.00 - 145	
13C-PCB-15	94.4	5.00 - 145	
13C-PCB-19	93.2	5.00 - 145	
13C-PCB-37	93.5	5.00 - 145	
13C-PCB-54	101	5.00 - 145	
13C-PCB-77	90.2	10.0 - 145	
13C-PCB-81	91.6	10.0 - 145	
13C-PCB-104	93.4	10.0 - 145	
13C-PCB-105	92.7	10.0 - 145	
13C-PCB-114	96.8	10.0 - 145	
13C-PCB-118	95.5	10.0 - 145	
13C-PCB-123	105	10.0 - 145	
13C-PCB-126	89.7	10.0 - 145	
13C-PCB-155	94.9	10.0 - 145	
13C-PCB-156	92.5	10.0 - 145	
13C-PCB-157	92.8	10.0 - 145	
13C-PCB-167	94.4	10.0 - 145	
13C-PCB-169	91.8	10.0 - 145	
13C-PCB-188	93.0	10.0 - 145	
13C-PCB-189	92.8	10.0 - 145	
13C-PCB-202	88.4	10.0 - 145	
13C-PCB-205	89.9	10.0 - 145	
13C-PCB-206	85.2	10.0 - 145	
13C-PCB-208	85.4	10.0 - 145	
13C-PCB-209	87.2	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	96.6	5.00 - 145	
13C-PCB-111	89.8	10.0 - 145	
13C-PCB-178	92.5	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/18/2013

Reviewed By: 
Date: 11/18/2013

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EPA Modified Method 1668
PCBs



FAL ID: 8156-001-OPR
Client ID: OPR
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: NA
Amount: 1.00 sample

ICal: 1668FAL4-10-24-13
GC Column: DB1
Units: ng/ml

Acquired: 11-13-2013

Compound	% Recovery	QC Limits	Qual	Internal Standards	% Recovery	QC Limits	Qual
PCB-1	104	60.0 - 135		13C-PCB-1	80.0	15.0 - 145	
PCB-3	104	60.0 - 135		13C-PCB-3	78.7	15.0 - 145	
PCB-4	96.4	60.0 - 135		13C-PCB-4	87.4	15.0 - 145	
PCB-15	102	60.0 - 135		13C-PCB-15	85.1	15.0 - 145	
PCB-19	104	60.0 - 135		13C-PCB-19	89.2	15.0 - 145	
PCB-37	101	60.0 - 135		13C-PCB-37	77.6	15.0 - 145	
PCB-54	100	60.0 - 135		13C-PCB-54	101	15.0 - 145	
PCB-77	103	60.0 - 135		13C-PCB-77	83.3	40.0 - 145	
PCB-81	106	60.0 - 135		13C-PCB-81	80.5	40.0 - 145	
PCB-104	105	60.0 - 135		13C-PCB-104	83.2	40.0 - 145	
PCB-105	99.4	60.0 - 135		13C-PCB-105	93.0	40.0 - 145	
PCB-114	99.2	60.0 - 135		13C-PCB-114	91.5	40.0 - 145	
PCB-118	99.4	60.0 - 135		13C-PCB-118	88.2	40.0 - 145	
PCB-123	96.6	60.0 - 135		13C-PCB-123	95.0	40.0 - 145	
PCB-126	104	60.0 - 135		13C-PCB-126	90.1	40.0 - 145	
PCB-155	107	60.0 - 135		13C-PCB-155	87.0	40.0 - 145	
PCB-156	107	60.0 - 135		13C-PCB-156	93.9	40.0 - 145	
PCB-157	112	60.0 - 135		13C-PCB-157	90.0	40.0 - 145	
PCB-167	111	60.0 - 135		13C-PCB-167	91.2	40.0 - 145	
PCB-169	110	60.0 - 135		13C-PCB-169	91.6	40.0 - 145	
PCB-188	110	60.0 - 135		13C-PCB-188	99.3	40.0 - 145	
PCB-189	113	60.0 - 135		13C-PCB-189	93.4	40.0 - 145	
PCB-202	109	60.0 - 135		13C-PCB-202	94.3	40.0 - 145	
PCB-205	113	60.0 - 135		13C-PCB-205	81.7	40.0 - 145	
PCB-206	107	60.0 - 135		13C-PCB-206	94.6	40.0 - 145	
PCB-208	98.2	60.0 - 135		13C-PCB-208	97.1	40.0 - 145	
PCB-209	122	60.0 - 135		13C-PCB-209	83.6	40.0 - 145	
				Cleanup Surrogate	% Recovery	QC limits	Qual
				13C-PCB-28	95.2	15.0 - 145	
				13C-PCB-111	87.9	40.0 - 145	
				13C-PCB-178	101	40.0 - 145	

Analyst: 

Date: 11/18/2013

Reviewed By: 

Date: 11/18/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-001-SA
Client ID: HC20131102-W-6A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013
Total Conc: 493000

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	27.6	-	J		PCB-51	127	-		
PCB-2	23.9	-	J		PCB-52	7110	-	C	69
PCB-3	80.4	-			PCB-53	401	-		
PCB-4	63.6	-			PCB-54	ND	5.35		
PCB-5	ND	6.22			PCB-55	175	-		
PCB-6	58.5	-			PCB-56	2940	-	C	60
PCB-7	16.7	-	J		PCB-57	19.5	-	J	
PCB-8	300	-			PCB-58	10.5	-	J	
PCB-9	17.1	-	J		PCB-59	-	-	C042	42
PCB-10	ND	6.23			PCB-60	-	-	C056	56
PCB-11	2360	-	B		PCB-61	13100	-	C	70
PCB-12	30.5	-	J		PCB-62	ND	7.90		
PCB-13	329	-			PCB-63	112	-		
PCB-14	ND	5.85			PCB-64	-	-	C041	41/71/72
PCB-15	621	-			PCB-65	ND	7.65		
PCB-16	208	-			PCB-66	4390	-	C	76
PCB-17	221	-			PCB-67	87.8	-		
PCB-18	695	-			PCB-68	76.4	-		
PCB-19	41.4	-			PCB-69	-	-	C052	52
PCB-20	700	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	423	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	5.62			PCB-73	13.6	-	J	
PCB-24	ND	2.05			PCB-74	1650	-		
PCB-25	72.9	-			PCB-75	-	-	C048	48
PCB-26	298	-			PCB-76	-	-	C066	66
PCB-27	49.5	-			PCB-77	1550	-		
PCB-28	852	-			PCB-78	86.1	-		
PCB-29	ND	7.26			PCB-79	355	-		
PCB-30	ND	1.97			PCB-80	ND	5.81		
PCB-31	886	-			PCB-81	615	-		
PCB-32	177	-			PCB-82	4550	-		
PCB-33	-	-	C020	20/21	PCB-83	1360	-	C	112
PCB-34	ND	7.61			PCB-84	13800	-	C	92
PCB-35	169	-			PCB-85	4650	-	C	116
PCB-36	35.2	-	J		PCB-86	35.5	-	J	
PCB-37	478	-			PCB-87	15000	-	C	117/125
PCB-38	11.5	-	J		PCB-88	4110	-	C	91
PCB-39	44.8	-			PCB-89	216	-		
PCB-40	556	-			PCB-90	36300	-	C	101
PCB-41	2590	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	631	-	C	59	PCB-92	-	-	C084	84
PCB-43	1910	-	C	49	PCB-93	ND	6.19		
PCB-44	3890	-			PCB-94	102	-		
PCB-45	194	-			PCB-95	25100	-		
PCB-46	155	-			PCB-96	129	-		
PCB-47	495	-			PCB-97	10300	-		
PCB-48	271	-	C	75	PCB-98	ND	5.33	C	102
PCB-49	-	-	C043	43	PCB-99	10700	-		
PCB-50	ND	9.23			PCB-100	47.3	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-001-SA
Client ID: HC20131102-W-6A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	8470	-		
PCB-102	-	-	C098	98	PCB-152	48.4	-		
PCB-103	97.6	-			PCB-153	31000	-		
PCB-104	ND	3.30			PCB-154	265	-		
PCB-105	12100	-			PCB-155	14.6	-	J	
PCB-106	32300	-	C	118	PCB-156	3170	-		
PCB-107	2240	-	C	108	PCB-157	880	-		
PCB-108	-	-	C107	107	PCB-158	4680	-	C	160
PCB-109	ND	7.97			PCB-159	122	-		
PCB-110	32700	-			PCB-160	-	-	C158	158
PCB-111	487	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	7.96			PCB-163	-	-	C138	138/164
PCB-114	700	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	145	-		
PCB-117	-	-	C087	87/125	PCB-167	1410	-		
PCB-118	-	-	C106	106	PCB-168	44.8	-		
PCB-119	306	-			PCB-169	16.4	-	J	
PCB-120	81.0	-			PCB-170	5150	-		
PCB-121	ND	4.26			PCB-171	1610	-		
PCB-122	370	-			PCB-172	764	-		
PCB-123	470	-			PCB-173	178	-		
PCB-124	1610	-			PCB-174	5890	-		
PCB-125	-	-	C087	87/117	PCB-175	282	-		
PCB-126	338	-			PCB-176	1220	-		
PCB-127	15.6	-	J		PCB-177	3420	-		
PCB-128	6660	-	C	162	PCB-178	1210	-		
PCB-129	2290	-			PCB-179	3530	-		
PCB-130	2650	-			PCB-180	7990	-		
PCB-131	1280	-	C	133	PCB-181	61.4	-		
PCB-132	16200	-	C	161	PCB-182	6100	-	C	187
PCB-133	-	-	C131	131	PCB-183	3110	-		
PCB-134	2660	-	C	143	PCB-184	24.7	-	J	
PCB-135	5710	-			PCB-185	781	-		
PCB-136	7940	-			PCB-186	ND	2.67		
PCB-137	2170	-			PCB-187	-	-	C182	182
PCB-138	33200	-	C	163/164	PCB-188	10.4	-	J	
PCB-139	35900	-	C	149	PCB-189	149	-		
PCB-140	180	-			PCB-190	950	-		
PCB-141	7960	-			PCB-191	191	-		
PCB-142	13.3	-	J		PCB-192	ND	3.08		
PCB-143	-	-	C134	134	PCB-193	394	-		
PCB-144	2320	-			PCB-194	479	-		
PCB-145	21.2	-	J		PCB-195	347	-		
PCB-146	4690	-	C	165	PCB-196	955	-	C	203
PCB-147	873	-			PCB-197	70.6	-		
PCB-148	ND	9.90			PCB-198	48.7	-		
PCB-149	-	-	C139	139	PCB-199	938	-		
PCB-150	57.8	-			PCB-200	225	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-001-SA
Client ID: HC20131102-W-6A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	232	-		
PCB-202	239	-		
PCB-203	-	-	C196	196
PCB-204	ND	3.19		
PCB-205	23.9	-	J	
PCB-206	48.9	-		
PCB-207	17.5	-	J	
PCB-208	19.6	-	J	
PCB-209	ND	6.51		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	92.1	5.00 - 145	
13C-PCB-3	88.8	5.00 - 145	
13C-PCB-4	97.0	5.00 - 145	
13C-PCB-15	94.7	5.00 - 145	
13C-PCB-19	89.2	5.00 - 145	
13C-PCB-37	102	5.00 - 145	
13C-PCB-54	95.4	5.00 - 145	
13C-PCB-77	103	10.0 - 145	
13C-PCB-81	103	10.0 - 145	
13C-PCB-104	92.1	10.0 - 145	
13C-PCB-105	112	10.0 - 145	
13C-PCB-114	105	10.0 - 145	
13C-PCB-118	104	10.0 - 145	
13C-PCB-123	115	10.0 - 145	
13C-PCB-126	112	10.0 - 145	
13C-PCB-155	83.7	10.0 - 145	
13C-PCB-156	101	10.0 - 145	
13C-PCB-157	98.0	10.0 - 145	
13C-PCB-167	101	10.0 - 145	
13C-PCB-169	98.9	10.0 - 145	
13C-PCB-188	86.4	10.0 - 145	
13C-PCB-189	98.2	10.0 - 145	
13C-PCB-202	86.0	10.0 - 145	
13C-PCB-205	93.4	10.0 - 145	
13C-PCB-206	90.4	10.0 - 145	
13C-PCB-208	87.9	10.0 - 145	
13C-PCB-209	83.6	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	110	5.00 - 145	
13C-PCB-111	101	10.0 - 145	
13C-PCB-178	98.7	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/18/2013

Reviewed By: 
Date: 11/18/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-002-SA
Client ID: HC20131102-W-6B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013
Total Conc: 841000

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	17.3	-	J		PCB-51	22.3	-	J	
PCB-2	10.5	-	J		PCB-52	2180	-	C	69
PCB-3	18.3	-	J		PCB-53	74.3	-		
PCB-4	31.9	-	J		PCB-54	ND	2.18		
PCB-5	ND	9.29			PCB-55	76.6	-		
PCB-6	26.6	-	J		PCB-56	1570	-	C	60
PCB-7	ND	9.55			PCB-57	ND	4.92		
PCB-8	143	-			PCB-58	ND	5.09		
PCB-9	ND	8.22			PCB-59	-	-	C042	42
PCB-10	ND	9.31			PCB-60	-	-	C056	56
PCB-11	849	-	B		PCB-61	5830	-	C	70
PCB-12	ND	9.88			PCB-62	ND	3.22		
PCB-13	ND	8.55			PCB-63	57.3	-		
PCB-14	ND	8.74			PCB-64	-	-	C041	41/71/72
PCB-15	47.5	-			PCB-65	ND	3.11		
PCB-16	58.9	-			PCB-66	2060	-	C	76
PCB-17	77.5	-			PCB-67	37.4	-	J	
PCB-18	203	-			PCB-68	11.1	-	J	
PCB-19	16.2	-	J		PCB-69	-	-	C052	52
PCB-20	228	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	129	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	4.14			PCB-73	ND	3.03		
PCB-24	ND	5.90			PCB-74	791	-		
PCB-25	21.9	-	J		PCB-75	-	-	C048	48
PCB-26	51.0	-			PCB-76	-	-	C066	66
PCB-27	12.9	-	J		PCB-77	1590	-		
PCB-28	280	-			PCB-78	70.0	-		
PCB-29	ND	3.95			PCB-79	194	-		
PCB-30	ND	5.66			PCB-80	ND	4.14		
PCB-31	282	-			PCB-81	602	-		
PCB-32	62.5	-			PCB-82	6180	-		
PCB-33	-	-	C020	20/21	PCB-83	1110	-	C	112
PCB-34	ND	4.14			PCB-84	7160	-	C	92
PCB-35	32.6	-	J		PCB-85	5300	-	C	116
PCB-36	ND	3.95			PCB-86	52.1	-		
PCB-37	121	-			PCB-87	14800	-	C	117/125
PCB-38	ND	4.02			PCB-88	1780	-	C	91
PCB-39	ND	4.15			PCB-89	85.5	-		
PCB-40	155	-			PCB-90	25500	-	C	101
PCB-41	865	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	178	-	C	59	PCB-92	-	-	C084	84
PCB-43	571	-	C	49	PCB-93	ND	5.59		
PCB-44	1250	-			PCB-94	36.0	-	J	
PCB-45	50.7	-			PCB-95	9860	-		
PCB-46	31.0	-	J		PCB-96	33.7	-	J	
PCB-47	140	-			PCB-97	9710	-		
PCB-48	92.2	-	C	75	PCB-98	ND	4.81	C	102
PCB-49	-	-	C043	43	PCB-99	8570	-		
PCB-50	ND	3.76			PCB-100	18.3	-	J	

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EPA Modified Method 1668 PCBs



FAL ID: 8156-002-SA
Client ID: HC20131102-W-6B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	11100	-		
PCB-102	-	-	C098	98	PCB-152	30.7	-	J	
PCB-103	33.3	-	J		PCB-153	75300	-		
PCB-104	ND	2.98			PCB-154	305	-		
PCB-105	38400	-			PCB-155	ND	5.28		
PCB-106	80300	-	C	118	PCB-156	10300	-		
PCB-107	4560	-	C	108	PCB-157	2930	-		
PCB-108	-	-	C107	107	PCB-158	14400	-	C	160
PCB-109	ND	7.26			PCB-159	330	-		
PCB-110	41400	-			PCB-160	-	-	C158	158
PCB-111	541	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	7.25			PCB-163	-	-	C138	138/164
PCB-114	1760	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	486	-		
PCB-117	-	-	C087	87/125	PCB-167	4900	-		
PCB-118	-	-	C106	106	PCB-168	105	-		
PCB-119	267	-			PCB-169	23.3	-	J	
PCB-120	50.7	-			PCB-170	17700	-		
PCB-121	ND	3.84			PCB-171	5070	-		
PCB-122	953	-			PCB-172	2350	-		
PCB-123	1180	-			PCB-173	538	-		
PCB-124	3160	-			PCB-174	17300	-		
PCB-125	-	-	C087	87/117	PCB-175	711	-		
PCB-126	1020	-			PCB-176	2250	-		
PCB-127	ND	9.51			PCB-177	10300	-		
PCB-128	22500	-	C	162	PCB-178	2650	-		
PCB-129	6990	-			PCB-179	6400	-		
PCB-130	7150	-			PCB-180	29600	-		
PCB-131	2360	-	C	133	PCB-181	205	-		
PCB-132	35600	-	C	161	PCB-182	15700	-	C	187
PCB-133	-	-	C131	131	PCB-183	8580	-		
PCB-134	4730	-	C	143	PCB-184	20.7	-	J	
PCB-135	8300	-			PCB-185	2020	-		
PCB-136	6000	-			PCB-186	ND	6.20		
PCB-137	7530	-			PCB-187	-	-	C182	182
PCB-138	95500	-	C	163/164	PCB-188	ND	5.44		
PCB-139	59100	-	C	149	PCB-189	373	-		
PCB-140	306	-			PCB-190	3260	-		
PCB-141	19700	-			PCB-191	612	-		
PCB-142	18.7	-	J		PCB-192	ND	7.17		
PCB-143	-	-	C134	134	PCB-193	1360	-		
PCB-144	3070	-			PCB-194	3480	-		
PCB-145	15.1	-	J		PCB-195	2160	-		
PCB-146	10000	-	C	165	PCB-196	4920	-	C	203
PCB-147	1380	-			PCB-197	221	-		
PCB-148	ND	9.97			PCB-198	252	-		
PCB-149	-	-	C139	139	PCB-199	4720	-		
PCB-150	27.7	-	J		PCB-200	788	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-002-SA
Client ID: HC20131102-W-6B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	674	-		
PCB-202	674	-		
PCB-203	-	-	C196	196
PCB-204	ND	3.84		
PCB-205	136	-		
PCB-206	396	-		
PCB-207	115	-		
PCB-208	100	-		
PCB-209	25.6	-	J	

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	91.1	5.00 - 145	
13C-PCB-3	89.7	5.00 - 145	
13C-PCB-4	93.7	5.00 - 145	
13C-PCB-15	94.8	5.00 - 145	
13C-PCB-19	88.1	5.00 - 145	
13C-PCB-37	99.0	5.00 - 145	
13C-PCB-54	94.5	5.00 - 145	
13C-PCB-77	102	10.0 - 145	
13C-PCB-81	103	10.0 - 145	
13C-PCB-104	90.8	10.0 - 145	
13C-PCB-105	111	10.0 - 145	
13C-PCB-114	106	10.0 - 145	
13C-PCB-118	109	10.0 - 145	
13C-PCB-123	117	10.0 - 145	
13C-PCB-126	107	10.0 - 145	
13C-PCB-155	86.8	10.0 - 145	
13C-PCB-156	101	10.0 - 145	
13C-PCB-157	98.1	10.0 - 145	
13C-PCB-167	103	10.0 - 145	
13C-PCB-169	100	10.0 - 145	
13C-PCB-188	88.2	10.0 - 145	
13C-PCB-189	98.3	10.0 - 145	
13C-PCB-202	84.5	10.0 - 145	
13C-PCB-205	99.2	10.0 - 145	
13C-PCB-206	92.0	10.0 - 145	
13C-PCB-208	89.9	10.0 - 145	
13C-PCB-209	86.0	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	99.8	5.00 - 145	
13C-PCB-111	93.8	10.0 - 145	
13C-PCB-178	89.6	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/18/2013

Reviewed By: 
Date: 11/18/2013

000012 of 000054

EPA Modified Method 1668 PCBs



FAL ID: 8156-003-SA
Client ID: HC20131102-W-6C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013
Total Conc: 226000

Page 1 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	136	-			PCB-51	441	-		
PCB-2	171	-			PCB-52	11000	-	C	69
PCB-3	1170	-			PCB-53	1780	-	J	
PCB-4	112	-			PCB-54	39.3	-	J	
PCB-5	24.3	-	J		PCB-55	130	-		
PCB-6	133	-			PCB-56	758	-	C	60
PCB-7	23.4	-	J		PCB-57	36.0	-	J	
PCB-8	397	-			PCB-58	42.5	-		
PCB-9	35.2	-	J		PCB-59	-	-	C042	42
PCB-10	10.8	-	J		PCB-60	-	-	C056	56
PCB-11	1250	-	B		PCB-61	7710	-	C	70
PCB-12	211	-			PCB-62	ND	3.25		
PCB-13	4810	-			PCB-63	37.4	-	J	
PCB-14	ND	9.20			PCB-64	-	-	C041	41/71/72
PCB-15	7120	-			PCB-65	ND	3.14		
PCB-16	183	-			PCB-66	1110	-	C	76
PCB-17	319	-			PCB-67	176	-		
PCB-18	1320	-			PCB-68	68.5	-		
PCB-19	115	-			PCB-69	-	-	C052	52
PCB-20	474	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	169	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	4.39			PCB-73	59.8	-		
PCB-24	12.2	-	J		PCB-74	237	-		
PCB-25	357	-			PCB-75	-	-	C048	48
PCB-26	2300	-			PCB-76	-	-	C066	66
PCB-27	109	-			PCB-77	1370	-		
PCB-28	372	-			PCB-78	55.9	-		
PCB-29	ND	4.19			PCB-79	598	-		
PCB-30	ND	2.08			PCB-80	ND	2.39		
PCB-31	955	-			PCB-81	186	-		
PCB-32	198	-			PCB-82	1710	-		
PCB-33	-	-	C020	20/21	PCB-83	642	-	C	112
PCB-34	23.7	-	J		PCB-84	4990	-	C	92
PCB-35	394	-			PCB-85	1590	-	C	116
PCB-36	213	-			PCB-86	14.6	-	J	
PCB-37	612	-			PCB-87	4030	-	C	117/125
PCB-38	19.4	-	J		PCB-88	2160	-	C	91
PCB-39	409	-			PCB-89	219	-		
PCB-40	374	-			PCB-90	12500	-	C	101
PCB-41	1940	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	983	-	C	59	PCB-92	-	-	C084	84
PCB-43	4230	-	C	49	PCB-93	ND	8.40		
PCB-44	3520	-			PCB-94	131	-		
PCB-45	238	-			PCB-95	8190	-		
PCB-46	471	-			PCB-96	215	-		
PCB-47	772	-			PCB-97	2990	-		
PCB-48	235	-	C	75	PCB-98	ND	7.23	C	102
PCB-49	-	-	C043	43	PCB-99	3400	-		
PCB-50	14.8	-	J		PCB-100	102	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-003-SA
Client ID: HC20131102-W-6C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

Page 2 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	1450	-		
PCB-102	-	-	C098	98	PCB-152	17.0	-	J	
PCB-103	169	-			PCB-153	12000	-		
PCB-104	ND	7.46			PCB-154	161	-		
PCB-105	4140	-			PCB-155	ND	3.59		
PCB-106	8710	-	C	118	PCB-156	2570	-		
PCB-107	1080	-	C	108	PCB-157	1080	-		
PCB-108	-	-	C107	107	PCB-158	2250	-	C	160
PCB-109	10.6	-	J		PCB-159	37.5	-	J	
PCB-110	8630	-			PCB-160	-	-	C158	158
PCB-111	119	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	9.69			PCB-163	-	-	C138	138/164
PCB-114	139	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	78.7	-		
PCB-117	-	-	C087	87/125	PCB-167	1440	-		
PCB-118	-	-	C106	106	PCB-168	45.4	-		
PCB-119	303	-			PCB-169	41.9	-		
PCB-120	151	-			PCB-170	5360	-		
PCB-121	1370	-			PCB-171	849	-		
PCB-122	170	-			PCB-172	595	-		
PCB-123	181	-			PCB-173	75.5	-		
PCB-124	660	-			PCB-174	1830	-		
PCB-125	-	-	C087	87/117	PCB-175	90.9	-		
PCB-126	557	-			PCB-176	180	-		
PCB-127	30.6	-	J		PCB-177	1260	-		
PCB-128	5990	-	C	162	PCB-178	260	-		
PCB-129	1250	-			PCB-179	437	-		
PCB-130	1840	-			PCB-180	5280	-		
PCB-131	523	-	C	133	PCB-181	45.8	-		
PCB-132	5720	-	C	161	PCB-182	1370	-	C	187
PCB-133	-	-	C131	131	PCB-183	927	-		
PCB-134	750	-	C	143	PCB-184	ND	6.91		
PCB-135	1760	-			PCB-185	132	-		
PCB-136	1670	-			PCB-186	ND	7.64		
PCB-137	980	-			PCB-187	-	-	C182	182
PCB-138	15900	-	C	163/164	PCB-188	ND	5.68		
PCB-139	9310	-	C	149	PCB-189	187	-		
PCB-140	129	-			PCB-190	868	-		
PCB-141	2390	-			PCB-191	177	-		
PCB-142	ND	8.53			PCB-192	ND	8.84		
PCB-143	-	-	C134	134	PCB-193	243	-		
PCB-144	415	-			PCB-194	475	-		
PCB-145	ND	5.34			PCB-195	177	-		
PCB-146	2380	-	C	165	PCB-196	407	-	C	203
PCB-147	286	-			PCB-197	15.3	-	J	
PCB-148	ND	6.78			PCB-198	23.6	-	J	
PCB-149	-	-	C139	139	PCB-199	329	-		
PCB-150	38.8	-	J		PCB-200	38.0	-	J	

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EPA Modified Method 1668 PCBs



FAL ID: 8156-003-SA
Client ID: HC20131102-W-6C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	33.3	-	J	
PCB-202	29.5	-	J	
PCB-203	-	-	C196	196
PCB-204	ND	3.16		
PCB-205	25.3	-	J	
PCB-206	42.2	-		
PCB-207	ND	9.87		
PCB-208	ND	8.06		
PCB-209	ND	5.33		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	86.5	5.00 - 145	
13C-PCB-3	82.9	5.00 - 145	
13C-PCB-4	92.0	5.00 - 145	
13C-PCB-15	88.1	5.00 - 145	
13C-PCB-19	81.6	5.00 - 145	
13C-PCB-37	94.2	5.00 - 145	
13C-PCB-54	93.5	5.00 - 145	
13C-PCB-77	91.7	10.0 - 145	
13C-PCB-81	94.0	10.0 - 145	
13C-PCB-104	86.2	10.0 - 145	
13C-PCB-105	103	10.0 - 145	
13C-PCB-114	98.1	10.0 - 145	
13C-PCB-118	98.4	10.0 - 145	
13C-PCB-123	104	10.0 - 145	
13C-PCB-126	103	10.0 - 145	
13C-PCB-155	80.7	10.0 - 145	
13C-PCB-156	92.2	10.0 - 145	
13C-PCB-157	89.7	10.0 - 145	
13C-PCB-167	93.5	10.0 - 145	
13C-PCB-169	89.2	10.0 - 145	
13C-PCB-188	82.5	10.0 - 145	
13C-PCB-189	87.4	10.0 - 145	
13C-PCB-202	77.1	10.0 - 145	
13C-PCB-205	91.6	10.0 - 145	
13C-PCB-206	86.3	10.0 - 145	
13C-PCB-208	88.9	10.0 - 145	
13C-PCB-209	81.2	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	96.9	5.00 - 145	
13C-PCB-111	90.4	10.0 - 145	
13C-PCB-178	89.3	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/18/2013

Reviewed By: 
Date: 11/18/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-004-SA
Client ID: HC20131102-W-7A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013
Total Conc: 727000

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	30.4	-	J		PCB-51	138	-		
PCB-2	25.6	-	J		PCB-52	21400	-	C	69
PCB-3	99.4	-			PCB-53	677	-		
PCB-4	72.0	-			PCB-54	ND	2.03		
PCB-5	18.0	-	J		PCB-55	292	-		
PCB-6	66.8	-			PCB-56	6150	-	C	60
PCB-7	18.9	-	J		PCB-57	30.5	-	J	
PCB-8	332	-			PCB-58	16.5	-	J	
PCB-9	17.3	-	J		PCB-59	-	-	C042	42
PCB-10	ND	7.22			PCB-60	-	-	C056	56
PCB-11	4250	-	B		PCB-61	32300	-	C	70
PCB-12	38.9	-	J		PCB-62	ND	2.99		
PCB-13	451	-			PCB-63	274	-		
PCB-14	ND	6.78			PCB-64	-	-	C041	41/71/72
PCB-15	1230	-			PCB-65	ND	2.90		
PCB-16	208	-			PCB-66	9640	-	C	76
PCB-17	213	-			PCB-67	149	-		
PCB-18	649	-			PCB-68	32.6	-	J	
PCB-19	41.7	-			PCB-69	-	-	C052	52
PCB-20	732	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	429	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	7.54			PCB-73	15.0	-	J	
PCB-24	10.6	-	J		PCB-74	4170	-		
PCB-25	88.4	-			PCB-75	-	-	C048	48
PCB-26	348	-			PCB-76	-	-	C066	66
PCB-27	40.9	-			PCB-77	1630	-		
PCB-28	903	-			PCB-78	175	-		
PCB-29	ND	7.20			PCB-79	750	-		
PCB-30	ND	1.81			PCB-80	ND	2.20		
PCB-31	1040	-			PCB-81	1090	-		
PCB-32	197	-			PCB-82	8630	-		
PCB-33	-	-	C020	20/21	PCB-83	2580	-	C	112
PCB-34	ND	7.55			PCB-84	24500	-	C	92
PCB-35	227	-			PCB-85	10100	-	C	116
PCB-36	41.5	-			PCB-86	82.0	-		
PCB-37	676	-			PCB-87	26600	-	C	117/125
PCB-38	20.0	-	J		PCB-88	8700	-	C	91
PCB-39	85.4	-			PCB-89	403	-		
PCB-40	985	-			PCB-90	64600	-	C	101
PCB-41	5660	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	1050	-	C	59	PCB-92	-	-	C084	84
PCB-43	4910	-	C	49	PCB-93	ND	4.98		
PCB-44	10500	-			PCB-94	220	-		
PCB-45	267	-			PCB-95	47300	-		
PCB-46	205	-			PCB-96	325	-		
PCB-47	774	-			PCB-97	20000	-		
PCB-48	428	-	C	75	PCB-98	ND	4.28	C	102
PCB-49	-	-	C043	43	PCB-99	23100	-		
PCB-50	ND	3.50			PCB-100	96.0	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-004-SA
Client ID: HC20131102-W-7A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	5810	-		
PCB-102	-	-	C098	98	PCB-152	71.5	-		
PCB-103	213	-			PCB-153	31200	-		
PCB-104	ND	2.65			PCB-154	382	-		
PCB-105	25600	-			PCB-155	15.5	-	J	
PCB-106	71100	-	C	118	PCB-156	4500	-		
PCB-107	4020	-	C	108	PCB-157	1250	-		
PCB-108	-	-	C107	107	PCB-158	5530	-	C	160
PCB-109	ND	8.55			PCB-159	62.5	-		
PCB-110	57700	-			PCB-160	-	-	C158	158
PCB-111	1140	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	8.54			PCB-163	-	-	C138	138/164
PCB-114	1650	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	219	-		
PCB-117	-	-	C087	87/125	PCB-167	1810	-		
PCB-118	-	-	C106	106	PCB-168	58.4	-		
PCB-119	694	-			PCB-169	18.1	-	J	
PCB-120	102	-			PCB-170	4240	-		
PCB-121	ND	3.42			PCB-171	945	-		
PCB-122	645	-			PCB-172	478	-		
PCB-123	917	-			PCB-173	67.4	-		
PCB-124	2780	-			PCB-174	2090	-		
PCB-125	-	-	C087	87/117	PCB-175	126	-		
PCB-126	362	-			PCB-176	385	-		
PCB-127	ND	9.86			PCB-177	1470	-		
PCB-128	9190	-	C	162	PCB-178	368	-		
PCB-129	2760	-			PCB-179	875	-		
PCB-130	3620	-			PCB-180	4590	-		
PCB-131	1480	-	C	133	PCB-181	59.3	-		
PCB-132	16000	-	C	161	PCB-182	1960	-	C	187
PCB-133	-	-	C131	131	PCB-183	1270	-		
PCB-134	2830	-	C	143	PCB-184	23.2	-	J	
PCB-135	5730	-			PCB-185	154	-		
PCB-136	7310	-			PCB-186	ND	5.99		
PCB-137	2950	-			PCB-187	-	-	C182	182
PCB-138	35900	-	C	163/164	PCB-188	ND	4.65		
PCB-139	31600	-	C	149	PCB-189	144	-		
PCB-140	261	-			PCB-190	612	-		
PCB-141	6310	-			PCB-191	136	-		
PCB-142	15.8	-	J		PCB-192	ND	6.93		
PCB-143	-	-	C134	134	PCB-193	217	-		
PCB-144	1710	-			PCB-194	318	-		
PCB-145	35.5	-	J		PCB-195	118	-		
PCB-146	4870	-	C	165	PCB-196	313	-	C	203
PCB-147	961	-			PCB-197	15.3	-	J	
PCB-148	ND	9.71			PCB-198	22.0	-	J	
PCB-149	-	-	C139	139	PCB-199	346	-		
PCB-150	76.1	-			PCB-200	31.4	-	J	

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EPA Modified Method 1668 PCBs



FAL ID: 8156-004-SA
Client ID: HC20131102-W-7A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	49.0	-		
PCB-202	56.2	-		
PCB-203	-	-	C196	196
PCB-204	ND	3.68		
PCB-205	15.7	-	J	
PCB-206	31.9	-	J	
PCB-207	ND	5.42		
PCB-208	10.3	-	J	
PCB-209	ND	7.81		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	84.7	5.00 - 145	
13C-PCB-3	80.8	5.00 - 145	
13C-PCB-4	87.8	5.00 - 145	
13C-PCB-15	86.8	5.00 - 145	
13C-PCB-19	80.7	5.00 - 145	
13C-PCB-37	94.7	5.00 - 145	
13C-PCB-54	90.0	5.00 - 145	
13C-PCB-77	92.4	10.0 - 145	
13C-PCB-81	93.5	10.0 - 145	
13C-PCB-104	83.8	10.0 - 145	
13C-PCB-105	102	10.0 - 145	
13C-PCB-114	94.6	10.0 - 145	
13C-PCB-118	93.4	10.0 - 145	
13C-PCB-123	102	10.0 - 145	
13C-PCB-126	98.0	10.0 - 145	
13C-PCB-155	76.7	10.0 - 145	
13C-PCB-156	92.3	10.0 - 145	
13C-PCB-157	91.2	10.0 - 145	
13C-PCB-167	91.1	10.0 - 145	
13C-PCB-169	91.7	10.0 - 145	
13C-PCB-188	80.6	10.0 - 145	
13C-PCB-189	91.9	10.0 - 145	
13C-PCB-202	77.6	10.0 - 145	
13C-PCB-205	87.3	10.0 - 145	
13C-PCB-206	80.3	10.0 - 145	
13C-PCB-208	82.1	10.0 - 145	
13C-PCB-209	76.5	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	94.3	5.00 - 145	
13C-PCB-111	89.1	10.0 - 145	
13C-PCB-178	86.0	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/18/2013

Reviewed By: 
Date: 11/18/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-005-SA
Client ID: HC20131102-W-7B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013
Total Conc: 768000

Page 1 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	15.7	-	J		PCB-51	33.3	-	J	
PCB-2	10.9	-	J		PCB-52	8860	-	C	69
PCB-3	15.7	-	J		PCB-53	201	-		
PCB-4	25.5	-	J		PCB-54	ND	2.30		
PCB-5	ND	9.04			PCB-55	186	-		
PCB-6	21.3	-	J		PCB-56	3640	-	C	60
PCB-7	ND	8.97			PCB-57	10.5	-	J	
PCB-8	116	-			PCB-58	ND	3.40		
PCB-9	ND	8.48			PCB-59	-	-	C042	42
PCB-10	ND	9.37			PCB-60	-	-	C056	56
PCB-11	1700	-	B		PCB-61	21000	-	C	70
PCB-12	ND	8.81			PCB-62	ND	3.68		
PCB-13	ND	9.43			PCB-63	171	-		
PCB-14	ND	8.85			PCB-64	-	-	C041	41/71/72
PCB-15	52.4	-			PCB-65	ND	3.15		
PCB-16	63.5	-			PCB-66	6240	-	C	76
PCB-17	73.2	-			PCB-67	63.4	-		
PCB-18	204	-			PCB-68	21.8	-	J	
PCB-19	13.7	-	J		PCB-69	-	-	C052	52
PCB-20	258	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	165	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	3.84			PCB-73	15.0	-	J	
PCB-24	ND	2.09			PCB-74	2710	-		
PCB-25	24.4	-	J		PCB-75	-	-	C048	48
PCB-26	64.9	-			PCB-76	-	-	C066	66
PCB-27	11.7	-	J		PCB-77	1240	-		
PCB-28	321	-			PCB-78	115	-		
PCB-29	ND	3.42			PCB-79	405	-		
PCB-30	ND	1.87			PCB-80	ND	2.63		
PCB-31	381	-			PCB-81	1080	-		
PCB-32	60.9	-			PCB-82	9290	-		
PCB-33	-	-	C020	20/21	PCB-83	2010	-	C	112
PCB-34	ND	3.41			PCB-84	18100	-	C	92
PCB-35	68.0	-			PCB-85	9130	-	C	116
PCB-36	ND	3.26			PCB-86	55.4	-		
PCB-37	191	-			PCB-87	26800	-	C	117/125
PCB-38	ND	3.13			PCB-88	4780	-	C	91
PCB-39	ND	3.48			PCB-89	251	-		
PCB-40	453	-			PCB-90	53200	-	C	101
PCB-41	2570	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	424	-	C	59	PCB-92	-	-	C084	84
PCB-43	2030	-	C	49	PCB-93	ND	3.93		
PCB-44	4800	-			PCB-94	109	-		
PCB-45	91.8	-			PCB-95	30600	-		
PCB-46	55.5	-			PCB-96	146	-		
PCB-47	307	-			PCB-97	17600	-		
PCB-48	174	-	C	75	PCB-98	ND	3.69	C	102
PCB-49	-	-	C043	43	PCB-99	20200	-		
PCB-50	ND	4.13			PCB-100	45.0	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-005-SA
Client ID: HC20131102-W-7B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

Page 2 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	6150	-		
PCB-102	-	-	C098	98	PCB-152	50.9	-		
PCB-103	103	-			PCB-153	47500	-		
PCB-104	ND	2.24			PCB-154	309	-		
PCB-105	44000	-			PCB-155	10.2	-	J	
PCB-106	96200	-	C	118	PCB-156	9530	-		
PCB-107	5270	-	C	108	PCB-157	2490	-		
PCB-108	-	-	C107	107	PCB-158	9590	-	C	160
PCB-109	ND	7.99			PCB-159	128	-		
PCB-110	61000	-			PCB-160	-	-	C158	158
PCB-111	1020	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	7.45			PCB-163	-	-	C138	138/164
PCB-114	2090	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	373	-		
PCB-117	-	-	C087	87/125	PCB-167	3520	-		
PCB-118	-	-	C106	106	PCB-168	117	-		
PCB-119	522	-			PCB-169	ND	7.98		
PCB-120	62.9	-			PCB-170	5130	-		
PCB-121	ND	3.35			PCB-171	1480	-		
PCB-122	997	-			PCB-172	711	-		
PCB-123	1110	-			PCB-173	117	-		
PCB-124	3470	-			PCB-174	3860	-		
PCB-125	-	-	C087	87/117	PCB-175	187	-		
PCB-126	444	-			PCB-176	530	-		
PCB-127	108	-			PCB-177	2280	-		
PCB-128	15700	-	C	162	PCB-178	653	-		
PCB-129	4550	-			PCB-179	1260	-		
PCB-130	5370	-			PCB-180	7750	-		
PCB-131	1650	-	C	133	PCB-181	54.9	-		
PCB-132	20500	-	C	161	PCB-182	3810	-	C	187
PCB-133	-	-	C131	131	PCB-183	2300	-		
PCB-134	2840	-	C	143	PCB-184	29.3	-	J	
PCB-135	5040	-			PCB-185	299	-		
PCB-136	5900	-			PCB-186	ND	5.42		
PCB-137	4970	-			PCB-187	-	-	C182	182
PCB-138	60500	-	C	163/164	PCB-188	ND	4.38		
PCB-139	36000	-	C	149	PCB-189	151	-		
PCB-140	227	-			PCB-190	723	-		
PCB-141	10900	-			PCB-191	183	-		
PCB-142	17.4	-	J		PCB-192	ND	6.14		
PCB-143	-	-	C134	134	PCB-193	322	-		
PCB-144	2180	-			PCB-194	573	-		
PCB-145	23.6	-	J		PCB-195	198	-		
PCB-146	6040	-	C	165	PCB-196	886	-	C	203
PCB-147	1190	-			PCB-197	40.7	-		
PCB-148	ND	9.36			PCB-198	37.5	-	J	
PCB-149	-	-	C139	139	PCB-199	1010	-		
PCB-150	49.2	-			PCB-200	106	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-005-SA
Client ID: HC20131102-W-7B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	144	-		
PCB-202	177	-		
PCB-203	-	-	C196	196
PCB-204	ND	3.86		
PCB-205	23.2	-	J	
PCB-206	179	-		
PCB-207	40.3	-		
PCB-208	61.2	-		
PCB-209	36.1	-	J	

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	93.1	5.00 - 145	
13C-PCB-3	92.2	5.00 - 145	
13C-PCB-4	95.5	5.00 - 145	
13C-PCB-15	95.0	5.00 - 145	
13C-PCB-19	90.0	5.00 - 145	
13C-PCB-37	103	5.00 - 145	
13C-PCB-54	97.0	5.00 - 145	
13C-PCB-77	101	10.0 - 145	
13C-PCB-81	99.2	10.0 - 145	
13C-PCB-104	92.4	10.0 - 145	
13C-PCB-105	104	10.0 - 145	
13C-PCB-114	93.4	10.0 - 145	
13C-PCB-118	97.8	10.0 - 145	
13C-PCB-123	105	10.0 - 145	
13C-PCB-126	105	10.0 - 145	
13C-PCB-155	89.1	10.0 - 145	
13C-PCB-156	99.3	10.0 - 145	
13C-PCB-157	98.6	10.0 - 145	
13C-PCB-167	99.5	10.0 - 145	
13C-PCB-169	105	10.0 - 145	
13C-PCB-188	85.3	10.0 - 145	
13C-PCB-189	98.4	10.0 - 145	
13C-PCB-202	85.5	10.0 - 145	
13C-PCB-205	91.5	10.0 - 145	
13C-PCB-206	79.5	10.0 - 145	
13C-PCB-208	78.4	10.0 - 145	
13C-PCB-209	73.6	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	101	5.00 - 145	
13C-PCB-111	94.8	10.0 - 145	
13C-PCB-178	91.1	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/19/2013

Reviewed By: 
Date: 11/19/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-006-SA
Client ID: HC20131102-W-7C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013
Total Conc: 16700

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	12.1	-	J		PCB-51	10.1	-	J	
PCB-2	10.2	-	J		PCB-52	506	-	C	69
PCB-3	12.3	-	J		PCB-53	38.0	-	J	
PCB-4	17.3	-	J		PCB-54	ND	2.14		
PCB-5	ND	9.06			PCB-55	11.5	-	J	
PCB-6	13.0	-	J		PCB-56	86.7	-	C	60
PCB-7	ND	9.31			PCB-57	ND	2.76		
PCB-8	66.2	-			PCB-58	ND	2.85		
PCB-9	ND	8.01			PCB-59	-	-	C042,J	42
PCB-10	ND	9.07			PCB-60	-	-	C056	56
PCB-11	719	-	B		PCB-61	413	-	C	70
PCB-12	ND	9.63			PCB-62	ND	3.15		
PCB-13	ND	8.34			PCB-63	ND	2.77		
PCB-14	ND	8.52			PCB-64	-	-	C041	41/71/72
PCB-15	15.1	-	J		PCB-65	ND	3.05		
PCB-16	14.2	-	J		PCB-66	139	-	C	76
PCB-17	23.6	-	J		PCB-67	12.3	-	J	
PCB-18	61.3	-			PCB-68	ND	2.68		
PCB-19	ND	7.73			PCB-69	-	-	C052	52
PCB-20	33.2	-	C,J	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020,J	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	17.8	-	J		PCB-72	-	-	C041	41/64/71
PCB-23	ND	6.54			PCB-73	ND	2.97		
PCB-24	ND	7.09			PCB-74	47.8	-		
PCB-25	ND	6.14			PCB-75	-	-	C048,J	48
PCB-26	17.5	-	J		PCB-76	-	-	C066	66
PCB-27	ND	7.08			PCB-77	168	-		
PCB-28	42.0	-			PCB-78	ND	2.59		
PCB-29	ND	6.24			PCB-79	20.7	-	J	
PCB-30	ND	6.80			PCB-80	ND	2.32		
PCB-31	45.8	-			PCB-81	27.0	-	J	
PCB-32	14.2	-	J		PCB-82	165	-		
PCB-33	-	-	C020,J	20/21	PCB-83	50.3	-	C	112
PCB-34	ND	6.55			PCB-84	438	-	C	92
PCB-35	24.8	-	J		PCB-85	178	-	C	116
PCB-36	ND	6.25			PCB-86	ND	7.97		
PCB-37	23.4	-	J		PCB-87	443	-	C	117/125
PCB-38	ND	6.35			PCB-88	180	-	C	91
PCB-39	ND	6.56			PCB-89	12.9	-	J	
PCB-40	21.6	-	J		PCB-90	985	-	C	101
PCB-41	115	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	37.0	-	C,J	59	PCB-92	-	-	C084	84
PCB-43	144	-	C	49	PCB-93	ND	7.07		
PCB-44	206	-			PCB-94	ND	7.93		
PCB-45	14.2	-	J		PCB-95	834	-		
PCB-46	12.9	-	J		PCB-96	12.4	-	J	
PCB-47	35.1	-	J		PCB-97	309	-		
PCB-48	15.3	-	C,J	75	PCB-98	ND	6.09	C	102
PCB-49	-	-	C043	43	PCB-99	392	-		
PCB-50	ND	3.68			PCB-100	ND	6.54		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-006-SA
Client ID: HC20131102-W-7C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	103	-		
PCB-102	-	-	C098	98	PCB-152	ND	4.88		
PCB-103	ND	8.98			PCB-153	791	-		
PCB-104	ND	5.58			PCB-154	17.4	-	J	
PCB-105	614	-			PCB-155	ND	3.47		
PCB-106	1150	-	C	118	PCB-156	176	-		
PCB-107	96.4	-	C	108	PCB-157	71.7	-		
PCB-108	-	-	C107	107	PCB-158	197	-	C	160
PCB-109	ND	6.88			PCB-159	ND	5.16		
PCB-110	985	-			PCB-160	-	-	C158	158
PCB-111	18.5	-	C,J	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	6.88			PCB-163	-	-	C138	138/164
PCB-114	31.8	-	J		PCB-164	-	-	C138	138/163
PCB-115	-	-	C111,J	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	10.7	-	J	
PCB-117	-	-	C087	87/125	PCB-167	80.3	-		
PCB-118	-	-	C106	106	PCB-168	ND	5.55		
PCB-119	21.0	-	J		PCB-169	ND	3.93		
PCB-120	ND	5.62			PCB-170	216	-		
PCB-121	ND	4.86			PCB-171	42.7	-		
PCB-122	20.7	-	J		PCB-172	24.4	-	J	
PCB-123	25.1	-	J		PCB-173	ND	5.63		
PCB-124	48.4	-			PCB-174	101	-		
PCB-125	-	-	C087	87/117	PCB-175	ND	4.95		
PCB-126	48.5	-			PCB-176	15.3	-	J	
PCB-127	ND	6.06			PCB-177	62.4	-		
PCB-128	396	-	C	162	PCB-178	17.5	-	J	
PCB-129	99.2	-			PCB-179	25.5	-	J	
PCB-130	141	-			PCB-180	251	-		
PCB-131	39.1	-	C,J	133	PCB-181	ND	5.46		
PCB-132	447	-	C	161	PCB-182	79.3	-	C	187
PCB-133	-	-	C131,J	131	PCB-183	55.3	-		
PCB-134	64.7	-	C	143	PCB-184	ND	3.45		
PCB-135	118	-			PCB-185	ND	5.30		
PCB-136	131	-			PCB-186	ND	3.82		
PCB-137	88.9	-			PCB-187	-	-	C182	182
PCB-138	1210	-	C	163/164	PCB-188	ND	3.15		
PCB-139	686	-	C	149	PCB-189	ND	2.58		
PCB-140	13.0	-	J		PCB-190	39.7	-	J	
PCB-141	198	-			PCB-191	10.1	-	J	
PCB-142	ND	8.25			PCB-192	ND	4.41		
PCB-143	-	-	C134	134	PCB-193	14.0	-	J	
PCB-144	42.0	-			PCB-194	24.4	-	J	
PCB-145	ND	5.16			PCB-195	ND	6.63		
PCB-146	145	-	C	165	PCB-196	30.8	-	C,J	203
PCB-147	25.6	-	J		PCB-197	ND	6.70		
PCB-148	ND	6.55			PCB-198	ND	8.72		
PCB-149	-	-	C139	139	PCB-199	28.5	-	J	
PCB-150	ND	5.21			PCB-200	ND	6.33		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-006-SA
Client ID: HC20131102-W-7C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	ND	6.21		
PCB-202	ND	4.91		
PCB-203	-	-	C196,J	196
PCB-204	ND	6.46		
PCB-205	ND	3.35		
PCB-206	ND	6.54		
PCB-207	ND	6.80		
PCB-208	ND	4.71		
PCB-209	ND	4.64		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	87.8	5.00 - 145	
13C-PCB-3	85.2	5.00 - 145	
13C-PCB-4	93.7	5.00 - 145	
13C-PCB-15	93.3	5.00 - 145	
13C-PCB-19	87.3	5.00 - 145	
13C-PCB-37	101	5.00 - 145	
13C-PCB-54	98.8	5.00 - 145	
13C-PCB-77	101	10.0 - 145	
13C-PCB-81	99.6	10.0 - 145	
13C-PCB-104	93.7	10.0 - 145	
13C-PCB-105	108	10.0 - 145	
13C-PCB-114	104	10.0 - 145	
13C-PCB-118	104	10.0 - 145	
13C-PCB-123	113	10.0 - 145	
13C-PCB-126	110	10.0 - 145	
13C-PCB-155	84.7	10.0 - 145	
13C-PCB-156	100	10.0 - 145	
13C-PCB-157	100	10.0 - 145	
13C-PCB-167	100	10.0 - 145	
13C-PCB-169	98.5	10.0 - 145	
13C-PCB-188	87.9	10.0 - 145	
13C-PCB-189	100	10.0 - 145	
13C-PCB-202	87.6	10.0 - 145	
13C-PCB-205	99.1	10.0 - 145	
13C-PCB-206	90.2	10.0 - 145	
13C-PCB-208	94.0	10.0 - 145	
13C-PCB-209	85.3	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	98.1	5.00 - 145	
13C-PCB-111	92.4	10.0 - 145	
13C-PCB-178	88.9	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/18/2013

Reviewed By: 
Date: 11/18/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-007-SA
Client ID: HC20131102-W-8A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013
Total Conc: 162000

Page 1 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	37.0	-	J		PCB-51	124	-		
PCB-2	28.9	-	J		PCB-52	10500	-	C	69
PCB-3	89.9	-			PCB-53	579	-		
PCB-4	104	-			PCB-54	ND	5.00		
PCB-5	18.8	-	J		PCB-55	102	-		
PCB-6	99.8	-			PCB-56	1090	-	C	60
PCB-7	24.6	-	J		PCB-57	19.5	-	J	
PCB-8	573	-			PCB-58	13.7	-	J	
PCB-9	29.5	-	J		PCB-59	-	-	C042	42
PCB-10	ND	6.73			PCB-60	-	-	C056	56
PCB-11	3080	-	B		PCB-61	6560	-	C	70
PCB-12	25.0	-	J		PCB-62	ND	7.38		
PCB-13	369	-			PCB-63	73.4	-		
PCB-14	ND	6.32			PCB-64	-	-	C041	41/71/72
PCB-15	1130	-			PCB-65	ND	7.15		
PCB-16	317	-			PCB-66	2010	-	C	76
PCB-17	362	-			PCB-67	85.0	-		
PCB-18	1030	-			PCB-68	46.4	-		
PCB-19	53.8	-			PCB-69	-	-	C052	52
PCB-20	1030	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	565	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	7.05			PCB-73	ND	6.96		
PCB-24	13.2	-	J		PCB-74	891	-		
PCB-25	114	-			PCB-75	-	-	C048	48
PCB-26	366	-			PCB-76	-	-	C066	66
PCB-27	64.0	-			PCB-77	648	-		
PCB-28	1330	-			PCB-78	41.4	-		
PCB-29	10.5	-	J		PCB-79	313	-		
PCB-30	ND	1.70			PCB-80	ND	5.43		
PCB-31	1420	-			PCB-81	ND	-		
PCB-32	301	-			PCB-82	1090	-		
PCB-33	-	-	C020	20/21	PCB-83	489	-	C	112
PCB-34	ND	7.05			PCB-84	5280	-	C	92
PCB-35	159	-			PCB-85	1240	-	C	116
PCB-36	31.1	-	J		PCB-86	18.7	-	J	
PCB-37	506	-			PCB-87	3670	-	C	117/125
PCB-38	15.1	-	J		PCB-88	2210	-	C	91
PCB-39	73.7	-			PCB-89	133	-		
PCB-40	377	-			PCB-90	11200	-	C	101
PCB-41	2220	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	578	-	C	59	PCB-92	-	-	C084	84
PCB-43	2660	-	C	49	PCB-93	ND	5.33		
PCB-44	4110	-			PCB-94	83.9	-		
PCB-45	238	-			PCB-95	12600	-		
PCB-46	171	-			PCB-96	162	-		
PCB-47	503	-			PCB-97	2750	-		
PCB-48	301	-	C	75	PCB-98	ND	4.59	C	102
PCB-49	-	-	C043	43	PCB-99	3560	-		
PCB-50	ND	8.62			PCB-100	48.5	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-007-SA
Client ID: HC20131102-W-8A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

Page 2 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	1210	-		
PCB-102	-	-	C098	98	PCB-152	20.3	-	J	
PCB-103	98.2	-			PCB-153	6910	-		
PCB-104	ND	2.84			PCB-154	99.6	-		
PCB-105	2210	-			PCB-155	ND	5.38		
PCB-106	5580	-	C	118	PCB-156	1200	-		
PCB-107	614	-	C	108	PCB-157	406	-		
PCB-108	-	-	C107	107	PCB-158	1120	-	C	160
PCB-109	ND	5.89			PCB-159	20.3	-	J	
PCB-110	7400	-			PCB-160	-	-	C158	158
PCB-111	123	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	5.89			PCB-163	-	-	C138	138/164
PCB-114	129	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	40.8	-		
PCB-117	-	-	C087	87/125	PCB-167	567	-		
PCB-118	-	-	C106	106	PCB-168	17.4	-	J	
PCB-119	163	-			PCB-169	13.5	-	J	
PCB-120	73.5	-			PCB-170	2020	-		
PCB-121	ND	3.66			PCB-171	366	-		
PCB-122	102	-			PCB-172	223	-		
PCB-123	115	-			PCB-173	31.6	-	J	
PCB-124	478	-			PCB-174	814	-		
PCB-125	-	-	C087	87/117	PCB-175	43.0	-		
PCB-126	200	-			PCB-176	115	-		
PCB-127	13.6	-	J		PCB-177	597	-		
PCB-128	2450	-	C	162	PCB-178	141	-		
PCB-129	595	-			PCB-179	284	-		
PCB-130	879	-			PCB-180	2150	-		
PCB-131	347	-	C	133	PCB-181	18.0	-	J	
PCB-132	4050	-	C	161	PCB-182	696	-	C	187
PCB-133	-	-	C131	131	PCB-183	442	-		
PCB-134	601	-	C	143	PCB-184	ND	5.69		
PCB-135	1450	-			PCB-185	70.9	-		
PCB-136	1900	-			PCB-186	ND	6.31		
PCB-137	502	-			PCB-187	-	-	C182	182
PCB-138	8010	-	C	163/164	PCB-188	ND	5.18		
PCB-139	7140	-	C	149	PCB-189	74.9	-		
PCB-140	61.0	-			PCB-190	356	-		
PCB-141	1310	-			PCB-191	66.2	-		
PCB-142	ND	-			PCB-192	ND	7.29		
PCB-143	-	-	C134	134	PCB-193	112	-		
PCB-144	344	-			PCB-194	180	-		
PCB-145	ND	7.98			PCB-195	69.3	-		
PCB-146	1310	-	C	165	PCB-196	173	-	C	203
PCB-147	202	-			PCB-197	ND	6.72		
PCB-148	ND	10.1			PCB-198	14.5	-	J	
PCB-149	-	-	C139	139	PCB-199	148	-		
PCB-150	27.6	-	J		PCB-200	22.3	-	J	

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EPA Modified Method 1668 PCBs



FAL ID: 8156-007-SA
Client ID: HC20131102-W-8A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-12-13
GC Column: DB1
Units: pg/sample

Acquired: 11-12-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	20.1	-	J	
PCB-202	21.5	-	J	
PCB-203	-	-	C196	196
PCB-204	ND	6.49		
PCB-205	ND	7.76		
PCB-206	22.3	-	J	
PCB-207	ND	7.88		
PCB-208	ND	5.40		
PCB-209	ND	6.19		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	83.6	5.00 - 145	
13C-PCB-3	80.9	5.00 - 145	
13C-PCB-4	89.6	5.00 - 145	
13C-PCB-15	89.2	5.00 - 145	
13C-PCB-19	83.1	5.00 - 145	
13C-PCB-37	94.6	5.00 - 145	
13C-PCB-54	93.1	5.00 - 145	
13C-PCB-77	100	10.0 - 145	
13C-PCB-81	101	10.0 - 145	
13C-PCB-104	87.5	10.0 - 145	
13C-PCB-105	107	10.0 - 145	
13C-PCB-114	99.6	10.0 - 145	
13C-PCB-118	96.7	10.0 - 145	
13C-PCB-123	99.3	10.0 - 145	
13C-PCB-126	104	10.0 - 145	
13C-PCB-155	86.4	10.0 - 145	
13C-PCB-156	94.5	10.0 - 145	
13C-PCB-157	93.0	10.0 - 145	
13C-PCB-167	96.4	10.0 - 145	
13C-PCB-169	91.8	10.0 - 145	
13C-PCB-188	81.8	10.0 - 145	
13C-PCB-189	89.7	10.0 - 145	
13C-PCB-202	79.8	10.0 - 145	
13C-PCB-205	88.2	10.0 - 145	
13C-PCB-206	84.8	10.0 - 145	
13C-PCB-208	86.3	10.0 - 145	
13C-PCB-209	79.3	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	107	5.00 - 145	
13C-PCB-111	105	10.0 - 145	
13C-PCB-178	95.9	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/18/2013

Reviewed By: 
Date: 11/18/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-008-SA
Client ID: HC20131102-W-8B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013
Total Conc: 833000

Page 1 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	27.9	-	J		PCB-51	115	-		
PCB-2	17.0	-	J		PCB-52	21600	-	C	69
PCB-3	37.0	-	J		PCB-53	597	-		
PCB-4	63.2	-			PCB-54	ND	2.56		
PCB-5	30.5	-	J		PCB-55	218	-		
PCB-6	67.9	-			PCB-56	4330	-	C	60
PCB-7	18.9	-	J		PCB-57	20.5	-	J	
PCB-8	369	-			PCB-58	ND	3.79		
PCB-9	22.7	-	J		PCB-59	-	-	C042	42
PCB-10	ND	7.45			PCB-60	-	-	C056	56
PCB-11	4780	-	B		PCB-61	26900	-	C	70
PCB-12	12.3	-	J		PCB-62	ND	4.10		
PCB-13	32.4	-	J		PCB-63	262	-		
PCB-14	ND	7.03			PCB-64	-	-	C041	41/71/72
PCB-15	186	-			PCB-65	ND	3.50		
PCB-16	268	-			PCB-66	8260	-	C	76
PCB-17	290	-			PCB-67	108	-		
PCB-18	811	-			PCB-68	68.4	-		
PCB-19	40.3	-			PCB-69	-	-	C052	52
PCB-20	925	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	572	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	6.69			PCB-73	ND	4.12		
PCB-24	ND	6.08			PCB-74	3900	-		
PCB-25	84.9	-			PCB-75	-	-	C048	48
PCB-26	217	-			PCB-76	-	-	C066	66
PCB-27	50.7	-			PCB-77	1750	-		
PCB-28	1120	-			PCB-78	116	-		
PCB-29	10.7	-	J		PCB-79	361	-		
PCB-30	ND	5.44			PCB-80	ND	2.92		
PCB-31	1460	-			PCB-81	976	-		
PCB-32	241	-			PCB-82	7480	-		
PCB-33	-	-	C020	20/21	PCB-83	1810	-	C	112
PCB-34	ND	5.94			PCB-84	18400	-	C	92
PCB-35	130	-			PCB-85	7490	-	C	116
PCB-36	14.7	-	J		PCB-86	74.8	-		
PCB-37	475	-			PCB-87	23300	-	C	117/125
PCB-38	14.8	-	J		PCB-88	5840	-	C	91
PCB-39	ND	6.06			PCB-89	276	-		
PCB-40	843	-			PCB-90	49100	-	C	101
PCB-41	5050	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	932	-	C	59	PCB-92	-	-	C084	84
PCB-43	5190	-	C	49	PCB-93	ND	8.18		
PCB-44	9720	-			PCB-94	159	-		
PCB-45	285	-			PCB-95	39500	-		
PCB-46	155	-			PCB-96	242	-		
PCB-47	841	-			PCB-97	15000	-		
PCB-48	504	-	C	75	PCB-98	ND	7.68	C	102
PCB-49	-	-	C043	43	PCB-99	18200	-		
PCB-50	ND	4.60			PCB-100	71.1	-		

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EPA Modified Method 1668

PCBs



FAL ID: 8156-008-SA
Client ID: HC20131102-W-8B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	6300	-		
PCB-102	-	-	C098	98	PCB-152	49.4	-		
PCB-103	181	-			PCB-153	51300	-		
PCB-104	ND	4.65			PCB-154	312	-		
PCB-105	41700	-			PCB-155	16.4	-	J	
PCB-106	82200	-	C	118	PCB-156	13200	-		
PCB-107	4850	-	C	108	PCB-157	3610	-		
PCB-108	-	-	C107	107	PCB-158	11100	-	C	160
PCB-109	ND	5.44			PCB-159	182	-		
PCB-110	50800	-			PCB-160	-	-	C158	158
PCB-111	949	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	5.07			PCB-163	-	-	C138	138/164
PCB-114	1900	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	408	-		
PCB-117	-	-	C087	87/125	PCB-167	4410	-		
PCB-118	-	-	C106	106	PCB-168	94.2	-		
PCB-119	532	-			PCB-169	17.2	-	J	
PCB-120	61.1	-			PCB-170	9670	-		
PCB-121	ND	6.98			PCB-171	2320	-		
PCB-122	861	-			PCB-172	1290	-		
PCB-123	1100	-			PCB-173	240	-		
PCB-124	2870	-			PCB-174	6930	-		
PCB-125	-	-	C087	87/117	PCB-175	287	-		
PCB-126	499	-			PCB-176	720	-		
PCB-127	ND	8.58			PCB-177	3880	-		
PCB-128	19800	-	C	162	PCB-178	1040	-		
PCB-129	5260	-			PCB-179	2000	-		
PCB-130	5590	-			PCB-180	14200	-		
PCB-131	1500	-	C	133	PCB-181	186	-		
PCB-132	19000	-	C	161	PCB-182	6640	-	C	187
PCB-133	-	-	C131	131	PCB-183	3660	-		
PCB-134	2820	-	C	143	PCB-184	36.3	-	J	
PCB-135	4880	-			PCB-185	743	-		
PCB-136	6290	-			PCB-186	ND	4.10		
PCB-137	5700	-			PCB-187	-	-	C182	182
PCB-138	69200	-	C	163/164	PCB-188	ND	3.55		
PCB-139	35700	-	C	149	PCB-189	295	-		
PCB-140	241	-			PCB-190	1790	-		
PCB-141	11500	-			PCB-191	367	-		
PCB-142	14.0	-	J		PCB-192	ND	4.63		
PCB-143	-	-	C134	134	PCB-193	616	-		
PCB-144	1950	-			PCB-194	1090	-		
PCB-145	23.1	-	J		PCB-195	479	-		
PCB-146	6450	-	C	165	PCB-196	2100	-	C	203
PCB-147	1010	-			PCB-197	81.4	-		
PCB-148	ND	4.88			PCB-198	101	-		
PCB-149	-	-	C139	139	PCB-199	2110	-		
PCB-150	51.9	-			PCB-200	313	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-008-SA
Client ID: HC20131102-W-8B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

Page 3 of 3

Compound	Conc	DL	Qual	Coeluters
PCB-201	324	-		
PCB-202	401	-		
PCB-203	-	-	C196	196
PCB-204	ND	9.87		
PCB-205	44.1	-		
PCB-206	274	-		
PCB-207	79.9	-		
PCB-208	113	-		
PCB-209	48.0	-		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	97.6	5.00 - 145	
13C-PCB-3	96.1	5.00 - 145	
13C-PCB-4	98.3	5.00 - 145	
13C-PCB-15	98.6	5.00 - 145	
13C-PCB-19	95.2	5.00 - 145	
13C-PCB-37	107	5.00 - 145	
13C-PCB-54	100	5.00 - 145	
13C-PCB-77	106	10.0 - 145	
13C-PCB-81	107	10.0 - 145	
13C-PCB-104	96.1	10.0 - 145	
13C-PCB-105	109	10.0 - 145	
13C-PCB-114	107	10.0 - 145	
13C-PCB-118	107	10.0 - 145	
13C-PCB-123	114	10.0 - 145	
13C-PCB-126	111	10.0 - 145	
13C-PCB-155	94.3	10.0 - 145	
13C-PCB-156	106	10.0 - 145	
13C-PCB-157	104	10.0 - 145	
13C-PCB-167	106	10.0 - 145	
13C-PCB-169	110	10.0 - 145	
13C-PCB-188	90.3	10.0 - 145	
13C-PCB-189	106	10.0 - 145	
13C-PCB-202	91.0	10.0 - 145	
13C-PCB-205	95.6	10.0 - 145	
13C-PCB-206	85.0	10.0 - 145	
13C-PCB-208	88.3	10.0 - 145	
13C-PCB-209	80.0	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	100	5.00 - 145	
13C-PCB-111	96.6	10.0 - 145	
13C-PCB-178	92.1	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/19/2013

Reviewed By: 
Date: 11/19/2013

000030 of 000054

EPA Modified Method 1668 PCBs



FAL ID: 8156-009-SA
Client ID: HC20131102-W-8C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013
Total Conc: 176000

Page 1 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	29.6	-	J		PCB-51	34.4	-	J	
PCB-2	31.1	-	J		PCB-52	2780	-	C	69
PCB-3	26.0	-	J		PCB-53	161	-		
PCB-4	35.6	-	J		PCB-54	ND	2.79		
PCB-5	ND	7.79			PCB-55	69.8	-		
PCB-6	24.9	-	J		PCB-56	627	-	C	60
PCB-7	11.9	-	J		PCB-57	10.8	-	J	
PCB-8	125	-			PCB-58	ND	4.11		
PCB-9	11.4	-	J		PCB-59	-	-	C042	42
PCB-10	ND	8.08			PCB-60	-	-	C056	56
PCB-11	12400	-	B		PCB-61	3840	-	C	70
PCB-12	ND	7.59			PCB-62	ND	4.44		
PCB-13	ND	8.13			PCB-63	44.5	-		
PCB-14	ND	7.63			PCB-64	-	-	C041	41/71/72
PCB-15	33.6	-	J		PCB-65	ND	3.80		
PCB-16	43.2	-			PCB-66	1160	-	C	76
PCB-17	54.5	-			PCB-67	69.6	-		
PCB-18	151	-			PCB-68	12.7	-	J	
PCB-19	12.4	-	J		PCB-69	-	-	C052	52
PCB-20	94.3	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	49.6	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	5.35			PCB-73	ND	4.47		
PCB-24	ND	7.74			PCB-74	412	-		
PCB-25	15.2	-	J		PCB-75	-	-	C048	48
PCB-26	66.7	-			PCB-76	-	-	C066	66
PCB-27	ND	6.99			PCB-77	1980	-		
PCB-28	110	-			PCB-78	43.9	-		
PCB-29	ND	4.77			PCB-79	182	-		
PCB-30	ND	6.93			PCB-80	13.7	-	J	
PCB-31	149	-			PCB-81	220	-		
PCB-32	27.7	-	J		PCB-82	1810	-		
PCB-33	-	-	C020	20/21	PCB-83	426	-	C	112
PCB-34	ND	4.75			PCB-84	3600	-	C	92
PCB-35	426	-			PCB-85	1740	-	C	116
PCB-36	444	-			PCB-86	12.6	-	J	
PCB-37	126	-			PCB-87	4670	-	C	117/125
PCB-38	ND	4.35			PCB-88	1190	-	C	91
PCB-39	ND	4.84			PCB-89	81.5	-		
PCB-40	130	-			PCB-90	9230	-	C	101
PCB-41	736	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	186	-	C	59	PCB-92	-	-	C084	84
PCB-43	761	-	C	49	PCB-93	ND	5.03		
PCB-44	1320	-			PCB-94	45.3	-		
PCB-45	43.9	-			PCB-95	6210	-		
PCB-46	47.8	-			PCB-96	57.0	-		
PCB-47	136	-			PCB-97	3080	-		
PCB-48	73.4	-	C	75	PCB-98	ND	4.72	C	102
PCB-49	-	-	C043	43	PCB-99	3690	-		
PCB-50	ND	4.99			PCB-100	27.0	-	J	

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EPA Modified Method 1668 PCBs



FAL ID: 8156-009-SA
Client ID: HC20131102-W-8C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

Page 2 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	1060	-		
PCB-102	-	-	C098	98	PCB-152	13.9	-	J	
PCB-103	51.5	-			PCB-153	10400	-		
PCB-104	ND	2.86			PCB-154	110	-		
PCB-105	8010	-			PCB-155	11.8	-	J	
PCB-106	14400	-	C	118	PCB-156	1960	-		
PCB-107	1200	-	C	108	PCB-157	748	-		
PCB-108	-	-	C107	107	PCB-158	2430	-	C	160
PCB-109	ND	8.28			PCB-159	30.0	-	J	
PCB-110	11000	-			PCB-160	-	-	C158	158
PCB-111	174	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	7.72			PCB-163	-	-	C138	138/164
PCB-114	311	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	84.1	-		
PCB-117	-	-	C087	87/125	PCB-167	1000	-		
PCB-118	-	-	C106	106	PCB-168	36.8	-	J	
PCB-119	135	-			PCB-169	20.6	-	J	
PCB-120	ND	6.53			PCB-170	2150	-		
PCB-121	ND	4.29			PCB-171	440	-		
PCB-122	222	-			PCB-172	310	-		
PCB-123	262	-			PCB-173	40.5	-		
PCB-124	609	-			PCB-174	1090	-		
PCB-125	-	-	C087	87/117	PCB-175	61.3	-		
PCB-126	682	-			PCB-176	120	-		
PCB-127	30.8	-	J		PCB-177	713	-		
PCB-128	5000	-	C	162	PCB-178	186	-		
PCB-129	1170	-			PCB-179	253	-		
PCB-130	1700	-			PCB-180	2890	-		
PCB-131	357	-	C	133	PCB-181	31.7	-	J	
PCB-132	4090	-	C	161	PCB-182	997	-	C	187
PCB-133	-	-	C131	131	PCB-183	610	-		
PCB-134	580	-	C	143	PCB-184	23.2	-	J	
PCB-135	1110	-			PCB-185	86.5	-		
PCB-136	1140	-			PCB-186	ND	5.52		
PCB-137	1060	-			PCB-187	-	-	C182	182
PCB-138	15600	-	C	163/164	PCB-188	ND	4.70		
PCB-139	7310	-	C	149	PCB-189	58.7	-		
PCB-140	88.5	-			PCB-190	375	-		
PCB-141	2320	-			PCB-191	87.2	-		
PCB-142	ND	5.81			PCB-192	ND	6.24		
PCB-143	-	-	C134	134	PCB-193	136	-		
PCB-144	342	-			PCB-194	241	-		
PCB-145	ND	5.06			PCB-195	90.6	-		
PCB-146	1510	-	C	165	PCB-196	298	-	C	203
PCB-147	231	-			PCB-197	17.6	-	J	
PCB-148	ND	6.20			PCB-198	20.4	-	J	
PCB-149	-	-	C139	139	PCB-199	299	-		
PCB-150	20.7	-	J		PCB-200	26.9	-	J	

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EPA Modified Method 1668 PCBs



FAL ID: 8156-009-SA
Client ID: HC20131102-W-8C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	33.3	-	J	
PCB-202	36.6	-	J	
PCB-203	-	-	C196	196
PCB-204	ND	3.34		
PCB-205	12.1	-	J	
PCB-206	46.8	-		
PCB-207	17.4	-	J	
PCB-208	15.3	-	J	
PCB-209	14.7	-	J	

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	87.5	5.00 - 145	
13C-PCB-3	87.4	5.00 - 145	
13C-PCB-4	87.8	5.00 - 145	
13C-PCB-15	89.6	5.00 - 145	
13C-PCB-19	85.8	5.00 - 145	
13C-PCB-37	94.7	5.00 - 145	
13C-PCB-54	87.6	5.00 - 145	
13C-PCB-77	95.2	10.0 - 145	
13C-PCB-81	94.6	10.0 - 145	
13C-PCB-104	86.7	10.0 - 145	
13C-PCB-105	96.0	10.0 - 145	
13C-PCB-114	94.1	10.0 - 145	
13C-PCB-118	92.2	10.0 - 145	
13C-PCB-123	102	10.0 - 145	
13C-PCB-126	100	10.0 - 145	
13C-PCB-155	84.4	10.0 - 145	
13C-PCB-156	95.2	10.0 - 145	
13C-PCB-157	94.8	10.0 - 145	
13C-PCB-167	95.5	10.0 - 145	
13C-PCB-169	98.8	10.0 - 145	
13C-PCB-188	81.1	10.0 - 145	
13C-PCB-189	93.2	10.0 - 145	
13C-PCB-202	81.9	10.0 - 145	
13C-PCB-205	87.5	10.0 - 145	
13C-PCB-206	81.0	10.0 - 145	
13C-PCB-208	82.8	10.0 - 145	
13C-PCB-209	75.5	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	91.9	5.00 - 145	
13C-PCB-111	89.4	10.0 - 145	
13C-PCB-178	87.8	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/19/2013

Reviewed By: 
Date: 11/19/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-010-SA
Client ID: HC20131102-W-9A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013
Total Conc: 147000

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	25.9	-	J		PCB-51	79.9	-		
PCB-2	19.5	-	J		PCB-52	8430	-	C	69
PCB-3	49.8	-			PCB-53	364	-		
PCB-4	58.1	-			PCB-54	ND	3.40		
PCB-5	ND	9.12			PCB-55	78.3	-		
PCB-6	57.3	-			PCB-56	871	-	C	60
PCB-7	15.6	-	J		PCB-57	ND	6.79		
PCB-8	309	-			PCB-58	ND	7.62		
PCB-9	27.6	-	J		PCB-59	-	-	C042	42
PCB-10	ND	9.45			PCB-60	-	-	C056	56
PCB-11	5160	-	B		PCB-61	7070	-	C	70
PCB-12	25.3	-	J		PCB-62	ND	8.24		
PCB-13	214	-			PCB-63	75.8	-		
PCB-14	ND	8.93			PCB-64	-	-	C041	41/71/72
PCB-15	419	-			PCB-65	ND	7.05		
PCB-16	174	-			PCB-66	2110	-	C	76
PCB-17	207	-			PCB-67	36.2	-	J	
PCB-18	577	-			PCB-68	31.2	-	J	
PCB-19	33.4	-	J		PCB-69	-	-	C052	52
PCB-20	491	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	300	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	7.51			PCB-73	21.7	-	J	
PCB-24	ND	6.25			PCB-74	997	-		
PCB-25	63.9	-			PCB-75	-	-	C048	48
PCB-26	190	-			PCB-76	-	-	C066	66
PCB-27	38.1	-	J		PCB-77	270	-		
PCB-28	611	-			PCB-78	32.4	-	J	
PCB-29	ND	6.70			PCB-79	116	-		
PCB-30	ND	5.59			PCB-80	ND	5.88		
PCB-31	723	-			PCB-81	190	-		
PCB-32	183	-			PCB-82	1390	-		
PCB-33	-	-	C020	20/21	PCB-83	514	-	C	112
PCB-34	ND	6.67			PCB-84	5660	-	C	92
PCB-35	101	-			PCB-85	1590	-	C	116
PCB-36	20.9	-	J		PCB-86	26.0	-	J	
PCB-37	199	-			PCB-87	4800	-	C	117/125
PCB-38	ND	7.57			PCB-88	2010	-	C	91
PCB-39	23.4	-	J		PCB-89	106	-		
PCB-40	308	-			PCB-90	13000	-	C	101
PCB-41	1910	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	408	-	C	59	PCB-92	-	-	C084	84
PCB-43	2070	-	C	49	PCB-93	ND	7.76		
PCB-44	3870	-			PCB-94	68.8	-		
PCB-45	163	-			PCB-95	12700	-		
PCB-46	103	-			PCB-96	118	-		
PCB-47	371	-			PCB-97	3480	-		
PCB-48	222	-	C	75	PCB-98	ND	7.29	C	102
PCB-49	-	-	C043	43	PCB-99	4770	-		
PCB-50	ND	6.10			PCB-100	37.9	-	J	

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EPA Modified Method 1668 PCBs



FAL ID: 8156-010-SA
Client ID: HC20131102-W-9A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	1040	-		
PCB-102	-	-	C098	98	PCB-152	17.1	-	J	
PCB-103	81.3	-			PCB-153	4730	-		
PCB-104	ND	4.42			PCB-154	72.0	-		
PCB-105	2940	-			PCB-155	ND	4.90		
PCB-106	7600	-	C	118	PCB-156	765	-		
PCB-107	565	-	C	108	PCB-157	225	-		
PCB-108	-	-	C107	107	PCB-158	876	-	C	160
PCB-109	ND	9.82			PCB-159	13.2	-	J	
PCB-110	9390	-			PCB-160	-	-	C158	158
PCB-111	268	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	9.16			PCB-163	-	-	C138	138/164
PCB-114	222	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	49.2	-		
PCB-117	-	-	C087	87/125	PCB-167	321	-		
PCB-118	-	-	C106	106	PCB-168	14.9	-	J	
PCB-119	149	-			PCB-169	ND	7.97		
PCB-120	27.3	-	J		PCB-170	838	-		
PCB-121	ND	6.62			PCB-171	202	-		
PCB-122	127	-			PCB-172	110	-		
PCB-123	133	-			PCB-173	28.4	-	J	
PCB-124	408	-			PCB-174	533	-		
PCB-125	-	-	C087	87/117	PCB-175	32.8	-	J	
PCB-126	63.5	-			PCB-176	83.6	-		
PCB-127	16.7	-	J		PCB-177	304	-		
PCB-128	1470	-	C	162	PCB-178	87.3	-		
PCB-129	471	-			PCB-179	212	-		
PCB-130	601	-			PCB-180	1010	-		
PCB-131	249	-	C	133	PCB-181	17.3	-	J	
PCB-132	2420	-	C	161	PCB-182	460	-	C	187
PCB-133	-	-	C131	131	PCB-183	278	-		
PCB-134	488	-	C	143	PCB-184	ND	5.97		
PCB-135	845	-			PCB-185	49.8	-		
PCB-136	1480	-			PCB-186	ND	6.43		
PCB-137	472	-			PCB-187	-	-	C182	182
PCB-138	5500	-	C	163/164	PCB-188	ND	5.44		
PCB-139	5090	-	C	149	PCB-189	33.4	-	J	
PCB-140	43.2	-			PCB-190	151	-		
PCB-141	1100	-			PCB-191	31.8	-	J	
PCB-142	ND	9.61			PCB-192	ND	7.27		
PCB-143	-	-	C134	134	PCB-193	54.9	-		
PCB-144	396	-			PCB-194	78.3	-		
PCB-145	ND	7.11			PCB-195	35.0	-	J	
PCB-146	732	-	C	165	PCB-196	99.0	-	C	203
PCB-147	178	-			PCB-197	ND	6.48		
PCB-148	ND	8.71			PCB-198	ND	8.69		
PCB-149	-	-	C139	139	PCB-199	102	-		
PCB-150	17.3	-	J		PCB-200	13.6	-	J	

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EPA Modified Method 1668 PCBs



FAL ID: 8156-010-SA
Client ID: HC20131102-W-9A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	18.2	-	J	
PCB-202	21.6	-	J	
PCB-203	-	-	C196	196
PCB-204	ND	6.29		
PCB-205	ND	6.99		
PCB-206	17.3	-	J	
PCB-207	ND	9.82		
PCB-208	ND	7.44		
PCB-209	10.8	-	J	

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	84.9	5.00 - 145	
13C-PCB-3	80.0	5.00 - 145	
13C-PCB-4	84.3	5.00 - 145	
13C-PCB-15	86.0	5.00 - 145	
13C-PCB-19	82.3	5.00 - 145	
13C-PCB-37	87.0	5.00 - 145	
13C-PCB-54	83.2	5.00 - 145	
13C-PCB-77	92.4	10.0 - 145	
13C-PCB-81	91.9	10.0 - 145	
13C-PCB-104	81.7	10.0 - 145	
13C-PCB-105	89.1	10.0 - 145	
13C-PCB-114	89.7	10.0 - 145	
13C-PCB-118	86.6	10.0 - 145	
13C-PCB-123	87.0	10.0 - 145	
13C-PCB-126	95.0	10.0 - 145	
13C-PCB-155	85.0	10.0 - 145	
13C-PCB-156	93.6	10.0 - 145	
13C-PCB-157	94.0	10.0 - 145	
13C-PCB-167	92.3	10.0 - 145	
13C-PCB-169	97.3	10.0 - 145	
13C-PCB-188	79.0	10.0 - 145	
13C-PCB-189	93.6	10.0 - 145	
13C-PCB-202	81.0	10.0 - 145	
13C-PCB-205	83.2	10.0 - 145	
13C-PCB-206	86.6	10.0 - 145	
13C-PCB-208	89.5	10.0 - 145	
13C-PCB-209	82.9	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	93.3	5.00 - 145	
13C-PCB-111	95.3	10.0 - 145	
13C-PCB-178	92.1	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/18/2013

Reviewed By: 
Date: 11/18/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-011-SA
Client ID: HC20131102-W-9B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013
Total Conc: 958000

Page 1 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	107	-			PCB-51	94.9	-		
PCB-2	139	-			PCB-52	17500	-	C	69
PCB-3	346	-			PCB-53	463	-		
PCB-4	56.3	-			PCB-54	ND	3.14		
PCB-5	94.7	-			PCB-55	258	-		
PCB-6	166	-			PCB-56	5030	-	C	60
PCB-7	51.5	-			PCB-57	21.3	-	J	
PCB-8	1070	-			PCB-58	ND	4.64		
PCB-9	54.0	-			PCB-59	-	-	C042	42
PCB-10	ND	6.11			PCB-60	-	-	C056	56
PCB-11	9940	-	B		PCB-61	33600	-	C	70
PCB-12	80.1	-			PCB-62	ND	5.02		
PCB-13	284	-			PCB-63	286	-		
PCB-14	ND	5.77			PCB-64	-	-	C041	41/71/72
PCB-15	1470	-			PCB-65	ND	4.29		
PCB-16	207	-			PCB-66	10000	-	C	76
PCB-17	215	-			PCB-67	121	-		
PCB-18	617	-			PCB-68	85.8	-		
PCB-19	32.0	-	J		PCB-69	-	-	C052	52
PCB-20	959	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	603	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	6.23			PCB-73	33.7	-	J	
PCB-24	ND	5.57			PCB-74	4380	-		
PCB-25	90.7	-			PCB-75	-	-	C048	48
PCB-26	217	-			PCB-76	-	-	C066	66
PCB-27	40.4	-			PCB-77	1990	-		
PCB-28	1250	-			PCB-78	145	-		
PCB-29	10.8	-	J		PCB-79	520	-		
PCB-30	ND	4.98			PCB-80	ND	3.58		
PCB-31	1370	-			PCB-81	1120	-		
PCB-32	197	-			PCB-82	10800	-		
PCB-33	-	-	C020	20/21	PCB-83	2600	-	C	112
PCB-34	ND	5.53			PCB-84	26200	-	C	92
PCB-35	293	-			PCB-85	10800	-	C	116
PCB-36	27.2	-	J		PCB-86	121	-		
PCB-37	934	-			PCB-87	33800	-	C	117/125
PCB-38	13.7	-	J		PCB-88	7540	-	C	91
PCB-39	ND	5.65			PCB-89	358	-		
PCB-40	835	-			PCB-90	70500	-	C	101
PCB-41	4810	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	845	-	C	59	PCB-92	-	-	C084	84
PCB-43	4260	-	C	49	PCB-93	ND	7.84		
PCB-44	9330	-			PCB-94	177	-		
PCB-45	234	-			PCB-95	47700	-		
PCB-46	132	-			PCB-96	238	-		
PCB-47	723	-			PCB-97	21800	-		
PCB-48	396	-	C	75	PCB-98	ND	7.37	C	102
PCB-49	-	-	C043	43	PCB-99	26900	-		
PCB-50	ND	5.63			PCB-100	78.0	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-011-SA
Client ID: HC20131102-W-9B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

Page 2 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	7130	-		
PCB-102	-	-	C098	98	PCB-152	66.7	-		
PCB-103	186	-			PCB-153	53000	-		
PCB-104	ND	4.46			PCB-154	403	-		
PCB-105	45100	-			PCB-155	17.2	-	J	
PCB-106	99700	-	C	118	PCB-156	11500	-		
PCB-107	5730	-	C	108	PCB-157	3060	-		
PCB-108	-	-	C107	107	PCB-158	10700	-	C	160
PCB-109	ND	6.54			PCB-159	93.6	-		
PCB-110	71500	-			PCB-160	-	-	C158	158
PCB-111	1610	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	6.10			PCB-163	-	-	C138	138/164
PCB-114	2180	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	403	-		
PCB-117	-	-	C087	87/125	PCB-167	3910	-		
PCB-118	-	-	C106	106	PCB-168	75.7	-		
PCB-119	757	-			PCB-169	ND	7.90		
PCB-120	97.6	-			PCB-170	7560	-		
PCB-121	ND	6.69			PCB-171	1980	-		
PCB-122	1010	-			PCB-172	1030	-		
PCB-123	1330	-			PCB-173	221	-		
PCB-124	4020	-			PCB-174	5450	-		
PCB-125	-	-	C087	87/117	PCB-175	251	-		
PCB-126	474	-			PCB-176	658	-		
PCB-127	ND	8.98			PCB-177	3140	-		
PCB-128	18300	-	C	162	PCB-178	837	-		
PCB-129	5240	-			PCB-179	1720	-		
PCB-130	6510	-			PCB-180	11500	-		
PCB-131	1950	-	C	133	PCB-181	176	-		
PCB-132	20900	-	C	161	PCB-182	4960	-	C	187
PCB-133	-	-	C131	131	PCB-183	2940	-		
PCB-134	3610	-	C	143	PCB-184	35.7	-	J	
PCB-135	6430	-			PCB-185	560	-		
PCB-136	7680	-			PCB-186	ND	8.60		
PCB-137	4930	-			PCB-187	-	-	C182	182
PCB-138	65500	-	C	163/164	PCB-188	ND	7.01		
PCB-139	40300	-	C	149	PCB-189	250	-		
PCB-140	274	-			PCB-190	1370	-		
PCB-141	12100	-			PCB-191	280	-		
PCB-142	16.1	-	J		PCB-192	ND	9.74		
PCB-143	-	-	C134	134	PCB-193	484	-		
PCB-144	2280	-			PCB-194	1110	-		
PCB-145	32.4	-	J		PCB-195	413	-		
PCB-146	7020	-	C	165	PCB-196	1660	-	C	203
PCB-147	1210	-			PCB-197	62.7	-		
PCB-148	ND	9.35			PCB-198	94.4	-		
PCB-149	-	-	C139	139	PCB-199	1710	-		
PCB-150	61.6	-			PCB-200	223	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-011-SA
Client ID: HC20131102-W-9B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	214	-		
PCB-202	267	-		
PCB-203	-	-	C196	196
PCB-204	ND	2.60		
PCB-205	44.6	-		
PCB-206	333	-		
PCB-207	64.9	-		
PCB-208	92.5	-		
PCB-209	53.0	-		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	89.6	5.00 - 145	
13C-PCB-3	86.3	5.00 - 145	
13C-PCB-4	90.5	5.00 - 145	
13C-PCB-15	92.8	5.00 - 145	
13C-PCB-19	86.5	5.00 - 145	
13C-PCB-37	97.9	5.00 - 145	
13C-PCB-54	93.8	5.00 - 145	
13C-PCB-77	102	10.0 - 145	
13C-PCB-81	99.9	10.0 - 145	
13C-PCB-104	86.9	10.0 - 145	
13C-PCB-105	99.8	10.0 - 145	
13C-PCB-114	98.6	10.0 - 145	
13C-PCB-118	91.4	10.0 - 145	
13C-PCB-123	96.0	10.0 - 145	
13C-PCB-126	104	10.0 - 145	
13C-PCB-155	86.9	10.0 - 145	
13C-PCB-156	98.2	10.0 - 145	
13C-PCB-157	97.7	10.0 - 145	
13C-PCB-167	99.0	10.0 - 145	
13C-PCB-169	103	10.0 - 145	
13C-PCB-188	82.4	10.0 - 145	
13C-PCB-189	97.6	10.0 - 145	
13C-PCB-202	82.8	10.0 - 145	
13C-PCB-205	85.7	10.0 - 145	
13C-PCB-206	76.4	10.0 - 145	
13C-PCB-208	78.7	10.0 - 145	
13C-PCB-209	70.1	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	96.3	5.00 - 145	
13C-PCB-111	98.6	10.0 - 145	
13C-PCB-178	95.5	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/18/2013

Reviewed By: 
Date: 11/18/2013

EPA Modified Method 1668 PCBs



FAL ID: 8156-012-SA
Client ID: HC20131102-W-9C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013
Total Conc: 546000

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	20.9	-	J		PCB-51	46.0	-		
PCB-2	ND	7.77			PCB-52	8710	-	C	69
PCB-3	12.4	-	J		PCB-53	354	-		
PCB-4	40.4	-			PCB-54	ND	2.10		
PCB-5	ND	9.57			PCB-55	135	-		
PCB-6	24.5	-	J		PCB-56	2060	-	C	60
PCB-7	ND	9.50			PCB-57	13.9	-	J	
PCB-8	110	-			PCB-58	ND	5.20		
PCB-9	ND	8.98			PCB-59	-	-	C042	42
PCB-10	ND	9.93			PCB-60	-	-	C056	56
PCB-11	528	-	B		PCB-61	12600	-	C	70
PCB-12	ND	9.33			PCB-62	ND	3.36		
PCB-13	ND	9.98			PCB-63	126	-		
PCB-14	ND	9.37			PCB-64	-	-	C041	41/71/72
PCB-15	34.7	-	J		PCB-65	ND	2.87		
PCB-16	44.3	-			PCB-66	3790	-	C	76
PCB-17	70.4	-			PCB-67	83.2	-		
PCB-18	218	-			PCB-68	11.5	-	J	
PCB-19	16.6	-	J		PCB-69	-	-	C052	52
PCB-20	141	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	79.2	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	3.99			PCB-73	ND	5.66		
PCB-24	ND	2.90			PCB-74	1640	-		
PCB-25	20.5	-	J		PCB-75	-	-	C048	48
PCB-26	81.3	-			PCB-76	-	-	C066	66
PCB-27	12.2	-	J		PCB-77	1150	-		
PCB-28	152	-			PCB-78	81.7	-		
PCB-29	ND	3.56			PCB-79	277	-		
PCB-30	ND	2.59			PCB-80	ND	4.01		
PCB-31	264	-			PCB-81	609	-		
PCB-32	55.4	-			PCB-82	5890	-		
PCB-33	-	-	C020	20/21	PCB-83	1380	-	C	112
PCB-34	ND	3.54			PCB-84	12400	-	C	92
PCB-35	70.8	-			PCB-85	5550	-	C	116
PCB-36	ND	3.39			PCB-86	91.4	-		
PCB-37	137	-			PCB-87	16100	-	C	117/125
PCB-38	ND	3.25			PCB-88	3600	-	C	91
PCB-39	ND	3.62			PCB-89	218	-		
PCB-40	332	-			PCB-90	32800	-	C	101
PCB-41	2060	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	392	-	C	59	PCB-92	-	-	C084	84
PCB-43	2130	-	C	49	PCB-93	ND	9.58		
PCB-44	3940	-			PCB-94	110	-		
PCB-45	102	-			PCB-95	21400	-		
PCB-46	76.7	-			PCB-96	133	-		
PCB-47	327	-			PCB-97	11100	-		
PCB-48	158	-	C	75	PCB-98	ND	9.01	C	102
PCB-49	-	-	C043	43	PCB-99	12800	-		
PCB-50	ND	3.77			PCB-100	54.4	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-012-SA
Client ID: HC20131102-W-9C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	4210	-		
PCB-102	-	-	C098	98	PCB-152	30.9	-	J	
PCB-103	112	-			PCB-153	35000	-		
PCB-104	ND	5.46			PCB-154	245	-		
PCB-105	28300	-			PCB-155	ND	8.35		
PCB-106	55900	-	C	118	PCB-156	9180	-		
PCB-107	3340	-	C	108	PCB-157	2560	-		
PCB-108	-	-	C107	107	PCB-158	7980	-	C	160
PCB-109	ND	7.48			PCB-159	108	-		
PCB-110	37500	-			PCB-160	-	-	C158	158
PCB-111	683	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	6.97			PCB-163	-	-	C138	138/164
PCB-114	1260	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	349	-		
PCB-117	-	-	C087	87/125	PCB-167	3140	-		
PCB-118	-	-	C106	106	PCB-168	72.7	-		
PCB-119	398	-			PCB-169	17.8	-	J	
PCB-120	47.0	-			PCB-170	7110	-		
PCB-121	ND	8.18			PCB-171	1690	-		
PCB-122	626	-			PCB-172	882	-		
PCB-123	732	-			PCB-173	164	-		
PCB-124	2110	-			PCB-174	4160	-		
PCB-125	-	-	C087	87/117	PCB-175	195	-		
PCB-126	478	-			PCB-176	451	-		
PCB-127	ND	8.87			PCB-177	2510	-		
PCB-128	14800	-	C	162	PCB-178	574	-		
PCB-129	4100	-			PCB-179	992	-		
PCB-130	5100	-			PCB-180	9080	-		
PCB-131	1280	-	C	133	PCB-181	133	-		
PCB-132	14400	-	C	161	PCB-182	3140	-	C	187
PCB-133	-	-	C131	131	PCB-183	2170	-		
PCB-134	2320	-	C	143	PCB-184	21.7	-	J	
PCB-135	3920	-			PCB-185	300	-		
PCB-136	3850	-			PCB-186	ND	8.26		
PCB-137	3650	-			PCB-187	-	-	C182	182
PCB-138	51000	-	C	163/164	PCB-188	ND	6.80		
PCB-139	26000	-	C	149	PCB-189	206	-		
PCB-140	191	-			PCB-190	1020	-		
PCB-141	8470	-			PCB-191	251	-		
PCB-142	13.4	-	J		PCB-192	ND	9.35		
PCB-143	-	-	C134	134	PCB-193	389	-		
PCB-144	1320	-			PCB-194	632	-		
PCB-145	16.7	-	J		PCB-195	220	-		
PCB-146	4770	-	C	165	PCB-196	846	-	C	203
PCB-147	773	-			PCB-197	33.1	-	J	
PCB-148	ND	8.48			PCB-198	41.5	-		
PCB-149	-	-	C139	139	PCB-199	857	-		
PCB-150	28.1	-	J		PCB-200	87.7	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-012-SA
Client ID: HC20131102-W-9C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	92.1	-		
PCB-202	96.2	-		
PCB-203	-	-	C196	196
PCB-204	ND	5.82		
PCB-205	23.5	-	J	
PCB-206	129	-		
PCB-207	25.3	-	J	
PCB-208	35.2	-	J	
PCB-209	25.5	-	J	

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	90.6	5.00 - 145	
13C-PCB-3	87.4	5.00 - 145	
13C-PCB-4	94.9	5.00 - 145	
13C-PCB-15	93.2	5.00 - 145	
13C-PCB-19	88.2	5.00 - 145	
13C-PCB-37	100	5.00 - 145	
13C-PCB-54	96.6	5.00 - 145	
13C-PCB-77	102	10.0 - 145	
13C-PCB-81	100	10.0 - 145	
13C-PCB-104	89.3	10.0 - 145	
13C-PCB-105	99.2	10.0 - 145	
13C-PCB-114	101	10.0 - 145	
13C-PCB-118	99.8	10.0 - 145	
13C-PCB-123	99.3	10.0 - 145	
13C-PCB-126	103	10.0 - 145	
13C-PCB-155	90.3	10.0 - 145	
13C-PCB-156	99.4	10.0 - 145	
13C-PCB-157	98.7	10.0 - 145	
13C-PCB-167	100	10.0 - 145	
13C-PCB-169	105	10.0 - 145	
13C-PCB-188	85.3	10.0 - 145	
13C-PCB-189	97.5	10.0 - 145	
13C-PCB-202	84.0	10.0 - 145	
13C-PCB-205	91.9	10.0 - 145	
13C-PCB-206	82.6	10.0 - 145	
13C-PCB-208	83.2	10.0 - 145	
13C-PCB-209	76.3	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	96.2	5.00 - 145	
13C-PCB-111	99.5	10.0 - 145	
13C-PCB-178	96.0	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/18/2013

Reviewed By: 
Date: 11/18/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-013-SA
Client ID: HC20131102-W-10A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013
Total Conc: 928000

Page 1 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	74.9	-			PCB-51	153	-		
PCB-2	31.6	-	J		PCB-52	8020	-	C	69
PCB-3	127	-			PCB-53	520	-		
PCB-4	149	-			PCB-54	ND	5.54		
PCB-5	49.5	-			PCB-55	127	-		
PCB-6	188	-			PCB-56	2750	-	C	60
PCB-7	40.3	-			PCB-57	14.3	-	J	
PCB-8	1010	-			PCB-58	ND	8.17		
PCB-9	51.5	-			PCB-59	-	-	C042	42
PCB-10	17.1	-	J		PCB-60	-	-	C056	56
PCB-11	1700	-	B		PCB-61	7960	-	C	70
PCB-12	48.4	-			PCB-62	ND	8.84		
PCB-13	262	-			PCB-63	146	-		
PCB-14	ND	5.48			PCB-64	-	-	C041	41/71/72
PCB-15	852	-			PCB-65	ND	7.57		
PCB-16	761	-			PCB-66	5490	-	C	76
PCB-17	672	-			PCB-67	129	-		
PCB-18	1840	-			PCB-68	36.5	-	J	
PCB-19	95.6	-			PCB-69	-	-	C052	52
PCB-20	2180	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	1400	-			PCB-72	-	-	C041	41/64/71
PCB-23	ND	5.64			PCB-73	14.1	-	J	
PCB-24	17.3	-	J		PCB-74	1590	-		
PCB-25	193	-			PCB-75	-	-	C048	48
PCB-26	538	-			PCB-76	-	-	C066	66
PCB-27	121	-			PCB-77	648	-		
PCB-28	2260	-			PCB-78	28.6	-	J	
PCB-29	18.1	-	J		PCB-79	107	-		
PCB-30	ND	3.63			PCB-80	ND	6.31		
PCB-31	2690	-			PCB-81	339	-		
PCB-32	503	-			PCB-82	1160	-		
PCB-33	-	-	C020	20/21	PCB-83	429	-	C	112
PCB-34	ND	5.01			PCB-84	9560	-	C	92
PCB-35	125	-			PCB-85	1180	-	C	116
PCB-36	12.8	-	J		PCB-86	16.1	-	J	
PCB-37	1060	-			PCB-87	8270	-	C	117/125
PCB-38	12.6	-	J		PCB-88	1440	-	C	91
PCB-39	21.5	-	J		PCB-89	100	-		
PCB-40	747	-			PCB-90	64300	-	C	101
PCB-41	3320	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	1030	-	C	59	PCB-92	-	-	C084	84
PCB-43	2400	-	C	49	PCB-93	ND	5.47		
PCB-44	3830	-			PCB-94	57.2	-		
PCB-45	450	-			PCB-95	52800	-		
PCB-46	242	-			PCB-96	100	-		
PCB-47	736	-			PCB-97	3470	-		
PCB-48	577	-	C	75	PCB-98	ND	5.14	C	102
PCB-49	-	-	C043	43	PCB-99	3310	-		
PCB-50	ND	9.93			PCB-100	31.1	-	J	

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EPA Modified Method 1668 PCBs



FAL ID: 8156-013-SA
Client ID: HC20131102-W-10A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

Page 2 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	43300	-		
PCB-102	-	-	C098	98	PCB-152	20.3	-	J	
PCB-103	67.4	-			PCB-153	102000	-		
PCB-104	ND	3.11			PCB-154	122	-		
PCB-105	3490	-			PCB-155	ND	5.27		
PCB-106	15100	-	C	118	PCB-156	2630	-		
PCB-107	572	-	C	108	PCB-157	198	-		
PCB-108	-	-	C107	107	PCB-158	7490	-	C	160
PCB-109	ND	9.92			PCB-159	773	-		
PCB-110	24400	-			PCB-160	-	-	C158	158
PCB-111	162	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	9.25			PCB-163	-	-	C138	138/164
PCB-114	318	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	48.7	-		
PCB-117	-	-	C087	87/125	PCB-167	1120	-		
PCB-118	-	-	C106	106	PCB-168	ND	6.74		
PCB-119	90.5	-			PCB-169	ND	4.51		
PCB-120	267	-			PCB-170	12400	-		
PCB-121	ND	4.67			PCB-171	5890	-		
PCB-122	61.3	-			PCB-172	2530	-		
PCB-123	78.1	-			PCB-173	544	-		
PCB-124	934	-			PCB-174	28400	-		
PCB-125	-	-	C087	87/117	PCB-175	1280	-		
PCB-126	105	-			PCB-176	5650	-		
PCB-127	ND	9.67			PCB-177	14500	-		
PCB-128	4580	-	C	162	PCB-178	5850	-		
PCB-129	1300	-			PCB-179	18500	-		
PCB-130	2580	-			PCB-180	32400	-		
PCB-131	1510	-	C	133	PCB-181	103	-		
PCB-132	27600	-	C	161	PCB-182	32600	-	C	187
PCB-133	-	-	C131	131	PCB-183	14900	-		
PCB-134	4160	-	C	143	PCB-184	ND	8.88		
PCB-135	13800	-			PCB-185	3980	-		
PCB-136	25200	-			PCB-186	ND	9.56		
PCB-137	469	-			PCB-187	-	-	C182	182
PCB-138	65000	-	C	163/164	PCB-188	ND	7.63		
PCB-139	123000	-	C	149	PCB-189	155	-		
PCB-140	90.2	-			PCB-190	2650	-		
PCB-141	27000	-			PCB-191	502	-		
PCB-142	ND	9.55			PCB-192	ND	10.8		
PCB-143	-	-	C134	134	PCB-193	1510	-		
PCB-144	9400	-			PCB-194	1740	-		
PCB-145	ND	7.66			PCB-195	1390	-		
PCB-146	10600	-	C	165	PCB-196	4650	-	C	203
PCB-147	295	-			PCB-197	362	-		
PCB-148	ND	9.38			PCB-198	210	-		
PCB-149	-	-	C139	139	PCB-199	4580	-		
PCB-150	35.4	-	J		PCB-200	1050	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-013-SA
Client ID: HC20131102-W-10A
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	1150	-		
PCB-202	1100	-		
PCB-203	-	-	C196	196
PCB-204	ND	4.33		
PCB-205	74.2	-		
PCB-206	195	-		
PCB-207	68.9	-		
PCB-208	72.8	-		
PCB-209	ND	8.16		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	92.0	5.00 - 145	
13C-PCB-3	89.1	5.00 - 145	
13C-PCB-4	90.8	5.00 - 145	
13C-PCB-15	93.7	5.00 - 145	
13C-PCB-19	87.6	5.00 - 145	
13C-PCB-37	98.4	5.00 - 145	
13C-PCB-54	93.4	5.00 - 145	
13C-PCB-77	102	10.0 - 145	
13C-PCB-81	101	10.0 - 145	
13C-PCB-104	89.3	10.0 - 145	
13C-PCB-105	102	10.0 - 145	
13C-PCB-114	97.4	10.0 - 145	
13C-PCB-118	98.6	10.0 - 145	
13C-PCB-123	105	10.0 - 145	
13C-PCB-126	103	10.0 - 145	
13C-PCB-155	90.0	10.0 - 145	
13C-PCB-156	102	10.0 - 145	
13C-PCB-157	98.5	10.0 - 145	
13C-PCB-167	99.3	10.0 - 145	
13C-PCB-169	104	10.0 - 145	
13C-PCB-188	85.7	10.0 - 145	
13C-PCB-189	99.5	10.0 - 145	
13C-PCB-202	86.2	10.0 - 145	
13C-PCB-205	103	10.0 - 145	
13C-PCB-206	87.4	10.0 - 145	
13C-PCB-208	90.2	10.0 - 145	
13C-PCB-209	88.0	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	95.0	5.00 - 145	
13C-PCB-111	94.8	10.0 - 145	
13C-PCB-178	91.2	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/19/2013

Reviewed By: 
Date: 11/19/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-014-SA
Client ID: HC20131102-W-10B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013
Total Conc: 24600000

Page 1 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	136	-			PCB-51	945	-		
PCB-2	76.6	-			PCB-52	42200	-	C	69
PCB-3	412	-			PCB-53	3450	-		
PCB-4	296	-			PCB-54	43.9	-		
PCB-5	115	-			PCB-55	1080	-		
PCB-6	354	-			PCB-56	18400	-	C	60
PCB-7	79.2	-			PCB-57	192	-		
PCB-8	1870	-			PCB-58	143	-		
PCB-9	105	-			PCB-59	-	-	C042	42
PCB-10	27.2	-	J		PCB-60	-	-	C056	56
PCB-11	4520	-	B		PCB-61	66400	-	C	70
PCB-12	147	-			PCB-62	ND	6.61		
PCB-13	2640	-			PCB-63	865	-		
PCB-14	ND	9.66			PCB-64	-	-	C041	41/71/72
PCB-15	11300	-			PCB-65	ND	5.66		
PCB-16	1630	-			PCB-66	36500	-	C	76
PCB-17	1610	-			PCB-67	1220	-		
PCB-18	4860	-			PCB-68	357	-		
PCB-19	234	-			PCB-69	-	-	C052	52
PCB-20	6090	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	3860	-			PCB-72	-	-	C041	41/64/71
PCB-23	12.7	-	J		PCB-73	85.8	-		
PCB-24	29.8	-	J		PCB-74	8890	-		
PCB-25	571	-			PCB-75	-	-	C048	48
PCB-26	1950	-			PCB-76	-	-	C066	66
PCB-27	329	-			PCB-77	10800	-		
PCB-28	7040	-			PCB-78	293	-		
PCB-29	50.1	-			PCB-79	3260	-		
PCB-30	ND	4.91			PCB-80	ND	4.72		
PCB-31	8310	-			PCB-81	3820	-		
PCB-32	1370	-			PCB-82	12300	-		
PCB-33	-	-	C020	20/21	PCB-83	4650	-	C	112
PCB-34	26.5	-	J		PCB-84	87100	-	C	92
PCB-35	1620	-			PCB-85	11900	-	C	116
PCB-36	276	-			PCB-86	171	-		
PCB-37	7120	-			PCB-87	88900	-	C	117/125
PCB-38	59.3	-			PCB-88	14200	-	C	91
PCB-39	890	-			PCB-89	1210	-		
PCB-40	3570	-			PCB-90	604000	-	C	101
PCB-41	17700	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	5750	-	C	59	PCB-92	-	-	C084	84
PCB-43	14300	-	C	49	PCB-93	ND	8.10		
PCB-44	19800	-			PCB-94	682	-		
PCB-45	1810	-			PCB-95	384000	-		
PCB-46	1410	-			PCB-96	1150	-		
PCB-47	3500	-			PCB-97	34300	-		
PCB-48	2520	-	C	75	PCB-98	ND	7.61	C	102
PCB-49	-	-	C043	43	PCB-99	31200	-		
PCB-50	25.3	-	J		PCB-100	370	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-014-SA
Client ID: HC20131102-W-10B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	572000	-		
PCB-102	-	-	C098	98	PCB-152	162	-		
PCB-103	759	-			PCB-153	2580000	-		
PCB-104	15.3	-	J		PCB-154	1310	-		
PCB-105	62300	-			PCB-155	31.2	-	J	
PCB-106	246000	-	C	118	PCB-156	186000	-		
PCB-107	8830	-	C	108	PCB-157	10000	-		
PCB-108	-	-	C107	107	PCB-158	263000	-	C	160
PCB-109	53.3	-			PCB-159	32600	-		
PCB-110	286000	-			PCB-160	-	-	C158	158
PCB-111	896	-	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083	83	PCB-162	-	-	C128	128
PCB-113	ND	8.79			PCB-163	-	-	C138	138/164
PCB-114	4100	-			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	693	-		
PCB-117	-	-	C087	87/125	PCB-167	67700	-		
PCB-118	-	-	C106	106	PCB-168	ND	6.55		
PCB-119	1310	-			PCB-169	186	-		
PCB-120	3250	-			PCB-170	1120000	-		
PCB-121	ND	6.92			PCB-171	362000	-		
PCB-122	1360	-			PCB-172	206000	-		
PCB-123	1240	-			PCB-173	29100	-		
PCB-124	13800	-			PCB-174	1530000	-		
PCB-125	-	-	C087	87/117	PCB-175	47100	-		
PCB-126	2540	-			PCB-176	136000	-		
PCB-127	122	-			PCB-177	853000	-		
PCB-128	184000	-	C	162	PCB-178	214000	-		
PCB-129	40700	-			PCB-179	394000	-		
PCB-130	89300	-			PCB-180	2640000	-		
PCB-131	26400	-	C	133	PCB-181	5270	-		
PCB-132	559000	-	C	161	PCB-182	1410000	-	C	187
PCB-133	-	-	C131	131	PCB-183	709000	-		
PCB-134	67500	-	C	143	PCB-184	247	-		
PCB-135	221000	-			PCB-185	180000	-		
PCB-136	266000	-			PCB-186	ND	7.31		
PCB-137	9940	-			PCB-187	-	-	C182	182
PCB-138	2200000	-	C	163/164	PCB-188	109	-		
PCB-139	1810000	-	C	149	PCB-189	17900	-		
PCB-140	1300	-			PCB-190	265000	-		
PCB-141	818000	-			PCB-191	45400	-		
PCB-142	ND	9.28			PCB-192	ND	8.28		
PCB-143	-	-	C134	134	PCB-193	134000	-		
PCB-144	112000	-			PCB-194	264000	-		
PCB-145	67.5	-			PCB-195	193000	-		
PCB-146	263000	-	C	165	PCB-196	503000	-	C	203
PCB-147	3010	-			PCB-197	18000	-		
PCB-148	ND	9.72			PCB-198	22500	-		
PCB-149	-	-	C139	139	PCB-199	466000	-		
PCB-150	342	-			PCB-200	67000	-		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-014-SA
Client ID: HC20131102-W-10B
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

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Compound	Conc	DL	Qual	Coeluters
PCB-201	56200	-		
PCB-202	47800	-		
PCB-203	-	-	C196	196
PCB-204	ND	9.88		
PCB-205	10200	-		
PCB-206	25100	-		
PCB-207	6570	-		
PCB-208	6480	-		
PCB-209	343	-		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	97.7	5.00 - 145	
13C-PCB-3	96.0	5.00 - 145	
13C-PCB-4	100	5.00 - 145	
13C-PCB-15	101	5.00 - 145	
13C-PCB-19	93.0	5.00 - 145	
13C-PCB-37	110	5.00 - 145	
13C-PCB-54	93.7	5.00 - 145	
13C-PCB-77	110	10.0 - 145	
13C-PCB-81	107	10.0 - 145	
13C-PCB-104	94.8	10.0 - 145	
13C-PCB-105	114	10.0 - 145	
13C-PCB-114	114	10.0 - 145	
13C-PCB-118	108	10.0 - 145	
13C-PCB-123	116	10.0 - 145	
13C-PCB-126	118	10.0 - 145	
13C-PCB-155	94.2	10.0 - 145	
13C-PCB-156	113	10.0 - 145	
13C-PCB-157	110	10.0 - 145	
13C-PCB-167	110	10.0 - 145	
13C-PCB-169	116	10.0 - 145	
13C-PCB-188	97.0	10.0 - 145	
13C-PCB-189	103	10.0 - 145	
13C-PCB-202	93.3	10.0 - 145	
13C-PCB-205	104	10.0 - 145	
13C-PCB-206	94.7	10.0 - 145	
13C-PCB-208	94.5	10.0 - 145	
13C-PCB-209	89.3	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	99.2	5.00 - 145	
13C-PCB-111	92.5	10.0 - 145	
13C-PCB-178	94.3	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/19/2013

Reviewed By: 
Date: 11/19/2013

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EPA Modified Method 1668 PCBs



FAL ID: 8156-015-SA
Client ID: HC20131102-W-10C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013
Total Conc: 18400

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Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-1	18.3	-	J		PCB-51	ND	4.58		
PCB-2	21.7	-	J		PCB-52	315	-	C	69
PCB-3	22.4	-	J		PCB-53	29.3	-	J	
PCB-4	23.1	-	J		PCB-54	ND	2.47		
PCB-5	ND	7.46			PCB-55	ND	3.36		
PCB-6	15.6	-	J		PCB-56	68.9	-	C	60
PCB-7	ND	7.40			PCB-57	ND	3.25		
PCB-8	84.1	-			PCB-58	ND	3.65		
PCB-9	ND	7.00			PCB-59	-	-	C042,J	42
PCB-10	ND	7.73			PCB-60	-	-	C056	56
PCB-11	568	-	B		PCB-61	327	-	C	70
PCB-12	ND	7.27			PCB-62	ND	3.95		
PCB-13	ND	7.78			PCB-63	ND	3.33		
PCB-14	ND	7.30			PCB-64	-	-	C041	41/71/72
PCB-15	25.4	-	J		PCB-65	ND	3.38		
PCB-16	23.3	-	J		PCB-66	126	-	C	76
PCB-17	31.7	-	J		PCB-67	ND	3.13		
PCB-18	86.0	-			PCB-68	ND	3.18		
PCB-19	ND	8.06			PCB-69	-	-	C052	52
PCB-20	49.2	-	C	21/33	PCB-70	-	-	C061	61
PCB-21	-	-	C020	20/33	PCB-71	-	-	C041	41/64/72
PCB-22	27.0	-	J		PCB-72	-	-	C041	41/64/71
PCB-23	ND	6.44			PCB-73	ND	3.97		
PCB-24	ND	7.83			PCB-74	46.0	-		
PCB-25	ND	5.27			PCB-75	-	-	C048,J	48
PCB-26	20.1	-	J		PCB-76	-	-	C066	66
PCB-27	ND	7.06			PCB-77	109	-		
PCB-28	65.9	-			PCB-78	ND	2.88		
PCB-29	ND	5.73			PCB-79	10.3	-	J	
PCB-30	ND	7.00			PCB-80	ND	2.82		
PCB-31	61.2	-			PCB-81	16.7	-	J	
PCB-32	16.2	-	J		PCB-82	112	-		
PCB-33	-	-	C020	20/21	PCB-83	34.7	-	C,J	112
PCB-34	ND	5.71			PCB-84	310	-	C	92
PCB-35	22.3	-	J		PCB-85	115	-	C	116
PCB-36	ND	5.46			PCB-86	ND	6.72		
PCB-37	23.6	-	J		PCB-87	317	-	C	117/125
PCB-38	ND	5.24			PCB-88	97.2	-	C	91
PCB-39	ND	5.82			PCB-89	ND	9.68		
PCB-40	17.7	-	J		PCB-90	866	-	C	101
PCB-41	99.8	-	C	64/71/72	PCB-91	-	-	C088	88
PCB-42	31.3	-	C,J	59	PCB-92	-	-	C084	84
PCB-43	106	-	C	49	PCB-93	ND	7.91		
PCB-44	158	-			PCB-94	ND	9.55		
PCB-45	ND	5.07			PCB-95	632	-		
PCB-46	ND	5.26			PCB-96	ND	6.12		
PCB-47	33.2	-	J		PCB-97	213	-		
PCB-48	19.4	-	C,J	75	PCB-98	ND	7.44	C	102
PCB-49	-	-	C043	43	PCB-99	270	-		
PCB-50	ND	4.44			PCB-100	ND	7.92		

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EPA Modified Method 1668 PCBs



FAL ID: 8156-015-SA
Client ID: HC20131102-W-10C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

Page 2 of 3

Compound	Conc	DL	Qual	Coeluters	Compound	Conc	DL	Qual	Coeluters
PCB-101	-	-	C090	90	PCB-151	269	-		
PCB-102	-	-	C098	98	PCB-152	ND	9.27		
PCB-103	ND	7.32			PCB-153	1220	-		
PCB-104	ND	4.51			PCB-154	ND	8.36		
PCB-105	296	-			PCB-155	ND	6.73		
PCB-106	599	-	C	118	PCB-156	133	-		
PCB-107	48.9	-	C	108	PCB-157	41.2	-		
PCB-108	-	-	C107	107	PCB-158	175	-	C	160
PCB-109	ND	7.04			PCB-159	12.3	-	J	
PCB-110	727	-			PCB-160	-	-	C158	158
PCB-111	ND	5.91	C	115	PCB-161	-	-	C132	132
PCB-112	-	-	C083,J	83	PCB-162	-	-	C128	128
PCB-113	ND	6.56			PCB-163	-	-	C138	138/164
PCB-114	ND	9.57			PCB-164	-	-	C138	138/163
PCB-115	-	-	C111	111	PCB-165	-	-	C146	146
PCB-116	-	-	C085	85	PCB-166	ND	6.39		
PCB-117	-	-	C087	87/125	PCB-167	72.5	-		
PCB-118	-	-	C106	106	PCB-168	ND	6.44		
PCB-119	13.0	-	J		PCB-169	ND	4.15		
PCB-120	ND	5.55			PCB-170	490	-		
PCB-121	ND	6.76			PCB-171	167	-		
PCB-122	ND	9.55			PCB-172	110	-		
PCB-123	18.2	-	J		PCB-173	ND	8.61		
PCB-124	37.6	-	J		PCB-174	535	-		
PCB-125	-	-	C087	87/117	PCB-175	39.7	-	J	
PCB-126	43.7	-			PCB-176	63.3	-		
PCB-127	ND	9.68			PCB-177	347	-		
PCB-128	291	-	C	162	PCB-178	111	-		
PCB-129	77.9	-			PCB-179	153	-		
PCB-130	116	-			PCB-180	934	-		
PCB-131	44.4	-	C	133	PCB-181	ND	7.60		
PCB-132	451	-	C	161	PCB-182	489	-	C	187
PCB-133	-	-	C131	131	PCB-183	249	-		
PCB-134	70.8	-	C	143	PCB-184	ND	5.39		
PCB-135	144	-			PCB-185	80.1	-		
PCB-136	191	-			PCB-186	ND	5.80		
PCB-137	67.7	-			PCB-187	-	-	C182	182
PCB-138	1330	-	C	163/164	PCB-188	ND	4.82		
PCB-139	1040	-	C	149	PCB-189	ND	9.95		
PCB-140	ND	7.75			PCB-190	118	-		
PCB-141	360	-			PCB-191	27.9	-	J	
PCB-142	ND	9.12			PCB-192	ND	6.56		
PCB-143	-	-	C134	134	PCB-193	58.7	-		
PCB-144	71.9	-			PCB-194	104	-		
PCB-145	ND	9.77			PCB-195	61.7	-		
PCB-146	167	-	C	165	PCB-196	185	-	C	203
PCB-147	23.8	-	J		PCB-197	ND	7.26		
PCB-148	ND	9.43			PCB-198	ND	9.74		
PCB-149	-	-	C139	139	PCB-199	186	-		
PCB-150	ND	9.86			PCB-200	27.6	-	J	

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EPA Modified Method 1668 PCBs



FAL ID: 8156-015-SA
Client ID: HC20131102-W-10C
Matrix: Wipe
Batch No: X2969

Date Extracted: 11-11-2013
Date Received: 11-05-2013
Amount: 1.00 sample

ICal: DAILY209FAL4-11-17-13
GC Column: DB1
Units: pg/sample

Acquired: 11-13-2013

Page 3 of 3

Compound	Conc	DL	Qual	Coeluters
PCB-201	26.0	-	J	
PCB-202	25.1	-	J	
PCB-203	-	-	C196	196
PCB-204	ND	7.04		
PCB-205	ND	6.09		
PCB-206	16.6	-	J	
PCB-207	ND	7.83		
PCB-208	ND	6.15		
PCB-209	ND	4.06		

Internal Standards	% Rec	QC Limits	Qual
13C-PCB-1	94.5	5.00 - 145	
13C-PCB-3	91.9	5.00 - 145	
13C-PCB-4	96.1	5.00 - 145	
13C-PCB-15	94.1	5.00 - 145	
13C-PCB-19	91.2	5.00 - 145	
13C-PCB-37	95.5	5.00 - 145	
13C-PCB-54	93.4	5.00 - 145	
13C-PCB-77	102	10.0 - 145	
13C-PCB-81	101	10.0 - 145	
13C-PCB-104	93.4	10.0 - 145	
13C-PCB-105	101	10.0 - 145	
13C-PCB-114	95.8	10.0 - 145	
13C-PCB-118	99.5	10.0 - 145	
13C-PCB-123	99.7	10.0 - 145	
13C-PCB-126	106	10.0 - 145	
13C-PCB-155	88.9	10.0 - 145	
13C-PCB-156	101	10.0 - 145	
13C-PCB-157	99.4	10.0 - 145	
13C-PCB-167	101	10.0 - 145	
13C-PCB-169	106	10.0 - 145	
13C-PCB-188	85.3	10.0 - 145	
13C-PCB-189	101	10.0 - 145	
13C-PCB-202	83.7	10.0 - 145	
13C-PCB-205	92.0	10.0 - 145	
13C-PCB-206	77.4	10.0 - 145	
13C-PCB-208	80.2	10.0 - 145	
13C-PCB-209	74.8	10.0 - 145	

Cleanup Surrogates	% Rec	QC Limits	Qual
13C-PCB-28	88.9	5.00 - 145	
13C-PCB-111	94.2	10.0 - 145	
13C-PCB-178	89.7	10.0 - 145	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Coelution
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 11/19/2013

Reviewed By: 
Date: 11/19/2013

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Frontier Analytical Laboratory
5172 Hillsdale Circle
El Dorado Hills, CA 95762
Tel: 916-934-0900
Fax: 916-934-0999

FAL USE ONLY

Laboratory Project No.: 8156
Temperature: 0 °C

Chain of Custody

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Please Print in Pen Page 2 of 3

CLIENT INFORMATION					INVOICE INFORMATION (if different from client info)					PROJECT INFORMATION										
Company Name: <u>Phylmar Group</u>					Company Name: <u>Same</u>					FAL Quote #: <u>2711A</u>										
Contact Name: <u>Mark Katchen</u>					Contact Name: _____					P.O. #: _____										
Address: <u>2342 Manning Ave., Los Angeles, CA 90064</u>					Address: _____					Project #: <u>365-001A</u>										
Phone: <u>310-474-3937</u> Fax: _____					Phone: _____ Fax: _____					Project Name: <u>MHS/Cabrillo Monitoring</u>										
Email: <u>mkatchen@phylmar.com</u>					Email: _____					TAT (business days): ☐ 15 ☒ 10 ☐ 5* ☐ 3* (✓ one)										
										* FAL must agree with price and RUSH TAT in writing.										
REPORT INFORMATION					REPORT DISTRIBUTION (email only is preferred)					ADDITIONAL INSTRUCTIONS										
Report Level: ☐ I/II ☐ III ☐ IV					☐ Hardcopy															
☐ EDD: ☐ FAL Basic ☐ Geotracker					☐ CD (.pdf including EDDs if requested)															
☐ Other: _____ ☐ Custom: Contact FAL					☒ Email (.pdf including EDDs if requested)															
☐ California State Drinking Water Form																				
System #: _____ Source #: _____																				
Sampler: _____ Employer: _____																				
Sample ID					Date	Time	Matrix	# of containers	EPA 1613**	EPA 8290**	DLM 02.0	EPA 8280**	Appendix IX	EPA TO-9/9A	EPA 23/23A	EPA 1668	FAL 15	Other	**CONGENERS	**TEQ
					Collected														☐ 2,3,7,8-TCDD only	☐ 1998 WHO
																			☐ 2,3,7,8-TCDD/F only	☐ 2005 WHO
																			☐ PCDD/F (Cl ₄ -Cl ₆)	☐ Other
																			Remarks	
1	HC20131102-W-6A	11/2/13		Wipe	1											✓			Area = 100 cm ²	
2	W-6B															✓			Area = 100 cm ²	
3	W-6C															✓			Area = 100 cm ²	
4	W-7A															✓			Area = 100 cm ²	
5	W-7B															✓			Area = 100 cm ²	
6	W-7C															✓			Area = 100 cm ²	
7	W-8A															✓			Area = 100 cm ²	
8	W-8B															✓			Area = 100 cm ²	
9	W-8C															✓			Area = 100 cm ²	
10	W-9A															✓			Area = 100 cm ²	
11	W-9B															✓			Area = 100 cm ²	
12	W-9C															✓			Area = 100 cm ²	
13	W-10A															✓			Area = 100 cm ²	
14	W-10B															✓			Area = 100 cm ²	
15	W-10C															✓			Area = 99 cm ²	
Samples will be disposed of 90 days after sample receipt unless other arrangements have been made and agreed upon in writing.																				
Relinquished by: (Signature and Printed Name)					Date	Time	Received by: (Signature and Printed Name)					Date	Time							
<u>Steven Modland</u>					<u>11/4/13</u>	<u>-</u>	<u>Kathy Zep</u> <u>KZP</u>					<u>11-5-13</u>	<u>1105</u>							

Client understands that all terms described in the proposals, quotations, and/or the general terms provided in the current FAL price schedules will be followed.
FAL reserves the rights to terminate its service or withhold delivery of reports, if in FAL's sole discretion the terms of the project have been broken.

White Copy - Report

Yellow Copy - Laboratory

Pink Copy - Originator

Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **8156**

Client:	The Phylmar Group
Client Project ID:	365-001A
Date Received:	11/05/2013
Time Received:	11:05 am
Received By:	KZ
Logged In By:	KZ
# of Samples Received:	15
Duplicates:	0
Storage Location:	R2

Method of Delivery:	Other
Tracking Number:	523102461
Shipping Container Received Intact	Yes
Custody seals(s) present?	No
Custody seals(s) intact?	No
Sample Arrival Temperature (C)	0
Cooling Method	Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	No
Test aqueous sample for residual Chlorine	No
Sodium Thiosulfate Added	No
Adequate Sample Volume	Yes
Appropriate Sample Container	Yes
pH Range of Aqueous Sample	N/A
Anomalies or additional comments:	



Frontier Analytical Laboratory
5172 Hillsdale Circle
El Dorado Hills, CA 95762
Tel: 916-934-0900
Fax: 916-934-0999

FAL USE ONLY

Laboratory Project No.: 8156
Temperature: 0 °C

Chain of Custody

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Please Print in Pen Page 2 of 3

CLIENT INFORMATION	INVOICE INFORMATION (if different from client info)	PROJECT INFORMATION
Company Name: Phylmar Group	Company Name: Same	FAL Quote #: 2711A
Contact Name: Mark Katchen	Contact Name:	P.O. #:
Address: 2342 Manning Ave., Los Angeles, CA 90094	Address:	Project #: <u>345-001A</u>
Phone: 310-474-3000	Phone:	Project Name: <u>ANALYSIS OF MARIJUANA</u>

8156-011-SA	8156-012-SA	8156-013-SA	8156-014-SA	8156-015-SA
Client ID: HC20131102-W-9B Storage: R2 (01 of 01)	Client ID: HC20131102-W-9C Storage: R2 (01 of 01)	Client ID: HC20131102-W-10A Storage: R2 (01 of 01)	Client ID: HC20131102-W-10B Storage: R2 (01 of 01)	Client ID: HC20131102-W-10C Storage: R2 (01 of 01)
SAMPLED BY: <u>HC20131102-W-9B</u>	SAMPLED BY: <u>HC20131102-W-9C</u>	SAMPLED BY: <u>HC20131102-W-10A</u>	SAMPLED BY: <u>HC20131102-W-10B</u>	SAMPLED BY: <u>HC20131102-W-10C</u>
DATE: _____	DATE: _____	DATE: _____	DATE: _____	DATE: _____
TIME: _____	TIME: _____	TIME: _____	TIME: _____	TIME: _____
LOCATION: _____	LOCATION: _____	LOCATION: _____	LOCATION: _____	LOCATION: _____
PRESERVATIVE: _____	PRESERVATIVE: _____	PRESERVATIVE: _____	PRESERVATIVE: _____	PRESERVATIVE: _____
ANALYST: _____	ANALYST: _____	ANALYST: _____	ANALYST: _____	ANALYST: _____
CLIENT: _____	CLIENT: _____	CLIENT: _____	CLIENT: _____	CLIENT: _____
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8156-006-SA	8156-007-SA	8156-008-SA	8156-009-SA	8156-010-SA
Client ID: HC20131102-W-7C Storage: R2 (01 of 01)	Client ID: HC20131102-W-8A Storage: R2 (01 of 01)	Client ID: HC20131102-W-8B Storage: R2 (01 of 01)	Client ID: HC20131102-W-8C Storage: R2 (01 of 01)	Client ID: HC20131102-W-9A Storage: R2 (01 of 01)
SAMPLED BY: <u>HC20131102-W-7C</u>	SAMPLED BY: <u>HC20131102-W-8A</u>	SAMPLED BY: <u>HC20131102-W-8B</u>	SAMPLED BY: <u>HC20131102-W-8C</u>	SAMPLED BY: <u>HC20131102-W-9A</u>
DATE: _____	DATE: _____	DATE: _____	DATE: _____	DATE: _____
TIME: _____	TIME: _____	TIME: _____	TIME: _____	TIME: _____
LOCATION: _____	LOCATION: _____	LOCATION: _____	LOCATION: _____	LOCATION: _____
PRESERVATIVE: _____	PRESERVATIVE: _____	PRESERVATIVE: _____	PRESERVATIVE: _____	PRESERVATIVE: _____
ANALYST: _____	ANALYST: _____	ANALYST: _____	ANALYST: _____	ANALYST: _____
CLIENT: _____	CLIENT: _____	CLIENT: _____	CLIENT: _____	CLIENT: _____
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8156-001-SA	8156-002-SA	8156-003-SA	8156-004-SA	8156-005-SA
Client ID: HC20131102-W-6A Storage: R2 (01 of 01)	Client ID: HC20131102-W-6B Storage: R2 (01 of 01)	Client ID: HC20131102-W-6C Storage: R2 (01 of 01)	Client ID: HC20131102-W-7A Storage: R2 (01 of 01)	Client ID: HC20131102-W-7B Storage: R2 (01 of 01)
SAMPLED BY: <u>HC20131102-W-6A</u>	SAMPLED BY: <u>HC20131102-W-6B</u>	SAMPLED BY: <u>HC20131102-W-6C</u>	SAMPLED BY: <u>HC20131102-W-7A</u>	SAMPLED BY: <u>HC20131102-W-7B</u>
DATE: _____	DATE: _____	DATE: _____	DATE: _____	DATE: _____
TIME: _____	TIME: _____	TIME: _____	TIME: _____	TIME: _____
LOCATION: _____	LOCATION: _____	LOCATION: _____	LOCATION: _____	LOCATION: _____
PRESERVATIVE: _____	PRESERVATIVE: _____	PRESERVATIVE: _____	PRESERVATIVE: _____	PRESERVATIVE: _____
ANALYST: _____	ANALYST: _____	ANALYST: _____	ANALYST: _____	ANALYST: _____
CLIENT: _____	CLIENT: _____	CLIENT: _____	CLIENT: _____	CLIENT: _____
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