SGS AXYS

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SGS AXYS Client No.: 4826

Client Address: Wastewater Department
710 E. Mullan Avenue
Coeur d'Alene, ID, US, 83814

The SGS AXYS contact for these data is Sean Campbell.

BATCH SUMMARY

Batch ID: WG59548	***Date:*** 15-Jun-2017
Analysis Type: PCB Congener	***Matrix Type:*** Aqueous

BATCH MAKEUP

Contract: 4826

Samples:

L27247-1	EFF EQUIP BLANK
L27247-2	CDA TMF
L27247-3	CDA EFFLUENT
L27247-4	CDA INFLUENT

Blank:
WG59548-101
WG59548-103
WG59548-104

Reference or Spike:
WG59548-102

Duplicate:

Comments:

1. Data are considered final.
2. Data are not blank corrected.
3. Blank data should be evaluated against specifications using the same blank sample size as the size of the client samples.
4. The concentration of native PCB 11 in the Lab Blank (AXYS ID: WG59548-101) exceeds the method control limits. As noted above, sample analyte concentrations are not blank corrected and blank levels should be considered during sample data review.
5. Disturbances of the mass ions used to monitor instrument performance (lock-mass) greater than method specifications were observed in the sample 'CDA EFFLUENT' and 'CDA INFLUENT' (AXYS ID: L27247-3, and -4, respectively) near the retention times corresponding to PCB 182 and PCB 197/200; the affected compounds have been flagged with a 'G'. Data for total PCBs are not considered to be significantly affected.

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February 2017

AXYS METHOD MLA-010 Rev 11

Form 3A
PCB CONGENERS INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 28-May-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_185A S: 2
CS1 Data Filename: PB7C_185C S: 5
CS2 Data Filename: PB7C_185C S: 4
CS3 Data Filename: PB7C_185C S: 3
CS4 Data Filename: PB7C_185C S: 2
CS5 Data Filename: PB7C_185C S: 1
CS6 Data Filename: PB7C_185C S: 8

				RELATIVE RESPONSE (RR)								
COMPOUND	**IUPAC NO.**	**CO-ELUTIONS**	**LAB FLAG[1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV[2] (%RSD)**
2-MoCB	1			1.14	1.09	1.11	1.10	1.11	1.10		1.11	1.46
4-MoCB	3			1.22	1.09	1.11	1.09	1.09	1.14		1.12	4.44
2,2'-DiCB	4			1.02	0.98	0.99	1.00	1.02	1.05	0.91	1.00	4.46
4,4'-DiCB	15			0.92	0.96	0.93	0.91	0.93	0.96		0.94	2.31
2,2',6-TriCB	19			1.09	1.06	1.06	1.07	1.08	1.12	1.06	1.08	1.99
3,4,4'-TriCB	37			1.04	0.98	1.01	1.00	1.03	1.04	0.97	1.01	2.74
2,2',6,6'-TeCB	54			1.09	1.07	1.10	1.10	1.12	1.13	1.05	1.10	2.49
3,3',4,4'-TeCB	77			1.11	0.98	1.04	1.06	1.05	1.09	1.01	1.05	4.49
3,4,4',5-TeCB	81			1.03	1.00	1.03	1.04	1.06	1.08	1.01	1.04	2.78
2,2',4,6,6'-PeCB	104			1.08	1.10	1.06	1.08	1.09	1.12	1.08	1.09	1.65
2,3,3',4,4'-PeCB	105			1.04	1.04	1.07	1.06	1.07	1.09	1.02	1.06	2.29
2,3,4,4',5-PeCB	114			1.16	1.07	1.11	1.11	1.13	1.14	1.06	1.11	3.21
2,3',4,4',5-PeCB	118			1.01	1.04	1.06	1.08	1.08	1.11	1.05	1.06	3.11
2',3,4,4',5-PeCB	123			0.95	0.95	1.02	1.02	1.02	1.06	0.99	1.00	4.10
3,3',4,4',5-PeCB	126			1.02	1.05	1.09	1.07	1.09	1.10	1.04	1.07	2.78
2,2',4,4',6,6'-HxCB	155			1.11	1.06	1.04	1.06	1.04	1.10	1.06	1.07	2.50
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.12	1.10	1.16	1.16	1.17	1.17		1.15	2.39
2,3,3',4,4',5'-HxCB	157	156 + 157	C156									
2,3',4,4',5,5'-HxCB	167			1.13	1.16	1.19	1.16	1.19	1.22	1.16	1.17	2.40
3,3',4,4',5,5'-HxCB	169			1.05	1.06	1.10	1.10	1.11	1.12	1.07	1.09	2.42
2,2',3,4',5,6,6'-HpCB	188			1.02	0.99	1.03	1.02	1.03	1.03	0.99	1.02	1.72
2,3,3',4,4',5,5'-HpCB	189			1.03	0.96	1.03	1.01	1.01	1.03	1.02	1.01	2.33
2,2',3,3',5,5',6,6'-OcCB	202			0.91	0.89	0.88	0.88	0.90	0.93	0.93	0.90	2.24
2,3,3',4,4',5,5',6-OcCB	205			0.88	0.96	1.02	1.05	1.03	1.03	1.00	1.00	6.03
2,2',3,3',4,4',5,5',6-NoCB	206			0.96	0.95	1.02	1.00	0.99	0.99	0.99	0.99	2.26
2,2',3,3',4,5,5',6,6'-NoCB	208			1.04	0.91	0.97	0.97	0.99	0.98	0.95	0.97	4.35
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.12	1.08	1.09	1.07	1.08	1.08	1.07	1.08	1.61

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) For contract CV specifications, see Section 10.4.4, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

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AXYS METHOD MLA-010 Rev 11

Form 3B
PCB CONGENERS INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 28-May-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_185A S: 2
CS1 Data Filename: PB7C_185C S: 5
CS2 Data Filename: PB7C_185C S: 4
CS3 Data Filename: PB7C_185C S: 3
CS4 Data Filename: PB7C_185C S: 2
CS5 Data Filename: PB7C_185C S: 1
CS6 Data Filename: PB7C_185C S: 8

				RELATIVE RESPONSE (RR)								
COMPOUND	**IUPAC NO.** [1]	**CO-ELUTIONS**	**LAB FLAG**[2]	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**MEAN RR**	**CV**[3] **(%RSD)**
13C12-2-MoCB	1L			1.03	1.02	1.03	1.05	1.04	1.09	1.08	1.05	2.46
13C12-4-MoCB	3L			0.97	0.99	0.98	1.01	1.03	1.08	1.07	1.02	4.58
13C12-2,2'-DiCB	4L			0.66	0.65	0.65	0.66	0.65	0.67	0.64	0.66	1.57
13C12-4,4'-DiCB	15L			0.82	1.03	1.03	1.06	1.09	1.14	1.15	1.04	10.7
13C12-2,2',6-TriCB	19L			0.47	0.52	0.52	0.52	0.51	0.53	0.55	0.52	4.85
13C12-3,4,4'-TriCB	37L			2.02	1.69	1.63	1.74	1.76	1.90	1.96	1.82	7.96
13C12-2,2',6,6'-TeCB	54L			1.15	1.38	1.39	1.41	1.39	1.42	1.44	1.37	7.18
13C12-3,3',4,4'-TeCB	77L			1.46	1.49	1.51	1.58	1.58	1.68	1.70	1.57	5.83
13C12-3,4,4',5-TeCB	81L			1.43	1.47	1.50	1.57	1.56	1.65	1.69	1.55	6.12
13C12-2,2',4,6,6'-PeCB	104L			1.39	1.33	1.27	1.28	1.29	1.35	1.47	1.34	5.40
13C12-2,3,3',4,4'-PeCB	105L			1.29	1.53	1.53	1.56	1.58	1.60	1.61	1.53	7.24
13C12-2,3,4,4',5-PeCB	114L			1.24	1.48	1.48	1.54	1.53	1.61	1.49	1.48	7.77
13C12-2,3',4,4',5-PeCB	118L			1.26	1.54	1.50	1.56	1.56	1.67	1.61	1.53	8.48
13C12-2',3,4,4',5-PeCB	123L			1.31	1.53	1.51	1.59	1.57	1.70	1.63	1.55	7.99
13C12-3,3',4,4',5-PeCB	126L			1.18	1.49	1.39	1.39	1.41	1.44	1.57	1.41	8.67
13C12-2,2',4,4',6,6'-HxCB	155L			1.57	1.30	1.34	1.39	1.42	1.54	1.55	1.44	7.54
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.33	1.26	1.17	1.23	1.22	1.37	1.53	1.30	9.35
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L									
13C12-2,3',4,4',5,5'-HxCB	167L			1.26	1.23	1.14	1.20	1.18	1.28	1.42	1.24	7.33
13C12-3,3',4,4',5,5'-HxCB	169L			1.38	1.22	1.14	1.22	1.18	1.33	1.52	1.28	10.3
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.77	1.68	1.74	1.76	1.80	2.09	2.00	1.83	8.17
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.59	1.66	1.65	1.66	1.63	1.80	1.86	1.69	5.77
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			1.39	1.48	1.48	1.48	1.50	1.66	1.66	1.52	6.63
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.45	1.43	1.44	1.42	1.43	1.57	1.73	1.50	7.56
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.97	0.90	0.92	0.93	0.92	1.02	1.12	0.97	7.98
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.16	1.11	1.15	1.19	1.15	1.36	1.41	1.22	9.78
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.11	1.02	1.03	1.03	1.05	1.19	1.26	1.10	8.48
CLEAN-UP STANDARD												
13C12-2,4,4'-TriCB	28L			1.85	1.85	1.87	1.89	1.88	1.88	1.76	1.86	2.41
13C12-2,3,3',5,5'-PeCB	111L			1.30	1.30	1.29	1.30	1.31	1.36	1.41	1.33	3.22
13C12-2,2',3,3',5,5',6-HpCB	178L			0.98	0.83	0.82	0.86	0.83	0.84	0.85	0.86	6.42

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) For contract CV specifications, see Section 10.4.4, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

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AXYS METHOD MLA-010 Rev 11

Form 3C
PCB CONGENER INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 28-May-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_185A S: 2
CS1 Data Filename: PB7C_185C S: 5
CS2 Data Filename: PB7C_185C S: 4
CS3 Data Filename: PB7C_185C S: 3
CS4 Data Filename: PB7C_185C S: 2
CS5 Data Filename: PB7C_185C S: 1
CS6 Data Filename: PB7C_185C S: 8

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG[1]	M/Z's FORMING RATIO [2]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS [2]
2-MoCB	1			**M/M+2**	3.15	3.07	3.16	3.13	3.09	2.99		2.66-3.60
4-MoCB	3			**M/M+2**	3.56	3.19	3.14	3.12	3.15	3.14		2.66-3.60
2,2'-DiCB	4			**M/M+2**	1.57	1.51	1.58	1.54	1.55	1.55	1.40	1.33-1.79
4,4'-DiCB	15			**M/M+2**	1.53	1.49	1.55	1.55	1.55	1.55		1.33-1.79
2,2',6-TriCB	19			**M/M+2**	1.11	0.97	1.07	1.07	1.06	1.07	1.06	0.88-1.20
3,4,4'-TriCB	37			**M/M+2**	0.99	1.02	1.02	1.03	1.03	1.03	1.02	0.88-1.20
2,2',6,6'-TeCB	54			**M/M+2**	0.66	0.79	0.78	0.80	0.79	0.81	0.80	0.65-0.89
3,3',4,4'-TeCB	77			**M/M+2**	0.75	0.78	0.78	0.78	0.78	0.78	0.78	0.65-0.89
3,4,4',5-TeCB	81			**M/M+2**	0.79	0.81	0.77	0.79	0.78	0.80	0.78	0.65-0.89
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.34	1.41	1.56	1.58	1.55	1.56	1.57	1.32-1.78
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.36	1.45	1.57	1.56	1.54	1.56	1.54	1.32-1.78
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.56	1.59	1.63	1.55	1.57	1.55	1.54	1.32-1.78
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.38	1.55	1.59	1.55	1.58	1.56	1.57	1.32-1.78
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.37	1.55	1.56	1.58	1.57	1.57	1.53	1.32-1.78
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.53	1.58	1.58	1.56	1.55	1.56	1.54	1.32-1.78
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.40	1.25	1.26	1.30	1.24	1.27	1.26	1.05-1.43
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.11	1.22	1.28	1.25	1.25	1.27		1.05-1.43
2,3,3',4,4',5'-HxCB	157	156 + 157	C156									
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.29	1.36	1.25	1.25	1.27	1.26	1.25	1.05-1.43
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.33	1.34	1.23	1.28	1.27	1.26	1.29	1.05-1.43
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.09	1.01	1.07	1.05	1.05	1.05	1.06	0.89-1.21
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.07	1.04	0.98	1.05	1.06	1.05	1.04	0.89-1.21
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	1.14	0.81	0.92	0.88	0.92	0.89	0.90	0.76-1.02
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.90	1.01	0.86	0.91	0.89	0.88	0.89	0.76-1.02
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.85	0.86	0.77	0.82	0.81	0.78	0.78	0.65-0.89
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.75	0.75	0.79	0.81	0.78	0.79	0.82	0.65-0.89
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	0.91	1.21	1.19	1.18	1.19	1.16	1.12	0.99-1.33

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8 Method 1668A for m/z specifications and ion abundance ratio control limits.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

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Report Filename: 1668_PCB1668_28-May-2017_PB7C__Form3C_GS70428.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

Form 3D
PCB CONGENER INITIAL CALIBRATION ION ABUNDANCE RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 28-May-2017

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: PB7C_185A S: 2
CS1 Data Filename: PB7C_185C S: 5
CS2 Data Filename: PB7C_185C S: 4
CS3 Data Filename: PB7C_185C S: 3
CS4 Data Filename: PB7C_185C S: 2
CS5 Data Filename: PB7C_185C S: 1
CS6 Data Filename: PB7C_185C S: 8

LABELED COMPOUND	IUPAC NO.[1]	CO-ELUTIONS	LAB FLAG[2]	M/Z's FORMING RATIO [3]	ION ABUNDANCE RATIO CS0	CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS [3]
13C12-2-MoCB	1L			**M/M+2**	3.08	3.22	3.23	3.21	3.18	3.19	3.16	2.66-3.60
13C12-4-MoCB	3L			**M/M+2**	3.23	3.17	3.18	3.15	3.16	3.13	3.04	2.66-3.60
13C12-2,2'-DiCB	4L			**M/M+2**	1.58	1.60	1.59	1.60	1.59	1.59	1.56	1.33-1.79
13C12-4,4'-DiCB	15L			**M/M+2**	1.61	1.59	1.58	1.58	1.57	1.57	1.56	1.33-1.79
13C12-2,2',6-TriCB	19L			**M/M+2**	1.08	1.06	1.05	1.06	1.05	1.06	1.06	0.88-1.20
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.05	1.06	1.05	1.05	1.06	1.05	1.05	0.88-1.20
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.81	0.81	0.81	0.80	0.80	0.80	0.81	0.65-0.89
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.81	0.77	0.77	0.81	0.78	0.81	0.78	0.65-0.89
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.78	0.77	0.78	0.80	0.81	0.77	0.78	0.65-0.89
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.62	1.59	1.62	1.58	1.56	1.59	1.60	1.32-1.78
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.59	1.58	1.57	1.56	1.59	1.61	1.59	1.32-1.78
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.58	1.62	1.57	1.64	1.59	1.60	1.60	1.32-1.78
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.57	1.60	1.57	1.61	1.56	1.60	1.54	1.32-1.78
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.57	1.56	1.58	1.57	1.56	1.59	1.59	1.32-1.78
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.57	1.58	1.59	1.58	1.57	1.58	1.56	1.32-1.78
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.24	1.23	1.30	1.22	1.26	1.30	1.32	1.05-1.43
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.28	1.27	1.27	1.28	1.29	1.28	1.29	1.05-1.43
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L									
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.27	1.28	1.30	1.29	1.27	1.29	1.29	1.05-1.43
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.30	1.27	1.28	1.28	1.27	1.28	1.27	1.05-1.43
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.05	1.00	1.01	1.04	1.05	1.06	1.00	0.89-1.21
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.05	1.09	1.07	1.09	1.09	1.07	1.09	0.89-1.21
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.92	0.92	0.88	0.93	0.89	0.92	0.90	0.76-1.02
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.91	0.92	0.91	0.93	0.92	0.92	0.92	0.76-1.02
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.78	0.78	0.79	0.81	0.78	0.79	0.83	0.65-0.89
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.77	0.78	0.75	0.78	0.80	0.79	0.77	0.65-0.89
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.20	1.14	1.22	1.13	1.20	1.20	1.14	0.99-1.33
CLEAN-UP STANDARD												
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.05	1.06	1.06	1.05	1.05	1.05	1.06	0.88-1.20
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.61	1.56	1.60	1.57	1.65	1.60	1.64	1.32-1.78
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.05	1.02	1.00	1.03	1.05	1.05	1.00	0.89-1.21

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8 Method 1668A for m/z specifications and ion abundance ratio control limits.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Shelley Honkanen_____

For Axys Internal Use Only [XSL Template: Form16683D.xsl; Created: 15-Jun-2017 11:56:02; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_28-May-2017_PB7C__Form3D_GS70428.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
EFF EQUIP BLANK
Sample Collection:
02-May-2017 06:40

Form 1A

PCB AROCLOR EQUIVALENT ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-1
Matrix:	AQUEOUS	**Sample Size:**	0.989 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 15:04:28	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

COMPOUND	CAS NO.	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)
Aroclor 1016	12674-11-2	U		12.3
Aroclor 1221	11104-28-2	U		6.38
Aroclor 1232	11141-16-5	U		1.80
Aroclor 1242	53469-21-9		148	13.7
Aroclor 1248	12672-29-6	U		3.27
Aroclor 1254	11097-69-1		133	4.05
Aroclor 1260	11096-82-5	U		2.82

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) PCB Aroclor equivalents were calculated from individual PCB congener concentrations using empirically determined conversion factors. Where the PCB pattern was not identifiable as a unique Aroclor formation, the Aroclor has been reported as a 1242/1254/1260 mixture.
(3) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668Aroclor.xsl; Created: 15-Jun-2017 11:57:41; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_AroclorsC_L27247-1_Aroclor_SJ2220069.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA TMF
Sample Collection:
02-May-2017 06:47

Form 1A

PCB AROCLOR EQUIVALENT ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-2
Matrix:	EFFLUENT FINAL	**Sample Size:**	0.992 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 16:08:46	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

COMPOUND	CAS NO.	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)
Aroclor 1016	12674-11-2	U		11.0
Aroclor 1221	11104-28-2	U		5.70
Aroclor 1232	11141-16-5	U		1.71
Aroclor 1242	53469-21-9		55.1	12.2
Aroclor 1248	12672-29-6	U		3.16
Aroclor 1254	11097-69-1	U		4.21
Aroclor 1260	11096-82-5	U		2.67

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) PCB Aroclor equivalents were calculated from individual PCB congener concentrations using empirically determined conversion factors. Where the PCB pattern was not identifiable as a unique Aroclor formation, the Aroclor has been reported as a 1242/1254/1260 mixture.
(3) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1668_PCB1668_AroclorsC_L27247-2_Aroclor_SJ2220071.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA EFFLUENT
Sample Collection:
02-May-2017 06:39

Form 1A

PCB AROCLOR EQUIVALENT ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-3
Matrix:	EFFLUENT FINAL	**Sample Size:**	0.990 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 17:13:00	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

COMPOUND	CAS NO.	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)
Aroclor 1016	12674-11-2	U		10.8
Aroclor 1221	11104-28-2	U		5.61
Aroclor 1232	11141-16-5	U		1.72
Aroclor 1242	53469-21-9		85.5	12.0
Aroclor 1248	12672-29-6	U		3.08
Aroclor 1254	11097-69-1		136	4.04
Aroclor 1260	11096-82-5		29.6	2.53

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) PCB Aroclor equivalents were calculated from individual PCB congener concentrations using empirically determined conversion factors. Where the PCB pattern was not identifiable as a unique Aroclor formation, the Aroclor has been reported as a 1242/1254/1260 mixture.
(3) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_AroclorsC_L27247-3_Aroclor_SJ2220073.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA INFLUENT
Sample Collection:
02-May-2017 06:25

Form 1A

PCB AROCLOR EQUIVALENT ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-4
Matrix:	INFLUENT	**Sample Size:**	0.989 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 22:42:00	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_189 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_189 S: 1
Concentration Units:	pg/L		

COMPOUND	CAS NO.	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)
Aroclor 1016	12674-11-2	U		8.26
Aroclor 1221	11104-28-2	U		4.29
Aroclor 1232	11141-16-5	U		3.04
Aroclor 1242	53469-21-9		1730	9.18
Aroclor 1248	12672-29-6	U		4.06
Aroclor 1254	11097-69-1		3400	6.97
Aroclor 1260	11096-82-5		1840	4.54

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) PCB Aroclor equivalents were calculated from individual PCB congener concentrations using empirically determined conversion factors. Where the PCB pattern was not identifiable as a unique Aroclor formation, the Aroclor has been reported as a 1242/1254/1260 mixture.
(3) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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For Axys Internal Use Only [XSL Template: 1668Aroclor.xsl; Created: 15-Jun-2017 11:57:41; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_AroclorsC_L27247-4_Aroclor_SJ2220131.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection: N/A

Form 1A
PCB AROCLOR EQUIVALENT ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-101 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 10:47:27	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

COMPOUND	CAS NO.	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)
Aroclor 1016	12674-11-2	U		9.21
Aroclor 1221	11104-28-2	U		4.78
Aroclor 1232	11141-16-5	U		1.70
Aroclor 1242	53469-21-9		27.2	10.2
Aroclor 1248	12672-29-6	U		3.13
Aroclor 1254	11097-69-1	U		4.00
Aroclor 1260	11096-82-5		21.3	2.67

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) PCB Aroclor equivalents were calculated from individual PCB congener concentrations using empirically determined conversion factors. Where the PCB pattern was not identifiable as a unique Aroclor formation, the Aroclor has been reported as a 1242/1254/1260 mixture.
(3) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668Aroclor.xsl; Created: 15-Jun-2017 11:57:41; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_AroclorsC_WG59548-101_Aroclor_SJ2223711.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection: N/A

Form 1A
PCB AROCLOR EQUIVALENT ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-103 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 11:51:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

COMPOUND	CAS NO.	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)
Aroclor 1016	12674-11-2	U		8.53
Aroclor 1221	11104-28-2	U		4.42
Aroclor 1232	11141-16-5	U		1.70
Aroclor 1242	53469-21-9		41.5	9.48
Aroclor 1248	12672-29-6	U		3.05
Aroclor 1254	11097-69-1		37.8	4.00
Aroclor 1260	11096-82-5	U		2.50

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) PCB Aroclor equivalents were calculated from individual PCB congener concentrations using empirically determined conversion factors. Where the PCB pattern was not identifiable as a unique Aroclor formation, the Aroclor has been reported as a 1242/1254/1260 mixture.
(3) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668Aroclor.xsl; Created: 15-Jun-2017 11:57:41; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_AroclorsC_WG59548-103_Aroclor_SJ2223714.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection: N/A

Form 1A
PCB AROCLOR EQUIVALENT ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-104 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 12:55:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

COMPOUND	CAS NO.	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)
Aroclor 1016	12674-11-2	U		10.2
Aroclor 1221	11104-28-2	U		5.27
Aroclor 1232	11141-16-5	U		1.70
Aroclor 1242	53469-21-9		27.7	11.3
Aroclor 1248	12672-29-6	U		3.05
Aroclor 1254	11097-69-1		13.4	4.00
Aroclor 1260	11096-82-5	U		2.50

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) PCB Aroclor equivalents were calculated from individual PCB congener concentrations using empirically determined conversion factors. Where the PCB pattern was not identifiable as a unique Aroclor formation, the Aroclor has been reported as a 1242/1254/1260 mixture.
(3) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668Aroclor.xsl; Created: 15-Jun-2017 11:57:41; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_AroclorsC_WG59548-104_Aroclor_SJ2223717.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
EFF EQUIP BLANK
Sample Collection:
02-May-2017 06:40

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-1
Matrix:	AQUEOUS	**Sample Size:**	0.989 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 15:04:28	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		6.31
Total Dichloro Biphenyls		131
Total Trichloro Biphenyls		72.1
Total Tetrachloro Biphenyls		61.5
Total Pentachloro Biphenyls		61.0
Total Hexachloro Biphenyls		27.5
Total Heptachloro Biphenyls		3.68
Total Octachloro Biphenyls	U	
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl		1.79
TOTAL PCBs		365

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L27247-1_Form1AHT_SJ2220069.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
EFF EQUIP BLANK

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4826	**Sample Collection:**	02-May-2017 06:40
		Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017
Matrix:	AQUEOUS	**Lab Sample I.D.:**	L27247-1
Sample Size:	0.989 L	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/L	**Sample Data Filename(s):**	**PB7C_188 S: 8**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 1998 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		0.506	0.0001	0.00e+00	2.53e-05	
3,4,4',5-TeCB	81		U		0.506	0.0001	0.00e+00	2.53e-05	
2,3,3',4,4'-PeCB	105			3.01	0.506	0.0001	3.01e-04	3.01e-04	
2,3,4,4',5-PeCB	114			0.521	0.506	0.0005	2.61e-04	2.61e-04	
2,3',4,4',5-PeCB	118			10.5	0.506	0.0001	1.05e-03	1.05e-03	
2',3,4,4',5-PeCB	123		U		0.506	0.0001	0.00e+00	2.53e-05	
3,3',4,4',5-PeCB	126		U		0.506	0.1	0.00e+00	2.53e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C U		0.506	0.0005	0.00e+00	1.27e-04	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.506	0.00001	0.00e+00	2.53e-06	
3,3',4,4',5,5'-HxCB	169		U		0.506	0.01	0.00e+00	2.53e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.506	0.0001	0.00e+00	2.53e-05	
					TOTAL TEQ		0.00161	0.0297	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		0.506	0.0001	0.00e+00	2.53e-05	
3,4,4',5-TeCB	81		U		0.506	0.0003	0.00e+00	7.59e-05	
2,3,3',4,4'-PeCB	105			3.01	0.506	0.00003	9.03e-05	9.03e-05	
2,3,4,4',5-PeCB	114			0.521	0.506	0.00003	1.56e-05	1.56e-05	
2,3',4,4',5-PeCB	118			10.5	0.506	0.00003	3.15e-04	3.15e-04	
2',3,4,4',5-PeCB	123		U		0.506	0.00003	0.00e+00	7.59e-06	
3,3',4,4',5-PeCB	126		U		0.506	0.1	0.00e+00	2.53e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C U		0.506	0.00003	0.00e+00	7.59e-06	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.506	0.00003	0.00e+00	7.59e-06	
3,3',4,4',5,5'-HxCB	169		U		0.506	0.03	0.00e+00	7.59e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.506	0.00003	0.00e+00	7.59e-06	
					TOTAL TEQ		0.000421	0.0334	

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) Concentrations that do not meet quantification criteria are not included in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L27247-1_TEQ_SJ2220069.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA TMF
Sample Collection:
02-May-2017 06:47

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-2
Matrix:	EFFLUENT FINAL	**Sample Size:**	0.992 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 16:08:46	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		5.77
Total Dichloro Biphenyls		62.8
Total Trichloro Biphenyls		25.0
Total Tetrachloro Biphenyls		37.0
Total Pentachloro Biphenyls		27.8
Total Hexachloro Biphenyls		3.65
Total Heptachloro Biphenyls		0.635
Total Octachloro Biphenyls	U	
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl	U	
TOTAL PCBs		163

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L27247-2_Form1AHT_SJ2220071.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA TMF

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4826	**Sample Collection:**	02-May-2017 06:47
		Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017
Matrix:	EFFLUENT FINAL	**Lab Sample I.D.:**	L27247-2
Sample Size:	0.992 L	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/L	**Sample Data Filename(s):**	**PB7C_188 S: 9**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 1998 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			0.841	0.504	0.0001	8.41e-05	8.41e-05	
3,4,4',5-TeCB	81		U		0.504	0.0001	0.00e+00	2.52e-05	
2,3,3',4,4'-PeCB	105			1.90	0.504	0.0001	1.90e-04	1.90e-04	
2,3,4,4',5-PeCB	114		U		0.504	0.0005	0.00e+00	1.26e-04	
2,3',4,4',5-PeCB	118			5.67	0.504	0.0001	5.67e-04	5.67e-04	
2',3,4,4',5-PeCB	123		U		0.504	0.0001	0.00e+00	2.52e-05	
3,3',4,4',5-PeCB	126		U		0.504	0.1	0.00e+00	2.52e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C	0.834	0.504	0.0005	4.17e-04	4.17e-04	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.504	0.00001	0.00e+00	2.52e-06	
3,3',4,4',5,5'-HxCB	169		U		0.504	0.01	0.00e+00	2.52e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.504	0.0001	0.00e+00	2.52e-05	
					TOTAL TEQ		0.00126	0.0292	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			0.841	0.504	0.0001	8.41e-05	8.41e-05	
3,4,4',5-TeCB	81		U		0.504	0.0003	0.00e+00	7.56e-05	
2,3,3',4,4'-PeCB	105			1.90	0.504	0.00003	5.70e-05	5.70e-05	
2,3,4,4',5-PeCB	114		U		0.504	0.00003	0.00e+00	7.56e-06	
2,3',4,4',5-PeCB	118			5.67	0.504	0.00003	1.70e-04	1.70e-04	
2',3,4,4',5-PeCB	123		U		0.504	0.00003	0.00e+00	7.56e-06	
3,3',4,4',5-PeCB	126		U		0.504	0.1	0.00e+00	2.52e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C	0.834	0.504	0.00003	2.50e-05	2.50e-05	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.504	0.00003	0.00e+00	7.56e-06	
3,3',4,4',5,5'-HxCB	169		U		0.504	0.03	0.00e+00	7.56e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.504	0.00003	0.00e+00	7.56e-06	
					TOTAL TEQ		0.000336	0.0332	

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) Concentrations that do not meet quantification criteria are not included in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L27247-2_TEQ_SJ2220071.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA EFFLUENT
Sample Collection:
02-May-2017 06:39

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-3
Matrix:	EFFLUENT FINAL	**Sample Size:**	0.990 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 17:13:00	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		2.05
Total Dichloro Biphenyls		82.5
Total Trichloro Biphenyls		52.7
Total Tetrachloro Biphenyls		78.7
Total Pentachloro Biphenyls		70.3
Total Hexachloro Biphenyls		27.4
Total Heptachloro Biphenyls		8.62
Total Octachloro Biphenyls	U	
Total Nonachloro Biphenyl	U	
Decachloro Biphenyl	U	
TOTAL PCBs		322

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L27247-3_Form1AHT_SJ2220073.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA EFFLUENT

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4826	**Sample Collection:**	02-May-2017 06:39
		Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017
Matrix:	EFFLUENT FINAL	**Lab Sample I.D.:**	L27247-3
Sample Size:	0.990 L	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/L	**Sample Data Filename(s):**	**PB7C_188 S: 10**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 1998 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			0.723	0.505	0.0001	7.23e-05	7.23e-05	
3,4,4',5-TeCB	81		U		0.505	0.0001	0.00e+00	2.53e-05	
2,3,3',4,4'-PeCB	105		U		0.505	0.0001	0.00e+00	2.53e-05	
2,3,4,4',5-PeCB	114		U		0.505	0.0005	0.00e+00	1.26e-04	
2,3',4,4',5-PeCB	118			9.05	0.505	0.0001	9.05e-04	9.05e-04	
2',3,4,4',5-PeCB	123		U		0.505	0.0001	0.00e+00	2.53e-05	
3,3',4,4',5-PeCB	126		U		0.505	0.1	0.00e+00	2.53e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.40	0.505	0.0005	7.00e-04	7.00e-04	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.505	0.00001	0.00e+00	2.53e-06	
3,3',4,4',5,5'-HxCB	169		U		0.505	0.01	0.00e+00	2.53e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.505	0.0001	0.00e+00	2.53e-05	
					TOTAL TEQ		0.00168	0.0297	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			0.723	0.505	0.0001	7.23e-05	7.23e-05	
3,4,4',5-TeCB	81		U		0.505	0.0003	0.00e+00	7.58e-05	
2,3,3',4,4'-PeCB	105		U		0.505	0.00003	0.00e+00	7.58e-06	
2,3,4,4',5-PeCB	114		U		0.505	0.00003	0.00e+00	7.58e-06	
2,3',4,4',5-PeCB	118			9.05	0.505	0.00003	2.72e-04	2.72e-04	
2',3,4,4',5-PeCB	123		U		0.505	0.00003	0.00e+00	7.58e-06	
3,3',4,4',5-PeCB	126		U		0.505	0.1	0.00e+00	2.53e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.40	0.505	0.00003	4.20e-05	4.20e-05	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.505	0.00003	0.00e+00	7.58e-06	
3,3',4,4',5,5'-HxCB	169		U		0.505	0.03	0.00e+00	7.58e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.505	0.00003	0.00e+00	7.58e-06	
					TOTAL TEQ		0.000386	0.0333	

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) Concentrations that do not meet quantification criteria are not included in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L27247-3_TEQ_SJ2220073.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA INFLUENT
Sample Collection:
02-May-2017 06:25

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-4
Matrix:	INFLUENT	**Sample Size:**	0.989 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 22:42:00	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_189 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_189 S: 1
Concentration Units:	pg/L		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		48.5
Total Dichloro Biphenyls		725
Total Trichloro Biphenyls		990
Total Tetrachloro Biphenyls		1710
Total Pentachloro Biphenyls		2120
Total Hexachloro Biphenyls		1520
Total Heptachloro Biphenyls		774
Total Octachloro Biphenyls		258
Total Nonachloro Biphenyls		60.1
Decachloro Biphenyl	U	
TOTAL PCBs		8210

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L27247-4_Form1AHT_SJ2220131.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA INFLUENT

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4826	**Sample Collection:**	02-May-2017 06:25
		Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017
Matrix:	INFLUENT	**Lab Sample I.D.:**	L27247-4
Sample Size:	0.989 L	**GC Column ID(s):**	SPB OCTYL
Concentration Units:	pg/L	**Sample Data Filename(s):**	**PB7C_189 S: 4**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 1998 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			14.8	0.678	0.0001	1.48e-03	1.48e-03	
3,4,4',5-TeCB	81			0.769	0.694	0.0001	7.69e-05	7.69e-05	
2,3,3',4,4'-PeCB	105			106	2.11	0.0001	1.06e-02	1.06e-02	
2,3,4,4',5-PeCB	114			7.68	2.10	0.0005	3.84e-03	3.84e-03	
2,3',4,4',5-PeCB	118			278	2.19	0.0001	2.78e-02	2.78e-02	
2',3,4,4',5-PeCB	123			16.0	2.26	0.0001	1.60e-03	1.60e-03	
3,3',4,4',5-PeCB	126		U		2.19	0.1	0.00e+00	1.10e-01	
2,3,3',4,4',5-HxCB	156	156 + 157	C	43.4	0.848	0.0005	2.17e-02	2.17e-02	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			12.2	0.670	0.00001	1.22e-04	1.22e-04	
3,3',4,4',5,5'-HxCB	169		U		0.762	0.01	0.00e+00	3.81e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.790	0.0001	0.00e+00	3.95e-05	
					TOTAL TEQ		0.0672	0.181	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			14.8	0.678	0.0001	1.48e-03	1.48e-03	
3,4,4',5-TeCB	81			0.769	0.694	0.0003	2.31e-04	2.31e-04	
2,3,3',4,4'-PeCB	105			106	2.11	0.00003	3.18e-03	3.18e-03	
2,3,4,4',5-PeCB	114			7.68	2.10	0.00003	2.30e-04	2.30e-04	
2,3',4,4',5-PeCB	118			278	2.19	0.00003	8.34e-03	8.34e-03	
2',3,4,4',5-PeCB	123			16.0	2.26	0.00003	4.80e-04	4.80e-04	
3,3',4,4',5-PeCB	126		U		2.19	0.1	0.00e+00	1.10e-01	
2,3,3',4,4',5-HxCB	156	156 + 157	C	43.4	0.848	0.00003	1.30e-03	1.30e-03	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			12.2	0.670	0.00003	3.66e-04	3.66e-04	
3,3',4,4',5,5'-HxCB	169		U		0.762	0.03	0.00e+00	1.14e-02	
2,3,3',4,4',5,5'-HpCB	189		U		0.790	0.00003	0.00e+00	1.19e-05	
					TOTAL TEQ		0.0156	0.137	

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) Concentrations that do not meet quantification criteria are not included in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_L27247-4_TEQ_SJ2220131.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-101 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 10:47:27	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		6.68
Total Dichloro Biphenyls		53.8
Total Trichloro Biphenyls		21.4
Total Tetrachloro Biphenyls		35.9
Total Pentachloro Biphenyls		9.73
Total Hexachloro Biphenyls		11.4
Total Heptachloro Biphenyls		5.45
Total Octachloro Biphenyls	U	
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl	U	
TOTAL PCBs		144

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG59548-101_Form1AHT_SJ2223711.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4826	**Sample Collection:**	N/A
Matrix:	AQUEOUS	**Project No.**	N/A
Sample Size:	1.00 L	**Lab Sample I.D.:**	WG59548-101 :7PT
Concentration Units:	pg/L	**GC Column ID(s):**	SPB OCTYL
		Sample Data Filename(s):	**PB7C_188 S: 4**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 1998 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		0.500	0.0001	0.00e+00	2.50e-05	
3,4,4',5-TeCB	81		U		0.500	0.0001	0.00e+00	2.50e-05	
2,3,3',4,4'-PeCB	105		U		0.500	0.0001	0.00e+00	2.50e-05	
2,3,4,4',5-PeCB	114		U		0.500	0.0005	0.00e+00	1.25e-04	
2,3',4,4',5-PeCB	118			2.04	0.500	0.0001	2.04e-04	2.04e-04	
2',3,4,4',5-PeCB	123		U		0.500	0.0001	0.00e+00	2.50e-05	
3,3',4,4',5-PeCB	126		U		0.500	0.1	0.00e+00	2.50e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C	0.514	0.500	0.0005	2.57e-04	2.57e-04	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.500	0.00001	0.00e+00	2.50e-06	
3,3',4,4',5,5'-HxCB	169		U		0.500	0.01	0.00e+00	2.50e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.500	0.0001	0.00e+00	2.50e-05	
					TOTAL TEQ		0.000461	0.0282	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		0.500	0.0001	0.00e+00	2.50e-05	
3,4,4',5-TeCB	81		U		0.500	0.0003	0.00e+00	7.50e-05	
2,3,3',4,4'-PeCB	105		U		0.500	0.00003	0.00e+00	7.50e-06	
2,3,4,4',5-PeCB	114		U		0.500	0.00003	0.00e+00	7.50e-06	
2,3',4,4',5-PeCB	118			2.04	0.500	0.00003	6.12e-05	6.12e-05	
2',3,4,4',5-PeCB	123		U		0.500	0.00003	0.00e+00	7.50e-06	
3,3',4,4',5-PeCB	126		U		0.500	0.1	0.00e+00	2.50e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C	0.514	0.500	0.00003	1.54e-05	1.54e-05	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.500	0.00003	0.00e+00	7.50e-06	
3,3',4,4',5,5'-HxCB	169		U		0.500	0.03	0.00e+00	7.50e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.500	0.00003	0.00e+00	7.50e-06	
					TOTAL TEQ		0.0000766	0.0327	

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) Concentrations that do not meet quantification criteria are not included in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG59548-101_TEQ_SJ2223711.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-103 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 11:51:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		6.12
Total Dichloro Biphenyls		48.4
Total Trichloro Biphenyls		25.3
Total Tetrachloro Biphenyls		43.1
Total Pentachloro Biphenyls		19.4
Total Hexachloro Biphenyls		6.37
Total Heptachloro Biphenyls	U	
Total Octachloro Biphenyls	U	
Total Nonachloro Biphenyls		0.601
Decachloro Biphenyl	U	
TOTAL PCBs		149

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG59548-103_Form1AHT_SJ2223714.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4826	**Sample Collection:**	N/A
Matrix:	AQUEOUS	**Project No.**	N/A
Sample Size:	1.00 L	**Lab Sample I.D.:**	WG59548-103 :7PT
Concentration Units:	pg/L	**GC Column ID(s):**	SPB OCTYL
		Sample Data Filename(s):	**PB7C_188 S: 5**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 1998 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			0.508	0.500	0.0001	5.08e-05	5.08e-05	
3,4,4',5-TeCB	81		U		0.500	0.0001	0.00e+00	2.50e-05	
2,3,3',4,4'-PeCB	105			0.840	0.500	0.0001	8.40e-05	8.40e-05	
2,3,4,4',5-PeCB	114		U		0.500	0.0005	0.00e+00	1.25e-04	
2,3',4,4',5-PeCB	118			2.44	0.500	0.0001	2.44e-04	2.44e-04	
2',3,4,4',5-PeCB	123		U		0.500	0.0001	0.00e+00	2.50e-05	
3,3',4,4',5-PeCB	126		U		0.500	0.1	0.00e+00	2.50e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C U		0.500	0.0005	0.00e+00	1.25e-04	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.500	0.00001	0.00e+00	2.50e-06	
3,3',4,4',5,5'-HxCB	169		U		0.500	0.01	0.00e+00	2.50e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.500	0.0001	0.00e+00	2.50e-05	
					TOTAL TEQ		0.000379	0.0282	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77			0.508	0.500	0.0001	5.08e-05	5.08e-05	
3,4,4',5-TeCB	81		U		0.500	0.0003	0.00e+00	7.50e-05	
2,3,3',4,4'-PeCB	105			0.840	0.500	0.00003	2.52e-05	2.52e-05	
2,3,4,4',5-PeCB	114		U		0.500	0.00003	0.00e+00	7.50e-06	
2,3',4,4',5-PeCB	118			2.44	0.500	0.00003	7.32e-05	7.32e-05	
2',3,4,4',5-PeCB	123		U		0.500	0.00003	0.00e+00	7.50e-06	
3,3',4,4',5-PeCB	126		U		0.500	0.1	0.00e+00	2.50e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C U		0.500	0.00003	0.00e+00	7.50e-06	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.500	0.00003	0.00e+00	7.50e-06	
3,3',4,4',5,5'-HxCB	169		U		0.500	0.03	0.00e+00	7.50e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.500	0.00003	0.00e+00	7.50e-06	
					TOTAL TEQ		0.000149	0.0328	

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) Concentrations that do not meet quantification criteria are not included in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG59548-103_TEQ_SJ2223714.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 1A

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-104 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 12:55:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

PCB HOMOLOGUE GROUP	LAB FLAG [1]	CONC. FOUND
Total Monochloro Biphenyls		5.34
Total Dichloro Biphenyls		33.0
Total Trichloro Biphenyls		17.8
Total Tetrachloro Biphenyls		21.7
Total Pentachloro Biphenyls		9.65
Total Hexachloro Biphenyls		4.35
Total Heptachloro Biphenyls		0.941
Total Octachloro Biphenyls	U	
Total Nonachloro Biphenyls	U	
Decachloro Biphenyl		1.23
TOTAL PCBs		94.1

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) All header information pertains to the initial instrumental analysis of the sample extract. Additional sample datafiles listed refer to secondary analysis of the sample extract.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: Form1668HTII.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG59548-104_Form1AHT_SJ2223717.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4826	**Sample Collection:**	N/A
Matrix:	AQUEOUS	**Project No.**	N/A
Sample Size:	1.00 L	**Lab Sample I.D.:**	WG59548-104 :7PT
Concentration Units:	pg/L	**GC Column ID(s):**	SPB OCTYL
		Sample Data Filename(s):	**PB7C_188 S: 6**

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 1998 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		0.500	0.0001	0.00e+00	2.50e-05	
3,4,4',5-TeCB	81		U		0.500	0.0001	0.00e+00	2.50e-05	
2,3,3',4,4'-PeCB	105			0.829	0.500	0.0001	8.29e-05	8.29e-05	
2,3,4,4',5-PeCB	114		U		0.500	0.0005	0.00e+00	1.25e-04	
2,3',4,4',5-PeCB	118			1.64	0.500	0.0001	1.64e-04	1.64e-04	
2',3,4,4',5-PeCB	123		U		0.500	0.0001	0.00e+00	2.50e-05	
3,3',4,4',5-PeCB	126		U		0.500	0.1	0.00e+00	2.50e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C	0.535	0.500	0.0005	2.68e-04	2.68e-04	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.500	0.00001	0.00e+00	2.50e-06	
3,3',4,4',5,5'-HxCB	169		U		0.500	0.01	0.00e+00	2.50e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.500	0.0001	0.00e+00	2.50e-05	
					TOTAL TEQ		0.000514	0.0282	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 TEF	TEQ U=0	TEQ U=1/2 RL	TEQ U=RL
3,3',4,4'-TeCB	77		U		0.500	0.0001	0.00e+00	2.50e-05	
3,4,4',5-TeCB	81		U		0.500	0.0003	0.00e+00	7.50e-05	
2,3,3',4,4'-PeCB	105			0.829	0.500	0.00003	2.49e-05	2.49e-05	
2,3,4,4',5-PeCB	114		U		0.500	0.00003	0.00e+00	7.50e-06	
2,3',4,4',5-PeCB	118			1.64	0.500	0.00003	4.92e-05	4.92e-05	
2',3,4,4',5-PeCB	123		U		0.500	0.00003	0.00e+00	7.50e-06	
3,3',4,4',5-PeCB	126		U		0.500	0.1	0.00e+00	2.50e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C	0.535	0.500	0.00003	1.61e-05	1.61e-05	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.500	0.00003	0.00e+00	7.50e-06	
3,3',4,4',5,5'-HxCB	169		U		0.500	0.03	0.00e+00	7.50e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.500	0.00003	0.00e+00	7.50e-06	
					TOTAL TEQ		0.0000901	0.0327	

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; C = co-eluting congener.
(2) Concentrations that do not meet quantification criteria are not included in the TEQ calculations.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 15-Jun-2017 11:57:04; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_HomTotals-TEQsC_WG59548-104_TEQ_SJ2223717.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	28-May-2017	**VER Data Filename:**	PB7C_188 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-May-2017
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:34:39

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.08	2.66-3.60	23.1	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.12	2.66-3.60	22.9	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.56	1.33-1.79	24.7	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.56	1.33-1.79	26.8	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.06	0.88-1.20	26.1	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.03	0.88-1.20	24.3	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.79	0.65-0.89	50.5	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.77	0.65-0.89	47.2	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.78	0.65-0.89	50.9	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.56	1.32-1.78	50.7	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.59	1.32-1.78	52.7	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.52	1.32-1.78	49.9	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.55	1.32-1.78	49.1	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.56	1.32-1.78	54.8	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.53	1.32-1.78	53.1	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.25	1.05-1.43	50.0	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.25	1.05-1.43	102	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.26	1.05-1.43	54.9	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.31	1.05-1.43	52.6	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.04	0.89-1.21	49.0	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.05	0.89-1.21	50.4	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.92	0.76-1.02	80.8	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.91	0.76-1.02	75.7	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.78	0.65-0.89	74.1	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.79	0.65-0.89	81.1	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.18	0.99-1.33	74.7	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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AXYS METHOD MLA-010 Rev 11

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	28-May-2017	**VER Data Filename:**	PB7C_188 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-May-2017
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:34:39

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.24	2.66-3.60	95.8	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.15	2.66-3.60	94.7	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.57	1.33-1.79	95.0	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.58	1.33-1.79	94.8	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.05	0.88-1.20	99.0	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.05	0.88-1.20	86.2	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.81	0.65-0.89	94.2	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.78	0.65-0.89	90.1	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.79	0.65-0.89	90.0	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.58	1.32-1.78	89.1	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.57	1.32-1.78	88.7	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.61	1.32-1.78	88.8	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.57	1.32-1.78	89.7	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.61	1.32-1.78	89.9	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.59	1.32-1.78	97.5	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.28	1.05-1.43	89.9	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.28	1.05-1.43	183	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.28	1.05-1.43	93.8	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.26	1.05-1.43	93.8	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.06	0.89-1.21	82.0	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.02	0.89-1.21	85.7	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.90	0.76-1.02	83.2	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.91	0.76-1.02	92.3	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.77	0.65-0.89	94.6	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.78	0.65-0.89	90.7	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.23	0.99-1.33	95.3	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.05	0.88-1.20	90.7	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.60	1.32-1.78	92.9	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.03	0.89-1.21	94.8	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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AXYS METHOD MLA-010 Rev 11

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	28-May-2017	**VER Data Filename:**	PB7C_188 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-May-2017
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:34:39

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.001	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.001	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.000	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.000	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.000	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.001	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.000	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.000	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.000	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.001	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.000	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.000	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.000	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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AXYS METHOD MLA-010 Rev 11

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	28-May-2017	**VER Data Filename:**	PB7C_188 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-May-2017
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:34:39

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.718	0.687-0.749
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.858	0.826-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.873	0.842-0.904
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.253	1.221-1.284
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.091	1.071-1.111
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.798-0.824
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.395	1.382-1.409
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.372	1.359-1.386
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.798-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.199	1.188-1.209
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.168-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.161	1.151-1.171
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.150	1.140-1.161
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.300	1.290-1.310
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.786	0.778-0.794
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.107	1.099-1.115
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.070-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.191	1.183-1.199
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.719
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.818	0.812-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.010	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.044	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.943-0.956
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.066-1.085
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.924	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.087	1.076-1.097
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

For Axys Internal Use Only [XSL Template: Form16686B.xsl; Created: 15-Jun-2017 11:56:02; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_PB7C_188S1__Form6B_SJ2223706.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 28-May-2017 **CAL Data Filename:** PB7C_188 S: 1

Instrument ID: HR GC/MS **Analysis Date:** 30-May-2017

GC Column ID: SPB OCTYL **Analysis Time:** 07:34:39

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3-MoCB	2			1.06	**M/M+2**	3.15	2.66-3.60	0.988	0.984 - 0.992
2,3-DiCB	5			1.09	**M/M+2**	1.56	1.33-1.79	1.199	1.195 - 1.202
2,3'-DiCB	6			1.21	**M/M+2**	1.57	1.33-1.79	1.176	1.173 - 1.180
2,4-DiCB	7			1.17	**M/M+2**	1.55	1.33-1.79	1.160	1.156 - 1.163
2,4'-DiCB	8			1.29	**M/M+2**	1.56	1.33-1.79	1.207	1.204 - 1.211
2,5-DiCB	9			1.21	**M/M+2**	1.54	1.33-1.79	1.146	1.143 - 1.150
2,6-DiCB	10			1.18	**M/M+2**	1.53	1.33-1.79	1.013	1.010 - 1.017
3,3'-DiCB	11			1.15	**M/M+2**	1.56	1.33-1.79	0.969	0.967 - 0.972
3,4-DiCB	12	12 + 13	C	1.15	**M/M+2**	1.55	1.33-1.79	0.985	0.983 - 0.988
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.17	**M/M+2**	1.53	1.33-1.79	0.926	0.924 - 0.929
2,2',3-TriCB	16			0.78	**M/M+2**	1.06	0.88-1.20	1.166	1.163 - 1.169
2,2',4-TriCB	17			0.91	**M/M+2**	1.07	0.88-1.20	1.139	1.136 - 1.142
2,2',5-TriCB	18	18 + 30	C	1.08	**M/M+2**	1.06	0.88-1.20	1.113	1.110 - 1.115
2,3,3'-TriCB	20	20 + 28	C	1.35	**M/M+2**	1.03	0.88-1.20	0.849	0.845 - 0.852
2,3,4-TriCB	21	21 + 33	C	1.35	**M/M+2**	1.03	0.88-1.20	0.856	0.853 - 0.859
2,3,4'-TriCB	22			1.21	**M/M+2**	1.03	0.88-1.20	0.872	0.870 - 0.873
2,3,5-TriCB	23			1.23	**M/M+2**	1.03	0.88-1.20	1.283	1.280 - 1.286
2,3,6-TriCB	24			1.19	**M/M+2**	1.05	0.88-1.20	1.159	1.156 - 1.162
2,3',4-TriCB	25			1.49	**M/M+2**	1.04	0.88-1.20	0.825	0.824 - 0.827
2,3',5-TriCB	26	26 + 29	C	1.32	**M/M+2**	1.03	0.88-1.20	1.303	1.298 - 1.307
2,3',6-TriCB	27			1.32	**M/M+2**	1.08	0.88-1.20	1.151	1.148 - 1.154
2,4,4'-TriCB	28	20 + 28	C20						
2,4,5-TriCB	29	26 + 29	C26						
2,4,6-TriCB	30	18 + 30	C18						
2,4',5-TriCB	31			1.41	**M/M+2**	1.03	0.88-1.20	0.837	0.835 - 0.839
2,4',6-TriCB	32			1.37	**M/M+2**	1.03	0.88-1.20	1.198	1.195 - 1.201
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.30	**M/M+2**	1.03	0.88-1.20	1.274	1.271 - 1.276
3,3',4-TriCB	35			1.24	**M/M+2**	1.04	0.88-1.20	0.985	0.984 - 0.987
3,3',5-TriCB	36			1.35	**M/M+2**	1.02	0.88-1.20	0.932	0.930 - 0.934
3,4,5-TriCB	38			1.29	**M/M+2**	1.03	0.88-1.20	0.967	0.965 - 0.969
3,4',5-TriCB	39			1.35	**M/M+2**	1.02	0.88-1.20	0.946	0.944 - 0.948
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.79	**M/M+2**	0.78	0.65-0.89	1.335	1.331 - 1.339
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.75	**M/M+2**	0.79	0.65-0.89	1.312	1.309 - 1.314
2,2',3,5-TeCB	43			0.69	**M/M+2**	0.78	0.65-0.89	1.246	1.244 - 1.249
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.88	**M/M+2**	0.79	0.65-0.89	1.286	1.282 - 1.291
2,2',3,6-TeCB	45	45 + 51	C	0.80	**M/M+2**	0.79	0.65-0.89	1.147	1.143 - 1.151
2,2',3,6'-TeCB	46			0.70	**M/M+2**	0.78	0.65-0.89	1.160	1.158 - 1.163
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.79	**M/M+2**	0.78	0.65-0.89	1.274	1.272 - 1.277
2,2',4,5'-TeCB	49	49 + 69	C	0.94	**M/M+2**	0.79	0.65-0.89	1.258	1.254 - 1.262
2,2',4,6-TeCB	50	50 + 53	C	0.82	**M/M+2**	0.79	0.65-0.89	1.111	1.107 - 1.115
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.87	**M/M+2**	0.79	0.65-0.89	1.234	1.232 - 1.236
2,2',5,6'-TeCB	53	50 + 53	C50						
2,3,3',4-TeCB	55			0.99	**M/M+2**	0.79	0.65-0.89	0.889	0.887 - 0.890
2,3,3',4'-TeCB	56			1.00	**M/M+2**	0.78	0.65-0.89	0.904	0.903 - 0.906

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,3,3',5-TeCB	57			1.04	**M/M+2**	0.78	0.65-0.89	0.844	0.842 - 0.845
2,3,3',5'-TeCB	58			0.99	**M/M+2**	0.77	0.65-0.89	0.852	0.850 - 0.853
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.07	**M/M+2**	0.79	0.65-0.89	1.302	1.298 - 1.306
2,3,4,4'-TeCB	60			1.00	**M/M+2**	0.79	0.65-0.89	0.911	0.910 - 0.912
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1.05	**M/M+2**	0.79	0.65-0.89	0.874	0.871 - 0.877
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			1.08	**M/M+2**	0.77	0.65-0.89	0.864	0.863 - 0.866
2,3,4',6-TeCB	64			1.08	**M/M+2**	0.80	0.65-0.89	1.349	1.346 - 1.351
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			1.08	**M/M+2**	0.78	0.65-0.89	0.884	0.883 - 0.886
2,3',4,5-TeCB	67			1.15	**M/M+2**	0.78	0.65-0.89	0.856	0.855 - 0.858
2,3',4,5'-TeCB	68			1.08	**M/M+2**	0.77	0.65-0.89	0.832	0.830 - 0.833
2,3',4,6-TeCB	69	49 + 69	C49						
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61						
2,3',4',6-TeCB	71	40 + 41 + 71	C40						
2,3',5,5'-TeCB	72			1.10	**M/M+2**	0.78	0.65-0.89	0.823	0.821 - 0.824
2,3',5',6-TeCB	73			1.02	**M/M+2**	0.78	0.65-0.89	1.241	1.239 - 1.244
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61						
2,4,4',6-TeCB	75	59 + 62 + 75	C59						
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61						
3,3',4,5-TeCB	78			1.06	**M/M+2**	0.77	0.65-0.89	0.987	0.985 - 0.988
3,3',4,5'-TeCB	79			1.22	**M/M+2**	0.77	0.65-0.89	0.970	0.969 - 0.971
3,3',5,5'-TeCB	80			1.14	**M/M+2**	0.77	0.65-0.89	0.924	0.923 - 0.926
2,2',3,3',4-PeCB	82			0.69	**M+2/M+4**	1.55	1.32-1.78	0.934	0.933 - 0.935
2,2',3,3',5-PeCB	83	83 + 99	C	0.77	**M+2/M+4**	1.60	1.32-1.78	0.885	0.882 - 0.887
2,2',3,3',6-PeCB	84			0.67	**M+2/M+4**	1.55	1.32-1.78	1.162	1.160 - 1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	0.93	**M+2/M+4**	1.56	1.32-1.78	0.920	0.917 - 0.922
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	0.88	**M+2/M+4**	1.59	1.32-1.78	0.900	0.897 - 0.904
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3,4,6-PeCB	88	88 + 91	C	0.74	**M+2/M+4**	1.59	1.32-1.78	1.152	1.148 - 1.156
2,2',3,4,6'-PeCB	89			0.71	**M+2/M+4**	1.62	1.32-1.78	1.182	1.180 - 1.184
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	0.87	**M+2/M+4**	1.59	1.32-1.78	0.869	0.867 - 0.871
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.76	**M+2/M+4**	1.56	1.32-1.78	0.853	0.852 - 0.855
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	0.76	**M+2/M+4**	1.61	1.32-1.78	1.129	1.118 - 1.140
2,2',3,5,6'-PeCB	94			0.68	**M+2/M+4**	1.57	1.32-1.78	1.102	1.100 - 1.103
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			1.00	**M+2/M+4**	1.56	1.32-1.78	1.015	1.011 - 1.018
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93						
2,2',4,4',5-PeCB	99	83 + 99	C83						
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90						
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5',6-PeCB	103			0.84	**M+2/M+4**	1.57	1.32-1.78	1.093	1.091 - 1.095
2,3,3',4,5-PeCB	106			1.10	**M+2/M+4**	1.57	1.32-1.78	1.004	1.003 - 1.005
2,3,3',4',5-PeCB	107 [4]			1.15	**M+2/M+4**	1.58	1.32-1.78	0.997	0.996 - 0.999
2,3,3',4,5'-PeCB	108 [4]	108 + 124	C	1.07	**M+2/M+4**	1.57	1.32-1.78	0.991	0.988 - 0.993
2,3,3',4,6-PeCB	109 [4]	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	1.03	**M+2/M+4**	1.56	1.32-1.78	0.926	0.924 - 0.929
2,3,3',5,5'-PeCB	111			1.03	**M+2/M+4**	1.56	1.32-1.78	0.946	0.945 - 0.947
2,3,3',5,6-PeCB	112			1.01	**M+2/M+4**	1.61	1.32-1.78	0.890	0.888 - 0.891
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',6-PeCB	115	110 + 115	C110						
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85						
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85						
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			1.12	**M+2/M+4**	1.61	1.32-1.78	0.959	0.957 - 0.960
2,3',4,5',6-PeCB	121			1.01	**M+2/M+4**	1.61	1.32-1.78	1.199	1.197 - 1.201
2',3,3',4,5-PeCB	122			1.03	**M+2/M+4**	1.57	1.32-1.78	1.010	1.008 - 1.011
2',3,4,5,5'-PeCB	124	108 + 124	C108						
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86						

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3,3',4,5,5'-PeCB	127			1.16	**M+2/M+4**	1.58	1.32-1.78	1.041	1.040 - 1.042
2,2',3,3',4,4'-HxCB	128	128 + 166	C	1.01	**M+2/M+4**	1.26	1.05-1.43	0.958	0.956 - 0.960
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	1.00	**M+2/M+4**	1.25	1.05-1.43	0.930	0.927 - 0.932
2,2',3,3',4,5'-HxCB	130			0.79	**M+2/M+4**	1.27	1.05-1.43	0.913	0.912 - 0.914
2,2',3,3',4,6-HxCB	131			0.82	**M+2/M+4**	1.26	1.05-1.43	1.159	1.157 - 1.160
2,2',3,3',4,6'-HxCB	132			0.78	**M+2/M+4**	1.28	1.05-1.43	1.174	1.171 - 1.176
2,2',3,3',5,5'-HxCB	133			0.83	**M+2/M+4**	1.27	1.05-1.43	1.190	1.189 - 1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.81	**M+2/M+4**	1.23	1.05-1.43	1.140	1.138 - 1.143
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	0.86	**M+2/M+4**	1.26	1.05-1.43	1.106	1.100 - 1.112
2,2',3,3',6,6'-HxCB	136			1.09	**M+2/M+4**	1.27	1.05-1.43	1.023	1.022 - 1.025
2,2',3,4,4',5-HxCB	137			0.84	**M+2/M+4**	1.25	1.05-1.43	0.918	0.917 - 0.920
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	0.91	**M+2/M+4**	1.26	1.05-1.43	1.152	1.150 - 1.155
2,2',3,4,4',6'-HxCB	140	139 + 140	C139						
2,2',3,4,5,5'-HxCB	141			0.88	**M+2/M+4**	1.18	1.05-1.43	0.903	0.902 - 0.904
2,2',3,4,5,6-HxCB	142			0.80	**M+2/M+4**	1.26	1.05-1.43	1.164	1.162 - 1.165
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			0.85	**M+2/M+4**	1.26	1.05-1.43	1.121	1.120 - 1.123
2,2',3,4,6,6'-HxCB	145			1.02	**M+2/M+4**	1.26	1.05-1.43	1.034	1.032 - 1.035
2,2',3,4',5,5'-HxCB	146			0.95	**M+2/M+4**	1.26	1.05-1.43	0.884	0.883 - 0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	0.93	**M+2/M+4**	1.26	1.05-1.43	1.133	1.130 - 1.135
2,2',3,4',5,6'-HxCB	148			0.80	**M+2/M+4**	1.27	1.05-1.43	1.083	1.082 - 1.085
2,2',3,4',5',6-HxCB	149	147 + 149	C147						
2,2',3,4',6,6'-HxCB	150			1.05	**M+2/M+4**	1.26	1.05-1.43	1.012	1.010 - 1.014
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			1.13	**M+2/M+4**	1.26	1.05-1.43	1.007	1.005 - 1.008
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.09	**M+2/M+4**	1.32	1.05-1.43	0.899	0.898 - 0.901
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,3,3',4,4',6-HxCB	158			1.28	**M+2/M+4**	1.27	1.05-1.43	0.938	0.937 - 0.939
2,3,3',4,5,5'-HxCB	159			1.20	**M+2/M+4**	1.27	1.05-1.43	0.982	0.981 - 0.983
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.19	**M+2/M+4**	1.28	1.05-1.43	0.887	0.886 - 0.888
2,3,3',4',5,5'-HxCB	162			1.20	**M+2/M+4**	1.25	1.05-1.43	0.989	0.988 - 0.990
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129						
2,3,3',4',5',6-HxCB	164			1.19	**M+2/M+4**	1.28	1.05-1.43	0.921	0.920 - 0.922
2,3,3',5,5',6-HxCB	165			1.03	**M+2/M+4**	1.25	1.05-1.43	0.878	0.877 - 0.879
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
2,2',3,3',4,4',5-HpCB	170			1.11	**M+2/M+4**	1.05	0.89-1.21	1.000	0.999 - 1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.71	**M+2/M+4**	1.06	0.89-1.21	1.162	1.160 - 1.164
2,2',3,3',4,5,5'-HpCB	172			0.71	**M+2/M+4**	1.05	0.89-1.21	0.897	0.896 - 0.898
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.78	**M+2/M+4**	1.08	0.89-1.21	1.133	1.132 - 1.134
2,2',3,3',4,5',6-HpCB	175			0.79	**M+2/M+4**	1.02	0.89-1.21	1.103	1.101 - 1.104
2,2',3,3',4,6,6'-HpCB	176			1.00	**M+2/M+4**	1.06	0.89-1.21	1.034	1.033 - 1.036
2,2',3,3',4',5,6-HpCB	177			0.78	**M+2/M+4**	1.05	0.89-1.21	1.145	1.144 - 1.146
2,2',3,3',5,5',6-HpCB	178			0.75	**M+2/M+4**	1.07	0.89-1.21	1.085	1.083 - 1.086
2,2',3,3',5,6,6'-HpCB	179			1.03	**M+2/M+4**	1.07	0.89-1.21	1.010	1.008 - 1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	1.00	**M+2/M+4**	1.05	0.89-1.21	1.000	0.999 - 1.001
2,2',3,4,4',5,6-HpCB	181			0.74	**M+2/M+4**	1.02	0.89-1.21	1.156	1.155 - 1.157
2,2',3,4,4',5,6'-HpCB	182			0.80	**M+2/M+4**	1.03	0.89-1.21	1.115	1.114 - 1.117
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.79	**M+2/M+4**	1.02	0.89-1.21	1.128	1.126 - 1.129
2,2',3,4,4',6,6'-HpCB	184			1.03	**M+2/M+4**	1.04	0.89-1.21	1.025	1.023 - 1.026
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			0.94	**M+2/M+4**	1.02	0.89-1.21	1.046	1.045 - 1.048
2,2',3,4',5,5',6-HpCB	187			0.81	**M+2/M+4**	1.07	0.89-1.21	1.110	1.109 - 1.111
2,3,3',4,4',5,6-HpCB	190			0.96	**M+2/M+4**	1.07	0.89-1.21	0.947	0.946 - 0.948
2,3,3',4,4',5',6-HpCB	191			0.96	**M+2/M+4**	1.04	0.89-1.21	0.918	0.917 - 0.919
2,3,3',4,5,5',6-HpCB	192			0.88	**M+2/M+4**	1.05	0.89-1.21	0.903	0.902 - 0.904
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			0.90	**M+2/M+4**	0.90	0.76-1.02	0.991	0.990 - 0.992
2,2',3,3',4,4',5,6-OcCB	195			0.84	**M+2/M+4**	0.91	0.76-1.02	0.945	0.944 - 0.946
2,2',3,3',4,4',5,6'-OcCB	196			0.74	**M+2/M+4**	0.89	0.76-1.02	0.915	0.914 - 0.916

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	1.00	**M+2/M+4**	0.90	0.76-1.02	1.045	1.043 - 1.048
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.72	**M+2/M+4**	0.89	0.76-1.02	1.114	1.112 - 1.116
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198						
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197						
2,2',3,3',4,5',6,6'-OcCB	201			0.99	**M+2/M+4**	0.88	0.76-1.02	1.023	1.021 - 1.024
2,2',3,4,4',5,5',6-OcCB	203			0.78	**M+2/M+4**	0.91	0.76-1.02	0.919	0.918 - 0.920
2,2',3,4,4',5,6,6'-OcCB	204			0.99	**M+2/M+4**	0.91	0.76-1.02	1.039	1.038 - 1.040
2,2',3,3',4,4',5,6,6'-NoCB	207			1.18	**M+2/M+4**	0.82	0.65-0.89	1.020	1.019 - 1.021

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.
(4) PCB Congener numbers 107, 108, and 109 defined as per EPA1668C specifications.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PB7C_188S1__Form346A_SJ2223686_GS70428.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	28-May-2017	**CAL Data Filename:**	PB7C_188 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-May-2017
GC Column ID:	SPB OCTYL	**Analysis Time:**	07:34:39

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			1.01	**M/M+2**	3.24	2.66-3.60	0.718	0.703 - 0.734
13C12-4-MoCB	3L			0.96	**M/M+2**	3.15	2.66-3.60	0.858	0.842 - 0.873
13C12-2,2'-DiCB	4L			0.62	**M/M+2**	1.57	1.33-1.79	0.873	0.858 - 0.889
13C12-4,4'-DiCB	15L			0.99	**M/M+2**	1.58	1.33-1.79	1.253	1.237 - 1.268
13C12-2,2',6-TriCB	19L			0.51	**M/M+2**	1.05	0.88-1.20	1.072	1.056 - 1.087
13C12-3,4,4'-TriCB	37L			1.57	**M/M+2**	1.05	0.88-1.20	1.091	1.081 - 1.101
13C12-2,2',6,6'-TeCB	54L			1.29	**M/M+2**	0.81	0.65-0.89	0.811	0.804 - 0.818
13C12-3,3',4,4'-TeCB	77L			1.41	**M/M+2**	0.78	0.65-0.89	1.395	1.389 - 1.402
13C12-3,4,4',5-TeCB	81L			1.40	**M/M+2**	0.79	0.65-0.89	1.372	1.366 - 1.379
13C12-2,2',4,6,6'-PeCB	104L			1.19	**M+2/M+4**	1.58	1.32-1.78	0.808	0.803 - 0.814
13C12-2,3,3',4,4'-PeCB	105L			1.36	**M+2/M+4**	1.57	1.32-1.78	1.199	1.194 - 1.204
13C12-2,3,4,4',5-PeCB	114L			1.32	**M+2/M+4**	1.61	1.32-1.78	1.179	1.173 - 1.184
13C12-2,3',4,4',5-PeCB	118L			1.37	**M+2/M+4**	1.57	1.32-1.78	1.161	1.156 - 1.166
13C12-2',3,4,4',5-PeCB	123L			1.39	**M+2/M+4**	1.61	1.32-1.78	1.150	1.145 - 1.155
13C12-3,3',4,4',5-PeCB	126L			1.37	**M+2/M+4**	1.59	1.32-1.78	1.300	1.295 - 1.305
13C12-2,2',4,4',6,6'-HxCB	155L			1.30	**M+2/M+4**	1.28	1.05-1.43	0.786	0.782 - 0.790
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.19	**M+2/M+4**	1.28	1.05-1.43	1.107	1.103 - 1.111
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L						
13C12-2,3',4,4',5,5'-HxCB	167L			1.17	**M+2/M+4**	1.28	1.05-1.43	1.078	1.074 - 1.082
13C12-3,3',4,4',5,5'-HxCB	169L			1.20	**M+2/M+4**	1.26	1.05-1.43	1.191	1.187 - 1.195
13C12-2,2',3,3',4,4',5-HpCB	170L			0.93	**M+2/M+4**	1.06	0.89-1.21	0.897	0.894 - 0.900
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.11	**M+2/M+4**	1.06	0.89-1.21	0.873	0.869 - 0.876
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.50	**M+2/M+4**	1.06	0.89-1.21	0.712	0.709 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.45	**M+2/M+4**	1.02	0.89-1.21	0.959	0.956 - 0.962
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			1.26	**M+2/M+4**	0.90	0.76-1.02	0.818	0.815 - 0.821
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.38	**M+2/M+4**	0.91	0.76-1.02	1.010	1.005 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.92	**M+2/M+4**	0.77	0.65-0.89	1.044	1.039 - 1.048
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.10	**M+2/M+4**	0.78	0.65-0.89	0.949	0.946 - 0.953

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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AXYS METHOD MLA-010 Rev 11

Form 4A
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	28-May-2017	**VER Data Filename:**	PB7C_189 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-May-2017
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:29:11

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	MZ's FORMING RATIO [2]	ION ABUND. RATIO	QC LIMITS [3]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
2-MoCB	1			**M/M+2**	3.17	2.66-3.60	23.9	18.8 - 31.3
4-MoCB	3			**M/M+2**	3.09	2.66-3.60	24.1	18.8 - 31.3
2,2'-DiCB	4			**M/M+2**	1.54	1.33-1.79	25.3	18.8 - 31.3
4,4'-DiCB	15			**M/M+2**	1.53	1.33-1.79	27.7	21.0 - 35.0
2,2',6-TriCB	19			**M/M+2**	1.07	0.88-1.20	26.4	18.8 - 31.3
3,4,4'-TriCB	37			**M/M+2**	1.03	0.88-1.20	24.4	18.8 - 31.3
2,2',6,6'-TeCB	54			**M/M+2**	0.79	0.65-0.89	50.7	37.5 - 62.5
3,3',4,4'-TeCB	77			**M/M+2**	0.78	0.65-0.89	47.3	37.5 - 62.5
3,4,4',5-TeCB	81			**M/M+2**	0.77	0.65-0.89	51.3	37.5 - 62.5
2,2',4,6,6'-PeCB	104			**M+2/M+4**	1.57	1.32-1.78	50.7	37.5 - 62.5
2,3,3',4,4'-PeCB	105			**M+2/M+4**	1.48	1.32-1.78	52.2	37.5 - 62.5
2,3,4,4',5-PeCB	114			**M+2/M+4**	1.54	1.32-1.78	50.4	37.5 - 62.5
2,3',4,4',5-PeCB	118			**M+2/M+4**	1.50	1.32-1.78	48.9	37.5 - 62.5
2',3,4,4',5-PeCB	123			**M+2/M+4**	1.57	1.32-1.78	50.1	37.5 - 62.5
3,3',4,4',5-PeCB	126			**M+2/M+4**	1.54	1.32-1.78	52.6	41.8 - 69.6
2,2',4,4',6,6'-HxCB	155			**M+2/M+4**	1.26	1.05-1.43	50.3	37.5 - 62.5
2,3,3',4,4',5-HxCB	156	156 + 157	C	**M+2/M+4**	1.26	1.05-1.43	102	75.0 - 125
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			**M+2/M+4**	1.26	1.05-1.43	55.8	37.5 - 62.5
3,3',4,4',5,5'-HxCB	169			**M+2/M+4**	1.30	1.05-1.43	52.8	37.5 - 62.5
2,2',3,4',5,6,6'-HpCB	188			**M+2/M+4**	1.05	0.89-1.21	48.7	37.5 - 62.5
2,3,3',4,4',5,5'-HpCB	189			**M+2/M+4**	1.05	0.89-1.21	50.1	37.5 - 62.5
2,2',3,3',5,5',6,6'-OcCB	202			**M+2/M+4**	0.89	0.76-1.02	82.8	63.2 - 105
2,3,3',4,4',5,5',6-OcCB	205			**M+2/M+4**	0.92	0.76-1.02	77.4	56.3 - 93.8
2,2',3,3',4,4',5,5',6-NoCB	206			**M+2/M+4**	0.78	0.65-0.89	76.9	56.3 - 93.8
2,2',3,3',4,5,5',6,6'-NoCB	208			**M+2/M+4**	0.80	0.65-0.89	82.9	62.9 - 105
2,2',3,3',4,4',5,5',6,6'-DeCB	209			**M+4/M+6**	1.14	0.99-1.33	74.7	56.3 - 93.8

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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AXYS METHOD MLA-010 Rev 11

Form 4B
PCB CONGENER CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	28-May-2017	**VER Data Filename:**	PB7C_189 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-May-2017
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:29:11

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	MZ's FORMING RATIO [3]	ION ABUND. RATIO	QC LIMITS [4]	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL)
13C12-2-MoCB	1L			**M/M+2**	3.17	2.66-3.60	96.8	50.0 - 145
13C12-4-MoCB	3L			**M/M+2**	3.12	2.66-3.60	95.1	50.0 - 145
13C12-2,2'-DiCB	4L			**M/M+2**	1.58	1.33-1.79	95.6	50.0 - 145
13C12-4,4'-DiCB	15L			**M/M+2**	1.58	1.33-1.79	95.9	50.0 - 145
13C12-2,2',6-TriCB	19L			**M/M+2**	1.05	0.88-1.20	97.6	50.0 - 145
13C12-3,4,4'-TriCB	37L			**M/M+2**	1.04	0.88-1.20	87.9	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			**M/M+2**	0.80	0.65-0.89	95.3	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			**M/M+2**	0.80	0.65-0.89	88.4	50.0 - 145
13C12-3,4,4',5-TeCB	81L			**M/M+2**	0.77	0.65-0.89	89.3	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			**M+2/M+4**	1.57	1.32-1.78	90.3	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			**M+2/M+4**	1.56	1.32-1.78	92.7	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			**M+2/M+4**	1.57	1.32-1.78	91.9	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			**M+2/M+4**	1.56	1.32-1.78	92.7	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			**M+2/M+4**	1.55	1.32-1.78	91.4	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			**M+2/M+4**	1.57	1.32-1.78	102	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			**M+2/M+4**	1.24	1.05-1.43	88.5	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	**M+2/M+4**	1.29	1.05-1.43	187	100 - 290
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			**M+2/M+4**	1.27	1.05-1.43	95.4	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			**M+2/M+4**	1.28	1.05-1.43	95.9	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			**M+2/M+4**	1.05	0.89-1.21	81.9	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			**M+2/M+4**	1.04	0.89-1.21	89.1	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			**M+2/M+4**	0.89	0.76-1.02	80.0	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			**M+2/M+4**	0.92	0.76-1.02	91.6	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			**M+2/M+4**	0.79	0.65-0.89	89.6	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			**M+2/M+4**	0.80	0.65-0.89	86.2	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			**M+4/M+6**	1.14	0.99-1.33	88.3	50.0 - 145
CLEAN-UP STANDARD								
13C12-2,4,4'-TriCB	28L			**M/M+2**	1.06	0.88-1.20	92.4	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			**M+2/M+4**	1.62	1.32-1.78	94.0	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			**M+2/M+4**	1.02	0.89-1.21	95.3	75.0 - 125

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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AXYS METHOD MLA-010 Rev 11

Form 6A
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	28-May-2017	**VER Data Filename:**	PB7C_189 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-May-2017
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:29:11

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RETENTION TIME REFERENCE	IUPAC NO. [2]	RRT	RRT QC LIMITS
2-MoCB	1			13C12-2-MoCB	1L	1.001	0.999-1.004
4-MoCB	3			13C12-4-MoCB	3L	1.001	0.999-1.004
2,2'-DiCB	4			13C12-2,2'-DiCB	4L	1.001	0.999-1.004
4,4'-DiCB	15			13C12-4,4'-DiCB	15L	1.002	0.999-1.002
2,2',6-TriCB	19			13C12-2,2',6-TriCB	19L	1.001	0.999-1.003
3,4,4'-TriCB	37			13C12-3,4,4'-TriCB	37L	1.001	0.999-1.002
2,2',6,6'-TeCB	54			13C12-2,2',6,6'-TeCB	54L	1.001	0.999-1.002
3,3',4,4'-TeCB	77			13C12-3,3',4,4'-TeCB	77L	1.000	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.000	1.000-1.001
2,2',4,6,6'-PeCB	104			13C12-2,2',4,6,6'-PeCB	104L	1.001	0.999-1.002
2,3,3',4,4'-PeCB	105			13C12-2,3,3',4,4'-PeCB	105L	1.001	1.000-1.001
2,3,4,4',5-PeCB	114			13C12-2,3,4,4',5-PeCB	114L	1.001	1.000-1.001
2,3',4,4',5-PeCB	118			13C12-2,3',4,4',5-PeCB	118L	1.000	1.000-1.001
2',3,4,4',5-PeCB	123			13C12-2',3,4,4',5-PeCB	123L	1.001	1.000-1.001
3,3',4,4',5-PeCB	126			13C12-3,3',4,4',5-PeCB	126L	1.000	1.000-1.001
2,2',4,4',6,6'-HxCB	155			13C12-2,2',4,4',6,6'-HxCB	155L	1.001	0.999-1.002
2,3,3',4,4',5-HxCB	156	156 + 157	C	13C12-2,3,3',4,4',5-HxCB and 13C12-2,3,3',4,4',5'-HxCB	156L/157L	1.000	0.998-1.003
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			13C12-2,3',4,4',5,5'-HxCB	167L	1.001	1.000-1.001
3,3',4,4',5,5'-HxCB	169			13C12-3,3',4,4',5,5'-HxCB	169L	1.001	1.000-1.001
2,2',3,4',5,6,6'-HpCB	188			13C12-2,2',3,4',5,6,6'-HpCB	188L	1.001	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.000	1.000-1.001
2,2',3,3',5,5',6,6'-OcCB	202			13C12-2,2',3,3',5,5',6,6'-OcCB	202L	1.001	1.000-1.001
2,3,3',4,4',5,5',6-OcCB	205			13C12-2,3,3',4,4',5,5',6-OcCB	205L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6-NoCB	206			13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	1.000	1.000-1.001
2,2',3,3',4,5,5',6,6'-NoCB	208			13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	1.000	1.000-1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	1.000	1.000-1.001

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(2) Suffix "L" indicates labeled compound

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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AXYS METHOD MLA-010 Rev 11

Form 6B
PCB CONGENER RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	28-May-2017	**VER Data Filename:**	PB7C_189 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-May-2017
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:29:11

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RETENTION TIME REFERENCE	IUPAC NO. [1]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			13C12-2,5-DiCB	9L	0.718	0.687-0.749
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.857	0.826-0.889
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.873	0.842-0.904
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.253	1.222-1.284
13C12-2,2',6-TriCB	19L			13C12-2,5-DiCB	9L	1.072	1.041-1.103
13C12-3,4,4'-TriCB	37L			13C12-2,2',5,5'-TeCB	52L	1.090	1.070-1.110
13C12-2,2',6,6'-TeCB	54L			13C12-2,2',5,5'-TeCB	52L	0.811	0.797-0.824
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.396	1.382-1.409
13C12-3,4,4',5-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.373	1.359-1.386
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.808	0.798-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.199	1.189-1.210
13C12-2,3,4,4',5-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.168-1.189
13C12-2,3',4,4',5-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.151-1.172
13C12-2',3,4,4',5-PeCB	123L			13C12-2,2',4,5,5'-PeCB	101L	1.151	1.141-1.161
13C12-3,3',4,4',5-PeCB	126L			13C12-2,2',4,5,5'-PeCB	101L	1.301	1.290-1.311
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.786	0.778-0.795
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.099-1.116
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L				
13C12-2,3',4,4',5,5'-HxCB	167L			13C12-2,2',3,4,4',5'-HxCB	138L	1.078	1.070-1.086
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.191	1.183-1.199
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.706-0.719
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.953-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.818	0.811-0.824
13C12-2,3,3',4,4',5,5',6-OcCB	205L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.009	1.000-1.019
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.044	1.034-1.053
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.949	0.943-0.955
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	1.075	1.066-1.084
CLEANUP STANDARD							
13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.924	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.088	1.078-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.012	1.004-1.020

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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AXYS METHOD MLA-010 Rev 11

Form 3A

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 28-May-2017 **CAL Data Filename:** PB7C_189 S: 1

Instrument ID: HR GC/MS **Analysis Date:** 30-May-2017

GC Column ID: SPB OCTYL **Analysis Time:** 19:29:11

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3-MoCB	2			1.06	**M/M+2**	3.16	2.66-3.60	0.989	0.985 - 0.993
2,3-DiCB	5			1.11	**M/M+2**	1.56	1.33-1.79	1.199	1.195 - 1.203
2,3'-DiCB	6			1.21	**M/M+2**	1.55	1.33-1.79	1.176	1.173 - 1.180
2,4-DiCB	7			1.17	**M/M+2**	1.56	1.33-1.79	1.160	1.156 - 1.163
2,4'-DiCB	8			1.29	**M/M+2**	1.56	1.33-1.79	1.209	1.205 - 1.212
2,5-DiCB	9			1.22	**M/M+2**	1.57	1.33-1.79	1.147	1.143 - 1.150
2,6-DiCB	10			1.18	**M/M+2**	1.54	1.33-1.79	1.014	1.011 - 1.018
3,3'-DiCB	11			1.18	**M/M+2**	1.54	1.33-1.79	0.970	0.968 - 0.973
3,4-DiCB	12	12 + 13	C	1.17	**M/M+2**	1.55	1.33-1.79	0.986	0.983 - 0.988
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.20	**M/M+2**	1.53	1.33-1.79	0.926	0.924 - 0.929
2,2',3-TriCB	16			0.77	**M/M+2**	1.06	0.88-1.20	1.166	1.163 - 1.169
2,2',4-TriCB	17			0.93	**M/M+2**	1.06	0.88-1.20	1.139	1.136 - 1.142
2,2',5-TriCB	18	18 + 30	C	1.09	**M/M+2**	1.07	0.88-1.20	1.113	1.110 - 1.116
2,3,3'-TriCB	20	20 + 28	C	1.37	**M/M+2**	1.03	0.88-1.20	0.849	0.846 - 0.852
2,3,4-TriCB	21	21 + 33	C	1.36	**M/M+2**	1.02	0.88-1.20	0.856	0.853 - 0.859
2,3,4'-TriCB	22			1.24	**M/M+2**	1.03	0.88-1.20	0.872	0.870 - 0.874
2,3,5-TriCB	23			1.26	**M/M+2**	1.01	0.88-1.20	1.283	1.281 - 1.286
2,3,6-TriCB	24			1.21	**M/M+2**	1.07	0.88-1.20	1.160	1.157 - 1.163
2,3',4-TriCB	25			1.52	**M/M+2**	1.03	0.88-1.20	0.826	0.824 - 0.828
2,3',5-TriCB	26	26 + 29	C	1.34	**M/M+2**	1.04	0.88-1.20	1.302	1.297 - 1.307
2,3',6-TriCB	27			1.33	**M/M+2**	1.06	0.88-1.20	1.151	1.149 - 1.154
2,4,4'-TriCB	28	20 + 28	C20						
2,4,5-TriCB	29	26 + 29	C26						
2,4,6-TriCB	30	18 + 30	C18						
2,4',5-TriCB	31			1.44	**M/M+2**	1.03	0.88-1.20	0.837	0.836 - 0.839
2,4',6-TriCB	32			1.39	**M/M+2**	1.03	0.88-1.20	1.197	1.194 - 1.200
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.31	**M/M+2**	1.06	0.88-1.20	1.275	1.272 - 1.278
3,3',4-TriCB	35			1.25	**M/M+2**	1.01	0.88-1.20	0.986	0.984 - 0.988
3,3',5-TriCB	36			1.36	**M/M+2**	1.03	0.88-1.20	0.932	0.931 - 0.934
3,4,5-TriCB	38			1.29	**M/M+2**	1.04	0.88-1.20	0.968	0.966 - 0.970
3,4',5-TriCB	39			1.35	**M/M+2**	1.03	0.88-1.20	0.946	0.944 - 0.948
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.81	**M/M+2**	0.79	0.65-0.89	1.335	1.331 - 1.339
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.77	**M/M+2**	0.80	0.65-0.89	1.312	1.310 - 1.314
2,2',3,5-TeCB	43			0.66	**M/M+2**	0.80	0.65-0.89	1.247	1.244 - 1.249
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.90	**M/M+2**	0.79	0.65-0.89	1.286	1.282 - 1.290
2,2',3,6-TeCB	45	45 + 51	C	0.81	**M/M+2**	0.80	0.65-0.89	1.147	1.143 - 1.151
2,2',3,6'-TeCB	46			0.71	**M/M+2**	0.78	0.65-0.89	1.161	1.158 - 1.163
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.80	**M/M+2**	0.79	0.65-0.89	1.274	1.271 - 1.276
2,2',4,5'-TeCB	49	49 + 69	C	0.95	**M/M+2**	0.79	0.65-0.89	1.258	1.254 - 1.262
2,2',4,6-TeCB	50	50 + 53	C	0.85	**M/M+2**	0.79	0.65-0.89	1.112	1.108 - 1.116
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.87	**M/M+2**	0.79	0.65-0.89	1.234	1.232 - 1.237
2,2',5,6'-TeCB	53	50 + 53	C50						
2,3,3',4-TeCB	55			0.97	**M/M+2**	0.78	0.65-0.89	0.889	0.888 - 0.891
2,3,3',4'-TeCB	56			0.96	**M/M+2**	0.78	0.65-0.89	0.904	0.903 - 0.906

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,3,3',5-TeCB	57			1.06	**M/M+2**	0.78	0.65-0.89	0.844	0.842 - 0.845
2,3,3',5'-TeCB	58			1.00	**M/M+2**	0.78	0.65-0.89	0.851	0.850 - 0.852
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.08	**M/M+2**	0.79	0.65-0.89	1.302	1.298 - 1.306
2,3,4,4'-TeCB	60			1.00	**M/M+2**	0.77	0.65-0.89	0.911	0.910 - 0.912
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	1.02	**M/M+2**	0.78	0.65-0.89	0.874	0.871 - 0.877
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			1.06	**M/M+2**	0.79	0.65-0.89	0.864	0.863 - 0.866
2,3,4',6-TeCB	64			1.10	**M/M+2**	0.80	0.65-0.89	1.349	1.346 - 1.351
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			1.09	**M/M+2**	0.77	0.65-0.89	0.884	0.882 - 0.885
2,3',4,5-TeCB	67			1.15	**M/M+2**	0.78	0.65-0.89	0.856	0.855 - 0.858
2,3',4,5'-TeCB	68			1.07	**M/M+2**	0.77	0.65-0.89	0.832	0.830 - 0.833
2,3',4,6-TeCB	69	49 + 69	C49						
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61						
2,3',4',6-TeCB	71	40 + 41 + 71	C40						
2,3',5,5'-TeCB	72			1.08	**M/M+2**	0.79	0.65-0.89	0.822	0.821 - 0.824
2,3',5',6-TeCB	73			1.10	**M/M+2**	0.79	0.65-0.89	1.242	1.239 - 1.244
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61						
2,4,4',6-TeCB	75	59 + 62 + 75	C59						
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61						
3,3',4,5-TeCB	78			1.06	**M/M+2**	0.77	0.65-0.89	0.987	0.985 - 0.988
3,3',4,5'-TeCB	79			1.25	**M/M+2**	0.78	0.65-0.89	0.970	0.969 - 0.971
3,3',5,5'-TeCB	80			1.13	**M/M+2**	0.78	0.65-0.89	0.924	0.923 - 0.925
2,2',3,3',4-PeCB	82			0.69	**M+2/M+4**	1.60	1.32-1.78	0.934	0.932 - 0.935
2,2',3,3',5-PeCB	83	83 + 99	C	0.73	**M+2/M+4**	1.57	1.32-1.78	0.885	0.882 - 0.887
2,2',3,3',6-PeCB	84			0.66	**M+2/M+4**	1.56	1.32-1.78	1.163	1.161 - 1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	0.91	**M+2/M+4**	1.53	1.32-1.78	0.919	0.916 - 0.922
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	0.87	**M+2/M+4**	1.58	1.32-1.78	0.900	0.897 - 0.904
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3,4,6-PeCB	88	88 + 91	C	0.73	**M+2/M+4**	1.61	1.32-1.78	1.153	1.149 - 1.157
2,2',3,4,6'-PeCB	89			0.70	**M+2/M+4**	1.61	1.32-1.78	1.182	1.180 - 1.184
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	0.86	**M+2/M+4**	1.58	1.32-1.78	0.869	0.867 - 0.871
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.74	**M+2/M+4**	1.57	1.32-1.78	0.853	0.852 - 0.855
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	0.75	**M+2/M+4**	1.57	1.32-1.78	1.130	1.119 - 1.141
2,2',3,5,6'-PeCB	94			0.67	**M+2/M+4**	1.57	1.32-1.78	1.102	1.100 - 1.104
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			0.98	**M+2/M+4**	1.58	1.32-1.78	1.015	1.012 - 1.019
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86						
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93						
2,2',4,4',5-PeCB	99	83 + 99	C83						
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90						
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93						
2,2',4,5',6-PeCB	103			0.82	**M+2/M+4**	1.56	1.32-1.78	1.094	1.092 - 1.096
2,3,3',4,5-PeCB	106			1.19	**M+2/M+4**	1.57	1.32-1.78	1.004	1.003 - 1.005
2,3,3',4',5-PeCB	107 [4]			1.19	**M+2/M+4**	1.56	1.32-1.78	0.997	0.996 - 0.999
2,3,3',4,5'-PeCB	108 [4]	108 + 124	C	1.04	**M+2/M+4**	1.50	1.32-1.78	0.991	0.988 - 0.993
2,3,3',4,6-PeCB	109 [4]	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	1.02	**M+2/M+4**	1.55	1.32-1.78	0.926	0.924 - 0.929
2,3,3',5,5'-PeCB	111			1.01	**M+2/M+4**	1.60	1.32-1.78	0.946	0.944 - 0.947
2,3,3',5,6-PeCB	112			1.05	**M+2/M+4**	1.58	1.32-1.78	0.889	0.888 - 0.890
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',6-PeCB	115	110 + 115	C110						
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85						
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85						
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			1.09	**M+2/M+4**	1.57	1.32-1.78	0.958	0.957 - 0.960
2,3',4,5',6-PeCB	121			0.99	**M+2/M+4**	1.59	1.32-1.78	1.200	1.198 - 1.202
2',3,3',4,5-PeCB	122			1.03	**M+2/M+4**	1.58	1.32-1.78	1.010	1.008 - 1.011
2',3,4,5,5'-PeCB	124	108 + 124	C108						
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86						

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
3,3',4,5,5'-PeCB	127			1.14	**M+2/M+4**	1.53	1.32-1.78	1.041	1.040 - 1.043
2,2',3,3',4,4'-HxCB	128	128 + 166	C	1.04	**M+2/M+4**	1.27	1.05-1.43	0.958	0.956 - 0.960
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	1.01	**M+2/M+4**	1.26	1.05-1.43	0.930	0.927 - 0.932
2,2',3,3',4,5'-HxCB	130			0.81	**M+2/M+4**	1.25	1.05-1.43	0.913	0.912 - 0.914
2,2',3,3',4,6-HxCB	131			0.81	**M+2/M+4**	1.26	1.05-1.43	1.159	1.157 - 1.160
2,2',3,3',4,6'-HxCB	132			0.79	**M+2/M+4**	1.28	1.05-1.43	1.174	1.171 - 1.176
2,2',3,3',5,5'-HxCB	133			0.85	**M+2/M+4**	1.24	1.05-1.43	1.191	1.189 - 1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.81	**M+2/M+4**	1.28	1.05-1.43	1.141	1.138 - 1.143
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	0.85	**M+2/M+4**	1.27	1.05-1.43	1.106	1.100 - 1.112
2,2',3,3',6,6'-HxCB	136			1.08	**M+2/M+4**	1.28	1.05-1.43	1.023	1.021 - 1.024
2,2',3,4,4',5-HxCB	137			0.88	**M+2/M+4**	1.27	1.05-1.43	0.918	0.917 - 0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	0.91	**M+2/M+4**	1.28	1.05-1.43	1.153	1.150 - 1.155
2,2',3,4,4',6'-HxCB	140	139 + 140	C139						
2,2',3,4,5,5'-HxCB	141			0.93	**M+2/M+4**	1.27	1.05-1.43	0.903	0.902 - 0.904
2,2',3,4,5,6-HxCB	142			0.84	**M+2/M+4**	1.26	1.05-1.43	1.163	1.162 - 1.165
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			0.83	**M+2/M+4**	1.25	1.05-1.43	1.121	1.120 - 1.123
2,2',3,4,6,6'-HxCB	145			1.02	**M+2/M+4**	1.26	1.05-1.43	1.033	1.032 - 1.035
2,2',3,4',5,5'-HxCB	146			0.99	**M+2/M+4**	1.27	1.05-1.43	0.884	0.883 - 0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	0.93	**M+2/M+4**	1.27	1.05-1.43	1.133	1.131 - 1.136
2,2',3,4',5,6'-HxCB	148			0.83	**M+2/M+4**	1.27	1.05-1.43	1.083	1.082 - 1.085
2,2',3,4',5',6-HxCB	149	147 + 149	C147						
2,2',3,4',6,6'-HxCB	150			1.07	**M+2/M+4**	1.25	1.05-1.43	1.012	1.010 - 1.014
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			1.10	**M+2/M+4**	1.26	1.05-1.43	1.006	1.005 - 1.008
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.09	**M+2/M+4**	1.26	1.05-1.43	0.899	0.897 - 0.901
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,3,3',4,4',6-HxCB	158			1.30	**M+2/M+4**	1.26	1.05-1.43	0.938	0.937 - 0.939
2,3,3',4,5,5'-HxCB	159			1.23	**M+2/M+4**	1.25	1.05-1.43	0.982	0.981 - 0.983
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.19	**M+2/M+4**	1.26	1.05-1.43	0.888	0.886 - 0.889
2,3,3',4',5,5'-HxCB	162			1.22	**M+2/M+4**	1.27	1.05-1.43	0.989	0.988 - 0.990
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129						
2,3,3',4',5',6-HxCB	164			1.18	**M+2/M+4**	1.28	1.05-1.43	0.921	0.920 - 0.922
2,3,3',5,5',6-HxCB	165			1.05	**M+2/M+4**	1.27	1.05-1.43	0.878	0.877 - 0.879
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
2,2',3,3',4,4',5-HpCB	170			1.12	**M+2/M+4**	1.04	0.89-1.21	1.000	0.999 - 1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.69	**M+2/M+4**	1.07	0.89-1.21	1.162	1.160 - 1.164
2,2',3,3',4,5,5'-HpCB	172			0.67	**M+2/M+4**	1.06	0.89-1.21	0.897	0.896 - 0.898
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.74	**M+2/M+4**	1.06	0.89-1.21	1.133	1.132 - 1.134
2,2',3,3',4,5',6-HpCB	175			0.75	**M+2/M+4**	1.05	0.89-1.21	1.102	1.101 - 1.104
2,2',3,3',4,6,6'-HpCB	176			0.98	**M+2/M+4**	1.05	0.89-1.21	1.034	1.033 - 1.036
2,2',3,3',4',5,6-HpCB	177			0.77	**M+2/M+4**	1.03	0.89-1.21	1.145	1.144 - 1.146
2,2',3,3',5,5',6-HpCB	178			0.72	**M+2/M+4**	1.05	0.89-1.21	1.085	1.083 - 1.086
2,2',3,3',5,6,6'-HpCB	179			1.01	**M+2/M+4**	1.06	0.89-1.21	1.010	1.008 - 1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	1.01	**M+2/M+4**	1.04	0.89-1.21	1.000	0.999 - 1.001
2,2',3,4,4',5,6-HpCB	181			0.72	**M+2/M+4**	1.07	0.89-1.21	1.156	1.155 - 1.157
2,2',3,4,4',5,6'-HpCB	182			0.78	**M+2/M+4**	1.05	0.89-1.21	1.115	1.114 - 1.117
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.76	**M+2/M+4**	1.05	0.89-1.21	1.128	1.126 - 1.129
2,2',3,4,4',6,6'-HpCB	184			1.01	**M+2/M+4**	1.04	0.89-1.21	1.025	1.023 - 1.026
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			0.93	**M+2/M+4**	1.05	0.89-1.21	1.046	1.045 - 1.048
2,2',3,4',5,5',6-HpCB	187			0.78	**M+2/M+4**	1.03	0.89-1.21	1.110	1.109 - 1.111
2,3,3',4,4',5,6-HpCB	190			0.91	**M+2/M+4**	1.07	0.89-1.21	0.947	0.946 - 0.948
2,3,3',4,4',5',6-HpCB	191			0.90	**M+2/M+4**	1.03	0.89-1.21	0.918	0.917 - 0.919
2,3,3',4,5,5',6-HpCB	192			0.83	**M+2/M+4**	1.06	0.89-1.21	0.903	0.902 - 0.904
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			0.92	**M+2/M+4**	0.90	0.76-1.02	0.991	0.990 - 0.992
2,2',3,3',4,4',5,6-OcCB	195			0.84	**M+2/M+4**	0.90	0.76-1.02	0.946	0.945 - 0.946
2,2',3,3',4,4',5,6'-OcCB	196			0.72	**M+2/M+4**	0.89	0.76-1.02	0.916	0.915 - 0.916

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	RRF	MZ's FORMING RATIO [2]	ION ABUND. RATIO	RATIO QC LIMITS [3]	RRT	RRT QC LIMITS
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	0.99	**M+2/M+4**	0.90	0.76-1.02	1.046	1.043 - 1.049
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.69	**M+2/M+4**	0.92	0.76-1.02	1.114	1.112 - 1.116
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198						
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197						
2,2',3,3',4,5',6,6'-OcCB	201			1.00	**M+2/M+4**	0.92	0.76-1.02	1.023	1.021 - 1.025
2,2',3,4,4',5,5',6-OcCB	203			0.75	**M+2/M+4**	0.90	0.76-1.02	0.920	0.919 - 0.920
2,2',3,4,4',5,6,6'-OcCB	204			0.98	**M+2/M+4**	0.91	0.76-1.02	1.039	1.038 - 1.041
2,2',3,3',4,4',5,6,6'-NoCB	207			1.23	**M+2/M+4**	0.79	0.65-0.89	1.020	1.019 - 1.021

(1) Where applicable, custom lab flags have been used on this report.
(2) See Table 8, Method 1668A, for m/z specifications.
(3) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.
(4) PCB Congener numbers 107, 108, and 109 defined as per EPA1668C specifications.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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AXYS METHOD MLA-010 Rev 11

Form 3B

PCB CONGENER INITIAL CALIBRATION RELATIVE RESPONSES, ION ABUNDANCE RATIOS, AND RELATIVE RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	28-May-2017	**CAL Data Filename:**	PB7C_189 S: 1
Instrument ID:	HR GC/MS	**Analysis Date:**	30-May-2017
GC Column ID:	SPB OCTYL	**Analysis Time:**	19:29:11

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	RRF	MZ's FORMING RATIO [3]	ION ABUND. RATIO	RATIO QC LIMITS [4]	RRT	RRT QC LIMITS
13C12-2-MoCB	1L			1.02	**M/M+2**	3.17	2.66-3.60	0.718	0.702 - 0.734
13C12-4-MoCB	3L			0.97	**M/M+2**	3.12	2.66-3.60	0.857	0.842 - 0.873
13C12-2,2'-DiCB	4L			0.63	**M/M+2**	1.58	1.33-1.79	0.873	0.857 - 0.889
13C12-4,4'-DiCB	15L			1.00	**M/M+2**	1.58	1.33-1.79	1.253	1.237 - 1.268
13C12-2,2',6-TriCB	19L			0.50	**M/M+2**	1.05	0.88-1.20	1.072	1.056 - 1.087
13C12-3,4,4'-TriCB	37L			1.60	**M/M+2**	1.04	0.88-1.20	1.090	1.080 - 1.100
13C12-2,2',6,6'-TeCB	54L			1.30	**M/M+2**	0.80	0.65-0.89	0.811	0.804 - 0.817
13C12-3,3',4,4'-TeCB	77L			1.39	**M/M+2**	0.80	0.65-0.89	1.396	1.389 - 1.402
13C12-3,4,4',5-TeCB	81L			1.38	**M/M+2**	0.77	0.65-0.89	1.373	1.366 - 1.379
13C12-2,2',4,6,6'-PeCB	104L			1.21	**M+2/M+4**	1.57	1.32-1.78	0.808	0.803 - 0.813
13C12-2,3,3',4,4'-PeCB	105L			1.42	**M+2/M+4**	1.56	1.32-1.78	1.199	1.194 - 1.205
13C12-2,3,4,4',5-PeCB	114L			1.36	**M+2/M+4**	1.57	1.32-1.78	1.179	1.174 - 1.184
13C12-2,3',4,4',5-PeCB	118L			1.42	**M+2/M+4**	1.56	1.32-1.78	1.162	1.157 - 1.167
13C12-2',3,4,4',5-PeCB	123L			1.42	**M+2/M+4**	1.55	1.32-1.78	1.151	1.146 - 1.156
13C12-3,3',4,4',5-PeCB	126L			1.43	**M+2/M+4**	1.57	1.32-1.78	1.301	1.296 - 1.306
13C12-2,2',4,4',6,6'-HxCB	155L			1.28	**M+2/M+4**	1.24	1.05-1.43	0.786	0.782 - 0.790
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.22	**M+2/M+4**	1.29	1.05-1.43	1.108	1.104 - 1.112
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L						
13C12-2,3',4,4',5,5'-HxCB	167L			1.18	**M+2/M+4**	1.27	1.05-1.43	1.078	1.074 - 1.082
13C12-3,3',4,4',5,5'-HxCB	169L			1.23	**M+2/M+4**	1.28	1.05-1.43	1.191	1.187 - 1.195
13C12-2,2',3,3',4,4',5-HpCB	170L			0.89	**M+2/M+4**	1.01	0.89-1.21	0.897	0.894 - 0.900
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.07	**M+2/M+4**	1.04	0.89-1.21	0.873	0.869 - 0.876
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.50	**M+2/M+4**	1.05	0.89-1.21	0.712	0.709 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.51	**M+2/M+4**	1.04	0.89-1.21	0.959	0.956 - 0.962
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			1.22	**M+2/M+4**	0.89	0.76-1.02	0.818	0.814 - 0.821
13C12-2,3,3',4,4',5,5',6-OcCB	205L			1.37	**M+2/M+4**	0.92	0.76-1.02	1.009	1.005 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.87	**M+2/M+4**	0.79	0.65-0.89	1.044	1.039 - 1.048
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.05	**M+2/M+4**	0.80	0.65-0.89	0.949	0.946 - 0.952

(1) Suffix "L" indicates labeled compound
(2) Where applicable, custom lab flags have been used on this report.
(3) See Table 8, Method 1668A, for m/z specifications.
(4) Ion Abundance Ratio Control Limits as specified in Table 8, Method 1668A.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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AXYS METHOD MLA-010 Rev 11

Form 1A

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
EFF EQUIP BLANK
Sample Collection:
02-May-2017 06:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-1
Matrix:	AQUEOUS	**Sample Size:**	0.989 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 15:04:28	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B J	3.89	0.506 (Q)	2.91	1.000
3-MoCB	2		K B J	1.36	0.506 (Q)	2.37	0.988
4-MoCB	3		B J	2.42	0.506 (Q)	3.17	1.000
2,2'-DiCB	4			17.2	7.42 (S)	1.53	1.000
2,3-DiCB	5		U		5.38 (S)		
2,3'-DiCB	6		U		4.86 (S)		
2,4-DiCB	7		U		5.00 (S)		
2,4'-DiCB	8		B	16.1	4.55 (S)	1.53	1.209
2,5-DiCB	9		U		4.83 (S)		
2,6-DiCB	10		U		4.99 (S)		
3,3'-DiCB	11		B	97.6	5.12 (S)	1.68	0.969
3,4-DiCB	12	12 + 13	C U		5.11 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		5.04 (S)		
4,4'-DiCB	15		K	6.11	5.37 (S)	1.17	1.001
2,2',3-TriCB	16		B	7.81	0.734 (S)	0.96	1.166
2,2',4-TriCB	17		B	4.97	0.628 (S)	1.04	1.140
2,2',5-TriCB	18	18 + 30	C B	12.9	0.531 (S)	1.08	1.115
2,2',6-TriCB	19		B J	2.76	0.693 (S)	0.90	1.001
2,3,3'-TriCB	20	20 + 28	C B	10.9	0.506 (Q)	1.06	0.848
2,3,4-TriCB	21	21 + 33	C B	7.73	0.506 (Q)	0.97	0.857
2,3,4'-TriCB	22		B	5.56	0.508 (S)	1.13	0.872
2,3,5-TriCB	23		U		0.506 (Q)		
2,3,6-TriCB	24		U		0.506 (Q)		
2,3',4-TriCB	25		J	0.876	0.506 (Q)	1.16	0.824
2,3',5-TriCB	26	26 + 29	C B J	1.81	0.506 (Q)	1.17	1.303
2,3',6-TriCB	27		J	0.748	0.506 (Q)	1.18	1.153
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31		B	9.31	0.506 (Q)	1.04	0.837
2,4',6-TriCB	32		B J	3.47	0.506 (Q)	0.96	1.199
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.506 (Q)		
3,3',4-TriCB	35		B J	0.986	0.506 (Q)	1.05	0.985
3,3',5-TriCB	36		U		0.506 (Q)		
3,4,4'-TriCB	37		B J	2.28	0.514 (S)	0.91	1.001
3,4,5-TriCB	38		U		0.506 (Q)		
3,4',5-TriCB	39		U		0.506 (Q)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C B	5.31	0.594 (S)	0.78	1.337
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		B J	2.56	0.631 (S)	0.87	1.312
2,2',3,5-TeCB	43		U		0.680 (S)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C B	14.4	0.536 (S)	0.77	1.287
2,2',3,6-TeCB	45	45 + 51	C B J	3.38	0.592 (S)	0.79	1.148
2,2',3,6'-TeCB	46		U		0.676 (S)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		B J	1.77	0.597 (S)	0.81	1.274
2,2',4,5'-TeCB	49	49 + 69	C B	5.53	0.506 (Q)	0.80	1.260
2,2',4,6-TeCB	50	50 + 53	C J	1.14	0.572 (S)	0.72	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		K B	10.2	0.541 (S)	0.91	1.235
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.506 (Q)		
2,3,3',4-TeCB	55		U		0.506 (Q)		
2,3,3',4'-TeCB	56		B J	2.79	0.506 (Q)	0.70	0.905
2,3,3',5-TeCB	57		U		0.506 (Q)		
2,3,3',5'-TeCB	58		U		0.506 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C J	0.814	0.506 (Q)	0.66	1.302
2,3,4,4'-TeCB	60		J	1.52	0.506 (Q)	0.88	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C B	11.2	0.506 (Q)	0.80	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		0.506 (Q)		
2,3,4',6-TeCB	64		B J	3.69	0.506 (Q)	0.70	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		B	6.40	0.506 (Q)	0.74	0.885
2,3',4,5-TeCB	67		U		0.506 (Q)		
2,3',4,5'-TeCB	68		B J	0.961	0.506 (Q)	0.69	0.832
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		0.506 (Q)		
2,3',5',6-TeCB	73		U		0.506 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		K J	0.799	0.506 (Q)	0.93	1.000
3,3',4,5-TeCB	78		U		0.506 (Q)		
3,3',4,5'-TeCB	79		U		0.506 (Q)		
3,3',5,5'-TeCB	80		U		0.506 (Q)		
3,4,4',5-TeCB	81		U		0.506 (Q)		
2,2',3,3',4-PeCB	82		K J	0.941	0.535 (S)	3.84	0.934
2,2',3,3',5-PeCB	83	83 + 99	C B	8.84	0.506 (Q)	1.54	0.885
2,2',3,3',6-PeCB	84		B J	2.98	0.555 (S)	1.46	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C K B J	2.33	0.506 (Q)	1.82	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C B	7.81	0.506 (Q)	1.46	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C J	2.28	0.506 (Q)	1.64	1.154
2,2',3,4,6'-PeCB	89		U		0.518 (S)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C B	15.8	0.506 (Q)	1.54	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		K B J	2.60	0.506 (Q)	1.85	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C B	8.44	0.506 (Q)	1.45	1.121
2,2',3,5,6'-PeCB	94		U		0.546 (S)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		0.506 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		0.506 (Q)		
2,2',4,6,6'-PeCB	104		U		0.506 (Q)		
2,3,3',4,4'-PeCB	105		B J	3.01	0.506 (Q)	1.68	1.000
2,3,3',4,5-PeCB	106		U		0.506 (Q)		
2,3,3',4',5-PeCB	107		J	0.842	0.506 (Q)	1.38	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C U		0.506 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C K B	10.4	0.506 (Q)	1.84	0.925
2,3,3',5,5'-PeCB	111		U		0.506 (Q)		
2,3,3',5,6-PeCB	112		U		0.506 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		J	0.521	0.506 (Q)	1.45	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		B	10.5	0.506 (Q)	1.60	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.506 (Q)		
2,3',4,5',6-PeCB	121		U		0.506 (Q)		
2',3,3',4,5-PeCB	122		U		0.506 (Q)		
2',3,4,4',5-PeCB	123		K J	0.520	0.506 (Q)	2.28	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		0.506 (Q)		
3,3',4,5,5'-PeCB	127		U		0.506 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C K J	1.15	0.506 (Q)	1.58	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C B	10.6	0.506 (Q)	1.33	0.928
2,2',3,3',4,5'-HxCB	130		U		0.603 (S)		
2,2',3,3',4,6-HxCB	131		U		0.581 (S)		
2,2',3,3',4,6'-HxCB	132		K B J	1.94	0.608 (S)	0.72	1.173
2,2',3,3',5,5'-HxCB	133		U		0.572 (S)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		0.585 (S)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C B J	3.67	0.506 (Q)	1.17	1.104
2,2',3,3',6,6'-HxCB	136		J	0.699	0.506 (Q)	1.23	1.023
2,2',3,4,4',5-HxCB	137		K J	0.891	0.566 (S)	1.82	0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		0.524 (S)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		B J	1.45	0.538 (S)	1.07	0.903
2,2',3,4,5,6-HxCB	142		U		0.595 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		0.506 (Q)		
2,2',3,4,6,6'-HxCB	145		U		0.506 (Q)		
2,2',3,4',5,5'-HxCB	146		K B J	2.23	0.506 (Q)	0.94	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C K B	6.83	0.512 (S)	1.05	1.133
2,2',3,4',5,6'-HxCB	148		U		0.506 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.506 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.506 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C B	11.1	0.506 (Q)	1.42	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		K B J	0.604	0.506 (Q)	0.85	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C K B J	1.06	0.506 (Q)	0.73	1.001
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		K J	0.912	0.506 (Q)	1.05	0.938
2,3,3',4,5,5'-HxCB	159		U		0.506 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		0.506 (Q)		
2,3,3',4',5,5'-HxCB	162		U		0.506 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		0.506 (Q)		
2,3,3',5,5',6-HxCB	165		U		0.506 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		0.506 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.506 (Q)		
2,2',3,3',4,4',5-HpCB	170		K B J	1.21	0.563 (S)	1.63	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		0.545 (S)		
2,2',3,3',4,5,5'-HpCB	172		U		0.546 (S)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		B J	0.994	0.506 (Q)	0.95	1.132
2,2',3,3',4,5',6-HpCB	175		U		0.506 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		0.506 (Q)		
2,2',3,3',4',5,6-HpCB	177		K J	0.771	0.506 (Q)	2.25	1.146
2,2',3,3',5,5',6-HpCB	178		U		0.516 (S)		
2,2',3,3',5,6,6'-HpCB	179		K J	0.518	0.506 (Q)	1.99	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C K B J	3.84	0.533 (S)	1.24	1.000
2,2',3,4,4',5,6-HpCB	181		U		0.521 (S)		
2,2',3,4,4',5,6'-HpCB	182		U		0.506 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C K B J	1.50	0.506 (Q)	1.35	1.127
2,2',3,4,4',6,6'-HpCB	184		U		0.506 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.506 (Q)		
2,2',3,4',5,5',6-HpCB	187		B J	2.69	0.506 (Q)	1.12	1.110
2,2',3,4',5,6,6'-HpCB	188		U		0.506 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		0.506 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		0.506 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		0.506 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		0.506 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		0.506 (Q)		
2,2',3,3',4,4',5,6-OcCB	195		U		0.535 (S)		
2,2',3,3',4,4',5,6'-OcCB	196		K J	0.890	0.520 (S)	0.31	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		0.506 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C K B J	1.05	0.536 (S)	2.04	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		0.506 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		0.506 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		K J	0.663	0.506 (Q)	1.12	0.920
2,2',3,4,4',5,6,6'-OcCB	204		U		0.506 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		0.506 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		0.929 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		0.695 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		0.766 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		B J	1.79	0.506 (Q)	1.01	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_L27247-1_Form1A_PB7C_188S8_SJ2220069.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
EFF EQUIP BLANK
Sample Collection:
02-May-2017 06:40

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-1
Matrix:	AQUEOUS	**Sample Size:**	0.989 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 15:04:28	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 8**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	987	49.4	3.16	0.718
13C12-4-MoCB	3L			2000	1010	50.3	3.13	0.857
13C12-2,2'-DiCB	4L			2000	1090	54.7	1.58	0.873
13C12-4,4'-DiCB	15L			2000	1250	62.5	1.57	1.253
13C12-2,2',6-TriCB	19L			2000	1250	62.5	1.05	1.071
13C12-3,4,4'-TriCB	37L			2000	1260	63.1	1.06	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1290	64.6	0.80	0.810
13C12-3,3',4,4'-TeCB	77L			2000	1440	72.0	0.80	1.396
13C12-3,4,4',5-TeCB	81L			2000	1440	71.9	0.79	1.372
13C12-2,2',4,6,6'-PeCB	104L			2000	1250	62.6	1.54	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1430	71.7	1.62	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1390	69.6	1.60	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1400	70.2	1.59	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1410	70.3	1.56	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1550	77.6	1.60	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1250	62.7	1.25	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2720	68.0	1.30	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1370	68.6	1.29	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1380	69.0	1.29	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1390	69.3	1.07	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1390	69.4	1.08	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1140	57.1	1.09	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1210	60.4	1.06	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1050	52.7	0.89	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1190	59.4	0.91	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1100	55.0	0.79	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1060	52.8	0.80	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1030	51.3	1.20	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1300	64.9	1.04	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1480	73.8	1.62	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1520	75.9	1.05	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_L27247-1_Form2_PB7C_188S8_SJ2220069.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA TMF
Sample Collection:
02-May-2017 06:47

Form 1A

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-2
Matrix:	EFFLUENT FINAL	**Sample Size:**	0.992 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 16:08:46	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 9**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B J	2.23	0.504 (Q)	3.09	1.001
3-MoCB	2		B J	1.33	0.504 (Q)	3.16	0.989
4-MoCB	3		B J	2.21	0.504 (Q)	3.32	1.001
2,2'-DiCB	4		U		6.59 (S)		
2,3-DiCB	5		U		4.81 (S)		
2,3'-DiCB	6		U		4.34 (S)		
2,4-DiCB	7		U		4.47 (S)		
2,4'-DiCB	8		B	4.28	4.07 (S)	1.43	1.207
2,5-DiCB	9		U		4.32 (S)		
2,6-DiCB	10		U		4.46 (S)		
3,3'-DiCB	11		B	58.5	4.58 (S)	1.44	0.969
3,4-DiCB	12	12 + 13	C U		4.57 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		4.50 (S)		
4,4'-DiCB	15		U		4.83 (S)		
2,2',3-TriCB	16		K B J	2.40	0.670 (S)	1.24	1.165
2,2',4-TriCB	17		B J	2.18	0.573 (S)	0.91	1.138
2,2',5-TriCB	18	18 + 30	C K B	5.00	0.504 (Q)	1.24	1.113
2,2',6-TriCB	19		K B J	0.848	0.679 (S)	2.19	1.001
2,3,3'-TriCB	20	20 + 28	C B	8.02	0.523 (S)	1.01	0.848
2,3,4-TriCB	21	21 + 33	C B J	2.65	0.522 (S)	0.97	0.857
2,3,4'-TriCB	22		B J	2.71	0.581 (S)	0.93	0.872
2,3,5-TriCB	23		U		0.572 (S)		
2,3,6-TriCB	24		U		0.504 (Q)		
2,3',4-TriCB	25		J	0.629	0.504 (Q)	1.06	0.825
2,3',5-TriCB	26	26 + 29	C K B J	1.15	0.534 (S)	0.85	1.301
2,3',6-TriCB	27		U		0.504 (Q)		
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31		B	6.06	0.504 (Q)	1.14	0.837
2,4',6-TriCB	32		B J	1.20	0.513 (S)	1.04	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.542 (S)		
3,3',4-TriCB	35		K B J	0.913	0.569 (S)	1.45	0.985
3,3',5-TriCB	36		U		0.525 (S)		
3,4,4'-TriCB	37		B J	1.60	0.568 (S)	0.89	1.000
3,4,5-TriCB	38		U		0.549 (S)		
3,4',5-TriCB	39		U		0.524 (S)		

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2,2',3,3'-TeCB	40	40 + 41 + 71	C K B J	2.19	0.574 (S)	0.94	1.337
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		K B J	1.27	0.609 (S)	0.52	1.313
2,2',3,5-TeCB	43		U		0.657 (S)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C B	9.30	0.518 (S)	0.77	1.287
2,2',3,6-TeCB	45	45 + 51	C B J	2.05	0.572 (S)	0.81	1.148
2,2',3,6'-TeCB	46		U		0.653 (S)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		K B J	0.926	0.576 (S)	0.91	1.275
2,2',4,5'-TeCB	49	49 + 69	C B J	3.32	0.504 (Q)	0.83	1.260
2,2',4,6-TeCB	50	50 + 53	C K J	0.699	0.553 (S)	1.35	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		B	9.58	0.523 (S)	0.74	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.504 (Q)		
2,3,3',4-TeCB	55		U		0.504 (Q)		
2,3,3',4'-TeCB	56		B J	1.26	0.504 (Q)	0.77	0.904
2,3,3',5-TeCB	57		U		0.504 (Q)		
2,3,3',5'-TeCB	58		U		0.504 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C U		0.504 (Q)		
2,3,4,4'-TeCB	60		K J	0.758	0.504 (Q)	0.93	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C B	7.28	0.504 (Q)	0.80	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		0.504 (Q)		
2,3,4',6-TeCB	64		K B J	1.97	0.504 (Q)	0.53	1.350
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		B J	3.33	0.504 (Q)	0.75	0.884
2,3',4,5-TeCB	67		U		0.504 (Q)		
2,3',4,5'-TeCB	68		K B J	0.765	0.504 (Q)	0.48	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		0.504 (Q)		
2,3',5',6-TeCB	73		U		0.504 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		J	0.841	0.504 (Q)	0.72	1.001
3,3',4,5-TeCB	78		U		0.504 (Q)		
3,3',4,5'-TeCB	79		U		0.504 (Q)		
3,3',5,5'-TeCB	80		U		0.504 (Q)		
3,4,4',5-TeCB	81		U		0.504 (Q)		
2,2',3,3',4-PeCB	82		K J	0.710	0.588 (S)	1.31	0.934
2,2',3,3',5-PeCB	83	83 + 99	C K B	4.35	0.526 (S)	1.19	0.886
2,2',3,3',6-PeCB	84		B J	1.98	0.611 (S)	1.51	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C K B J	1.17	0.504 (Q)	3.05	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C K B	4.94	0.504 (Q)	1.87	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C K J	0.565	0.548 (S)	0.89	1.155
2,2',3,4,6'-PeCB	89		U		0.569 (S)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C B	7.33	0.504 (Q)	1.61	0.870
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		K B J	1.44	0.536 (S)	2.07	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C B	5.59	0.536 (S)	1.35	1.120
2,2',3,5,6'-PeCB	94		U		0.600 (S)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		0.504 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		0.504 (Q)		
2,2',4,6,6'-PeCB	104		U		0.504 (Q)		
2,3,3',4,4'-PeCB	105		B J	1.90	0.504 (Q)	1.45	1.000
2,3,3',4,5-PeCB	106		U		0.504 (Q)		
2,3,3',4',5-PeCB	107		U		0.504 (Q)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		0.504 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C B	5.33	0.504 (Q)	1.58	0.925
2,3,3',5,5'-PeCB	111		U		0.504 (Q)		
2,3,3',5,6-PeCB	112		U		0.504 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		0.504 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		B	5.67	0.504 (Q)	1.77	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.504 (Q)		
2,3',4,5',6-PeCB	121		U		0.504 (Q)		
2',3,3',4,5-PeCB	122		U		0.504 (Q)		
2',3,4,4',5-PeCB	123		K J	0.591	0.504 (Q)	1.10	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		0.504 (Q)		
3,3',4,5,5'-PeCB	127		U		0.504 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C U		0.504 (Q)		
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C K B	4.46	0.504 (Q)	1.44	0.928
2,2',3,3',4,5'-HxCB	130		U		0.504 (Q)		
2,2',3,3',4,6-HxCB	131		U		0.504 (Q)		
2,2',3,3',4,6'-HxCB	132		K B J	1.17	0.504 (Q)	1.47	1.174
2,2',3,3',5,5'-HxCB	133		U		0.504 (Q)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		0.504 (Q)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C K B J	2.01	0.509 (S)	0.89	1.104
2,2',3,3',6,6'-HxCB	136		K J	0.566	0.504 (Q)	1.64	1.023
2,2',3,4,4',5-HxCB	137		K J	0.514	0.504 (Q)	0.88	0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		0.504 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		U		0.504 (Q)		
2,2',3,4,5,6-HxCB	142		U		0.504 (Q)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		0.510 (S)		
2,2',3,4,6,6'-HxCB	145		U		0.504 (Q)		
2,2',3,4',5,5'-HxCB	146		K B J	0.718	0.504 (Q)	1.02	0.883
2,2',3,4',5,6-HxCB	147	147 + 149	C B J	2.82	0.504 (Q)	1.16	1.133
2,2',3,4',5,6'-HxCB	148		U		0.542 (S)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.504 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.504 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C K B J	3.39	0.504 (Q)	1.56	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		0.504 (Q)		
2,3,3',4,4',5-HxCB	156	156 + 157	C B J	0.834	0.504 (Q)	1.40	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		0.504 (Q)		
2,3,3',4,5,5'-HxCB	159		U		0.504 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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2,3,3',4,5',6-HxCB	161		U		0.504 (Q)		
2,3,3',4',5,5'-HxCB	162		U		0.504 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		0.504 (Q)		
2,3,3',5,5',6-HxCB	165		U		0.504 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		0.504 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.504 (Q)		
2,2',3,3',4,4',5-HpCB	170		K B J	0.891	0.534 (S)	1.77	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		0.524 (S)		
2,2',3,3',4,5,5'-HpCB	172		U		0.525 (S)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		U		0.504 (Q)		
2,2',3,3',4,5',6-HpCB	175		U		0.504 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		0.504 (Q)		
2,2',3,3',4',5,6-HpCB	177		U		0.504 (Q)		
2,2',3,3',5,5',6-HpCB	178		U		0.504 (Q)		
2,2',3,3',5,6,6'-HpCB	179		U		0.504 (Q)		
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C K B J	1.66	0.504 (Q)	0.68	1.000
2,2',3,4,4',5,6-HpCB	181		U		0.504 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U		0.504 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C K B J	0.671	0.504 (Q)	1.60	1.127
2,2',3,4,4',6,6'-HpCB	184		U		0.504 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.504 (Q)		
2,2',3,4',5,5',6-HpCB	187		B J	0.635	0.504 (Q)	1.05	1.110
2,2',3,4',5,6,6'-HpCB	188		U		0.504 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		0.504 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		0.504 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		0.504 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		0.504 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		0.511 (S)		
2,2',3,3',4,4',5,6-OcCB	195		U		0.547 (S)		
2,2',3,3',4,4',5,6'-OcCB	196		U		0.504 (Q)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		0.504 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C U		0.504 (Q)		
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		0.504 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		0.504 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		U		0.504 (Q)		
2,2',3,4,4',5,6,6'-OcCB	204		U		0.504 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		0.504 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		0.892 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		0.648 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		0.699 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		K B J	1.25	0.504 (Q)	1.97	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 15-Jun-2017 11:56:02; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_PCBTFC_L27247-2_Form1A_PB7C_188S9_SJ2220071.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
CDA TMF
Sample Collection:
02-May-2017 06:47

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-2
Matrix:	EFFLUENT FINAL	**Sample Size:**	0.992 L
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Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 16:08:46	**GC Column ID:**	SPB OCTYL
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Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg absolute		

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LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	758	37.9	3.13	0.718
13C12-4-MoCB	3L			2000	776	38.8	3.14	0.857
13C12-2,2'-DiCB	4L			2000	858	42.9	1.62	0.873
13C12-4,4'-DiCB	15L			2000	992	49.6	1.58	1.253
13C12-2,2',6-TriCB	19L			2000	1020	51.0	1.06	1.072
13C12-3,4,4'-TriCB	37L			2000	1150	57.3	1.04	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1060	53.1	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1270	63.5	0.80	1.396
13C12-3,4,4',5-TeCB	81L			2000	1260	62.9	0.80	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1120	56.1	1.58	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1310	65.7	1.62	1.199
13C12-2,3,4,4',5-PeCB	114L			2000	1270	63.4	1.58	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1290	64.6	1.60	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1290	64.6	1.57	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1350	67.7	1.58	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1140	57.1	1.26	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2690	67.4	1.28	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1330	66.5	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1360	68.1	1.31	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1450	72.5	1.03	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1480	74.2	1.05	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1190	59.4	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1320	66.1	1.08	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1150	57.7	0.92	0.818
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1250	62.3	0.93	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1250	62.5	0.81	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1290	64.4	0.80	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1170	58.5	1.20	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1030	51.3	1.05	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1260	62.8	1.57	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1370	68.7	1.05	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

For Axys Internal Use Only [XSL Template: Form16682.xsl; Created: 15-Jun-2017 11:56:02; Application: XMLTransformer-1.16.9;
Report Filename: 1668_PCB1668_PCBTFC_L27247-2_Form2_PB7C_188S9_SJ2220071.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA EFFLUENT
Sample Collection:
02-May-2017 06:39

Form 1A

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-3
Matrix:	EFFLUENT FINAL	**Sample Size:**	0.990 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 17:13:00	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		K B	4.13	0.505 (Q)	3.82	1.000
3-MoCB	2		B J	2.05	0.505 (Q)	3.34	0.988
4-MoCB	3		K B J	3.54	0.505 (Q)	3.64	1.000
2,2'-DiCB	4		U		6.97 (S)		
2,3-DiCB	5		U		4.73 (S)		
2,3'-DiCB	6		U		4.28 (S)		
2,4-DiCB	7		U		4.40 (S)		
2,4'-DiCB	8		U		4.01 (S)		
2,5-DiCB	9		U		4.26 (S)		
2,6-DiCB	10		U		4.40 (S)		
3,3'-DiCB	11		B	82.5	4.51 (S)	1.51	0.968
3,4-DiCB	12	12 + 13	C U		4.50 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		4.43 (S)		
4,4'-DiCB	15		K	5.54	4.58 (S)	1.31	1.001
2,2',3-TriCB	16		B J	3.42	0.607 (S)	0.97	1.165
2,2',4-TriCB	17		B J	2.93	0.519 (S)	0.95	1.138
2,2',5-TriCB	18	18 + 30	C B	6.86	0.505 (Q)	1.10	1.113
2,2',6-TriCB	19		K B J	0.985	0.620 (S)	0.57	1.000
2,3,3'-TriCB	20	20 + 28	C B	12.7	0.505 (Q)	1.03	0.848
2,3,4-TriCB	21	21 + 33	C B	4.74	0.505 (Q)	1.03	0.856
2,3,4'-TriCB	22		B	4.41	0.505 (Q)	1.04	0.872
2,3,5-TriCB	23		U		0.505 (Q)		
2,3,6-TriCB	24		U		0.505 (Q)		
2,3',4-TriCB	25		K J	0.823	0.505 (Q)	1.26	0.825
2,3',5-TriCB	26	26 + 29	C B J	1.81	0.505 (Q)	0.89	1.301
2,3',6-TriCB	27		U		0.505 (Q)		
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31		B	8.95	0.505 (Q)	1.00	0.836
2,4',6-TriCB	32		B J	1.72	0.505 (Q)	1.15	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.505 (Q)		
3,3',4-TriCB	35		B J	1.47	0.505 (Q)	0.98	0.985
3,3',5-TriCB	36		J	0.545	0.505 (Q)	1.17	0.932
3,4,4'-TriCB	37		B J	3.15	0.505 (Q)	1.11	1.001
3,4,5-TriCB	38		U		0.505 (Q)		
3,4',5-TriCB	39		U		0.505 (Q)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C B	4.48	0.557 (S)	0.88	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		B J	2.46	0.591 (S)	0.68	1.312
2,2',3,5-TeCB	43		U		0.637 (S)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C B	16.9	0.505 (Q)	0.78	1.287
2,2',3,6-TeCB	45	45 + 51	C B J	3.30	0.555 (S)	0.75	1.148
2,2',3,6'-TeCB	46		J	0.644	0.633 (S)	0.72	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		B J	1.75	0.559 (S)	0.77	1.275
2,2',4,5'-TeCB	49	49 + 69	C B	6.35	0.505 (Q)	0.88	1.260
2,2',4,6-TeCB	50	50 + 53	C J	0.992	0.536 (S)	0.85	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		B	15.5	0.507 (S)	0.81	1.235
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.505 (Q)		
2,3,3',4-TeCB	55		U		0.505 (Q)		
2,3,3',4'-TeCB	56		K B J	2.57	0.505 (Q)	0.96	0.905
2,3,3',5-TeCB	57		U		0.505 (Q)		
2,3,3',5'-TeCB	58		U		0.505 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C J	0.547	0.505 (Q)	0.69	1.302
2,3,4,4'-TeCB	60		K J	1.87	0.505 (Q)	0.94	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C B	13.8	0.505 (Q)	0.80	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		0.505 (Q)		
2,3,4',6-TeCB	64		B J	3.63	0.505 (Q)	0.74	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		B	6.44	0.505 (Q)	0.80	0.885
2,3',4,5-TeCB	67		U		0.505 (Q)		
2,3',4,5'-TeCB	68		B J	1.16	0.505 (Q)	0.73	0.832
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		0.505 (Q)		
2,3',5',6-TeCB	73		U		0.505 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		J	0.723	0.505 (Q)	0.65	1.001
3,3',4,5-TeCB	78		U		0.505 (Q)		
3,3',4,5'-TeCB	79		U		0.505 (Q)		
3,3',5,5'-TeCB	80		U		0.505 (Q)		
3,4,4',5-TeCB	81		U		0.505 (Q)		
2,2',3,3',4-PeCB	82		K J	1.24	0.505 (Q)	1.15	0.933
2,2',3,3',5-PeCB	83	83 + 99	C B	7.36	0.505 (Q)	1.67	0.885
2,2',3,3',6-PeCB	84		B J	3.13	0.505 (Q)	1.54	1.162
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C B J	1.87	0.505 (Q)	1.47	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C B	9.63	0.505 (Q)	1.60	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C K J	1.75	0.505 (Q)	1.80	1.154
2,2',3,4,6'-PeCB	89		U		0.505 (Q)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C B	13.5	0.505 (Q)	1.63	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		B J	2.65	0.505 (Q)	1.35	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C B	12.3	0.505 (Q)	1.62	1.120
2,2',3,5,6'-PeCB	94		U		0.505 (Q)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		0.505 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		0.505 (Q)		
2,2',4,6,6'-PeCB	104		U		0.505 (Q)		
2,3,3',4,4'-PeCB	105		K B J	3.42	0.505 (Q)	2.10	1.000
2,3,3',4,5-PeCB	106		U		0.505 (Q)		
2,3,3',4',5-PeCB	107		K J	0.707	0.505 (Q)	2.43	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C U		0.505 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C B	10.8	0.505 (Q)	1.49	0.925
2,3,3',5,5'-PeCB	111		U		0.505 (Q)		
2,3,3',5,6-PeCB	112		U		0.505 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		0.505 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		B	9.05	0.505 (Q)	1.56	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.505 (Q)		
2,3',4,5',6-PeCB	121		U		0.505 (Q)		
2',3,3',4,5-PeCB	122		U		0.505 (Q)		
2',3,4,4',5-PeCB	123		U		0.505 (Q)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		0.505 (Q)		
3,3',4,5,5'-PeCB	127		U		0.505 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C K J	1.19	0.505 (Q)	2.23	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C B	7.93	0.505 (Q)	1.33	0.929
2,2',3,3',4,5'-HxCB	130		K J	0.525	0.505 (Q)	0.55	0.913
2,2',3,3',4,6-HxCB	131		U		0.505 (Q)		
2,2',3,3',4,6'-HxCB	132		K B J	2.71	0.505 (Q)	1.00	1.173
2,2',3,3',5,5'-HxCB	133		U		0.505 (Q)		
2,2',3,3',5,6-HxCB	134	134 + 143	C K J	0.550	0.505 (Q)	0.61	1.139
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C K B J	3.64	0.505 (Q)	1.00	1.103
2,2',3,3',6,6'-HxCB	136		K J	1.14	0.505 (Q)	2.04	1.023
2,2',3,4,4',5-HxCB	137		U		0.505 (Q)		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		0.505 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		B J	1.43	0.505 (Q)	1.24	0.903
2,2',3,4,5,6-HxCB	142		U		0.505 (Q)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		0.505 (Q)		
2,2',3,4,6,6'-HxCB	145		U		0.505 (Q)		
2,2',3,4',5,5'-HxCB	146		B J	1.41	0.505 (Q)	1.30	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C B	5.90	0.505 (Q)	1.38	1.133
2,2',3,4',5,6'-HxCB	148		U		0.505 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.505 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.505 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C B	7.68	0.505 (Q)	1.37	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		B J	0.906	0.505 (Q)	1.41	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C B J	1.40	0.505 (Q)	1.08	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		J	0.777	0.505 (Q)	1.07	0.938
2,3,3',4,5,5'-HxCB	159		U		0.505 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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2,3,3',4,5',6-HxCB	161		U		0.505 (Q)		
2,3,3',4',5,5'-HxCB	162		U		0.505 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		0.505 (Q)		
2,3,3',5,5',6-HxCB	165		U		0.505 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		0.505 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.505 (Q)		
2,2',3,3',4,4',5-HpCB	170		B J	1.70	0.505 (Q)	1.03	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C K J	0.758	0.505 (Q)	0.86	1.163
2,2',3,3',4,5,5'-HpCB	172		U		0.505 (Q)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		K B J	1.68	0.505 (Q)	1.29	1.133
2,2',3,3',4,5',6-HpCB	175		U		0.505 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		0.505 (Q)		
2,2',3,3',4',5,6-HpCB	177		K J	0.957	0.505 (Q)	2.23	1.145
2,2',3,3',5,5',6-HpCB	178		U		0.505 (Q)		
2,2',3,3',5,6,6'-HpCB	179		K J	0.705	0.505 (Q)	1.69	1.009
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C B	4.21	0.505 (Q)	0.94	1.000
2,2',3,4,4',5,6-HpCB	181		U		0.505 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U G		0.505 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C K B J	1.23	0.505 (Q)	0.56	1.127
2,2',3,4,4',6,6'-HpCB	184		K B J	1.09	0.505 (Q)	0.50	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.505 (Q)		
2,2',3,4',5,5',6-HpCB	187		B J	2.71	0.505 (Q)	1.03	1.110
2,2',3,4',5,6,6'-HpCB	188		U		0.505 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		0.505 (Q)		
2,3,3',4,4',5,6-HpCB	190		K J	0.559	0.505 (Q)	0.69	0.947
2,3,3',4,4',5',6-HpCB	191		U		0.505 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		0.505 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		K J	0.877	0.505 (Q)	1.08	0.991
2,2',3,3',4,4',5,6-OcCB	195		U		0.505 (Q)		
2,2',3,3',4,4',5,6'-OcCB	196		K J	0.527	0.505 (Q)	0.56	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U G		0.505 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C K B J	1.78	0.505 (Q)	0.65	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		0.505 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		K J	0.721	0.505 (Q)	0.48	1.000
2,2',3,4,4',5,5',6-OcCB	203		K J	1.02	0.505 (Q)	0.71	0.920
2,2',3,4,4',5,6,6'-OcCB	204		U		0.505 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		0.505 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		0.734 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		0.541 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		0.589 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		K B J	1.31	0.505 (Q)	1.55	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_L27247-3_Form1A_PB7C_188S10_SJ2220073.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
CDA EFFLUENT
Sample Collection:
02-May-2017 06:39

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-3
Matrix:	EFFLUENT FINAL	**Sample Size:**	0.990 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 17:13:00	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 10**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	729	36.4	3.18	0.719
13C12-4-MoCB	3L			2000	823	41.2	3.12	0.858
13C12-2,2'-DiCB	4L			2000	903	45.2	1.59	0.874
13C12-4,4'-DiCB	15L			2000	1150	57.6	1.57	1.254
13C12-2,2',6-TriCB	19L			2000	1130	56.4	1.05	1.073
13C12-3,4,4'-TriCB	37L			2000	1280	63.9	1.06	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1200	60.1	0.81	0.810
13C12-3,3',4,4'-TeCB	77L			2000	1410	70.3	0.77	1.396
13C12-3,4,4',5-TeCB	81L			2000	1410	70.3	0.79	1.372
13C12-2,2',4,6,6'-PeCB	104L			2000	1250	62.3	1.56	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1410	70.6	1.56	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1370	68.7	1.60	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1380	69.2	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1380	69.1	1.60	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1500	75.0	1.59	1.300
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1290	64.5	1.25	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3030	75.8	1.27	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1500	75.2	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1550	77.5	1.30	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1540	77.0	1.06	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1490	74.3	1.03	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1160	57.8	1.03	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1330	66.7	1.07	0.958
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1170	58.7	0.93	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1390	69.3	0.92	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1330	66.7	0.81	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1290	64.6	0.79	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1310	65.5	1.20	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1240	62.2	1.05	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1410	70.4	1.57	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1530	76.6	1.03	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_L27247-3_Form2_PB7C_188S10_SJ2220073.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
CDA INFLUENT
Sample Collection:
02-May-2017 06:25

Form 1A

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-4
Matrix:	INFLUENT	**Sample Size:**	0.989 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 22:42:00	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_189 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_189 S: 1
Concentration Units:	pg/L		

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B	19.6	0.506 (Q)	3.25	1.001
3-MoCB	2		B	6.61	0.506 (Q)	3.20	0.988
4-MoCB	3		B	22.3	0.506 (Q)	3.29	1.001
2,2'-DiCB	4			27.7	4.88 (S)	1.70	1.001
2,3-DiCB	5		U		3.56 (S)		
2,3'-DiCB	6			27.5	3.25 (S)	1.39	1.175
2,4-DiCB	7		K	5.20	3.38 (S)	1.23	1.159
2,4'-DiCB	8			86.1	3.06 (S)	1.53	1.208
2,5-DiCB	9			5.74	3.23 (S)	1.41	1.148
2,6-DiCB	10		U		3.33 (S)		
3,3'-DiCB	11		B	518	3.34 (S)	1.54	0.968
3,4-DiCB	12	12 + 13	C	15.4	3.36 (S)	1.79	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		3.30 (S)		
4,4'-DiCB	15			44.1	3.65 (S)	1.61	1.001
2,2',3-TriCB	16			59.8	1.26 (S)	1.09	1.166
2,2',4-TriCB	17			53.6	1.05 (S)	1.09	1.138
2,2',5-TriCB	18	18 + 30	C	114	0.893 (S)	1.03	1.115
2,2',6-TriCB	19			12.5	1.17 (S)	0.98	1.001
2,3,3'-TriCB	20	20 + 28	C	199	0.866 (S)	1.03	0.848
2,3,4-TriCB	21	21 + 33	C	121	0.871 (S)	1.05	0.857
2,3,4'-TriCB	22			81.9	0.955 (S)	1.02	0.872
2,3,5-TriCB	23		U		0.942 (S)		
2,3,6-TriCB	24		J	2.14	0.807 (S)	1.18	1.158
2,3',4-TriCB	25			12.9	0.779 (S)	0.99	0.825
2,3',5-TriCB	26	26 + 29	C	31.8	0.888 (S)	1.05	1.302
2,3',6-TriCB	27			7.27	0.732 (S)	1.17	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			178	0.827 (S)	1.03	0.837
2,4',6-TriCB	32			38.7	0.855 (S)	1.04	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.907 (S)		
3,3',4-TriCB	35			20.5	0.953 (S)	0.98	0.985
3,3',5-TriCB	36			5.97	0.876 (S)	0.90	0.932
3,4,4'-TriCB	37			49.9	0.995 (S)	1.02	1.001
3,4,5-TriCB	38		U		0.918 (S)		
3,4',5-TriCB	39		J	1.43	0.878 (S)	1.00	0.946

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C	92.0	0.739 (S)	0.78	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			43.0	0.777 (S)	0.83	1.312
2,2',3,5-TeCB	43			6.71	0.898 (S)	0.81	1.247
2,2',3,5'-TeCB	44	44 + 47 + 65	C	240	0.666 (S)	0.78	1.286
2,2',3,6-TeCB	45	45 + 51	C B	41.1	0.736 (S)	0.82	1.147
2,2',3,6'-TeCB	46			9.43	0.836 (S)	0.67	1.161
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48			36.3	0.742 (S)	0.87	1.274
2,2',4,5'-TeCB	49	49 + 69	C	108	0.628 (S)	0.79	1.259
2,2',4,6-TeCB	50	50 + 53	C	21.9	0.703 (S)	0.80	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			303	0.687 (S)	0.78	1.235
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.527 (S)		
2,3,3',4-TeCB	55		J	3.23	0.731 (S)	0.75	0.890
2,3,3',4'-TeCB	56			80.5	0.732 (S)	0.80	0.906
2,3,3',5-TeCB	57		U		0.668 (S)		
2,3,3',5'-TeCB	58		U		0.708 (S)		
2,3,3',6-TeCB	59	59 + 62 + 75	C	14.6	0.554 (S)	0.75	1.302
2,3,4,4'-TeCB	60			49.3	0.708 (S)	0.75	0.912
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	393	0.689 (S)	0.78	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63			6.32	0.669 (S)	0.88	0.864
2,3,4',6-TeCB	64			77.1	0.542 (S)	0.79	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			153	0.648 (S)	0.78	0.885
2,3',4,5-TeCB	67			4.27	0.613 (S)	0.84	0.856
2,3',4,5'-TeCB	68		B	11.8	0.662 (S)	0.77	0.832
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		0.653 (S)		
2,3',5',6-TeCB	73		U		0.544 (S)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77			14.8	0.678 (S)	0.84	1.000
3,3',4,5-TeCB	78		U		0.664 (S)		
3,3',4,5'-TeCB	79			4.08	0.564 (S)	0.70	0.970
3,3',5,5'-TeCB	80		U		0.625 (S)		
3,4,4',5-TeCB	81		J	0.769	0.694 (S)	0.74	1.000
2,2',3,3',4-PeCB	82			35.6	0.921 (S)	1.49	0.933
2,2',3,3',5-PeCB	83	83 + 99	C	189	0.871 (S)	1.63	0.885
2,2',3,3',6-PeCB	84			86.3	0.962 (S)	1.57	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	55.3	0.695 (S)	1.64	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	236	0.724 (S)	1.65	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C	42.6	0.870 (S)	1.40	1.155
2,2',3,4,6'-PeCB	89		J	3.79	0.903 (S)	1.33	1.183
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	356	0.739 (S)	1.57	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			56.4	0.851 (S)	1.44	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	278	0.847 (S)	1.56	1.121
2,2',3,5,6'-PeCB	94		J	1.29	0.944 (S)	1.69	1.102
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		K J	2.14	0.560 (S)	1.23	1.016
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		K	5.03	0.769 (S)	2.01	1.094
2,2',4,6,6'-PeCB	104		K J	2.24	0.555 (S)	1.29	1.001
2,3,3',4,4'-PeCB	105			106	2.11 (S)	1.60	1.000
2,3,3',4,5-PeCB	106		U		1.97 (S)		
2,3,3',4',5-PeCB	107			14.4	1.96 (S)	1.60	0.997
2,3,3',4,5'-PeCB	108	108 + 124	C	10.2	2.23 (S)	1.62	0.991
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C	340	0.624 (S)	1.57	0.925
2,3,3',5,5'-PeCB	111		U		0.624 (S)		
2,3,3',5,6-PeCB	112		U		0.601 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			7.68	2.10 (S)	1.39	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			278	2.19 (S)	1.53	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.580 (S)		
2,3',4,5',6-PeCB	121		K J	3.31	0.641 (S)	1.22	1.202
2',3,3',4,5-PeCB	122		J	3.21	2.26 (S)	1.75	1.010
2',3,4,4',5-PeCB	123			16.0	2.26 (S)	1.53	1.001
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		2.19 (S)		
3,3',4,5,5'-PeCB	127		U		2.04 (S)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C	39.4	0.772 (S)	1.28	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	325	0.791 (S)	1.33	0.928
2,2',3,3',4,5'-HxCB	130			18.0	0.990 (S)	1.39	0.913
2,2',3,3',4,6-HxCB	131			5.08	0.984 (S)	1.36	1.159
2,2',3,3',4,6'-HxCB	132			105	1.01 (S)	1.26	1.173
2,2',3,3',5,5'-HxCB	133			5.27	0.940 (S)	1.16	1.191
2,2',3,3',5,6-HxCB	134	134 + 143	C	15.5	0.986 (S)	1.22	1.139
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	121	0.677 (S)	1.25	1.103
2,2',3,3',6,6'-HxCB	136			45.1	0.535 (S)	1.34	1.023
2,2',3,4,4',5-HxCB	137			17.4	0.914 (S)	1.42	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	9.87	0.877 (S)	1.09	1.152
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			54.5	0.864 (S)	1.25	0.903
2,2',3,4,5,6-HxCB	142		U		0.958 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			18.3	0.694 (S)	1.22	1.121
2,2',3,4,6,6'-HxCB	145		U		0.563 (S)		
2,2',3,4',5,5'-HxCB	146			49.4	0.808 (S)	1.28	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	244	0.862 (S)	1.24	1.133
2,2',3,4',5,6'-HxCB	148		J	3.16	0.698 (S)	1.18	1.083
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		J	2.72	0.541 (S)	1.34	1.012
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.523 (S)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C	306	0.732 (S)	1.32	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			34.2	0.506 (Q)	1.26	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	43.4	0.848 (S)	1.26	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			29.8	0.613 (S)	1.37	0.938
2,3,3',4,5,5'-HxCB	159		U		0.649 (S)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		0.672 (S)		
2,3,3',4',5,5'-HxCB	162		J	1.12	0.658 (S)	1.25	0.988
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			18.4	0.679 (S)	1.27	0.921
2,3,3',5,5',6-HxCB	165		U		0.765 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167			12.2	0.670 (S)	1.32	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.762 (S)		
2,2',3,3',4,4',5-HpCB	170			73.5	0.908 (S)	1.06	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	21.0	0.909 (S)	1.01	1.162
2,2',3,3',4,5,5'-HpCB	172		K	14.0	0.927 (S)	0.87	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			71.3	0.843 (S)	1.13	1.132
2,2',3,3',4,5',6-HpCB	175		K	4.06	0.830 (S)	0.87	1.102
2,2',3,3',4,6,6'-HpCB	176			12.2	0.635 (S)	1.16	1.034
2,2',3,3',4',5,6-HpCB	177		K	35.3	0.809 (S)	0.86	1.145
2,2',3,3',5,5',6-HpCB	178			22.2	0.864 (S)	1.17	1.085
2,2',3,3',5,6,6'-HpCB	179			43.6	0.620 (S)	1.00	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	232	0.867 (S)	1.06	1.000
2,2',3,4,4',5,6-HpCB	181		U		0.867 (S)		
2,2',3,4,4',5,6'-HpCB	182		K J G	1.52	0.802 (S)	0.70	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	62.5	0.816 (S)	1.04	1.126
2,2',3,4,4',6,6'-HpCB	184			90.9	0.617 (S)	1.08	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.669 (S)		
2,2',3,4',5,5',6-HpCB	187			130	0.795 (S)	1.02	1.110
2,2',3,4',5,6,6'-HpCB	188		J	0.679	0.583 (S)	0.96	1.000
2,3,3',4,4',5,5'-HpCB	189		K J	2.77	0.790 (S)	1.34	1.001
2,3,3',4,4',5,6-HpCB	190			14.5	0.689 (S)	0.90	0.947
2,3,3',4,4',5',6-HpCB	191		K J	2.94	0.690 (S)	0.72	0.918
2,3,3',4,5,5',6-HpCB	192		U		0.747 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194			49.4	1.62 (S)	0.85	0.991
2,2',3,3',4,4',5,6-OcCB	195		K	27.4	1.77 (S)	0.56	0.946
2,2',3,3',4,4',5,6'-OcCB	196			28.4	0.833 (S)	0.83	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C G	16.6	0.604 (S)	0.82	1.046
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	69.3	0.865 (S)	0.86	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201			9.90	0.596 (S)	0.91	1.023
2,2',3,3',5,5',6,6'-OcCB	202			23.9	0.698 (S)	0.87	1.000
2,2',3,4,4',5,5',6-OcCB	203			53.8	0.803 (S)	0.94	0.920
2,2',3,4,4',5,6,6'-OcCB	204		J	3.96	0.611 (S)	0.97	1.039
2,3,3',4,4',5,5',6-OcCB	205		J	2.37	1.43 (S)	0.79	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			39.4	1.78 (S)	0.77	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			6.25	1.22 (S)	0.83	1.019
2,2',3,3',4,5,5',6,6'-NoCB	208			14.4	1.35 (S)	0.85	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209		K	21.2	0.858 (S)	1.58	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than lowest calibration equivalent; G = lock mass interference present; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_L27247-4_Form1A_PB7C_189S4_SJ2220131.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

Form 2

PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
CDA INFLUENT
Sample Collection:
02-May-2017 06:25

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	CDA PCB/DIOXIN 2ND QUARTER 2017		
Contract No.:	4826	**Lab Sample I.D.:**	L27247-4
Matrix:	INFLUENT	**Sample Size:**	0.989 L
Sample Receipt Date:	04-May-2017	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 22:42:00	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_189 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_189 S: 1
Concentration Units:	pg absolute		

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	804	40.2	3.18	0.718
13C12-4-MoCB	3L			2000	855	42.8	3.13	0.857
13C12-2,2'-DiCB	4L			2000	864	43.2	1.58	0.873
13C12-4,4'-DiCB	15L			2000	960	48.0	1.58	1.254
13C12-2,2',6-TriCB	19L			2000	902	45.1	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	950	47.5	1.04	1.091
13C12-2,2',6,6'-TeCB	54L			2000	927	46.4	0.79	0.811
13C12-3,3',4,4'-TeCB	77L			2000	997	49.8	0.80	1.396
13C12-3,4,4',5-TeCB	81L			2000	978	48.9	0.77	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	833	41.6	1.58	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	968	48.4	1.55	1.199
13C12-2,3,4,4',5-PeCB	114L			2000	952	47.6	1.62	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	927	46.4	1.59	1.161
13C12-2',3,4,4',5-PeCB	123L			2000	928	46.4	1.61	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1010	50.5	1.59	1.300
13C12-2,2',4,4',6,6'-HxCB	155L			2000	774	38.7	1.24	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	1660	41.5	1.27	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	836	41.8	1.28	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	822	41.1	1.29	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	887	44.4	1.08	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	879	44.0	1.06	0.873
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	736	36.8	1.06	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	747	37.3	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	630	31.5	0.94	0.818
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	725	36.3	0.88	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	668	33.4	0.77	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	712	35.6	0.80	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	646	32.3	1.19	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1340	67.0	1.04	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1430	71.6	1.59	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1500	75.2	1.04	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_L27247-4_Form2_PB7C_189S4_SJ2220131.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 1A

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-101 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 10:47:27	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		J	2.28	0.500 (Q)	2.94	1.001
3-MoCB	2		J	1.76	0.500 (Q)	3.16	0.987
4-MoCB	3		J	2.64	0.500 (Q)	3.52	1.000
2,2'-DiCB	4		U		5.50 (S)		
2,3-DiCB	5		U		4.03 (S)		
2,3'-DiCB	6		U		3.64 (S)		
2,4-DiCB	7		U		3.75 (S)		
2,4'-DiCB	8		K	4.73	3.41 (S)	1.82	1.209
2,5-DiCB	9		U		3.62 (S)		
2,6-DiCB	10		U		3.74 (S)		
3,3'-DiCB	11			53.8	3.84 (S)	1.55	0.969
3,4-DiCB	12	12 + 13	C U		3.83 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		3.77 (S)		
4,4'-DiCB	15		U		4.06 (S)		
2,2',3-TriCB	16		J	1.73	0.614 (S)	1.00	1.165
2,2',4-TriCB	17		J	1.97	0.525 (S)	1.06	1.139
2,2',5-TriCB	18	18 + 30	C K J	3.67	0.500 (Q)	1.25	1.114
2,2',6-TriCB	19		K J	0.606	0.600 (S)	2.24	1.002
2,3,3'-TriCB	20	20 + 28	C	4.97	0.500 (Q)	0.99	0.848
2,3,4-TriCB	21	21 + 33	C J	3.04	0.500 (Q)	1.05	0.857
2,3,4'-TriCB	22		J	1.96	0.500 (Q)	0.99	0.871
2,3,5-TriCB	23		U		0.500 (Q)		
2,3,6-TriCB	24		U		0.500 (Q)		
2,3',4-TriCB	25		U		0.500 (Q)		
2,3',5-TriCB	26	26 + 29	C J	0.844	0.500 (Q)	1.17	1.302
2,3',6-TriCB	27		U		0.500 (Q)		
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			4.10	0.500 (Q)	0.98	0.837
2,4',6-TriCB	32		J	1.12	0.500 (Q)	1.14	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.500 (Q)		
3,3',4-TriCB	35		J	0.596	0.500 (Q)	1.18	0.985
3,3',5-TriCB	36		U		0.500 (Q)		
3,4,4'-TriCB	37		J	1.11	0.500 (Q)	0.98	1.001
3,4,5-TriCB	38		U		0.500 (Q)		
3,4',5-TriCB	39		U		0.500 (Q)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C J	1.83	0.569 (S)	0.77	1.336
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		K J	0.797	0.604 (S)	0.48	1.313
2,2',3,5-TeCB	43		U		0.651 (S)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C	16.2	0.513 (S)	0.74	1.288
2,2',3,6-TeCB	45	45 + 51	C	4.55	0.567 (S)	0.86	1.148
2,2',3,6'-TeCB	46		U		0.647 (S)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		J	0.765	0.571 (S)	0.71	1.275
2,2',4,5'-TeCB	49	49 + 69	C K J	1.90	0.500 (Q)	0.61	1.260
2,2',4,6-TeCB	50	50 + 53	C U		0.548 (S)		
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			5.20	0.518 (S)	0.78	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.500 (Q)		
2,3,3',4-TeCB	55		U		0.500 (Q)		
2,3,3',4'-TeCB	56		J	0.950	0.500 (Q)	0.68	0.904
2,3,3',5-TeCB	57		U		0.500 (Q)		
2,3,3',5'-TeCB	58		U		0.500 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C U		0.500 (Q)		
2,3,4,4'-TeCB	60		U		0.500 (Q)		
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C J	3.55	0.500 (Q)	0.74	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		0.500 (Q)		
2,3,4',6-TeCB	64		J	1.14	0.500 (Q)	0.76	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		K J	1.76	0.500 (Q)	0.58	0.884
2,3',4,5-TeCB	67		U		0.500 (Q)		
2,3',4,5'-TeCB	68		J	1.72	0.500 (Q)	0.67	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		0.500 (Q)		
2,3',5',6-TeCB	73		U		0.500 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		U		0.500 (Q)		
3,3',4,5-TeCB	78		U		0.500 (Q)		
3,3',4,5'-TeCB	79		U		0.500 (Q)		
3,3',5,5'-TeCB	80		U		0.500 (Q)		
3,4,4',5-TeCB	81		U		0.500 (Q)		
2,2',3,3',4-PeCB	82		U		0.534 (S)		
2,2',3,3',5-PeCB	83	83 + 99	C K J	1.47	0.500 (Q)	0.93	0.885
2,2',3,3',6-PeCB	84		K J	0.961	0.554 (S)	1.96	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C J	0.763	0.500 (Q)	1.62	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C K J	3.68	0.500 (Q)	2.00	0.900
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C U		0.500 (Q)		
2,2',3,4,6'-PeCB	89		U		0.517 (S)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C J	3.63	0.500 (Q)	1.73	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		J	0.607	0.500 (Q)	1.72	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C K J	3.68	0.500 (Q)	1.16	1.123
2,2',3,5,6'-PeCB	94		U		0.545 (S)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		0.500 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		0.500 (Q)		
2,2',4,6,6'-PeCB	104		U		0.500 (Q)		
2,3,3',4,4'-PeCB	105		K J	0.949	0.500 (Q)	1.15	1.000
2,3,3',4,5-PeCB	106		U		0.500 (Q)		
2,3,3',4',5-PeCB	107		U		0.500 (Q)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		0.500 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C J	2.69	0.500 (Q)	1.52	0.925
2,3,3',5,5'-PeCB	111		U		0.500 (Q)		
2,3,3',5,6-PeCB	112		U		0.500 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		0.500 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		J	2.04	0.500 (Q)	1.44	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.500 (Q)		
2,3',4,5',6-PeCB	121		U		0.500 (Q)		
2',3,3',4,5-PeCB	122		U		0.500 (Q)		
2',3,4,4',5-PeCB	123		U		0.500 (Q)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		0.500 (Q)		
3,3',4,5,5'-PeCB	127		U		0.500 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C U		0.500 (Q)		
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C J	3.33	0.500 (Q)	1.15	0.928
2,2',3,3',4,5'-HxCB	130		U		0.551 (S)		
2,2',3,3',4,6-HxCB	131		U		0.531 (S)		
2,2',3,3',4,6'-HxCB	132		K J	0.818	0.557 (S)	1.02	1.173
2,2',3,3',5,5'-HxCB	133		U		0.524 (S)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		0.535 (S)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C J	1.42	0.500 (Q)	1.30	1.104
2,2',3,3',6,6'-HxCB	136		U		0.500 (Q)		
2,2',3,4,4',5-HxCB	137		U		0.518 (S)		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		0.500 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		K J	0.602	0.500 (Q)	3.01	0.902
2,2',3,4,5,6-HxCB	142		U		0.545 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		0.500 (Q)		
2,2',3,4,6,6'-HxCB	145		U		0.500 (Q)		
2,2',3,4',5,5'-HxCB	146		K J	0.711	0.500 (Q)	2.03	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C J	2.68	0.500 (Q)	1.08	1.133
2,2',3,4',5,6'-HxCB	148		U		0.500 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.500 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.500 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C J	3.44	0.500 (Q)	1.28	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		K J	0.642	0.500 (Q)	1.85	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C J	0.514	0.500 (Q)	1.31	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		0.500 (Q)		
2,3,3',4,5,5'-HxCB	159		U		0.500 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		0.500 (Q)		
2,3,3',4',5,5'-HxCB	162		U		0.500 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		0.500 (Q)		
2,3,3',5,5',6-HxCB	165		U		0.500 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		0.500 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.500 (Q)		
2,2',3,3',4,4',5-HpCB	170		J	0.879	0.534 (S)	1.08	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		0.542 (S)		
2,2',3,3',4,5,5'-HpCB	172		U		0.543 (S)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		K J	0.885	0.500 (Q)	1.28	1.133
2,2',3,3',4,5',6-HpCB	175		U		0.500 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		0.500 (Q)		
2,2',3,3',4',5,6-HpCB	177		U		0.500 (Q)		
2,2',3,3',5,5',6-HpCB	178		U		0.514 (S)		
2,2',3,3',5,6,6'-HpCB	179		U		0.500 (Q)		
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C J	2.62	0.500 (Q)	0.95	1.000
2,2',3,4,4',5,6-HpCB	181		U		0.518 (S)		
2,2',3,4,4',5,6'-HpCB	182		U		0.500 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C J	0.754	0.500 (Q)	0.98	1.127
2,2',3,4,4',6,6'-HpCB	184		K J	0.942	0.500 (Q)	0.78	1.025
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.500 (Q)		
2,2',3,4',5,5',6-HpCB	187		J	1.20	0.500 (Q)	1.08	1.110
2,2',3,4',5,6,6'-HpCB	188		U		0.500 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		0.500 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		0.500 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		0.500 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		0.500 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		0.500 (Q)		
2,2',3,3',4,4',5,6-OcCB	195		U		0.500 (Q)		
2,2',3,3',4,4',5,6'-OcCB	196		U		0.500 (Q)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		0.500 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C K J	0.577	0.500 (Q)	1.05	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		0.500 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		0.500 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		U		0.500 (Q)		
2,2',3,4,4',5,6,6'-OcCB	204		U		0.500 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		0.500 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		0.621 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		0.500 (Q)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		0.524 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		K J	1.17	0.500 (Q)	0.91	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_WG59548-101_Form1A_PB7C_188S4_SJ2223711.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 2

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-101 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 10:47:27	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 4**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg absolute		

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	1040	51.9	3.22	0.719
13C12-4-MoCB	3L			2000	1110	55.6	3.12	0.858
13C12-2,2'-DiCB	4L			2000	1170	58.5	1.60	0.873
13C12-4,4'-DiCB	15L			2000	1350	67.7	1.56	1.254
13C12-2,2',6-TriCB	19L			2000	1380	68.9	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	1410	70.5	1.05	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1380	68.8	0.81	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1500	74.8	0.78	1.396
13C12-3,4,4',5-TeCB	81L			2000	1510	75.4	0.78	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1360	68.2	1.60	0.809
13C12-2,3,3',4,4'-PeCB	105L			2000	1460	73.0	1.58	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1450	72.6	1.57	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1450	72.6	1.56	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1430	71.7	1.59	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1540	77.1	1.61	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1470	73.5	1.27	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3230	80.8	1.28	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1640	81.8	1.31	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1620	81.0	1.27	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1750	87.7	1.03	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1740	86.8	1.05	0.873
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1390	69.4	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1450	72.7	1.08	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1370	68.6	0.93	0.818
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1550	77.5	0.91	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1520	76.0	0.78	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1480	74.1	0.80	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1470	73.7	1.13	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1430	71.6	1.03	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1570	78.5	1.61	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1720	86.2	1.04	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_WG59548-101_Form2_PB7C_188S4_SJ2223711.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

Form 8A

PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4826	**Lab Sample I.D.:**	WG59548-102 :7PT
Matrix:	AQUEOUS	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 08:38:55	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**OPR Data Filename:**	**PB7C_188 S: 2**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1

CONCENTRATIONS REPORTED ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
2-MoCB	1			3.12	50.0	44.9	30.0 - 67.5	89.8
4-MoCB	3			3.15	50.0	43.6	30.0 - 67.5	87.2
2,2'-DiCB	4			1.53	50.0	46.1	30.0 - 67.5	92.3
4,4'-DiCB	15			1.53	50.0	45.9	30.0 - 67.5	91.8
2,2',6-TriCB	19			1.06	50.0	46.1	30.0 - 67.5	92.1
3,4,4'-TriCB	37			1.02	50.0	47.0	30.0 - 67.5	94.1
2,2',6,6'-TeCB	54			0.79	50.0	45.6	30.0 - 67.5	91.3
3,3',4,4'-TeCB	77			0.78	50.0	45.9	30.0 - 67.5	91.7
3,4,4',5-TeCB	81			0.78	50.0	46.6	30.0 - 67.5	93.1
2,2',4,6,6'-PeCB	104			1.55	50.0	45.1	30.0 - 67.5	90.2
2,3,3',4,4'-PeCB	105			1.53	50.0	46.7	30.0 - 67.5	93.5
2,3,4,4',5-PeCB	114			1.53	50.0	45.8	30.0 - 67.5	91.5
2,3',4,4',5-PeCB	118			1.54	50.0	46.0	30.0 - 67.5	91.9
2',3,4,4',5-PeCB	123			1.52	50.0	46.1	30.0 - 67.5	92.2
3,3',4,4',5-PeCB	126			1.56	50.0	46.8	30.0 - 67.5	93.6
2,2',4,4',6,6'-HxCB	155			1.27	50.0	43.0	30.0 - 67.5	85.9
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.26	100	96.2	60.0 - 135	96.2
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			1.28	50.0	47.6	30.0 - 67.5	95.3
3,3',4,4',5,5'-HxCB	169			1.28	50.0	48.3	30.0 - 67.5	96.6
2,2',3,4',5,6,6'-HpCB	188			1.03	50.0	44.6	30.0 - 67.5	89.1
2,3,3',4,4',5,5'-HpCB	189			1.05	50.0	50.1	30.0 - 67.5	100
2,2',3,3',5,5',6,6'-OcCB	202			0.90	50.0	46.3	30.0 - 67.5	92.6
2,3,3',4,4',5,5',6-OcCB	205			0.88	50.0	48.5	30.0 - 67.5	97.0
2,2',3,3',4,4',5,5',6-NoCB	206			0.80	50.0	48.5	30.0 - 67.5	97.0
2,2',3,3',4,5,5',6,6'-NoCB	208			0.80	50.0	45.8	30.0 - 67.5	91.6
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.19	50.0	46.5	30.0 - 67.5	92.9

(1) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1668_PCB1668_PCBTFC_WG59548-102_Form8A_SJ2223708.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

Form 8B

PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4826	**Lab Sample I.D.:**	WG59548-102 :7PT
Matrix:	AQUEOUS	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 08:38:55	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**OPR Data Filename:**	**PB7C_188 S: 2**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1

CONCENTRATIONS REPORTED ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG[2]	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
13C12-2-MoCB	1L			3.13	100	50.2	15.0 - 145	50.2
13C12-4-MoCB	3L			3.17	100	56.1	15.0 - 145	56.1
13C12-2,2'-DiCB	4L			1.58	100	57.2	15.0 - 145	57.2
13C12-4,4'-DiCB	15L			1.56	100	68.5	15.0 - 145	68.5
13C12-2,2',6-TriCB	19L			1.06	100	67.9	15.0 - 145	67.9
13C12-3,4,4'-TriCB	37L			1.06	100	73.4	15.0 - 145	73.4
13C12-2,2',6,6'-TeCB	54L			0.82	100	68.1	15.0 - 145	68.1
13C12-3,3',4,4'-TeCB	77L			0.80	100	79.0	40.0 - 145	79.0
13C12-3,4,4',5-TeCB	81L			0.79	100	78.8	40.0 - 145	78.8
13C12-2,2',4,6,6'-PeCB	104L			1.58	100	67.8	40.0 - 145	67.8
13C12-2,3,3',4,4'-PeCB	105L			1.59	100	76.0	40.0 - 145	76.0
13C12-2,3,4,4',5-PeCB	114L			1.57	100	74.8	40.0 - 145	74.8
13C12-2,3',4,4',5-PeCB	118L			1.56	100	75.6	40.0 - 145	75.6
13C12-2',3,4,4',5-PeCB	123L			1.60	100	74.9	40.0 - 145	74.9
13C12-3,3',4,4',5-PeCB	126L			1.59	100	80.0	40.0 - 145	80.0
13C12-2,2',4,4',6,6'-HxCB	155L			1.26	100	74.0	40.0 - 145	74.0
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.28	200	168	80.0 - 290	84.0
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			1.29	100	82.2	40.0 - 145	82.2
13C12-3,3',4,4',5,5'-HxCB	169L			1.27	100	88.3	40.0 - 145	88.3
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.06	100	65.9	40.0 - 145	65.9
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.09	100	75.0	40.0 - 145	75.0
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			0.90	100	68.0	40.0 - 145	68.0
13C12-2,3,3',4,4',5,5',6-OcCB	205L			0.92	100	80.5	40.0 - 145	80.5
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.80	100	79.6	40.0 - 145	79.6
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			0.79	100	78.4	40.0 - 145	78.4
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.21	100	80.7	40.0 - 145	80.7
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			1.04	100	73.5	15.0 - 145	73.5
13C12-2,3,3',5,5'-PeCB	111L			1.57	100	79.5	40.0 - 145	79.5
13C12-2,2',3,3',5,5',6-HpCB	178L			1.06	100	88.3	40.0 - 145	88.3

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: 1668_PCB1668_PCBTFC_WG59548-102_Form8B_SJ2223708.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 1A

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-103 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 11:51:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B J	2.23	0.500 (Q)	3.35	1.000
3-MoCB	2		B J	1.55	0.500 (Q)	2.66	0.988
4-MoCB	3		B J	2.34	0.500 (Q)	3.51	1.000
2,2'-DiCB	4		U		5.21 (S)		
2,3-DiCB	5		U		3.73 (S)		
2,3'-DiCB	6		U		3.37 (S)		
2,4-DiCB	7		U		3.47 (S)		
2,4'-DiCB	8		U		3.16 (S)		
2,5-DiCB	9		U		3.35 (S)		
2,6-DiCB	10		U		3.46 (S)		
3,3'-DiCB	11		B	48.4	3.55 (S)	1.49	0.969
3,4-DiCB	12	12 + 13	C U		3.54 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		3.49 (S)		
4,4'-DiCB	15		U		3.69 (S)		
2,2',3-TriCB	16		B J	1.91	0.566 (S)	0.96	1.165
2,2',4-TriCB	17		K B J	1.83	0.500 (Q)	1.43	1.138
2,2',5-TriCB	18	18 + 30	C B J	3.51	0.500 (Q)	1.00	1.114
2,2',6-TriCB	19		K B J	0.646	0.542 (S)	0.55	1.001
2,3,3'-TriCB	20	20 + 28	C B	5.76	0.500 (Q)	1.00	0.848
2,3,4-TriCB	21	21 + 33	C B J	3.17	0.500 (Q)	0.99	0.857
2,3,4'-TriCB	22		B J	2.03	0.500 (Q)	1.06	0.872
2,3,5-TriCB	23		U		0.500 (Q)		
2,3,6-TriCB	24		U		0.500 (Q)		
2,3',4-TriCB	25		J	0.555	0.500 (Q)	0.94	0.825
2,3',5-TriCB	26	26 + 29	C B J	0.866	0.500 (Q)	1.00	1.302
2,3',6-TriCB	27		U		0.500 (Q)		
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31		B	4.57	0.500 (Q)	1.03	0.837
2,4',6-TriCB	32		B J	1.16	0.500 (Q)	1.15	1.197
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.500 (Q)		
3,3',4-TriCB	35		B J	0.645	0.500 (Q)	1.08	0.985
3,3',5-TriCB	36		U		0.500 (Q)		
3,4,4'-TriCB	37		B J	1.12	0.500 (Q)	1.06	1.001
3,4,5-TriCB	38		U		0.500 (Q)		
3,4',5-TriCB	39		U		0.500 (Q)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C K B J	2.10	0.500 (Q)	0.93	1.337
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		K B J	1.30	0.500 (Q)	0.91	1.312
2,2',3,5-TeCB	43		U		0.528 (S)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C B	18.6	0.500 (Q)	0.80	1.287
2,2',3,6-TeCB	45	45 + 51	C B	5.34	0.500 (Q)	0.74	1.148
2,2',3,6'-TeCB	46		U		0.524 (S)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		B J	1.04	0.500 (Q)	0.68	1.274
2,2',4,5'-TeCB	49	49 + 69	C B J	2.95	0.500 (Q)	0.66	1.259
2,2',4,6-TeCB	50	50 + 53	C K J	0.606	0.500 (Q)	1.15	1.111
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		B	6.01	0.500 (Q)	0.77	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.500 (Q)		
2,3,3',4-TeCB	55		U		0.500 (Q)		
2,3,3',4'-TeCB	56		B J	1.25	0.500 (Q)	0.83	0.904
2,3,3',5-TeCB	57		U		0.500 (Q)		
2,3,3',5'-TeCB	58		U		0.500 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C U		0.500 (Q)		
2,3,4,4'-TeCB	60		J	0.598	0.500 (Q)	0.74	0.911
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C B	4.65	0.500 (Q)	0.86	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		0.500 (Q)		
2,3,4',6-TeCB	64		K B J	2.21	0.500 (Q)	1.02	1.348
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		B J	2.14	0.500 (Q)	0.81	0.884
2,3',4,5-TeCB	67		U		0.500 (Q)		
2,3',4,5'-TeCB	68		K B J	1.90	0.500 (Q)	0.95	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		0.500 (Q)		
2,3',5',6-TeCB	73		U		0.500 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		J	0.508	0.500 (Q)	0.85	1.001
3,3',4,5-TeCB	78		U		0.500 (Q)		
3,3',4,5'-TeCB	79		U		0.500 (Q)		
3,3',5,5'-TeCB	80		U		0.500 (Q)		
3,4,4',5-TeCB	81		U		0.500 (Q)		
2,2',3,3',4-PeCB	82		U		0.500 (Q)		
2,2',3,3',5-PeCB	83	83 + 99	C B J	1.85	0.500 (Q)	1.56	0.886
2,2',3,3',6-PeCB	84		B J	1.05	0.500 (Q)	1.57	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C K B J	0.597	0.500 (Q)	2.41	0.920
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C B J	2.88	0.500 (Q)	1.53	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C K J	0.582	0.500 (Q)	2.59	1.155
2,2',3,4,6'-PeCB	89		U		0.500 (Q)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C B J	3.67	0.500 (Q)	1.52	0.870
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		B J	0.621	0.500 (Q)	1.37	0.853
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C B J	2.94	0.500 (Q)	1.39	1.122
2,2',3,5,6'-PeCB	94		U		0.500 (Q)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		0.500 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		0.500 (Q)		
2,2',4,6,6'-PeCB	104		U		0.500 (Q)		
2,3,3',4,4'-PeCB	105		B J	0.840	0.500 (Q)	1.33	1.001
2,3,3',4,5-PeCB	106		U		0.500 (Q)		
2,3,3',4',5-PeCB	107		U		0.500 (Q)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		0.500 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C B J	3.13	0.500 (Q)	1.67	0.925
2,3,3',5,5'-PeCB	111		U		0.500 (Q)		
2,3,3',5,6-PeCB	112		U		0.500 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		0.500 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		B J	2.44	0.500 (Q)	1.64	1.001
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.500 (Q)		
2,3',4,5',6-PeCB	121		U		0.500 (Q)		
2',3,3',4,5-PeCB	122		U		0.500 (Q)		
2',3,4,4',5-PeCB	123		U		0.500 (Q)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		0.500 (Q)		
3,3',4,5,5'-PeCB	127		U		0.500 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C U		0.500 (Q)		
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C B J	1.93	0.500 (Q)	1.28	0.929
2,2',3,3',4,5'-HxCB	130		U		0.500 (Q)		
2,2',3,3',4,6-HxCB	131		U		0.500 (Q)		
2,2',3,3',4,6'-HxCB	132		K B J	0.786	0.500 (Q)	0.79	1.174
2,2',3,3',5,5'-HxCB	133		U		0.500 (Q)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		0.500 (Q)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C B J	1.02	0.500 (Q)	1.22	1.105
2,2',3,3',6,6'-HxCB	136		U		0.500 (Q)		
2,2',3,4,4',5-HxCB	137		U		0.500 (Q)		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		0.500 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		U		0.500 (Q)		
2,2',3,4,5,6-HxCB	142		U		0.500 (Q)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		0.500 (Q)		
2,2',3,4,6,6'-HxCB	145		U		0.500 (Q)		
2,2',3,4',5,5'-HxCB	146		U		0.500 (Q)		
2,2',3,4',5,6-HxCB	147	147 + 149	C B J	1.66	0.500 (Q)	1.11	1.133
2,2',3,4',5,6'-HxCB	148		U		0.500 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.500 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.500 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C B J	1.76	0.500 (Q)	1.13	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		0.500 (Q)		
2,3,3',4,4',5-HxCB	156	156 + 157	C U		0.500 (Q)		
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		0.500 (Q)		
2,3,3',4,5,5'-HxCB	159		U		0.500 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		0.500 (Q)		
2,3,3',4',5,5'-HxCB	162		U		0.500 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		0.500 (Q)		
2,3,3',5,5',6-HxCB	165		U		0.500 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		0.500 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.500 (Q)		
2,2',3,3',4,4',5-HpCB	170		K B J	0.558	0.500 (Q)	1.84	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		0.500 (Q)		
2,2',3,3',4,5,5'-HpCB	172		U		0.500 (Q)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		U		0.500 (Q)		
2,2',3,3',4,5',6-HpCB	175		U		0.500 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		0.500 (Q)		
2,2',3,3',4',5,6-HpCB	177		U		0.500 (Q)		
2,2',3,3',5,5',6-HpCB	178		U		0.500 (Q)		
2,2',3,3',5,6,6'-HpCB	179		U		0.500 (Q)		
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C K B J	1.01	0.500 (Q)	1.85	1.000
2,2',3,4,4',5,6-HpCB	181		U		0.500 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U		0.500 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C U		0.500 (Q)		
2,2',3,4,4',6,6'-HpCB	184		U		0.500 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.500 (Q)		
2,2',3,4',5,5',6-HpCB	187		K B J	0.605	0.500 (Q)	0.85	1.110
2,2',3,4',5,6,6'-HpCB	188		U		0.500 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		0.500 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		0.500 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		0.500 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		0.500 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		0.500 (Q)		
2,2',3,3',4,4',5,6-OcCB	195		U		0.500 (Q)		
2,2',3,3',4,4',5,6'-OcCB	196		U		0.500 (Q)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		0.500 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C K B J	0.569	0.500 (Q)	0.68	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		0.500 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		0.500 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		U		0.500 (Q)		
2,2',3,4,4',5,6,6'-OcCB	204		U		0.500 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		0.500 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		J	0.601	0.547 (S)	0.69	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207		U		0.500 (Q)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		0.500 (Q)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		K B J	1.31	0.500 (Q)	0.62	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_WG59548-103_Form1A_PB7C_188S5_SJ2223714.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 2

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-103 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 11:51:43	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 5**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	1030	51.4	3.26	0.719
13C12-4-MoCB	3L			2000	1100	54.9	3.11	0.858
13C12-2,2'-DiCB	4L			2000	1180	59.1	1.58	0.873
13C12-4,4'-DiCB	15L			2000	1350	67.4	1.56	1.253
13C12-2,2',6-TriCB	19L			2000	1370	68.6	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	1390	69.3	1.05	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1360	67.9	0.80	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1490	74.4	0.79	1.396
13C12-3,4,4',5-TeCB	81L			2000	1470	73.6	0.79	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1380	69.0	1.56	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1480	73.9	1.57	1.199
13C12-2,3,4,4',5-PeCB	114L			2000	1460	73.0	1.59	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1480	74.1	1.60	1.161
13C12-2',3,4,4',5-PeCB	123L			2000	1500	75.2	1.60	1.150
13C12-3,3',4,4',5-PeCB	126L			2000	1520	75.9	1.56	1.300
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1480	74.1	1.26	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3210	80.3	1.27	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1600	80.2	1.27	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1610	80.4	1.28	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1760	87.9	1.02	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1740	87.0	1.05	0.873
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1420	70.8	1.05	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1500	74.9	1.03	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1400	70.1	0.90	0.818
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1610	80.6	0.90	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1570	78.6	0.77	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1540	77.1	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1470	73.5	1.17	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1380	68.9	1.04	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1540	76.8	1.63	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1640	82.2	1.04	1.012

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_WG59548-103_Form2_PB7C_188S5_SJ2223714.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 1A

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-104 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 12:55:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg/L		

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2-MoCB	1		B J	2.07	0.500 (Q)	2.83	1.001
3-MoCB	2		B J	1.09	0.500 (Q)	3.30	0.989
4-MoCB	3		B J	2.18	0.500 (Q)	3.55	1.001
2,2'-DiCB	4		U		6.41 (S)		
2,3-DiCB	5		U		4.45 (S)		
2,3'-DiCB	6		U		4.02 (S)		
2,4-DiCB	7		U		4.14 (S)		
2,4'-DiCB	8		K B	4.65	3.77 (S)	1.14	1.209
2,5-DiCB	9		U		4.00 (S)		
2,6-DiCB	10		U		4.13 (S)		
3,3'-DiCB	11		B	33.0	4.24 (S)	1.49	0.968
3,4-DiCB	12	12 + 13	C U		4.23 (S)		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		4.17 (S)		
4,4'-DiCB	15		U		4.34 (S)		
2,2',3-TriCB	16		B J	1.46	0.670 (S)	0.97	1.166
2,2',4-TriCB	17		B J	1.42	0.573 (S)	1.13	1.139
2,2',5-TriCB	18	18 + 30	C B J	2.37	0.500 (Q)	1.18	1.115
2,2',6-TriCB	19		U		0.672 (S)		
2,3,3'-TriCB	20	20 + 28	C B J	3.84	0.500 (Q)	0.91	0.848
2,3,4-TriCB	21	21 + 33	C B J	2.34	0.500 (Q)	0.92	0.857
2,3,4'-TriCB	22		B J	1.29	0.500 (Q)	0.89	0.872
2,3,5-TriCB	23		U		0.500 (Q)		
2,3,6-TriCB	24		U		0.500 (Q)		
2,3',4-TriCB	25		U		0.500 (Q)		
2,3',5-TriCB	26	26 + 29	C K B J	0.640	0.500 (Q)	1.42	1.302
2,3',6-TriCB	27		U		0.500 (Q)		
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31		B J	3.01	0.500 (Q)	0.97	0.837
2,4',6-TriCB	32		B J	0.752	0.500 (Q)	1.14	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.500 (Q)		
3,3',4-TriCB	35		B J	0.639	0.500 (Q)	0.92	0.985
3,3',5-TriCB	36		U		0.500 (Q)		
3,4,4'-TriCB	37		B J	0.720	0.500 (Q)	1.19	1.001
3,4,5-TriCB	38		U		0.500 (Q)		
3,4',5-TriCB	39		U		0.500 (Q)		

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',3,3'-TeCB	40	40 + 41 + 71	C K B J	1.58	0.554 (S)	0.99	1.335
2,2',3,4-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		B J	0.633	0.588 (S)	0.88	1.311
2,2',3,5-TeCB	43		U		0.634 (S)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C B	7.96	0.500 (Q)	0.88	1.287
2,2',3,6-TeCB	45	45 + 51	C B J	1.96	0.552 (S)	0.79	1.148
2,2',3,6'-TeCB	46		U		0.630 (S)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5-TeCB	48		B J	0.712	0.556 (S)	0.87	1.274
2,2',4,5'-TeCB	49	49 + 69	C B J	1.52	0.500 (Q)	0.88	1.259
2,2',4,6-TeCB	50	50 + 53	C U		0.533 (S)		
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		B	4.06	0.504 (S)	0.68	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.500 (Q)		
2,3,3',4-TeCB	55		U		0.500 (Q)		
2,3,3',4'-TeCB	56		B J	0.628	0.500 (Q)	0.72	0.905
2,3,3',5-TeCB	57		U		0.500 (Q)		
2,3,3',5'-TeCB	58		U		0.500 (Q)		
2,3,3',6-TeCB	59	59 + 62 + 75	C U		0.500 (Q)		
2,3,4,4'-TeCB	60		U		0.500 (Q)		
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C B J	3.21	0.500 (Q)	0.80	0.875
2,3,4,6-TeCB	62	59 + 62 + 75	C59				
2,3,4',5-TeCB	63		U		0.500 (Q)		
2,3,4',6-TeCB	64		K B J	1.47	0.500 (Q)	0.58	1.349
2,3,5,6-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		K B J	1.52	0.500 (Q)	0.95	0.884
2,3',4,5-TeCB	67		U		0.500 (Q)		
2,3',4,5'-TeCB	68		B J	1.06	0.500 (Q)	0.76	0.831
2,3',4,6-TeCB	69	49 + 69	C49				
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		U		0.500 (Q)		
2,3',5',6-TeCB	73		U		0.500 (Q)		
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	C61				
2,4,4',6-TeCB	75	59 + 62 + 75	C59				
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	C61				
3,3',4,4'-TeCB	77		U		0.500 (Q)		
3,3',4,5-TeCB	78		U		0.500 (Q)		
3,3',4,5'-TeCB	79		U		0.500 (Q)		
3,3',5,5'-TeCB	80		U		0.500 (Q)		
3,4,4',5-TeCB	81		U		0.500 (Q)		
2,2',3,3',4-PeCB	82		U		0.500 (Q)		
2,2',3,3',5-PeCB	83	83 + 99	C B J	1.68	0.500 (Q)	1.71	0.885
2,2',3,3',6-PeCB	84		K B J	0.845	0.500 (Q)	1.20	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C U		0.500 (Q)		
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C K B J	2.07	0.500 (Q)	1.12	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3,4,6-PeCB	88	88 + 91	C U		0.500 (Q)		
2,2',3,4,6'-PeCB	89		U		0.500 (Q)		
2,2',3,4',5-PeCB	90	90 + 101 + 113	C B J	3.12	0.500 (Q)	1.59	0.869
2,2',3,4',6-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		U		0.500 (Q)		
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C K B J	3.21	0.500 (Q)	1.28	1.122
2,2',3,5,6'-PeCB	94		U		0.500 (Q)		
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		0.500 (Q)		
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 109 + 119 + 125	C86				
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	C93				
2,2',4,4',5-PeCB	99	83 + 99	C83				

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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		0.500 (Q)		
2,2',4,6,6'-PeCB	104		U		0.500 (Q)		
2,3,3',4,4'-PeCB	105		B J	0.829	0.500 (Q)	1.54	1.000
2,3,3',4,5-PeCB	106		U		0.500 (Q)		
2,3,3',4',5-PeCB	107		U		0.500 (Q)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		0.500 (Q)		
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3,3',4',6-PeCB	110	110 + 115	C B J	2.38	0.500 (Q)	1.69	0.925
2,3,3',5,5'-PeCB	111		U		0.500 (Q)		
2,3,3',5,6-PeCB	112		U		0.500 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		0.500 (Q)		
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		B J	1.64	0.500 (Q)	1.72	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.500 (Q)		
2,3',4,5',6-PeCB	121		U		0.500 (Q)		
2',3,3',4,5-PeCB	122		U		0.500 (Q)		
2',3,4,4',5-PeCB	123		U		0.500 (Q)		
2',3,4,5,5'-PeCB	124	108 + 124	C108				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 109 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		U		0.500 (Q)		
3,3',4,5,5'-PeCB	127		U		0.500 (Q)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C U		0.500 (Q)		
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C K B J	2.45	0.500 (Q)	1.43	0.928
2,2',3,3',4,5'-HxCB	130		U		0.500 (Q)		
2,2',3,3',4,6-HxCB	131		U		0.500 (Q)		
2,2',3,3',4,6'-HxCB	132		B J	0.623	0.500 (Q)	1.28	1.174
2,2',3,3',5,5'-HxCB	133		U		0.500 (Q)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		0.500 (Q)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C B J	0.855	0.500 (Q)	1.25	1.105
2,2',3,3',6,6'-HxCB	136		U		0.500 (Q)		
2,2',3,4,4',5-HxCB	137		U		0.500 (Q)		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		0.500 (Q)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		U		0.500 (Q)		
2,2',3,4,5,6-HxCB	142		U		0.500 (Q)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		0.500 (Q)		
2,2',3,4,6,6'-HxCB	145		U		0.500 (Q)		
2,2',3,4',5,5'-HxCB	146		U		0.500 (Q)		
2,2',3,4',5,6-HxCB	147	147 + 149	C K B J	1.56	0.500 (Q)	1.60	1.133
2,2',3,4',5,6'-HxCB	148		U		0.500 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.500 (Q)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.500 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C B J	2.34	0.500 (Q)	1.32	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		U		0.500 (Q)		
2,3,3',4,4',5-HxCB	156	156 + 157	C B J	0.535	0.500 (Q)	1.25	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		0.500 (Q)		
2,3,3',4,5,5'-HxCB	159		U		0.500 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		0.500 (Q)		
2,3,3',4',5,5'-HxCB	162		U		0.500 (Q)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		0.500 (Q)		
2,3,3',5,5',6-HxCB	165		U		0.500 (Q)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		U		0.500 (Q)		
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.500 (Q)		
2,2',3,3',4,4',5-HpCB	170		U		0.500 (Q)		
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		0.500 (Q)		
2,2',3,3',4,5,5'-HpCB	172		U		0.500 (Q)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		U		0.500 (Q)		
2,2',3,3',4,5',6-HpCB	175		U		0.500 (Q)		
2,2',3,3',4,6,6'-HpCB	176		U		0.500 (Q)		
2,2',3,3',4',5,6-HpCB	177		U		0.500 (Q)		
2,2',3,3',5,5',6-HpCB	178		U		0.500 (Q)		
2,2',3,3',5,6,6'-HpCB	179		U		0.500 (Q)		
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C K B J	1.01	0.500 (Q)	0.81	1.000
2,2',3,4,4',5,6-HpCB	181		U		0.500 (Q)		
2,2',3,4,4',5,6'-HpCB	182		U		0.500 (Q)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C U		0.500 (Q)		
2,2',3,4,4',6,6'-HpCB	184		U		0.500 (Q)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.500 (Q)		
2,2',3,4',5,5',6-HpCB	187		B J	0.941	0.500 (Q)	0.90	1.110
2,2',3,4',5,6,6'-HpCB	188		U		0.500 (Q)		
2,3,3',4,4',5,5'-HpCB	189		U		0.500 (Q)		
2,3,3',4,4',5,6-HpCB	190		U		0.500 (Q)		
2,3,3',4,4',5',6-HpCB	191		U		0.500 (Q)		
2,3,3',4,5,5',6-HpCB	192		U		0.500 (Q)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		0.500 (Q)		
2,2',3,3',4,4',5,6-OcCB	195		U		0.500 (Q)		
2,2',3,3',4,4',5,6'-OcCB	196		U		0.500 (Q)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		0.500 (Q)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C U		0.500 (Q)		
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		0.500 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		U		0.500 (Q)		
2,2',3,4,4',5,5',6-OcCB	203		U		0.500 (Q)		
2,2',3,4,4',5,6,6'-OcCB	204		U		0.500 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		U		0.500 (Q)		
2,2',3,3',4,4',5,5',6-NoCB	206		U		0.679 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		0.511 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		0.566 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		B J	1.23	0.500 (Q)	0.99	1.001

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_WG59548-104_Form1A_PB7C_188S6_SJ2223717.html; Workgroup: WG59548; Design ID: 2500]

AXYS METHOD MLA-010 Rev 11

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 2

PCB CONGENER ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	4826	**Lab Sample I.D.:**	WG59548-104 :7PT
Matrix:	AQUEOUS	**Sample Size:**	1.00 L
Sample Receipt Date:	N/A	**Initial Calibration Date:**	28-May-2017
Extraction Date:	12-May-2017	**Instrument ID:**	HR GC/MS
Analysis Date:	30-May-2017 **Time:** 12:55:57	**GC Column ID:**	SPB OCTYL
Extract Volume (uL):	20	**Sample Data Filename:**	**PB7C_188 S: 6**
Injection Volume (uL):	1.0	**Blank Data Filename:**	PB7C_188 S: 4
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	PB7C_188 S: 1
Concentration Units:	pg absolute		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	IUPAC NO. [1]	CO-ELUTIONS	LAB FLAG [2]	SPIKE CONC.	CONC. FOUND	R(%) [3]	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	931	46.6	3.17	0.718
13C12-4-MoCB	3L			2000	1010	50.6	3.11	0.857
13C12-2,2'-DiCB	4L			2000	1050	52.4	1.57	0.873
13C12-4,4'-DiCB	15L			2000	1290	64.7	1.56	1.254
13C12-2,2',6-TriCB	19L			2000	1250	62.3	1.05	1.072
13C12-3,4,4'-TriCB	37L			2000	1370	68.6	1.03	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1250	62.6	0.81	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1530	76.6	0.79	1.396
13C12-3,4,4',5-TeCB	81L			2000	1500	75.2	0.79	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1320	66.0	1.59	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1510	75.4	1.56	1.200
13C12-2,3,4,4',5-PeCB	114L			2000	1480	74.1	1.55	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1510	75.3	1.58	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1500	74.8	1.61	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1610	80.6	1.58	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1370	68.5	1.26	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	3220	80.6	1.28	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1600	80.2	1.26	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1640	82.0	1.30	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1660	83.2	1.03	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1630	81.4	1.06	0.873
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1290	64.5	1.06	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1440	72.1	1.09	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	1310	65.7	0.92	0.818
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1490	74.3	0.91	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1510	75.6	0.79	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1450	72.6	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1440	72.1	1.22	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1300	65.2	1.04	0.924
13C12-2,3,3',5,5'-PeCB	111L			2000	1540	77.0	1.61	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1620	81.0	1.05	1.011

(1) Suffix "L" indicates labeled compound.
(2) Where applicable, custom lab flags have been used on this report; C = co-eluting congener.
(3) R% = percent recovery of labeled compounds.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Ting Chen_____

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Report Filename: 1668_PCB1668_PCBTFC_WG59548-104_Form2_PB7C_188S6_SJ2223717.html; Workgroup: WG59548; Design ID: 2500]

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
BFR	BTBPE	SGS AXYS MLA-033	MLA-033			Y										Y							Y									
	DBDPE	SGS AXYS MLA-033	MLA-033			Y										Y							Y									
	HBB	SGS AXYS MLA-033	MLA-033			Y										Y							Y									
	PBEB	SGS AXYS MLA-033	MLA-033			Y										Y							Y									
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																			Y										
	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																			Y										
	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																			Y										
	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																			Y										
	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																			Y										
	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																			Y										
	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																			Y										
	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																			Y										
	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																			Y										
	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																			Y										
	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																			Y										
FTS	4:2 fluorotelomer sulfonate (4:2 FTS)	SGS AXYS MLA-081	MLA-081																													YD
		SGS AXYS MLA-089	MLA-089											YD																		
	6:2 fluorotelomer sulfonate (6:2 FTS)	SGS AXYS MLA-081	MLA-081																													YD
		SGS AXYS MLA-089	MLA-089											YD																		
	8:2 fluorotelomer sulfonate (8:2 FTS)	SGS AXYS MLA-081	MLA-081																													YD
		SGS AXYS MLA-089	MLA-089											YD																		
HBCDD	alpha-hexabromocyclododecane (a-HBCDD)	SGS AXYS MLA-070	MLA-070		Y																											
	beta-hexabromocyclododecane (b-HBCDD)	SGS AXYS MLA-070	MLA-070		Y																											
	gamma-hexabromocyclododecane (g-HBCDD)	SGS AXYS MLA-070	MLA-070		Y																											
OC Pesticides	2,4'-DDD	EPA 625	MLA-007																					Y								
		EPA 8270	MLA-007					Y					Y																				
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y								Y							Y		Y								
	2,4'-DDE	EPA 625	MLA-007																					Y								
		EPA 8270	MLA-007					Y					Y																				
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y								Y							Y		Y								
	2,4'-DDT	EPA 625	MLA-007																					Y								
		EPA 8270	MLA-007					Y					Y																				
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y								Y							Y		Y								
	4,4'-DDD	EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y	Y	Y																		
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	
	4,4'-DDE	EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y	Y	Y																		
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	
	4,4'-DDT	EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		EPA 8270	MLA-007				Y	Y			Y	Y	Y	Y	Y																	
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	
	Aldrin	EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y	Y	Y																		
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	
	Alpha-HCH	EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y	Y	Y																		
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	
	Beta-HCH	EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y	Y	Y																		
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	
	Chlordane, technical	EPA 625	MLA-007																					Y							Y		
		EPA 8270	MLA-007				Y	Y			Y	Y		Y	Y											Y			Y	Y		Y	Y	
		SGS AXYS MLA-007	MLA-007					Y							Y										Y							Y	
	cis-Chlordane (alpha-Chlordane)	EPA 8270	MLA-007					Y			Y		Y	Y	Y										Y			Y			Y	Y	
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	
	cis-Nonachlor	EPA 8270	MLA-007					Y					Y												Y								
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y								Y							Y		Y								
	Delta-HCH	EPA 608	MLA-007																						Y			Y	Y		Y	Y	
		EPA 8081	MLA-007					Y			Y	Y	Y	Y	Y																		
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	
	Dieldrin	EPA 608	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8081	MLA-007				Y	Y			Y	Y	Y	Y	Y																		
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	
	Endosulphan I	EPA 608	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8081	MLA-007				Y	Y			Y	Y	Y	Y	Y																		
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	
	Endosulphan II	EPA 608	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8081	MLA-007				Y	Y			Y	Y	Y	Y	Y																		
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y							Y		Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y							Y		Y							Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	Endosulphan sulphate	EPA 608	MLA-007																				Y	Y			Y	Y		Y	Y	
		EPA 8081	MLA-007				Y	Y			Y	Y	Y	Y	Y																	
		EPA 1699	MLA-028					Y							Y									Y								Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y						Y	Y									Y	
	Endrin	EPA 608	MLA-007																				Y	Y			Y	Y		Y	Y	
		EPA 8081	MLA-007				Y	Y			Y	Y	Y	Y	Y																	
		EPA 1699	MLA-028					Y							Y									Y								Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y						Y	Y									Y	
	Endrin aldehyde	EPA 608	MLA-007																				Y	Y			Y	Y		Y	Y	
		EPA 8081	MLA-007				Y	Y			Y	Y	Y	Y	Y																	
		EPA 1699	MLA-028					Y							Y									Y								Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y		Y	
		SGS AXYS MLA-007	MLA-007			Y		Y							Y								Y									Y	
	Endrin ketone	EPA 8081	MLA-007					Y			Y		Y		Y																	
		EPA 1699	MLA-028					Y							Y									Y								Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y			
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y						Y	Y									Y	
	Gamma-HCH (Lindane)	EPA 625	MLA-007																				Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y	Y	Y																	
		EPA 1699	MLA-028					Y							Y									Y								Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y						Y	Y									Y	
	Heptachlor	EPA 625	MLA-007																				Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y	Y	Y																	
		EPA 1699	MLA-028					Y							Y									Y								Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y						Y	Y									Y	
	Heptachlor epoxide	EPA 608	MLA-007																				Y	Y			Y	Y		Y	Y	
		EPA 8081	MLA-007				Y	Y			Y	Y	Y	Y	Y																	
		EPA 1699	MLA-028					Y							Y									Y								Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y						Y	Y									Y	
	Hexachlorobenzene	EPA 1625	MLA-007																				Y	Y				Y				Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y	Y	Y																	
		EPA 1699	MLA-028					Y							Y									Y								Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y						Y	Y									Y	
	Methoxychlor	EPA 608	MLA-007																					Y				Y	Y			Y	
		EPA 8081	MLA-007				Y	Y			Y	Y	Y	Y	Y																	
		EPA 1699	MLA-028					Y							Y									Y								Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y						Y	Y									Y	
	Mirex	EPA 8270	MLA-007					Y			Y		Y		Y																	
		EPA 1699	MLA-028					Y							Y									Y								Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y						Y	Y									Y	
	Oxychlordane	EPA 8270	MLA-007					Y					Y											Y									
		EPA 1699	MLA-028					Y							Y									Y								Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y	Y							Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y								Y						Y	Y										
	Toxaphene	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y						Y											
	trans-Chlordane (gamma-Chlordane)	EPA 8270	MLA-007					Y			Y		Y	Y	Y										Y			Y			Y	Y
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y			Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y							Y	Y						Y			Y							Y	
	trans-Nonachlor	EPA 8270	MLA-007					Y					Y												Y								
		EPA 1699	MLA-028					Y							Y										Y							Y	
		SGS AXYS MLA-028	MLA-028		Y	Y		Y					Y		Y	Y						Y			Y					Y		Y	
		SGS AXYS MLA-007	MLA-007		Y	Y		Y								Y									Y								
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021			Y																Y										
	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021			Y																Y										
	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021			Y																Y										
	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021			Y																Y										
	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021			Y																Y										
	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021			Y																Y										
	1-Methylchrysene	SGS AXYS MLA-021	MLA-021			Y																Y										
	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021			Y																Y										
	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021			Y																Y										
	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021			Y																Y										
	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021			Y																Y										
	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021			Y																Y										
	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021			Y																Y										
	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021			Y																Y										
	2/3-Methyldibenzothiophenes	SGS AXYS MLA-021	MLA-021			Y																Y										
	2-Methylanthracene	SGS AXYS MLA-021	MLA-021			Y																Y										
	2-Methylfluorene	SGS AXYS MLA-021	MLA-021			Y																Y										
	2-methylnaphthalene	EPA 1625	MLA-021																													Y	
		EPA 8270	MLA-021					Y			Y				Y										Y								
		SGS AXYS MLA-021	MLA-021			Y		Y							Y								Y									Y	
	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021			Y																Y										
	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021			Y																Y										
	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021			Y																Y										
	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021			Y																Y										
	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021			Y																Y										
	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021			Y																Y										
	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021			Y																Y										
	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021			Y																Y										
	Acenaphthene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y						Y			Y							Y	
	Acenaphthylene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y						Y			Y							Y	
	Anthracene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																			
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y						Y			Y							Y	
	Benz[a]anthracene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																	
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Benzo[a]pyrene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																		
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Benzo[b]fluoranthene	EPA 1625	MLA-021																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																		
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021			Y										Y							Y										
	Benzo[ghi]perylene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																		
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021																				Y										
	Benzo[k]fluoranthene	EPA 1625	MLA-021																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-021					Y			Y			Y	Y																		
		SGS AXYS MLA-021	MLA-021					Y							Y	Y							Y		Y							Y	
	Biphenyl	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C1-Biphenyls	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C1-Fluorenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C2-Biphenyls	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C2-Fluorenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C3-Fluorenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021			Y																	Y										
	Chrysene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																		
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Dibenz[ah]anthracene	SGS AXYS MLA-021	MLA-021			Y										Y							Y										
	Dibenzo[ah]anthracene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																	
		SGS AXYS MLA-021	MLA-021					Y							Y										Y							Y	
	Dibenzothiophene	SGS AXYS MLA-021	MLA-021			Y																	Y										
	Fluoranthene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																		
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Fluorene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																		
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																		
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Naphthalene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																		
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Perylene	SGS AXYS MLA-021	MLA-021			Y										Y							Y										
	Phenanthrene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																		
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Pyrene	EPA 1625	MLA-021																					Y	Y			Y	Y			Y	
		EPA 8270	MLA-021				Y	Y			Y	Y		Y	Y																		
		SGS AXYS MLA-021	MLA-021			Y		Y							Y	Y							Y		Y							Y	
	Retene	SGS AXYS MLA-021	MLA-021			Y										Y							Y										
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033										Y																	Y			

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Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y									
	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE-183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
	BDE-33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033										Y																	Y			
		SGS AXYS MLA-033	MLA-033		Y	Y										Y							Y										
PCB Aroclors	PCB Aroclor 1016	EPA 1668	MLA-010				Y							Y	Y									Y							Y	Y	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		EPA 625	MLA-007																				Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y			Y																		
		SGS AXYS MLA-010	MLA-010					Y							Y									Y								Y	
		SGS AXYS MLA-007	MLA-007			Y		Y							Y	Y							Y		Y							Y	
	PCB Aroclor 1016/1242	EPA 8270	MLA-007										Y																				
	PCB Aroclor 1221	EPA 1668	MLA-010					Y						Y	Y										Y							Y	Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y		Y																		
		SGS AXYS MLA-010	MLA-010					Y							Y										Y								Y	
		SGS AXYS MLA-007	MLA-007			Y		Y							Y	Y							Y		Y								Y	
	PCB Aroclor 1232	EPA 1668	MLA-010					Y						Y	Y										Y							Y	Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y		Y																		
		SGS AXYS MLA-010	MLA-010					Y							Y										Y								Y	
		SGS AXYS MLA-007	MLA-007			Y		Y							Y	Y							Y		Y								Y	
	PCB Aroclor 1242	EPA 1668	MLA-010					Y						Y	Y										Y							Y	Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y			Y																		
		SGS AXYS MLA-010	MLA-010					Y							Y										Y								Y	
		SGS AXYS MLA-007	MLA-007			Y		Y							Y	Y							Y		Y								Y	
	PCB Aroclor 1248	EPA 1668	MLA-010					Y						Y	Y										Y							Y	Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y		Y																		
		SGS AXYS MLA-010	MLA-010					Y							Y										Y								Y	
		SGS AXYS MLA-007	MLA-007			Y		Y							Y	Y							Y		Y								Y	
	PCB Aroclor 1254	EPA 1668	MLA-010					Y						Y	Y										Y							Y	Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y		Y																		
		SGS AXYS MLA-010	MLA-010					Y							Y										Y								Y	
		SGS AXYS MLA-007	MLA-007			Y		Y							Y	Y							Y		Y								Y	
	PCB Aroclor 1260	EPA 1668	MLA-010					Y						Y	Y										Y							Y	Y	
		EPA 625	MLA-007																					Y	Y			Y	Y		Y	Y	
		EPA 8270	MLA-007				Y	Y			Y	Y	Y		Y																		
		SGS AXYS MLA-010	MLA-010					Y							Y										Y								Y	
		SGS AXYS MLA-007	MLA-007			Y		Y							Y	Y							Y		Y								Y	
	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007			Y										Y							Y										
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y		YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 101/90/89	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 105/127	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 107/109	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 111/117	EPA 8270	MLA-007										Y																				
	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB 118/106	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										

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Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 12/13	EPA 8270	MLA-007										Y																				
	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y		YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 131/142	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 132/168	EPA 8270	MLA-007										Y																				
	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		EPA 8270	MLA-007										Y																			
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y	YD					YD				Y			Y	Y	Y	Y	YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 134/143	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB 138/163/164	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 144/135	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 149/139	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 158/160	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 16/32	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB 170/190	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y		YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 172/192	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										

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SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y		YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 174/181	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 177 2,2',3,3',4,5',6'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	

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SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB 187/182	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 196/203	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y		YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y

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SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		EPA 8270	MLA-007										Y																			
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	Y YD						YD				Y			Y	Y	Y	Y	YD	Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		EPA 8270	MLA-007										Y																			
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y		YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 23/34	EPA 8270	MLA-007										Y																				
	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 24/27	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y		YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 33/20/21	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	

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SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 4/10	EPA 8270	MLA-007										Y																				
	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 41/71/64/68	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 42/59	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 47/48/75	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 49/43	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 52/73	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 56/60	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 62/65	EPA 8270	MLA-007										Y																				
	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y

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				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 66/80	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y																	Y										
	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 7/9	EPA 8270	MLA-007										Y																				
	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 70/76	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y																	Y										
	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB 74/61	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y																	Y										
	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y																	Y										
	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 8/5	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y																	Y										
	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 83/108	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y		YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 85/120	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 87/115/116	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 88/121	EPA 8270	MLA-007										Y																				
	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y		YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 95/93	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y			Y	Y	Y	Y	YD						YD				Y			Y	Y	Y	Y	YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 97/86	EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
	PCB 98/102	EPA 8270	MLA-007										Y																				
	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010					Y		Y	Y	Y	Y	Y	YD						YD				Y		Y	Y	Y	Y		YD	Y
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y		Y							YD	Y					YD		Y		Y							YD	
		SGS AXYS MLA-007	MLA-007			Y										Y							Y										
		SGS AXYS MLA-901	MLA-901		Y																												
	PCB congeners, total	EPA 1668	MLA-010								Y																		Y				
	Sum - Dichlorobiphenyls (BZ-12-+ BZ-13)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Heptachlorobiphenyls (BZ-171 + BZ-173)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Heptachlorobiphenyls (BZ-180 + BZ-193)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Heptachlorobiphenyls (BZ-183 + BZ-185)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Hexachlorobiphenyls (BZ-128 + BZ-166)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Hexachlorobiphenyls (BZ-129 + BZ-138 + BZ-160 + BZ-163)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Hexachlorobiphenyls (BZ-134 + BZ-143)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Hexachlorobiphenyls (BZ-135 + BZ-151 + BZ-154)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Hexachlorobiphenyls (BZ-139 + BZ-140)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Hexachlorobiphenyls (BZ-147 + BZ-149)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Hexachlorobiphenyls (BZ-153 + BZ-168)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Hexachlorobiphenyls (BZ-156 + BZ-157)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Pentachlorobiphenyls (BZ-107 + BZ-124)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Pentachlorobiphenyls (BZ-108 + BZ-124)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Pentachlorobiphenyls (BZ-110 + BZ-115)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Pentachlorobiphenyls (BZ-83 + BZ-99)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Pentachlorobiphenyls (BZ-85 + BZ-116 + BZ-117)	EPA 1668	MLA-010												YD						YD											YD	
		SGS AXYS MLA-010	MLA-010												YD						YD											YD	
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ 97 + BZ-109 + BZ-119 + BZ-125)	EPA 1668	MLA-010												YD						YD											YD	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE*	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Pentachlorobiphenyls (BZ-86 + BZ-87 + BZ-97 + BZ-108 + BZ-119 +BZ-125)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Pentachlorobiphenyls (BZ-88 + BZ-91)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Pentachlorobiphenyls (BZ-90 + BZ-101 + BZ-113)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Pentachlorobiphenyls (BZ-93 + BZ-95 + BZ-98 + BZ-100 + BZ-102)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Tetrachlorobiphenyls (BZ-40 + BZ-41 + BZ-71)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Tetrachlorobiphenyls (BZ-44 + BZ-47 + BZ-65)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Tetrachlorobiphenyls (BZ-45 + BZ-51)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Tetrachlorobiphenyls (BZ-49 + BZ-69)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Tetrachlorobiphenyls (BZ-50 + BZ-53)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Tetrachlorobiphenyls (BZ-59 + BZ-62 + BZ-75)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Tetrachlorobiphenyls (BZ-61 + BZ-70 + BZ-74 + BZ-76)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Trichlorobiphenyls (BZ-18 + BZ-30)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Trichlorobiphenyls (BZ-20 + BZ-28)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Trichlorobiphenyls (BZ-21 + BZ-33)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Sum - Trichlorobiphenyls (BZ-26 + BZ-29)	EPA 1668	MLA-010											YD						YD											YD
		SGS AXYS MLA-010	MLA-010											YD						YD											YD
	Total Dichlorobiphenyls	EPA 1668	MLA-010											YD						YD											YD
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y								YD		Y				YD		Y											YD
		SGS AXYS MLA-007	MLA-007			Y										Y						Y											
	Total Heptachlorobiphenyls	EPA 1668	MLA-010											YD						YD											YD		
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y								YD		Y				YD		Y											YD
		SGS AXYS MLA-007	MLA-007			Y										Y						Y											
	Total Hexachlorobiphenyls	EPA 1668	MLA-010											YD						YD											YD		
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y								YD		Y				YD		Y											YD
		SGS AXYS MLA-007	MLA-007			Y										Y						Y											
	Total Monochlorobiphenyls	EPA 1668	MLA-010											YD						YD											YD		
		SGS AXYS MLA-010	MLA-010		Y	Y								YD		Y				YD		Y											YD
	Total Nonachlorobiphenyls	EPA 1668	MLA-010											YD						YD											YD		
		EPA 8270	MLA-007										Y																				
		SGS AXYS MLA-010	MLA-010		Y	Y								YD		Y				YD		Y											YD
		SGS AXYS MLA-007	MLA-007			Y										Y						Y											
	Total Octachlorobiphenyls	EPA 1668	MLA-010											YD						YD												YD	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		EPA 8270	MLA-007										Y																			
		SGS AXYS MLA-010	MLA-010		Y	Y									YD	Y					YD		Y									YD
		SGS AXYS MLA-007	MLA-007			Y										Y							Y									
	Total PCBs	EPA 1668	MLA-010												YD						YD											YD
		SGS AXYS MLA-010	MLA-010												YD						YD											YD
	Total Pentachlorobiphenyls	EPA 1668	MLA-010												YD						YD											YD
		EPA 8270	MLA-007										Y																			
		SGS AXYS MLA-010	MLA-010		Y	Y									YD	Y					YD		Y									YD
		SGS AXYS MLA-007	MLA-007			Y										Y							Y									
	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007			Y										Y							Y									
	Total Tetrachlorobiphenyls	EPA 1668	MLA-010												YD						YD											YD
		EPA 8270	MLA-007										Y																			
		SGS AXYS MLA-010	MLA-010		Y	Y									YD	Y					YD		Y									YD
		SGS AXYS MLA-007	MLA-007			Y										Y							Y									
	Total Trichlorobiphenyls	EPA 1668	MLA-010												YD						YD											YD
		EPA 8270	MLA-007										Y																			
		SGS AXYS MLA-010	MLA-010		Y	Y									YD	Y					YD		Y									YD
		SGS AXYS MLA-007	MLA-007			Y										Y							Y									
PCDDF	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD
	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD
	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD
	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD
	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD
	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD
	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD
	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD
	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD
	1,2,3,7,8-PeCDD	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD
	1,2,3,7,8-PeCDF	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable									
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD	
	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD	
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD	
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD	
	2,3,4,7,8-PeCDF	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD	
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD	
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD	
	2,3,7,8-TCDD	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD	
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD	
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD	
	2,3,7,8-TCDF	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD	
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD	
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD	
	OCDD	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD	
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD	
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD	
	OCDF	EPA 1613	MLA-017										Y		YD						YD			Y	Y		Y	Y	Y	Y	Y	YD	
		EPA 8290	MLA-017				Y	Y		Y	Y	Y		Y	YD		Y		Y	Y	YD				Y			Y	Y			YD	
		SGS AXYS MLA-017	MLA-017	Y	Y	Y		Y							YD	Y	Y				YD		Y		Y							YD	
	Total HpCDD	EPA 1613	MLA-017												YD						YD			Y	Y						Y	YD	
		EPA 8290	MLA-017					Y		Y		Y		Y	YD		Y		Y	Y	YD				Y				Y			YD	
		SGS AXYS MLA-017	MLA-017					Y							YD		Y				YD				Y							YD	
	Total HpCDF	EPA 1613	MLA-017												YD						YD			Y	Y						Y	YD	
		EPA 8290	MLA-017					Y		Y		Y		Y	YD		Y		Y	Y	YD				Y				Y			YD	
		SGS AXYS MLA-017	MLA-017					Y							YD		Y				YD				Y							YD	
	Total HxCDD	EPA 1613	MLA-017												YD						YD			Y	Y						Y	YD	
		EPA 8290	MLA-017					Y		Y		Y		Y	YD		Y		Y	Y	YD				Y				Y			YD	
		SGS AXYS MLA-017	MLA-017					Y							YD		Y				YD				Y							YD	
	Total HxCDF	EPA 1613	MLA-017												YD						YD			Y	Y						Y	YD	
		EPA 8290	MLA-017					Y		Y		Y		Y	YD		Y		Y	Y	YD				Y				Y			YD	
		SGS AXYS MLA-017	MLA-017					Y							YD		Y				YD				Y							YD	
	Total PCDD	EPA 1613	MLA-017												YD						YD											YD	
		EPA 8290	MLA-017												YD						YD											YD	
		SGS AXYS MLA-017	MLA-017												YD						YD											YD	
	Total PCDD+PCDF	EPA 1613	MLA-017												YD						YD											YD	
		EPA 8290	MLA-017												YD						YD											YD	
		SGS AXYS MLA-017	MLA-017												YD						YD											YD	
	Total PCDF	EPA 1613	MLA-017												YD						YD											YD	
		EPA 8290	MLA-017												YD						YD											YD	
		SGS AXYS MLA-017	MLA-017												YD						YD											YD	
	Total PeCDD	EPA 1613	MLA-017												YD						YD			Y	Y						Y	YD	
		EPA 8290	MLA-017					Y		Y		Y		Y	YD		Y		Y	Y	YD				Y				Y			YD	
		SGS AXYS MLA-017	MLA-017					Y							YD		Y				YD				Y							YD	
	Total PeCDF	EPA 1613	MLA-017												YD						YD			Y	Y						Y	YD	
		EPA 8290	MLA-017					Y		Y		Y		Y	YD		Y		Y	Y	YD				Y				Y			YD	
		SGS AXYS MLA-017	MLA-017					Y							YD		Y				YD				Y							YD	
	Total TCDD	EPA 1613	MLA-017												YD						YD			Y	Y						Y	YD	
		EPA 8290	MLA-017					Y		Y		Y		Y	YD		Y		Y	Y	YD				Y				Y			YD	
		SGS AXYS MLA-017	MLA-017					Y							YD		Y				YD				Y							YD	
	Total TCDF	EPA 1613	MLA-017												YD						YD			Y	Y						Y	YD	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		EPA 8290	MLA-017					Y		Y		Y		Y	YD		Y		Y	Y	YD				Y					Y		YD	
		SGS AXYS MLA-017	MLA-017					Y							YD		Y				YD				Y							YD	
PFAS	4:2 fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	6:2 fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	8:2 fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorobutanoate (PFBA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorodecanoate (PFDA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorononanoate (PFNA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorooctanesulfonamide (PFOSA), a.k.a FOSA	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorooctanoate (PFOA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110																				Y										
	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110																				Y										
	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-110	MLA-110			Y																	Y										
PFC	Perfluorobutanesulfonate (PFBS)	EPA 537 modified	MLA-041												YD																		
			MLA-043																		YD												
			MLA-060																														YD
		SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						YD
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y					YD																		
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		YD												
		SGS AXYS MLA-042	MLA-042		Y																												
	Perfluorobutanoate (PFBA)	EPA 537 modified	MLA-041												YD																		
			MLA-043																		YD												
			MLA-060																														YD
		SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						YD
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y					YD																		
		SGS AXYS MLA-043	MLA-043													Y	Y	Y	Y		YD												
		SGS AXYS MLA-042	MLA-042		Y																												
	Perfluorodecanoate (PFDA)	EPA 537 modified	MLA-041												YD																		
			MLA-043																		YD												
			MLA-060																														YD
		SGS AXYS MLA-060	MLA-060																				Y		Y	Y	Y						YD
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y					YD																		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids									Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-043	MLA-043												Y	Y	Y	Y		YD												
		SGS AXYS MLA-042	MLA-042		Y																											
	Perfluorododecanoate (PFDoA)	EPA 537 modified	MLA-041											YD																		
			MLA-043																	YD												
			MLA-060																												YD	
		SGS AXYS MLA-060	MLA-060																			Y		Y	Y	Y					YD	
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y				YD																		
		SGS AXYS MLA-043	MLA-043												Y	Y	Y	Y		YD												
		SGS AXYS MLA-042	MLA-042		Y																											
	Perfluoroheptanoate (PFHpA)	EPA 537 modified	MLA-041											YD																		
			MLA-043																	YD												
			MLA-060																												YD	
		SGS AXYS MLA-060	MLA-060																			Y		Y	Y	Y					YD	
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y				YD																		
		SGS AXYS MLA-043	MLA-043												Y	Y	Y	Y		YD												
		SGS AXYS MLA-042	MLA-042		Y																											
	Perfluorohexanesulfonate (PFHxS)	EPA 537 modified	MLA-041											YD																		
			MLA-043																	YD												
			MLA-060																												YD	
		SGS AXYS MLA-060	MLA-060																			Y		Y	Y	Y					YD	
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y				YD																		
		SGS AXYS MLA-043	MLA-043												Y	Y	Y	Y		YD												
		SGS AXYS MLA-042	MLA-042		Y																											
	Perfluorohexanoate (PFHxA)	EPA 537 modified	MLA-041											YD																		
			MLA-043																	YD												
			MLA-060																												YD	
		SGS AXYS MLA-060	MLA-060																			Y		Y	Y	Y					YD	
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y				YD																		
		SGS AXYS MLA-043	MLA-043												Y	Y	Y	Y		YD												
		SGS AXYS MLA-042	MLA-042		Y																											
	Perfluorononanoate (PFNA)	EPA 537 modified	MLA-041											YD																		
			MLA-043																	YD												
			MLA-060																												YD	
		SGS AXYS MLA-060	MLA-060																			Y		Y	Y	Y					YD	
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y				YD																		
		SGS AXYS MLA-043	MLA-043												Y	Y	Y	Y		YD												
		SGS AXYS MLA-042	MLA-042		Y																											
	Perfluorooctane sulfonamide (PFOSA)	EPA 537 modified	MLA-041											YD																		
			MLA-043																	YD												
			MLA-060																												YD	
		SGS AXYS MLA-060	MLA-060																			Y		Y	Y	Y					YD	
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y				YD																		
		SGS AXYS MLA-043	MLA-043												Y	Y	Y	Y		YD												
		SGS AXYS MLA-042	MLA-042		Y																											
	Perfluorooctanesulfonate (PFOS)	EPA 537 modified	MLA-041											YD																		
			MLA-043																	YD												
			MLA-060																												YD	
		SGS AXYS MLA-060	MLA-060																			Y		Y	Y	Y					YD	
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y				YD																		
		SGS AXYS MLA-043	MLA-043												Y	Y	Y	Y		YD												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids									Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-042	MLA-042		Y																										
	Perfluorooctanoate (PFOA)	EPA 537 modified	MLA-041											YD																	
			MLA-043																	YD											
			MLA-060																												YD
		SGS AXYS MLA-060	MLA-060																			Y		Y		Y					YD
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y				YD																	
		SGS AXYS MLA-043	MLA-043												Y	Y		Y		YD											
		SGS AXYS MLA-042	MLA-042		Y																										
	Perfluoropentanoate (PFPeA)	EPA 537 modified	MLA-041											YD																	
			MLA-043																	YD											
			MLA-060																												YD
		SGS AXYS MLA-060	MLA-060																			Y		Y		Y					YD
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y				YD																	
		SGS AXYS MLA-043	MLA-043												Y	Y		Y		YD											
		SGS AXYS MLA-042	MLA-042		Y																										
	Perfluoroundecanoate (PFUnA)	EPA 537 modified	MLA-041											YD																	
			MLA-043																	YD											
			MLA-060																												YD
		SGS AXYS MLA-060	MLA-060																			Y		Y		Y					YD
		SGS AXYS MLA-041	MLA-041			Y		Y	Y	Y				YD																	
		SGS AXYS MLA-043	MLA-043												Y	Y		Y		YD											
		SGS AXYS MLA-042	MLA-042		Y																										
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075											Y																Y	
		SGS AXYS MLA-075	MLA-075			Y																Y									
	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075			Y																Y									
	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075			Y																Y									
	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075											Y																Y	
		SGS AXYS MLA-075	MLA-075			Y																Y									
	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075											Y																Y	
		SGS AXYS MLA-075	MLA-075			Y																Y									
	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075											Y																Y	
		SGS AXYS MLA-075	MLA-075			Y																Y									
	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075											Y																Y	
		SGS AXYS MLA-075	MLA-075			Y																Y									
	4-Epitetracycline (ETC)	EPA 1694	MLA-075											Y																Y	
		SGS AXYS MLA-075	MLA-075			Y																Y									
	Acetaminophen	EPA 1694	MLA-075											Y																Y	
		SGS AXYS MLA-075	MLA-075			Y																Y									
	Albuterol	EPA 1694	MLA-075											Y																Y	
		SGS AXYS MLA-075	MLA-075			Y																Y									
	Alprazolam	SGS AXYS MLA-075	MLA-075			Y																Y									
	Amitriptyline	SGS AXYS MLA-075	MLA-075			Y																Y									
	Amlodipine	SGS AXYS MLA-075	MLA-075			Y																Y									
	Amphetamine	SGS AXYS MLA-075	MLA-075			Y																Y									
	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075											Y																Y	
		SGS AXYS MLA-075	MLA-075			Y																Y									
	Anhydrotetracycline (ATC)	EPA 1694	MLA-075											Y																Y	
		SGS AXYS MLA-075	MLA-075			Y																Y									
	Atenolol	SGS AXYS MLA-075	MLA-075			Y																Y									
	Atorvastatin	SGS AXYS MLA-075	MLA-075			Y																Y									

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	Azithromycin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Benzoylecgonine	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Benztropine	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Betamethasone	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Bisphenol A	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Caffeine	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Carbadox	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Carbamazepine	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Cefotaxime	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Chlortetracycline (CTC)	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Cimetidine	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Ciprofloxacin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Clarithromycin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Clinafloxacin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Clonidine	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Cloxacillin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Cocaine	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Codeine	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Cotinine	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Dehydronifedipine	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Demeclocycline	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Diazepam	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Digoxigenin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Digoxin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Diltiazem	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Diphenhydramine	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Doxycycline	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	Enalapril	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Enrofloxacin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Erythromycin	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Erythromycin anydrate	EPA 1694	MLA-075											Y																	Y		
	Flumequine	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Fluocinonide	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Fluoxetine	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Fluticasone propionate	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Furosemide	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Gemfibrozil	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Glipizide	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Glyburide	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Hydrocodone	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Hydrocortisone	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Ibuprofen	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Isochlortetracycline (ICTC)	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Lincomycin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Lomefloxacin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Meprobamate	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Metformin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Methylprednisolone	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Metoprolol	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Miconazole	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Minocycline	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Naproxen	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Norfloxacin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Norfluoxetine	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Norgestimate	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Norverapamil	SGS AXYS MLA-075	MLA-075			Y																	Y										
	Ofloxacin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Ormetoprim	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Oxacillin	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Oxolinic acid	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Oxycodone	EPA 1694	MLA-075											Y																	Y		
		SGS AXYS MLA-075	MLA-075			Y																	Y										
	Oxytetracycline (OTC)	EPA 1694	MLA-075											Y																	Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids									Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Paroxetine	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Penicillin G	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Penicillin V	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Prednisolone	SGS AXYS MLA-075	MLA-075			Y																Y										
	Prednisone	SGS AXYS MLA-075	MLA-075			Y																Y										
	Promethazine	SGS AXYS MLA-075	MLA-075			Y																Y										
	Propoxyphene	SGS AXYS MLA-075	MLA-075			Y																Y										
	Propranolol	SGS AXYS MLA-075	MLA-075			Y																Y										
	Ranitidine	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Roxithromycin	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Sarafloxacin	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Sertraline	SGS AXYS MLA-075	MLA-075			Y																Y										
	Simvastatin	SGS AXYS MLA-075	MLA-075			Y																Y										
	Sulfachloropyridazine	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Sulfadiazine	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Sulfadimethoxine	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Sulfamerazine	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Sulfamethazine	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Sulfamethizole	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Sulfamethoxazole	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Sulfanilamide	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Sulfathiazole	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Tetracycline (TC)	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Theophylline	SGS AXYS MLA-075	MLA-075			Y																Y										
	Thiabendazole	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Trenbolone	SGS AXYS MLA-075	MLA-075			Y																Y										
	Trenbolone acetate	SGS AXYS MLA-075	MLA-075			Y																Y										
	Triamterene	SGS AXYS MLA-075	MLA-075			Y																Y										
	Triclocarban	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Triclosan	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Trimethoprim	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Tylosin	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																Y										
	Valsartan	SGS AXYS MLA-075	MLA-075			Y																Y										
	Verapamil	SGS AXYS MLA-075	MLA-075			Y																Y										
	Virginiamycin	EPA 1694	MLA-075											Y																	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
				CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
		SGS AXYS MLA-075	MLA-075			Y																	Y									
	Warfarin	EPA 1694	MLA-075											Y																	Y	
		SGS AXYS MLA-075	MLA-075			Y																	Y									
Targeted Metabolites	11, 14, 17-eicosatrienoic acid (eicosatrienoic acid)	SGS AXYS MLM-001	MLM-001													Y																
	11, 14-eicosadienoic acid	SGS AXYS MLM-001	MLM-001													Y																
	3-hydroxytyrosine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Acetylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Acetylornithine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Alanine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	alpha-Aminoadipic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Arginine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Asparagine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Aspartate	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Asymmetric dimethylarginine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Butenylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Butyrylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	C22:5 ISOMER 1 (tentatively all-cis-4, 8, 12, 15, 19-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																
	C22:5 ISOMER 2 (all-cis-7,10,13,16,19-docosapentaenoic acid (DPA)	SGS AXYS MLM-001	MLM-001													Y																
	C22:5 ISOMER 3 (tentatively all-cis-4, 7, 10, 13, 16-docosapentaenoic acid)	SGS AXYS MLM-001	MLM-001													Y																
	Carnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Carnosine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	chenodeoxycholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	cholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Citrulline	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Creatinine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Decadienylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	decanoic acid (capric acid)	SGS AXYS MLM-001	MLM-001													Y																
	Decanoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Decenoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	deoxycholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	docosahexaenoic acid (DHA)	SGS AXYS MLM-001	MLM-001													Y																
	docosatetraenoic acid (adrenic acid)	SGS AXYS MLM-001	MLM-001													Y																
	Dodecanedioylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Dodecanoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Dodecenoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Dopamine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	eicosapentaenoic acid (EPA)	SGS AXYS MLM-001	MLM-001													Y																
	Eicosatetraenoic acid (arachidonic acid)	SGS AXYS MLM-001	MLM-001													Y																
	eicosatrienoic acid (dihomo-γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																
	Glutaconylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Glutamate	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Glutamine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Glutarylcarnitine (Hydroxyhexanoylcarnitine)	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Glycine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	glycochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	glycocholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	glycodeoxycholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	hexadecanoic acid (palmitic acid)	SGS AXYS MLM-001	MLM-001													Y																
	Hexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	hexadecenoic acid (palmitoleic acid)	SGS AXYS MLM-001	MLM-001													Y																
	Hexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hexanoylcarnitine (Fumarylcarnitine)	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hexenoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hexose (sum isomers)	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Histamine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Histidine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE*	Maine DOH	ANAB	Pennsylvania DEP
	Hydroxyhexadecadienylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxyhexadecanoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxyhexadecenoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxylbutyrylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxyoctadecenoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxyproline	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxypropionylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxysphingomyeline C14:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxysphingomyeline C16:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxysphingomyeline C22:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxysphingomyeline C22:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxysphingomyeline C24:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxytetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxytetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Hydroxyvalerylcarnitine (Methylmalonylcarnitine)	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Isoleucine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Kynurenine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Leucine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lithocholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Lysine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C14:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C16:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C16:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C17:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C18:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C18:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C18:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C20:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C20:4	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C24:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C26:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C28:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	lysoPhosphatidylcholine acyl C28:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Methionine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Methioninesulfoxide	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Methylglutarylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Nitrotyrosine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Nonaylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	octadecadienoic acid (linoleic acid)	SGS AXYS MLM-001	MLM-001													Y																
	Octadecadienylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	octadecanoic acid (stearic acid)	SGS AXYS MLM-001	MLM-001													Y																
	Octadecanoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	octadecatrienoic acid (γ-linolenic acid)	SGS AXYS MLM-001	MLM-001													Y																
	Octadecenoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Octanoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Ornithine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phenylalanine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phenylethylamine	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C30:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C30:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C30:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C32:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C32:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C34:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C34:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C34:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C34:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	Maine DOH	ANAB	Pennsylvania DEP
	Phosphatidylcholine acyl-alkyl C36:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C36:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C36:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C36:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C36:4	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C36:5	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C38:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C38:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C38:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C38:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C38:5	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C38:6	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C40:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C40:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C40:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C40:4	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C40:5	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C40:6	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C42:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C42:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C42:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C42:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C42:4	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C42:5	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C44:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C44:4	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C44:5	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine acyl-alkyl C44:6	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C24:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C26:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C28:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C30:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C30:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C32:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C32:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C32:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C32:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C34:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C34:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C34:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C34:4	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C36:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C36:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C36:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C36:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C36:4	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C36:5	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C36:6	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C38:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C38:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C38:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C38:4	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C38:5	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C38:6	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C40:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C40:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y										
	Phosphatidylcholine diacyl C40:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y										

Accreditation Scope

SGS AXYS Analytical Services Ltd.
(formerly AXYS Analytical Services Ltd.)
file ref.: ACC-101 Rev. 34

				Pulp	Serum	Solids										Tissue						Urine	Water	Water, Non-Potable								
Compound Class	Compound	Accredited Method ID	SGS AXYS Metho	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE*	Maine DOH	ANAB	Pennsylvania DEP
	Phosphatidylcholine diacyl C40:4	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Phosphatidylcholine diacyl C40:5	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Phosphatidylcholine diacyl C40:6	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Phosphatidylcholine diacyl C42:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Phosphatidylcholine diacyl C42:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Phosphatidylcholine diacyl C42:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Phosphatidylcholine diacyl C42:4	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Phosphatidylcholine diacyl C42:5	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Phosphatidylcholine diacyl C42:6	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Pimelylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Proline	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Propenoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Propionylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Putrescine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sarcosine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Serine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Serotonin	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Spermidine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Spermine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sphingomyeline C16:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sphingomyeline C16:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sphingomyeline C18:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sphingomyeline C18:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sphingomyeline C20:2	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sphingomyeline C22:3	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sphingomyeline C24:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sphingomyeline C24:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sphingomyeline C26:0	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Sphingomyeline C26:1	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Symmetric dimethylarginine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Taurine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	taurochenodeoxycholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	taurocholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	taurodeoxycholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	taurolithocholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	tauroursodexoycholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Tetradecadienylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	tetradecanoic acid (myristic acid)	SGS AXYS MLM-001	MLM-001													Y																	
	Tetradecanoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Tetradecenoylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Threonine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Tiglylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Total dimethylarginine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Tryptophan	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Tyrosine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	ursodexoycholic acid	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Valerylcarnitine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
	Valine	SGS AXYS MLM-001	MLM-001		Y											Y						Y											
TBBPA	Tetrabromobisphenol A	SGS AXYS MLA-079	MLA-079		Y																												

Note*
Analysis of pesticides and PCBs in non-potable water samples by AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.

Legend

Y	Accreditation scope
YD	Accreditation scope, including DoD scope
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
FTS	Fluorotelomer sulfonates
HBCDD	Hexabromocyclododecane
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PFC	Perfluorinated Compounds
PPCP	Pharmaceutical and Personal Care Products
TBBPA	Tetrabromobisphenol A
California DPH	California Department of Public Health, Lab ID 2911 (target analytes shown are those approved 2014)
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003

CALA — Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2005 Standard)

CALA Testing Accreditation No. A 2637

ANAB — ANSI-ASQ National Accreditation Board, certificate ADE-1861, (ISO/IEC 17025:2005 and US DOD Standards)

ANAB ACCREDITED ISO/IEC 17025 DOD ELAP Certificate ADE-1861