

SGS

AXYS

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SGS AXYS Client No.: 4817

Client Address: Inland Empire Paper Company
3320 N. Argonne Rd.
Millwood, WA, US, 99212

The SGS AXYS contact for these data is Sean Campbell.

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CHAIN OF CUSTODY

2045 Mills Road West

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Sidney, British Columbia, Canada V8L 5X2

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SGS AXYS CLIENT #: 4817

REPORT TO:			INVOICE TO:			ANALYSIS REQUESTED				
Company	Inland Empire Paper Company		Company	Inland Empire Paper Company		PCB Analysis SGS Axys Method MLA-010				
Address	3320 N. Argonne Road Spokane, WA 99212		Address	3320 N. Argonne Road Spokane, WA 99212 PO# 114942						
Contact	Ben Carleton; David Demers		Contact	Ben Carleton						
Phone	(509) 924-1911		Phone	(509) 924-1911						
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E-mail	bencarleton@iepcoco.com; daviddemers@iepcoco.com		E-mail	bencarleton@iepcoco.com						
Project Name/Number: Quarterly PCB Analysis			Sampler's Name: David Demers Signature:							
Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	SGS AXYS Lab Sample ID (Lab use only)					
Final Outfall 001- PCB 2023-05-1819	WW	5-18-23	9:50	1L Amber	L39438-1	X				
Relinquished by (Signature)	Date	Time	Received by (Signature)			Courier	Waybill No.			
David Demers	5-23-23	10:45	Date 24-may-2023 Time 11:00							
Relinquished by (Signature)	Date	Time	Received by (Signature)			Sample Receipt				
			Date			Cooler				
Remarks						Temp °C				
						Custody Seal #				
						Seal Intact Y / N				
						Sample Tags Y / N				

SGS AXYS METHOD MLA-010 Rev 12

Form 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
Final Outfall 001-PCB 2023-05-19
Sample Collection:
19-May-2023 09:50

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4817

Project No.

QUARTERLY PCB ANALYSIS

Lab Sample I.D.:

L39418-1

Matrix: EFFLUENT FINAL

Sample Size:

0.967 L

Sample Receipt Date: 24-May-2023

Initial Calibration Date:

04-Aug-2023

Extraction Date: 01-Sep-2023

Instrument ID:

HR GC/MS

Analysis Date: 04-Oct-2023 Time: 00:47:03

GC Column ID:

SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename:

PB3B_236A S: 12

Injection Volume (uL): 1.0

Blank Data Filename:

PB3B_236A S: 10

Dilution Factor: N/A

Cal. Ver. Data Filename:

PB3B_236A S: 7

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	10.1	0.283 (S)	3.29	1.001
3-MoCB	2		B J	8.53	0.341 (S)	2.77	0.988
4-MoCB	3		B J	14.9	0.319 (S)	2.78	1.001
2,2'-DiCB	4		B J	21.7	1.43 (S)	1.61	1.001
2,3-DiCB	5		U		0.916 (S)		
2,3'-DiCB	6		B J	6.96	0.865 (S)	1.40	1.174
2,4-DiCB	7		B J	4.82	0.842 (S)	1.46	1.156
2,4'-DiCB	8		B J	25.1	0.829 (S)	1.74	1.205
2,5-DiCB	9		B J	2.54	0.867 (S)	1.51	1.144
2,6-DiCB	10		U		0.876 (S)		
3,3'-DiCB	11		B	77.4	0.932 (S)	1.57	0.969
3,4-DiCB	12	12 + 13	C B J	4.14	0.930 (S)	1.64	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.883 (S)		
4,4'-DiCB	15		B J	13.6	0.948 (S)	1.42	1.001
2,2',3-TriCB	16		J	18.5	1.19 (S)	1.13	1.165
2,2',4-TriCB	17		J	13.7	0.984 (S)	0.91	1.137
2,2',5-TriCB	18	18 + 30	C J	32.2	0.822 (S)	1.12	1.112
2,2',6-TriCB	19		B J	6.39	1.02 (S)	0.90	1.001
2,3,3'-TriCB	20	20 + 28	C B J	26.8	0.815 (S)	1.04	0.848
2,3,4-TriCB	21	21 + 33	C B J	15.8	0.839 (S)	0.94	0.858
2,3,4'-TriCB	22		B J	11.9	0.831 (S)	0.94	0.873
2,3,5-TriCB	23		U		0.817 (S)		
2,3,6-TriCB	24		U		0.743 (S)		
2,3',4-TriCB	25		J	2.33	0.769 (S)	0.97	0.825
2,3',5-TriCB	26	26 + 29	C B J	6.70	0.810 (S)	0.98	1.298
2,3',6-TriCB	27		J	2.35	0.717 (S)	1.12	1.151
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		J	25.8	0.802 (S)	1.02	0.837
2,4',6-TriCB	32		J	7.07	0.777 (S)	1.06	1.195
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		U		0.834 (S)		
3,3',4-TriCB	35		U		0.924 (S)		
3,3',5-TriCB	36		U		0.786 (S)		
3,4,4'-TriCB	37		B J	8.32	0.959 (S)	0.91	1.001
3,4,5-TriCB	38		U		0.845 (S)		
3,4',5-TriCB	39		U		0.770 (S)		

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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 J	11.7	0.955 (S)	0.83	1.335
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		J	2.39	1.09 (S)	0.76	1.309
2,2',3,5'-TeCB	43		U		1.04 (S)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C B J	31.7	0.896 (S)	0.88	1.284
2,2',3,6'-TeCB	45	45 + 51	C B J	6.05	0.976 (S)	0.68	1.145
2,2',3,6'-TeCB	46		U		1.08 (S)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48		J	2.83	0.929 (S)	0.81	1.271
2,2',4,5'-TeCB	49	49 + 69	C B J	10.9	0.882 (S)	0.67	1.256
2,2',4,6'-TeCB	50	50 + 53	C J	3.24	0.918 (S)	0.77	1.109
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		B J	18.6	0.934 (S)	0.79	1.232
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		U		0.729 (S)		
2,3,3',4'-TeCB	55		U		0.883 (S)		
2,3,3',4'-TeCB	56		B J	5.78	0.878 (S)	0.69	0.905
2,3,3',5'-TeCB	57		U		0.860 (S)		
2,3,3',5'-TeCB	58		U		0.816 (S)		
2,3,3',6'-TeCB	59	59 + 62 + 75	C B J	1.93	0.732 (S)	0.67	1.300
2,3,4,4'-TeCB	60		J	3.23	0.866 (S)	0.67	0.911
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C B J	20.8	0.852 (S)	0.79	0.874
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63		U		0.829 (S)		
2,3,4',6'-TeCB	64		K J	7.20	0.759 (S)	0.63	1.346
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		B J	11.2	0.843 (S)	0.70	0.884
2,3',4,5'-TeCB	67		U		0.747 (S)		
2,3',4,5'-TeCB	68		K J	3.56	0.749 (S)	0.89	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		0.812 (S)		
2,3',5,6'-TeCB	73		U		0.765 (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		B J	1.92	0.869 (S)	0.86	1.001
3,3',4,5'-TeCB	78		U		0.959 (S)		
3,3',4,5'-TeCB	79		U		0.749 (S)		
3,3',5,5'-TeCB	80		U		0.775 (S)		
3,4,4',5'-TeCB	81		U		0.878 (S)		
2,2',3,3',4'-PeCB	82		U		1.77 (S)		
2,2',3,3',5'-PeCB	83	83 + 99	C K B J	7.21	1.57 (S)	1.16	0.886
2,2',3,3',6'-PeCB	84		J	3.85	1.65 (S)	1.65	1.164
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C J	2.52	1.28 (S)	1.66	0.921
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C K B J	10.4	1.35 (S)	1.15	0.903
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	2.53	1.51 (S)	1.48	1.154
2,2',3,4,6'-PeCB	89		U		1.61 (S)		
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C K B J	12.3	1.32 (S)	1.81	0.870
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		J	2.52	1.55 (S)	1.46	0.853
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C B J	12.9	1.45 (S)	1.71	1.120
2,2',3,5,6'-PeCB	94		U		1.55 (S)		
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		0.550 (S)		
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		1.34 (S)		
2,2',4,6,6'-PeCB	104		U		0.629 (S)		
2,3,3',4,4'-PeCB	105		B J	4.74	0.905 (S)	1.44	1.001
2,3,3',4,5-PeCB	106		U		0.956 (S)		
2,3,3',4',5-PeCB	107		J	1.53	0.943 (S)	1.68	0.999
2,3,3',4,5'-PeCB	108	108 + 124	C U		0.959 (S)		
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	13.8	1.19 (S)	1.50	0.926
2,3,3',5,5'-PeCB	111		U		1.12 (S)		
2,3,3',5,6-PeCB	112		U		1.08 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		U		0.933 (S)		
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	9.02	0.961 (S)	1.34	1.001
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		1.12 (S)		
2,3',4,5',6-PeCB	121		U		1.10 (S)		
2',3,3',4,5-PeCB	122		U		1.06 (S)		
2',3,4,4',5-PeCB	123		U		1.04 (S)		
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		1.04 (S)		
3,3',4,5,5'-PeCB	127		U		0.995 (S)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C J	2.47	0.947 (S)	1.39	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C B J	14.0	0.994 (S)	1.31	0.929
2,2',3,3',4,5'-HxCB	130		U		1.22 (S)		
2,2',3,3',4,6-HxCB	131		U		1.23 (S)		
2,2',3,3',4,6'-HxCB	132		K J	3.79	1.11 (S)	0.84	1.177
2,2',3,3',5,5'-HxCB	133		U		1.11 (S)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		1.21 (S)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C B J	5.95	0.833 (S)	1.35	1.106
2,2',3,3',6,6'-HxCB	136		J	1.58	0.646 (S)	1.09	1.025
2,2',3,4,4',5-HxCB	137		U		1.08 (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		0.989 (S)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		K J	3.18	1.05 (S)	1.55	0.903
2,2',3,4,5,6-HxCB	142		U		1.18 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		0.868 (S)		
2,2',3,4,6,6'-HxCB	145		U		0.650 (S)		
2,2',3,4',5,5'-HxCB	146		K J	2.30	0.954 (S)	0.85	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C B J	8.93	1.00 (S)	1.30	1.135
2,2',3,4',5,6'-HxCB	148		U		0.877 (S)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.624 (S)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.645 (S)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C K B J	12.9	0.862 (S)	0.79	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	0.926	0.733 (S)	2.48	1.000
2,3,3',4,4',5-HxCB	156	156 + 157	C U		1.07 (S)		
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		0.753 (S)		
2,3,3',4,5,5'-HxCB	159		U		0.850 (S)		
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		0.811 (S)		
2,3,3',4',5,5'-HxCB	162		U		0.840 (S)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		K J	1.38	0.834 (S)	1.56	0.921
2,3,3',5,5',6-HxCB	165		U		0.855 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		K B J	0.775	0.749 (S)	0.78	1.001
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.774 (S)		
2,2',3,3',4,4',5-HpCB	170		K B J	4.00	0.966 (S)	0.80	1.001
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		0.991 (S)		
2,2',3,3',4,5,5'-HpCB	172		U		1.04 (S)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		K J	4.22	0.892 (S)	1.22	1.135
2,2',3,3',4,5',6-HpCB	175		U		0.886 (S)		
2,2',3,3',4,6,6'-HpCB	176		U		0.693 (S)		
2,2',3,3',4',5,6-HpCB	177		K J	1.89	0.966 (S)	1.53	1.147
2,2',3,3',5,5',6-HpCB	178		J	1.10	0.924 (S)	1.09	1.086
2,2',3,3',5,6,6'-HpCB	179		J	1.23	0.665 (S)	1.01	1.011
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C B J	10.5	0.771 (S)	1.10	1.000
2,2',3,4,4',5,6-HpCB	181		U		0.902 (S)		
2,2',3,4,4',5,6'-HpCB	182		U		0.840 (S)		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C K J	2.04	0.902 (S)	1.77	1.127
2,2',3,4,4',6,6'-HpCB	184		U		0.613 (S)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.666 (S)		
2,2',3,4',5,5',6-HpCB	187		K B J	5.39	0.767 (S)	0.65	1.111
2,2',3,4',5,6,6'-HpCB	188		U		0.679 (S)		
2,3,3',4,4',5,5'-HpCB	189		U		0.881 (S)		
2,3,3',4,4',5,6-HpCB	190		J	1.17	0.786 (S)	1.06	0.947
2,3,3',4,4',5',6-HpCB	191		U		0.781 (S)		
2,3,3',4,5,5',6-HpCB	192		U		0.795 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		J	1.96	0.853 (S)	0.84	0.992
2,2',3,3',4,4',5,6-OcCB	195		U		0.934 (S)		
2,2',3,3',4,4',5,6'-OcCB	196		U		0.453 (S)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C U		0.304 (S)		
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C J	1.44	0.439 (S)	0.88	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		U		0.311 (S)		
2,2',3,3',5,5',6,6'-OcCB	202		K B J	0.646	0.438 (S)	3.91	1.000
2,2',3,4,4',5,5',6-OcCB	203		J	0.618	0.403 (S)	0.81	0.919
2,2',3,4,4',5,6,6'-OcCB	204		U		0.317 (S)		
2,3,3',4,4',5,5',6-OcCB	205		U		0.588 (S)		
2,2',3,3',4,4',5,5',6-NoCB	206		K B J	1.50	0.787 (S)	0.98	1.001
2,2',3,3',4,4',5,6,6'-NoCB	207		U		0.580 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		0.557 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		B J	2.16	0.327 (S)	1.27	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 limit of quantification; 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: _____ Henry Huang _____

SGS AXYS METHOD MLA-010 Rev 12

Form 2
PCB CONGENER ANALYSIS REPORTCLIENT SAMPLE NO.
Final Outfall 001-PCB 2023-05-19
Sample Collection:
19-May-2023 09:50

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4817
 Matrix: EFFLUENT FINAL
 Sample Receipt Date: 24-May-2023
 Extraction Date: 01-Sep-2023
 Analysis Date: 04-Oct-2023 Time: 00:47:03
 Extract Volume (uL): 20
 Injection Volume (uL): 1.0
 Dilution Factor: N/A
 Concentration Units: pg absolute

Project No. QUARTERLY PCB ANALYSIS
 Lab Sample I.D.: L39418-1
 Sample Size: 0.967 L
 Initial Calibration Date: 04-Aug-2023
 Instrument ID: HR GC/MS
 GC Column ID: SPB OCTYL
 Sample Data Filename: PB3B_236A S: 12
 Blank Data Filename: PB3B_236A S: 10
 Cal. Ver. Data Filename: PB3B_236A S: 7

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.

LABELLED COMPOUND	IUPAC NO. ¹	CO-ELUTIONS	LAB FLAG ²	SPIKE CONC.	CONC. FOUND	R(%) ³	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	317	15.9	3.47	0.722
13C12-4-MoCB	3L			2000	336	16.8	3.48	0.860
13C12-2,2'-DiCB	4L			2000	326	16.3	1.52	0.875
13C12-4,4'-DiCB	15L			2000	380	19.0	1.51	1.252
13C12-2,2',6-TriCB	19L			2000	402	20.1	1.10	1.072
13C12-3,4,4'-TriCB	37L			2000	379	19.0	1.02	1.091
13C12-2,2',6,6'-TeCB	54L			2000	389	19.4	0.77	0.813
13C12-3,3',4,4'-TeCB	77L			2000	451	22.6	0.76	1.396
13C12-3,4,4',5-TeCB	81L			2000	422	21.1	0.76	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	300	15.0	1.63	0.809
13C12-2,3,3',4,4'-PeCB	105L			2000	466	23.3	1.54	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	451	22.6	1.57	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	432	21.6	1.53	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	422	21.1	1.54	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	444	22.2	1.55	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	341	17.0	1.29	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	1030	25.8	1.21	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	513	25.7	1.16	1.077
13C12-3,3',4,4',5,5'-HxCB	169L			2000	549	27.5	1.14	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	547	27.4	1.07	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	511	25.6	1.09	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	448	22.4	1.08	0.711
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	496	24.8	1.00	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	281	14.1	0.86	0.817
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	561	28.0	0.80	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	532	26.6	0.78	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	533	26.7	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	430	21.5	1.20	1.075

CLEANUP STANDARD

13C12-2,4,4'-TriCB	28L			2000	943	47.2	1.02	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1280	63.9	1.63	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1160	58.0	1.10	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: _____ Henry Huang _____

HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
Final Outfall 001-PCB 2023-05-19
Sample Collection:
19-May-2023 09:50

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4817

Project No.

QUARTERLY PCB ANALYSIS

Lab Sample I.D.:

L39418-1

Matrix: EFFLUENT FINAL

Sample Size: 0.967 L

Sample Receipt Date: 24-May-2023

Initial Calibration Date: 04-Aug-2023

Extraction Date: 01-Sep-2023

Instrument ID: HR GC/MS

Analysis Date: 04-Oct-2023 Time: 00:47:03

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename: PB3B_236A S: 12

Injection Volume (uL): 1.0

Blank Data Filename: PB3B_236A S: 10

Dilution Factor: N/A

Cal. Ver. Data Filename: PB3B_236A S: 7

Concentration Units: pg/L

PCB HOMOLOGUE GROUP

LAB
FLAG ¹

CONC.
FOUND

Total Monochloro Biphenyls 33.5

Total Dichloro Biphenyls 156

Total Trichloro Biphenyls 178

Total Tetrachloro Biphenyls 132

Total Pentachloro Biphenyls 53.4

Total Hexachloro Biphenyls 32.9

Total Heptachloro Biphenyls 14.0

Total Octachloro Biphenyls 4.02

Total Nonachloro Biphenyls U

Decachloro Biphenyl 2.16

TOTAL PCBs 606

(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: _____Henry Huang_____

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.

SGS AXYS METHOD MLA-010 Rev 12

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

CLIENT SAMPLE NO.
Final Outfall 001-PCB 2023-05-19

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4817

Matrix: EFFLUENT FINAL

Sample Size: 0.967 L

Concentration Units: pg/L

Sample Collection: 19-May-2023 09:50

Project No. QUARTERLY PCB ANALYSIS

Lab Sample I.D.: L39418-1

GC Column ID(s): SPB OCTYL

Sample Data Filename(s): PB3B_236A S: 12

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL)	WHO 1998 TEF	TEQ		
							U=0	U=1/2 RL	U=RL
3,3',4,4'-TeCB	77			1.92	0.869	0.0001	1.92e-04	1.92e-04	
3,4,4',5-TeCB	81		U		0.878	0.0001	0.00e+00	4.39e-05	
2,3,3',4,4'-PeCB	105			4.74	0.905	0.0001	4.74e-04	4.74e-04	
2,3,4,4',5-PeCB	114		U		0.933	0.0005	0.00e+00	2.33e-04	
2,3',4,4',5-PeCB	118			9.02	0.961	0.0001	9.02e-04	9.02e-04	
2',3,4,4',5-PeCB	123		U		1.04	0.0001	0.00e+00	5.20e-05	
3,3',4,4',5-PeCB	126		U		1.04	0.1	0.00e+00	5.20e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C U		1.07	0.0005	0.00e+00	2.68e-04	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.749	0.00001	0.00e+00	3.75e-06	
3,3',4,4',5,5'-HxCB	169		U		0.774	0.01	0.00e+00	3.87e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.881	0.0001	0.00e+00	4.41e-05	
TOTAL TEQ							0.00157	0.0581	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 TEF	TEQ		
							U=0	U=1/2 RL	U=RL
3,3',4,4'-TeCB	77			1.92	0.869	0.0001	1.92e-04	1.92e-04	
3,4,4',5-TeCB	81		U		0.878	0.0003	0.00e+00	1.32e-04	
2,3,3',4,4'-PeCB	105			4.74	0.905	0.00003	1.42e-04	1.42e-04	
2,3,4,4',5-PeCB	114		U		0.933	0.00003	0.00e+00	1.40e-05	
2,3',4,4',5-PeCB	118			9.02	0.961	0.00003	2.71e-04	2.71e-04	
2',3,4,4',5-PeCB	123		U		1.04	0.00003	0.00e+00	1.56e-05	
3,3',4,4',5-PeCB	126		U		1.04	0.1	0.00e+00	5.20e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C U		1.07	0.00003	0.00e+00	1.61e-05	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		U		0.749	0.00003	0.00e+00	1.12e-05	
3,3',4,4',5,5'-HxCB	169		U		0.774	0.03	0.00e+00	1.16e-02	
2,3,3',4,4',5,5'-HpCB	189		U		0.881	0.00003	0.00e+00	1.32e-05	
TOTAL TEQ							0.000605	0.0644	

(1) Where applicable, custom lab flags may 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: _____Henry Huang_____

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.

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

Contract No.: 4817

Project No.

QUARTERLY PCB ANALYSIS

Lab Sample I.D.:

L39418-1

Matrix: EFFLUENT FINAL

Sample Size:

0.967 L

Sample Receipt Date: 24-May-2023

Initial Calibration Date:

04-Aug-2023

Extraction Date: 01-Sep-2023

Instrument ID:

HR GC/MS

Analysis Date: 04-Oct-2023 Time: 00:47:03

GC Column ID:

SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename:

PB3B_236A S: 12

Injection Volume (uL): 1.0

Blank Data Filename:

PB3B_236A S: 10

Dilution Factor: N/A

Cal. Ver. Data Filename:

PB3B_236A S: 7

Concentration Units: pg/L

COMPOUND	CAS NO.	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL)
Aroclor 1016	12674-11-2	U		2.24
Aroclor 1221	11104-28-2	U		1.16
Aroclor 1232	11141-16-5	U		2.79
Aroclor 1242	53469-21-9		330	2.49
Aroclor 1248	12672-29-6	U		5.46
Aroclor 1254	11097-69-1	U		12.6
Aroclor 1260	11096-82-5		52.5	4.83

(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: _____Henry Huang_____

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.

SGS AXYS METHOD MLA-010 Rev 12

Form 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.

Lab Blank

Sample Collection:

N/A

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4817

Project No.

N/A

Lab Sample I.D.:

WG86864-101

Matrix: AQUEOUS

Sample Size:

1.00 L

Sample Receipt Date: N/A

Initial Calibration Date:

04-Aug-2023

Extraction Date: 01-Sep-2023

Instrument ID:

HR GC/MS

Analysis Date: 03-Oct-2023 Time: 22:39:51

GC Column ID:

SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename:

PB3B_236A S: 10

Injection Volume (uL): 1.0

Blank Data Filename:

PB3B_236A S: 10

Dilution Factor: N/A

Cal. Ver. Data Filename:

PB3B_236A S: 7

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		J	6.25	0.0978 (S)	2.87	1.001
3-MoCB	2		J	3.32	0.126 (S)	2.95	0.989
4-MoCB	3		J	8.35	0.126 (S)	3.09	1.002
2,2'-DiCB	4		J	4.74	0.580 (S)	1.37	1.001
2,3-DiCB	5		U		0.410 (S)		
2,3'-DiCB	6		J	1.77	0.387 (S)	1.39	1.174
2,4-DiCB	7		J	1.65	0.377 (S)	1.40	1.155
2,4'-DiCB	8		J	3.94	0.372 (S)	1.59	1.205
2,5-DiCB	9		J	0.718	0.389 (S)	1.36	1.144
2,6-DiCB	10		U		0.393 (S)		
3,3'-DiCB	11		J	15.1	0.417 (S)	1.67	0.969
3,4-DiCB	12	12 + 13	C J	1.50	0.417 (S)	1.47	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		U		0.396 (S)		
4,4'-DiCB	15		J	5.33	0.450 (S)	1.49	1.001
2,2',3-TriCB	16		K J	1.45	0.448 (S)	1.25	1.164
2,2',4-TriCB	17		J	0.989	0.370 (S)	1.17	1.136
2,2',5-TriCB	18	18 + 30	C J	2.75	0.309 (S)	0.95	1.112
2,2',6-TriCB	19		J	2.96	0.373 (S)	1.08	1.001
2,3,3'-TriCB	20	20 + 28	C J	3.31	0.319 (S)	1.10	0.848
2,3,4-TriCB	21	21 + 33	C J	2.48	0.329 (S)	1.00	0.858
2,3,4'-TriCB	22		J	1.20	0.326 (S)	0.96	0.873
2,3,5-TriCB	23		J	1.70	0.320 (S)	0.93	1.280
2,3,6-TriCB	24		U		0.279 (S)		
2,3',4-TriCB	25		U		0.301 (S)		
2,3',5-TriCB	26	26 + 29	C J	0.713	0.317 (S)	0.93	1.299
2,3',6-TriCB	27		U		0.269 (S)		
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		J	2.37	0.314 (S)	0.92	0.837
2,4',6-TriCB	32		J	0.582	0.304 (S)	0.96	1.195
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		J	1.55	0.327 (S)	0.99	1.270
3,3',4-TriCB	35		U		0.362 (S)		
3,3',5-TriCB	36		U		0.308 (S)		
3,4,4'-TriCB	37		J	2.48	0.383 (S)	1.19	1.001
3,4,5-TriCB	38		U		0.331 (S)		
3,4',5-TriCB	39		U		0.302 (S)		

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 J	1.34	0.588 (S)	0.69	1.335
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		U		0.669 (S)		
2,2',3,5'-TeCB	43		U		0.637 (S)		
2,2',3,5'-TeCB	44	44 + 47 + 65	C J	4.12	0.551 (S)	0.85	1.284
2,2',3,6'-TeCB	45	45 + 51	C J	0.859	0.600 (S)	0.77	1.148
2,2',3,6'-TeCB	46		U		0.663 (S)		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48		U		0.572 (S)		
2,2',4,5'-TeCB	49	49 + 69	C J	1.28	0.543 (S)	0.81	1.256
2,2',4,6'-TeCB	50	50 + 53	C U		0.565 (S)		
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		J	2.72	0.575 (S)	0.71	1.232
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		J	2.28	0.445 (S)	0.88	1.001
2,3,3',4'-TeCB	55		U		0.306 (S)		
2,3,3',4'-TeCB	56		J	0.824	0.304 (S)	0.83	0.905
2,3,3',5'-TeCB	57		U		0.298 (S)		
2,3,3',5'-TeCB	58		U		0.282 (S)		
2,3,3',6'-TeCB	59	59 + 62 + 75	C K J	0.531	0.450 (S)	1.43	1.299
2,3,4,4'-TeCB	60		J	0.310	0.300 (S)	0.77	0.913
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C J	2.23	0.295 (S)	0.68	0.873
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63		U		0.287 (S)		
2,3,4',6'-TeCB	64		K J	0.650	0.467 (S)	0.63	1.345
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		J	1.36	0.292 (S)	0.79	0.884
2,3',4,5'-TeCB	67		U		0.258 (S)		
2,3',4,5'-TeCB	68		U		0.259 (S)		
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		0.281 (S)		
2,3',5',6'-TeCB	73		U		0.471 (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		J	1.47	0.311 (S)	0.75	1.001
3,3',4,5'-TeCB	78		U		0.332 (S)		
3,3',4,5'-TeCB	79		U		0.259 (S)		
3,3',5,5'-TeCB	80		U		0.268 (S)		
3,4,4',5'-TeCB	81		K J	1.13	0.295 (S)	0.86	1.001
2,2',3,3',4'-PeCB	82		U		0.776 (S)		
2,2',3,3',5'-PeCB	83	83 + 99	C K J	0.905	0.685 (S)	0.80	0.885
2,2',3,3',6'-PeCB	84		U		0.723 (S)		
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C U		0.562 (S)		
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C J	1.86	0.590 (S)	1.41	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		0.660 (S)		
2,2',3,4,6'-PeCB	89		U		0.707 (S)		
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C K J	1.63	0.576 (S)	2.36	0.870
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		U		0.677 (S)		
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C J	2.41	0.634 (S)	1.34	1.121
2,2',3,5,6'-PeCB	94		U		0.677 (S)		
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		U		0.241 (S)		
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				

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',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		0.589 (S)		
2,2',4,6,6'-PeCB	104		J	1.65	0.277 (S)	1.47	1.001
2,3,3',4,4'-PeCB	105		J	1.86	0.387 (S)	1.33	1.001
2,3,3',4,5-PeCB	106		U		0.397 (S)		
2,3,3',4',5-PeCB	107		U		0.392 (S)		
2,3,3',4,5'-PeCB	108	108 + 124	C U		0.398 (S)		
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	2.07	0.521 (S)	1.49	0.926
2,3,3',5,5'-PeCB	111		U		0.490 (S)		
2,3,3',5,6-PeCB	112		U		0.472 (S)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		J	1.27	0.386 (S)	1.52	1.001
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	2.46	0.395 (S)	1.52	1.001
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.491 (S)		
2,3',4,5',6-PeCB	121		U		0.484 (S)		
2',3,3',4,5-PeCB	122		U		0.441 (S)		
2',3,4,4',5-PeCB	123		J	1.09	0.423 (S)	1.77	1.000
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		K J	1.19	0.429 (S)	1.46	1.000
3,3',4,5,5'-PeCB	127		U		0.413 (S)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C U		0.528 (S)		
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C K J	1.67	0.554 (S)	1.01	0.929
2,2',3,3',4,5'-HxCB	130		U		0.680 (S)		
2,2',3,3',4,6-HxCB	131		U		0.685 (S)		
2,2',3,3',4,6'-HxCB	132		U		0.619 (S)		
2,2',3,3',5,5'-HxCB	133		U		0.621 (S)		
2,2',3,3',5,6-HxCB	134	134 + 143	C U		0.674 (S)		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C K J	1.22	0.398 (S)	2.48	1.105
2,2',3,3',6,6'-HxCB	136		U		0.308 (S)		
2,2',3,4,4',5-HxCB	137		U		0.602 (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		0.552 (S)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		U		0.584 (S)		
2,2',3,4,5,6-HxCB	142		U		0.657 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		U		0.414 (S)		
2,2',3,4,6,6'-HxCB	145		U		0.310 (S)		
2,2',3,4',5,5'-HxCB	146		U		0.532 (S)		
2,2',3,4',5,6-HxCB	147	147 + 149	C K J	1.08	0.559 (S)	0.87	1.136
2,2',3,4',5,6'-HxCB	148		U		0.418 (S)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.298 (S)		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		U		0.308 (S)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C K J	1.47	0.481 (S)	1.03	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		J	1.26	0.370 (S)	1.10	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C J	2.57	0.565 (S)	1.35	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		U		0.420 (S)		
2,3,3',4,5,5'-HxCB	159		U		0.474 (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		0.452 (S)		
2,3,3',4',5,5'-HxCB	162		U		0.469 (S)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		U		0.465 (S)		
2,3,3',5,5',6-HxCB	165		U		0.477 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		J	1.22	0.411 (S)	1.16	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		U		0.807 (S)		
2,2',3,3',4,4',5-HpCB	170		J	1.31	0.484 (S)	1.10	1.000
2,2',3,3',4,4',6-HpCB	171	171 + 173	C U		0.488 (S)		
2,2',3,3',4,5,5'-HpCB	172		U		0.514 (S)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		U		0.439 (S)		
2,2',3,3',4,5',6-HpCB	175		U		0.436 (S)		
2,2',3,3',4,6,6'-HpCB	176		U		0.341 (S)		
2,2',3,3',4',5,6-HpCB	177		U		0.476 (S)		
2,2',3,3',5,5',6-HpCB	178		U		0.455 (S)		
2,2',3,3',5,6,6'-HpCB	179		U		0.327 (S)		
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C J	1.54	0.385 (S)	0.91	1.001
2,2',3,4,4',5,6-HpCB	181		U		0.444 (S)		
2,2',3,4,4',5,6'-HpCB	182		J	1.39	0.414 (S)	0.89	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C U		0.444 (S)		
2,2',3,4,4',6,6'-HpCB	184		U		0.302 (S)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.328 (S)		
2,2',3,4',5,5',6-HpCB	187		J	1.54	0.377 (S)	0.90	1.110
2,2',3,4',5,6,6'-HpCB	188		J	1.15	0.333 (S)	1.12	1.001
2,3,3',4,4',5,5'-HpCB	189		K J	0.959	0.396 (S)	1.27	1.000
2,3,3',4,4',5,6-HpCB	190		U		0.387 (S)		
2,3,3',4,4',5',6-HpCB	191		U		0.384 (S)		
2,3,3',4,5,5',6-HpCB	192		U		0.391 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		U		0.336 (S)		
2,2',3,3',4,4',5,6-OcCB	195		U		0.368 (S)		
2,2',3,3',4,4',5,6'-OcCB	196		U		0.298 (S)		
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C K J	0.205	0.200 (S)	1.57	1.045
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C U		0.288 (S)		
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		0.204 (S)		
2,2',3,3',5,5',6,6'-OcCB	202		K J	1.72	0.277 (S)	0.74	1.001
2,2',3,4,4',5,5',6-OcCB	203		U		0.265 (S)		
2,2',3,4,4',5,6,6'-OcCB	204		U		0.208 (S)		
2,3,3',4,4',5,5',6-OcCB	205		K J	0.955	0.238 (S)	1.14	1.000
2,2',3,3',4,4',5,5',6-NoCB	206		J	1.32	0.335 (S)	0.73	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207		U		0.253 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		J	1.42	0.248 (S)	0.80	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209		J	2.80	0.193 (S)	1.08	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 limit of quantification; 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: _____ Henry Huang _____

SGS AXYS METHOD MLA-010 Rev 12

Form 2
PCB CONGENER ANALYSIS REPORTCLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4817
 Matrix: AQUEOUS
 Sample Receipt Date: N/A
 Extraction Date: 01-Sep-2023
 Analysis Date: 03-Oct-2023 Time: 22:39:51
 Extract Volume (uL): 20
 Injection Volume (uL): 1.0
 Dilution Factor: N/A
 Concentration Units: pg absolute

Project No. N/A
 Lab Sample I.D.: WG86864-101
 Sample Size: 1.00 L
 Initial Calibration Date: 04-Aug-2023
 Instrument ID: HR GC/MS
 GC Column ID: SPB OCTYL
 Sample Data Filename: PB3B_236A S: 10
 Blank Data Filename: PB3B_236A S: 10
 Cal. Ver. Data Filename: PB3B_236A S: 7

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.

LABELLED COMPOUND	IUPAC NO. ¹	CO-ELUTIONS	LAB FLAG ²	SPIKE CONC.	CONC. FOUND	R(%) ³	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L			2000	985	49.2	3.54	0.722
13C12-4-MoCB	3L			2000	944	47.2	3.50	0.859
13C12-2,2'-DiCB	4L			2000	959	48.0	1.51	0.875
13C12-4,4'-DiCB	15L			2000	971	48.6	1.55	1.252
13C12-2,2',6-TriCB	19L			2000	1090	54.3	1.09	1.072
13C12-3,4,4'-TriCB	37L			2000	964	48.2	1.03	1.091
13C12-2,2',6,6'-TeCB	54L			2000	1030	51.7	0.76	0.813
13C12-3,3',4,4'-TeCB	77L			2000	1190	59.7	0.76	1.396
13C12-3,4,4',5-TeCB	81L			2000	1170	58.7	0.74	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	825	41.2	1.67	0.809
13C12-2,3,3',4,4'-PeCB	105L			2000	1230	61.4	1.57	1.201
13C12-2,3,4,4',5-PeCB	114L			2000	1250	62.3	1.57	1.179
13C12-2,3',4,4',5-PeCB	118L			2000	1160	58.1	1.57	1.162
13C12-2',3,4,4',5-PeCB	123L			2000	1180	58.8	1.58	1.151
13C12-3,3',4,4',5-PeCB	126L			2000	1220	60.8	1.55	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	834	41.7	1.31	0.785
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	4000	2830	70.7	1.17	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1350	67.3	1.18	1.077
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1360	68.1	1.20	1.192
13C12-2,2',3,3',4,4',5-HpCB	170L			2000	1340	67.1	1.08	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1270	63.5	1.09	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1110	55.3	1.08	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1190	59.4	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			2000	707	35.3	0.87	0.818
13C12-2,3,3',4,4',5,5',6-OcCB	205L			2000	1380	69.0	0.83	1.010
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1340	67.1	0.78	1.044
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1290	64.4	0.77	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1040	51.9	1.25	1.075

CLEANUP STANDARD

13C12-2,4,4'-TriCB	28L			2000	886	44.3	1.02	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1200	59.9	1.60	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1110	55.4	1.07	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: _____Henry Huang_____

Form 1A
HOMOLOGUE TOTAL PCB ANALYSIS REPORT

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

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4817

Project No. N/A
Lab Sample I.D.: WG86864-101

Matrix: AQUEOUS Sample Size: 1.00 L

Sample Receipt Date: N/A Initial Calibration Date: 04-Aug-2023

Extraction Date: 01-Sep-2023 Instrument ID: HR GC/MS

Analysis Date: 03-Oct-2023 Time: 22:39:51 GC Column ID: SPB OCTYL

Extract Volume (uL): 20 Sample Data Filename: PB3B_236A S: 10

Injection Volume (uL): 1.0 Blank Data Filename: PB3B_236A S: 10

Dilution Factor: N/A Cal. Ver. Data Filename: PB3B_236A S: 7

Concentration Units: pg/L

PCB HOMOLOGUE GROUP	LAB FLAG ¹	CONC. FOUND
Total Monochloro Biphenyls		17.9
Total Dichloro Biphenyls		34.7
Total Trichloro Biphenyls		23.1
Total Tetrachloro Biphenyls		18.8
Total Pentachloro Biphenyls		14.7
Total Hexachloro Biphenyls		5.05
Total Heptachloro Biphenyls		6.93
Total Octachloro Biphenyls	U	
Total Nonachloro Biphenyls		2.74
Decachloro Biphenyl		2.80
TOTAL PCBs		127

(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: _____Henry Huang_____

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.

SGS AXYS METHOD MLA-010 Rev 12

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4817

Matrix: AQUEOUS

Sample Size: 1.00 L

Concentration Units: pg/L

Sample Collection: N/A

Project No. N/A

Lab Sample I.D.: WG86864-101

GC Column ID(s): SPB OCTYL

Sample Data Filename(s): PB3B_236A S: 10

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL)	WHO 1998 TEF	TEQ		
							U=0	U=1/2 RL	U=RL
3,3',4,4'-TeCB	77			1.47	0.311	0.0001	1.47e-04	1.47e-04	
3,4,4',5'-TeCB	81		U		0.295	0.0001	0.00e+00	1.48e-05	
2,3,3',4,4'-PeCB	105			1.86	0.387	0.0001	1.86e-04	1.86e-04	
2,3,4,4',5'-PeCB	114			1.27	0.386	0.0005	6.35e-04	6.35e-04	
2,3',4,4',5'-PeCB	118			2.46	0.395	0.0001	2.46e-04	2.46e-04	
2',3,4,4',5'-PeCB	123			1.09	0.423	0.0001	1.09e-04	1.09e-04	
3,3',4,4',5'-PeCB	126		U		0.429	0.1	0.00e+00	2.15e-02	
2,3,3',4,4',5'-HxCB	156	156 + 157	C	2.57	0.565	0.0005	1.29e-03	1.29e-03	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			1.22	0.411	0.00001	1.22e-05	1.22e-05	
3,3',4,4',5,5'-HxCB	169		U		0.807	0.01	0.00e+00	4.04e-03	
2,3,3',4,4',5,5'-HpCB	189		U		0.396	0.0001	0.00e+00	1.98e-05	
TOTAL TEQ							0.00262	0.0281	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL)	WHO 2005 TEF	TEQ		
							U=0	U=1/2 RL	U=RL
3,3',4,4'-TeCB	77			1.47	0.311	0.0001	1.47e-04	1.47e-04	
3,4,4',5-TeCB	81		U		0.295	0.0003	0.00e+00	4.43e-05	
2,3,3',4,4'-PeCB	105			1.86	0.387	0.00003	5.58e-05	5.58e-05	
2,3,4,4',5-PeCB	114			1.27	0.386	0.00003	3.81e-05	3.81e-05	
2,3',4,4',5-PeCB	118			2.46	0.395	0.00003	7.38e-05	7.38e-05	
2',3,4,4',5-PeCB	123			1.09	0.423	0.00003	3.27e-05	3.27e-05	
3,3',4,4',5-PeCB	126		U		0.429	0.1	0.00e+00	2.15e-02	
2,3,3',4,4',5-HxCB	156	156 + 157	C	2.57	0.565	0.00003	7.71e-05	7.71e-05	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			1.22	0.411	0.00003	3.66e-05	3.66e-05	
3,3',4,4',5,5'-HxCB	169		U		0.807	0.03	0.00e+00	1.21e-02	
2,3,3',4,4',5,5'-HpCB	189		U		0.396	0.00003	0.00e+00	5.94e-06	
TOTAL TEQ							0.000461	0.0341	

(1) Where applicable, custom lab flags may 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: _____Henry Huang_____

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.

SGS AXYS METHOD MLA-010 Rev 12

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

Contract No.: 4817

Matrix: AQUEOUS

Sample Receipt Date: N/A

Extraction Date: 01-Sep-2023

Analysis Date: 03-Oct-2023 Time: 22:39:51

Extract Volume (uL): 20

Injection Volume (uL): 1.0

Dilution Factor: N/A

Concentration Units: pg/L

CLIENT SAMPLE NO.

Lab Blank

Sample Collection: N/A

Project No. N/A

Lab Sample I.D.: WG86864-101

Sample Size: 1.00 L

Initial Calibration Date: 04-Aug-2023

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

Sample Data Filename: PB3B_236A S: 10

Blank Data Filename: PB3B_236A S: 10

Cal. Ver. Data Filename: PB3B_236A S: 7

COMPOUND	CAS NO.	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL)
Aroclor 1016	12674-11-2	U		1.00
Aroclor 1221	11104-28-2	U		0.520
Aroclor 1232	11141-16-5	U		1.05
Aroclor 1242	53469-21-9		37.1	1.12
Aroclor 1248	12672-29-6	U		3.36
Aroclor 1254	11097-69-1		14.9	5.48
Aroclor 1260	11096-82-5		14.3	2.42

(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: _____Henry Huang_____

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.

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.:	4817	Lab Sample I.D.:	WG86864-102 i
Matrix:	AQUEOUS	Initial Calibration Date:	04-Aug-2023
Extraction Date:	01-Sep-2023	Instrument ID:	HR GC/MS
Analysis Date:	06-Oct-2023 Time: 14:45:16	GC Column ID:	SPB OCTYL
Extract Volume (uL):	20	OPR Data Filename:	PB3B_238 S: 2
Injection Volume (uL):	1.0	Blank Data Filename:	PB3B_236A S: 10
Dilution Factor:	N/A	Cal. Ver. Data Filename:	PB3B_238 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			2.97	50.0	49.5	30.0 - 67.5	99.0
4-MoCB	3			3.02	50.0	49.5	30.0 - 67.5	98.9
2,2'-DiCB	4			1.58	50.0	52.8	30.0 - 67.5	106
4,4'-DiCB	15			1.55	50.0	50.8	30.0 - 67.5	102
2,2',6-TriCB	19			1.06	50.0	53.4	30.0 - 67.5	107
3,4,4'-TriCB	37			1.00	50.0	53.3	30.0 - 67.5	107
2,2',6,6'-TeCB	54			0.80	50.0	53.3	30.0 - 67.5	107
3,3',4,4'-TeCB	77			0.75	50.0	50.5	30.0 - 67.5	101
3,4,4',5-TeCB	81			0.75	50.0	50.8	30.0 - 67.5	102
2,2',4,6,6'-PeCB	104			1.59	50.0	62.2	30.0 - 67.5	124
2,3,3',4,4'-PeCB	105			1.52	50.0	51.0	30.0 - 67.5	102
2,3,4,4',5-PeCB	114			1.54	50.0	51.8	30.0 - 67.5	104
2,3',4,4',5-PeCB	118			1.53	50.0	51.8	30.0 - 67.5	104
2',3,4,4',5-PeCB	123			1.53	50.0	51.8	30.0 - 67.5	104
3,3',4,4',5-PeCB	126			1.58	50.0	51.7	30.0 - 67.5	103
2,2',4,4',6,6'-HxCB	155			1.31	50.0	61.3	30.0 - 67.5	123
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.20	100	106	60.0 - 135	106
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			1.19	50.0	54.1	30.0 - 67.5	108
3,3',4,4',5,5'-HxCB	169			1.20	50.0	52.5	30.0 - 67.5	105
2,2',3,4',5,6,6'-HpCB	188			1.05	50.0	58.3	30.0 - 67.5	117
2,3,3',4,4',5,5'-HpCB	189			1.04	50.0	52.9	30.0 - 67.5	106
2,2',3,3',5,5',6,6'-OcCB	202			0.91	50.0	64.4	30.0 - 67.5	129
2,3,3',4,4',5,5',6-OcCB	205			0.87	50.0	51.7	30.0 - 67.5	103
2,2',3,3',4,4',5,5',6-NoCB	206			0.80	50.0	54.9	30.0 - 67.5	110
2,2',3,3',4,5,5',6,6'-NoCB	208			0.79	50.0	56.0	30.0 - 67.5	112
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.21	50.0	55.0	30.0 - 67.5	110

(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: _____Henry Huang_____

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.

SGS AXYS METHOD MLA-010 Rev 12

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.:	4817	Lab Sample I.D.:	WG86864-102 i
Matrix:	AQUEOUS	Initial Calibration Date:	04-Aug-2023
Extraction Date:	01-Sep-2023	Instrument ID:	HR GC/MS
Analysis Date:	06-Oct-2023 Time: 14:45:16	GC Column ID:	SPB OCTYL
Extract Volume (uL):	20	OPR Data Filename:	PB3B_238 S: 2
Injection Volume (uL):	1.0	Blank Data Filename:	PB3B_236A S: 10
Dilution Factor:	N/A	Cal. Ver. Data Filename:	PB3B_238 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			3.55	100	25.6	15.0 - 145	25.6
13C12-4-MoCB	3L			3.54	100	26.7	15.0 - 145	26.7
13C12-2,2'-DiCB	4L			1.50	100	29.9	15.0 - 145	29.9
13C12-4,4'-DiCB	15L			1.53	100	37.5	15.0 - 145	37.5
13C12-2,2',6-TriCB	19L			1.06	100	38.2	15.0 - 145	38.2
13C12-3,4,4'-TriCB	37L			1.00	100	46.4	15.0 - 145	46.4
13C12-2,2',6,6'-TeCB	54L			0.76	100	42.5	15.0 - 145	42.5
13C12-3,3',4,4'-TeCB	77L			0.74	100	59.0	40.0 - 145	59.0
13C12-3,4,4',5-TeCB	81L			0.77	100	55.9	40.0 - 145	55.9
13C12-2,2',4,6,6'-PeCB	104L			1.62	100	40.1	40.0 - 145	40.1
13C12-2,3,3',4,4'-PeCB	105L			1.58	100	65.4	40.0 - 145	65.4
13C12-2,3,4,4',5-PeCB	114L			1.57	100	59.4	40.0 - 145	59.4
13C12-2,3',4,4',5-PeCB	118L			1.59	100	59.9	40.0 - 145	59.9
13C12-2',3,4,4',5-PeCB	123L			1.56	100	59.8	40.0 - 145	59.8
13C12-3,3',4,4',5-PeCB	126L			1.58	100	62.9	40.0 - 145	62.9
13C12-2,2',4,4',6,6'-HxCB	155L			1.32	100	42.6	40.0 - 145	42.6
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.19	200	133	80.0 - 290	66.5
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			1.19	100	66.7	40.0 - 145	66.7
13C12-3,3',4,4',5,5'-HxCB	169L			1.19	100	67.7	40.0 - 145	67.7
13C12-2,2',3,3',4,4',5-HpCB	170L			1.08	100	67.7	40.0 - 145	67.7
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.08	100	69.6	40.0 - 145	69.6
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.06	100	55.3	40.0 - 145	55.3
13C12-2,3,3',4,4',5,5'-HpCB	189L			0.98	100	64.3	40.0 - 145	64.3
13C12-2,2',3,3',5,5',6,6'-OxCB	202L		V	0.87	100	38.6	40.0 - 145	38.6
13C12-2,3,3',4,4',5,5',6-OxCB	205L			0.82	100	68.4	40.0 - 145	68.4
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.76	100	65.3	40.0 - 145	65.3
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			0.76	100	64.5	40.0 - 145	64.5
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.22	100	53.6	40.0 - 145	53.6

CLEANUP STANDARD

13C12-2,4,4'-TriCB	28L			1.04	100	39.5	15.0 - 145	39.5
13C12-2,3,3',5,5'-PeCB	111L			1.62	100	60.1	40.0 - 145	60.1
13C12-2,2',3,3',5,5',6-HpCB	178L			1.11	100	55.7	40.0 - 145	55.7

(1) Suffix "L" indicates labeled compound.

(2) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; 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: _____ Henry Huang _____

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.

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: 04-Aug-2023

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: N/A
CS1 Data Filename: PB3B_219B S: 7
CS2 Data Filename: PB3B_219B S: 6
CS3 Data Filename: PB3B_219B S: 5
CS4 Data Filename: PB3B_219B S: 4
CS5 Data Filename: PB3B_219B S: 3
CS6 Data Filename: PB3B_219B S: 10

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	RELATIVE RESPONSE (RR)							MEAN RR	CV ² (%RSD)
				CS0	CS1	CS2	CS3	CS4	CS5	CS6		
2-MoCB	1				1.02	0.99	0.97	0.94	0.99		0.98	2.96
4-MoCB	3				1.09	1.00	0.99	0.98	1.03		1.02	4.29
2,2'-DiCB	4				0.86	0.86	0.84	0.84	0.89	0.92	0.87	3.33
4,4'-DiCB	15				0.95	0.88	0.86	0.85	0.89	0.87	0.88	4.09
2,2',6-TriCB	19				1.23	1.15	1.12	1.10	1.12	1.13	1.14	4.16
3,4,4'-TriCB	37				0.90	0.88	0.87	0.85	0.88	0.90	0.88	2.15
2,2',6,6'-TeCB	54				1.02	1.01	0.98	0.95	0.98	0.99	0.99	2.44
3,3',4,4'-TeCB	77				0.99	0.94	0.92	0.90	0.93	0.95	0.94	3.40
3,4,4',5-TeCB	81				1.03	0.97	0.94	0.93	0.96	0.98	0.97	3.63
2,2',4,6,6'-PeCB	104				1.22	1.22	1.21	1.19	1.17	1.20	1.20	1.71
2,3,3',4,4'-PeCB	105				0.98	0.93	0.91	0.88	0.93	0.95	0.93	3.75
2,3,4,4',5-PeCB	114				1.01	0.95	0.91	0.91	0.94	0.98	0.95	4.05
2,3',4,4',5-PeCB	118				0.96	0.93	0.91	0.90	0.94	0.96	0.93	2.40
2',3,4,4',5-PeCB	123				0.89	0.87	0.84	0.81	0.86	0.88	0.86	3.46
3,3',4,4',5-PeCB	126				1.01	0.96	0.92	0.92	0.95	0.97	0.96	3.54
2,2',4,4',6,6'-HxCB	155				1.07	1.10	1.08	1.03	1.08	1.08	1.07	2.25
2,3,3',4,4',5-HxCB	156	156 + 157	C		1.06	1.04	1.01	0.99	1.02	1.03	1.02	2.40
2,3,3',4,4',5'-HxCB	157	156 + 157	C156									
2,3',4,4',5,5'-HxCB	167				1.07	1.04	1.02	1.00	1.04	1.04	1.04	2.33
3,3',4,4',5,5'-HxCB	169				1.00	1.02	0.99	0.99	0.99	1.00	1.00	1.01
2,2',3,4',5,6,6'-HpCB	188				1.07	1.04	1.03	1.00	1.03	1.00	1.03	2.40
2,3,3',4,4',5,5'-HpCB	189				0.93	0.88	0.85	0.84	0.87	0.90	0.88	3.63
2,2',3,3',5,5',6,6'-OcCB	202				1.06	1.09	1.08	1.06	1.07	1.07	1.07	1.22
2,3,3',4,4',5,5',6-OcCB	205				1.04	0.99	0.95	0.93	0.98	0.99	0.98	3.97
2,2',3,3',4,4',5,5',6-NoCB	206				1.01	0.99	0.97	0.96	0.99	0.99	0.99	1.78
2,2',3,3',4,4',5,5',6,6'-NoCB	208				1.02	1.03	1.01	1.01	1.03	1.02	1.02	0.84
2,2',3,3',4,4',5,5',6,6'-DeCB	209				1.05	0.99	0.97	0.95	0.98	0.98	0.99	3.35

(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: Amal Mudalige

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: 04-Aug-2023

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: N/A
CS1 Data Filename: PB3B_219B S: 7
CS2 Data Filename: PB3B_219B S: 6
CS3 Data Filename: PB3B_219B S: 5
CS4 Data Filename: PB3B_219B S: 4
CS5 Data Filename: PB3B_219B S: 3
CS6 Data Filename: PB3B_219B S: 10

				RELATIVE RESPONSE (RR)								
				CS0	CS1	CS2	CS3	CS4	CS5	CS6	MEAN RR	CV ³ (%RSD)
COMPOUND	IUPAC NO. ¹	CO- ELUTIONS	LAB FLAG ²									
13C12-2-MoCB	1L				1.06	1.05	1.04	1.06	1.01	0.93	1.02	4.78
13C12-4-MoCB	3L				1.02	1.02	1.02	1.02	1.00	0.94	1.00	3.26
13C12-2,2'-DiCB	4L				0.62	0.62	0.61	0.62	0.60	0.57	0.61	3.29
13C12-4,4'-DiCB	15L				1.01	1.00	1.02	0.98	1.00	0.97	1.00	1.56
13C12-2,2',6-TriCB	19L				0.53	0.52	0.53	0.53	0.49	0.46	0.51	5.37
13C12-3,4,4'-TriCB	37L				1.48	1.47	1.45	1.40	1.50	1.46	1.46	2.48
13C12-2,2',6,6'-TeCB	54L				1.29	1.29	1.27	1.29	1.24	1.18	1.26	3.62
13C12-3,3',4,4'-TeCB	77L				1.26	1.27	1.24	1.18	1.28	1.24	1.24	2.76
13C12-3,4,4',5-TeCB	81L				1.23	1.23	1.22	1.16	1.26	1.24	1.22	2.71
13C12-2,2',4,6,6'-PeCB	104L				0.98	0.99	0.96	0.99	0.92	0.87	0.95	4.81
13C12-2,3,3',4,4'-PeCB	105L				1.11	1.11	1.08	1.07	1.11	1.14	1.10	2.02
13C12-2,3,4,4',5-PeCB	114L				1.08	1.09	1.06	1.06	1.09	1.07	1.08	1.04
13C12-2,3',4,4',5-PeCB	118L				1.15	1.14	1.12	1.12	1.14	1.17	1.14	1.76
13C12-2',3,4,4',5-PeCB	123L				1.15	1.17	1.14	1.14	1.16	1.18	1.16	1.39
13C12-3,3',4,4',5-PeCB	126L				1.01	1.02	0.99	0.97	1.06	1.06	1.02	3.54
13C12-2,2',4,4',6,6'-HxCB	155L				1.20	1.23	1.18	1.25	1.17	1.12	1.19	3.84
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C		1.19	1.19	1.17	1.17	1.22	1.20	1.19	1.65
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L									
13C12-2,3',4,4',5,5'-HxCB	167L				1.20	1.20	1.19	1.17	1.21	1.22	1.20	1.49
13C12-3,3',4,4',5,5'-HxCB	169L				1.13	1.15	1.11	1.10	1.22	1.21	1.15	4.41
13C12-2,2',3,4',5,6,6'-HpCB	188L				1.87	1.87	1.85	1.96	1.79	1.71	1.84	4.60
13C12-2,3,3',4,4',5,5'-HpCB	189L				1.37	1.38	1.32	1.38	1.45	1.50	1.40	4.36
13C12-2,2',3,3',5,5',6,6'-OxCB	202L				1.28	1.28	1.25	1.32	1.25	1.23	1.27	2.37
13C12-2,3,3',4,4',5,5',6-OxCB	205L				1.42	1.44	1.39	1.46	1.47	1.52	1.45	3.23
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L				1.11	1.13	1.09	1.13	1.14	1.15	1.12	1.93
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L				1.49	1.51	1.48	1.52	1.49	1.52	1.50	1.16
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L				1.16	1.19	1.13	1.19	1.18	1.18	1.17	1.79
CLEAN-UP STANDARD												
13C12-2,4,4'-TriCB	28L				1.62	1.61	1.58	1.56	1.59	1.57	1.59	1.46
13C12-2,3,3',5,5'-PeCB	111L				1.21	1.22	1.20	1.20	1.20	1.17	1.20	1.39
13C12-2,2',3,3',5,5',6-HpCB	178L				0.80	0.81	0.79	0.79	0.80	0.80	0.80	0.72

(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: _____Amal Mudalige_____

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: N/A

CS1 Data Filename: PB3B_219B S: 7

CS2 Data Filename: PB3B_219B S: 6

CS3 Data Filename: PB3B_219B S: 5

CS4 Data Filename: PB3B_219B S: 4

CS5 Data Filename: PB3B_219B S: 3

CS6 Data Filename: PB3B_219B S: 10

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	M/Z's FORMING RATIO ²	ION ABUNDANCE RATIO							QC LIMITS ²
					CS0	CS1	CS2	CS3	CS4	CS5	CS6	
2-MoCB	1			M/M+2	3.00	2.99	3.03	3.03	3.06			2.66-3.60
4-MoCB	3			M/M+2	3.00	2.96	3.04	3.08	3.06			2.66-3.60
2,2'-DiCB	4			M/M+2	1.67	1.56	1.56	1.54	1.55	1.58		1.33-1.79
4,4'-DiCB	15			M/M+2	1.57	1.54	1.58	1.56	1.55	1.48		1.33-1.79
2,2',6-TriCB	19			M/M+2	1.00	1.03	1.05	1.05	1.04	1.04		0.88-1.20
3,4,4'-TriCB	37			M/M+2	1.04	1.01	1.00	1.01	1.01	1.01		0.88-1.20
2,2',6,6'-TeCB	54			M/M+2	0.85	0.80	0.84	0.84	0.84	0.84		0.65-0.89
3,3',4,4'-TeCB	77			M/M+2	0.78	0.77	0.74	0.75	0.76	0.76		0.65-0.89
3,4,4',5-TeCB	81			M/M+2	0.74	0.76	0.76	0.75	0.76	0.76		0.65-0.89
2,2',4,6,6'-PeCB	104			M+2/M+4	1.64	1.58	1.61	1.59	1.51	1.55		1.32-1.78
2,3,3',4,4'-PeCB	105			M+2/M+4	1.56	1.56	1.51	1.54	1.54	1.54		1.32-1.78
2,3,4,4',5-PeCB	114			M+2/M+4	1.59	1.55	1.55	1.56	1.55	1.55		1.32-1.78
2,3',4,4',5-PeCB	118			M+2/M+4	1.59	1.54	1.59	1.54	1.54	1.54		1.32-1.78
2',3,4,4',5-PeCB	123			M+2/M+4	1.58	1.53	1.56	1.54	1.56	1.55		1.32-1.78
3,3',4,4',5-PeCB	126			M+2/M+4	1.53	1.54	1.54	1.54	1.55	1.56		1.32-1.78
2,2',4,4',6,6'-HxCB	155			M+2/M+4	1.24	1.27	1.27	1.27	1.27	1.27		1.05-1.43
2,3,3',4,4',5-HxCB	156	156 + 157	C	M+2/M+4	1.17	1.12	1.15	1.16	1.15	1.16		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	1.17	1.10	1.14	1.15	1.15	1.16		1.05-1.43
3,3',4,4',5,5'-HxCB	169			M+2/M+4	1.21	1.13	1.17	1.15	1.15	1.15		1.05-1.43
2,2',3,4',5,6,6'-HpCB	188			M+2/M+4	1.03	1.02	1.04	1.03	1.04	1.04		0.89-1.21
2,3,3',4,4',5,5'-HpCB	189			M+2/M+4	0.98	1.04	1.00	1.02	1.03	1.03		0.89-1.21
2,2',3,3',5,5',6,6'-OcCB	202			M+2/M+4	0.91	0.95	0.92	0.91	0.92	0.91		0.76-1.02
2,3,3',4,4',5,5',6-OcCB	205			M+2/M+4	0.91	0.93	0.90	0.89	0.90	0.89		0.76-1.02
2,2',3,3',4,4',5,5',6-NoCB	206			M+2/M+4	0.75	0.79	0.78	0.78	0.78	0.78		0.65-0.89
2,2',3,3',4,5,5',6,6'-NoCB	208			M+2/M+4	0.85	0.78	0.78	0.79	0.78	0.78		0.65-0.89
2,2',3,3',4,4',5,5',6,6'-DeCB	209			M+4/M+6	1.23	1.20	1.20	1.18	1.21	1.20		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: Amal Mudalige

For Axys Internal Use Only [XSL Template: Form16683C.xsl; Created: 28-Oct-2023 18:51:44; Application: XMLTransformer-1.18.44; Report Filename: 1668_PCB1668_04-Aug-2023_PB3B_Form3C_GS105346.html; Workgroup: WG86864; Design ID: 2468]

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

CS0 Data Filename: N/A

CS1 Data Filename: PB3B_219B S: 7

CS2 Data Filename: PB3B_219B S: 6

CS3 Data Filename: PB3B_219B S: 5

CS4 Data Filename: PB3B_219B S: 4

CS5 Data Filename: PB3B_219B S: 3

CS6 Data Filename: PB3B_219B S: 10

LABELED COMPOUND	IUPAC NO. ¹	CO- ELUTIONS	LAB FLAG ²	M/Z's FORMING RATIO ³	ION ABUNDANCE RATIO						QC LIMITS ³
					CS0	CS1	CS2	CS3	CS4	CS5	CS6
13C12-2-MoCB	1L			M/M+2	3.56	3.53	3.54	3.53	3.50	3.51	2.66-3.60
13C12-4-MoCB	3L			M/M+2	3.52	3.51	3.49	3.50	3.47	3.46	2.66-3.60
13C12-2,2'-DiCB	4L			M/M+2	1.57	1.55	1.57	1.57	1.58	1.59	1.33-1.79
13C12-4,4'-DiCB	15L			M/M+2	1.58	1.56	1.54	1.58	1.58	1.58	1.33-1.79
13C12-2,2',6-TriCB	19L			M/M+2	1.08	1.05	1.07	1.07	1.07	1.08	0.88-1.20
13C12-3,4,4'-TriCB	37L			M/M+2	1.03	1.02	1.01	1.02	1.02	1.05	0.88-1.20
13C12-2,2',6,6'-TeCB	54L			M/M+2	0.78	0.79	0.77	0.80	0.78	0.79	0.65-0.89
13C12-3,3',4,4'-TeCB	77L			M/M+2	0.77	0.76	0.75	0.75	0.76	0.77	0.65-0.89
13C12-3,4,4',5-TeCB	81L			M/M+2	0.75	0.76	0.77	0.75	0.76	0.77	0.65-0.89
13C12-2,2',4,6,6'-PeCB	104L			M+2/M+4	1.64	1.61	1.62	1.62	1.63	1.60	1.32-1.78
13C12-2,3,3',4,4'-PeCB	105L			M+2/M+4	1.59	1.57	1.57	1.58	1.59	1.60	1.32-1.78
13C12-2,3,4,4',5-PeCB	114L			M+2/M+4	1.59	1.58	1.60	1.58	1.59	1.58	1.32-1.78
13C12-2,3',4,4',5-PeCB	118L			M+2/M+4	1.57	1.57	1.57	1.59	1.58	1.57	1.32-1.78
13C12-2',3,4,4',5-PeCB	123L			M+2/M+4	1.57	1.58	1.59	1.58	1.57	1.58	1.32-1.78
13C12-3,3',4,4',5-PeCB	126L			M+2/M+4	1.59	1.59	1.58	1.57	1.60	1.62	1.32-1.78
13C12-2,2',4,4',6,6'-HxCB	155L			M+2/M+4	1.30	1.27	1.27	1.28	1.28	1.29	1.05-1.43
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	M+2/M+4	1.25	1.24	1.25	1.25	1.25	1.25	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	1.24	1.24	1.24	1.24	1.24	1.24	1.05-1.43
13C12-3,3',4,4',5,5'-HxCB	169L			M+2/M+4	1.25	1.23	1.24	1.22	1.24	1.24	1.05-1.43
13C12-2,2',3,4',5,6,6'-HpCB	188L			M+2/M+4	1.08	1.07	1.06	1.06	1.07	1.06	0.89-1.21
13C12-2,3,3',4,4',5,5'-HpCB	189L			M+2/M+4	1.04	1.05	1.03	1.03	1.04	1.04	0.89-1.21
13C12-2,2',3,3',5,5',6,6'-OxCB	202L			M+2/M+4	0.90	0.91	0.91	0.89	0.91	0.90	0.76-1.02
13C12-2,3,3',4,4',5,5',6-OxCB	205L			M+2/M+4	0.83	0.83	0.84	0.83	0.84	0.84	0.76-1.02
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			M+2/M+4	0.77	0.77	0.77	0.78	0.78	0.78	0.65-0.89
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			M+2/M+4	0.78	0.77	0.78	0.78	0.78	0.80	0.65-0.89
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			M+4/M+6	1.19	1.20	1.20	1.20	1.18	1.18	0.99-1.33

CLEAN-UP STANDARD

13C12-2,4,4'-TriCB	28L			M/M+2	1.02	1.02	1.03	1.02	1.02	1.02	0.88-1.20
13C12-2,3,3',5,5'-PeCB	111L			M+2/M+4	1.59	1.59	1.60	1.60	1.61	1.60	1.32-1.78
13C12-2,2',3,3',5,5',6-HpCB	178L			M+2/M+4	1.07	1.08	1.06	1.07	1.05	1.08	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: _____ Amal Mudalige _____

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

VER Data Filename: PB3B_236A S: 7

Instrument ID: HR GC/MS

Analysis Date: 03-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 19:31:30

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	3.12	2.66-3.60	25.7	20.6 - 34.4
4-MoCB	3			M/M+2	3.06	2.66-3.60	23.8	20.6 - 34.4
2,2'-DiCB	4			M/M+2	1.55	1.33-1.79	28.1	20.6 - 34.4
4,4'-DiCB	15			M/M+2	1.53	1.33-1.79	26.6	20.6 - 34.4
2,2',6-TriCB	19			M/M+2	1.07	0.88-1.20	27.8	20.6 - 34.4
3,4,4'-TriCB	37			M/M+2	0.99	0.88-1.20	28.9	20.6 - 34.4
2,2',6,6'-TeCB	54			M/M+2	0.81	0.65-0.89	57.3	41.3 - 68.8
3,3',4,4'-TeCB	77			M/M+2	0.75	0.65-0.89	52.2	41.3 - 68.8
3,4,4',5-TeCB	81			M/M+2	0.78	0.65-0.89	52.4	41.3 - 68.8
2,2',4,6,6'-PeCB	104			M+2/M+4	1.54	1.32-1.78	57.2	41.3 - 68.8
2,3,3',4,4'-PeCB	105			M+2/M+4	1.54	1.32-1.78	55.5	41.3 - 68.8
2,3,4,4',5-PeCB	114			M+2/M+4	1.54	1.32-1.78	58.3	41.3 - 68.8
2,3',4,4',5-PeCB	118			M+2/M+4	1.51	1.32-1.78	56.6	41.3 - 68.8
2',3,4,4',5-PeCB	123			M+2/M+4	1.55	1.32-1.78	54.8	41.3 - 68.8
3,3',4,4',5-PeCB	126			M+2/M+4	1.55	1.32-1.78	58.8	41.3 - 68.8
2,2',4,4',6,6'-HxCB	155			M+2/M+4	1.27	1.05-1.43	57.7	41.3 - 68.8
2,3,3',4,4',5-HxCB	156	156 + 157	C	M+2/M+4	1.17	1.05-1.43	112	82.5 - 138
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			M+2/M+4	1.16	1.05-1.43	58.1	41.3 - 68.8
3,3',4,4',5,5'-HxCB	169			M+2/M+4	1.18	1.05-1.43	57.3	41.3 - 68.8
2,2',3,4',5,6,6'-HpCB	188			M+2/M+4	1.08	0.89-1.21	55.8	41.3 - 68.8
2,3,3',4,4',5,5'-HpCB	189			M+2/M+4	1.03	0.89-1.21	56.5	41.3 - 68.8
2,2',3,3',5,5',6,6'-OcCB	202			M+2/M+4	0.93	0.76-1.02	82.2	61.9 - 103
2,3,3',4,4',5,5',6-OcCB	205			M+2/M+4	0.90	0.76-1.02	79.4	61.9 - 103
2,2',3,3',4,4',5,5',6-NoCB	206			M+2/M+4	0.78	0.65-0.89	82.3	61.9 - 103
2,2',3,3',4,5,5',6,6'-NoCB	208			M+2/M+4	0.80	0.65-0.89	81.3	61.9 - 103
2,2',3,3',4,4',5,5',6,6'-DeCB	209			M+4/M+6	1.23	0.99-1.33	92.6	61.9 - 103

(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: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form16684A.xsl; Created: 28-Oct-2023 18:51:44; Application: XMLTransformer-1.18.44;
Report Filename: 1668_PCB1668_PB3B_236AS7__Form4A_SJ3321948.html; Workgroup: WG86864; Design ID: 2468]

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

VER Data Filename: PB3B_236A S: 7

Instrument ID: HR GC/MS

Analysis Date: 03-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 19:31:30

LABELLED 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	3.33	2.66-3.60	107	50.0 - 145
13C12-4-MoCB	3L			M/M+2	3.51	2.66-3.60	99.8	50.0 - 145
13C12-2,2'-DiCB	4L			M/M+2	1.57	1.33-1.79	107	50.0 - 145
13C12-4,4'-DiCB	15L			M/M+2	1.55	1.33-1.79	91.5	50.0 - 145
13C12-2,2',6-TriCB	19L			M/M+2	1.07	0.88-1.20	107	50.0 - 145
13C12-3,4,4'-TriCB	37L			M/M+2	1.02	0.88-1.20	88.2	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			M/M+2	0.79	0.65-0.89	102	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			M/M+2	0.75	0.65-0.89	94.7	50.0 - 145
13C12-3,4,4',5-TeCB	81L			M/M+2	0.76	0.65-0.89	91.4	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			M+2/M+4	1.62	1.32-1.78	87.5	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			M+2/M+4	1.54	1.32-1.78	99.4	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			M+2/M+4	1.60	1.32-1.78	95.6	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			M+2/M+4	1.57	1.32-1.78	93.3	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			M+2/M+4	1.56	1.32-1.78	94.2	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			M+2/M+4	1.58	1.32-1.78	95.2	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			M+2/M+4	1.29	1.05-1.43	90.0	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	M+2/M+4	1.19	1.05-1.43	192	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	1.21	1.05-1.43	97.1	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			M+2/M+4	1.19	1.05-1.43	96.5	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			M+2/M+4	1.08	0.89-1.21	95.8	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			M+2/M+4	0.97	0.89-1.21	91.4	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OxCB	202L			M+2/M+4	0.95	0.76-1.02	75.8	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OxCB	205L			M+2/M+4	0.79	0.76-1.02	96.3	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			M+2/M+4	0.76	0.65-0.89	93.3	50.0 - 145
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			M+2/M+4	0.79	0.65-0.89	93.4	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			M+4/M+6	1.20	0.99-1.33	85.4	50.0 - 145

CLEAN-UP STANDARD

13C12-2,4,4'-TriCB	28L			M/M+2	1.02	0.88-1.20	87.6	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			M+2/M+4	1.62	1.32-1.78	97.1	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			M+2/M+4	1.02	0.89-1.21	91.7	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: _____Henry Huang_____

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

VER Data Filename: PB3B_236A S: 7

Instrument ID: HR GC/MS

Analysis Date: 03-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 19:31:30

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	1.002	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	1.001	1.000-1.001
3,4,4',5-TeCB	81			13C12-3,4,4',5-TeCB	81L	1.001	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	1.001	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	1.001	0.999-1.003
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	1.001	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'-OxCB	202			13C12-2,2',3,3',5,5',6,6'-OxCB	202L	1.000	1.000-1.001
2,3,3',4,4',5,5',6-OxCB	205			13C12-2,3,3',4,4',5,5',6-OxCB	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	1.001	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	1.001	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: _____Henry Huang_____

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Report Filename: 1668_PCB1668_PB3B_236AS7__Form6A_SJ3321948.html; Workgroup: WG86864; Design ID: 2468]

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:

04-Aug-2023

Instrument ID:

HR GC/MS

GC Column ID:

SPB OCTYL

VER Data Filename:

PB3B_236A S: 7

Analysis Date:

03-Oct-2023

Analysis Time:

19:31:30

LABELLED 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	0.723	0.691-0.754
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.860	0.828-0.891
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.876	0.844-0.906
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.251	1.219-1.282
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	0.813	0.800-0.826
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.395	1.381-1.408
13C12-3,4,4',5'-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.371	1.358-1.384
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.809	0.799-0.820
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.201	1.190-1.211
13C12-2,3,4,4',5'-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.169-1.189
13C12-2,3',4,4',5'-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.161	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	0.785	0.777-0.793
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	13C12-2,2',3,4,4',5'-HxCB	138L	1.108	1.099-1.115
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	1.077	1.069-1.085
13C12-3,3',4,4',5,5'-HxCB	169L			13C12-2,2',3,4,4',5'-HxCB	138L	1.191	1.182-1.199
13C12-2,2',3,4',5,6,6'-HpCB	188L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.712	0.705-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.959	0.952-0.965
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	1.000-1.018
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	1.065-1.084

CLEANUP STANDARD

13C12-2,4,4'-TriCB	28L			13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L			13C12-2,2',4,5,5'-PeCB	101L	1.087	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L			13C12-2,2',3,4,4',5'-HxCB	138L	1.011	1.003-1.019

(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: _____Henry Huang_____

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

CAL Data Filename: PB3B_236A S: 7

Instrument ID: HR GC/MS

Analysis Date: 03-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 19:31:30

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-MoCB	1			0.92	M/M+2	3.12	2.66-3.60	1.001	0.996 - 1.006
3-MoCB	2			0.88	M/M+2	3.09	2.66-3.60	0.988	0.983 - 0.993
4-MoCB	3			0.88	M/M+2	3.06	2.66-3.60	1.001	0.996 - 1.006
2,2'-DiCB	4			0.89	M/M+2	1.55	1.33-1.79	1.001	0.996 - 1.006
2,3-DiCB	5			1.07	M/M+2	1.52	1.33-1.79	1.197	1.191 - 1.203
2,3'-DiCB	6			1.13	M/M+2	1.56	1.33-1.79	1.174	1.168 - 1.180
2,4-DiCB	7			1.16	M/M+2	1.54	1.33-1.79	1.156	1.150 - 1.162
2,4'-DiCB	8			1.18	M/M+2	1.55	1.33-1.79	1.206	1.199 - 1.212
2,5-DiCB	9			1.13	M/M+2	1.55	1.33-1.79	1.145	1.139 - 1.150
2,6-DiCB	10			1.11	M/M+2	1.54	1.33-1.79	1.014	1.009 - 1.019
3,3'-DiCB	11			1.05	M/M+2	1.58	1.33-1.79	0.969	0.964 - 0.974
3,4-DiCB	12	12 + 13	C	1.05	M/M+2	1.57	1.33-1.79	0.985	0.980 - 0.990
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.10	M/M+2	1.55	1.33-1.79	0.926	0.922 - 0.931
4,4'-DiCB	15			0.85	M/M+2	1.53	1.33-1.79	1.001	0.996 - 1.006
2,2',3-TriCB	16			0.85	M/M+2	1.06	0.88-1.20	1.165	1.159 - 1.171
2,2',4-TriCB	17			1.03	M/M+2	1.06	0.88-1.20	1.137	1.131 - 1.142
2,2',5-TriCB	18	18 + 30	C	1.24	M/M+2	1.05	0.88-1.20	1.110	1.104 - 1.115
2,2',6-TriCB	19			1.16	M/M+2	1.07	0.88-1.20	1.002	0.997 - 1.007
2,3,3'-TriCB	20	20 + 28	C	1.14	M/M+2	1.00	0.88-1.20	0.849	0.845 - 0.853
2,3,4-TriCB	21	21 + 33	C	1.11	M/M+2	1.01	0.88-1.20	0.858	0.853 - 0.862
2,3,4'-TriCB	22			1.12	M/M+2	1.01	0.88-1.20	0.873	0.868 - 0.877
2,3,5-TriCB	23			1.14	M/M+2	1.01	0.88-1.20	1.280	1.273 - 1.286
2,3,6-TriCB	24			1.37	M/M+2	1.06	0.88-1.20	1.158	1.152 - 1.163
2,3',4-TriCB	25			1.21	M/M+2	1.01	0.88-1.20	0.826	0.821 - 0.830
2,3',5-TriCB	26	26 + 29	C	1.15	M/M+2	1.01	0.88-1.20	1.299	1.293 - 1.306
2,3',6-TriCB	27			1.42	M/M+2	1.08	0.88-1.20	1.150	1.144 - 1.156
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			1.16	M/M+2	1.02	0.88-1.20	0.837	0.833 - 0.841
2,4',6-TriCB	32			1.20	M/M+2	1.00	0.88-1.20	1.195	1.189 - 1.201
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.11	M/M+2	1.00	0.88-1.20	1.270	1.264 - 1.277
3,3',4-TriCB	35			1.01	M/M+2	1.01	0.88-1.20	0.985	0.980 - 0.990
3,3',5-TriCB	36			1.18	M/M+2	0.97	0.88-1.20	0.932	0.927 - 0.936
3,4,4'-TriCB	37			0.91	M/M+2	0.99	0.88-1.20	1.001	0.995 - 1.006
3,4,5-TriCB	38			1.10	M/M+2	1.01	0.88-1.20	0.967	0.962 - 0.972
3,4',5-TriCB	39			1.21	M/M+2	0.98	0.88-1.20	0.945	0.941 - 0.950
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.86	M/M+2	0.82	0.65-0.89	1.334	1.327 - 1.341
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.76	M/M+2	0.82	0.65-0.89	1.309	1.302 - 1.315
2,2',3,5-TeCB	43			0.80	M/M+2	0.81	0.65-0.89	1.243	1.237 - 1.249
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.92	M/M+2	0.81	0.65-0.89	1.282	1.276 - 1.289
2,2',3,6-TeCB	45	45 + 51	C	0.84	M/M+2	0.81	0.65-0.89	1.147	1.141 - 1.152
2,2',3,6'-TeCB	46			0.77	M/M+2	0.81	0.65-0.89	1.160	1.154 - 1.165
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.89	M/M+2	0.80	0.65-0.89	1.270	1.264 - 1.276
2,2',4,5'-TeCB	49	49 + 69	C	0.93	M/M+2	0.82	0.65-0.89	1.254	1.247 - 1.260

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',4,6-TeCB	50	50 + 53	C	0.90	M/M+2	0.81	0.65-0.89	1.110	1.104 - 1.115
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.88	M/M+2	0.80	0.65-0.89	1.231	1.225 - 1.237
2,2',5,6'-TeCB	53	50 + 53	C50						
2,2',6,6'-TeCB	54			1.03	M/M+2	0.81	0.65-0.89	1.001	0.996 - 1.006
2,3,3',4-TeCB	55			0.89	M/M+2	0.77	0.65-0.89	0.890	0.885 - 0.894
2,3,3',4'-TeCB	56			0.90	M/M+2	0.75	0.65-0.89	0.905	0.901 - 0.910
2,3,3',5-TeCB	57			0.92	M/M+2	0.75	0.65-0.89	0.844	0.840 - 0.849
2,3,3',5'-TeCB	58			0.96	M/M+2	0.76	0.65-0.89	0.852	0.847 - 0.856
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.13	M/M+2	0.82	0.65-0.89	1.299	1.292 - 1.305
2,3,4,4'-TeCB	60			0.91	M/M+2	0.77	0.65-0.89	0.912	0.907 - 0.916
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	0.92	M/M+2	0.76	0.65-0.89	0.875	0.871 - 0.879
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			0.95	M/M+2	0.78	0.65-0.89	0.864	0.860 - 0.869
2,3,4',6-TeCB	64			1.09	M/M+2	0.81	0.65-0.89	1.346	1.339 - 1.352
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			0.93	M/M+2	0.77	0.65-0.89	0.885	0.880 - 0.889
2,3',4,5-TeCB	67			1.05	M/M+2	0.73	0.65-0.89	0.857	0.852 - 0.861
2,3',4,5'-TeCB	68			1.05	M/M+2	0.74	0.65-0.89	0.831	0.827 - 0.835
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			0.97	M/M+2	0.75	0.65-0.89	0.823	0.819 - 0.827
2,3',5',6-TeCB	73			1.08	M/M+2	0.80	0.65-0.89	1.239	1.232 - 1.245
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			0.88	M/M+2	0.75	0.65-0.89	1.001	0.996 - 1.006
3,3',4,5-TeCB	78			0.82	M/M+2	0.82	0.65-0.89	0.987	0.982 - 0.992
3,3',4,5'-TeCB	79			1.05	M/M+2	0.75	0.65-0.89	0.970	0.965 - 0.975
3,3',5,5'-TeCB	80			1.02	M/M+2	0.76	0.65-0.89	0.923	0.919 - 0.928
3,4,4',5-TeCB	81			0.92	M/M+2	0.77	0.65-0.89	1.001	0.996 - 1.006
2,2',3,3',4-PeCB	82			0.82	M+2/M+4	1.55	1.32-1.78	0.935	0.930 - 0.939
2,2',3,3',5-PeCB	83	83 + 99	C	0.92	M+2/M+4	1.58	1.32-1.78	0.886	0.881 - 0.890
2,2',3,3',6-PeCB	84			0.88	M+2/M+4	1.56	1.32-1.78	1.164	1.158 - 1.170
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	1.13	M+2/M+4	1.56	1.32-1.78	0.921	0.916 - 0.925
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	1.07	M+2/M+4	1.56	1.32-1.78	0.900	0.895 - 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	0.96	M+2/M+4	1.55	1.32-1.78	1.154	1.148 - 1.160
2,2',3,4,6'-PeCB	89			0.90	M+2/M+4	1.53	1.32-1.78	1.183	1.177 - 1.189
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	1.10	M+2/M+4	1.56	1.32-1.78	0.869	0.865 - 0.874
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.94	M+2/M+4	1.57	1.32-1.78	0.853	0.849 - 0.858
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	1.00	M+2/M+4	1.56	1.32-1.78	1.128	1.123 - 1.134
2,2',3,5,6'-PeCB	94			0.94	M+2/M+4	1.58	1.32-1.78	1.103	1.097 - 1.108
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			0.99	M+2/M+4	1.65	1.32-1.78	1.017	1.012 - 1.022
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			1.08	M+2/M+4	1.57	1.32-1.78	1.093	1.087 - 1.098
2,2',4,6,6'-PeCB	104			1.25	M+2/M+4	1.54	1.32-1.78	1.001	0.996 - 1.006
2,3,3',4,4'-PeCB	105			0.94	M+2/M+4	1.54	1.32-1.78	1.001	0.995 - 1.006
2,3,3',4,5-PeCB	106			0.97	M+2/M+4	1.53	1.32-1.78	1.004	0.999 - 1.009
2,3,3',4',5-PeCB	107			0.99	M+2/M+4	1.54	1.32-1.78	0.998	0.993 - 1.003
2,3,3',4,5'-PeCB	108	108 + 124	C	0.97	M+2/M+4	1.55	1.32-1.78	0.990	0.985 - 0.995
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	1.22	M+2/M+4	1.55	1.32-1.78	0.926	0.922 - 0.931
2,3,3',5,5'-PeCB	111			1.29	M+2/M+4	1.56	1.32-1.78	0.945	0.940 - 0.950

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',5,6-PeCB	112			1.34	M+2/M+4	1.56	1.32-1.78	0.890	0.885 - 0.894
2,3,3',5,6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',5-PeCB	114			1.00	M+2/M+4	1.54	1.32-1.78	1.001	0.995 - 1.006
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			0.96	M+2/M+4	1.51	1.32-1.78	1.001	0.996 - 1.006
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			1.29	M+2/M+4	1.53	1.32-1.78	0.958	0.953 - 0.963
2,3',4,5',6-PeCB	121			1.31	M+2/M+4	1.54	1.32-1.78	1.198	1.192 - 1.204
2',3,3',4,5-PeCB	122			0.88	M+2/M+4	1.53	1.32-1.78	1.011	1.006 - 1.016
2',3,4,4',5-PeCB	123			0.86	M+2/M+4	1.55	1.32-1.78	1.001	0.995 - 1.006
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			1.02	M+2/M+4	1.55	1.32-1.78	1.000	0.995 - 1.005
3,3',4,5,5'-PeCB	127			0.93	M+2/M+4	1.56	1.32-1.78	1.040	1.035 - 1.045
2,2',3,3',4,4'-HxCB	128	128 + 166	C	0.97	M+2/M+4	1.17	1.05-1.43	0.959	0.954 - 0.963
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	0.93	M+2/M+4	1.18	1.05-1.43	0.929	0.924 - 0.934
2,2',3,3',4,5'-HxCB	130			0.76	M+2/M+4	1.18	1.05-1.43	0.914	0.909 - 0.918
2,2',3,3',4,6-HxCB	131			0.75	M+2/M+4	1.18	1.05-1.43	1.161	1.155 - 1.166
2,2',3,3',4,6'-HxCB	132			0.83	M+2/M+4	1.15	1.05-1.43	1.176	1.170 - 1.182
2,2',3,3',5,5'-HxCB	133			0.83	M+2/M+4	1.17	1.05-1.43	1.192	1.186 - 1.198
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.76	M+2/M+4	1.21	1.05-1.43	1.144	1.138 - 1.150
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	0.78	M+2/M+4	1.28	1.05-1.43	1.106	1.100 - 1.111
2,2',3,3',6,6'-HxCB	136			1.01	M+2/M+4	1.28	1.05-1.43	1.026	1.021 - 1.031
2,2',3,4,4',5-HxCB	137			0.85	M+2/M+4	1.17	1.05-1.43	0.919	0.914 - 0.923
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	0.93	M+2/M+4	1.16	1.05-1.43	1.153	1.148 - 1.159
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	1.19	1.05-1.43	0.904	0.899 - 0.908
2,2',3,4,5,6-HxCB	142			0.78	M+2/M+4	1.17	1.05-1.43	1.166	1.160 - 1.171
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			0.75	M+2/M+4	1.28	1.05-1.43	1.123	1.117 - 1.128
2,2',3,4,6,6'-HxCB	145			1.01	M+2/M+4	1.28	1.05-1.43	1.035	1.030 - 1.040
2,2',3,4',5,5'-HxCB	146			0.97	M+2/M+4	1.16	1.05-1.43	0.884	0.880 - 0.888
2,2',3,4',5,6-HxCB	147	147 + 149	C	0.92	M+2/M+4	1.17	1.05-1.43	1.135	1.129 - 1.140
2,2',3,4',5,6'-HxCB	148			0.75	M+2/M+4	1.27	1.05-1.43	1.084	1.079 - 1.090
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	1.28	1.05-1.43	1.014	1.009 - 1.019
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			1.01	M+2/M+4	1.28	1.05-1.43	1.008	1.003 - 1.013
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.07	M+2/M+4	1.18	1.05-1.43	0.899	0.895 - 0.904
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,2',4,4',6,6'-HxCB	155			1.13	M+2/M+4	1.27	1.05-1.43	1.001	0.995 - 1.006
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.04	M+2/M+4	1.17	1.05-1.43	1.001	0.996 - 1.006
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3,3',4,4',6-HxCB	158			1.22	M+2/M+4	1.18	1.05-1.43	0.938	0.933 - 0.943
2,3,3',4,5,5'-HxCB	159			1.08	M+2/M+4	1.14	1.05-1.43	0.983	0.978 - 0.988
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.14	M+2/M+4	1.18	1.05-1.43	0.887	0.883 - 0.892
2,3,3',4',5,5'-HxCB	162			1.10	M+2/M+4	1.19	1.05-1.43	0.989	0.984 - 0.994
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129						
2,3,3',4',5',6-HxCB	164			1.10	M+2/M+4	1.18	1.05-1.43	0.922	0.917 - 0.926
2,3,3',5,5',6-HxCB	165			1.08	M+2/M+4	1.17	1.05-1.43	0.878	0.874 - 0.883
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5,5'-HxCB	167			1.09	M+2/M+4	1.16	1.05-1.43	1.000	0.995 - 1.005
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
3,3',4,4',5,5'-HxCB	169			1.04	M+2/M+4	1.18	1.05-1.43	1.001	0.996 - 1.006
2,2',3,3',4,4',5-HpCB	170			1.09	M+2/M+4	1.04	0.89-1.21	1.000	0.995 - 1.005
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.80	M+2/M+4	1.06	0.89-1.21	1.164	1.158 - 1.169
2,2',3,3',4,5,5'-HpCB	172			0.76	M+2/M+4	1.01	0.89-1.21	0.897	0.892 - 0.901
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.89	M+2/M+4	1.05	0.89-1.21	1.135	1.129 - 1.140

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',4,5',6-HpCB	175			0.89	M+2/M+4	1.03	0.89-1.21	1.103	1.098 - 1.109
2,2',3,3',4,6',6-HpCB	176			1.14	M+2/M+4	1.04	0.89-1.21	1.035	1.030 - 1.040
2,2',3,3',4',5,6-HpCB	177			0.82	M+2/M+4	1.03	0.89-1.21	1.147	1.141 - 1.152
2,2',3,3',5,5',6-HpCB	178			0.86	M+2/M+4	1.04	0.89-1.21	1.086	1.080 - 1.091
2,2',3,3',5,6,6'-HpCB	179			1.19	M+2/M+4	1.03	0.89-1.21	1.011	1.006 - 1.016
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	1.20	M+2/M+4	1.03	0.89-1.21	1.000	0.995 - 1.005
2,2',3,4,4',5,6-HpCB	181			0.88	M+2/M+4	1.04	0.89-1.21	1.157	1.151 - 1.163
2,2',3,4,4',5,6'-HpCB	182			0.94	M+2/M+4	1.05	0.89-1.21	1.116	1.110 - 1.121
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.88	M+2/M+4	1.06	0.89-1.21	1.127	1.121 - 1.133
2,2',3,4,4',6,6'-HpCB	184			1.29	M+2/M+4	1.07	0.89-1.21	1.025	1.020 - 1.030
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			1.19	M+2/M+4	1.02	0.89-1.21	1.048	1.043 - 1.053
2,2',3,4',5,5',6-HpCB	187			1.03	M+2/M+4	1.05	0.89-1.21	1.111	1.105 - 1.116
2,2',3,4',5,6,6'-HpCB	188			1.04	M+2/M+4	1.08	0.89-1.21	1.001	0.996 - 1.006
2,3,3',4,4',5,5'-HpCB	189			0.91	M+2/M+4	1.05	0.89-1.21	1.000	0.995 - 1.005
2,3,3',4,4',5,6-HpCB	190			1.01	M+2/M+4	1.05	0.89-1.21	0.947	0.942 - 0.952
2,3,3',4,4',5',6-HpCB	191			1.01	M+2/M+4	1.04	0.89-1.21	0.917	0.913 - 0.922
2,3,3',4,5,5',6-HpCB	192			0.99	M+2/M+4	1.06	0.89-1.21	0.903	0.898 - 0.907
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			0.93	M+2/M+4	0.88	0.76-1.02	0.991	0.986 - 0.996
2,2',3,3',4,4',5,6-OcCB	195			0.85	M+2/M+4	0.95	0.76-1.02	0.946	0.941 - 0.950
2,2',3,3',4,4',5,6'-OcCB	196			0.64	M+2/M+4	0.93	0.76-1.02	0.916	0.911 - 0.920
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	0.95	M+2/M+4	0.91	0.76-1.02	1.044	1.039 - 1.049
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.66	M+2/M+4	0.89	0.76-1.02	1.114	1.109 - 1.120
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			0.93	M+2/M+4	0.89	0.76-1.02	1.022	1.017 - 1.028
2,2',3,3',5,5',6,6'-OcCB	202			1.07	M+2/M+4	0.93	0.76-1.02	1.000	0.995 - 1.005
2,2',3,4,4',5,5',6-OcCB	203			0.72	M+2/M+4	0.91	0.76-1.02	0.920	0.915 - 0.924
2,2',3,4,4',5,6,6'-OcCB	204			0.91	M+2/M+4	0.92	0.76-1.02	1.038	1.033 - 1.043
2,3,3',4,4',5,5',6-OcCB	205			0.94	M+2/M+4	0.90	0.76-1.02	1.000	0.995 - 1.005
2,2',3,3',4,4',5,5',6-NoCB	206			0.98	M+2/M+4	0.78	0.65-0.89	1.000	0.995 - 1.005
2,2',3,3',4,4',5,6,6'-NoCB	207			1.13	M+2/M+4	0.79	0.65-0.89	1.020	1.015 - 1.025
2,2',3,3',4,5,5',6,6'-NoCB	208			1.01	M+2/M+4	0.80	0.65-0.89	1.001	0.996 - 1.006
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.11	M+4/M+6	1.23	0.99-1.33	1.001	0.996 - 1.006

(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.

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

Signed: _____Henry Huang_____

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

CAL Data Filename: PB3B_236A S: 7

Instrument ID: HR GC/MS

Analysis Date: 03-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 19:31:30

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			1.09	M/M+2	3.33	2.66-3.60	0.723	0.719 - 0.726
13C12-4-MoCB	3L			1.00	M/M+2	3.51	2.66-3.60	0.860	0.856 - 0.864
13C12-2,2'-DiCB	4L			0.65	M/M+2	1.57	1.33-1.79	0.876	0.871 - 0.880
13C12-4,4'-DiCB	15L			0.91	M/M+2	1.55	1.33-1.79	1.251	1.245 - 1.257
13C12-2,2',6-TriCB	19L			0.55	M/M+2	1.07	0.88-1.20	1.072	1.067 - 1.078
13C12-3,4,4'-TriCB	37L			1.29	M/M+2	1.02	0.88-1.20	1.091	1.086 - 1.097
13C12-2,2',6,6'-TeCB	54L			1.28	M/M+2	0.79	0.65-0.89	0.813	0.809 - 0.817
13C12-3,3',4,4'-TeCB	77L			1.18	M/M+2	0.75	0.65-0.89	1.395	1.388 - 1.402
13C12-3,4,4',5-TeCB	81L			1.12	M/M+2	0.76	0.65-0.89	1.371	1.365 - 1.378
13C12-2,2',4,6,6'-PeCB	104L			0.83	M+2/M+4	1.62	1.32-1.78	0.809	0.805 - 0.813
13C12-2,3,3',4,4'-PeCB	105L			1.10	M+2/M+4	1.54	1.32-1.78	1.201	1.195 - 1.207
13C12-2,3,4,4',5-PeCB	114L			1.03	M+2/M+4	1.60	1.32-1.78	1.179	1.173 - 1.185
13C12-2,3',4,4',5-PeCB	118L			1.06	M+2/M+4	1.57	1.32-1.78	1.161	1.156 - 1.167
13C12-2',3,4,4',5-PeCB	123L			1.09	M+2/M+4	1.56	1.32-1.78	1.151	1.145 - 1.157
13C12-3,3',4,4',5-PeCB	126L			0.97	M+2/M+4	1.58	1.32-1.78	1.301	1.294 - 1.308
13C12-2,2',4,4',6,6'-HxCB	155L			1.07	M+2/M+4	1.29	1.05-1.43	0.785	0.781 - 0.789
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.14	M+2/M+4	1.19	1.05-1.43	1.108	1.102 - 1.113
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L						
13C12-2,3',4,4',5,5'-HxCB	167L			1.16	M+2/M+4	1.21	1.05-1.43	1.077	1.072 - 1.083
13C12-3,3',4,4',5,5'-HxCB	169L			1.11	M+2/M+4	1.19	1.05-1.43	1.191	1.185 - 1.197
13C12-2,2',3,3',4,4',5-HpCB	170L			1.04	M+2/M+4	1.08	0.89-1.21	0.897	0.893 - 0.902
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.21	M+2/M+4	1.05	0.89-1.21	0.872	0.868 - 0.877
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.76	M+2/M+4	1.08	0.89-1.21	0.712	0.708 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.28	M+2/M+4	0.97	0.89-1.21	0.959	0.954 - 0.964
13C12-2,2',3,3',5,5',6,6'-OxCB	202L			0.96	M+2/M+4	0.95	0.76-1.02	0.818	0.814 - 0.822
13C12-2,3,3',4,4',5,5',6-OxCB	205L			1.39	M+2/M+4	0.79	0.76-1.02	1.009	1.004 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			1.05	M+2/M+4	0.76	0.65-0.89	1.044	1.038 - 1.049
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.41	M+2/M+4	0.79	0.65-0.89	0.949	0.944 - 0.954
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.00	M+4/M+6	1.20	0.99-1.33	1.075	1.069 - 1.080

(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: _____ Henry Huang _____

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

VER Data Filename: PB3B_238 S: 1

Instrument ID: HR GC/MS

Analysis Date: 06-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 13:43:54

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	2.96	2.66-3.60	24.9	20.6 - 34.4
4-MoCB	3			M/M+2	2.96	2.66-3.60	24.2	20.6 - 34.4
2,2'-DiCB	4			M/M+2	1.57	1.33-1.79	28.1	20.6 - 34.4
4,4'-DiCB	15			M/M+2	1.54	1.33-1.79	26.6	20.6 - 34.4
2,2',6-TriCB	19			M/M+2	1.06	0.88-1.20	27.6	20.6 - 34.4
3,4,4'-TriCB	37			M/M+2	1.02	0.88-1.20	28.6	20.6 - 34.4
2,2',6,6'-TeCB	54			M/M+2	0.80	0.65-0.89	56.6	41.3 - 68.8
3,3',4,4'-TeCB	77			M/M+2	0.74	0.65-0.89	51.9	41.3 - 68.8
3,4,4',5-TeCB	81			M/M+2	0.75	0.65-0.89	52.8	41.3 - 68.8
2,2',4,6,6'-PeCB	104			M+2/M+4	1.64	1.32-1.78	59.3	41.3 - 68.8
2,3,3',4,4'-PeCB	105			M+2/M+4	1.51	1.32-1.78	55.3	41.3 - 68.8
2,3,4,4',5-PeCB	114			M+2/M+4	1.53	1.32-1.78	58.8	41.3 - 68.8
2,3',4,4',5-PeCB	118			M+2/M+4	1.51	1.32-1.78	56.2	41.3 - 68.8
2',3,4,4',5-PeCB	123			M+2/M+4	1.36	1.32-1.78	50.8	41.3 - 68.8
3,3',4,4',5-PeCB	126			M+2/M+4	1.55	1.32-1.78	58.5	41.3 - 68.8
2,2',4,4',6,6'-HxCB	155			M+2/M+4	1.28	1.05-1.43	62.4	41.3 - 68.8
2,3,3',4,4',5-HxCB	156	156 + 157	C	M+2/M+4	1.21	1.05-1.43	112	82.5 - 138
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			M+2/M+4	1.18	1.05-1.43	57.9	41.3 - 68.8
3,3',4,4',5,5'-HxCB	169			M+2/M+4	1.22	1.05-1.43	56.5	41.3 - 68.8
2,2',3,4',5,6,6'-HpCB	188			M+2/M+4	1.05	0.89-1.21	57.9	41.3 - 68.8
2,3,3',4,4',5,5'-HpCB	189			M+2/M+4	1.04	0.89-1.21	56.4	41.3 - 68.8
2,2',3,3',5,5',6,6'-OcCB	202			M+2/M+4	0.92	0.76-1.02	94.8	61.9 - 103
2,3,3',4,4',5,5',6-OcCB	205			M+2/M+4	0.88	0.76-1.02	77.7	61.9 - 103
2,2',3,3',4,4',5,5',6-NoCB	206			M+2/M+4	0.78	0.65-0.89	83.4	61.9 - 103
2,2',3,3',4,5,5',6,6'-NoCB	208			M+2/M+4	0.79	0.65-0.89	86.2	61.9 - 103
2,2',3,3',4,4',5,5',6,6'-DeCB	209			M+4/M+6	1.21	0.99-1.33	96.5	61.9 - 103

(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: _____Henry Huang_____

For Axys Internal Use Only [XSL Template: Form16684A.xsl; Created: 28-Oct-2023 18:51:44; Application: XMLTransformer-1.18.44;
Report Filename: 1668_PCB1668_PB3B_238S1__Form4A_SJ3323293.html; Workgroup: WG86864; Design ID: 2468]

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

VER Data Filename: PB3B_238 S: 1

Instrument ID: HR GC/MS

Analysis Date: 06-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 13:43:54

LABELLED 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	3.57	2.66-3.60	111	50.0 - 145
13C12-4-MoCB	3L			M/M+2	3.53	2.66-3.60	104	50.0 - 145
13C12-2,2'-DiCB	4L			M/M+2	1.52	1.33-1.79	104	50.0 - 145
13C12-4,4'-DiCB	15L			M/M+2	1.55	1.33-1.79	98.6	50.0 - 145
13C12-2,2',6-TriCB	19L			M/M+2	1.07	0.88-1.20	111	50.0 - 145
13C12-3,4,4'-TriCB	37L			M/M+2	1.03	0.88-1.20	90.4	50.0 - 145
13C12-2,2',6,6'-TeCB	54L			M/M+2	0.77	0.65-0.89	101	50.0 - 145
13C12-3,3',4,4'-TeCB	77L			M/M+2	0.76	0.65-0.89	97.5	50.0 - 145
13C12-3,4,4',5-TeCB	81L			M/M+2	0.77	0.65-0.89	95.8	50.0 - 145
13C12-2,2',4,6,6'-PeCB	104L			M+2/M+4	1.64	1.32-1.78	80.8	50.0 - 145
13C12-2,3,3',4,4'-PeCB	105L			M+2/M+4	1.57	1.32-1.78	99.9	50.0 - 145
13C12-2,3,4,4',5-PeCB	114L			M+2/M+4	1.57	1.32-1.78	95.8	50.0 - 145
13C12-2,3',4,4',5-PeCB	118L			M+2/M+4	1.58	1.32-1.78	95.2	50.0 - 145
13C12-2',3,4,4',5-PeCB	123L			M+2/M+4	1.55	1.32-1.78	95.4	50.0 - 145
13C12-3,3',4,4',5-PeCB	126L			M+2/M+4	1.57	1.32-1.78	98.0	50.0 - 145
13C12-2,2',4,4',6,6'-HxCB	155L			M+2/M+4	1.31	1.05-1.43	73.8	50.0 - 145
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	M+2/M+4	1.24	1.05-1.43	199	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	1.18	1.05-1.43	98.9	50.0 - 145
13C12-3,3',4,4',5,5'-HxCB	169L			M+2/M+4	1.20	1.05-1.43	103	50.0 - 145
13C12-2,2',3,4',5,6,6'-HpCB	188L			M+2/M+4	1.07	0.89-1.21	86.8	50.0 - 145
13C12-2,3,3',4,4',5,5'-HpCB	189L			M+2/M+4	0.98	0.89-1.21	90.0	50.0 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			M+2/M+4	0.89	0.76-1.02	58.2	50.0 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L			M+2/M+4	0.83	0.76-1.02	95.3	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	0.76	0.65-0.89	90.4	50.0 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			M+4/M+6	1.20	0.99-1.33	77.5	50.0 - 145

CLEAN-UP STANDARD

13C12-2,4,4'-TriCB	28L			M/M+2	1.03	0.88-1.20	87.9	65.0 - 135
13C12-2,3,3',5,5'-PeCB	111L			M+2/M+4	1.62	1.32-1.78	97.9	75.0 - 125
13C12-2,2',3,3',5,5',6-HpCB	178L			M+2/M+4	1.06	0.89-1.21	85.9	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: _____Henry Huang_____

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

VER Data Filename: PB3B_238 S: 1

Instrument ID: HR GC/MS

Analysis Date: 06-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 13:43:54

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	1.002	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	1.000	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	1.000	1.000-1.001
2,3,3',4,4',5,5'-HpCB	189			13C12-2,3,3',4,4',5,5'-HpCB	189L	1.001	1.000-1.001
2,2',3,3',5,5',6,6'-OxCB	202			13C12-2,2',3,3',5,5',6,6'-OxCB	202L	1.001	1.000-1.001
2,3,3',4,4',5,5',6-OxCB	205			13C12-2,3,3',4,4',5,5',6-OxCB	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	1.001	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	1.001	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: _____Henry Huang_____

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

VER Data Filename: PB3B_238 S: 1

Instrument ID: HR GC/MS

Analysis Date: 06-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 13:43:54

LABELLED 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	0.722	0.691-0.753
13C12-4-MoCB	3L			13C12-2,5-DiCB	9L	0.859	0.827-0.890
13C12-2,2'-DiCB	4L			13C12-2,5-DiCB	9L	0.875	0.844-0.906
13C12-4,4'-DiCB	15L			13C12-2,5-DiCB	9L	1.250	1.219-1.281
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	0.813	0.799-0.826
13C12-3,3',4,4'-TeCB	77L			13C12-2,2',5,5'-TeCB	52L	1.396	1.383-1.409
13C12-3,4,4',5'-TeCB	81L			13C12-2,2',5,5'-TeCB	52L	1.372	1.359-1.385
13C12-2,2',4,6,6'-PeCB	104L			13C12-2,2',4,5,5'-PeCB	101L	0.809	0.799-0.819
13C12-2,3,3',4,4'-PeCB	105L			13C12-2,2',4,5,5'-PeCB	101L	1.201	1.190-1.211
13C12-2,3,4,4',5'-PeCB	114L			13C12-2,2',4,5,5'-PeCB	101L	1.179	1.169-1.190
13C12-2,3',4,4',5'-PeCB	118L			13C12-2,2',4,5,5'-PeCB	101L	1.162	1.152-1.172
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	1.302	1.291-1.312
13C12-2,2',4,4',6,6'-HxCB	155L			13C12-2,2',3,4,4',5'-HxCB	138L	0.785	0.777-0.793
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	1.069-1.086
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	0.705-0.718
13C12-2,3,3',4,4',5,5'-HpCB	189L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.958	0.952-0.965
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			13C12-2,2',3,3',4,4',5,5'-OcCB	194L	0.817	0.811-0.823
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	1.043	1.034-1.052
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	1.065-1.084

CLEANUP STANDARD

13C12-2,4,4'-TriCB	28L	13C12-2,2',5,5'-TeCB	52L	0.925	0.911-0.938
13C12-2,3,3',5,5'-PeCB	111L	13C12-2,2',4,5,5'-PeCB	101L	1.087	1.077-1.098
13C12-2,2',3,3',5,5',6-HpCB	178L	13C12-2,2',3,4,4',5'-HxCB	138L	1.012	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: _____ Henry Huang _____

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

CAL Data Filename: PB3B_238 S: 1

Instrument ID: HR GC/MS

Analysis Date: 06-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 13:43:54

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-MoCB	1			0.89	M/M+2	2.96	2.66-3.60	1.001	0.996 - 1.006
3-MoCB	2			0.87	M/M+2	2.98	2.66-3.60	0.989	0.984 - 0.994
4-MoCB	3			0.89	M/M+2	2.96	2.66-3.60	1.002	0.997 - 1.007
2,2'-DiCB	4			0.89	M/M+2	1.57	1.33-1.79	1.001	0.996 - 1.006
2,3-DiCB	5			0.99	M/M+2	1.53	1.33-1.79	1.196	1.190 - 1.202
2,3'-DiCB	6			1.08	M/M+2	1.53	1.33-1.79	1.173	1.167 - 1.179
2,4-DiCB	7			1.12	M/M+2	1.56	1.33-1.79	1.155	1.149 - 1.161
2,4'-DiCB	8			1.17	M/M+2	1.56	1.33-1.79	1.205	1.198 - 1.211
2,5-DiCB	9			1.06	M/M+2	1.51	1.33-1.79	1.144	1.138 - 1.149
2,6-DiCB	10			1.05	M/M+2	1.55	1.33-1.79	1.014	1.009 - 1.019
3,3'-DiCB	11			1.02	M/M+2	1.56	1.33-1.79	0.970	0.965 - 0.975
3,4-DiCB	12	12 + 13	C	1.03	M/M+2	1.58	1.33-1.79	0.986	0.981 - 0.991
3,4'-DiCB	13	12 + 13	C12						
3,5-DiCB	14			1.07	M/M+2	1.53	1.33-1.79	0.926	0.922 - 0.931
4,4'-DiCB	15			0.85	M/M+2	1.54	1.33-1.79	1.002	0.997 - 1.007
2,2',3-TriCB	16			0.89	M/M+2	1.06	0.88-1.20	1.164	1.158 - 1.170
2,2',4-TriCB	17			1.03	M/M+2	1.03	0.88-1.20	1.136	1.130 - 1.141
2,2',5-TriCB	18	18 + 30	C	1.21	M/M+2	1.04	0.88-1.20	1.109	1.103 - 1.114
2,2',6-TriCB	19			1.15	M/M+2	1.06	0.88-1.20	1.001	0.996 - 1.006
2,3,3'-TriCB	20	20 + 28	C	1.10	M/M+2	1.01	0.88-1.20	0.849	0.845 - 0.853
2,3,4-TriCB	21	21 + 33	C	1.03	M/M+2	1.00	0.88-1.20	0.857	0.853 - 0.862
2,3,4'-TriCB	22			1.08	M/M+2	1.01	0.88-1.20	0.873	0.868 - 0.877
2,3,5-TriCB	23			1.09	M/M+2	1.01	0.88-1.20	1.278	1.272 - 1.285
2,3,6-TriCB	24			1.37	M/M+2	1.06	0.88-1.20	1.157	1.151 - 1.162
2,3',4-TriCB	25			1.17	M/M+2	1.01	0.88-1.20	0.825	0.821 - 0.829
2,3',5-TriCB	26	26 + 29	C	1.09	M/M+2	1.00	0.88-1.20	1.298	1.291 - 1.304
2,3',6-TriCB	27			1.41	M/M+2	1.05	0.88-1.20	1.149	1.144 - 1.155
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			1.14	M/M+2	1.00	0.88-1.20	0.837	0.833 - 0.841
2,4',6-TriCB	32			1.11	M/M+2	1.00	0.88-1.20	1.195	1.189 - 1.201
2',3,4-TriCB	33	21 + 33	C21						
2',3,5-TriCB	34			1.02	M/M+2	1.01	0.88-1.20	1.270	1.263 - 1.276
3,3',4-TriCB	35			1.04	M/M+2	0.94	0.88-1.20	0.985	0.980 - 0.990
3,3',5-TriCB	36			1.09	M/M+2	1.02	0.88-1.20	0.931	0.927 - 0.936
3,4,4'-TriCB	37			0.91	M/M+2	1.02	0.88-1.20	1.001	0.996 - 1.006
3,4,5-TriCB	38			1.06	M/M+2	1.01	0.88-1.20	0.967	0.962 - 0.972
3,4',5-TriCB	39			1.18	M/M+2	1.00	0.88-1.20	0.945	0.941 - 0.950
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.84	M/M+2	0.79	0.65-0.89	1.335	1.328 - 1.341
2,2',3,4-TeCB	41	40 + 41 + 71	C40						
2,2',3,4'-TeCB	42			0.74	M/M+2	0.80	0.65-0.89	1.309	1.303 - 1.316
2,2',3,5-TeCB	43			0.75	M/M+2	0.80	0.65-0.89	1.243	1.237 - 1.249
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.90	M/M+2	0.80	0.65-0.89	1.283	1.276 - 1.289
2,2',3,6-TeCB	45	45 + 51	C	0.82	M/M+2	0.78	0.65-0.89	1.147	1.141 - 1.153
2,2',3,6'-TeCB	46			0.73	M/M+2	0.81	0.65-0.89	1.160	1.154 - 1.165
2,2',4,4'-TeCB	47	44 + 47 + 65	C44						
2,2',4,5-TeCB	48			0.86	M/M+2	0.78	0.65-0.89	1.271	1.264 - 1.277
2,2',4,5'-TeCB	49	49 + 69	C	0.92	M/M+2	0.82	0.65-0.89	1.254	1.248 - 1.260

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',4,6-TeCB	50	50 + 53	C	0.86	M/M+2	0.81	0.65-0.89	1.110	1.105 - 1.116
2,2',4,6'-TeCB	51	45 + 51	C45						
2,2',5,5'-TeCB	52			0.83	M/M+2	0.79	0.65-0.89	1.232	1.226 - 1.238
2,2',5,6'-TeCB	53	50 + 53	C50						
2,2',6,6'-TeCB	54			1.02	M/M+2	0.80	0.65-0.89	1.001	0.996 - 1.006
2,3,3',4-TeCB	55			0.90	M/M+2	0.75	0.65-0.89	0.889	0.885 - 0.894
2,3,3',4'-TeCB	56			0.88	M/M+2	0.75	0.65-0.89	0.905	0.900 - 0.909
2,3,3',5-TeCB	57			0.89	M/M+2	0.75	0.65-0.89	0.844	0.839 - 0.848
2,3,3',5'-TeCB	58			0.93	M/M+2	0.74	0.65-0.89	0.851	0.847 - 0.855
2,3,3',6-TeCB	59	59 + 62 + 75	C	1.10	M/M+2	0.80	0.65-0.89	1.299	1.292 - 1.305
2,3,4,4'-TeCB	60			0.91	M/M+2	0.75	0.65-0.89	0.911	0.907 - 0.916
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	C	0.89	M/M+2	0.76	0.65-0.89	0.875	0.870 - 0.879
2,3,4,6-TeCB	62	59 + 62 + 75	C59						
2,3,4',5-TeCB	63			0.92	M/M+2	0.76	0.65-0.89	0.864	0.860 - 0.869
2,3,4',6-TeCB	64			1.06	M/M+2	0.79	0.65-0.89	1.345	1.339 - 1.352
2,3,5,6-TeCB	65	44 + 47 + 65	C44						
2,3',4,4'-TeCB	66			0.92	M/M+2	0.75	0.65-0.89	0.884	0.880 - 0.889
2,3',4,5-TeCB	67			1.01	M/M+2	0.73	0.65-0.89	0.856	0.852 - 0.860
2,3',4,5'-TeCB	68			1.02	M/M+2	0.75	0.65-0.89	0.831	0.827 - 0.835
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			0.92	M/M+2	0.74	0.65-0.89	0.822	0.818 - 0.826
2,3',5',6-TeCB	73			1.10	M/M+2	0.80	0.65-0.89	1.238	1.232 - 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',4,4'-TeCB	77			0.88	M/M+2	0.73	0.65-0.89	1.001	0.995 - 1.006
3,3',4,5-TeCB	78			0.87	M/M+2	0.75	0.65-0.89	0.987	0.982 - 0.992
3,3',4,5'-TeCB	79			1.04	M/M+2	0.75	0.65-0.89	0.970	0.965 - 0.975
3,3',5,5'-TeCB	80			1.02	M/M+2	0.76	0.65-0.89	0.923	0.918 - 0.927
3,4,4',5-TeCB	81			0.93	M/M+2	0.75	0.65-0.89	1.001	0.995 - 1.006
2,2',3,3',4-PeCB	82			0.85	M+2/M+4	1.54	1.32-1.78	0.935	0.930 - 0.940
2,2',3,3',5-PeCB	83	83 + 99	C	0.95	M+2/M+4	1.54	1.32-1.78	0.886	0.881 - 0.890
2,2',3,3',6-PeCB	84			0.87	M+2/M+4	1.56	1.32-1.78	1.164	1.158 - 1.170
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	1.13	M+2/M+4	1.59	1.32-1.78	0.921	0.916 - 0.925
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 109 + 119 + 125	C	1.09	M+2/M+4	1.56	1.32-1.78	0.900	0.895 - 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	0.95	M+2/M+4	1.57	1.32-1.78	1.155	1.149 - 1.161
2,2',3,4,6'-PeCB	89			0.91	M+2/M+4	1.58	1.32-1.78	1.183	1.177 - 1.189
2,2',3,4',5-PeCB	90	90 + 101 + 113	C	1.10	M+2/M+4	1.54	1.32-1.78	0.869	0.865 - 0.874
2,2',3,4',6-PeCB	91	88 + 91	C88						
2,2',3,5,5'-PeCB	92			0.94	M+2/M+4	1.59	1.32-1.78	0.853	0.849 - 0.858
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	C	0.96	M+2/M+4	1.57	1.32-1.78	1.128	1.123 - 1.134
2,2',3,5,6'-PeCB	94			0.93	M+2/M+4	1.56	1.32-1.78	1.103	1.097 - 1.108
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	C93						
2,2',3,6,6'-PeCB	96			0.94	M+2/M+4	1.60	1.32-1.78	1.016	1.011 - 1.021
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			1.06	M+2/M+4	1.52	1.32-1.78	1.093	1.087 - 1.098
2,2',4,6,6'-PeCB	104			1.29	M+2/M+4	1.64	1.32-1.78	1.001	0.996 - 1.006
2,3,3',4,4'-PeCB	105			0.94	M+2/M+4	1.51	1.32-1.78	1.001	0.996 - 1.006
2,3,3',4,5-PeCB	106			1.02	M+2/M+4	1.55	1.32-1.78	1.004	0.999 - 1.009
2,3,3',4',5-PeCB	107			1.03	M+2/M+4	1.70	1.32-1.78	0.998	0.993 - 1.003
2,3,3',4,5'-PeCB	108	108 + 124	C	0.98	M+2/M+4	1.55	1.32-1.78	0.991	0.986 - 0.996
2,3,3',4,6-PeCB	109	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3,3',4',6-PeCB	110	110 + 115	C	1.22	M+2/M+4	1.58	1.32-1.78	0.926	0.922 - 0.931
2,3,3',5,5'-PeCB	111			1.31	M+2/M+4	1.57	1.32-1.78	0.945	0.941 - 0.950

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',5,6-PeCB	112			1.31	M+2/M+4	1.58	1.32-1.78	0.890	0.885 - 0.894
2,3,3',5,6-PeCB	113	90 + 101 + 113	C90						
2,3,4,4',5-PeCB	114			1.01	M+2/M+4	1.53	1.32-1.78	1.001	0.996 - 1.006
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			0.95	M+2/M+4	1.51	1.32-1.78	1.001	0.995 - 1.006
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 109 + 119 + 125	C86						
2,3',4,5,5'-PeCB	120			1.33	M+2/M+4	1.56	1.32-1.78	0.958	0.953 - 0.963
2,3',4,5',6-PeCB	121			1.32	M+2/M+4	1.56	1.32-1.78	1.198	1.192 - 1.204
2',3,3',4,5-PeCB	122			0.91	M+2/M+4	1.53	1.32-1.78	1.011	1.005 - 1.016
2',3,4,4',5-PeCB	123			0.79	M+2/M+4	1.36	1.32-1.78	1.001	0.996 - 1.006
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			1.02	M+2/M+4	1.55	1.32-1.78	1.000	0.995 - 1.005
3,3',4,5,5'-PeCB	127			0.98	M+2/M+4	1.54	1.32-1.78	1.041	1.035 - 1.046
2,2',3,3',4,4'-HxCB	128	128 + 166	C	0.99	M+2/M+4	1.21	1.05-1.43	0.959	0.954 - 0.963
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	0.95	M+2/M+4	1.22	1.05-1.43	0.929	0.924 - 0.934
2,2',3,3',4,5'-HxCB	130			0.77	M+2/M+4	1.20	1.05-1.43	0.913	0.909 - 0.918
2,2',3,3',4,6-HxCB	131			0.74	M+2/M+4	1.22	1.05-1.43	1.161	1.155 - 1.167
2,2',3,3',4,6'-HxCB	132			0.83	M+2/M+4	1.18	1.05-1.43	1.176	1.170 - 1.182
2,2',3,3',5,5'-HxCB	133			0.84	M+2/M+4	1.20	1.05-1.43	1.193	1.187 - 1.198
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.78	M+2/M+4	1.20	1.05-1.43	1.145	1.139 - 1.150
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	0.71	M+2/M+4	1.29	1.05-1.43	1.106	1.100 - 1.111
2,2',3,3',6,6'-HxCB	136			0.90	M+2/M+4	1.30	1.05-1.43	1.026	1.021 - 1.031
2,2',3,4,4',5-HxCB	137			0.85	M+2/M+4	1.21	1.05-1.43	0.919	0.914 - 0.923
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129						
2,2',3,4,4',6-HxCB	139	139 + 140	C	0.92	M+2/M+4	1.20	1.05-1.43	1.154	1.148 - 1.160
2,2',3,4,4',6'-HxCB	140	139 + 140	C139						
2,2',3,4,5,5'-HxCB	141			0.92	M+2/M+4	1.19	1.05-1.43	0.904	0.899 - 0.908
2,2',3,4,5,6-HxCB	142			0.80	M+2/M+4	1.19	1.05-1.43	1.166	1.160 - 1.172
2,2',3,4,5,6'-HxCB	143	134 + 143	C134						
2,2',3,4,5',6-HxCB	144			0.70	M+2/M+4	1.29	1.05-1.43	1.123	1.117 - 1.128
2,2',3,4,6,6'-HxCB	145			0.88	M+2/M+4	1.31	1.05-1.43	1.035	1.030 - 1.040
2,2',3,4',5,5'-HxCB	146			0.94	M+2/M+4	1.18	1.05-1.43	0.884	0.879 - 0.888
2,2',3,4',5,6-HxCB	147	147 + 149	C	0.91	M+2/M+4	1.18	1.05-1.43	1.135	1.129 - 1.140
2,2',3,4',5,6'-HxCB	148			0.67	M+2/M+4	1.30	1.05-1.43	1.084	1.079 - 1.090
2,2',3,4',5',6-HxCB	149	147 + 149	C147						
2,2',3,4',6,6'-HxCB	150			0.94	M+2/M+4	1.29	1.05-1.43	1.014	1.009 - 1.019
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135						
2,2',3,5,6,6'-HxCB	152			0.90	M+2/M+4	1.30	1.05-1.43	1.008	1.003 - 1.013
2,2',4,4',5,5'-HxCB	153	153 + 168	C	1.08	M+2/M+4	1.21	1.05-1.43	0.899	0.895 - 0.903
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135						
2,2',4,4',6,6'-HxCB	155			1.22	M+2/M+4	1.28	1.05-1.43	1.001	0.995 - 1.006
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.03	M+2/M+4	1.22	1.05-1.43	1.000	0.995 - 1.005
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3,3',4,4',6-HxCB	158			1.25	M+2/M+4	1.20	1.05-1.43	0.938	0.933 - 0.943
2,3,3',4,5,5'-HxCB	159			1.13	M+2/M+4	1.19	1.05-1.43	0.982	0.977 - 0.987
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129						
2,3,3',4,5',6-HxCB	161			1.18	M+2/M+4	1.20	1.05-1.43	0.887	0.882 - 0.891
2,3,3',4',5,5'-HxCB	162			1.21	M+2/M+4	1.18	1.05-1.43	0.989	0.984 - 0.994
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	1.18	1.05-1.43	0.921	0.917 - 0.926
2,3,3',5,5',6-HxCB	165			1.09	M+2/M+4	1.17	1.05-1.43	0.878	0.874 - 0.882
2,3,4,4',5,6-HxCB	166	128 + 166	C128						
2,3',4,4',5,5'-HxCB	167			1.09	M+2/M+4	1.18	1.05-1.43	1.000	0.995 - 1.005
2,3',4,4',5',6-HxCB	168	153 + 168	C153						
3,3',4,4',5,5'-HxCB	169			1.02	M+2/M+4	1.22	1.05-1.43	1.001	0.996 - 1.006
2,2',3,3',4,4',5-HpCB	170			1.12	M+2/M+4	1.04	0.89-1.21	1.000	0.995 - 1.005
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	0.82	M+2/M+4	1.05	0.89-1.21	1.163	1.157 - 1.169
2,2',3,3',4,5,5'-HpCB	172			0.81	M+2/M+4	1.04	0.89-1.21	0.897	0.892 - 0.901
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171						
2,2',3,3',4,5,6'-HpCB	174			0.91	M+2/M+4	1.05	0.89-1.21	1.134	1.128 - 1.140

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',4,5',6-HpCB	175			0.90	M+2/M+4	1.05	0.89-1.21	1.103	1.097 - 1.108
2,2',3,3',4,6',6-HpCB	176			1.16	M+2/M+4	1.06	0.89-1.21	1.035	1.030 - 1.040
2,2',3,3',4',5,6-HpCB	177			0.84	M+2/M+4	1.03	0.89-1.21	1.146	1.140 - 1.152
2,2',3,3',5,5',6-HpCB	178			0.87	M+2/M+4	1.05	0.89-1.21	1.085	1.080 - 1.091
2,2',3,3',5,6,6'-HpCB	179			1.20	M+2/M+4	1.04	0.89-1.21	1.011	1.006 - 1.016
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	1.27	M+2/M+4	1.05	0.89-1.21	1.000	0.995 - 1.005
2,2',3,4,4',5,6-HpCB	181			0.89	M+2/M+4	1.03	0.89-1.21	1.157	1.151 - 1.163
2,2',3,4,4',5,6'-HpCB	182			0.95	M+2/M+4	1.05	0.89-1.21	1.116	1.110 - 1.121
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	0.88	M+2/M+4	1.04	0.89-1.21	1.127	1.121 - 1.133
2,2',3,4,4',6,6'-HpCB	184			1.27	M+2/M+4	1.05	0.89-1.21	1.024	1.019 - 1.030
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183						
2,2',3,4,5,6,6'-HpCB	186			1.19	M+2/M+4	1.04	0.89-1.21	1.047	1.042 - 1.053
2,2',3,4',5,5',6-HpCB	187			1.00	M+2/M+4	1.05	0.89-1.21	1.110	1.105 - 1.116
2,2',3,4',5,6,6'-HpCB	188			1.08	M+2/M+4	1.05	0.89-1.21	1.001	0.995 - 1.006
2,3,3',4,4',5,5'-HpCB	189			0.87	M+2/M+4	1.04	0.89-1.21	1.001	0.996 - 1.006
2,3,3',4,4',5,6-HpCB	190			1.04	M+2/M+4	1.04	0.89-1.21	0.947	0.943 - 0.952
2,3,3',4,4',5',6-HpCB	191			1.07	M+2/M+4	1.05	0.89-1.21	0.918	0.913 - 0.922
2,3,3',4,5,5',6-HpCB	192			1.04	M+2/M+4	1.04	0.89-1.21	0.903	0.898 - 0.907
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180						
2,2',3,3',4,4',5,5'-OcCB	194			1.00	M+2/M+4	0.90	0.76-1.02	0.991	0.986 - 0.996
2,2',3,3',4,4',5,6-OcCB	195			0.96	M+2/M+4	0.90	0.76-1.02	0.946	0.941 - 0.950
2,2',3,3',4,4',5,6'-OcCB	196			0.62	M+2/M+4	0.93	0.76-1.02	0.916	0.911 - 0.920
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C	0.89	M+2/M+4	0.91	0.76-1.02	1.044	1.039 - 1.049
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C	0.62	M+2/M+4	0.95	0.76-1.02	1.114	1.109 - 1.120
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			0.86	M+2/M+4	0.93	0.76-1.02	1.023	1.018 - 1.028
2,2',3,3',5,5',6,6'-OcCB	202			1.23	M+2/M+4	0.92	0.76-1.02	1.001	0.996 - 1.006
2,2',3,4,4',5,5',6-OcCB	203			0.67	M+2/M+4	0.90	0.76-1.02	0.920	0.915 - 0.924
2,2',3,4,4',5,6,6'-OcCB	204			0.87	M+2/M+4	0.91	0.76-1.02	1.039	1.034 - 1.044
2,3,3',4,4',5,5',6-OcCB	205			0.92	M+2/M+4	0.88	0.76-1.02	1.000	0.995 - 1.005
2,2',3,3',4,4',5,5',6-NoCB	206			1.00	M+2/M+4	0.78	0.65-0.89	1.001	0.996 - 1.006
2,2',3,3',4,4',5,6,6'-NoCB	207			1.13	M+2/M+4	0.80	0.65-0.89	1.020	1.014 - 1.025
2,2',3,3',4,5,5',6,6'-NoCB	208			1.07	M+2/M+4	0.79	0.65-0.89	1.000	0.995 - 1.005
2,2',3,3',4,4',5,5',6,6'-DeCB	209			1.15	M+4/M+6	1.21	0.99-1.33	1.001	0.996 - 1.006

(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.

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

Signed: _____Henry Huang_____

SGS AXYS METHOD MLA-010 Rev 12

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: 04-Aug-2023

CAL Data Filename: PB3B_238 S: 1

Instrument ID: HR GC/MS

Analysis Date: 06-Oct-2023

GC Column ID: SPB OCTYL

Analysis Time: 13:43:54

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			1.14	M/M+2	3.57	2.66-3.60	0.722	0.719 - 0.726
13C12-4-MoCB	3L			1.04	M/M+2	3.53	2.66-3.60	0.859	0.855 - 0.863
13C12-2,2'-DiCB	4L			0.63	M/M+2	1.52	1.33-1.79	0.876	0.871 - 0.880
13C12-4,4'-DiCB	15L			0.98	M/M+2	1.55	1.33-1.79	1.250	1.244 - 1.256
13C12-2,2',6-TriCB	19L			0.57	M/M+2	1.07	0.88-1.20	1.072	1.067 - 1.078
13C12-3,4,4'-TriCB	37L			1.32	M/M+2	1.03	0.88-1.20	1.091	1.086 - 1.097
13C12-2,2',6,6'-TeCB	54L			1.27	M/M+2	0.77	0.65-0.89	0.813	0.809 - 0.817
13C12-3,3',4,4'-TeCB	77L			1.21	M/M+2	0.76	0.65-0.89	1.396	1.389 - 1.403
13C12-3,4,4',5-TeCB	81L			1.17	M/M+2	0.77	0.65-0.89	1.372	1.366 - 1.379
13C12-2,2',4,6,6'-PeCB	104L			0.77	M+2/M+4	1.64	1.32-1.78	0.809	0.805 - 0.813
13C12-2,3,3',4,4'-PeCB	105L			1.10	M+2/M+4	1.57	1.32-1.78	1.201	1.195 - 1.207
13C12-2,3,4,4',5-PeCB	114L			1.03	M+2/M+4	1.57	1.32-1.78	1.179	1.173 - 1.185
13C12-2,3',4,4',5-PeCB	118L			1.08	M+2/M+4	1.58	1.32-1.78	1.162	1.156 - 1.168
13C12-2',3,4,4',5-PeCB	123L			1.10	M+2/M+4	1.55	1.32-1.78	1.151	1.145 - 1.157
13C12-3,3',4,4',5-PeCB	126L			1.00	M+2/M+4	1.57	1.32-1.78	1.302	1.295 - 1.308
13C12-2,2',4,4',6,6'-HxCB	155L			0.88	M+2/M+4	1.31	1.05-1.43	0.785	0.781 - 0.789
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C	1.18	M+2/M+4	1.25	1.05-1.43	1.108	1.102 - 1.114
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	1.18	1.05-1.43	1.078	1.072 - 1.083
13C12-3,3',4,4',5,5'-HxCB	169L			1.18	M+2/M+4	1.20	1.05-1.43	1.192	1.186 - 1.197
13C12-2,2',3,3',4,4',5-HpCB	170L			1.00	M+2/M+4	1.07	0.89-1.21	0.897	0.893 - 0.902
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.11	M+2/M+4	1.10	0.89-1.21	0.872	0.868 - 0.876
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.60	M+2/M+4	1.07	0.89-1.21	0.712	0.708 - 0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.26	M+2/M+4	0.98	0.89-1.21	0.959	0.954 - 0.963
13C12-2,2',3,3',5,5',6,6'-OxCB	202L			0.74	M+2/M+4	0.89	0.76-1.02	0.817	0.813 - 0.821
13C12-2,3,3',4,4',5,5',6-OxCB	205L			1.38	M+2/M+4	0.83	0.76-1.02	1.009	1.004 - 1.014
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			1.06	M+2/M+4	0.77	0.65-0.89	1.043	1.038 - 1.048
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			1.36	M+2/M+4	0.76	0.65-0.89	0.949	0.944 - 0.954
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			0.91	M+4/M+6	1.20	0.99-1.33	1.075	1.069 - 1.080

(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: _____ Henry Huang _____

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum													Tissue and Tissue Flora	Urine	Water	Water, Non-Potable	AFF
				CAIA	Alaska DEC	ANAB bDd **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE					
OC Pesticides	Alpha-HCH	SGS AXYS MLA-007	MLA-007						Y	Y							Y		Y		
OC Pesticides		SGS AXYS MLA-228	MLA-228						Y	Y							Y	Y			
OC Pesticides		EPA 625	MLA-007															Y	Y	Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y					
OC Pesticides		EPA 1699	MLA-028						Y								Y				
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y					Y	Y					Y			Y			Y
OC Pesticides		SGS AXYS MLA-007	MLA-007						Y	Y					Y		Y		Y		
OC Pesticides		SGS AXYS MLA-228	MLA-228						Y	Y					Y	Y	Y				Y
OC Pesticides	Beta-HCH	EPA 625	MLA-007																Y	Y	Y
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y					
OC Pesticides		EPA 1699	MLA-028						Y								Y				
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y					Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-007	MLA-007						Y	Y					Y		Y		Y		
OC Pesticides		SGS AXYS MLA-228	MLA-228						Y	Y					Y	Y	Y				Y
OC Pesticides		EPA 8270E	MLA-007																Y	Y	Y
OC Pesticides		EPA 1699	MLA-028						Y								Y				
OC Pesticides	Chlordane, technical	SGS AXYS MLA-007	MLA-007						Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-007	MLA-007						Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-228	MLA-228						Y	Y					Y	Y		Y			Y
OC Pesticides		EPA 8270E	MLA-007																Y	Y	Y
OC Pesticides	cis-Chlordane (alpha-Chlordane)	SGS AXYS MLA-007	MLA-007																Y		
OC Pesticides		SGS AXYS MLA-228	MLA-228																Y		
OC Pesticides		EPA 8270E	MLA-007							Y	Y			Y	Y				Y	Y	Y
OC Pesticides		EPA 1699	MLA-028																Y		
OC Pesticides	cis-Nonachlor	SGS AXYS MLA-028	MLA-028	Y					Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-007	MLA-007						Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-228	MLA-228						Y	Y					Y	Y		Y			Y
OC Pesticides		EPA 8270E	MLA-007																Y	Y	Y
OC Pesticides	Delta-HCH	EPA 1699	MLA-028																Y		
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y					Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-007	MLA-007						Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-228	MLA-228						Y	Y					Y	Y		Y			Y
OC Pesticides	Dieldrin	EPA 608	MLA-007																Y	Y	Y
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y					
OC Pesticides		EPA 1699	MLA-028																Y		
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y					Y	Y					Y	Y		Y			Y
OC Pesticides	Endosulphan I	SGS AXYS MLA-007	MLA-007						Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-228	MLA-228						Y	Y					Y	Y		Y			Y
OC Pesticides		EPA 608	MLA-007																Y	Y	Y
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y					
OC Pesticides	Endosulphan II	EPA 1699	MLA-028																Y		
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y					Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-007	MLA-007						Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-228	MLA-228						Y	Y					Y	Y		Y			Y
OC Pesticides	Endosulphan sulphate	EPA 608	MLA-007																Y	Y	Y
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y					
OC Pesticides		EPA 1699	MLA-028																Y		
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y					Y	Y					Y	Y		Y			Y
OC Pesticides	Endrin	SGS AXYS MLA-007	MLA-007						Y	Y					Y	Y		Y			Y
OC Pesticides		SGS AXYS MLA-228	MLA-228						Y	Y					Y	Y		Y			Y
OC Pesticides		EPA 608	MLA-007																Y	Y	Y
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y					
OC Pesticides	Endrin aldehyde	EPA 1699	MLA-028																Y		
OC Pesticides																					
OC Pesticides																					
OC Pesticides																					

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Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Tissue and Tissue Flora	Urine	Water	Water, Non-Potable	AFF
				CAIA Alaska DEC ANAB b/d ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE ANAB b/d ** ANAB ISO 17025 CAIA Florida DOH Minnesota DOH New Jersey DEP Virginia DGS CAIA Alaska DEC ANAB b/d ** ANAB ISO 17025 California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE ** ANAB b/d ** ANAB ISO 17025	CAIA Alaska DEC ANAB b/d ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE ** ANAB b/d ** ANAB ISO 17025	CAIA Alaska DEC ANAB b/d ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE ** ANAB b/d ** ANAB ISO 17025	CAIA Alaska DEC ANAB b/d ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE ** ANAB b/d ** ANAB ISO 17025	CAIA Alaska DEC ANAB b/d ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE ** ANAB b/d ** ANAB ISO 17025	CAIA Alaska DEC ANAB b/d ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE ** ANAB b/d ** ANAB ISO 17025
PAH	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021						
PAH	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021						
PAH	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021						
PAH	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021						
PAH	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021						
PAH	C3-Fluorenes	SGS AXYS MLA-021	MLA-021						
PAH	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021						
PAH	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021						
PAH	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021						
PAH	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021						
PAH	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021						
PAH	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021						
PAH	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021						
PAH	Chrysene	EPA 1625	MLA-021						
PAH		EPA 8270E	MLA-021						
PAH		SGS AXYS MLA-021	MLA-021						
PAH	Dibenzo[a,h]anthracene	EPA 1625	MLA-021						
PAH		EPA 8270E	MLA-021						
PAH		SGS AXYS MLA-021	MLA-021						
PAH	Dibenzothiophene	SGS AXYS MLA-021	MLA-021						
PAH	Fluoranthene	EPA 1625	MLA-021						
PAH		EPA 8270E	MLA-021						
PAH		SGS AXYS MLA-021	MLA-021						
PAH	Fluorene	EPA 1625	MLA-021						
PAH		EPA 8270E	MLA-021						
PAH		SGS AXYS MLA-021	MLA-021						
PAH	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021						
PAH		EPA 8270E	MLA-021						
PAH		SGS AXYS MLA-021	MLA-021						
PAH	Naphthalene	EPA 1625	MLA-021						
PAH		EPA 8270E	MLA-021						
PAH		SGS AXYS MLA-021	MLA-021						
PAH	Perylene	SGS AXYS MLA-021	MLA-021						
PAH	Phenanthrene	EPA 1625	MLA-021						
PAH		EPA 8270E	MLA-021						
PAH		SGS AXYS MLA-021	MLA-021						
PAH	Pyrene	EPA 1625	MLA-021						
PAH		EPA 8270E	MLA-021						
PAH		SGS AXYS MLA-021	MLA-021						
PAH	Retene	SGS AXYS MLA-021	MLA-021						
PBDE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						
PBDE	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033						
PBDE		SGS AXYS MLA-033	MLA-033						

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Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Accreditation Scope				Serum	Solids											Tissue and Tissue Flora		Urine	Water	Water, Non-Potable		AFF																
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID			ALA	Alaska DEC	ANAB bDd **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP								New York DOH	Virginia DGS	Washington DE	ANAB bDd **	ANAB ISO 17025	CAIA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	Alaska DEC	ANAB bDd **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH
PCB congeners	PCB 105/127	SGS AXYS MLA-210	MLA-210						Y																													
PCB congeners		SGS AXYS MLA-908	MLA-908												Y	Y																						
PCB congeners		EPA 1628	MLA-908																																			
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	SGS AXYS MLA-007	MLA-007						Y										Y																			
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y											Y	Y			Y	Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010		Y					Y	Y				Y	Y										Y												
PCB congeners		SGS AXYS MLA-210	MLA-210				Y			Y	Y								Y	Y					Y													
PCB congeners	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	SGS AXYS MLA-908	MLA-908												Y	Y																						
PCB congeners		EPA 1628	MLA-908																																			
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007							Y																												
PCB congeners	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y			Y									Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010		Y					Y	Y																											
PCB congeners		SGS AXYS MLA-210	MLA-210				Y			Y	Y								Y	Y																		
PCB congeners		SGS AXYS MLA-908	MLA-908												Y	Y																						
PCB congeners	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1628	MLA-908																																			
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y												Y	Y			Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010		Y					Y	Y																											
PCB congeners		SGS AXYS MLA-210	MLA-210				Y												Y	Y																		
PCB congeners	PCB 11 3,3'-Dichlorobiphenyl	SGS AXYS MLA-908	MLA-908																																			
PCB congeners		EPA 1628	MLA-908																																			
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y											Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	SGS AXYS MLA-010	MLA-010		Y					Y	Y																											
PCB congeners		SGS AXYS MLA-210	MLA-210				Y																															
PCB congeners		SGS AXYS MLA-908	MLA-908																																			
PCB congeners		EPA 1628	MLA-908																																			
PCB congeners	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y																					
PCB congeners		SGS AXYS MLA-010	MLA-010		Y																																	
PCB congeners		SGS AXYS MLA-210	MLA-210				Y				Y																											
PCB congeners		SGS AXYS MLA-908	MLA-908								Y				Y	Y																						
PCB congeners	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1628	MLA-908																																			
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010		Y						Y	Y																										
PCB congeners		SGS AXYS MLA-210	MLA-210				Y																															
PCB congeners	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	SGS AXYS MLA-908	MLA-908																																			
PCB congeners		EPA 1628	MLA-908																																			
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y																				
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	SGS AXYS MLA-010	MLA-010		Y					Y	Y																											
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007																																			
PCB congeners		SGS AXYS MLA-210	MLA-210				Y				Y																											
PCB congeners	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	SGS AXYS MLA-908	MLA-908																																			
PCB congeners		EPA 1628	MLA-908																																			
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y																				
PCB congeners		EPA 8270E	MLA-007																																			

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Accreditation Scope				Serum	Solids											Tissue and Tissue Flora		Urine	Water	Water, Non-Potable		AFF																	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB bDd **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB bDd **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB bDd **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB bDd **	ANAB ISO 17025
PCB congeners	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	SGS AXYS MLA-210	MLA-210					Y		Y							Y			Y		Y						Y											
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y							Y										
PCB congeners		EPA 1628	MLA-908								Y									Y		Y							Y										
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y							Y	Y		Y	Y	Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y										Y	Y				Y				Y										
PCB congeners		SGS AXYS MLA-210	MLA-210						Y	Y						Y				Y		Y		Y					Y										
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y		Y						Y										
PCB congeners		EPA 1628	MLA-908							Y											Y									Y									
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y				Y		Y							Y	Y		Y	Y	Y	Y	Y	Y	
PCB congeners	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 8270E	MLA-007																	Y	Y				Y														
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y	Y											Y	Y				Y				Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y							Y							Y						Y										
PCB congeners		SGS AXYS MLA-908	MLA-908						Y							Y	Y				Y		Y						Y										
PCB congeners		EPA 1628	MLA-908								Y																			Y									
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y				Y		Y						Y	Y		Y	Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y											Y	Y				Y				Y									
PCB congeners		SGS AXYS MLA-007	MLA-007						Y																														
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	SGS AXYS MLA-210	MLA-210					Y	Y						Y					Y		Y						Y											
PCB congeners		SGS AXYS MLA-908	MLA-908						Y							Y	Y				Y		Y					Y											
PCB congeners		EPA 1628	MLA-908							Y																			Y										
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y						Y	Y		Y	Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y											Y	Y				Y				Y									
PCB congeners		SGS AXYS MLA-007	MLA-007						Y																														
PCB congeners		SGS AXYS MLA-210	MLA-210						Y	Y						Y													Y										
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y		Y					Y											
PCB congeners		EPA 1628	MLA-908								Y																		Y										
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y												Y	Y		Y	Y	Y	Y	Y	Y	Y	
PCB congeners	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 8270E	MLA-007							Y	Y		Y	Y	Y	Y				Y		Y						Y											
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y	Y																Y				Y										
PCB congeners		SGS AXYS MLA-007	MLA-007						Y												Y																		
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y							Y													Y										
PCB congeners		SGS AXYS MLA-908	MLA-908						Y							Y	Y				Y		Y					Y											
PCB congeners		EPA 1628	MLA-908								Y																		Y										
PCB congeners		EPA 8270E	MLA-007								Y																												
PCB congeners		SGS AXYS MLA-007	MLA-007						Y																														
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y																						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y											Y	Y				Y				Y									
PCB congeners	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	SGS AXYS MLA-007	MLA-007																																				
PCB congeners		EPA 1628	MLA-908								Y																		Y										
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y						Y	Y		Y	Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y	Y												Y	Y				Y				Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y							Y													Y										
PCB congeners		SGS AXYS MLA-908	MLA-908						Y							Y	Y				Y		Y					Y											
PCB congeners		EPA 1628	MLA-908								Y																		Y										
PCB congeners		EPA 8270E	MLA-007								Y																												
PCB congeners		SGS AXYS MLA-007	MLA-007																																				
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y																						
PCB congeners	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y				Y	Y											Y	Y				Y				Y										
PCB congeners		SGS AXYS MLA-007	MLA-007																																				
PCB congeners		EPA 1628	MLA-908								Y																												

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Accreditation Scope				Serum	Solids	Tissue and Tissue Flora												Urine	Water	Water, Non-Potable	AFF								
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID			ALA	Alaska DEC	ANAB b/d **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS					Washington DE	ANAB b/d **	ANAB ISO 17025	CAIA	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH
PCB congeners	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210																										
PCB congeners		SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210																										
PCB congeners		SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	SGS AXYS MLA-210	MLA-210																										
PCB congeners		SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		EPA 8270E	MLA-007																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210																										
PCB congeners	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		EPA 8270E	MLA-007																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210																										
PCB congeners		SGS AXYS MLA-908	MLA-908																										
PCB congeners	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1628	MLA-908																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		EPA 8270E	MLA-007																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210																										
PCB congeners		SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners	PCB 168 2,3',4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210																										
PCB congeners		SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	SGS AXYS MLA-210	MLA-210																										
PCB congeners		SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		EPA 8270E	MLA-007																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210																										
PCB congeners	PCB 17 2,2',4-Trichlorobiphenyl	SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		EPA 8270E	MLA-007																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210																										
PCB congeners		SGS AXYS MLA-908	MLA-908																										
PCB congeners	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1628	MLA-908																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210																										
PCB congeners		SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 8270E	MLA-007																										
PCB congeners		SGS AXYS MLA-007	MLA-007																										
PCB congeners		SGS AXYS MLA-210	MLA-210																										
PCB congeners		SGS AXYS MLA-908	MLA-908																										
PCB congeners		EPA 1628	MLA-908																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	SGS AXYS MLA-007	MLA-007																										
PCB congeners		EPA 1668	MLA-010																										
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																									
PCB congeners																													
PCB congeners																													
PCB congeners																													
PCB congeners																													

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Accreditation Scope				Serum													Tissue and Tissue Flora	Urine	Water	Water, Non-Potable	AFF							
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CAIA	Alaska DEC	ANAB bDd **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB bDd **	ANAB ISO 17025	CAIA	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB bDd **	ANAB ISO 17025
PCB congeners	PCB 172/192	SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y						Y			
PCB congeners		SGS AXYS MLA-908	MLA-908											Y	Y				Y					Y		Y	Y	
PCB congeners		EPA 1628	MLA-908							Y									Y						Y		Y	Y
PCB congeners		EPA 8270E	MLA-007																Y									
PCB congeners	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	SGS AXYS MLA-007	MLA-007					Y											Y									
PCB congeners		EPA 1668	MLA-010							Y		Y	Y	Y	Y				Y		Y				Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																						Y			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y	Y										Y	Y					Y			
PCB congeners	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	SGS AXYS MLA-210	MLA-210					Y		Y					Y				Y		Y				Y			
PCB congeners		SGS AXYS MLA-908	MLA-908							Y				Y	Y				Y		Y			Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y									Y						Y			
PCB congeners		EPA 8270E	MLA-007																									
PCB congeners	PCB 174/181	SGS AXYS MLA-007	MLA-007					Y											Y									
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y			Y		Y			Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y	Y										Y					Y				
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y						Y				Y		Y			Y	Y	Y	Y	
PCB congeners	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	SGS AXYS MLA-908	MLA-908											Y	Y				Y		Y			Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y									Y					Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																									
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y	Y										Y	Y				Y				
PCB congeners	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	SGS AXYS MLA-007	MLA-007					Y																				
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y										Y		Y			Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908						Y						Y	Y			Y		Y			Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007							Y	Y		Y	Y	Y	Y								Y	Y	Y	Y	
PCB congeners	PCB 177 2,2',3,3',4,5',6'-Heptachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y				Y	Y										Y		Y			Y				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y		Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y						Y				Y		Y			Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y						Y	Y			Y		Y			Y	Y	Y	Y	
PCB congeners	PCB 178 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1628	MLA-908							Y															Y	Y	Y	
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y			Y		Y			Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																									
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y	Y										Y	Y				Y				
PCB congeners	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	SGS AXYS MLA-007	MLA-007																Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y					Y					Y		Y			Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y		Y			Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y									Y						Y			
PCB congeners	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y			Y		Y			Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																									
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y	Y										Y	Y				Y				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y									
PCB congeners	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	SGS AXYS MLA-210	MLA-210					Y	Y										Y		Y			Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y		Y			Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y									Y						Y			
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y			Y		Y			Y	Y	Y	Y	
PCB congeners	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 8270E	MLA-007																Y		Y			Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y	Y										Y	Y				Y				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y									
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																								
PCB congeners	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	SGS AXYS MLA-210	MLA-210					Y	Y						Y						Y			Y	Y	Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CA	Alaska DEC	ANAB Dcd **	ANAB ISO 17025	CA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB Dcd **	ANAB ISO 17025	CA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CA	CA	Alaska DEC	ANAB Dcd **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB Dcd **	ANAB ISO 17025
PCB congeners	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y																
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y											Y	Y		Y		Y								Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-210	MLA-210																			Y		Y															
PCB congeners	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	SGS AXYS MLA-908	MLA-908												Y	Y						Y		Y															
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010								Y	Y										Y		Y								Y	Y		Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y													Y		Y		Y													
PCB congeners		SGS AXYS MLA-210	MLA-210																																				
PCB congeners	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	SGS AXYS MLA-908	MLA-908												Y	Y						Y		Y															
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y				Y		Y							Y	Y		Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y											Y	Y			Y													
PCB congeners	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	SGS AXYS MLA-007	MLA-007																																				
PCB congeners		SGS AXYS MLA-210	MLA-210																																				
PCB congeners		SGS AXYS MLA-908	MLA-908																																				
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y				Y		Y							Y	Y		Y	Y	Y	Y		
PCB congeners	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y											Y	Y			Y													
PCB congeners		SGS AXYS MLA-007	MLA-007																																				
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y																												
PCB congeners		SGS AXYS MLA-908	MLA-908																																				
PCB congeners	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y				Y		Y							Y	Y		Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y																												
PCB congeners		SGS AXYS MLA-210	MLA-210																																				
PCB congeners	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	SGS AXYS MLA-908	MLA-908																																				
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y				Y		Y							Y	Y		Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y																												
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners	PCB 187/182	SGS AXYS MLA-210	MLA-210						Y		Y																												
PCB congeners		SGS AXYS MLA-908	MLA-908																																				
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007						Y																														
PCB congeners	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y					Y		Y															
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y																												
PCB congeners		SGS AXYS MLA-210	MLA-210																																				
PCB congeners		SGS AXYS MLA-908	MLA-908																																				
PCB congeners	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y				Y		Y							Y	Y		Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y																												
PCB congeners		SGS AXYS MLA-007	MLA-007																																				
PCB congeners	PCB 19 2,2',6-Trichlorobiphenyl	SGS AXYS MLA-210	MLA-210																																				
PCB congeners		SGS AXYS MLA-908	MLA-908																																				
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y				Y		Y															
PCB congeners		EPA 8270E	MLA-007																																				

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Accreditation Scope				Serum	Solids	Tissue and Tissue Flora												Urine	Water	Water, Non-Potable	AFF													
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID			ALA	Alaska DEC	ANAB bDd **	ANAB ISO 17025	ALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS					Washington DE	ANAB bDd **	ANAB ISO 17025	ALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *
PCB congeners	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y			Y	Y	Y																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y											Y							Y							
PCB congeners		SGS AXYS MLA-210	MLA-210						Y												Y						Y							
PCB congeners		SGS AXYS MLA-908	MLA-908																		Y						Y							
PCB congeners	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1628	MLA-908							Y																Y								
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																															
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y										Y	Y						Y						
PCB congeners		SGS AXYS MLA-007	MLA-007						Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y																Y							
PCB congeners	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	SGS AXYS MLA-908	MLA-908																	Y						Y								
PCB congeners		EPA 1628	MLA-908																							Y								
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y								Y	Y		Y	Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y												Y	Y					Y							
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y															Y								
PCB congeners		SGS AXYS MLA-908	MLA-908																		Y					Y								
PCB congeners	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1628	MLA-908																							Y								
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y								Y	Y		Y	Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																															
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y										Y	Y						Y						
PCB congeners		SGS AXYS MLA-007	MLA-007						Y																									
PCB congeners		SGS AXYS MLA-210	MLA-210								Y																Y							
PCB congeners	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	SGS AXYS MLA-908	MLA-908							Y																Y								
PCB congeners		EPA 1628	MLA-908																							Y								
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y								Y	Y		Y	Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010																															
PCB congeners		SGS AXYS MLA-007	MLA-007	Y					Y																									
PCB congeners		SGS AXYS MLA-901	MLA-901	Y							Y																							
PCB congeners	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	SGS AXYS MLA-210	MLA-210							Y	Y															Y								
PCB congeners		SGS AXYS MLA-908	MLA-908																						Y									
PCB congeners		EPA 1628	MLA-908								Y															Y								
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y								Y	Y		Y	Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																															
PCB congeners		SGS AXYS MLA-010	MLA-010	Y							Y	Y									Y	Y					Y							
PCB congeners	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	SGS AXYS MLA-007	MLA-007																															
PCB congeners		SGS AXYS MLA-210	MLA-210								Y															Y								
PCB congeners		SGS AXYS MLA-908	MLA-908																							Y								
PCB congeners		EPA 1628	MLA-908								Y															Y								
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y									Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																															
PCB congeners	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y						Y																								
PCB congeners		SGS AXYS MLA-007	MLA-007																															
PCB congeners		SGS AXYS MLA-210	MLA-210								Y															Y								
PCB congeners		SGS AXYS MLA-908	MLA-908																							Y								
PCB congeners		EPA 1628	MLA-908								Y															Y								
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y									Y	Y		Y	Y	Y	Y	Y	
PCB congeners	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 8270E	MLA-007																															
PCB congeners		SGS AXYS MLA-010	MLA-010	Y							Y																							
PCB congeners		SGS AXYS MLA-007	MLA-007																															
PCB congeners		SGS AXYS MLA-210	MLA-210								Y															Y								
PCB congeners		SGS AXYS MLA-908	MLA-908																							Y								
PCB congeners		EPA 1628	MLA-908								Y															Y								
PCB congeners	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y				Y	Y	Y	Y								Y									
PCB congeners		EPA 8270E	MLA-007																															
PCB congeners		SGS AXYS MLA-010	MLA-010	Y							Y																							
PCB congeners		SGS AXYS MLA-007	MLA-007																															
PCB congeners	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	SGS AXYS MLA-210	MLA-210							Y															Y									
PCB congeners		SGS AXYS MLA-908	MLA-908																						Y									

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CAIA	Alaska DEC	ANAB Dcd **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	ANAB Dcd **	ANAB ISO 17025	CAIA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CAIA	CAIA	Alaska DEC	ANAB Dcd **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB Dcd **	ANAB ISO 17025		
PCB congeners	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y	Y		Y								Y	Y		Y	Y	Y	Y	Y			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y																Y	Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y										Y			Y							Y			Y	Y	Y	Y	Y			
PCB congeners		SGS AXYS MLA-908	MLA-908												Y	Y							Y																		
PCB congeners	EPA 1628	MLA-908								Y											Y										Y										
PCB congeners	PCB 4/10	EPA 8270E	MLA-007																																						
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y										Y	Y		Y	Y	Y	Y	Y			
PCB congeners		EPA 8270E	MLA-007																																						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y										Y	Y				Y															
PCB congeners	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	SGS AXYS MLA-007	MLA-007																						Y																
PCB congeners		SGS AXYS MLA-210	MLA-210																						Y																
PCB congeners		SGS AXYS MLA-908	MLA-908																							Y															
PCB congeners		EPA 1628	MLA-908																																						
PCB congeners	PCB 41 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y			Y							Y	Y		Y	Y	Y	Y	Y			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y																Y																
PCB congeners		SGS AXYS MLA-210	MLA-210						Y																							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908																													Y				Y	Y	Y	Y	Y	
PCB congeners	PCB 41 2,2',3,4'-Tetrachlorobiphenyl	EPA 1628	MLA-908							Y																						Y									
PCB congeners		EPA 8270E	MLA-007																																						
PCB congeners		SGS AXYS MLA-010	MLA-010								Y	Y		Y	Y	Y	Y																								
PCB congeners		SGS AXYS MLA-210	MLA-210	Y					Y		Y															Y															
PCB congeners	PCB 41 2,2',3,4'-Tetrachlorobiphenyl	SGS AXYS MLA-908	MLA-908																																						
PCB congeners		EPA 1628	MLA-908																																						
PCB congeners		EPA 8270E	MLA-007																																						
PCB congeners		SGS AXYS MLA-007	MLA-007							Y																															
PCB congeners	PCB 41 7/11/64/68	EPA 1668	MLA-010																																						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y																																
PCB congeners		SGS AXYS MLA-210	MLA-210						Y																																
PCB congeners		SGS AXYS MLA-908	MLA-908																																						
PCB congeners	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1628	MLA-908																																						
PCB congeners		EPA 8270E	MLA-007																																						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y			Y	Y	Y	Y																								
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y																														
PCB congeners	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	SGS AXYS MLA-908	MLA-908																																						
PCB congeners		EPA 1628	MLA-908																																						
PCB congeners		EPA 8270E	MLA-007																																						
PCB congeners		SGS AXYS MLA-007	MLA-007																																						
PCB congeners	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y																									
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y																														
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y																														
PCB congeners		SGS AXYS MLA-908	MLA-908																																						
PCB congeners	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1628	MLA-908																																						
PCB congeners		EPA 8270E	MLA-007																																						
PCB congeners		SGS AXYS MLA-010	MLA-010																																						
PCB congeners		SGS AXYS MLA-210	MLA-210	Y					Y		Y																														
PCB congeners	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	SGS AXYS MLA-908	MLA-908																																						
PCB congeners		EPA 1628	MLA-908																																						
PCB congeners		EPA 8270E	MLA-007																																						
PCB congeners		SGS AXYS MLA-007	MLA-007																																						
PCB congeners	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y																									
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y																														
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y																														
PCB congeners		SGS AXYS MLA-908	MLA-908																												</										

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CAIA	Alaska DEC	ANAB Dcd **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	ANAB Dcd **	ANAB ISO 17025	CAIA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CAIA	CAIA	Alaska DEC	ANAB Dcd **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB Dcd **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-010	MLA-010	Y		Y		Y										Y		Y				Y	Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y									Y																					
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y									Y	Y	Y	Y	Y			
PCB congeners		EPA 1628	MLA-908								Y																												
PCB congeners	PCB 49/43	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007																																				
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y				Y				Y						Y	Y		Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y										Y					Y														
PCB congeners	PCB 5 2,3-Dichlorobiphenyl	SGS AXYS MLA-210	MLA-210						Y												Y		Y																
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y										Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908								Y																												
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y		
PCB congeners	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y															Y														
PCB congeners		SGS AXYS MLA-210	MLA-210								Y																												
PCB congeners		SGS AXYS MLA-908	MLA-908												Y	Y							Y		Y									Y	Y	Y	Y	Y	
PCB congeners	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1628	MLA-908							Y																													
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y																						
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y						Y	Y																												
PCB congeners	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	SGS AXYS MLA-210	MLA-210							Y																													
PCB congeners		SGS AXYS MLA-908	MLA-908								Y																												
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y																						
PCB congeners	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y						Y	Y																												
PCB congeners		SGS AXYS MLA-210	MLA-210								Y																												
PCB congeners		SGS AXYS MLA-908	MLA-908												Y	Y																							
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007						Y																														
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y																						
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y					Y	Y																													
PCB congeners		SGS AXYS MLA-210	MLA-210							Y																													
PCB congeners		SGS AXYS MLA-908	MLA-908												Y	Y																							
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y																							
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y						Y	Y																												
PCB congeners		SGS AXYS MLA-210	MLA-210							Y	Y																												
PCB congeners	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	SGS AXYS MLA-908	MLA-908											Y	Y																								
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010																																				
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners	PCB 55 2,3,3',4-Tetrachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y						Y	Y																												
PCB congeners		SGS AXYS MLA-210	MLA-210								Y																												
PCB congeners		SGS AXYS MLA-908	MLA-908												Y	Y																							
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010											Y	Y	Y	Y																						
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y							Y	Y																											
PCB congeners		SGS AXYS MLA-210	MLA-210																																				
PCB congeners	PCB 55 2,3,3',4-Tetrachlorobiphenyl	SGS AXYS MLA-908	MLA-908																																				
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners		EPA 1668	MLA-010												Y	Y	Y	Y																					
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y						Y	Y																												
PCB congeners		SGS AXYS MLA-210	MLA-210																																				
PCB congeners		SGS AXYS MLA-908	MLA-908																																				
PCB congeners		EPA 1628	MLA-908																																				
PCB congeners	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010											Y	Y	Y	Y																						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y							Y	Y																											
PCB congeners		SGS AXYS MLA-210	MLA-210																																				
PCB congeners		SGS AX																																					

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CAIA	Alaska DEC	ANAB Dcd **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	ANAB Dcd **	ANAB ISO 17025	CAIA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CAIA	CAIA	Alaska DEC	ANAB Dcd **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB Dcd **	ANAB ISO 17025		
PCB congeners	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1628	MLA-908							Y										Y										Y											
PCB congeners		EPA 1668	MLA-010								Y	Y		Y	Y	Y	Y			Y			Y		Y					Y	Y		Y	Y	Y	Y	Y				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y	Y									Y	Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210						Y	Y											Y		Y								Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y		Y								Y		Y	Y	Y	Y	Y	Y	Y		
PCB congeners	PCB 6 2,3'-Dichlorobiphenyl	EPA 1628	MLA-908							Y										Y											Y										
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y			Y				Y							Y	Y		Y	Y	Y	Y	Y			
PCB congeners		EPA 8270E	MLA-007																							Y															
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y										Y	Y										Y										
PCB congeners		SGS AXYS MLA-210	MLA-210						Y	Y											Y		Y				Y									Y	Y	Y	Y	Y	
PCB congeners	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	SGS AXYS MLA-908	MLA-908							Y										Y		Y									Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y										
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y											Y	Y				Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210						Y	Y											Y		Y								Y					Y	Y	Y	Y	Y	
PCB congeners	PCB 61 2,3,4,5-Tetrachlorobiphenyl	SGS AXYS MLA-908	MLA-908							Y										Y		Y									Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y										
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y											Y	Y				Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210						Y	Y											Y		Y								Y					Y	Y	Y	Y	Y	
PCB congeners	PCB 62 2,3,4,6-Tetrachlorobiphenyl	SGS AXYS MLA-908	MLA-908							Y										Y		Y									Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y										
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y	Y											Y	Y				Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210						Y	Y											Y		Y								Y					Y	Y	Y	Y	Y	
PCB congeners	PCB 62/65	SGS AXYS MLA-908	MLA-908							Y										Y		Y									Y										
PCB congeners		EPA 1628	MLA-908							Y											Y										Y										
PCB congeners		EPA 8270E	MLA-007																																						
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y			
PCB congeners		EPA 8270E	MLA-007																																						
PCB congeners	PCB 63 2,3,4',5-Tetrachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y				Y	Y											Y	Y				Y						Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y												Y										Y										
PCB congeners		SGS AXYS MLA-908	MLA-908						Y												Y		Y								Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y										
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y				Y		Y								Y										
PCB congeners	PCB 64 2,3,4',6-Tetrachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y				Y	Y											Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y												Y										Y										
PCB congeners		SGS AXYS MLA-908	MLA-908						Y												Y		Y								Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y										
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y			
PCB congeners	PCB 65 2,3,5,6-Tetrachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y				Y	Y											Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y												Y										Y										
PCB congeners		SGS AXYS MLA-908	MLA-908						Y												Y		Y								Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y										
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y			
PCB congeners	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y				Y	Y											Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y	Y												Y										Y										
PCB congeners		SGS AXYS MLA-908	MLA-908						Y												Y		Y								Y					Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y										
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y			
PCB congeners	PCB 66/80	SGS AXYS MLA-010	MLA-010	Y				Y	Y											Y	Y					Y															

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids										Tissue and Tissue Flora	Urine	Water	Water, Non-Potable										AFFF
				CAIA	Alaska DEC	ANAB bDd **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB bDd **	ANAB ISO 17025	CAIA	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB bDd **	ANAB ISO 17025
PCB congeners	PCB 7 2,4-Dichlorobiphenyl	SGS AXYS MLA-908	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1668	MLA-010																									
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y	Y				Y	Y	Y	Y				Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-210	MLA-210					Y												Y								
PCB congeners	PCB 7/9	SGS AXYS MLA-908	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 70 2,3',4',5'-Tetrachlorobiphenyl	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 70/76	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 74/61	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									
PCB congeners		EPA 1628	MLA-908																									

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CA	Alaska DEC	ANAB Dcd **	ANAB ISO 17025	CA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB Dcd **	ANAB ISO 17025	CA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CA	CA	Alaska DEC	ANAB Dcd **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB Dcd **	ANAB ISO 17025	
PCB congeners	PCBs, as congeners	EPA 1668	MLA-010																																					
PCB congeners		SGS AXYS MLA-010	MLA-010																																					
PCB congeners		SGS AXYS MLA-210	MLA-210								Y																													
PCB congeners	Total Dichlorobiphenyls	SGS AXYS MLA-908	MLA-908							Y																														
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y																Y															
PCB congeners	Total Heptachlorobiphenyls	SGS AXYS MLA-007	MLA-007																						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210						Y																															
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y																							
PCB congeners	Total Hexachlorobiphenyls	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y																															
PCB congeners		SGS AXYS MLA-007	MLA-007																																					
PCB congeners	Total Monochlorobiphenyls	SGS AXYS MLA-210	MLA-210						Y																															
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y																Y															
PCB congeners	Total Nonachlorobiphenyls	SGS AXYS MLA-210	MLA-210						Y																															
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y																							
PCB congeners		EPA 8270E	MLA-007	Y																																				
PCB congeners	Total Octachlorobiphenyls	SGS AXYS MLA-010	MLA-010						Y																															
PCB congeners		SGS AXYS MLA-007	MLA-007																																					
PCB congeners		SGS AXYS MLA-210	MLA-210							Y																														
PCB congeners	Total Pentachlorobiphenyls	SGS AXYS MLA-908	MLA-908							Y						Y	Y																							
PCB congeners		EPA 8270E	MLA-007	Y					Y																															
PCB congeners		SGS AXYS MLA-010	MLA-010							Y																														
PCB congeners	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007																																					
PCB congeners		EPA 8270E	MLA-007	Y																																				
PCB congeners		SGS AXYS MLA-010	MLA-010																																					
PCB congeners	Total Tetrachlorobiphenyls	SGS AXYS MLA-007	MLA-007	Y					Y																															
PCB congeners		SGS AXYS MLA-210	MLA-210																																					
PCB congeners		SGS AXYS MLA-908	MLA-908								Y																													
PCB congeners	Total Trichlorobiphenyls	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y						Y																														
PCB congeners		SGS AXYS MLA-007	MLA-007																																					
PCB congeners	Total Trichlorobiphenyls	SGS AXYS MLA-210	MLA-210							Y																														
PCB congeners		SGS AXYS MLA-908	MLA-908								Y																													
PCB congeners		EPA 8270E	MLA-007	Y																																				
PCDDF	"Dioxins and Dibenzofurans" category (CA only)	EPA 1613	MLA-017																																					
PCDDF		EPA 8290A	MLA-017																																					
PCDDF		EPA 1613	MLA-017		Y						Y						Y											Y			Y	Y	Y			Y	Y			
PCDDF	1,2,3,4,6,7,8-HpCDD	EPA 8290A	MLA-017		Y						Y																Y			Y	Y	Y			Y	Y				
PCDDF		SGS AXYS MLA-017	MLA-017																																					
PCDDF		SGS AXYS MLA-217	MLA-217	Y						Y	Y																Y			Y	Y	Y			Y	Y				
PCDDF	1,2,3,4,6,7,8-HpCDF	ATM 16130	MLA-217																																					
PCDDF		EPA 1613	MLA-017		Y						Y						Y										Y			Y	Y	Y			Y	Y				
PCDDF		EPA 8290A	MLA-017		Y						Y	Y															Y			Y	Y	Y			Y	Y				
PCDDF	1,2,3,4,7,8,9-HpCDD	SGS AXYS MLA-017	MLA-017	Y						Y																														
PCDDF		SGS AXYS MLA-217	MLA-217																																					
PCDDF		ATM 16130	MLA-217																																					
PCDDF	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017		Y																																			
PCDDF		EPA 8290A	MLA-017		Y						Y																													
PCDDF		SGS AXYS MLA-017	MLA-017	Y							Y																													
PCDDF	1,2,3,4,7,8-HxCDF	SGS AXYS MLA-217	MLA-217																																					
PCDDF		ATM 16130	MLA-217																																					
PCDDF		EPA 1613	MLA-017		Y																																			

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID
		EPA 8290A SGS AXYS MLA-017 SGS AXYS MLA-217 ATM 16130	MLA-017 MLA-017 MLA-217 MLA-217
	Total PCDD	EPA 1613 EPA 8290A	MLA-017 MLA-017
	Total PCDD/F	EPA 1613 EPA 8290A	MLA-017 MLA-017
	Total PCDF	EPA 1613 EPA 8290A	MLA-017 MLA-017
	Total PeCDD	EPA 1613 EPA 8290A	MLA-017 MLA-017
		SGS AXYS MLA-017 SGS AXYS MLA-217 ATM 16130	MLA-017 MLA-217 MLA-217
	Total PeCDF	EPA 1613 EPA 8290A	MLA-017 MLA-017
		SGS AXYS MLA-017 SGS AXYS MLA-217 ATM 16130	MLA-017 MLA-217 MLA-217
	Total TCDD	EPA 1613 EPA 8290A	MLA-017 MLA-017
		SGS AXYS MLA-017 SGS AXYS MLA-217 ATM 16130	MLA-017 MLA-217 MLA-217
	Total TCDF	EPA 1613 EPA 8290A	MLA-017 MLA-017
		SGS AXYS MLA-017 SGS AXYS MLA-217 ATM 16130	MLA-017 MLA-217 MLA-217
PFAS	"Per- and Polyfluorinated Alkyl Substances (PFAS)" category (CA only)	DoD QSM Version 5.1 (or new)	MLA-110
PFAS	11-chloroicosafluoro-3-oxaundecane-1-sulfonate (11Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110
PFAS	11-chloroicosafuoro-3-oxaundecane-1-sulfonate (11Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110
PFAS	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-CI-PF3OUdS)	SGS AXYS MLA-110	MLA-110
PFAS		DoD QSM Version 5.3	MLA-110
PFAS		DoD QSM Version 5.4	MLA-110
PFAS	4,8-Dioxia-3H-perfluorononanoic acid (ADONA)	EPA 1633 draft	MLA-110
PFAS		SGS AXYS MLA-110	MLA-110
PFAS		DoD QSM Version 5.3	MLA-110
PFAS		DoD QSM Version 5.4	MLA-110
PFAS		EPA 1633 draft	MLA-110
PFAS	4,8-dioxa-3H-perfluorononanolate (ADONA)	SGS AXYS MLA-110	MLA-110
PFAS		DoD QSM Version 5.3	MLA-110
PFAS		DoD QSM Version 5.4	MLA-110
PFAS		EPA 1633 draft	MLA-110
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-110	MLA-110
PFAS		DoD QSM Version 5.3	MLA-110
PFAS		DoD QSM Version 5.4	MLA-110
PFAS		EPA 1633 draft	MLA-110
PFAS	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-110	MLA-110
PFAS		DoD QSM Version 5.3	MLA-110
PFAS		DoD QSM Version 5.4	MLA-110
PFAS		EPA 1633 draft	MLA-110
PFAS	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-110	MLA-110
PFAS		DoD QSM Version 5.3	MLA-110
PFAS		DoD QSM Version 5.4	MLA-110
PFAS		EPA 1633 draft	MLA-110
PFAS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110
PFAS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110
PFAS	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-CI-PF3ONS)	SGS AXYS MLA-110	MLA-110
PFAS		DoD QSM Version 5.3	MLA-110
PFAS		DoD QSM Version 5.4	MLA-110
PFAS		EPA 1633 draft	MLA-110
PFAS	Dodecafluoro-3H-4,8-dioxanonecarboxylic acid (NaDONA)	SGS AXYS MLA-110	MLA-110
PFAS		EPA 1633 draft	MLA-110
PFAS	Hexafluoropropylene oxide dimer acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110
PFAS		DoD QSM Version 5.3	MLA-110
PFAS		DoD QSM Version 5.4	MLA-110
PFAS		EPA 1633 draft	MLA-110
PFAS	Hexafluoropropylene oxide dimer acid, anion and acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110
PFAS	Hexafluoropropylene oxide dimer acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110
PFAS	N-Ethylperfluorooctane sulfonamide (EtFOSAm)	SGS AXYS MLA-110	MLA-110
PFAS		DoD QSM Version 5.3	MLA-110
PFAS		DoD QSM Version 5.4	MLA-110

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Accreditation Scope				Serum													Tissue and Tissue Flora				Urine	Water	Water, Non-Potable													AFF						
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CAIA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025	CAIA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CAIA	CAIA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025			
PFAS	N-Ethyl(perfluorooctanesulfonamide (N-EtFOSA)	EPA 1633 draft	MLA-110	Y		Y	Y	Y					Y			Y	Y	Y	Y			Y			Y	Y	Y										Y	Y				
		SGS AXYS MLA-110	MLA-110			Y	Y											Y								Y	Y											Y	Y			
		DoD QSM Version 5.3	MLA-110				Y	Y										Y	Y								Y	Y											Y	Y		
		DoD QSM Version 5.4	MLA-110				Y	Y										Y	Y								Y	Y											Y	Y		
	N-Ethyl(perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	EPA 1633 draft	MLA-110	Y		Y	Y	Y	Y		Y						Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
		SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y	Y	Y							Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
		DoD QSM Version 5.3	MLA-110			Y	Y		Y									Y								Y	Y		Y										Y			
		DoD QSM Version 5.4	MLA-110				Y	Y	Y	Y								Y	Y							Y	Y	Y		Y									Y	Y		
	N-Ethyl(perfluorooctanesulfonamidoethanol (N-EtFOSE)	EPA 1633 draft	MLA-110	Y		Y	Y	Y	Y	Y		Y	Y	Y			Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y	
		SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y	Y	Y							Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y	
DoD QSM Version 5.3		MLA-110			Y	Y		Y									Y								Y		Y		Y									Y				
DoD QSM Version 5.4		MLA-110				Y	Y	Y	Y								Y	Y							Y		Y	Y		Y								Y	Y			
N-Methyl(perfluorooctanesulfonamide (N-MeFOSA)	EPA 1633 draft	MLA-110	Y		Y	Y	Y	Y	Y		Y					Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y	Y	Y	Y						Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	DoD QSM Version 5.3	MLA-110			Y	Y		Y									Y								Y		Y		Y									Y				
	DoD QSM Version 5.4	MLA-110				Y	Y	Y	Y								Y	Y							Y		Y	Y		Y								Y	Y			
N-Methyl(perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	EPA 1633 draft	MLA-110	Y		Y	Y	Y	Y	Y		Y	Y				Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y	Y	Y	Y						Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	DoD QSM Version 5.3	MLA-110			Y	Y		Y									Y								Y		Y		Y									Y				
	DoD QSM Version 5.4	MLA-110				Y	Y	Y	Y								Y	Y							Y		Y	Y		Y								Y	Y			
N-Methyl(perfluorooctanesulfonamidoethanol (N-MeFOSE)	EPA 1633 draft	MLA-110	Y		Y	Y	Y	Y	Y		Y	Y				Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y	Y	Y	Y						Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	DoD QSM Version 5.3	MLA-110			Y	Y		Y									Y								Y		Y		Y									Y				
	DoD QSM Version 5.4	MLA-110				Y	Y	Y	Y								Y	Y							Y		Y	Y		Y								Y	Y			
Perfluorobutanesulfonate (PFBS)	EPA 1633 draft	MLA-110	Y		Y	Y	Y	Y	Y		Y	Y				Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	SGS AXYS MLA-060	MLA-060																																								
	SGS AXYS MLA-041	MLA-041																																								
	SGS AXYS MLA-043	MLA-043																																								
Perfluorobutanoate (PFBA)	EPA 1633 draft	MLA-110	Y		Y		Y	Y	Y							Y	Y		Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	SGS AXYS MLA-110	MLA-110	Y		Y		Y	Y	Y	Y						Y	Y		Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	DoD QSM Version 5.3	MLA-110			Y	Y	Y	Y	Y								Y	Y		Y					Y		Y	Y		Y								Y	Y			
	DoD QSM Version 5.4	MLA-110				Y	Y	Y	Y								Y	Y							Y		Y	Y		Y								Y	Y			
Perfluorodecanesulfonate (PFDS)	EPA 1633 draft	MLA-110	Y		Y	Y	Y	Y	Y		Y	Y				Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	SGS AXYS MLA-110	MLA-110	Y		Y		Y	Y	Y	Y						Y	Y		Y	Y	Y			Y		Y		Y		Y								Y	Y			
	DoD QSM Version 5.3	MLA-110			Y	Y	Y	Y	Y	Y							Y	Y		Y					Y		Y	Y		Y								Y	Y			
	DoD QSM Version 5.4	MLA-110				Y	Y	Y	Y								Y	Y							Y		Y	Y		Y								Y	Y			
Perfluorodecanoate (PFDA)	EPA 1633 draft	MLA-110	Y		Y	Y	Y	Y	Y		Y	Y				Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	SGS AXYS MLA-060	MLA-060																																								
	SGS AXYS MLA-041	MLA-041																																								
	SGS AXYS MLA-043	MLA-043																																								
Perfluorododecanesulfonate (PFDoS)	EPA 1633 draft	MLA-110	Y		Y	Y	Y	Y	Y		Y	Y				Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y	Y	Y	Y						Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y			
	DoD QSM Version 5.3	MLA-110			Y		Y										Y								Y		Y		Y									Y				
	DoD QSM Version 5.4	MLA-110				Y	Y										Y	Y							Y		Y	Y		Y								Y	Y			
Perfluorododecanoate (PFDoA)	EPA 1633 draft	MLA-110	Y		Y	Y	Y	Y	Y		Y	Y				Y	Y	Y	Y	Y	Y			Y		Y	Y	Y		Y								Y	Y	Y		
	SGS AXYS MLA-060	MLA-060																													</											

Accreditation Scope					
SGS AXYS Analytical Services Ltd. file ref.: ACC-103 Rev. 70					
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Tissue and Tissue Flora
				Solids	
				CALA Alaska DEC ANAB DdD ** ANAB ISO 17025 CALA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE	ANAB DdD ** ANAB ISO 17025 CALA Florida DOH Minnesota DOH New Jersey DEP Virginia DGS
				Urine	Water
				Water, Non-Potable	AFF
				ALASKA DEC ANAB DdD ** ANAB ISO 17025 California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE * ANAB DdD ** ANAB ISO 17025	
PFAS	Perfluorooheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060		
PFAS		SGS AXYS MLA-041	MLA-041		
PFAS		SGS AXYS MLA-043	MLA-043		
PFAS		SGS AXYS MLA-042	MLA-042	Y	
PFAS		SGS AXYS MLA-110	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		DcD QSM Version 5.3	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		DcD QSM Version 5.4	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		EPA 1633 draft	MLA-110	Y Y Y Y Y	Y Y Y Y Y
PFAS	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060		
PFAS		SGS AXYS MLA-041	MLA-041		
PFAS		SGS AXYS MLA-043	MLA-043		
PFAS		SGS AXYS MLA-042	MLA-042	Y	
PFAS		SGS AXYS MLA-110	MLA-110	Y	
PFAS		DcD QSM Version 5.3	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		DcD QSM Version 5.4	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		EPA 1633 draft	MLA-110	Y Y Y Y Y	Y Y Y Y Y
PFAS	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060		
PFAS		SGS AXYS MLA-041	MLA-041		
PFAS		SGS AXYS MLA-043	MLA-043		
PFAS		SGS AXYS MLA-042	MLA-042	Y	
PFAS		SGS AXYS MLA-110	MLA-110	Y	
PFAS		DcD QSM Version 5.3	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		DcD QSM Version 5.4	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		EPA 1633 draft	MLA-110	Y Y Y Y Y	Y Y Y Y Y
PFAS	Perfluorononanenesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110	Y	
PFAS		DcD QSM Version 5.3	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		DcD QSM Version 5.4	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		EPA 1633 draft	MLA-110	Y Y Y Y Y	Y Y Y Y Y
PFAS	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060		
PFAS		SGS AXYS MLA-041	MLA-041		
PFAS		SGS AXYS MLA-043	MLA-043		
PFAS		SGS AXYS MLA-042	MLA-042	Y	
PFAS		SGS AXYS MLA-110	MLA-110	Y	
PFAS		DcD QSM Version 5.3	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		DcD QSM Version 5.4	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		EPA 1633 draft	MLA-110	Y Y Y Y Y	Y Y Y Y Y
PFAS	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060		
PFAS		SGS AXYS MLA-041	MLA-041		
PFAS		SGS AXYS MLA-043	MLA-043		
PFAS		SGS AXYS MLA-042	MLA-042	Y	
PFAS		SGS AXYS MLA-110	MLA-110	Y	
PFAS		DcD QSM Version 5.3	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		DcD QSM Version 5.4	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		EPA 1633 draft	MLA-110	Y Y Y Y Y	Y Y Y Y Y
PFAS	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060		
PFAS		SGS AXYS MLA-041	MLA-041		
PFAS		SGS AXYS MLA-043	MLA-043		
PFAS		SGS AXYS MLA-042	MLA-042	Y	
PFAS		SGS AXYS MLA-110	MLA-110	Y	
PFAS		DcD QSM Version 5.3	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		DcD QSM Version 5.4	MLA-110	Y Y Y Y	Y Y Y Y
PFAS		EPA 1633 draft	MLA-110	Y Y Y Y Y	Y Y Y Y Y
PFAS	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060		
PFAS		SGS AXYS MLA-041	MLA-041		
PFAS		SGS AXYS MLA-043	MLA-043		
PFAS		SGS AXYS MLA-042	MLA-042	Y	

[illegible]

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum												Tissue and Tissue Flora		Urine	Water	Water, Non-Potable												AFFF					
				CAIA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE *	CAIA			CAIA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS		Washington DE *	ANAB DoD **	ANAB ISO 17025		
PPCP		SGS AXYS MLA-075	MLA-075				Y																														
PPCP	Trenbolone	SGS AXYS MLA-075	MLA-075				Y																														
PPCP	Trenbolone acetate	SGS AXYS MLA-075	MLA-075				Y																														
PPCP	Triamterene	SGS AXYS MLA-075	MLA-075				Y																														
PPCP	Triclocarban	EPA 1694	MLA-075								Y														Y												
PPCP		SGS AXYS MLA-075	MLA-075					Y																													
PPCP	Triclosan	EPA 1694	MLA-075							Y															Y												
PPCP		SGS AXYS MLA-075	MLA-075					Y																													
PPCP	Trimethoprim	EPA 1694	MLA-075							Y															Y												
PPCP		SGS AXYS MLA-075	MLA-075					Y																													
PPCP	Tylosin	EPA 1694	MLA-075							Y															Y												
PPCP		SGS AXYS MLA-075	MLA-075					Y																													
PPCP	Valsartan	SGS AXYS MLA-075	MLA-075					Y																													
PPCP	Verapamil	SGS AXYS MLA-075	MLA-075					Y																													
PPCP	Virginiamycin	EPA 1694	MLA-075							Y															Y												
PPCP		SGS AXYS MLA-075	MLA-075					Y																													
PPCP	Warfarin	EPA 1694	MLA-075							Y															Y												
PPCP		SGS AXYS MLA-075	MLA-075					Y																													
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluorotridecanoate (PFTriDA)	SGS AXYS MLA-111	MLA-111					Y																													
TOP	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111					Y																													
Note *	Analysis of pesticides and PCBs in non-potable water samples by SGS 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.																																				
Note **	PFAS by LC-MS/MS compliant with US DoD QSM 5.3 table B-15 and US DoD QSM 5.4 table B-24																																				

Legend	
Y	Accreditation scope
AFFF	Aqueous film forming foam
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TOP	Total Oxidizable Precursors
California WB	California Water Boards, Lab ID 2911
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)
Alaska DEC	Alaska Department of Environmental Conservation, Contaminated Sites Laboratory Approval 17-014
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids	Tissue and Tissue Flora	Urine	Water	Water, Non-Potable	AFFF
				CALA	Alaska DEC ANAB DoD ** ANAB ISO 17025 CALA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE	ANAB DoD ** ANAB ISO 17025 CALA Florida DOH Minnesota DOH New Jersey DEP Virginia DGS	CALA	CALA	Alaska DEC ANAB DoD ** ANAB ISO 17025 California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE *	ANAB DoD ** ANAB ISO 17025

ANAB DoD ANSI National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.3 and 5.4 Standard)



CALA Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2017 Standard)



CALA
Testing
Accreditation No. A2637