
Appendix A3

Raw Chemical Data

**Organo Chlorine Pesticide
Analysis Report**

Form 1A
PESTICIDE ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM029A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

POP1406

Lab Sample I.D.:

L11831-2

Matrix: TISSUE

Sample Size:

10.1 g (wet)

Sample Receipt Date: 07-Oct-2008

Initial Calibration Date:

BRACKETING CAL

Extraction Date: 24-Oct-2008

Instrument ID:

HR GC/MS

Analysis Date: 31-Oct-2008 Time: 00:44:50

GC Column ID:

DB5

Extract Volume (uL): 40

Sample Data Filename:

CL81_334 S: 23

Injection Volume (uL): 1.0

Blank Data Filename:

CL81_334 S: 21

Dilution Factor: N/A

Opening Cal. Data Filename:

CL81_334 S: 17

Closing Cal. Data Filename:

CL81_334 S: 26

Concentration Units: ng/g (wet weight basis)

% Lipid:

1.26

COMPOUND	CAS NO.	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	ION ABUND. RATIO	RRT
Hexachlorobenzene	118-74-1		0.025	0.0050	1.30	1.000
HCH, alpha	319-84-6	ND		0.0050		
HCH, beta	319-85-7	ND		0.0050		
HCH, gamma	58-89-9	ND		0.0050		
HCH, delta	319-86-8	X				
Heptachlor	76-44-8	ND		0.0050		
Aldrin	309-00-2	ND		0.0050		
Chlordane, oxy-	27304-13-8	NDR	0.013	0.0050	1.00	1.000
Chlordane, gamma (trans)	5103-74-2	ND		0.0050		
Chlordane, alpha (cis)	5103-71-9	ND		0.0050		
Nonachlor, trans-	39765-80-5	NDR	0.008	0.0050	0.67	1.001
Nonachlor, cis-	5103-73-1	ND		0.0050		
2,4'-DDD	53-19-0	ND		0.0078		
4,4'-DDD	72-54-8		0.031	0.0088	1.69	1.000
2,4'-DDE	3424-82-6	ND		0.0060		
4,4'-DDE	72-55-9		0.102	0.0069	1.70	1.001
2,4'-DDT	789-02-6	ND		0.0154		
4,4'-DDT	50-29-3	ND		0.0165		
Mirex	2385-85-5	ND		0.0050		

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; X = result reported separately.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axys Internal Use Only [XSL Template: Pest1A.xsl; Created: 14-Nov-2008 09:32:25; Application: XMLTransformer-1.9.15;
Report Filename: Pest_PEST_HI_E1HI_L11831-2_Form1A_CL81_334S23_SJ925680.html; Workgroup: WG26811; Design ID: 595]

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 2
PESTICIDE ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM029A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

POP1406

Lab Sample I.D.:

L11831-2

Matrix: TISSUE

Sample Size: 10.1 g (wet)

Sample Receipt Date: 07-Oct-2008

Initial Calibration Date: BRACKETING CAL

Extraction Date: 24-Oct-2008

Instrument ID: HR GC/MS

Analysis Date: 31-Oct-2008 Time: 00:44:50

GC Column ID: DB5

Extract Volume (uL): 40

Sample Data Filename: CL81_334 S: 23

Injection Volume (uL): 1.0

Blank Data Filename: CL81_334 S: 21

Dilution Factor: N/A

Opening Cal. Data Filename: CL81_334 S: 17
Closing Cal. Data Filename: CL81_334 S: 26

Concentration Units: ng absolute

% Lipid: 1.26

LABELED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	ION ABUND. RATIO	RRT
13C-Hexachlorobenzene		16.0	9.78	61.1	1.33	0.789
13C-beta-HCH		16.0	12.8	80.0	0.84	0.825
13C-gamma-HCH		16.0	12.1	75.8	0.81	0.832
13C-delta-HCH	X					
13C-Heptachlor		16.0	17.2	108	1.34	0.963
13C-Aldrin		16.0	9.95	62.2	1.64	1.030
13C-Chlordane, oxy		16.0	15.9	99.6	1.61	1.109
13C-Chlordane, gamma (trans)		16.0	12.2	76.3	1.29	0.838
13C-Nonachlor, trans-		16.0	12.6	78.9	1.29	0.867
13C-Nonachlor, cis-		16.0	12.9	80.4	1.28	0.955
13C-2,4'-DDE		16.0	11.9	74.5	1.51	0.845
13C-4,4'-DDE		40.6	33.4	82.2	1.51	0.890
13C-4,4'-DDD		16.0	16.4	102	1.63	0.949
13C-2,4'-DDT		16.0	13.9	86.7	1.65	0.954
13C-4,4'-DDT		19.8	20.5	103	1.63	0.996
13C-Mirex		16.0	12.3	76.8	1.30	1.085

(1) Where applicable, custom lab flags have been used on this report; X = result reported separately.
(2) R% = percent recovery.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1A
PESTICIDE ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

N/A

Lab Sample I.D.:

WG26811-101

Matrix: TISSUE

Sample Size:

10.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

BRACKETING CAL

Extraction Date: 24-Oct-2008

Instrument ID:

HR GC/MS

Analysis Date: 30-Oct-2008 Time: 23:30:22

GC Column ID:

DB5

Extract Volume (uL): 40

Sample Data Filename:

CL81_334 S: 21

Injection Volume (uL): 1.0

Blank Data Filename:

CL81_334 S: 21

Dilution Factor: N/A

Opening Cal. Data Filename:

CL81_334 S: 17

Closing Cal. Data Filename:

CL81_334 S: 26

Concentration Units: ng/g

COMPOUND	CAS NO.	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	ION ABUND. RATIO	RRT
Hexachlorobenzene	118-74-1	ND		0.0050		
HCH, alpha	319-84-6	ND		0.0050		
HCH, beta	319-85-7	ND		0.0050		
HCH, gamma	58-89-9	ND		0.0050		
HCH, delta	319-86-8	X				
Heptachlor	76-44-8	ND		0.0050		
Aldrin	309-00-2	ND		0.0050		
Chlordane, oxy-	27304-13-8	ND		0.0050		
Chlordane, gamma (trans)	5103-74-2	ND		0.0050		
Chlordane, alpha (cis)	5103-71-9	ND		0.0050		
Nonachlor, trans-	39765-80-5	ND		0.0050		
Nonachlor, cis-	5103-73-1	ND		0.0050		
2,4'-DDD	53-19-0	ND		0.0118		
4,4'-DDD	72-54-8	ND		0.0133		
2,4'-DDE	3424-82-6	ND		0.0063		
4,4'-DDE	72-55-9	ND		0.0078		
2,4'-DDT	789-02-6	ND		0.0187		
4,4'-DDT	50-29-3	ND		0.0228		
Mirex	2385-85-5	ND		0.0050		

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; X = result reported separately.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axy Internal Use Only [XSL Template: Pest1A.xsl; Created: 14-Nov-2008 09:32:25; Application: XMLTransformer-1.9.15; Report Filename: Pest_PEST_HI_E1HI_WG26811-101_Form1A_CL81_334S21_SJ925678.html; Workgroup: WG26811; Design ID: 595]

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 2
PESTICIDE ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

N/A

Lab Sample I.D.:

WG26811-101

Matrix: TISSUE

Sample Size:

10.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

BRACKETING CAL

Extraction Date: 24-Oct-2008

Instrument ID:

HR GC/MS

Analysis Date: 30-Oct-2008 Time: 23:30:22

GC Column ID:

DB5

Extract Volume (uL): 40

Sample Data Filename:

CL81_334 S: 21

Injection Volume (uL): 1.0

Blank Data Filename:

CL81_334 S: 21

Dilution Factor: N/A

Opening Cal. Data Filename:

CL81_334 S: 17

Closing Cal. Data Filename:

CL81_334 S: 26

Concentration Units: ng absolute

LABELED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	ION ABUND. RATIO	RRT
13C-Hexachlorobenzene		16.0	7.20	45.0	1.36	0.789
13C-beta-HCH		16.0	9.81	61.3	0.79	0.823
13C-gamma-HCH		16.0	11.2	70.2	0.80	0.833
13C-delta-HCH	X					
13C-Heptachlor		16.0	10.7	66.7	1.36	0.964
13C-Aldrin		16.0	10.4	64.7	1.56	1.030
13C-Chlordane, oxy		16.0	13.6	85.1	1.63	1.110
13C-Chlordane, gamma (trans)		16.0	14.0	87.5	1.31	0.838
13C-Nonachlor, trans-		16.0	13.3	83.3	1.27	0.867
13C-Nonachlor, cis-		16.0	14.0	87.3	1.12	0.955
13C-2,4'-DDE		16.0	12.9	80.7	1.52	0.846
13C-4,4'-DDE		40.6	34.6	85.1	1.52	0.890
13C-4,4'-DDD		16.0	14.9	93.1	1.57	0.949
13C-2,4'-DDT		16.0	15.3	95.3	1.59	0.954
13C-4,4'-DDT		19.8	19.0	95.7	1.59	0.996
13C-Mirex		16.0	13.9	86.6	1.29	1.085

(1) Where applicable, custom lab flags have been used on this report; X = result reported separately.

(2) R% = percent recovery.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axy Internal Use Only [XSL Template: Pest2.xsl; Created: 14-Nov-2008 09:32:25; Application: XMLTransformer-1.9.15; Report Filename: Pest_PEST_HI_E1HI_WG26811-101_Form2_CL81_334S21_SJ925678.html; Workgroup: WG26811; Design ID: 595]

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 8A
PESTICIDE ONGOING PRECISION AND RECOVERY (OPR)

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

OPR Data Filename: CL81_334 S: 18

Matrix: TISSUE

Lab Sample I.D.: WG26811-102

Extraction Date: 24-Oct-2008

Analysis Date: 30-Oct-2008 Time: 21:38:50

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON 100 µL EXTRACT.

COMPOUND	CAS NO.	LAB FLAG ¹	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
Hexachlorobenzene	118-74-1		1.24	80.0	79.0	56.0 - 104	98.8
HCH, alpha	319-84-6		0.77	160	127	112 - 208	79.3
HCH, beta	319-85-7		0.77	160	157	112 - 208	98.1
HCH, gamma	58-89-9		0.79	160	162	112 - 208	101
HCH, delta	319-86-8	X					
Heptachlor	76-44-8		1.20	81.0	81.9	56.7 - 105	101
Aldrin	309-00-2		1.58	160	149	112 - 208	93.2
Chlordane, oxy-	27304-13-8		1.52	160	147	112 - 208	91.6
Chlordane, gamma (trans)	5103-74-2		1.17	160	152	112 - 208	94.8
Chlordane, alpha (cis)	5103-71-9		1.23	160	153	112 - 208	95.5
Nonachlor, trans-	39765-80-5		1.14	160	162	112 - 208	101
Nonachlor, cis-	5103-73-1		1.16	160	170	112 - 208	106
2,4'-DDD	53-19-0		1.66	82.0	81.3	57.4 - 107	99.1
4,4'-DDD	72-54-8		1.68	82.0	77.2	57.4 - 107	94.2
2,4'-DDE	3424-82-6		1.64	82.0	80.1	57.4 - 107	97.7
4,4'-DDE	72-55-9		1.69	80.0	81.4	56.0 - 104	102
2,4'-DDT	789-02-6		1.79	82.0	82.2	57.4 - 107	100
4,4'-DDT	50-29-3		1.76	81.0	74.7	56.7 - 105	92.2
Mirex	2385-85-5		0.47	81.0	79.9	56.7 - 105	98.6

(1) Where applicable, custom lab flags have been used on this report; X = result reported separately.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axys Internal Use Only [XSL Template: Pest8A.xsl; Created: 14-Nov-2008 09:32:25; Application: XMLTransformer-1.9.15;
Report Filename: Pest_PEST_HI_E1HI_WG26811-102_Form8A_SJ925676.html; Workgroup: WG26811; Design ID: 595]

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 8B
PESTICIDE ONGOING PRECISION AND RECOVERY (OPR)**

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

OPR Data Filename: CL81_334 S: 18

Matrix: TISSUE

Lab Sample I.D.: WG26811-102

Extraction Date: 24-Oct-2008

Analysis Date: 30-Oct-2008 **Time:** 21:38:50

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON 100 uL EXTRACT.

LABELLED COMPOUND	CAS NO.	LAB FLAG ¹	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
13C-Hexachlorobenzene			1.31	160	74.7	32.0-240	46.7
13C-beta-HCH			0.80	160	97.7	48.0-240	61.1
13C-gamma-HCH			0.79	160	112	47.9-240	69.9
13C-delta-HCH		X					
13C-Heptachlor			1.28	160	115	48.0-240	71.6
13C-Aldrin			1.51	160	108	48.0-240	67.7
13C-Chlordane, oxy			1.52	160	135	48.0-320	84.5
13C-Chlordane, gamma (trans)			1.29	160	139	48.0-320	86.8
13C-Nonachlor, trans-			1.26	160	127	48.0-240	79.6
13C-Nonachlor, cis-			1.33	160	135	48.0-240	84.5
13C-2,4'-DDE			1.54	160	132	64.0-240	82.2
13C-4,4'-DDE			1.49	406	308	163-610	75.8
13C-4,4'-DDD			1.63	160	140	64.0-240	87.5
13C-2,4'-DDT			1.61	160	149	64.0-240	93.3
13C-4,4'-DDT			1.57	198	200	79.4-298	101
13C-Mirex			1.31	160	141	48.0-240	88.2

(1) Where applicable, custom lab flags have been used on this report; X = result reported separately.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axys Internal Use Only [XSL Template: Pest8B.xsl; Created: 14-Nov-2008 09:32:25; Application: XMLTransformer-1.9.15; Report Filename: Pest_PEST_HI_E1HI_WG26811-102_Form8B_SJ925676.html; Workgroup: WG26811; Design ID: 595]

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 Analysis Report

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Sample Collection: N/A

Project No. POP1406

Matrix: SOIL

Lab Sample I.D.: L11830-9 i

Sample Size: 10.6 g (dry)

GC Column ID(s): SPB OCTYL

Concentration Units: pg/g (dry weight basis)

Sample Data Filename(s): PB8B_315 S: 4

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 1998 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			380	4.00	0.0001	3.80e-02	3.80e-02	
3,4,4',5-TeCB	81			19.0	4.11	0.0001	1.90e-03	1.90e-03	
2,3,3',4,4'-PeCB	105			5120	2.77	0.0001	5.12e-01	5.12e-01	
2,3,4,4',5-PeCB	114			305	2.74	0.0005	1.53e-01	1.53e-01	
2,3',4,4',5-PeCB	118			11700	3.09	0.0001	1.17e+00	1.17e+00	
2',3,4,4',5-PeCB	123			173	2.79	0.0001	1.73e-02	1.73e-02	
3,3',4,4',5-PeCB	126			82.5	3.20	0.1	8.25e+00	8.25e+00	
2,3,3',4,4',5-HxCB	156	156 + 157	C	3000	12.0	0.0005	1.50e+00	1.50e+00	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			1100	7.76	0.00001	1.10e-02	1.10e-02	
3,3',4,4',5,5'-HxCB	169		ND		29.2	0.01	0.00e+00	1.46e-01	
2,3,3',4,4',5,5'-HpCB	189			524	2.53	0.0001	5.24e-02	5.24e-02	

TOTAL TEQ

11.7	11.9
TEQ	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			380	4.00	0.0001	3.80e-02	3.80e-02	
3,4,4',5-TeCB	81			19.0	4.11	0.0003	5.70e-03	5.70e-03	
2,3,3',4,4'-PeCB	105			5120	2.77	0.00003	1.54e-01	1.54e-01	
2,3,4,4',5-PeCB	114			305	2.74	0.00003	9.15e-03	9.15e-03	
2,3',4,4',5-PeCB	118			11700	3.09	0.00003	3.51e-01	3.51e-01	
2',3,4,4',5-PeCB	123			173	2.79	0.00003	5.19e-03	5.19e-03	
3,3',4,4',5-PeCB	126			82.5	3.20	0.1	8.25e+00	8.25e+00	
2,3,3',4,4',5-HxCB	156	156 + 157	C	3000	12.0	0.00003	9.00e-02	9.00e-02	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			1100	7.76	0.00003	3.30e-02	3.30e-02	
3,3',4,4',5,5'-HxCB	169		ND		29.2	0.03	0.00e+00	4.38e-01	
2,3,3',4,4',5,5'-HpCB	189			524	2.53	0.00003	1.57e-02	1.57e-02	

TOTAL TEQ

8.95	9.39
------	------

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

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1A
HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811
Contract No.: 2607

Matrix: SOIL
Sample Receipt Date: 07-Oct-2008

Extraction Date: 16-Oct-2008

Analysis Date: 17-Nov-2008 **Time:** 14:34:24

Extract Volume (uL): 200

Injection Volume (uL): 1.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No. POP1406
Lab Sample I.D.: L11830-10 (A)

Sample Size: 9.89 g (dry)

Initial Calibration Date: 22-Oct-2008

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

Sample Data Filename(s): **PB8B_315 S: 8, PB8C_452 S: 6**

Blank Data Filename: PB8C_447A S: 4

Cal. Ver. Data Filename: PB8C_452 S: 1

% Moisture: 6.06

PCB HOMOLOGUE GROUP	LAB FLAG ¹	CONC. FOUND
Total Monochloro Biphenyls		5.45
Total Dichloro Biphenyls		931
Total Trichloro Biphenyls		9520
Total Tetrachloro Biphenyls		175000
Total Pentachloro Biphenyls		613000
Total Hexachloro Biphenyls		1200000
Total Heptachloro Biphenyls		300000
Total Octachloro Biphenyls		76900
Total Nonachloro Biphenyls		3710
Decachloro Biphenyl		63.3
TOTAL PCBs		2380000

(1) Where applicable, custom lab flags have been used on this report.

(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.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOIL
Sample Size: 9.89 g (dry)
Concentration Units: pg/g (dry weight basis)

Sample Collection: N/A
Project No. POP1406
Lab Sample I.D.: L11830-10 (A)
GC Column ID(s): SPB OCTYL
Sample Data Filename(s): PB8B_315 S: 8
PB8C_452 S: 6

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 1998 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			2390	7.19	0.0001	2.39e-01	2.39e-01	
3,4,4',5-TeCB	81		ND		7.85	0.0001	0.00e+00	3.93e-04	
2,3,3',4,4'-PeCB	105			56800	252	0.0001	5.68e+00	5.68e+00	
2,3,4,4',5-PeCB	114			4820	6.54	0.0005	2.41e+00	2.41e+00	
2,3',4,4',5-PeCB	118			122000	249	0.0001	1.22e+01	1.22e+01	
2',3,4,4',5-PeCB	123			2770	7.21	0.0001	2.77e-01	2.77e-01	
3,3',4,4',5-PeCB	126		ND		6.47	0.1	0.00e+00	3.24e-01	
2,3,3',4,4',5-HxCB	156	156 + 157	C	20200	12.1	0.0005	1.01e+01	1.01e+01	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			8010	8.26	0.00001	8.01e-02	8.01e-02	
3,3',4,4',5,5'-HxCB	169		ND		130	0.01	0.00e+00	6.50e-01	
2,3,3',4,4',5,5'-HpCB	189			2140	6.62	0.0001	2.14e-01	2.14e-01	
TOTAL TEQ							31.2	32.2	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			2390	7.19	0.0001	2.39e-01	2.39e-01	
3,4,4',5-TeCB	81		ND		7.85	0.0003	0.00e+00	1.18e-03	
2,3,3',4,4'-PeCB	105			56800	252	0.00003	1.70e+00	1.70e+00	
2,3,4,4',5-PeCB	114			4820	6.54	0.00003	1.45e-01	1.45e-01	
2,3',4,4',5-PeCB	118			122000	249	0.00003	3.66e+00	3.66e+00	
2',3,4,4',5-PeCB	123			2770	7.21	0.00003	8.31e-02	8.31e-02	
3,3',4,4',5-PeCB	126		ND		6.47	0.1	0.00e+00	3.24e-01	
2,3,3',4,4',5-HxCB	156	156 + 157	C	20200	12.1	0.00003	6.06e-01	6.06e-01	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			8010	8.26	0.00003	2.40e-01	2.40e-01	
3,3',4,4',5,5'-HxCB	169		ND		130	0.03	0.00e+00	1.95e+00	
2,3,3',4,4',5,5'-HpCB	189			2140	6.62	0.00003	6.42e-02	6.42e-02	
TOTAL TEQ							6.74	9.02	

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

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1A
HOMOLOGUE TOTAL PCB ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811
Contract No.: 2607

Project No. N/A
Lab Sample I.D.: WG26760-101
Sample Size: 10.0 g
Initial Calibration Date: 22-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8C_447A S: 4
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8C_447A S: 1

Matrix: SOLID
Sample Receipt Date: N/A
Extraction Date: 16-Oct-2008
Analysis Date: 15-Nov-2008 **Time:** 01:16:25
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g

PCB HOMOLOGUE GROUP	LAB FLAG ¹	CONC. FOUND
Total Monochloro Biphenyls	ND	
Total Dichloro Biphenyls		1.21
Total Trichloro Biphenyls		1.85
Total Tetrachloro Biphenyls		10.5
Total Pentachloro Biphenyls		27.6
Total Hexachloro Biphenyls		49.4
Total Heptachloro Biphenyls		32.2
Total Octachloro Biphenyls		6.89
Total Nonachloro Biphenyls		0.186
Decachloro Biphenyl		0.250
TOTAL PCBs		130

(1) Where applicable, custom lab flags have been used on this report; ND = not detected.
 (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.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Sample Collection: N/A

Project No. N/A

Matrix: SOLID

Lab Sample I.D.: WG26760-101

Sample Size: 10.0 g

GC Column ID(s): SPB OCTYL

Concentration Units: pg/g

Sample Data Filename(s): PB8C_447A S: 4

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 1998 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			0.441	0.0595	0.0001	4.41e-05	4.41e-05	
3,4,4',5-TeCB	81		ND		0.0600	0.0001	0.00e+00	3.00e-06	
2,3,3',4,4'-PeCB	105			2.91	0.0829	0.0001	2.91e-04	2.91e-04	
2,3,4,4',5-PeCB	114			0.186	0.0822	0.0005	9.30e-05	9.30e-05	
2,3',4,4',5-PeCB	118			5.66	0.0802	0.0001	5.66e-04	5.66e-04	
2',3,4,4',5-PeCB	123		ND		0.0831	0.0001	0.00e+00	4.16e-06	
3,3',4,4',5-PeCB	126		ND		0.0863	0.1	0.00e+00	4.32e-03	
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.30	0.0662	0.0005	6.50e-04	6.50e-04	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			0.373	0.0550	0.00001	3.73e-06	3.73e-06	
3,3',4,4',5,5'-HxCB	169		ND		0.0585	0.01	0.00e+00	2.93e-04	
2,3,3',4,4',5,5'-HpCB	189			0.223	0.0500	0.0001	2.23e-05	2.23e-05	
TOTAL TEQ							0.00167	0.00628	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			0.441	0.0595	0.0001	4.41e-05	4.41e-05	
3,4,4',5-TeCB	81		ND		0.0600	0.0003	0.00e+00	9.00e-06	
2,3,3',4,4'-PeCB	105			2.91	0.0829	0.00003	8.73e-05	8.73e-05	
2,3,4,4',5-PeCB	114			0.186	0.0822	0.00003	5.58e-06	5.58e-06	
2,3',4,4',5-PeCB	118			5.66	0.0802	0.00003	1.70e-04	1.70e-04	
2',3,4,4',5-PeCB	123		ND		0.0831	0.00003	0.00e+00	1.25e-06	
3,3',4,4',5-PeCB	126		ND		0.0863	0.1	0.00e+00	4.32e-03	
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.30	0.0662	0.00003	3.90e-05	3.90e-05	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			0.373	0.0550	0.00003	1.12e-05	1.12e-05	
3,3',4,4',5,5'-HxCB	169		ND		0.0585	0.03	0.00e+00	8.78e-04	
2,3,3',4,4',5,5'-HpCB	189			0.223	0.0500	0.00003	6.69e-06	6.69e-06	
TOTAL TEQ							0.000364	0.00557	

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

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1A
HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A (Duplicate)
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

POP1406

Lab Sample I.D.:

WG26760-103 (DUP L11830-10)

Matrix: SOIL

Sample Size:

9.81 g (dry)

Sample Receipt Date: 07-Oct-2008

Initial Calibration Date:

22-Oct-2008

Extraction Date: 16-Oct-2008

Instrument ID:

HR GC/MS

Analysis Date: 17-Nov-2008 Time: 15:38:48

GC Column ID:

SPB OCTYL

Extract Volume (uL): 200

Sample Data Filename(s):

PB8B_315 S: 9, PB8C_452 S: 7

Injection Volume (uL): 1.0

Blank Data Filename:

PB8C_447A S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename:

PB8C_452 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture:

7.23

PCB HOMOLOGUE GROUP

LAB
FLAG ¹

CONC.
FOUND

Total Monochloro Biphenyls

1.59

Total Dichloro Biphenyls

1050

Total Trichloro Biphenyls

11400

Total Tetrachloro Biphenyls

188000

Total Pentachloro Biphenyls

605000

Total Hexachloro Biphenyls

1080000

Total Heptachloro Biphenyls

251000

Total Octachloro Biphenyls

80200

Total Nonachloro Biphenyls

3970

Decachloro Biphenyl

66.4

TOTAL PCBs

2220000

(1) Where applicable, custom lab flags have been used on this report.

(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.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: .xsl; Created: 01-Dec-2008 18:00:57; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_HomTotals-TEQs_WG26760-103_Form1AHT_SJ931370.html; Workgroup: WG26760; Design ID: 925]

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 1C
PCB CONGENER TEQ ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A (Duplicate)

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOIL
Sample Size: 9.81 g (dry)
Concentration Units: pg/g (dry weight basis)

Sample Collection: N/A
Project No. POP1406
Lab Sample I.D.: WG26760-103 (DUP L11830-10)
GC Column ID(s): SPB OCTYL
Sample Data Filename(s): PB8B_315 S: 9
PB8C_452 S: 7

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 1998 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			2520	5.37	0.0001	2.52e-01	2.52e-01	
3,4,4',5-TeCB	81		ND		5.12	0.0001	0.00e+00	2.56e-04	
2,3,3',4,4'-PeCB	105			54100	227	0.0001	5.41e+00	5.41e+00	
2,3,4,4',5-PeCB	114			5110	3.93	0.0005	2.56e+00	2.56e+00	
2,3',4,4',5-PeCB	118			118000	233	0.0001	1.18e+01	1.18e+01	
2',3,4,4',5-PeCB	123			3590	3.71	0.0001	3.59e-01	3.59e-01	
3,3',4,4',5-PeCB	126		ND		4.36	0.1	0.00e+00	2.18e-01	
2,3,3',4,4',5-HxCB	156	156 + 157	C	21100	13.8	0.0005	1.06e+01	1.06e+01	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			9000	9.74	0.00001	9.00e-02	9.00e-02	
3,3',4,4',5,5'-HxCB	169		ND		147	0.01	0.00e+00	7.35e-01	
2,3,3',4,4',5,5'-HpCB	189			2240	6.55	0.0001	2.24e-01	2.24e-01	
TOTAL TEQ							31.2	32.2	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			2520	5.37	0.0001	2.52e-01	2.52e-01	
3,4,4',5-TeCB	81		ND		5.12	0.0003	0.00e+00	7.68e-04	
2,3,3',4,4'-PeCB	105			54100	227	0.00003	1.62e+00	1.62e+00	
2,3,4,4',5-PeCB	114			5110	3.93	0.00003	1.53e-01	1.53e-01	
2,3',4,4',5-PeCB	118			118000	233	0.00003	3.54e+00	3.54e+00	
2',3,4,4',5-PeCB	123			3590	3.71	0.00003	1.08e-01	1.08e-01	
3,3',4,4',5-PeCB	126		ND		4.36	0.1	0.00e+00	2.18e-01	
2,3,3',4,4',5-HxCB	156	156 + 157	C	21100	13.8	0.00003	6.33e-01	6.33e-01	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			9000	9.74	0.00003	2.70e-01	2.70e-01	
3,3',4,4',5,5'-HxCB	169		ND		147	0.03	0.00e+00	2.21e+00	
2,3,3',4,4',5,5'-HpCB	189			2240	6.55	0.00003	6.72e-02	6.72e-02	
TOTAL TEQ							6.65	9.07	

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

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Matrix: SOIL

Sample Receipt Date: 07-Oct-2008

Extraction Date: 16-Oct-2008

Analysis Date: 20-Nov-2008 Time: 03:35:25

Extract Volume (uL): 4000

Injection Volume (uL): 1.0

Dilution Factor: 20

Concentration Units: pg/g (dry weight basis)

Project No. POP1406
Lab Sample I.D.: L11830-10 NK (A)
Sample Size: 9.89 g (dry)
Initial Calibration Date: 19-Nov-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8B_315 S: 8
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8B_315 S: 1
% Moisture: 6.06

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2-MoCB	1		X				
3-MoCB	2		X				
4-MoCB	3		X				
2,2'-DiCB	4		X				
2,3-DiCB	5		X				
2,3'-DiCB	6		X				
2,4-DiCB	7		X				
2,4'-DiCB	8		X				
2,5-DiCB	9		X				
2,6-DiCB	10		X				
3,3'-DiCB	11		X				
3,4-DiCB	12	12 + 13	C X				
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		X				
4,4'-DiCB	15		X				
2,2',3-TriCB	16		X				
2,2',4-TriCB	17		X				
2,2',5-TriCB	18	18 + 30	C X				
2,2',6-TriCB	19		X				
2,3,3'-TriCB	20	20 + 28	C X				
2,3,4-TriCB	21	21 + 33	C X				
2,3,4'-TriCB	22		X				
2,3,5-TriCB	23		X				
2,3,6-TriCB	24		X				
2,3',4-TriCB	25		X				
2,3',5-TriCB	26	26 + 29	C X				
2,3',6-TriCB	27		X				
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		X				
2,4',6-TriCB	32		X				
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		X				
3,3',4-TriCB	35		X				
3,3',5-TriCB	36		X				
3,4,4'-TriCB	37		X				
3,4,5-TriCB	38		X				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,4',5-TriCB	39		X				
2,2',3,3'-TeCB	40	40 + 41 + 71	C X				
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		X				
2,2',3,5'-TeCB	43		X				
2,2',3,5'-TeCB	44	44 + 47 + 65	C X				
2,2',3,6'-TeCB	45	45 + 51	C X				
2,2',3,6'-TeCB	46		X				
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48		X				
2,2',4,5'-TeCB	49	49 + 69	C X				
2,2',4,6'-TeCB	50	50 + 53	C X				
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		X				
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		X				
2,3,3',4'-TeCB	55		X				
2,3,3',4'-TeCB	56		X				
2,3,3',5'-TeCB	57		X				
2,3,3',5'-TeCB	58		X				
2,3,3',6'-TeCB	59	59 + 62 + 75	C X				
2,3,4,4'-TeCB	60		X				
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C D	59900	51.5	0.77	0.875
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63		X				
2,3,4',6'-TeCB	64		X				
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		X				
2,3',4,5'-TeCB	67		X				
2,3',4,5'-TeCB	68		X				
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		X				
2,3',5,6'-TeCB	73		X				
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		X				
3,3',4,5'-TeCB	78		X				
3,3',4,5'-TeCB	79		X				
3,3',5,5'-TeCB	80		X				
3,4,4',5'-TeCB	81		X				
2,2',3,3',4'-PeCB	82		X				
2,2',3,3',5'-PeCB	83	83 + 99	C D	82100	25.8	1.59	0.886
2,2',3,3',6'-PeCB	84		X				
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C X				
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	C X				
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	C86				
2,2',3,4,6'-PeCB	88	88 + 91	C X				
2,2',3,4,6'-PeCB	89		X				
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C D	79300	22.9	1.59	0.869
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		X				
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C X				
2,2',3,5,6'-PeCB	94		X				
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		X				
2,2',3',4,5'-PeCB	97	86 + 87 + 97 + 108 + 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				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,2',4,5',6-PeCB	103		X				
2,2',4,6,6'-PeCB	104		X				
2,3,3',4,4'-PeCB	105		D	56800	252	1.57	1.000
2,3,3',4,5-PeCB	106		X				
2,3,3',4',5-PeCB	107	107 + 124	C X				
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109		X				
2,3,3',4',6-PeCB	110	110 + 115	C D	98400	19.2	1.56	0.925
2,3,3',5,5'-PeCB	111		X				
2,3,3',5,6-PeCB	112		X				
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		X				
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		D	122000	249	1.58	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		X				
2,3',4,5',6-PeCB	121		X				
2',3,3',4,5-PeCB	122		X				
2',3,4,4',5-PeCB	123		X				
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		X				
3,3',4,5,5'-PeCB	127		X				
2,2',3,3',4,4'-HxCB	128	128 + 166	C X				
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C D	402000	249	1.26	0.929
2,2',3,3',4,5'-HxCB	130		X				
2,2',3,3',4,6-HxCB	131		X				
2,2',3,3',4,6'-HxCB	132		X				
2,2',3,3',5,5'-HxCB	133		X				
2,2',3,3',5,6-HxCB	134	134 + 143	C X				
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C X				
2,2',3,3',6,6'-HxCB	136		X				
2,2',3,4,4',5-HxCB	137		X				
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C X				
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		X				
2,2',3,4,5,6-HxCB	142		X				
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		D	8950	23.1	1.24	1.122
2,2',3,4,6,6'-HxCB	145		X				
2,2',3,4',5,5'-HxCB	146		X				
2,2',3,4',5,6-HxCB	147	147 + 149	C X				
2,2',3,4',5,6'-HxCB	148		X				
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		X				
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		X				
2,2',4,4',5,5'-HxCB	153	153 + 168	C D	362000	225	1.27	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		X				
2,3,3',4,4',5-HxCB	156	156 + 157	C X				
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		X				
2,3,3',4,5,5'-HxCB	159		X				
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				
2,3,3',4,5',6-HxCB	161		X				
2,3,3',4',5,5'-HxCB	162		X				
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		X				
2,3,3',5,5',6-HxCB	165		X				
2,3,4,4',5,6-HxCB	166	128 + 166	C128				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,3',4,4',5,5'-HxCB	167		X				
2,3',4,4',5',6'-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		X				
2,2',3,3',4,4',5'-HpCB	170		X				
2,2',3,3',4,4',6'-HpCB	171	171 + 173	C X				
2,2',3,3',4,5,5'-HpCB	172		X				
2,2',3,3',4,5,6'-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		X				
2,2',3,3',4,5',6'-HpCB	175		X				
2,2',3,3',4,6',6'-HpCB	176		X				
2,2',3,3',4',5,6'-HpCB	177		X				
2,2',3,3',5,5',6'-HpCB	178		X				
2,2',3,3',5,6',6'-HpCB	179		X				
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C D	98000	14.1	1.04	0.911
2,2',3,4,4',5,6'-HpCB	181		X				
2,2',3,4,4',5,6'-HpCB	182		X				
2,2',3,4,4',5',6'-HpCB	183	183 + 185	C X				
2,2',3,4,4',6,6'-HpCB	184		X				
2,2',3,4,5,5',6'-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		X				
2,2',3,4',5,5',6'-HpCB	187		X				
2,2',3,4',5,6,6'-HpCB	188		X				
2,3,3',4,4',5,5'-HpCB	189		X				
2,3,3',4,4',5,6'-HpCB	190		X				
2,3,3',4,4',5',6'-HpCB	191		X				
2,3,3',4,5,5',6'-HpCB	192		X				
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OxCB	194		X				
2,2',3,3',4,4',5,6'-OxCB	195		X				
2,2',3,3',4,4',5,6'-OxCB	196		X				
2,2',3,3',4,4',6,6'-OxCB	197	197 + 200	C X				
2,2',3,3',4,5,5',6'-OxCB	198	198 + 199	C X				
2,2',3,3',4,5,5',6'-OxCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OxCB	200	197 + 200	C197				
2,2',3,3',4,5,6,6'-OxCB	201		X				
2,2',3,3',5,5',6,6'-OxCB	202		X				
2,2',3,4,4',5,5',6'-OxCB	203		X				
2,2',3,4,4',5,6,6'-OxCB	204		X				
2,3,3',4,4',5,5',6'-OxCB	205		X				
2,2',3,3',4,4',5,5',6'-NoCB	206		X				
2,2',3,3',4,4',5,6,6'-NoCB	207		X				
2,2',3,3',4,5,5',6,6'-NoCB	208		X				
2,2',3,3',4,4',5,5',6,6'-DeCB	209		X				

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; C = co-eluting congener; X = result reported separately.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16681A.xsl; Created: 01-Dec-2008 17:59:29; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_L11830-10_Form1A_PB8B_315S8_SJ934949.html; Workgroup: WG26760; Design ID: 925]

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 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811
Contract No.: 2607

Project No. POP1406
Lab Sample I.D.: L11830-10 (A)
Sample Size: 9.89 g (dry)
Initial Calibration Date: 22-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8C_452 S: 6
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8C_452 S: 1
% Moisture: 6.06

Matrix: SOIL
Sample Receipt Date: 07-Oct-2008
Extraction Date: 16-Oct-2008
Analysis Date: 17-Nov-2008 Time: 14:34:24
Extract Volume (uL): 200
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2-MoCB	1		ND		0.568		
3-MoCB	2			2.76	0.647	2.93	0.988
4-MoCB	3			2.69	0.761	2.72	1.000
2,2'-DiCB	4			29.2	2.94	1.72	1.000
2,3-DiCB	5			5.07	1.95	1.71	1.200
2,3'-DiCB	6			81.2	1.73	1.45	1.177
2,4-DiCB	7		ND		1.76		
2,4'-DiCB	8			86.0	1.58	1.55	1.209
2,5-DiCB	9		NDR	3.78	1.72	2.28	1.147
2,6-DiCB	10		ND		1.72		
3,3'-DiCB	11			500	1.94	1.57	0.968
3,4-DiCB	12	12 + 13	C	33.0	1.93	1.76	0.984
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		ND		1.84		
4,4'-DiCB	15			197	1.88	1.59	1.000
2,2',3-TriCB	16			264	0.785	1.03	1.166
2,2',4-TriCB	17			291	0.699	1.06	1.139
2,2',5-TriCB	18	18 + 30	C	572	0.583	1.06	1.114
2,2',6-TriCB	19			55.6	0.756	1.00	1.000
2,3,3'-TriCB	20	20 + 28	C	2110	0.987	1.02	0.846
2,3,4-TriCB	21	21 + 33	C	846	0.981	1.02	0.856
2,3,4'-TriCB	22			712	1.08	1.04	0.871
2,3,5-TriCB	23			14.6	1.04	1.10	1.287
2,3,6-TriCB	24			9.61	0.551	1.08	1.160
2,3',4-TriCB	25			167	0.878	1.01	0.823
2,3',5-TriCB	26	26 + 29	C	333	0.981	1.03	1.305
2,3',6-TriCB	27			46.2	0.484	1.08	1.153
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			2270	0.923	1.03	0.835
2,4',6-TriCB	32			277	0.934	1.01	1.199
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			8.06	1.05	1.02	1.277
3,3',4-TriCB	35			38.8	1.08	0.99	0.986
3,3',5-TriCB	36			731	0.980	0.98	0.917
3,4,4'-TriCB	37			745	1.07	1.03	1.001
3,4,5-TriCB	38		NDR	1.66	1.06	2.29	0.968



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,4',5'-TriCB	39			32.4	1.07	1.06	0.946
2,2',3,3'-TeCB	40	40 + 41 + 71	C	3940	1.51	0.79	1.343
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		ND		1.56		
2,2',3,5'-TeCB	43			172	1.81	0.77	1.252
2,2',3,5'-TeCB	44	44 + 47 + 65	C	13400	1.36	0.79	1.291
2,2',3,6'-TeCB	45	45 + 51	C	350	1.46	0.76	1.149
2,2',3,6'-TeCB	46			124	1.68	0.80	1.164
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48			1010	1.49	0.78	1.279
2,2',4,5'-TeCB	49	49 + 69	C	8800	1.27	0.78	1.265
2,2',4,6'-TeCB	50	50 + 53	C	537	1.41	0.78	1.113
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		ND		1.40		
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		ND		1.08		
2,3,3',4'-TeCB	55		ND		7.82		
2,3,3',4'-TeCB	56			8160	7.80	0.77	0.904
2,3,3',5'-TeCB	57			1940	7.51	0.74	0.846
2,3,3',5'-TeCB	58		ND		7.33		
2,3,3',6'-TeCB	59	59 + 62 + 75	C	1230	1.12	0.78	1.317
2,3,4,4'-TeCB	60			7310	7.79	0.77	0.910
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C OLR				
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63			1470	7.13	0.77	0.863
2,3,4',6'-TeCB	64			7720	1.10	0.79	1.355
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			38400	7.26	0.77	0.884
2,3',4,5'-TeCB	67			678	6.36	0.76	0.856
2,3',4,5'-TeCB	68		ND		7.33		
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		ND		7.36		
2,3',5,6'-TeCB	73			17200	1.09	0.78	1.240
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			2390	7.19	0.77	1.000
3,3',4,5'-TeCB	78		ND		7.35		
3,3',4,5'-TeCB	79			727	6.37	0.77	0.969
3,3',5,5'-TeCB	80		ND		7.01		
3,4,4',5'-TeCB	81		NDR	133	7.85	0.82	1.001
2,2',3,3',4'-PeCB	82			8130	3.23	1.57	0.933
2,2',3,3',5'-PeCB	83	83 + 99	C OLR				
2,2',3,3',6'-PeCB	84			12100	3.45	1.58	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	26100	2.42	1.67	0.920
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	C	46100	2.50	1.58	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	C86				
2,2',3,4,6'-PeCB	88	88 + 91	C	9050	3.08	1.58	1.157
2,2',3,4,6'-PeCB	89			672	3.20	1.58	1.184
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C OLR				
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			8860	3.07	1.58	0.853
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C	40500	2.90	1.58	1.122
2,2',3,5,6'-PeCB	94			156	3.18	1.56	1.103
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			165	0.905	1.61	1.015
2,2',3',4,5'-PeCB	97	86 + 87 + 97 + 108 + 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				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,2',4,5',6-PeCB	103			207	2.58	1.52	1.095
2,2',4,6,6'-PeCB	104		NDR	1.34	1.24	4.94	1.001
2,3,3',4,4'-PeCB	105		OLR				
2,3,3',4,5-PeCB	106			8350	6.63	1.56	0.997
2,3,3',4',5-PeCB	107	107 + 124	C ND		7.21		
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109			3900	6.57	1.54	0.990
2,3,3',4',6-PeCB	110	110 + 115	C OLR				
2,3,3',5,5'-PeCB	111		ND		2.24		
2,3,3',5,6-PeCB	112		ND		2.20		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			4820	6.54	1.56	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		OLR				
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			1000	2.11	1.60	0.951
2,3',4,5',6-PeCB	121		ND		2.27		
2',3,3',4,5-PeCB	122			1200	7.31	1.49	1.009
2',3,4,4',5-PeCB	123			2770	7.21	1.58	1.001
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		NDR	590	6.47	1.54	1.000
3,3',4,5,5'-PeCB	127			206	6.93	1.38	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	36200	11.5	1.27	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C OLR				
2,2',3,3',4,5'-HxCB	130			9170	14.6	1.26	0.913
2,2',3,3',4,6-HxCB	131			1520	14.0	1.25	1.159
2,2',3,3',4,6'-HxCB	132			54000	14.8	1.26	1.174
2,2',3,3',5,5'-HxCB	133			1620	13.7	1.27	1.191
2,2',3,3',5,6-HxCB	134	134 + 143	C	5780	14.0	1.27	1.140
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	37000	2.95	1.26	1.103
2,2',3,3',6,6'-HxCB	136			12200	2.26	1.25	1.023
2,2',3,4,4',5-HxCB	137			13300	12.7	1.26	0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	3770	12.7	1.25	1.152
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			35700	12.5	1.27	0.904
2,2',3,4,5,6-HxCB	142		ND		13.7		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		X				
2,2',3,4,6,6'-HxCB	145			40.0	2.39	1.27	1.033
2,2',3,4',5,5'-HxCB	146			21200	11.6	1.26	0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	126000	12.6	1.27	1.133
2,2',3,4',5,6'-HxCB	148			36.9	3.05	1.13	1.083
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			75.1	2.33	1.16	1.012
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			48.2	2.24	1.30	1.006
2,2',4,4',5,5'-HxCB	153	153 + 168	C OLR				
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		ND		2.61		
2,3,3',4,4',5-HxCB	156	156 + 157	C	20200	12.1	1.26	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			25900	9.42	1.27	0.938
2,3,3',4,5,5'-HxCB	159			1630	9.69	1.28	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				
2,3,3',4,5',6-HxCB	161		ND		9.79		
2,3,3',4',5,5'-HxCB	162			1390	10.1	1.26	0.990
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			12500	9.86	1.27	0.922
2,3,3',5,5',6-HxCB	165		ND		10.6		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,3',4,4',5,5'-HxCB	167			8010	8.26	1.26	1.000
2,3',4,4',5',6'-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		ND		130		
2,2',3,3',4,4',5-HpCB	170			37700	2.78	1.04	0.937
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	10400	2.82	1.04	1.161
2,2',3,3',4,5,5'-HpCB	172			5450	2.79	1.05	0.898
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			34200	2.59	1.04	1.132
2,2',3,3',4,5',6-HpCB	175			1410	2.52	1.04	1.102
2,2',3,3',4,6,6'-HpCB	176			4030	1.94	1.05	1.034
2,2',3,3',4',5,6-HpCB	177			17500	2.74	1.04	1.144
2,2',3,3',5,5',6-HpCB	178			6340	2.70	1.04	1.084
2,2',3,3',5,6,6'-HpCB	179			12000	1.89	1.04	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C OLR				
2,2',3,4,4',5,6-HpCB	181			204	2.71	1.04	1.155
2,2',3,4,4',5,6'-HpCB	182			108	2.49	1.06	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	24200	2.51	1.04	1.126
2,2',3,4,4',6,6'-HpCB	184		ND		1.91		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		ND		2.04		
2,2',3,4',5,5',6-HpCB	187			37400	2.39	1.04	1.109
2,2',3,4',5,6,6'-HpCB	188			19.0	2.51	1.08	1.001
2,3,3',4,4',5,5'-HpCB	189			2140	6.62	1.05	1.000
2,3,3',4,4',5,6-HpCB	190			7140	2.00	1.04	0.948
2,3,3',4,4',5',6-HpCB	191			1360	1.99	1.05	0.918
2,3,3',4,5,5',6-HpCB	192		ND		2.23		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OxCB	194			25100	7.32	0.89	0.991
2,2',3,3',4,4',5,6-OxCB	195			9720	6.91	0.90	0.946
2,2',3,3',4,4',5,6'-OxCB	196			9110	1.26	0.89	0.917
2,2',3,3',4,4',6,6'-OxCB	197	197 + 200	C	2120	0.974	0.91	1.046
2,2',3,3',4,5,5',6-OxCB	198	198 + 199	C	15300	1.35	0.91	1.114
2,2',3,3',4,5,5',6'-OxCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OxCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OxCB	201			1630	1.01	0.91	1.022
2,2',3,3',5,5',6,6'-OxCB	202			2620	1.29	0.90	1.001
2,2',3,4,4',5,5',6-OxCB	203			10300	1.22	0.90	0.921
2,2',3,4,4',5,6,6'-OxCB	204		ND		0.991		
2,3,3',4,4',5,5',6-OxCB	205			1040	5.22	0.89	1.001
2,2',3,3',4,4',5,5',6-NoCB	206			2820	1.90	0.79	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			419	1.54	0.80	1.019
2,2',3,3',4,5,5',6,6'-NoCB	208			467	1.48	0.80	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			63.3	0.955	0.75	1.001

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; C = co-eluting congener; X = result reported separately; OLR = exceeds calibrated linear range, see dilution data.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16681A.xsl; Created: 01-Dec-2008 17:59:29; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_L11830-10_Form1A_PB8C_452S6_SJ931361.html; Workgroup: WG26760; Design ID: 925]

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 2
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOIL
Sample Receipt Date: 07-Oct-2008
Extraction Date: 16-Oct-2008
Analysis Date: 20-Nov-2008 Time: 03:35:25
Extract Volume (uL): 4000
Injection Volume (uL): 1.0
Dilution Factor: 20
Concentration Units: pg absolute

Project No. POP1406
Lab Sample I.D.: L11830-10 NK (A)
Sample Size: 9.89 g (dry)
Initial Calibration Date: 19-Nov-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8B_315 S: 8
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8B_315 S: 1
% Moisture: 6.06

LABELLED COMPOUND	IUPAC NO. 1	CO-ELUTIONS	LAB FLAG 2	SPIKE CONC.	CONC. FOUND	R(%) 3	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L		X					
13C12-4-MoCB	3L		X					
13C12-2,2'-DiCB	4L		X					
13C12-4,4'-DiCB	15L		X					
13C12-2,2',6-TriCB	19L		X					
13C12-3,4,4'-TriCB	37L		X					
13C12-2,2',6,6'-TeCB	54L		X					
13C12-3,3',4,4'-TeCB	77L		X					
13C12-3,4,4',5-TeCB	81L		X					
13C12-2,2',4,6,6'-PeCB	104L		X					
13C12-2,3,3',4,4'-PeCB	105L		X					
13C12-2,3,4,4',5-PeCB	114L		X					
13C12-2,3',4,4',5-PeCB	118L		X					
13C12-2',3,4,4',5-PeCB	123L		X					
13C12-3,3',4,4',5-PeCB	126L		X					
13C12-2,2',4,4',6,6'-HxCB	155L		X					
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C X					
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L		X					
13C12-3,3',4,4',5,5'-HxCB	169L		X					
13C12-2,2',3,3',4,4',5-HpCB	170L		X					
13C12-2,2',3,4,4',5,5'-HpCB	180L		X					
13C12-2,2',3,4',5,6,6'-HpCB	188L		X					
13C12-2,3,3',4,4',5,5'-HpCB	189L		X					
13C12-2,2',3,3',5,5',6,6'-OcCB	202L		X					
13C12-2,3,3',4,4',5,5',6-OcCB	205L		X					
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L		X					
13C12-2,2',3,3',4,4',5,5',6,6'-NoCB	208L		X					
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L		X					
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L		X					
13C12-2,3,3',5,5'-PeCB	111L		X					
13C12-2,2',3,3',5,5',6-HpCB	178L		X					

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

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 2
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOIL
Sample Receipt Date: 07-Oct-2008
Extraction Date: 16-Oct-2008
Analysis Date: 17-Nov-2008 Time: 14:34:24
Extract Volume (uL): 200
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg absolute

Project No. POP1406
Lab Sample I.D.: L11830-10 (A)
Sample Size: 9.89 g (dry)
Initial Calibration Date: 22-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8C_452 S: 6
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8C_452 S: 1
% Moisture: 6.06

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	1100	55.2	3.43	0.717
13C12-4-MoCB	3L			2000	1160	58.0	3.59	0.858
13C12-2,2'-DiCB	4L			2000	1350	67.7	1.55	0.873
13C12-4,4'-DiCB	15L			2000	1890	94.7	1.60	1.257
13C12-2,2',6-TriCB	19L			2000	1820	90.9	1.05	1.073
13C12-3,4,4'-TriCB	37L			2000	2230	111	1.04	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1630	81.7	0.75	0.808
13C12-3,3',4,4'-TeCB	77L			2000	2430	121	0.83	1.401
13C12-3,4,4',5'-TeCB	81L			2000	2330	117	0.79	1.377
13C12-2,2',4,6,6'-PeCB	104L			2000	1610	80.6	1.51	0.806
13C12-2,3,3',4,4'-PeCB	105L			2000	2550	128	1.52	1.199
13C12-2,3,4,4',5'-PeCB	114L			2000	2500	125	1.62	1.178
13C12-2,3',4,4',5'-PeCB	118L			2000	2670	134	1.63	1.162
13C12-2',3,4,4',5'-PeCB	123L			2000	2440	122	1.52	1.151
13C12-3,3',4,4',5'-PeCB	126L			2000	2840	142	1.55	1.299
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1100	55.2	1.24	0.786
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	4000	2150	53.7	1.37	1.106
13C12-2,3,3',4,4',5',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1380	68.8	1.36	1.077
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1540	76.9	1.26	1.189
13C12-2,2',3,3',4,4',5'-HpCB	170L			2000	1530	76.5	1.00	0.898
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1350	67.3	1.16	0.874
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1450	72.4	1.01	0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	2980	149	1.10	0.959
13C12-2,2',3,3',5,5',6,6'-OxCB	202L			2000	1400	70.0	0.85	0.819
13C12-2,3,3',4,4',5,5',6-OxCB	205L			2000	1810	90.3	0.90	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1660	82.8	0.77	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1600	80.1	0.77	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1430	71.6	1.19	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1750	87.6	0.99	0.923
13C12-2,3,3',5,5'-PeCB	111L			2000	1670	83.7	1.60	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1350	67.6	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.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1A
PCB CONGENER ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No. N/A

Lab Sample I.D.: WG26760-101

Matrix: SOLID

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 22-Oct-2008

Extraction Date: 16-Oct-2008

Instrument ID: HR GC/MS

Analysis Date: 15-Nov-2008 Time: 01:16:25

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename: PB8C_447A S: 4

Injection Volume (uL): 1.0

Blank Data Filename: PB8C_447A S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: PB8C_447A S: 1

Concentration Units: pg/g

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2-MoCB	1		NDR	0.064	0.0500	2.27	1.000
3-MoCB	2		ND		0.0500		
4-MoCB	3		NDR	0.108	0.0500	7.18	1.000
2,2'-DiCB	4		ND		0.108		
2,3-DiCB	5		ND		0.0754		
2,3'-DiCB	6		NDR	0.106	0.0672	1.31	1.178
2,4-DiCB	7		ND		0.0693		
2,4'-DiCB	8			0.133	0.0613	1.56	1.211
2,5-DiCB	9		ND		0.0672		
2,6-DiCB	10		ND		0.0661		
3,3'-DiCB	11			0.974	0.0702	1.67	0.969
3,4-DiCB	12	12 + 13	C ND		0.0696		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		ND		0.0668		
4,4'-DiCB	15			0.100	0.0742	1.57	1.000
2,2',3-TriCB	16		NDR	0.086	0.0500	1.55	1.165
2,2',4-TriCB	17		NDR	0.072	0.0500	1.33	1.138
2,2',5-TriCB	18	18 + 30	C	0.176	0.0500	1.19	1.114
2,2',6-TriCB	19		ND		0.0500		
2,3,3'-TriCB	20	20 + 28	C	0.482	0.0500	0.93	0.848
2,3,4-TriCB	21	21 + 33	C ND		0.0500		
2,3,4'-TriCB	22			0.230	0.0500	0.92	0.872
2,3,5-TriCB	23		ND		0.0500		
2,3,6-TriCB	24		ND		0.0500		
2,3',4-TriCB	25		ND		0.0500		
2,3',5-TriCB	26	26 + 29	C NDR	0.078	0.0500	0.86	1.303
2,3',6-TriCB	27		ND		0.0500		
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			0.354	0.0500	1.13	0.836
2,4',6-TriCB	32			0.063	0.0500	1.13	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		ND		0.0500		
3,3',4-TriCB	35		ND		0.0500		
3,3',5-TriCB	36		ND		0.0500		
3,4,4'-TriCB	37			0.541	0.0500	0.93	1.001
3,4,5-TriCB	38		ND		0.0500		



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,4',5'-TriCB	39		ND		0.0500		
2,2',3,3'-TeCB	40	40 + 41 + 71	C	0.704	0.0500	0.76	1.337
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			0.270	0.0500	0.72	1.314
2,2',3,5'-TeCB	43		ND		0.0500		
2,2',3,5'-TeCB	44	44 + 47 + 65	C NDR	0.911	0.0500	0.92	1.287
2,2',3,6'-TeCB	45	45 + 51	C	0.115	0.0500	0.69	1.149
2,2',3,6'-TeCB	46		ND		0.0500		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48			0.132	0.0500	0.79	1.275
2,2',4,5'-TeCB	49	49 + 69	C	0.345	0.0500	0.81	1.260
2,2',4,6'-TeCB	50	50 + 53	C ND		0.0500		
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			0.657	0.0500	0.80	1.235
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		ND		0.0500		
2,3,3',4'-TeCB	55		ND		0.0577		
2,3,3',4'-TeCB	56			1.37	0.0593	0.84	0.905
2,3,3',5'-TeCB	57		ND		0.0542		
2,3,3',5'-TeCB	58		ND		0.0587		
2,3,3',6'-TeCB	59	59 + 62 + 75	C NDR	0.073	0.0500	1.42	1.303
2,3,4,4'-TeCB	60			0.707	0.0588	0.67	0.911
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C	3.37	0.0553	0.76	0.875
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63		ND		0.0536		
2,3,4',6'-TeCB	64			0.441	0.0500	0.82	1.350
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			1.96	0.0543	0.76	0.884
2,3',4,5'-TeCB	67		NDR	0.057	0.0500	0.42	0.857
2,3',4,5'-TeCB	68		ND		0.0537		
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		ND		0.0530		
2,3',5,6'-TeCB	73		ND		0.0500		
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			0.441	0.0595	0.88	1.001
3,3',4,5'-TeCB	78		ND		0.0562		
3,3',4,5'-TeCB	79		ND		0.0500		
3,3',5,5'-TeCB	80		ND		0.0531		
3,4,4',5'-TeCB	81		ND		0.0600		
2,2',3,3',4'-PeCB	82			0.663	0.0500	1.62	0.933
2,2',3,3',5'-PeCB	83	83 + 99	C	1.96	0.0500	1.47	0.885
2,2',3,3',6'-PeCB	84			0.729	0.0500	1.53	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	0.845	0.0500	1.41	0.920
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	C	2.79	0.0500	1.59	0.902
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	C86				
2,2',3,4,6'-PeCB	88	88 + 91	C NDR	0.313	0.0500	1.19	1.154
2,2',3,4,6'-PeCB	89		ND		0.0500		
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C	3.69	0.0500	1.65	0.870
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			0.511	0.0500	1.62	0.853
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C	1.95	0.0500	1.41	1.120
2,2',3,5,6'-PeCB	94		ND		0.0500		
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		ND		0.0500		
2,2',3',4,5'-PeCB	97	86 + 87 + 97 + 108 + 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				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,2',4,5',6-PeCB	103		ND		0.0500		
2,2',4,6,6'-PeCB	104		ND		0.0500		
2,3,3',4,4'-PeCB	105			2.91	0.0829	1.66	1.000
2,3,3',4,5-PeCB	106		ND		0.0725		
2,3,3',4',5-PeCB	107	107 + 124	C NDR	0.165	0.0792	1.09	0.990
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109			0.388	0.0738	1.42	0.998
2,3,3',4',6-PeCB	110	110 + 115	C	5.30	0.0500	1.55	0.924
2,3,3',5,5'-PeCB	111		ND		0.0500		
2,3,3',5,6-PeCB	112		ND		0.0500		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			0.186	0.0822	1.73	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			5.66	0.0802	1.48	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		ND		0.0500		
2,3',4,5',6-PeCB	121		ND		0.0500		
2',3,3',4,5-PeCB	122		ND		0.0819		
2',3,4,4',5-PeCB	123		ND		0.0831		
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		ND		0.0863		
3,3',4,5,5'-PeCB	127		ND		0.0741		
2,2',3,3',4,4'-HxCB	128	128 + 166	C	1.75	0.0660	1.16	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	12.0	0.0651	1.24	0.929
2,2',3,3',4,5'-HxCB	130			0.533	0.0833	1.38	0.913
2,2',3,3',4,6-HxCB	131		NDR	0.083	0.0789	1.49	1.160
2,2',3,3',4,6'-HxCB	132			3.94	0.0827	1.34	1.174
2,2',3,3',5,5'-HxCB	133		NDR	0.088	0.0763	0.93	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	0.424	0.0789	1.40	1.139
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	3.00	0.0500	1.31	1.103
2,2',3,3',6,6'-HxCB	136			1.01	0.0500	1.33	1.023
2,2',3,4,4',5-HxCB	137			0.308	0.0790	1.33	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C NDR	0.084	0.0707	2.00	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			2.52	0.0726	1.32	0.903
2,2',3,4,5,6-HxCB	142		ND		0.0805		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144			0.421	0.0500	1.23	1.121
2,2',3,4,6,6'-HxCB	145		ND		0.0500		
2,2',3,4',5,5'-HxCB	146			1.24	0.0686	1.28	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	8.50	0.0714	1.29	1.133
2,2',3,4',5,6'-HxCB	148		ND		0.0500		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		ND		0.0500		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		ND		0.0500		
2,2',4,4',5,5'-HxCB	153	153 + 168	C	10.1	0.0591	1.22	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		ND		0.0500		
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.30	0.0662	1.21	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			1.12	0.0509	1.16	0.938
2,3,3',4,5,5'-HxCB	159		NDR	0.222	0.0541	1.43	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				
2,3,3',4,5',6-HxCB	161		ND		0.0523		
2,3,3',4',5,5'-HxCB	162		ND		0.0552		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			0.901	0.0544	1.22	0.921
2,3,3',5,5',6-HxCB	165		ND		0.0630		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,3',4,4',5,5'-HxCB	167			0.373	0.0550	1.21	1.000
2,3',4,4',5',6'-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		ND		0.0585		
2,2',3,3',4,4',5-HpCB	170			4.13	0.0500	1.06	0.936
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	1.25	0.0500	1.01	1.162
2,2',3,3',4,5,5'-HpCB	172			0.658	0.0500	1.04	0.897
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			4.37	0.0500	1.04	1.133
2,2',3,3',4,5',6-HpCB	175			0.172	0.0500	0.97	1.102
2,2',3,3',4,6,6'-HpCB	176			0.486	0.0500	0.97	1.034
2,2',3,3',4',5,6-HpCB	177			2.35	0.0500	1.09	1.145
2,2',3,3',5,5',6-HpCB	178		NDR	0.746	0.0500	1.28	1.085
2,2',3,3',5,6,6'-HpCB	179			1.62	0.0500	1.10	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	8.70	0.0500	1.04	0.910
2,2',3,4,4',5,6-HpCB	181		ND		0.0500		
2,2',3,4,4',5,6'-HpCB	182		ND		0.0500		
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	2.82	0.0500	1.07	1.127
2,2',3,4,4',6,6'-HpCB	184		ND		0.0500		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		ND		0.0500		
2,2',3,4',5,5',6-HpCB	187			4.59	0.0500	1.01	1.110
2,2',3,4',5,6,6'-HpCB	188		ND		0.0500		
2,3,3',4,4',5,5'-HpCB	189			0.223	0.0500	0.94	1.000
2,3,3',4,4',5,6-HpCB	190			0.860	0.0500	1.14	0.947
2,3,3',4,4',5',6-HpCB	191		NDR	0.176	0.0500	0.83	0.917
2,3,3',4,5,5',6-HpCB	192		ND		0.0500		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OxCB	194			1.98	0.0500	0.82	0.991
2,2',3,3',4,4',5,6-OxCB	195		NDR	0.730	0.0500	1.03	0.946
2,2',3,3',4,4',5,6'-OxCB	196			1.04	0.0500	0.94	0.916
2,2',3,3',4,4',6,6'-OxCB	197	197 + 200	C NDR	0.309	0.0500	1.26	1.046
2,2',3,3',4,5,5',6-OxCB	198	198 + 199	C	2.08	0.0500	0.88	1.115
2,2',3,3',4,5,5',6'-OxCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OxCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OxCB	201			0.230	0.0500	0.93	1.023
2,2',3,3',5,5',6,6'-OxCB	202		NDR	0.338	0.0500	0.72	1.001
2,2',3,4,4',5,5',6-OxCB	203			1.40	0.0500	0.89	0.920
2,2',3,4,4',5,6,6'-OxCB	204		ND		0.0500		
2,3,3',4,4',5,5',6-OxCB	205			0.161	0.0500	0.82	1.001
2,2',3,3',4,4',5,5',6-NoCB	206		NDR	0.643	0.0815	0.93	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207		NDR	0.083	0.0587	0.50	1.020
2,2',3,3',4,5,5',6,6'-NoCB	208			0.186	0.0610	0.76	1.001
2,2',3,3',4,4',5,5',6,6'-DeCB	209			0.250	0.0500	0.68	1.000

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; C = co-eluting congener.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16681A.xsl; Created: 01-Dec-2008 17:59:29; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_WG26760-101_Form1A_PB8C_447AS4_SJ931178.html; Workgroup: WG26760; Design ID: 925]

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 2
PCB CONGENER ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOLID
Sample Receipt Date: N/A
Extraction Date: 16-Oct-2008
Analysis Date: 15-Nov-2008 Time: 01:16:25
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.: WG26760-101
Sample Size: 10.0 g
Initial Calibration Date: 22-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8C_447A S: 4
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8C_447A S: 1

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	938	46.9	3.19	0.718
13C12-4-MoCB	3L			2000	962	48.1	3.20	0.858
13C12-2,2'-DiCB	4L			2000	1040	52.2	1.57	0.873
13C12-4,4'-DiCB	15L			2000	1370	68.7	1.57	1.256
13C12-2,2',6-TriCB	19L			2000	1030	51.7	1.05	1.073
13C12-3,4,4'-TriCB	37L			2000	1740	87.2	1.04	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1070	53.4	0.81	0.810
13C12-3,3',4,4'-TeCB	77L			2000	2020	101	0.78	1.397
13C12-3,4,4',5'-TeCB	81L			2000	1990	99.4	0.77	1.374
13C12-2,2',4,6,6'-PeCB	104L			2000	1210	60.4	1.60	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	2010	100	1.56	1.200
13C12-2,3,4,4',5'-PeCB	114L			2000	1970	98.4	1.56	1.178
13C12-2,3',4,4',5'-PeCB	118L			2000	1980	99.1	1.54	1.161
13C12-2',3,4,4',5'-PeCB	123L			2000	1970	98.6	1.57	1.151
13C12-3,3',4,4',5'-PeCB	126L			2000	2200	110	1.56	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1180	58.9	1.24	0.786
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	4000	3370	84.3	1.26	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1680	83.8	1.25	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1750	87.6	1.24	1.191
13C12-2,2',3,3',4,4',5'-HpCB	170L			2000	1690	84.4	1.05	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1660	83.1	1.05	0.873
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1310	65.7	1.06	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	2010	100	1.02	0.959
13C12-2,2',3,3',5,5',6,6'-OxCB	202L			2000	1220	61.0	0.89	0.818
13C12-2,3,3',4,4',5,5',6-OxCB	205L			2000	1680	84.0	0.91	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1420	71.1	0.79	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1410	70.7	0.78	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1200	59.8	1.19	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1390	69.3	1.04	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1590	79.6	1.60	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1430	71.5	1.04	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.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



**Form 8A
PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)**

AXYS ANALYTICAL SERVICES

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

Contract No.:	2607	Lab Sample I.D.:	WG26760-102
Matrix:	SOLID	Initial Calibration Date:	22-Oct-2008
Extraction Date:	16-Oct-2008	Instrument ID:	HR GC/MS
Analysis Date:	14-Nov-2008 Time: 23:07:44	GC Column ID:	SPB OCTYL
Extract Volume (uL):	20	OPR Data Filename:	PB8C_447A S: 2
Injection Volume (uL):	1.0	Blank Data Filename:	PB8C_447A S: 4
Dilution Factor:	N/A	Cal. Ver. Data Filename:	PB8C_447A 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			2.93	50.0	49.5	25.0 - 75.0	98.9
4-MoCB	3			3.00	50.0	50.4	25.0 - 75.0	101
2,2'-DiCB	4			1.49	50.0	49.3	25.0 - 75.0	98.5
4,4'-DiCB	15			1.53	50.0	50.4	25.0 - 75.0	101
2,2',6-TriCB	19			1.06	50.0	51.9	25.0 - 75.0	104
3,4,4'-TriCB	37			1.03	50.0	54.9	25.0 - 75.0	110
2,2',6,6'-TeCB	54			0.82	50.0	51.4	25.0 - 75.0	103
3,3',4,4'-TeCB	77			0.79	50.0	55.1	25.0 - 75.0	110
3,4,4',5-TeCB	81			0.79	50.0	55.9	25.0 - 75.0	112
2,2',4,6,6'-PeCB	104			1.57	50.0	51.0	25.0 - 75.0	102
2,3,3',4,4'-PeCB	105		N	1.54	50.0	78.4	25.0 - 75.0	157
2,3,4,4',5-PeCB	114			1.57	50.0	58.1	25.0 - 75.0	116
2,3',4,4',5-PeCB	118		N	1.56	50.0	106	25.0 - 75.0	212
2',3,4,4',5-PeCB	123			1.57	50.0	59.0	25.0 - 75.0	118
3,3',4,4',5-PeCB	126			1.59	50.0	55.7	25.0 - 75.0	111
2,2',4,4',6,6'-HxCB	155			1.26	50.0	50.9	25.0 - 75.0	102
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.27	100	110	50.0 - 150	110
2,3,3',4,4',5',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5',5'-HxCB	167			1.27	50.0	55.4	25.0 - 75.0	111
3,3',4,4',5,5',5'-HxCB	169			1.27	50.0	52.4	25.0 - 75.0	105
2,2',3,4',5,6,6'-HpCB	188			1.04	50.0	51.7	25.0 - 75.0	103
2,3,3',4,4',5,5',5'-HpCB	189			1.02	50.0	54.7	25.0 - 75.0	109
2,2',3,3',5,5',6,6'-OcCB	202			0.88	50.0	52.8	25.0 - 75.0	106
2,3,3',4,4',5,5',6-OcCB	205			0.89	50.0	53.2	25.0 - 75.0	106
2,2',3,3',4,4',5,5',6-NoCB	206			0.79	50.0	52.8	25.0 - 75.0	106
2,2',3,3',4,5,5',6,6'-NoCB	208			0.79	50.0	51.5	25.0 - 75.0	103
2,2',3,3',4,4',5,5',6,6'-DeCB	209			0.69	50.0	49.0	25.0 - 75.0	98.0

(1) Where applicable, custom lab flags have been used on this report; N = authentic recovery is not within method/contract control limits; C = co-eluting congener.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axys Internal Use Only [XSL Template: Form16688A.xsl; Created: 01-Dec-2008 17:59:29; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_WG26760-102_Form8A_SJ931175.html; Workgroup: WG26760; Design ID: 925]

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 8B
PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)

AXYS ANALYTICAL SERVICES

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

Contract No.:	2607	Lab Sample I.D.:	WG26760-102
Matrix:	SOLID	Initial Calibration Date:	22-Oct-2008
Extraction Date:	16-Oct-2008	Instrument ID:	HR GC/MS
Analysis Date:	14-Nov-2008 Time: 23:07:44	GC Column ID:	SPB OCTYL
Extract Volume (uL):	20	OPR Data Filename:	PB8C_447A S: 2
Injection Volume (uL):	1.0	Blank Data Filename:	PB8C_447A S: 4
Dilution Factor:	N/A	Cal. Ver. Data Filename:	PB8C_447A S: 1

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

LABELLED 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			3.25	100	37.0	15.0 - 140	37.0
13C12-4-MoCB	3L			3.19	100	45.3	15.0 - 140	45.3
13C12-2,2'-DiCB	4L			1.58	100	50.3	30.0 - 140	50.3
13C12-4,4'-DiCB	15L			1.58	100	70.4	30.0 - 140	70.4
13C12-2,2',6-TriCB	19L			1.06	100	52.7	30.0 - 140	52.7
13C12-3,4,4'-TriCB	37L			1.07	100	101	30.0 - 140	101
13C12-2,2',6,6'-TeCB	54L			0.81	100	73.5	30.0 - 140	73.5
13C12-3,3',4,4'-TeCB	77L			0.80	100	98.0	30.0 - 140	98.0
13C12-3,4,4',5'-TeCB	81L			0.78	100	92.7	30.0 - 140	92.7
13C12-2,2',4,6,6'-PeCB	104L			1.61	100	72.0	30.0 - 140	72.0
13C12-2,3,3',4,4'-PeCB	105L			1.59	100	137	30.0 - 140	137
13C12-2,3,4,4',5'-PeCB	114L			1.59	100	131	30.0 - 140	131
13C12-2,3',4,4',5'-PeCB	118L			1.59	100	130	30.0 - 140	130
13C12-2',3,4,4',5'-PeCB	123L			1.58	100	133	30.0 - 140	133
13C12-3,3',4,4',5'-PeCB	126L		V	1.56	100	148	30.0 - 140	148
13C12-2,2',4,4',6,6'-HxCB	155L			1.25	100	47.8	30.0 - 140	47.8
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	1.27	200	174	60.0 - 280	86.8
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			1.27	100	85.6	30.0 - 140	85.6
13C12-3,3',4,4',5,5'-HxCB	169L			1.27	100	95.6	30.0 - 140	95.6
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.05	100	41.6	30.0 - 140	41.6
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.04	100	108	30.0 - 140	108
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			0.91	100	41.7	30.0 - 140	41.7
13C12-2,3,3',4,4',5,5',6-OcCB	205L			0.92	100	78.2	30.0 - 140	78.2
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.77	100	65.9	30.0 - 140	65.9
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			0.79	100	60.9	30.0 - 140	60.9
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.17	100	57.6	30.0 - 140	57.6

CLEANUP STANDARD

13C12-2,4,4'-TriCB	28L			1.05	100	102	40.0 - 125	102
13C12-2,3,3',5,5'-PeCB	111L			1.62	100	81.5	40.0 - 125	81.5
13C12-2,2',3,3',5,5',6-HpCB	178L			1.06	100	65.2	40.0 - 125	65.2

(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.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A (Duplicate)
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

POP1406

Lab Sample I.D.:

WG26760-103 NK (DUP L11830-10)

Matrix: SOIL

Sample Size:

9.81 g (dry)

Sample Receipt Date: 07-Oct-2008

Initial Calibration Date:

19-Nov-2008

Extraction Date: 16-Oct-2008

Instrument ID:

HR GC/MS

Analysis Date: 20-Nov-2008 Time: 04:39:55

GC Column ID:

SPB OCTYL

Extract Volume (uL): 4000

Sample Data Filename:

PB8B_315 S: 9

Injection Volume (uL): 1.0

Blank Data Filename:

PB8C_447A S: 4

Dilution Factor: 20

Cal. Ver. Data Filename:

PB8B_315 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture:

7.23

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2-MoCB	1		X				
3-MoCB	2		X				
4-MoCB	3		X				
2,2'-DiCB	4		X				
2,3-DiCB	5		X				
2,3'-DiCB	6		X				
2,4-DiCB	7		X				
2,4'-DiCB	8		X				
2,5-DiCB	9		X				
2,6-DiCB	10		X				
3,3'-DiCB	11		X				
3,4-DiCB	12	12 + 13	C X				
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		X				
4,4'-DiCB	15		X				
2,2',3-TriCB	16		X				
2,2',4-TriCB	17		X				
2,2',5-TriCB	18	18 + 30	C X				
2,2',6-TriCB	19		X				
2,3,3'-TriCB	20	20 + 28	C X				
2,3,4-TriCB	21	21 + 33	C X				
2,3,4'-TriCB	22		X				
2,3,5-TriCB	23		X				
2,3,6-TriCB	24		X				
2,3',4-TriCB	25		X				
2,3',5-TriCB	26	26 + 29	C X				
2,3',6-TriCB	27		X				
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		X				
2,4',6-TriCB	32		X				
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		X				
3,3',4-TriCB	35		X				
3,3',5-TriCB	36		X				
3,4,4'-TriCB	37		X				
3,4,5-TriCB	38		X				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,4',5-TriCB	39		X				
2,2',3,3'-TeCB	40	40 + 41 + 71	C X				
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		X				
2,2',3,5'-TeCB	43		X				
2,2',3,5'-TeCB	44	44 + 47 + 65	C X				
2,2',3,6'-TeCB	45	45 + 51	C X				
2,2',3,6'-TeCB	46		X				
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48		X				
2,2',4,5'-TeCB	49	49 + 69	C X				
2,2',4,6'-TeCB	50	50 + 53	C X				
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		X				
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		X				
2,3,3',4'-TeCB	55		X				
2,3,3',4'-TeCB	56		X				
2,3,3',5'-TeCB	57		X				
2,3,3',5'-TeCB	58		X				
2,3,3',6'-TeCB	59	59 + 62 + 75	C X				
2,3,4,4'-TeCB	60		X				
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C D	60400	64.3	0.76	0.875
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63		X				
2,3,4',6'-TeCB	64		X				
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		X				
2,3',4,5'-TeCB	67		X				
2,3',4,5'-TeCB	68		X				
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		X				
2,3',5,6'-TeCB	73		X				
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		X				
3,3',4,5'-TeCB	78		X				
3,3',4,5'-TeCB	79		X				
3,3',5,5'-TeCB	80		X				
3,4,4',5'-TeCB	81		X				
2,2',3,3',4'-PeCB	82		X				
2,2',3,3',5'-PeCB	83	83 + 99	C D	78500	17.5	1.59	0.886
2,2',3,3',6'-PeCB	84		X				
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C X				
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	C X				
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	C86				
2,2',3,4,6'-PeCB	88	88 + 91	C X				
2,2',3,4,6'-PeCB	89		X				
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C D	77100	15.5	1.58	0.869
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		X				
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C X				
2,2',3,5,6'-PeCB	94		X				
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		X				
2,2',3',4,5'-PeCB	97	86 + 87 + 97 + 108 + 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				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,2',4,5',6-PeCB	103		X				
2,2',4,6,6'-PeCB	104		X				
2,3,3',4,4'-PeCB	105		D	54100	227	1.56	1.000
2,3,3',4,5-PeCB	106		X				
2,3,3',4',5-PeCB	107	107 + 124	C X				
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109		X				
2,3,3',4',6-PeCB	110	110 + 115	C D	93600	13.0	1.58	0.925
2,3,3',5,5'-PeCB	111		X				
2,3,3',5,6-PeCB	112		X				
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		X				
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		D	118000	233	1.58	1.001
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		X				
2,3',4,5',6-PeCB	121		X				
2',3,3',4,5-PeCB	122		X				
2',3,4,4',5-PeCB	123		X				
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		X				
3,3',4,5,5'-PeCB	127		X				
2,2',3,3',4,4'-HxCB	128	128 + 166	C X				
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C D	289000	152	1.27	0.929
2,2',3,3',4,5'-HxCB	130		X				
2,2',3,3',4,6-HxCB	131		X				
2,2',3,3',4,6'-HxCB	132		X				
2,2',3,3',5,5'-HxCB	133		X				
2,2',3,3',5,6-HxCB	134	134 + 143	C X				
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C X				
2,2',3,3',6,6'-HxCB	136		X				
2,2',3,4,4',5-HxCB	137		X				
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C X				
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		X				
2,2',3,4,5,6-HxCB	142		X				
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		D	9720	14.9	1.26	1.122
2,2',3,4,6,6'-HxCB	145		X				
2,2',3,4',5,5'-HxCB	146		X				
2,2',3,4',5,6-HxCB	147	147 + 149	C X				
2,2',3,4',5,6'-HxCB	148		X				
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		X				
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		X				
2,2',4,4',5,5'-HxCB	153	153 + 168	C D	248000	137	1.26	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		X				
2,3,3',4,4',5-HxCB	156	156 + 157	C X				
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		X				
2,3,3',4,5,5'-HxCB	159		X				
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				
2,3,3',4,5',6-HxCB	161		X				
2,3,3',4',5,5'-HxCB	162		X				
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		X				
2,3,3',5,5',6-HxCB	165		X				
2,3,4,4',5,6-HxCB	166	128 + 166	C128				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,3',4,4',5,5'-HxCB	167		X				
2,3',4,4',5',6'-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		X				
2,2',3,3',4,4',5'-HpCB	170		X				
2,2',3,3',4,4',6'-HpCB	171	171 + 173	C X				
2,2',3,3',4,5,5'-HpCB	172		X				
2,2',3,3',4,5,6'-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		X				
2,2',3,3',4,5',6'-HpCB	175		X				
2,2',3,3',4,6',6'-HpCB	176		X				
2,2',3,3',4',5,6'-HpCB	177		X				
2,2',3,3',5,5',6'-HpCB	178		X				
2,2',3,3',5,6',6'-HpCB	179		X				
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C X				
2,2',3,4,4',5,6'-HpCB	181		X				
2,2',3,4,4',5,6'-HpCB	182		X				
2,2',3,4,4',5',6'-HpCB	183	183 + 185	C X				
2,2',3,4,4',6,6'-HpCB	184		X				
2,2',3,4,5,5',6'-HpCB	185	183 + 185	C183				
2,2',3,4,5,6',6'-HpCB	186		X				
2,2',3,4',5,5',6'-HpCB	187		X				
2,2',3,4',5,6,6'-HpCB	188		X				
2,3,3',4,4',5,5'-HpCB	189		X				
2,3,3',4,4',5,6'-HpCB	190		X				
2,3,3',4,4',5',6'-HpCB	191		X				
2,3,3',4,5,5',6'-HpCB	192		X				
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OxCB	194		X				
2,2',3,3',4,4',5,6'-OxCB	195		X				
2,2',3,3',4,4',5,6'-OxCB	196		X				
2,2',3,3',4,4',6,6'-OxCB	197	197 + 200	C X				
2,2',3,3',4,5,5',6'-OxCB	198	198 + 199	C X				
2,2',3,3',4,5,5',6'-OxCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OxCB	200	197 + 200	C197				
2,2',3,3',4,5,6,6'-OxCB	201		X				
2,2',3,3',5,5',6,6'-OxCB	202		X				
2,2',3,4,4',5,5',6'-OxCB	203		X				
2,2',3,4,4',5,6,6'-OxCB	204		X				
2,3,3',4,4',5,5',6'-OxCB	205		X				
2,2',3,3',4,4',5,5',6'-NoCB	206		X				
2,2',3,3',4,4',5,6,6'-NoCB	207		X				
2,2',3,3',4,5,5',6,6'-NoCB	208		X				
2,2',3,3',4,4',5,5',6,6'-DeCB	209		X				

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; C = co-eluting congener; X = result reported separately.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16681A.xsl; Created: 01-Dec-2008 17:59:29; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_WG26760-103_Form1A_PB8B_315S9_SJ934951.html; Workgroup: WG26760; Design ID: 925]

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 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A (Duplicate)
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

POP1406

Lab Sample I.D.:

WG26760-103 (DUP L11830-10)

Matrix: SOIL

Sample Size:

9.81 g (dry)

Sample Receipt Date: 07-Oct-2008

Initial Calibration Date:

22-Oct-2008

Extraction Date: 16-Oct-2008

Instrument ID:

HR GC/MS

Analysis Date: 17-Nov-2008 Time: 15:38:48

GC Column ID:

SPB OCTYL

Extract Volume (uL): 200

Sample Data Filename:

PB8C_452 S: 7

Injection Volume (uL): 1.0

Blank Data Filename:

PB8C_447A S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename:

PB8C_452 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture:

7.23

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2-MoCB	1			1.59	0.672	2.86	1.001
3-MoCB	2		NDR	3.00	0.830	2.51	0.987
4-MoCB	3		NDR	3.41	1.07	2.48	1.001
2,2'-DiCB	4			28.1	3.18	1.42	1.001
2,3-DiCB	5			5.24	2.21	1.43	1.200
2,3'-DiCB	6			82.1	1.96	1.56	1.178
2,4-DiCB	7		ND		2.00		
2,4'-DiCB	8			90.9	1.79	1.50	1.209
2,5-DiCB	9		NDR	3.25	1.95	2.34	1.148
2,6-DiCB	10		ND		1.95		
3,3'-DiCB	11			596	2.19	1.54	0.968
3,4-DiCB	12	12 + 13	C	37.7	2.19	1.50	0.983
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		ND		2.08		
4,4'-DiCB	15			214	2.18	1.53	1.001
2,2',3-TriCB	16			337	0.817	1.04	1.166
2,2',4-TriCB	17			376	0.728	1.04	1.139
2,2',5-TriCB	18	18 + 30	C	735	0.606	1.04	1.114
2,2',6-TriCB	19			56.6	0.721	0.99	1.000
2,3,3'-TriCB	20	20 + 28	C	2480	1.45	1.02	0.846
2,3,4-TriCB	21	21 + 33	C	1020	1.44	1.04	0.854
2,3,4'-TriCB	22			852	1.58	1.03	0.870
2,3,5-TriCB	23			19.0	1.53	1.01	1.286
2,3,6-TriCB	24			12.3	0.573	0.99	1.160
2,3',4-TriCB	25			191	1.29	1.03	0.823
2,3',5-TriCB	26	26 + 29	C	390	1.44	1.01	1.305
2,3',6-TriCB	27			58.0	0.503	1.02	1.152
2,4,4'-TriCB	28	20 + 28	C20				
2,4,5-TriCB	29	26 + 29	C26				
2,4,6-TriCB	30	18 + 30	C18				
2,4',5-TriCB	31			2680	1.35	1.03	0.834
2,4',6-TriCB	32			340	1.37	1.00	1.199
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			9.10	1.55	0.98	1.277
3,3',4-TriCB	35			65.8	1.58	1.02	0.985
3,3',5-TriCB	36			895	1.44	0.98	0.916
3,4,4'-TriCB	37			871	1.68	1.03	1.001
3,4,5-TriCB	38		NDR	5.17	1.56	0.87	0.967



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,4',5-TriCB	39			42.0	1.58	0.94	0.945
2,2',3,3'-TeCB	40	40 + 41 + 71	C	4420	1.35	0.79	1.342
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		ND		1.40		
2,2',3,5'-TeCB	43			216	1.63	0.79	1.250
2,2',3,5'-TeCB	44	44 + 47 + 65	C	15100	1.22	0.79	1.289
2,2',3,6'-TeCB	45	45 + 51	C	402	1.31	0.79	1.148
2,2',3,6'-TeCB	46			143	1.50	0.77	1.162
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48			1140	1.33	0.78	1.278
2,2',4,5'-TeCB	49	49 + 69	C	9990	1.14	0.79	1.263
2,2',4,6'-TeCB	50	50 + 53	C	620	1.27	0.77	1.112
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		ND		1.26		
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		ND		0.815		
2,3,3',4'-TeCB	55		ND		5.07		
2,3,3',4'-TeCB	56			8740	5.06	0.78	0.903
2,3,3',5'-TeCB	57			2040	4.87	0.74	0.845
2,3,3',5'-TeCB	58		ND		4.75		
2,3,3',6'-TeCB	59	59 + 62 + 75	C	526	1.01	0.78	1.307
2,3,4,4'-TeCB	60			8250	5.05	0.77	0.910
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C OLR				
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63			1620	4.62	0.77	0.863
2,3,4',6'-TeCB	64			8510	0.989	0.79	1.354
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			42200	4.71	0.78	0.883
2,3',4,5'-TeCB	67			743	4.12	0.75	0.855
2,3',4,5'-TeCB	68		ND		4.75		
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		ND		4.77		
2,3',5,6'-TeCB	73			19300	0.978	0.78	1.238
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			2520	5.37	0.78	1.000
3,3',4,5'-TeCB	78		ND		4.76		
3,3',4,5'-TeCB	79			622	4.13	0.73	0.968
3,3',5,5'-TeCB	80		ND		4.54		
3,4,4',5'-TeCB	81		NDR	181	5.12	0.78	1.000
2,2',3,3',4'-PeCB	82			8510	5.04	1.59	0.933
2,2',3,3',5'-PeCB	83	83 + 99	C OLR				
2,2',3,3',6'-PeCB	84			12900	5.39	1.58	1.165
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C	26300	3.77	1.63	0.919
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	C	48700	3.90	1.58	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	C86				
2,2',3,4,6'-PeCB	88	88 + 91	C	9400	4.81	1.57	1.156
2,2',3,4,6'-PeCB	89			696	4.99	1.60	1.184
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C OLR				
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			9360	4.79	1.58	0.852
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C	43500	4.53	1.58	1.122
2,2',3,5,6'-PeCB	94			175	4.97	1.63	1.103
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96			181	1.06	1.54	1.015
2,2',3',4,5'-PeCB	97	86 + 87 + 97 + 108 + 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				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,2',4,5',6-PeCB	103			213	4.03	1.65	1.095
2,2',4,6,6'-PeCB	104		ND		1.30		
2,3,3',4,4'-PeCB	105		OLR				
2,3,3',4,5-PeCB	106			8040	3.55	1.63	0.997
2,3,3',4',5-PeCB	107	107 + 124	C ND		3.87		
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109			4200	3.52	1.56	0.991
2,3,3',4',6-PeCB	110	110 + 115	C OLR				
2,3,3',5,5'-PeCB	111		ND		3.49		
2,3,3',5,6-PeCB	112		ND		3.43		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			5110	3.93	1.54	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		OLR				
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120			1050	3.30	1.56	0.951
2,3',4,5',6-PeCB	121		ND		3.55		
2',3,3',4,5-PeCB	122			1420	3.92	1.56	1.009
2',3,4,4',5-PeCB	123			3590	3.71	1.38	1.000
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		NDR	599	4.36	1.55	1.000
3,3',4,5,5'-PeCB	127			144	3.72	1.70	1.041
2,2',3,3',4,4'-HxCB	128	128 + 166	C	39800	11.6	1.27	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C OLR				
2,2',3,3',4,5'-HxCB	130			11100	14.7	1.27	0.914
2,2',3,3',4,6-HxCB	131			2090	14.1	1.27	1.159
2,2',3,3',4,6'-HxCB	132			68900	14.8	1.27	1.175
2,2',3,3',5,5'-HxCB	133			2030	13.8	1.27	1.192
2,2',3,3',5,6-HxCB	134	134 + 143	C	6720	14.0	1.28	1.140
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	47500	3.33	1.25	1.104
2,2',3,3',6,6'-HxCB	136			15400	2.55	1.26	1.023
2,2',3,4,4',5-HxCB	137			14900	12.8	1.27	0.919
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C	4940	12.8	1.26	1.153
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141			46000	12.6	1.26	0.904
2,2',3,4,5,6-HxCB	142		ND		13.7		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		X				
2,2',3,4,6,6'-HxCB	145			44.3	2.70	1.33	1.033
2,2',3,4',5,5'-HxCB	146			26800	11.6	1.26	0.885
2,2',3,4',5,6-HxCB	147	147 + 149	C	165000	12.7	1.26	1.133
2,2',3,4',5,6'-HxCB	148			49.8	3.44	1.33	1.084
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150			91.6	2.63	1.33	1.012
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152			60.4	2.53	1.21	1.006
2,2',4,4',5,5'-HxCB	153	153 + 168	C OLR				
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		ND		2.09		
2,3,3',4,4',5-HxCB	156	156 + 157	C	21100	13.8	1.25	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158			30600	9.46	1.26	0.939
2,3,3',4,5,5'-HxCB	159			1180	9.73	1.27	0.981
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				
2,3,3',4,5',6-HxCB	161		ND		9.84		
2,3,3',4',5,5'-HxCB	162			1250	10.2	1.26	0.991
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164			14900	9.90	1.28	0.922
2,3,3',5,5',6-HxCB	165		ND		10.6		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,3',4,4',5,5'-HxCB	167			9000	9.74	1.24	1.000
2,3',4,4',5',6'-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		ND		147		
2,2',3,3',4,4',5-HpCB	170			31500	2.38	1.05	0.937
2,2',3,3',4,4',6-HpCB	171	171 + 173	C	9330	2.41	1.04	1.161
2,2',3,3',4,5,5'-HpCB	172			4670	2.39	1.04	0.899
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174			28900	2.21	1.05	1.131
2,2',3,3',4,5',6-HpCB	175			1470	2.15	1.03	1.101
2,2',3,3',4,6,6'-HpCB	176			4350	1.66	1.04	1.034
2,2',3,3',4',5,6-HpCB	177			15800	2.34	1.04	1.144
2,2',3,3',5,5',6-HpCB	178			6860	2.31	1.04	1.084
2,2',3,3',5,6,6'-HpCB	179			13500	1.62	1.04	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	65300	1.92	1.04	0.912
2,2',3,4,4',5,6-HpCB	181			192	2.32	1.05	1.155
2,2',3,4,4',5,6'-HpCB	182			120	2.12	0.95	1.115
2,2',3,4,4',5',6-HpCB	183	183 + 185	C	21700	2.14	1.04	1.126
2,2',3,4,4',6,6'-HpCB	184			17.4	1.64	1.04	1.024
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		ND		1.74		
2,2',3,4',5,5',6-HpCB	187			37800	2.04	1.04	1.109
2,2',3,4',5,6,6'-HpCB	188			21.4	1.99	0.97	1.001
2,3,3',4,4',5,5'-HpCB	189			2240	6.55	1.05	1.001
2,3,3',4,4',5,6-HpCB	190			5970	1.71	1.04	0.948
2,3,3',4,4',5',6-HpCB	191			1240	1.70	1.00	0.919
2,3,3',4,5,5',6-HpCB	192		ND		1.91		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OxCB	194			27700	5.91	0.89	0.991
2,2',3,3',4,4',5,6-OxCB	195			10500	5.59	0.89	0.946
2,2',3,3',4,4',5,6'-OxCB	196			9150	1.80	0.91	0.917
2,2',3,3',4,4',6,6'-OxCB	197	197 + 200	C	1960	1.39	0.91	1.046
2,2',3,3',4,5,5',6-OxCB	198	198 + 199	C	14400	1.91	0.91	1.113
2,2',3,3',4,5,5',6'-OxCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OxCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OxCB	201			1530	1.43	0.92	1.022
2,2',3,3',5,5',6,6'-OxCB	202			2600	2.03	0.93	1.001
2,2',3,4,4',5,5',6-OxCB	203			11300	1.74	0.90	0.921
2,2',3,4,4',5,6,6'-OxCB	204			2.16	1.41	0.96	1.038
2,3,3',4,4',5,5',6-OxCB	205			1060	3.80	0.90	1.000
2,2',3,3',4,4',5,5',6-NoCB	206			3000	1.99	0.78	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207			482	1.62	0.79	1.019
2,2',3,3',4,5,5',6,6'-NoCB	208			488	1.57	0.79	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209			66.4	1.25	0.65	1.000

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; C = co-eluting congener; X = result reported separately; OLR = exceeds calibrated linear range, see dilution data.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

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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 2
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A (Duplicate)
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOIL
Sample Receipt Date: 07-Oct-2008
Extraction Date: 16-Oct-2008
Analysis Date: 20-Nov-2008 Time: 04:39:55
Extract Volume (uL): 4000
Injection Volume (uL): 1.0
Dilution Factor: 20
Concentration Units: pg absolute

Project No. POP1406
Lab Sample I.D.: WG26760-103 NK (DUP L11830-10)
Sample Size: 9.81 g (dry)
Initial Calibration Date: 19-Nov-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8B_315 S: 9
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8B_315 S: 1
% Moisture: 7.23

LABELLED COMPOUND	IUPAC NO. ¹	CO-ELUTIONS	LAB FLAG ²	SPIKE CONC.	CONC. FOUND	R(%) ³	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L		X					
13C12-4-MoCB	3L		X					
13C12-2,2'-DiCB	4L		X					
13C12-4,4'-DiCB	15L		X					
13C12-2,2',6-TriCB	19L		X					
13C12-3,4,4'-TriCB	37L		X					
13C12-2,2',6,6'-TeCB	54L		X					
13C12-3,3',4,4'-TeCB	77L		X					
13C12-3,4,4',5-TeCB	81L		X					
13C12-2,2',4,6,6'-PeCB	104L		X					
13C12-2,3,3',4,4'-PeCB	105L		X					
13C12-2,3,4,4',5-PeCB	114L		X					
13C12-2,3',4,4',5-PeCB	118L		X					
13C12-2',3,4,4',5-PeCB	123L		X					
13C12-3,3',4,4',5-PeCB	126L		X					
13C12-2,2',4,4',6,6'-HxCB	155L		X					
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C X					
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L		X					
13C12-3,3',4,4',5,5'-HxCB	169L		X					
13C12-2,2',3,3',4,4',5-HpCB	170L		X					
13C12-2,2',3,4,4',5,5'-HpCB	180L		X					
13C12-2,2',3,4',5,6,6'-HpCB	188L		X					
13C12-2,3,3',4,4',5,5'-HpCB	189L		X					
13C12-2,2',3,3',5,5',6,6'-OxCB	202L		X					
13C12-2,3,3',4,4',5,5',6-OxCB	205L		X					
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L		X					
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L		X					
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L		X					
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L		X					
13C12-2,3,3',5,5'-PeCB	111L		X					
13C12-2,2',3,3',5,5',6-HpCB	178L		X					

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

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 2
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A (Duplicate)
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOIL
Sample Receipt Date: 07-Oct-2008
Extraction Date: 16-Oct-2008
Analysis Date: 17-Nov-2008 Time: 15:38:48
Extract Volume (uL): 200
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg absolute

Project No. POP1406
Lab Sample I.D.: WG26760-103 (DUP L11830-10)
Sample Size: 9.81 g (dry)
Initial Calibration Date: 22-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8C_452 S: 7
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8C_452 S: 1
% Moisture: 7.23

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	928	46.4	3.30	0.716
13C12-4-MoCB	3L			2000	833	41.7	3.49	0.857
13C12-2,2'-DiCB	4L			2000	1310	65.5	1.58	0.872
13C12-4,4'-DiCB	15L			2000	1640	81.9	1.57	1.255
13C12-2,2',6-TriCB	19L			2000	1930	96.5	1.17	1.072
13C12-3,4,4'-TriCB	37L			2000	1640	82.2	0.95	1.093
13C12-2,2',6,6'-TeCB	54L			2000	1630	81.3	0.80	0.808
13C12-3,3',4,4'-TeCB	77L			2000	1900	94.8	0.77	1.401
13C12-3,4,4',5'-TeCB	81L			2000	2120	106	0.79	1.378
13C12-2,2',4,6,6'-PeCB	104L			2000	1510	75.6	1.56	0.806
13C12-2,3,3',4,4'-PeCB	105L			2000	2430	121	1.65	1.200
13C12-2,3,4,4',5'-PeCB	114L			2000	2280	114	1.57	1.179
13C12-2,3',4,4',5'-PeCB	118L			2000	2430	122	1.55	1.162
13C12-2',3,4,4',5'-PeCB	123L			2000	2350	118	1.61	1.152
13C12-3,3',4,4',5'-PeCB	126L			2000	2150	107	1.61	1.300
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1240	62.2	1.26	0.786
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	4000	1760	44.1	1.31	1.106
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1010	50.4	1.42	1.077
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1140	56.9	1.31	1.189
13C12-2,2',3,3',4,4',5'-HpCB	170L			2000	1060	52.9	1.05	0.898
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1050	52.7	1.07	0.874
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1470	73.6	1.07	0.715
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	2570	129	0.97	0.959
13C12-2,2',3,3',5,5',6,6'-OxCB	202L			2000	1160	57.9	0.86	0.819
13C12-2,3,3',4,4',5,5',6-OxCB	205L			2000	1770	88.5	0.82	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1630	81.7	0.78	1.043
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			2000	1610	80.5	0.79	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1490	74.6	1.12	1.074
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1680	83.9	1.06	0.923
13C12-2,3,3',5,5'-PeCB	111L			2000	1630	81.4	1.62	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	1420	70.9	1.03	1.012

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

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM021A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Matrix: SOIL

Sample Receipt Date: 07-Oct-2008

Extraction Date: 16-Oct-2008

Analysis Date: 19-Nov-2008 Time: 23:17:26

Extract Volume (uL): 200

Injection Volume (uL): 1.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No. POP1406
Lab Sample I.D.: L11830-9 i
Sample Size: 10.6 g (dry)
Initial Calibration Date: 19-Nov-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8B_315 S: 4
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8B_315 S: 1
% Moisture: 4.20

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,3',4,4'-TeCB	77			380	4.00	0.80	1.000
3,4,4',5'-TeCB	81			19.0	4.11	0.66	1.001
2,3,3',4,4'-PeCB	105			5120	2.77	1.58	1.000
2,3,4,4',5'-PeCB	114			305	2.74	1.63	1.000
2,3',4,4',5'-PeCB	118			11700	3.09	1.57	1.000
2',3,4,4',5'-PeCB	123			173	2.79	1.56	1.000
3,3',4,4',5'-PeCB	126			82.5	3.20	1.55	1.000
2,3,3',4,4',5'-HxCB	156	156 + 157	C	3000	12.0	1.17	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			1100	7.76	1.22	1.001
3,3',4,4',5,5'-HxCB	169		ND		29.2		
2,2',3,3',4,4',5'-HpCB	170			16200	1.40	1.06	1.001
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	40300	1.66	1.03	1.001
2,3,3',4,4',5,5'-HpCB	189			524	2.53	1.01	1.001
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180				

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; C = co-eluting congener.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

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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 2
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM021A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOIL
Sample Receipt Date: 07-Oct-2008
Extraction Date: 16-Oct-2008
Analysis Date: 19-Nov-2008 Time: 23:17:26
Extract Volume (uL): 200
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg absolute

Project No. POP1406
Lab Sample I.D.: L11830-9 i
Sample Size: 10.6 g (dry)
Initial Calibration Date: 19-Nov-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8B_315 S: 4
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8B_315 S: 1
% Moisture: 4.20

LABELLED COMPOUND	IUPAC NO. ¹	CO-ELUTIONS	LAB FLAG ²	SPIKE CONC.	CONC. FOUND	R(%) ³	ION ABUND. RATIO	RRT
13C12-3,3',4,4'-TeCB	77L			2000	1590	79.7	0.79	1.396
13C12-3,4,4',5'-TeCB	81L			2000	1590	79.5	0.81	1.373
13C12-2,3,3',4,4'-PeCB	105L			2000	1490	74.4	1.67	1.199
13C12-2,3,4,4',5'-PeCB	114L			2000	1480	73.9	1.68	1.178
13C12-2,3',4,4',5'-PeCB	118L			2000	1430	71.4	1.64	1.161
13C12-2',3,4,4',5'-PeCB	123L			2000	1560	78.2	1.71	1.151
13C12-3,3',4,4',5'-PeCB	126L			2000	1380	68.9	1.69	1.300
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	4000	1430	35.7	1.41	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	997	49.9	1.38	1.077
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1540	76.8	1.28	1.190
13C12-2,2',3,3',4,4',5'-HpCB	170L			2000	1320	66.0	1.10	1.175
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1010	50.7	0.91	1.143
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1790	89.6	1.03	1.255
CLEANUP STANDARD								
13C12-2,3,3',5,5'-PeCB	111L			2000	1780	89.2	1.64	1.087
13C12-2,2',3,3',5,5',6'-HpCB	178L			2000	1940	96.9	1.09	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.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



Form 1A
PCB CONGENER ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No. N/A

Lab Sample I.D.: WG26760-101

Matrix: SOLID

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 22-Oct-2008

Extraction Date: 16-Oct-2008

Instrument ID: HR GC/MS

Analysis Date: 15-Nov-2008 Time: 01:16:25

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename: PB8C_447A S: 4

Injection Volume (uL): 1.0

Blank Data Filename: PB8C_447A S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: PB8C_447A S: 1

Concentration Units: pg/g

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,3',4,4'-TeCB	77			0.441	0.0595	0.88	1.001
3,4,4',5'-TeCB	81		ND		0.0600		
2,3,3',4,4'-PeCB	105			2.91	0.0829	1.66	1.000
2,3,4,4',5'-PeCB	114			0.186	0.0822	1.73	1.001
2,3',4,4',5'-PeCB	118			5.66	0.0802	1.48	1.000
2',3,4,4',5'-PeCB	123		ND		0.0831		
3,3',4,4',5'-PeCB	126		ND		0.0863		
2,3,3',4,4',5'-HxCB	156	156 + 157	C	1.30	0.0662	1.21	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			0.373	0.0550	1.21	1.000
3,3',4,4',5,5'-HxCB	169		ND		0.0585		
2,2',3,3',4,4',5'-HpCB	170			4.36	0.0500	1.06	1.001
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	10.5	0.0500	1.04	1.000
2,3,3',4,4',5,5'-HpCB	189			0.223	0.0500	0.94	1.000
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180				

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; C = co-eluting congener.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

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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 2
PCB CONGENER ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOLID
Sample Receipt Date: N/A
Extraction Date: 16-Oct-2008
Analysis Date: 15-Nov-2008 Time: 01:16:25
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.: WG26760-101
Sample Size: 10.0 g
Initial Calibration Date: 22-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8C_447A S: 4
Blank Data Filename: PB8C_447A S: 4
Cal. Ver. Data Filename: PB8C_447A S: 1

LABELLED COMPOUND	IUPAC NO. ¹	CO-ELUTIONS	LAB FLAG ²	SPIKE CONC.	CONC. FOUND	R(%) ³	ION ABUND. RATIO	RRT
13C12-3,3',4,4'-TeCB	77L			2000	2020	101	0.78	1.397
13C12-3,4,4',5'-TeCB	81L			2000	1990	99.4	0.77	1.374
13C12-2,3,3',4,4'-PeCB	105L			2000	2010	100	1.56	1.200
13C12-2,3,4,4',5'-PeCB	114L			2000	1970	98.4	1.56	1.178
13C12-2,3',4,4',5'-PeCB	118L			2000	1980	99.1	1.54	1.161
13C12-2',3,4,4',5'-PeCB	123L			2000	1970	98.6	1.57	1.151
13C12-3,3',4,4',5'-PeCB	126L			2000	2200	110	1.56	1.301
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	4000	3370	84.3	1.26	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1680	83.8	1.25	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1750	87.6	1.24	1.191
13C12-2,2',3,3',4,4',5'-HpCB	170L			2000	1480	74.0	1.05	1.175
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1490	74.5	1.05	1.143
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	2040	102	1.02	1.256
CLEANUP STANDARD								
13C12-2,3,3',5,5'-PeCB	111L			2000	1590	79.6	1.60	1.087
13C12-2,2',3,3',5,5',6'-HpCB	178L			2000	1430	71.5	1.04	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.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

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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 8A
PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)**

AXYS ANALYTICAL SERVICES

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

Contract No.:	2607	Lab Sample I.D.:	WG26760-102
Matrix:	SOLID	Initial Calibration Date:	22-Oct-2008
Extraction Date:	16-Oct-2008	Instrument ID:	HR GC/MS
Analysis Date:	14-Nov-2008 Time: 23:07:44	GC Column ID:	SPB OCTYL
Extract Volume (uL):	20	OPR Data Filename:	PB8C_447A S: 2
Injection Volume (uL):	1.0	Blank Data Filename:	PB8C_447A S: 4
Dilution Factor:	N/A	Cal. Ver. Data Filename:	PB8C_447A 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
3,3',4,4'-TeCB	77			0.79	50.0	55.1	25.0 - 75.0	110
3,4,4',5'-TeCB	81			0.79	50.0	55.9	25.0 - 75.0	112
2,3,3',4,4'-PeCB	105		N	1.54	50.0	78.4	25.0 - 75.0	157
2,3,4,4',5'-PeCB	114			1.57	50.0	58.1	25.0 - 75.0	116
2,3',4,4',5'-PeCB	118		N	1.56	50.0	106	25.0 - 75.0	212
2',3,4,4',5'-PeCB	123			1.57	50.0	59.0	25.0 - 75.0	118
3,3',4,4',5'-PeCB	126			1.59	50.0	55.7	25.0 - 75.0	111
2,3,3',4,4',5'-HxCB	156	156 + 157	C	1.27	100	110	50.0 - 150	110
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			1.27	50.0	55.4	25.0 - 75.0	111
3,3',4,4',5,5'-HxCB	169			1.27	50.0	52.4	25.0 - 75.0	105
2,2',3,3',4,4',5'-HpCB	170		N	1.04	50.0	79.1	25.0 - 75.0	158
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C N	1.04	50.0	120	25.0 - 75.0	241
2,3,3',4,4',5,5'-HpCB	189			1.02	50.0	54.7	25.0 - 75.0	109
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180					

(1) Where applicable, custom lab flags have been used on this report; N = authentic recovery is not within method/contract control limits; C = co-eluting congener.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

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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 8B
PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)**

AXYS ANALYTICAL SERVICES

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

Contract No.:	2607	Lab Sample I.D.:	WG26760-102
Matrix:	SOLID	Initial Calibration Date:	22-Oct-2008
Extraction Date:	16-Oct-2008	Instrument ID:	HR GC/MS
Analysis Date:	14-Nov-2008 Time: 23:07:44	GC Column ID:	SPB OCTYL
Extract Volume (uL):	20	OPR Data Filename:	PB8C_447A S: 2
Injection Volume (uL):	1.0	Blank Data Filename:	PB8C_447A S: 4
Dilution Factor:	N/A	Cal. Ver. Data Filename:	PB8C_447A S: 1

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

LABELLED 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
13C12-3,3',4,4'-TeCB	77L			0.80	100	98.0	30.0 - 140	98.0
13C12-3,4,4',5'-TeCB	81L			0.78	100	92.7	30.0 - 140	92.7
13C12-2,3,3',4,4'-PeCB	105L			1.59	100	137	30.0 - 140	137
13C12-2,3,4,4',5'-PeCB	114L			1.59	100	131	30.0 - 140	131
13C12-2,3',4,4',5'-PeCB	118L			1.59	100	130	30.0 - 140	130
13C12-2',3,4,4',5'-PeCB	123L			1.58	100	133	30.0 - 140	133
13C12-3,3',4,4',5'-PeCB	126L		V	1.56	100	148	30.0 - 140	148
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	1.27	200	174	60.0 - 280	86.8
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5'-HxCB	167L			1.27	100	85.6	30.0 - 140	85.6
13C12-3,3',4,4',5,5'-HxCB	169L			1.27	100	95.6	30.0 - 140	95.6
13C12-2,2',3,3',4,4',5'-HpCB	170L			1.04	100	75.9	30.0 - 140	75.9
13C12-2,2',3,4,4',5,5'-HpCB	180L			1.05	100	73.7	30.0 - 140	73.7
13C12-2,3,3',4,4',5,5'-HpCB	189L		V	1.04	100	142	30.0 - 140	142

CLEANUP STANDARD

13C12-2,3,3',5,5'-PeCB	111L			1.62	100	81.5	40.0 - 125	81.5
13C12-2,2',3,3',5,5',6-HpCB	178L			1.06	100	65.2	40.0 - 125	65.2

(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.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist



PCB CONGENER ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

AXYS ANALYTICAL SERVICES

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

Project No.

POP1406

Contract No.: 2607

Client ID: 08CAM022A

Concentration Units: pg/g (dry weight basis)

COMPOUND	IUPAC NO.	L11830-10 (A)		WG26760-103		MEAN	RELATIVE PERCENT DIFFERENCE
		LAB FLAG ¹	CONC. FOUND	LAB FLAG ¹	CONC. FOUND		
2-MoCB	1	ND			1.59		
3-MoCB	2		2.76	NDR	3.00		
4-MoCB	3		2.69	NDR	3.41		
2,2'-DiCB	4		29.2		28.1	28.6	3.85
2,3-DiCB	5		5.07		5.24	5.15	3.30
2,3'-DiCB	6		81.2		82.1	81.7	1.20
2,4-DiCB	7	ND		ND			
2,4'-DiCB	8		86.0		90.9	88.4	5.55
2,5-DiCB	9	NDR	3.78	NDR	3.25		
2,6-DiCB	10	ND		ND			
3,3'-DiCB	11		500		596	548	17.6
3,4-DiCB	12	C	33.0	C	37.7	35.3	13.4
3,4'-DiCB	13	C12		C12			
3,5-DiCB	14	ND		ND			
4,4'-DiCB	15		197		214	205	8.28
2,2',3-TriCB	16		264		337	300	24.3
2,2',4-TriCB	17		291		376	333	25.3
2,2',5-TriCB	18	C	572	C	735	654	24.9
2,2',6-TriCB	19		55.6		56.6	56.1	1.95
2,3,3'-TriCB	20	C	2110	C	2480	2290	16.3
2,3,4-TriCB	21	C	846	C	1020	935	19.0
2,3,4'-TriCB	22		712		852	782	17.8
2,3,5-TriCB	23		14.6		19.0	16.8	26.3
2,3,6-TriCB	24		9.61		12.3	10.9	24.4
2,3',4-TriCB	25		167		191	179	13.3
2,3',5-TriCB	26	C	333	C	390	361	15.9
2,3',6-TriCB	27		46.2		58.0	52.1	22.7
2,4,4'-TriCB	28	C20		C20			
2,4,5-TriCB	29	C26		C26			
2,4,6-TriCB	30	C18		C18			
2,4',5-TriCB	31		2270		2680	2470	16.8
2,4',6-TriCB	32		277		340	308	20.7
2',3,4-TriCB	33	C21		C21			
2',3,5-TriCB	34		8.06		9.10	8.58	12.1
3,3',4-TriCB	35		38.8		65.8	52.3	51.6
3,3',5-TriCB	36		731		895	813	20.2
3,4,4'-TriCB	37		745		871	808	15.6
3,4,5-TriCB	38	NDR	1.66	NDR	5.17		
3,4',5-TriCB	39		32.4		42.0	37.2	25.8
2,2',3,3'-TeCB	40	C	3940	C	4420	4180	11.5
2,2',3,4'-TeCB	41	C40		C40			
2,2',3,4'-TeCB	42	ND		ND			
2,2',3,5'-TeCB	43		172		216	194	22.8
2,2',3,5'-TeCB	44	C	13400	C	15100	14300	11.8
2,2',3,6'-TeCB	45	C	350	C	402	376	13.9
2,2',3,6'-TeCB	46		124		143	134	14.3
2,2',4,4'-TeCB	47	C44		C44			
2,2',4,5'-TeCB	48		1010		1140	1080	12.2
2,2',4,5'-TeCB	49	C	8800	C	9990	9390	12.6
2,2',4,6'-TeCB	50	C	537	C	620	579	14.4
2,2',4,6'-TeCB	51	C45		C45			
2,2',5,5'-TeCB	52	ND		ND			
2,2',5,6'-TeCB	53	C50		C50			
2,2',6,6'-TeCB	54	ND		ND			
2,3,3',4'-TeCB	55	ND		ND			
2,3,3',4'-TeCB	56		8160		8740	8450	6.93
2,3,3',5'-TeCB	57		1940		2040	1990	5.01
2,3,3',5'-TeCB	58	ND		ND			
2,3,3',6'-TeCB	59	C	1230	C	526	876	80.0
2,3,4,4'-TeCB	60		7310		8250	7780	12.0



COMPOUND	IUPAC NO.	L11830-10 (A)		WG26760-103		MEAN	RELATIVE PERCENT DIFFERENCE
		LAB FLAG ¹	CONC. FOUND	LAB FLAG ¹	CONC. FOUND		
2,3,4,5-TeCB	61	C D	59900	C D	60400	60100	0.763
2,3,4,6-TeCB	62	C59		C59			
2,3,4',5-TeCB	63		1470		1620	1540	9.28
2,3,4',6-TeCB	64		7720		8510	8110	9.74
2,3,5,6-TeCB	65	C44		C44			
2,3',4,4'-TeCB	66		38400		42200	40300	9.53
2,3',4,5-TeCB	67		678		743	710	9.25
2,3',4,5'-TeCB	68	ND		ND			
2,3',4,6-TeCB	69	C49		C49			
2,3',4',5-TeCB	70	C61		C61			
2,3',4',6-TeCB	71	C40		C40			
2,3',5,5'-TeCB	72	ND		ND			
2,3',5',6-TeCB	73		17200		19300	18300	11.5
2,4,4',5-TeCB	74	C61		C61			
2,4,4',6-TeCB	75	C59		C59			
2',3,4,5-TeCB	76	C61		C61			
3,3',4,4'-TeCB	77		2390		2520	2450	5.05
3,3',4,5-TeCB	78	ND		ND			
3,3',4,5'-TeCB	79		727		622	675	15.5
3,3',5,5'-TeCB	80	ND		ND			
3,4,4',5-TeCB	81	NDR	133	NDR	181		
2,2',3,3',4-PeCB	82		8130		8510	8320	4.48
2,2',3,3',5-PeCB	83	C D	82100	C D	78500	80300	4.43
2,2',3,3',6-PeCB	84		12100		12900	12500	6.58
2,2',3,4,4'-PeCB	85	C	26100	C	26300	26200	0.699
2,2',3,4,5-PeCB	86	C	46100	C	48700	47400	5.35
2,2',3,4,5'-PeCB	87	C86		C86			
2,2',3,4,6-PeCB	88	C	9050	C	9400	9230	3.83
2,2',3,4,6'-PeCB	89		672		696	684	3.53
2,2',3,4',5-PeCB	90	C D	79300	C D	77100	78200	2.86
2,2',3,4',6-PeCB	91	C88		C88			
2,2',3,5,5'-PeCB	92		8860		9360	9110	5.42
2,2',3,5,6-PeCB	93	C	40500	C	43500	42000	7.33
2,2',3,5,6'-PeCB	94		156		175	166	11.5
2,2',3,5',6-PeCB	95	C93		C93			
2,2',3,6,6'-PeCB	96		165		181	173	9.67
2,2',3',4,5-PeCB	97	C86		C86			
2,2',3',4,6-PeCB	98	C93		C93			
2,2',4,4',5-PeCB	99	C83		C83			
2,2',4,4',6-PeCB	100	C93		C93			
2,2',4,5,5'-PeCB	101	C90		C90			
2,2',4,5,6'-PeCB	102	C93		C93			
2,2',4,5',6-PeCB	103		207		213	210	2.87
2,2',4,6,6'-PeCB	104	NDR	1.34	ND			
2,3,3',4,4'-PeCB	105	D	56800	D	54100	55500	4.75
2,3,3',4,5-PeCB	106		8350		8040	8190	3.81
2,3,3',4',5-PeCB	107	C ND		C ND			
2,3,3',4,5'-PeCB	108	C86		C86			
2,3,3',4,6-PeCB	109		3900		4200	4050	7.43
2,3,3',4',6-PeCB	110	C D	98400	C D	93600	96000	5.06
2,3,3',5,5'-PeCB	111	ND		ND			
2,3,3',5,6-PeCB	112	ND		ND			
2,3,3',5',6-PeCB	113	C90		C90			
2,3,4,4',5-PeCB	114		4820		5110	4970	5.84
2,3,4,4',6-PeCB	115	C110		C110			
2,3,4,5,6-PeCB	116	C85		C85			
2,3,4',5,6-PeCB	117	C85		C85			
2,3',4,4',5-PeCB	118	D	122000	D	118000	120000	3.54
2,3',4,4',6-PeCB	119	C86		C86			
2,3',4,5,5'-PeCB	120		1000		1050	1030	4.38
2,3',4,5',6-PeCB	121	ND		ND			
2',3,3',4,5-PeCB	122		1200		1420	1310	17.1
2',3,4,4',5-PeCB	123		2770		3590	3180	25.8
2',3,4,5,5'-PeCB	124	C107		C107			
2',3,4,5,6'-PeCB	125	C86		C86			
3,3',4,4',5-PeCB	126	NDR	590	NDR	599		
3,3',4,5,5'-PeCB	127		206		144	175	35.7
2,2',3,3',4,4'-HxCB	128	C	36200	C	39800	38000	9.56
2,2',3,3',4,5-HxCB	129	C D	402000	C D	289000	345000	32.9



COMPOUND	IUPAC NO.	L11830-10 (A)		WG26760-103		MEAN	RELATIVE PERCENT DIFFERENCE
		LAB FLAG ¹	CONC. FOUND	LAB FLAG ¹	CONC. FOUND		
2,2',3,3',4,5'-HxCB	130		9170		11100	10100	19.2
2,2',3,3',4,6'-HxCB	131		1520		2090	1810	31.5
2,2',3,3',4,6'-HxCB	132		54000		68900	61500	24.3
2,2',3,3',5,5'-HxCB	133		1620		2030	1820	22.3
2,2',3,3',5,6'-HxCB	134	C	5780	C	6720	6250	15.0
2,2',3,3',5,6'-HxCB	135	C	37000	C	47500	42200	24.9
2,2',3,3',6,6'-HxCB	136		12200		15400	13800	23.3
2,2',3,4,4',5-HxCB	137		13300		14900	14100	11.3
2,2',3,4,4',5'-HxCB	138	C129		C129			
2,2',3,4,4',6-HxCB	139	C	3770	C	4940	4360	26.8
2,2',3,4,4',6'-HxCB	140	C139		C139			
2,2',3,4,5,5'-HxCB	141		35700		46000	40800	25.2
2,2',3,4,5,6-HxCB	142	ND		ND			
2,2',3,4,5,6'-HxCB	143	C134		C134			
2,2',3,4,5',6-HxCB	144	D	8950	D	9720	9340	8.24
2,2',3,4,6,6'-HxCB	145		40.0		44.3	42.1	10.1
2,2',3,4',5,5'-HxCB	146		21200		26800	24000	23.6
2,2',3,4',5,6-HxCB	147	C	126000	C	165000	146000	26.8
2,2',3,4',5,6'-HxCB	148		36.9		49.8	43.3	29.7
2,2',3,4',5',6-HxCB	149	C147		C147			
2,2',3,4',6,6'-HxCB	150		75.1		91.6	83.3	19.9
2,2',3,5,5',6-HxCB	151	C135		C135			
2,2',3,5,6,6'-HxCB	152		48.2		60.4	54.3	22.5
2,2',4,4',5,5'-HxCB	153	C D	362000	C D	248000	305000	37.2
2,2',4,4',5,6'-HxCB	154	C135		C135			
2,2',4,4',6,6'-HxCB	155	ND		ND			
2,3,3',4,4',5-HxCB	156	C	20200	C	21100	20700	4.64
2,3,3',4,4',5'-HxCB	157	C156		C156			
2,3,3',4,4',6-HxCB	158		25900		30600	28200	16.9
2,3,3',4,5,5'-HxCB	159		1630		1180	1400	32.1
2,3,3',4,5,6-HxCB	160	C129		C129			
2,3,3',4,5',6-HxCB	161	ND		ND			
2,3,3',4',5,5'-HxCB	162		1390		1250	1320	10.8
2,3,3',4',5,6-HxCB	163	C129		C129			
2,3,3',4',5',6-HxCB	164		12500		14900	13700	17.3
2,3,3',5,5',6-HxCB	165	ND		ND			
2,3,4,4',5,6-HxCB	166	C128		C128			
2,3',4,4',5,5'-HxCB	167		8010		9000	8510	11.7
2,3',4,4',5',6-HxCB	168	C153		C153			
3,3',4,4',5,5'-HxCB	169	ND		ND			
2,2',3,3',4,4',5-HpCB	170		37700		31500	34600	18.1
2,2',3,3',4,4',6-HpCB	171	C	10400	C	9330	9870	10.8
2,2',3,3',4,5,5'-HpCB	172		5450		4670	5060	15.4
2,2',3,3',4,5,6-HpCB	173	C171		C171			
2,2',3,3',4,5,6'-HpCB	174		34200		28900	31500	16.9
2,2',3,3',4,5',6-HpCB	175		1410		1470	1440	4.48
2,2',3,3',4,6,6'-HpCB	176		4030		4350	4190	7.68
2,2',3,3',4',5,6-HpCB	177		17500		15800	16700	9.97
2,2',3,3',5,5',6-HpCB	178		6340		6860	6600	7.89
2,2',3,3',5,6,6'-HpCB	179		12000		13500	12700	11.7
2,2',3,4,4',5,5'-HpCB	180	C D	98000	C	65300	81600	40.0
2,2',3,4,4',5,6-HpCB	181		204		192	198	5.74
2,2',3,4,4',5,6'-HpCB	182		108		120	114	11.2
2,2',3,4,4',5',6-HpCB	183	C	24200	C	21700	23000	10.5
2,2',3,4,4',6,6'-HpCB	184	ND			17.4		
2,2',3,4,5,5',6-HpCB	185	C183		C183			
2,2',3,4,5,6,6'-HpCB	186	ND		ND			
2,2',3,4',5,5',6-HpCB	187		37400		37800	37600	1.11
2,2',3,4',5,6,6'-HpCB	188		19.0		21.4	20.2	11.9
2,3,3',4,4',5,5'-HpCB	189		2140		2240	2190	4.65
2,3,3',4,4',5,6-HpCB	190		7140		5970	6560	17.8
2,3,3',4,4',5',6-HpCB	191		1360		1240	1300	9.47
2,3,3',4,5,5',6-HpCB	192	ND		ND			
2,3,3',4',5,5',6-HpCB	193	C180		C180			
2,2',3,3',4,4',5,5'-OxCB	194		25100		27700	26400	10.1
2,2',3,3',4,4',5,6-OxCB	195		9720		10500	10100	7.58
2,2',3,3',4,4',5,6'-OxCB	196		9110		9150	9130	0.511
2,2',3,3',4,4',6,6'-OxCB	197	C	2120	C	1960	2040	7.85
2,2',3,3',4,5,5',6-OxCB	198	C	15300	C	14400	14900	5.61



COMPOUND	IUPAC NO.	L11830-10 (A)		WG26760-103		MEAN	RELATIVE PERCENT DIFFERENCE
		LAB FLAG ¹	CONC. FOUND	LAB FLAG ¹	CONC. FOUND		
2,2',3,3',4,5,5',6'-OcCB	199	C198		C198			
2,2',3,3',4,5,6,6'-OcCB	200	C197		C197			
2,2',3,3',4,5',6,6'-OcCB	201		1630		1530	1580	6.33
2,2',3,3',5,5',6,6'-OcCB	202		2620		2600	2610	0.863
2,2',3,4,4',5,5',6-OcCB	203		10300		11300	10800	8.62
2,2',3,4,4',5,6,6'-OcCB	204	ND			2.16		
2,3,3',4,4',5,5',6-OcCB	205		1040		1060	1050	1.44
2,2',3,3',4,4',5,5',6-NoCB	206		2820		3000	2910	6.19
2,2',3,3',4,4',5,6,6'-NoCB	207		419		482	451	13.9
2,2',3,3',4,5,5',6,6'-NoCB	208		467		488	477	4.36
2,2',3,3',4,4',5,5',6,6'-DeCB	209		63.3		66.4	64.9	4.77

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; D = dilution data; C = co-eluting congener.

Approved by: _____ Jason MacKenzie _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: RPD.xsl; Created: 01-Dec-2008 18:01:46; Application: XMLTransformer-1.9.15; Report Filename: RPD_PCB1668_RPD_WG26760-103_L11830-10_.html; Workgroup: WG26760; Design ID: 925]

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 1A
HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM010A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Matrix: SOIL

Sample Receipt Date: 07-Oct-2008

Extraction Date: 26-Nov-2008

Analysis Date: 02-Dec-2008 **Time:** 17:47:20

Extract Volume (uL): 20

Injection Volume (uL): 1.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No. POP1406
Lab Sample I.D.: L11830-6 R

Sample Size: 10.1 g (dry)

Initial Calibration Date: 22-Oct-2008

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

Sample Data Filename: **PB8C_477 S: 9**
Blank Data Filename: PB8C_477 S: 5
Cal. Ver. Data Filename: PB8C_477 S: 1

% Moisture: 1.41

PCB HOMOLOGUE GROUP	LAB FLAG ¹	CONC. FOUND
Total Tetrachloro Biphenyls		7.50
Total Pentachloro Biphenyls		350
Total Hexachloro Biphenyls		39.4
Total Heptachloro Biphenyls		79.1
TOTAL PCBs		476

(1) Where applicable, custom lab flags have been used on this report.

(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.

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist



Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Sample Collection: N/A

Project No. POP1406

Matrix: SOIL

Lab Sample I.D.: L11830-6 R

Sample Size: 10.1 g (dry)

GC Column ID(s): SPB OCTYL

Concentration Units: pg/g (dry weight basis)

Sample Data Filename(s): PB8C_477 S: 9

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 1998 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			7.03	0.216	0.0001	7.03e-04	7.03e-04	
3,4,4',5-TeCB	81			0.474	0.217	0.0001	4.74e-05	4.74e-05	
2,3,3',4,4'-PeCB	105			113	0.502	0.0001	1.13e-02	1.13e-02	
2,3,4,4',5-PeCB	114			7.43	0.531	0.0005	3.72e-03	3.72e-03	
2,3',4,4',5-PeCB	118			223	0.528	0.0001	2.23e-02	2.23e-02	
2',3,4,4',5-PeCB	123			4.98	0.539	0.0001	4.98e-04	4.98e-04	
3,3',4,4',5-PeCB	126			1.50	0.581	0.1	1.50e-01	1.50e-01	
2,3,3',4,4',5-HxCB	156	156 + 157	C	29.9	0.418	0.0005	1.50e-02	1.50e-02	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			9.52	0.335	0.00001	9.52e-05	9.52e-05	
3,3',4,4',5,5'-HxCB	169		ND		0.356	0.01	0.00e+00	1.78e-03	
2,3,3',4,4',5,5'-HpCB	189			1.17	0.0723	0.0001	1.17e-04	1.17e-04	
TOTAL TEQ							0.204	0.206	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			7.03	0.216	0.0001	7.03e-04	7.03e-04	
3,4,4',5-TeCB	81			0.474	0.217	0.0003	1.42e-04	1.42e-04	
2,3,3',4,4'-PeCB	105			113	0.502	0.00003	3.39e-03	3.39e-03	
2,3,4,4',5-PeCB	114			7.43	0.531	0.00003	2.23e-04	2.23e-04	
2,3',4,4',5-PeCB	118			223	0.528	0.00003	6.69e-03	6.69e-03	
2',3,4,4',5-PeCB	123			4.98	0.539	0.00003	1.49e-04	1.49e-04	
3,3',4,4',5-PeCB	126			1.50	0.581	0.1	1.50e-01	1.50e-01	
2,3,3',4,4',5-HxCB	156	156 + 157	C	29.9	0.418	0.00003	8.97e-04	8.97e-04	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			9.52	0.335	0.00003	2.86e-04	2.86e-04	
3,3',4,4',5,5'-HxCB	169		ND		0.356	0.03	0.00e+00	5.34e-03	
2,3,3',4,4',5,5'-HpCB	189			1.17	0.0723	0.00003	3.51e-05	3.51e-05	
TOTAL TEQ							0.163	0.168	

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

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist



Form 1A
HOMOLOGUE TOTAL PCB ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

N/A

Lab Sample I.D.:

WG27171-101

Matrix: SOLID

Sample Size:

10.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

22-Oct-2008

Extraction Date: 26-Nov-2008

Instrument ID:

HR GC/MS

Analysis Date: 02-Dec-2008 **Time:** 13:29:56

GC Column ID:

SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename:

PB8C_477 S: 5

Injection Volume (uL): 1.0

Blank Data Filename:

PB8C_477 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename:

PB8C_477 S: 1

Concentration Units: pg/g

PCB HOMOLOGUE GROUP

**LAB
 FLAG ¹**

**CONC.
 FOUND**

Total Tetrachloro Biphenyls

ND

Total Pentachloro Biphenyls

ND

Total Hexachloro Biphenyls

ND

Total Heptachloro Biphenyls

0.225

TOTAL PCBs

0.225

(1) Where applicable, custom lab flags have been used on this report; ND = not detected.

(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.

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist

For Axys Internal Use Only [XSL Template: .xsl; Created: 15-Dec-2008 15:46:11; Application: XMLTransformer-1.9.16;
 Report Filename: 1668_PCB1668_HomTotals-TEQs_WG27171-101_Form1AHT_SJ944012.html; Workgroup: WG27171; Design ID: 925]

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. Results are compliant with NELAP where specific accreditation is held.



Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Sample Collection: N/A

Project No. N/A

Matrix: SOLID

Lab Sample I.D.: WG27171-101

Sample Size: 10.0 g

GC Column ID(s): SPB OCTYL

Concentration Units: pg/g

Sample Data Filename(s): PB8C_477 S: 5

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 1998 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77		ND		0.0912	0.0001	0.00e+00	4.56e-06	
3,4,4',5-TeCB	81		ND		0.0923	0.0001	0.00e+00	4.62e-06	
2,3,3',4,4'-PeCB	105		ND		0.0500	0.0001	0.00e+00	2.50e-06	
2,3,4,4',5-PeCB	114		ND		0.0509	0.0005	0.00e+00	1.27e-05	
2,3',4,4',5-PeCB	118		ND		0.0500	0.0001	0.00e+00	2.50e-06	
2',3,4,4',5-PeCB	123		ND		0.0530	0.0001	0.00e+00	2.65e-06	
3,3',4,4',5-PeCB	126		ND		0.0529	0.1	0.00e+00	2.65e-03	
2,3,3',4,4',5-HxCB	156	156 + 157	C ND		0.0740	0.0005	0.00e+00	1.85e-05	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		ND		0.0561	0.00001	0.00e+00	2.81e-07	
3,3',4,4',5,5'-HxCB	169		ND		0.0597	0.01	0.00e+00	2.99e-04	
2,3,3',4,4',5,5'-HpCB	189		ND		0.0566	0.0001	0.00e+00	2.83e-06	
TOTAL TEQ							0	0.00299	

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77		ND		0.0912	0.0001	0.00e+00	4.56e-06	
3,4,4',5-TeCB	81		ND		0.0923	0.0003	0.00e+00	1.38e-05	
2,3,3',4,4'-PeCB	105		ND		0.0500	0.00003	0.00e+00	7.50e-07	
2,3,4,4',5-PeCB	114		ND		0.0509	0.00003	0.00e+00	7.64e-07	
2,3',4,4',5-PeCB	118		ND		0.0500	0.00003	0.00e+00	7.50e-07	
2',3,4,4',5-PeCB	123		ND		0.0530	0.00003	0.00e+00	7.95e-07	
3,3',4,4',5-PeCB	126		ND		0.0529	0.1	0.00e+00	2.65e-03	
2,3,3',4,4',5-HxCB	156	156 + 157	C ND		0.0740	0.00003	0.00e+00	1.11e-06	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167		ND		0.0561	0.00003	0.00e+00	8.42e-07	
3,3',4,4',5,5'-HxCB	169		ND		0.0597	0.03	0.00e+00	8.96e-04	
2,3,3',4,4',5,5'-HpCB	189		ND		0.0566	0.00003	0.00e+00	8.49e-07	
TOTAL TEQ							0	0.00356	

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

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist



Form 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM010A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOIL
Sample Receipt Date: 07-Oct-2008
Extraction Date: 26-Nov-2008
Analysis Date: 02-Dec-2008 Time: 17:47:20
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. POP1406
Lab Sample I.D.: L11830-6 R
Sample Size: 10.1 g (dry)
Initial Calibration Date: 22-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8C_477 S: 9
Blank Data Filename: PB8C_477 S: 5
Cal. Ver. Data Filename: PB8C_477 S: 1
% Moisture: 1.41

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,3',4,4'-TeCB	77			7.03	0.216	0.77	1.000
3,4,4',5'-TeCB	81			0.474	0.217	.75	1.001
2,3,3',4,4'-PeCB	105			113	0.502	1.52	1.001
2,3,4,4',5'-PeCB	114			7.43	0.531	1.50	1.001
2,3',4,4',5'-PeCB	118			223	0.528	1.55	1.001
2',3,4,4',5'-PeCB	123			4.98	0.539	1.59	1.001
3,3',4,4',5'-PeCB	126			1.50	0.581	1.39	1.000
2,3,3',4,4',5'-HxCB	156	156 + 157	C	29.9	0.418	1.24	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167			9.52	0.335	1.23	1.000
3,3',4,4',5,5'-HxCB	169		ND		0.356		
2,2',3,3',4,4',5'-HpCB	170			26.7	0.0637	1.06	1.000
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	51.2	0.0571	1.05	1.000
2,3,3',4,4',5,5'-HpCB	189			1.17	0.0723	1.07	1.001
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180				

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; C = co-eluting congener.

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist

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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. Results are compliant with NELAP where specific accreditation is held.



Form 2
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM010A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOIL
Sample Receipt Date: 07-Oct-2008
Extraction Date: 26-Nov-2008
Analysis Date: 02-Dec-2008 Time: 17:47:20
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg absolute

Project No. POP1406
Lab Sample I.D.: L11830-6 R
Sample Size: 10.1 g (dry)
Initial Calibration Date: 22-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8C_477 S: 9
Blank Data Filename: PB8C_477 S: 5
Cal. Ver. Data Filename: PB8C_477 S: 1
% Moisture: 1.41

LABELLED COMPOUND	IUPAC NO. ¹	CO-ELUTIONS	LAB FLAG ²	SPIKE CONC.	CONC. FOUND	R(%) ³	ION ABUND. RATIO	RRT
13C12-3,3',4,4'-TeCB	77L			2000	2180	109	0.77	1.397
13C12-3,4,4',5'-TeCB	81L			2000	2160	108	0.77	1.373
13C12-2,3,3',4,4'-PeCB	105L			2000	2420	121	1.56	1.200
13C12-2,3,3',4,4',5'-PeCB	114L			2000	2200	110	1.56	1.178
13C12-2,3',4,4',5'-PeCB	118L			2000	2210	110	1.54	1.161
13C12-2',3,4,4',5'-PeCB	123L			2000	2200	110	1.56	1.151
13C12-3,3',4,4',5'-PeCB	126L			2000	2430	121	1.55	1.301
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	4000	3730	93.3	1.27	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1810	90.3	1.30	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1930	96.4	1.29	1.191
13C12-2,2',3,3',4,4',5'-HpCB	170L			2000	1550	77.3	1.05	1.176
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1490	74.7	1.02	1.143
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	2260	113	1.02	1.256
CLEANUP STANDARD								
13C12-2,3,3',5,5'-PeCB	111L			2000	1840	91.8	1.61	1.087
13C12-2,2',3,3',5,5',6'-HpCB	178L			2000	1540	77.2	1.05	1.011

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

Approved by: _____Teresa Rawsthorne_____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16682.xsl; Created: 15-Dec-2008 15:45:54; Application: XMLTransformer-1.9.16; Report Filename: 1668_PCB1668_PCBTOX_L11830-6_Form2_PB8C_477S9_SJ944013.html; Workgroup: WG27171; Design ID: 925]

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. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCB CONGENER ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No. N/A

Lab Sample I.D.: WG27171-101

Matrix: SOLID

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 22-Oct-2008

Extraction Date: 26-Nov-2008

Instrument ID: HR GC/MS

Analysis Date: 02-Dec-2008 Time: 13:29:56

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename: PB8C_477 S: 5

Injection Volume (uL): 1.0

Blank Data Filename: PB8C_477 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: PB8C_477 S: 1

Concentration Units: pg/g

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,3',4,4'-TeCB	77		ND		0.0912		
3,4,4',5'-TeCB	81		ND		0.0923		
2,3,3',4,4'-PeCB	105		NDR	0.058	0.0500	2.50	1.000
2,3,4,4',5'-PeCB	114		ND		0.0509		
2,3',4,4',5'-PeCB	118		NDR	0.086	0.0500	2.44	1.001
2',3,4,4',5'-PeCB	123		ND		0.0530		
3,3',4,4',5'-PeCB	126		ND		0.0529		
2,3,3',4,4',5'-HxCB	156	156 + 157	C ND		0.0740		
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3',4,4',5,5'-HxCB	167		ND		0.0561		
3,3',4,4',5,5'-HxCB	169		ND		0.0597		
2,2',3,3',4,4',5'-HpCB	170		ND		0.0600		
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	0.225	0.0527	1.10	1.001
2,3,3',4,4',5,5'-HpCB	189		ND		0.0566		
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180				

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; C = co-eluting congener.

Approved by: _____Teresa Rawsthorne_____ QA/QC Chemist

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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. Results are compliant with NELAP where specific accreditation is held.



Form 2
PCB CONGENER ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: SOLID
Sample Receipt Date: N/A
Extraction Date: 26-Nov-2008
Analysis Date: 02-Dec-2008 Time: 13:29:56
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.: WG27171-101
Sample Size: 10.0 g
Initial Calibration Date: 22-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8C_477 S: 5
Blank Data Filename: PB8C_477 S: 5
Cal. Ver. Data Filename: PB8C_477 S: 1

LABELLED COMPOUND	IUPAC NO. ¹	CO-ELUTIONS	LAB FLAG ²	SPIKE CONC.	CONC. FOUND	R(%) ³	ION ABUND. RATIO	RRT
13C12-3,3',4,4'-TeCB	77L			2000	1500	75.0	0.77	1.397
13C12-3,4,4',5'-TeCB	81L			2000	1430	71.7	0.77	1.373
13C12-2,3,3',4,4'-PeCB	105L			2000	1700	84.8	1.55	1.200
13C12-2,3,4,4',5'-PeCB	114L			2000	1550	77.6	1.56	1.178
13C12-2,3',4,4',5'-PeCB	118L			2000	1590	79.7	1.54	1.162
13C12-2',3,4,4',5'-PeCB	123L			2000	1520	76.2	1.54	1.151
13C12-3,3',4,4',5'-PeCB	126L			2000	1770	88.7	1.53	1.301
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	4000	2790	69.8	1.27	1.107
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1390	69.3	1.27	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1480	73.9	1.25	1.191
13C12-2,2',3,3',4,4',5'-HpCB	170L			2000	1200	60.0	1.06	1.175
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1170	58.7	1.03	1.143
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1670	83.3	1.03	1.256
CLEANUP STANDARD								
13C12-2,3,3',5,5'-PeCB	111L			2000	1230	61.7	1.61	1.088
13C12-2,2',3,3',5,5',6'-HpCB	178L			2000	1120	55.8	1.03	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.

Approved by: _____Teresa Rawsthorne_____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16682.xsl; Created: 15-Dec-2008 15:45:54; Application: XMLTransformer-1.9.16; Report Filename: 1668_PCB1668_PCBTOX_WG27171-101_Form2_PB8C_477S5_SJ944012.html; Workgroup: WG27171; Design ID: 925]

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. Results are compliant with NELAP where specific accreditation is held.



**Form 8A
PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)**

AXYS ANALYTICAL SERVICES

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

Contract No.:	2607	Lab Sample I.D.:	WG27171-102
Matrix:	SOLID	Initial Calibration Date:	22-Oct-2008
Extraction Date:	26-Nov-2008	Instrument ID:	HR GC/MS
Analysis Date:	02-Dec-2008 Time: 10:16:47	GC Column ID:	SPB OCTYL
Extract Volume (uL):	20	OPR Data Filename:	PB8C_477 S: 2
Injection Volume (uL):	1.0	Blank Data Filename:	PB8C_477 S: 5
Dilution Factor:	N/A	Cal. Ver. Data Filename:	PB8C_477 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
3,3',4,4'-TeCB	77			0.75	50.0	48.3	25.0 - 75.0	96.6
3,4,4',5'-TeCB	81			0.75	50.0	47.2	25.0 - 75.0	94.3
2,3,3',4,4'-PeCB	105			1.53	50.0	48.9	25.0 - 75.0	97.9
2,3,4,4',5'-PeCB	114			1.51	50.0	47.6	25.0 - 75.0	95.2
2,3',4,4',5'-PeCB	118			1.54	50.0	47.6	25.0 - 75.0	95.2
2',3,4,4',5'-PeCB	123			1.53	50.0	48.2	25.0 - 75.0	96.3
3,3',4,4',5'-PeCB	126			1.56	50.0	47.7	25.0 - 75.0	95.4
2,3,3',4,4',5'-HxCB	156	156 + 157	C	1.25	100	98.2	50.0 - 150	98.2
2,3,3',4,4',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5'-HxCB	167			1.26	50.0	49.9	25.0 - 75.0	99.8
3,3',4,4',5,5'-HxCB	169			1.25	50.0	49.7	25.0 - 75.0	99.4
2,2',3,3',4,4',5'-HpCB	170			1.06	50.0	51.2	25.0 - 75.0	102
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	1.05	50.0	52.2	25.0 - 75.0	104
2,3,3',4,4',5,5'-HpCB	189			1.02	50.0	47.7	25.0 - 75.0	95.5
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180					

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

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist

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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. Results are compliant with NELAP where specific accreditation is held.



**Form 8B
PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)**

AXYS ANALYTICAL SERVICES

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

Contract No.:	2607	Lab Sample I.D.:	WG27171-102
Matrix:	SOLID	Initial Calibration Date:	22-Oct-2008
Extraction Date:	26-Nov-2008	Instrument ID:	HR GC/MS
Analysis Date:	02-Dec-2008 Time: 10:16:47	GC Column ID:	SPB OCTYL
Extract Volume (uL):	20	OPR Data Filename:	PB8C_477 S: 2
Injection Volume (uL):	1.0	Blank Data Filename:	PB8C_477 S: 5
Dilution Factor:	N/A	Cal. Ver. Data Filename:	PB8C_477 S: 1

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

LABELLED 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
13C12-3,3',4,4'-TeCB	77L			0.77	100	94.8	30.0 - 140	94.8
13C12-3,4,4',5'-TeCB	81L			0.76	100	95.8	30.0 - 140	95.8
13C12-2,3,3',4,4'-PeCB	105L			1.56	100	99.8	30.0 - 140	99.8
13C12-2,3,4,4',5'-PeCB	114L			1.56	100	91.6	30.0 - 140	91.6
13C12-2,3',4,4',5'-PeCB	118L			1.54	100	92.6	30.0 - 140	92.6
13C12-2',3,4,4',5'-PeCB	123L			1.54	100	93.3	30.0 - 140	93.3
13C12-3,3',4,4',5'-PeCB	126L			1.54	100	98.3	30.0 - 140	98.3
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	1.28	200	168	60.0 - 280	84.0
13C12-2,3,3',4,4',5',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5',5'-HxCB	167L			1.26	100	83.2	30.0 - 140	83.2
13C12-3,3',4,4',5',5'-HxCB	169L			1.27	100	89.2	30.0 - 140	89.2
13C12-2,2',3,3',4,4',5'-HpCB	170L			1.04	100	71.8	30.0 - 140	71.8
13C12-2,2',3,4,4',5',5'-HpCB	180L			1.06	100	71.8	30.0 - 140	71.8
13C12-2,3,3',4,4',5',5'-HpCB	189L			1.02	100	104	30.0 - 140	104

CLEANUP STANDARD

13C12-2,3,3',5,5'-PeCB	111L			1.62	100	77.8	40.0 - 125	77.8
13C12-2,2',3,3',5,5',6-HpCB	178L			1.04	100	70.5	40.0 - 125	70.5

(1) Suffix "L" indicates labeled compound.

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

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist

For Axys Internal Use Only [XSL Template: Form16688B.xsl; Created: 15-Dec-2008 15:45:54; Application: XMLTransformer-1.9.16; Report Filename: 1668_PCB1668_PCBTOX_WG27171-102_Form8B_SJ944010.html; Workgroup: WG27171; Design ID: 925]

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. Results are compliant with NELAP where specific accreditation is held.



**Dioxin/Furan (PCDD/F) Analysis
Report**

Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811
Contract No.: 2607

Project No. POP1406
Lab Sample I.D.: L11830-10
Sample Size: 20.8 g (dry)
Initial Calibration Date: 25-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX8M_090A S: 10
Blank Data Filename: DX8M_089A S: 5
Cal. Ver. Data Filename: DX8M_090A S: 1
% Moisture: 3.44

Matrix: SOIL
Sample Receipt Date: 07-Oct-2008
Extraction Date: 22-Oct-2008
Analysis Date: 04-Nov-2008 Time: 18:29:58
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD		0.310	0.0241	0.74	1.001
1,2,3,7,8-PECDD ³		0.684	0.0241	0.60	1.001
1,2,3,4,7,8-HXCDD		1.03	0.0262	1.26	1.001
1,2,3,6,7,8-HXCDD		2.09	0.0262	1.21	1.000
1,2,3,7,8,9-HXCDD		2.41	0.0262	1.14	1.000
1,2,3,4,6,7,8-HPCDD		41.3	0.0419	1.03	1.000
OCDD		383	0.0881	0.89	1.000
2,3,7,8-TCDF		7.35	0.0260	0.77	1.001
1,2,3,7,8-PECDF		2.01	0.0300	1.50	1.001
2,3,4,7,8-PECDF		3.67	0.0300	1.54	1.001
1,2,3,4,7,8-HXCDF		6.13	0.0343	1.24	1.000
1,2,3,6,7,8-HXCDF		2.78	0.0343	1.28	1.000
1,2,3,7,8,9-HXCDF		0.218	0.0343	1.28	1.002
2,3,4,6,7,8-HXCDF		1.85	0.0343	1.20	1.000
1,2,3,4,6,7,8-HPCDF		18.4	0.0452	1.07	1.000
1,2,3,4,7,8,9-HPCDF		2.46	0.0452	1.18	1.000
OCDF		34.2	0.0436	0.88	1.002
TOTAL TETRA-DIOXINS		14.5	0.0241		
TOTAL PENTA-DIOXINS		11.5	0.0241		
TOTAL HEXA-DIOXINS		20.7	0.0262		
TOTAL HEPTA-DIOXINS		76.8	0.0419		
TOTAL TETRA-FURANS		34.8	0.0260		
TOTAL PENTA-FURANS		31.3	0.0300		
TOTAL HEXA-FURANS		35.2	0.0343		
TOTAL HEPTA-FURANS		42.1	0.0452		

(1) Where applicable, custom lab flags have been used on this report.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

Approved by: _____Teresa Rawsthorne_____ QA/QC Chemist



Form 2
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No. POP1406

Lab Sample I.D.: L11830-10

Matrix: SOIL

Sample Size: 20.8 g (dry)

Sample Receipt Date: 07-Oct-2008

Initial Calibration Date: 25-Oct-2008

Extraction Date: 22-Oct-2008

Instrument ID: HR GC/MS

Analysis Date: 04-Nov-2008 Time: 18:29:58

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX8M_090A S: 10

Injection Volume (uL): 1.0

Blank Data Filename: DX8M_089A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX8M_090A S: 1

Concentration Units: pg absolute

% Moisture: 3.44

LABELLED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	ION ABUND. RATIO ³	RRT ³
13C-2,3,7,8-TCDD		2000	916	45.8	0.80	1.014
13C-1,2,3,7,8-PECDD ⁴		2000	1020	51.1	0.63	1.380
13C-1,2,3,4,7,8-HXCDD		2000	853	42.7	1.28	0.987
13C-1,2,3,6,7,8-HXCDD		2000	853	42.7	1.24	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	831	41.5	1.00	1.094
13C-OCDD		4000	1170	29.3	0.96	1.181
13C-2,3,7,8-TCDF		2000	832	41.6	0.78	0.968
13C-1,2,3,7,8-PECDF		2000	942	47.1	1.57	1.285
13C-2,3,4,7,8-PECDF		2000	978	48.9	1.56	1.350
13C-1,2,3,4,7,8-HXCDF		2000	862	43.1	0.52	0.955
13C-1,2,3,6,7,8-HXCDF		2000	764	38.2	0.53	0.959
13C-1,2,3,7,8,9-HXCDF		2000	834	41.7	0.53	1.004
13C-2,3,4,6,7,8-HXCDF		2000	777	38.8	0.52	0.981
13C-1,2,3,4,6,7,8-HPCDF		2000	742	37.1	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	742	37.1	0.46	1.103

CLEANUP STANDARD

37CL-2,3,7,8-TCDD		200	95.4	47.7		1.016
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(1) Where applicable, custom lab flags have been used on this report.

(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.

(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD

(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist



Form 1A
PCDD/PCDF ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811
Contract No.: 2607

Project No. N/A
Lab Sample I.D.: WG26790-101 :5PT
Sample Size: 20.0 g
Initial Calibration Date: 25-Oct-2008
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX8M_089A S: 5
Blank Data Filename: DX8M_089A S: 5
Cal. Ver. Data Filename: DX8M_089A S: 1

Matrix: SOLID
Sample Receipt Date: N/A
Extraction Date: 22-Oct-2008
Analysis Date: 03-Nov-2008 Time: 14:04:07
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	ND		0.0250		
1,2,3,7,8-PECDD ³	ND		0.0250		
1,2,3,4,7,8-HXCDD	NDR	0.031	0.0250	1.56	1.000
1,2,3,6,7,8-HXCDD		0.027	0.0250	1.20	1.000
1,2,3,7,8,9-HXCDD	ND		0.0250		
1,2,3,4,6,7,8-HPCDD	NDR	0.067	0.0250	1.34	1.000
OCDD	NDR	0.321	0.0250	0.75	1.000
2,3,7,8-TCDF	ND		0.0250		
1,2,3,7,8-PECDF	ND		0.0250		
2,3,4,7,8-PECDF	NDR	0.035	0.0250	3.19	1.001
1,2,3,4,7,8-HXCDF	ND		0.0250		
1,2,3,6,7,8-HXCDF	ND		0.0250		
1,2,3,7,8,9-HXCDF	NDR	0.026	0.0250	1.77	1.000
2,3,4,6,7,8-HXCDF	NDR	0.033	0.0250	0.81	1.001
1,2,3,4,6,7,8-HPCDF	NDR	0.043	0.0250	0.87	1.000
1,2,3,4,7,8,9-HPCDF		0.037	0.0250	0.99	1.001
OCDF		0.110	0.0250	0.86	1.002
TOTAL TETRA-DIOXINS	ND		0.0250		
TOTAL PENTA-DIOXINS	ND		0.0250		
TOTAL HEXA-DIOXINS		0.027	0.0250		
TOTAL HEPTA-DIOXINS		0.119	0.0250		
TOTAL TETRA-FURANS	ND		0.0250		
TOTAL PENTA-FURANS	ND		0.0250		
TOTAL HEXA-FURANS	ND		0.0250		
TOTAL HEPTA-FURANS		0.037	0.0250		

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist



Form 2
PCDD/PCDF ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

N/A

Lab Sample I.D.:

WG26790-101 :5PT

Matrix: SOLID

Sample Size:

20.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

25-Oct-2008

Extraction Date: 22-Oct-2008

Instrument ID:

HR GC/MS

Analysis Date: 03-Nov-2008 Time: 14:04:07

GC Column ID:

DB5

Extract Volume (uL): 20

Sample Data Filename:

DX8M_089A S: 5

Injection Volume (uL): 1.0

Blank Data Filename:

DX8M_089A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename:

DX8M_089A S: 1

Concentration Units: pg absolute

LABELLED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	ION ABUND. RATIO ³	RRT ³
13C-2,3,7,8-TCDD		2000	807	40.3	0.79	1.013
13C-1,2,3,7,8-PECDD ⁴		2000	937	46.9	0.63	1.383
13C-1,2,3,4,7,8-HXCDD		2000	1010	50.7	1.25	0.987
13C-1,2,3,6,7,8-HXCDD		2000	993	49.7	1.25	0.990
13C-1,2,3,4,6,7,8-HPCDD		2000	1100	55.2	1.02	1.094
13C-OCDD		4000	2040	50.9	0.89	1.178
13C-2,3,7,8-TCDF		2000	767	38.3	0.79	0.966
13C-1,2,3,7,8-PECDF		2000	897	44.8	1.58	1.284
13C-2,3,4,7,8-PECDF		2000	905	45.2	1.56	1.351
13C-1,2,3,4,7,8-HXCDF		2000	945	47.2	0.51	0.954
13C-1,2,3,6,7,8-HXCDF		2000	937	46.9	0.52	0.958
13C-1,2,3,7,8,9-HXCDF		2000	958	47.9	0.52	1.005
13C-2,3,4,6,7,8-HXCDF		2000	947	47.3	0.51	0.980
13C-1,2,3,4,6,7,8-HPCDF		2000	1010	50.4	0.46	1.062
13C-1,2,3,4,7,8,9-HPCDF		2000	1000	50.2	0.45	1.103

CLEANUP STANDARD

37CL-2,3,7,8-TCDD		200	80.3	40.1		1.014
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(1) Where applicable, custom lab flags have been used on this report.

(2) Contract-required limits for percent recovery (R) are specified in Section 9.3.3, Method 1613.

(3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613. NOTE: There is no ion abundance ratio for 37Cl4-2,3,7,8-TCDD

(4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist



**Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)**

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607	OPR Data Filename: DX8M_089A S: 2
Matrix: SOLID	Lab Sample I.D.: WG26790-102 :5PT
Extraction Date: 22-Oct-2008	Analysis Date: 03-Nov-2008 Time: 11:21:02

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 µL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	ION ABUND. RATIO ²	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS ³ (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.80	10.6	9.76	7.10 - 16.7	92.1
1,2,3,7,8-PECDD ⁴		0.63	56.6	51.4	39.6 - 80.4	90.9
1,2,3,4,7,8-HXCDD		1.23	59.2	51.5	41.4 - 97.1	87.0
1,2,3,6,7,8-HXCDD		1.22	51.8	55.1	39.4 - 69.4	106
1,2,3,7,8,9-HXCDD		1.22	56.7	55.3	36.3 - 91.9	97.6
1,2,3,4,6,7,8-HPCDD		1.05	50.0	50.5	35.0 - 70.0	101
OCDD		0.88	108	146	84.2 - 155	136
2,3,7,8-TCDF		0.78	10.9	10.7	8.18 - 17.2	97.7
1,2,3,7,8-PECDF		1.54	50.0	41.9	40.0 - 67.0	83.8
2,3,4,7,8-PECDF		1.55	50.0	45.8	34.0 - 80.0	91.6
1,2,3,4,7,8-HXCDF		1.23	54.4	49.0	39.2 - 72.9	90.0
1,2,3,6,7,8-HXCDF		1.24	50.0	45.7	42.0 - 65.0	91.4
1,2,3,7,8,9-HXCDF		1.25	50.0	51.5	39.0 - 65.0	103
2,3,4,6,7,8-HXCDF		1.25	53.1	53.6	37.2 - 82.8	101
1,2,3,4,6,7,8-HPCDF		1.04	50.0	54.5	41.0 - 61.0	109
1,2,3,4,7,8,9-HPCDF		1.03	50.0	47.8	39.0 - 69.0	95.6
OCDF		0.89	109	82.0	68.4 - 185	75.5

- (1) Where applicable, custom lab flags have been used on this report.
- (2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
- (3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form8A.xsl; Created: 20-Nov-2008 07:27:08; Application: XMLTransformer-1.9.15; Report Filename: 1613_DIOXINS_1613DB5_WG26790-102_Form8A_SJ927069.html; Workgroup: WG26790; Design ID: 988]

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 8B
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)**

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607	OPR Data Filename: DX8M_089A S: 2
Matrix: SOLID	Lab Sample I.D.: WG26790-102 :5PT
Extraction Date: 22-Oct-2008	Analysis Date: 03-Nov-2008 Time: 11:21:02

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

LABELLED COMPOUND	LAB FLAG ¹	ION ABUND. RATIO ²	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS ³ (ng/mL)	% RECOVERY
13C-2,3,7,8-TCDD		0.78	100	50.5	20.0-175	50.5
13C-1,2,3,7,8-PECDD ⁴		0.63	100	50.2	21.0-227	50.2
13C-1,2,3,4,7,8-HXCDD		1.24	100	45.9	21.0-193	45.9
13C-1,2,3,6,7,8-HXCDD		1.25	100	43.7	25.0-163	43.7
13C-1,2,3,4,6,7,8-HPCDD		1.02	100	48.6	26.0-166	48.6
13C-OCDD		0.89	200	95.6	26.0-397	47.8
13C-2,3,7,8-TCDF		0.78	100	46.3	22.0-152	46.3
13C-1,2,3,7,8-PECDF		1.63	100	52.2	21.0-192	52.2
13C-2,3,4,7,8-PECDF		1.59	100	45.5	13.0-328	45.5
13C-1,2,3,4,7,8-HXCDF		0.52	100	45.7	19.0-202	45.7
13C-1,2,3,6,7,8-HXCDF		0.52	100	44.1	21.0-159	44.1
13C-1,2,3,7,8,9-HXCDF		0.52	100	45.9	17.0-205	45.9
13C-2,3,4,6,7,8-HXCDF		0.51	100	42.3	22.0-176	42.3
13C-1,2,3,4,6,7,8-HPCDF		0.45	100	43.4	21.0-158	43.4
13C-1,2,3,4,7,8,9-HPCDF		0.45	100	44.0	20.0-186	44.0

CLEANUP STANDARD

37CL-2,3,7,8-TCDD			10.0	8.21	3.10-19.1	82.1
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- (1) Where applicable, custom lab flags have been used on this report.
- (2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
- (3) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. Labeled compound concentrations limits are based on required percent recovery (Section 15.5, Method 1613).
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

Approved by: _____Teresa Rawsthorne_____ QA/QC Chemist

For Axys Internal Use Only [XSL Template: Form8B.xsl; Created: 20-Nov-2008 07:27:08; Application: XMLTransformer-1.9.15; Report Filename: 1613_DIOXINS_1613DB5_WG26790-102_Form8B_SJ927069.html; Workgroup: WG26790; Design ID: 988]

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 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM022A
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No. POP1406

Lab Sample I.D.: L11830-10

Matrix: SOIL

Sample Size: 20.8 g (dry)

Sample Receipt Date: 07-Oct-2008

Initial Calibration Date: 06-Nov-2008

Extraction Date: 22-Oct-2008

Instrument ID: HR GC/MS

Analysis Date: 14-Nov-2008 Time: 02:43:59

GC Column ID: DB225

Extract Volume (uL): 20

Sample Data Filename: DB83_259 S: 8

Injection Volume (uL): 2.0

Blank Data Filename: DB83_259 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DB83_259 S: 2

Concentration Units: pg/g (dry weight basis)

% Moisture: 3.44

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF		4.50	0.170	0.80	1.001

(1) Where applicable, custom lab flags have been used on this report.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

Approved by: _____ Laura Luo _____ QA/QC Chemist

For Axyx Internal Use Only [XSL Template: Form1A.xsl; Created: 20-Nov-2008 07:27:35; Application: XMLTransformer-1.9.15; Report Filename: 1613_DIOXINS_1613DB225_L11830-10_Form1A_DB83_259S8_SJ930689.html; Workgroup: WG26790; Design ID: 988]

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 1A
PCDD/PCDF ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

N/A

Lab Sample I.D.:

WG26790-101 :5PT

Matrix: SOLID

Sample Size:

20.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

06-Nov-2008

Extraction Date: 22-Oct-2008

Instrument ID:

HR GC/MS

Analysis Date: 14-Nov-2008 Time: 00:57:18

GC Column ID:

DB225

Extract Volume (uL): 20

Sample Data Filename:

DB83_259 S: 5

Injection Volume (uL): 2.0

Blank Data Filename:

DB83_259 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename:

DB83_259 S: 2

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	NDR	0.004	0.0015	0.97	1.002

(1) Where applicable, custom lab flags have been used on this report; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

Approved by: _____ Laura Luo _____ QA/QC Chemist

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 20-Nov-2008 07:27:35; Application: XMLTransformer-1.9.15; Report Filename: 1613_DIOXINS_1613DB225_WG26790-101_Form1A_DB83_259S5_SJ930686.html; Workgroup: WG26790; Design ID: 988]

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.



AXYS ANALYTICAL SERVICES

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

Sample Collection: N/A

Contract No.: 2607

Project No. POP1406

Matrix: SOIL

Lab Sample I.D.: L11830-10

Sample Size: 20.8 g (dry)

GC Column ID(s): DB225
DB5

Concentration Units: pg/g (dry weight basis)

Sample Data Filenames: DB83_259 S: 8
DX8M_090A S: 10

COMPOUND	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 1998 TEF	TEQ		
					ND=0	ND=1/2 DL	ND=DL
2,3,7,8-TCDD		0.310	0.0241	1	3.10e-01	3.10e-01	
1,2,3,7,8-PECDD		0.684	0.0241	1	6.84e-01	6.84e-01	
1,2,3,4,7,8-HXCDD		1.03	0.0262	0.1	1.03e-01	1.03e-01	
1,2,3,6,7,8-HXCDD		2.09	0.0262	0.1	2.09e-01	2.09e-01	
1,2,3,7,8,9-HXCDD		2.41	0.0262	0.1	2.41e-01	2.41e-01	
1,2,3,4,6,7,8-HPCDD		41.3	0.0419	0.01	4.13e-01	4.13e-01	
OCDD		383	0.0881	0.0001	3.83e-02	3.83e-02	
2,3,7,8-TCDF		4.50	0.170	0.1	4.50e-01	4.50e-01	
1,2,3,7,8-PECDF		2.01	0.0300	0.05	1.01e-01	1.01e-01	
2,3,4,7,8-PECDF		3.67	0.0300	0.5	1.84e+00	1.84e+00	
1,2,3,4,7,8-HXCDF		6.13	0.0343	0.1	6.13e-01	6.13e-01	
1,2,3,6,7,8-HXCDF		2.78	0.0343	0.1	2.78e-01	2.78e-01	
1,2,3,7,8,9-HXCDF		0.218	0.0343	0.1	2.18e-02	2.18e-02	
2,3,4,6,7,8-HXCDF		1.85	0.0343	0.1	1.85e-01	1.85e-01	
1,2,3,4,6,7,8-HPCDF		18.4	0.0452	0.01	1.84e-01	1.84e-01	
1,2,3,4,7,8,9-HPCDF		2.46	0.0452	0.01	2.46e-02	2.46e-02	
OCDF		34.2	0.0436	0.0001	3.42e-03	3.42e-03	
TOTAL TEQ					5.69	5.69	

COMPOUND	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ		
					ND=0	ND=1/2 DL	ND=DL
2,3,7,8-TCDD		0.310	0.0241	1	3.10e-01	3.10e-01	
1,2,3,7,8-PECDD		0.684	0.0241	1	6.84e-01	6.84e-01	
1,2,3,4,7,8-HXCDD		1.03	0.0262	0.1	1.03e-01	1.03e-01	
1,2,3,6,7,8-HXCDD		2.09	0.0262	0.1	2.09e-01	2.09e-01	
1,2,3,7,8,9-HXCDD		2.41	0.0262	0.1	2.41e-01	2.41e-01	
1,2,3,4,6,7,8-HPCDD		41.3	0.0419	0.01	4.13e-01	4.13e-01	
OCDD		383	0.0881	0.0003	1.15e-01	1.15e-01	
2,3,7,8-TCDF		4.50	0.170	0.1	4.50e-01	4.50e-01	
1,2,3,7,8-PECDF		2.01	0.0300	0.03	6.03e-02	6.03e-02	
2,3,4,7,8-PECDF		3.67	0.0300	0.3	1.10e+00	1.10e+00	
1,2,3,4,7,8-HXCDF		6.13	0.0343	0.1	6.13e-01	6.13e-01	
1,2,3,6,7,8-HXCDF		2.78	0.0343	0.1	2.78e-01	2.78e-01	
1,2,3,7,8,9-HXCDF		0.218	0.0343	0.1	2.18e-02	2.18e-02	
2,3,4,6,7,8-HXCDF		1.85	0.0343	0.1	1.85e-01	1.85e-01	
1,2,3,4,6,7,8-HPCDF		18.4	0.0452	0.01	1.84e-01	1.84e-01	
1,2,3,4,7,8,9-HPCDF		2.46	0.0452	0.01	2.46e-02	2.46e-02	
OCDF		34.2	0.0436	0.0003	1.03e-02	1.03e-02	
TOTAL TEQ					5.00	5.00	

(1) Where applicable, custom lab flags have been used on this report.
(2) Concentrations that do not meet quantification criteria are not included in the TEQ calculations.

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist



AXYS ANALYTICAL SERVICES

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

Sample Collection: N/A
Project No. N/A
Lab Sample I.D.: WG26790-101 :5PT
GC Column ID(s): DB225
DB5
Sample Data Filenames: DB83_259 S: 5
DX8M_089A S: 5

Contract No.: 2607
Matrix: SOLID
Sample Size: 20.0 g
Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 1998 TEF	TEQ		
					ND=0	ND=1/2 DL	ND=DL
2,3,7,8-TCDD	ND		0.0250	1	0.00e+00	1.25e-02	
1,2,3,7,8-PECDD	ND		0.0250	1	0.00e+00	1.25e-02	
1,2,3,4,7,8-HXCDD	ND		0.0250	0.1	0.00e+00	1.25e-03	
1,2,3,6,7,8-HXCDD		0.027	0.0250	0.1	2.70e-03	2.70e-03	
1,2,3,7,8,9-HXCDD	ND		0.0250	0.1	0.00e+00	1.25e-03	
1,2,3,4,6,7,8-HPCDD	ND		0.0250	0.01	0.00e+00	1.25e-04	
OCDD	ND		0.0250	0.0001	0.00e+00	1.25e-06	
2,3,7,8-TCDF	ND		0.0015	0.1	0.00e+00	7.50e-05	
1,2,3,7,8-PECDF	ND		0.0250	0.05	0.00e+00	6.25e-04	
2,3,4,7,8-PECDF	ND		0.0250	0.5	0.00e+00	6.25e-03	
1,2,3,4,7,8-HXCDF	ND		0.0250	0.1	0.00e+00	1.25e-03	
1,2,3,6,7,8-HXCDF	ND		0.0250	0.1	0.00e+00	1.25e-03	
1,2,3,7,8,9-HXCDF	ND		0.0250	0.1	0.00e+00	1.25e-03	
2,3,4,6,7,8-HXCDF	ND		0.0250	0.1	0.00e+00	1.25e-03	
1,2,3,4,6,7,8-HPCDF	ND		0.0250	0.01	0.00e+00	1.25e-04	
1,2,3,4,7,8,9-HPCDF		0.037	0.0250	0.01	3.70e-04	3.70e-04	
OCDF		0.110	0.0250	0.0001	1.10e-05	1.10e-05	
TOTAL TEQ					0.00308	0.0428	

COMPOUND	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ		
					ND=0	ND=1/2 DL	ND=DL
2,3,7,8-TCDD	ND		0.0250	1	0.00e+00	1.25e-02	
1,2,3,7,8-PECDD	ND		0.0250	1	0.00e+00	1.25e-02	
1,2,3,4,7,8-HXCDD	ND		0.0250	0.1	0.00e+00	1.25e-03	
1,2,3,6,7,8-HXCDD		0.027	0.0250	0.1	2.70e-03	2.70e-03	
1,2,3,7,8,9-HXCDD	ND		0.0250	0.1	0.00e+00	1.25e-03	
1,2,3,4,6,7,8-HPCDD	ND		0.0250	0.01	0.00e+00	1.25e-04	
OCDD	ND		0.0250	0.0003	0.00e+00	3.75e-06	
2,3,7,8-TCDF	ND		0.0015	0.1	0.00e+00	7.50e-05	
1,2,3,7,8-PECDF	ND		0.0250	0.03	0.00e+00	3.75e-04	
2,3,4,7,8-PECDF	ND		0.0250	0.3	0.00e+00	3.75e-03	
1,2,3,4,7,8-HXCDF	ND		0.0250	0.1	0.00e+00	1.25e-03	
1,2,3,6,7,8-HXCDF	ND		0.0250	0.1	0.00e+00	1.25e-03	
1,2,3,7,8,9-HXCDF	ND		0.0250	0.1	0.00e+00	1.25e-03	
2,3,4,6,7,8-HXCDF	ND		0.0250	0.1	0.00e+00	1.25e-03	
1,2,3,4,6,7,8-HPCDF	ND		0.0250	0.01	0.00e+00	1.25e-04	
1,2,3,4,7,8,9-HPCDF		0.037	0.0250	0.01	3.70e-04	3.70e-04	
OCDF		0.110	0.0250	0.0003	3.30e-05	3.30e-05	
TOTAL TEQ					0.00310	0.0401	

(1) Where applicable, custom lab flags have been used on this report; ND = not detected.
(2) Concentrations that do not meet quantification criteria are not included in the TEQ calculations.

Approved by: _____ Teresa Rawsthorne _____ QA/QC Chemist



**CALUX Analysis Report (PCDD/F and
Dioxin-like PCB TEQs)**

BIOMONITORING OF POPs AND POPs-LIKE CHEMICALS -
CAMBODIA, LAO PDR, MALAYSIA, AND THAILAND
TERMS OF REFERENCE

Final report
(Cambodia)

The World Bank

2008.09.05
Hiyoshi Corporation

Final report (Soil) – 1

Sample No.	Sample type	Sample volume(g)	CALUX Raw Date					WHO-TEF1998			WHO-TEF2006		
			PCDDs/Fs	DL-PCBs	DXNs	LOD	LOQ	PCDDs/Fs	DL-PCBs	DXNs	PCDDs/Fs	DL-PCBs	DXNs
			pgCALUX-TEQ/g					pg-TEQ _{(WHO1998)/g}			pg-TEQ _{(WHO2006)/g}		
1	08CAM001B	3.50	1.3	0	1.3	0.45	0.89	0.30	0	0.30	0.28	0	0.28
2	08CAM002B	3.50	1.5	0	1.5	0.45	0.89	0.35	0	0.35	0.32	0	0.32
3	08CAM003B	3.50	1.0	0	1.0	0.45	0.89	0.23	0	0.23	0.22	0	0.22
4	08CAM004B	3.50	0	0	0	0.45	0.89	0	0	0	0	0	0
5	08CAM005B	3.50	(0.86)	0	0.86	0.45	0.89	(0.20)	0	0.20	(0.18)	0	0.18
6	08CAM006B	3.50	1.9	0	1.9	0.45	0.89	0.43	0	0.43	0.40	0	0.40
7	08CAM007B	3.50	0	0	0	0.45	0.89	0	0	0	0	0	0
8	08CAM008B	3.50	1.2	0	1.2	0.45	0.89	0.28	0	0.28	0.26	0	0.26
9	08CAM009B	3.50	1.1	(0.56)	1.7	0.45	0.89	0.26	(1.4)	1.7	0.24	(1.5)	1.7
10	08CAM010B	3.50	2.1	(0.78)	2.9	0.45	0.89	0.48	(2.0)	2.5	0.44	(2.1)	2.5
11	08CAM011B	3.50	2.1	0	2.1	0.45	0.89	0.49	0	0.49	0.46	0	0.46
12	08CAM012B	3.50	2.2	(0.49)	2.7	0.45	0.89	0.51	(1.2)	1.7	0.47	(1.3)	1.8
13	08CAM013B	3.50	2.1	0	2.1	0.45	0.89	0.49	0	0.49	0.45	0	0.45
14	08CAM014B	3.50	1.5	0	1.5	0.45	0.89	0.35	0	0.35	0.32	0	0.32
15	08CAM015B	3.50	0.98	0	1.0	0.45	0.89	0.23	0	0.23	0.21	0	0.21
16	08CAM016B	3.50	0	0	0	0.45	0.89	0	0	0	0	0	0
17	08CAM017B	3.50	0	0	0	0.45	0.89	0	0	0	0	0	0
18	08CAM018B	3.50	1.2	0	1.2	0.45	0.89	0.29	0	0.29	0.26	0	0.26
19	08CAM019B	3.50	44	(0.76)	45	0.45	0.89	10	(1.9)	12	9.4	(2.0)	11
20	08CAM020B	3.50	6.5	0	6.5	0.45	0.89	1.5	0	1.5	1.4	0	1.4
21	08CAM021B	3.50	55	5.5	61	0.45	0.89	13	14	27	12	14	26
22	08CAM022B ①	1.13	9.1	17	26	1.4	2.8	2.1	42	44	2.0	44	46
23	08CAM023B ①	1.25	5.6	6.0	12	1.3	2.5	1.3	15	16	1.2	16	17

	①PCDD/Fs	②DL-PCBs	③DXNs	④PCDD/Fs	⑤DL-PCBs	⑥DXNs
Conversion factor	0.231	2.53	①+②	0.214	2.63	④+⑤

* "0" represent below detection limit (LOD)

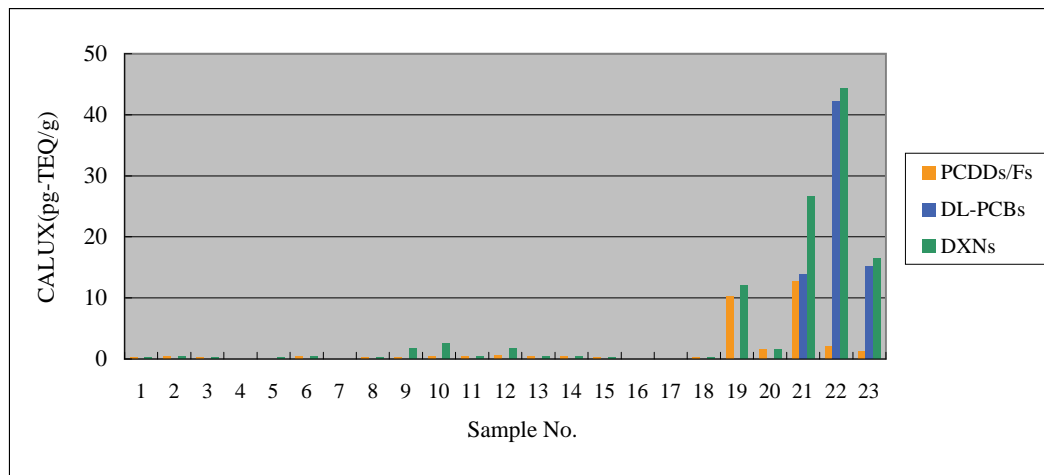
** number in bracket represent the number below quantification limit and above detection limit which has been converted into DXNs

*** Average of quantified and measured toxic equivalent value and calculate standard deviation and coefficient of variation(CV) from standard curve obtained from 5 time measured adjusted standard for detection limit and create quality profile. Detection limit (LOD) should be within CV 30% and quantification limit (LOQ) should be within CV 20%

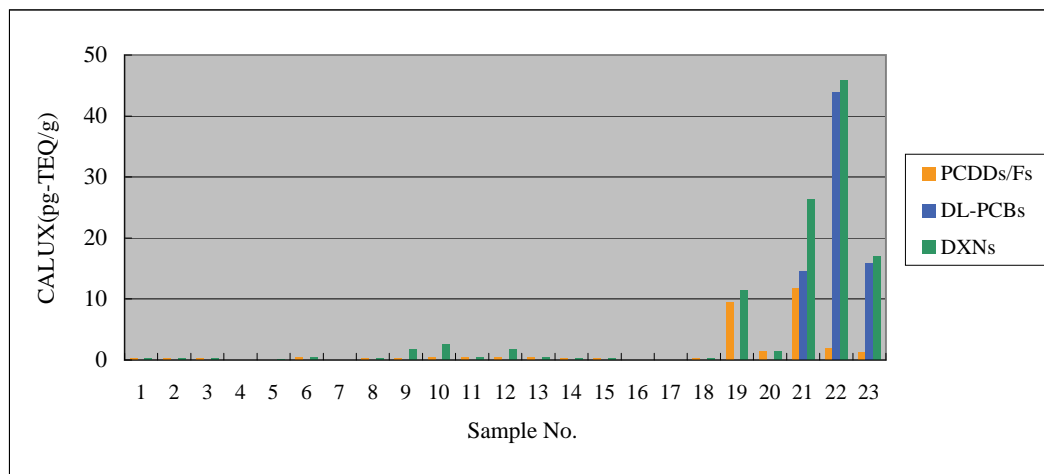
**** Guideline for quality control of dioxin environmental measurement, March 3, 2006 by Ministry of the Environment, was used to set quantification limit and detection limit was

①Because there were large amount of alloy, analysis was done with less sample amount then normal.

Final report (Soil) – 2



WHO-TEF1998



WHO-TEF2006

Final report (Fish) – 1

Sample No.	Sample type	Sample volume(g)	CALUX Raw Date					WHO-TEF1998			WHO-TEF2006		
			PCDDs/Fs	DL-PCBs	DXNs	LOD	LOQ	PCDDs/Fs	DL-PCBs	DXNs	PCDDs/Fs	DL-PCBs	DXNs
			pgCALUX-TEQ/gwet					pg-TEQ _(WHO1998) /gwet			pg-TEQ _(WHO2006) /gwet		
1	08CAM025B fishmuscle ①	5.6409	0	0	0	0.28	0.55	0	0	0	0	0	0
2	08CAM027B fishmuscle ①	7.7381	0	0	0	0.20	0.40	0	0	0	0	0	0
3	08CAM029B ②	8.2992	1.0	0	1.0	0.19	0.38	0.21	0	0.21	0.34	0	0.34
4	08CAM030B ③	9.7311	0	0	0	0.16	0.32	0	0	0	0	0	0

Sample No.	Sample type	Sample volume(fat)	CALUX Raw Date					WHO-TEF1998			WHO-TEF2006		
			PCDDs/Fs	DL-PCBs	DXNs	LOD	LOQ	PCDDs/Fs	DL-PCBs	DXNs	PCDDs/Fs	DL-PCBs	DXNs
			pgCALUX-TEQ/fat					pg-TEQ _(WHO1998) /gfat			pg-TEQ _(WHO2006) /gfat		
1	08CAM025B fishmuscle ①	0.56	0	0	0	49	99	0	0	0	0	0	0
2	08CAM027B fishmuscle ①	0.34	0	0	0	60	120	0	0	0	0	0	0
3	08CAM029B ②	1.2	85	0	85	16	32	18	0	18	29	0	29
4	08CAM030B ③	0.84	0.0	0	0	19	38	0	0	0	0	0	0

	①PCDD/Fs	②DL-PCBs	③DXNs	④PCDD/Fs	⑤DL-PCBs	⑥DXNs
Conversion factor	0.214	2.63	①+②	0.344	2.52	④+⑤

* "0" represent below detection limit (LOD)

** number in bracket represent the number below quantification limit and above detection limit which has been converted into DXNs

*** Average of quantified and measured toxic equivalent value and calculate standard deviation and coefficient of variation(CV) from standard curve obtained from 5 time measured adjusted standard for detection limit and create quality profile. Detection limit (LOD) should be within CV 30% and quantification limit (LOQ) should be within CV 20%

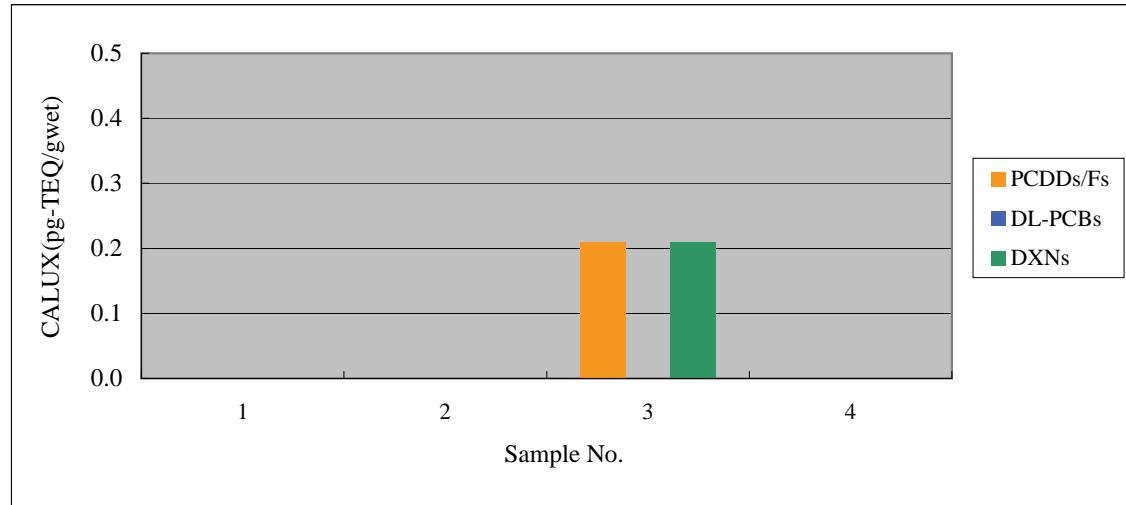
**** Guideline for quality control of dioxin environmental measurement, March 3, 2006 by Ministry of the Environment, was used to set quantification limit and detection limit was

① All sample were used and homogenized and applied for the analysis

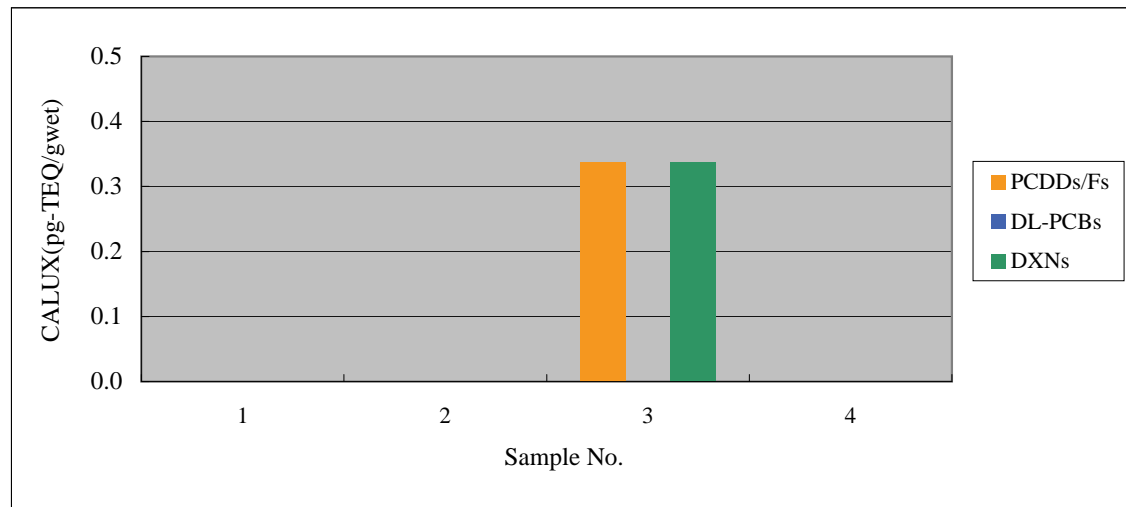
② All parts including shell were used and pestled in mortar and homogenized and total of less than 10g were used.

③ Removed shell and homogenized all the meat, less than 10g

Final report (Fish) – 2



WHO-TEF1998



WHO-TEF2006

Final report (Water)

Sample No.	Sample type	Sample volume(l)	CALUX Raw Data				
			PCDDs/Fs	DL-PCBs	DXNs	LOD	LOQ
			pgCALUX-TEQ/l				
1	08CAM024B	0.56	0	0	0	29	58

* "0" represent below detection limit (LOD)

** number in bracket represent the number below quantification limit and above detection limit which has been converted into DXNs

*** Average of quantified and measured toxic equivalent value and calculate standard deviation and coefficient of variation(CV) from standard curve obtained from 5 time measured adjusted standard for detection limit and create quality profile. Detection limit (LOD) should be within CV 30% and quantification limit (LOQ) should be within CV 20%

**** Guideline for quality control of dioxin environmental measurement, March 3, 2006 by Ministry of the Environment, was used to set quantification limit and detection limit was

Blood PCB Chemistry

Form 1A
HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM-B01
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No. POP1406
Lab Sample I.D.: L11590-12 L

Matrix: BLOOD

Sample Size: 44.1 g (wet)

Sample Receipt Date: 15-Aug-2008

Initial Calibration Date: 30-Jul-2008

Extraction Date: 03-Sep-2008

Instrument ID: HR GC/MS

Analysis Date: 05-Oct-2008 **Time:** 04:28:17

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename(s): **PB8B_262 S: 9, PB8B_271A S: 4**

Injection Volume (uL): 1.0

Blank Data Filename: PB8B_261 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: PB8B_262 S: 1

Concentration Units: pg/g (wet weight basis)

% Lipid: 0.32

PCB HOMOLOGUE GROUP	LAB FLAG ¹	CONC. FOUND
Total Monochloro Biphenyls		2.21
Total Dichloro Biphenyls		3.51
Total Trichloro Biphenyls		10.0
Total Tetrachloro Biphenyls		16.1
Total Pentachloro Biphenyls		26.6
Total Hexachloro Biphenyls		42.8
Total Heptachloro Biphenyls		29.5
Total Octachloro Biphenyls		11.8
Total Nonachloro Biphenyls		2.81
Decachloro Biphenyl	ND	
TOTAL PCBs		145

(1) Where applicable, custom lab flags have been used on this report; ND = not detected.
 (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.

Approved by: _____Shelley Facchin_____ QA/QC Chemist



Form 1A
HOMOLOGUE TOTAL PCB ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM-B01
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811
Contract No.: 2607

Project No. POP1406
Lab Sample I.D.: L11590-12 L
Sample Size: 0.141 g (lipid)
Initial Calibration Date: 30-Jul-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename(s): **PB8B_262 S: 9, PB8B_271A S: 4**
Blank Data Filename: PB8B_261 S: 5
Cal. Ver. Data Filename: PB8B_262 S: 1
% Lipid: 0.32

Matrix: BLOOD
Sample Receipt Date: 15-Aug-2008
Extraction Date: 03-Sep-2008
Analysis Date: 05-Oct-2008 **Time:** 04:28:17
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (lipid weight basis)

PCB HOMOLOGUE GROUP	LAB FLAG ¹	CONC. FOUND
Total Monochloro Biphenyls		692
Total Dichloro Biphenyls		1100
Total Trichloro Biphenyls		3140
Total Tetrachloro Biphenyls		5030
Total Pentachloro Biphenyls		8340
Total Hexachloro Biphenyls		13400
Total Heptachloro Biphenyls		9260
Total Octachloro Biphenyls		3710
Total Nonachloro Biphenyls		882
Decachloro Biphenyl	ND	
TOTAL PCBs		45600

(1) Where applicable, custom lab flags have been used on this report; ND = not detected.
 (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.

Approved by: _____Shelley Facchin_____ QA/QC Chemist



Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: BLOOD
Sample Size: 44.1 g (wet)
Concentration Units: pg/g (wet weight basis)

Sample Collection: N/A
Project No. POP1406
Lab Sample I.D.: L11590-12 L
GC Column ID(s): SPB OCTYL
Sample Data Filename(s): PB8B_262 S: 9
PB8B_271A S: 4

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			1.64	0.0663	0.0001	1.64e-04	1.64e-04	
3,4,4',5-TeCB	81			1.55	0.0623	0.0003	4.65e-04	4.65e-04	
2,3,3',4,4'-PeCB	105			3.41	0.0470	0.00003	1.02e-04	1.02e-04	
2,3,4,4',5-PeCB	114			1.53	0.0445	0.00003	4.59e-05	4.59e-05	
2,3',4,4',5-PeCB	118			7.25	0.0445	0.00003	2.18e-04	2.18e-04	
2',3,4,4',5-PeCB	123			1.24	0.0455	0.00003	3.72e-05	3.72e-05	
3,3',4,4',5-PeCB	126			1.82	0.0542	0.1	1.82e-01	1.82e-01	
2,3,3',4,4',5-HxCB	156	156 + 157	C	5.62	0.0171	0.00003	1.69e-04	1.69e-04	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			1.85	0.0130	0.00003	5.55e-05	5.55e-05	
3,3',4,4',5,5'-HxCB	169		ND		1.22	0.03	0.00e+00	1.83e-02	
2,3,3',4,4',5,5'-HpCB	189			1.77	0.0327	0.00003	5.31e-05	5.31e-05	
TOTAL TEQ							0.183	0.202	

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

Approved by: _____ Shelley Facchin _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 15-Oct-2008 10:22:59; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_HomTotals-TEQs_L11590-12_TEQ_SJ909748.html; Workgroup: WG26343; Design ID: 925]

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 1C
PCB CONGENER TEQ ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM-B01

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: BLOOD
Sample Size: 0.141 g (lipid)
Concentration Units: pg/g (lipid weight basis)

Sample Collection: N/A
Project No. POP1406
Lab Sample I.D.: L11590-12 L
GC Column ID(s): SPB OCTYL
Sample Data Filename(s): PB8B_262 S: 9
PB8B_271A S: 4

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ		
							ND=0	ND=1/2 DL	ND=DL
3,3',4,4'-TeCB	77			514	20.8	0.0001	5.14e-02	5.14e-02	
3,4,4',5-TeCB	81			486	19.5	0.0003	1.46e-01	1.46e-01	
2,3,3',4,4'-PeCB	105			1070	14.7	0.00003	3.21e-02	3.21e-02	
2,3,4,4',5-PeCB	114			480	13.9	0.00003	1.44e-02	1.44e-02	
2,3',4,4',5-PeCB	118			2270	13.9	0.00003	6.81e-02	6.81e-02	
2',3,4,4',5-PeCB	123			389	14.3	0.00003	1.17e-02	1.17e-02	
3,3',4,4',5-PeCB	126			570	17.0	0.1	5.70e+01	5.70e+01	
2,3,3',4,4',5-HxCB	156	156 + 157	C	1760	5.36	0.00003	5.28e-02	5.28e-02	
2,3,3',4,4',5'-HxCB	157	156 + 157	C156						
2,3',4,4',5,5'-HxCB	167			580	4.07	0.00003	1.74e-02	1.74e-02	
3,3',4,4',5,5'-HxCB	169		ND		382	0.03	0.00e+00	5.73e+00	
2,3,3',4,4',5,5'-HpCB	189			555	10.2	0.00003	1.67e-02	1.67e-02	
TOTAL TEQ								57.4	63.1

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

Approved by: _____ Shelley Facchin _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 15-Oct-2008 10:22:59; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_HomTotals-TEQs_L11590-12_TEQ_SJ909748_Lipid.html; Workgroup: WG26343; Design ID: 925]

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 1A
HOMOLOGUE TOTAL PCB ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No.

N/A

Lab Sample I.D.:

WG26343-101 L

Matrix: BLOOD

Sample Size:

40.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

30-Jul-2008

Extraction Date: 03-Sep-2008

Instrument ID:

HR GC/MS

Analysis Date: 04-Oct-2008 **Time:** 12:49:23

GC Column ID:

SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename:

PB8B_261 S: 5

Injection Volume (uL): 1.0

Blank Data Filename:

PB8B_261 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename:

PB8B_261 S: 1

Concentration Units: pg/g

PCB HOMOLOGUE GROUP

**LAB
 FLAG ¹**

**CONC.
 FOUND**

Total Monochloro Biphenyls

ND

Total Dichloro Biphenyls

0.527

Total Trichloro Biphenyls

1.09

Total Tetrachloro Biphenyls

0.796

Total Pentachloro Biphenyls

0.238

Total Hexachloro Biphenyls

0.706

Total Heptachloro Biphenyls

0.385

Total Octachloro Biphenyls

0.070

Total Nonachloro Biphenyls

ND

Decachloro Biphenyl

0.049

TOTAL PCBs

3.86

(1) Where applicable, custom lab flags have been used on this report; ND = not detected.

(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.

Approved by: _____Shelley Facchin_____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: .xsl; Created: 28-Oct-2008 07:16:20; Application: XMLTransformer-1.9.15;
 Report Filename: 1668_PCB1668_HomTotals-TEQs_WG26343-101_Form1AHT_SJ910826.html; Workgroup: WG26343; Design ID: 925]

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 1C
PCB CONGENER TEQ ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Sample Collection: N/A

Project No. N/A

Matrix: BLOOD

Lab Sample I.D.: WG26343-101 L

Sample Size: 40.0 g

GC Column ID(s): SPB OCTYL

Concentration Units: pg/g

Sample Data Filename(s): PB8B_261 S: 5

COMPOUND	IUPAC NO.	COELUTIONS	LAB FLAG ¹	CONC. FOUND	DETECTION LIMIT	WHO 2005 TEF	TEQ			
							ND=0	ND=1/2 DL	ND=DL	
3,3',4,4'-TeCB	77		ND		0.0326	0.0001	0.00e+00	1.63e-06		
3,4,4',5'-TeCB	81		ND		0.0336	0.0003	0.00e+00	5.04e-06		
2,3,3',4,4'-PeCB	105		ND		0.0149	0.00003	0.00e+00	2.24e-07		
2,3,4,4',5'-PeCB	114		ND		0.0137	0.00003	0.00e+00	2.06e-07		
2,3',4,4',5'-PeCB	118		ND		0.0145	0.00003	0.00e+00	2.18e-07		
2',3,4,4',5'-PeCB	123		ND		0.0153	0.00003	0.00e+00	2.30e-07		
3,3',4,4',5'-PeCB	126		ND		0.0170	0.1	0.00e+00	8.50e-04		
2,3,3',4,4',5'-HxCB	156	156 + 157	C	0.069	0.0125	0.00003	2.07e-06	2.07e-06		
2,3,3',4,4',5'-HxCB	157	156 + 157	C156							
2,3',4,4',5,5'-HxCB	167			0.022	0.0125	0.00003	6.60e-07	6.60e-07		
3,3',4,4',5,5'-HxCB	169		ND		0.0261	0.03	0.00e+00	3.92e-04		
2,3,3',4,4',5,5'-HpCB	189			0.026	0.0125	0.00003	7.80e-07	7.80e-07		
TOTAL TEQ								0.000004	0.00125	

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

Approved by: _____ Shelley Facchin _____ QA/QC Chemist

For Axys Internal Use Only [XSL Template: 1668TEQ.xsl; Created: 15-Oct-2008 10:22:59; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_HomTotals-TEQs_WG26343-101_TEQ_SJ910826.html; Workgroup: WG26343; Design ID: 925]

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 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM-B01
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Matrix: BLOOD

Sample Receipt Date: 15-Aug-2008

Extraction Date: 03-Sep-2008

Analysis Date: 05-Oct-2008 Time: 04:28:17

Extract Volume (uL): 20

Injection Volume (uL): 1.0

Dilution Factor: N/A

Concentration Units: pg/g (wet weight basis)

Project No. POP1406
Lab Sample I.D.: L11590-12 L

Sample Size: 44.1 g (wet)

Initial Calibration Date: 30-Jul-2008

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

Sample Data Filename: PB8B_262 S: 9

Blank Data Filename: PB8B_261 S: 5

Cal. Ver. Data Filename: PB8B_262 S: 1

% Lipid: 0.32

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2-MoCB	1			0.990	0.0244	3.03	1.001
3-MoCB	2		ND		0.0267		
4-MoCB	3			1.22	0.0327	3.52	1.000
2,2'-DiCB	4			1.01	0.0720	1.77	1.000
2,3-DiCB	5		ND		0.0530		
2,3'-DiCB	6		ND		0.0473		
2,4-DiCB	7		ND		0.0504		
2,4'-DiCB	8			1.24	0.0434	1.58	1.208
2,5-DiCB	9		ND		0.0489		
2,6-DiCB	10		ND		0.0533		
3,3'-DiCB	11		NDR	0.558	0.0469	1.80	0.970
3,4-DiCB	12	12 + 13	C ND		0.0468		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		ND		0.0469		
4,4'-DiCB	15			1.26	0.0529	1.70	1.001
2,2',3-TriCB	16		NDR	0.041	0.0296	0.82	1.167
2,2',4-TriCB	17		NDR	0.045	0.0264	0.31	1.138
2,2',5-TriCB	18	18 + 30	C	0.980	0.0223	1.04	1.114
2,2',6-TriCB	19			1.12	0.0264	1.18	1.001
2,3,3'-TriCB	20	20 + 28	C	2.77	0.0282	1.07	0.848
2,3,4-TriCB	21	21 + 33	C NDR	0.106	0.0277	1.23	0.857
2,3,4'-TriCB	22		NDR	0.059	0.0311	1.61	0.871
2,3,5-TriCB	23			1.03	0.0303	1.05	1.283
2,3,6-TriCB	24		ND		0.0194		
2,3',4-TriCB	25		ND		0.0255		
2,3',5-TriCB	26	26 + 29	C ND		0.0289		
2,3',6-TriCB	27		ND		0.0188		
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			1.39	0.0267	1.12	0.837
2,4',6-TriCB	32		ND		0.0277		
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			1.07	0.0297	1.08	1.275
3,3',4-TriCB	35		ND		0.0272		
3,3',5-TriCB	36		ND		0.0276		
3,4,4'-TriCB	37			1.65	0.0354	1.06	1.001
3,4,5-TriCB	38		ND		0.0275		



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,4',5'-TriCB	39		ND		0.0281		
2,2',3,3'-TeCB	40	40 + 41 + 71	C	1.06	0.0190	0.78	1.337
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		ND		0.0198		
2,2',3,5'-TeCB	43		ND		0.0221		
2,2',3,5'-TeCB	44	44 + 47 + 65	C	1.48	0.0175	0.76	1.285
2,2',3,6'-TeCB	45	45 + 51	C	0.068	0.0198	0.74	1.149
2,2',3,6'-TeCB	46		ND		0.0222		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48		NDR	0.026	0.0196	0.53	1.274
2,2',4,5'-TeCB	49	49 + 69	C	1.09	0.0166	0.82	1.260
2,2',4,6'-TeCB	50	50 + 53	C	0.023	0.0192	0.85	1.112
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			1.44	0.0179	0.78	1.235
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			1.20	0.0123	0.76	1.001
2,3,3',4'-TeCB	55		ND		0.0581		
2,3,3',4'-TeCB	56			1.40	0.0577	0.81	0.905
2,3,3',5'-TeCB	57		ND		0.0563		
2,3,3',5'-TeCB	58		ND		0.0595		
2,3,3',6'-TeCB	59	59 + 62 + 75	C ND		0.0145		
2,3,4,4'-TeCB	60		NDR	0.430	0.0575	0.92	0.911
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C	2.84	0.0548	0.79	0.877
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63		ND		0.0552		
2,3,4',6'-TeCB	64			0.060	0.0140	0.71	1.349
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			2.21	0.0530	0.81	0.885
2,3',4,5'-TeCB	67		ND		0.0510		
2,3',4,5'-TeCB	68		NDR	0.068	0.0552	0.96	0.832
2,3',4,6'-TeCB	69	49 + 69	C49				
2,3',4',5'-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6'-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		ND		0.0551		
2,3',5,6'-TeCB	73		ND		0.0149		
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			1.64	0.0663	0.82	1.000
3,3',4,5'-TeCB	78		ND		0.0541		
3,3',4,5'-TeCB	79		ND		0.0467		
3,3',5,5'-TeCB	80		ND		0.0515		
3,4,4',5'-TeCB	81			1.55	0.0623	0.78	1.000
2,2',3,3',4'-PeCB	82		NDR	0.030	0.0292	1.27	0.934
2,2',3,3',5'-PeCB	83	83 + 99	C	4.50	0.0286	1.56	0.886
2,2',3,3',6'-PeCB	84		ND		0.0309		
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C NDR	0.211	0.0227	2.08	0.919
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	C	1.35	0.0243	1.72	0.902
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	C86				
2,2',3,4,6'-PeCB	88	88 + 91	C ND		0.0284		
2,2',3,4,6'-PeCB	89		ND		0.0294		
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C	1.48	0.0243	1.56	0.869
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			0.161	0.0280	1.74	0.853
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C	1.43	0.0279	1.40	1.120
2,2',3,5,6'-PeCB	94		ND		0.0312		
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		ND		0.0117		
2,2',3',4,5'-PeCB	97	86 + 87 + 97 + 108 + 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				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,2',4,5',6-PeCB	103		ND		0.0257		
2,2',4,6,6'-PeCB	104			0.824	0.0113	1.62	1.001
2,3,3',4,4'-PeCB	105			3.41	0.0470	1.53	1.000
2,3,3',4,5-PeCB	106		ND		0.0397		
2,3,3',4',5-PeCB	107	107 + 124	C ND		0.0426		
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109			0.156	0.0392	1.68	0.997
2,3,3',4',6-PeCB	110	110 + 115	C	1.47	0.0202	1.59	0.925
2,3,3',5,5'-PeCB	111		ND		0.0203		
2,3,3',5,6-PeCB	112		ND		0.0198		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			1.53	0.0445	1.56	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			7.25	0.0445	1.60	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		ND		0.0193		
2,3',4,5',6-PeCB	121		NDR	0.024	0.0214	4.10	1.199
2',3,3',4,5-PeCB	122		ND		0.0435		
2',3,4,4',5-PeCB	123			1.24	0.0455	1.61	1.000
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126			1.82	0.0542	1.73	1.000
3,3',4,5,5'-PeCB	127		ND		0.0400		
2,2',3,3',4,4'-HxCB	128	128 + 166	C X				
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C X				
2,2',3,3',4,5'-HxCB	130		X				
2,2',3,3',4,6-HxCB	131		X				
2,2',3,3',4,6'-HxCB	132		X				
2,2',3,3',5,5'-HxCB	133		X				
2,2',3,3',5,6-HxCB	134	134 + 143	C X				
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C X				
2,2',3,3',6,6'-HxCB	136		X				
2,2',3,4,4',5-HxCB	137		X				
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C X				
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		X				
2,2',3,4,5,6-HxCB	142		X				
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		X				
2,2',3,4,6,6'-HxCB	145		X				
2,2',3,4',5,5'-HxCB	146		X				
2,2',3,4',5,6-HxCB	147	147 + 149	C X				
2,2',3,4',5,6'-HxCB	148		X				
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		X				
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		X				
2,2',4,4',5,5'-HxCB	153	153 + 168	C X				
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			0.628	0.0113	1.21	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	5.62	0.0171	1.27	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		X				
2,3,3',4,5,5'-HxCB	159		X				
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				
2,3,3',4,5',6-HxCB	161		X				
2,3,3',4',5,5'-HxCB	162		X				
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		X				
2,3,3',5,5',6-HxCB	165		X				
2,3,4,4',5,6-HxCB	166	128 + 166	C128				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,3',4,4',5,5'-HxCB	167			1.85	0.0130	1.19	1.000
2,3',4,4',5',6'-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		X				
2,2',3,3',4,4',5'-HpCB	170		X				
2,2',3,3',4,4',6'-HpCB	171	171 + 173	C X				
2,2',3,3',4,5,5'-HpCB	172		X				
2,2',3,3',4,5,6'-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		X				
2,2',3,3',4,5',6'-HpCB	175		X				
2,2',3,3',4,6',6'-HpCB	176		X				
2,2',3,3',4',5,6'-HpCB	177		X				
2,2',3,3',5,5',6'-HpCB	178		X				
2,2',3,3',5,6',6'-HpCB	179		X				
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C X				
2,2',3,4,4',5,6'-HpCB	181		X				
2,2',3,4,4',5,6'-HpCB	182		X				
2,2',3,4,4',5',6'-HpCB	183	183 + 185	C X				
2,2',3,4,4',6,6'-HpCB	184		X				
2,2',3,4,5,5',6'-HpCB	185	183 + 185	C183				
2,2',3,4,5,6',6'-HpCB	186		X				
2,2',3,4',5,5',6'-HpCB	187		X				
2,2',3,4',5,6',6'-HpCB	188		X				
2,3,3',4,4',5,5'-HpCB	189		X				
2,3,3',4,4',5,6'-HpCB	190		X				
2,3,3',4,4',5',6'-HpCB	191		X				
2,3,3',4,5,5',6'-HpCB	192		X				
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OxCB	194		X				
2,2',3,3',4,4',5,6'-OxCB	195		X				
2,2',3,3',4,4',5,6'-OxCB	196		X				
2,2',3,3',4,4',6',6'-OxCB	197	197 + 200	C X				
2,2',3,3',4,5,5',6'-OxCB	198	198 + 199	C X				
2,2',3,3',4,5,5',6'-OxCB	199	198 + 199	C198				
2,2',3,3',4,5,6',6'-OxCB	200	197 + 200	C197				
2,2',3,3',4,5,6',6'-OxCB	201		X				
2,2',3,3',5,5',6',6'-OxCB	202		X				
2,2',3,4,4',5,5',6'-OxCB	203		X				
2,2',3,4,4',5,6',6'-OxCB	204		X				
2,3,3',4,4',5,5',6'-OxCB	205		X				
2,2',3,3',4,4',5,5',6'-NoCB	206		X				
2,2',3,3',4,4',5,6',6'-NoCB	207		X				
2,2',3,3',4,5,5',6',6'-NoCB	208		X				
2,2',3,3',4,4',5,5',6',6'-DeCB	209		X				

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; C = co-eluting congener; X = result reported separately.

Approved by: _____ Shelley Facchin _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16681A.xsl; Created: 15-Oct-2008 10:21:32; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_L11590-12_Form1A_PB8B_262S9_SJ909748.html; Workgroup: WG26343; Design ID: 925]

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 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM-B01
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Matrix: BLOOD

Sample Receipt Date: 15-Aug-2008

Extraction Date: 03-Sep-2008

Analysis Date: 05-Oct-2008 Time: 04:28:17

Extract Volume (uL): 20

Injection Volume (uL): 1.0

Dilution Factor: N/A

Concentration Units: pg/g (lipid weight basis)

Project No. POP1406
Lab Sample I.D.: L11590-12 L

Sample Size: 0.141 g (lipid)

Initial Calibration Date: 30-Jul-2008

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

Sample Data Filename: PB8B_262 S: 9

Blank Data Filename: PB8B_261 S: 5

Cal. Ver. Data Filename: PB8B_262 S: 1

% Lipid: 0.32

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2-MoCB	1			310	7.65	3.03	1.001
3-MoCB	2		ND		8.37		
4-MoCB	3			382	10.2	3.52	1.000
2,2'-DiCB	4			317	22.6	1.77	1.000
2,3-DiCB	5		ND		16.6		
2,3'-DiCB	6		ND		14.8		
2,4-DiCB	7		ND		15.8		
2,4'-DiCB	8			389	13.6	1.58	1.208
2,5-DiCB	9		ND		15.3		
2,6-DiCB	10		ND		16.7		
3,3'-DiCB	11		NDR	175	14.7	1.80	0.970
3,4-DiCB	12	12 + 13	C ND		14.7		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		ND		14.7		
4,4'-DiCB	15			395	16.6	1.70	1.001
2,2',3-TriCB	16		NDR	12.9	9.28	0.82	1.167
2,2',4-TriCB	17		NDR	14.1	8.27	0.31	1.138
2,2',5-TriCB	18	18 + 30	C	307	6.99	1.04	1.114
2,2',6-TriCB	19			351	8.27	1.18	1.001
2,3,3'-TriCB	20	20 + 28	C	868	8.84	1.07	0.848
2,3,4-TriCB	21	21 + 33	C NDR	33.2	8.68	1.23	0.857
2,3,4'-TriCB	22		NDR	18.5	9.75	1.61	0.871
2,3,5-TriCB	23			323	9.50	1.05	1.283
2,3,6-TriCB	24		ND		6.08		
2,3',4-TriCB	25		ND		7.99		
2,3',5-TriCB	26	26 + 29	C ND		9.06		
2,3',6-TriCB	27		ND		5.89		
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			436	8.37	1.12	0.837
2,4',6-TriCB	32		ND		8.68		
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34			335	9.31	1.08	1.275
3,3',4-TriCB	35		ND		8.53		
3,3',5-TriCB	36		ND		8.65		
3,4,4'-TriCB	37			517	11.1	1.06	1.001
3,4,5-TriCB	38		ND		8.62		



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,4',5-TriCB	39		ND		8.81		
2,2',3,3'-TeCB	40	40 + 41 + 71	C	332	5.96	0.78	1.337
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		ND		6.21		
2,2',3,5'-TeCB	43		ND		6.93		
2,2',3,5'-TeCB	44	44 + 47 + 65	C	464	5.49	0.76	1.285
2,2',3,6'-TeCB	45	45 + 51	C	21.3	6.21	0.74	1.149
2,2',3,6'-TeCB	46		ND		6.96		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48		NDR	8.15	6.14	0.53	1.274
2,2',4,5'-TeCB	49	49 + 69	C	342	5.20	0.82	1.260
2,2',4,6'-TeCB	50	50 + 53	C	7.21	6.02	0.85	1.112
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			451	5.61	0.78	1.235
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54			376	3.86	0.76	1.001
2,3,3',4'-TeCB	55		ND		18.2		
2,3,3',4'-TeCB	56			439	18.1	0.81	0.905
2,3,3',5'-TeCB	57		ND		17.6		
2,3,3',5'-TeCB	58		ND		18.6		
2,3,3',6'-TeCB	59	59 + 62 + 75	C ND		4.54		
2,3,4,4'-TeCB	60		NDR	135	18.0	0.92	0.911
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C	890	17.2	0.79	0.877
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63		ND		17.3		
2,3,4',6'-TeCB	64			18.8	4.39	0.71	1.349
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66			693	16.6	0.81	0.885
2,3',4,5'-TeCB	67		ND		16.0		
2,3',4,5'-TeCB	68		NDR	21.3	17.3	0.96	0.832
2,3',4,6'-TeCB	69	49 + 69	C49				
2,3',4',5'-TeCB	70	61 + 70 + 74 + 76	C61				
2,3',4',6'-TeCB	71	40 + 41 + 71	C40				
2,3',5,5'-TeCB	72		ND		17.3		
2,3',5,6'-TeCB	73		ND		4.67		
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			514	20.8	0.82	1.000
3,3',4,5'-TeCB	78		ND		17.0		
3,3',4,5'-TeCB	79		ND		14.6		
3,3',5,5'-TeCB	80		ND		16.1		
3,4,4',5'-TeCB	81			486	19.5	0.78	1.000
2,2',3,3',4'-PeCB	82		NDR	9.40	9.15	1.27	0.934
2,2',3,3',5'-PeCB	83	83 + 99	C	1410	8.96	1.56	0.886
2,2',3,3',6'-PeCB	84		ND		9.69		
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C NDR	66.1	7.11	2.08	0.919
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	C	423	7.62	1.72	0.902
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	C86				
2,2',3,4,6'-PeCB	88	88 + 91	C ND		8.90		
2,2',3,4,6'-PeCB	89		ND		9.21		
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C	464	7.62	1.56	0.869
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92			50.5	8.78	1.74	0.853
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C	448	8.74	1.40	1.120
2,2',3,5,6'-PeCB	94		ND		9.78		
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		ND		3.67		
2,2',3',4,5'-PeCB	97	86 + 87 + 97 + 108 + 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				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,2',4,5',6-PeCB	103		ND		8.06		
2,2',4,6,6'-PeCB	104			258	3.54	1.62	1.001
2,3,3',4,4'-PeCB	105			1070	14.7	1.53	1.000
2,3,3',4,5-PeCB	106		ND		12.4		
2,3,3',4',5-PeCB	107	107 + 124	C ND		13.4		
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109			48.9	12.3	1.68	0.997
2,3,3',4',6-PeCB	110	110 + 115	C	461	6.33	1.59	0.925
2,3,3',5,5'-PeCB	111		ND		6.36		
2,3,3',5,6-PeCB	112		ND		6.21		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114			480	13.9	1.56	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118			2270	13.9	1.60	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		ND		6.05		
2,3',4,5',6-PeCB	121		NDR	7.52	6.71	4.10	1.199
2',3,3',4,5-PeCB	122		ND		13.6		
2',3,4,4',5-PeCB	123			389	14.3	1.61	1.000
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126			570	17.0	1.73	1.000
3,3',4,5,5'-PeCB	127		ND		12.5		
2,2',3,3',4,4'-HxCB	128	128 + 166	C X				
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C X				
2,2',3,3',4,5'-HxCB	130		X				
2,2',3,3',4,6-HxCB	131		X				
2,2',3,3',4,6'-HxCB	132		X				
2,2',3,3',5,5'-HxCB	133		X				
2,2',3,3',5,6-HxCB	134	134 + 143	C X				
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C X				
2,2',3,3',6,6'-HxCB	136		X				
2,2',3,4,4',5-HxCB	137		X				
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C X				
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		X				
2,2',3,4,5,6-HxCB	142		X				
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		X				
2,2',3,4,6,6'-HxCB	145		X				
2,2',3,4',5,5'-HxCB	146		X				
2,2',3,4',5,6-HxCB	147	147 + 149	C X				
2,2',3,4',5,6'-HxCB	148		X				
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		X				
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		X				
2,2',4,4',5,5'-HxCB	153	153 + 168	C X				
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155			197	3.54	1.21	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C	1760	5.36	1.27	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		X				
2,3,3',4,5,5'-HxCB	159		X				
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				
2,3,3',4,5',6-HxCB	161		X				
2,3,3',4',5,5'-HxCB	162		X				
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		X				
2,3,3',5,5',6-HxCB	165		X				
2,3,4,4',5,6-HxCB	166	128 + 166	C128				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,3',4,4',5,5'-HxCB	167			580	4.07	1.19	1.000
2,3',4,4',5',6'-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		X				
2,2',3,3',4,4',5'-HpCB	170		X				
2,2',3,3',4,4',6'-HpCB	171	171 + 173	C X				
2,2',3,3',4,5,5'-HpCB	172		X				
2,2',3,3',4,5,6'-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		X				
2,2',3,3',4,5',6'-HpCB	175		X				
2,2',3,3',4,6',6'-HpCB	176		X				
2,2',3,3',4',5,6'-HpCB	177		X				
2,2',3,3',5,5',6'-HpCB	178		X				
2,2',3,3',5,6',6'-HpCB	179		X				
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C X				
2,2',3,4,4',5,6'-HpCB	181		X				
2,2',3,4,4',5,6'-HpCB	182		X				
2,2',3,4,4',5',6'-HpCB	183	183 + 185	C X				
2,2',3,4,4',6,6'-HpCB	184		X				
2,2',3,4,5,5',6'-HpCB	185	183 + 185	C183				
2,2',3,4,5,6',6'-HpCB	186		X				
2,2',3,4',5,5',6'-HpCB	187		X				
2,2',3,4',5,6',6'-HpCB	188		X				
2,3,3',4,4',5,5'-HpCB	189		X				
2,3,3',4,4',5,6'-HpCB	190		X				
2,3,3',4,4',5',6'-HpCB	191		X				
2,3,3',4,5,5',6'-HpCB	192		X				
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OxCB	194		X				
2,2',3,3',4,4',5,6'-OxCB	195		X				
2,2',3,3',4,4',5,6'-OxCB	196		X				
2,2',3,3',4,4',6',6'-OxCB	197	197 + 200	C X				
2,2',3,3',4,5,5',6'-OxCB	198	198 + 199	C X				
2,2',3,3',4,5,5',6'-OxCB	199	198 + 199	C198				
2,2',3,3',4,5,6',6'-OxCB	200	197 + 200	C197				
2,2',3,3',4,5,6',6'-OxCB	201		X				
2,2',3,3',5,5',6',6'-OxCB	202		X				
2,2',3,4,4',5,5',6'-OxCB	203		X				
2,2',3,4,4',5,6',6'-OxCB	204		X				
2,3,3',4,4',5,5',6'-OxCB	205		X				
2,2',3,3',4,4',5,5',6'-NoCB	206		X				
2,2',3,3',4,4',5,6',6'-NoCB	207		X				
2,2',3,3',4,5,5',6',6'-NoCB	208		X				
2,2',3,3',4,4',5,5',6',6'-DeCB	209		X				

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; C = co-eluting congener; X = result reported separately.

Approved by: _____ Shelley Facchin _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16681A.xsl; Created: 15-Oct-2008 10:21:32; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_L11590-12_Form1A_PB8B_262S9_SJ909748_Lipid.html; Workgroup: WG26343; Design ID: 925]

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 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM-B01
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Matrix: BLOOD

Sample Receipt Date: 15-Aug-2008

Extraction Date: 03-Sep-2008

Analysis Date: 10-Oct-2008 Time: 02:25:52

Extract Volume (uL): 200

Injection Volume (uL): 1.0

Dilution Factor: 10

Concentration Units: pg/g (wet weight basis)

Project No. POP1406
Lab Sample I.D.: L11590-12 LW

Sample Size: 44.1 g (wet)

Initial Calibration Date: 30-Jul-2008

Instrument ID: HR GC/MS

GC Column ID: SPB OCTYL

Sample Data Filename: PB8B_271A S: 4

Blank Data Filename: PB8B_261 S: 5

Cal. Ver. Data Filename: PB8B_271 S: 1

% Lipid: 0.32

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2-MoCB	1		X				
3-MoCB	2		X				
4-MoCB	3		X				
2,2'-DiCB	4		X				
2,3-DiCB	5		X				
2,3'-DiCB	6		X				
2,4-DiCB	7		X				
2,4'-DiCB	8		X				
2,5-DiCB	9		X				
2,6-DiCB	10		X				
3,3'-DiCB	11		X				
3,4-DiCB	12	12 + 13	C X				
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		X				
4,4'-DiCB	15		X				
2,2',3-TriCB	16		X				
2,2',4-TriCB	17		X				
2,2',5-TriCB	18	18 + 30	C X				
2,2',6-TriCB	19		X				
2,3,3'-TriCB	20	20 + 28	C X				
2,3,4-TriCB	21	21 + 33	C X				
2,3,4'-TriCB	22		X				
2,3,5-TriCB	23		X				
2,3,6-TriCB	24		X				
2,3',4-TriCB	25		X				
2,3',5-TriCB	26	26 + 29	C X				
2,3',6-TriCB	27		X				
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		X				
2,4',6-TriCB	32		X				
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		X				
3,3',4-TriCB	35		X				
3,3',5-TriCB	36		X				
3,4,4'-TriCB	37		X				
3,4,5-TriCB	38		X				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,4',5-TriCB	39		X				
2,2',3,3'-TeCB	40	40 + 41 + 71	C X				
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		X				
2,2',3,5'-TeCB	43		X				
2,2',3,5'-TeCB	44	44 + 47 + 65	C X				
2,2',3,6'-TeCB	45	45 + 51	C X				
2,2',3,6'-TeCB	46		X				
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48		X				
2,2',4,5'-TeCB	49	49 + 69	C X				
2,2',4,6'-TeCB	50	50 + 53	C X				
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		X				
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		X				
2,3,3',4'-TeCB	55		X				
2,3,3',4'-TeCB	56		X				
2,3,3',5'-TeCB	57		X				
2,3,3',5'-TeCB	58		X				
2,3,3',6'-TeCB	59	59 + 62 + 75	C X				
2,3,4,4'-TeCB	60		X				
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C X				
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63		X				
2,3,4',6'-TeCB	64		X				
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		X				
2,3',4,5'-TeCB	67		X				
2,3',4,5'-TeCB	68		X				
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		X				
2,3',5,6'-TeCB	73		X				
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		X				
3,3',4,5'-TeCB	78		X				
3,3',4,5'-TeCB	79		X				
3,3',5,5'-TeCB	80		X				
3,4,4',5'-TeCB	81		X				
2,2',3,3',4'-PeCB	82		X				
2,2',3,3',5'-PeCB	83	83 + 99	C X				
2,2',3,3',6'-PeCB	84		X				
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C X				
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	C X				
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	C86				
2,2',3,4,6'-PeCB	88	88 + 91	C X				
2,2',3,4,6'-PeCB	89		X				
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C X				
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		X				
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C X				
2,2',3,5,6'-PeCB	94		X				
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		X				
2,2',3',4,5'-PeCB	97	86 + 87 + 97 + 108 + 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				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,2',4,5',6-PeCB	103		X				
2,2',4,6,6'-PeCB	104		X				
2,3,3',4,4'-PeCB	105		X				
2,3,3',4,5-PeCB	106		X				
2,3,3',4',5-PeCB	107	107 + 124	C X				
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109		X				
2,3,3',4',6-PeCB	110	110 + 115	C X				
2,3,3',5,5'-PeCB	111		X				
2,3,3',5,6-PeCB	112		X				
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		X				
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		X				
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		X				
2,3',4,5',6-PeCB	121		X				
2',3,3',4,5-PeCB	122		X				
2',3,4,4',5-PeCB	123		X				
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		X				
3,3',4,5,5'-PeCB	127		X				
2,2',3,3',4,4'-HxCB	128	128 + 166	C NDR D	0.337	0.108	3.02	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C D	14.0	0.107	1.22	0.929
2,2',3,3',4,5'-HxCB	130		D	0.493	0.134	1.36	0.913
2,2',3,3',4,6-HxCB	131		ND D		0.129		
2,2',3,3',4,6'-HxCB	132		ND D		0.136		
2,2',3,3',5,5'-HxCB	133		NDR D	0.198	0.125	1.99	1.191
2,2',3,3',5,6-HxCB	134	134 + 143	C ND D		0.129		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C D	1.52	0.0899	1.28	1.103
2,2',3,3',6,6'-HxCB	136		ND D		0.0663		
2,2',3,4,4',5-HxCB	137		NDR D	0.708	0.133	1.05	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C ND D		0.120		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		NDR D	0.172	0.123	1.99	0.903
2,2',3,4,5,6-HxCB	142		ND D		0.127		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		ND D		0.0899		
2,2',3,4,6,6'-HxCB	145		ND D		0.0714		
2,2',3,4',5,5'-HxCB	146		D	2.28	0.108	1.42	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C NDR D	1.38	0.119	1.54	1.133
2,2',3,4',5,6'-HxCB	148		ND D		0.0922		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		ND D		0.0688		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		ND D		0.0635		
2,2',4,4',5,5'-HxCB	153	153 + 168	C D	16.4	0.0953	1.28	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		X				
2,3,3',4,4',5-HxCB	156	156 + 157	C X				
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		NDR D	0.348	0.0847	1.91	0.938
2,3,3',4,5,5'-HxCB	159		ND D		0.0899		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				
2,3,3',4,5',6-HxCB	161		ND D		0.0924		
2,3,3',4',5,5'-HxCB	162		ND D		0.0906		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		ND D		0.0892		
2,3,3',5,5',6-HxCB	165		ND D		0.104		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,3',4,4',5,5'-HxCB	167		X				
2,3',4,4',5',6'-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		ND D		1.22		
2,2',3,3',4,4',5'-HpCB	170		D	7.39	0.103	1.04	0.936
2,2',3,3',4,4',6'-HpCB	171	171 + 173	C NDR D	0.582	0.109	0.56	1.162
2,2',3,3',4,5,5'-HpCB	172		NDR D	0.971	0.108	0.79	0.897
2,2',3,3',4,5,6'-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		D	0.142	0.102	1.07	1.133
2,2',3,3',4,5',6'-HpCB	175		ND D		0.103		
2,2',3,3',4,6',6'-HpCB	176		ND D		0.0800		
2,2',3,3',4',5,6'-HpCB	177		NDR D	1.16	0.102	0.65	1.145
2,2',3,3',5,5',6'-HpCB	178		D	1.06	0.105	0.97	1.085
2,2',3,3',5,6',6'-HpCB	179		ND D		0.0774		
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C D	14.6	0.0864	1.00	0.910
2,2',3,4,4',5,6'-HpCB	181		ND D		0.103		
2,2',3,4,4',5,6'-HpCB	182		D	0.721	0.102	0.92	1.116
2,2',3,4,4',5',6'-HpCB	183	183 + 185	C D	2.62	0.103	1.01	1.126
2,2',3,4,4',6',6'-HpCB	184		NDR D	0.097	0.0784	0.55	1.024
2,2',3,4,5,5',6'-HpCB	185	183 + 185	C183				
2,2',3,4,5,6',6'-HpCB	186		ND D		0.0825		
2,2',3,4',5,5',6'-HpCB	187		NDR D	5.69	0.0980	0.87	1.110
2,2',3,4',5,6',6'-HpCB	188		NDR D	0.678	0.0608	0.75	1.001
2,3,3',4,4',5,5'-HpCB	189		D	1.77	0.0327	1.20	1.000
2,3,3',4,4',5,6'-HpCB	190		D	1.23	0.0775	0.97	0.947
2,3,3',4,4',5',6'-HpCB	191		NDR D	0.317	0.0794	1.45	0.917
2,3,3',4,5,5',6'-HpCB	192		ND D		0.0887		
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		D	3.13	0.0550	0.95	0.991
2,2',3,3',4,4',5,6'-OcCB	195		NDR D	0.486	0.0655	1.10	0.944
2,2',3,3',4,4',5,6'-OcCB	196		D	2.92	0.114	0.89	0.914
2,2',3,3',4,4',6',6'-OcCB	197	197 + 200	C ND D		0.0963		
2,2',3,3',4,5,5',6'-OcCB	198	198 + 199	C D	4.37	0.118	0.87	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6',6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6',6'-OcCB	201		ND D		0.0956		
2,2',3,3',5,5',6',6'-OcCB	202		NDR D	1.01	0.0895	1.17	1.000
2,2',3,4,4',5,5',6'-OcCB	203		NDR D	1.89	0.109	1.03	0.918
2,2',3,4,4',5,6',6'-OcCB	204		ND D		0.0972		
2,3,3',4,4',5,5',6'-OcCB	205		D	1.41	0.0581	0.88	1.000
2,2',3,3',4,4',5,5',6'-NoCB	206		D	1.83	0.340	0.74	1.000
2,2',3,3',4,4',5,6',6'-NoCB	207		ND D		0.273		
2,2',3,3',4,5,5',6',6'-NoCB	208		D	0.983	0.251	0.79	1.000
2,2',3,3',4,4',5,5',6',6'-DeCB	209		NDR D	1.23	0.0761	0.84	1.000

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; D = dilution data; C = co-eluting congener; X = result reported separately.

Approved by: _____ Shelley Facchin _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16681A.xsl; Created: 15-Oct-2008 10:21:32; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_L11590-12_Form1A_PB8B_271AS4_SJ913320.html; Workgroup: WG26343; Design ID: 925]

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 1A
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM-B01
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811
Contract No.: 2607

Matrix: BLOOD
Sample Receipt Date: 15-Aug-2008
Extraction Date: 03-Sep-2008
Analysis Date: 10-Oct-2008 Time: 02:25:52
Extract Volume (uL): 200
Injection Volume (uL): 1.0
Dilution Factor: 10
Concentration Units: pg/g (lipid weight basis)

Project No. POP1406
Lab Sample I.D.: L11590-12 LW
Sample Size: 0.141 g (lipid)
Initial Calibration Date: 30-Jul-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8B_271A S: 4
Blank Data Filename: PB8B_261 S: 5
Cal. Ver. Data Filename: PB8B_271 S: 1
% Lipid: 0.32

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2-MoCB	1		X				
3-MoCB	2		X				
4-MoCB	3		X				
2,2'-DiCB	4		X				
2,3-DiCB	5		X				
2,3'-DiCB	6		X				
2,4-DiCB	7		X				
2,4'-DiCB	8		X				
2,5-DiCB	9		X				
2,6-DiCB	10		X				
3,3'-DiCB	11		X				
3,4-DiCB	12	12 + 13	C X				
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		X				
4,4'-DiCB	15		X				
2,2',3-TriCB	16		X				
2,2',4-TriCB	17		X				
2,2',5-TriCB	18	18 + 30	C X				
2,2',6-TriCB	19		X				
2,3,3'-TriCB	20	20 + 28	C X				
2,3,4-TriCB	21	21 + 33	C X				
2,3,4'-TriCB	22		X				
2,3,5-TriCB	23		X				
2,3,6-TriCB	24		X				
2,3',4-TriCB	25		X				
2,3',5-TriCB	26	26 + 29	C X				
2,3',6-TriCB	27		X				
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		X				
2,4',6-TriCB	32		X				
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		X				
3,3',4-TriCB	35		X				
3,3',5-TriCB	36		X				
3,4,4'-TriCB	37		X				
3,4,5-TriCB	38		X				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,4',5-TriCB	39		X				
2,2',3,3'-TeCB	40	40 + 41 + 71	C X				
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42		X				
2,2',3,5'-TeCB	43		X				
2,2',3,5'-TeCB	44	44 + 47 + 65	C X				
2,2',3,6'-TeCB	45	45 + 51	C X				
2,2',3,6'-TeCB	46		X				
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48		X				
2,2',4,5'-TeCB	49	49 + 69	C X				
2,2',4,6'-TeCB	50	50 + 53	C X				
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52		X				
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		X				
2,3,3',4'-TeCB	55		X				
2,3,3',4'-TeCB	56		X				
2,3,3',5'-TeCB	57		X				
2,3,3',5'-TeCB	58		X				
2,3,3',6'-TeCB	59	59 + 62 + 75	C X				
2,3,4,4'-TeCB	60		X				
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C X				
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63		X				
2,3,4',6'-TeCB	64		X				
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		X				
2,3',4,5'-TeCB	67		X				
2,3',4,5'-TeCB	68		X				
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		X				
2,3',5',6'-TeCB	73		X				
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		X				
3,3',4,5'-TeCB	78		X				
3,3',4,5'-TeCB	79		X				
3,3',5,5'-TeCB	80		X				
3,4,4',5'-TeCB	81		X				
2,2',3,3',4'-PeCB	82		X				
2,2',3,3',5'-PeCB	83	83 + 99	C X				
2,2',3,3',6'-PeCB	84		X				
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C X				
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	C X				
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	C86				
2,2',3,4,6'-PeCB	88	88 + 91	C X				
2,2',3,4,6'-PeCB	89		X				
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C X				
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		X				
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C X				
2,2',3,5,6'-PeCB	94		X				
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		X				
2,2',3',4,5'-PeCB	97	86 + 87 + 97 + 108 + 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				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,2',4,5',6-PeCB	103		X				
2,2',4,6,6'-PeCB	104		X				
2,3,3',4,4'-PeCB	105		X				
2,3,3',4,5-PeCB	106		X				
2,3,3',4',5-PeCB	107	107 + 124	C X				
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109		X				
2,3,3',4',6-PeCB	110	110 + 115	C X				
2,3,3',5,5'-PeCB	111		X				
2,3,3',5,6-PeCB	112		X				
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		X				
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		X				
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		X				
2,3',4,5',6-PeCB	121		X				
2',3,3',4,5-PeCB	122		X				
2',3,4,4',5-PeCB	123		X				
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		X				
3,3',4,5,5'-PeCB	127		X				
2,2',3,3',4,4'-HxCB	128	128 + 166	C NDR D	106	33.9	3.02	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C D	4390	33.5	1.22	0.929
2,2',3,3',4,5'-HxCB	130		D	155	42.0	1.36	0.913
2,2',3,3',4,6-HxCB	131		ND D		40.4		
2,2',3,3',4,6'-HxCB	132		ND D		42.6		
2,2',3,3',5,5'-HxCB	133		NDR D	62.1	39.2	1.99	1.191
2,2',3,3',5,6-HxCB	134	134 + 143	C ND D		40.4		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C D	476	28.2	1.28	1.103
2,2',3,3',6,6'-HxCB	136		ND D		20.8		
2,2',3,4,4',5-HxCB	137		NDR D	222	41.7	1.05	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C ND D		37.6		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		NDR D	53.9	38.6	1.99	0.903
2,2',3,4,5,6-HxCB	142		ND D		39.8		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		ND D		28.2		
2,2',3,4,6,6'-HxCB	145		ND D		22.4		
2,2',3,4',5,5'-HxCB	146		D	715	33.9	1.42	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C NDR D	433	37.3	1.54	1.133
2,2',3,4',5,6'-HxCB	148		ND D		28.9		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		ND D		21.6		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		ND D		19.9		
2,2',4,4',5,5'-HxCB	153	153 + 168	C D	5140	29.9	1.28	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		X				
2,3,3',4,4',5-HxCB	156	156 + 157	C X				
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		NDR D	109	26.5	1.91	0.938
2,3,3',4,5,5'-HxCB	159		ND D		28.2		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				
2,3,3',4,5',6-HxCB	161		ND D		29.0		
2,3,3',4',5,5'-HxCB	162		ND D		28.4		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		ND D		28.0		
2,3,3',5,5',6-HxCB	165		ND D		32.6		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,3',4,4',5,5'-HxCB	167		X				
2,3',4,4',5',6'-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		ND D		382		
2,2',3,3',4,4',5'-HpCB	170		D	2320	32.3	1.04	0.936
2,2',3,3',4,4',6'-HpCB	171	171 + 173	C NDR D	182	34.2	0.56	1.162
2,2',3,3',4,5,5'-HpCB	172		NDR D	304	33.9	0.79	0.897
2,2',3,3',4,5,6'-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		D	44.5	32.0	1.07	1.133
2,2',3,3',4,5',6'-HpCB	175		ND D		32.3		
2,2',3,3',4,6,6'-HpCB	176		ND D		25.1		
2,2',3,3',4',5,6'-HpCB	177		NDR D	364	32.0	0.65	1.145
2,2',3,3',5,5',6'-HpCB	178		D	332	32.9	0.97	1.085
2,2',3,3',5,6,6'-HpCB	179		ND D		24.3		
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C D	4580	27.1	1.00	0.910
2,2',3,4,4',5,6'-HpCB	181		ND D		32.3		
2,2',3,4,4',5,6'-HpCB	182		D	226	32.0	0.92	1.116
2,2',3,4,4',5',6'-HpCB	183	183 + 185	C D	821	32.3	1.01	1.126
2,2',3,4,4',6,6'-HpCB	184		NDR D	30.4	24.6	0.55	1.024
2,2',3,4,5,5',6'-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		ND D		25.9		
2,2',3,4',5,5',6'-HpCB	187		NDR D	1780	30.7	0.87	1.110
2,2',3,4',5,6,6'-HpCB	188		NDR D	213	19.1	0.75	1.001
2,3,3',4,4',5,5'-HpCB	189		D	555	10.2	1.20	1.000
2,3,3',4,4',5,6'-HpCB	190		D	386	24.3	0.97	0.947
2,3,3',4,4',5',6'-HpCB	191		NDR D	99.4	24.9	1.45	0.917
2,3,3',4,5,5',6'-HpCB	192		ND D		27.8		
2,3,3',4',5,5',6'-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		D	981	17.2	0.95	0.991
2,2',3,3',4,4',5,6'-OcCB	195		NDR D	152	20.5	1.10	0.944
2,2',3,3',4,4',5,6'-OcCB	196		D	915	35.7	0.89	0.914
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C ND D		30.2		
2,2',3,3',4,5,5',6'-OcCB	198	198 + 199	C D	1370	37.0	0.87	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		ND D		30.0		
2,2',3,3',5,5',6,6'-OcCB	202		NDR D	317	28.1	1.17	1.000
2,2',3,4,4',5,5',6'-OcCB	203		NDR D	592	34.2	1.03	0.918
2,2',3,4,4',5,6,6'-OcCB	204		ND D		30.5		
2,3,3',4,4',5,5',6'-OcCB	205		D	442	18.2	0.88	1.000
2,2',3,3',4,4',5,5',6'-NoCB	206		D	574	107	0.74	1.000
2,2',3,3',4,4',5,6,6'-NoCB	207		ND D		85.6		
2,2',3,3',4,5,5',6,6'-NoCB	208		D	308	78.7	0.79	1.000
2,2',3,3',4,4',5,5',6,6'-DeCB	209		NDR D	386	23.9	0.84	1.000

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; D = dilution data; C = co-eluting congener; X = result reported separately.

Approved by: _____ Shelley Facchin _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16681A.xsl; Created: 15-Oct-2008 10:21:32; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_L11590-12_Form1A_PB8B_271AS4_SJ913320_Lipid.html; Workgroup: WG26343; Design ID: 925]

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 2
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM-B01
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: BLOOD
Sample Receipt Date: 15-Aug-2008
Extraction Date: 03-Sep-2008
Analysis Date: 05-Oct-2008 Time: 04:28:17
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg absolute

Project No. POP1406
Lab Sample I.D.: L11590-12 L
Sample Size: 44.1 g (wet)
Initial Calibration Date: 30-Jul-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8B_262 S: 9
Blank Data Filename: PB8B_261 S: 5
Cal. Ver. Data Filename: PB8B_262 S: 1
% Lipid: 0.32

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	700	35.0	3.21	0.718
13C12-4-MoCB	3L			2000	761	38.0	3.18	0.858
13C12-2,2'-DiCB	4L			2000	1030	51.7	1.65	0.874
13C12-4,4'-DiCB	15L			2000	1280	63.9	1.61	1.255
13C12-2,2',6-TriCB	19L			2000	1270	63.4	1.06	1.072
13C12-3,4,4'-TriCB	37L			2000	1400	70.1	1.05	1.092
13C12-2,2',6,6'-TeCB	54L			2000	1360	68.1	0.81	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1690	84.7	0.82	1.397
13C12-3,4,4',5'-TeCB	81L			2000	1730	86.4	0.83	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1510	75.6	1.59	0.809
13C12-2,3,3',4,4'-PeCB	105L			2000	1680	83.9	1.64	1.200
13C12-2,3,4,4',5'-PeCB	114L			2000	1730	86.3	1.67	1.179
13C12-2,3',4,4',5'-PeCB	118L			2000	1740	87.1	1.65	1.162
13C12-2',3,4,4',5'-PeCB	123L			2000	1740	86.9	1.63	1.151
13C12-3,3',4,4',5'-PeCB	126L			2000	1580	79.1	1.60	1.301
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1750	87.3	1.24	0.786
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	4000	3000	74.9	1.31	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1590	79.4	1.29	1.078
13C12-3,3',4,4',5,5'-HxCB	169L		X					
13C12-2,2',3,3',4,4',5'-HpCB	170L		X					
13C12-2,2',3,4,4',5,5'-HpCB	180L		X					
13C12-2,2',3,4',5,6,6'-HpCB	188L		X					
13C12-2,3,3',4,4',5,5'-HpCB	189L		X					
13C12-2,2',3,3',5,5',6,6'-OxCB	202L		X					
13C12-2,3,3',4,4',5,5',6-OxCB	205L		X					
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L		X					
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L		X					
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L		X					
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1910	95.7	1.06	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1960	98.2	1.63	1.088
13C12-2,2',3,3',5,5',6-HpCB	178L		X					

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

Approved by: _____Shelley Facchin_____ QA/QC Chemist



Form 2
PCB CONGENER ANALYSIS REPORT

CLIENT SAMPLE NO.
08CAM-B01
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: BLOOD
Sample Receipt Date: 15-Aug-2008
Extraction Date: 03-Sep-2008
Analysis Date: 10-Oct-2008 Time: 02:25:52
Extract Volume (uL): 200
Injection Volume (uL): 1.0
Dilution Factor: 10
Concentration Units: pg absolute

Project No. POP1406
Lab Sample I.D.: L11590-12 LW
Sample Size: 44.1 g (wet)
Initial Calibration Date: 30-Jul-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8B_271A S: 4
Blank Data Filename: PB8B_261 S: 5
Cal. Ver. Data Filename: PB8B_271 S: 1
% Lipid: 0.32

LABELLED COMPOUND	IUPAC NO. 1	CO-ELUTIONS	LAB FLAG 2	SPIKE CONC.	CONC. FOUND	R(%) 3	ION ABUND. RATIO	RRT
13C12-2-MoCB	1L		X					
13C12-4-MoCB	3L		X					
13C12-2,2'-DiCB	4L		X					
13C12-4,4'-DiCB	15L		X					
13C12-2,2',6-TriCB	19L		X					
13C12-3,4,4'-TriCB	37L		X					
13C12-2,2',6,6'-TeCB	54L		X					
13C12-3,3',4,4'-TeCB	77L		X					
13C12-3,4,4',5-TeCB	81L		X					
13C12-2,2',4,6,6'-PeCB	104L		X					
13C12-2,3,3',4,4'-PeCB	105L		X					
13C12-2,3,4,4',5-PeCB	114L		X					
13C12-2,3',4,4',5-PeCB	118L		X					
13C12-2',3,4,4',5-PeCB	123L		X					
13C12-3,3',4,4',5-PeCB	126L		X					
13C12-2,2',4,4',6,6'-HxCB	155L		D	2000	1800	89.9	1.28	0.786
13C12-2,3,3',4,4',5-HxCB	156L	156L + 157L	C D	4000	3270	81.8	1.28	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L		D	2000	1610	80.5	1.22	1.078
13C12-3,3',4,4',5,5'-HxCB	169L		D	2000	2210	111	1.27	1.191
13C12-2,2',3,3',4,4',5-HpCB	170L		D	2000	2430	121	1.10	0.896
13C12-2,2',3,4,4',5,5'-HpCB	180L		D	2000	2150	107	1.01	0.871
13C12-2,2',3,4',5,6,6'-HpCB	188L		D	2000	1570	78.7	1.12	0.711
13C12-2,3,3',4,4',5,5'-HpCB	189L		D	2000	1920	96.2	1.06	0.958
13C12-2,2',3,3',5,5',6,6'-OxCB	202L		D	2000	1660	82.9	0.85	0.817
13C12-2,3,3',4,4',5,5',6-OxCB	205L		D	2000	1510	75.5	0.90	1.010
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L		D	2000	1690	84.5	0.84	1.043
13C12-2,2',3,3',4,4',5,5',6,6'-NoCB	208L		D	2000	2080	104	0.75	0.949
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L		D	2000	1730	86.3	1.26	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L		X					
13C12-2,3,3',5,5'-PeCB	111L		X					
13C12-2,2',3,3',5,5',6-HpCB	178L		D	2000	2330	117	1.08	1.012

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

Approved by: _____ Shelley Facchin _____ QA/QC Chemist



Form 1A
PCB CONGENER ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607

Project No. N/A

Lab Sample I.D.: WG26343-101 L

Matrix: BLOOD

Sample Size: 40.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 30-Jul-2008

Extraction Date: 03-Sep-2008

Instrument ID: HR GC/MS

Analysis Date: 04-Oct-2008 Time: 12:49:23

GC Column ID: SPB OCTYL

Extract Volume (uL): 20

Sample Data Filename: PB8B_261 S: 5

Injection Volume (uL): 1.0

Blank Data Filename: PB8B_261 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: PB8B_261 S: 1

Concentration Units: pg/g

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2-MoCB	1		NDR	0.082	0.0288	2.48	1.001
3-MoCB	2		NDR	0.056	0.0346	5.46	0.988
4-MoCB	3		ND		0.0435		
2,2'-DiCB	4		ND		0.131		
2,3-DiCB	5		ND		0.0992		
2,3'-DiCB	6		ND		0.0918		
2,4-DiCB	7		ND		0.0941		
2,4'-DiCB	8			0.189	0.0842	1.53	1.209
2,5-DiCB	9		ND		0.0916		
2,6-DiCB	10		ND		0.0956		
3,3'-DiCB	11			0.338	0.0896	1.52	0.970
3,4-DiCB	12	12 + 13	C ND		0.0892		
3,4'-DiCB	13	12 + 13	C12				
3,5-DiCB	14		ND		0.0891		
4,4'-DiCB	15		ND		0.103		
2,2',3-TriCB	16			0.073	0.0291	1.04	1.166
2,2',4-TriCB	17		NDR	0.075	0.0270	1.25	1.138
2,2',5-TriCB	18	18 + 30	C	0.149	0.0233	1.02	1.113
2,2',6-TriCB	19		NDR	0.045	0.0338	1.43	1.002
2,3,3'-TriCB	20	20 + 28	C	0.264	0.0386	0.94	0.847
2,3,4-TriCB	21	21 + 33	C	0.135	0.0371	0.99	0.857
2,3,4'-TriCB	22			0.109	0.0422	1.09	0.871
2,3,5-TriCB	23		ND		0.0416		
2,3,6-TriCB	24		ND		0.0212		
2,3',4-TriCB	25		ND		0.0358		
2,3',5-TriCB	26	26 + 29	C	0.049	0.0399	0.88	1.301
2,3',6-TriCB	27		ND		0.0190		
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			0.210	0.0369	1.07	0.836
2,4',6-TriCB	32			0.056	0.0400	1.20	1.198
2',3,4-TriCB	33	21 + 33	C21				
2',3,5-TriCB	34		ND		0.0413		
3,3',4-TriCB	35		ND		0.0351		
3,3',5-TriCB	36		ND		0.0352		
3,4,4'-TriCB	37			0.046	0.0395	1.03	1.000
3,4,5-TriCB	38		ND		0.0354		



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
3,4',5'-TriCB	39		ND		0.0369		
2,2',3,3'-TeCB	40	40 + 41 + 71	C NDR	0.119	0.0231	0.91	1.337
2,2',3,4'-TeCB	41	40 + 41 + 71	C40				
2,2',3,4'-TeCB	42			0.039	0.0237	0.73	1.311
2,2',3,5'-TeCB	43		ND		0.0274		
2,2',3,5'-TeCB	44	44 + 47 + 65	C	0.215	0.0216	0.74	1.286
2,2',3,6'-TeCB	45	45 + 51	C ND		0.0254		
2,2',3,6'-TeCB	46		ND		0.0286		
2,2',4,4'-TeCB	47	44 + 47 + 65	C44				
2,2',4,5'-TeCB	48		NDR	0.037	0.0239	1.17	1.275
2,2',4,5'-TeCB	49	49 + 69	C NDR	0.112	0.0207	0.91	1.260
2,2',4,6'-TeCB	50	50 + 53	C NDR	0.035	0.0250	0.60	1.113
2,2',4,6'-TeCB	51	45 + 51	C45				
2,2',5,5'-TeCB	52			0.219	0.0229	0.75	1.234
2,2',5,6'-TeCB	53	50 + 53	C50				
2,2',6,6'-TeCB	54		ND		0.0217		
2,3,3',4'-TeCB	55		ND		0.0323		
2,3,3',4'-TeCB	56			0.066	0.0322	0.85	0.904
2,3,3',5'-TeCB	57		ND		0.0319		
2,3,3',5'-TeCB	58		ND		0.0328		
2,3,3',6'-TeCB	59	59 + 62 + 75	C	0.031	0.0179	0.86	1.303
2,3,4,4'-TeCB	60		ND		0.0320		
2,3,4,5'-TeCB	61	61 + 70 + 74 + 76	C	0.226	0.0311	0.79	0.875
2,3,4,6'-TeCB	62	59 + 62 + 75	C59				
2,3,4',5'-TeCB	63		ND		0.0308		
2,3,4',6'-TeCB	64		NDR	0.073	0.0170	1.16	1.349
2,3,5,6'-TeCB	65	44 + 47 + 65	C44				
2,3',4,4'-TeCB	66		NDR	0.115	0.0302	1.11	0.885
2,3',4,5'-TeCB	67		ND		0.0292		
2,3',4,5'-TeCB	68		ND		0.0315		
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		ND		0.0314		
2,3',5,6'-TeCB	73		ND		0.0190		
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		ND		0.0326		
3,3',4,5'-TeCB	78		ND		0.0297		
3,3',4,5'-TeCB	79		ND		0.0250		
3,3',5,5'-TeCB	80		ND		0.0284		
3,4,4',5'-TeCB	81		ND		0.0336		
2,2',3,3',4'-PeCB	82		ND		0.0218		
2,2',3,3',5'-PeCB	83	83 + 99	C NDR	0.075	0.0207	2.23	0.886
2,2',3,3',6'-PeCB	84			0.036	0.0232	1.44	1.163
2,2',3,4,4'-PeCB	85	85 + 116 + 117	C NDR	0.017	0.0169	2.82	0.920
2,2',3,4,5'-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	C NDR	0.110	0.0175	1.97	0.901
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	C86				
2,2',3,4,6'-PeCB	88	88 + 91	C	0.031	0.0210	1.73	1.154
2,2',3,4,6'-PeCB	89		ND		0.0215		
2,2',3,4',5'-PeCB	90	90 + 101 + 113	C	0.171	0.0180	1.46	0.869
2,2',3,4',6'-PeCB	91	88 + 91	C88				
2,2',3,5,5'-PeCB	92		ND		0.0209		
2,2',3,5,6'-PeCB	93	93 + 95 + 98 + 100 + 102	C NDR	0.186	0.0207	1.27	1.121
2,2',3,5,6'-PeCB	94		ND		0.0234		
2,2',3,5',6'-PeCB	95	93 + 95 + 98 + 100 + 102	C93				
2,2',3,6,6'-PeCB	96		ND		0.0125		
2,2',3',4,5'-PeCB	97	86 + 87 + 97 + 108 + 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				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,2',4,5',6-PeCB	103		ND		0.0200		
2,2',4,6,6'-PeCB	104		ND		0.0125		
2,3,3',4,4'-PeCB	105		NDR	0.074	0.0149	1.07	1.000
2,3,3',4,5-PeCB	106		ND		0.0133		
2,3,3',4',5-PeCB	107	107 + 124	C ND		0.0144		
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109		ND		0.0125		
2,3,3',4',6-PeCB	110	110 + 115	C NDR	0.142	0.0150	1.88	0.925
2,3,3',5,5'-PeCB	111		ND		0.0149		
2,3,3',5,6-PeCB	112		ND		0.0151		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		NDR	0.026	0.0137	1.07	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		NDR	0.102	0.0145	1.95	1.000
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		ND		0.0142		
2,3',4,5',6-PeCB	121		ND		0.0158		
2',3,3',4,5-PeCB	122		ND		0.0149		
2',3,4,4',5-PeCB	123		ND		0.0153		
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		NDR	0.027	0.0170	1.80	1.000
3,3',4,5,5'-PeCB	127		ND		0.0131		
2,2',3,3',4,4'-HxCB	128	128 + 166	C NDR	0.029	0.0125	0.88	0.958
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C	0.193	0.0125	1.32	0.928
2,2',3,3',4,5'-HxCB	130		ND		0.0145		
2,2',3,3',4,6-HxCB	131		ND		0.0146		
2,2',3,3',4,6'-HxCB	132		NDR	0.060	0.0149	1.56	1.174
2,2',3,3',5,5'-HxCB	133		ND		0.0134		
2,2',3,3',5,6-HxCB	134	134 + 143	C ND		0.0138		
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C	0.068	0.0125	1.39	1.104
2,2',3,3',6,6'-HxCB	136			0.024	0.0125	1.19	1.024
2,2',3,4,4',5-HxCB	137		ND		0.0133		
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C ND		0.0130		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		NDR	0.025	0.0129	1.44	0.903
2,2',3,4,5,6-HxCB	142		ND		0.0139		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		ND		0.0125		
2,2',3,4,6,6'-HxCB	145		ND		0.0125		
2,2',3,4',5,5'-HxCB	146			0.019	0.0125	1.12	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C	0.145	0.0130	1.15	1.133
2,2',3,4',5,6'-HxCB	148		ND		0.0125		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		ND		0.0125		
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	C135				
2,2',3,5,6,6'-HxCB	152		ND		0.0125		
2,2',4,4',5,5'-HxCB	153	153 + 168	C	0.166	0.0125	1.23	0.899
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		ND		0.0125		
2,3,3',4,4',5-HxCB	156	156 + 157	C	0.069	0.0125	1.41	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		NDR	0.023	0.0125	0.86	0.938
2,3,3',4,5,5'-HxCB	159		ND		0.0125		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				
2,3,3',4,5',6-HxCB	161		ND		0.0125		
2,3,3',4',5,5'-HxCB	162		ND		0.0125		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		ND		0.0125		
2,3,3',5,5',6-HxCB	165		ND		0.0125		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				



COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT	ION ABUND. RATIO	RRT
2,3',4,4',5,5'-HxCB	167			0.022	0.0125	1.10	1.000
2,3',4,4',5',6'-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		ND		0.0261		
2,2',3,3',4,4',5-HpCB	170			0.086	0.0125	1.08	0.936
2,2',3,3',4,4',6-HpCB	171	171 + 173	C NDR	0.023	0.0125	1.33	1.162
2,2',3,3',4,5,5'-HpCB	172		ND		0.0125		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		NDR	0.055	0.0125	0.53	1.133
2,2',3,3',4,5',6-HpCB	175		ND		0.0125		
2,2',3,3',4,6,6'-HpCB	176		ND		0.0125		
2,2',3,3',4',5,6-HpCB	177			0.019	0.0125	0.91	1.145
2,2',3,3',5,5',6-HpCB	178		ND		0.0125		
2,2',3,3',5,6,6'-HpCB	179		NDR	0.022	0.0125	0.62	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C	0.152	0.0125	1.10	0.910
2,2',3,4,4',5,6-HpCB	181		ND		0.0125		
2,2',3,4,4',5,6'-HpCB	182			0.013	0.0125	0.89	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C NDR	0.048	0.0125	1.31	1.127
2,2',3,4,4',6,6'-HpCB	184		ND		0.0125		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		ND		0.0125		
2,2',3,4',5,5',6-HpCB	187			0.089	0.0125	0.95	1.110
2,2',3,4',5,6,6'-HpCB	188		ND		0.0125		
2,3,3',4,4',5,5'-HpCB	189			0.026	0.0125	1.01	1.000
2,3,3',4,4',5,6-HpCB	190		ND		0.0125		
2,3,3',4,4',5',6-HpCB	191		ND		0.0125		
2,3,3',4,5,5',6-HpCB	192		ND		0.0125		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OxCB	194			0.070	0.0125	0.94	0.991
2,2',3,3',4,4',5,6-OxCB	195		ND		0.0125		
2,2',3,3',4,4',5,6'-OxCB	196		NDR	0.017	0.0125	0.58	0.916
2,2',3,3',4,4',6'-OxCB	197	197 + 200	C ND		0.0125		
2,2',3,3',4,5,5',6-OxCB	198	198 + 199	C ND		0.0125		
2,2',3,3',4,5,5',6'-OxCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OxCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OxCB	201		ND		0.0125		
2,2',3,3',5,5',6,6'-OxCB	202		NDR	0.017	0.0125	1.99	1.000
2,2',3,4,4',5,5',6-OxCB	203		NDR	0.027	0.0125	0.39	0.919
2,2',3,4,4',5,6,6'-OxCB	204		ND		0.0125		
2,3,3',4,4',5,5',6-OxCB	205		NDR	0.016	0.0125	0.63	1.000
2,2',3,3',4,4',5,5',6-NoCB	206		ND		0.0478		
2,2',3,3',4,4',5,6,6'-NoCB	207		ND		0.0434		
2,2',3,3',4,5,5',6,6'-NoCB	208		ND		0.0417		
2,2',3,3',4,4',5,5',6,6'-DeCB	209			0.049	0.0125	0.70	1.001

(1) Where applicable, custom lab flags have been used on this report; ND = not detected; NDR = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; C = co-eluting congener.

Approved by: _____ Shelley Facchin _____ QA/QC Chemist

For Axy's Internal Use Only [XSL Template: Form16681A.xsl; Created: 15-Oct-2008 10:21:32; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_WG26343-101_Form1A_PB8B_261S5_SJ910826.html; Workgroup: WG26343; Design ID: 925]

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 2
PCB CONGENER ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 2607
Matrix: BLOOD
Sample Receipt Date: N/A
Extraction Date: 03-Sep-2008
Analysis Date: 04-Oct-2008 Time: 12:49:23
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.: WG26343-101 L
Sample Size: 40.0 g
Initial Calibration Date: 30-Jul-2008
Instrument ID: HR GC/MS
GC Column ID: SPB OCTYL
Sample Data Filename: PB8B_261 S: 5
Blank Data Filename: PB8B_261 S: 5
Cal. Ver. Data Filename: PB8B_261 S: 1

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	498	24.9	3.21	0.718
13C12-4-MoCB	3L			2000	496	24.8	3.29	0.858
13C12-2,2'-DiCB	4L			2000	745	37.3	1.59	0.873
13C12-4,4'-DiCB	15L			2000	937	46.9	1.62	1.255
13C12-2,2',6-TriCB	19L			2000	975	48.8	1.06	1.072
13C12-3,4,4'-TriCB	37L			2000	1290	64.3	1.05	1.092
13C12-2,2',6,6'-TeCB	54L			2000	957	47.9	0.82	0.811
13C12-3,3',4,4'-TeCB	77L			2000	1860	92.8	0.83	1.396
13C12-3,4,4',5'-TeCB	81L			2000	1800	89.9	0.84	1.373
13C12-2,2',4,6,6'-PeCB	104L			2000	1360	68.0	1.60	0.808
13C12-2,3,3',4,4'-PeCB	105L			2000	1870	93.6	1.64	1.199
13C12-2,3,4,4',5'-PeCB	114L			2000	1940	97.2	1.64	1.179
13C12-2,3',4,4',5'-PeCB	118L			2000	1920	96.2	1.64	1.162
13C12-2',3,4,4',5'-PeCB	123L			2000	1860	93.0	1.66	1.151
13C12-3,3',4,4',5'-PeCB	126L			2000	1710	85.7	1.61	1.300
13C12-2,2',4,4',6,6'-HxCB	155L			2000	1660	82.8	1.22	0.786
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	4000	3480	87.0	1.24	1.108
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			2000	1780	88.8	1.21	1.078
13C12-3,3',4,4',5,5'-HxCB	169L			2000	1690	84.3	1.21	1.191
13C12-2,2',3,3',4,4',5'-HpCB	170L			2000	1860	92.8	1.04	0.897
13C12-2,2',3,4,4',5,5'-HpCB	180L			2000	1920	95.8	1.06	0.872
13C12-2,2',3,4',5,6,6'-HpCB	188L			2000	1800	89.8	1.04	0.712
13C12-2,3,3',4,4',5,5'-HpCB	189L			2000	1910	95.4	1.05	0.959
13C12-2,2',3,3',5,5',6,6'-OxCB	202L			2000	1880	93.9	0.92	0.818
13C12-2,3,3',4,4',5,5',6-OxCB	205L			2000	1860	92.8	0.88	1.009
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			2000	1870	93.7	0.81	1.044
13C12-2,2',3,3',4,4',5,5',6,6'-NoCB	208L			2000	1910	95.5	0.80	0.950
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			2000	1920	95.8	1.20	1.075
CLEANUP STANDARD								
13C12-2,4,4'-TriCB	28L			2000	1210	60.7	1.04	0.925
13C12-2,3,3',5,5'-PeCB	111L			2000	1810	90.5	1.62	1.087
13C12-2,2',3,3',5,5',6-HpCB	178L			2000	2210	111	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.

Approved by: _____ Shelley Facchin _____ QA/QC Chemist



**Form 8A
PCB CONGENER ONGOING PRECISION AND RECOVERY (OPR)**

AXYS ANALYTICAL SERVICES

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

Contract No.:	2607	Lab Sample I.D.:	WG26343-102 L
Matrix:	BLOOD	Initial Calibration Date:	30-Jul-2008
Extraction Date:	03-Sep-2008	Instrument ID:	HR GC/MS
Analysis Date:	04-Oct-2008 Time: 09:35:22	GC Column ID:	SPB OCTYL
Extract Volume (uL):	20	OPR Data Filename:	PB8B_261 S: 2
Injection Volume (uL):	1.0	Blank Data Filename:	PB8B_261 S: 5
Dilution Factor:	N/A	Cal. Ver. Data Filename:	PB8B_261 S: 1

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

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG ¹	ION ABUND. RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (ng/mL)	% RECOVERY
2-MoCB	1			3.15	50.0	53.8	25.0 - 75.0	108
4-MoCB	3			3.13	50.0	52.3	25.0 - 75.0	105
2,2'-DiCB	4			1.54	50.0	52.8	25.0 - 75.0	106
4,4'-DiCB	15			1.58	50.0	49.5	25.0 - 75.0	99.1
2,2',6-TriCB	19			1.07	50.0	53.3	25.0 - 75.0	107
3,4,4'-TriCB	37			1.04	50.0	53.1	25.0 - 75.0	106
2,2',6,6'-TeCB	54			0.76	50.0	50.2	25.0 - 75.0	100
3,3',4,4'-TeCB	77			0.80	50.0	52.0	25.0 - 75.0	104
3,4,4',5-TeCB	81			0.80	50.0	52.2	25.0 - 75.0	104
2,2',4,6,6'-PeCB	104			1.59	50.0	48.2	25.0 - 75.0	96.4
2,3,3',4,4'-PeCB	105			1.57	50.0	50.6	25.0 - 75.0	101
2,3,4,4',5-PeCB	114			1.54	50.0	48.1	25.0 - 75.0	96.3
2,3',4,4',5-PeCB	118			1.57	50.0	52.1	25.0 - 75.0	104
2',3,4,4',5-PeCB	123			1.58	50.0	49.2	25.0 - 75.0	98.4
3,3',4,4',5-PeCB	126			1.57	50.0	49.5	25.0 - 75.0	98.9
2,2',4,4',6,6'-HxCB	155			1.28	50.0	45.9	25.0 - 75.0	91.9
2,3,3',4,4',5-HxCB	156	156 + 157	C	1.26	100	99.0	50.0 - 150	99.0
2,3,3',4,4',5',5'-HxCB	157	156 + 157	C156					
2,3',4,4',5,5',5'-HxCB	167			1.26	50.0	48.7	25.0 - 75.0	97.5
3,3',4,4',5,5',5'-HxCB	169			1.27	50.0	50.7	25.0 - 75.0	101
2,2',3,4',5,6,6'-HpCB	188			1.07	50.0	46.0	25.0 - 75.0	92.0
2,3,3',4,4',5,5',5'-HpCB	189			1.00	50.0	51.4	25.0 - 75.0	103
2,2',3,3',5,5',6,6'-OcCB	202			0.92	50.0	50.7	25.0 - 75.0	101
2,3,3',4,4',5,5',6-OcCB	205			0.90	50.0	48.6	25.0 - 75.0	97.1
2,2',3,3',4,4',5,5',6-NoCB	206			0.79	50.0	51.7	25.0 - 75.0	103
2,2',3,3',4,5,5',6,6'-NoCB	208			0.79	50.0	49.7	25.0 - 75.0	99.4
2,2',3,3',4,4',5,5',6,6'-DeCB	209			0.70	50.0	51.2	25.0 - 75.0	102

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

Approved by: _____ Shelley Facchin _____ QA/QC Chemist

For Axys Internal Use Only [XSL Template: Form16688A.xsl; Created: 15-Oct-2008 10:21:32; Application: XMLTransformer-1.9.15; Report Filename: 1668_PCB1668_PCBTF_WG26343-102_Form8A_SJ910820.html; Workgroup: WG26343; Design ID: 925]

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)

AXYS ANALYTICAL SERVICES

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

Contract No.:	2607	Lab Sample I.D.:	WG26343-102 L
Matrix:	BLOOD	Initial Calibration Date:	30-Jul-2008
Extraction Date:	03-Sep-2008	Instrument ID:	HR GC/MS
Analysis Date:	04-Oct-2008 Time: 09:35:22	GC Column ID:	SPB OCTYL
Extract Volume (uL):	20	OPR Data Filename:	PB8B_261 S: 2
Injection Volume (uL):	1.0	Blank Data Filename:	PB8B_261 S: 5
Dilution Factor:	N/A	Cal. Ver. Data Filename:	PB8B_261 S: 1

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

LABELLED 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			3.19	100	22.5	15.0 - 140	22.5
13C12-4-MoCB	3L			3.12	100	24.0	15.0 - 140	24.0
13C12-2,2'-DiCB	4L			1.66	100	35.7	30.0 - 140	35.7
13C12-4,4'-DiCB	15L			1.63	100	54.1	30.0 - 140	54.1
13C12-2,2',6-TriCB	19L			1.06	100	50.7	30.0 - 140	50.7
13C12-3,4,4'-TriCB	37L			1.05	100	66.0	30.0 - 140	66.0
13C12-2,2',6,6'-TeCB	54L			0.83	100	46.9	30.0 - 140	46.9
13C12-3,3',4,4'-TeCB	77L			0.83	100	86.3	30.0 - 140	86.3
13C12-3,4,4',5'-TeCB	81L			0.83	100	89.2	30.0 - 140	89.2
13C12-2,2',4,6,6'-PeCB	104L			1.60	100	72.3	30.0 - 140	72.3
13C12-2,3,3',4,4'-PeCB	105L			1.64	100	88.2	30.0 - 140	88.2
13C12-2,3,4,4',5'-PeCB	114L			1.65	100	91.6	30.0 - 140	91.6
13C12-2,3',4,4',5'-PeCB	118L			1.62	100	92.3	30.0 - 140	92.3
13C12-2',3,4,4',5'-PeCB	123L			1.64	100	92.2	30.0 - 140	92.2
13C12-3,3',4,4',5'-PeCB	126L			1.62	100	81.0	30.0 - 140	81.0
13C12-2,2',4,4',6,6'-HxCB	155L			1.21	100	90.2	30.0 - 140	90.2
13C12-2,3,3',4,4',5'-HxCB	156L	156L + 157L	C	1.23	200	173	60.0 - 280	86.3
13C12-2,3,3',4,4',5'-HxCB	157L	156L + 157L	C156L					
13C12-2,3',4,4',5,5'-HxCB	167L			1.25	100	88.3	30.0 - 140	88.3
13C12-3,3',4,4',5,5'-HxCB	169L			1.19	100	90.4	30.0 - 140	90.4
13C12-2,2',3,4',5,6,6'-HpCB	188L			1.06	100	74.2	30.0 - 140	74.2
13C12-2,3,3',4,4',5,5'-HpCB	189L			1.05	100	91.5	30.0 - 140	91.5
13C12-2,2',3,3',5,5',6,6'-OcCB	202L			0.90	100	77.1	30.0 - 140	77.1
13C12-2,3,3',4,4',5,5',6-OcCB	205L			0.89	100	85.9	30.0 - 140	85.9
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L			0.82	100	82.8	30.0 - 140	82.8
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L			0.80	100	86.5	30.0 - 140	86.5
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L			1.18	100	85.5	30.0 - 140	85.5

CLEANUP STANDARD

13C12-2,4,4'-TriCB	28L			1.06	100	70.3	40.0 - 125	70.3
13C12-2,3,3',5,5'-PeCB	111L			1.62	100	96.4	40.0 - 125	96.4
13C12-2,2',3,3',5,5',6-HpCB	178L			1.07	100	111	40.0 - 125	111

(1) Suffix "L" indicates labeled compound.

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

Approved by: _____Shelley Facchin_____ QA/QC Chemist



PARAMETERIZATION OF RISK ASSESSMENT MODEL

The following bullets detail how each of the variables in the risk assessment model were selected:

- C_S (Soil Concentration used by the accidental soil ingestion, inhalation of contaminated particles and dermal contact with contaminated soil pathways, units = mg/kg dry). The maximum soil/dust concentrations of dioxins/furans + DL-PCB TEQs measured in soil were used for modeling. It was anticipated that employees may be exposed to indoor dust and outdoor on-site soils during a shift. Residents of the dormitory may be exposed to on-site soils, while local residents would only be exposed to the highest off-site soil concentration.
- C_{Food} (Concentration measured in food, units = mg/kg wet). The maximum tissue concentration of dioxins/furans + DL-PCB TEQs measured was used in the model. Crabs had the highest concentrations of all other animals sampled (i.e., fish and snails).
- P_{Air} (Concentration of particulates suspended in the air, units = $\mu\text{g}/\text{m}^3$). The Health Canada default value ($0.76 \mu\text{g}/\text{m}^3$, as per USEPA 1992), was considered too low for Cambodia. Instead, a value of $100 \mu\text{g}/\text{m}^3$ was adopted during meetings with Cambodian team members.
- IR_S (mass of soil per day accidentally ingested, units = mg/day). The rate value used was taken directly from the Health Canada default table ($0.00002 \text{ kg}/\text{day}$). The same rate was used for both children and adults because on a per mass body weight basis, it is assumed that children have greater contact with soil during play.
- IR_{Food} (mass of contaminated food per day ingested, units = kg/day). The default Canadian values were adopted for the model ($0.11 \text{ kg}/\text{day}$ for adults and $0.09 \text{ kg}/\text{day}$ for children).
- IR_A (volume of air inhaled each hour, units = m^3/hr). This variable is used for the inhalation pathway only. The rate value for adults and children were taken directly from the Health Canada default values. Note that Health Canada default values are presented in units of m^3/day and therefore were divided by 24 hrs/day to get units of m^3/hr .
- SA_H (surface area of skin exposed to contaminated soils, units = cm^2). This variable was derived roughly from the Health Canada default values. While working in the warehouse, it was assumed that both hands and arms could be exposed and therefore a value of 1800 cm^2 was adopted. For the other scenarios, it was assumed that only part of the hand may be exposed and therefore a value of 200 cm^2 was adopted (100 cm^2 for children). Values were developed during meetings with Cambodian team members.

- SL_H (Soil loading to exposed skin, indicates the usual surface area coverage per volume of contaminated soil, units = g/cm² - event). The Health Canada default value (0.0001 g/cm² for hands) was adopted.
- AF_{GIT} (absorption factor across the gastro intestinal tract, units = unitless). This variable was used both for accidental soil ingestion and food ingestion pathways. There are no readily available AF_{GIT} values for total dioxins/furans + DL-PCB TEQs. In these cases, Health Canada guidance recommends adopting a conservative estimate of “1”. This indicates that 100% of chemical is absorbed across the gastrointestinal tract into the body.
- AF_{Inh} (Absorption Factor for the lungs, units = unitless). There are no readily available AF_{GIT} values for total dioxins/furans + DL-PCB TEQs. In these cases, Health Canada guidance recommends adopting a conservative estimate of “1”. This indicates that 100% of chemical is absorbed across the lungs into the body.
- AF_{Skin} (Absorption Factor for the skin, units = unitless). For dioxins/furans + DL-PCB, an AF_{Skin} of 14% was adopted this is the absorption factor for PCB arochlor mixtures commonly applied by the USEPA (cited in Mayes et al., 2002). The same factor was used for dioxins/furans + DL-PCB TEQs.
- EF (number of dermal exposures per day, units = events/day). It was assumed that there could be up to five exposure events per day in the warehouse, while adults outside the warehouse, living at the dormitory and local residents may have two exposure events per day. Children were assumed to have only one dermal exposure per day. These values were developed during discussions with Cambodian team members.
- D_{hours} (number of hours a day that an individual is potentially exposed, units = hrs/day). D_{hours} is used by the accidental ingestion and inhalation of contaminated particle pathways, but the value is slightly different for each exposure pathway. For accidental soil ingestion, it is assumed that individuals may only be exposed while they are near contaminated soils and also awake (i.e., 16 hours a day). The model assumed eight hours inside the warehouse and one hour outside the warehouse for SEDCW employees, and 16 possible hours of exposure for residents of the dormitory and local residents. For inhalation of contaminated particles it was assumed that individual may be exposed at any time that they are near to contaminated soils, therefore the model assumed eight hours for an employee working in the warehouse, one hour while working outside, and for residents of the dormitory or local residents, 24 hours.
- D_{days} (number of days per week, or days per year, that an individual is potentially exposed, units = days/week or days/year). D_{days} is used by all the exposure pathways, but the value is slightly different for each. For accidental soil ingestion, inhalation of contaminated particles and dermal contact, it was assumed that warehouse employees would be potentially exposed five days a week, while dormitory resident or local residents would be exposed seven days a week. The numbers were based on interviews with warehouse employees, and

were selected during meetings with Cambodian team members. The food ingestion pathway uses days per year, which indicates the number of days each year that contaminated food items may be ingested. In this risk assessment it was assumed that only fish or other meat sources collected from the site were potentially contaminated.

- D_{weeks} (number of weeks per year that an individual is potentially exposed, units = weeks/year). D_{weeks} is used by the accidental soil ingestion, inhalation of contaminated particles and dermal contact pathways. It was assumed that the person (either an employee, dormitory resident or local resident) would be potentially exposed most weeks of the year, but would not be at the site during short periods of holiday or vacation. The numbers were based on interviews with employees, and were selected during meetings with Cambodian team members.
- D_{years} (number of years that an individual is potentially exposed, units = years). D_{years} is used by all exposure pathways, but only in the non-threshold model (i.e., the carcinogen model). SEDCW employees were assumed to be working at the site for approximately 30 years, while local residents were assumed to be living in the community for 30 years. The numbers were based on interviews with employees, and were selected during meetings with Cambodian team members.
- BW (Body weight, units = kg). Adults were assumed to weight 60 kg. The adult BW was developed during discussions with Cambodian team members. The child body weight was estimated to be 32.9 kg.
- LE (Life expectancy, the number of year that the person is likely to live. Not used for non-carcinogens, units = years). It was assumed that the average life expectancy was 55 years. The live expectancy value was developed during discussions with Cambodian team members.