

SGS

AXYS

2045 Mills Road West

TEL: (250) 655-5800

Sidney, BC, Canada V8L5X2

TOLL-FREE: 1-888-373-0881

SGS AXYS Client No.: 4066

Client Address: Tetra Tech, Inc. - Pacific Guardian Ctr.
737 Bishop St., Suite 2340, Mauka Tower
Honolulu, HI, US, 96813-3201

The SGS AXYS contact for these data is Dale Robinson.

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BATCH SUMMARY

Batch ID:	WG88608	Date:	01-Mar-2024
Analysis Type:	Per- and Polyfluoroalkyl Substances (PFAS)	Matrix Type:	Aqueous
BATCH MAKEUP			
Contract:	4066	Blank:	WG88608-101
Samples:			
L40347-3	HNWWTP-EFFL-EB		
L40347-6	HNWWTP-EFFL		
L40347-9	HNWWTP-INFL-EB		
L40347-12	HNWWTP-INFL		
		Reference or Spike:	WG88608-102 WG88608-103
		Duplicate:	
Comments: <ol style="list-style-type: none"> 1. Data are considered final. 2. Data are not blank corrected. Blank data should be taken into consideration when evaluating sample data. 3. Blank data should be evaluated against specifications using the same blank sample size as the size of the client samples. 4. In the continuing calibration verification (filename: FC4G_042 S:15, S:31) some surrogates are observed above the upper method control limit. As the result for the associated targets are observed within method specifications data is not considered impacted. 5. The percent recovery of native 3:3 FTCA in the OPR and LLOPR (AXYS ID: WG88608-102, -103) was observed to be lower than method specifications and has been flagged with 'N'. Sample data may be similarly affected. 6. Percent recoveries of a few surrogates in the client samples were observed to be outside the method limits and these surrogates have been flagged with a 'V' on the report forms. As the isotope dilution method of quantification produces data that are recovery corrected, the slight variance from the method acceptance criteria is deemed not to affect the quantification of these analytes. Percent surrogate recoveries are used as a general method performance indicator only. 			

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February 2017

FQA-006 Rev. 4. 20-Sep-2013

CHAIN OF CUSTODY

2045 Mills Road West TEL: (250) 655-5800 TOLL FREE 1-888-373-0881
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

SGS AXYS CLIENT #: 4066

REPORT TO:			INVOICE TO:			ANALYSIS REQUESTED				
Company	Hawaii DOH-HEER OFFICE		Company	TetraTech		MLA-100	MLA-111	MLA-119		
Address	2385 Waimano Home Rd #100 Pearl City, HI 96782		Address	737 Bishop St Ste 2340 Honolulu, HI 96813						
Contact	Roger Brewer		Contact	Eric Jensen						
Phone	808-586-4249		Phone	808-225-7084						
FAX			FAX							
E-mail	roger.brewer@doh.hawaii.gov		E-mail	eric.jensen@tetratech.com						
Project Name/Number:			Sampler's Name:							
			Signature:							
Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	SGS AXYS Lab Sample ID (Lab use only)					
HVWWTP-EFFL	H ₂ O	9/19/23	7:54am	2 50ml	L 40347-6	X	X	X		
HVWWTP-INFL	"	9/19/23	7:37am	3 125ml	-12	X	X	X		
HVWWTP-EFFL-EB	"	9/18/23	7:10am	"	-3	X	X	X		
HVWWTP-INFL-EB	"	9/18/23	7:30am	"	-9	X	X	X		
Relinquished by (Signature)	Date	Time	Received by (Signature) <u>ASS</u>			Courier		Waybill No.		
<u>Proge B</u>	10/3/23	9:00am	Date <u>06 OCT-2023</u> Time <u>09:20</u>							
Relinquished by (Signature)	Date	Time	Received by (Signature)			Sample Receipt				
			Date			Cooler				
Remarks * Filter water samples prior to analysis (0.45um)						Temp °C				
						Custody Seal #				
						Seal Intact Y / N				
						Sample Tags		Y / N		

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

CLIENT SAMPLE NO.

HNWWTP-EFFL-EB

Sample Collection:

18-Sep-2023 07:10

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No.

HONOULIULI WWTP

Lab Sample I.D.:

L40347-3

Matrix: AQUEOUS

Sample Size: 0.513 L

Sample Receipt Date: 06-Oct-2023

Initial Calibration Date: 19-Feb-2023

Extraction Date: 01-Feb-2024

Instrument ID: LC MS/MS

Analysis Date: 03-Feb-2024 Time: 02:58:55

Column ID: C18

Extract Volume (uL): 4000

Sample Data Filename: FC4G_042 S: 24

Injection Volume (uL): 2

Blank Data Filename: FC4G_042 S: 21

Dilution Factor: N/A

Cal. Ver. Data Filename: FC4G_042 S: 15

Concentration Units: ng/L

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

COMPOUND	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL) ²	RATIO	RRT
PFBA	U		1.56 (Q)		
PFPeA	U		0.780 (Q)		
PFHxA	U		0.390 (Q)		
PFHpA	U		0.390 (Q)		
PFOA	U		0.390 (Q)		
PFNA	U		0.390 (Q)		
PFDA	U		0.390 (Q)		
PFUnA	U		0.390 (Q)		
PFDoA	U		0.312 (Q)		
PFTTrDA	U		0.390 (Q)		
PFTeDA	U		0.390 (Q)		
PFBS	U		0.390 (Q)		
PFPeS	U		0.392 (Q)		
PFHxS	U		0.390 (Q)		
PFHpS	U		0.390 (Q)		
PFOS	U		0.390 (Q)		
PFNS	U		0.390 (Q)		
PFDS	U		0.390 (Q)		
PFDoS	U		0.390 (Q)		
4:2 FTS	U		1.56 (Q)		
6:2 FTS	U		1.41 (Q)		
8:2 FTS	U		1.33 (Q)		
PFOSA	U		0.390 (Q)		
N-MeFOSA	U		0.390 (Q)		
N-EtFOSA	U		1.09 (Q)		
MeFOSAA	U		0.390 (Q)		
EtFOSAA	U		0.390 (Q)		
N-MeFOSE	U		3.90 (Q)		
N-EtFOSE	U		3.90 (Q)		
HFPO-DA	U		1.56 (Q)		
ADONA	U		1.56 (Q)		
9CI-PF3ONS	U		1.56 (Q)		
11CI-PF3OUdS	U		1.56 (Q)		
3:3 FTCA	U		1.56 (Q)		
5:3 FTCA	U		9.74 (Q)		
7:3 FTCA	U		9.74 (Q)		
PFEESA	U		0.390 (Q)		
PFMPA	U		0.780 (Q)		
PFMBA	U		0.390 (Q)		
NFDHA	U		0.780 (Q)		

- (1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

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

Signed: _____Aaron Kyle_____

For Alys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 01-Mar-2024 12:03:52; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40347-3_Form1A_FC4G_042S24_SJ3384014.html; Workgroup: WG88608; Design ID: 3989]

Form 2
PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No. HONOUILIULI WWTP

Lab Sample I.D.: L40347-3

Matrix: AQUEOUS

Sample Size: 0.513 L

Sample Receipt Date: 06-Oct-2023

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Analysis Date: 03-Feb-2024 Time: 02:58:55

Column ID: C18

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Injection Volume (uL): 2

Blank Data Filename: FC4G_042 S: 21

Dilution Factor: N/A

Cal. Ver. Data Filename: FC4G_042 S: 15

Concentration Units: ng absolute

This page is part of a total report that contains information necessary for accreditation compliance.
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LABELLED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	RATIO	RRT
13C4-PFBA		40.0	31.6	79.0		1.000
13C5-PFPeA		20.0	22.8	114		0.874
13C5-PFHxA		10.0	8.36	83.6	15.5	1.000
13C4-PFHpA		10.0	8.03	80.3		0.895
13C8-PFOA		10.0	9.60	96.0		1.000
13C9-PFNA		5.00	4.76	95.1		1.000
13C6-PFDA		5.00	4.21	84.2		1.000
13C7-PFUnA		5.00	4.35	87.0		1.046
13C2-PFDoA		5.00	4.36	87.2		1.080
13C2-PFTeDA		5.00	3.83	76.6		1.158
13C3-PFBS		10.0	7.85	78.3	2.49	0.800
13C3-PFHxS		10.0	8.73	87.2	2.21	0.999
13C8-PFOS		10.1	9.73	96.7	2.01	1.000
13C2-4:2 FTS		20.2	14.4	71.4	1.75	0.839
13C2-6:2 FTS		20.0	18.4	92.0	1.99	1.002
13C2-8:2 FTS		20.0	14.9	74.4	3.29	1.259
13C8-PFOSA		10.0	12.2	122		1.161
D3-N-MeFOSA		10.0	8.57	85.7		1.342
D5-N-EtFOSA		10.0	7.94	79.4		1.381
D3-MeFOSAA		20.0	12.9	64.7		1.302
D5-EtFOSAA		20.0	12.0	59.9		1.327
d7-NMe-FOSE		100	107	106		1.322
d9-NEt-FOSE		100	120	120		1.363
13C3-HFPO-DA		40.0	40.3	101	2.53	1.029

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

(2) R(%) = percent recovery.

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

Signed: _____Aaron Kyle_____

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

CLIENT SAMPLE NO.

HNWWTP-EFFL

Sample Collection:

19-Sep-2023 07:54

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No.

HONOULIULI WWTP

Lab Sample I.D.:

L40347-6

Matrix: EFFLUENT FINAL

Sample Size: 0.521 L

Sample Receipt Date: 06-Oct-2023

Initial Calibration Date: 19-Feb-2023

Extraction Date: 01-Feb-2024

Instrument ID: LC MS/MS

Analysis Date: 03-Feb-2024 Time: 04:15:42

Column ID: C18

Extract Volume (uL): 4000

Sample Data Filename: FC4G_042 S: 30

Injection Volume (uL): 2

Blank Data Filename: FC4G_042 S: 21

Dilution Factor: N/A

Cal. Ver. Data Filename: FC4G_042 S: 15

Concentration Units: ng/L

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

COMPOUND	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL) ²	RATIO	RRT
PFBA	J	3.67	1.54 (Q)		1.003
PFPeA		7.61	0.768 (Q)		1.000
PFHxA		7.18	0.384 (Q)	4.73	1.000
PFHpA	J	1.01	0.384 (Q)	2.30	1.001
PFOA		2.80	0.384 (Q)	2.20	
PFNA	J	0.418	0.384 (Q)	2.79	
PFDA	J	0.502	0.384 (Q)	4.02	1.000
PFUnA	U		0.384 (Q)		
PFDaA	U		0.307 (Q)		
PFTTrDA	U		0.384 (Q)		
PFTeDA	U		0.384 (Q)		
PFBS	R	6.68	0.384 (Q)	15.9	0.998
PFPeS	U		0.386 (Q)		
PFHxS	J	1.40	0.384 (Q)	2.36	
PFHpS	U		0.384 (Q)		
PFOS		4.00	0.384 (Q)	3.47	
PFNS	U		0.384 (Q)		
PFDS	U		0.384 (Q)		
PFDoS	U		0.384 (Q)		
4:2 FTS	U		1.54 (Q)		
6:2 FTS	R J	2.52	1.38 (Q)	0.34	1.001
8:2 FTS	U		1.31 (Q)		
PFOSA	U		0.384 (Q)		
N-MeFOSA	U		0.384 (Q)		
N-EtFOSA	U		1.08 (Q)		
MeFOSAA	U		0.384 (Q)		
EtFOSAA	R J	0.403	0.384 (Q)	3.47	
N-MeFOSE	U		3.84 (Q)		
N-EtFOSE	U		3.84 (Q)		
HFPO-DA	U		1.54 (Q)		
ADONA	U		1.54 (Q)		
9CI-PF3ONS	U		1.54 (Q)		
11CI-PF3OUdS	U		1.54 (Q)		
3:3 FTCA	U		1.54 (Q)		
5:3 FTCA	J	11.7	9.60 (Q)	1.49	1.049
7:3 FTCA	U		9.60 (Q)		
PFEESA	U		0.384 (Q)		
PFMPA	U		0.768 (Q)		
PFMBA	U		0.384 (Q)		
NFDHA	U		0.768 (Q)		

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; R = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification.

(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

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

Signed: _____Aaron Kyle_____

For Axy's Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 01-Mar-2024 12:03:52; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40347-6_Form1A_FC4G_042S30_SJ3384020.html; Workgroup: WG88608; Design ID: 3989]

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No.

HONOULIULI WWTP

Lab Sample I.D.:

L40347-6

Matrix: EFFLUENT FINAL

Sample Size: 0.521 L

Sample Receipt Date: 06-Oct-2023

Initial Calibration Date: 19-Feb-2023

Extraction Date: 01-Feb-2024

Instrument ID: LC MS/MS

Analysis Date: 03-Feb-2024 Time: 04:15:42

Column ID: C18

Extract Volume (uL): 4000

Sample Data Filename: FC4G_042 S: 30

Injection Volume (uL): 2

Blank Data Filename: FC4G_042 S: 21

Dilution Factor: N/A

Cal. Ver. Data Filename: FC4G_042 S: 15

Concentration Units: ng absolute

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

LABELLED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	RATIO	RRT
13C4-PFBA	V	40.0	2.91	7.26		0.997
13C5-PFPeA		20.0	11.9	59.3		0.872
13C5-PFHxA		10.0	7.84	78.4	15.4	1.000
13C4-PFHpA		10.0	8.06	80.6		0.897
13C8-PFOA		10.0	9.35	93.5		1.000
13C9-PFNA		5.00	4.47	89.5		1.000
13C6-PFDA		5.00	4.11	82.3		1.000
13C7-PFUnA		5.00	3.79	75.8		1.047
13C2-PFDoA		5.00	3.21	64.2		1.081
13C2-PFTeDA		5.00	1.45	29.1		1.158
13C3-PFBS		10.0	8.39	83.7	2.60	0.803
13C3-PFHxS		10.0	8.95	89.4	2.27	1.000
13C8-PFOS		10.1	8.88	88.3	2.05	1.000
13C2-4:2 FTS		20.2	30.4	151	1.54	0.842
13C2-6:2 FTS		20.0	17.2	85.9	2.07	1.002
13C2-8:2 FTS	V	20.0	9.16	45.7	3.17	1.257
13C8-PFOSA		10.0	11.1	111		1.160
D3-N-MeFOSA		10.0	7.75	77.5		1.341
D5-N-EtFOSA		10.0	7.16	71.6		1.380
D3-MeFOSAA		20.0	19.2	95.9		1.301
D5-EtFOSAA		20.0	22.2	111		1.326
d7-NMe-FOSE		100	77.9	77.7		1.322
d9-NEt-FOSE		100	90.6	90.5		1.362
13C3-HFPO-DA		40.0	34.4	86.0	2.50	1.029

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

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

Signed: _____Aaron Kyle_____

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No.

HONOULIULI WWTP

Lab Sample I.D.:

L40347-9

Matrix: AQUEOUS

Sample Size: 0.468 L

Sample Receipt Date: 06-Oct-2023

Initial Calibration Date: 19-Feb-2023

Extraction Date: 01-Feb-2024

Instrument ID: LC MS/MS

Analysis Date: 03-Feb-2024 Time: 03:37:22

Column ID: C18

Extract Volume (uL): 4000

Sample Data Filename: FC4G_042 S: 27

Injection Volume (uL): 2

Blank Data Filename: FC4G_042 S: 21

Dilution Factor: N/A

Cal. Ver. Data Filename: FC4G_042 S: 15

Concentration Units: ng/L

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COMPOUND	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL) ²	RATIO	RRT
PFBA	U		1.71 (Q)		
PFPeA	U		0.854 (Q)		
PFHxA	U		0.427 (Q)		
PFHpA	U		0.427 (Q)		
PFOA	U		0.427 (Q)		
PFNA	U		0.427 (Q)		
PFDA	U		0.427 (Q)		
PFUnA	U		0.427 (Q)		
PFDaA	U		0.342 (Q)		
PFTTrDA	U		0.427 (Q)		
PFTeDA	U		0.427 (Q)		
PFBS	U		0.427 (Q)		
PFPeS	U		0.429 (Q)		
PFHxS	U		0.427 (Q)		
PFHpS	U		0.427 (Q)		
PFOS	U		0.427 (Q)		
PFNS	U		0.427 (Q)		
PFDS	U		0.427 (Q)		
PFDoS	U		0.427 (Q)		
4:2 FTS	U		1.71 (Q)		
6:2 FTS	U		1.54 (Q)		
8:2 FTS	U		1.45 (Q)		
PFOSA	U		0.427 (Q)		
N-MeFOSA	U		0.427 (Q)		
N-EtFOSA	U		1.20 (Q)		
MeFOSAA	U		0.427 (Q)		
EtFOSAA	U		0.427 (Q)		
N-MeFOSE	U		4.27 (Q)		
N-EtFOSE	U		4.27 (Q)		
HFPO-DA	U		1.71 (Q)		
ADONA	U		1.71 (Q)		
9CI-PF3ONS	U		1.71 (Q)		
11CI-PF3OUdS	U		1.71 (Q)		
3:3 FTCA	U		1.71 (Q)		
5:3 FTCA	U		10.7 (Q)		
7:3 FTCA	U		10.7 (Q)		
PFEESA	U		0.427 (Q)		
PFMPA	U		0.854 (Q)		
PFMBA	U		0.427 (Q)		
NFDHA	U		0.854 (Q)		

- (1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

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Form 2
PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No. HONOUILIULI WWTP

Lab Sample I.D.: L40347-9

Matrix: AQUEOUS

Sample Size: 0.468 L

Sample Receipt Date: 06-Oct-2023

Initial Calibration Date: 19-Feb-2023

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LABELLED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	RATIO	RRT
13C4-PFBA		40.0	32.6	81.5		1.000
13C5-PFPeA		20.0	23.2	116		0.872
13C5-PFHxA		10.0	8.54	85.4	16.1	1.000
13C4-PFHpA		10.0	8.46	84.6		0.897
13C8-PFOA		10.0	9.84	98.4		1.000
13C9-PFNA		5.00	4.93	98.5		1.000
13C6-PFDA		5.00	4.33	86.6		0.999
13C7-PFUnA		5.00	4.67	93.3		1.046
13C2-PFDoA		5.00	4.24	84.7		1.079
13C2-PFTeDA		5.00	3.21	64.3		1.156
13C3-PFBS		10.0	8.90	88.9	2.66	0.802
13C3-PFHxS		10.0	9.46	94.4	2.30	1.000
13C8-PFOS		10.1	10.6	105	2.09	1.000
13C2-4:2 FTS		20.2	14.3	70.8	1.70	0.841
13C2-6:2 FTS		20.0	19.1	95.6	2.11	1.002
13C2-8:2 FTS		20.0	15.3	76.1	3.01	1.259
13C8-PFOSA		10.0	12.9	129		1.159
D3-N-MeFOSA		10.0	8.15	81.5		1.340
D5-N-EtFOSA		10.0	7.97	79.7		1.379
D3-MeFOSAA		20.0	12.7	63.5		1.303
D5-EtFOSAA		20.0	11.8	58.8		1.328
d7-NMe-FOSE		100	115	114		1.321
d9-NEt-FOSE		100	118	118		1.361
13C3-HFPO-DA		40.0	41.8	105	2.65	1.029

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

(2) R(%) = percent recovery.

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

Signed: _____Aaron Kyle_____

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

CLIENT SAMPLE NO.

HNWWTP-INFL

Sample Collection:

19-Sep-2023 07:37

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No.

HONOULIULI WWTP

Lab Sample I.D.:

L40347-12

Matrix: INFLUENT

Sample Size: 0.481 L

Sample Receipt Date: 06-Oct-2023

Initial Calibration Date: 19-Feb-2023

Extraction Date: 01-Feb-2024

Instrument ID: LC MS/MS

Analysis Date: 03-Feb-2024 Time: 05:19:48

Column ID: C18

Extract Volume (uL): 4000

Sample Data Filename: FC4G_042 S: 35

Injection Volume (uL): 2

Blank Data Filename: FC4G_042 S: 21

Dilution Factor: N/A

Cal. Ver. Data Filename: FC4G_042 S: 31

Concentration Units: ng/L

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

COMPOUND	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL) ²	RATIO	RRT
PFBA	J	2.67	1.66 (Q)		1.000
PFPeA		3.39	0.832 (Q)		1.001
PFHxA		3.80	0.416 (Q)	3.31	1.001
PFHpA	J	0.799	0.416 (Q)	2.11	1.000
PFOA		1.71	0.416 (Q)	2.50	
PFNA	U		0.416 (Q)		
PFDA	U		0.416 (Q)		
PFUnA	U		0.416 (Q)		
PFDoA	U		0.333 (Q)		
PFTTrDA	U		0.416 (Q)		
PFTeDA	U		0.416 (Q)		
PFBS	R	6.01	0.416 (Q)	12.1	0.997
PFPeS	U		0.418 (Q)		
PFHxS	J	1.37	0.416 (Q)	2.06	
PFHpS	U		0.416 (Q)		
PFOS	R	6.53	0.416 (Q)	6.15	
PFNS	U		0.416 (Q)		
PFDS	U		0.416 (Q)		
PFDoS	U		0.416 (Q)		
4:2 FTS	U		1.66 (Q)		
6:2 FTS	R J	3.98	1.50 (Q)	0.51	1.000
8:2 FTS	U		1.41 (Q)		
PFOSA	U		0.416 (Q)		
N-MeFOSA	U		0.416 (Q)		
N-EtFOSA	U		1.17 (Q)		
MeFOSAA	U		0.416 (Q)		
EtFOSAA	U		0.416 (Q)		
N-MeFOSE	U		4.16 (Q)		
N-EtFOSE	U		4.16 (Q)		
HFPO-DA	U		1.66 (Q)		
ADONA	U		1.66 (Q)		
9CI-PF3ONS	U		1.67 (Q)		
11CI-PF3OUdS	U		1.67 (Q)		
3:3 FTCA	U		1.66 (Q)		
5:3 FTCA	U		10.4 (Q)		
7:3 FTCA	U		10.4 (Q)		
PFEESA	U		0.416 (Q)		
PFMPA	U		0.832 (Q)		
PFMBA	U		0.416 (Q)		
NFDHA	U		0.832 (Q)		

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

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

Signed: _____Aaron Kyle_____

For Axy's Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 01-Mar-2024 12:03:52; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40347-12_Form1A_FC4G_042S35_SJ3384027.html; Workgroup: WG88608; Design ID: 3989]

Form 2
PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No.

HONOULIULI WWTP

Lab Sample I.D.:

L40347-12

Matrix: INFLUENT

Sample Size: 0.481 L

Sample Receipt Date: 06-Oct-2023

Initial Calibration Date: 19-Feb-2023

Extraction Date: 01-Feb-2024

Instrument ID: LC MS/MS

Analysis Date: 03-Feb-2024 Time: 05:19:48

Column ID: C18

Extract Volume (uL): 4000

Sample Data Filename: FC4G_042 S: 35

Injection Volume (uL): 2

Blank Data Filename: FC4G_042 S: 21

Dilution Factor: N/A

Cal. Ver. Data Filename: FC4G_042 S: 31

Concentration Units: ng absolute

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

LABELLED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	RATIO	RRT
13C4-PFBA		40.0	4.08	10.2		1.000
13C5-PFPeA		20.0	16.9	84.6		0.872
13C5-PFHxA		10.0	7.70	77.0	15.7	0.999
13C4-PFHpA		10.0	7.37	73.7		0.898
13C8-PFOA		10.0	8.96	89.6		1.000
13C9-PFNA		5.00	4.50	90.0		1.000
13C6-PFDA		5.00	3.87	77.4		0.999
13C7-PFUnA		5.00	3.37	67.4		1.049
13C2-PFDoA		5.00	2.73	54.6		1.083
13C2-PFTeDA		5.00	1.00	20.0		1.160
13C3-PFBS		10.0	8.11	80.9	2.73	0.804
13C3-PFHxS		10.0	8.63	86.2	2.30	1.000
13C8-PFOS		10.1	8.99	89.4	2.16	1.000
13C2-4:2 FTS		20.2	18.6	92.3	1.63	0.842
13C2-6:2 FTS		20.0	16.5	82.7	1.85	1.002
13C2-8:2 FTS	V	20.0	8.93	44.5	2.89	1.256
13C8-PFOSA		10.0	11.0	110		1.163
D3-N-MeFOSA		10.0	7.85	78.5		1.345
D5-N-EtFOSA		10.0	7.59	75.9		1.384
D3-MeFOSAA		20.0	10.5	52.4		1.299
D5-EtFOSAA		20.0	9.40	47.0		1.324
d7-NMe-FOSE		100	78.8	78.5		1.325
d9-NEt-FOSE		100	104	104		1.366
13C3-HFPO-DA		40.0	30.5	76.1	2.38	1.028

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

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

Signed: _____Aaron Kyle_____

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

CLIENT SAMPLE NO.

Lab Blank

Sample Collection:

N/A

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No.

N/A

Lab Sample I.D.:

WG88608-101

Matrix: AQUEOUS

Sample Size: 0.500 L

Sample Receipt Date: N/A

Initial Calibration Date: 19-Feb-2023

Extraction Date: 01-Feb-2024

Instrument ID: LC MS/MS

Analysis Date: 03-Feb-2024 Time: 02:20:27

Column ID: C18

Extract Volume (uL): 4000

Sample Data Filename: FC4G_042 S: 21

Injection Volume (uL): 2

Blank Data Filename: FC4G_042 S: 21

Dilution Factor: N/A

Cal. Ver. Data Filename: FC4G_042 S: 15

Concentration Units: ng/L

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

COMPOUND	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL) ²	RATIO	RRT
PFBA	U		1.60 (Q)		
PFPeA	U		0.800 (Q)		
PFHxA	U		0.400 (Q)		
PFHpA	U		0.400 (Q)		
PFOA	U		0.400 (Q)		
PFNA	U		0.400 (Q)		
PFDA	U		0.400 (Q)		
PFUnA	U		0.400 (Q)		
PFDaA	U		0.320 (Q)		
PFTTrDA	U		0.400 (Q)		
PFTeDA	U		0.400 (Q)		
PFBS	U		0.400 (Q)		
PFPeS	U		0.402 (Q)		
PFHxS	U		0.400 (Q)		
PFHpS	U		0.400 (Q)		
PFOS	U		0.400 (Q)		
PFNS	U		0.400 (Q)		
PFDS	U		0.400 (Q)		
PFDoS	U		0.400 (Q)		
4:2 FTS	U		1.60 (Q)		
6:2 FTS	U		1.44 (Q)		
8:2 FTS	U		1.36 (Q)		
PFOSA	U		0.400 (Q)		
N-MeFOSA	U		0.400 (Q)		
N-EtFOSA	U		1.12 (Q)		
MeFOSAA	U		0.400 (Q)		
EtFOSAA	U		0.400 (Q)		
N-MeFOSE	U		4.00 (Q)		
N-EtFOSE	U		4.00 (Q)		
HFPO-DA	U		1.60 (Q)		
ADONA	U		1.60 (Q)		
9CI-PF3ONS	U		1.60 (Q)		
11CI-PF3OUdS	U		1.60 (Q)		
3:3 FTCA	U		1.60 (Q)		
5:3 FTCA	U		10.0 (Q)		
7:3 FTCA	U		10.0 (Q)		
PFEESA	U		0.400 (Q)		
PFMPA	U		0.800 (Q)		
PFMBA	U		0.400 (Q)		
NFDHA	U		0.800 (Q)		

- (1) Where applicable, custom lab flags have been used on this report; U = not detected at RL.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

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

Signed: _____Aaron Kyle_____

For Alys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 01-Mar-2024 12:03:52; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_WG88608-101_Form1A_FC4G_042S21_SJ3384010.html; Workgroup: WG88608; Design ID: 3989]

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No.

N/A

Lab Sample I.D.:

WG88608-101

Matrix: AQUEOUS

Sample Size: 0.500 L

Sample Receipt Date: N/A

Initial Calibration Date: 19-Feb-2023

Extraction Date: 01-Feb-2024

Instrument ID: LC MS/MS

Analysis Date: 03-Feb-2024 Time: 02:20:27

Column ID: C18

Extract Volume (uL): 4000

Sample Data Filename: FC4G_042 S: 21

Injection Volume (uL): 2

Blank Data Filename: FC4G_042 S: 21

Dilution Factor: N/A

Cal. Ver. Data Filename: FC4G_042 S: 15

Concentration Units: ng absolute

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

LABELLED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	RATIO	RRT
13C4-PFBA	V	40.0	2.72	6.79		1.000
13C5-PFPeA	V	20.0	6.06	30.3		0.872
13C5-PFHxA		10.0	6.34	63.4	15.6	1.000
13C4-PFHpA		10.0	7.83	78.3		0.896
13C8-PFOA		10.0	9.49	94.9		1.000
13C9-PFNA		5.00	4.69	93.8		1.000
13C6-PFDA		5.00	4.11	82.2		1.000
13C7-PFUnA		5.00	4.32	86.3		1.045
13C2-PFDoA		5.00	4.01	80.1		1.079
13C2-PFTeDA		5.00	3.49	69.9		1.157
13C3-PFBS		10.0	8.09	80.8	2.54	0.801
13C3-PFHxS		10.0	8.89	88.7	2.32	1.001
13C8-PFOS		10.1	9.63	95.7	2.02	1.000
13C2-4:2 FTS	V	20.2	6.63	32.9	1.86	0.839
13C2-6:2 FTS		20.0	17.2	86.3	1.95	1.002
13C2-8:2 FTS		20.0	15.9	79.1	3.62	1.259
13C8-PFOSA		10.0	12.5	125		1.160
D3-N-MeFOSA		10.0	11.0	110		1.340
D5-N-EtFOSA		10.0	10.5	105		1.379
D3-MeFOSAA		20.0	13.0	64.9		1.303
D5-EtFOSAA		20.0	14.3	71.3		1.328
d7-NMe-FOSE		100	106	106		1.321
d9-NEt-FOSE		100	118	118		1.362
13C3-HFPO-DA		40.0	30.9	77.2	2.39	1.028

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

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

Signed: _____Aaron Kyle_____

SGS AXYS METHOD MLA-110 Rev 02

Form 8A

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES

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

Contract No.:	4066	Lab Sample I.D.:	WG88608-102
Matrix:	AQUEOUS	Initial Calibration Date:	19-Feb-2023
Extraction Date:	01-Feb-2024	Instrument ID:	LC MS/MS
Analysis Date:	03-Feb-2024 Time: 01:54:41	Column ID:	C18
Extract Volume (uL):	4000	OPR Data Filename:	FC4G_042 S: 19
Injection Volume (uL):	2	Blank Data Filename:	FC4G_042 S: 21
Dilution Factor:	N/A	Cal. Ver. Data Filename:	FC4G_042 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
PFBA			20.0	18.7	93.3	1.007
PFPeA			10.0	9.87	98.7	1.000
PFHxA		4.33	5.00	5.10	102	1.000
PFHpA		2.05	5.00	5.24	105	1.000
PFOA		2.11	5.00	5.51	110	
PFNA		2.82	5.00	5.59	112	
PFDA		2.43	5.00	4.54	90.8	1.000
PFUnA		3.83	5.00	5.24	105	1.000
PFDoA		6.98	4.06	4.46	110	1.000
PFTTrDA		2.86	5.00	5.06	101	0.963
PFTeDA		2.24	5.00	4.84	96.8	1.001
PFBS		2.43	5.00	4.90	98.0	1.000
PFPeS		2.17	5.00	4.81	96.1	0.885
PFHxS		2.31	5.00	4.59	91.8	
PFHpS		2.11	5.00	5.62	112	0.927
PFOS		2.55	5.00	4.81	96.2	
PFNS		2.24	5.00	4.27	85.4	1.043
PFDS		2.31	5.00	5.09	102	1.077
PFDoS		2.28	5.00	4.21	84.2	
4:2 FTS		0.46	20.0	20.4	102	1.000
6:2 FTS		0.49	18.0	22.5	126	1.000
8:2 FTS		0.52	16.9	16.9	99.9	1.000
PFOSA			5.00	5.35	107	
N-MeFOSA		0.58	5.00	5.27	105	
N-EtFOSA		0.60	14.0	15.0	107	
MeFOSAA		2.06	5.00	5.69	114	
EtFOSAA		1.18	5.00	5.19	104	
N-MeFOSE			50.0	47.9	95.9	
N-EtFOSE			50.0	40.5	81.1	
HFPO-DA		2.42	20.0	21.2	106	1.001
ADONA		1.28	20.0	21.0	105	1.099
9CI-PF3ONS		3.21	20.0	21.6	108	0.970
11CI-PF3OUdS		3.23	20.0	21.7	109	1.036
3:3 FTCA	N	1.63	20.0	4.77	23.9	
5:3 FTCA		1.25	125	135	108	1.049

COMPOUND	LAB FLAG ¹	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
7:3 FTCA		0.73	125	162	129	1.344
PFEESA		10.4	5.00	6.77	135	1.036
PFMPA			10.0	5.33	53.3	
PFMBA			5.00	6.27	125	1.060
NFDHA			10.0	11.3	113	

(1) Where applicable, custom lab flags have been used on this report; N = authentic recovery in the OPR is not within method/contract control limits.

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

Signed: _____Aaron Kyle_____

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.

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES

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

Contract No.:	4066	Lab Sample I.D.:	WG88608-102
Matrix:	AQUEOUS	Initial Calibration Date:	19-Feb-2023
Extraction Date:	01-Feb-2024	Instrument ID:	LC MS/MS
Analysis Date:	03-Feb-2024 Time: 01:54:41	Column ID:	C18
Extract Volume (uL):	4000	OPR Data Filename:	FC4G_042 S: 19
Injection Volume (uL):	2	Blank Data Filename:	FC4G_042 S: 21
Dilution Factor:	N/A	Cal. Ver. Data Filename:	FC4G_042 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

LABELLED COMPOUND	LAB FLAG ¹	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
13C4-PFBA			40.0	4.59	11.5	0.997
13C5-PFPeA			20.0	9.49	47.4	0.874
13C5-PFHxA		15.2	10.0	8.32	83.2	1.000
13C4-PFHpA			10.0	7.82	78.2	0.896
13C8-PFOA			10.0	9.37	93.7	1.000
13C9-PFNA			5.00	4.51	90.2	1.000
13C6-PFDA			5.00	4.51	90.2	1.000
13C7-PFUnA			5.00	4.50	90.0	1.046
13C2-PFDoA			5.00	4.45	88.9	1.079
13C2-PFTeDA			5.00	3.76	75.3	1.157
13C3-PFBS		2.57	10.0	8.44	84.3	0.801
13C3-PFHxS		2.21	10.0	9.22	92.1	1.001
13C8-PFOS		2.08	10.1	10.1	100	1.000
13C2-4:2 FTS		1.61	20.2	10.7	53.3	0.839
13C2-6:2 FTS		1.84	20.0	18.1	90.7	1.001
13C2-8:2 FTS		3.03	20.0	16.9	84.2	1.258
13C8-PFOSA			10.0	12.7	127	1.160
D3-N-MeFOSA			10.0	10.6	106	1.342
D5-N-EtFOSA			10.0	10.0	100	1.381
D3-MeFOSAA			20.0	14.2	70.9	1.302
D5-EtFOSAA			20.0	14.7	73.4	1.327
d7-NMe-FOSE			100	108	107	1.322
d9-NEt-FOSE			100	129	129	1.363
13C3-HFPO-DA		2.50	40.0	40.9	102	1.029

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

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

Signed: _____Aaron Kyle_____

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

SGS AXYS METHOD MLA-110 Rev 02

Form 8A

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES

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

Contract No.:	4066	Lab Sample I.D.:	WG88608-103
Matrix:	AQUEOUS	Initial Calibration Date:	19-Feb-2023
Extraction Date:	01-Feb-2024	Instrument ID:	LC MS/MS
Analysis Date:	03-Feb-2024 Time: 01:41:52	Column ID:	C18
Extract Volume (uL):	4000	OPR Data Filename:	FC4G_042 S: 18
Injection Volume (uL):	2	Blank Data Filename:	FC4G_042 S: 21
Dilution Factor:	N/A	Cal. Ver. Data Filename:	FC4G_042 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
PFBA			6.40	5.66	88.4	1.003
PFPeA			3.20	2.86	89.5	1.001
PFHxA		5.04	1.60	1.68	105	1.000
PFHpA		2.06	1.60	1.55	97.0	1.000
PFOA		2.14	1.60	1.67	104	
PFNA		2.60	1.60	1.49	93.3	
PFDA		2.38	1.60	1.45	90.7	1.000
PFUnA		4.15	1.60	1.59	99.5	1.000
PFDoA		6.42	1.30	1.27	97.7	0.999
PFTTrDA		2.70	1.60	1.56	97.7	0.962
PFTeDA		2.44	1.60	1.57	98.2	1.000
PFBS		2.39	1.60	1.46	91.3	1.000
PFPeS		2.14	1.60	1.37	85.9	0.886
PFHxS		2.20	1.60	1.41	88.0	
PFHpS		2.18	1.60	1.75	109	0.927
PFOS		2.23	1.60	1.49	93.1	
PFNS		2.16	1.60	1.32	82.7	1.043
PFDS		2.22	1.60	1.51	94.5	1.077
PFDoS		2.16	1.60	1.24	77.4	
4:2 FTS		0.45	6.40	6.34	99.1	1.000
6:2 FTS		0.48	5.75	7.93	138	1.002
8:2 FTS		0.52	5.42	4.98	91.9	1.000
PFOSA			1.60	1.63	102	
N-MeFOSA		0.57	1.60	1.63	102	
N-EtFOSA		0.56	4.48	4.26	95.0	
MeFOSAA		1.86	1.60	1.42	89.0	
EtFOSAA		1.97	1.60	1.45	90.6	
N-MeFOSE			16.0	14.1	87.9	
N-EtFOSE			16.0	12.3	76.7	
HFPO-DA		2.27	6.40	6.60	103	1.000
ADONA		1.30	6.40	6.28	98.1	1.099
9CI-PF3ONS		3.37	6.40	6.51	102	0.969
11CI-PF3OUdS		3.19	6.40	6.59	103	1.035
3:3 FTCA	N	0.67	6.40	1.95	30.4	
5:3 FTCA		1.20	40.0	43.1	108	1.048

COMPOUND	LAB FLAG ¹	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
7:3 FTCA		0.75	40.0	48.8	122	1.343
PFEESA		10.7	1.60	1.97	123	1.036
PFMPA			3.20	1.77	55.3	
PFMBA			1.60	1.78	111	1.061
NFDHA			3.20	3.38	106	

(1) Where applicable, custom lab flags have been used on this report; N = authentic recovery in the OPR is not within method/contract control limits.

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

Signed: _____Aaron Kyle_____

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.

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES

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

Contract No.:	4066	Lab Sample I.D.:	WG88608-103
Matrix:	AQUEOUS	Initial Calibration Date:	19-Feb-2023
Extraction Date:	01-Feb-2024	Instrument ID:	LC MS/MS
Analysis Date:	03-Feb-2024 Time: 01:41:52	Column ID:	C18
Extract Volume (uL):	4000	OPR Data Filename:	FC4G_042 S: 18
Injection Volume (uL):	2	Blank Data Filename:	FC4G_042 S: 21
Dilution Factor:	N/A	Cal. Ver. Data Filename:	FC4G_042 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

LABELLED COMPOUND	LAB FLAG ¹	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
13C4-PFBA			40.0	9.73	24.3	0.997
13C5-PFPeA			20.0	15.4	76.9	0.873
13C5-PFHxA		16.9	10.0	8.30	83.0	1.000
13C4-PFHpA			10.0	8.38	83.8	0.895
13C8-PFOA			10.0	9.67	96.7	1.000
13C9-PFNA			5.00	4.81	96.2	1.000
13C6-PFDA			5.00	4.43	88.6	1.000
13C7-PFUnA			5.00	4.56	91.2	1.046
13C2-PFDoA			5.00	4.32	86.5	1.080
13C2-PFTeDA			5.00	3.68	73.6	1.158
13C3-PFBS		2.48	10.0	8.28	82.6	0.801
13C3-PFHxS		2.31	10.0	9.03	90.2	1.000
13C8-PFOS		2.00	10.1	9.97	99.1	1.000
13C2-4:2 FTS		1.59	20.2	12.5	62.0	0.839
13C2-6:2 FTS		1.85	20.0	17.7	88.6	1.001
13C2-8:2 FTS		3.19	20.0	16.1	80.5	1.259
13C8-PFOSA			10.0	12.9	129	1.160
D3-N-MeFOSA			10.0	9.95	99.5	1.341
D5-N-EtFOSA			10.0	9.61	96.1	1.380
D3-MeFOSAA			20.0	13.9	69.7	1.302
D5-EtFOSAA			20.0	14.1	70.3	1.327
d7-NMe-FOSE			100	112	112	1.322
d9-NEt-FOSE			100	123	123	1.362
13C3-HFPO-DA		2.31	40.0	39.7	99.3	1.028

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

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

Signed: _____Aaron Kyle_____

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

SGS AXYS METHOD MLA-110 Rev 02

Form 3A

INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES

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

Initial Calibration Date: 19-Feb-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A

CS1 Data Filename: FC3G_006 S: 16

CS2 Data Filename: FC3G_006 S: 17

CS3 Data Filename: FC3G_006 S: 18

CS4 Data Filename: FC3G_006 S: 19

CS5 Data Filename: FC3G_006 S: 20

CS6 Data Filename: FC3G_006 S: 21

CS7 Data Filename: FC3G_006 S: 22

CS8 Data Filename: FC3G_006 S: 23

COMPOUND	LAB FLAG ¹	RELATIVE RESPONSE (RR)								MEAN RR	CV (%RSD) ²	
		CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7			CS8
PFBA			1.14	0.93	0.92	0.86	0.90	0.86	0.86	0.86	0.92	10.4
PFPeA			1.21	1.06	1.02	0.98	1.03	0.98	0.98	0.97	1.03	7.90
PFHxA			1.30	1.13	1.04	0.94	0.98	0.95	0.94	0.97	1.03	12.1
PFFHpA			1.38	1.18	1.11	1.16	1.20	1.11	1.14	1.13	1.18	7.43
PFOA			1.47	1.28	1.26	1.18	1.22	1.19	1.18	1.18	1.24	7.98
PFNA			1.21	1.05	1.00	1.01	1.05	1.04	1.02	1.02	1.05	6.47
PFDA			0.96	0.82	0.85	0.76	0.82	0.80	0.77	0.80	0.82	7.62
PFUnA			0.83	0.74	0.74	0.68	0.74	0.73	0.71	0.74	0.74	5.90
PFDoA			1.25	1.14	1.07	1.00	1.08	1.05	1.04	1.01	1.08	7.41
PFTTrDA			1.02	0.84	0.84	0.82	0.86	0.81	0.81	0.73	0.84	9.87
PFTeDA			0.94	0.83	0.82	0.74	0.79	0.78	0.76	0.71	0.80	8.77
PFBS			1.07	1.05	1.00	1.01	1.02	1.00	1.01	1.02	1.02	2.48
PFPeS			1.01	0.98	1.01	0.99	1.03	1.04	1.03	0.98	1.01	2.30
PFHxS			1.38	1.39	1.37	1.26	1.35	1.32	1.34	1.32	1.34	3.07
PFFHpS			1.01	0.98	1.09	0.97	1.02	1.02	1.00	0.99	1.01	3.72
PFOS			1.43	1.15	1.09	1.05	1.15	1.23	1.10	1.13	1.17	10.1
PFNS			1.17	1.19	1.19	1.10	1.16	1.15	1.14	1.11	1.15	2.93
PFDS			1.01	1.05	1.02	1.01	1.05	1.03	1.00	1.02	1.02	1.76
PFDoS			0.90	0.86	0.83	0.79	0.85	0.84	0.83	0.85	0.84	3.59
4:2 FTS			0.48	0.47	0.56	0.55	0.53	0.52	0.51	0.46	0.51	7.33
6:2 FTS			0.52	0.53	0.48	0.51	0.49	0.51	0.49	0.45	0.50	5.07
8:2 FTS			0.31	0.33	0.33	0.31	0.34	0.33	0.31	0.27	0.32	7.19
PFOSA			0.98	0.97	0.97	0.92	0.96	0.93	0.93	0.95	0.95	2.35
N-MeFOSA			0.97	0.97	1.03	0.93	0.96	0.96	0.98	0.90	0.96	4.03
N-EtFOSA			1.25	1.19	1.23	1.10	1.22	1.19	1.18	1.18	1.19	3.74
MeFOSAA			0.66	0.79	0.88	0.83	0.83	0.83	0.86	0.84	0.82	8.30
EtFOSAA			0.76	0.64	0.68	0.69	0.70	0.67	0.72	0.68	0.69	5.01
N-MeFOSE			0.81	0.78	0.78	0.74	0.78	0.77	0.75	0.74	0.77	3.09
N-EtFOSE			1.12	1.10	1.09	1.07	1.13	1.09	1.08	1.06	1.09	2.17
HFPO-DA			0.96	0.94	0.93	0.90	0.96	0.94	0.91	0.88	0.93	3.20
ADONA			8.26	7.79	7.49	7.42	7.83	7.38	7.65	7.14	7.62	4.53
9CI-PF3ONS			2.17	2.08	1.99	1.97	2.10	1.94	1.94	1.80	2.00	5.72
11CI-PF3OUds			1.32	1.28	1.20	1.20	1.29	1.20	1.24	1.17	1.24	4.39
3:3 FTCA			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.05	7.14
5:3 FTCA			0.22	0.18	0.19	0.17	0.18	0.17	0.17	0.18	0.18	9.21
7:3 FTCA			0.11	0.10	0.10	0.09	0.10	0.09	0.09	0.10	0.10	6.93
PFEESA			2.74	2.73	2.70	2.57	2.71	2.64	2.64	2.80	2.69	2.67
PFMPA			1.40	1.34	1.34	1.26	1.37	1.31	1.35	1.46	1.36	4.34

COMPOUND	LAB FLAG ¹	RELATIVE RESPONSE (RR)								MEAN RR	CV (%RSD) ²	
		CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7			CS8
PFMBA			1.84	1.70	1.72	1.71	1.82	1.75	1.78	1.93	1.78	4.41
NFDHA			0.05	0.05	0.06	0.05	0.06	0.04	0.05	0.04	0.05	15.8

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see SGS AXYS METHOD MLA-110 Rev 02

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

SGS AXYS METHOD MLA-110 Rev 02

Form 3B
INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES

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

Initial Calibration Date: 19-Feb-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A

CS1 Data Filename: FC3G_006 S: 16

CS2 Data Filename: FC3G_006 S: 17

CS3 Data Filename: FC3G_006 S: 18

CS4 Data Filename: FC3G_006 S: 19

CS5 Data Filename: FC3G_006 S: 20

CS6 Data Filename: FC3G_006 S: 21

CS7 Data Filename: FC3G_006 S: 22

CS8 Data Filename: FC3G_006 S: 23

LABELED COMPOUND	LAB FLAG ¹	RELATIVE RESPONSE (RR)								MEAN RR	CV (%RSD) ²	
		CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7			CS8
13C4-PFBA			1.15	1.18	1.14	1.13	1.15	1.16	1.16	1.14	1.15	1.43
13C5-PFPeA			0.87	0.90	0.88	0.86	0.83	0.87	0.86	0.81	0.86	3.20
13C5-PFHxA			0.70	0.75	0.73	0.72	0.73	0.74	0.74	0.72	0.73	2.04
13C4-PFHpA			3.23	3.36	3.29	3.30	3.12	3.45	3.17	3.25	3.27	3.24
13C8-PFOA			3.52	3.75	3.58	3.76	3.61	3.80	3.62	3.76	3.67	2.82
13C9-PFNA			1.05	1.09	1.09	1.05	1.07	1.06	1.07	1.09	1.07	1.63
13C6-PFDA			0.97	1.07	1.00	1.01	0.97	1.02	1.04	0.98	1.01	3.74
13C7-PFUnA			1.09	1.21	1.11	1.13	1.12	1.07	1.03	0.77	1.07	12.3
13C2-PFDoA			0.87	1.00	0.93	0.94	0.93	0.95	0.96	0.98	0.94	4.10
13C2-PFTeDA			0.76	0.85	0.77	0.79	0.81	0.81	0.83	0.88	0.81	5.10
13C3-PFBS			1.33	1.32	1.30	1.27	1.34	1.30	1.29	1.15	1.29	4.67
13C3-PFHxS			1.07	1.14	1.07	1.05	1.09	1.07	1.05	1.08	1.08	2.55
13C8-PFOS			0.91	0.94	0.91	0.92	0.91	0.91	0.96	0.90	0.92	2.11
13C2-4:2 FTS			1.12	1.07	1.02	0.98	1.05	1.01	1.00	1.00	1.03	4.27
13C2-6:2 FTS			0.92	0.96	0.95	0.90	0.97	0.93	0.98	1.01	0.95	3.79
13C2-8:2 FTS			1.37	1.43	1.33	1.38	1.41	1.37	1.41	1.46	1.40	2.80
13C8-PFOSA			1.76	1.80	1.79	1.71	1.71	1.74	1.84	1.82	1.77	2.87
D3-N-MeFOSA			0.25	0.26	0.24	0.24	0.25	0.24	0.25	0.28	0.25	4.94
D5-N-EtFOSA			0.23	0.24	0.23	0.23	0.22	0.22	0.23	0.23	0.23	3.19
D3-MeFOSAA			0.62	0.67	0.65	0.64	0.71	0.74	0.76	0.88	0.71	12.2
D5-EtFOSAA			0.52	0.59	0.54	0.54	0.58	0.61	0.63	0.75	0.59	12.4
d7-NMe-FOSE			1.88	2.01	1.94	1.89	1.90	1.88	1.99	1.96	1.93	2.67
d9-NEt-FOSE			1.49	1.62	1.55	1.51	1.51	1.51	1.60	1.58	1.55	3.09
13C3-HFPO-DA			0.28	0.31	0.31	0.30	0.29	0.31	0.29	0.27	0.29	5.27

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

(2) For contract CV specifications, see SGS AXYS METHOD MLA-110 Rev 02.

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

Signed: _____Kristina Coleman_____

SGS AXYS METHOD MLA-110 Rev 02

Form 3C
LC MS/MS INITIAL CALIBRATION RATIOS

SGS AXYS ANALYTICAL SERVICES

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

Initial Calibration Date: 19-Feb-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A

CS1 Data Filename: FC3G_006 S: 16

CS2 Data Filename: FC3G_006 S: 17

CS3 Data Filename: FC3G_006 S: 18

CS4 Data Filename: FC3G_006 S: 19

CS5 Data Filename: FC3G_006 S: 20

CS6 Data Filename: FC3G_006 S: 21

CS7 Data Filename: FC3G_006 S: 22

CS8 Data Filename: FC3G_006 S: 23

COMPOUND	LAB FLAG ¹	RATIOS								
		CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
PFBA										
PFPeA										
PFHxA			5.63	5.90	5.29	4.81	5.06	4.89	4.87	5.02
PFHpA			2.04	2.02	2.06	2.01	2.00	1.95	2.00	2.00
PFOA			1.90	1.98	1.92	1.86	1.89	1.91	1.95	1.86
PFNA			3.21	2.58	2.42	2.64	2.78	2.71	2.66	2.67
PFDA			2.73	2.60	2.75	2.69	2.64	2.75	2.67	2.68
PFUnA			3.76	3.56	3.89	3.64	3.81	3.83	3.70	3.79
PFDaA			6.48	6.53	6.28	6.40	6.42	6.55	6.31	6.34
PFTTrDA			2.95	2.60	2.69	2.75	2.74	2.74	2.69	2.66
PFTeDA			3.00	2.18	2.31	2.19	2.29	2.29	2.28	2.31
PFBS			2.39	2.39	2.41	2.57	2.52	2.49	2.48	2.48
PFPeS			1.97	2.00	2.02	2.15	2.03	2.11	2.10	2.12
PFHxS			1.78	2.06	2.22	2.05	2.26	2.22	2.19	2.22
PFHpS			2.22	2.01	2.15	2.11	2.05	2.07	2.04	2.03
PFOS			2.03	2.34	2.37	2.33	2.57	2.48	2.38	2.49
PFNS			2.06	2.21	2.14	2.21	2.20	2.19	2.18	2.17
PFDS			2.14	2.11	2.26	2.27	2.23	2.22	2.21	2.23
PFDoS			2.14	2.14	2.07	2.12	2.12	2.17	2.16	2.14
4:2 FTS			0.43	0.42	0.49	0.52	0.49	0.48	0.48	0.50
6:2 FTS			0.48	0.51	0.48	0.50	0.46	0.47	0.48	0.49
8:2 FTS			0.49	0.50	0.51	0.50	0.53	0.51	0.51	0.50
PFOSA										
N-MeFOSA			0.64	0.57	0.59	0.56	0.57	0.58	0.58	0.58
N-EtFOSA			0.61	0.57	0.58	0.56	0.57	0.57	0.58	0.57
MeFOSAA			1.25	1.51	1.92	1.84	1.84	1.96	1.98	2.00
EtFOSAA			0.96	1.23	1.29	1.33	1.26	1.22	1.30	1.28
N-MeFOSE										
N-EtFOSE										
HFPO-DA			2.55	2.55	2.69	2.48	2.51	2.66	2.45	2.59
ADONA			1.16	1.17	1.16	1.18	1.15	1.18	1.17	1.18
9CI-PF3ONS			3.41	3.45	3.19	3.06	3.18	3.13	3.06	3.13
11CI-PF3OUdS			3.16	3.35	3.24	3.09	3.13	3.17	3.20	3.18
3:3 FTCA			1.08	1.07	1.14	1.13	1.16	1.16	1.19	1.18
5:3 FTCA			1.42	1.32	1.35	1.21	1.24	1.20	1.21	1.22

COMPOUND	LAB FLAG ¹	RATIOS								
		CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
7:3 FTCA			0.81	0.77	0.81	0.76	0.79	0.76	0.78	0.77
PFEESA			8.87	9.36	9.77	10.1	10.3	10.1	10.4	10.5
PFMPA										
PFMBA										
NFDHA										

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

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

Signed: _____Kristina Coleman_____

For Axys Internal Use Only [XSL Template: FC2-Form3C.xsl; Created: 01-Mar-2024 12:03:52; Application: XMLTransformer-1.18.48; Report Filename: PFOA_FC_LC_19-Feb-2023_FC3G__Form3C_GS107461.html; Workgroup: WG88608; Design ID: 3989]

Form 3D
LC MS/MS INITIAL CALIBRATION RATIOS

SGS AXYS ANALYTICAL SERVICES

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

Initial Calibration Date: 19-Feb-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: FC3G_006 S: 16
CS2 Data Filename: FC3G_006 S: 17
CS3 Data Filename: FC3G_006 S: 18
CS4 Data Filename: FC3G_006 S: 19
CS5 Data Filename: FC3G_006 S: 20
CS6 Data Filename: FC3G_006 S: 21
CS7 Data Filename: FC3G_006 S: 22
CS8 Data Filename: FC3G_006 S: 23

LABELED COMPOUND	LAB FLAG ¹	RATIOS								
		CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
13C4-PFBA										
13C5-PFPeA										
13C5-PFHxA			20.2	21.2	22.4	21.8	24.1	19.9	23.9	21.1
13C4-PFHpA										
13C8-PFOA										
13C9-PFNA										
13C6-PFDA										
13C7-PFUnA										
13C2-PFDoA										
13C2-PFTeDA										
13C3-PFBS			2.56	2.45	2.51	2.44	2.54	2.53	2.48	2.47
13C3-PFHxS			2.22	2.29	2.28	2.25	2.22	2.24	2.19	2.24
13C8-PFOS			2.09	2.04	1.95	2.04	2.08	2.07	2.11	2.03
13C2-4:2 FTS			1.91	1.74	1.67	1.58	1.57	1.48	1.14	0.55
13C2-6:2 FTS			1.88	1.97	1.95	1.75	1.85	1.57	1.33	0.65
13C2-8:2 FTS			3.33	3.33	3.15	3.12	3.07	2.71	2.34	1.15
13C8-PFOSA										
D3-N-MeFOSA										
D5-N-EtFOSA										
D3-MeFOSAA										
D5-EtFOSAA										
d7-NMe-FOSE										
d9-NEt-FOSE										
13C3-HFPO-DA			2.38	2.43	2.52	2.53	2.46	2.51	2.47	2.55

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

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

Signed: _____Kristina Coleman_____

Form 4A
LC MS/MS CALIBRATION VERIFICATION

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

Initial Calibration Date: 19-Feb-2023 VER Data Filename: FC4G_042 S: 15
Instrument ID: LC MS/MS Analysis Date: 03-Feb-2024
LC Column ID: C18 Analysis Time: 01:03:31

COMPOUND	LAB FLAG ¹	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
PFBA		1.003	213 > 169		20.0	19.5	97.3
PFPeA		1.001	263 > 219		10.0	9.54	95.4
PFHxA		1.000	313 > 269	4.52	5.00	5.27	105
PFFHpA		1.000	363 > 319	2.04	5.00	5.15	103
PFOA		1.000	413 > 369	2.22	5.00	5.66	113
PFNA		1.000	463 > 419	2.70	5.00	5.31	106
PFDA		1.000	513 > 469	2.52	5.00	4.42	88.4
PFOUnA		1.000	563 > 519	3.74	5.00	4.97	99.3
PFDaA		0.999	613 > 569	6.88	4.06	4.57	113
PFTTrDA		0.962	663 > 619	2.82	5.00	5.27	105
PFTTeDA		1.000	713 > 669	2.35	5.00	4.91	98.1
PFBS		1.000	299 > 80	2.33	5.00	4.86	97.1
PFPeS		0.884	349 > 80	2.17	5.00	4.97	99.4
PFHxS		1.001	399 > 80	2.17	5.00	4.62	92.4
PFFHpS		0.927	449 > 80	2.11	5.00	5.65	113
PFOS		1.000	499 > 80	2.38	5.00	4.56	91.2
PFNS		1.043	549 > 80	2.20	5.00	4.27	85.4
PFDS		1.077	599 > 80	2.29	5.00	5.14	103
PFDaS			699 > 80	2.31	5.00	5.56	111
4:2 FTS		0.999	327 > 307	0.51	20.0	22.5	112
6:2 FTS		1.000	427 > 407	0.48	18.0	20.1	112
8:2 FTS		1.000	527 > 507	0.51	17.0	19.0	112
PFOSA		1.000	498 > 78		5.00	5.58	112
N-MeFOSA		1.000	512 > 219	0.58	5.00	5.28	106
N-EtFOSA		1.001	526 > 219	0.55	14.0	13.8	98.4
MeFOSAA		1.001	570 > 419	1.91	5.00	5.24	105
EtFOSAA		1.001	584 > 419	1.09	5.00	4.43	88.6
N-MeFOSE		1.002	616 > 59		50.0	54.7	109
N-EtFOSE		1.002	630 > 59		50.0	49.4	98.7
HFPO-DA		1.000	285 > 169	2.50	20.0	22.6	113
ADONA		1.099	377 > 251	1.29	20.0	22.4	112
9CI-PF3ONS		0.969	531 > 351	3.17	20.0	22.3	111
11CI-PF3OUdS		1.036	631 > 451	3.22	20.0	26.0	130
3:3 FTCA			241 > 177	1.24	20.0	21.4	107
5:3 FTCA		1.049	341 > 237	1.27	125	139	112
7:3 FTCA		1.346	441 > 317	0.75	125	154	123
PFEESA		1.036	315 > 135	11.1	5.00	5.99	120
PFMPA			229 > 85		10.0	9.86	98.6
PFMBA		1.061	279 > 85		5.00	4.91	98.2
NFDHA			295 > 201		10.0	8.80	88.0

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

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

Signed: _____Aaron Kyle_____

SGS AXYS METHOD MLA-110 Rev 02

Form 4B
LC MS/MS CALIBRATION VERIFICATION

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

Initial Calibration Date:	19-Feb-2023	VER Data Filename:	FC4G_042 S: 15
Instrument ID:	LC MS/MS	Analysis Date:	03-Feb-2024
LC Column ID:	C18	Analysis Time:	01:03:31

LABELED COMPOUND	LAB FLAG ¹	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
13C4-PFBA		1.000	217 > 172		40.0	32.9	82.3
13C5-PFPeA		0.874	268 > 223		20.0	24.8	124
13C5-PFHxA		1.000	318 > 273	15.1	10.0	8.84	88.4
13C4-PFHpA		0.895	367 > 322		10.0	8.72	87.2
13C8-PFOA		1.000	421 > 376		10.0	10.2	102
13C9-PFNA		1.000	472 > 427		5.00	5.14	103
13C6-PFDA		1.000	519 > 474		5.00	4.97	99.5
13C7-PFUnA		1.046	570 > 525		5.00	4.82	96.3
13C2-PFDoA		1.080	615 > 570		5.00	4.88	97.6
13C2-PFTeDA		1.158	715 > 670		5.00	5.54	111
13C3-PFBS		0.801	302 > 80	2.51	10.0	9.00	89.8
13C3-PFHxS		1.000	402 > 80	2.22	10.0	9.71	97.0
13C8-PFOS		1.000	507 > 80	2.08	10.1	11.5	114
13C2-4:2 FTS		0.840	329 > 81	1.68	20.2	14.8	73.6
13C2-6:2 FTS		1.002	429 > 81	1.84	20.0	21.0	105
13C2-8:2 FTS		1.259	529 > 81	3.11	20.0	16.4	81.7
13C8-PFOSA		1.162	506 > 78		10.0	13.1	131
D3-N-MeFOSA		1.342	515 > 219		10.0	11.8	118
D5-N-EtFOSA		1.380	531 > 219		10.0	11.9	119
D3-MeFOSAA		1.303	573 > 419		20.0	15.4	76.8
D5-EtFOSAA		1.328	589 > 419		20.0	17.2	86.2
d7-NMe-FOSE		1.322	623 > 59		100	131	130
d9-NEt-FOSE		1.363	639 > 59		100	142	142
13C3-HFPO-DA		1.028	287 > 169	2.37	40.0	40.1	100

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

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

Signed: _____Aaron Kyle_____

For Axys Internal Use Only [XSL Template: FC2-Form4B.xsl; Created: 01-Mar-2024 12:03:52; Application: XMLTransformer-1.18.48; Report Filename: PFOA_FC_LC_FC4G_042S15__Form4B_SJ3384002.html; Workgroup: WG88608; Design ID: 3989]

Form 4A
LC MS/MS CALIBRATION VERIFICATION

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

Initial Calibration Date: 19-Feb-2023 VER Data Filename: FC4G_042 S: 31
Instrument ID: LC MS/MS Analysis Date: 03-Feb-2024
LC Column ID: C18 Analysis Time: 04:28:31

COMPOUND	LAB FLAG ¹	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
PFBA		1.003	213 > 169		20.0	19.2	96.1
PFPeA		1.001	263 > 219		10.0	9.76	97.6
PFHxA		1.000	313 > 269	4.52	5.00	5.28	106
PfHpA		1.000	363 > 319	2.04	5.00	5.10	102
PFOA		1.001	413 > 369	2.14	5.00	5.57	111
PFNA		1.001	463 > 419	2.70	5.00	5.23	105
PFDA		1.000	513 > 469	2.56	5.00	4.56	91.1
PFUnA		1.000	563 > 519	3.61	5.00	5.07	101
PFDaA		0.999	613 > 569	6.98	4.06	4.35	107
PFTTrDA		0.963	663 > 619	2.89	5.00	5.29	106
PFTeDA		1.001	713 > 669	2.31	5.00	4.84	96.9
PFBS		1.000	299 > 80	2.44	5.00	4.58	91.6
PFPeS		0.887	349 > 80	2.14	5.00	5.02	100
PFHxS		1.000	399 > 80	2.25	5.00	4.73	94.6
PFHpS		0.927	449 > 80	2.11	5.00	5.76	115
PFOS		1.000	499 > 80	2.57	5.00	4.95	99.1
PFNS		1.043	549 > 80	2.17	5.00	4.32	86.4
PFDS		1.077	599 > 80	2.32	5.00	5.22	104
PFDoS			699 > 80	2.29	5.00	5.65	113
4:2 FTS		1.000	327 > 307	0.50	20.0	21.4	107
6:2 FTS		0.999	427 > 407	0.50	18.0	20.4	114
8:2 FTS		1.000	527 > 507	0.51	17.0	17.7	104
PFOSA		1.000	498 > 78		5.00	5.53	111
N-MeFOSA		1.000	512 > 219	0.62	5.00	4.77	95.4
N-EtFOSA		1.001	526 > 219	0.62	14.0	10.3	73.3
MeFOSAA		1.000	570 > 419	2.31	5.00	5.47	109
EtFOSAA		1.001	584 > 419	1.22	5.00	5.34	107
N-MeFOSE		1.002	616 > 59		50.0	54.1	108
N-EtFOSE		1.002	630 > 59		50.0	49.1	98.3
HFPO-DA		1.000	285 > 169	2.36	20.0	21.7	108
ADONA		1.098	377 > 251	1.31	20.0	22.5	113
9CI-PF3ONS		0.969	531 > 351	3.23	20.0	22.0	110
11CI-PF3OUdS		1.035	631 > 451	3.17	20.0	25.3	126
3:3 FTCA			241 > 177	1.10	20.0	21.4	107
5:3 FTCA		1.050	341 > 237	1.26	125	143	115
7:3 FTCA		1.343	441 > 317	0.75	125	160	128
PFEESA		1.036	315 > 135	11.0	5.00	5.89	118
PFMPA			229 > 85		10.0	9.78	97.8
PFMBA		1.062	279 > 85		5.00	5.08	102
NFDHA			295 > 201		10.0	8.88	88.8

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

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

Signed: _____Aaron Kyle_____

SGS AXYS METHOD MLA-110 Rev 02

Form 4B
LC MS/MS CALIBRATION VERIFICATION

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

Initial Calibration Date:	19-Feb-2023	VER Data Filename:	FC4G_042 S: 31
Instrument ID:	LC MS/MS	Analysis Date:	03-Feb-2024
LC Column ID:	C18	Analysis Time:	04:28:31

LABELLED COMPOUND	LAB FLAG ¹	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
13C4-PFBA		1.000	217 > 172		40.0	32.9	82.1
13C5-PFPeA		0.873	268 > 223		20.0	24.7	123
13C5-PFHxA		1.000	318 > 273	14.5	10.0	8.99	89.9
13C4-PFHpA		0.897	367 > 322		10.0	9.24	92.4
13C8-PFOA		0.999	421 > 376		10.0	10.7	107
13C9-PFNA		1.000	472 > 427		5.00	5.33	107
13C6-PFDA		1.000	519 > 474		5.00	5.20	104
13C7-PFUnA		1.046	570 > 525		5.00	4.91	98.3
13C2-PFDoA		1.080	615 > 570		5.00	5.23	105
13C2-PFTeDA		1.156	715 > 670		5.00	5.56	111
13C3-PFBS		0.803	302 > 80	2.62	10.0	9.24	92.2
13C3-PFHxS		1.000	402 > 80	2.28	10.0	9.89	98.7
13C8-PFOS		1.000	507 > 80	2.03	10.1	11.2	111
13C2-4:2 FTS		0.841	329 > 81	1.58	20.2	15.9	78.8
13C2-6:2 FTS		1.002	429 > 81	1.88	20.0	21.6	108
13C2-8:2 FTS		1.258	529 > 81	3.14	20.0	18.0	89.7
13C8-PFOSA		1.159	506 > 78		10.0	13.2	132
D3-N-MeFOSA		1.340	515 > 219		10.0	11.9	119
D5-N-EtFOSA		1.379	531 > 219		10.0	11.9	119
D3-MeFOSAA		1.302	573 > 419		20.0	16.8	84.1
D5-EtFOSAA		1.327	589 > 419		20.0	17.2	86.2
d7-NMe-FOSE		1.321	623 > 59		100	138	138
d9-NEt-FOSE		1.362	639 > 59		100	147	147
13C3-HFPO-DA		1.029	287 > 169	2.49	40.0	41.2	103

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

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

Signed: _____Aaron Kyle_____

Accreditation Scope

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

Accreditation Scope																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Accreditation Scope

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

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

Accreditation Scope

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

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum												Tissue and Tissue Flora	Urine	Water	Water, Non-Potable			AFF				
				CA LA	Alaska DEC	ANAB bDd **	ANAB ISO 17025	CA LA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB bDd **	ANAB ISO 17025	CA LA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	Washington DE *	ANAB bDd **	ANAB ISO 17025
PBDPE	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 208 2,2',3,3',4,5,5',6'-nonabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PBDPE	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033													Y									Y	
PBDPE		SGS AXYS MLA-033	MLA-033						Y									Y								
PCB Aroclors	"Organochlorine Pesticides and PCBs" category (CA only)	EPA 625	MLA-007																							
PCB Aroclors	"PCBs" category (CA only)	EPA 8270E	MLA-007						Y																	
PCB Aroclors	PCB Aroclor 1016	EPA 1668	MLA-010							Y	Y													Y	Y	
PCB Aroclors		EPA 625	MLA-007																				Y	Y	Y	
PCB Aroclors		EPA 8270E	MLA-007							Y	Y			Y	Y											
PCB Aroclors		SGS AXYS MLA-010	MLA-010																					Y		
PCB Aroclors		SGS AXYS MLA-007	MLA-007																					Y		
PCB Aroclors	PCB Aroclor 1016/1242	EPA 8270E	MLA-007																				Y			
PCB Aroclors	PCB Aroclor 1221	EPA 1668	MLA-010							Y	Y													Y	Y	
PCB Aroclors		EPA 625	MLA-007																					Y	Y	Y
PCB Aroclors		EPA 8270E	MLA-007							Y	Y			Y	Y											
PCB Aroclors		SGS AXYS MLA-010	MLA-010								Y													Y		
PCB Aroclors		SGS AXYS MLA-007	MLA-007							Y													Y			
PCB Aroclors	PCB Aroclor 1232	EPA 1668	MLA-010								Y	Y												Y	Y	
PCB Aroclors		EPA 625	MLA-007																				Y	Y	Y	
PCB Aroclors		EPA 8270E	MLA-007							Y	Y			Y	Y											

Accreditation Scope

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

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

Accreditation Scope

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

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Tissue and Tissue Flora	Urine	Water	Water, Non-Potable	AFF
				CAIA Alaska DEC ANAB bDd ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE	CAIA Alaska DEC ANAB bDd ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE	CAIA Alaska DEC ANAB bDd ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE	CAIA Alaska DEC ANAB bDd ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE	CAIA Alaska DEC ANAB bDd ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE	CAIA Alaska DEC ANAB bDd ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE
PCB congeners	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	SGS AXYS MLA-908	MLA-908						
PCB congeners		EPA 1628	MLA-908						
PCB congeners		EPA 1668	MLA-010						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					
PCB congeners		SGS AXYS MLA-210	MLA-210						
PCB congeners	PCB 182 2,2',3,4,4',5,6-Heptachlorobiphenyl	SGS AXYS MLA-908	MLA-908						
PCB congeners		EPA 1628	MLA-908						
PCB congeners		EPA 1668	MLA-010						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					
PCB congeners		SGS AXYS MLA-210	MLA-210						
PCB congeners	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	SGS AXYS MLA-908	MLA-908						
PCB congeners		EPA 1628	MLA-908						
PCB congeners		EPA 1668	MLA-010						
PCB congeners		EPA 8270E	MLA-007	Y					
PCB congeners		SGS AXYS MLA-010	MLA-010						
PCB congeners	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	SGS AXYS MLA-007	MLA-007						
PCB congeners		SGS AXYS MLA-210	MLA-210						
PCB congeners		SGS AXYS MLA-908	MLA-908						
PCB congeners		EPA 1628	MLA-908						
PCB congeners		EPA 1668	MLA-010						
PCB congeners	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 8270E	MLA-007						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					
PCB congeners		SGS AXYS MLA-007	MLA-007						
PCB congeners		SGS AXYS MLA-210	MLA-210						
PCB congeners		SGS AXYS MLA-908	MLA-908						
PCB congeners	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1628	MLA-908						
PCB congeners		EPA 1668	MLA-010						
PCB congeners		EPA 8270E	MLA-007						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					
PCB congeners		SGS AXYS MLA-210	MLA-210						
PCB congeners	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	SGS AXYS MLA-908	MLA-908						
PCB congeners		EPA 1628	MLA-908						
PCB congeners		EPA 1668	MLA-010						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					
PCB congeners		SGS AXYS MLA-901	MLA-901	Y					
PCB congeners	PCB 187/182	SGS AXYS MLA-210	MLA-210						
PCB congeners		SGS AXYS MLA-908	MLA-908						
PCB congeners		EPA 1628	MLA-908						
PCB congeners		EPA 8270E	MLA-007						
PCB congeners		SGS AXYS MLA-007	MLA-007						
PCB congeners	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010						
PCB congeners		EPA 8270E	MLA-007						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					
PCB congeners		SGS AXYS MLA-210	MLA-210						
PCB congeners		SGS AXYS MLA-908	MLA-908						
PCB congeners	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1628	MLA-908						
PCB congeners		EPA 1668	MLA-010						
PCB congeners		EPA 8270E	MLA-007						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					
PCB congeners		SGS AXYS MLA-007	MLA-007						
PCB congeners	PCB 19 2,2',6-Trichlorobiphenyl	SGS AXYS MLA-210	MLA-210						
PCB congeners		SGS AXYS MLA-908	MLA-908						
PCB congeners		EPA 1628	MLA-908						
PCB congeners		EPA 1668	MLA-010						
PCB congeners		EPA 8270E	MLA-007						

Accreditation Scope

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

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

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Accreditation Scope									
SGS AXYS Analytical Services Ltd. file ref.: ACC-103 Rev. 70									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids	Tissue and Tissue Flora	Urine	Water	Water, Non-Potable
				CALA	Alaska DEC ANAB DoD ** ANAB ISO 17025 CALA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE	ANAB DoD ** ANAB ISO 17025 CALA Florida DOH Minnesota DOH New Jersey DEP Virginia DGS Washington DE *	CALA	CALA	Alaska DEC ANAB DoD ** ANAB ISO 17025 California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE *
PCDDF		EPA 8290A	MLA-017						
PCDDF		SGS AXYS MLA-017	MLA-017						
PCDDF		SGS AXYS MLA-217	MLA-217						
PCDDF		ATM 16130	MLA-217						
PCDDF	Total PCDD	EPA 1613	MLA-017						
PCDDF		EPA 8290A	MLA-017						
PCDDF	Total PCDD/F	EPA 1613	MLA-017						
PCDDF		EPA 8290A	MLA-017						
PCDDF	Total PCDF	EPA 1613	MLA-017						
PCDDF		EPA 8290A	MLA-017						
PCDDF	Total PeCDD	EPA 1613	MLA-017						
PCDDF		EPA 8290A	MLA-017						
PCDDF		SGS AXYS MLA-017	MLA-017						
PCDDF		SGS AXYS MLA-217	MLA-217						
PCDDF		ATM 16130	MLA-217						
PCDDF	Total PeCDF	EPA 1613	MLA-017						
PCDDF		EPA 8290A	MLA-017						
PCDDF		SGS AXYS MLA-017	MLA-017						
PCDDF		SGS AXYS MLA-217	MLA-217						
PCDDF		ATM 16130	MLA-217						
PCDDF	Total TCDD	EPA 1613	MLA-017						
PCDDF		EPA 8290A	MLA-017						
PCDDF		SGS AXYS MLA-017	MLA-017						
PCDDF		SGS AXYS MLA-217	MLA-217						
PCDDF		ATM 16130	MLA-217						
PCDDF	Total TCDF	EPA 1613	MLA-017						
PCDDF		EPA 8290A	MLA-017						
PCDDF		SGS AXYS MLA-017	MLA-017						
PCDDF		SGS AXYS MLA-217	MLA-217						
PCDDF		ATM 16130	MLA-217						
PFAS	"Per- and Polyfluorinated Alkyl Substances (PFAS)" category (CA only)	DoD QSM Version 5.1 (or new)	MLA-110						
PFAS	11-chloroicosafuoro-3-oxaundecane-1-sulfonate (11Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110						
PFAS	11-chloroicosafuoro-3-oxaundecane-1-sulfonate (11Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110						
PFAS	11-Chloroicosafuoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	DoD QSM Version 5.3	MLA-110						
PFAS		DoD QSM Version 5.4	MLA-110						
PFAS	4,8-Dioxia-3H-perfluorononanoic acid (ADONA)	EPA 1633 draft	MLA-110						
PFAS		SGS AXYS MLA-110	MLA-110						
PFAS		DoD QSM Version 5.3	MLA-110						
PFAS		DoD QSM Version 5.4	MLA-110						
PFAS	4,8-dioxia-3H-perfluoronanonoate (ADONNA)	EPA 1633 draft	MLA-110						
PFAS		SGS AXYS MLA-110	MLA-110						
PFAS		DoD QSM Version 5.3	MLA-110						
PFAS		DoD QSM Version 5.4	MLA-110						
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	EPA 1633 draft	MLA-110						
PFAS		SGS AXYS MLA-110	MLA-110						
PFAS		DoD QSM Version 5.3	MLA-110						
PFAS		DoD QSM Version 5.4	MLA-110						
PFAS	6:2 Fluorotelomersulfonate (6:2 FTS)	EPA 1633 draft	MLA-110						
PFAS		SGS AXYS MLA-110	MLA-110						
PFAS		DoD QSM Version 5.3	MLA-110						
PFAS		DoD QSM Version 5.4	MLA-110						
PFAS	8:2 Fluorotelomersulfonate (8:2 FTS)	EPA 1633 draft	MLA-110						
PFAS		SGS AXYS MLA-110	MLA-110						
PFAS		DoD QSM Version 5.3	MLA-110						
PFAS		DoD QSM Version 5.4	MLA-110						
PFAS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	EPA 1633 draft	MLA-110						
PFAS		SGS AXYS MLA-110	MLA-110						
PFAS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110						
PFAS		DoD QSM Version 5.3	MLA-110						
PFAS		DoD QSM Version 5.4	MLA-110						
PFAS	Dodecafluoro-3H-4,8-dioxanonanoate (NaDONA)	EPA 1633 draft	MLA-110						
PFAS		SGS AXYS MLA-110	MLA-110						
PFAS		EPA 1633 draft	MLA-110						
PFAS	Hexafluoropropylene oxide dimer acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110						
PFAS		DoD QSM Version 5.3	MLA-110						
PFAS		DoD QSM Version 5.4	MLA-110						
PFAS		EPA 1633 draft	MLA-110						
PFAS	Hexafluoropropylene oxide dimer acid, anion and acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110						
PFAS	Hexafluoropropylene oxide dimer acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110						
PFAS	N-Ethylperfluorooctane sulfonamide (EtFOSAm)	DoD QSM Version 5.3	MLA-110						
PFAS		DoD QSM Version 5.4	MLA-110						

[illegible]

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Tissue and Tissue Flora										Urine	Water	Water, Non-Potable										AFF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
				CALA	Alaska DEC	ANAB DaD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DaD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DaD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DaD **	ANAB ISO 17025																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
PFAS	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-042	MLA-042	Y																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	</

Accreditation Scope									
SGS AXYS Analytical Services Ltd. file ref.: ACC-103 Rev. 70									
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Tissue and Tissue Flora	Urine	Water	Water, Non-Potable	AFFF
				CALA	Alaska DEC ANAB D+D ** ANAB ISO 17025 CALA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE	ALAB D+D ** ANAB ISO 17025 CALA Florida DOH Minnesota DOH New Jersey DEP Virginia DGS	CALA ALASKA DEC ANAB D+D ** ANAB ISO 17025 California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE * ANAB D+D ** ANAB ISO 17025		
PPCP	Lincomycin	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Lomefloxacin	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Mefenamic acid	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Meprobamate	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Metformin	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Methylprednisolone	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Metoprolol	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Miconazole	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Minocycline	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Naproxen	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Norflouxetine	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Norgestimate	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Norverapamil	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Olofenacin	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Ormetoprim	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Oxacillin	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Oxolinic acid	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Oxydodone	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Oxytetracycline (OTC)	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Paroxetine	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Penicillin G	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Penicillin V	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Prednisolone	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Prednisone	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Promethazine	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Propoxyphene	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Ranitidine	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Roxithromycin	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sarafloxacin	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sertraline	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Simvastatin	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sulfachloropyridazine	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sulfadiazine	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sulfadimethoxine	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sulfamerazine	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sulfamethazine	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sulfamethizole	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sulfamethoxazole	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sulfanilamide	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Sulfathiazole	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Tetracycline (TC)	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Theophylline	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		
PPCP	Thiabendazole	SGS AXYS MLA-075	MLA-075	EPA 1694	Y		Y		

Legend	
Y	Accreditation scope
AFFF	Aqueous film forming foam
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PCPC	Pharmaceutical and Personal Care Products
TOP	Total Oxidizable Precursors
California WB	California Water Boards, Lab ID 2911
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Alaska DEC	Alaska Department of Environmental Conservation, Contaminated Sites Laboratory Approval 17-014
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN000003

Accreditation Scope

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

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

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



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

