



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.

"This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law."

"The sample(s) to which the findings recorded herein (the "Findings") relate was[were] drawn and [or] provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is[are] said to be extracted."

BATCH SUMMARY

Batch ID: WG88111	Date: 14-Dec-2023
Analysis Type: Phosphate Flame Retardants	Matrix Type: Solid
BATCH MAKEUP	
Contract: 4066 Samples: L40563-1 LAHAINA ASH DU-1	Blank: WG88111-101
	Reference or Spike: WG88111-102
	Duplicate:
Comments: 1. Data are considered final. 2. The analytes TCPP, TPP, 2IPDP, TBEP and TEHP were detected in the Lab Blank (SGS AXYS ID: WG88111-101) above the method blank limit. 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. Percent recovery of labeled compound d51-TEHP in the continuing calibration (data filename: RP3X_119 S: 23) was above the method limit. Given that the corresponding analytes met method criteria, data are not considered affected. 5. Percent recovery of analytes TEP, 2IPDP, and TBEP in the OPR (SGS AXYS ID: WG88111-102) were above the method limit and were flagged with an 'N'. Sample data may be similarly affected. 6. Percent recovery of several labeled compounds in the Lab Blank and client sample were below the method nominal limit and were flagged with a 'V'. As the isotope dilution method of quantification produces data that are recovery corrected, the variances from the method acceptance criteria are deemed not to affect the quantification of the analytes. Percent labeled compound recoveries are used as a general method performance indicator only.	

Copyright SGS AXYS Analytical Services Ltd
February 2017

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

4066

Project #: 103S864023138

Samples Intact

SGS AXYS

SGS AXYS METHOD MLA-098 Rev 01

Form 1A
ANALYSIS REPORT

CLIENT SAMPLE NO.
LAHAINA ASH DU-1
Sample Collection:
08-Nov-2023 11:00

SGS AXYS ANALYTICAL SERVICES

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

Project No.

DOH MAUI WILDFIRE -
LAHAINA ASH DU-1
L40563-1 R

Contract No.: 4066**Lab Sample I.D.:****Matrix:** SOLID**Sample Size:** 9.71 g (dry)**Sample Receipt Date:** 17-Nov-2023**Initial Calibration Date:** 18-Oct-2023**Extraction Date:** 07-Dec-2023**Instrument ID:** LC MS/MS**Analysis Date:** 12-Dec-2023 **Time:** 02:32:40**Column ID:** C18**Extract Volume (uL):** 1000**Sample Data Filename:** RP3X_119 S: 31**Injection Volume (uL):** 2**Blank Data Filename:** RP3X_119 S: 29**Dilution Factor:** N/A**Cal. Ver. Data Filename:** RP3X_119 S: 23**Concentration Units:** ng/g (dry weight basis)**% Moisture:** 2.97

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL) ²	RETENTION TIME
TEP	B	1.55	0.0093 (L)	7:26
TPrP		0.013	0.0093 (L)	
TBP	B	1.11	0.0093 (L)	
TCEP	B	0.048	0.0206 (L)	8:12
TCPP	B	2.89	0.0772 (L)	10:21
TPP	B	1.51	0.0772 (L)	11:59
EHDPP	B	0.118	0.0412 (L)	14:11
2IPDPDP	B	5.36	0.0257 (L)	13:22
TCrP	B	0.078	0.0093 (L)	
4TBPDPDP		0.136	0.0257 (L)	13:59
TBEP	B	64.7	0.0618 (L)	13:05
TDCPP		0.162	0.0412 (L)	11:51
V6	U		0.0257 (L)	
TDBPP	U		0.0618 (L)	
TEHP	B	0.332	0.0103 (L)	16:41

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank.

(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: Bryan Alonzo

Form 2
ANALYSIS REPORT

CLIENT SAMPLE NO.
LAHAINA ASH DU-1
Sample Collection:
08-Nov-2023 11:00

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Matrix: SOLID

Sample Receipt Date: 17-Nov-2023

Extraction Date: 07-Dec-2023

Analysis Date: 12-Dec-2023 Time: 02:32:40

Extract Volume (uL): 1000

Injection Volume (uL): 2

Dilution Factor: N/A

Concentration Units: ng absolute

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

DOH MAUI WILDFIRE -
LAHAINA ASH DU-1
L40563-1 R

9.71 g (dry)

18-Oct-2023

LC MS/MS

C18

RP3X_119 S: 31

RP3X_119 S: 29

RP3X_119 S: 23

2.97

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	RETENTION TIME
d15-TEP		5.00	0.995	19.9	7:21
d21-TPrP		5.00	2.20	44.1	10:05
d27-TBP		5.00	3.22	64.4	12:31
d12-TCEP		102	89.3	87.6	8:09
d18-TCPP		15.0	12.8	85.3	10:21
13C18-TPP		30.0	25.1	83.6	11:59
d10-2IPPDPP	V	150	37.6	25.1	13:19
d10-4TBPDP	V	150	34.7	23.1	13:56
d27-TBEP	V	450	114	25.4	12:57
d15-TDCPP		200	149	74.2	11:48
d51-TEHP		200	60.5	30.2	16:37
d16-V6		150	33.2	22.2	10:56
d15-TDBPP	V	750	197	26.2	12:21

(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: Bryan Alonzo

Form 1A
ANALYSIS REPORT

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

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No.

N/A

Lab Sample I.D.:

WG88111-101

Matrix: SOLID

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 18-Oct-2023

Extraction Date: 07-Dec-2023

Instrument ID: LC MS/MS

Analysis Date: 12-Dec-2023 Time: 01:48:46

Column ID: C18

Extract Volume (uL): 1000

Sample Data Filename: RP3X_119 S: 29

Injection Volume (uL): 2

Blank Data Filename: RP3X_119 S: 29

Dilution Factor: N/A

Cal. Ver. Data Filename: RP3X_119 S: 23

Concentration Units: ng/g

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG ¹	CONC. FOUND	REPORTING LIMIT (RL) ²	RETENTION TIME
TEP	U	0.430	0.0090 (L)	7:26
TPrP			0.0090 (L)	
TBP		0.565	0.0090 (L)	
TCEP		0.033	0.0200 (L)	8:12
TCPP	U	0.378	0.0750 (L)	10:21
TPP		1.10	0.0750 (L)	11:58
EHDPP		0.122	0.0400 (L)	14:10
2IPPDPP		4.71	0.0250 (L)	13:20
TCrP		0.052	0.0090 (L)	
4TBDPP			0.0250 (L)	
TBEP		46.9	0.0600 (L)	13:04
TDCPP			0.0400 (L)	
V6			0.0250 (L)	
TDBPP			0.0600 (L)	
TEHP		0.103	0.0100 (L)	16:44

(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: _____Bryan Alonzo_____

Form 2
ANALYSIS REPORT

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

SGS AXYS ANALYTICAL SERVICES

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

Contract No.: 4066

Project No.

N/A

Lab Sample I.D.:

WG88111-101

Matrix: SOLID

Sample Size:

10.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

18-Oct-2023

Extraction Date: 07-Dec-2023

Instrument ID:

LC MS/MS

Analysis Date: 12-Dec-2023 Time: 01:48:46

Column ID:

C18

Extract Volume (uL): 1000

Sample Data Filename:

RP3X_119 S: 29

Injection Volume (uL): 2

Blank Data Filename:

RP3X_119 S: 29

Dilution Factor: N/A

Cal. Ver. Data Filename:

RP3X_119 S: 23

Concentration Units: ng absolute

This page is part of a total report that contains information necessary for accreditation compliance.
This test is not NELAP accredited. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG ¹	SPIKE CONC.	CONC. FOUND	R(%) ²	RETENTION TIME
d15-TEP		5.00	1.12	22.4	7:21
d21-TPrP		5.00	2.11	42.1	10:05
d27-TBP		5.00	3.38	67.6	12:30
d12-TCEP		102	78.1	76.6	8:09
d18-TCPP		15.0	11.8	78.8	10:21
13C18-TPP		30.0	26.1	86.8	11:58
d10-2IPDPDP	V	150	44.3	29.5	13:17
d10-4TBDPDP	V	150	42.7	28.5	13:55
d27-TBEP	V	450	106	23.6	12:55
d15-TDCPP		200	169	84.3	11:47
d51-TEHP		200	275	137	16:40
d16-V6	V	150	22.7	15.2	10:55
d15-TDBPP	V	750	204	27.2	12:20

(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: _____Bryan Alonzo_____

Form 8A
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.:	WG88111-102
Matrix:	SOLID	Initial Calibration Date:	18-Oct-2023
Extraction Date:	07-Dec-2023	Instrument ID:	LC MS/MS
Analysis Date:	12-Dec-2023 Time: 00:42:47	Column ID:	C18
Extract Volume (uL):	1000	OPR Data Filename:	RP3X_119 S: 26
Injection Volume (uL):	2	Blank Data Filename:	RP3X_119 S: 29
Dilution Factor:	N/A	Cal. Ver. Data Filename:	RP3X_119 S: 23

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

COMPOUND	LAB FLAG ¹	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RETENTION TIME
TEP	N	10.0	15.5	155	7:26
TPrP		30.0	29.6	98.6	
TBP		40.0	40.2	100	
TCEP		40.0	42.1	105	8:11
TCPP		50.0	45.6	91.2	10:21
TPP		50.2	61.7	123	11:59
EHDPP		80.0	79.3	99.1	14:11
2IPDPDP	N	50.0	70.8	142	13:22
TCrP		40.2	41.0	102	
4TBDPDP		50.0	52.7	106	13:59
TBEP	N	40.1	182	455	13:05
TDCPP		80.0	78.7	98.4	11:51
V6		49.9	53.3	107	10:58
TDBPP		120	114	94.8	12:25
TEHP		20.0	26.2	131	16:41

(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: _____Bryan Alonzo_____

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
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.:	WG88111-102
Matrix:	SOLID	Initial Calibration Date:	18-Oct-2023
Extraction Date:	07-Dec-2023	Instrument ID:	LC MS/MS
Analysis Date:	12-Dec-2023 Time: 00:42:47	Column ID:	C18
Extract Volume (uL):	1000	OPR Data Filename:	RP3X_119 S: 26
Injection Volume (uL):	2	Blank Data Filename:	RP3X_119 S: 29
Dilution Factor:	N/A	Cal. Ver. Data Filename:	RP3X_119 S: 23

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

LABELLED COMPOUND	LAB FLAG ¹	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RETENTION TIME
d15-TEP		5.00	2.12	42.4	7:21
d21-TPrP		5.00	3.39	67.9	10:05
d27-TBP		5.00	4.24	84.8	12:31
d12-TCEP		102	92.6	90.9	8:08
d18-TCPP		15.0	14.4	96.1	10:21
13C18-TPP		30.0	27.1	90.3	11:59
d10-2IPPDPP		50.0	43.0	86.1	13:19
d10-4TBDPP		50.0	40.6	81.3	13:56
d27-TBEP		150	125	83.3	12:57
d15-TDCPP		200	169	84.4	11:48
d51-TEHP		200	50.1	25.0	16:37
d16-V6		50.0	38.4	76.8	10:55
d15-TDBPP		250	222	88.7	12:21

(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: _____Bryan Alonzo_____

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.

LC MS/MS INITIAL CALIBRATION PERCENT RECOVERIES

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811
Initial Calibration Date: 18-Oct-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: RP3X_099 S: 8
CS2 Data Filename: RP3X_099 S: 9
CS3 Data Filename: RP3X_099 S: 10
CS4 Data Filename: RP3X_099 S: 11
CS5 Data Filename: RP3X_099 S: 12
CS6 Data Filename: RP3X_099 S: 13
CS7 Data Filename: RP3X_099 S: 14
CS8 Data Filename: N/A

COMPOUND	LAB FLAG ¹	PERCENT RECOVERY (%)							
		CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7
TEP			120	139	95.9	89.1	87.0	86.9	81.8
TPrP			102	95.4	104	103	105	103	87.1
TBP			132	126	98.6	92.2	88.2	87.8	75.1
TCEP			121	102	99.5	98.7	100	96.5	81.6
TCPP				138	102	89.6	82.3	88.3	
TPP				106	105	102	99.7	99.6	88.3
EHDPP			123	106	97.8	93.8	91.3	87.9	
2IPPDPP			102	116	107	105	105	96.9	67.4
TCrP			99.5	93.8	98.4	96.2	97.7	106	108
4TBPDP			118	110	104	102	99.4	94.7	71.5
TBEP				129	106	94.0	88.0	83.1	
TDCPP			130	104	91.4	99.0	96.2	96.4	83.2
V6			101	102	105	103	103	99.7	85.9
TDBPP			101	105	104	103	103	99.2	85.4
TEHP			114	95.2	105	103	103	100	79.1

(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: _____Bryan Alonzo_____

LC MS/MS INITIAL CALIBRATION PERCENT RECOVERIES

SGS AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811
Initial Calibration Date: 18-Oct-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: RP3X_099 S: 8
CS2 Data Filename: RP3X_099 S: 9
CS3 Data Filename: RP3X_099 S: 10
CS4 Data Filename: RP3X_099 S: 11
CS5 Data Filename: RP3X_099 S: 12
CS6 Data Filename: RP3X_099 S: 13
CS7 Data Filename: RP3X_099 S: 14
CS8 Data Filename: N/A

LABELED COMPOUND	LAB FLAG ¹	PERCENT RECOVERIES (%)							
		CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7
d15-TEP			103	99.0	99.3	96.9	100	100	101
d21-TPrP			103	102	99.9	97.0	97.3	100	101
d27-TBP			103	101	99.8	99.7	104	102	91.0
d12-TCEP			103	100	101	98.6	100	100	97.1
d18-TCPP			101	102	97.4	99.8	103	98.6	97.9
13C18-TPP			105	104	102	100	104	100	83.9
d10-2IPPDPP			101	100	101	97.8	102	101	97.8
d10-4TBDPP			101	98.8	99.1	98.4	103	102	97.7
d27-TBEP			102	97.3	99.7	96.9	102	104	97.8
d15-TDCPP			101	102	98.2	97.9	102	101	97.7
d51-TEHP			58.5	78.2	83.8	90.4	125	124	140
d16-V6			103	101	99.2	99.2	101	102	94.3
d15-TDBPP			101	100	98.7	98.6	101	103	96.8

(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: _____Bryan Alonzo_____

Form 3C
LC MS/MS INITIAL CALIBRATION RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES

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

Initial Calibration Date: 18-Oct-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: RP3X_099 S: 8
CS2 Data Filename: RP3X_099 S: 9
CS3 Data Filename: RP3X_099 S: 10
CS4 Data Filename: RP3X_099 S: 11
CS5 Data Filename: RP3X_099 S: 12
CS6 Data Filename: RP3X_099 S: 13
CS7 Data Filename: RP3X_099 S: 14
CS8 Data Filename: N/A

		RETENTION TIMES								MEAN RT
COMPOUND	LAB FLAG ¹	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	
TEP			7:32	7:31	7:30	7:31	7:30	7:32	7:30	7:31
TPrP										0
TBP										0
TCEP			8:18	8:17	8:17	8:17	8:16	8:19	8:16	8:17
TCPP				10:30	10:31	10:30	10:30	10:32		10:31
TPP				12:09	12:10	12:09	12:10	12:11	12:09	12:10
EHDPP			14:26	14:24	14:25	14:23	14:25	14:24		14:25
2IPPDPP			13:36	13:34	13:35	13:33	13:35	13:34	13:34	13:34
TCrP										0
4TBPDPP			14:13	14:11	14:12	14:11	14:12	14:11	14:12	14:12
TBEP				13:18	13:19	13:17	13:19	13:18		13:18
TDCPP			12:05	12:02	12:03	12:02	12:03	12:03	12:02	12:03
V6			11:10	11:06	11:08	11:06	11:07	11:09	11:06	11:07
TDBPP			12:39	12:36	12:37	12:35	12:37	12:37	12:36	12:37
TEHP			16:52	16:57	16:52	16:55	16:53	16:54	16:55	16:54

(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: _____Bryan Alonzo_____

For Axys Internal Use Only [XSL Template: FC-Form3C.xsl; Created: 14-Dec-2023 09:14:58; Application: XMLTransformer-1.18.46;
Report Filename: GENERIC-SPECS_FR_LC_18-Oct-2023_RP3X_Form3C_GS106526.html; Workgroup: WG88111; Design ID: 5276]

Form 3D
LC MS/MS INITIAL CALIBRATION RETENTION TIMES

SGS AXYS ANALYTICAL SERVICES

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

Initial Calibration Date: 18-Oct-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: RP3X_099 S: 8
CS2 Data Filename: RP3X_099 S: 9
CS3 Data Filename: RP3X_099 S: 10
CS4 Data Filename: RP3X_099 S: 11
CS5 Data Filename: RP3X_099 S: 12
CS6 Data Filename: RP3X_099 S: 13
CS7 Data Filename: RP3X_099 S: 14
CS8 Data Filename: N/A

		RETENTION TIMES								MEAN RT
LABELLED COMPOUND	LAB FLAG ¹	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	
d15-TEP			7:27	7:26	7:25	7:26	7:25	7:27	7:25	7:26
d21-TPrP			10:17	10:14	10:15	10:14	10:14	10:16	10:13	10:15
d27-TBP			12:46	12:43	12:44	12:43	12:44	12:45	12:44	12:44
d12-TCEP			8:15	8:14	8:14	8:14	8:13	8:16	8:13	8:14
d18-TCPP			10:33	10:30	10:31	10:30	10:30	10:32	10:30	10:31
13C18-TPP			12:12	12:09	12:10	12:09	12:10	12:11	12:09	12:10
d10-2IPDPP			13:33	13:31	13:32	13:30	13:32	13:31	13:31	13:31
d10-4TBDPP			14:11	14:09	14:09	14:08	14:09	14:09	14:09	14:09
d27-TBEP			13:12	13:09	13:10	13:09	13:10	13:10	13:10	13:10
d15-TDCPP			12:02	11:58	12:00	11:58	12:00	12:00	11:58	11:59
d51-TEHP			16:48	16:52	16:48	16:51	16:49	16:50	16:51	16:50
d16-V6			11:07	11:04	11:05	11:04	11:04	11:06	11:04	11:05
d15-TDBPP			12:35	12:32	12:33	12:32	12:33	12:34	12:32	12:33

(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: _____Bryan Alonzo_____

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:	18-Oct-2023	VER Data Filename:	RP3X_119 S: 23
Instrument ID:	LC MS/MS	Analysis Date:	11-Dec-2023
LC Column ID:	C18	Analysis Time:	23:36:55

COMPOUND	LAB FLAG ¹	RETENTION TIME	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
TEP		7:25	10.0	8.89	88.5
TPrP			30.0	32.8	109
TBP			40.0	36.4	91.1
TCEP		8:10	40.0	39.3	98.4
TCPP		10:18	50.0	42.8	85.6
TPP		11:57	50.2	49.0	97.6
EHDPP		14:11	80.0	75.9	94.8
2IPDP		13:21	50.0	52.1	104
TCrP			40.0	38.3	95.7
4TBPDP		13:59	50.0	50.6	101
TBEP		13:04	40.1	35.7	89.0
TDCPP		11:49	80.0	80.1	100
V6		10:56	49.9	51.2	102
TDBPP		12:23	120	123	102
TEHP		16:43	20.0	24.1	120

(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: Bryan Alonzo

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:	18-Oct-2023	VER Data Filename:	RP3X_119 S: 23
Instrument ID:	LC MS/MS	Analysis Date:	11-Dec-2023
LC Column ID:	C18	Analysis Time:	23:36:55

LABELLED COMPOUND	LAB FLAG ¹	RETENTION TIME	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
d15-TEP		7:20	5.00	5.10	102
d21-TPrP		10:02	5.00	5.16	103
d27-TBP		12:30	5.00	5.10	102
d12-TCEP		8:07	100	101	101
d18-TCPP		10:19	15.0	14.8	99.1
13C18-TPP		11:57	30.0	31.4	105
d10-2IPPDPP		13:18	50.0	49.8	99.6
d10-4TBPDP		13:56	50.0	50.6	101
d27-TBEP		12:56	150	141	93.7
d15-TDCPP		11:46	200	189	94.5
d51-TEHP		16:39	200	402	201
d16-V6		10:53	50.0	44.1	88.2
d15-TDBPP		12:20	250	231	92.4

(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: _____Bryan Alonzo_____

For Axys Internal Use Only [XSL Template: FC-Form4B.xsl; Created: 14-Dec-2023 09:14:58; Application: XMLTransformer-1.18.46; Report Filename: GENERIC-SPECS_FR_LC_RP3X_119S23__Form4B_SJ3357275.html; Workgroup: WG88111; Design ID: 5276]

Page 20 of 51

Page 21 of 51

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 DOD ** ANAB ISO 17025 CAIA California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Virginia DGS Washington DE ANAB DOD ** ANAB ISO 17025 CAIA Florida DOH Minnesota DOH New Jersey DEP Virginia DGS CAIA CAIA Alaska DEC ANAB DOD ** ANAB ISO 17025 California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE ** ANAB DOD ** ANAB ISO 17025					
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	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 8270E	MLA-007						
PCB congeners		SGS AXYS MLA-007	MLA-007						
PCB congeners		EPA 1668	MLA-010						
PCB congeners	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y			Y		
PCB congeners		SGS AXYS MLA-210	MLA-210				Y		
PCB congeners		SGS AXYS MLA-908	MLA-908				Y		
PCB congeners	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1628	MLA-908						
PCB congeners		EPA 8270E	MLA-007						
PCB congeners		SGS AXYS MLA-007	MLA-007				Y		
PCB congeners	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y		
PCB congeners		SGS AXYS MLA-210	MLA-210				Y		
PCB congeners	PCB 11 3,3'-Dichlorobiphenyl	SGS AXYS MLA-908	MLA-908				Y		
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	Y			Y		
PCB congeners		SGS AXYS MLA-210	MLA-210				Y		
PCB congeners		SGS AXYS MLA-908	MLA-908				Y		
PCB congeners	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1628	MLA-908						
PCB congeners		EPA 1668	MLA-010						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y		
PCB congeners	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	SGS AXYS MLA-210	MLA-210				Y		
PCB congeners		SGS AXYS MLA-908	MLA-908				Y		
PCB congeners		EPA 1628	MLA-908						
PCB congeners	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010						
PCB congeners		EPA 8270E	MLA-007						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y		
PCB congeners	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	SGS AXYS MLA-210	MLA-210				Y		
PCB congeners		SGS AXYS MLA-908	MLA-908				Y		
PCB congeners		EPA 1628	MLA-908						
PCB congeners	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010						
PCB congeners		EPA 8270E	MLA-007						
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y		

Page 30 of 51

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 DOD **	ANAB ISO 17025	CAIA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DOD **	ANAB ISO 17025	CAIA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CAIA	CAIA	CAIA	Alaska DEC	ANAB DOD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DOD **	ANAB ISO 17025		
PCB congeners	PCB 190 2,3,3',4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y			Y	Y		Y								Y	Y		Y	Y	Y	Y	Y					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y										Y	Y					Y																		
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y		Y	Y	Y	Y	Y					
PCB congeners		SGS AXYS MLA-908	MLA-908												Y					Y		Y									Y											
PCB congeners	PCB 191 2,3,3',4',4',5',6-Heptachlorobiphenyl	EPA 1628	MLA-908							Y										Y											Y											
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y			Y		Y		Y								Y	Y		Y	Y	Y	Y	Y				
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y								Y	Y					Y							Y											
PCB congeners	PCB 192 2,3,3',4,4',5,5',6-Heptachlorobiphenyl	SGS AXYS MLA-007	MLA-007					Y										Y						Y																		
PCB congeners		SGS AXYS MLA-210	MLA-210							Y						Y				Y		Y												Y	Y	Y	Y	Y	Y			
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y		Y	Y	Y	Y	Y	Y				
PCB congeners		EPA 1628	MLA-908							Y										Y												Y										
PCB congeners	PCB 193 2,3,3',4',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y			Y		Y		Y								Y	Y		Y	Y	Y	Y	Y				
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y								Y	Y					Y							Y											
PCB congeners		SGS AXYS MLA-007	MLA-007					Y										Y						Y																		
PCB congeners	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	SGS AXYS MLA-210	MLA-210					Y		Y					Y					Y		Y												Y	Y	Y	Y	Y	Y			
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y										Y		Y	Y	Y	Y	Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y												Y										
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y			Y		Y		Y								Y	Y		Y	Y	Y	Y	Y				
PCB congeners	PCB 195 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y								Y	Y					Y							Y											
PCB congeners		SGS AXYS MLA-007	MLA-007					Y										Y																								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y					Y					Y		Y									Y				Y	Y	Y	Y	Y	Y		
PCB congeners	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y										Y		Y	Y	Y	Y	Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y												Y										
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y			Y		Y		Y								Y	Y		Y	Y	Y	Y	Y				
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y				Y		Y								Y	Y					Y							Y											
PCB congeners		SGS AXYS MLA-007	MLA-007					Y										Y																								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y					Y					Y		Y									Y				Y	Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y				Y	Y	Y	Y	Y	Y		
PCB congeners	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1628	MLA-908							Y										Y												Y										
PCB congeners		EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y			Y		Y		Y								Y	Y		Y	Y	Y	Y	Y	Y			
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y								Y	Y					Y							Y											
PCB congeners	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	SGS AXYS MLA-007	MLA-007					Y										Y																								
PCB congeners		SGS AXYS MLA-210	MLA-210							Y										Y		Y																				
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y				Y	Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y												Y										

Accreditation Scope

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

Accreditation Scope				Serum	Solids												Tissue and Tissue Flora					Urine	Water	Water, Non-Portable										AFF			
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID		ALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	ALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	ALA	Florida DOH			Minnesota DOH	New Jersey DEP	Virginia DGS	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH		New Jersey DEP	New York DOH	Pennsylvania DEP
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y											Y																		
PCB congeners		SGS AXYS MLA-210	MLA-210						Y										Y																		
PCB congeners		SGS AXYS MLA-908	MLA-908												Y					Y																	
PCB congeners		EPA 1628	MLA-908																																		
PCB congeners	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010							Y				Y	Y	Y	Y			Y																	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y											Y																	
PCB congeners		SGS AXYS MLA-210	MLA-210						Y												Y																
PCB congeners		SGS AXYS MLA-908	MLA-908												Y	Y					Y																
PCB congeners	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1628	MLA-908																																		
PCB congeners		EPA 1668	MLA-010							Y	Y			Y	Y	Y	Y				Y																
PCB congeners		SGS AXYS MLA-010	MLA-010	Y						Y											Y																
PCB congeners		SGS AXYS MLA-210	MLA-210							Y												Y															
PCB congeners	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	SGS AXYS MLA-908	MLA-908																		Y																
PCB congeners		EPA 1628	MLA-908																																		
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y				Y															
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y					Y												Y																
PCB congeners		SGS AXYS MLA-007	MLA-007						Y																												
PCB congeners		SGS AXYS MLA-210	MLA-210							Y												Y															
PCB congeners		SGS AXYS MLA-908	MLA-908													Y	Y					Y															
PCB congeners	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1628	MLA-908																																		
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y				Y															
PCB congeners		SGS AXYS MLA-010	MLA-010	Y						Y												Y															
PCB congeners		SGS AXYS MLA-210	MLA-210								Y												Y														
PCB congeners	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	SGS AXYS MLA-908	MLA-908																			Y															
PCB congeners		EPA 1628	MLA-908																																		
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y				Y															
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	SGS AXYS MLA-010	MLA-010	Y					Y												Y																
PCB congeners		SGS AXYS MLA-210	MLA-210							Y												Y															
PCB congeners		SGS AXYS MLA-908	MLA-908																			Y															
PCB congeners		EPA 1628	MLA-908																																		
PCB congeners	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y						Y												Y															
PCB congeners		SGS AXYS MLA-210	MLA-210								Y												Y														
PCB congeners		SGS AXYS MLA-908	MLA-908																				Y														
PCB congeners	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1628	MLA-908																																		
PCB congeners		EPA 1668	MLA-010								Y	Y			Y	Y	Y	Y				Y															
PCB congeners		SGS AXYS MLA-010	MLA-010	Y						Y												Y															
PCB congeners		SGS AXYS MLA-210	MLA-210								Y												Y														
PCB congeners	PCB 98 2,2',3,4',6-Pentachlorobiphenyl	SGS AXYS MLA-908	MLA-908																			Y															
PCB congeners		EPA 1628	MLA-908																																		
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-007	MLA-007							Y													Y														
PCB congeners	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y						Y												Y															
PCB congeners		SGS AXYS MLA-210	MLA-210								Y												Y														
PCB congeners		SGS AXYS MLA-908	MLA-908																				Y														
PCB congeners	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1628	MLA-908																																		
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y						Y												Y															
PCB congeners		SGS AXYS MLA-007	MLA-007								Y												Y														
PCB congeners	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	SGS AXYS MLA-901	MLA-901	Y																																	
PCB congeners		SGS AXYS MLA-210	MLA-210							Y													Y														
PCB congeners		SGS AXYS MLA-908	MLA-908								Y												Y														
PCB congeners		EPA 1628	MLA-908																																		
PCB congeners	PCB congeners, total	SGS AXYS MLA-010	MLA-010																																		
PCB congeners		EPA 1668	MLA-010																																		

Page 43 of 51

Accreditation Scope

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

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
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	ANAB DoD ** ANAB ISO 17025 CALA Florida DOH Minnesota DOH New Jersey DEP Virginia DGS
Unine	Water	Water, Non-Portable	AFFE
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 California WB Florida DOH Maine DOH Minnesota DOH New Jersey DEP New York DOH Pennsylvania DEP Virginia DGS Washington DE *	ANAB DoD ** ANAB ISO 17025
PFAS	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	EPA 1633 draft SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4	MLA-110 MLA-110 MLA-110 MLA-110
PFAS	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-110 MLA-110 MLA-110 MLA-110
PFAS	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-110 MLA-110 MLA-110 MLA-110
PFAS	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-110 MLA-110 MLA-110 MLA-110
PFAS	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-110 MLA-110 MLA-110 MLA-110
PFAS	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-110 MLA-110 MLA-110 MLA-110
PFAS	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060 SGS AXYS MLA-041 SGS AXYS MLA-043 SGS AXYS MLA-042 SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-060 MLA-041 MLA-043 MLA-042 MLA-110 MLA-110 MLA-110 MLA-110
PFAS	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060 SGS AXYS MLA-041 SGS AXYS MLA-043 SGS AXYS MLA-042 SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-060 MLA-041 MLA-043 MLA-042 MLA-110 MLA-110 MLA-110 MLA-110
PFAS	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-110 MLA-110 MLA-110 MLA-110
PFAS	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060 SGS AXYS MLA-041 SGS AXYS MLA-043 SGS AXYS MLA-042 SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-060 MLA-041 MLA-043 MLA-042 MLA-110 MLA-110 MLA-110 MLA-110
PFAS	Perfluorododecanesulfonate (PFDdS)	SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-110 MLA-110 MLA-110 MLA-110
PFAS	Perfluorododecanoate (PFDdA)	SGS AXYS MLA-060 SGS AXYS MLA-041 SGS AXYS MLA-043 SGS AXYS MLA-042 SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-060 MLA-041 MLA-043 MLA-042 MLA-110 MLA-110 MLA-110 MLA-110
PFAS	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110 DoD QSM Version 5.3 DoD QSM Version 5.4 EPA 1633 draft	MLA-110 MLA-110 MLA-110 MLA-110

[illegible]

Page 47 of 51

Page 48 of 51

Accreditation Scope

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

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CA	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025	
PPCP		SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Trenbolone	SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Trenbolone acetate	SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Triamterene	SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Triclocarban	EPA 1694	MLA-075								Y											Y								
PPCP		SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Triclosan	EPA 1694	MLA-075							Y														Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Trimethoprim	EPA 1694	MLA-075							Y													Y							
PPCP		SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Tylosin	EPA 1694	MLA-075							Y													Y							
PPCP		SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Valsartan	SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Verapamil	SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Virginiamycin	EPA 1694	MLA-075							Y													Y							
PPCP		SGS AXYS MLA-075	MLA-075					Y																						
PPCP	Warfarin	EPA 1694	MLA-075							Y													Y							
PPCP		SGS AXYS MLA-075	MLA-075					Y																						
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111					Y																						
TOP	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111					Y																						
Note *	Analysis of pesticides and PCBs in non-potable water samples by SGS AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.																													
Note **	PFAS by LC-MS/MS compliant with US DoD QSM 5.3 table B-15 and US DoD QSM 5.4 table B-24																													

Legend	
Y	Accreditation scope
AFFF	Aqueous film forming foam
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TOP	Total Oxidizable Precursors
California WB	California Water Boards, Lab ID 2911
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Alaska DEC	Alaska Department of Environmental Conservation, Contaminated Sites Laboratory Approval 17-014
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003

Accreditation Scope

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

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

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



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



CALA
Testing
Accreditation No. A2637