



2045 Mills Road West  
Sidney, BC, Canada V8L5X2

TEL: (250) 655-5800  
TOLL-FREE: 1-888-373-0881

---

AXYS Client No.: 4826

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

The AXYS contact for these data is Sean Campbell.

# BATCH SUMMARY

<b>Batch ID:</b> WG57937	<b>Date:</b> 16-Feb-2017
<b>Analysis Type:</b> Dioxin/Furan	<b>Matrix Type:</b> Effluent final
<b>BATCH MAKEUP</b>	
<b>Contract:</b> 4826 <b>Samples:</b>  L26602-3 CDA EFFLUENT L26602-4 CDA INFLUENT	<b>Blank:</b> WG57937-101  <b>Reference or Spike:</b> WG57937-102  <b>Duplicate:</b>
<b>Comments:</b> 1. Data are considered final. 2. Data are not blank corrected.	

Copyright AXYS Analytical Services Ltd  
February 1993

FQA-006 Rev. 2. 18-Jul-1994

AXYS METHOD MLA-017 Rev 20

Form 3A  
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

AXYS ANALYTICAL SERVICES

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

Initial Calibration Date: 27-Sep-2016

Instrument ID: HR GC/MS

GC Column ID: DB5

CS0 Data Filename: N/A

CS1 Data Filename: DX6M\_125 S: 5

CS2 Data Filename: DX6M\_125 S: 6

CS3 Data Filename: DX6M\_125 S: 4

CS4 Data Filename: DX6M\_125 S: 7

CS5 Data Filename: DX6M\_125 S: 8

CS6 Data Filename: N/A

COMPOUND	LAB FLAG <sup>1</sup>	RELATIVE RESPONSE (RR)						MEAN RR	CV (%RSD) <sup>2</sup>
		CS0	CS1	CS2	CS3	CS4	CS5		
2,3,7,8-TCDD			0.96	0.96	0.99	1.00	1.00	0.98	2.00

- (1) Where applicable, custom lab flags have been used on this report.
- (2) For contract CV specifications, see Section 10.5.4, Method 1613.
- (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.
- (4) Response ratios are calculated relative to the labeled analogs of the other two HXCDDs (Section 17.1.2, Method 1613).
- (5) Response ratios are calculated relative to the labeled analog of OCDD (Section 17.1.1, Method 1613).

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

Signed: \_\_\_\_\_ Robert Tones \_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form3A.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35; Report Filename: 1613\_DIOXINS\_27-Sep-2016\_DX6M\_Form3A\_GS68602.html; Workgroup: WG57937; Design ID: 2503 ]

AXYS METHOD MLA-017 Rev 20

Form 3B  
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

**AXYS ANALYTICAL SERVICES**

2045 MILLS RD., SIDNEY, B.C., CANADA  
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811  
Initial Calibration Date: 27-Sep-2016

CS0 Data Filename: N/A  
CS1 Data Filename: DX6M\_125 S: 5  
CS2 Data Filename: DX6M\_125 S: 6  
CS3 Data Filename: DX6M\_125 S: 4  
CS4 Data Filename: DX6M\_125 S: 7  
CS5 Data Filename: DX6M\_125 S: 8  
CS6 Data Filename: N/A

Instrument ID: HR GC/MS  
GC Column ID: DB5

LABELED COMPOUND	LAB FLAG <sup>1</sup>	RELATIVE RESPONSE (RR)						MEAN RR	CV (%RSD) <sup>2</sup>
		CS0	CS1	CS2	CS3	CS4	CS5		
<b>13C-2,3,7,8-TCDD</b>			0.98	0.98	1.02	0.99	1.03	1.00	2.53
<b>CLEANUP STANDARD</b>									
<b>37CL-2,3,7,8-TCDD</b>			1.13	1.04	1.08	1.03	1.08	1.07	3.68

- (1) Where applicable, custom lab flags have been used on this report.
- (2) For contract CV specifications, see Section 10.5.4, Method 1613.
- (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.  
Signed: \_\_\_\_\_Robert Tones\_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form3B.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35; Report Filename: 1613\_DIOXINS\_27-Sep-2016\_DX6M\_Form3B\_GS68602.html; Workgroup: WG57937; Design ID: 2503 ]

AXYS METHOD MLA-017 Rev 20

Form 3C  
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA  
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811  
Initial Calibration Date: 27-Sep-2016

Instrument ID: HR GC/MS  
GC Column ID: DB5

CS0 Data Filename: N/A  
CS1 Data Filename: DX6M\_125 S: 5  
CS2 Data Filename: DX6M\_125 S: 6  
CS3 Data Filename: DX6M\_125 S: 4  
CS4 Data Filename: DX6M\_125 S: 7  
CS5 Data Filename: DX6M\_125 S: 8  
CS6 Data Filename: N/A

COMPOUND	LAB FLAG <sup>1</sup>	M/Z's FORMING RATIO <sup>2</sup>	ION ABUNDANCE RATIO						QC LIMITS <sup>3</sup>
			CS0	CS1	CS2	CS3	CS4	CS5	
2,3,7,8-TCDD		M/M+2		0.70	0.77	0.79	0.78	0.78	0.65-0.89

- (1) Where applicable, custom lab flags have been used on this report.
- (2) See Table 8, Method 1613, for m/z specifications.
- (3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

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

Signed: \_\_\_\_\_Robert Tones\_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form3C.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35; Report Filename: 1613\_DIOXINS\_27-Sep-2016\_DX6M\_Form3C\_GS68602.html; Workgroup: WG57937; Design ID: 2503 ]



AXYS METHOD MLA-017 Rev 20

Form 3D  
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA  
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811  
Initial Calibration Date: 27-Sep-2016

CS0 Data Filename: N/A  
CS1 Data Filename: DX6M\_125 S: 5  
CS2 Data Filename: DX6M\_125 S: 6  
CS3 Data Filename: DX6M\_125 S: 4  
CS4 Data Filename: DX6M\_125 S: 7  
CS5 Data Filename: DX6M\_125 S: 8  
CS6 Data Filename: N/A

Instrument ID: HR GC/MS

GC Column ID: DB5

LABELED COMPOUND	LAB FLAG <sup>1</sup>	M/Z's FORMING RATIO <sup>2</sup>	ION ABUNDANCE RATIO						QC LIMITS <sup>3</sup>	
			CS0	CS1	CS2	CS3	CS4	CS5		CS6
13C-2,3,7,8-TCDD		M/M+2		0.77	0.78	0.76	0.78	0.78		0.65-0.89

- (1) Where applicable, custom lab flags have been used on this report.
- (2) See Table 8, Method 1613, for m/z specifications.
- (3) Ion Abundance Ratio Control Limits from Table 9, Method 1613.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

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

Signed: \_\_\_\_\_Robert Tones\_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form3D.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35; Report Filename: 1613\_DIOXINS\_27-Sep-2016\_DX6M\_Form3D\_GS68602.html; Workgroup: WG57937; Design ID: 2503 ]

AXYS METHOD MLA-017 Rev 20

Form 1A  
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.  
CDA EFFLUENT  
Sample Collection:  
N/A

AXYS ANALYTICAL SERVICES

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

<b>Contract No.:</b>	4826	<b>Project No.</b>	CDA PCBS/DIOXIN 1ST QUARTER 2017
<b>Matrix:</b>	EFFLUENT FINAL	<b>Lab Sample I.D.:</b>	L26602-3
<b>Sample Receipt Date:</b>	12-Jan-2017	<b>Sample Size:</b>	0.982 L
<b>Extraction Date:</b>	18-Jan-2017	<b>Initial Calibration Date:</b>	27-Sep-2016
<b>Analysis Date:</b>	10-Feb-2017 Time: 04:37:39	<b>Instrument ID:</b>	HR GC/MS
<b>Extract Volume (uL):</b>	20	<b>GC Column ID:</b>	DB5
<b>Injection Volume (uL):</b>	1.0	<b>Sample Data Filename:</b>	DX7M_013 S: 17
<b>Dilution Factor:</b>	N/A	<b>Blank Data Filename:</b>	DX7M_013 S: 14
<b>Concentration Units:</b>	pg/L	<b>Cal. Ver. Data Filename:</b>	DX7M_013 S: 10

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 <sup>1</sup>	CONCENTRATION FOUND	REPORTING LIMIT (RL) <sup>2</sup>	ION ABUND. RATIO <sup>3</sup>	RRT <sup>3</sup>
2,3,7,8-TCDD	U		0.509 (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.
- (3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

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

Signed: \_\_\_\_\_ Jason MacKenzie \_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form1A.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35; Report Filename: 1613\_DIOXINS\_1613DB5\_L26602-3\_Form1A\_DX7M\_013S17\_SJ2166473.html; Workgroup: WG57937; Design ID: 2503 ]



AXYS METHOD MLA-017 Rev 20

**Form 2**  
**PCDD/PCDF ANALYSIS REPORT**

**CLIENT SAMPLE NO.**  
**CDA EFFLUENT**  
**Sample Collection:**  
**N/A**

**AXYS ANALYTICAL SERVICES**

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

<b>Contract No.:</b>	4826	<b>Project No.</b>	CDA PCBS/DIOXIN 1ST QUARTER 2017
<b>Matrix:</b>	EFFLUENT FINAL	<b>Lab Sample I.D.:</b>	L26602-3
<b>Sample Receipt Date:</b>	12-Jan-2017	<b>Sample Size:</b>	0.982 L
<b>Extraction Date:</b>	18-Jan-2017	<b>Initial Calibration Date:</b>	27-Sep-2016
<b>Analysis Date:</b>	10-Feb-2017 <b>Time:</b> 04:37:39	<b>Instrument ID:</b>	HR GC/MS
<b>Extract Volume (uL):</b>	20	<b>GC Column ID:</b>	DB5
<b>Injection Volume (uL):</b>	1.0	<b>Sample Data Filename:</b>	<b>DX7M_013 S: 17</b>
<b>Dilution Factor:</b>	N/A	<b>Blank Data Filename:</b>	DX7M_013 S: 14
<b>Concentration Units:</b>	pg absolute	<b>Cal. Ver. Data Filename:</b>	DX7M_013 S: 10

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

LABELED COMPOUND	LAB FLAG <sup>1</sup>	SPIKE CONC.	CONC. FOUND	R(%) <sup>2</sup>	ION ABUND. RATIO <sup>3</sup>	RRT <sup>3</sup>
13C-2,3,7,8-TCDD		2000	1280	63.9	0.78	1.013

**CLEANUP STANDARD**

37CL-2,3,7,8-TCDD		200	133	66.6		1.001
-------------------	--	-----	-----	------	--	-------

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

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

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

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

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

Signed: \_\_\_\_\_ Jason MacKenzie \_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form2.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35;  
Report Filename: 1613\_DIOXINS\_1613DB5\_L26602-3\_Form2\_DX7M\_013S17\_SJ2166473.html; Workgroup: WG57937; Design ID: 2503 ]





AXYS METHOD MLA-017 Rev 20

Form 1A  
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.  
CDA INFLUENT  
Sample Collection:  
N/A

AXYS ANALYTICAL SERVICES

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

**Contract No.:** 4826  
**Matrix:** INFLUENT  
**Sample Receipt Date:** 12-Jan-2017  
**Extraction Date:** 18-Jan-2017  
**Analysis Date:** 10-Feb-2017 **Time:** 05:32:54  
**Extract Volume (uL):** 20  
**Injection Volume (uL):** 1.0  
**Dilution Factor:** N/A  
**Concentration Units:** pg/L

**Project No.** CDA PCBS/DIOXIN 1ST QUARTER 2017  
**Lab Sample I.D.:** L26602-4  
**Sample Size:** 0.981 L  
**Initial Calibration Date:** 27-Sep-2016  
**Instrument ID:** HR GC/MS  
**GC Column ID:** DB5  
**Sample Data Filename:** DX7M\_013 S: 18  
**Blank Data Filename:** DX7M\_013 S: 14  
**Cal. Ver. Data Filename:** DX7M\_013 S: 10

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 <sup>1</sup>	CONCENTRATION FOUND	REPORTING LIMIT (RL) <sup>2</sup>	ION ABUND. RATIO <sup>3</sup>	RRT <sup>3</sup>
2,3,7,8-TCDD	U		0.510 (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.
- (3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate and in accord with AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.  
Signed: \_\_\_\_\_ Jason MacKenzie \_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form1A.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35;  
Report Filename: 1613\_DIOXINS\_1613DB5\_L26602-4\_Form1A\_DX7M\_013S18\_SJ2166474.html; Workgroup: WG57937; Design ID: 2503 ]



## AXYS METHOD MLA-017 Rev 20

Form 2  
PCDD/PCDF ANALYSIS REPORTCLIENT SAMPLE NO.  
CDA INFLUENT  
Sample Collection:  
N/A

## AXYS ANALYTICAL SERVICES

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

**Contract No.:** 4826

**Matrix:** INFLUENT

**Sample Receipt Date:** 12-Jan-2017

**Extraction Date:** 18-Jan-2017

**Analysis Date:** 10-Feb-2017 **Time:** 05:32:54

**Extract Volume (uL):** 20

**Injection Volume (uL):** 1.0

**Dilution Factor:** N/A

**Concentration Units:** pg absolute

**Project No.** CDA PCBS/DIOXIN 1ST QUARTER  
2017

**Lab Sample I.D.:** L26602-4

**Sample Size:** 0.981 L

**Initial Calibration Date:** 27-Sep-2016

**Instrument ID:** HR GC/MS

**GC Column ID:** DB5

**Sample Data Filename:** DX7M\_013 S: 18

**Blank Data Filename:** DX7M\_013 S: 14

**Cal. Ver. Data Filename:** DX7M\_013 S: 10

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

LABELED COMPOUND	LAB FLAG <sup>1</sup>	SPIKE CONC.	CONC. FOUND	R(%) <sup>2</sup>	ION ABUND. RATIO <sup>3</sup>	RRT <sup>3</sup>
13C-2,3,7,8-TCDD		2000	1550	77.6	0.77	1.013
<b>CLEANUP STANDARD</b>						
37CL-2,3,7,8-TCDD		200	175	87.7		1.001

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

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

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

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

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

Signed: \_\_\_\_\_ Jason MacKenzie \_\_\_\_\_



AXYS METHOD MLA-017 Rev 20

Form 1A  
PCDD/PCDF ANALYSIS REPORT

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

AXYS ANALYTICAL SERVICES

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

Contract No.: 4826  
Matrix: AQUEOUS  
Sample Receipt Date: N/A  
Extraction Date: 18-Jan-2017  
Analysis Date: 10-Feb-2017 Time: 01:52:00  
Extract Volume (uL): 20  
Injection Volume (uL): 1.0  
Dilution Factor: N/A  
Concentration Units: pg/L

Project No. N/A  
Lab Sample I.D.: WG57937-101  
Sample Size: 1.00 L  
Initial Calibration Date: 27-Sep-2016  
Instrument ID: HR GC/MS  
GC Column ID: DB5  
Sample Data Filename: DX7M\_013 S: 14  
Blank Data Filename: DX7M\_013 S: 14  
Cal. Ver. Data Filename: DX7M\_013 S: 10

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 <sup>1</sup>	CONCENTRATION FOUND	REPORTING LIMIT (RL) <sup>2</sup>	ION ABUND. RATIO <sup>3</sup>	RRT <sup>3</sup>
2,3,7,8-TCDD	U		0.500 (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.
- (3) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

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

Signed: \_\_\_\_\_ Jason MacKenzie \_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form1A.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35;  
Report Filename: 1613\_DIOXINS\_1613DB5\_WG57937-101\_Form1A\_DX7M\_013S14\_SJ2166468.html; Workgroup: WG57937; Design ID: 2503 ]



## AXYS METHOD MLA-017 Rev 20

Form 2  
PCDD/PCDF ANALYSIS REPORTCLIENT SAMPLE NO.  
Lab Blank  
Sample Collection:  
N/A

## AXYS ANALYTICAL SERVICES

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

Contract No.: 4826

Matrix: AQUEOUS

Sample Receipt Date: N/A

Extraction Date: 18-Jan-2017

Analysis Date: 10-Feb-2017 Time: 01:52:00

Extract Volume (uL): 20

Injection Volume (uL): 1.0

Dilution Factor: N/A

Concentration Units: pg absolute

Project No. N/A

Lab Sample I.D.: WG57937-101

Sample Size: 1.00 L

Initial Calibration Date: 27-Sep-2016

Instrument ID: HR GC/MS

GC Column ID: DB5

Sample Data Filename: DX7M\_013 S: 14

Blank Data Filename: DX7M\_013 S: 14

Cal. Ver. Data Filename: DX7M\_013 S: 10

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 <sup>1</sup>	SPIKE CONC.	CONC. FOUND	R(%) <sup>2</sup>	ION ABUND. RATIO <sup>3</sup>	RRT <sup>3</sup>
13C-2,3,7,8-TCDD		2000	1410	70.6	0.76	1.013
<b>CLEANUP STANDARD</b>						
37CL-2,3,7,8-TCDD		200	169	84.3		1.001

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

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

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

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

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

Signed: \_\_\_\_\_ Jason MacKenzie \_\_\_\_\_

For Axy Internal Use Only [ XSL Template: Form2.xml; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35;  
Report Filename: 1613\_DIOXINS\_1613DB5\_WG57937-101\_Form2\_DX7M\_013S14\_SJ2166468.html; Workgroup: WG57937; Design ID: 2503 ]



## AXYS METHOD MLA-017 Rev 20

## Form 8A

## PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

## AXYS ANALYTICAL SERVICES

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

Contract No.: 4826

OPR Data Filename:

DX7M\_013 S: 11

Matrix: AQUEOUS

Lab Sample I.D.:

WG57937-102

Extraction Date: 18-Jan-2017

Analysis Date:

09-Feb-2017 Time: 23:09:02

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

COMPOUND	LAB FLAG <sup>1</sup>	ION ABUND. RATIO <sup>2</sup>	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS <sup>3</sup> (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.76	10.0	9.55	6.70 - 15.8	95.5

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

(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.

(3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.

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

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

Signed: \_\_\_\_\_ Jason MacKenzie \_\_\_\_\_

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

For Axys Internal Use Only [ XSL Template: Form8A.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35;  
 Report Filename: 1613\_DIOXINS\_1613DB5\_WG57937-102\_Form8A\_SJ2166463.html; Workgroup: WG57937; Design ID: 2503 ]



## AXYS METHOD MLA-017 Rev 20

## Form 8B

## PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

## AXYS ANALYTICAL SERVICES

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

Contract No.: 4826

OPR Data Filename:

DX7M\_013 S: 11

Matrix: AQUEOUS

Lab Sample I.D.:

WG57937-102

Extraction Date: 18-Jan-2017

Analysis Date:

09-Feb-2017 Time: 23:09:02

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

LABELLED COMPOUND	LAB FLAG <sup>1</sup>	ION ABUND. RATIO <sup>2</sup>	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS <sup>3</sup> (ng/mL)	% RECOVERY
13C-2,3,7,8-TCDD		0.78	100	71.0	20.0-175	71.0
<b>CLEANUP STANDARD</b>						
37CL-2,3,7,8-TCDD			10.0	7.77	3.10-19.1	77.7

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

(2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.

(3) Contract-required concentration limits for OPR as specified in Table 6, Method 1613. Labeled compound concentrations limits are based on required percent recovery (Section 15.5, Method 1613).

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

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

Signed: \_\_\_\_\_ Jason MacKenzie \_\_\_\_\_

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

For Axys Internal Use Only [ XSL Template: Form8B.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35;  
 Report Filename: 1613\_DIOXINS\_1613DB5\_WG57937-102\_Form8B\_SJ2166463.html; Workgroup: WG57937; Design ID: 2503 ]

## AXYS METHOD MLA-017 Rev 20

## Form 5

## PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

## AXYS ANALYTICAL SERVICES

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

<b>Instrument ID:</b>	HR GC/MS	<b>Initial Calibration Date:</b>	27-Sep-2016
<b>RT Window Data Filename:</b>	DX6M_125 S: 1	<b>Analysis Date:</b>	27-Sep-2016
<b>DB-5 IS Data Filename:</b>	DX6M_125 S: 1	<b>Analysis Date:</b>	27-Sep-2016
<b>DB-225 IS Data Filename:</b>		<b>Analysis Date:</b>	
		<b>Time:</b>	09:17:52
		<b>Time:</b>	09:17:52
		<b>Time:</b>	

## DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	22:59	1,3,6,8-TCDF (F)	21:28
1,2,8,9-TCDD (L)	28:19	1,2,8,9-TCDF (L)	28:10
1,2,4,7,9-PECDD (F)	32:02	1,3,4,6,8-PECDF (F)	28:53
1,2,3,8,9-PECDD (L)	37:01	1,2,3,8,9-PECDF (L)	37:05
1,2,4,6,7,9-HXCDD (F)	40:01	1,2,3,4,6,8-HXCDF (F)	38:58
1,2,3,4,6,7-HXCDD (L)	42:40	1,2,3,4,8,9-HXCDF (L)	43:00
1,2,3,4,6,7,9-HPCDD (F)	45:46	1,2,3,4,6,7,8-HPCDF (F)	45:19
1,2,3,4,6,7,8-HPCDD (L)	46:42	1,2,3,4,7,8,9-HPCDF (L)	47:07

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

## ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD 1,2,7,8-TCDD	0	1,2,3,8-TCDD 2,3,7,8-TCDD	10
1,2,7,8-TCDD 1,4,7,8-TCDD	0	2,3,4,7-TCDF 2,3,7,8-TCDF	N/A
1,4,7,8-TCDD 1,2,3,7-TCDD	0	2,3,7,8-TCDF 1,2,3,9-TCDF	N/A
1,2,3,7-TCDD 1,2,3,8-TCDD	DB-5 column; co-elute as per Figure 6 in Method		

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

Signed: \_\_\_\_\_ Robert Tones \_\_\_\_\_

## AXYS METHOD MLA-017 Rev 20

## Form 5

## PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

## AXYS ANALYTICAL SERVICES

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

Instrument ID:	HR GC/MS	Initial Calibration Date:	27-Sep-2016
RT Window Data Filename:	DX7M_013 S: 10	Analysis Date:	09-Feb-2017
DB-5 IS Data Filename:	DX7M_013 S: 10	Analysis Date:	09-Feb-2017
DB-225 IS Data Filename:		Analysis Date:	
		Time:	22:04:28
		Time:	22:04:28
		Time:	

## DB5 RT WINDOW DEFINING STANDARDS RESULT

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	23:00	1,3,6,8-TCDF (F)	21:30
1,2,8,9-TCDD (L)	28:17	1,2,8,9-TCDF (L)	28:07
1,2,4,7,9-PECDD (F)	31:58	1,3,4,6,8-PECDF (F)	28:50
1,2,3,8,9-PECDD (L)	37:00	1,2,3,8,9-PECDF (L)	37:03
1,2,4,6,7,9-HXCDD (F)	40:01	1,2,3,4,6,8-HXCDF (F)	38:58
1,2,3,4,6,7-HXCDD (L)	42:42	1,2,3,4,8,9-HXCDF (L)	43:02
1,2,3,4,6,7,9-HPCDD (F)	45:52	1,2,3,4,6,7,8-HPCDF (F)	45:24
1,2,3,4,6,7,8-HPCDD (L)	46:47	1,2,3,4,7,8,9-HPCDF (L)	47:13

(F) = First eluting isomer (DB-5); (L) = Last eluting isomer (DB-5)

## ISOMER SPECIFICITY (IS) TEST STANDARDS RESULT

Isomers	% Valley Height Between Compared Peaks	Isomers	% Valley Height Between Compared Peaks
1,2,3,4-TCDD 1,2,7,8-TCDD	0	1,2,3,8-TCDD 2,3,7,8-TCDD	13
1,2,7,8-TCDD 1,4,7,8-TCDD	0	2,3,4,7-TCDF 2,3,7,8-TCDF	N/A
1,4,7,8-TCDD 1,2,3,7-TCDD	0	2,3,7,8-TCDF 1,2,3,9-TCDF	N/A
1,2,3,7-TCDD 1,2,3,8-TCDD	DB-5 column; co-elute as per Figure 6 in Method		

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

Signed: \_\_\_\_\_ Kristen Bowes \_\_\_\_\_





AXYS METHOD MLA-017 Rev 20

Form 4A  
PCDD/PCDF CALIBRATION VERIFICATION

AXYS ANALYTICAL SERVICES

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

Initial Calibration Date: 27-Sep-2016

VER Data Filename: DX7M\_013 S: 10

Instrument ID: HR GC/MS

Analysis Date: 09-Feb-2017

GC Column ID: DB5

Analysis Time: 22:04:28

COMPOUND	LAB FLAG <sup>1</sup>	MZ's FORMING RATIO <sup>2</sup>	ION ABUND. RATIO	QC LIMITS <sup>3</sup>	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) <sup>4</sup>
2,3,7,8-TCDD		M/M+2	0.77	0.65-0.89	10.3	7.8 - 12.9

- (1) Where applicable, custom lab flags have been used on this report.
- (2) See Table 8, Method 1613, for m/z specifications.
- (3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
- (4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
- (5) Alternate confirmation and quantitation ions used for native and labeled PECDD.

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

Signed: \_\_\_\_\_Kristen Bowes\_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form4A.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35; Report Filename: 1613\_DIOXINS\_DX7M\_013S10\_\_Form4A\_SJ2166437.html; Workgroup: WG57937; Design ID: 2503 ]

AXYS METHOD MLA-017 Rev 20

Form 4B  
PCDD/PCDF CALIBRATION VERIFICATION

AXYS ANALYTICAL SERVICES

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

Initial Calibration Date: 27-Sep-2016

VER Data Filename: DX7M\_013 S: 10

Instrument ID: HR GC/MS

Analysis Date: 09-Feb-2017

GC Column ID: DB5

Analysis Time: 22:04:28

LABELLED COMPOUND	LAB FLAG <sup>1</sup>	MZ's FORMING RATIO <sup>2</sup>	ION ABUND. RATIO	QC LIMITS <sup>3</sup>	CONC. FOUND (ng/mL)	CONC. RANGE (ng/mL) <sup>4</sup>
13C-2,3,7,8-TCDD		M/M+2	0.77	0.65-0.89	98.8	82 - 121
CLEANUP STANDARD						
37CL-2,3,7,8-TCDD <sup>6</sup>					9.71	7.9 - 12.7

- (1) Where applicable, custom lab flags have been used on this report.
- (2) See Table 8, Method 1613, for m/z specifications.
- (3) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.
- (4) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under VER.
- (5) Alternate confirmation and quantitation ions used for native and labeled PECDD.
- (6) No ion abundance ratio for 37Cl4-2,3,7,8-TCDD; concentration reported.

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

Signed: \_\_\_\_\_Kristen Bowes\_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form4B.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35; Report Filename: 1613\_DIOXINS\_DX7M\_013S10\_Form4B\_SJ2166437.html; Workgroup: WG57937; Design ID: 2503 ]

**AXYS METHOD MLA-017 Rev 20**

**Form 6A  
PCDD/PCDF RELATIVE RETENTION TIMES**

**AXYS ANALYTICAL SERVICES**

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

<b>Initial Calibration Date:</b>	27-Sep-2016	<b>VER Data Filename:</b>	DX7M_013 S: 10
<b>Instrument ID:</b>	HR GC/MS	<b>Analysis Date:</b>	09-Feb-2017
<b>GC Column ID:</b>	DB5	<b>Analysis Time:</b>	22:04:28

COMPOUND	LAB FLAG <sup>1</sup>	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS <sup>2</sup>
<b>2,3,7,8-TCDD</b>		13C-2,3,7,8-TCDD	1.001	0.999-1.002

- (1) Where applicable, custom lab flags have been used on this report.
- (2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.
- (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

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

Signed: \_\_\_\_\_Kristen Bowes\_\_\_\_\_

For Axys Internal Use Only [ XSL Template: Form6A.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35;  
Report Filename: 1613\_DIOXINS\_DX7M\_013S10\_\_Form6A\_SJ2166437.html; Workgroup: WG57937; Design ID: 2503 ]

AXYS METHOD MLA-017 Rev 20

Form 6B  
PCDD/PCDF RELATIVE RETENTION TIMES

AXYS ANALYTICAL SERVICES

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

Initial Calibration Date: 27-Sep-2016

VER Data Filename: DX7M\_013 S: 10

Instrument ID: HR GC/MS

Analysis Date: 09-Feb-2017

GC Column ID: DB5

Analysis Time: 22:04:28

LAB FLAG <sup>1</sup>	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS <sup>2</sup>
<b>LABELED COMPOUND</b>			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.013	0.976-1.043
<b>CLEANUP STANDARD</b>			
37CL-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.001	0.989-1.052

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

(2) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

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

Signed: \_\_\_\_\_ Kristen Bowes \_\_\_\_\_

For Axs Internal Use Only [ XSL Template: Form6B.xsl; Created: 16-Feb-2017 14:28:59; Application: XMLTransformer-1.15.35; Report Filename: 1613\_DIOXINS\_DX7M\_013S10\_\_Form6B\_SJ2166437.html; Workgroup: WG57937; Design ID: 2503 ]

### Accreditation Scope

AXYS Analytical Services Ltd.  
file ref.: ACC-101 Rev. 32

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



























































**Accreditation Scope**

AXYS Analytical Services Ltd.  
file ref.: ACC-101 Rev. 32

Compound Class	Compound	Accredited Method D	AXYS Method D	CALA	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	Maine DOH	ANAB	Tissue		Urine		Water		Water, Non-Potable						
																CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	ANAB	CALA	CALA	California DPH	Florida DOH	Minnesota DOH	New Jersey DEP	New York DOH
Perfluorinated Compounds	Perfluorononanoate (PFNA)		MLA-043 MLA-060																					YD				
		AXYS MLA-041	MLA-041			Y	Y	Y	Y																			
		AXYS MLA-042	MLA-042		Y																							
		AXYS MLA-043	MLA-043															Y	Y	Y	Y					YD		
		AXYS MLA-060	MLA-060																									
	Perfluorooctane sulfonamide (PFOSA)	EPA 537 modified	MLA-041 MLA-043 MLA-060														YD					Y		Y	Y	Y	YD	
		AXYS MLA-041	MLA-041			Y	Y	Y	Y																			
		AXYS MLA-042	MLA-042		Y																							
		AXYS MLA-043	MLA-043															Y	Y	Y	Y	YD						
		AXYS MLA-060	MLA-060																	Y			Y	Y	Y		YD	
	Perfluorooctanesulfonate (PFOS)	EPA 537 modified	MLA-041 MLA-043 MLA-060														YD										YD	
		AXYS MLA-041	MLA-041			Y	Y	Y	Y																			
		AXYS MLA-042	MLA-042		Y																							
		AXYS MLA-043	MLA-043															Y	Y	Y	Y	YD						
		AXYS MLA-060	MLA-060																	Y			Y	Y	Y		YD	
	Perfluorooctanoate (PFOA)	EPA 537 modified	MLA-041 MLA-043 MLA-060														YD										YD	
		AXYS MLA-041	MLA-041			Y	Y	Y	Y																			
		AXYS MLA-042	MLA-042		Y																							
		AXYS MLA-043	MLA-043															Y	Y	Y	Y	YD						
		AXYS MLA-060	MLA-060																	Y			Y	Y	Y		YD	
Perfluoropentanoate (PFPeA)	EPA 537 modified	MLA-041 MLA-043 MLA-060														YD										YD		
	AXYS MLA-041	MLA-041			Y	Y	Y	Y																				
	AXYS MLA-042	MLA-042		Y																								
	AXYS MLA-043	MLA-043															Y	Y	Y	Y	YD							
	AXYS MLA-060	MLA-060																	Y			Y	Y	Y		YD		
Perfluoroundecanoate (PFUnA)	EPA 537 modified	MLA-041 MLA-043 MLA-060														YD										YD		
	AXYS MLA-041	MLA-041			Y	Y	Y	Y																				
	AXYS MLA-042	MLA-042		Y																								
	AXYS MLA-043	MLA-043															Y	Y	Y	Y	YD							
	AXYS MLA-060	MLA-060																	Y			Y	Y	Y		YD		
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075													Y										Y		
		AXYS MLA-075	MLA-075			Y																Y						
	10-hydroxy-amitriptyline	AXYS MLA-075	MLA-075			Y																					Y	
		AXYS MLA-075	MLA-075			Y																					Y	
	2-hydroxy-ibuprofen	AXYS MLA-075	MLA-075			Y																					Y	
		EPA 1694	MLA-075												Y												Y	
4-Epianhydrochlorotetracycline (EACTC)	AXYS MLA-075	MLA-075			Y																Y							





















**Legend**

Y	Accreditation scope
YD	Accreditation scope, including US DOD scope
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
FTS	Fluorotelomer sulfonates
HBCDD	Hexabromocyclododecane
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFC	Perfluorinated Compounds
PPCP	Pharmaceutical and Personal Care Products
TBBPA	Tetrabromobisphenol A
California DPH	California Department of Public Health, Lab D 2911 (target analytes shown are those approved 2014)
Florida DOH	Florida Department of Health, Lab D 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 D C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab D 460224, (NELAC Standard)
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab D CN00003

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



Testing  
Accreditation No. A 2637

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

